



# Roadside Safety: a Moral Obligation



By Robert Legato, SRWA

**A**t the risk of stereotyping myself and compromising your opinion of all that I say, I will tell you that one of my favorite movies is *Monty Python and the Holy Grail*. Now before you write me off as a “fringe lunatic,” let me point out that I find some wonderful philosophy inherent in all the nonsense that movie portrays.

One of the most memorable scenes is one where the gallant troop of “searchers” comes upon a troll-like individual living at the edge of a deep chasm. He asks them their favorite color. The first knight gives a reply that evidently does not please the troll and the knight is summarily cast into the chasm! The next knight is obviously afraid, so that when it comes his turn to name his favorite color, he names first “blue,” then quickly adds, “no, green!” Well, we can anticipate his fate: he is cast into the chasm just for hesitating.

What is there about this scene that jars our sensibilities? I think it is simply this: that the troll allows for no error, no leeway and no hesitation. One mistake and you’ve had it!

Let’s move now to a highway near you. It’s just been opened and winter is still upon us. Within two days the first report of a fatality hits the newspapers: a youngster traveling at 10 miles or so over the speed

limit loses his purchase on a turn and is sent careening to his death as his vehicle smashes into a cliff alongside the shoulder of the road. A few days later there's a second report: an elderly woman approaches that same turn and finds it covered with thick ice. She slows to a crawl, but a truck approaching from the rear misjudges her speed and sends her careening into that same cliff.

You are outraged, aren't you? Don't you think the designers of that road have an obligation to look ahead and create a roadside that's more forgiving? Why is that turn so sharp right at the base of a cliff? Why was the ice there? Was there proper drainage? Were no salt crews available? Were there any warning signs that a potentially dangerous situation was ahead to alert that truck driver? We're supposed to be building "Intelligent Highways," aren't we? Well, where's the "intelligence" in this case? Highway engineers have a moral obligation to design safe roads, don't they?

Yes, they do. And, I hasten to add that no one is more aware of that, generally, than the people who design and build roads. But what about the rest of us? I'm talking about the utilities that place poles and other appurtenances alongside roadways. Do we not have a similar moral obligation to create forgiving roadsides?

From our lofty perspective let's look at a situation where a vehicle has struck a pole—one of your poles—after losing control on a bend. The driver was sober, but inattentive for a moment. His outside wheel caught the soft gravel shoulder, spinning him off into the pole placed some two feet across the shoulder. "Well," you exclaim, "The shoulder should have been more stable ... and the driver should have been more

diligent!" I won't argue with you; there are all kinds of things that contribute to an accident. The bottom line is that the pole can be "made safe" for a few days; the driver wasn't as lucky.

In an ideal world, incidents such as the unstable shoulder and the pole waiting for the errant driver don't happen. In an ideal world, utility engineers work hand-in-glove with highway engineers to avoid "hazards" alongside highways.

Let's go now to your work to replace this pole. As

you went to your records, you found that the pole that was struck was placed last year. Digging back a little, you might have found that its predecessor was placed only six months before that! You put out your work order to replace the pole alongside the one that was hit. You have to apply for a highway permit and your permit is routinely granted. A day or so later, there's a lovely new "black-jack" there and the old hole has been covered over. See anything wrong with this picture?

Sure you do. What's wrong with a utility engineer that ignores previous history on a pole and continues "business as usual?" And what's wrong with a highway

engineer that rubber-stamps utility permits without a thought as to why the pole is being replaced so often?

I vividly recall an incident that occurred many years ago, when I had just become an Outside Plant Engineer for a telephone company. It was lunchtime, and a few of us engineering types had brought our lunch and had eaten at our desks. Bert was rocked back in his chair with his feet on the desk, reading a newspaper. Tom, a supervising line foreman, strode purposefully over to Bert's desk, clutching a work



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order in his hand.

Tom leaned over the newspaper, waving the piece of paper under Bert's nose and saying through gritted teeth: "We ain't gonna do it this way again, Bert," Bert folded his arms and said, "That's the way it's written and that's the way you're going to do it." Tom grabbed Bert's ankle, his face livid with anger. I was truly afraid for Bert's safety at this point; if Tom wanted to he could easily pick up this bantamweight engineer and thrash him! The rest of us intervened and Tom finally stalked out of the office. But he had the good sense to go to Bert's boss with the problem.

In later days, I found out why Tom had been so incensed. Bert's order was to set a pole at the bottom of a hill I had known from my youth as "Cannonball Hill." I remember that ol' Cannonball Hill was the test hill for our efforts to improve my brother's souped-up Buick. If we could make Cannonball in high gear, the car was running at its absolute best! The hill had two plateaus in it, but they separated three slopes of considerable pitch. On an icy day, a car coming down Cannonball had to proceed very cautiously in order to make it around the T-intersection at the bottom. Well, Bert's pole was at the bottom of the hill. It had been struck three times in the past two years. Bert's work order called for placing the new pole behind the one that had just been struck, leaving the old pole butt in place to protect against damage to the new one!

Needless to say, I had great respect for Tom from that day. He recognized the obligation that we have to think about why bad things happen and to do something to prevent them.

Our friends in the Federal Highway Administration track car/pole accidents and their statistics are enlightening. It is easy enough to spot those states where the most accidents happen; the top ten are: Pennsylvania, Ohio, California, New York, Florida, New Jersey, Tennessee, Texas, Massachusetts and North Carolina. "But wait," you might well protest, "Aren't those also states with heavy traffic?" Yes, and the FHWA

Rank	State	Utility Pole Fatalities	Rank	State	Utility Pole Fatalities Per 100-BVMT
1	Ohio	632	1	Rhode Island	119
2	Pennsylvania	625	2	West Virginia	117
3	California	585	3	Tennessee	113
4	New York	517	4	New Jersey	104
5	Florida	475	5	Pennsylvania	98
6	New Jersey	436	6	Maine	97
7	Texas	423	7	Ohio	94
8	Tennessee	409	8	Hawaii	93
9	Massachusetts	301	9	Massachusetts	91
10	Georgia	282	10	Delaware	77

has thought about this, too. So they keep another set of statistics, according to "billion vehicle miles of travel," ranking the top ten states both ways in the years 1990-1996 (See above).

I guess there are some surprises when one reads from one column to the other and those directly involved with those states may want to argue about certain mitigating circumstances, such as mountainous terrain or the number of trucks among those "billion vehicle miles."

We could argue until the cows come home. The fact is that those operating in states in either column on that list owe it to the traveling public (your customers) to be extra vigilant in making roads safe. Does that let the rest of us off the hook? Let's not state the obvious.

To their credit, the solution embraced by most highway departments and the FHWA has not been to simply remove all poles from the roadside. They recognize the general principle that the king's roads are for the king's utilities as well. Put another way, the public needs to have its rights-of-way utilized by all those who serve the public.

The feds and our local DOT's have an abundance of advisory manuals available to help keep roadside pole accidents to a minimum, available through the FHWA and AASHTO. They are too numerous and varied to enumerate them here. However there is one publication that bears mentioning

It should be noted that the *Highway/*

*Utility Guide* is just that—a guide. However, it serves as an excellent foundation to cover all but the most exceptional circumstances.

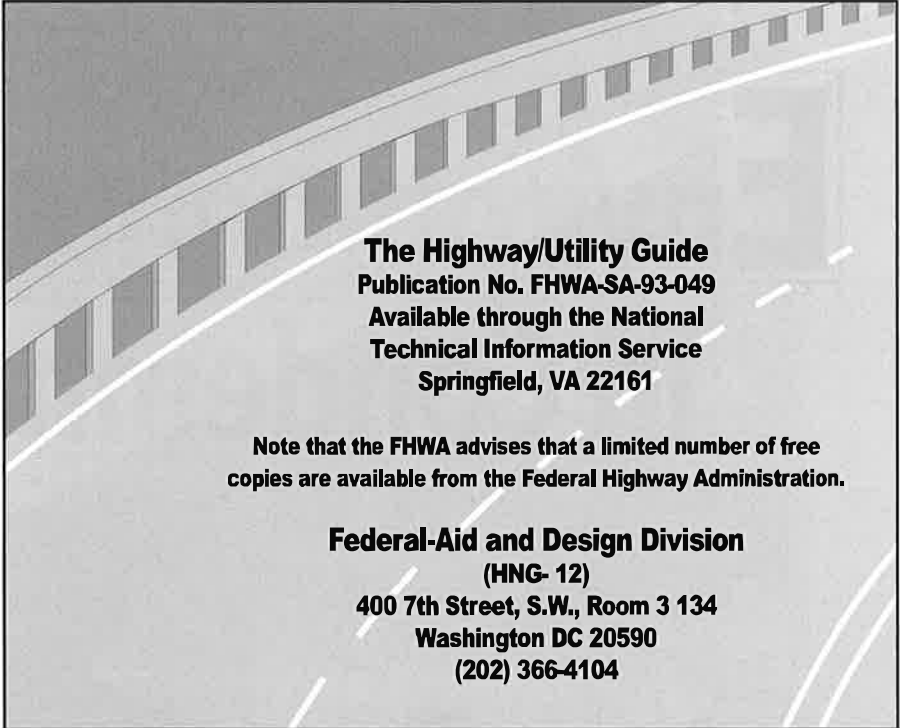
It likewise serves another purpose, one whose importance cannot be overestimated: it's a good talking point for utilities engineers and highway engineers to begin a dialogue. From that dialogue will come solutions for some of these roadside issues that loom over the traveling public and let's not forget the utility companies and highway departments as well.

I would respectfully suggest a number of operating principles for both utilities and highway engineers to bear in mind:

- There are very few poles about which "nothing can be done."
- Safety standards for pole line construction should not be violated, particularly the National Electrical Safety Code.
- A state highway department may use federal funds to offset expenses to relocate or even acquire additional rights of way for utilities, as long as the expenditure is made in the name of safety.
- Poles should not generally be singled out; any effort made to relocate them should be part of a comprehensive effort to make an entire portion of roadway safe. In such an area, trees and abutments that make for an "unforgiving" roadside should be dealt with as well.

There are a number of initiatives being undertaken by individual highway departments to reduce the number of car/pole accidents. It behooves transportation engineers to discuss some of those with their counterparts in the utility companies. It likewise behooves those utility engineers to make every effort to provide good input to those initiatives, both to ensure their success and to ensure that the proposed solutions are ones with which the utilities can live. It is only through cooperation between highway engineers and utility companies that realistic solutions to car/pole accidents can be established. ■

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**Note that the FHWA advises that a limited number of free copies are available from the Federal Highway Administration.**

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