As seen on the surveillance footage from train #705, it was clear, dry and the lighting was approaching dusk.

Mr. Brown, deposed on June 6, 2023, testified that he was seated in the eastside, B end of the main floor of train car 1266, facing south and his seat was in a four-seater configuration. He thought that Mr. Pochron had his seat in a four-seater configuration as well and Ms. Jones was seated further south of them, on the west side in or near the first seat of gallery seats after the handicap/bike accessible area. They were all sitting there, doing a briefing, when Ms. Jones began to scream. He stood up, turned towards the northside emergency door, looked over his right shoulder, saw the other train coming at them and then the impact occurred. He did not know if he was fully standing straight up when the impact occurred and thought his torso was still turned and his head was looking over his right shoulder. When the impact occurred, he was thrown from the east side of the gallery over to the west side seats. He thought he landed on the floor on his right hip and side of his butt and used his arm “like half my arm straddling the seat, I think the seat in front of me kind of trying to grab onto it.” He was able to get up off of the floor without assistance after falling. He did not see what happened to Mr. Pochron or to Ms. Davis when the impact occurred. He thought the hand written statement completed by him, Ms. Davis, and Mr. Pochron was completed while they were still in the emergency room.

Ms. Jones, deposed on June 5, 2023, testified that she was seated in the B end of the train car on the lower level facing north. Mr. Pochron was facing north and Mr. Brown was facing south. Mr. Pochron had his seat in the four-seat configuration and Mr. Brown was sitting behind that. She could not remember if she heard or felt the impact first, but it was a combination of that. She could see the other train coming towards the front end, which was unusual, and then slam, they got hit. She later said she heard the impact first, looked up and saw the other train. When the impact occurred, she had both of her feet on the floor and she was facing completely forward, looking straight ahead to the north. The only thing she remembered about the impact was she was losing it, was screaming, it was taking everything to hold on, and it seemed like it lasted forever. She could not remember if any part of her body hit the inside of the train car, but she did not think so. Mr. Brown was running away from it and was coming towards her, and she didn’t know if he struck anything inside the train car and did not see him fall. She did not know what happened to Mr. Pochron and did not know if he struck anything inside the train car either. She did not know if the other two were seated at the time the impact occurred or not. Regarding the hand written statement, she recognized her signature on it and thought that Mr. Pochron wrote it out. She wasn’t thrown inside the window as it was stated in the written statement. (During the deposition, she was provided a seating schematic and discussed the locations of them at the time of the impact, however, that file was not provided.)

In the handwritten statement Mr. Brown, Ms. Jones, and Mr. Pochron stated “crew on comb #47 sitting on B end of Cab Car #1266 having job briefing, brakeman (Denise Jones) starting yelling and train #705 collided into train #140. Conductor and Engineer sitting mid-car on east side, Brakeman on west side, Brakeman was thrown in side window Conductor and Engineer thrown out of seat into aisle. Brakeman facing north and Conductor facing north, Engineer facing south.”

A diagram of a building

Description automatically generatedMr. Pochron, deposed on June 2, 2023, testified that he was on train #140/#723 and was seated in the B-end, on the east side, of car #1266 on the main level, facing north, at the time of the crash. He had flipped the seat to make it a four-seater which had it opened like a desk. Mr. Brown was seated in a four-seater in front of him on the east side, facing south, and Ms. Jones was seated directly across the aisle from him in a four-seater on the west side, facing north (during the deposition he completed an approximate seating diagram for the three of them). Ms. Jones began screaming and was looking toward the front of the cab. He began to stand and up turn towards Ms. Jones to try and figure out why she was screaming when he heard the boom and felt the crunch of the impact. His torso was turned towards Ms. Jones and his head was turned to the right to look out the front of the train when the impact occurred. The impact threw him back towards his seat, his left hip struck the arm rest/arm rail of the seat and then he fell fully back into his seat. He did not remember if he hit his head or any other parts of his body when he was thrown back into his seat. He did not know what happened to Ms. Jones and Mr. Brown during the impact or how their bodies reacted to it. He was not able to put into words how the train moved or felt during the impact, only that it seemed to last about a minute or two. After the impact he saw that things outside the window were not where they were supposed to be and felt that train #705 had hit them. He completed a written statement after the crash and Mr. Brown, Ms. Jones and he signed it. They had discussed what had happened and agreed with what was written down in the statement.

**Mr. Pochron’s seating diagram**

Mr. Williams, deposed on February 6, 2024, testified that he was the Assistant Conductor on train 705 when the incident occurred, and he was in the second car. Train 705 consisted of six cars and had a four-person crew consisting of himself, Paul Buckley (Conductor-lead car), Jason Taksas (Engineer) and Mr. Funches (Conductor Trainee). They had just dropped off the passengers at the nearby platform and were taking the train to the yard to stow it. Mr. Buckley and Mr. Funches had disembarked the train to manage the 2/3 switch when the passengers disembarked prior to the incident occurring. The train they collided into was Train 140 and it consisted of four cars. The head car of Train 140 was struck by the rear car of his train. During deposition, his written statement was read and in it he said, “while riding in the second car from the south end I felt a large jolt and then the train stopped.” He was standing when the train came to an abrupt and sudden stop and the force threw him around. He was thrown into the rack above him, he hit his shoulder into the upper railing and then fell into the seats. The impact was large enough that it knocked the trains off of the tracks. He took photos after the incident was over and some of the photos showed the train wheels off of the tracks, the track itself being bent and the rail spikes coming out of the ground/ties. He noticed

Mr. Taksas, deposed on February 6, 2024, testified that he was the Engineer on Train 705 that hit Train 140 and he was seated in the lead car at the time of the incident. Train 705 consisted of six cars and had a four-person crew consisting of himself, Mr. Williams (Assistant Conductor), Mr. Buckley (Conductor) and Mr. Funches (Conductor Trainee). The other train, Train 140, consisted of four cars and had a three-person crew consisting of Mr. Brown (Engineer), Mr. Pochron (Conductor) and Ms. Jones (Assistant Conductor). During deposition, his written statement was read and in it he said, “while pulling train 705 into track number two, felt a large jolt and shake. Then train went into emergency. Then I was told we were on the ground and hit the other train.” The lead car of Train 140 and the rear car of Train 705 had collided. The impact was the hardest one he had ever felt but he was not thrown about in the train because he was seated when the impact occurred. After the impact was over, he disembarked his train and got on the other train. Mr. Pochron told him he was thrown into the wall; Mr. Anthony told him he was thrown down to the ground and hurt his groin and Ms. Jones was so shaken up she never moved.

Mr. Manuel, deposed on May 31, 2024, testified that his role in the case was to perform a crash analysis/reconstruction and an impact analysis related to the subject train cars and he did not have any biomechanical opinions on the movements or reactions of the occupants inside the train cars. His analysis was based upon the subject crash being a longitudinal impact with a full energy exchange and it assumed that both subject trains were on a level plane. The subject crash was one impact, but they did break it down to look at both the longitudinal and roll components.

They were able to determine a speed profile from the analysis of the video, using videogammetry, which he felt was more accurate than using the distance measured between two objects, such as poles numbered 3126 and 3120 in this case.

They reviewed the trains EDR recorder data, but that system has inherent limitations in that the speed data was an average speed that was captured over a diameter dimension of a wheel, which is about 36 inches, and with one sensor.

Regarding train car 1266, his initial calculations indicated a speed of 7.4 mph with a maximum force of 2 g’s in the longitudinal direction and a combination of the lateral and longitudinal forces, referred to as a resultant component, which was as high as 0.3 g. The speed range he ultimately used for deposition was 7.4 to 9.4 mph. The speed of 9.4 mph resulted in a longitudinal force as high as 2.5 g’s and the resultant component force was 0.4 g.

Using a 7.4 mph impact speed with a friction coefficient of 0.3, train 140/train car 1266 would have a delta V of 3.7 mph with a peak acceleration range of 1.1 to 1.7 g’s and train 705/train car 1262 would be the opposite of that (-3.7 mph delta V and -1.1 to – 1.7 g’s).

His report was a preliminary analysis and after reviewing Dr. Freeman’s report, and in preparation for this deposition, he revisited the videogammetry analysis. His current calculations indicated a speed range of 7.4 to 9.4 mph, and the acceleration factors were not affected by more than half a g.

He reviewed Dr. Freeman’s report with the focus pertaining to impact analysis and there were things missing in his report, one of them being an acceleration for either vehicle as a result of his calculated impact. The calculation of the average speed listed a time interval that wasn’t evenly divisible by the frame rate of the video. He also did not quantify the roll on the lateral and vertical accelerations. The areas measured to determine the distance used between the two poles was unclear; was it as a crow files or along the tracks? The date of the aerial used to measure those distances was also missing. He disagreed with Dr. Freeman’s ultimate conclusion, but he did not create a rebuttal report documenting that or any of the other disagreements he had. During this portion of the deposition, he was shown reports generated by Metra that were not provided to him for his analysis. Those reports indicated speeds of 8.6 and 9 mph and he said that had he seen those prior to reviewing Dr. Freeman’s report he would not have had any issues with Dr. Freeman’s reported speeds of 8.7 and 9 mph.

Multiple view video footage-Train #705

The video is taken from 5 cameras mounted both interiorly and exteriorly. Two show the view from the rear of the train, two show what appears to be empty operator or other type of employee occupant compartments and one shows a front view of the train with the camera mounted on the right exterior.

The video begins with a date/time stamp of 2020-10-12 18:14:59 and the impact occurs at about 18:15:50.

A train on the tracks

Description automatically generatedA train on the tracks

Description automatically generated

A train on the tracks

Description automatically generatedA close-up of a train

Description automatically generated

**Rear Facing FSH camera, train #705, showing impact knocking**

**car #1266 to the right and off the track, prior to direct impact**