By Charles Warren

This is a summary of "Daubert-Compliant Research Design for Property Damage Valuations," Environmental Claims Journal, Winter 2001: 33-52).

Basically, before Daubert, an expert could testify, basically, "Based on my thirty years of experience and the evidence in this case the damages are $x. Stigma is $y." Randall Bell wrote and the Appraisal Institute published a book about how to do that. The research designs outlined therein are faulty by modern standards.

This creates an additional burden for plaintiffs. Good research isn't cheap. But it is an opportunity for the defense. If plaintiff has not put together good research, it can more easily be discredited.

Basically the usual problem with damage valuation lies in incomplete research design. Paired sale analysis is a basic appraisal tool. But it is incomplete. First, finding the perfect pair which are different in only one respect, the damage, is a challenge. It is tempting to find a pair, one of which is more expensive and ostensibly undamaged. More fundamentally, there is no control group and no time series. Instead of having two elements, there are really six: affected property, comparison properties and control properties, before the incident in question and after. Absent that, the ostensibly affected property might always have been cheaper for some other reason, or the whole community may have declined in value for other reasons.

An example of the first was a study published by ARES in which two PhD's concluded that leaking underground storage tanks (LUSTs) negatively affected the value of nearby property. Having published their first paper, they got information and a grant from an oil company. Their second paper demonstrated that proximity to a service station was a negative, but proximity to a plume of pollution emanating from LUSTs did not add to that effect. Basically they had proved a maxim of real estate appraisal going back to "Real Estate Analysis" by Ratcliff published in 1961. A service station is not a harmonious use in a residential neighborhood because of noise, smells, lights, traffic and hours of operation. Location next to a service station is a classic example of "Economic (locational) obsolescence", an element of depreciation in the cost approach to value.

The effect was there, and had probably been there for the decades since the original construction of the stations. But the causation was not the LUSTs. By the way,many appraisers feel that they are able to accurately quantify environmental and stigma damages. Economic geographers,

though, find themselves statistically successful at that only about half the time. And one of the "successes" is cited above.