James T. Moore, Executive Director
Florida Department of Law Enforcement
PO Box 1489
Tallahassee, FL 32302-1489
September 9, 2001

RE: Highway Safety: A preliminary study of excessive speed.

Dear Mr. Moore,

A few months ago my daughter received her learners permit and we began driving together. I soon found that helping my daughter to develop good driving habits was going to be more difficult than I had expected. Of all the challenges, respecting the speed limit became the hardest to explain. You see, if Karen drives the speed limit, our vehicle became an obstruction to the common flow of traffic.

These incidents heightened my awareness and I soon became totally frustrated with the behaviour of the drivers with whom we shared the road. I was not certain what to do about this but knew I couldn't simply tell my daughter it was OK to break the speed limit.

Being a scientist, I decided that to make my point I needed to be able to support these casual observations with data. I decided to conduct a little study.

The protocol was elegantly simple. First I calibrated my speedometer and then set the cruise control at the posted speed limit. Using a punch counter from the lab, I was able to then count the number of cars I passed during the test period as well as the number of cars which passed me. The results could not tell me how much in excess of the speed limits the speeders were traveling. The method did allow me to calculate the number of vehicles traveling in excess of the speed limit and compare that to the number of vehicles traveling slower than the posted limit. Vehicles traveling at exactly the posted limit would neither be passed by my vehicle nor would they pass me and so represent a data gap.

From May $24^{\text {th }}$ to August $30^{\text {th }}, 2001$, each time I used the highway I conducted this test. I restricted it to highways having two lanes in each direction so that speeders were unimpeded by the congestion of a single travel lane.

The results were quite amazing. Please see tables one and two for details.

The ratio of the numbers of vehicles speeding to those traveling at less than the speed limit varied from a low of 4.0 to a high of 26.0. There were three test periods when no vehicles were observed traveling at less than the speed limit. The ratio of such data would be infinity and so is not included in the above noted range.

After such a dramatic set of results, a second set of data was collected. The same method was used but the cruise control was set a 5 MPH above the posted speed. A much smaller data set was collected, but in only one of the three tests was the number of vehicles traveling at less than 5 MPH over the speed limit greater than the number of vehicles traveling at more than 5 MPH over the speed limit.

While the above data is serious enough in itself, the most disconcerting findings were in the anecdotal data collected during this time.

The focused observation and forced adherence to the posted speeds made me aware that the practice of exceeding the speed limit and breaking the law was not restricted to the private vehicles. In a very short time, it became apparent that police vehicles, emergency vehicles, and government vehicles were being operated in an equally unsafe manner and in a manner equally disrespectful of the law.

Among violators were highway patrolmen, county sheriffs, municipal officers, ambulances, fire and rescue vehicles, and county and city cars and trucks. It was fairly common for these vehicles to tailgate and cut off other drivers. On several occasions, the infraction was so abhorrent that the local officials were called and the time, vehicle number, and tag number were reported to the watch captains.

One of the challenges to this set of data was in becoming reasonably certain that the vehicle observed was not on an emergency call. After only a little observation, it becomes easy to distinguish an official vehicle on a call from one which is simply being operated dangerously.

The most blatant example of this was a municipal officer transporting a prisoner 15 MPH in excess of the posted speed limit. The excessive speed and the knowledge of the infraction by the officer was verified when the officer traveled through the Highway Patrol speed trap, slammed on the brakes and slowed to the limit until the trap area had been passed. Another was that set by a department of corrections bus carrying prisoners in excess of the speed limits.

The most abrasive driver was in a car with US government plates. This vehicle pulled up behind me, flashing his headlights, tailgating, eventually passing on right before I could move over once the lane had cleared, cutting me off and then proceeding to drive dangerously and aggressively through the traffic ahead of me.

Once behaviour like the above had been noted, we incorporated the ability to videotape the poor examples being offered our young people. Our records now include tape (and tag numbers) of these observations.

Conclusions:

Most vehicles travel at speeds in excess of the posted speed limits.
Most vehicles exceed the speed limit by more than 5 MPH.

- Most vehicles marked as public travel at speeds in excess of the posted speed limits.
- Law enforcement condones and participates in this disregard for safety and law. While no percentage can be assigned to this statement, it is apparent that traveling in excess of the speed limit has become the normal practice.

Questions for consideration:
How can I ask my daughter to hold herself to a higher standard than that of law enforcement, of emergency vehicles, of government vehicles?

Is this really the example that those charged with protecting us from dangerous drivers are supposed to be setting?

If the officers and emergency vehicles have no respect for the law and the safety of other drivers, how wan we really expect anyone else to do so?

As an end note, I am writing to you because I cannot write to each and every police chief, sheriff, wildlife office, fire chief, department of corrections, ambulance company, county commission or mayor. We will continue our study and are now routinely incorporating video recording, keeping car and tag records, and shall begin to notify responsible supervisors of dangerous situations.

It is my sincerest hope that you in your position can do something to convince our public employees to respect these laws and obviate the need for any further reports. It is contradictory and sad that these men and women who risk their lives every day to help and protect us would also risk their lives and ours by violating our traffic laws and encouraging others to violate them through the poor example they set. I would have hoped that these bad examples are being set by only a few officers but the fact is that while conducting this study, I do not have any record of having encountered one of the official vehicles traveling at less than the posted speed.

There was one final observation that was not tallied and so remains untested. It was apparent that many of the vehicles were equipped with radar detection devices. This simple device serves no purpose other than to assist a person in the violation of Florida Statutes and as such serves no legitimate legal purpose. It is my supposition, again not tested, that these same drivers would be less likely to exceed the speed limit if they did not think they could get away with it. Any other device whose sole purpose was to assist in the breaking of a law would certainly have been removed from the market long ago.

It is my sincerest hope that our public servants can begin to set a more appropriate example simply by being made aware that there are those of us who are watching. Some, like me, are doing so consciously. Others, like every 17 year old child learning the rules of the road, are simply learning to drive like the rest of us. More people are killed on our highways each year than died during the entire Vietnam Conflict. Drunk driving takes the brunt of the blame, but if

80 to $99 \%$ of us are speeding, that behaviour is certain to be a contributing factor.

Respectfully,

Thomas R. Cuba, Ph.D
President, Delta Seven Inc.

