On August 12, 2019, at 5:08 a.m., local time, westbound CSX Transportation (CSX) freight train H70211 collided with eastbound CSX freight train W31411 near Carey, Ohio. The trains were operating on the CSX Columbus Subdivision which extends 90.6 miles from Columbus, Ohio, to Fostoria, Ohio, in a geographic north-south direction. In this report, however, trains are referred to as running east and west based on the CSX timetable. (See figure.) As a result of the collision, the lead locomotive of train H70211 and 4 railcars carrying trash were derailed on their side. Train W31411 derailed 21 railcars, loaded with frac sand, in positions 6 through 26. Both train engineers were transported by ambulance to a hospital with minor injuries and where they were underwent postaccident drug and alcohol testing. The two train conductors were later driven by railroad officials to the hospital for postaccident drug and alcohol testing. Initial accident damage was estimated at $4.9 million.
CSX train movements on the Columbus Subdivision were governed by operating rules, timetable instructions, wayside signal indications, and enforced with a positive train control (PTC) system. The CSX dispatcher for the Columbus Subdivision, located in Jacksonville, Florida, coordinated train movements using the signal system. The subdivision was single main track territory with portions of multiple main track territory and passing sidings. The maximum authorized speed in the vicinity of the accident location was 50 mph. The westbound train tonnage required a speed restriction of 40 mph.

The eastbound train crew reported for duty in Garrett, Indiana, at 1:40 a.m. local time. Train W31411 consisted of two locomotives and 110 loaded railcars. The previous crew of train W31411 experienced a PTC system failure while en route to Garrett, which required the PTC system to be cut out (disabled). The crew involved in the accident notified the CSX dispatcher of the disabled PTC system prior to departing Garrett and were given permission to proceed to Columbus where the system could be repaired.

During postaccident interviews, the crew of the eastbound train said the wayside signals indicated as they approached control point (CP) Springs that the train would be diverged from the single main track onto main track 2. They stated they saw the westbound train approaching...
CP Springs on main track 1 and noted the locomotive headlight was on bright. The eastbound train engineer said that he flashed his headlight to indicate to the westbound train engineer to dim the locomotive headlight but received no response.

The westbound train crew reported for duty in Columbus, Ohio, at 9:00 p.m. Train H70211 consisted of two locomotives and 176 railcars (109 loaded and 67 empty). The PTC system was activated prior to departure. The crew’s first job assignment was to set out 30 empty cars in Carey. CSX instructions specify that for trains operating with active PTC, crews performing pickups, set offs, or other switching activities including shoving movements must: (1) Stop the train/locomotive; (2) Use restricted mode for the PTC system. In restricted mode, the PTC system allows train movement at restricted speed and no longer automatically stops the train before it can violate a red (stop) signal.

Train H70211 was still almost 2 miles long after the 30 empty cars were set out. The conductor, working at the rear of the train, planned to ride a railroad shuttle van to a nearby highway-rail grade crossing to board the lead locomotive and continue westbound to their next job assignment in Fostoria, Ohio. The engineer of train H70211 departed with the PTC system still in restricted mode and continued westbound for about 2 miles to CP Springs. Preliminary event recorder data indicated the train speed never exceeded 20 mph (upper limit threshold of CSX restricted speed rule). The train continued past the red signal at CP Springs and collided with the sixth railcar of the eastbound train W31411.

The NTSB investigation is ongoing. Investigative activities will focus on train crew distractions, crew resource management, and current railroad operating rules for PTC. Parties to the investigation include the Federal Railroad Administration; CSX Railroad; Brotherhood of Locomotive Engineers and Trainmen; Brotherhood of Railroad Signalmen; and International Association of Sheet Metal, Air, Rail, and Transportation Workers-Transportation Division.