NATIONAL RAILROAD PASSENGER CORPORATION
500 W. Jackson Boulevard, Chicago, IL 60661

April 18, 2017

Timothy DePaepe, Investigator in Charge
National Transportation Safety Board
49 L'Enfant Plaza East, S.W.
Washington, D.C. 20594

Re: Proposed Findings, Proposed Probable Cause in the Matter of Amtrak Train 4 Derailment Near Cimarron, Kansas on March 14, 2016; NTSB Docket No. DCA16MR004

Dear Mr. DePaepe;

Amtrak respectfully submits the following proposed findings with respect to the March 14, 2016 derailment of Amtrak Train 4 near Cimarron, Kansas. Amtrak requests that the NTSB consider this submission prior to issuing its final report and that this submission become part of the official public record. We appreciate the assistance, cooperation, and guidance of the NTSB throughout the investigative process and for allowing Amtrak to participate in the investigation.

INCIDENT SUMMARY

On March 14, 2016 at approximately 12:02 a.m. Central Daylight Savings Time, Eastbound Amtrak Passenger Train 4 was operating on BNSF Railway track. The Los Angeles to Chicago train included two locomotives and 10 cars. As the train approached milepost 373, the train encountered a displacement in the railroad ties and tracks at approximately milepost 373.07. The two locomotives, baggage car, and the first three passenger cars (Sleeper Cars 39023, 32109, and 32071) traversed the displaced rail without derailing. The fourth passenger car (Diner Car 38044) came to a rest upright. The fifth passenger car (Lounge Car 33020) came to a rest tilted approximately 30 degrees to the north. The last four cars (Coach Cars 34042, 31013, 34056, and 34046) derailed coming to a rest on an embankment on the northside of the railroad tracks next to U.S. Highway 50 which runs parallel to the single main line railroad tracks.

Following the derailment, National Transportation Safety Board (NTSB) investigators inspected the railroad ties and tracks at the scene of the derailment. Investigators conducted measurements of the track conditions to the west of the point of derailment and displaced rails and determined the track condition to be in compliance with Federal Railroad Administration Track Safety Standards for the assigned class of the track.

At the scene, investigators also found fresh damage to the north ends of the railroad ties at approximately milepost 373.07 and fresh tire tracks perpendicular to the railroad tracks. The track

conditions were photographed and measured, and the misalignment of the track was found to be seven inches.

From this location, investigators identified tire tread patterns and tire tracks leading away from the misalignment. The tire tracks were traced to a feedlot owned by Cimarron Crossing Feeders, LLC where investigators located a 2004 Kenworth International truck owned by Cimarron. Investigators also observed and photographed damage to the truck's front bumper which were recent in origin and also matched the tire treads of the vehicle with the tire track patterns observed adjacent to the fresh damage in the railroad tracks and track structure.

The Cimarron employee who had been operating the Cimarron feed truck informed investigators that on March 13, 2016, at approximately 10 a.m. he was working in the loading bay area at the feedlot and was asked to provide assistance to a co-employee in clearing a pipe. The truck operator parked the feed truck and left it unattended. At some time during the process, the unattended feed truck started rolling down the hill. The feed truck then made an uncontrolled movement down the hill, crossed Highway 50 and struck the railroad tracks. The truck operator stated that he got in his personal vehicle and drove down the hill alone, parked his vehicle on the south side of the railroad tracks. He then got out of his vehicle, crossed the tracks and got on the runaway feed truck backing it out onto Highway 50 and driving it back up the hill to the feed plant.

The truck operator stated that upon arriving at the feed plant, he reported the incident to his supervisor but no action was taken by the supervisor other than to tell the truck operator that he did not want to hear about. At no point during the remainder of the day on March 13, 2016, or at any point prior to the Amtrak train derailment, did any employee from Cimarron contact BNSF, Amtrak or law enforcement officials to advise that the feed truck had struck the railroad tracks causing the misalignment.

PROPOSED FINDINGS

A. Track Conditions

1. The derailment occurred on the BNSF La Junta Subdivision. The La Junta Subdivision consists of primarily single main line track. BNSF designates and maintains the single main track in the vicinity of the derailment as Class 3 track with a maximum, authorized timetable speed of 60 mph for passenger trains.

2. At this location, investigators photographed and measured the condition of the track and lateral shift or misalignment. The amount of misalignment was measured at seven inches and was determined to have been the Point of Impact (POI) or intrusion from the Cimarron Crossing Feeders truck striking the track structure.

3. Based upon the inspection, measurement, and photographic documentation of the area of the track in the footprint of the derailment and to the west of the POI, track field

notes and measurements documented that the track was within FRA Track Safety Standards for Class 3 track.

4. Aside from the misalignment in the tracks caused by the Cimarron Crossing Feeders truck striking the railroad track structure and tracks, investigators did not identify any defects with any other track conditions at the derailment site including the condition of the rail, track geometry or track components.

5. A review and inspection of the BNSF track inspection records did not disclose any deficiencies in the records or the inspections performed, and BNSF's inspections were performed in compliance with FRA Track Safety Standards.

6. A review of BNSF track geometry, rail flaw defection testing, and rail joint testing records did not show any defects at or near the vicinity of the derailment.

7. The cause of the misalignment of the tracks was the impact and intrusion or outside forces placed upon the track structure from the Cimarron Crossing Feeders truck impacting the track structure.

8. Other than the misalignment, the track conditions did not cause or contribute to the accident.

B. Operations and Analysis of Event and On-Board Image Recorders

1. As the Amtrak train was approaching the derailment scene, the train was operating at 60 mph which was within the maximum authorized track speed for the area of track where the derailment occurred.

2. Time distance calculations for the train operating at 60 mph place the train as traveling 88.02 feet per second.

3. The Amtrak lead locomotive AMTK153 was equipped with a Wabtec VideoTrax On-Board Image recorder with a forward-facing video camera that recorded at a resolution of 704 x 240 pixels at 30 frames per second with external audio and also recorded time in minutes and seconds (the LDVR video).

4. The Amtrak lead locomotive AMTK153 was also equipped with a Wabtec event recorder (the event recorder).

5. At 02:24 on the LDVR video, the LDVR video appears to depict the track misalignment becoming visible. This event corresponds approximately to the time of 02:12 on the event recorder data. At this time, the event recorder data reflects that the train was traveling at 60 mph or 88 feet per second and was 355 feet from the Engineer Induced Emergency (EIE) event.

6. Two seconds later, at 02:26, the LDVR video reflects that the train swayed to the right and then the left as the lead locomotive passed through the misalignment in the tracks. The train was traveling at 60 mph at this time and time distance calculations reflect that the train had traveled only approximately 178 feet. This is confirmed by the event recorder data.

7. On March 16, 2016, NTSB investigators boarded Amtrak Train 4 and rode the train from Garden City to Dodge City on Locomotive AMTK3 for the purpose of making site distance observations. The site distance observations included informing the engineer to keep a lookout for an object placed near the tracks, and the train was traveling at 25 mph, not 60 mph. The observation involved placing a distinguishable object at the location of the misalignment and having the engineer indicate when the object was visible. The site distance visibility based upon the engineer's indication was measured at 381 feet with the locomotive counter and 403 feet with a wheel counter.

8. The following factors did not cause or contribute to the accident: the physical condition, train handling or actions of the engineer of Amtrak Train 4, or the railroad operating rules, policies and procedures.

C. Mechanical

1. On March 12, 2016, a Class I Air Brake Test and daily inspection was conducted on Amtrak Train 4 at Los Angeles, California. The inspection was conducted consistent with FRA Passenger Equipment Safety Standards.

2. On March 16, 2016, the NTSB mechanical group conducted an inspection of Amtrak Train 4 which had been reassembled in its original configuration at the time of the incident. The inspection included an inspection of lead locomotive AMTK153 as well as review of all documentation concerning the pre-incident inspection and maintenance history of the locomotive and equipment in Train 4. No exception was taken to the documentation received nor the maintenance history of the equipment. Furthermore, no exception was taken with respect to the operation and condition of locomotive AMTK153.

3. The mechanical condition of the locomotive and train consist did not cause or contribute to the accident.

PROBABLE CAUSE

The probable cause of the incident was the failure on the part of Cimarron Crossing Feeders to properly secure the feed truck allowing it to roll away from the Cimarron Crossing Feeders facility and strike the track structure thereby causing the misalignment and derailment of the

Amtrak train. In addition, the failure of Cimarron Crossing Feeders to notify BNSF, Amtrak or law enforcement officials during the approximately 14 hours from the time of the roll away event to the derailment of the damage to the track structure contributed to the derailment by failing to provide any notice to BNSF, Amtrak or law enforcement officials to allow for halting train operations and making repairs to the tracks before the Amtrak train traversed the tracks.

Amtrak appreciates the opportunity to participate as a party to this investigation.

Respectfully,

[redacted]

Mark Murphy
Vice President Business Development