

# A REPORT TO THE PARENTS OF DETROIT ON DECENTRALIZATION

## "A REPORT TO THE PARENTS OF DETROIT ON SCHOOL DECENTRALIZATION"

by

William Bunge, Yvonne Colvard, Susan Cozzens, Beverly Edward, Dwight Ferguson, Jerol Jordan,
Marilyn Middlebrooks, John Trafton, Robert Ward, Gwendolyn Warren

## Detroit Geographical Expedition and Institute

#### December, 1969

Copyright, 1969, West Central Organization and the Detroit Geographical Expedition and Institute.

First Edition

Trinted in Detroit, Michigan

Detroit Geographical Expedition and Institute 5229 Cass Detroit, Michigan

December 22, 1969

Mr. John Watson Director, West Central Organization 3354 Grand River Detroit, Michigan

State Senator Coleman Young State Capitol Lansing, Michigan

#### Gentlemen:

In response to your request for technical assistance in the implementation of Senate Bill No. 635, we hand you herewith a copy of a progress report entitled "A Report to the Parents of Detroit on School Decentralization" by the Detroit Geographical Exedition and Institute. The final printed report is in advanced preparation and will be in your hands shortly.

The report is interesting in that it required some of the latest programming techniques in the most advanced languages available on the continent. Five or six university mathematical and geography staffs are finalizing the high school based regions and are beginning the grade school based region problem. We would like to draw special attention to the work of Dr. John Sheppard the geographer from the London School of Economics who this year is fortunately on leave to Queen's College in Kingston, Ontario, and who threw himself and colleauges into the task literally night and day to meet the deadlines set by men of more practical day to day affairs.

Thank you for this opportunity to turn abstract science to good use.

Sincerely,

Miss Gwendolyn Warren

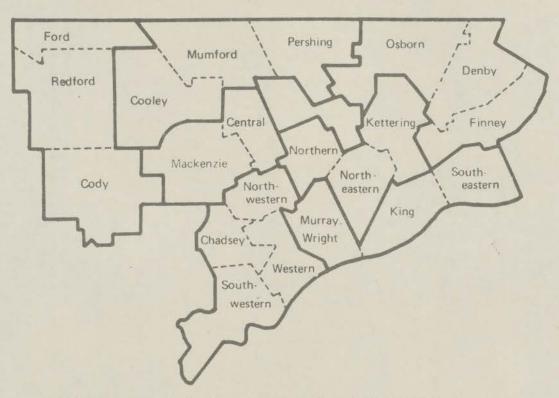
Administrative Director

Dr. William W. Bunge Jr.

Research Director

#### Community Control

The strategy of this first chapter is to examine the problem of a school decentralization plan afresh, as if no other plans were in existence. As a first step it is necessary to establish the criteria on which the regionalization is to be based. It is possible to optimalize the interests of the taxpayer, the school system, the teachers union, the registered voter or the children. Clearly the needs of the children should receive first priority. The map below shows the main results.



High School Districts Combined to Maximize Sympathetic Authority

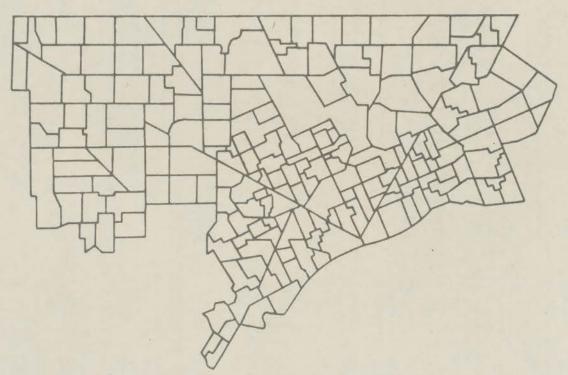
Black children are among the most abused children in America. It is imperative that these most endangered children receive the most protection. (The infant morality rate of black children in the King High School area on the east side of Detroit is higher than that of San Salvador, a fact some Americans consider unpatriotic.) Therefore, a humane research strategy should be to design a plan for the schools which protects the most vulnerable children and is still in strict accordance with the law. <sup>1</sup> The main geographic provision of the bill is that Detroit shall be divided into 7 to 11 regional school districts with not more than 50,000 nor less than 25,000 students in each district. In addition, each of the regional school districts will elect a single member to the central School Board. Federal law requires that each of the regional school districts be in one piece, that is, contiguous

<sup>1.</sup> State of Michigan, Senate Bill No. 635, approved by the Governor, August 11, 1969. (The complete bill is reproduced in Appendix I.)

To meet the primary goal of protecting the most abused children, every possible legal regional combination of Detroit High School Districts (over six hundred) are being ranked according to sympathetic authority to the children from most to least. The measure of sympathy used is "the total number of black children under white authority." (Appendix II.) A regional school district is defined as being under white authority where a majority of voters voted for white candidates in the mayoral primary. (A man with white skin color who voted black was considered to be a "black voter" and vice versa.) Assuming short run consistancy in racial voting attitudes, it can reasonably be predicted which regional school districts would be under white authority.

Among the hundreds of possible combinations, some samples of the best plans were made for this progress report and the plan which achieved the best-for-the-children result combines the high school districts mapped on page one. This most child sympathetic plan puts 15,001 black children under white authority. For purposes of comparison the lowest ranked plan drawn from the sample of hundreds places 104,801 number of black children under unsympathetic authority. (Since the School Board has discussed using discontiguous regions and currently uses discontiguous combinations of high schools administratively, the computer programming has been constructed to rank all possible discontiguous plans though such combinations are perhaps illegal.)

Greater sympathetic control could be obtained if the grade schools were grouped into regional districts, that is, if the high school boundaries were changed by reassigning grade schools. High school enrollment capacities had to be added to this problem. (Appendix III.) When this research design is used, children in unsympathetic high school districts are gathered under sympathetic authority, such as in extreme southwestern Detroit and Old Delray.



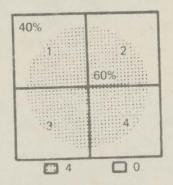
Grade School Districts Combined to Maximize Sympathetic Authority (in preparation)

The two sample best plans for the welfare of the children, one based on existing high school districts and one on existing grade school districts, are not entered as the only desirable plans. The wisdom of the community needs to be

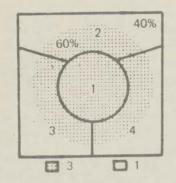
brought to the problem. For instance King High School has a strong community organization that might be important to preserve in any plan. The wisdom of the community and additional factors such as those presented in the atlas appendix (Appendix IV) deserve serious consideration, but obviously the scientists hope the various communities in Detroit pick near the top of the ranked order of the high schools or boundaries near the grade school optimum.<sup>2</sup>

#### B. Philosophy of Community Control

At this juncture the philosophy of "community control" must be briefly explained. "Community control" is another way of saying "local government" or "sub-urban units" or "homogeneous regions" or simply "democracy." The object of "community control" is to assure that all people, regardless of race, color, religion, national origin or class be given control over their own community's interests. In this case, their community's interest is sympathetic authority over their children in the public schools. The opposite of "community control" is the denial of political power to the community, and this is often accomplished by the device of "gerrymandering." "Gerrymandering" is the drawing of voting boundaries in such a fashion as to leave a group with little or no political power in spite of their numbers. Gerrymandering is geographic vote stealing. The perfectly gerrymandered group is one with huge minorities in all voting districts, in theory many minorities of 49.999999999 per cent. The more voting districts of this nature the more votes, the minority group has wasted. Votes are also wasted if they are near 100 per cent, so the group being gerrymandered is often given a few districts with 100 per cent votes especially in situations where the gerrymandering strives to have nothing but tiny majorities, ideally 50.000000001 per cent, thus wasting not one of their votes. Notice how geographically reasonable gerrymandering can appear on the map. Both examples below of gerrymandering are in every respect legal; the voting districes in both cases are compact, contiguous, equal sized in area, equal sized in population, yet both are severely gerrymandered. The case of



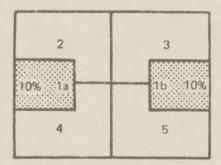
Gerrymandering by the Inner City



Gertymandering by the Outer City

<sup>2.</sup> Assisting scientists in all aspects of this study include Dr. John Sheppard of the Geography Department, Queens College, Kingston, Ontario, Professors Ray Johnston and Charles Baer of the Political Science Department, Wayne State University. Detroit, Assistant Professors Ronald Horvath and Edward Vandervelde of the Geography Department, Michigan State University, East Lansing: Michigan and two geography graduate students from the same department, Charles Ipcar and Melinda Meade: Professor John Nystuen and Assistant Professor Donald Deskins, of the Geography Department, University of Michigan, Ann. Arbor, Michigan. The grade school version of the assignment problem has been submitted to research teams of geographers at the following universities. Clark, Harvard, Queens, Northwestern, the University of Pennsylvania, and the University of Washington (Seattle). In addition, the Council of the American Association of Geographers at their quarterly meeting in Chicago, December 12, 1969, under the chairmanship of Professor Ross Mackay, gave attention to the problem as presented by Miss Warren and Dr. Bunge.

Gerrymandering by the Inner City leaves forty per cent of the people, the entire outer ring, without representation. The case of Gerrymandering by the Outer City gives only one voting district to the Inner City and three to the Outer City in spite of the Inner City's clear majority. It leaves a total of thirty five per cent of the people, a doughnut shaped ring, without representation. To drive this point home, it is theoretically possible that a discontiguous plan would be less gerrymandered, though we are in no way advocating such a possible illegality under existing law. The sketch below shows a case where a minority group is geographically split into two parts each representing ten per cent of the group's numbers. If the twenty per cent minority group is to have any representation under a five district plan it must be grouped discontiguously. No geographer in the world would advocate vastly discontiguous regions, but the point is made to center again on the true essence of gerrymandering and to cut through the confusion about "compactness," "contiguity," "equal size in area" and so forth. To repeat most forcefully, the geography of cheating voters, gerrymandering, has only one goal and one clear measure; the degree to which a group is deprived of power below its proportion of members in the total population. (Appendix V.)



Region 1 is in two parts to prevent gerrymandering.

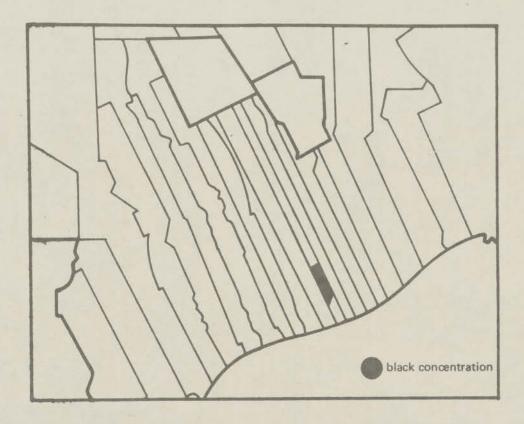
The most extensively used device for achieving gerrymandering is to increase the size of the voting district just when a people is growing into a majority in a given voting district. In 1918, as black people coming up from the South were beginning to fill up eastside wards, Detroit switched to city-wide government with the power structure and its press campaigning for "governmental efficiency" and "modernization." The black people of Detroit had to wait till 1957 before electing a black representative to the Common Council, a delay of thirty nine years which made Detroit one of the last major American cities to elect a black city representative. Now that the at-large voting in Detroit is about to go black, again there is much talk abroad of "efficiency," "regional planning," and a "Southeastern Michigan government" which would deny black people elected political power.

| 1970 - 45 | 1976 - 60 |
|-----------|-----------|
| 1971 - 48 | 1977 - 64 |
| 1972 - 50 | 1978 - 67 |
| 1973 - 52 | 1979 - 70 |
| 1974 - 54 | 1980 - 73 |
| 1975 - 57 |           |

Predicted Per Cent of Black Residences in Detroit (Detroit Department of Health, 10/69)

The argument that the rich suburbs added to the central city will be beneficial to the poor is deceptive. Normally in such partnerships the poor lose political power to the affluent and do not gain economic advantage. Even wealth

<sup>3. &</sup>quot;Race and Representation in Detroit and the Six County Metropolitan Region," Louis H. Masotti, John R. Krause, Jr., Sheldon R. Gawiser, Metropolitan Fund Inc., Detroit, 1968.



**BLACK POPULATION, 1915** 

(Detroit Bureau of Governmental Research, Inc., The Negro in Detroit, 1926, p. 10, cited in Marc Belding Anderson, Racial Discrimination in Detroit. A Spatial Analysis of Racism, p. 105; also, Metropolitan Fund Inc., Race and Representation in Detroit and the Six County Metropolitan Region, 1968, p. 10)

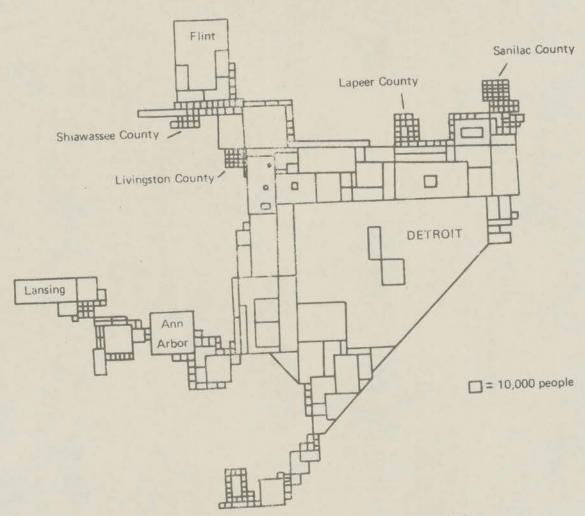
in geographic proximity to the poor is economically and politically remote to them. For instance, General Motors' headquarters on Grand Boulevard near Woodward is in the Northern High School District but what tangible advantage is gained by Northern?

#### C. The Decline of Urban Local Government

The result of centuries of gerrymandering by enlarging voter districts has left no local government in American cities. That is, the tens of millions of Americans who now have moved to or have been born in cities have been effectively disenfranchised out of local governmental representation. On the map of southern Michigan of local governmental districts, the cities show up as holes. For instance, there is no governmental unit in the cities called 'townships."

The average population of townships in the State of Michigan is 2,349 people, about the same number of people as in city block clubs. In order for urban dwellers to enjoy local government comparable to that of the countryside, block clubs should be given governmental status comparable to townships. County sized units of political control have about the same number of people as suburbs on the city fringes. The city itself has no such governmental unit though "community councils" or "homeowners associations" or just plain "districts" have the right numbers as the cities try to form this natural political unit. The word "suburb" means "sub-urban," a break down of the huge

metropolitan region into units of community control for the non-poor. The middle class "sub-urbs" in Detroit average 37,019 people, the affluent sub-urbs 11,090 people. Most sub-urbs have their own police departments, garbage collection systems, libraries, and other public sources, and most pertinent to this discussion, their independent school system. Black people will not have to move to the sub-urbs to get local government, if sub-urban independent school system.



Cartogram of Townships and Cities in Southeastern Michigan with Areas of Government in Proportion to Population

units of local government are only allowed in the city. The average number of school children in the affluent sub-urban school system is 11,138. Since there are 280,000 school children in the Detroit public school system, in order for our city children to enjoy equal opportunity of local control. Detroit needs 25 school districts, the order for our city children to enjoy equal opportunity of local control. Detroit needs 25 school districts, the approximate size of each city high school region not the seven to eleven regional districts for which provisions have approximate size of each city high school region not the seven to eleven regional districts up to a high number, the better.

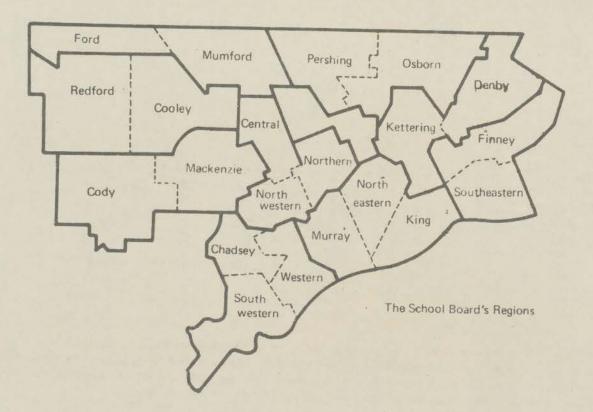
#### Chapter 2

#### The School Board's Plan

The strategy of the second chapter is to examine the School Board's decentralization plan with the objectivity of science.

#### A. Major Errors in the Plan

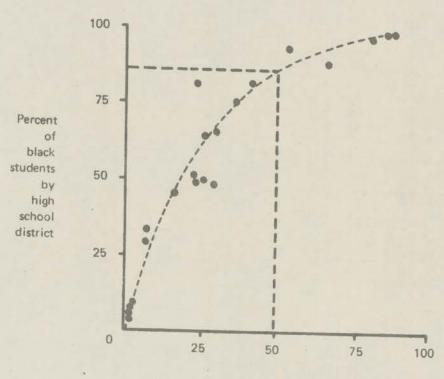
The Detroit Free Press, Sunday, December 7, 1969, released what it claimed to be the essence of the School Board's thinking as shown in the map below. If the School Board is indeed thinking along the lines reported, and all



their public statements support the hypothesis, then their plan might well fall below the actual theoretical Absolute Gerrymandering limit. This worse-than-theoretical-possible result is achieved by redesigning high school boundaries in the Ford-Mumford-Cooley region. 112,108 black children are placed under unsympathic authority. The Black community would be able to protect only 68,362 of its own children. Only 4,217 white students are not under white authority. This plan would place seven white and only two black members on the central board thus materially weakening existing black representation on that board.

School Board public statements about their planning principles have undertones that it is protecting the white community from counter-gerrymandering by the black people. But "community control" is anti-gerrymandering, fair to all groups, it is not counter-gerrymandering. In addition, black attitudes toward white children are heavily integrationist relative to whites toward black children, that is, "black authority" can not be equated with "white authority" in terms of "unsympathetic authority." Overwhelmingly, as documented in the Kerner Commission Report and many other studies, racism is a social disease of the whites, not the blacks, so equating placing white

children under black authority with counterracism is not justified. But regardless of its possible desirability, black gerrymandering is impossible. Black people barely have enough power to control regions where their children are attending schools in overwhelming numbers. A school district with only fifteen per cent white school children has fifty per cent white voters. That is, in the crucial swing situations, the ones that determine power, each white child represents more than six times the voting power of each black child. In positions of such marginality even within their own communities, black community control hardly can afford to dilute itself at all to gerrymander control



Percent of black voters by high school district

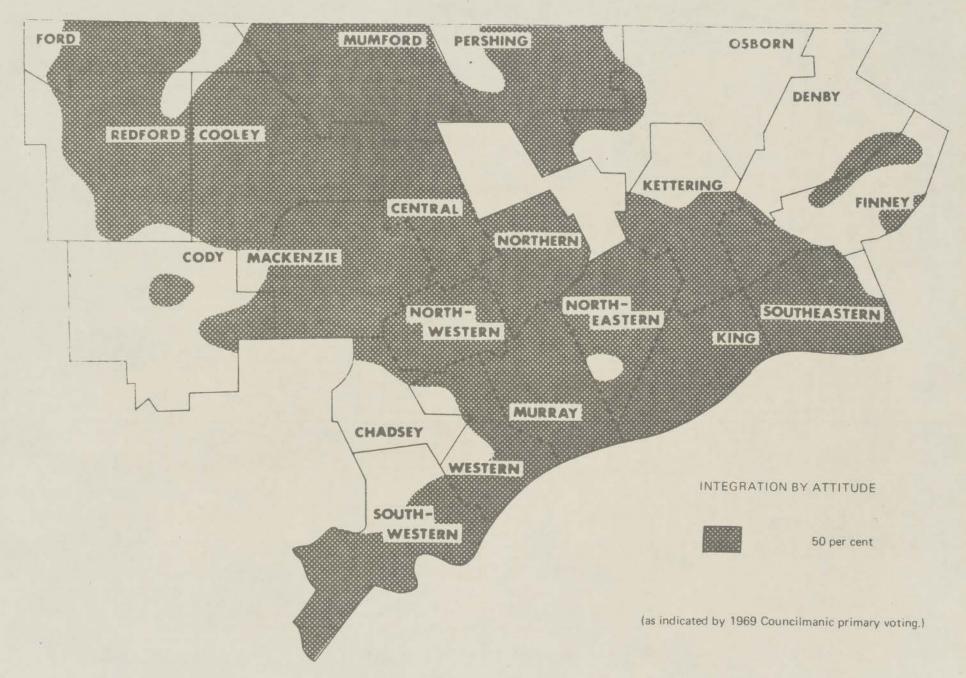
(Metropolitan Fund, 12/68)

over white children. The reasons for large white voter registration relative to black are numerous and include an older white population, a white Catholic population who have no children in the black schools but have voter rights over them, a tradition of racist law in the country making white racists feel more at home with all aspects of the governmental apparatus, including voting, than the oft times black victims feel with the apparatus.

Another mis-impression that the School Board plan gives is the confusion over the principle of "one-man, one vote." "Man" under the Constitution of the United States of America, does not mean a registered voter. "Man" means every human being including the newest born black infant. Representation in this country is supposed to be proportional to the total population. The placing of white voters in authority over black children under the principles of "one man, one vote" is incorrect.

#### B. The School Board Plan's Effects on Integration

If integration is defined as an attitude, "integrationist versus racist," the School Board plan places racists in the saddle of power. The truth of this assertion can be demonstrated. The key aspect of racist attitude relative to power is "Can a voter overcome his prejudices enough to vote for a man of the other race?" If voters in a given precinct vote



Map 1

half white and half black, they are one hundred percent integrationists, or more sharply, if they totally vote for one race they are one hundred percent racist. Using the primary election results of the 1969 Councilmanic race, which allows considerable extremes to register at the polls, analysis of those who voted for the top and bottom major white candidates (Ravitz and Wiezbicki) and the top and bottom major black candidates (Hood and Brown) identify patterns within the city as to degree of racist voting attitudes. Extreme voter racism exists in the totally white areas of the city, the northwest, northeast and southwest. (Map 1.) It is precisely these racist voters that the School Board plan places in control of integrationist children in such examples as a Denby controlling a Kettering. Indeed, only the principle of community control allows areas like Cody to maintain their right to vote. If the School Board were consistent with its avowed principles of integration, Cody should have a regional district board totally elected by voters imposed from integrationist regions such as Northern.

The second definition of integration is not that of attitude, but rather of geographic proximity. The school board, again in the name of integration, puts geographically different regions together and arrives at a stasticial integration on paper. True integration, in the sense of "geographic proximity," geographers the world over agree, means that the two races are geographically intermingled. Consider the logic of example illustrations. Case 1 is obviously one of integration. Case 2 is an example of segregation and Case 3 a mixed example of two segregated regions with a zone

XOXOXO XXXOOO XXOXOO OXOXOX XXXOOO XXXOOO XOXOXO XXXOOO XXOXOO Case 1 Case 2 Case 3 Perfect Integration Perfect Segregation Partial Segregation and Integration

of integration in between which typifies reality on Detroit's west side. The grain of Case 3, the Detroit west side pattern, obviously runs north and south, but the School Board pattern runs across this natural grain. The School Board plan destroys the integrated pattern and subordinates it to the racist pattern. To put it in another fashion,



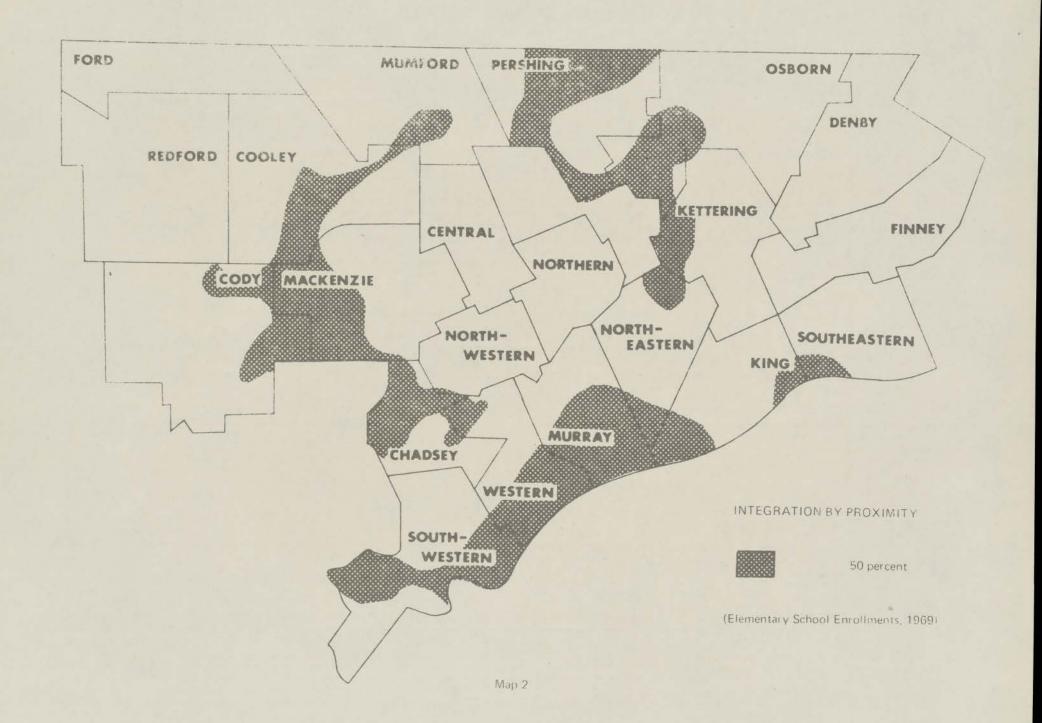
Community Control Districts



School Board Districts

school integration is only one force for integration. Other forces, such as real estate practices, ethnic attitudes, proximity to work and so forth are also important. By using up the school's force for integration in hopeless combination with racist areas, this school force is in fact wasted.

The only way to make the reality of the three cases appear in the statistics, a reality that is so apparent to the naked eye, is to make statistics drawn from small regions. If a huge enough region is statistically lumped together the Planet Earth itself can be statistically "proven" to have achieved integrated brotherhood for all mankind. Even Case 2, the segregated example, comes out statistically, fifty-fifty if considered as a false whole. On the real-life earth's surface in Detroit, an elementary school district is a small enough areal unit to reflect true geographic integration. If a grade school has a fifty-fifty racial ratio, it is in fact, as well as statitistic, one hundred percent integrated. The children are in fact interacting face to face each day. The true picture of integration in Detroit is shown on Map 2. Only community control can place these schools under integrationist authority.



Since Americans are such mobile people perhaps the geographis permanance of areas of integration is not as important as its adequate availability of integration in the general region. The metropolitan region of Detroit is growing at approximately two yards a day. If the total urbanized city size doubles, so should the black and integrated areas. This geographic phenomenon is not the result of a pushy people aggresively invading other peoples neighborhood, it is simply natural proportional growth. Further, the cause of white flight from integrated areas is not necessarily simply racism. "Integration" to whites too often means bad schools; and young liberal white families. the ones most likely to want to integrate, will not do so at the expense of their children's education. The low quality of education, especially the predictable tremendous overcrowding that accompanies expanding black neighborhoods, is precisely the overwhelming factor that drives out young liberal white couples from integrated areas. The condition of the schools themselves are the most active instrument of segregation in the city today in spite of an officially proclaimed policy of integration. In neighborhoods with good schools such as the Lafayette Tower area and north of the University of Detroit, integration is showing signs of geographic stability. But such integration is only available to the highest paid black families and the middle or higher paid white ones. Modestly financed people of either race cannot buy sucy permanent integration assuming they so desire. Still, families of average income are achieving a mechanical integration in the northwest portion of Detroit because of the surplus housing for black people. Contrary to seeming dominant white impressions, there is not an infinite supply of black people. If the Greater Detroit Metropolitan Region were geographically integrated only less than one house in every five would contain a black family. With areas of real estate open to black families in northwest Detroit, the supply of solid housing for black people is exceeding the demand and integration has a posibility of becoming geographically fixed. As the former knife edge blurs, as can be seen again especially in northwest Detroit, rather stable geographis integration is a massive possibility. It is this sort of natural integrated community that the School Board plan injures.

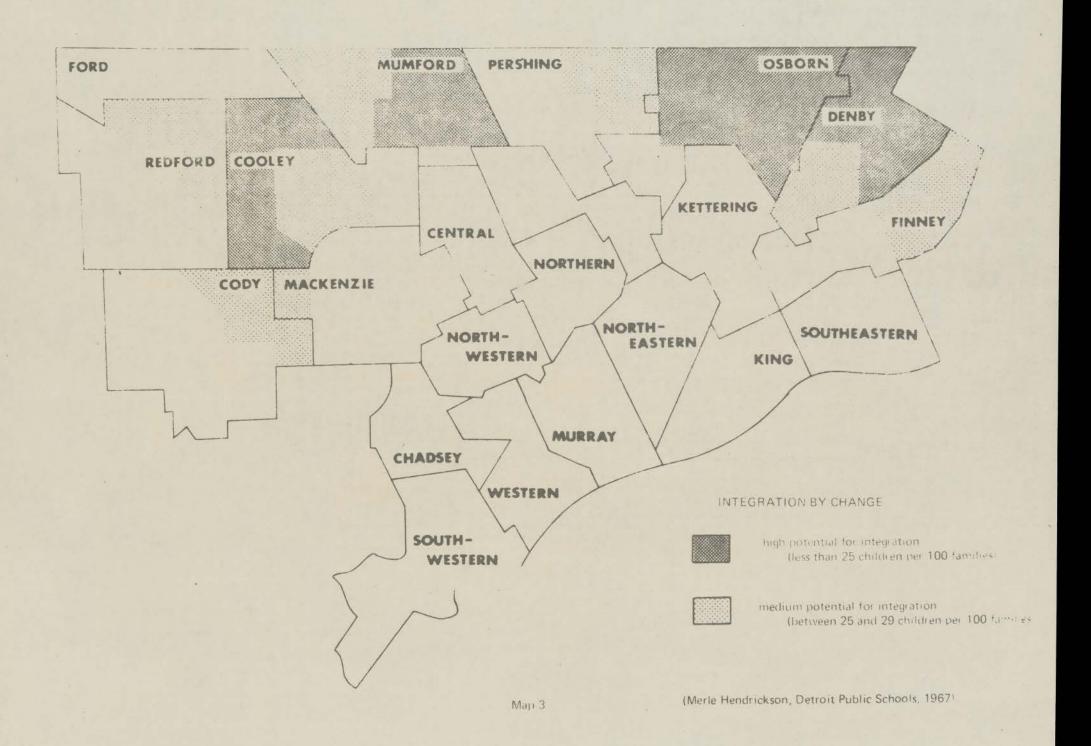
Integration can be defined a third way as simply a "changing neighborhood." If integration is viewed as the time between "the first black family moving in and the last white one moving out," then the School Board plan must be considered racist in effect because breaking up these zones of change will leave black children under white control many years after the community has become black. Again, the grain of the School Board plan runs athwart the grain of coming change. To be responsive to black change, the community control plan is again clearly fair. The School Board statistician, Merle Hendrickson, has devised an accurate method of predicting racial change. It is based on the fact that neighborhoods tend to form new subdivisions with newly wed couples and about forty years after the couples begin to retire and collectively sell their homes. This creates a vacuum in housing demands in a neighborhood and a second generation of young couples enter. The second generation in Detroit has recently always been black. Using Hendrickson's material (Map 3), clearly Osborn and Denby in the northeast side should be kept as a grouping since the slow grinding wheels of economic real estate is, regardless of the subjective attitudes of the present white residences, about to tip the whole region integrationist. Thus the School Board planning violates integration defined as change and the community control plan does not.

#### C. The School Board's Machinery for Making Decisions

The School Board has the advantage in any dispute with the public of controlling its own data, data that has a semi-legal status. For instance, in preparing a community decentralization school plan, the School Board can determine for itself what are the legal capacities of the schools. In 1960 Fitzgerald Elementary School was a white school and was given a listed capacity of 1,472 students. Tremendous overcrowding (the broom closet is now the violin room) produced a statistical expansion of the main building to a listed capacity of 1,760 students without the addition of a single brick of physical expansion. The School Board data control has already produced a heavily illegal school system throughout the black city of Detroit. Fire regulations are normally based on the number of humans per square footage, but not in schools. Firedoors are illegally locked making a tragedy on increased probability though school records indicate "safe."

The school lunch rooms are allowed to fall below Health Department standards which are enforced in private

<sup>4.</sup> Urban renewal of the "negro removal" sort as accorded at the Chrysler School in earlier decades was based on removing extremely poor black families and building luxuary apartments on the site of their former homes and completely reversing racial balances. This luxury apartment planning has become too difficult politically so that much more modestly priced dwellings are now being constructed on urban renewal projects that keep the racial balances about the same as today.



restaurants, and lunchroom overcrowding mechanically produces unhygenic conditions each noon in many Detroit schools. Broken glass is allowed to accumulate on the playgrounds to the extent that would not be permitted in a private amustment park. School sidewalks are illegally only partially shoveled. The oldest lighting and accoustics in many neighborhoods is found in the schools which are rated adequate by the School Board. Such a tradition of data disguise does not induce confidence in the School Board's ability to resist the temptation of proving its own case. But since all community groups in the city agree on the principle of community control, since it is demonstratable that community control reinforces integration, since community control is in the American tradition of town hall democracy of our forebears, since community control clearly places the children under the authority of their own parents and gives to children the combination of love and guidance best for them, the School Board should listen to advice that does not agree with its pre-judgement. The School Board plan is so technically inept that the temptation to charge cynical manipulation of a good bill badly implemented by surburbanite white power that runs Detroit is overruled by a second possibility, just plain incompetence in the technical advice being received. Like many other American urban systems, the educational machinery in Detroit appears to be grinding to a halt. Therefore some expert advice, including the wisdom of the parents of school children, might still save the children from further injury.

Act No. 244
Public Acts of 1969
Approved by Governor
August 11, 1969

#### STATE OF MICHIGAN 75TH LEGISLATURE

#### REGULAR SESSION OF 1969

Introduced by Senators Young, Brown and Cartwright

## **ENROLLED SENATE BILL No. 635**

AN ACT to require first class school districts to be divided into regional districts and to provide for local district school boards and to define their powers and duties and the powers and duties of the first class district board.

#### The People of the State of Michigan enact:

Sec. 1. Not later than January 30, 1970, the school board of each first class district shall divide its district into not less than 7 nor more than 11 regional school districts with not more than 50,000 nor less than 25,000 students in each district.

Sec. 2. In addition to the present members of the first class board there shall be elected by the registered and qualified electors of each district to the first class board 1 member from each of the districts for a term of 4 years. The members of the first class school district board provided in section 2 to be elected by regions shall be elected in the general election to be held in November, 1970 and every fourth year thereafter for a term commencing on January 1 next following their election. The candidates shall be nominated in primary elections in the manner provided by law for the present first class school district members.

The term of office of the present first class school board members shall hereafter be 4 years. The terms of office of present first class school board members which expire June 30, 1971 are extended to January 1, 1973. The term of office of present first class school board members which expire June 30, 1973 are shortened to January 1, 1973. The 5 at large positions on the first class district school board which expire January 1, 1973 shall be filled at the general election to be held in November, 1972 for a term of 4 years. The terms of office of present first class school district board members which expire on June 30, 1975 are extended to January 1, 1977 and shall be filled at the general election to be held in November, 1976 for a term of 4 years.

Sec. 3. In each regional district there shall be elected 9 members to the regional board. No person shall be elected who is not a resident of the regional district from which he is elected. The members shall be nominated and elected by the registered and qualified electors of each district as is provided by law for the nomination and election of first class school board members except that signatures required on nominating petitions shall be not less than 500 nor more than 1.000. The members shall be elected for terms of 4 years. Except that of the members elected at the general election in 1970 the 5 members receiving the highest number of votes shall be elected for a term of 4 years and the 4 members receiving the next highest number of votes shall be elected for a term of 2 years.

Sec 4. The first class school district board shall retain all the powers and duties now possessed by a first class school district except for those given to a regional school district board under the provisions of this act.

Sec 5. Effective upon the commencement of its term of office, the regional school district board, subject to guidelines established by the first class district board, shall have the power to:

(1) Employ and discharge a superintendent for the regional school district from a list or lists of candidates submitted by the district board.

(2) Employ and discharge, assign and promote all teachers and other employees of the regional school district, subject to review by the first class school district board, which may overrule, modify or affirm the action of the regional district board.

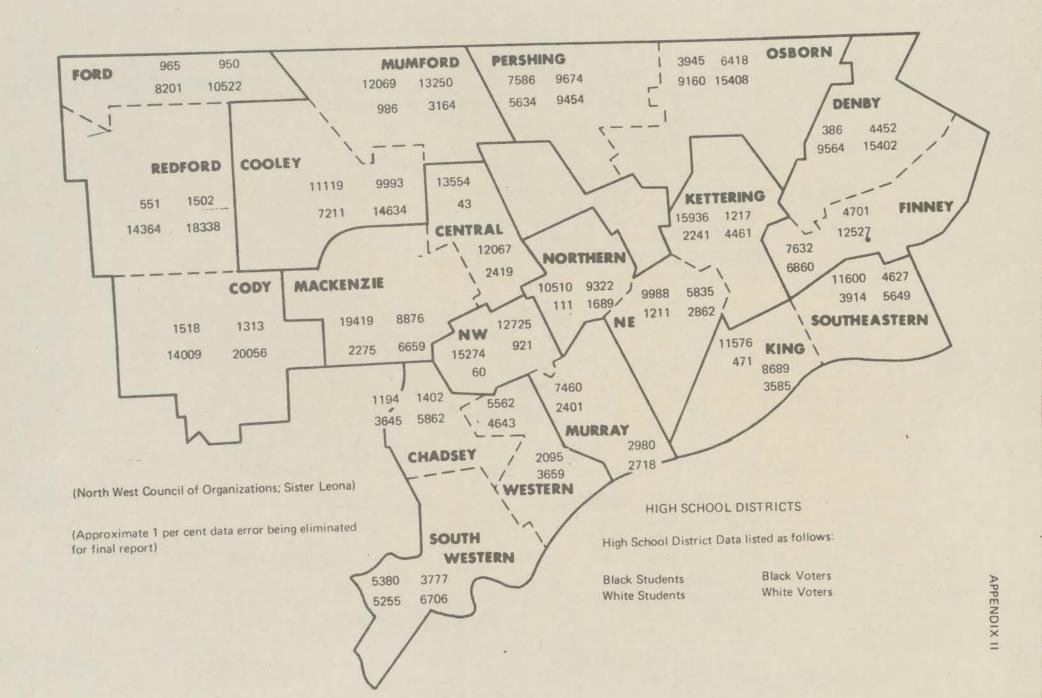
(3) Determine the curriculum, use of educational facilities and establishment of educational and testing programs in the regional school district.

(4) Determine the budget for the regional school district based upon the allocation of funds received from the first class school district board.

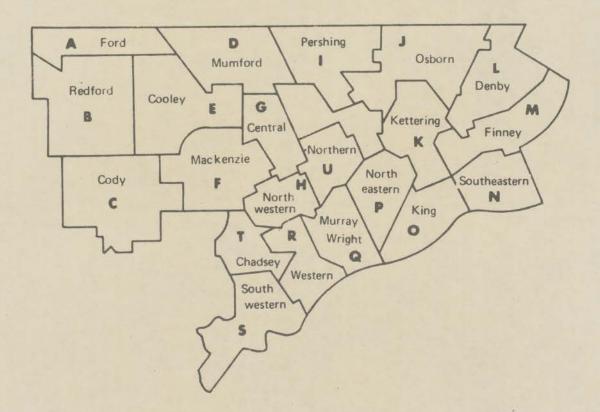
Sec. 6. The rights of retirement, tenure, seniority and of any other benefits of any employee transferred to a regional school district or between regional school districts from the first class district shall not be abrogated diminished or impaired.

Sec 7 The first class school district board shall perform the following functions for the regional school districts:

- (1) Central purchasing.
- (2) Payroll.
- (3) Contract negotiations for all employees, subject to the provisions of Act No. 336 of the Fublic Acts of 1947, as amended, being sections 423,201 to 423,216 of the Compiled Laws of 1948, and subject to any bargaining certification and to the provisions of any collective bargaining agreement pertaining to affected employees.
  - (4) Property management and maintenance.
  - (5) Bonding.
  - (6) Special education programs.
  - (7) Allocation of funds for capital outlay and operations to each regional school district.
- (8) On or before November 1, 1970, establish guidelines for the implementation of the provisions of section 5.



The following pages contain a sampling of the top, middle, and bottom of over 600 possible high school combinations, ranked according to percentage of black children under unsympathetic authority (white control).



#### Comparison of All Plans Submitted

|    | a    | b    | c    | d    | е    | f    | g    | h*   | i*    |
|----|------|------|------|------|------|------|------|------|-------|
| 1. | 80.0 | 71.2 | 71.2 | 64.1 | 61.8 | 59.5 | 58.6 | 39.4 | 31.4  |
| 2. | 20.0 | 28.8 | 28.8 | 35.9 | 38.2 | 40.5 | 41.4 | 60.6 | ×68.6 |
| 3. | 79.5 | 84.9 | 84.9 | 85.6 | 80.5 | 77.3 | 90.0 | 95.8 | 79.2  |
|    | 20.5 |      |      |      |      |      |      |      |       |

- 1. Percentage of black children under black control.
- 2. Percentage of black children under white control.
- 3. Percentage of white children under white control.
- 4. Percentage of white children under black control.
- a. Northwest Community Organization
- b. Action Committee For Education
- c. Detroit Council of Organizations
- d. Edison School Parents Club
- e. Ad-Hoc Committee for Community Control of Schools
- f. Promotion Study Success, Inc.
- g. Berkowitz Plan
- h. Detroit Board of Education
- i. First District Democratic-Education Committee

\* High School Boundaries Altered

#### ELECTRICIAN : BLACK, VHITE, AND TOTAL

| ABC   | 1.14.1 | FG    | RRST  | J Lit: | LIU   | 1.00  |
|-------|--------|-------|-------|--------|-------|-------|
| 3034  | 30774  | 32973 | 27410 | 11963  | 36434 | 30636 |
| 36574 | 13831  | 2318  | 13603 | 25584  | 3563  | 6786  |
| 39608 | 44605  | 35291 | 41013 | 37547  | 39997 | 37422 |

| LAJCIITY LLRC                    | LLNII.T P  | OLITICAL CCH                     | TICL               | NUMBER OF                    | DISTRICTS |
|----------------------------------|--|----------------------------------|--------------------|------------------------------|-----------|
| ELACK<br>BLACK<br>WLITE<br>KHITE |  | BLACK<br>WHITE<br>WHITE<br>BLACK |                    | 5<br>0<br>2<br>0             |           |
| PERCENTAGE OF<br>PERCENTAGE OF   | BLACK CHILDREN<br>BLACK CHILDREN<br>UNITE CHILDREN<br>WHITE CHILDREN | UNDER WHITE                      | CONTROL<br>CONTROL | 91.3<br>0.66<br>60.8<br>39.2 |           |

#### ELRCLIFELTS : BLACK, WHITE, AND TOTAL

| ADC   | LLI   | FG    | HTS   | JII   | EPU   | LOCE  |
|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 30774 | 32973 | 21848 | 11963 | 36434 | 36198 |
| 36574 | 13831 | 2318  | 8960  | 25584 | 3563  | 11429 |
| 39608 | 14605 | 35291 | 30808 | 37547 | 39997 | 47627 |

| MACCHITY ELECT.                  | LIENT - FO   | CLITICAL CONTI                   | ROL EUNDER       | CT TISTRICTS |
|----------------------------------|--|----------------------------------|------------------|--------------|
| ELACE<br>LLACA<br>WHITI<br>WHITI |  | BLACK<br>WHITE<br>WHITE<br>BLACK | 5<br>C<br>2<br>0 |              |
| FERGULATAGE OF                   | DLACK CHILDREL<br>LLACK CHILLREL<br>WHITE CHILDREL<br>WHITE CHILDREL | UNDER WHITE O                    | COLTROL 8.66     |              |

#### ENROLLMENTS : BLACK, WHITE, AND TOTAL

| ABC   | DEI   | FG    | HQ    | JLM   | KPU   | NO    | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 30774 | 32973 | 22734 | 11963 | 36434 | 23176 | 12136 |
| 36574 | 13831 | 2318  | 2461  | 25584 | 3563  | 4385  | 13543 |
| 39608 | 44605 | 35291 | 25195 | 37547 | 39997 | 27561 | 25679 |

| MAJORITY ENROLLMENT | POLITICAL CONTROL | NUMBER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BLACK             | 5                   |
| BLACK.              | WHITE             | 0                   |
| WHITE               | WHITE             | 3                   |
| WHITE               | BLACK             | 0                   |

26

PERCENTAGE OF BLACK CHILDREN UNDER BLACK CONTROL PERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL PERCENTAGE OF WHITE CHILDREN UNDER WHITE CONTROL 74 PERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL

ELROLLNEWTS: BLACK, WHITE, ALD TOTAL

AEC DEI FG HRST SLM KI KOQU

3034 30774 32973 27410 11963 25924 41146
36574 13831 2318 13603 25584 3452 6897
39608 44605 35291 41013 37547 29376 48043

| MATANTHY TH  | TO T  | r +: r:: m | PO       | LITICA                       | L CONT          | RCL     | NUMBER C.                    | F DISTRICTS |
|--|-------|------------|----------|------------------------------|-----------------|---------|------------------------------|-------------|
| MAJORITY EN  BLACK BLACK WHITE WHITE                 | I.C.L | Liet.T     | 10       | BLAC<br>WHIT<br>WHIT<br>BLAC | II.<br>PE<br>PE |         | 4<br>1<br>2<br>0             |             |
| PERCEETAGE<br>PERCENTAGE<br>PERCENTAGE<br>PERCENTAGE | OF    | BLACK      | CHILDREN | UNDER                        | WHITE           | COLTROL | 76.4<br>23.6<br>64.2<br>35.8 |             |

ENROLLMENTS: BLACK, WHITE, AND TOTAL

ABC DEI FGU ETS JLM KP NOOR

3034 30774 43483 21848 11963 25924 36198
36574 13831 2429 8960 25584 3452 11429
39608 44605 45912 30808 37547 29376 47627

NAJORITY ENROLLMENT POLITICAL CONTROL NUMBER OF DISTRICTS

BLACK
BLACK
WHITE
WHITE
WHITE
BLACK
WHITE
BLACK
0

PERCENTAGE OF BLACK CHILDREN UNDER BLACK CONTROL
PERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTFOL
35.8

EEROLLMENTS : BLACK, WHITE, AND TOTAL

ABC DEI FG HTS JLN: KF NO QRU

3034 30774 32973 21848 11963 25924 23176 23532
36574 13831 2318 8960 25584 3452 4385 7155
36574 13831 2318 8960 37547 29376 27561 30687

MAJORITY EUROLLMENT POLITICAL CONTROL NUMBER OF DISTRICTS

BLACK WHITE SHACK 1
WHITE BLACK 0
WHITE BLACK 0

PERCENTACE OF BLACK CHILDREN UNDER BLACK CONTROL
PERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER BLACK CCUTROL
35.8

LAFELLETTS : FLACE, WHITE, AND TOTAL

| $\Lambda LC$ | DLI   | 1 G U | RRSI  | JLI'  | _ I.P | KCC   |
|--------------|-------|-------|-------|-------|-------|-------|
| 3034         | 30774 | 43483 | 27410 | 11963 | 25924 | 30636 |
| 36574        | 13831 | 2429  | 13603 | 25584 | 3452  | 6786  |
| 39608        | 44605 | 45912 | 41013 | 37547 | 29376 | 37422 |

|                                    |            |  |                          |                    |                              | \$        |
|------------------------------------|------------|--|--------------------------|--------------------|------------------------------|-----------|
| PAJORITY FE                        | ROLLI'LLT  | 107.141  | CAL CCES                 | "ECL               | LULTER OF                    | DISTRICTS |
| DLACE<br>DLACE<br>UNITE<br>WHITE   |            | 1.77<br>1.71   | ACE<br>ITE<br>ITE<br>ACE |                    | 1<br>2<br>0                  |           |
| I ERCELTAGE                        | OF WHITE C | HILDEE ULDE<br>HILLEE ULDE<br>HILDEE ULDE<br>HILLEE ULDE | R UNITE                  | CONTROL<br>CONTROL | 76.4<br>23.6<br>64.2<br>35.8 |           |
| ENROLLIN                           |            | ACK, UNITE,  |                          |                    |                              |           |
| ABC DI                             | SI FGU     | RRST JL  | V EFC                    | re                 |                              |           |
| 3034 307<br>36574 138<br>39608 446 |            | 27410 119<br>13603 255<br>41013 375                      | 34 585                   | 3 4385             |                              |           |

| MAJORITY ELECTIVE | TOLITICAL CONTROL            | NUMBER OF DISTRICTS |
|-------------------|------------------------------|---------------------|
| ELACK             | ELACK                        | f 4                 |
| DLACK             | VIIITE                       | 1                   |
| WHITE             | WHITE                        | 2                   |
| WHITE             | ELACE                        | ō                   |
|                   |                              |                     |
| PERCEITAGE OF LLA | CK CHILDRED ULDER BLACK COLT | TROL -72.1          |

| PERCELTAGE | CF | LLACK | CHILDREN  | ULDER | ELA.CK | COLTROL | .72.1  |
|------------|----|-------|-----------|-------|--------|---------|--------|
| PERCENTAGE | OF | BLACK | CHILDREL  | UEDER | VHITE  | COLTROL | (27.9) |
| PERCENTAGE | OF | WHITE | CHILDREE  | UNDER | WHITE  | CONTROL | 66.5   |
| FERCEUTAGE | CF | WHITE | CHILDREI. | ULDER | BLACK  | COLTROL | 33.5   |
|            |    |       |           |       |        |         |        |

| EKRCLI | CMENTS | : BL  | ACK, EH | ITE, AU. | D TOTAL |       |       |
|--------|--------|-------|---------|----------|---------|-------|-------|
| ABC    | DEI    | FGU   | HQ      | JLN      | EP      | EC    | RET   |
| 3034   | 30774  | 43483 | 22734   | 11963    | 25924   | 23176 | 12136 |
| 36574  | 13831  | 2429  | 2461    | 25584    | 3452    | 4385  | 13543 |
| 30608  |        | 45912 | 25195   | 37547    | 29376   | 27561 | 25679 |

| MAJORITY EMPOLLMENT              | PCLITICAL CONTROL                | CULTER OF DISTRICTS |
|----------------------------------|----------------------------------|---------------------|
| ELACK<br>ELACK<br>WHITE<br>WHITE | BLACK<br>WHITE<br>WHITE<br>BLACE | 4<br>1<br>3<br>0    |
| */                               |                                  |                     |

| FERCELTACE<br>PERCELTAGE | OF | LLACE   | CHILDRELL | ULDER          | WHITE        | COLTICL         | 30.6 |
|--------------------------|----|---------|-----------|----------------|--------------|-----------------|------|
| FERCULTAGE<br>FERCULTAGE | CI | WHITE   | CHILEREL  | ULDER          | REACE        | CCUTECL         | 22.6 |
| TERCEUTAGE               | UE | 1.01111 | CHILDDEEL | TATA TO TREET. | T. THE PARTY | O-C-17-W-A15-07 |      |

#### ENROLLMENTS: BLACK, WHITE, AND TOTAL

| ABC   | DEI   | FG    | HRST  | JLM   | KNO   | PQU   |
|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 30774 | 32973 | 27410 | 11963 | 39112 | 27958 |
| 36574 | 13831 | 2318  | 13603 | 25584 | 6626  | 3723  |
| 39608 | 44605 | 35291 | 41013 | 37547 | 45738 | 31681 |

| MAJORITY EN | ROI  | LMENT  | PC       | DLITICA | L CONT      | ROL     | NUMBER | OF | DISTRICTS |  |
|-------------|--|--|----------|---------|-------------|---------|--------|----|-----------|--|
| BLACK       |  |  |          | BLAC    | 'K          |         | 4      |    |           |  |
| BLACK       |  |  |          | WHIT    | E           |         | 1      |    |           |  |
| WHITE       |  |  |          | WHIT    | $^{\circ}E$ |         | 2      |    |           |  |
| WHITE       |  |  |          | BLAC    | K           |         | 0      |    |           |  |
| PERCENTAGE  | OF   | BLACK  | CHILDREN | UNDER   | BLACK       | CONTROL | 68.8   |    |           |  |
| PERCENTAGE  |  |  |          |         |             |         | (31.2  |    |           |  |
| PERCENTAGE  |  |  |          |         |             | CONTROL | 67.3   |    |           |  |
| PERCENTAGE  | The state of the s | A CONTRACTOR OF THE PARTY OF TH |          |         |             | CONTROL | 32.7   |    |           |  |
|             |  |  |          |         |             |         |        |    |           |  |

EUROLLIENTS : BLACK, WHITE, AND TOYAL

| ABC   | DEI   | FGU   | HTS   | JLE   | KHC   | FCR   |
|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 30774 | 43483 | 21848 | 11963 | 39112 | 23010 |
| 36574 | 13831 | 2429  | 8960  | 25584 | 6626  | 8255  |
| 39608 | 44605 | 45912 | 30808 | 37547 | 45738 | 31265 |

| L'AJORITY EL                           | RGI      | LLMERT         | P                    | OLITIC/                      | L CORT         | TECL               | LULTET                       | CF | DISTRICTS |  |
|--|----------|----------------|----------------------|------------------------------|----------------|--------------------|------------------------------|----|-----------|--|
| BLACK<br>BLACK<br>WHITE<br>WHITE       |          |                |                      | BLAC<br>WHIS<br>WHIS<br>ELAC | TE<br>TE       |                    | 4<br>1<br>2<br>0             |    |           |  |
| PERCENTAGE<br>PERCENTAGE<br>PERCENTAGE | OF<br>OF | BLACK<br>WHITE | CHILDREN<br>CHILDREN | UNDER<br>UNDER               | WHITE<br>WHITE | CCUTECL<br>CCUTECL | 68.8<br>31.2<br>67.3<br>32.7 |    |           |  |

#### ENROLLMENTS : BLACK, WHITE, AND TOTAL

| ABC   | DEI   | FG    | HPQU  | JI,M  | KNO   | RST   |
|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 30774 | 32973 | 43232 | 11963 | 39112 | 12136 |
| 36574 | 13831 | 2318  | 3783  | 25584 | 6626  | 13543 |
| 39608 | 44605 | 35291 | 47015 | 37547 | 45738 | 25679 |

| MAJORITY EPROLLMENT | POLITICAL CONTROL | NUMBER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BLACK             | 3                   |
| BLACK               | WHITE             | 1                   |
| WHITE               | WHITE             | 3                   |
| WHITE               | BLACK             | 0                   |

| PERCENTAGE<br>PERCENTAGE<br>PERCENTAGE | OF | BLACK | CHILDREN | UNDER | WHITE | CONTROL | 61.8<br>38.2<br>80.5<br>19.5 |
|--|----|-------|----------|-------|-------|---------|------------------------------|
|--|----|-------|----------|-------|-------|---------|------------------------------|

#### ENROLLMENTS : BLACK, WHITE, AND TOTAL

| ARC   | DEI   | FG    | HPU   | e <sup>T</sup> LM | KNO   | ORST  |
|-------|-------|-------|-------|-------------------|-------|-------|
| 3034  | 30774 | 32973 | 35772 | 11963             | 39112 | 19596 |
| 36574 | 13831 | 2318  | 1382  | 25584             | 6626  | 15944 |
| 39608 | 44605 | 35291 | 37154 | 37547             | 45738 | 35540 |

| MAJORITY EN                            | ROL      | LMENT          | PO                | LITICA                           | L CONT         | TROL                          | NUMBER OF                    | DISTRICTS |
|--|----------|----------------|-------------------|----------------------------------|----------------|-------------------------------|------------------------------|-----------|
| BLACK<br>BLACK<br>WHITE<br>WHITE       |          |                |                   | BLAC<br>WHIL<br>WHIL<br>BLAC     | TE<br>TE       |                               | 3<br>2<br>2<br>0             |           |
| PERCENTAGE<br>PERCENTAGE<br>PERCENTAGE | OF<br>OF | BLACK<br>WHITE | CHILDREN CHILDREN | UNDER<br>UNDER<br>UNDER<br>UNDER | WHITE<br>WHITE | CONTROL<br>CONTROL<br>CONTROL | 57.5<br>42.5<br>82.9<br>17.1 |           |
| ENFOIL!                                | ++ >: m  |                | FLACK, I'H        | TTF. A                           | ND TOT         | AL                            |                              |           |

| EHECI | LLEEUTS | : E D | HUA, MA | 221.9 |     |     |            |
|-------|---------|-------|---------|-------|-----|-----|------------|
| AEF   | PC      | DIJ   | GHU     | KL    | T.E | ore | <i>LST</i> |
| 31503 |         |       |         |       |     |     |            |

31503 2069 23600 39338 16322 19232 25024 12135 17687 28373 15780 214 11805 10774 4083 13543 49190 30442 39380 39552 28127 30006 33107 25679

| MAJORITY ENROLLMENT | FOLITICAL COUTROL | UNITER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BLACK             | 3                   |
| BLACK               | WHITE             | 3                   |
| WHITE               | WHITE             | 2                   |
| WHITE               | ELACK             | 0                   |

PERCENTAGE OF BLACK CHILDREN UNDER BLACK CONTROL
FERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL
19.6

#### DUROLLMENTS : BLACK, WHITE, AND TOTAL

| ABC   | DIJ   | EF.   | GHU   | KL    | 1:17  | OFC   | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 3034  | 23600 | 30538 | 39338 | 16322 | 19232 | 29024 | 12136 |
| 36574 | 15780 | 9486  | 214   | 11805 | 10774 | 4083  | 13543 |
| 39608 | 39380 | 40024 | 39552 | 28127 | 30006 | 33107 | 25679 |

| MAJORITY ENROLLMENT | POLITICAL CONTROL | NUMBER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BIACK             | 3                   |
| FLACK               | WHITE             | 3                   |
| VHITE               | WHITE             | 2                   |
| VHITE               | BLACK             | 0                   |

| FURCERTACE               | OF | BLACK | CHILDREN | UNDER | BILACK | COUTICI | 53.1 |
|--------------------------|----|-------|----------|-------|--------|---------|------|
| PERCENTAGE               | OF | BLACK | CHILDREN | ULDER | WHITE  | COUTROL | 46.9 |
| TERCENTAGE<br>TERCENTAGE | OF | WHITE | CHILDREN | UHDER | BLACE  | CONTROL | 19.6 |

#### ENROLLMENTS : BLACK, WHITE, AND TOTAL

| ADI   | BC    | EF    | GHU   | JK    | LWN   | OPC   | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 20620 | 2069  | 30538 | 39338 | 19881 | 19618 | 29024 | 12136 |
| 14821 | 28373 | 9486  | 214   | 11401 | 20338 | 4083  | 13543 |
| 35441 | 30442 | 40024 | 39552 | 31282 | 39956 | 33107 | 25679 |

| CAJORITY EL | ROLLMENT | F        | OLITICAL | COLI  | ROL     | NULBER | OF | DISTRI |
|-------------|----------|----------|----------|-------|---------|--------|----|--------|
| BLACK       |          |          | BLACK    | (     |         | 3      |    |        |
| BLACK       |          |          | WHITE    | 7     |         | 2      |    |        |
| L'HITE      |          |          | WHITE    | 7     |         | 3      |    |        |
| WHITE       |          |          | BLACI    |       |         | 0      |    |        |
|             |          |          |          |       |         |        |    |        |
| TERCENTAGE  | OF BLACK | CHILDREN | UNDER B  | BLACK | CONTROL | 51.4   |    |        |

PERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL
1ERCENTAGE OF WHITE CHILDREN UNDER WHITE CONTROL
1ERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL
18.7

#### EURCLLMENTS : BLACK, WHITE, AND TOTAL

| ADI   | BE    | CF    | GHU   | JK    | LMII  | OPQ   | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 20620 | 11670 | 20937 | 39338 | 19881 | 19618 | 29024 | 12136 |
| 14821 | 21575 | 16284 | 214   | 11401 | 20338 | 4083  | 13543 |
| 35441 | 33245 | 37221 | 39552 | 31282 | 39956 | 33107 | 25679 |

| MAJORITY ENROLLMENT              | POLITICAL CONTROL                | NUMBER OF DISTRICT |
|----------------------------------|----------------------------------|--------------------|
| BLACK<br>ELACK<br>WHITE<br>WHITE | BLACK<br>WHITE<br>WHITE<br>BLACK | 3<br>2<br>3<br>0   |
| 26                               |                                  |                    |

PERCENTAGE OF BLACK CHILDREN UNDER BLACK CCUTROL
FERCENTAGE OF BLACK CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER WHITE CONTROL
PERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL
18.7

#### ENROLLMENTS : BLACK, WHITE, AND TOTAL

| ADI   | . BC  | EF    | GHU   | JLI:  | KE    | OPQ   | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 20620 | 2069  | 30538 | 39338 | 11963 | 27536 | 29024 | 12136 |
| 14821 | 28373 | 9486  | 214   | 25584 | 6155  | 4083  | 13543 |
| 35441 | 30442 | 40024 | 39552 | 37547 | 33691 | 33107 | 25679 |

| MAJORITY ENROLLMENT | POLITICAL CONTROL | NUMBER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BLACK             | 3                   |
| BLACK               | WHITE             | 2                   |
| KHITE               | WHITE             | 3                   |
| k'HITE              | BLACK             | 0                   |

| PERCENTAGE<br>PERCENTAGE<br>PERCENTAGE | OF<br>OF | BLACK<br>WHITE | CHILDREN<br>CHILDREN | UNDER<br>UNDER | WHITE WHITE | CONTROL<br>CONTROL | 51.4<br>48.6<br>81.3 |
|--|----------|----------------|----------------------|----------------|-------------|--------------------|----------------------|
| PERCENTALE                             | OF       | WHITE          | CHILDREN             | UNDER          | BLACK       | CONTROL            | 18.7                 |

| UNICLLUENTS :                               | DIACE HUTO     | E. AND TOTAL |
|---|----------------|--------------|
| 6 4) 4: 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | Didition white | La RUD IVIAL |

| AFE   | CF    | PI    | GHU   | JK    | LMII  | OPQ   | RST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 12635 | 20937 | 19655 | 39338 | 19881 | 19618 | 29024 | 12136 |
| 29776 | 16284 | 6620  | 214   | 11401 | 20338 | 4083  | 13543 |
| 42411 | 37221 | 26275 | 39552 | 31282 | 39956 | 33107 | 25679 |

| L'ACCLITY EERO | יייונונו | T/        | DLITICA | I COM     | PRCT.   | THETER   | OF  | DISTRICTS      | 2 |
|----------------|----------|-----------|---------|-----------|---------|----------|-----|----------------|---|
|                |          | 1.0       | DITTO   | L COM     | 1102    | 1.01.021 | 100 | 011/11/11/01/0 |   |
| LIACK          |          |           | BLAC    | ZK.       |         | 3        |     |                |   |
| ULACK          |          |           | WHIT    | Section 1 |         | 2        |     |                |   |
| L'HITE         |          |           | WHII    |           |         | 3        |     |                |   |
| WEITE          |          |           | BLAC    | ZK.       |         | 0        |     |                |   |
|                |          |           |         |           |         |          |     |                |   |
| TERCENTAGE OF  | F TLACK  | CHILDREL  | UNDER   | BLACK     | CONTROL | 50.8     |     |                |   |
| TEPCENTAGE CI  | FLACK    | CHILDREN  | UNDER   | WHITE     | CONTROL | 49.2     | >   |                |   |
| PERCENTAGE OF  | F WHITE  | CHILDREI. | UNDER   | WHITE     | CCHTROL | 89.3     |     |                |   |

### EURCLLUEUTS ; BLACK, WHITE, AND TOTAL

| AEF   | BC    | DI    | GHU   | JLM   | KE    | OFC   | EST   |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 31503 | 2069  | 19655 | 39338 | 11963 | 27536 | 29024 | 12136 |
| 17687 | 28373 | 6620  | 214   | 25584 | 6155  | 4083  | 13543 |
| 49190 | 30442 | 26275 | 39552 | 37547 | 33691 | 33107 | 25679 |

FERCENTAGE OF WHITE CHILDREN UNDER BLACK CONTROL 10.7

| LAJORITY ENFOLLMENT | POLITICAL CONTROL | NUMBER OF DISTRICTS |
|---------------------|-------------------|---------------------|
| BLACK               | BLACK<br>WHITE    | 3 2                 |
| BLACK<br>WHITE      | WHITE             | 3                   |
| VHITE               | BLACK             | 0                   |

|            |    | 1     |          |       |        |         |        |
|------------|----|-------|----------|-------|--------|---------|--------|
| TERCEUTAGE | OF | BLACK | CHILDREN | UNDER | BLACK  | CONTROL | 50.8   |
| PERCENTAGE | OF | BLACK | CHILDREN | ULDER | L'HITE | CONTROL | (19.2) |
| FERCENTAGE | OF | WHITE | CHILDREN | UNDER | WHITE  | CONTROL | 89.3   |
| PERCENTAGE | OF | WHITE | CHILDREN | UNDER | BLACK  | CONTROL | 10.7   |

## EURCLLMENTS : BLACK, WHITE, AND TOTAL

| AEF            | B C                    | DIJL                    | GHU                   | KHE                     | OFC                    | RST                     |
|----------------|------------------------|-------------------------|-----------------------|-------------------------|------------------------|-------------------------|
| 31503<br>17687 | 2069<br>28373<br>30442 | 23986<br>25344<br>49330 | 39338<br>214<br>39552 | 35168<br>13015<br>48183 | 29024<br>4083<br>33107 | 12136<br>13543<br>25679 |

| MAJORITY ENROLLMENT | POLITICAL CONTROL | EUNBER OF DISTRICES |
|---------------------|-------------------|---------------------|
| BLACK               | ELACK             | 2                   |
| FLACK               | WHITE             | 2                   |
| EHITE               | WHITE             | 3                   |
| WHITE               | ELACK             | 0                   |

| I. | ERCENTACE<br>ERCENTAGE<br>ELCENTAGE<br>ELCENTAGE | OF | BLACK | CUTLUKEK | ULLER | UHITE | CCETECL | 95.8 |
|----|--|----|-------|----------|-------|-------|---------|------|

| * *** * * * *  |  | nancia, Ell        | ITI . FID      | 2021:4         |                | × *       |            |
|----------------|--|--------------------|----------------|----------------|----------------|-----------|------------|
| :DI:           | LE CL  | CLU                | I.L            | t:I:           | CIC            | rst       |            |
| 24565 1        | 1676 2693  | 7 39338            | 16322          | 19232          | 29024          | 12136     |            |
|                | 1575 1628<br>3245 3722                               |                    | 28127          |                |                |           |            |
|                |  |                    |                |                |                |           |            |
|                | CLECLLITET   | . 70               | LITICAL        | CCETIC         | E.             | EULTEE CF | LISTIICE:  |
| ELAC           |  |                    | F.L.A.CI.      |                |                | 2         |            |
| BLACI<br>EHITI |  |                    | HITTE          |                |                | 2         |            |
| FEITE          |  |                    | PLACE.         |                |                | 0         |            |
| PERCEL TROP    | OF BLACK   | CHILDREL           | UELEE EL       | ACE CC         | TICI.          | 39.5      |            |
| FERCELTAGE     | OF MEITE   | CHILDREL           | UNDER LE       | ITTE CO.       | GT1.CL         | 95.8      |            |
| I BRCEL TAGI   | CF UMITE   | CHILDREL           | UEDE! DE       | ACE CC         | ETICI          | 4.2       |            |
|                |  |                    |                |                |                |           |            |
| ENROL          | LUELTS :   | BLACK. I'          | HITE, AT       | E TOUAL        |                |           |            |
| ADIJ           | BC CF  | GĽU                | EL             | IT.            | CTC            | EST       |            |
| 24565          | 2069 305   | 38 39338           | 16322          | 19232          | 29024          | 12136     |            |
| 48546          | 28373 94<br>30442 400                                | 86 214<br>24 39552 | 11805<br>28127 | 10774<br>30005 | 4083<br>33107  | 13543     |            |
|                |  |                    |                |                |                |           |            |
| AJORITY .      | EURCLLUUUT   | F                  | CLITICAL       | CCUTTC         | L              | EULTER OF | DIETFICT   |
| BLAC           |  |                    | FLACK          |                |                | 2         |            |
| BLAC.          | E  |                    | UNITE<br>UNITE |                |                | 2         |            |
| VHIT           | L'   |                    | PLACE          |                |                | 0         |            |
| FERCENTAC      | E OF BLACK   | CHILDREE           | UUPEL FI       | LACE CO        | ETROL          | 39,5      |            |
| I ERCERTAL     | E OF BLACK<br>E OF WHITE                             | CHILLREE           | UNIDER VI      | TITE CC        | ETFCL.         | 95.8      |            |
| FERCEUTAG      | E OF WHITE   | CHILTEEL           | ULDER TI       | LA.CI. CC      | ETICL          | 4.2       |            |
|                |  |                    |                |                |                |           |            |
| ELROL          | LUCUTE :   | ELACK. U           | UITE. AEI      | TOTAL          |                | *         |            |
| ABC            | DIJL EF  | GHU                | EEE            | ere            | EST            |           |            |
| 3034           | 23906 305  | 38 39338           | 35168          | 29024          | 12136          |           |            |
| 36574<br>39608 | 25344 94<br>49330 400                                | 86 214<br>24 39552 | 13015          | 33107          | 25079          |           |            |
| - Alexander    |  |                    |                |                |                |           |            |
| ::AJCEITY      | FURCLLEFET   | P                  | CLITICAL       | COLTPO         | I.             | LULPER CF | ricri icce |
| LIAC           | I.   |                    | PLACE          |                |                | 2         |            |
| ELAC           | K  |                    | THITE<br>THITE |                |                | 3         |            |
| F.E.I.7,       |  |                    | TLACK.         |                |                | 0         |            |
| 25.0           |  |                    |                |                |                |           |            |
| TEPCELTA (     | F (F ELACK   | CHILLEL            | DEDEK T        | LACT CC        | LTPCL          | 30.5      |            |
| TEPCEETA (     | F OF BLACK<br>E OF FLACK<br>F OF VEITE<br>E OF WEITE | CHILERIA           | UELLE TE       | HITE CO        | LTICL<br>LTICL | 30.5      |            |

#### APPENDIX III

The following game is submitted to the following team leaders:

Professor Gerald Karaska Department of Geography Clark University Worcester, Massachusetts

Professor Richard Morrill Department of Geography University of Washington Seattle, Washington

Professor Thomas Reiner
Department of Regional Science
Wharton School of Business
University of Pennsylvania
Philadelphia, Pennsylvania

Professor Duane Marble Department of Geography Northwestern University Evanston, Illinois

Professor William Warntz Computer Graphics Harvard University Cambridge, Massachusetts

Dr. John Sheppard Department of Geography Queens College Kingston, Ontario Dear Geraid, Duane, Dick, Bill, Tom and John,

One way or the other I'm sure you are all alerted to the problem before the Detroit school children. The problem is to prevent racist authority over the most vulnerable children, Detroit's poor children who are also overwhelmingly black. Therefore, our objective function is to minimize "the number of black children under white authority." "White authority" is not a biological reference since a "white voter" is defined not by skin color but by ability to vote for black individuals. The details of the operational procedures in these definitions will follow when we mail you the progress report. We need as much speed as possible since the law still reads that this decision must be reached by January 30th of the coming year. There might be an extension, Implementation is next fall.

Public interest is extreme and the geographers will make a presentation to a rather large community audience the 28th of December at the University of Detroit in the early evening. You are all most cordially invited to attend, by the way.

To become more formal:

- 1. The objective function is to minimize the number of black children under white authority.
- 2. Contiguity must be maintained.
- 3. Metric compactness is not a constraint, topological configuity will do under the law and in life.
- 4. Euch regional school district must contain between 25,000 to 50,000 students.
- 5. There must be between 7 to 11 regions.
- 6. High School capacities must be matched to within ten percent of their listed upper limits.
- 7. Junior high school capacities are not important since grades can be held over in grade school and grade school capacities expanded by temporary measures, a well established practice.
- 8. High school students are taken to be 19 percent of the total school population, the city wide average.

What follows are the map of the schools necessary for a connectivity matrix, a listing of total school population by race for each grade school region (k through 12), a listing of "white" and "black" voters for each grade school region, and a listing of high school capacities and the grade school location of the high schools.

If you have any questions just call me at work 313-577-2126 or home 313-341-6694 day or night.

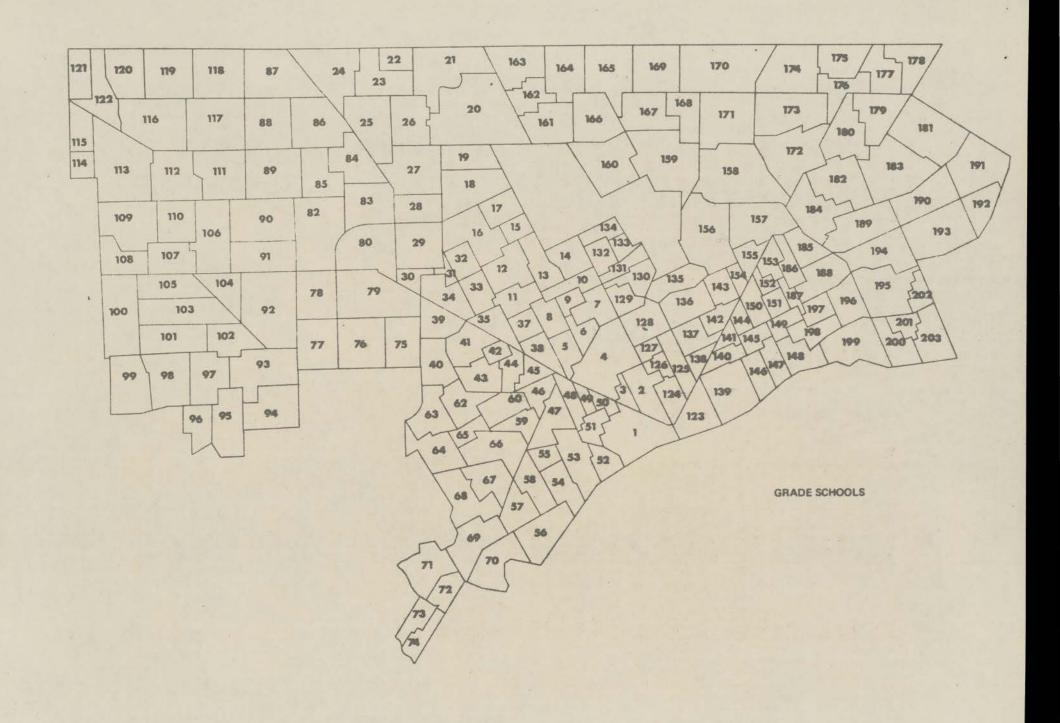
Merry Christmas to you and yours.

Regards

Dr. William Bunge

Research Director, Detroit

Geographical Expedition and Institute



|    |                | n.11.    | 111 6 4  | w.1 .1 | 195 6 4 |
|----|----------------|----------|----------|--------|---------|
|    |                | Black    | White    | Black  | White   |
|    |                | Students | Students | Vote   | Vote    |
| 1  | Franklin       | 495      | 1006     | 152    | 575     |
| 2  | Burton         | 240      | 721      | 377    | 896     |
| 3  | Couzens        | 1234     | 13       | 598    | 282     |
| 4  | Edmonson       | 2467     | 674      | 1305   | 628     |
| 5  | Estabrook      | 788      | 0        | 598    | 103     |
| 6  | Goldberg       | 1536     | 48       | 629    | 63      |
| 7  | Fairbanks      | 869      | 86       | 616    | 468     |
| 8  | Thirkell       | 1750     | 0        | 1543   | 133     |
| 9  | Sanders        | 1362     | 0        | 940    | 72      |
| 10 | Crosman        | 2013     | 0        | 1191   | 133     |
| 11 | Brady          | 1870     | 0        | 2097   | 138     |
| 12 | Roosevelt      | 2392     | 0        | 3160   | 164     |
| 13 | Peck           | 1694     | 0        | 956    | 72      |
| 14 | Dety           | 1415     | 14       | 1804   | 289     |
| 15 | Longfellow     | 1112     | 11       | 862    | 36      |
| 16 | McCulloch      | 2628     | 10       | 3349   | 237     |
| 17 | Glazier        | 1238     | 0        | 1005   | 63      |
| 18 | Custer         | 2970     | 12       | 2371   | 230     |
| 19 | Hally          | 1372     | 14       | 1643   | 317     |
| 20 | Hampton        | 541      | 661      | 1155   | 2070    |
| 21 | Pasteur        | 37       | 1823     | 1665   | 952     |
| 22 | Higginbotham   | 837      | 0        | 931    | 30      |
| 23 | McDowell       | 1839     | 38       | 1466   | 407     |
| 24 | Vernor         | 1885     | 109      | 1773   | 798     |
| 25 | Schultz        | 1997     | 61       | 1368   | 943     |
| 26 | Bagley         | 2329     | 97       | 2267   | 550     |
| 27 | Fitzgerald     | 3941     | 80       | 2199   | 839     |
| 28 | Clinton        | 2443     | 156      | . 1000 | 263     |
| 29 | Courtis        | 2737     | 85       | 1656   | 359     |
| 30 | Noble          | 1117     | 47       | 525    | . 133   |
| 31 | Winterhalter   | 554      | 6        | 982    | 63      |
| 32 | Birney         | 1042     | 0        | 979.   | 46      |
| 33 | Keidan         | 3016     | 0        | 1339   | 78      |
| 34 | McKerrow       | 2355     | 48       | 1173   | 145     |
| 35 | Angel1         | 2176     | 0        | 1941   | 105     |
| 37 | Jamieson       | 2165     | 0        | 1891   | 82      |
| 38 | Woodward       | 1259     | 13       | 953 '  | 153     |
| 39 | Ruthruff       | 1710     | 14       | 834    | 164     |
| 40 | Sherrill       | 1251     | 1011     | 1506   | 149     |
| 41 | Pattengil1     | 2278     | 0        | 2104   | 121     |
| 42 | Biddle         | 730      | 0        | 313    | 11      |
| 43 | Sampson        | 1382     | 0        | 1795   | 96      |
| 44 | Wingert        | 1090     | 0        | 1103   | 65      |
| 45 | McGraw         | 642      | 6        | 663    | 53      |
| 46 | Columbian      | 1613     | 0        | 994    | 66      |
| 47 | Craft          | 1086     | 111      | 589    | 187     |
| 48 | Chaney         | 849      | 50       | 301    | 48      |
| 49 | Kennedy (and   | 1169     | 584      | 146    | 102     |
| 50 | Kennedy Annex) |          |          |        |         |

|          |                 | Black       | White      | Black       | White       |
|----------|-----------------|-------------|------------|-------------|-------------|
|          |                 | Students    | Students   | Vote        | Vote        |
| 51       | Owen            | 722         | 241        | 187         | 210         |
| 52       | Preston         | 334         | 123        | 85          | 85          |
| 53       | Webster         | 761         | 528        | 144         | 335         |
| 54       | Maybury         | 252         | 755        | 100         | 740         |
| 55       | McKinstry       | 297         | 660        | 45          | 257         |
| 56       | Cary            | 872         | 373        | 273         | 170         |
| 57       | Beard           | 130         | 867        | 56          | 728         |
| 58       | Neinas          | 461         | 1704       | 79          | 893         |
| 59       | Newberry        | 1206        | 320        | 320         | 408         |
| 60       | Sill            | 1539        | 315        | 713         | 712         |
| 62       | Hanneman        | 637         | 405        | 314         | 648         |
| 63       | Priest          | 454         | 1225       | 372         | 2269        |
| 64       | Holmes          | 286         | 699        | 71          | 634         |
| 65       | Clippert        | 92          | 561        | 19          | 802         |
| 66       | Logan           | 246         | 737        | 66          | 1941        |
| 67       | Harms           | 120         | 974        | 84          | 887         |
| 68       | Bennett         | 225         | 1383       | 72          | 949         |
| 69       | Higgins         | 140         | 1131       | 72          | 1059        |
| 70       | Morley          | 693         | 1040       | 132         | 394         |
| 71       | Hunter          | 227         | 290        | 23          | 173         |
| 72       | Jeffries        | 985         | 0          | 592         | 15          |
| 73       | Boynton         | 1008        | 10         | 1009        | 81          |
| 74       | Mark Twain      | 1304        | 0          | 1219        | 46<br>670   |
| 75       | Barton          | 1330        | 70         | 1366<br>736 | 1330        |
| 76       | McFarlane       | 1787        | 221        | 66          | 1249        |
| 77       | Parkman         | 84          | 852<br>445 | 95          | 1139        |
| 78       | Ford            | 250<br>1775 | 999        | 779         | 1720        |
| 79       | Parker          | 2009        | 441        | 1028        | 948         |
| 80       | Monnier         | 783         | 1601       | 394         | 2497        |
| 81       | Cadillac        | 1705        | 301        | 776         | 777         |
| 83<br>84 | Guest           | 945         | 207        | 642         | 1079        |
| 85       | King<br>Cerveny | 708         | 654        | 233         | 994         |
| 86       | Winship         | 540         | 498        | 696         | 1401        |
| 87       | Bow             | 347         | 2169       | 417         | 2508        |
| 88       | Newton          | 185         | 973        | 96          | 2123        |
| 89       | Crary           | 72          | 1130       | 294         | 3311        |
| 90       | Edison          | 162         | 790        | 261         | 2574        |
| 91       | Dossin          | 64          | 846        | 169         | 1986        |
| 92       | Coolidge        | 78          | 1870       | 164         | 2517        |
| 93       | Herman          | 1746        | 1318       | 302         | 1639        |
| 94       | Gardner         | 30          | 963        | 85          | 1883        |
| 95       | Carver          | 23          | 1125       | 45          | 1253        |
| 96       | Leslie          | 109         | 800        | 42          | 1814        |
| 97       | Dixon           | 39          | 1266       | 84          | 1604        |
| 98       | Kosciusko       | 31          | 1016       | 64          | 1407<br>674 |
| 99       | Ann Arbor Trail | 27          | 886        | 36          | 384         |
| 100      | McLean          | 8           | 376        | 18<br>75    | 1267        |
| 101      | McColl          | 104         | 766        | 46          | 677         |
| 102      | Everett         | 11          | 533<br>813 | 111         | 1513        |
| 103      | Mann            | 122         | 400        | 27          | 337         |
| 104      | Marsh           | 206         | 578        | 68          | 948         |
| 105      | Weatherby       | 6           | 2/0        | 00          | 340         |

|            |                    | Black<br>Students | Write<br>Studer fs | Black<br>Vote | White<br>Vote |
|------------|--------------------|-------------------|--------------------|---------------|---------------|
|            |                    | <u>Devidence</u>  | <u>Derider ED</u>  | <u> </u>      | 1000          |
| 106        | Vetal              | 1.5               | 1574               | 177           | 2098          |
| 107        | Gompers            | 18                | 204                | 29            | 452           |
| 108        | Healy              | 11                | 612                | 50            | 836           |
| 109        | Hubert .           | 31                | 1592               | 4.5           | 897           |
| 110        | Harding            | 163               | 1640               | 118           | 557           |
| 111        | Cooke              | 0                 | 1440               | 197           | 2054          |
| 112        | Burt               | 28                | 1358               | 183           | 2338          |
| 113        | Houghten           | 33                | 1689               | 91            | 1486          |
| 114        | Yost               | 158               | 599<br>6 <b>31</b> | 17<br>45      | 253<br>702    |
| 115        | Lodge              | 167               | 1286               | 206           | 2370          |
| 116        | Holcomb            | 26<br>56          | 1345               | 198           | 2740          |
| 117<br>118 | Emerson            | 148               | 1496               | 135           | 1782          |
| 110        | Pitcher<br>McKenny | 168               | 2226               | 239           | 2326          |
| 120        | Dow                | 30                | 1450               | 140           | 1372          |
| 121        | Burgess            | 10                | 980                | 56            | 857           |
| 122        | Larned             | 16                | 513                | 64            | 783           |
| 123        | Chrysler           | 157               | 177                | 744           | 893           |
| 124        | Foster             | 1055              | 0                  | 1119          | 265           |
| 125        | George             | 5.02              | 0                  | 500           | 64            |
| 126        | Lincoln            | 718               | ó                  | 456           | 39            |
| 127        | Trowbridge         | 241               | j                  | 400           | 33            |
| 128        | Balch              | 954               | 9                  | 1022          | 167           |
| 129        | Palmer             | 782               | P                  | 838           | 88            |
| 130        | Breitmeyer         | 847               | 9                  | 761           | 45            |
| 131        | Moore              | 206               | 0                  | 730           | 33            |
| 132        | Alger              | 791               | 16                 | 1530          | 90            |
| 133        | Maybee             | 707               | 7                  | 468           | 17            |
| 134        | Dwyer              | 1114              | 0                  | 64.7          | 54            |
| 135        | Parke              | 738               | 534                | 201           | 864           |
| 136        | Ferry              | 1157              | 596                | 426           | 1606          |
| 137        | Campbell           | 1738              | 23                 | 946           | 340           |
| 138        | Norvell            | 556               | 0                  | 350           | 20            |
| 139        | Duffield           | 40                | 1289               | 1055          | 284           |
| 140        | Burche             | 1679              | 0                  | 879           | 44            |
| 141        | Harris             | 761               | 0                  | 351           | 21            |
| 142        | Williams           | 1750              | 24                 | 867           | 298           |
| 143        | Thomas             | 830               | 92                 | 389           | 134           |
| 144        | Marcy '            | 1026              | 21                 | 645           | 75            |
| 145        | Berry              | 1529              | 5                  | 1042          | 84            |
| 146        | Bellevue           | 1364              | 0                  | 719           | 198           |
| 147        | Field              | 1729              | 175                | 795           | 366           |
| 148        | Monteith           | 1565              | 115                | 586           | 1514          |
| 149        | Nichols            | 1716              | 34                 | 605           | 171<br>115    |
| 150        | Jones              | 2204              | 0                  | 1162<br>880   | 74            |
| 151        | Joyce              | 1425              | 0                  | 874           | 75            |
| 152        | Hillger            | 1021              | 0<br>48            | 582           | 122           |
| 153        | Chandler           | 1551              | 36                 | 451           | 145           |
| 154        | Rose               | 1160<br>1681      | 17                 | 715           | 127           |
| 155        | Stephens           | 1686              | 1124               | 513           | 1685          |
| 1.56       | Cooper             | 3105              | 423                | 805           | 938           |
| 157        | Holmes             | 129               | 791                | 51            | 1516          |
| 158        | Lynch              | 787               | 1327               | 221           | 2856          |
| 159        | White              | 101               | 1327               | 27.7          | -             |

|            |                      | Black<br>Students | White<br>Students | Black<br>Vote | White<br>Vote |
|------------|----------------------|-------------------|-------------------|---------------|---------------|
| 160        | Davison              | 2751              | . 56              | 1552          | 821           |
| 161        | Greenfield Park      | 688               | 1396              | 389           | 1571          |
| 162        | Greenfield Union     | 69                | 1084              | 48            | 570           |
| 163        | Grayling             | 932               | 248               | 154           | 1370          |
| 164        | Marshall             | 1290              | 924               | 601           | 1584          |
| 165        | Mason                | 648               | 647               | 616           | 2128          |
| 166        | Courville            | 3003              | 30                | 2441          | 308           |
| 167        | Atkinson             | 1246              | 13                | 1718          | 531           |
| 168        | Pierce               | 549               | 334               | 259           | 501           |
| 169        | Van Zile             | 677               | 734               | 471           | 1622          |
| 170        | Law                  | 97                | 496               | 125           | 2745          |
| 171        | Grant                | 194               | 674               | 118           | 1256          |
| 172        | Wilkins              | 205               | 1614              | 155           | 3236          |
| 173        | Fleming              | 15                | 1062              | 102           | 2717          |
| 174        | Pulaski              | 387               | 1205              | 112           | 3068          |
| 175        | Trix                 | 336               | 920               | 77            | 1725          |
| 176        | Richard              | 35                | 604               | 68            | 1342          |
| 177        | Burbank              | 67                | 795               | 69            | 1547          |
| 178        | McGregor             | 168               | 714               | 93            | 1832          |
| 1.79       | Columbus             | 14                | 1372              | 131           | 2081          |
| 180        | Robinson             | 10                | 1376              | 122           | 2226          |
| 181        | Carleton             | 16                | 1551              | 206<br>149    | 3724<br>3025  |
| 182        | Goodale              | 0                 | 1594              | 226           | 3952          |
| 183        | Wayne                | 29                | 1401<br>1110      | 147           | 1359          |
| 184        | Macomb               | 1802              | 55                | 507           | 170           |
| 185        | Hutchinson           | 1506              | 0                 | 939           | 83            |
| 186        | Marxhausen           | 1233              | 0                 | 516           | 46            |
| 187        | Pingree<br>St. Clair | 3489              | 81                | 1596          | 150           |
| 188<br>189 | Hamilton             | 986               | 554               | 405           | 1558          |
| 190        | Stellwagon           | 10                | 1020              | 214           | 2719          |
| 191        | Marquette            | 7                 | 742               | 148           | 2096          |
| 192        | Hanstein             | 32                | 284               | 27            | 682           |
| 193        | Clark                | 15                | 1487              | 304           | 3525          |
| 194        | Hosmer               | 155               | 1390              | 286           | 2296          |
| 195        | Carstens             | 1112              | 1815              | 331           | 848           |
| 196        | Lillibridge          | 2975              | 398               | 762           | 220           |
| 197        | Howe                 | 1939              | 20                | 1069          | 85            |
| 198        | Scripps'             | 1520              | 31                | 746           | 175           |
| 199        | Lingeman             | 881               | 721               | 250           | 401           |
| 200        | Stark                | 1178              | 24                | 603           | 182           |
| 201        | Keating              | 2072              | 310               | 613           | 280           |
| 202        | Ives                 | . 71              | 713               | 56            | 757           |
| 203        | Guyton               | 308               | 1234              | 221           | 1463          |
|            |                      |                   |                   |               |               |

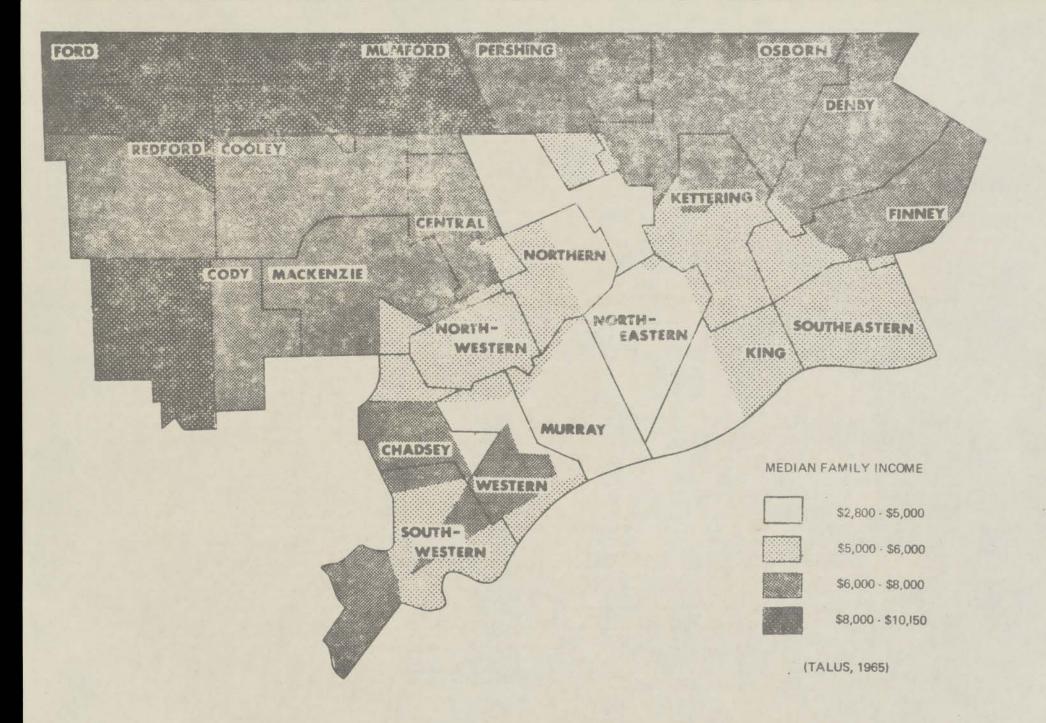
The same of the sa

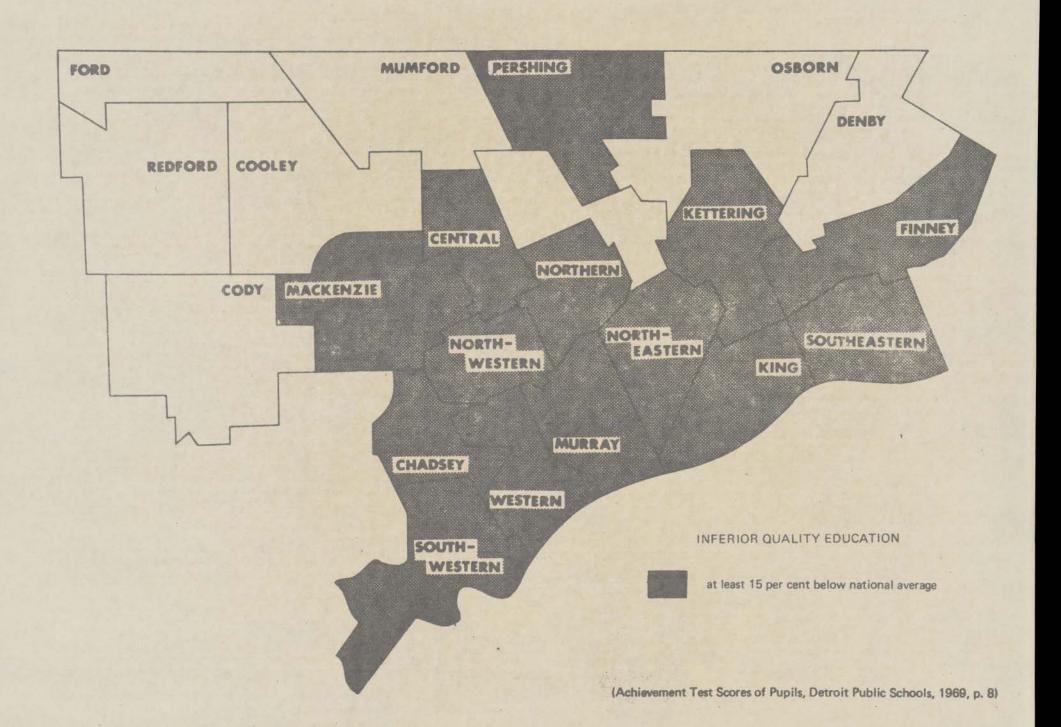
### High School Student Capacities Located By Grade Schools

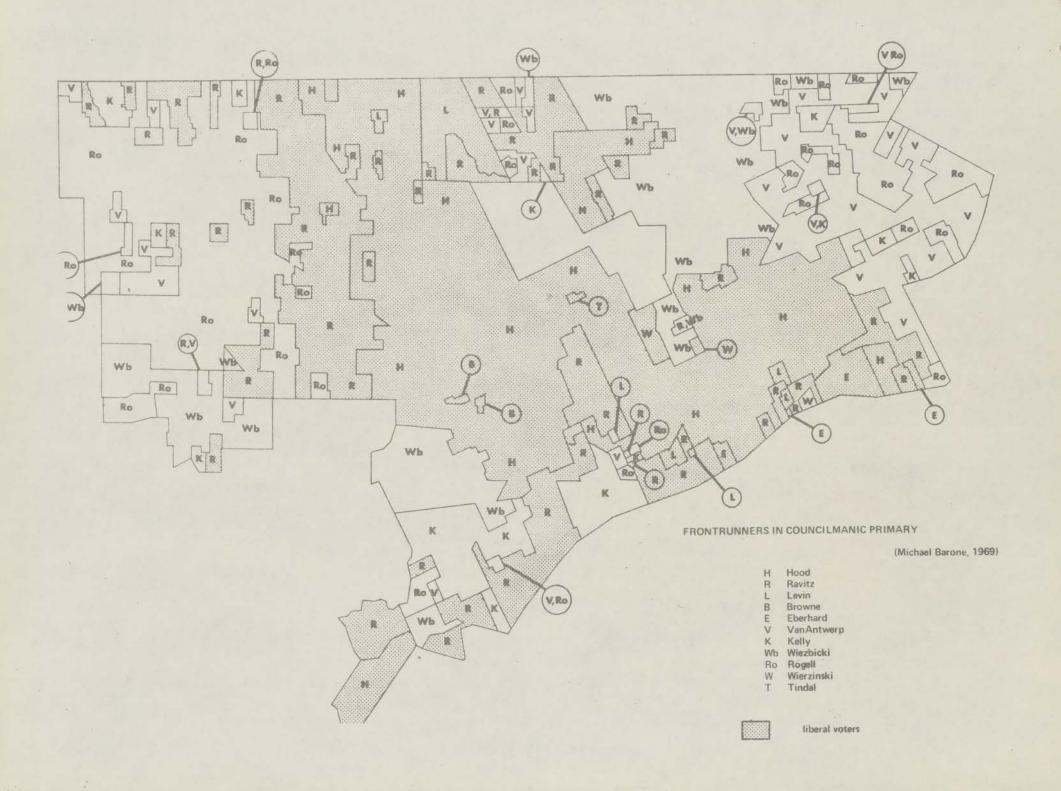
| 2,820 | Coolidge   | 2,460 | Burns     | 2,160 | Marquette   |
|-------|------------|-------|-----------|-------|-------------|
| 2,006 | Priest     | 2,550 | McKenny   | 2,310 | Lillibridge |
| 1,950 | Craft      | 2,600 | Schultz   | 2,730 | Macomb      |
| 3,248 | McCullough | 2,600 | Courville | 1,910 | Duffield    |
| 2,840 | Woodward   | 2,510 | Carleton  | 2,640 | Owens       |
| 2,710 | Ho1comb    | 2,230 | Alger     | 1,620 | Terry       |
| 2,350 | Roosevelt  | 2,630 | Grant     | 1,930 | Hunter      |

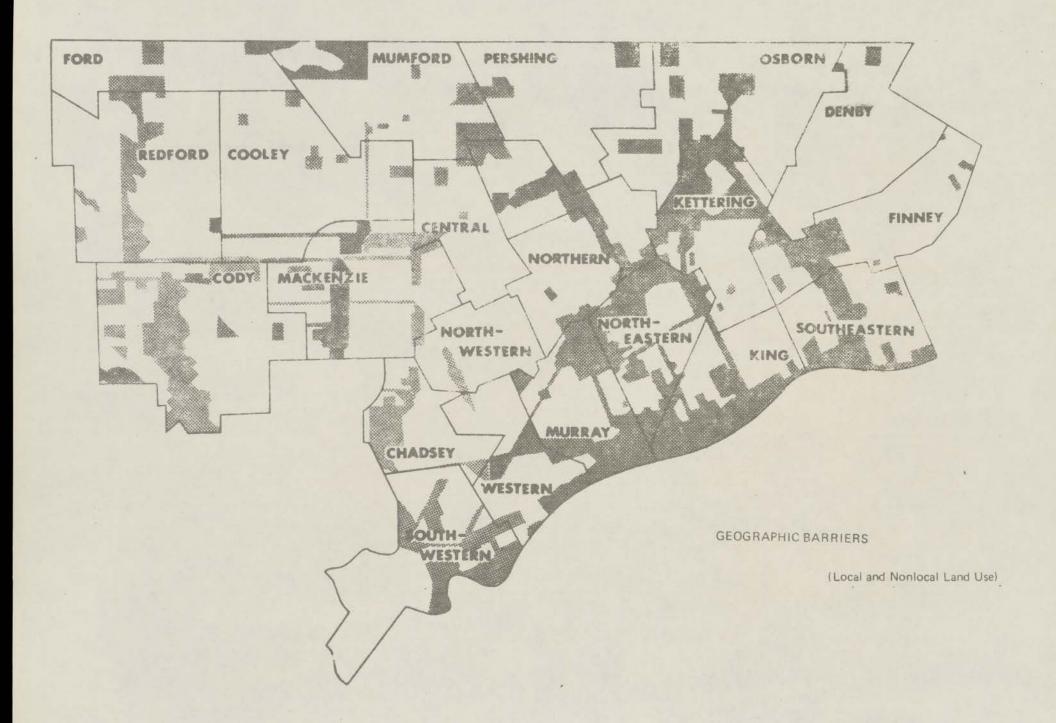
APPENDIX IV

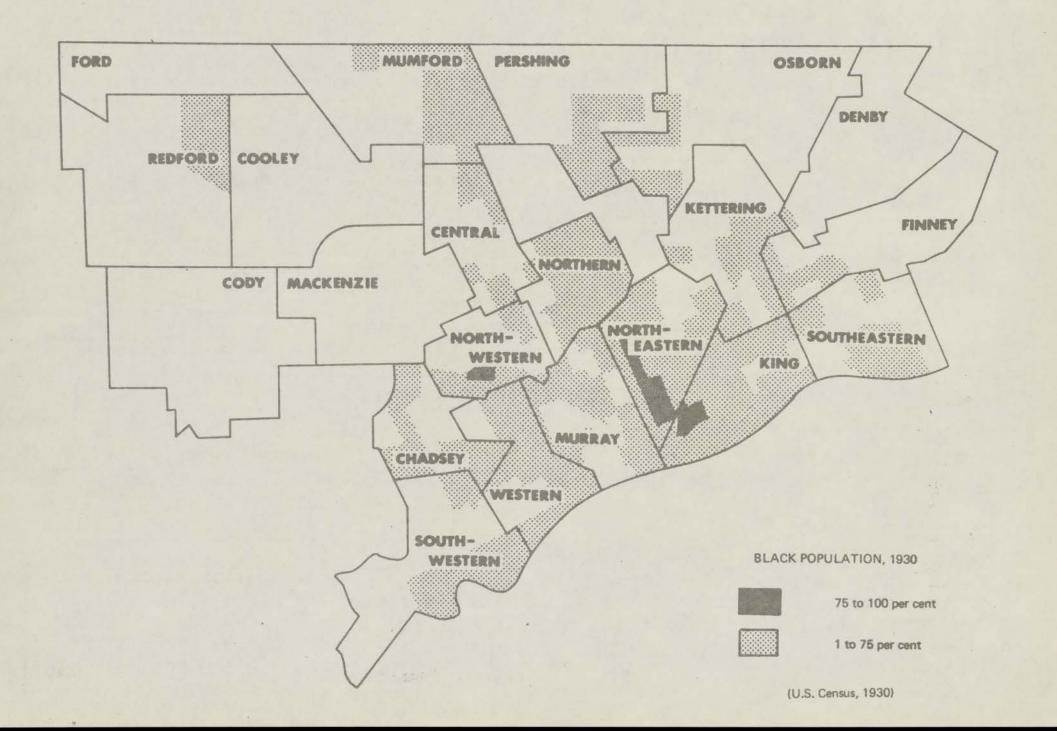
ATLAS

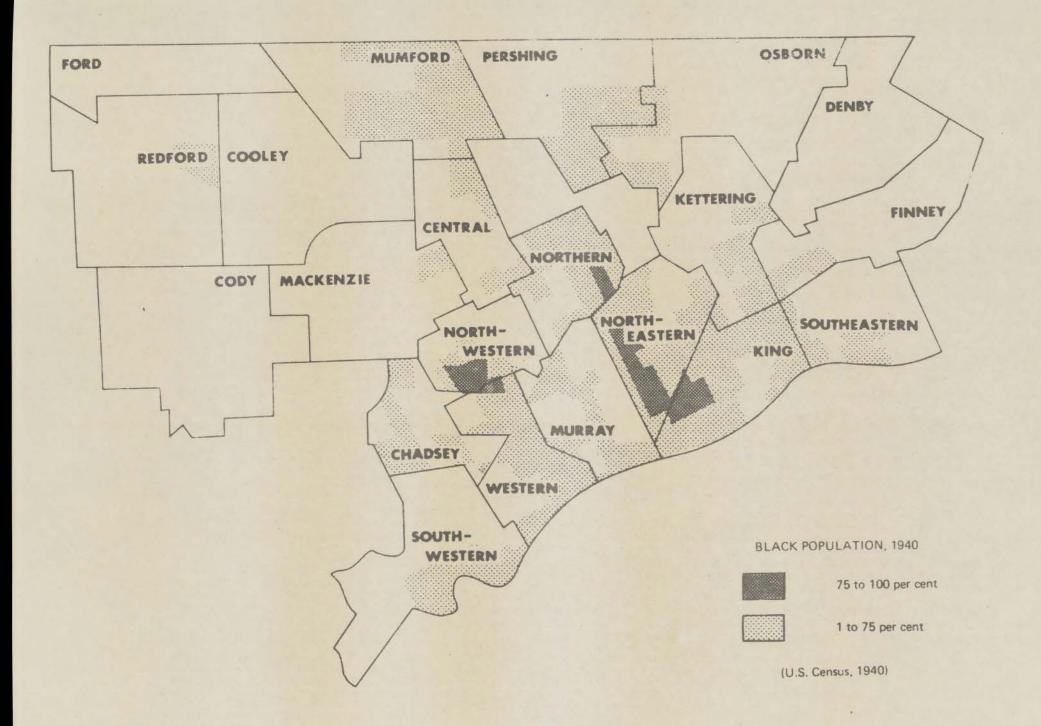


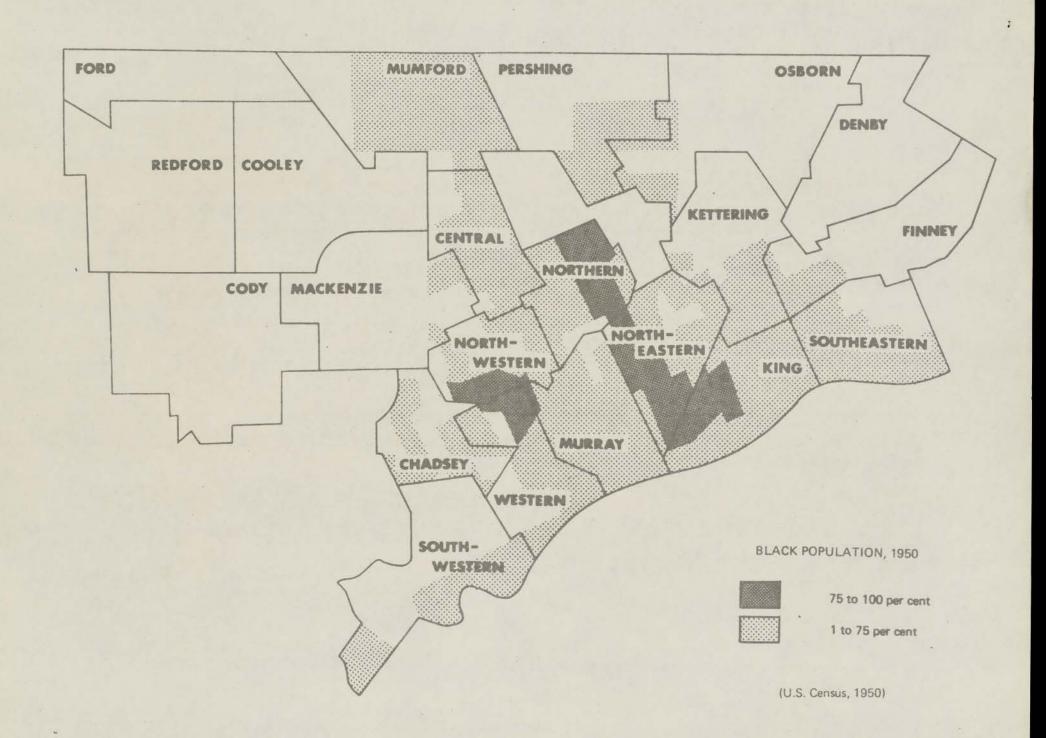


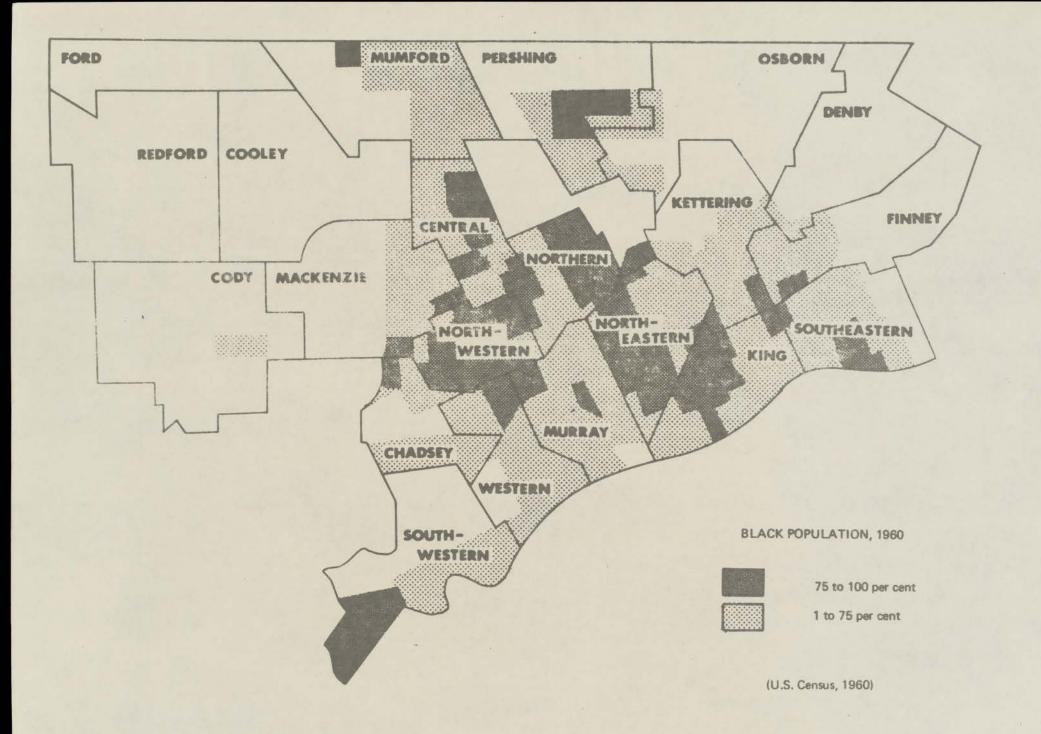




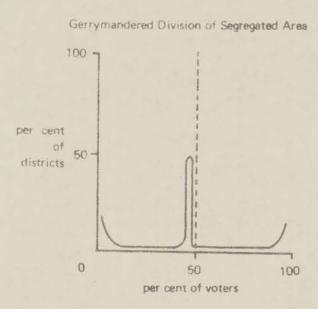


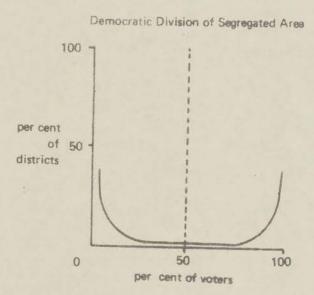


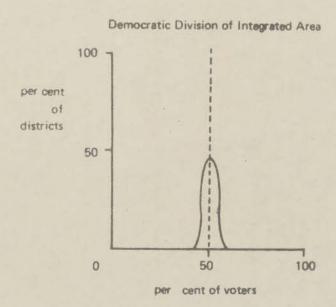




## THEORETICALLY PERFECT COMMUNITY CONTROL AND GERRYMANDERING







- 1. It is necessary but not sufficient for perfect community control that the boundaries of the voting districts coincide with the boundaries of the community.
- 2. It is necessary but not sufficient for perfect community control that the proportionality of the communities be reflected in the proportion of voting districts. In terms of applied mathematics, this means a great number of voting districts.