



Structural Integrity: Silver Bridge

Trigger Factors

So what were the weather conditions on that evening of December the 15th 1967 and how was the bridge being used at the time?

Charlene Wood

The weather was kind of chilly. There were snow flurries coming, and it was getting dark. It was around, uh, well it was time when everyone was getting off work, in the evening time.

Jack Fowler

Traffic lights on a bridge change the patterns of the traffic flow. Once it changes then you've got all the traffic that's backed up, and they come, a wave of them rush across the bridge, and whatever is in that line, that's the load that you're going to get at that time. And it was on both sides and it worked both ways... So as you can tell from our model that there were a great many coming through...through from that last change of light in Point Pleasant.

Charlene Wood

when there was heavy traffic on the bridge, there was a motion of going up and down, but I was told that that was normal, so I wasn't afraid of the bridge.

Jack Fowler

The bridge, I don't think anyone ever crossed it that they didn't feel movement. Uh, that was a discussion of the community, of the area, because it...it...there was always swaying. It had the up-and-down motion from so much weight on it, and everybody always said wow this bridge is going to fall someday. But then you look back at the design, it was a different design, and we felt that it...it...because of the design it had that built-in motion so to speak. So, you talked about it, but did you worry about it, no, but the motion was there, we experienced that personally.

Pete Lewis

This is where the bearing surface would connect with the pin, and it's, uh, from roughly a position, um, a...at right angles to the shank of the bar where the critical brittle crack, which brought the bridge down, actually started. On the inner bearing surface, there is extensive pitting corrosion, very similar to the one on the corresponding part of the pin, uh, and also traces of fretting marks caused by particles of rust wearing away the surface as the bearing moved.

Narrator

The eyebar that failed, number 330, was positioned on the Ohio end of the bridge on its northern side.

Back at the West Virginia end... Charlene Wood was approaching in her car...but, with the failure of that eyebar, she was heading into trouble. ...

Charlene Wood

As I stopped, the bridge was coming forward like dominos, swaying back and forth, but the tower went to the north when it fell, and as I was seeing all of this, unbelievably, didn't know what was really happening. I did know what was happening but it just hadn't registered yet