Researchers and other persons interested in promoting research about rural school busing met in Columbus, Ohio, in December 1998. Drawing on that meeting and the rural school literature, this report describes why school transportation is an important issue nationwide, explains the lack of research on rural school busing, proposes a research agenda, and recommends ways to use the agenda to foster research on the topic. School busing is relevant to nearly all school districts because of its theoretical relationship to the generic culture of U.S. schooling and its practical (but unknown) impacts on family life and school participation and on student achievement. A discussion of 20th-century school consolidation and professionalization trends and of the dominant, functionalist framework for educational research suggests that the functionalist tradition privileges some topics of research over others. In particular, the concerns of rural families and communities about busing, often raised in protest to long bus rides and rural school closures, were in opposition to prevailing views of professionals and functionalist researchers and, therefore, unlikely to provoke much research interest. A research agenda is outlined in detail. Its categories (all in relation to rural school busing) are history, politics, spatial distribution of schools, consolidation, social and cultural circumstances, outcomes or correlates of schooling, children's health and safety, finance, and alternatives to current circumstances. Appendices include "Long Rides, Tough Hides: Enduring Long School Bus Rides" (Belle Zars) and background on the collaboration between AEL and the Rural School and Community Trust Policy Program. (Contains 40 references.) (SV)
An Agenda for Studying Rural School Busing

Craig B. Howley
Charles R. Smith
AEL's mission is to link the knowledge from research with the wisdom from practice to improve teaching and learning. AEL serves as the Regional Educational Laboratory for Kentucky, Tennessee, Virginia, and West Virginia. For these same four states, it operates an Eisenhower Regional Consortium for Mathematics and Science Education. In addition, it serves as the Region IV Comprehensive Center and operates the ERIC Clearinghouse on Rural Education and Small Schools.

The Rural Education Specialty at AEL serves as the organizational home for those aspects of AEL's work that involve providing R&D-based services to rural schools and communities. This includes the Rural Laboratory Network Program for the nation's system of 10 Regional Educational Laboratories. The mission of the Rural Education Specialty is to promote the integrity of rural, small schools in a global economy. Its guiding focus is to foster the essential relationship between rural schools and their communities.

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Introduction

The Policy Program of the Rural School and Community Trust (Rural Trust) and the Rural Center at AEL collaborated to convene a meeting of people actively studying rural school busing (from the perspective of students, families, and communities) or promoting policy change with respect to rural school busing. Both organizations believed that such a meeting could help promote wider interest in and research about rural school busing, but conceived their roles differently with respect to the meeting. AEL sought the help of meeting participants to create a list of researchable topics (a research agenda), whereas the Rural Trust sought to secure the commitment of researchers to conduct actual investigations of rural school busing. Everyone known by the Rural Center and the Rural Trust to be working in the field was invited to participate in the meeting, held in Columbus, Ohio, on December 15, 1998.2

This report describes

- why school transportation is an important issue in nearly all schools and districts nationwide
- observations about the silence of research on the issue of rural school busing
- the research agenda
- recommendations for using the agenda to help foster research on the topic

This report also includes, in Appendix A, the white paper on rural school busing developed by Dr. Belle Zars for the Rural Trust Policy Program, which was mailed to participants in advance of the Columbus meeting.3 Appendix B includes information about the interests of each organization in the issue, the nature of the collaboration between the two organizations, and the process and outcomes of the meeting itself and the follow-up to create a comprehensive list of research topics on the issue ("the agenda").

Though our concern here is with rural districts, we begin our report with the consideration of why this issue is not solely, or not merely, a rural issue. Then we provide

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1 The usual inquiry addresses the efficiency of the transportation system from the perspective of an LEA or SEA. For instance, in the week following the Columbus meeting, we received the report of one new study of this sort (completed for the SEA of a very rural state). The focus of the study and, hence, its recommendations was the efficiency of the transportation system statewide. Among its findings, the report noted that the SEA gathered no systematic data about the length of students' bus rides. Among its nearly 80 recommendations, however, it did not advise the SEA to gather such data. Whereas busing to achieve racial integration has received considerable scrutiny in the past, rural school busing, in which racial integration is very seldom at stake, has received almost none (from the perspective of students, families, and communities).

2 Appendix B includes a list of participants.

3 Zars, Long Rides, Tough Hides.
our recommendations for use, and possibly further development, of the agenda we have created. The agenda itself begins on page 15.

Busing: A Relevant Issue for Nearly All Schools and Districts Nationwide

Our work in creating this agenda has prompted sharp and perhaps justifiable skepticism from some of the colleagues with whom we have shared it. The typical response from those outside the rural education community is something like this: “This might be important work if anyone cared about it!” The lack of research into the influence of busing on communities, families, and children constitutes prima facie evidence that most researchers and policymakers do not care about the issue or consider it very important.

There are three key reasons for such colleagues to consider changing their minds. The first reason provided here is theoretical, but the second and third have important practical implications.

First, there is a theoretical issue. Failure to study such effects would be akin to a failure of attention among sociologists to consider the effect of the automobile on U.S. culture.

What is the relationship of school busing, to carry this analogy along, on the generic culture of U.S. schooling (i.e., why schools exist, what they feel like, who benefits most and least, in what ways, under what circumstances, and why)? Researchers have been remarkably silent on this issue, despite their deep and abiding concern for the influences of U.S. culture in general on schooling. Consider, for instance, the fact that the automobile has turned the United States into a suburban nation in many ways (e.g., institutionally, economically, politically). The way in which school transportation has (possibly) accomplished similar results in education remains uninvestigated. Is it unlikely that schools have been, in some senses, “suburbanized” as well? Does this matter? To whom? Why? The mainstream education research and policy communities have not considered the possibility.

Second, and of more practical interest among policymakers and school personnel, the particular influences of busing and length of bus rides on family life and school participation are unknown—whether schools be urban, suburban, or rural.

Michael Fox has shown, in a rural context, that hypotheses about such influences are reasonable and the effects practically significant. Fox’s Canadian study, however, was the only recently published investigation on the topic to have come to our

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4Anonymous review of a proposal to discuss the agenda at the 2000 annual meeting of the American Educational Research Association.
attention as we carried out our initial work. These influences might be as likely to be found in many urban and suburban communities, but they might manifest themselves differently or be constituted differently.5

A third reason this domain of new research ought to interest urban and suburban practitioners and policymakers is that we do not understand the possible influences of riding the bus on the school performance of students.

Who benefits from long bus rides, or rides that include long waits, transfers, travel over poor roads or mountainous terrain, mixed age groups, or similar inconveniences to riders? Who suffers? Is there no effect of putting a 7-year-old child on the bus at 6:30 a.m. and returning that child home at 4:30 p.m.—as often happens? Does it matter if the child is poor, if the child is an American Indian, or African American, or if the child lives in an affluent suburb? We do not know.

The Phenomenon of Rural School Busing

Throughout the rural parts of the United States, millions of young Americans are transported to schools, often over treacherous roads in difficult terrain (mountains, deserts), through challenging weather, or for long distances. No one knows how long the typical rural bus ride is, nor what the range of variation is.

The advent of the automobile not only remade the culture and the landscape, it contributed strongly to the consolidation of rural schools. In the 19th century, a goal of some state superintendents was to create schools within walking distance of each child. Such schools were most commonly one-teacher schools. In 1917, however, the U.S. urban population for the first time equaled the rural population. Rapid urbanization continued throughout the next five decades, and, of course, school transportation expanded dramatically

5 Or perhaps not: our ignorance of these matters is profound. This question of influences is not only of theoretical interest, of course, but could be critical to practical school improvement efforts. Parent and community participation are widely regarded as essential positive influences on school success. If families of at-risk students, for instance, confront a system of schooling that is less geographically accessible than parents of other students, their participation is likely to suffer additional threats beyond those they already face. A member of our group reports participating in an event with a high-ranking official at which the official claimed that failure to provide “late buses” had no effect on parent participation or even on the extra-curricular participation of impoverished students. “If they want to be there, they’ll get there,” was his reported comment. This sort of vantage on the life-world of families appears to be reflected, as well, in the lack of researchers’ interest on this topic. We should not, therefore, be too keen to condemn the apparent insensitivity of this official. His problem would appear to be our problem as well. See Fox, 1995.
as schools within walking distance were concurrently closed. In urban and suburban areas, schools often remained within walking distance because denser populations meant children could be collected from a smaller geographic area to fill a modern school. Since 1970, the rural-urban proportion of the nation's population has wobbled around a 25-75 percent split.

Improvements in transportation, of course, were hardly the only influence on school consolidation during the twentieth century. Expectations for schools were changing as well—just as they are still changing. In the early years of the last century, segments of the public (e.g., manufacturers) and of the profession (e.g., school administrators) sought to remake a very loosely organized system of schooling, with roots in agrarian communities, into a system that might better serve the construction of the industrialized society then emerging. In any case, concerns for a system of schooling to help create an industrial world-power also incorporated the charge to adapt millions of new immigrant children from parts of the world then considered outlandish to the requirements of such a power (i.e., southern and eastern Europe, China, and Japan).

The modern schools conceived according to such expectations were, like industrial concerns, to be professionally managed, centralized, and "scientifically" organized. Organizational changes included the employment of new kinds of specialists, the grading and sorting of pupils by such characteristics as chronological and mental age, and the overall regimentation of instruction and the standardization of curriculum. Scholarship about education, as a related field of specialization, emerged simultaneously in order to help fine-tune the emerging system on a more systematic basis than had previously been regarded as necessary. By mid-century (circa 1950) the national system of schooling was substantially different from what it had been 50 years earlier.

The rural world itself was being transformed by closely related changes. In 1900, about 60 percent of US citizens lived in rural areas, with 2/3 of rural residents living on farms. By 1950, however, 36 percent of Americans lived in rural areas, but less than ½ of rural residents were living on farms. And by 1990, about 25 percent of Americans lived in rural areas, with perhaps 1/8 of rural residents living on farms, and today the ideal of "the

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6 That is, it created the graded common school. A graded school is one in which, for instance, "tracking" and "sorting" become possible in the name of efficiency, with confirmed ill-effects among at-risk students. Thus, a logical chain of conditions links improvements in transportation to educational handicaps hypothetically imposed by such "improvements" on impoverished families, communities, and students. The issue, of course, has not been studied.

7 For details about this grand sweep of educational and industrial history see the classic works by Cremin (1980, 1961), Hobsbawm (1962), Katz (1968), and Williams (1969).
"family farm" persists in such extreme jeopardy\(^8\) that many people view it as a dying way of life.

Some astute observers have thought the declines in rural population and in farming as an occupation to be dangerous to the welfare of the nation as a whole.\(^9\) For the 2000 Census, the Bureau of the Census is dropping the long-standing distinction between rural non-farm and rural farm populations.\(^10\) While farming has been regarded as the quintessential rural calling, mechanization and industrialization have also reduced employment in mining, timbering, and fishing—other traditional rural occupations.

As small schools and small districts were rapidly consolidated and closed, generally with the aggressive intervention of the growing ranks of professional school administrators and the increasingly powerful state education agencies (SEAs), bus transport included more and more children.\(^11\) As of 1989, the U.S. maintained 32 percent of the number of schools it had maintained just 60 years previously (262,000 in 1989 as compared to 84,600 in 1929), and only 12 percent of the districts (127,000 in 1989 as compared to 15,400 in 1929). This great reduction in schools and districts took place concurrently with a 57.7 percent increase in students enrolled.

If one were to look for a likely cause of the separation of the public from its schools, as highlighted by David Matthews\(^12\) and others, then it would seem advisable to consider this historic trend toward larger schools and districts and the accompanying mass transportation of children out of their neighborhoods and communities to remotely located institutions. According to Howley,\(^13\)

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\(^8\) Strange, *Family Farming*.

\(^9\) See, for example, Berry, *What Are People For?*; Theobald, *Teaching the Commons*.

\(^10\) Practically all rural people are now classified as non-farming. The distinction no longer carries the economic meaning it once did, for although many rural residents continue to farm, their involvement carries little economic weight even in rural areas. Wendell Berry and others employ other definitions of economic value that include the *use value* of goods (gardens, wood products, animal products, etc.) for rural household economies, however, rather than their *value in trade* (as money). Sociologists (e.g., Tickamyer, 1998) study this phenomenon under the rubric of "informal economy." In this alternative sense, farming remains economically very salient in many rural areas (Logsdon, 1994; U. S. Bureau of the Census, 1987).


\(^12\) Matthews, *Is There a Public for Public Schools?*

Consolidation may also be seen to encompass not only the widespread separation of children from parents, but, indeed, the young from the watchful eyes and positive influence of adults more generally (cf., Coleman, 1961, 1988). If these understandings are even partly right, then the trend to larger units would have to be understood not as progress, but as one feature of a catastrophic social dislocation (cf., Lasch, 1991).

The “catastrophic dislocation” referred to here, of course, is not school consolidation. The dislocation refers to a history of cultural and economic development that has uprooted Americans from localized communities—communities of place. Like Paul Theobald, many observers fear that this loss constitutes a social catastrophe that harbors long-term ill for the public good of the nation as a whole.

A prevailing professional consensus holds that modern school facilities are required to house the programs and activities essential to spur the economic development that will “revitalize” rural areas and ensure the continued global pre-eminence of the U.S. economy. Others question this view. Pittman, McGinty, and Gerstl-Pepin recently found that economic development precedes improved educational attainment in rural as compared to urban states. Haas and Nachtigal have argued persuasively that only certain sorts of economic development are beneficial to rural areas. On such evidence and logic, many rural advocates conclude that the prevailing mode of schooling is not suitable to rural locales.

**Theoretical perspectives for interpreting the lack of research on school busing.** The issue of rural school busing has received surprisingly little study in the past 40 years, despite the fact that a great deal of articulate critique of the “factory model” of schooling has appeared in recent years. Although some writers have questioned the sustainability of public schooling conducted on the industrial model, and have examined many features of possible school reform, the issue of the implications of busing for rural children, families, and communities has hardly been raised. Why?

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14 Theobald, *Teaching the Commons*.


16 Haas and Nachtigal, *Place Value*.

17 Kannapel and DeYoung, “The Rural School Problem in 1999.”

18 See Appendix B for an interpretation of available research and information.

19 See, for example, Howley and Eckman, *Sustainable Small Schools*; Meier, *The Power of Their Ideas*; Theobald, *Teaching the Commons*. 

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Some of the possible answers seem self-evident. For instance, perhaps the issue is simply uninteresting and valueless, and any sensible scholar would realize this fact. On the other hand, rural people are very much concerned with lengthy bus rides and school consolidation, and research often scrutinizes unpopular or overlooked issues.

Another possible self-evident answer is based on a widespread assumption about the economics and academic importance of new construction. When school closures are specified in the planning of new construction, school boards, administrators, and SEA officials routinely affirm that the loss of smaller, more local schools is a good bargain for new facilities. The new facilities enable essential programming, more specialized instruction, and perhaps the installation of indispensable commuter networks. The necessity of increased school transportation is just a footnote to that bargain. This answer, however, returns us to the inadequacy of the previous answer—the risky supposition that a footnote to an undisputed benefit does not merit investigation. Self-evidence, it seems, is hardly an adequate yardstick for judging the worth of a research topic. Albert Einstein is reputed to have once remarked, “Problems cannot be solved at the same level of awareness that created them.”

A quite different series of answers might attribute lack of concern about the issue to the research frameworks that guide educational research. Briefly, the competing frameworks include (1) functionalism, (2) structuralism, (3) critical theory, (4) symbolic interactionism, and (5) postmodernism.

The dominant framework for education research during practically all of the twentieth century was functionalism. For the most part, and in brief, functionalism posits the existence of hypothetical relationships between measurable variables, investigations of which describe how a system or part of a system actually functions. Cause and effect relationships are a major concern of functionalist research, and findings are taken to describe the objective

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20 Spence, Long School Bus Rides.

21 See, for example, DeYoung, The Death and Life of a Rural American High School; Peshkin, The Imperfect Union.

22 Over the decades of the twentieth century, many rural schools were pushed—in just this way—incrementally further and further away from identity with any local community. In places where county-level district organization now prevails, or in other places where all the district schools are centralized in a single location, rural schools are left without any identifiable actual community to “own” them.

23 This scheme also distinguishes functionalism from structuralism, though what is referred to here as “functionalism” is often called “structural-functionalism.” Whatever one calls it, functionalism is arguably the principal methodological toolkit of “positivism,” the dominant perspective on social science since the French Revolution of 1789.
working of some part of such a system. An important assertion of functionalism is that findings will permit experts in social engineering to manipulate the systems thus described. Functionalist research methods have been typically quantitative, but research in the qualitative mode has often been conducted.

Functionalist research methods have been typically quantitative, but research in the qualitative mode has often been conducted.

Functionalism has the distinct advantage of claiming value-neutrality, a claim that seems to set it beyond the reach of partisan bias and the distortions of people embroiled in local controversy. Such claims have strong appeal to policymakers, whose main efforts put them squarely in the middle of partisanship and controversy. Functionalism presents its findings as durable and objective.

Functionalism also aims at developing a cumulative knowledge base, along scientific lines. Theories are posed, tested, and revised. Facts are reported, and validated or falsified. In the case of both theory and findings, lines of understanding and evidence emerge and predominate among researchers. A sort of scholarly momentum develops; interest in an issue breeds more interest and lack of interest breeds less interest. As policymakers devise policies based on the findings of functionalist research and subsequently fund further research along the same lines, lack of interest can eventually enforce silence on some issues.

Now, by contrast with functionalism, classical structuralism is used quite seldom in education. This framework originated most famously in anthropology, and perhaps can be seen as guiding the political economy of Karl Marx. But structuralism, like functionalism, also makes strong claims about objectivity; Marx, for instance, insisted that his method was objective and scientific. Structuralism, however, generally aims to uncover the basic features, usually hidden from view, of larger or more fundamental systems than functionalism usually treats (e.g., language, culture, psychology). School transportation systems clearly are a sort of invisible structural feature of American education.

The remaining alternative frameworks, however, make much weaker claims about objectivity than either structuralism or functionalism. They focus most often on symbols, discourse, or meanings, all of which comprise subjective projections made by individuals separately or jointly (as in "symbolic interactionism"). These theoretical frameworks do not assert generalizability (applicability of findings to a large population) and their claims about "objectivity" are weaker than those of functionalism. Extreme positions within these alternative frameworks deny the existence of an objective reality altogether. One can well understand that most policymakers would be prone to dismiss the findings of such scholarly efforts—as compared to those of functionalism—as impractical and difficult, if not suspicious.

This all-too-brief consideration of dominant and alternative research frameworks may suggest a more satisfactory series of answer to the question about the silence of education research on the topic of rural school busing (with respect to children, families, and communities).
First, the historic tendency of modern schooling has been to separate families and communities from schooling—to professionalize schooling, a process that understandably entails the comparative reduction, even removal, of lay influence. The upshot of this historic tendency is that concerns of families and communities will figure less strongly (and more obscurely) to education researchers than do the concerns of professional educators. Concerns of the lay public, in short, present themselves less forcefully than professional concerns to education researchers. So far as education research is concerned, education is practically synonymous with schooling, and the symbols of schooling—such as busing—belong not to communities, families, and children but to the enterprise of schooling.

Second, because of the increasingly wide gap separating the concerns of the ordinary lay citizen and the profession, lines of research and evidence in the functionalist mode have not been laid down. Rural opposition to twentieth-century style school reform (on the factory model) would also have placed this segment of the lay public (rural citizens) squarely in opposition to the fruits of functionalist education research as then conducted.\(^{24}\) This opposition would have constituted a further disincentive for researchers to take seriously the concerns raised. Instead, a literature on ways to overcome opposition would tend to develop, as indeed it did (through the mid-1980s).\(^{25}\)

And, finally, because the issue of rural school busing (from the perspective of children, families, and communities) won no history within the functionalist scheme, contemporary researchers have inherited little scholarly incentive to investigate it. Of course, all of this means that the usual channels for funding education research have also ignored the issue. Though no formal entity is leaning heavily upon education researchers not to investigate rural school busing, lack of researchers' interest in rural school busing cannot be attributed to laziness and ignorance, but to a system of perception and preparation with deep historical roots.

Admittedly, this series of answers has been generated out of a functionalist view of the issue: namely that the silence of education research has been generated by a system of investigation governed by certain measurable influences (variables) that have produced a more-or-less predictable result. Answers framed on the basis of critical theory or some postmodern perspective would probably differ sharply from the answers just given. This


\(^{25}\) The Library of Congress subject heading “schools–centralization” will retrieve citations to this literature in the archives of all academic libraries. The earliest entry listed appeared in 1899 and the latest in 1969. Prominent influences not appearing under this heading, however, included Ellwood Cubberley (1915); Howard Dawson (1948), and James Conant (1959). By the mid-1980s, many voices were questioning the consolidation literature; Larry Cuban (1979) was among the first to pose such questions.
discussion, however, illustrates a general point: the topics considered by education research arise not simply on account of naturally existing merit or importance, but through a tradition of investigation constructed in ways that privilege some topics and not others. In particular, in this case, the concerns of rural children, families, and communities about busing—often raised in loud protest to long bus rides and rural school closures—have not been positioned in the imagination of researchers to provoke much interest.

While seemingly predictable, this result is not inevitable. In fact, it is no longer appropriate, given present scholarly skepticism about large size and school consolidation. And most education researchers today might agree that the public interest in its own schooling (i.e., “public schooling”) persists under greater jeopardy than it did 30 or 40 years ago. The concerns of the public are, therefore, regarded as a much more salient topic of inquiry than formerly. Parent involvement has become a mantra in the past two decades, and, more recently, “community engagement” has become a recognized issue.

Surely the time has come to pay attention to the long-submerged issue of rural school busing. The issue has applicability not only in rural areas, but wherever school and district size provoke reconsideration of the former conventional wisdom. Though rural education is what we study, we invite others situated elsewhere to adapt this agenda to other contexts.

The Rural School Busing Research Agenda

The research agenda that follows is the work of 16 separate minds focused on a common interest (see participants list in Appendix B). This common interest, as it appeared to participating AEL staff members, is a mostly practical one, as the introduction to this report suggests. In this case, and unlike many practical education issues, the interest of the group was by no means limited to “what works.” Two main reasons informed this broader perspective. First, best practice with respect to the interests of children, families, and communities remains largely unconsidered, so that bases for evaluating related claims about the influence of rural school busing have not been elaborated at all. Second, the proposition that rural school busing already “works” is presumed on the basis of widespread social acceptance (or silence). Participants agreed about the need to examine this issue largely because the objections of the rural public have been so often dismissed by the education profession as uninformed exaggerations.26

The practical focus of the participant group seemed, to AEL staff participants, to lie in questions about “who benefits?” and “who suffers?” under the prevailing arrangement—in other words, the prime interest concerned fairness and equity, especially for rural children, families, and communities. These parties, participants maintained, were seldom considered

26 For example, as reported by DeYoung in The Death and Life of a Rural American High School.
and hardly ever consulted when decisions about rural school transportation were made. The appearance of this viewpoint perhaps partly can be explained by the composition of the group, because nearly all of them appreciated the issues from personal experience (as rural children and as parents of rural children) as well as from professional understanding. A different group would likely have fashioned a different agenda.

Neither AEL nor the Rural Trust Policy Program makes the claim that this agenda is value-free or neutral. On the other hand, all involved were academics or practitioner-scholars committed to legitimate scholarship, logical argument, and a fair representation of reality.

Participants seemed to believe, along the lines of Michael Fox's research, that busing in general, especially when it involves long rides, may constitute a costly intrusion into family and community life. Further, participants agreed that the degree to which children suffer long bus rides needlessly, and indeed to what ill-effects, is quite unknown. Participants seemed, as well, to agree that ongoing and sharply heightened concern is justified given the continuing consolidations in rural districts, a trend that inevitably lengthens rides.

Though the focus of the meeting and the agenda was rural school busing, participants thought the topic of busing as a social experience of American children, families, and communities had received such little scholarly attention that the agenda could easily profit many researchers who are interested in school busing, but not particularly concerned with the rural context.

Limitations of the agenda. This agenda is intended to stimulate the thinking and actions of individuals and groups who share the general concern of AEL's Rural Center, the Rural Trust, and the participants in the Columbus meeting over the lack of understanding that prevails on the issue of busing, particularly in rural communities. The “agenda,” in the sense of underlying purpose, is simply better understanding. Of course interested organizations and individuals should develop their own more focused “agendas” (organizing, focusing, or developing our list to fit their purposes). We specifically want to disavow, in any case, the notion that this agenda is a comprehensive plan for a program of research. It is comprehensive only in the sense that it includes a wide range of questions developed by everyone known to have an interest in the topic of rural school busing at this time. Indeed, the range of questions is very wide in view of how very little is known of the subject!

Several reviewers of the draft agenda advised us to focus this list, or to prioritize it, or to make it less eclectic. If more were known of the subject, those suggestions would point to useful activities. They would be essential activities if substantial funding to pursue a focused

27 Fox, “Rural School Transportation as a Daily Constraint in Student’s Lives.”

28 As in the expression, “I’m coming to this meeting with my own agenda.”
plan of research into rural school busing (or simply school busing, for that matter) were forthcoming. At this juncture, however, the authors believe that such an exercise would be "academic"—in the sense of being more or less pointless. We cannot advise a one-best program for research at this time; in fact, we doubt that such programs advance the public good, which depends on multiply articulated perspectives. Funding organizations, of course, must select from among proposals presented, the best according to some set of criteria. In actual practice, such proposals are seldom the best that might be possible under varying circumstances (e.g., different sets of criteria). In short, a number of reasons suggest that focusing the present agenda is premature, or, at least, that this sort of activity lacks the necessary context.

Nonetheless, we wish to introduce the agenda by noting that the nine rubrics (broad categories of topics) are roughly organized from the more general to the more specific, with the exception of the final rubric ("alternatives"). The agenda in its entirety is presented in the next section.

1. **History of rural school busing**

   The history of school busing has hardly been told, at least not from the perspective of the impact on rural communities. The history of rural communities, of course, is a major portion of the history of the transformations of U.S. culture in the twentieth century. In a sense, this history is the background for understanding all other questions.

2. **Politics of rural school busing**

   This rubric overlaps with the next rubric, which is more specifically focused on issues of justice. This rubric is more concerned with the political processes that determine policies and practices.

3. **Geographic justice and the spatial distribution of schools**

   This rubric relates to the U.S. pattern of "geographically zoned" common schooling, under which all the children in a particular geographic area attend a particular school (or district). This long-standing pattern is perhaps changing somewhat, but is still the dominant pattern. The placement of schools is seen as an issue of justice related to physical accessibility. This perception is actually a long-standing concern, and some of the earliest case law related to public education concerns conflicts over the placement of the school (generally it was a single building) within school districts, the issue at that time being whose children had the most difficult walk.

4. **Relationship of consolidation to rural school busing**
This rubric might be understood as very specific, rather than general, but since consolidation is a major historical process of schooling in the U.S., and since it figures as a prominent state-level policy issue both historically and currently, we have placed it at this point in the list. Doubtless rural school busing enabled consolidation and rural school consolidation has enabled rural school busing: a complex and unexplored relationship exists. The rubric, as articulated here, relates to history, politics, and justice (i.e., the preceding three rubrics).

5. **Social and cultural circumstances of rural school busing**

This rubric might be understood as a more fine-grained correlate of the preceding two rubrics. Although it contains three main questions (see next section), it is nonetheless concerned with just two principal issues, one “ideological” (what are the underlying ideas related to busing) and the other “phenomenological” (how is the phenomenon of riding the bus experienced by communities, families, and children). Concerns for the relationship of race, ethnicity, and SES would be properly investigated under this and the next two rubrics.

6. **Outcomes or correlates of schooling influenced by rural school busing**

This rubric quite specifically concerns the unique (academically related) influences, effects, results, or outcomes of rural school busing on communities, families, parents, and students.

7. **Influences of rural school busing on children’s health and safety**

This rubric is of the same sort as the preceding rubric, except that the focus is on physical (or mental) health and safety.

8. **Rural school transportation finance**

Most studies of school transportation have focused on financial efficiency. Such studies have, however, tended to ignore any social costs. This rubric includes concerns for efficiency but attempts to point toward the need to develop a broader view of transportation finance. It is nonetheless, a more narrow concern than the initial rubrics in the agenda.

9. **Alternatives to current circumstances of rural school busing**

As noted previously, this rubric circles back to more general concerns. Alternatives, the editors believe, cannot be understood without attention to educational effects, justice, and to the quality of community, family, and student life. In a sense, then, this rubric is quite specific, because lacking better information about rural school
busing, the development of appropriate alternatives is premature. Nonetheless, this rubric points up initial thinking about such possible alternatives.
The Agenda

1. History of Rural School Busing

A. How have social changes in U.S. society as a whole been reflected in the experience of rural school busing (e.g., violence on buses, mixed ages of riders, attitudinal changes)?

B. To what extent has consolidation lengthened rural school bus rides? (Where, by what means, and in concert with what other historical changes?)

C. What are the major sociopolitical and economic forces at national, state, and local levels that have contributed, directly or indirectly, to the creation of current rural school busing practices?

D. What significant reports, explanations, or passages about rural school busing exist within the rural literature (including fiction, scholarship in salient disciplines, and personal nonfiction accounts)?

2. Politics of Rural School Busing

A. Who must ride long distances (30 minutes or more each way) on buses and why?

- Who makes these decisions about length of bus routes? Who is excluded from this decision making? With what effect?

- How (i.e., according to what procedures) are decisions made?

- What role does consolidation play in forcing these decisions? What issues drive consolidation? What is the state’s role?

- What state and local policies exist on length of bus rides? How are they implemented or enforced (or to what extent are they ignored)? With what effects, and for whom?

- Who benefits when some students are bused long distances?

- Are there any transportation circumstances that excuse children from compulsory attendance under the various state laws (e.g., extremely remote or secluded residence)? How are such children schooled or transported to schools or other educational sites?

B. What political processes (formal and informal) surround decision making about rural school transportation?
• Must school districts provide transportation? What is the statutory and case law on this issue? How does it vary among states?

• What unusual rural school transportation arrangements exist? Why? With what effects, and on whom?

• To what extent have contiguous districts coordinated the delivery of transportation services to minimize bus time for rural students?

• What groups participate in rural school transportation decisions? What groups are excluded? With what effect, and for whom?

• To what extent do state rules and regulations on transportation accommodate the rural circumstance within states?

• What is the federal involvement in school transportation generally? Under what authority? With what effects for rural schools and communities?

• To what extent are all affected parties represented in rural school busing decisions?

• What contingencies create inefficiency in bus routes (e.g., the need not to cross district boundaries in completing bus routes, the need to gather even the remotest children in a district)?

3. Geographic Justice and the Spatial Distribution of Schools

A. What role does the pattern of geographically-zoned schooling (and practices and ideologies related to it) play in fostering lengthy bus rides? Does an alternative to this pattern exist elsewhere in rural parts of the developed world? At other historical periods in the U.S.? In imagination?

B. Does the geographic distribution of schools make sense in terms of the distribution of students?

• How inequitable is the distribution of schools?
• How much more do some students travel than others?
• What is the degree of variance, in terms of miles traveled? How is it best measured?

C. Does the spatial distribution of schools unfairly impact lower SES students as compared to higher SES students?

D. What long-term mechanism can be established to ensure adequate and accurate information about travel distances?
• How could data from schools be channeled, as part of a required policy, such that researchers and the general public could be kept informed of rural school busing as an issue of continuing concern?

• How would such information be most effectively disseminated to political leaders, policymakers, and citizens (so as to facilitate changes in policy and practice)? What would a rural bus travel-time report card look like?

4. Relationship of Consolidation to Rural School Busing

A. To what extent is rural school busing an issue (e.g., as raised by patrons or as formally considered by administrators and school boards) when schools and districts consolidate, merge, or are closed?

• Do certain groups oppose or favor consolidation of schools and districts based on proximity or other factors relevant to rural school transportation?

• What issues do patrons raise? With whom and with what ideological base? With what effect under what circumstances?

• What considerations do administrators or school boards engage formally? Informally? With whom and with what ideological base? With what effect, and under what circumstances?

B. Do the incentives used by SEAs to encourage consolidation include additional support for rural school transportation? To what extent? Where? How? With what effect, and on whom?

C. To what extent are funds reallocated when rural schools or districts consolidate, merge, or close? To what purposes? With what relationship to rural school transportation?

D. When schools consolidate or close at different levels (elementary, middle level, high school), what are the implications for transportation and related issues (e.g., outcomes, geographic justice, etc.)?

E. When rural elementary schools (K-4, K-6, or K-8) consolidate or close, what attention is paid to ensuring short bus rides for students (e.g., less than 20 minutes each way)?

5. Social and Cultural Circumstances of Rural School Busing

A. What ideologies of rural school busing (attitudes and beliefs implicating fundamental values, views, and commitments) do various parties hold?
• How do these ideologies influence the rural busing situation within districts and within and among states?

• To what extent, and in what ways, do these ideologies vary among patrons of a school, district, or state?

• To what extent are citizens whose children are not bused aware of the social costs of busing on others?

B. What is the experience of the rural school bus ride (particularly longer bus rides, e.g., greater than 30 or 60 minutes each way) for bus drivers, teachers, students, parents, administrators, communities?

• Who rides the bus? Are some rural groups more likely to be bused long distances? Which? Under what circumstances? Why? With what effect?

• What are the characteristics of the bus ride (e.g., road conditions, length of travel, length of wait time, bus comfort, number of riders, ages of those bused)?

• Does the SES of rural bus riders differ from those who do not ride the bus?

• To what extent do parents of bused rural children provide transportation and under what circumstances?

C. What are the social costs of rural school busing for students and families?

• What do students and families sacrifice to accommodate long rural bus rides? What coping mechanisms do they use to deal with long rural bus rides?

• In what ways are the lives of children and families involved in long rural bus rides different from those not confronting long rides (e.g., extracurricular participation, family life, peer relationships, community participation)?

• Are some groups (e.g., the poor, people of color) more likely to bear these costs? Where? Under what circumstances? With what effects?

• To what extent, where, under what circumstances, and with what effects do rural schools and districts provide transportation home after regular academic hours (late buses)?

6. Outcomes or Correlates of Schooling Influenced by Rural School Busing

A. All else equal, how do academic outcomes compare in places where bus rides are generally long (e.g., on some American Indian reservations) to such outcomes in places where bus rides are much shorter?
B. All else equal, how does length of bus ride (time or distance) relate to

- student academic achievement
- student course-taking (e.g., vocational, mathematics, etc.)
- student grades
- student extracurricular participation
- student aspirations (e.g., education, career, personal)
- student motivation
- student self-esteem
- student attendance, absenteeism, and truancy
- student high school completion (or school-leaving)
- student special education diagnoses (e.g., ADD, LD, SBD)
- student out-of-school study time
- student use of leisure time (e.g., play, recreation, reading, television, phone use)
- parent interaction with school (or disengagement from school)
- parent satisfaction with school, district, and administration
- family well-being (e.g., cohesion, stress)
- family cultural discontinuity with school
- family valuation (or ideology) of formal education (in general)
- family valuation (or ideology) of rural living
- community well-being (e.g., autonomy, integrity, identity, vitality)
- community cultural discontinuity with schooling
- community participation in curriculum and instruction
- community participation in district decision making

7. Influences of Rural School Busing on Children's Health and Safety

A. What policies exist to ensure the health and safety of rural students who are bused?

- Are rural school buses inspected carefully and well-maintained? How do we know? What policies ensure this result?

- What range of policies covers busing incidents, emergencies, or accidents (including violence, sexual harassment, and student illnesses)?

- Are rural school bus drivers adequately trained to deal effectively with emergencies (e.g., accidents, illness, breakdowns, violence)?

- What are the rules about seatbelt provision and use? Are they adequate to protect rural school bus riders?

- Are rural school bus shelters adequate? What policies ensure this result?
B. All else equal, how does length of bus ride (time or distance) relate to

- motion sickness
- fatigue-related syndromes
- eating breakfast
- securing adequate rest and sleep
- incidence of asthma or other respiratory ailments
- risk of serious injury or death
- securing sufficient exercise (e.g., playtime)
- incidence of significant psychological complaints (e.g., boredom, depression, anxiety, ADD, phobias)

C. To what extent do lengthy bus rides compound pre-existing student physical conditions (e.g., asthma, susceptibility to infections or colds) or psychological conditions (e.g., ADD, severe behavior disorders)?

8. Rural School Transportation Finance

A. What information management systems exist (federal, state, local) to track transportation costs and expenditures; how, by whom, and to what effect is this information used?

B. What management techniques maximize the efficiency of rural school transportation (e.g., contracting out, grants, parent-supplied transport) and with what probable effects on whom (e.g., students, families, communities, teachers, LEA administrators, SEA staff, legislators)?

C. What is the cost (or expenditure) structure of rural school busing?

- What financial costs (or expenditures) does rural school busing entail? What are the components of these costs (or expenditures)?

- How do states and localities measure costs (e.g., miles, road conditions, per student expenditures)? Does it make a difference? In what ways?

- How do the states' funding provisions vary for regular (as opposed to disabled) student transportation? Why? With what effect, and for whom?

- What revenue sources fund rural school busing? How does this vary among states? Why? With what effect, and for whom?

- What unusual alternatives for funding have been tried, by whom, under what circumstances, and with what results?
D. In comparison to instructional or current operating expenditures, what proportion of total expenditures does the transportation budget claim?

- What differences exist by state? Why? With what effect, and for whom?

- What differences exist by districts nationally and within states (e.g., rural vs. urban, rich vs. poor, minority vs. other communities)?

- Does the proportion claimed by transportation influence the proportion available for other purposes? Which? Why? With what effect, and for whom?

- How do the budgets of high-transportation-cost districts compare to low-transportation-cost districts (e.g., with respect to instructional expense and to the ratio of instructional to current expenditures)?

9. Alternatives to Current Circumstances of Rural School Busing

A. What practices do parents or communities use to circumvent long bus rides for their children?

B. What practices do rural schools and districts use to circumvent long bus rides for their students, improve the quality of time children must devote to lengthy bus rides, or mitigate possible adverse effects of such rides?

C. To what degree are such practices as home-schooling, alternative schools, charter schools, home-bound instruction, circuit teachers, and distance learning used as formal alternatives to long bus rides? By whom and where? To what extent? Under what circumstances? With what effect on whom?

D. To what extent is cross-district collaboration used to shorten bus rides?

E. How long a ride is too long? Why? For whom? What policies can states adopt to minimize the length of rural bus rides and to proactively prevent rides that are too long?
Pressing Questions

We offer the following suggestions for research not as a coherent program of investigation, but merely as our nomination of pressing questions that could help concerned organizations and individuals exert an immediate influence on policy and practice, if the answers were known. We have been involved with rural education research and practice for some time, we understand the rural issues related to these questions, and these questions represent our best personal judgment. We provide, as well, brief warrants for the judgments offered.

1. What is the unique influence of length of bus ride on the academic performance of low-income rural children?

*Rationale*: State-level accountability systems are sensitive to the influences on students’ achievement. The greatest improvements—and the ones easiest to secure in a school’s or district’s academic performance—are to be realized among low-income or at-risk students. If long bus rides are an impediment to the school performance of such children, policymakers and school administrators can change the relevant practices and policies to mitigate the ill effects.

2. To what extent do school busing patterns in consolidated rural high schools exclude students from participating in extracurricular activities?

*Rationale*: A long line of evidence suggests that extracurricular participation is vigorous in smaller high schools (e.g., Coladarci & Cobb, 1996). In larger high schools, fewer students participate as a structural matter (i.e., the ratio of roles to students is lower). If consolidated rural high schools do not provide late buses (as many do not) to accommodate the transportation needs of students in remote locales, the structural disadvantage of large size (with respect to participation rates) is hypothetically magnified. A related question would be: “Which students suffer the worst consequences?” Hypothetically, those who suffer the worst consequences would be low-income or otherwise “marginal” students.

3. What are the social costs of long bus rides for rural students, families, and communities?

*Rationale*: David Monk, a leading rural education researcher, has frequently observed that administrative decisions always have costs; some of these costs may be monetary, but
some costs may be borne by families and students. The reduced accessibility of the school to some families is such a cost, one that is hypothetically realized as increased private transportation costs, lost sleep, lost family time, and so forth. Fox, previously mentioned, has investigated such costs in one Quebec district, with promising results. More work, and at a larger scale, seems warranted to us.

Conclusion

This agenda is a first attempt to intuit the features of an unexamined issue. It is difficult and inherently risky work—which might well describe most research efforts.

Every field has such issues, and they are not easily discovered, since the ordinary assumptions of daily life blind us to their existence. More difficult still, however, is the work of promoting examination of such issues when discovered. Again, the difficulty concerns moving against the grain: the U.S. school transportation system is a stunning achievement. Tens of millions of children are moved in comparative safety each day. In a way, this system of transportation has itself enabled the success of compulsory schooling. Not only are more children able to attend school, the school day and year have lengthened considerably since the advent of paved roads and school systems' purchase (or use) of buses.

In this weight of tradition and success lie powers and interests to which the effects of long rides among rural children must seem, or have seemed for some time, of minor concern. No one knows how long a bus ride is too long, nor for whom and under what circumstances, nor how many children and families now tolerate such conditions in their daily routines.

Rural bus rides are perhaps becoming symbols of other pressing dilemmas that encompass the entire experience of schooling in the late twentieth century. These dilemmas are not simple ones and most people may feel them more than they understand them. The dilemmas include the alienation of school and community (at a time when their closeness is widely believed to benefit learning), the misuse of schooling to sort and segregate students (a function that undermines democratic institutions), the diminished priority of nation-building (in favor of globalization) as a function of mass education, and the decline of the local communities that might amplify identity and generate the common purpose necessary to confront the human condition. The range and nature of such questions underscore our belief that the issue of school busing is hardly one that is confined to rural areas.

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30 Fox, “Rural School Transportation.”

31 Theobald, Teaching the Commons; Kemmis, Community and the Politics of Place.
Recommendations for Applying the Agenda

This articulation of an unexamined issue in education is but a fair beginning. The articulation might be refined in a number of ways. At present, little but speculation guides insight into either methodological challenges to be confronted or the substantive themes that may emerge.

Developing initial insights. Focus groups representing students, families, and communities might provide some initial insights into the challenges of gathering data and surfacing additional issues, or elaborating issues already indicated. Indeed, such an activity might constitute a logical starting point for research before investigating the questions posed in the agenda.

Disseminating the agenda. To help stimulate research into rural school busing, AEL and the Rural Trust Policy Program are considering a variety of tactics to publicize the agenda. Among these are the following: (1) sharing the agenda with the Rural Education Special Interest Group of the American Educational Research Association (e.g., through the SIG newsletter and Web page), (2) publishing the agenda in rural education professional journals and magazines (e.g., the Journal of Research in Rural Education, The Rural Educator, School Administrator, American School Board Journal), (3) sending a news release about the agenda and the availability of this report to the newsletter editors of 20-40 organizations (e.g., National Rural Education Association; American Association of School Administrators), and, finally, (4) periodically holding a national invitational rural school busing symposium to share the experience and findings of research, to encourage additional and ongoing research efforts, to consider practical applications, and to organize further research and practice based on findings.

Applying the agenda to research. The discovery and articulation of a virtually new topic for investigation should logically be greeted warmly by members of the education research community. Many topics in education have been investigated so frequently, at such length, in such enormously varied ways, and often with such varying results that “what works” (i.e., reputed effectiveness, appropriateness, or acceptability) has often been left unresolved—usually to the frustration of beleaguered practitioners and policymakers.

We refer to such refinements as soliciting additional topics and questions, prioritizing topics, clarifying questions, and so forth. Several anonymous reviewers advised that we complete such work at this juncture. In response to these suggestions, we have reorganized topics somewhat, and performed additional copyediting in line with their comments. We still believe that prioritizing topics is unwise until the domain of knowledge and interpretation indicated by the agenda is somewhat better articulated by actual research efforts. The editors have indicated their personal preferences for immediate attention, together with brief rationales for the selection of questions.

Of course, “what works” may differ among groups, settings, and individuals such that nothing might be found to work with everyone, everywhere, and at every time.
Here is a fresh field, with many new and almost totally unexplored issues. Education professors, sociologists, geographers, and anthropologists with an interest in schooling ought to find inspiration in the questions enumerated in the agenda. Similarly, talented doctoral students should find cause for celebration. They need not look very far for a topic under the rubric of which to assert a substantively original contribution. The disadvantage for doctoral students, however, is the lack of directly relevant literature.

For both professors and doctoral students, the intellectual challenge of this agenda is the two-fold need (a) to read quite widely an as-yet unspecified relevant literature and (b) to transgress conventional wisdom (i.e., the prevailing view that school busing works equally well for everyone, everywhere, and at every time) and conduct research against the grain of this conventional wisdom.34

**Applying the agenda to practice.** It might seem to some readers that a research agenda has little bearing on practice. Three circumstances might help disabuse one of such a view, however.

First, academic research is no longer the only player on the field with an interest in the topics of “research.” For instance, non-profit organizations, journalists, and community organizers can find useful ideas in such an agenda. Second, all education research is applied research, and, in this case, the questions are specifically motivated by the unexamined conditions of practice. Third, practitioners and policymakers must increasingly evaluate their programs with an eye to their effects on students. Rural school transportation programs have not (to the knowledge of any participant in the Columbus meeting) ever been evaluated from the perspective of students, families, and communities.

The research agenda, then, can quite easily inform the work of community organizers (e.g., in participatory research activities), policymakers (e.g., simply in reflecting on the impact of busing on those most involved in it), and practitioners (e.g., in evaluating extant practice). Many of the participants—especially AEL and Rural Trust Policy Program staff—would happily confer with any LEA or SEA representatives interested in applications of the agenda to their situations.

**Using the agenda in public forums.** The agenda raises issues that figure as sufficiently weighty in communities to merit the attention of the press and the public. Education writers, in particular, are constantly searching for new story ideas. The agenda, asking largely unasked questions, harbors many such ideas.

Communities facing school closures or citizens in districts targeted for consolidation with other districts might use the agenda to inform public discussion and interaction with local administrators and state policymakers. Indeed, concerned citizens might want, in any community in which long bus rides seem to impose difficult burdens on families and children, to sponsor discussions of some of the issues raised in the agenda, including alternatives to the current situation.
Long Rides, Tough Hides: Enduring Long School Bus Rides
Belle Zars

If Shirley K., a mother in Yaak, Montana, decides to keep her children in public school next year, she will load her boys into the car before 6:30 a.m. and drive for an hour to the ranger station to meet the bus that will take her older child to Troy High School. Once on the bus, her son will get to school in about 1.5 hours: school begins at 8:30. From the ranger station, Shirley will go back to Yaak and drop off her younger child at the two-room elementary school, also by 8:30. In the late afternoon she and her children will repeat the journey. "This is a real hardship for families," she said. "I see kids who are exhausted."

Back before the district trimmed the route and decided not to go all the way into Yaak to pick up the high school students, Shirley rode the school bus from the turnaround at the Yaak school to the ranger station where she worked. "The kids were shot," she said. "They slept all the way."

Her options are few, and expensive. She can board her older son in town. But who to trust? "A 16-year-old needs parental guidance. Kids can get into trouble in town," she says. The district will pay $8 a day, but that won't cover expenses. She can move into town herself. "Finally," she says, "I had to balance the value of Troy High School: We realized that Troy does not equal the value of his father."

The Extent of Busing

Busing began as the carrot to the school consolidation stick. Transporting pupils was a concession to make school closure and district consolidation palatable. Later, busing became the tool to achieve the social goal of racially integrated schools. The busing system became increasingly extensive and pervasive: The rides got longer and longer.

Today in the United States, 60 percent of all school children ride a school bus to and from school. It's a system of overwhelming magnitude. Twenty-three million children ride in 400,000 school buses that log over 21 million miles every day. The annual cost of the system is over $10 billion. Before busing for school desegregation began in earnest, and back when most urban children walked to school, buses traveled 2.2 billion miles per year. Now they travel 3.8 billion miles per year. Although the numbers are not broken out for the very different purposes of busing, a good estimate would suggest that busing in rural areas today comprises at least 75 percent of the total miles.

In the Chinle School District in rural Arizona on the Navajo Reservation, 73 buses travel over a million miles each year transporting 4,200 students. Not far away in Monument Valley, high school students travel on the bus for 3 hours each way; children who attend Navajo Elementary in Blanding, Utah, travel for 2 hours and 15 minutes to get to and from
school—a total of 4.5 hours on the bus every day. Paul Platero, a researcher with the Dine Department of Education, remembers riding the bus with children who were leaning out into the aisles asleep. "We would shake the kids awake: 'Your mom is waiting outside,' and get the kids off the bus."

The Roots of Busing

In the rural South, school busing came with school consolidation in the early 1900s and was slightly expanded during the late 1960s and early 1970s as part of the effort to equalize funding and desegregate schools. Prior to desegregation there were situations in the South where two buses traveled a route because it was unacceptable for whites and African Americans to ride the same bus together. In other situations, because schools that served African American children were funded at levels far below those of their white counterparts, it was not uncommon for a school bus to pick up white children and drive by African American children walking to an adjacent school. In one commentator's mind, busing was the "red scare issue" of the civil rights movement (Mills, 1973). It became the rallying cry to prevent integration and a huge amount of time and energy was spent trying to prove that busing was a financial burden, bad for children, against tradition, and contradictory to the values of a neighborhood/community school. The topic of debate became busing, rather than the value of children attending school together.

Despite the notoriety of busing around desegregation issues, the primary reason for busing children is school consolidation. Thirty-one states passed laws to consolidate schools and soon after passed laws allowing public money to be used to transport students. In another 14 states, consolidation and pupil transportation laws passed simultaneously. Closing schools was the goal; busing students to centralized schools was the tool, and a part of the package for the communities who were losing their schools and where students could no longer reasonably walk to school (Mills, 1973).

Tucker County, West Virginia, and Routt County, Colorado, are two typical cases. In Tucker County in the 1920s there were at least 12 elementary schools and 4 high schools. There was virtually no transportation of pupils at public expense. Today Tucker County has one high school, one K-8 school, and one K-4 school. The high school and the elementary/middle school are situated in the middle of the county, far from any town or settlement. Every student in the county now rides a bus to school. The school board employs 20 bus drivers, a mechanic, and a bus superintendent to operate the system. Students in the settlement of Turkey Run, in the southeastern corner of the district, get on a bus at 6:30 a.m., change buses at Parsons, and arrive at the high school at 8:10 a.m. The average bus ride for all K-12 students is 45 minutes. Every year sudden storms cause school to be dismissed early and the buses hurry to get children to their homes. There is no second bus or provision for students from these areas to participate in extracurricular activities.
In Routt County, Colorado, the story is very similar. In the early 1900s, and in some areas surviving into the 1950s, there were elementary schools in every corner of the county—over 45 in all. Everyone walked or skied to school. Occasionally, in some of the districts parents would transport children on horse-drawn wagons or sleds. In the 1930s some of these parents were reimbursed by the district for bringing in children from more distant ranches and homesteads. In 1920 the push for consolidation began and today there are only 3 high schools and 4 elementary schools in the 2,300-square-mile county. Nearly everyone rides the bus to school unless they happen to live in one of the three towns where the remaining schools are located. Students in the Elkhead area who used to walk a mile to a K-12 school now take the bus for just under 2 hours each way to reach elementary and high school. Many families found the long distances to school untenable. After losing ground economically, the loss of their schools and the prospect of long bus rides was the last straw. Nearly all the families in the Elkhead area moved away after the nearby schools closed.

Research on Busing

Whether through benign neglect or a desire to stay away from hot topics, research on busing virtually stopped in the early 1970s. The last study to look at the effects of long bus rides on student achievement is quick to give an introductory caveat: "None of the students in the sample was being bused to achieve racial balance, so the results should provide insights into the influence of busing per se without the statistically confounding effect of currently emotional issues" (Lu & Tweeten, 1973). No researcher wanted to wade into a situation where the work could be used indirectly to promote or quash school desegregation. In the late 1960s Allen Zetler at Western Montana University wrote his dissertation on school buses and their effect on student success. He studied 812 rural Montana children and found that they "accommodated very well" to long bus rides and had the same rates of success in school as their short ride peers. He did not consider family background or socioeconomic status. Nor did he have a control group of similar students who were not riding the bus. Lu and Tweeten studied 440 bused and nonbused students in rural Oklahoma. They found that the longer the bus ride the lower the composite achievement score. However, like Zetler, they did not consider socioeconomic status of the children and their conclusions are no more definitive than Zetler's.

In Canada and Australia two researchers have looked into the costs and consequences of long bus rides. In a novel approach, Mark Witham, an Australian economist, computes the costs of closing schools and busing children to a central location. He poses the question: What is children's time worth? If we plan for them to ride the bus for 2-3 hours every day to save the money that would have been spent on the local school, how much do we imply their time is worth? He proposes calculating the number of hours of "lost opportunity time" that children spend on the bus each year and dividing it into the anticipated savings from school closure. He concludes that the resulting low wages "could be considered exploitation of children's time" (Witham, 1997).
Michael Fox, a Canadian geographer, tried another approach to understanding the effects of busing. He asked students and their family members how they would spend their time if bus rides were shortened. He found that "time on the bus is considered to be empty time, with few possible activities to engage in." Students said they would sleep, engage in social and recreational activities, and work if they had more time. Families reported constraints on their time as they try to meet the demanding school bus schedule. According to Fox, the data indicate that "as time on the bus increases, students participate in fewer non-essential activities (those activities other than sleep, personal care, school, and the bus ride). . . . The individuals with large average times on a bus report lower grades and poorer levels of fitness, fewer social activities and poor study habits. The universal complaint by all students is the loss of choice in activities and the overall loss of sleep-time" (Fox, 1996).

**How States Track Busing**

Although every school administrator and transportation coordinator I spoke with expressed concern about the costs—both financial and human—of the present system, none had examined the effects of busing on children and families or had looked for correlation of school achievement, parent participation, dropout rates, or attendance with the length of the bus rides.

At the state level, with millions of dollars every year being spent to bus children, one would suppose that someone would look into the consequences of such a massive outlay of resources. I have not yet found any state reports or documents that seriously consider the effects of busing on schools, children, or families. Most of the states' efforts concentrate on costs and efficiency of buses alone. Buses and miles driven are their units of measurement.

In Texas, a state with a $300 million school busing budget, one transportation director and his secretary oversee the entire program. Texas does not keep track of the actual bus routes and no one documents the longest bus rides or miles driven. As in many states, the State Board of Education recommends no more than an hour ride for students, but that recommendation is widely known to be overlooked. Montana, a state with vast distances to consider, has a slightly more sophisticated system. The state made an effort to keep small schools with fewer than 10 students by guaranteeing them at least one teacher—but that was rescinded a few years ago. Families are currently reimbursed for transporting children to school if they live more than 3 miles from the school or bus stop. In some situations where families board their children in town, Montana provides $8 a day for the first child and $5 a day for each additional child to cover the costs of lodging and care. At one time Montana built and operated dormitories for students who lived a long way from school, but these have since been abandoned.
Busing and Safety

Statistics on school buses tend to focus on the health of the buses rather than the health of the students who ride them. What statistics are gathered focus on tragic accidents and very narrowly discuss the issue of safety. On average, 41 children die each year in school-bus-related accidents. About three fourths of them are hit by the bus while they are either entering or leaving. Far more people are killed by school buses while they drive in their passenger cars. In the last 10 years, an average of 250 people a year were killed in collisions with school buses.

This focus on bus safety has led to important changes in bus design but no reduction in the number of miles ridden. Buses have been redesigned so that they don't collapse easily and students have been taught many lessons on how to avoid getting hit by a bus at the bus stop. There has been some debate over whether children should wear seat belts while riding school buses, but most recently the opinion of the Transportation Department is that seat belts are not an effective use of dollars and that more lives could be saved by teaching children safe behavior in and around buses.

School bus drivers now have to be licensed commercial drivers and many states require regular drug and alcohol testing. Unfortunately, poorer districts have not been able to purchase newer, safer buses and many districts are plagued by poorly supervised and unprofessional bus drivers. In rural Alabama, stories abound of buses breaking down and children walking or hitchhiking home. Children wait without the protection of shelters for buses that never arrive in the morning. And, of course, everywhere there is a plethora of stories about sex, sexual harassment, fires, and violent fights on school buses. Obviously, bus drivers are not in a position to effectively supervise children while they are driving. Nor are they typically trained in classroom management strategies. In Round Top, Arizona, where 85 percent of the district's roads are dirt and the rides are up to 80 miles each way, the superintendent reported seat covers ripped off, vandalism, harassment of younger children by older children, and perennial fights. "It is a rare bus driver that can control 30 kids for 2 hours in a confined space," he said. "The long rides are harmful to kids: they are physically demanding. It's down time."

In many districts the response has been a system of punishment for infractions on the bus. Tonasket, Washington, is one example of a typical response to out-of-control situations on the bus. At the beginning of the year a note outlining the rules on the bus goes home to be signed by the parents and the child. On the first reported infraction the child is verbally warned, on the second a note goes home; the third and fourth incidents bring suspensions of 5 and 10 days respectively; on the next infraction the child is suspended from the bus for the remainder of the semester, or the year. One Texas district with a similar system reported suspending 3 students from the bus for the year during the first weeks of school. The students had no alternative transportation and, though technically they dropped out, they were effectively expelled.
Busing and Health

Health issues have not been explored. In some ways it is ironic that the biggest feeding program in the country—the federal free and reduced breakfast and lunch program—has thoroughly documented the need for children to have healthy meals both before and during school, yet no one has investigated the effect of bus riding on children's eating habits. According to the families I spoke with, most children skip breakfast. Food and drink are not allowed on the bus. Many ride to school slightly nauseous and if breakfast is offered, turn away. One grown man reported throwing up on the bus all through his school years.

A second health issue is going to the bathroom. Unlike most commercial buses, school buses don't have toilets. For students with rides over 30 minutes and through remote countryside, there is little if any opportunity to go to the bathroom. A few years ago a 35-mile bus run was abruptly interrupted on Interstate 40 when Navajo children traveling between Albuquerque and Canoncito had a "group reaction" to something eaten at school. The driver had to stop and allow the sick children to take care of themselves along the highway.

What is the effect of spending so many hours in a young life riding on a bus? Children, whose lively little bodies have been sitting in school all day, are also sitting for hours on a bus. This is not time when they can stand up, run, play, or otherwise exercise. One source speculated that long rides contribute to overweight and obese students. By the time they get home the playing part of the day is likely over. Students report getting on the bus in the dark and getting off the bus in the dark, especially in areas with long northern winters. Time on the bus is time lost.

Students traveling long distances on unimproved roads report asthmatic and allergic reactions from the dust and diesel fumes, but these complaints have never been documented or verified. Students also complain about the lack of heating and cooling when riding buses in extreme temperatures. Children in Montana are not asked to ride the bus when temperatures drop below minus 20. Children in Texas are expected to ride the bus even when temperatures are over 100. In Terlingua, Texas, in the Chihuahuan desert, students rode the bus 80 miles each way to high school in Alpine from the pick-up point at the elementary school. Travel to the elementary school varied from a few minutes to over 30 minutes on dirt roads. High school attendance was rare. Students typically tried it for a year and then quit.

In Sharples, West Virginia, when the state decided to close the local middle and high school and bus children over the mountain to schools in Chapmanville, students prepared for a 40-minute ride in good weather, over an hour in bad weather. They brought pillows on the bus and tried to sleep. The state immediately said that pillows were a hazard and forbade them on the bus.
Community Response

Children and their parents react to these conditions in subtle and direct ways. To the irritation of school administrators, parents often choose to keep their children at home rather than risk a bus ride. An example given was of a child not feeling well in the morning. If the school was nearby, the parent would probably send the child to school and know that, if they got worse or failed to get better, the school could send the child home. A child with a long bus ride doesn't have that option. Another common coping strategy is to provide a newly licensed young person with a car to drive to school. Most rural high schools can report an enormous increase in the number of students who drive themselves, their friends, and younger siblings to school. No one has calculated the miles that teens are driving when they could be riding the school bus, but this is a common concession to keep a disgruntled, tired-of-riding-the-bus student in school.

Among the avalanche of school closures in rural areas, there are a few schools that have been left open, or even built new, to prevent or alleviate the hardship of long bus rides. In West Virginia, where school closure has been a priority of the state department of education and the governor for the past 10 years, Pickens K-12 school is the only school that has won a closure fight. The turning point in the decision was busing. State school board members themselves drove the single-lane gravel mountain road that students would take to the proposed consolidated school. They returned to Charleston and voted against the closure, admitting that the road was dangerous and saying they did not want a school bus crash on their conscience.

For the past 100 years, Terlingua, Texas, had a K-8 school and its high school students took the bus to Alpine over 80 miles away. Last year, after a massive effort at private fund raising, Terlingua and neighboring San Vicente district built a modest five-room high school. The school board and parents cite the long bus ride as the cause of the incredibly high dropout rate of Terlingua students and the determining factor in the decision to build a high school.

Until recently, students from Navajo Mountain in southern Utah rode the bus to Blanding—a ride on mostly unimproved roads that took over 2 hours each way. In the 1970s and again in 1997, the Navajo Nation Tribal Council successfully sued the San Juan School District and forced the district to build an elementary school in the Navajo Mountain area and a high school in Monument Valley. Navajo leaders used civil rights law to protest the unequal treatment of their children who were suffering from the long rides to school.

Each of these cases is an exception and each school stands alone in defiance of the prevailing policies in its state. No one has carefully considered the effects of busing in extreme cases like Pickens, Terlingua, and Navajo Mountain, where the fight has been won by community people, school personnel, parents, and students operating from their own common sense and direct experience.
What Research Should Examine

There are three enormous questions about school busing in rural areas that rest undisturbed by research:

1. What is the impact of long bus rides (over 30 minutes each way) on children's success in school? Within that question lies a whole set of questions about whether children are tired at school when they ride a bus for a couple of hours, whether their ability to get their homework done is lessened, and whether they can participate in important extracurricular activities. We don't know what riding a bus for 1-6 hours a day, 180 days a year for 12 years does to a child's overall health and well-being. Perhaps the effects are greater on some children than others and, if so, who is most affected? Recent research documents the importance of parents in children's school success, but we have no idea whether parents who live, for example, 80 miles from the elementary school are less able to participate in school activities and form a relationship with their child's teacher.

2. What is the effect of long bus rides on families? School busing has come to be seen as a necessary component of schooling in rural areas, hence the school day extends to nearly 12 hours for some children. What are the gains and losses to family life and well-being? What contributions do the students make and fail to make to the family economy? In what ways do families share the financial burdens of long bus rides (for example, by transporting students to bus terminuses and bus stops, and providing vehicles for older students to drive)?

3. What are the true costs of long bus rides to school districts? Very little information is available on the actual cost of the school bus system either at the school, district, or state level. Many districts float bonds to buy school buses, thereby adding to their indebtedness and possibly diminishing the chances of other capital improvements. County road departments improve and maintain roads where school buses travel. County boards and state insurance funds absorb the costs of accidents, lawsuits, and penalties. As mentioned above, parents often contribute directly to the costs of transporting students.

Conclusion

Initially driven by school consolidation and later augmented by the mandate to desegregate, school busing systems have grown monumentally all over the United States. Busing policy choices have been made and expanded without regard to the impact on the central enterprise of schools—student learning. Anecdotes abound and nearly everyone who has ridden a school bus has an opinion and a story to tell. But research on school busing in this country is scarce and, where it exists, insubstantial.

Whether a child rides a bus to school to promote desegregation, because the school that used to be nearby has closed, or simply because he or she lives in a sparsely populated
area, we need to understand the true cost of that ride to the student, the family, and the school system. How far is too far? That question touches every bus-riding student whatever the cause of his or her long ride. If we knew more about the effects of busing we might make better choices about closing, maintaining, or opening new schools in rural areas. Riding the bus should not be a 12-year task that children endure, but one that makes sense as an integral part of their successful and full education.


Notes

Information on Alan Zetler's work is from a telephone interview during which he summarized his dissertation research and subsequent work. See also Thibeault, R.J., Zetler, A.G., & Wilson, A. (1977). The achievement of bus transported pupils. *Journal of Teaching and Learning 2*(3), 17-22.


More than 25 interviews with rural school parents, principals, district transportation directors, superintendents, and state transportation directors provided the anecdotal stories in this report. These interviews were conducted between June 1997 and June 1998.

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For more information on this or other rural education issues, please contact the Rural Trust Policy Program, P.O. Box 68, Randolph, VT 05060; 802-728-5299; www.ruraledu.org.
Background on this Collaboration

AEL's Rural Education Specialty Area and the Rural Trust Policy Program have both common and differing interests that informed this collaborative effort to stimulate study of rural school transportation. Whereas AEL is a nonprofit research and development organization, the Rural Trust and particularly its Policy Program have in view, among other goals, activities to influence policy directly. AEL generally limits its policy work to indirect methods of influence—conducting applied research, synthesizing and disseminating research findings, developing research-based interventions, examining the alternatives of education policy choices, and sponsoring a wide range of collaborations (such as, in the present case, with the Rural Trust) to convene, on politically neutral turf, various audiences in consideration of timely education issues.

The Rural Trust Policy Program seeks to understand complex issues affecting rural schools and communities, to inform the public debate over rural education policy, and to help rural communities act on education policy issues affecting them. The Rural Trust Policy Program poses questions not usually addressed in current public policy debate:

What should be the goals of education?
Who should speak for community in decisions about public schools?
How can young people learn to live well in any place they choose?
What policies will help schools and communities flourish together?

The Policy Program is part of a national effort by the Rural Trust to change public education by strengthening the ties between rural schools and their communities. The Trust works with schools and communities across the country to create education that is rooted in the culture, community, and ecology of rural places. Creating this kind of curriculum and education practice is viewed as an important part of the revitalization of rural communities and the creation of sustainable rural economies.

AEL's Rural Education Specialty Area seeks to articulate a similar vision of rural education as integral with community. "Student Success" is a focus in this work, which includes describing effective rural learning environments as well as developing strategies, models, and general approaches to facilitate education reform efforts that will support rural revitalization and development. "Policy Challenges" figures among the five themes that AEL adopted as relevant to its collaborative rural work (the other themes are Sense of Place, Small-Scale Organization, Pathways to Adulthood, Unsettling America).

The Current Collaboration

AEL and the Rural Trust have collaborated on a number of projects for many years. In this instance, staff from both AEL and the Rural Trust agreed that very little was known
about rural school busing from the perspective of the people most affected by it (i.e.,
students, families, and communities). They agreed, further, that so little was known about
rural school busing in this light that any sort of policy work addressing the topic (direct or
indirect) was stymied by lack of reliable and representative information. This agreement
formed the basis of the collaboration that has led to this report.

The Rural Trust was most interested to encourage immediate research to develop
information for use in its policy and organizing work. AEL was most interested to develop a
research agenda to which education scholars and education policy analysts could turn in
future months and years for guidance in possible studies of rural school busing (from the
perspective of students, families, and communities). Staff of both organizations agreed that
their aims could be accommodated in a single meeting of interested parties (scholars and
others who might be helpful in defining the pertinent research issues from the perspective of
students, families, and communities). The two organizations agreed to divide the cost of this
meeting between them. Planning for the meeting began during the summer of 1998.

The meeting was organized by the Rural Trust with assistance from AEL to identify
participants and design the day's activities. Dr. Mary Hughes, editor of the Journal of
Education Finance, expressed interest in a possible theme issue devoted to rural school
busing and also nominated participants.

Sixteen participants attended the meeting in Columbus, Ohio, on December 15, 1998,
to advise the Rural Trust and begin development of the more comprehensively conceived
research agenda. Participants included university researchers, two doctoral candidates
completing dissertations, community organizers, and representatives of the sponsoring
organizations (see the end of this Appendix for the participant list).

The session started with participants describing their relevant work and interests in
this project. Marty Strange of the Rural Trust told of his strong interest in the effect of
busing on rural kids and how it impacts their academic achievement, participation in school
activities, health, dropout rate, and their family lives. He proposed to get the information into
the hands of people to make wise decisions.

Participants began with a discussion of concerns, proceeded to consider a topical
organization of research questions (this consideration was to serve later as the starting point
for creating the comprehensive agenda), and focused rather quickly on four study domains (a
mixture of methodological approaches and research interests: state and national studies,
district-level studies, historical studies, and spatial equity). Participants self-selected to form
groups charged with sketching possible studies within each domain. Each group answered
the following questions to generate its sketch: What are the issues, who is interested in the
topic, what methodologies are suitable, what are the data needs, what are the budget
implications, and in what venues should findings be disseminated.
The meeting concluded with a report from each group about a range of possible studies (e.g., the state and national group recommended five separate studies). AEL staff also (a) enlisted the participants to continue elaborating the topical approach initially begun during the meeting and (b) made the commitment to lead to development of a more comprehensive list of research topics. Everyone present agreed to participate in the effort via e-mail.

Creating the Comprehensive Research Agenda

Participants saw the Columbus meeting partly as a chance to sketch a variety of applied research ideas that might be of immediate use to the Policy Program of the Rural Trust. In fact, in the days and weeks immediately after the meeting, the Rural Trust Policy Program began working with several individuals and groups to begin studies on several of the topics outlined in Columbus. Participants also understood that AEL would help evolve their initial efforts toward a more comprehensive collection of researchable topics and related questions.

Completion of a “research agenda” seemed particularly pressing following the meeting, where our discussions were very lively and generated a number of sets of roughly outlined research scenarios. In addition to being a probable touchstone for future work by other groups and individuals, an agenda created by the group might also enjoy the likely status of serving as a starting point for the Rural Trust’s ongoing effort to stimulate research on the topics listed.

First steps. Meeting participants, as noted previously, shared their e-mail addresses and agreed to continue discussing the issues, under AEL’s leadership, after returning to their homes. AEL circulated a list of organizing rubrics that had been generated at the outset of the Columbus meeting. In Columbus, participants quickly moved from these general topics to more specific study ideas. After the meeting, however, ample time was available to further consider the rubrics as a framework for organizing narrower, researchable questions. The initial list, as proposed in the first e-mail message to the group in late December 1998, follows:

Finance
Politics
Social and Cultural Factors
Historical Context
Outcomes
Health and Safety
Reactions from participants arrived quickly and precipitated the following synthesis of their comments, which met with the subsequent approval of the e-mail group.\textsuperscript{35}

1. Rural School Transportation Finance
2. Politics of Rural School Busing
3. Social and Cultural Circumstances of Rural School Busing
4. History of Rural School Busing
5. Outcomes of Schooling Influenced by Rural School Busing (e.g., child, family, community)
6. Influences of Rural School Busing on Children's Health and Safety
7. Psychological Dimensions of Rural School Busing
8. Alternatives to Current Circumstances of Rural School Busing (practice, policy, theorizing)

With the Columbus discussions still fresh in everyone's minds, there was rapid consensus on the topics and, in replies, an apparent eagerness and even impatience to get on with the task of defining specific questions.

**Subsequent elaborations.** This phase of the work took the group to the more challenging task of \textit{elaborating the agenda}. Lengthy responses came in slowly, one at a time, over the course of several weeks. Near the end of January, 1999, additional prompts elicited further submissions from the group. Among the outcomes was the suggestion to combine questions from the psychological rubric under outcomes and the suggestion to add a rubric for \textit{geographic justice}.\textsuperscript{36}

AEL staff reviewed all input from participants with an eye to two principles, first to represent every suggestion offered in the completed agenda, and second, to minimize redundancy. Inevitably and naturally, participants offered redundant questions, and though some of these were combined, others offered nuances that influenced the wording of the final items. Most often, however, submissions that seemed to be redundant prompted the creation of multiple items suggesting different perspectives on the same issue.

**Final steps.** Once the draft synthesis was complete, it was circulated to all participants. A few minor modifications were suggested and adopted, but messages from

\textsuperscript{35} The e-mail group included \textit{all} participants—none lacked this form of communication.

\textsuperscript{36} "Geographic justice" was nominated by Emily Talen, a geographer. The term refers, in this instance, to the advantages and disadvantages—with respect to school transportation—of residence in certain locales. More broadly, the concept indicates an intolerance for a distribution of services—including health care, banking, education, and more—that systematically disadvantages groups or individuals based on the location of their residence. Talen's idea received wide support from participants.
individual participants indicated that the draft represented the group's best thinking. The agenda itself was completed, except for subsequent copy editing and fine-tuning, by mid-February 1999. The draft report was completed at the end of March 1999. External reviews of the draft were received by AEL in the summer of 1999. First revisions were completed in early March 2000, with final revisions, following AEL internal quality control review, occurring in August and September 2000.

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