

So, we wondered, how do we conduct the test? I have done fuel economy tests lots of times, but I didn't want to just do a "controlled" test this time. In fact, Purple Line had the AEROplus tested extensively by the Motor Industry Research Association known now only as MIRA Ltd., a leading automotive design and test organization in the U.K. and the University of Johannesburg Technolab. We wanted to see how this worked on a "real RV trip."

So we decided to do a round-trip in Massachusetts, from Springfield to Brewster, which is on Cape Cod. On the way to the Cape we would have the AEROplus unit installed; the way home would be without. To calculate the mileage we would simply use the truck's computer as a guide from point to point, instead of using fueling points the old fashioned way. What we really wanted to see was if the truck and trailer handled differently on a long trip.

The trip was mostly interstate travel between Springfield and the Cape, using I-90 and I-495, and the trip was Aug. 29, the Friday leading into Labor Day weekend. We were pleasantly surprised by not only delightful weather but light traffic on I-495 headed down to Cape Cod. On I-90, however, we encountered relatively heavy traffic including many trucks, but the speed was maintained at 65 mph.

As a side note, the F-350, which is pretty stout, is also equipped with Torklift upper overload bumpers and a Reese weight distributing hitch system attached to their class five hitch. Even with all this, towing this size trailer could be, at times, stressful. Not that it handled badly most of the time, mind you, but I always knew the trailer was there, and trucks could do a pretty good job of sucking the trailer around. All things considered, I've towed much worse, so I guess I figured it just couldn't be improved.

Well, I was wrong ... again.

With the AEROplus installed, and at highway speed, I noticed quite a difference in the tow. In fact, my wife even noticed I was considerably more relaxed driving "the team." Except for occasional porpoising, which has nothing to do with the aerodynamics of the vehicle, the trailer had largely stabilized. There was minimal buffeting by crosswinds, trucks, or the drag that develops between a tow vehicle and trailer. Counter-steering, or making steering adjustments to account for wind buffeting and trailer sway, reduced dramatically in my highway testing. In other words, it did what it was designed to do.



The return trip a few days later, Tuesday, without the AEROplus in place was back to the norm, and being midweek, we again encountered truck traffic on I-90.

The drag and buffeting was back, and in our setup, while not being "hair-raising" by any means, did make the drive less enjoyable and more "tiring" or stressful.

Now, that said, the AEROplus counts on having air movement to work in order to create the slipstream to stabilize the trailer. While there is no way for me to quantify this, imagine a chart with one side representing the increase in stability, and the other being the increase in speed. The stability factor would rise as the speed increases. At slower speeds, the effect, while still there, is less noticeable but is needed less at slower speeds. We were also doing this test with a 34-foot long trailer, which is about as long as a travel trailer gets. Shorter and lighter trailers, which most people have, will probably benefit from a more pronounced effect than we did.

Fuel economy was also slightly improved with the unit in place. I normally get around 9.9 mpg towing this trailer on the highway. On the trip out I got 10.7, and on the way home about 10. Not a huge increase in mileage, but anything helps. The company says that a 15-percent increase was seen in the MIRA testing; however, Caravan World Magazine saw a 13-percent increase, the University saw a 6.3 percent increase, and we saw a 7 percent increase. We did have some hilly terrain, however, and we had a particularly large and heavy truck and trailer combination.

All in all, the AEROplus performed well, with an almost complete reduction in turbulence and buffeting between the trailer and truck, a definite increase in lateral stability even when driving in high-speed truck and bus traffic, and some fuel savings, which was a bonus.

More information AEROplus Wind Deflector is available at the [company's website](#). It may be ordered at [Amazon.com](#).