

Frank Turner on 1-in-5

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Frank Turner on 1-in-5

In the late 1980s, the American Association of State Highway and Transportation Officials (AASHTO) conducted an oral history exercise with many State highway officials and some Federal leaders. The material from the oral histories provided background for AASHTO's excellent book, *The States and the Interstates: Research on the Planning, Design and Construction of the Interstate and Defense Highway System* (1991).

One of those interviewed was Frank Turner, the only career employee of the Bureau of Public Roads/Federal Highway Administration to rise to the position of Federal Highway Administrator (1969-1972). Beginning in the 1950s until his retirement, Turner was involved in all aspects of the Interstate System. During an interview on February 7, 1988, John T. Greenwood asked Turner about the influence of the autobahn on Interstate design:

One of the things that we did just as a sideline on the Autobahns; after we got a start on the thing . . . we actually went over there and looked at the Autobahns in that regard to include and to incorporate into the Interstate Program (in the design) some of the concepts that they had over there. The Air Force, particularly pushed us on this. I suppose you're familiar with [the fact that one] of our major airports over there that was a part of the Autobahn. In fact, the Autobahn was used originally as runways. The airport was built right on the Autobahn

My understanding was that they actually grew out of - the Autobahns were to some extent designed for military purposes, including capabilities as landing strips for aircraft. You couldn't get very many current aircraft down on them. They were designed with that in mind as a secondary use or primary, I don't know which, but anyway, they were used that way. At least one or more of the original early day air bases that were part of the European activity over there, grew out of that. They just enlarged the highway there and I guess they rerouted the highway around it.

After the war in the early "50s, we were pressured pretty hard by the Air Force to build into the Interstate System exactly that same capability and that we would even locate the lines, not in accordance with what the law says, by routes as direct as practicable between [the principal metropolitan areas, cities, and industrial centers]-even if we had to twist the alignment here to get in the wind directional consideration, and the low gradients and lack of obstructions and one thing and another, for three mile long sections that would be spaced along here at certain intervals, we were to design those into the system. So, periodically, about every 40-50 miles, we'd have about a three-mile section there that would meet those requirements. This was to be highly classified, of course. But this was one of the concepts that was cranked into it at that time.

I sent a guy, a team actually, over to Europe with a team from the Air Force headquarters to look at that particular point and see if we could incorporate it. They came back with the conclusion that from a practical standpoint we couldn't really do it. Not because we couldn't do it physically, but we could not, with our projections of traffic use and the kind of controls that would be required to permit emergency use of that thing, except as you took all the highway traffic off entirely. Made it exclusively a runway. It had to be one or the other. It couldn't-maybe today it'd be this way and this afternoon it'd be something different. We just couldn't mold those two concepts together. So it was abandoned, but it was abandoned for that kind of reason, rather than the physical capability of it. But the design of the interstate was based on all this accumulation of material, basic data, traffic counts, economy, everything else that prohibited any intrusion into that concept by something like emergency strips. Part of the system's consideration was defense use by the military. Even if we did that for the Air Force, the Air

Force would then be competing with the Transportation Corps on the ground that moving convoys, which one's going to get the green light.
