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Planning for Schools in Michigan:

Local School Board Decisionmaking on School Renovation, New School Construction, and School Siting

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Summary

There is a growing debate across Michigan and the U.S. about the relationships between new school construction and community growth. Oft-stated concerns are that the siting of new schools in undeveloped or "exurban" locations is contributing to sprawl and that school boards are not addressing this consideration adequately when making school construction and siting decisions. Based on a pair of surveys of school district superintendents and local government officials in Michigan, this study was designed to test a number of commonly made assertions about factors influencing school board decisionmaking. Key study findings include the following:

- Roughly half of the 552 public school districts across the state have undertaken some type of major facilities improvement initiative—defined as a major technology improvement project, major renovation project, and/or new school construction project—between 1999 and 2004.
- Of the initiatives reported by survey respondents, about half were renovation projects and about one-quarter were new school construction projects. Of those new schools, more than half were sited in urban locations or at existing school sites, while fewer than one-fifth were sited in exurban locations.
- In general, the factors that most influenced school district officials' decisionmaking in districts that decided to *undertake an initiative* were the following: a sense of need to stay competitive with surrounding school districts for student enrollments; facilities issues like overcrowding, aging, or the need for consolidation; financial considerations; and a sense that the school district's mission would be best served by the initiative. Consultants' recommendations were moderately influential.
- School officials consulted with local government officials on about half of the initiatives undertaken. When they did so, local government officials' comments had little apparent influence on school board decisionmaking.
- When contemplating whether to renovate or relocate existing schools, the most influential considerations were school officials' and community preferences, state building and renovation codes (generally perceived to favor new construction over renovation), financial issues, and site issues (availability of sites and need for space).
- Contrary to common expectations, there is also some evidence that school officials' review of local plans, and possibly the use of public participation during the final stages of the decisionmaking process, were associated with an increased likelihood that the school board decided to relocate rather than renovate.
- For school districts that constructed new schools, the only factor significantly associated with an increased likelihood that the new school was constructed on an exurban site rather than an urban-fringe or urban site was that the site ultimately chosen was offered to the school district at a good price.

These and other findings are discussed more thoroughly in this report, followed by several general research conclusions.



OVERVIEW

On-going low density suburbanization, often referred to as "sprawl," is a topic of great interest across Michigan and the U.S. Growing concerns about both the causes and consequences of sprawl have in turn prompted considerable research. One aspect of this debate pertains to the relationship between the siting of new schools and the phenomenon of sprawl. There appears to be a broad consensus that school districts are increasingly deciding to relocate new school facilities to exurban sites rather than renovating their existing urban facilities. Having been relocated, these new schools then draw new residential development out to them as parents with school-aged children follow. In other words, the concern

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is that these school relocation decisions are a major driving force behind sprawl.

The current literature on this topic suggests that the phenomenon of "schools and sprawl" is substantial. Moreover, analysts commonly assert that local school boards need to do a better job of planning for their school renovation and new school construction projects in terms of consulting with local officials and local master plans in order to evaluate and address the potential for impacts on community growth and development from their projects. Given a lack of systematic empirical study, however, it is not very clear how extensive the phenomenon of school relocation and corresponding new exurban construction really is. Nor is it very clear what considerations are motivating local school boards in their school facilities decisionmaking more generally, let alone with regard to community growth and development issues specifically.

This report describes a study that addresses school district decisionmaking on school renovation and new school construction across the state of Michigan. The study was designed to determine the extent to which school facilities improvements have actually been occurring statewide and then to characterize the factors

that are most important to school officials in deciding what kinds of facilities improvements to undertake. The various factors addressed were drawn from the current literature on "schools and sprawl," including recent studies undertaken in Michigan. The study focuses especially on the extent to which school officials consult with local government officials and consider land use and growth issues when making their decisions.

METHODS

The study consists primarily of a pair of web-based surveys conducted in early 2005, including one of Michigan school districts and a second of public officials in local communities served by those school districts. The

first survey was targeted to a random selection of 250 school district superintendents, representing 45 percent of the 552 public "local educational agency" school districts across the state. For the second survey, a subset of 100 of those school districts was selected and the key local administrator (e.g., the city manager or township supervisor) for the largest or most central local

visor) for the largest or most central local jurisdiction served by each was identified and contacted. Data were also obtained from the Michigan State Department of Treasury on the numbers and types of school bond initiatives proposed across the state between 1996 and 2003. Of the 250 superintendents contacted, 123 responded to the survey request (about 50% of the sample), 45 of whom (about 37% of the respondents) indicated that the school district had not undertaken an initiative. Sixty-nine superintendents (about 56% of the respondents) indicated that the school district had undertaken an initiative and completed

the full survey. Completed survey responses were also received from 28 local government officials, 18 of whom represented localities for which the corresponding superintendent had responded.

Each survey respondent was asked initially to indicate whether his or her school district had actually undertaken a "school facilities improvement initiative"—defined specifically as a major technology improvement project, other major renovation project, or new school construction project—between 1999 and 2004. Respondents were then asked several questions about the kinds of facilities improvement initiatives undertaken and the sources of funding used; a series of more general questions about the school board's decisionmaking process; questions on whether the school board had contemplated renovating or relocating a school and what considerations influenced that decision; questions on where the school board decided to construct a new school and what considerations influenced that decision; and finally a series of questions about the extent to which school officials consulted with local government officials and the degree to which local officials' and citizens' comments influenced the board.

FINDINGS

FACILITIES IMPROVEMENT ACTIVITIES

There proved to be no significant correlation between the Michigan Treasury Department data and superintendent responses in terms of whether a school district had actually undertaken an initiative, primarily because of

About the Author

Richard K. Norton is Assistant Professor in the Urban and Regional Planning program at the University of Michigan's Taubman College of Architecture and Urban Planning, and serves as Faculty Coordinator for the Land Use and Environmental Planning concentration. He is also a Faculty Associate with the University of Michigan's Program in the Environment. Professor Norton earned his Ph.D. in City and Regional Planning and his J.D. with honors at the University of North Carolina at Chapel Hill. He also holds Masters Degrees in Public Policy Studies and Environmental Management from Duke University. Dr. Norton teaches and conducts research in the areas of sustainable development, environmental planning, and planning law. He is interested in local governance for land use and development management, particularly as it relates to the theory and practice of urban and regional planning for sustainable development. Prior to completing his graduate studies, he worked in professional practice as a consulting environmental policy analyst and planner in Washington, D.C., and San Francisco, California.



Table 1. School improvement projects, 2005 superintendents survey

	Type of Facilities Improvement Initiative			
Type of Facility	Technology Improvements	Other Major Renovations	New School Construction	Total
High School	27	37	16	80
Junior High	32	35	11	78
Elementary School	33	44	13	90
K-12 School	9	12	3	24
Combined ¹	2	4	6	12
Athletic Facilities ²	2	27	13	42
Non-Academic ³	3	7	14	24
Other	2	6	7	15
Total	110	172	83	365

Notes:

- 1. "Combined" refers to combined regular and magnet school projects, etc.
- 2. "Athletic facilities" includes fields, phys-ed facilities, playgrounds, etc.
- 3. "Non-academic" includes theaters, administration buildings, etc.

instances where a superintendent reported an initiative but that initiative was not recorded in the state database (48 cases). In eight cases the state database indicated that an initiative had been undertaken while the superintendent reported that it had not, two of which were cases where the superintendent indicated that a bond initiative had failed. Thus, based first on the superintendent responses, and then on the state data for cases where the superintendent did not respond, it appears that about 114 of the 250 school districts sampled undertook some type of facilities improvement initiative between 1999 and 2004.

Recognizing the disparity between these two data sources, there was no evidence in the data to suggest a clear bias in superintendent responses, although it is reasonable to assume that a superintendent with a district that had undertaken an initiative was somewhat more likely to respond to the survey request. Given that, and because the sample of superintendents was randomly drawn, extrapolating from the two data sources suggests that as many as—but not likely more than—half of the state's 552 public school districts undertook some type of facilities improvement initiative during the study period, a number of which included the construction of multiple new schools. Table 1 presents the types of facilities improvement initiatives undertaken as reported by school district superintendents who responded to the survey, organized by the type of initiative (technology, renovation, or new school) and type of facility (high school, junior high, etc.). Note that the numbers of the various improvements, totaling 365 altogether, exceed the number of survey responses because many districts undertook multiple improvements as part of the same initiative.

These results suggest that roughly 30 percent of the total number of improvements undertaken were major technology improvement projects, 47 percent were major renovation projects, and 23 percent were new school construction projects. About 78 percent of the improvement projects were for academic buildings, while about 12 percent were for athletic facilities and 10 percent were for non-academic facilities.

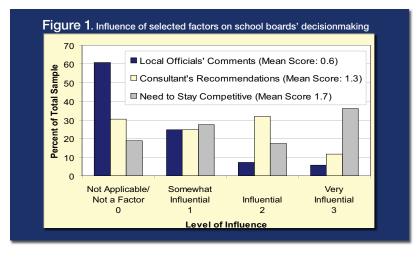
The average time between the initial proposal and the completion of an initiative was about 4.5 years. Total expenditures for these initiatives ranged from \$1 million to about \$42 million, with a mean expenditure of about \$28 million. About 60 percent of these initiatives were funded with state support under the Michigan State Bond Loan (SBL) Program, with about 80 percent of those relying entirely on SBL funding. The remaining districts, as well as those SBL districts employing other sources, relied on other types of bonds or on combinations of other funding sources, which included various funds (capital projects, gen-

eral, sinking) or, in several instances, private donations.

SCHOOL BOARD DECISIONMAKING

Almost all of the superintendents (64 or 93%) indicated that the school district used public participation or outreach activities in making the initial decision on whether to undertake a facilities improvement initiative, while somewhat fewer (55 or 80%) did so for making the final decision on the actual facilities improvements made. Similarly, virtually all (68 of the 69) indicated that the school district engaged an architect or other consultant for their facilities decisionmaking, a large majority of which (49 or 72%) did so on a contingency basis—with payment contingent upon the passage of a bond proposal—while about one-fourth (19 districts) did so for pay. Finally, about half (36 superintendents) indicated that their school district sought input, formally or informally, from local government officials within the school district about the proposed initiative.

Superintendents were asked to indicate the degree to which their consultant's recommendations and local government officials' comments appeared to influence the school board's decisionmaking on its facilities improvement initiative generally. They were also asked to indicate the degree to which a sense of competition with neighboring school districts for student enrollments appeared to influence the school board in its decisionmaking. As illustrated by Figure 1, the sense of competition with neighboring districts was the most important of these three considerations, characterized as "very influential" by the greatest number of superintendents and



scoring on average 1.7 on a scale of 0 to 3. Consultant recommendations could generally be characterized as "influential" with a mean score of 1.3, while local officials' comments could generally be characterized as "somewhat influential" with a mean score of 0.6 At the low end of the scale, 33 superintendents indicated that local officials were not consulted at all. Thus, with regard to the influence of local officials on school board decisionmaking specifically, these findings suggest that a substantial number of school districts do not consult with local officials about their proposed initiatives and that, when they do, the officials' comments are usually considered but are not very influential.

Superintendents were also asked whether they thought the school board's decision to undertake a facilities improvement initiative had been affected by "Proposal A," the state's school finance reforms enacted in 1995, as has been suggested by other studies. The responses to this question suggest that about 60 percent of the school districts were largely unaffected while about 30 percent were encouraged to undertake a facilities improvement initiative because of the reforms. In addition, about 60 percent of the superintendents indicated that their districts' initiatives were undertaken between 1999 and 2001, while the distributions of both proposal dates and project start dates revealed a declining rate of new initiatives during the study period. These findings suggest that to the extent that the Proposal A reforms did prompt a surge in new school construction, that surge apparently peaked quickly and has tapered off.

Following these specific questions, superintendents where then asked through an openended question to indicate whether there were any "other important considerations prompting the school board to undertake a facilities improvement initiative." The explanations volunteered by the superintendents to this question are categorized in Table 2. Most respondents gave a single reason, which taken together can be grouped into three broad categories. About a third of the respondents pointed to facilities-related issues, such as overcrowding, aging facilities, and the need to consolidate because of declining enrollments. Less than 10 percent pointed to various reasons related to the school district's educational mission or to various financial considerations, respectively.

Table 2. Reasons for undertaking a facilities improvement initiative

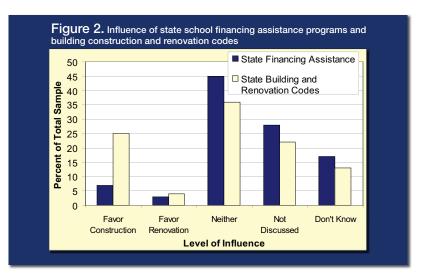
Reason Stated	Number	Percent ¹
Facilities Needs		
Overcrowding of existing facilities	9	13 %
Problems from aging of existing facilities	9	13 %
Community demand for facilities improvements	3	4 %
Need to consolidate existing facilities	2	3 %
School District Mission and Services		
Need to provide the best education possible	3	4 %
Desire to provide new services	2	3 %
Financial Considerations		
Opportunity to continue an expiring millage	2	3 %
Other financial considerations	4	6 %

Notes:

RENOVATE OR RELOCATE

Superintendents were asked whether the state's financing assistance programs (such as the Michigan State Bond Loan program) and its building and renovation codes influenced their school boards' decisionmaking by favoring new construction over renovation or vice versa. A large majority of the superintendents indicated that neither the state's financing system nor its codes influenced this decision either way (or that the issues were not discussed, or that they did not know). Less than 10 percent indicated that the financing system had some effect, with the majority of those indicating that the system tended to favor new construction over renovation. About 25 percent of the superintendents, however, indicated that the state's building and renovation codes tended to favor construction over renovation, while less than five percent indicated that the codes favored renovation. These results are reported in Figure 2.

After asking these questions about state financing and codes in general, superintendents were then asked whether the school board specifically considered the questions of whether to renovate rather than relocate an existing school. Superintendents for 13 districts (19%) indicated renovate, 9 (13%) indicated relocate, 3 (4%) indicated both, and 44 (64%) indicated neither. If the board did contemplate and make such a decision, superintendents were asked through an open-ended question to indicate what major reasons motivated that decision.



^{1.} Percent of observations is the percent of the entire survey (69 superintendents).

Table 3. Reasons for renovating or relocating

Reason Stated	Number	Percent ¹
Renovate Rather Than Relocate an Existing School		
Community/school officials' preference	7	28%
Financial analysis favored renovation	3	12%
Declining enrollments	1	4%
Land for new site (to relocate) unavailable	1	4%
Planning analysis favored renovation	1	4%
Relocate Rather Than Renovate an Existing School		
Community/school officials' preference	6	24%
Financial analysis favored relocation	2	8%
Insufficient space available at the existing school site	2	8%
Planning analysis favored relocation	1	4%
Building code limits on renovation favored relocation	1	4%

Notae:

 Percent of observations is the percent of school districts that specifically contemplated whether to renovate or relocate (25 school districts).

Most respondents gave a single reason. Those responses are categorized in Table 3.

On the question of whether to renovate or relocate, the primary considerations motivating school boards point especially to community and school district preferences. Specifically, for over a quarter of the school districts that contemplated the issue of whether to renovate or relocate—or about half of those deciding to renovate—the primary motivation was the community's or school officials' preference to renovate or to not have to build a new building. Similarly, for another quarter of these school districts—or about half of those deciding to relocate—the primary motivation was the community's or school officials' preference to relocate or to not have to stay in and maintain an old building. Beyond these preferences, other important factors included the school district's own financial situation or planning assessments and site-related issues.

Superintendents were also asked a series of questions about whether school officials consulted with local government officials or reviewed local master plans to determine whether the initiative would be consistent with local plan policies, and whether the board members raised concerns themselves or heard concerns raised by community residents regarding the potential impacts on commu-

nity growth and development as a result of school renovations or new school construction. The responses to these questions are reported in Table 4. Superintendents were also asked whether they submitted site plans for their proposed facilities improvements to the local planning jurisdiction(s) for review and comment (which is not required in Michigan because

school districts are exempt from local planning and land use regulations). On this question, superintendents for 37 districts (54%) indicated that they did submit site plans, while 24 (35%) indicated that they did not, and 8 (12%) indicated that site plan review was not applicable.

Table 4. con	sultation and con	sideration of impa	cts to the comm	nunity¹
	Type of Consultation / Discussion			
Level of Consultation / Discussion	Consult with Local Officials	Review Local Master Plans	Board Discussion	Citizen Discussion
No / None	16%	26%	10%	36%
Informal / Brief	75%	54%	33%	33%
Formal / Extensive	9%	20%	57%	31%

Notes:

PUBLIC INVOLVEMENT AND PLANNING PROCESS

In order to test the common assertions that increased public involvement and increased coordination between school district decisionmaking and local planning tend to increase the likelihood that districts will renovate existing schools rather than relocate them, a statistical analysis referred to as logistical regression was conducted. The results from this analysis suggest that factors such as consultation with local officials, site plan review, citizen comments, and the use of public participation early in the initiative process had little or no discernable association with the decision to relocate or renovate. However, and contrary to expectations, the analysis does show that when a school district reviewed local master plans to determine whether the proposed facilities improvement initiative was consistent with plan policies, the district was substantially more likely to relocate the existing school. It is not clear, however, whether reviewing the plan prompted them to relocate, or whether having already decided to relocate, they were

Contrary to common assertions, public participation and coordination with local planning processes may actually increase the likelihood of relocation as opposed to renovation.

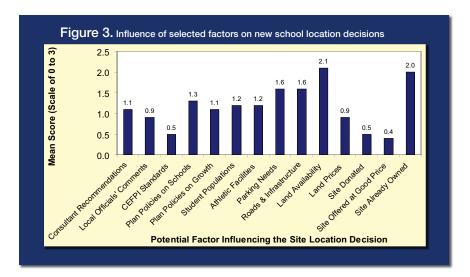
then more likely to have reviewed the plan. In addition, the analysis also provided some indication that public participation at the facilities planning stage was also associated with an increased likelihood of deciding to relocate. Thus, contrary to common assertions about the influence of public participation and coordination with local planning, the results of this survey of school district superintendents suggest that these activities may have actually increased the likelihood of a decision to relocate rather than renovate.

NEW SCHOOL CONSTRUCTION AND SITING

Superintendents were asked whether the school district had constructed one or more new schools as part of their initiatives. Superintendents for 33 districts (48%) indicated that



^{1.} Percent of observations is the percent of the entire survey (69 superintendents).



the district did not construct a new school while 36 (52%) did (including several that constructed multiple schools), yielding a total of 41 newly constructed schools. Superintendents were then asked to indicate whether the new school(s) was located: within an urbanized or developed area; at or near the transition edge from an urban to a more rural area (referred to hereafter as "fringe"); or outside of an existing urban area - i.e., more than about a half-mile from the edge of existing development (referred to hereafter as "exurban"). Respondents reported 19 new urban schools (about 46% of the total number built), 9 fringe schools (22%), 7 exurban schools (17%), and 6 schools located at existing school sites (15%), which were presumably urban or fringe sites.

Superintendents who responded that a new school had been constructed were asked how important a series of considerations were in influencing the school board's decision on where to locate that school. Respondents scaled each consideration as "not a factor" (coded 0), "somewhat influential" (coded 1), "influential" (coded 2), or "very influential" (coded 3). Figure 3 reports the mean scores for each of these factors.

The responses suggest that the two most influential factors were the availability of land for new sites generally and the easy availability of land given that the site ultimately chosen was already owned by the school district. Factors that were influential (with mean scores ranging from 1.0 - 1.9) include concerns about the availability of roads and infrastructure, parking needs, plan policies regarding new school development, anticipated shifts

in student populations, athletic facility needs, local plan policies regarding growth and development, and finally consultant recommendations. Factors that were less influential (with mean scores below 1.0) include differences in land prices across potential school sites, local officials' comments, Council of Educational Facility Planners International (CEFPI) acreage standards, and the easy availability of land given that the site chosen was donated or offered to the school district at a good price.

These factors provide a sense of what considerations appear to have most influenced school board decisionmaking in general, but do not indicate how those considerations tended to operate in terms of favoring one new school site location over another. In order to evaluate the importance of these factors from the perspective of choosing between alternative sites, several different logistical regression analyses were conducted. The results from these statistical analyses suggest that only two of the factors identified in Figure 3 proved to be associated with new school location decisions to a statistically significant extent. The one factor associated with a substantially increased likelihood of selecting a more exurban site was the easy availability of land given that the site ultimately chosen was offered to the school district at a good price. In contrast, the influence of consultant recommendations was associated in the opposite direction, where an increase in the consultant's level of influence was associated with a decreased likelihood that the new school was sited in an exurban location.

SURVEY OF LOCAL GOVERNMENT OFFICIALS

Local officials in communities served by the study school districts were surveyed for two reasons. The first was to characterize local officials' own perceptions of the kinds of facilities improvement initiatives that the school district serving their communities had undertaken, as well as their perceptions of the key factors influencing the school boards' decisionmaking. The second reason was to estimate the degree of correspondence between local officials' perceptions and school district superintendents' perceptions on these sets of questions.

In general, comparing responses offered by local government officials to those offered by superintendents, the two groups tended to agree only on whether the school district engaged a consultant, used public participation, and renovated or constructed a school. Beyond that, responses from the two groups showed virtually no correspondence, including responses to questions about whether local government officials had been consulted and, if so, the degree to which their comments influenced the school board's decisionmaking. Assuming that superintendents are in the best position to evaluate their own school boards, this finding in particular suggests that local government officials in Michigan are not well informed about school board decisionmaking regarding proposed school facilities initiatives, whether consulted or not.

DISCUSSION AND CONCLUSIONS

As noted at the beginning of this report, one of the issues underlying the "schools and sprawl" debate is the concern that the construction of new schools in exurban locations is an important cause of sprawl. The findings from this study, that new school construction projects are less common than other kinds of facilities projects occurring across the state and that most of those new schools are actually being constructed in urban or urban fringe locations rather than exurban locations, arguably temper that concern somewhat. Moreover, the finding that a primary motivator behind the initiation of school facilities projects are facilities-related conditions like overcrowding



or the need for consolidation suggests that school districts may be responding to changing demographics (including sprawl) as much as they are influencing those demographics. Nonetheless, this study was not designed to address the specific question of whether the construction of a new school—either by itself or in combination with other factors-might be prompting more or less sprawl in a given location than otherwise might have occurred. While the findings noted here provide some additional context for addressing that issue, they should not be used to dismiss out-of-hand concerns about the relationships between new school construction and the phenomenon of sprawl.

In terms of the factors that appear to be influencing school board decisionmaking with regard to facilities improvements—the issue that was addressed specifically in this study—the results presented above are generally consistent with common assertions in the literature regarding the array of factors that play some role, but they are not entirely consistent in terms of the relative importance of those factors. Similarly, regarding the question more broadly of whether school districts are "planning" for schools, the findings from this study provide some evidence that school boards are considering growth and development issues to some extent in their deliberations, although they were generally considered only informally or briefly and apparently were not perceived to be an overriding factor or concern for most districts.

The findings from this study, while limited by their sole reliance on survey data, nevertheless support several general research conclusions. First, if the goal is to encourage school districts in Michigan to renovate existing schools rather than relocate and build new, or to build new schools in urban rather than exurban locations, then it appears that the most promising way to do so is to put forward compelling arguments targeted to both school officials and citizens that focus on the facility-related and educational benefits of a renovated or new urban school compared to a new exurban school. This approach could address school officials' concerns about staying competitive with neighboring school districts and advancing the educational mission of the school district, and most importantly would speak directly to the influential role played by school officials' and community preferences. Except for the potential influence of the

state's building and renovation codes, other considerations commonly identified in the literature, such as the need for athletic fields and parking lots or the influence of conventional school design standards, appeared to be less important to school officials in making school construction and siting decisions—at least directly—and so represent less potential for effecting change.

Second, key findings from this study suggest that little meaningful consultation is occurring between school districts and local governments in Michigan, and that local planning considerations have little apparent influence on decisions about where to site newly constructed schools. These findings could be used to support arguments for increased local government review and oversight of school district projects-particularly those involving land use changes such as new school construction. However, the additional finding that local plans, if having any effect at all, may actually be encouraging school districts to relocate rather than renovate existing schools, suggests the equally important need to address local planning on schools and community growth as well, particularly if the goal of requiring local oversight would be to discourage the construction of new exurban schools. The most important conclusion to draw from this study, therefore, is that efforts to address the issue of schools and sprawl in Michigan through increased local government review of school board decisionmaking alone will not likely succeed. Rather, more comprehensive efforts that focus on local government planning related to schools and sprawl, as well as the factors prompting citizens to demand new exurban schools in the first place, will be required.

Note:

A more detailed version of this report is currently under review for publication by the *Journal of Planning Education and Research*. A working paper version of that manuscript, which includes a full bibliography of sources consulted for this study, can be found at:

http://www.sitemaker.umich.edu/urrcworkingpapers

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