Final Report

The New National Ambient Air Quality Standards in Transportation Planning

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16. Abstract

The creation of new air quality standards in 1997 necessitates the expansion of nonattainment area boundaries in many places and establishment of new areas elsewhere. Transportation conformity, obligatory for transportation plans in all nonattainment areas, will therefore be carried out on a much larger scale under the new standards than it has been since its inception in the early nineties.

Legal and administrative delays postponed implementation of these standards from 2000 until 2004. Some areas have taken advantage of these delays to prepare in advance while others have attempted various avoidance strategies. This project sought to study through case studies a variety of tactics.

The work produced several published articles, numerous presentations to national conferences in addition to the teaching case studies that were the central objective of the investigation. Written as a matched pair, the teaching cases describe the preparatory efforts of North Carolina, a state that has been at the front of efforts to prepare for the designation of new nonattainment areas.

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Objective

The purpose of this project is to identify the strategies adopted by several states around the country for preparing to adjust their transportation planning practices to the regulatory requirements associated with designation as an air quality nonattainment area, namely transportation conformity.

This circumstance was brought about by the creation of new air quality standards in 1997 that supercede the standards that have been in place since the Clean Air Act of 1970. The conformity regulation has been in place in its current form since the early nineties, following the enactment of the Clean Air Act Amendments of 1990 and the Intermodal Surface Transportation Efficiency Act of 1991. Being more stringent, the new standards result in larger and more numerous nonattainment areas and therefore a greater number of transportation planning processes subjected to the conformity regulation.

Because of administrative and legal delays, the implementation of the new standards was postponed from 2000 by four years. Some areas took advantage of this time to prepare while others did not. Circumstances vary widely and as the actual deadlines for implementation approach, the outcomes are informative.

Because the research done by the Principal Investigator and Project Manager on transportation conformity in its first decade can be useful for areas facing conformity for the first time, this moment in time provided an opportunity to compare the needs of prospective nonattainment areas with the lessons from veterans of nonattainment and conformity.

The overarching objective of the project was to produce a set of teaching case studies based on the preparation activities in North Carolina, a state known for being aggressive in its integration of transportation and air quality planning.

Method

The research project was case study based. Initial investigations into three different circumstances called on Georgia, North Carolina and Oklahoma. In each place, interviews were held, generally by phone, with staff of local, state and federal transportation as well as air quality agencies. As appropriate, there were also interviews with representatives of environmental, business, and government advocacy groups who had taken an interest in the topic. In many cases, the preparation activities involved numerous parts of a large agency and numerous interview subjects were addressed.

In North Carolina, two research trips were made, including one that allowed observations of the central activity of the state's preparation activity, the "North Carolina Air Quality Roundtable," which is an interagency effort pulling together personnel statewide to discuss the challenges of preparing for the new standards and transportation conformity.

The production of several peer reviewed papers in the course of the project also created opportunities for feedback from interview subjects and other experts. Finally, interviews and conversations with staff of USEPA and DOT who are involved in implementing the new standards and regulations were critical in the research process.

Findings

At the broadest possible level, it is pertinent to observe that agencies are inherently difficult to mobilize to prepare for something that is hardly tangible, technically complex (or even arcane), for which the rules are regularly in flux, and for which the goal posts (such as deadlines and operating parameters) are constantly being moved. At several points in time, deadlines appeared near, tasks urgent, and the need to act perfectly clear. On each occasion, however, the details changed, the urgency was removed, and efforts were either aborted, left to dissipate without impetus, or, at worst, humiliated.

It became quite clear that one important factor that consistently prompted action was clear evidence of the consequences of inaction. In North Carolina but especially Georgia, memories of transportation conformity lapses – where federal funding for most projects is suspended while conflicts with air quality plans are resolved – were vivid and powerful. Where high-level resources or elected officials needed to be mobilized, the stark memory of a lapse's political fallout was all that was needed. In many places, the motto, "don't let that happen here" or "let's not be the next Atlanta" were effective rallying cries.

Forces to the contrary were equally powerful, however. In Oklahoma, some parties looked to Texas where anecdotes suggested the rules could be easily flouted or consequences were minimal and felt there was no need to make local preparations. Advocates of early action were faced with rigid opposition, such as one legislator who felt money should be spent only to address a problem, whose solution would be rewarded but not on pre-emptive measures whose aversion would earn no public honors.

In North Carolina, there was a little bit of both factors. There was a lot of willingness to invest in efforts to prepare for transportation conformity under the new standards, in part because the widely-held perception was that the state's economy was significantly threatened by failure in the area. However, each successive false-start undermined the level of support. By the time the actual designations were approaching, the stakes had been lowered by a series of good-weather summers and the fear had substantially subsided. With less political support for pre-emptive efforts, it became harder to mobilze agency staff from around the state, from institutions struggling with tight budgets.

Conclusion

The experiences of these places struggling to prepare to do conformity in new nonattainment areas underscores many of the lessons learned by areas that have now had

a decade or more of experience with the regulation. The re-allocation of human and technical resources can be a major challenge. The bridging of cultural divides between transportation and air quality agencies or between the technical and political parts of a single agency is something for which most of the people involved have little background. The motivation caused by threatening the flow of federal transportation funds is unparalleled in transportation planning.

Most observers within national agencies such as USEPA feel that the formation of strong peer networks is one of the most valuable activities during the preparation and early phases. In many cases, the new standards will add counties to an existing nonattainment area, creating a tension between rookies and veterans that can be creatively turned into a strong peer relationship.

The fact that a series of good-weather summers and a policy innovation that excuses some of the less-severe prospective nonattainment areas from the conformity regulation has made a tremendous difference, especially in the southeast where the problem is concentrated. While the reduced scale has served to undermine the urgency of the situation, it has also allowed federal and state agencies to concentrate on the remaining areas. It is possible that this has turned a crisis into a manageable challenge. If the policy innovation, known as an Early Action Compact, is revoked because of legal challenge, the profession will face a serious and urgent crisis.

Ultimately, the transportation conformity regulation is one of several policy efforts to move toward integrated transportation planning that seeks to simultaneously add rigor to a field that is based on professional discretion and flexibility that facilitates deeper integration. Veterans of transportation conformity avow an “early and often” philosophy regarding their duties and auxiliary benefits of that approach have been apparent in relevant cases. Most observers of the efforts to prepare for the new standards echo that sentiment, saying that if nothing else, this interval has improved the practice of transportation planning in the affected areas.

Products

Papers from this work have been published in TR News, Transportation Research Record, and various newsletters (National Association of Regional Coucils, e.g.). Presentations have been made at national conferences such as Transportation Research Board and the Air and Waste Management Association. Finally, a matched-pair of teaching case studies have been developed concerning preparation activities in North Carolina. The first describes the air quality planning side of things, leading up to a decision about whether or not the Raleigh/Durham/Chapel Hill area will engage in an Early Action Compact, the EPA policy that would exempt the area from conformity in exchange for accelerated emission reductions. The second case describes the challenges of maintaining the statewide air quality roundtable in the absence of a consistent motivation. The decision focuses on how the roundtable’s new facilitator, hired in the fall of 2003, should move the program forward despite a variety of major changes.