New Federal Road Sign Requirements

Read Case 12.2

Once you have read the case in the textbook, also read the USA Today story upon which it was based. That story is duplicated below, along with a few comments readers posted on the USA Today web site

ALL CAPS? Not OK on road signs, federal government says
Updated 10/21/2010
By Larry Copeland, USA TODAY

In a nod to the fading eyesight of the nation's growing number of aging Baby Boomers, the federal government is requiring communities around the USA to change street name signs from all capital letters to a combination of capital and lowercase letters. The government says that makes them easier to read.

Cash-starved localities also will have to dig deep for new, more reflective traffic signs to make them easier to see at night, especially by older drivers.

Under Federal Highway Administration (FHWA) regulations, communities have until 2015 to improve the nighttime visibility of roadside signs — such as stop, yield and railroad crossing signs. The issue is how well a sign redirects light from an automobile's headlights back toward the vehicle. Signs that fail to meet minimum standards must be replaced. Communities will be allowed to change the street name signs as they wear out.

The changes are called for in the Manual on Uniform Traffic Control Devices, an 816-page (plus appendixes) behemoth that sets standards for traffic control devices — signs, signals and pavement markings.

"As drivers get older, we want to make sure they're able to read the signs," says FHWA administrator Victor Mendez. "Research shows that older drivers are better able to read signs when they're written in both capital and small letters. It's really driven by safety."

Despite that, the rule changes are not welcome in communities that have cut budgets to the quick.

"I think it's ridiculous," says Milwaukee Alderman Bob Donovan, whose city will spend about $1.4 million on new signs over the next four years. "Our street signs have worked perfectly well for 100 years or more. I think it's just the federal government run amok. If they don't have far more important things to deal with, they're not doing their job."

A gripe heard across the land: The government is providing no funds to make the change.

Iron Mountain, Mich., which has a population of 8,154 and a $6 million budget, will spend $30-$50 apiece replacing several hundred signs, says city manager Jordan Stanchina. "You're looking at all the other things you've got to cut, and now you've got to do this," he says.

Canyon, Texas, city manager Randy Criswell says the Texas Panhandle city of about 15,000 will replace 1,500-2,000 signs at a cost of about $100 apiece. "Do I think that's money that's spent as well as it could be? I sure don't," he says. "I've got parents that are getting elderly. They think this is silly."

Some cities such as Eau Claire, Wis., have already been gradually replacing signs as they wear out. Brian Amundson, the city's public works director, says replacing signs is "a good, worthwhile program. It really does make a difference." But he says, "It's just that in these difficult financial times, people don't like it shoved down their throat because they don't see the immediate value of it."

Comments: (693)
RunnXXXX 8/30/2011
Just another round of absolute stupidity by our federal government. I, personally, prefer the street signs to be in all capital letters. I resent having my tax money being used for such nonsense as this!

CaboXXXX  10/25/2010
How old was the researcher, thirty something, ask all baby boomers. BIG IS BETTER!

RetiredXXXX
Anybody with any common sense at all knows that that is a crock. Which letters are larger? That answers the question of which is easier to see and read. Who was the study done by? Other bureaucrats? It might have some credibility if it were done by a panel of optometrists.

PolitiXXXX  10/25/2010
Is there anything that the Feds don't want to control.

BumpXXXX  10/27/2010
An example of what's wrong with BIG GOVERNMENT. Only idiots would need 816 pages to explain traffic control devices. Now these idiots want to set regulations requiring upper & lower case signs. Are we taxpayers actually paying the person who came-up with this stuff?

MekXXXX:   10/24/2010
I can see some logic to making signs as visible as possible. However, given the desperate budget situation a great many governments are in, 2015 is arguably too soon a deadline, perhaps *much* too soon.

I would suggest the FHWA reconsider that deadline, extending it to at least 2020 and perhaps even later than that.

After reading both the case study and the few reader comments (out of almost 700) above, most of us would likely react pretty much the same as the readers. Why are cities required to spend huge amounts of money changing signs to lower case when all caps is obviously easier to read? And what could possibly justify the federal government needing an 816 page manual on road signs?

But things are usually not as they seem at first glance, particularly when dealing with complicated government policy that must apply thousands of towns, cities, and counties across the country. So first we delve a bit into history and then return to some of the contemporary complaints above.

The Manual on Uniform Traffic Control Devices (MUTCD)
Why does it exist?

Purpose, as described in the manual’s introduction:

“The traffic control devices (TCD) are very critical for the safe and efficient transportation of people and goods. The Manual on Uniform Traffic Control Devices (MUTCD), by setting minimum standards and providing guidance, ensures uniformity of traffic control devices across the nation. The use of uniform TCDs (messages, location, size, shapes, and colors) helps reduce crashes and congestion, and improves the efficiency of the surface transportation system. Uniformity also helps reduce the cost of TCDs through standardization. The information contained in the MUTCD is the result of either years of practical experience, research, and/or
the MUTCD experimentation process. This effort ensures that TCDs are visible, recognizable, understandable, and necessary. The MUTCD is a dynamic document that changes with time to address contemporary safety and operational issues.”

It is easy for us in the current era to have little understanding of the history of automobile traffic, a history that many of your grandparents had to grapple with. The automobile was invented in the late 1800s, and Ford introduced his assembly line Model T in 1908. As car prices dropped with the ever-increasing efficiency of the assembly line, American bought cars in droves.

At the beginning a car was just like a horse, drive it anywhere. As cars became more popular, traffic increasingly became dangerous – people driving wherever they wanted to at whatever speeds they felt like.

It was not until 1911 that somebody in Michigan thought of painting a centerline on a road. In 1915 the first STOP sign appeared and in 1918 the first 3-color traffic signal, both in the automobile’s home city of Detroit. All of these innovations spread across the country, but only very slowly.

Roads developed so that people began to drive across states, and even across country in the late 1920s and early 1930s. But there were no signs on most roads – no speed limit signs nor signs telling which way you were going (north or south) or where the road led (were you going south to New York City or north to Albany or some entirely different place).

Once you got into a city you might see some traffic signs but what did they mean? A stop sign might be colored red on an 8 foot post in one city, but colored blue written on a curb in another, and colored yellow on a 3 foot sign (like a realtor’s for sale sign) in yet another city. And this is just one traffic control sign. Imagine the complexity of a variety of sign shapes, sizes, colors, and locations for speed limits, street names, directions to other cities, and all the other signs we take for granted today.

In the 1920s state traffic control officers met and developed a report (voluntary suggestions) on signs. This was the forerunner of the MUTDC which was first printed in 1935. As the country changes the manual must be continually updated. Imagine driving from state to state and not being able to recognize signs for dangerous curves, school zones, or the like.

As the country and its transportation practices evolve, new sign standards must be continually developed so drivers will understand what they need to do no matter where they are in the country. It was not until 1978 that a new standard was developed for bicycle lanes. Highway signs designating airports, available restaurants and gas stations at off ramps, and many more are relatively recent innovations. With the growth of electric cars or alternate fuels, drivers will need standardized signs to know where they can obtain a battery recharge, or hydrogen for their fuel tanks.

All of these needs are met by the MUTCD. But rules are not arbitrary. Proposed rules are always announced in advance and federal agencies are required to hold open meetings where “any interested person or organization” may submit comments. Cities, states, automobile clubs, automobile manufacturers and more all have multiple opportunities for input before a rule is finally adopted and added to the MUTCD.
A different newspaper story about a city dealing with the MUTCD requirements appeared in the Topeka Capital-Journal a month earlier than the USA today story. That story is reprinted below.


The Topeka Capital-Journal

City abiding by federal mandate
Sign names need to use uppercase, lowercase
Posted: September 29, 2010 - 6:28pm

By Phil Anderson

Despite public confusion that arose from recent news reports on the issue, city crews will continue to replace street name signs to comply with Federal Highway Administration regulations that specify changes be in place by 2012.


Capital letters on the new signs are to be 6 inches, while lowercase letters are to be 4 1/2 inches.

The requirement to go to 6-inch lettering was part of the 2000 manual. The requirement to use uppercase and lowercase lettering was part of the 2009 manual.

The deadline for the 6-inch lettering is 2012. No deadline has been set for the uppercase and lowercase, which is to be done as signs are replaced.

Additionally, new reflectivity standards are being required for street name signs, taking effect in 2018. The higher reflectivity standards, which enable the signs to be more visible when illuminated by a car's headlights, are being incorporated in the new signs.
Old street name signs in Topeka had 4-inch lettering that was in all-caps. Many of the older signs have lost their reflectivity and exceeded their life expectancy, necessitating they be replaced, city leaders said.

The cost to the city for the street sign replacement project has been estimated at $414,000.

City traffic engineer Linda Voss said it wasn't likely all of the city's street signs would be replaced by the 2012 deadline. However, she said, the city is showing a good-faith effort to abide by the regulations as it attempts to find the funding for the project.

"We're doing the best we can with what we have," she said.

Voss said failure to comply by the 2012 deadline probably wouldn't result in a cut in federal funding for the city.

She said the government would look at the progress the city is making and say: "You're working on it. It's OK."

Should a governmental entity ignore the regulations, Voss said, it would be in greater jeopardy of losing federal funding.

Voss said she "takes exception" to some publicly expressed sentiments that the regulations amounted to an unfunded federal mandate. The regulations for 6-inch lettering, she said, have been on the books since 1997.

"They gave us 15 years to comply," she said.

New street name signs that were replaced in the past few years with all capital letters won't be replaced, Voss said, as they were in compliance at the time they were installed and they have lettering that is 6 inches in height.

Street name signs are being replaced by zones in the city. Additionally, signs damaged by traffic accidents or vandalism are replaced by signs meeting the new standards.

Voss called the "Manual on Traffic Control Devices for Streets and Highways" a "good thing," emphasizing it achieves the purpose of consistency in signage from one community to the next in Kansas and across the United States.

Meanwhile, Shawnee County crews haven't been replacing street name signs on a systematic basis. However, when street name signs are replaced, there are done so in accordance with new regulations.

The matter was brought before the Shawnee County Commission last week. County public works director Tom Vlach reported it would cost the county $225,000 to replace street name signs. Between $80,000 and $100,000 had been set aside in the county's 2010 budget to help achieve compliance.

Commissioners took no action on the mandate at their Sept. 20 meeting.

FHA officials stated in an e-mail to The Topeka Capital-Journal that there is "no compliance date" for the mixed-case lettering requirement.

"That means that agencies do not have to replace their existing signs for the sole purpose of displaying the street name legends in mixed-case lettering," the officials stated. "Instead, this change is accomplished through a systematic upgrading as existing devices wear out or are replaced for other reasons, such as complying with the minimum letter heights from the 2000 and 2003 requirements or complying with the minimum retroreflectivity values."

FHA officials also said "noncompliance with the retroreflectivity requirements means that drivers will not be able to read the signs at night, the practical consequences of which range from minor

...
Americans are conditioned to believe that government in general and the federal government in particular is clumsy, wasteful, too big, and regularly intrusive with silly bureaucratic regulations into the lives of citizens, private businesses, and lower level governments. Stories with this theme attract an audience. The USA today story tends to emphasize this element, and your textbook author, Kettl, adds emphasis to the theme by quoting how the FHWA letter describing how to prepare a sign warning of curve. But looking deeper into the issue suggests both the USA Today story and the case study written by Kettl are somewhat misleading. Consider the following:

Both the USA Today story and the case study suggest cities are having to spend significant amounts of money to meet the upper and lower case requirements. Read again the USA Today story that describes the upper and lower case requirement in the first paragraph and then, in the next paragraph, mentions cash starved cities having to dig deep to meet the reflectivity requirements. The typical reader will thing these two items are connected, but they are actually two different items not related at all except for both being MUTCD sign requirements.

It is true that Americans are living longer and an increasing proportion of American citizens are over the age of 65. This demographic reality has placed enormous and well-publicized strains on the Social Security and Medicare programs, but it also has ramifications elsewhere, such as making sure that traffic signs adjust to a driving pool that is constantly getting older. As a result the MUTCD was changed to require capital letters on signs to be increased to 6 inches high by 2012 and that higher reflectivity paint be in place by 2018. While the increased letter size first appeared in the 2000 edition of the MUTCD manual, the rule was actually adopted and circulated to all parties in 1997. Rules are constantly being adopted or modified and circulated via bulletins or posted on web sites, but reprinting entire manuals are expensive and is only done once every 6-10 years. The result is, as the Topeka article makes clear, cities and counties had 15 years to make this change and a similar length of time to change sign reflectivity. This time period was chosen because it is the approximate life span of traffic signs. So a lot of the “costs” of replacing signs quoted in the stories are costs that would have to be borne anyway to replace the signs as they wore out. The typical city phases in the new requirements as they go through their regular sign maintenance process.

And what about the upper and lower case requirements? There is no deadline and thus no direct cost to city or county governments. According to the Department of Transportation:

“There has never been a requirement to change an existing sign for the sole purpose of displaying its legend using upper- and lower-case letters instead of all upper-case. Instead, the requirement to display destinations and roadway names in upper- and lower-case letters is met when existing signs are replaced for other reasons, such as serviceability.”
Questions to address:

1. I assume most would probably agree on the desirability of standardized traffic signs (though if the group disagrees with this feel free to explain the reasons for your position). Assuming agreement, is federal action through the MUTCD the best way to achieve that standardization? If not, what other system would you suggest?

2. Regardless of your answer to #1, whether federal action is desirable, is the MUTCD a fair exercise of federal government power? Or is it, as expressed by some of the comments to the USA Today article, more examples of big government and excessive federal control? In developing your answer does either of the following make a difference? (a) Federal rules such as MUTCD are adopted only after a lengthy process (months to years) of the federal agency announcing the proposed rule and soliciting comments and suggestions from all affected parties. (b) No city, county, state, or any government is required to follow any of these rules. They may choose not to do so. But if they make that choice they may also have to give up federal highway or transportation funds. They would then have to fund these city or county projects by collecting their own taxes instead of using the federal government’s tax money.

3. In writing the case study Kettl added emphasis to the assumed silliness and bureaucratization of federal regulations by quoting a difficult a letter from the Federal Highway Administration describing warning signs for curves. The language in that letter makes little sense to the average person. But the letter was not in response to an inquiry by an average person or lay member of a city council. Instead it was a letter between two engineers: a federal government traffic engineer responding to an inquiry by an assistant city engineer. In such a communication each would naturally assume that the other was familiar with the history and practices of their field. Does this make any difference to your interpretation of the letter quoted by Kettl?

4. Some of the public comments to the USA Today story disparage the upper and lower case rule as just plain wrong. “Anybody with any common sense at all knows that that is a crock.” Despite this appeal to “common sense” a vast number of studies by both academics and state transportation departments show that people can more quickly and easily read signs that use both upper and lower case. It is how we read everything – novels, newspapers, textbooks, office memos. People can readily interpret what they are used to but pause a bit when encountering the unusual. The evidence behind this is overwhelming. Nonetheless it does not make immediate sense to the casual newspaper reader or television news viewer.

You are the Director of the Texas State Department of Transportation. You earlier commissioned a study on the readability of state signs that also recommended changing to upper and lower case, and also wrote in support of the MUTCD change when it was first proposed. You see various Texas newspapers have picked up on the USA Today story and the online comments mirror the one above, that the average citizen believes it is obvious
sings in all capitals are easier to read and dismisses the upper – lower case argument as simply arrogant bureaucrats with another nonsensical regulation. What do you do?

a. Begin a statewide public relations effort to justify the change and describe all the research behind it.

b. Believe people will not change their minds and so you ignore the issue. You will continue changing your state’s traffic signs hoping public attention will die away as people become bored with the issue.

c. The same as “b” but if ever questioned about it by politicians or reporters you will simply blame the federal government for creating the regulation and claim you have no choice but to abide by their rules.

d. Something else.

5. I have contended that the USA Today story is misleading, at least in part. Does the group agree or disagree? Given that the Topeka Capital-Journal story has a different emphasis, do you believe it is more or less accurate than the USA Today story? Take whichever story your believe is less accurate and describe what changes you would like to see in the story to make it more accurate. Would those changes (a) require the reporter to spend a lot more time on research (and thus have to write fewer stories); (b) require the newspaper to devote more space to the story (paper and ink do cost money); and / or (c) change how interesting the story is and thus increase or decrease the paper’s readership?