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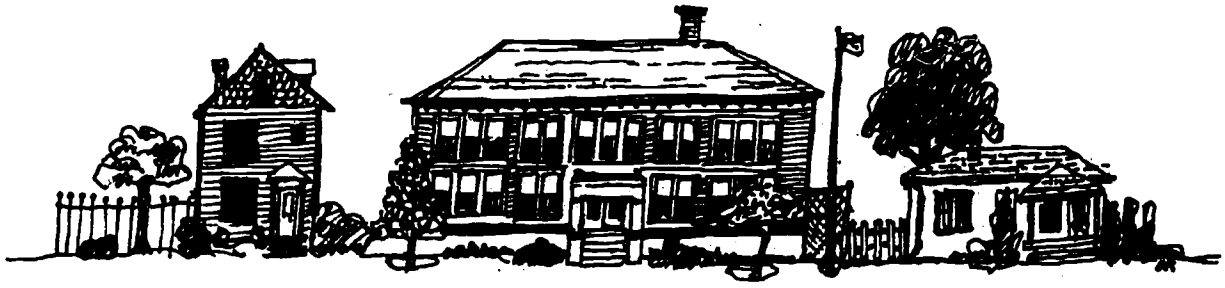
ABSTRACT

This report is a summary of the research conducted in Phase 1 of the Schools and Neighborhoods Research Study. The program's objectives, each of which represents a separate study, are to identify the perceptions and expectations of neighborhood residents and businesses with respect to the school, to identify the services provided by the neighborhood school, and to determine the significance of the neighborhood school to the maintenance and the development of the neighborhood unit. The research approach used a pre- and post-closure comparison of selected variables. Five general questions provide the framework for reporting the findings--(1) Is the "quality" of a neighborhood changed by school closure? (2) Are residents less satisfied with their neighborhood and schools after school closure? (3) Does school closure affect the quality of education available to students in the closure neighborhood? (4) Does school closure affect school levy support? (5) Does school closure change the pattern and frequency of community use of schools? Appendixes give the background and closure circumstances and information about the research methods and school closures in other cities. (Author/IRT)



SCHOOLS AND NEIGHBORHOODS RESEARCH STUDY

Phase One: Executive Summary

CITY OF SEATTLE and
SEATTLE PUBLIC SCHOOLS

NATIONAL INSTITUTE OF EDUCATION PROJECT NO. NIE-G-75-0026

SCHOOLS AND NEIGHBORHOODS

RESEARCH STUDY

PHASE ONE - EXECUTIVE SUMMARY

PREPARED FOR:

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CITY OF SEATTLE
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CONTENTS

Page

ACKNOWLEDGEMENTS iii

THE MAJOR FINDINGS 1

Question 1 4

Question 2 10

Question 3 12

Question 4 13

Question 5 14

POLICY IMPLICATIONS AND SOME FINDINGS UNRELATED TO SCHOOL CLOSURE 17

APPENDIXES 21

A. Background and Previous Closure Circumstances 23

B. The Research Approach 29

The Neighborhood Survey 31

The Neighborhood Impact Study 33

School Building Use Study 35

C. School Districts Responding to Requests for Facilities Information 37

D. School Closure Information from Other Cities 39

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MAJOR FINDINGS OF THREE STUDIES

This report is a summary of the research conducted in Phase I of the Schools and Neighborhoods Research Study, funded by a grant from the National Institute of Education (NIE). The objectives and corresponding studies that constitute Phase I are:

> *To identify the perceptions and expectations of neighborhood residents and businesses with respect to the school;* The Neighborhood Survey.
>
> *To identify the services provided by the neighborhood school;* School Building Use Study.
>
> *To determine the significance of the neighborhood school to the maintenance and/or the development of the neighborhood unit;* The Neighborhood Impact Study.

Appendix B contains a description of each of the studies. The complete texts are available from the Seattle School District Research Office.

The research approach used for the three studies was a pre- and post-closure comparison of selected variables. Data for each of the variables were analyzed to see if school closure had any effect on the variable over time.

Each of the four Seattle neighborhoods in which an elementary school had previously been closed was matched with a similar neighborhood in which the school had not been closed. In one of the four neighborhoods, the school had been threatened with closure. The closure-control comparison was used in all cases except Summit (because of its location, a control neighborhood could not be found). The 1965 boundaries of each school attendance area were used as the geographical units of analysis for the following closure-control pairs:[1] Interlake-Allen, Georgetown-Concord, Mann-Minor and Leschi, Decatur (threatened closure)-Maple Leaf. A City of Seattle map locating the closure and control schools is shown on the following page.

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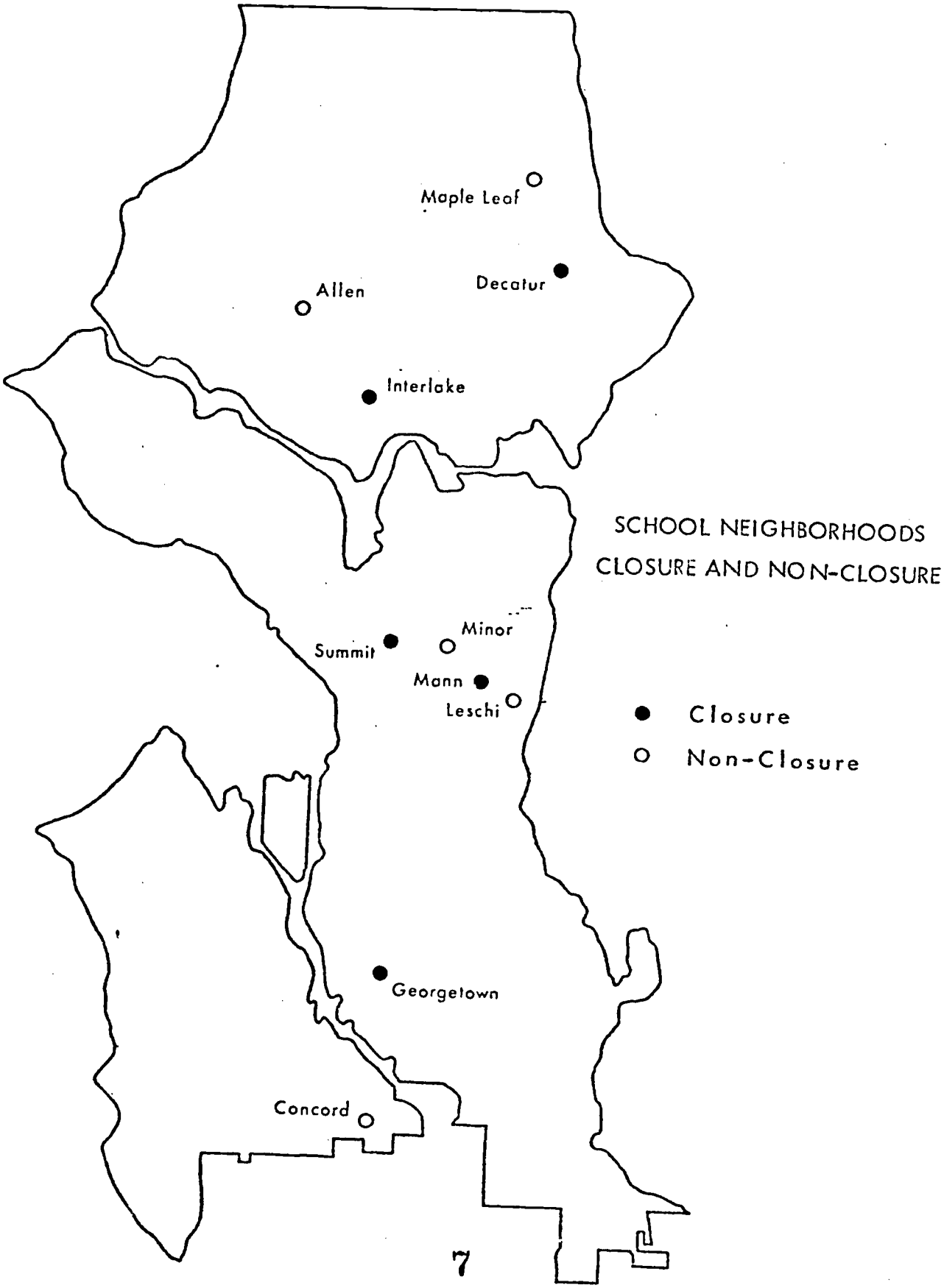
[1] 1965 was the year of the first closure under study. Boundary realignments for elementary schools have not been made since 1965 except for the adjustments necessitated by school closures.


Maple Leaf
Allen
Decatur
Interlake
Summit
Minor
Mann
Leschi
Georgetown
Concord
SCHOOL NEIGHBORHOODS
CLOSURE AND NON-CLOSURE
Closure
Non-Closure

It should be noted that there is a difference between the three studies in the way the data is aggregated. The Neighborhood Impact Study and the Building Use Study focused on individual closure and control neighborhoods. The results are neighborhood specific. The variability between closure circumstances, location, and neighborhood type make generalization to all school closures in Seattle impossible.

On the other hand, the Neighborhood Survey dealt with people's opinions and though the information was collected by individual neighborhoods, it was aggregated to a higher level. Rather than an analysis by individual neighborhoods, the following groups were used: "Closure" (all household or business respondents in the Interlake, Georgetown, and Mann neighborhoods); "Control" (all households or business respondents in the Allen, Concord, Minor/Leschi neighborhoods); "Tracked" (all respondents who were residents of the closure neighborhood with children enrolled in the school at the time of closure and subsequently moved to another Seattle neighborhood); "Tenured Closure" (all closure household or business respondents who resided in the neighborhood at the time of school closure); "Non-tenured Closure" (all closure household or business respondents who moved into the neighborhood since school closure).

Five general questions provide the framework for reporting the findings. The underlying theme is the relationship of an elementary school to its neighborhood. The questions are also meant to encompass concerns most often expressed by school closure opponents.

The five questions are:

1) Is the "quality" of a neighborhood changed by school closure?
2) Are residents less satisfied with their neighborhood and schools after school closure?
3) Does school closure affect the quality of education available to students in the closure neighborhood?
4) Does school closure affect school levy support?
5) Does school closure change the pattern and frequency of community use of schools?

Question 1

Is the "quality" of a neighborhood changed by school closure?

Neighborhood quality will be defined by social, economic and physical variables which were analyzed in the Neighborhood Survey and Impact Study. Additional data which was gathered by the Schools and Neighborhoods Research Study Staff and the Urban Data Center at the University of Washington will be reported where appropriate.

Social Quality Variables

Neighborhood reaction to closure: The most important perception across the entire survey sample was that residents think that the neighborhood did or would change because of school closure. In comparing those respondents who had not experienced school closure with those respondents who had, about twice the percentage thought school closure would cause a neighborhood to change. This may suggest that school closure publicity has sensitized Seattle residents to possible negative impacts.[2] Another explanation is that residents who thought the neighborhood would change had already moved from the area.

The Impact Study tested two hypotheses in each of the closure situations: 1) to the extent that the school is a major component of community identity, its closure will lead to rapid changes in overall community structure; 2) or the reverse, that school closure is the expected result of prior changes in community structure, including the processes of urban growth and succession.

There is only limited support for the first hypothesis, and the above Survey findings, in the Impact Study. Among the four closure-control pairs, a loss of population (after controlling for a natural increase of births over deaths) was evident in only one of the

[2] In a related question, respondents were asked how closely they followed news accounts of the recent school closure issue. A significantly greater percentage of closure neighborhood residents (22.9%) than control residents (15.1%) responded that they followed the closure news very closely. (This suggests that closure residents have been sensitized to the closure issue because of the events in their own neighborhood.)

closure neighborhoods and none of the control neighborhoods. This loss occurred in Interlake. Interlake also experienced a four percent decrease in the proportion of professional/technical and managerial workers following closure. There was no change in Allen, the control. Because these changes occurred in only one neighborhood, and because they do not address the issue of changes in school age population, they cannot with certainty be related to school closure. However, findings suggesting the loss of school age population in two neighborhoods is discussed in the section on neighborhood satisfaction.

The Impact Study provided little support for the second hypothesis, either. In Interlake, Mann, and Decatur, no indication was found that school closure was the expected result of prior changes in community structure. In Summit and Georgetown, there were some indications that school closure had resulted from changes in the community.

Criminal activity and incidence of fires: Of the possible impacts of school closure, an increase in neighborhood crime is consistently mentioned. In examining this variable, the Impact Study used two indicators of crime: part one offenses, and crimes against property.[3] Crimes against property are of particular interest in studying the relationship between crime and school closure, because they are more likely to occur in residential areas.

An analysis of the crime rates for the pre- and post-closure time periods was done for all closure and control neighborhoods. No consistent pattern of increased crime was observed either before or after closure in any of the neighborhoods. However, the survey revealed that businesses in control neighborhoods perceive that more crime occurs in their neighborhood than do businesses in closure neighborhoods. In a similar analysis of residential fires data, there was no discernable relationship between school closure and the incidence of fires in any of the neighborhoods.

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[3]Part one offens as listed in the Seattle Police Department Annual Reports include: murder and negligent manslaughter, rape, robbery, aggravated assault, burglary, larceny, auto theft and non-aggravated assault. Crimes againt property include three of the part one offenses: burglary, larceny and auto theft.

Economic Quality Variables

Business volume: More tenured closure than tenured control businesses reported their business volume as decreasing since school closure took place. When comparisons were made at the neighborhood level, the results indicate that 27.6% of the businesses in the Interlake neighborhood reported a decline in volume, while in Allen, only 8.3% of the businesses reported a decrease. This difference was statistically significant. There was a similar pattern in the Mann/Minor-Leschi comparison with over 40% of the Mann businesses reporting a decline in volume as compared to 26% in Minor-Leschi. Although it was not possible to obtain actual sales data from the surveyed businesses, the Survey results were consistent enough to indicate that the business responses were reflective of a general sales pattern.

Property values and property turnover: The most frequently asserted impacts of school closure have been a decrease in residential property values and an increase in the number of single family home sales. To test the validity of these assertions, residential property assessments and sales data were obtained from the records of the King County Assessor. Assessment and sales data for a selected sample of properties from the Interlake/Allen, Mann/Minor-Leschi and Decatur/Maple Leaf neighborhoods were tracked from 1950-74.

During the 1960-1974 period, there was a drop in the property sales rate in both Interlake and Allen. However, there was a lesser drop in Interlake compared to Allen following the Interlake closure. While the difference between the two areas is not large, it is suggestive of a post-closure impact. In this case, it seems that Allen had a lower property turnover rate (and hence greater stability) in the years following closure of Interlake School. In focusing on the more immediate pre- and post-closure period (3.5 years before and after the school closure), much the same conclusion can be drawn on the basis of a modest relative increase in property turnover in Interlake following closure. These findings give some support to the conclusion that families were moving from the Interlake area because of school closure.

Comparing the assessed land values for Interlake/Allen in the three years before and after the school closure shows no apparent impact from the closure decision. A similar analysis using assessed improvement value did not identify any particular closure impacts. In analyzing land assessments by distance from Interlake and Allen, the results indicate no particular tendency for the area adjacent to the school to have land assessment values increasing at a lesser rate than areas more distant.

The mean sale price for the sample of residential properties in Interlake and Allen was plotted for the period 1966 to 1974. Property values have increased in Interlake and Allen in both the pre- and post-closure periods. Interlake's sales values (in dollars per square foot of land) represent 95% of the comparable figure in Allen, both in 1966 and 1974. However, Interlake's sales values dropped absolutely and in relation to Allen in the year immediately following school closure. This suggests a possible short-term impact.

In the case of Mann/Minor-Leschi, there was a noticeable drop in property turnover rate in all three school areas in the post-closure period. A similar pattern was revealed in the assessed land value and sales value analyses regardless of distance from school.

An increased housing vacancy rate in the area nearest the school, (within three blocks), occurred only in the Mann neighborhood. The vacancy rate in the immediate post closure period (1969-71) was 13%. This increased to 19% by 1973-75. The vacancy rates for distances greater than three blocks from Mann School remained fairly constant throughout the two time periods.

In Decatur, there was an increase in property turnover in the immediate post-threatened closure period from 6.7 to 7.7 sales/hundred properties, as compared to 7.2 to 7.3 sales/hundred properties in Maple Leaf. Because the information was only collected for a one-half year period following threatened closure, it was insufficient to assess impacts relating to sales value, and land assessments in this neighborhood.

Physical Quality Variables

Demolition and construction of residential units: Demolition and construction data were analyzed to ascertain the effect of school closure upon physical changes to residential units. Demolition and construction data were obtained from the Office of Policy Planning, City of Seattle, for the years 1972, 1973 and 1974. The information was limited to residential units only. Although there were variations between the different neighborhoods (i.e., Georgetown experienced a massive amount of demolition due to industrial development), no definitive pattern related to school closure emerged.

In a recent study completed by Urban Planning students at the University of Washington Urban Data Center, pre- and post-school closure residential and commercial investment in Interlake/Allen and Mann/Minor-Leschi was examined.[4] Investment is measured by number and dollar value of building permits issued. The researchers found that residential investment in Allen increased relative to Interlake beginning in 1968. There is some indication that this pattern of increased residential investment in Allen has intensified since the closure of Interlake. Contrasted with the pattern of increased residential investment in the Allen area, is an increasing trend of commercial investment in the Interlake area.

These trends are consistent with the finding that a greater loss of population occurred in Interlake compared to Allen in the years immediately following closure. This is assuming that an increase in commercial investment and decrease in residential investment are concurrent trends with population loss.

School vandalism: One of the school closure impacts which causes the most potential concern is the possibility of increased crime due to school related vandalism. The fear is that a closed school building will be attractive to acts of vandalism. This in turn may lead to a spillover effect in which there will be a general increase in crime within the school attendance area.

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[4] Jalali Irag, Marty Lester and Barney Myer, "Background Study and Impact Analysis of the Relationship Between School Closures and Private Investment," (Urban Data Center, University of Washington, June, 1976).

Results from the Impact Study reported earlier indicate that school closure was not followed by a greater increase in crime in the closure as opposed to control neighborhoods. In order to check the actual number of crimes perpetrated on school grounds, data from the Seattle Public Schools Security Department were used. Crimes included were burglary, larceny, and window and property damage. The total number of reported offenses for two years before and two years after closure were plotted and analyzed for the following schools: Interlake/Allen, Mann/Minor-Leschi, and Georgetown/Concord. The comparisons show that school closure is not directly related to an increase in vandalism of school property.

In the case of Seattle School closures, the schools were not boarded up following closure. The buildings were utilized for a number of alternative programs and administrative purposes. Therefore, it was not possible to assess the effects of closing and boarding up a school on the amount of building related vandalism in Seattle.

To gain further information about closed school vandalism, the study staff collected data from another school district and informally surveyed a number of urban school districts throughout the country.[5]

Results of this investigation indicated that in Shoreline, a school district where a number of schools had been closed and boarded up in the past ten years, there was a dramatic drop in damage due to vandalism following closure. Contributing to the drop in vandalism, was the installation of security devices in addition to boarding up. In the informal survey of urban school districts, a speedy disposition of the facility was reported as the obvious solution to vandalism.

[5] See Appendix C for a list of school districts responding to request for facilities information.

Question 2

Are residents less satisfied with their neighborhood and schools after school closure?

The Survey revealed little evidence that the closure of a neighborhood elementary school would cause residents in the closure neighborhood to be less satisfied than control residents with their neighborhood as a place to live. However, persons dissatisfied with the closure neighborhood may have moved by the time the survey was conducted. There were differences in responses between the closure, control and tracked samples. As would be expected, the differences are explained by the presence of children in the household.

Among neighborhood businesses surveyed, signficantly fewer closure businesses (49%) than control businesses (61%) reported that they were very satisfied with the neighborhood where they were located. Approximately 54% of the Mann businesses thought the neighborhood was a less favorable place to do business compared to 25% of the Minor-Leschi businesses. The reasons for this dissatisfaction can probably be found in the fact that significantly more tenured closure than tenured control businesses reported that their business volume had decreased since school closure took place.

The quality of schools was significantly more important to neighborhood satisfaction for the tracked respondents than for the closure, control, and closure with children respondents. Of the tracked sample, 27.9% mentioned school quality as the single most important aspect of neighborhood satisfaction. This compares with only 10.3% of the closures with children and 7.4% and 8.9% for the total closure and control groups.

The presence of children in a family dramatically increases the importance of closeness to schools and quality of schools as a determinant of neighborhood satisfaction. Respondents were asked whether or not they would want to move if any of a number of changes occurred in their neighborhoods, including closure of the neighborhood elementary school and/or decline in school quality. Respondents who indicated they would want to move if either of these two events occurred were asked if they would actually move if the change occurred. Approximately 34% of all households with children would want to move as opposed to 8% of all

households without children. When asked if they would actually move, the percentages decreased to 7% and 4%.

About 10% of the respondents stated that the primary reason for choosing their current location is the proximity to an elementary school.

Findings from the Impact Study and a supplementary Summit attendance area enrollment analysis support the conclusion that in two of the neighborhoods there appears to be a decline in the ability of the neighborhood to hold and attract families with school age children. In this analysis related to neighborhood satisfaction, two variables were used as indicators.

The first variable, an enrollment pattern analysis, was used to determine if the school enrollment was increasing or declining. This concept, commonly referred to as holding power, is usually expressed as a ratio. The ratio is used as an index of gain or loss between two time periods. In comparing the Interlake and Allen ratios, Interlake exhibits a lower holding power (.66) than Allen (.77) following closure. This indicates that enrollment of students from the Interlake area declined after the school was closed. Results of the enrollment pattern analysis of the other closure-control pairs were inconclusive.

The second variable used was a detailed student mobility analysis. This analysis was done to determine if the lower holding power of Interlake was due to students moving out of the attendance area or fewer students moving into the area after closure. The mobility analysis traced students leaving the attendance area in grades 3 and 4 for both Interlake and Allen over the three years immediately following closure.

This analysis showed that the third and fourth grade student sample at Interlake had fewer movers than did Allen during the years following closure. This would seem to be a contradictory result. The most obvious explanation is that Interlake was less attractive to new families with school age children during the years following closure than was Allen. This conclusion is based upon the fact tha a lower rate of student mobility was coupled with a larger percentage reduction in K-6 resident enrollments in the Interlake area during the years immediately following closure. Since there was no noticeable reduction in birth rates and no apparent shifts in parochial and private school enrollments, it is

possible to conclude that although school closure in the Interlake area did not lead to an immediate flight of families living in the area, it did apparently serve to make the Interlake area less attractive to newer families with children.

An analysis of Summit resident enrollments in the immediate years pre- and post-closure suggests an impact related to school closure. The enrollments are presented in Table 1.

TABLE 1

SUMMIT SCHOOL RESIDENT ENROLLMENTS

	62-63	63-64	64-65	65-66	66-67	67-68	68-69
				*Closure as elementary school			
Resident Enrollment*	240	207	201	132	113	99	71

*Resident enrollment following closure consisted of those students who still resided in the old Summit attendance area but were attending another Seattle Public School.

Summit shows a significant enrollment drop in the first few years following closure. Although the enrollment figures available for this period of time are not as accurate as more recent data, it appears that the closure of Summit contributed to the decline of school age population in that attendance area.

Question 3

Does school closure affect the quality of education available to students in the closure neighborhood?

The Neighborhood Survey respondents were asked to indicate their perception of the quality of education available to students in their neighborhood. There was a significant difference between the matched closure and control groups. Control neighborhood respondents were more likely to perceive that the quality of of public school education is excellent. In comparing residents of closure neighborhoods who had children in the Seattle Schools at the time of closure with the tracked sample, the tracked sample is significantly more likely to report that the quality of education available to their children is excellent.

The survey respondents were also asked whether, in their opinion, the quality of education has changed in recent years. A significantly greater percentage of the control (40%) as compared to closure (32%) respondents indicated that the quality of education is improving. At the other end of the scale, about 30% of all persons surveyed thought that quality of education had declined but there were no significant closure/control differences.

In the Impact Study, a comparison of pre- and post-closure student achievement scores was used as a proxy for educational quality. The intent was to determine: 1) if families with higher achieving students were more likely to move following closure, and 2) if the achievement of students remaining in the attendance area following closure declined as a result of being assigned to a different school. Math and reading scores for selected grade levels of students residing in two closure/control neighborhoods were collected for the year preceding closure and a number of subsequent years. Comparisons were then made between the closure/control pairs over time.

In the Interlake/Allen post-closure comparison, no differences in achievement patterns exist between students who moved out of the former Interlake attendance area and students who remained. Reading and math scores of Interlake students who remained in the attendance area following closure were not measurably affected by reassignment to other schools.

Due to high student mobility, only reading tests were available for second and third graders in the Mann/Minor-Leschi comparison. The only conclusions which can be drawn from the limited data available is that there was not an exodus of the more able students from the Mann attendance area following the school closure.

Question 4

Does school closure affect school levy support?

Both the Neighborhood Survey and Impact Study provide data directly related to closure and levy voting patterns. Survey respondents were asked how they had voted in the last school levy election. Although there was a statistically significant difference between matched closure and control

responses, this difference was due to respondent characteristics other than residence in a closure or control neighborhood. The presence of children in the respondent's household did not have a significant impact on reported voting behavior.

The Neighborhood Impact Study used "yes" votes in Seattle School Levy elections as the measure of school support. Levy election results were obtained from the School District for the years 1966 1975. Data were analyzed for all matched neighborhoods. Patterns of support are not related to school closure, nor do levels of school support in areas close to the closure schools differ from the total attendance area of those schools.

Question 5

Does school closure change the pattern and frequency of community use of schools?

Based on the findings of the School Building Use Study, school closures in Seattle resulted in an increase in the total number of community uses of the closed facilities. This finding is somewhat surprising. The expectation is that closure would lead to decline in building use.

The finding supports the conclusion that there is a demand for the use of excess school space in at least some communities. What appears to be an increased use of "closed schools"[6] may only be a community's response to space becoming available for other uses. Surveys discussed in the Building Use Study substantiate the existence of a large potential demand for excess school space. Interest was expressed in renting space both in open and closed schools. The shared use of space would keep the schools open and provide space at cost to those interested. Revenue generated from such rentals could help offset the costs of keeping schools open. Demands for use range from community meetings to locations for various programs.

In future school closure deliberations, the following considerations sho be weighed:

[6]The term "closed schools" may be deceptive in that the schools have been put to various uses since they have been discontinued as regular elementary attendance centers.

1) The strong community support for shared use of school facilities.

2) The existence of a demand for excess school space in a potential closure neighborhood.

3) Fiscal implications of charging rent for use of excess space in District owned facilities.

POLICY IMPLICATIONS AND SOME FINDINGS UNRELATED TO SCHOOL CLOSURE

It was expected that exploring the impacts associated with prior school closures in Seattle would lead to a better understanding of the relationship between elementary schools and their neighborhoods. Some attitudinal and data based findings appear to be closure related. The existence of these limited impacts indicates that an urban elementary school is one factor affecting urban neighborhood vitality.

Some of the other factors affecting people's attitudes toward urban schools and neighborhoods were revealed in the survey results. This information should enlighten some of the future decisions made by the City and School District. Further, the research staff believes that some analysis of the results for policy implications would be helpful.

Familiarity with the three studies summarized in this document, with reports of related research, and with information received and collected from other cities,[7] provides the study staff with a background of knowledge from which conclusions can be drawn. It is from this base of information that the following findings, some unrelated to school closure, are reported, and policy implications are suggested.

Data from the Impact Study showed some relationship between closure and locational mobility patterns in Interlake and Summit. The possibility that school closure may cause people to change their attitudes toward the schools and their neighborhood or to move are factors that should be weighed carefully by the School District in any future school closure decisions. The increasing concern on the part of the City and School District with retaining present residents and halting the enrollment decline suggests a need for the City and School District to maintain

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[7] See Appendix B for information received from other cities and Alice Woldt, "Report of Field Research Conducted in Other Cities, October 2-10, 1975", (Schools and Neighborhoods Research Study, Seattle School District No. 1, October, 1975).

dialogue relating the City's concern over neighborhood vitality, with the School District's concern over managing its building use problems. This assumes that the policy of the City will continue to be one of attracting and holding a family oriented population.

Results from the Survey indicated control neighborhood residents thought that neighborhood changes would result from school closure. This was the case, despite the fact that schools had not been closed in their immediate neighborhood.

The findings also indicate that school closure did influence peoples' attitudes concerning educational quality. The survey suggests that more residents in control neighborhoods perceive the quality of education to be excellent and improving than residents in neighborhoods where schools have closed. These findings, along with school closure experiences reported by other districts, suggest that the School Board should develop policies to assure residents that neighborhoods, or the quality of education in any neighborhood, will not be adversely affected by school closure. These policies should be adopted prior to any closure decision so that parents will know what they can expect from the School District. Specifically, policies should include:

...Assurance that special programs offered to students at one school will be continued at the receiving school.

...A process defining the decisions to be made and the opportunities for involvement by the public. This plan should be highly visible and should encourage participation by affected parents.

...A plan for informing parents and students about the receiving schools including opportunities to meet the principal and teaching staff. Teacher-student exchanges in receiving school classrooms for transferring students and parents, and personal parental contacts by principals of both receiving and transferring schools are examples of mitigating measures.

...Requests by receiving and closure school staff members for transfers to another school should be granted in so far as possible, so that an accepting environment is maintained.

...Receiving school personnel assignments should be made as soon as possible after a closure decision to reduce parent, student, and staff apprehensions.

It is also suggested that the School District encourage residents of future closure neighborhoods to play a major role in deciding what the best post-closure uses for the school should be. This conclusion is underscored by the results of the informal survey of other school districts on disposition of school facilities. The major point made by respondents was the need for a speedy disposition of the

building following closure. A boarded-up building becomes a rallying point for community disaffection with the School District. Thus to allow neighborhood residents to have a role in the facility disposition decision might go a long way to maintaining viable school-community relationships.

Indications that neighborhood businesses were affected by school closure implies that the District should consider possible impacts upon neighborhood businesses in making a decision to close schools. The number of businesses in the attendance area which depend upon family households for their subsistence should be assessed. The decline of neighborhood businesses may have a detrimental affect on the ability of the neighborhood to attract families. Households that rely on second-income jobs and jobs for youth often depend upon neighborhood businesses as a source of such employment. This is an important component of the neighborhood economy. It may affect the physical attractiveness of a neighborhood as well as its economic attractiveness. Loss of income for maintaining or improving businesses, or residences, and closed businesses resulting in vacant storefronts, have a deteriorating effect on the appearance of the neighborhood.

Survey responses indicate that there are factors more important than school closures as determinants of peoples' satisfaction with their neighborhood. A low crime rate was cited by all respondent groups as the single most important aspect of neighborhood satisfaction. The importance of this finding should not be overlooked by either the City or School District. Programs that provide families with a sense of security and reduce apprehensions of threats to life and property should be supported. Safety of students to and from school, a concern often voiced in the school closure debates, should be a major consideration in any decision affecting the movement of students. It would seem that developing a sense of neighborhood security is important in the City's efforts to hold and attract families. City programs, such as the "block watch program", should be a deterrent to neighborhood dissatisfaction.

Recent survey research[8] has shown that neighborhood characteristics are less important in accounting for household moving behavior than are family and housing related reasons. These findings seem to be confirmed by the Neighborhood Survey. When asked, in an open ended question, why they had left their previous neighbor-

[8]Kevin McCarthy, The Household Life Cycle and Housing Changes, (Santa Monica: The Rand Corporation, 1975), p. 25.

hood, 30% of the tracked sample moved to find a different house.

The fact that the major factor in mobility and locational decisions is the house itself, rather than the neighborhood, has important policy implications for the City and School District. It is in the interest of both agencies to see that the supply of single family housing attractive to families is maintained. Private and public policies that discourage home improvements and home ownership in older residential areas should be corrected.

There was considerable variation among different neighborhoods in response to the questions on educational quality. Over 20% of all respondents in Georgetown and Concord thought the quality of public education was poor, as opposed to only 6% of all respondents in Decatur, and 4% of all respondents in Maple Leaf. Likewise, patterns of levy support varied widely from neighborhood to neighborhood. The statistically significant difference in levy support between matched closure and control responses was due to respondent characteristics, not school closure. The significant variables which influenced voting patterns were age, race and sex of the respondent. Young (18 to 24) as compared to middle and old, black and other minorities as compared to white, and female as compared to male were most likely to have indicated that they voted yes in the last levy election.

The fact that there are considerable differences among neighborhoods in residents' attitudes and actions towards schools is important. The School District should consider identifying neighborhoods that have not supported schools in the past, and develop strategies to reverse the existing negative attitudes. Programs that would reach out to the community for advice and involvement should be explored, since typical public relations programs would probably have a negligible effect in these neighborhoods. These "community outreach" programs should not be viewed as a means to enlist support for levy elections, but rather as programs to make the schools a more integral part of the community.

APPENDIXES

APPENDIX A

BACKGROUND AND PREVIOUS SCHOOL CLOSURE CIRCUMSTANCES

Seattle School District enrollments have been declining for a number of years. Total enrollment declined from 99,722 students in 1963 to 66,490 in 1976, a 33% drop. One of the results of the enrollment decline has been a consideration of school closure. Schools were closed in the 1960's and early 1970 period, although only two of these closures were directly related to declining enrollments. The closures generally proceeded without strong community protest. However, following the closure of Interlake and Georgetown elementary schools in 1971, the climate of community acceptance changed. School District discussions of building closures now became a topic of community resistance, which reached its height during the summer of 1974.

It was at this time that the School District Administration presented a plan to the Seattle School Board recommending the closure of seven elementary schools. Generally, the residents of the proposed closure neighborhoods were opposed to the plan. The Seattle City Council and Mayor were also opposed.

The opposition argued that elementary schools were an essential element in the maintenance of neighborhood viability. The case against school closure usually centered around the following themes:

1) The effect of school closure upon neighborhood quality.
2) The effect of school closure upon residents' satisfaction with their neighborhoods.
3) The effect of school closure upon educational quality.
4) The effect of school closure upon the level of community support for schools.
5) The effect of school closure upon community utilization of school facilities.

The arguments had their effect and, following a city-wide series of public hearings, the Seattle School District Superintendent recommended against closures,

pending further study of the issues.

Following the decision to postpone closures, the City of Seattle, Seattle School District and the Joint Advisory Commission on Education (JACE) applied to the National Institute of Education (NIE) for a grant to explore school closures and related questions.

The NIE grant proposal was designed so that a neighborhood survey and impact study were to be done by research consultants. The Bureau of School Service and Research (BSSR) of the University of Washington was selected to conduct the research relating to the Impact Study. Mathematica Policy Research, Inc. was selected to carry out the work of the Neighborhood Survey.

Circumstances Associated With Previous Closure Decisions

The historical circumstances associated with the four school closures and one threatened closure which served as the focus for the research in this summary are briefly discussed. Also included is information concerning uses of the school buildings since closure.

Summit

Summit School was "permanently closed" by a vote of the Seattle School Board on August 25, 1965. Less than three months later Seattle voters authorized sale of the building, but no takers were found. Justification for the closure was attributed to "outgrown facilities and a declining school population, which made it economically impossible to continue a strong program at that side." (Forbes Bottomly, Superintendent of Seattle Public Schools, in a letter to parents dated July 5, 1966). The 200 students who had attended Summit were bused to schools outside the Central Area with little reaction from individual parents or the community. The fact that only five percent of the Summit area population was in the under-18 age classification may explain this absence of any strong negative reaction to closure. Despite the building's unsuitability as an elementary school because of its inadequate play area and inability to meet fire codes, it remained closed for only one year.

From September 1966 through June 1973, the building was leased by Seattle Central Community College to house its classes while its campus was under construction. Efforts to sell the building were repeated during the summer of 1973;

but again no acceptable buyers could be found. Even before the solicitation of bids commenced, other potential school uses were suggested, including housing the City's second Nova alternative high school. From 1973 until the present time, variously named alternative programs have made use of the basement and sub-basement of the "permanently closed" old Summit School. The current program enrolls 133 students from throughout the City.

Mann

Horace Mann School, closed initially at the end of the 1967-68 school year, has been in continuous use since its closure. Though children had been bused of the Mann neighborhood for several years because of the school's overcrowded condition, and proposals for closing the school had been presented by recognized organizations and individuals from within the Central Area community, reactions to the closure of Mann were significant.

Unlike the Summit case, where the closure was primarily for physical and demographic reasons, the closure of Mann marked the beginning of the Seattle School Board's efforts to desegregate the city's schools. Closing Mann was designed to facilitate the transfer of a number of children from the Central Area, mostly blacks, into north-end Seattle schools, in an attempt to equalize the benefits of better school facilities and provide multi-racial education for more students. However, fewer students than intended actually continued enrollments at their north-end schools. This was, in part, due to the lack of a strong commitment on the part of the School District to support this effort.

Closing Mann also facilitated the establishment of the city's first "magnet" program, an attempt to keep inner-city students in school through alternative forms of education. As part of an overall expansion of programs at Garfield High School (a block from Mann), Mann helped to provide space for 716 students in dance, pottery, sculpture, painting and other fine arts classes during its first year of closure. Currently, the building houses both the Garfield Alternative Program (GAP) and a Nova program, plus leased space for the Central Seattle Community Council Federation.

Georgetown

The 1971 closures of Georgetown and Interlake schools were for widely divergent reasons. Georgetown was a neighborhood with an anticipated

elementary school population of less than 50 students by 1980. By the spring of 1969, the school was declared "...the only remaining viable social institution" in the community by its principal. Closing the school for demographic and economic reasons was not questioned.

With completion of the new Maple School in February 1971, all Georgetown students were transferred out of the old building. However, the building's vacancy was short lived. Members of the community petitioned to have the building's annexes used as a Georgetown Service Center even before the closure was completed. Beginning with the 1971-72 school year, Georgetown became the home of the new Project Interchange Junior/Senior High School for would-be dropouts from throughout the city. The school has been fully utilized since its closure, currently housing 191 students, plus many extracurricular and community activities.

Interlake

Interlake Elementary School was "permanently closed" at the end of the 1970-71 school year, primarily as a means of accommodating the School Board's mandatory transfer plan for middle-school desegregation. If Lincoln High School was to become a four-year high school, more space was needed in the area. Interlake School had the potential of providing that space. Speculation about the closure and mandatory busing plans for desegregation began at least a full year before the actual closure decision; however, it is doubtful that the parents of Interlake students became aware of a definite closure possibility until March 1971. Because of the inextricable links between the closure and desegregation plans, it is virtually impossible to determine which caused the greater outcry.

The approximately 460 elementary students attending Interlake at the time of closure were transferred to Day, Latona and McDonald schools at the same time as high school students from both the immediate attendance area, and voluntary transfer students from the Central Area moved into the old Interlake building. The entire building was used as expansion classrooms for Lincoln High School until Spring 1975, when declining secondary enrollments released part of Interlake for other uses. During the 1975-76 school year, the building began housing a wide range of activities including Follow Through, Work Training, Interim School programs, Special Counseling and

Continuation, a nursery for the School-Age Parent Program, People's School, a surplus book depository, and binding operations for the School District. The building has been continuously utilized since its closure as an elementary school in 1971.

Decatur

Decatur Elementary presents a still different picture, as it was merely threatened with closure which would have occurred by fall 1975. Because of a moratorium on school closures announced at the end of August 1974, actual closure never occurred for Decatur and six other schools threatened with closure that year. However, the threat of closure was certainly perceived as real, from its first proposal to the School Board on June 26, 1974, until the moratorium was voted two months later. Unlike five of the other schools, announced for possible closure at the time, Decatur had not been previously threatened and was essentially a replacement on the previous year's list for View Ridge, an adjacent attendance area which provided "a storm of outcry" the summer before (The Seattle Times, June 26, 1974). Decatur continues to perform as an elementary school, though not all of its physical facilities are being fully utilized.

APPENDIX B

THE RESEARCH APPROACH

A similar approach was used in conducting all three studies. An experimental design was established using a pre- and post-school closure comparison of selected variables. The experimental group was the neighborhoods in which schools had been closed. The control group was a matching group of neighborhoods in which schools had not been closed.

The neighborhoods were within elementary school attendance boundaries as established by the Seattle Public Schools, Department of Planning, Research and Evaluation. This definition was used because of the large amount of data available aggregated by elementary school attendance boundaries. Further, a proration algorithm, programmed by Educational Data Systems within the School District, allowed the allocation of census tracts to school attendance boundaries.

A list of variables to be tracked over time in both closure and control neighborhoods was established for the Impact Study, and a series of research questions were defined for the Neighborhood Survey. A research plan was also established for the collection of school building use information.

To find neighborhoods similar to the closure neighborhoods, several steps were taken. The first step was to identify those neighborhoods in which schools had closed in past years. Five neighborhoods had been identified in the study proposal. They were Georgetown, Interlake, Mann, Maple, and Summit. Upon further investigation, it was determined that Maple School was not a closure case because a new school had been constructed as a replacement in the same neighborhood. Decatur, a school

which had been threatened with closure in 1974, was substituted for Maple. In the Decatur case, the research would attempt to determine what effects there were when a neighborhood elementary school is threatened with closure, but does not actually close.

The second step was to identify the boundaries of the closure school attendance areas. Because school closures had occurred between 1965 and 1971, a decision was made to reconstruct elementary school boundaries as of 1965 - the year of the earliest closure. The boundaries would be held constant from 1965 to the present, thereby eliminating problems associated with boundaries redrawn at a later date. In fact, there were very few attendance boundary shifts in the closure or control neighborhoods between 1965 and 1976, outside of adjustments made at the time of school closure.

The third step in the matching process was to assemble a common data base for each elementary school attendance area. The data base was made up of selected census, social indicator, and land use variables. The variables were collected by census tract and the census tracts were then allocated to school attendance areas. The school attendance area allocated data base was then factor analyzed using the Statistical Package for the Social Sciences (SPSS). Factor scores for each of the identified factors were calculated for the individual school attendance areas. The factor scores were used to construct a series of graphics visually displaying a profile for each attendance area. A comparison was then made between the factor score profile for each closure neighborhood, and all of the remaining elementary school attendance neighborhoods in Seattle, to find the most similar profile. In the case of Summit, it was impossible to find a similar profile because the attendance area included the central business district of Seattle. Another statistical analysis was done prior to the final selection of matched neighborhhoods. The additional technique is called hierarchical grouping analysis.[9]

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[9] Donald Veldman, Fortran Programming for the Behavioral Sciences, 1967, p. 308.

The fourth step was an extensive process carried out by the Schools and Neighborhoods Research Study staff which included interviews, on-site inspection of the neighborhoods, and extensive analysis of a supplementary base. Based upon the initial statistical analyses and extensive follow-up, the control neighborhoods in Table 1 were selected.

TABLE 1

CLOSURE/CONTROL SCHOOLS AND YEAR OF CLOSURE

Closure School	Year Closed	Control School
Summit	1965	No match
Mann	1968	Minor-Leschi[10]
Georgetown	1971	Concord
Interlake	1971	Allen
Decatur (threatened closure)	1974	Maple Leaf

It can be noted from the map on page 3 that the closure schools are located in widely divergent geographical areas of Seattle.

The Neighborhood Survey

The intent of the Neighborhood Survey was to identify the perceptions and the expectations of neighborhood residents and businesses with respect to the neighborhood elementary school. The survey focused on the perceived effects of school closure. To accomplish this, personal interviews were conducted in households and businesses in closure and control neighborhoods. The closure and control neighborhoods were aggregated in a number of ways for analytical purposes. Following are the most important sample aggregations.

1) Matched Closures and Matched Controls: The three closure neighborhoods used were Interlake, Mann, and Georgetown. The control neighborhoods utilized were Allen, Minor-Leschi, and

[10] Both Minor and Leschi were selected because each neighborhood was a good match on certain factors. Neither was a clearly superior overall match.

Concord. Decatur was excluded from this aggregation because it was never closed. Summit was excluded because of the lack of a matched control neighborhood and because only 13.7% of the Summit sample resided there at the time of closure.

Sample sizes for the two groups were 528 matched closure respondents and 282 matched control respondents. Response rates were 75% for matched closures and 67% for matched controls.

2) Tenured Closures and Controls: This was a sub-group of the matched closure and control respondents. The tenured group was comprised of residents now living in a closure or control neighborhood who were also living in the same neighborhood at the time of school closure. Sample size for the tenured closures was 274 and 127 for tenured controls.

3) Closures With Children: This group included those matched closure households who had children of elementary school age at the time of closure. The sample size of this group was 147.

4) Tracked: This sample frame was composed of parents of those children who had been enrolled in a closure or threatened closure school and who moved to another Seattle neighborhood either the year of closure or threatened closure or the following year. Depending on the analysis, Decatur was often split off from the other tracked neighborhoods. Sample sizes were 15 for Decatur and 46 for the remaining three neighborhoods. The response rate for the total tracked sample was 82.4%.

5) Business: This sample was made up of businesses in the matched closure and control neighborhoods. The businesses were selected from small neighborhood establishments in close proximity to the closure or control school. A subgroup of tenured business responses were analyzed. Sample size was 111 closure business respondents, 75 control and 65 tenured closure respondents. The response rate for the total business sample was 91.2%.

The overall response rate for the neighborhood survey was 73.6%. This was less than anticipated because of a low response rate in the Summit (50.8%) and Minor-Leschi neighborhoods (58.2%). The major difficulty encountered in the Summit neighborhood was the presence of a large number of locked apartment buildings. There was no apparent reason for the low response rate in Minor-Leschi. Demographic data from the survey were compared with available information on the two neighborhoods. This analysis revealed no apparent biases, so data for Minor-Leschi is included in the analysis. Without Summit and Minor-Leschi, the overall response rate was 78.1%, within an acceptable range.

The primary weakness of the survey is that it was undertaken from five to eleven years after the fact of closure. Because of this, perceived impacts of school closures were probably lost. This is due to two reasons: 1) people adjust over time to changed circumstances, and having adjusted, it is likely that many residents will not recall clearly what actually happened immediately after the closure; and 2) residents who reacted most strongly to closure may have moved out of the neighborhood. Only about half of the sample interviewed lived in the neighborhoods at the time of closure. These limitations probably constitute a bias on the perceptions of the impact of closure. As such, it is possible that the impact was at least as great as that reported in this study and possibly greater.

Neighborhood Impact Study

The major purpose of this study was to examine possible impacts of closing schools. Clusters of variables that were analyzed include: population and land use trends, school enrollment changes, residential property values, crime and fire rates, public support for schools (school levy elections), and general quality of neighborhood life.

Variables were tracked pre- and post-closure in both closure and control neighborhood pairs. Comparisons were made between the variable patterns for the closure/control pairs to determine if differences existed

between the patterns. Assuming that characteristics of the closure neighborhoods were similar to those of the control neighborhoods, differences in the patterns of the variables may be due to closure of the elementary school.[11] When possible, changes in variable patterns were examined within each neighborhood in relation to distance from the school.

There were two hypotheses which guided the analysis: 1) To the extent that the school is a major component of community identity, its closure will lead to rapid changes in overall community structure; and 2) School closure is the expected result of prior changes in community structure, including the processes of urban growth and succession. An attempt was made to determine which hypothesis was most appropriate in explaining each of the closure situations.

Because of the limited number of school closure cases in Seattle, and the wide variability of circumstances represented by these closure situations, this study should be viewed as an exploratory effort to assess school closure impacts. It represents one of the first comprehensive research efforts in the area of school closures and urban ecology.

While it may be possible to draw out of this study probable impacts for certain types of school closure situations, it is impossible to generalize to all Seattle school closures. Comparisons cannot be made between the closure of Interlake school (in a predominantly residential area in the Northern part of the City), Mann school (in a residential section of Central Seattle), Georgetown school (in an area being faced with rapid industrial and commercial growth), and Summit school (in the downtown business district).

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[11] The number of time periods for each variable varied with the availability of data. Demographic variables were generally limited to 1960, 1970 U.S. Census and 1974 Polk Survey.

As with most studies of this kind, there were limitations associated with data sources. Heavy reliance upon U. S. Census and Polk Survey data for parts of the analysis necessitates the usual cautions associated with use of these sources. Time and money constraints prevented gathering an equally extensive data base for all closure neighborhoods. Despite these qualifications, the data upon which the anaysis is based represents the most extensive and systematic collection of information which circumstances would permit.

If additional primary data were available, replicate or follow-up studies would be appropriate.

School Building Use Study

In this study, an analysis was conducted to determine the extent and type of school facility use by the community for purposes other than the regular instructional program. The data for the study were compiled from existing Seattle Public School building use records, the Neighborhood Survey and survey data collected by the Seattle Public Schools Research Department.

The impact of school closure upon the pattern of community facility use in the closure and non-closure neighborhoods is assessed. A description and analysis of the School Program Involving our City Elderly (SPICE) program, a joint City/School District venture, is also included.

APPENDIX C

SCHOOL DISTRICTS RESPONDING TO REQUESTS FOR FACILITIES INFORMATION

Atlanta Public Schools, Atlanta, Georgia

Minneapolis Public Schools, Minneapolis, Minnesota

Pittsburgh Public Schools, Pittsburgh, Pennsylvania

Cedar Rapids Public Schools, Cedar Rapids, Iowa

Grand Rapids Public Schools, Grand Rapids, Michigan

Tucson Public Schools, Tucson, Arizona

Indianapolis Public Schools, Indianapolis, Indiana

Chicago Public Schools, Chicago, Illinois

Buffalo Public Schools, Buffalo, New York

New Orleans Public Schools, New Orleans, Louisiana

San Diego Public Schools, San Diego, California

Hartford Public Schools, Hartford, Connecticut

Jefferson County Public Schools, Louisville, Kentucky

Detroit Public Schools, Detroit, Michigan

San Antonio Public Schools, San Antonio, Texas

Lansing Public Schools, Lansing, Michigan

Arlington Public Schools, Arlington, Virginia

Birmingham Public Schools, Birmingham, Alabama

Birmingham Public Schools, Birmingham, Michigan

APPENDIX D

SCHOOL CLOSURE INFORMATION FROM OTHER CITIES

Arlington, Virginia.

"Arlington County Committee on Pupil Enrollment School Projections." Jan. 1974.

"Desired Range of Size of Elementary Schools for Optimum Educational Opportunities." [September 24, 1974].

Arlington Public Schools. "History." 2/28/75.
Policy on school mergers.

"Schools Reprogrammed." 7/22/75.

Atlanta, Georgia

"Disposition of Discontinued School Facilities, Policy and Administrative Regulations." n.d.

"The Superintendent's Commission on Facilities." 21 May 1975.
Purpose, objectives and organization.

Atlanta Public Schools. "Discontinued Schools." July 1975.

"Progress Report; Superintendent's Commission on Facilities." August, 1975.

Birmingham, Michigan

"Alternatives for Use of Classroom Space." n.d.

Birmingham Public Schools. "Criteria to be Considered for Selection of Schools to be Closed." n.d.

Facilities Study Report to the Board of Education, Phase I. September 4, 1973.

"Timeline for Facilities Planning Priority 1974-75." 10/22/74.

Birmingham Public Schools. Facilities Study Report to the Board of Education, Phase III. [Abstract] January 21, 1975.
Good example of application of criteria to schools.

Buffalo, New York

Letter from Joseph F. Jones, Associate Superintendent, Plant Services and School Planning, *re School Closings*. October 24, 1975.*

Charlotte, North Carolina

Letter from Chris Folk, Assistant Superintendent for Communications. October 2, 1975.

Denver, Colorado

Letter from Robert L. Hedley, Director of Facility Planning. October 8, 1975.

Des Moines, Iowa

Des Moines City. Plan and Zoning Commission. Preliminary 1980 Community Facilities Plan, Part of the Comprehensive Plan, Plan Report Number Five. February 1962.
Section on schools.

Des Moines City. Plan and Zoning Commission. "City Goals for Planning." 1975.

Des Moines City. Plan and Zoning Commission. Letter from Beverly Fleming, Planning Technician, October 8, 1975.
Includes survey questionnaire regarding citizen's attitudes and opinions on the quality of their neighborhood and the services available there.

Des Moines Public Schools. "Feeder Schools." n.d.

Des Moines Public Schools. Charrette '71; How a Community Planned Two New Inner-City Schools. 1971.
Process.

Des Moines Public Schools. "Boundaries of Attendance Areas." August 1, 1972.

Des Moines Public Schools. "Organization, Procedure and Practice in the Secondary Schools." July 29, 1974.
Includes Board of Education policies, goals and objectives on equal educational opportunity.

Des Moines Public Schools. "Explanation of Boundary Changes from 1967-1974." September 30, 1974.

Des Moines Public Schools. "Enrollment Decrease Data from 1969 to 1974." June 25, 1975.

Des Moines Public Schools. "Five-Year Projected Enrollments." June 25, 1975.

Des Moines Public Schools. Several other tables, memos and newspaper clippings related to school closures and boundary changes.

"Neighborhood Ranking." n.d.
Criteria for judging declining neighborhoods.

Detroit, Michigan

Detroit Public Schools. Inventory of Facility Needs. 1972.

Letter from Merle Henrickson, Divisional Director, Planning and Building Studies. January 6, 1976.

Downey, California

Letter from Manuel Gallegos, Superintendent. November 4, 1975.

East Meadow, New York

Final Report. Ad Hoc Facilities Committee. February, 1976.

Evansville, Indiana

Evansville-Vanderburgh School Corporation. "Plan for Desegregation and School Reorganization for September, 1972." November 17, 1971.
Recommended closure of three schools for desegregation.

Evansville, Indiana *(Cont'd)*

Evansville-Vanderburgh School Corporation. "Recommendations for Furthering School Integration, 1971-72." November 17, 1971.

Evansville-Vanderburgh School Corporation. "Recommendations for Redistricting for 1972-73." 2/16/72.

Glen Cove, New York

Letter from Jean Hirschberg, Public Information Consultant. October 29, 1975.

Grand Rapids, Michigan

"The Closing of Oakleigh and Crestview Elementary Schools: the Parents Opinions." n.d.

Memorandums, School Board minutes, letters from Superintendent to parents. [1974, 1975]

Letter from David J. Bailey, Assistant to the Superintendent. December 10, 1975.

Hayward, California

Arveson, Raymond G., Superintendent of Hayward Unified School District. "The Shrinking School District; an Analysis of the Phenomenon," Management Action Paper/Association of California School Administrators. September 25, 1972.
Includes questionnaire on closing schools.

Illinois

Illinois State. Office of Education. Report of the Illinois Task Force on Declining Enrollments in the Public Schools. December, 1975.
Includes enrollment statistics and projections, revenue and expenditure projections, facility closures and staffing issues.

Indianapolis, Indiana

Letter from Joseph C. Payne, Assistant to the Superintendent for Planning. December 10, 1975.

Kansas City, Missouri

"Predicting Enrollment Decline." n.d.
Includes Keough Indicator Survey Scale, Involvement Techniques (Teachers, Students, Board, Parent Leaders), Task Forces, Community Polls, Anxiety.

"School Closing Checklist." n.d.

Midwest Research Institute. Decision Criteria and Policy for School Consolidation. Report prepared for the Kansas City School District. March 15, 1974.
Includes proposed Board of Education policy on school consolidation and suggestions for implementation of same.

Letter from Clyde J. Baer, Director of Research and Program Evaluation. November 26, 1975.

Lansing, Michigan

Report and Recommendations. Citizens' Advisory Ad Hoc Committee on Demography. July 18, 1974.
Criteria for closing schools: [illegible] description of neighborhood; questionnaire [illegible]; property values [illegible].

Madison, Wisconsin

"Vacant Halls of Learning." n.d.

Report to the Madison Board of Education on the Future of Central-University School. On cover: Report on Future of Central-University High School, 1966. January 24, 1966.

A Proposed Plan for School Facilities. On cover: Proposed Plan for Reorganization of Joint School District 8 Madison, Wisconsin. February 1970.
Policy on neighborhood schools and central city schools.

Dane County Regional Planning Commission. Revised Planning Review Manual. February 14, 1974.

Madison City Planning Department. Objectives and Policies for the City of Madison; Proposals for Public Discussion. September 1974.
Definition of neighborhoods.

Report of the Task Force on Declining Enrollment. August 1975.
Intergovernmental cooperative process; neighborhood school, updated 1970 policy; joint use of schools by school, city and other agencies.

Minneapolis, Minnesota

Minneapolis Board of Education. "Closing Existing Buildings." Third draft. January 28, 1975.
Good criteria process

"Criteria for Phasing Out Schools." n.d.

New Orleans, Louisiana

Letter from John E. Morehiser, Jr., Supervisor, Department of Research and Evaluation. October 22, 1975.

New Rochelle, New York

Letter from Rosalind B. Byrnes, Principal: District-Wide Services. October 17, 1975.

Northville, Michigan

"Selecting the Right Elementary School To Close." Memorandum from R.E. Spear, Superintendent, to Board of Education, August 20, 1975.
Includes many newspaper clippings.

Philadelphia, Pennsylvania

Letter from Walter E. Arrison, Director, Physical Development Department. October 1, 1975.

Sacramento, California

Sacramento City Unified School District. "Procedures for Estimating Enrollment." October 8, 1975.

Salt Lake City, Utah

KSL editorial on School Boards (November 12/13, 1972) and numerous newspaper clippings.

"Council on School Building Needs." Charge by Board of Education, Salt Lake City School District. n.d.

"Five Ways to Save Money With Declining Enrollments." n.d.

"Questions and Answers on School Closure in Salt Lake City Schools." 3/17/70.

Salt Lake City Schools; Enrollment Trends, 1956-57 - 1970-71 and 1970-71 to 1971-72 (Est.). Prepared by Stanley R. Morgan. May 19, 1971.

The Board of Education of Salt Lake City. Consolidation Study. Prepared by Dr. Stanley R. Morgan, Assistant Superintendent. January 1973.
Includes district school closure policy.

"Present and Future Enrollments; Salt Lake City School District." Report prepared by Kent Thomas. October 1973.

Letter from M. Donald Thomas, Superintendent, to Dr. Lloyd McCleary. January 30, 1974.
Trends re individualization and utilization of media as related to space needs.

Letter from LaVar L. Sorensen, Assistant Superintendent to Mr. Lloyd McCleary. February 12, 1974.
Space needs for junior highs and high schools.

Salt Lake City School District. "Evaluation of and Response to Elementary and Secondary School Buildings Needs Committee." Memorandum from Administrative Staff to Board of Education. September 3, 1974.
Suggest school representative be appointed as advisor to Planning Commission. Good article on economic growth and population growth.

"School Building Needs; Recommendations for Public Discussion." November 5, 1974.

"Suggestions and Guide Lines for the Permanent Closing of Schools." March 1975.

Numerous miscellaneous maps, tables, memos (includes a "Summary of Existing Zoning Procedures as They Relate to the High Schools." Board of Education of the City of New York. January 25, 1972.)

San Antonio, Texas

"Pupil Assignments for School Year 1975-76." Memo from Harold H. Hitt, Superintendent, to All Board Members. March 6, 1975.
Discusses factors used in school closure decisions.

"Information Concerning Proposed Closing of Schools as Requested by Members of the Board." Memo from Victor Rodriguez, Assistant Superintendent, Administrative Services, to Dr. Harold H. Hitt, Superintendent. March 20, 1975.

San Diego, California

Letter from William H. Stegeman, Deputy Superintendent, Operations, *re Closing Schools*. December 19, 1975.

Santa Clara, California

"Superintendent's Recommendations on the Facility Needs of the Santa Clara Unified School District; Summary and Conclusions." n.d.

"Facilities Study Committee Final Report." January 23, 1975.

Wichita, Kansas

"The 1974 Wichita Public Schools Community Profile." n.d.

School Facilities Plan U.S.D. 259 Wichita. n.d.

Wichita Public Schools. "Number of Schools in Wichita Unified School District No. 259 by Years."

Wichita Public Schools. "Schools and Buildings Owned by USD No. 259 Not in Use as Regular Attendance Centers 1946-1975." n.d.

Wichita Public Schools. Bond Feasibility Study; Project Identification Committee Report. May 1973.

Wichita Public Schools. "Planning, Providing, and Maintaining School Facilities Board Policy." August, 1973.

Gschwind, Randolf A. The Intergovernmental Enumeration, Wichita-Sedgwick County, Kansas: 1971-1973. Working Paper No. 2. November, 1973.

Wichita City. Department of Community Development. Sedgwick County Annual Enumeration and Socio Economic Survey, 1969-1974. Prepared by Langston, Kitch and Associates, Inc. September, 1974.

Wichita Public Schools. Statistical Report for School Year 1973-1974. December, 1974.

Letter from James M. Heinicke, Junior Planner, Metropolitan Area Planning Commission, *re Intergovernmental Enumeration*. May 20, 1975.

Wichita Public Schools. "Summary of Mobility." June 9, 1975.

Miscellaneous memos, tables, etc. regarding Intergovernmental Enumeration.

Worcester, Massachusetts

Letter from Mabel E. Wray, Executive Assistant for Special Studies. January 8, 1976.