



**PATRICK BEDARD**

## Why we need more speed and less Frank J. Wilson.

If all the government guys who've lied in defense of the double-nickel were stacked on top of one another, it would be worth the heavy lifting, I think, just to get them out of the loop.

And while we're at it, let's stick Frank J. Wilson up there on top of the stack. He's the New Jersey transportation commissioner. Last summer, when that state was thinking of loosening up speed limits on rural interstates, Wilson countered with scary numbers. Upping speeds to 65, he said, would increase fuel consumption by 22 percent, increase NOx by 31 percent, increase hydrocarbons by 50 percent, and increase carbon monoxide by 100 percent.

For sure, greater speed requires more power, so the engine must work a bit harder. But enough to burn 22 percent more fuel? Let's have some expert testimony. I asked Lindsay Brooke, Chrysler Engineering's answer man, for mpg and emissions data for a variety of cars, each traveling at 55, 65, and 75 mph. He worked with powertrain engineer Burke Brown to produce a detailed performance profile of the modern car, where it's efficient and where it's not.

Now let's watch the Pinocchio nose grow on Frank J. Wilson. Speeding up from 55 mph to 65 increases fuel consumption about 10 percent, more on low power-to-weight cars like the 2.0-liter Neon (up nearly 13 percent), less on high power-to-weight models like the 3.5-liter

Intrepid (up 9 percent). Notice that the consumption increase is less than half of Wilson's claim. In fact, most of the cars in Chrysler's sample could speed up to 75 and still be under Wilson's 22-percent threat.

Talking of fuel-consumption increases in percentages is also misleading because it completely obscures how efficiently cars run at constant freeway speeds. Yes, they burn more fuel as they speed up, but they're still amazingly thrifty. For example, the 3.5-liter Intrepid is a huge, bring-all-the-neighbors four-door that accelerates from 0 to 60 in 8.8 seconds, yet it still gets nearly 29 mpg at a constant 65 mph, well above Congress's mandated average mileage as specified by the 27.5-mpg Corporate Average Fuel Economy. Speed up to 75 mph in this car, and mileage drops just a little to 26 mpg.

The smaller Neon tops 34 mpg at 65 and drops barely under 30 mpg at 75.

If fuel economy is important, Wilson should go after gas guzzlers like today's fashionable sport-utes and pickups—not the speed limit. The V-8 Jeep Grand Cherokee is by no means the worst offender, yet it gets just 21 mpg at 55, 5 mpg less than the Intrepid at 75.

Brown told me that Chrysler had to run special tests to answer my questions, because when up to operating temperature and running at constant freeway speeds, cars are so clean and efficient that there's no point in testing those conditions. Yes, precision equipment can find increases in exhaust pollutants with increasing speed, but the numbers are so small you have to be careful not to lose them in the rounding. Consider this 3.5-liter Intrepid, tested with 85,000 miles on its catalyst system. Against the present Tier 1 emissions standard, which allows 0.25 gram per mile (g/mi) of hydrocarbons, it produced 0.001 g/mi at 55 mph, 0.002 at 65 mph, and 0.004 at 75 mph. Wilson's propaganda machine could say that speeding up to 65 increased hydrocarbons 100 percent, and 75 mph increased them 300 percent. All true. But may I point out that, at 75 mph, this high-mileage emissions system emits less than two percent of what the standard allows per mile traveled.

The same story applies to the other regulated emissions. Brown was embarrassed by this Dodge's increase in CO, from 0.002 g/mi at 55 mph up to 0.027 g/mi at 75. But the standard allows 3.4 g/mi, so it's actually emitting less than one percent of the mandated limit at 75 mph.

NOx levels rounded to the same 0.001 g/mi at both 55 and 65 mph and then rose to 0.002 g/mi at 75, again less than one percent of the standard.

If Wilson and his ilk really care about fuel economy and air pollution, they have the speed effect exactly backward, because fast cruising is when cars cover the most miles with the least emissions. The Intrepid we've been talking about can drive 105 miles at 75 mph for the same amount of hydrocarbons it passes in the first 20 seconds of idle after cold start. For CO, the distance is 72 miles at 75 mph; for NOx, 5 miles.

Think of it. Every cold start emits the equivalent of a significant (and fast) trip on the freeway. Brown tells me that all the industry's emissions work these days is devoted to the first minute or two following startup (and, of course, to ensuring that the emissions system remains effective at high mileages). Once the engine is warmed up, the emissions of a properly operating car are too close to zero to be of any consequence.

Knowing that, we can look at car travel in a new light: Once the commuter starts up in the morning and drives out of his neighborhood, Brown's work is done. But the job of transportation commissioner Wilson is just beginning. Cars idling in traffic accomplish nothing of value. Yet they burn fuel—0.28 gallon per hour for a Neon; 0.38 for the Intrepid I've been describing; 0.64 for a 5.2-liter Grand Cherokee V-8. They pollute the air, too. The top priority of a credible transportation commissioner, it seems to me, would be keeping vehicles moving at highway speeds. We're not talking secret technology here. The window sticker on every new car for years has shown two EPA fuel-economy numbers, one for city and one for highway. And the highway number is always better.

The closer the road comes to an open expressway where cars can move along at constant speed, the cleaner and more economical the cars are—even at velocities that would make a New Jersey highway patrolman grin like a lottery winner. Our test Intrepid could dash along at 75 mph for nearly 10 miles on the fuel it would burn stuck for an hour in traffic.

When I read Wilson's backward take on speed, and see the constipated flow of traffic on his Garden State Parkway with its pollution-maximizing tollbooths every few miles, I see a transportation commissioner running on empty. Fortunately, engineers like Chrysler's Brown have even better things in store. He sent me test data for an Intrepid 3.3-liter engineered to the tighter TLEV (Transitional Low-Emissions Vehicle) spec; 17,000 of them will be built during this model year. As it speeds along at 75 mph, its NOx emissions read goose eggs out to three decimal places, and its mileage tops 31 mpg. ●