Bandwidth of a VW wagon

The year is 1967. A Volkswagen bus loaded with 8-track tapes is cruising down Route 2 with the pedal to the metal. Estimate the data transmission bandwidth (bit/s). Bonus point: answer without using the internet, which wasn't yet invented in 1967.

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Suggested by Charles Kankelborg

Charles' estimate without using the internet is as follows:

First, estimate total equivalent data storage of the tapes.

Number of tapes stacked in the bus: 50 high x 10 wide x 20 long $= 10^4$.

If the audio recording has response at 20kHz, it can store 10 kbit/s.

I can't remember the duration of an 8-track tape, but say 1000 s of music (mono).

Thus, the total information content is 10^8 kbit $= 100$ Mbit.

Second, estimate the time required for this information to go by on the highway. I know that the speed of sound is around 600-700 mi/hr, or 1000 ft/s. So a VW bus on the highway can go about 100 ft/s. The tapes are stored over a length of perhaps 10 ft. So the information passes a bystander in 0.1 s.

The bandwidth is therefore approximately 100 Mbit / 0.1 s = 1 Gbit/s.