

RESEARCH

Meta-Analysis of Plan Quality— More than a Literature Review

Every planning research article includes a literature review. In fact, nothing undermines the credibility of an author more than lack of familiarity with the literature, and nothing adds more credibility to a paper than building on what has been written on the topic. The *Journal of Planning Literature* publishes only review articles—that is, entire articles whose purpose is to synthesize the relevant literature. With two reviews per issue and four issues per year, there is no shortage of literature reviews on planning topics.

In contrast, we see few meta-analyses of planning literature. The typical literature review is strictly qualitative: “Smith found X, and Jones found Y.” Meta-analyses, as noted in this column in March 2007, are quantitative: “Studies by Smith, Jones, and others found that the average effect of A on B is C.”

Unlike traditional research methods, meta-analysis uses summary statistics from primary research studies as the data points in a new analysis. Its appeal is that it aggregates all available research on a topic, allowing common threads to emerge. The result is a more accurate representation of relationships for entire populations (as opposed to individual samples).

But the technique also has drawbacks. Combining “good” and “bad” studies can taint the results (“garbage in, garbage out”). Further, meta-analysis inevitably mixes apples and oranges because the studies involved use different quantitative techniques, independent and dependent variables, and sampling units. With a large enough sample of quantitative studies, however,

these drawbacks are overshadowed by the advantage of being able to reduce many individual results to a small set of summary statistics.

A recent literature search uncovered only 10 meta-analyses related to planning, not many for a field that annually generates several dozen quantitative studies. The topics of those planning meta-analyses include the effect of railroad stations on property values, success factors in sustainable city initiatives, public willingness to pay for cleaner air, and demographic differences in visual preferences.

Add to these the study that appeared in the February issue of *JPL*: “Searching for the Good Plan: A Meta-Analysis of Plan Quality Studies.” It’s by Phillip Berke and David Godschalk, FAICP, two bright lights in our field from the University of North Carolina at Chapel Hill. The two are also the coauthors of the

fifth edition of the classic planning text, *Urban Land Use Planning*.

Their meta-analysis synthesizes 16 studies of plan quality, followed by a critique of the methodology used in these studies. They follow the standard meta-analytic procedure of transforming the study statistics (e.g., means and standard deviations) into standardized scores. Using mean scores weighted by sample size, they find that the plans identify issues clearly but are weak in specifying community goals, establishing policies to achieve those goals, and providing the data needed for goal setting and policy formulation. They conclude that state-mandated plans are consistently of higher quality than optional plans.

Overall, they find, the mean scores for implementation are moderate while the scores for monitoring and evaluation are somewhat lower. Some plans clearly specify timelines for implementation and monitoring, but many do not. Compliance with plan mandates is high, although it appears that the plans often follow the letter of the law rather than the spirit. In general, the plans receive a relatively low mean score for interorganizational coordination and a still lower score for overall organization and presentation.

The article ends with recommendations for improving plan quality, which should be useful for practitioners. For researchers, it’s the boost the authors give to meta-analysis that is most valuable. “Planning research has expanded to the point where we are witnessing a critical need for this approach,” they write. The message for literature reviewers is clear: Think big. Become meta-analysts.

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EVALUATION CRITERIA

Internal Characteristics

- Issue identification and vision: community needs, assets, trends
- Goals: future land-use and development patterns
- Facts: current and future conditions
- Policies: principles guiding land-use decisions
- Implementation: commitments to carry out actions
- Evaluation: provisions for tracking change
- Consistency: all mutually reinforcing

External Characteristics

- Organization and presentation: provisions to enhance understanding
- Coordination: integration with other plans, policies
- Compliance: consistent with plan mandates