2000

Saginaw Metropolitics

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Saginaw Metropolitics:
A Regional Agenda for Community and Stability

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Metropolitan Area Research Corporation

A Report to the Ezekiel Project
October 2000

This report was a project of the Metropolitan Area Research Corporation (MARC). It was made possible with the support of the Charles Stewart Mott Foundation.

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TABLE OF CONTENTS

I. Introduction

A. Metropolitan Polarization

Social and economic disparity and wasteful development patterns threaten the future of metropolitan regions across the country. This pattern begins with the concentration of social and economic need in many neighborhoods of the region's central city, suburbs, and satellite cities and townships. This concentration destabilizes schools and neighborhoods, is associated with increases in crime, and results in the flight of middle-class families and businesses. As social needs accelerate in these places, the tax base supporting local services erodes. In most metropolitan areas, about 40 to 65 percent of the regional population live in jurisdictions such as these.

The mythic dichotomy of urban decline and suburban prosperity holds that social and economic decline stops neatly at the central city borders. Nothing could be further from the truth. As poverty and social instability cross into communities just outside of the central city, and begin to grow in older satellite cities, all of the trends of urban decline accelerate and intensify. Lacking the strong business district, vitality and resources, high-end housing market, parks, culture and amenities that the central city has—and without a large police department and social service agencies to respond to growing social stress—the schools in these communities become poor faster and the local retail evaporates more rapidly.

Next, in a related pattern, middle-income communities begin to experience increases in their poverty and crime rates. They could well become tomorrow's troubled communities, particularly those that have low property wealth. Like the group of declining communities discussed above, these places are often inner communities and satellite cities, but also include many fast-growing, low property value second- and third-tier places. In most regions, these places are home to another 20 to 40 percent of the regional population.

As middle-class families—generally those who cannot afford the executive homes now built in America's more prosperous communities—leave declining neighborhoods of the central city and inner suburbs, many are jumping out of a social frying pan and into a fiscal one. When they reject neighborhoods and schools of increasing social stress, they often land in communities with enormous fiscal stress. These edge communities, predominately composed of housing below $150,000 in value and with many times the region's ratio of school-age children to adults, find their local base of resources substantially inadequate to cover the costs of new schools and other infrastructure needed to properly support the scale of growth.

Because these fast-growing communities often allow septic-tank development to occur on lots too small to absorb sewer effluent, groundwater and lakes become polluted; if wells are a local source of water, the public health is seriously threatened. The remediation that is soon required by the state (*i.e.*, digging up roads, lawns, and basements in order to connect to sewer systems) requires enormous expenditure, costing the community many times what it would have cost to do it right in the first instance. Further, due to a lack of planning in these places, local roads are soon too narrow to handle the traffic. Again, the remediation necessary (*i.e.*, moving commercial and residential buildings back from roads) is a huge expense for local taxpayers. All

of this is assessed off the very small tax base of communities that could not even afford to plan to begin with.

Finally, upper-income communities that are dominated by expensive homes capture the largest share of regional infrastructure spending, economic growth, and jobs. These places are primarily recently developed communities with wealthy residential subdivisions and modern office parks, but in many regions they also include some older, established, close-in communities. As the tax base expands in these affluent areas and their housing markets remain closed to most of the region's low-wage workers, they become both socially and politically isolated from regional responsibilities. In most metropolitan areas, only about 10 to 20 percent of the regional population live in places such as these.

As these places achieve the enviable position of having the region's largest tax base and the least need for social services, they become the most desirable places in the region to live. As business and housing developers compete for locations in these communities on the edge of the metropolitan area, open space evaporates and people who sought an insulated life closer to natural amenities find themselves in the midst of edge-city urban life with as much or more congestion, development, and stress as the places they left behind. As the highly desirable land melts away into development, "pass-through" traffic increases as new roads are built to connect residents of the next urbanizing community.

While these high tax base communities have resources, they often cannot, by themselves, control the pace of development that pushes them toward something they do not want to become: a crowded edge city with little green space and unattractive levels of traffic congestion. These high-income places often pass significant tax referenda for comparatively modest open space initiatives. As development pressure increases, these communities, and communities with strong support for local agriculture, are the most likely to unilaterally act to control growth. While local development moratoria or slowdowns seem like a solution at the time, ultimately they only throw development further out to the next growth-hungry community. Thus, such well-intentioned unilateral action to halt growth can actually make the problems associated with sprawl worse rather than better. For example, in 1972, Petaluma, California decided to slow growth by limiting the number of building permits issued annually, causing housing demands to dramatically increase in further-out Santa Rosa.[1] Indeed, the population of the Santa Rosa area nearly doubled between 1970 and 1980. Actions like this cause regions to become geographically larger than they would be under a plan to accommodate growth in an orderly manner. In Santa Rosa additional infrastructure in terms of roads and sewers had to be built and residents of Petaluma were forced to deal with the dramatically increased traffic moving through their community.

Social and economic polarization and sprawling development patterns on a regional scale exact costs in terms of waste of human resources, deterioration of much of the region's core communities, increased fiscal stress, increased costs of infrastructure and land, loss of

[1] Anthony Downs, *New Visions for Metropolitan America* (Washington DC: The Brookings Institution, 1994): 36.

agricultural and fragile lands, and increased vehicle miles traveled and number of automobile trips.

B. A Regional Agenda

Only through a strong, multifaceted, regional response can social and economic polarization and wasteful development patterns be countered. MARC and a growing core of scholars; national, state, and local government officials; and activists from urban, faith-based, business, good-government, and environmental backgrounds, believe that metropolitan separation and sprawl need a strong, multifaceted, regional response. To combat these trends, there are three areas of reform that must be sought on a regional scale: 1) greater equity among jurisdictions of a region, particularly those with land-use planning powers 2) smarter growth through better planning practices, 3) structural reform of metropolitan governance and transportation planning to allow for fair and efficient transportation and community planning. These reforms are inter-related and reinforce each other substantively and politically.

In the 1970s, moderate “Rockefeller” Republicans, such as Richard Lugar of Indiana, Tom McCall of Oregon, Harold Levander of Minnesota, and George Romney and William Milliken of Michigan, began to outline an elegant limited government response to the problem of inter-local disparity and sprawling, inefficient land use. The message of cost-effective regional planning, supported by local business leadership, had a strong influence in Minneapolis-St. Paul (Twin Cities), Indianapolis, and Portland, Oregon twenty-five years ago. In 1970 the city of Indianapolis merged with Marion County into one unified government. In 1971 the state of Minnesota passed groundbreaking legislation for a system of tax-base sharing among the cities and counties of that region, and in 1975 implemented the system. In 1973 the state of Oregon passed its Land Use Act, a statewide planning framework that requires each of the state's 242 cities and 36 counties to establish an urban growth boundary and develop a long-range, comprehensive plan for development within those boundaries. In 1979, voters in the Portland, Oregon metropolitan area chose to make that region's metropolitan planning organization a directly elected regional body—the first (and as yet, the only) one of its kind in the U.S. During the 1980s, Minnesota established a regional boundary called the Metropolitan Urban Services Area around the Twin Cities region and Florida passed its Growth Management Act.

In the 1990s there has been a renewed interest in land use and regional reform across the nation. The state of Washington helped to spark this regional planning renaissance with its 1990 Growth Management Act. In Washington D.C., former United States Housing and Urban Development Secretary Henry Cisneros advocated that the federal government strengthen metropolitan coordination of affordable housing, land use, environmental protection, and transportation issues. In 1994, President Clinton issued an executive order beginning this process.[2] In 1997, Maryland, under the leadership of Governor Parris Glendening, passed legislation that limits growth to locally-designated "smart growth" areas by withholding infrastructure funding for development outside such areas. In September 1998 in a speech at the

[2] United States President Bill Clinton, Executive Order, “Leadership and Coordination of Fair Housing in Federal Programs: Affirmatively Furthering Fair Housing, Executive Order 12892 of January 17, 1994,” The Weekly Compilation of Presidential Documents (24 January 1994): 110-14.

Brookings Institution, Vice-President Al Gore announced a federal agenda "to help encourage smarter growth and more livable communities all across America".[3] Later that year , the Tennessee legislature passed land-use planning legislation requiring urban growth boundaries around developing municipalities and New Jersey voters approved the dedication of $98 million a year for the next ten years to preserve one million acres of farmland and open space. Governor Christine Todd Whitman lead this effort.

Recently the Commercial Club of Chicago and the Greater Baltimore Committee, whose members represent some of the most significant business interests in their respective regions, endorsed sweeping proposals for regional reform including tax-base sharing, land-use planning, and regional governance reform.[4] They believed that these reforms were very important to the economic health of their metropolitan areas.

Columnist Neal Peirce has helped to revitalize this type of good-government metropolitanism, broadening its base by emphasizing the social and economic interdependence of metropolitan areas and the need for regional economic coordination to compete effectively in the new world economy.[5] On another front, David Rusk, former mayor of Albuquerque, New Mexico, has simply and effectively connected the issues of metropolitanism and social equity.[6] He has done this by showing that regions with an effective metropolitan planning body are more equitable, less segregated by race and class, and economically healthier. Anthony Downs, of the Brookings Institution, has assembled his own research together with recent groundbreaking work of urban poverty scholars, economists, transportation experts, and land-use planners. He makes compelling new arguments for metropolitan governance and broad metropolitan-based reforms in fair housing, transportation, land use, and regional fiscal equity.[7]

In separate studies, William Barnes and Larry Ledebur, Richard Voith, and H. V. Savitch asserted the deep interconnections of metropolitan economies. A study of seventy-eight metropolitan areas, conducted by Barnes and Ledebur, for example, found that between 1979 and 1989 in most U. S. metropolitan areas, median household incomes of central cities and suburbs moved up and down together.[8] They also found that the strength of this relationship appears to be increasing. An earlier study of forty-eight metropolitan areas, conducted by the same team, found

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[3] United States Vice President Al Gore, Brookings Policy Series, September 2, 1998.

[4] Elmer W. Johnson, "Chicago Metropolis 2020, Draft Plan of 1999: Preparing Metropolitan Chicago for the 21st Century", A Project of the Commercial Club of Chicago, Draft, October 1998; Greater Baltimore Committee, "One Region, One Future: A Report on Regionalism", July 1997.

[5] Neal Peirce, *Citistates: How Urban America Can Prosper in a Competitive World* (Washington, D.C.: Seven Locks Press, 1993).

[6] David Rusk, *Cities Without Suburbs* (Washington, D.C.: Woodrow Wilson Center Press, 1993).

[7] Downs, *New Visions*.

[8] Larry C. Ledebur and William R. Barnes, *"All In It Together": Cities, Suburbs and Local Economic Regions* (Washington, D. C.: National League of Cities, 1993).

that metropolitan areas with the smallest gap between city and suburban incomes had the greatest regional job growth.[9]

These scholars argue that cities and suburbs within a metropolitan area are interdependent; and that when social and economic polarization is minimized, the region is stronger; and that regional planning and metro-wide reforms are good for the entire region. Despite this, many believe that metropolitan reforms are no longer possible because the suburbs have taken over American politics.[10] Representing over 50 percent of the American population and 65 percent in the Saginaw area (including satellite cities and townships), clearly "the suburbs" do have great political power. Commentators glory in an ideal of small suburban government close to the people. They maintain that regional reform threatens this idea.

In response, the reality of the late 1990s, as described in the pages that follow, contrasts starkly with this impression. Once policy makers and reform advocates recognize that suburban communities are not a monolith with common needs and resources, the declining inner neighborhoods, satellite cities, and low tax base developing communities, as well as fast-growing high fiscal capacity communities can identify each other as allies in regional reform and begin to work together for a stronger, more stable region. Some of these communities will find their motivation in a common social and fiscal decline that requires regional equity, others in the need to plan for growth for a sustainable, stable future.

In the end, regional reform seeks to create circumstances in which a new ideal of local control and long term community stability can become a reality—an ideal in which central cities and declining neighborhoods of older, inner suburbs can maintain a middle-class base and renew themselves, and in which developing communities can have decent services and be free from destabilizing patterns of boom and bust.

C. Saginaw Metropolitics

"Saginaw Metropolitics" reports on regional social, economic, and growth trends in the Saginaw area and outlines policy strategies for regional reform. Since 1995, MARC has completed (or is in the process of completing) studies of social separation and sprawl in more than thirty metropolitan areas of the U.S., including the nation's twenty-five largest regions.[11] MARC has developed a four-step process to analyze regional trends that combines quantitative

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[9] William R. Barnes and Larry C. Ledebur, *City Distress, Metropolitan Disparities, and Economic Growth* (Washington, D. C.: National League of Cities, 1992).

[10] Anthony Downs, in *New Visions* repeatedly outlines the necessity of sweeping metropolitan reform and then dismisses the possibility of political success because of the monolithic opposition of the suburbs.

[11] MARC projects either completed or in process include: Atlanta, Baltimore, Boston, Central Valley of California, Chicago, Cincinnati, Cleveland, Dallas-Fort Worth, Denver, Detroit, Grand Rapids, Houston, Kansas City, the state of Kentucky, Los Angeles, Milwaukee, Minneapolis-St. Paul, New York City, Philadelphia, Phoenix, Pittsburgh, Portland (OR), St. Louis, San Diego, San Francisco Bay Area, Seattle, South Florida (Miami), Tampa, and Washington, D.C.

socioeconomic data with qualitative information gathered at the local level. MARC's studies demonstrate that 1) social separation and sprawl are occurring in small and large regions across the country; 2) in any region, communities classified as "suburbs" represent a group of heterogeneous communities whose current conditions and future prospects differ greatly; and 3) coalitions can be forged in any region between previously thought unlikely partners—elected officials of the central city and suburban communities of a region—to support and implement regional reforms in the best interests of all the citizens of the region.

Based on demographic research, "Saginaw Metropolitics" shows that the Saginaw area is facing a scenario very similar to the one encountered by the other regions MARC has studied across the country. This report also argues that regional reform coalitions similar to those formed in other regions can be developed in the Saginaw area to combat these growing problems. It is MARC's hope that the results of this study will help to further the processes of metropolitan reform in the Saginaw region. Through this analysis of the progressive and negative effects of metropolitan polarization on people and communities, this study will provide evidence regarding the necessity of reform for elected officials as well as the traditional advocates of land use, housing, fiscal and governmental reform.

Those who should read this report include people working to respond to poverty in central city neighborhoods and other declining places in the region, advocates for smart growth and the environment, and especially, state legislators and elected officials who represent cities and counties. Cities and counties are political units with land-use planning powers and are the true units of regional competition or cooperation. These land-use planning powers—interacting with competition for valuable tax resources, local citizen preferences, regional and local infrastructure policy, and racial discrimination—shape the region's future. Cities and counties are also the centers of real political power which will facilitate or impede metropolitan reform. Because these elected officials are an important audience for this report, much of the data in Sections III and IV are by municipality. Those who make decisions for municipalities and other units of government—mayors, county commissioners, council members, state legislators—often do not have adequate data upon which to base their decisions. They generally have a sense of what is happening within their jurisdiction, but often do not have adequate information concerning how regional trends and the behavior of other units of government are likely to shape their future. Moreover, they are often not aware of the number of other communities that are facing similar challenges.

"Saginaw Metropolitics" begins with a general discussion in Section II of the detrimental effects of concentrating a region's poor in abandoned neighborhoods of the central and satellite cities and the costs of wasteful development patterns. Section III presents the results of MARC's analysis to identify like communities—or subregions—within the Saginaw area. Section IV will document regional polarization in the area by simply presenting, through the use of color maps, social and economic data for all of the communities in the region and giving summary statistics, where possible, for each of the identified subregions. Finally, in Section V the report briefly discusses policy strategies for regional reform and in Section VI discusses tax-base sharing in greater detail.

II. Problems Associated with Regional Polarization and Sprawl

A. Concentrated Poverty

In the central cities of most major U.S. metropolitan areas, there is a subset of distressed census tracts with more than 40 percent of their population below the federal poverty line. According to sociologists, such neighborhoods are extreme poverty tracts or ghettos.[12] Surrounding these severely distressed neighborhoods are transitional neighborhoods with 20 to 40 percent of their population in poverty.[13] According to Paul Jargowsky, between 1970 and 1990 the national poverty rate declined from 13.6 to 12.8 percent and the metropolitan poverty rate barely increased, moving from 10.9 to 11.8 percent. However, despite large increases in social spending and the gross national product, the population of high poverty areas doubled and their geographic size expanded faster than their population increased.

In the 1970s, extreme poverty tracts and transitional neighborhoods exploded in size and population in the large cities of the Northeast and Midwest. During the 1970s, New York City's ghetto, the nation's largest, increased from 70 census tracts to 311.[14] During the 1980s, ghettoization rapidly increased in Chicago, Detroit, and many of the secondary cities of the Northeast and Midwest.[15] In 1980, 48 percent of Detroit's census tracts had at least 20 percent of the residents in poverty; by 1990, 75 percent of its tracts did.[16] In Midwestern cities as a whole, the number of ghettoized tracts doubled in the 1980s.[17]

The expansion of extreme and transitional poverty tracts is not just confined to these large urban centers of the Northeast and Midwest. MARC has found that these trends, while more severe in some cities than in others, are present and worsening in all of the fifteen U.S. regions MARC has studied thus far. Furthermore, as the number and population of poverty tracts has grown in most metropolitan areas, they have spilled beyond the central city borders into older, inner-ring suburbs. Between 1980 and 1990, while the three central cities of the South Florida region (Miami, Fort Lauderdale, and West Palm Beach) combined went from 13 to 27 extreme poverty tracts and from 33 to 40 transitional tracts, their inner suburbs went from 5 to 8 extreme poverty tracts and from 18 to 49 transitional tracts. Similarly, as the city of Baltimore lost

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12 See Paul A. Jargowsky and Mary Jo Bane, "Ghetto Poverty in the United States, 1970 to 1980," in Christopher Jencks and Paul E. Peterson (eds.), *The Urban Underclass* (Washington, DC: The Brookings Institution), 235-273; John D. Kasarda, "Inner-City Concentrated Poverty and Neighborhood Distress: 1970 to 1990," *Housing Policy Debate* 4, no. 3, 253-302.

13 Ibid.

14 Kasarda, "Concentrated Poverty," 261.

15 Kasarda, "Concentrated Poverty"; Paul A. Jargowsky, "Ghetto Poverty Among Blacks," *Journal of Policy Analysis and Management* 13, no. 2 (1994): 288-310.

16 Kasarda, "Concentrated Poverty," 261.

17 Ibid., 260.

poverty tracts between 1980 and 1990—going from 36 to 35 extreme poverty tracts and from 69 to 63 transitional tracts, its inner suburbs gained poverty tracts—going from zero to two extreme poverty tracts and from one to two transitional tracts. The Portland, Oregon region, which went from 3 to 10 extreme poverty tracts and from 18 to 28 transitional poverty tracts during the 1980's (all located in the central city), gained its first two suburban poverty tracts during that period.

Stimulated by William Julius Wilson's book, *The Truly Disadvantaged*, scholars in the late 1980s began actively studying the effects of concentrated poverty in metropolitan areas. Their research confirms that concentrated poverty multiplies the severity of problems faced by both communities and poor individuals.[18] As neighborhoods become dominated by joblessness, racial segregation, and single-parentage, they become isolated from middle-class society and the private economy.[19] Individuals, particularly children, are deprived of local successful role models and connections to opportunity outside the neighborhood. A distinct society emerges with expectations and patterns of behavior that contrast strongly with middle-class norms.

Studies have found that poor individuals living in concentrated poverty are far more likely to become pregnant as teenagers,[20] drop out of high school,[21] and remain jobless[22] than if they lived in socioeconomically mixed neighborhoods. These types of outcome dramatically diminish the quality of life and opportunity. Similarly, the concentration of poverty and its

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18 William Julius Wilson, *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy* (Chicago: University of Chicago Press, 1987); Douglas S. Massey and Nancy A. Denton, *American Apartheid: Segregation and the Making of the Underclass* (Cambridge: Harvard University Press, 1993); Christopher Jencks and Paul Peterson eds., *The Urban Underclass* (Washington, D.C.: Brookings Institution, 1991); Nicholas Lemann, *The Promised Land: The Great Black Migration and How it Changed America* (New York: Alfred A Knopf, 1991); Nicholas Lemann, "The Origins of the Underclass," *The Atlantic Monthly* 257 (1986): 31-55; Hope Melton, "Ghettos of the Nineties: The Consequences of Concentrated Poverty," (St. Paul Department of Planning and Economic Development, November 10, 1993).

19 See generally George C. Galster, "A Cumulative Causation Model of the Underclass: Implications for Urban Economic Policy Development," in *The Metropolis in Black and White: Place, Power and Polarization*, eds. George Galster and Edward Hill (New Brunswick, NJ: Center for Urban Policy Research, 1992).

20 Jonathan Crane, "The Effects of Neighborhoods on Dropping Out of School and Teenage Childbearing," in *The Urban Underclass*, eds. C. Jencks and P. Peterson (Washington, D.C.: Brookings Institution, 1991), 299-320; Susan E. Mayer, "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates?" in *The Urban Underclass*, 321-41; Massey and Denton, *American Apartheid* 169-70; Dennis P. Hogan and Evelyn Kitagawa, "The Impact of Social Status, Family Structure, and Neighborhood on the Fertility of Black Adolescents," *American Journal of Sociology* 90, no. 4 (1985): 825-55; Frank F. Furstenburg, Jr., S. Philip Morgan, Kristen A. Moore, and James Peterson, "Race Differences in the Timing of Adolescent Intercourse," *American Sociological Review* 52 (1987): 511-18; Elijah Anderson, "Neighborhood Effects on Teenage Pregnancy," in *The Urban Underclass*, 375-98; Sara McLanahan and Irwin Garfinkel, "Single Mothers, the Underclass, and Social Policy," *The Annals of the American Academy of Political and Social Science* 501 (1989): 92.

21 Crane, "The Effects of Neighborhoods," 274-320; Mayer, "Graduation and Teenage Fertility Rates," 321-41; Massey and Denton, *American Apartheid*, 169-70.

22 Massey and Denton, *American Apartheid*, 180-82.

attendant social isolation leads to the development of speech patterns increasingly distinct from mainstream English.[23] These speech differences make education, job search, and general interaction with mainstream society difficult.[24]

The effects of concentrated poverty can also be seen by comparing the experience of the poor living in concentrated poverty to that of poor individuals living in mixed-income communities. At least one large social experiment demonstrates that when poor individuals are freed from poor neighborhoods and provided with opportunities, their lives can change quite dramatically. Under a 1976 court order in the case of *Hills v. Gautreaux*,[25] thousands of single-parent black families living in Chicago public housing have been provided housing opportunities in predominantly white middle-class suburbs. Under the consent decree in a fair housing lawsuit originally brought in 1966, more than 5,000 low-income households have been given housing opportunities in the Chicago area. By random assignment more than half of these households moved to affluent suburbs that were more than 96 percent white, while the other participants moved to neighborhoods that were poor and more than 90 percent black. The pool of *Gautreaux* families thus provides a strong sample to study the effects of suburban housing opportunities on very poor city residents.

James Rosenbaum and colleagues from Northwestern University have intensively studied the *Gautreaux* families.[26] His research established that the low-income women who moved to the suburbs "clearly experienced improved employment and earnings, even though the program

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23 John Baugh, *Black Street Speech: Its History, Structure and Survival* (Austin: University of Texas Press, 1983): 11-22; William Labov, *Language in the Inner City: Studies in the Black English Vernacular* (Philadelphia: University of Pennsylvania Press, 1972); Id., "The Logic of Nonstandard English" in *Black American English: Its Background and its Usage in the Schools and in Literature*, ed. Paul Stroller (New York: Dell Publishing Company, 1975); William Labov and Wendell Harris, "De Facto Segregation of Black and White Vernaculars," in *Diversity and Diachrony*, ed. David Sankoff, Current Issues in Linguistic Theory Series, vol. 53 (Philadelphia: Benjamins, 1986), 1-24; William Labov, *Locating Language in Space and Time* (New York: Academic Press, 1980).

24 Joleen Kirschmen and Kathryn M. Neckerman, "'We'd Love to Hire Them, But...': The Meaning of Race for Employers" in *The Urban Underclass*, eds. C. Jenks and P. Peterson (Washington, D.C.: Brookings Institution, 1991): 203-32; Roger Shuy, "Teacher Training and Urban Language Problems," in *Black American English: Its Background and Its Usage in the Schools and in Literature*, ed. Paul Stoller (New York: Dell Publishing Company, 1975): 168-85.

25 *Hills v Gautreaux*, 425 US 284 (1976).

26 James Rosenbaum and Susan Popkin, "Employment and Earnings of Low-Income Blacks Who Move to Middle-Class Suburbs," in *The Urban Underclass* eds. C. Jencks and P. Peterson (Washington, D.C.: Brookings Institution, 1991); Rosenbaum, Popkin, Kaufman, and Rustin, "Social Integration of Low-Income Black Adults in Middle-Class White Suburbs," *Social Problems* 38, no. 4 (1991): 448-61; James E. Rosenbaum, Marilyn J. Kulieke, and Leonard S. Rubinowitz, "White Suburban Schools' Responses to Low-Income Black Children: Sources of Successes and Problems," *The Urban Review* 20, no. 1 (1988): 28-41; James E. Rosenbaum and Susan Popkin, "Black Pioneers: Do Their Moves to the Suburbs Increase Economic Opportunity for Mothers and Children?" *Housing Policy Debate* 2, no. 4 (1991): 1179-1213; James E. Rosenbaum and Julie Kaufman, "Educational and Occupational Achievements of Low Income Black Youth in White Suburbs" (paper presented at the annual meeting of the American Sociological Association, Cincinnati, Oh., 18 October 1991).

provided no job training or placement services."[27] Very rapidly after the moves, the suburbanites were about 15 percent more likely to be employed.[28] Rosenbaum found that the children of the suburban movers dropped out of high school less frequently than the city movers (5 percent vs. 20 percent).[29] Second, they maintained similar grades despite higher standards in suburban schools. Third, the children who moved to the suburbs were significantly more likely to be on a college track (40.3 percent vs. 23.5 percent[30]) and went to college at a rate of 54 percent, compared with 21 percent who stayed in the city.[31] In terms of employment, 75 percent of the suburban youth had jobs compared to 41 percent in the city.[32] Moreover, the suburban youth had a significant advantage in job pay and were more likely to have a prestigious job with benefits.[33] Finally, 90 percent of the suburban youth were either working or in school compared with 74 percent of the city youth.[34]

As poverty concentrates in central and satellite cities and social disorganization increases, crime grows, and waves of middle-class flight, business disinvestment, and declining property values surrounding the area of decline intensify. As the middle class leave, there are fewer customers for local retailers and the value of local housing declines precipitously. In the poorest metropolitan neighborhoods, basic private services, even grocery stores, disappear.[35] Social needs and hence property taxes begin to accelerate on a declining base of values. These cities become pressed to provide more with less. Often they must choose between increasing tax rates or providing fewer services of poorer quality, thereby further burdening poor residents and

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27 Rosenbaum and Popkin, "Employment and Earnings."

28 Ibid.

29 Rosenbaum and Kaufman, "Educational and Occupational Achievements," 4.

30 Ibid., 5.

31 Ibid., 5-6.

32 Ibid., 6-7.

33 Ibid.

34 Ibid. The acceptance of these poor black families in affluent, predominantly white suburbs was not painless or immediate. At the outset, about 52 percent of the suburban movers reported incidence of racial harassment, compared to 23 percent in the city. However, the incidence of harassment rapidly decreased over time. Interestingly, both the suburban and city movers reported similar amounts of neighbor assistance and support (24.8 percent suburban v. 25.0 percent city) and essentially no difference in terms of their degree of contact with neighbors. When asked, the suburban movers were actually slightly more likely to have friends in their new neighborhoods than the city movers did. In terms of interracial friendships, the suburban movers had more than two times the number of white friends that the city movers had and slightly fewer black friends. Further, over time, the degree of integration continued for suburban movers, and re-segregation did not occur.

35 Gary Orfield, "Ghettoization and Its Alternatives," in ed. Paul Peterson, *The New Urban Reality* (Washington, D.C.: Brookings Institution, 1985): 163.

further alienating any remaining middle-class residents.[36] As local property taxes become highest in the least desirable parts of the region, the flight of the middle class and the private economy increases. Larger industrial and service businesses are disadvantaged by high taxes, deteriorating public infrastructure, crime, loss of property value, lack of room for expansion or parking, lack of rapid access to radial highways, and the cost of urban environmental issues.[37] In addition, urban employers increasingly believe that the work force in distressed and ghetto neighborhoods is unsuitable.

At the same time, the zoning policies of many suburban jurisdictions help to ensure that the region's poorest residents remain in poor neighborhoods of the central and satellite cities. By requiring low maximum building densities, the zoning codes of many suburban jurisdictions allow for little or no multi-family housing. These codes also include requirements for single-family housing such as large minimum lot sizes, two car garages, and high minimum square footage. Such requirements raise the cost of development, effectively excluding poor (or even middle-class) persons.

In the clearest sense, the increase of property wealth in affluent suburbs and the stagnation of decline of central city, satellite city, and inner-suburban values represents, in part, an interregional transfer of tax base. As such, the loss of value and increased fiscal stress in older, poorer communities is a cost of regional polarization and urban sprawl.

In the end, the lack of a social mortar necessary to hold neighborhoods together and build communities makes community development in concentrated poverty neighborhoods difficult. Programs geared at job training or creation must struggle to incorporate the diversity of human resources and experiences of a social group that has been isolated from the functioning economy and jobs, from adequate nutrition and schools that succeed, and from a supportive and economically stable family structure. To the extent such programs succeed, individuals—even if they are employed in the neighborhood—often move to less poor areas.[38] Physical rehabilitation programs, while they improve the quality of shelter and neighborhood appearance, do little to attack the underlying "tangle of pathology"[39] associated with concentrated poverty.

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36 George Sternlieb and Robert W. Burchell, *Residential Abandonment: The Tenement Landlord Revisited.* (New Brunswick: Center of Urban Policy Research, Rutgers University, 1977), cited in: Robert W. Burchell, et. al., *Costs of Sprawl Revisited: The Evidence of Sprawl's Negative and Positive Impacts.* (Transportation Research Board, National Research Council).

37 John D. Kasarda, "Urban Change and Minority Opportunities," in *The New Urban Reality*, ed. P. Peterson (Washington, D.C.: Brookings Institution, 1985): 33-68; John D. Kasarda, "Urban Industrial Transition and the Underclass," *The Annals of the American Academy of Political and Social Science* 501 (1989): 26-47.

38 Nicholas Lemann, "The Myth of Community Development," *The New York Times Sunday Magazine* (2 January 1994); Ibid., "The Promised Land," 109-222; Rusk, *Cities Without Suburbs*, 44-47.

39 See Wilson, *The Truly Disadvantaged*, 21.

In terms of business development, areas of concentrated poverty have great difficulty competing with developing suburbs that offer middle-class customers, low taxes, low crime rates, cheap land with increasing values, room for expansion and parking, new highways, and few contaminated industrial sites. Thus, it is not surprising that even when enormous financial resources have been devoted to enterprise zones or inner-city tax abatements, it has been very difficult to stimulate viable business opportunities that employ poor residents.[40]

David Rusk recently studied the effects of several of the largest and most successful inner-city focused, antipoverty initiatives in the country.[41] In virtually all of these areas of massive inner-city investment, family and individual poverty rates substantially increased and moved further from metropolitan norms, the median household income declined and moved further away from the metro average, and the communities grew more segregated.

In response, it is possible that efforts that target poor inner-city neighborhoods have made these communities better than they might otherwise have been; it is impossible to know how they would have fared without such intense investment. Moreover, Rusk's analysis does not reflect individuals who have been empowered by such programs and have left poor neighborhoods. It is also true that these programs have often represented the only available response to concentrated poverty. However, in the end, Rusk's analysis does indicate that central-city, antipoverty efforts alone are woefully inadequate in the face of the enormous force of metropolitan polarization.

Proposed solutions to the problem of concentrations of poverty differ widely in approach. The debate which is most central to this report focuses on the relative value of creating housing opportunities throughout the region for low-income working and poor people versus investing in the communities in which they now live. It is clear that both strategies are necessary. It is fundamentally important for low-income people to have access to high quality education, good jobs, services, loans, and other amenities a mixed-income community provides and for low-

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[40] See generally Roy E. Green, ed., *Enterprise Zones: New Directions in Economic Development* (Newbury Park, CA: Sage Publications, 1991); Thomas Donlan, "Danger Zones: The Required Ingredient in an Enterprise Zone is Enterprise," *Barron's* (22 June 1992): 10; Glenda Glover and J. Paul Brownridge, "Enterprise Zones as an Instrument of Urban Policy: A Review of the Zones in South Central Los Angeles," *Government Finance Review* (June 1993): 15-17; Neal Peirce, "Enterprise Zones - No Great Shakes," *National Journal* (17 July 1993): 1828; Elizabeth Larson, "Network News: Enterprise Zones Ignore the Importance of Social Networks," *Reason* (April 1994): 17; Richard Pomp, Sandra Kanter, Kenneth Simonson, and Roger Vaughan, "Can Tax Policy be Used to Stimulate Economic Development?" *The American University Law Review* 29 no. 207 (1979-80): 207-33; Paul Kantor and H. V. Savitch, "Can Politicians Bargain with Business: A Theoretical and Comparative Perspective on Urban Development," *Urban Affairs Quarterly* 29 no. 2 (1993): 230-255; Elizabeth Gunn, "The Growth of Enterprise Zones: A Policy Transformation," *Policy Studies Journal* 21 no. 3 (1993): 432-49; Otto Hetzel, "Some Historical Lessons for Implementing the Clinton Administration's Empowerment Zones and Enterprise Community Programs: Experiences from the Model Cities Program," *The Urban Lawyer* 26 no. 1 (1994): 63-81; Jeffrey Katz "Enterprise Zones Struggle To Make Their Mark," *CQ* (17 July 1993): 1880-83; Timothy Bartik, *Who Benefits From State and Local Economic Development Policies?* (Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1991): 17-62; Laura McClure, "Enterprise Zones Have Negligible History of Success," *National Catholic Reporter* (13 November 1992); Glenda Glover, "Enterprise Zones: Incentives are Not Attracting Minority Firms," *The Review of Black Political Economy* (Summer 1993): 73-99.

[41] David Rusk, *Inside Game/Outside Game* (Washington, D.C.: Brookings Institution, 1999).

income families to be able to choose where they want to live based on a wide variety of factors. A metropolitan development agenda should address barriers to low income people, particularly people of color, moving closer to jobs and schools located in the affluent suburbs of the region and, at the same time, the revitalization of existing low-income Saginaw neighborhoods and satellite cities in ways that benefit (rather than simply displace) the incumbent residents. In the end, the goal of regional reform is to create thriving, mixed-income neighborhoods in all communities of the region.

B. Racial Segregation

Those who live in concentrated poverty areas are largely black and Hispanic. This is as true in regions with a small minority population as it is in regions with a large minority population. Nationwide, in 1990 there were almost as many poor white persons in the country's metropolitan areas as blacks and Hispanics combined (10.8 million poor whites, 6.9 million poor blacks, and 4.8 million poor Hispanics), yet three-quarters of these poor whites lived in middle-class neighborhoods (mostly suburban) while three-quarters of poor blacks and one half of poor Hispanics lived in neighborhoods with 20 percent or more persons in poverty.[42] Jargowsky found that the number of African Americans living in high poverty neighborhoods, mostly highly segregated ghettos, climbed from 2.4 million to 4.2 million between 1970 and 1990 and that the number of Hispanics living in high poverty neighborhoods increased from 729,000 to 2.0 million during this period.[43]

Despite the fact that poor members of minority groups continue to be far more likely to live in concentrated poverty than are poor whites, the discussion of racial segregation has long left the nation's political radar screen—the discussion of social separation never really got there. There appears to be a broadly shared illusion that United States had a period of substantial civil rights reform in the 1960's and that the problem of segregation has largely been solved. This clearly is not the case. Raising public awareness about regional socioeconomic polarization, also means re-opening the discussion of race and segregation.

The segregation of blacks in American cities and metropolitan areas is unique in its intensity and longevity. A comparison of black residential segregation to the segregation of ethnic European immigrants in this century (*e.g.*, Italians, Poles, Jews), finds that black segregation has steadily increased since 1910, while European ethnics have integrated into mainstream white society. The highest level of spatial isolation ever measured for European ethnic groups was experienced by Milwaukee's Italians in 1910; their level of segregation reached an index of 56, where 100 equals total segregation.[44] Thereafter, the degree of isolation

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42 David Rusk, *Inside Game Outside Game: Winning Strategies for Saving Urban America* (Washington, D.C.: Brookings Institution Press, 1999).

43 Paul A. Jargowsky and Mary Jo Bane, "Ghetto Poverty in the United States, 1970 to 1980".

44 Stanley Lieberson, *A Piece of the Pie: Blacks and White Immigrants since 1880* (Berkeley: University of California Press, 1980), cited in Massey and Denton, *American Apartheid*.

for all European ethnic groups fell steadily as children and grandchildren moved out of poverty and into mainstream white society.[45]

Yet for blacks—poor or not—the opposite is true. In 1910 the average isolation index for blacks was 9.7, but by 1970 it had climbed to 73.5 in northern cities and 76.4 in southern cities.[46] Further, in 1980, Douglas Massey and Nancy Denton found that a rise in socioeconomic status for some blacks had virtually no affect on their level of segregation—black segregation was almost as high for affluent and middle-class blacks as it was for poor blacks, and was higher than for any other racial group, regardless of income. For example, in the Los Angeles metropolitan area, affluent blacks were more segregated than poor Hispanics (indices of 78.9 and 64, respectively), and in the San Francisco-Oakland region, affluent blacks were more segregated than poor Asians (indices of 72.1 and 64 respectively).[47] Massey and Denton also found that average black isolation in U.S. metropolitan areas was ten times higher than for Asians, and while Hispanics are more segregated than Asians, blacks are still 2.5 times more isolated than Hispanics.[48]

Moreover, the level of black isolation has dropped slightly since 1970, but still remains higher than the highest level ever reached by any other group. Using another measure of segregation (the Taeuber index), Massey and Denton show that the average index of black segregation in 1970 in northern metropolitan areas was 84.5 and in southern areas, 75.3. In 1990, this segregation index measured blacks at 77.8 in the north and 66.5 in the south.[49]

Discriminatory housing practices are a significant contributing factor to racial segregation in metropolitan regions. In his book *Closed Doors, Opportunities Lost*, John Yinger analyzed

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Using racial and ethnic data for city ward populations, this index was developed by computing the percentage of a given racial or ethnic population living in the ward of the average citizen of that racial or ethnic group. This average, or *isolation index*, measures the extent to which a group lives in neighborhoods that are primarily of their race or ethnicity. For example, a value of 50 percent for blacks means that blacks are equally likely to have whites and blacks as neighbors; a value of 100 percent means that blacks live in totally black areas.

45 Massey and Denton, *American Apartheid*.

46 Lieberson, *A Piece of the Pie;* Massey and Denton, *American Apartheid.*

47 Douglas S. Massey and Nancy A. Denton, "Trends in the Residential Segregation of Blacks, Hispanics, and Asians: 1970 and 1980," *American Sociological Review* 52 (1987): 815-16; cited in Massey and Denton, *American Apartheid*.

48 Douglas S. Massey and Nancy A. Denton Trends in the Residential Segregation of Blacks, Hispanics, and Asians: 1970 and 1980". U.S. metropolitan areas refers here to the 50 largest Standard Metropolitan Statistical Areas.

49 Ibid.; and Roderick J. Harrison and Daniel H. Weinberg, "Racial and Ethnic Segregation in 1990," presented at the annual meetings of the Population Association of America, April 20–May 2, 1992, Denver, CO; cited in Massey and Denton, *American Apartheid*.

These indices of racial segregation measure the relative percentage of blacks who would have to move their place of residence to a different census tract in order to achieve an integrated, *i.e.* even racial residential pattern.

discrimination against blacks and Hispanics in the housing market. In studies as recent as 1991 and 1993, he found that discrimination takes place at every point of the home-buying (or renting) process, from the time a black or Hispanic calls a real estate agent to the time he is denied a mortgage. Examples of housing market discrimination include: a real estate agent indicating that an advertised unit is sold, when it is not; an agent showing only the advertised unit and no others; a lender denying a mortgage to a minority person when he would give the same mortgage to a white person; or an agent *steering* his customers—be they whites, minorities, rich or poor—to neighborhoods dominated by their race.[50] All told, Yinger calculates that a black person has a 60 percent chance of being discriminated against when he seeks to buy a home and visits one real estate agent; this increases to 90 percent when he visits three agents. Yinger found that housing discrimination was more prominent against blacks than Hispanics, but still significant for the Hispanics as well.

C. Fiscal Stress and High Development Costs on the Region's Fringe

Not only does regional polarization negatively impact the central and satellite cities of a region and the people who live there, but it also creates serious problems on the region's fringe—both for the communities that are developing there and for the natural environment.

As social and economic decline moves outward from the region's core, tides of middle-class families—often young families with children—sweep into fringe communities where local governments compete for limited tax base to cover their growing infrastructure costs. Different types of land uses require different levels of public services (*e.g.*, schools, sewer and water treatment, roads, social services) and generate varying levels of tax revenue for a city. Understandably, from a local government standpoint, those uses that generate the most tax revenue and cost the least in terms of public services, are the most desirable. Generally, non-residential uses are more profitable than residential uses with variable levels of return within each of these categories.[51] As the most profitable uses leave the compact confines of the central city, they become diluted in the vast expanse of the suburbs; there simply are not enough research office parks for every community to have one. Usually, only the wealthiest cities are able to attract the types of development that provide the most tax base and require the fewest city

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50 John Yinger, *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination* (New York: Russell Sage Foundation, 1995).

51 Typically the least profitable use are mobile home parks and the most profitable are research office parks, with garden apartments, inexpensive single-family homes, 3-4 bedroom townhomes, expensive single-family homes, 2-3 bedroom townhomes, retail facilities, open space, garden condominiums, age-restricted housing, 1 bedroom/studio high-rise apartments, industrial development, and office parks in between (moving from least to most desirable). In a very simple analysis, the break even point for school districts is somewhere between 3-4 bedroom townhomes and expensive single-family homes and the break-even point for municipalities is about at open space.

From Robert W. Burchell, "Fiscal Impact Analysis: State of the Art and State of the Practice," in Susan G. Robinson, ed. *Financing Growth: Who Benefits? Who Pays? And How Much?* (Government Finance Officers Association, 1990).

resources.[52] Other cities are left with miles of townhomes and strip malls that don't pay the cost of the schools, sewer lines, and other infrastructure the new residents require.

Further, the cost of infrastructure on the region's fringe is more than in the compact, carefully planned core. The seminal study on the costs of suburban growth was published by the Real Estate Research Corporation (RERC) in 1974. *The Costs of Sprawl* compared five different community prototypes for development: "low-density sprawl", "low-density planned", "sprawl mix", "planned mix", and "high-density planned". The study found that public infrastructure costs (including recreation facilities, schools, public facilities, roads, utilities) were highest under the "low-density sprawl" growth pattern ($9,777 per unit) and were lowest under the "high-density planned" pattern ($5,167 per unit).[53] Thus, according to RERC, the cost to the public of high-density planned development is about 53 percent of the cost of low-density unplanned development. Although the RERC study has been criticized for, among other things, not taking into consideration the greater number of people requiring services in high-density development,[54] many studies conducted since then by other well-respected researchers have had very similar, albeit not as dramatic, results. Most of these found that public infrastructure costs for compact, planned development were 75 to 95 percent of the cost for unplanned, sprawl-type development.[55] Similarly, these studies found that the cost of land under compact, urban development is less than under sprawl-type development.[56]

Studies have also found that development that utilizes existing capacity costs cities less over time than does new development. For example, in a study comparing potential costs that would be incurred and revenues that would be generated under low-density, sprawl-type development versus compact, planned development in the state of New Jersey, Robert Burchell

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52 Burchell, et. al., *Costs of Sprawl Revisited*.

53 Real Estate Research Corporation (RERC), *The Costs of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe*. (Washington DC: U.S. Government Printing Office, 1974), cited in: Burchell, et. al., *Costs of Sprawl Revisited*. Dollar figures are in 1973 dollars.

54 Alan Altshuler, "Review of *The Costs of Sprawl*", *Journal of the American Planning Association* 43, 2: 207-9 (1977) cited in: Burchell, et. al., *Costs of Sprawl Revisited*.

55 James E. Frank, *The Costs of Alternative Development Patterns: A Review of the Literature* (1989); James E. Duncan, et. al, *The Search for Efficient Urban Growth Patterns* (1989); Robert W. Burchell, *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan* (1992); Robert W. Burchell, *Fiscal Impacts of Alternative Land Development Patterns in Michigan: The Costs of Current Development Versus Compact Growth* (1997); Robert W. Burchell, *South Carolina Infrastructure Study: Projection of Statewide Infrastructure Costs 1995-2015* (1997); Robert W. Burchell and David Listokin, *Land, Infrastructure, Housing Costs, and Fiscal Impacts Associated with Growth: The Literature on the Impacts of Traditional versus Managed Growth* (1995); cited in Burchell, et. al., *Costs of Sprawl Revisited*.

56 Burchell, *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan*; Burchell, *Fiscal Impacts of Alternative Land Development Patterns in Michigan*; Burchell, *South Carolina Infrastructure Study*; John D. Landis, "Imagining Land Use Futures: Applying the California Urban Futures Model", *Journal of the American Planning Association*, 61, 4 (Autumn): 438-457 (1995); cited in: Robert W. Burchell, et. al., *Costs of Sprawl Revisited*.

found that directing population and job growth to already developed areas and using existing infrastructure, would save municipalities $112 million annually and school districts $286 million annually in maintenance costs and debt service.[57]

D. Environmental and Transportation Impacts

The vast supply of developmental infrastructure put into communities on the region's fringe—many of which are restrictively zoned, allowing little affordable housing—creates land-use patterns that are low density, economically inefficient, and environmentally harmful. Growing communities that face tremendous service and infrastructure needs (as described above) offer development incentives and zone in ways that allow them to capture the most tax base.[58] In so doing, they lock the region into low-density development patterns that needlessly destroy tens of thousands of acres of forest and farmland, destabilize environmentally sensitive areas, and greatly increase vehicle miles traveled and number of automobile trips made.

In *Costs of Sprawl Revisited,* Robert Burchell and colleagues synthesized the findings of approximately 500 studies that in one way or another, measured the costs of sprawl.[59] They identified in the literature forty-one alleged impacts of sprawl (both positive and negative) and reported on whether or not there was general agreement among the researchers as to the existence of the condition and to whether it is strongly linked to sprawl. The impacts that Burchell and colleagues identified that had the highest level of agreement on both questions, were 1) that sprawl development generates more miles of vehicle travel than compact development, 2) that sprawl development generates more automobile trips (and fewer trips using other modes of transportation) than compact development, 3) that more agricultural lands are lost under sprawl development than under any other type of development, and 4) that more fragile lands are lost under sprawl development than under any other type of development.[60]

The first two of these impacts of sprawl, both transportation issues, are due to much lower levels of density and more segregated land uses under sprawl. In communities developing on the region's fringe, the places where people live, work, play, go to school, and shop are spread over a much greater land area and are rarely integrated, essentially requiring travel by car and requiring many miles of such travel. Ultimately this can mean increased air and water pollution, noise, parking costs, and accident costs, although Burchell found slightly less agreement on the relationship between sprawl development and these factors. When homes, shops, and workplaces are clustered together, as under higher-density, planned forms of development, fewer trips by

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57 Burchell, *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan*.

58 D. Winsor, *Fiscal Zoning in Suburban Communities* (1979); B. Rolleston, "Determinants of Restrictive Suburban Zoning: An Empirical Analysis," *Journal of Urban Economics* 21 (1987): 1-21; M. Wasylenko, "Evidence of Fiscal Differentials and Intrametropolitan Firm Relocation," *Land Economics* 56 (1980): 339-56.

59 Burchell, et. al., *Costs of Sprawl Revisited*.

60 Ibid.

automobile are necessary as some trips can be combined, and other modes of travel become more efficient and feasible, such as transit, walking, and bicycling.

The second two impacts of sprawl for which Burchell found a high level agreement—the loss of agricultural lands and the loss of fragile lands—are both issues of land stewardship. Very simply, because most development on the fringe is low density, more land is needed. Land just beyond the developed area of the region becomes highly sought after and those who own it are under tremendous pressure to sell. As a result, an estimated 1-2 million acres of farmland are lost in America each year.[61] Further, because land on the edge of the region is so valuable—both to the seller and to the city once it is developed—and because development there often lacks coordinated planning, it's likely that sensitive areas such as wetlands, flood plains, and steeply sloped and unstable coastal areas will be developed. As an example of this, one study estimates that 110 million acres of wetlands have been lost in the U.S. since colonial times, or 55 percent of originally documented wetlands.[62] When these fragile lands are developed and later fail, the damage—to people, homes, and communities—is devastating and the costs exorbitant.

Probably the most intensive effort to protect agricultural and fragile lands in the U.S. from development has been the establishment of over 1,300 land trusts, some dating to the 1950s. However, while these efforts have been well-intentioned, they have been extremely costly and terribly ineffective. In order to purchase potentially developable land from land owners, these trusts secure large amounts of money from public and private sources—funds that could be used for research or policy advocacy of mandatory planning legislation. But, despite intense investment in land trusts by government agencies and foundations, sprawl development continues to consume more land on the edge of metropolitan regions each year than all of these land trusts have saved in twenty years.[63] According to the American Farmland Trust, only about 36,000 acres of farmland are saved from development each year by the fourteen largest state land trusts.[64] The Trust for Public Land, one of the largest land trusts in the nation, has protected nearly 40,000 acres of land per year since 1976 (both farmland and environmentally sensitive lands).[65] These numbers, while large, are not nearly enough to make up for the millions of acres of agricultural and fragile lands lost each year that could have been protected by legislation like the Oregon land-use law.

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61 Henry R. Richmond, "A Land Use Policy Agenda for 21st Century America", a report to the Steering Committee, American Land Institute, October 15, 1996.

62 Thomas E. Dahl, *Wetlands Losses in the United States: 1780s - 1980s* (1990); cited in: Robert W. Burchell, et. al., *Costs of Sprawl Revisited*.

63 Henry R. Richmond, "Program Design: The American Land Institute". a report to the Steering Committee, American Land Institute, August 29, 1997.

64 Trust for Public Land newsletter, September 22, 1996.

65 Richmond, "A Land Use Policy Agenda for 21st Century America".

III. The Diversity of Metropolitan Areas

A. The Sectoral Development of American Metropolitan Areas

Students of American metropolitan housing markets, from Homer Hoyt through John Adams, have demonstrated that American metropolitan areas develop in socioeconomic sectors, or wedges, that reach out from central city neighborhoods deep into suburbia.[66] As cities come into being, neighborhoods segment along class lines in sectors surrounding a growing central business district. The working class settles within walking distance of industrial sites. The middle class forms neighborhoods "upwind (or at least not downwind)"[67] from heavy transport and manufacturing areas on sites close to white-collar, downtown jobs. The upper class settles in neighborhoods removed from the other two groups, often on land with attractive topographical features. Over time, these three distinct neighborhoods grow in pie-shaped wedges into the expanding city.

Historically, as these sectors filled out city boundaries, working-class neighborhoods extended into working-class first- and second-tier suburbs, middle-class neighborhoods into middle-class suburbs, and upper-class neighborhoods into upper-class suburbs. These patterns followed streetcar lines and radial access roads beyond the city into the first-tier suburbs.

In the Saginaw area, these sectors have grown out from the cities of Saginaw, Bay, and Midland. In Saginaw, it appears that the poor moved from the northern and central neighborhoods of the city along the Saginaw River, south and east to other parts of the city and to places like Buena Vista and Bridgeport; the middle-class moved further out into surrounding townships such as Richland and towards Midland City; and the upper class moved both to the eastern portion of the region to communities such as Blumfield and Frankenmuth, and also somewhat to the west into Saginaw, Thomas, and Swan Creek Townships.

In Bay City, it appears the poor moved from the center of the city south toward Portsmouth; the middle class seem to have moved from the western portion of the city out toward Midland City; and the affluent sector, in the eastern part of the city, moved further east into Hampton and Merritt.

The trends are less clear in the Midland City area but the southern portion of the city has grown poor and the middle class has moved to the south and east into communities like Midland Township. The affluent neighborhoods of northern Midland have spread out into Larkin.

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66 John S. Adams, "Housing Submarkets in an American Metropolis," in *Our Changing Cities*, ed. John Fraser, (Baltimore: Johns Hopkins University Press, 1991), 108-26; Homer Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities* (Washington D.C.: US Government Printing Office, 1939) reprinted in 1966 with analysis of the 1960 census data; Ronald F. Abler and John S. Adams, *A Comparative Atlas of America's Great Cities: Twenty Metropolitan Regions* (University of Minnesota Press: Association of American Geographers, 1976); John Adams, *Housing America in the 1980s* (New York: Russell Sage Foundation, 1987); John S. Adams, "The Sectoral Dynamic of Housing Markets within Midwestern Cities of the United States," in *The Geographic Evolution of the United States Urban System*, ed. John Adams.

67 Adams, "Sectoral Dynamic."

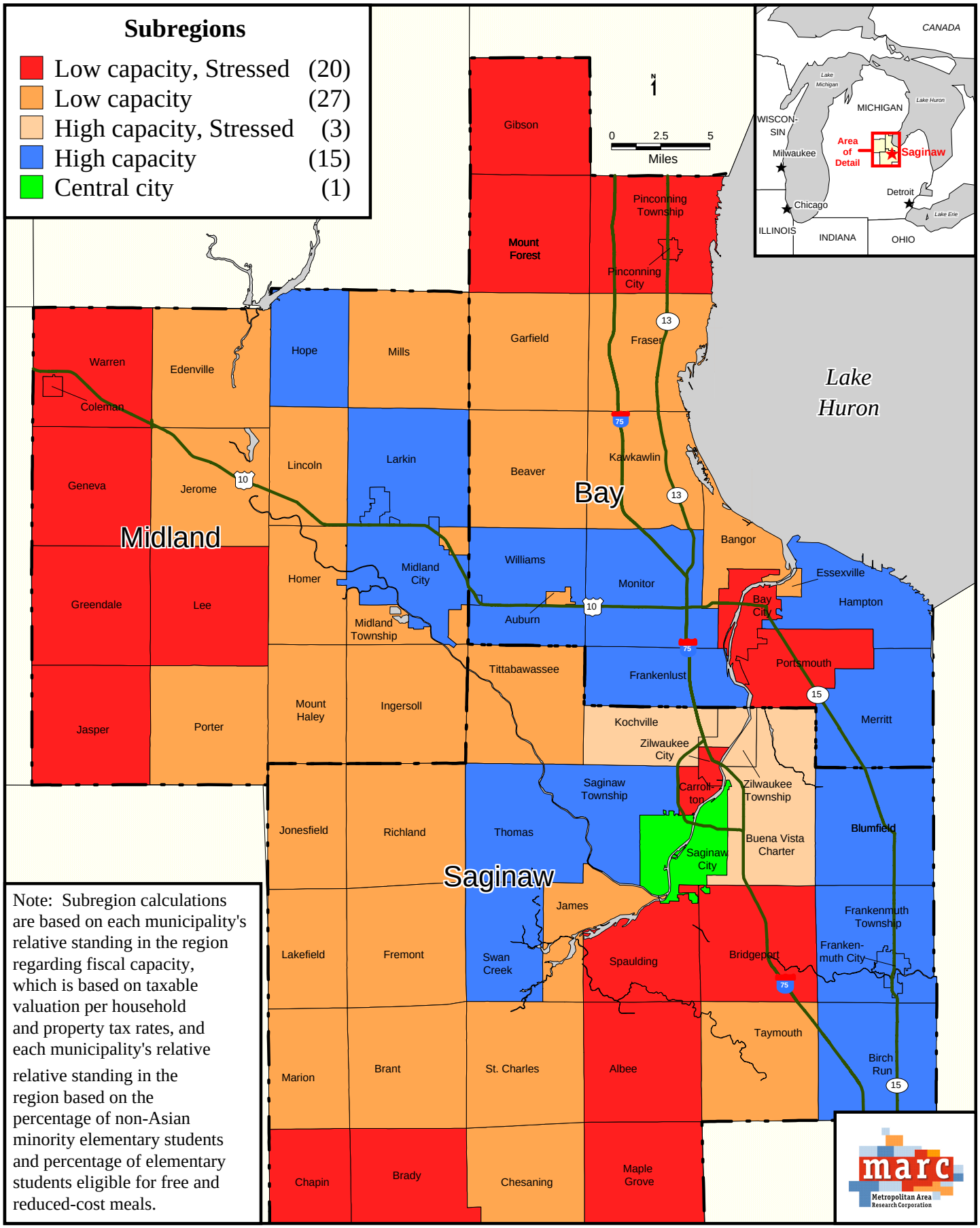
B. Saginaw Area Subregions

The Saginaw area consists of three counties—Bay, Midland, and Saginaw. In 1998 the estimated total population of this region was 401,990 and there were 66 cities and townships. This study divides these jurisdictions into four distinct types of communities: (1) Low Capacity/Stressed Communities; (2) Low Capacity Communities; (3) High Capacity/Stressed Communities and (4) High Capacity Communities (Figure 1). The jurisdictions were divided into these subregions based on their relative tax capacity per household, and relative percentage of non-Asian minority elementary students and percentage of students eligible for free and reduced-cost meals (see Appendix A for the data and calculations used to assign places to subregions).[68] The table below shows statistics for each subregion category, with separate statistics for the central city.

[68] First, an average property tax rate for the region is calculated from the municipal rates. This rate is then applied to each jurisdiction's total taxable valuation per household to determine fiscal capacity. Each jurisdiction is then assigned a capacity score based on its value in relation to the regional value (above the regional value = High Capacity, below the regional value = Low Capacity). Next, for each jurisdiction, z-scores are determined for both of the stress factors (percentage of non-Asian minority elementary students and percentage of students eligible for free and reduced-cost meals). A z-score is the normalized deviation from the average. So, for example, a jurisdiction whose percentage non-Asian elementary students fell at exactly average for the region would have a non-Asian elementary students z-score of zero. The z-scores were multiplied by -1 resulting in a positive number for places with a below-average stress level and a negative number for places with an above-average stress level. Then, the two z-scores were averaged together to arrive at a combined stress score for the jurisdiction. Each jurisdiction was then assigned a stress score based on its value in relation to zero (positive values = low stress, negative values = high stress). Finally, each jurisdiction is then assigned to one of the four subregion categories based on their stress and fiscal capacity scores.

1998 percentage of non-Asian minority elementary students and 1998 percentage of students eligible for free and reduced-cost meals data are from the Michigan Department of Education, Information Services Center; 1998 taxable valuation data were from the Michigan Department of Treasury, State Tax Commission.1998 population estimates are from the East Central Michigan Planning and Development Regional Commission.

Figure 1: Subregions



Social & Economic Statistics for the Central City & Subregions						
	Region	**Saginaw**	**Low Capacity/ Stressed Communities**	**Low Capacity Communities**	**High Capacity/ Stressed Communities**	**High Capacity Communities**
Estimated Persons, 1998	401,990	63,464	89,203	94,484	13,040	141,799
% of Region's Total Municipal Population, 1998	100	15.8	22.2	23.5	3.2	35.3
Estimated Households, 1998	148,775	23,877	32,759	33,193	4,685	54,261
Median Household Income, 1989	$29,368	$17,736	$25,234	$32,179	$23,482	$36,859
% Change in Real Median Household Income, 1979-1989	-12.6	-28.6	-16.7	-10.2	-23.6	-8.1
% Children under 5 in Poverty, 1990	26.1	50.3	26.6	17.0	42.5	11.4
Change in % Points: Children under 5 in Poverty, 1980-1990	9.5	17.8	9.2	5.0	25.1	3.7
Female-Headed Households w/Children as a % of All Households with Children, 1990	22.4	47.3	21.6	13.1	32.6	14.2
Change in % Points Female-Headed Households with Children, 1980-1990	5.9	10.2	6.9	2.6	9.2	3.8
Total Property Tax Base per Household, 1998[69]	$54,400	$26,672	$35,617	$48,129	$72,814	$87,159
% Change in Real Property Tax Base per Household, 1986-1998	21.8	-9.9	16.1	19.3	14.0	26.4

1. Low Capacity/Stressed Communities

Low Capacity/Stressed Communities are distressed places that are fully developed and have experienced negative socioeconomic change since 1980 or are beginning to experience such change. In the three-county Saginaw area they include a number of older satellite cities, such as Bay City, Pinconning and Coleman, as well as many outlying townships in western Midland, northern Bay, and southern Saginaw Counties. These jurisdictions are defined by a combination of increasing social needs and low tax base. They often do not have sufficient social or economic resources to respond to growing social challenges. It is important to note that in older metropolitan areas of the country, as poverty and social instability crossed city/suburban lines or began to grow in older towns and satellite cities overrun by urban sprawl, it actually began to accelerate and intensify. For example, many older transitioning suburbs on the south and west sides of Chicago and in communities such as Camden, New Jersey, Compton, California, and East

[69] In March 1994, Michigan voters, as part of Proposal A, limited future property tax increases to the rate of inflation, but not to exceed 5 percent per year. This rate is referred to as the Taxable Valuation and is used in this report to measure 1998 tax base. However, in order to compare 1998 tax-base data to 1986 tax-base data (prior to the tax limitation measure), this report uses 1998 assessed values, rather than taxable values.

St. Louis, Illinois suffer more severe deprivation, and higher levels of crime than the cities they adjoin.[70]

2. Low Capacity Communities

Low Capacity Communities are places that have few local resources for schools and public services but whose social problems are not quite as severe as those of the Low Capacity/Stressed Communities. Low Capacity Communities include both older cities and townships as well as fast-growing, middle-income places that are developing too quickly to accumulate the resources necessary to meet their high service and infrastructure needs. In the Saginaw area, these communities include many of the townships that blanket the region as well as the satellite city of Auburn. While these places do not presently have as deep social problems as the Low Capacity/Stressed Communities, they are often tomorrow's troubled places. As the narrative below indicates, many of these communities have experienced declining incomes, increasing female-headed households, increasing crime, increasing childhood poverty, and a declining tax base in recent years.

3. High Capacity/Stressed Communities

High Capacity/Stressed Communities are distressed places that have experienced negative socioeconomic change since 1980 or are beginning to, but have maintained a strong tax base, usually due to commercial/industrial development. In the Saginaw region, three communities, all bordering the central city, are in this category: Kochville, Zilwaukee Township, and Buena Vista. These jurisdictions are experiencing the same increasing social needs as the Low Capacity/Stressed Communities, but currently have a greater tax base to cope with these needs. Again, they are at high risk of becoming more troubled places.

4. High Capacity Communities

High Capacity Communities are the cities and townships with the highest tax bases and the fewest social needs. In the Saginaw area they are primarily located in the eastern portion of the region, around Midland City, and between Midland and Bay City. These cities and townships are often recently developed communities, with wealthy residential subdivisions and modern office parks, but also include some older, established, wealthy places. When people speak of "the suburbs", that monolith with common needs and resources, they are usually referring to these places, which, in the Saginaw region, actually represent only about 35.3 percent of the total regional population.

[70] Orfield and Monfort, "School Desegregation," 30; Rob Gurwitt, "Saving the Aging Suburb," *Governing* 6, no. 8 (1993): 36; Paul Glastris and Dorian Friedman, "A Tale of Two Suburbias," *US News and World Report* (9 November 1993): 32-36; Massey and Denton, *American Apartheid*, 67-74. See also Schools section below.

IV. Demographic Findings

This section examines social, economic, and urbanization trends in the Saginaw area to determine whether regional polarization and sprawl is occurring. These trends are illustrated using color-coded, GIS-generated maps, where, in most cases, the value for the region is at the break between the orange and blue categories.[71] Thus, on each map, orange and red jurisdictions are below average for the region and blue jurisdictions are above average. The patterns revealed through comparing these maps will help to identify local governments with common needs and resources in the Saginaw area.

The first few maps and tables illustrate social and economic trends in the region between the 1980 and 1990 census periods. These data show that during the 1980's poverty grew increasingly concentrated in Saginaw, Bay City, Midland City, and western Midland County. Further, the city of Saginaw and Bay City experienced social and economic decline in terms of income and female-headed households. Many of Saginaw's neighboring communities also experienced social and economic decline during the decade. At the same time, most of the communities near Midland City were doing better than the regional average in 1990 poverty, childhood poverty, female-headed households, and income.

While poverty, childhood poverty, household income, and female-headed household data are not available for the region beyond 1990, other data indicate that the same trends have continued into the 1990's. The twenty-three maps that follow the census data show that social need continues to be concentrated in Saginaw and its neighboring communities, Bay City, and outlying communities. In these same places, economic resources remain among the lowest in the region and continue to decline. At the same time, the communities east of Saginaw in Bay and Saginaw Counties and near Midland City—the places with the fewest social needs and most economic resources in 1990—are only getting better. In addition, regional resources are flowing to these areas, further improving the status of these places and furthering regional sprawl.

A. Concentrated Poverty

As discussed in Section II of this report, the effects of concentrated poverty are devastating—both to individuals and to communities. Although, the most severe concentrations of poverty are located in large industrial cities such as Detroit, Chicago, Philadelphia, Cleveland, and Milwaukee, with much smaller concentrations in secondary cities such as Saginaw, the effects of concentration of poverty on those who live in such neighborhoods, and on the region as a whole, are the same. Further, smaller cities are showing consistent increases in levels of concentration.

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[71] The maps presented in this section were created using geographic information system (GIS) software. This software attaches data stored in a separate database to a geographic base map. The data source for each map is noted on the map. The break points for the data were determined using a method of natural breaks. With this method the data are split at places where a gap in the data naturally occurs. This method helps to insure that the places in a particular color category have values that are closer to each other than they are to the values for places in other categories.

In the central city of Saginaw there is a subset of distressed census tracts with more than 40 percent of its population below the federal poverty line.[72] According to sociologists, such neighborhoods are extreme poverty tracts or ghettos.[73] Surrounding these severely distressed neighborhoods are transitional neighborhoods with 20 to 40 percent of their population in poverty.[74]

In 1980 there were three extreme poverty tracts in the Saginaw region—ones in which 40 percent or more of the residents lived in poverty (Figure 2).[75] All were located in the city of Saginaw. By 1990 the number of extreme poverty tracts in the region had increased to ten, nine in Saginaw and one in Bay City (Figure 3).[76] Overall, the region saw an increase in extreme poverty tracts between 1980 and 1990 of 233 percent.

An additional twelve tracts in the region were transitional in 1980—having between 20 and 40 percent of their population in poverty. Eight of these were in the city of Saginaw and four were in Bay City. By 1990 there were a total of eighteen transitional tracts in the region. Saginaw had decreased to five transitional tracts, Bay City had increased to six transitional tracts, and seven transitional tracts were added in the rest of the region—two in Midland City, three near Saginaw in Buena Vista and Bridgeport, one encompassing Lee, and one encompassing Greendale, Jasper, and Porter.

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72 While it could be argued that the Federal poverty line is a rather conservative measure of poverty, it is used here for reasons of data availability and to compare poverty levels in this region to other metropolitan areas of the U.S. Another measure of poverty is student eligibility for the Federal Free and Reduced-cost Meal program—130% of the Federal poverty line for free lunches and 185% of the poverty line for reduced cost lunches. This measure will be used later in this study.

73 See Paul A. Jargowsky and Mary Jo Bane, "Ghetto Poverty in the United States, 1970 to 1980," in Christopher Jencks and Paul E. Peterson (eds.), *The Urban Underclass* (Washington, DC: The Brookings Institution, 1991), 235-273; John D. Kasarda, "Inner-City Concentrated Poverty and Neighborhood Distress: 1970 to 1990," *Housing Policy Debate* 4, no. 3: 253-302.

74 Ibid.

75 *Census of Population and Housing, 1980: Summary Tape File 3A*, [machine-readable data files] / prepared by the Bureau of the Census. –Washington: The Bureau [producer and distributor], 1981.

76 *Census of Population and Housing, 1990: Summary Tape File 3A*, CD ROM/ prepared by the Bureau of the Census. –Washington: The Bureau [producer and distributor], 1991. All figures that follow are from either the 1980 or the 1990 Census STF3A unless otherwise noted.

Figure 2: Percentage Persons in Poverty by Census Tract, 1980

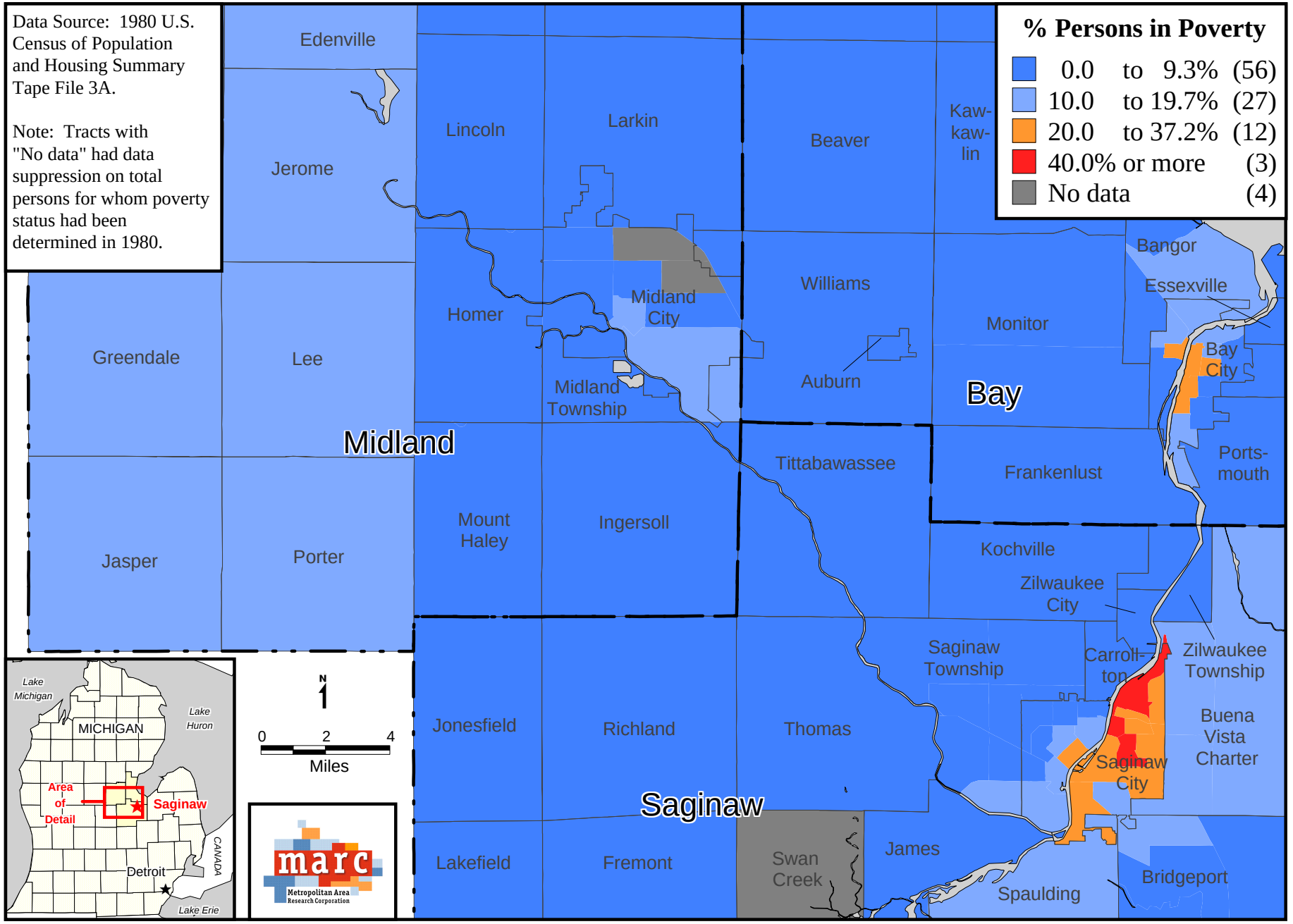
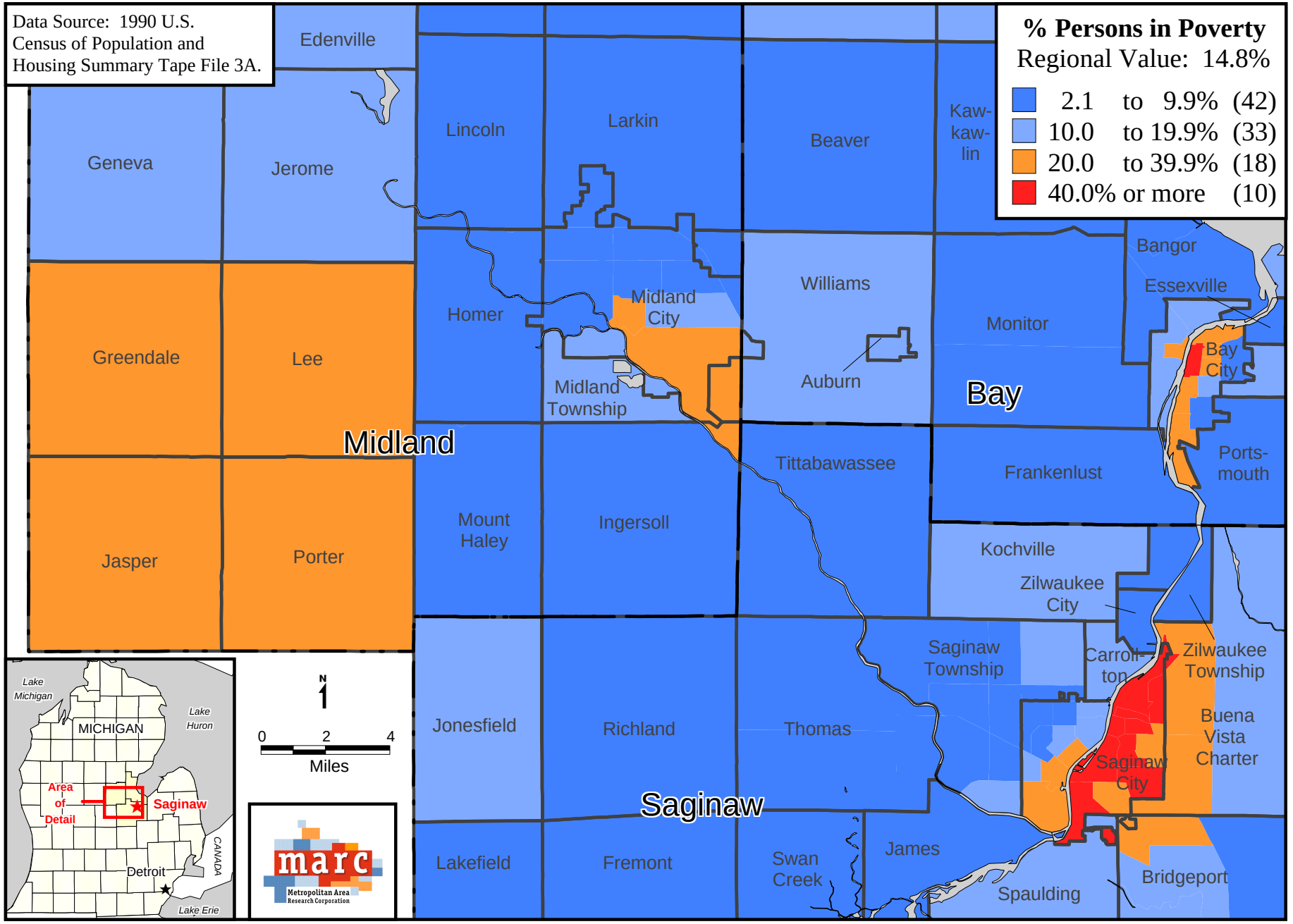


Figure 3: Percentage Persons in Poverty by Census Tract, 1990



Poverty Tracts, 1980-1990

	1980		1990	
	20-40 %	**40% +**	**20-40 %**	**40% +**
Saginaw	8	3	5	9
Bay City	4	-	6	1
Bridgeport	-	-	1	-
Buena Vista	-	-	2	-
Greednale, Jasper, & Porter	-	-	1	-
Lee	-	-	1	-
Midland City	-	-	2	-
Total	12	3	18	10

Source: 1980 US Census Summary Tape File 3A and 1990 US Census Summary Tape File 3A.

B. Poor Children

During the 1980s, the federal poverty line did not keep up with inflation. By 1990, a single mother and her child were not considered poor unless they had an annual income of less than $8,420.[77] Most social scientists do not think this is a measure of poverty, but of desperate poverty.

In 1990, 26.1 percent of children under five years old in the Saginaw region lived in poverty, the highest rate in the region (Figure 4).[78] As a comparison, 23.4 percent of children under five in the Detroit region and 15.0 percent in the Grand Rapids region were in poverty in 1990. Over half (50.3 percent) of all children under five in the city of Saginaw lived in poverty. In the Low Capacity/Stressed Communities the percentage was about the same, but it was much higher in the High Capacity/Stressed Communities (42.5 percent). The Low Capacity and High Capacity Communities had much lower averages.

Percent Children Under Five in Poverty, 1990

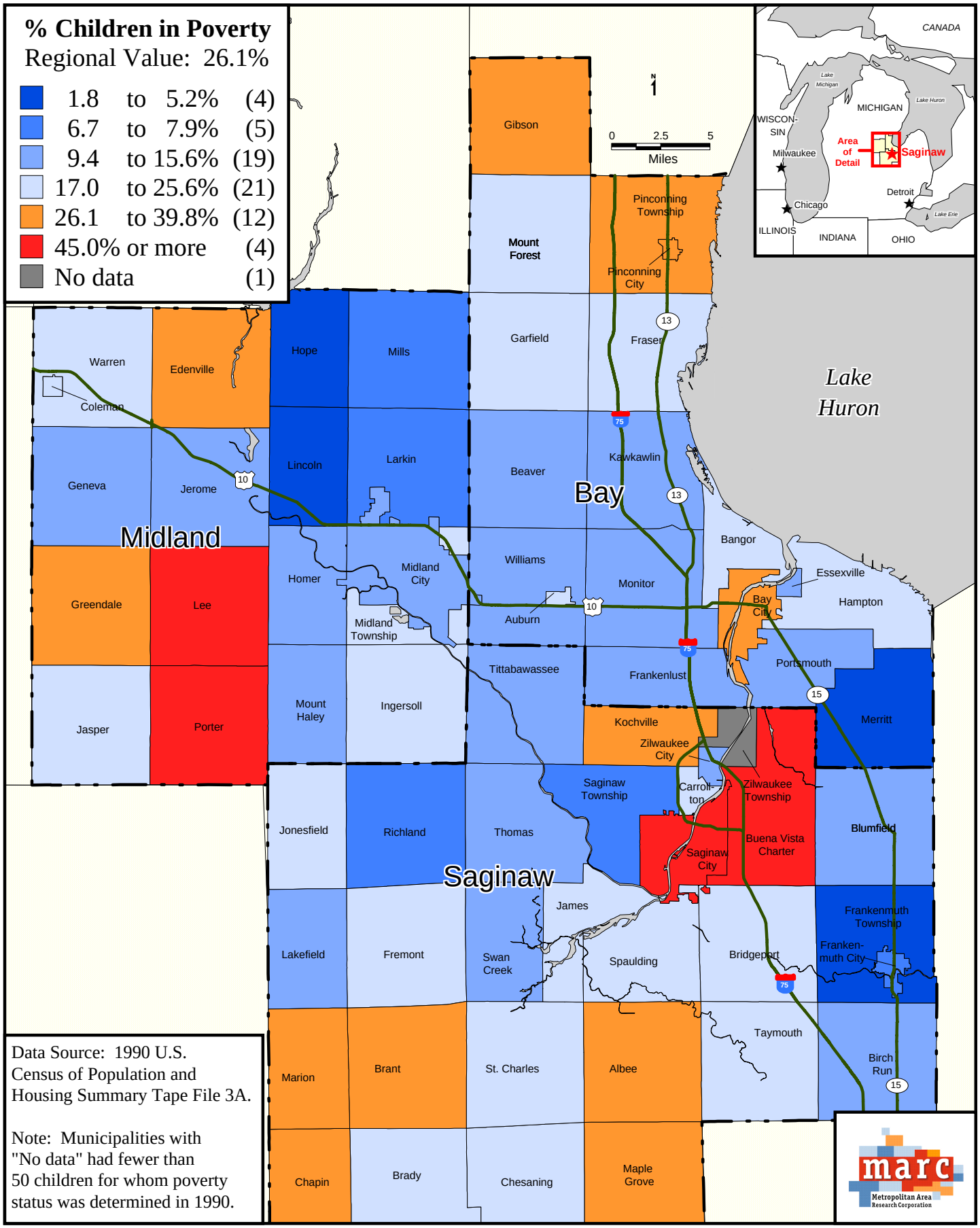
Region	**Saginaw**	**Low Capacity/ Stressed Communities**	**Low Capacity Communities**	**High Capacity/ Stressed Communities**	**High Capacity Communities**
26.1	**50.3**	**26.6**	**17.0**	**42.5**	**11.4**

In all, there were fifteen townships and satellite cities in addition to Saginaw with at least 26 percent of their children in poverty, including Pinconning City (39.8 percent), Lee (45.0 percent), and Buena Vista (45.1 percent). On the other hand, there were nine communities in the region with less than 8 percent of their children under five in poverty. Some of the lowest rates were in Saginaw Township (6.7percent), Lincoln (3.4 percent), and Frankenmuth Township (1.8 percent).

77 Family of three: $10,560; family of four: $12,700. (Federal Register 1990, vol. 55, no. 33: 5665).

78 *Census of Population and Housing, 1990: Summary Tape File 3A.*

Figure 4: Percentage Children in Poverty by Municipality, 1990



In terms of the change in the level of childhood poverty between 1980 and 1990, Saginaw-area children as a whole grew somewhat poorer, going from 16.6 percent to 26.1 percent poor preschool children, a 9.5 percentage point increase (Figure 5).[79] During this period, the rate of childhood poverty in the city of Saginaw increased by 17.8 percentage points, from 32.5 to 50.3 percent. The Low Capacity/Stressed Communities increased by 8.2 percentage points, from 29.9 to 38.1 percent, while the High Capacity/Stressed Communities increased at the fastest rate, 25.1 percentage points, from 17.4 to 42.5 percent. The Low Capacity and High Capacity Communities increased only slightly.

Change in Percentage Points Children Under Five in Poverty, 1980-1990

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
9.5	17.8	9.2	5.0	25.1	3.7

Eight places saw childhood poverty grow more rapidly than in the central city. The fastest growth in childhood poverty occurred in outlying townships, such as Maple Grove, which went from 0 to 27.1 percent, and Gibson, which went from 9.4 to 37.2 percent (27.8 percentage points). There were also some communities near Saginaw that saw higher increases than the city, such as Kochville, which went from 3.3 to 26.5 percent (23.1 percentage points). On the other hand, sixteen jurisdictions experienced a decrease in childhood poverty, five by at least 6 percentage points. Examples include Low Capacity/Stressed Colemen, which went from 26.1 to 19.0 percent (-7.1 percentage points) and High Capacity Hope, which went from 17.4 to 4.5 percent (-12.9 percentage points).

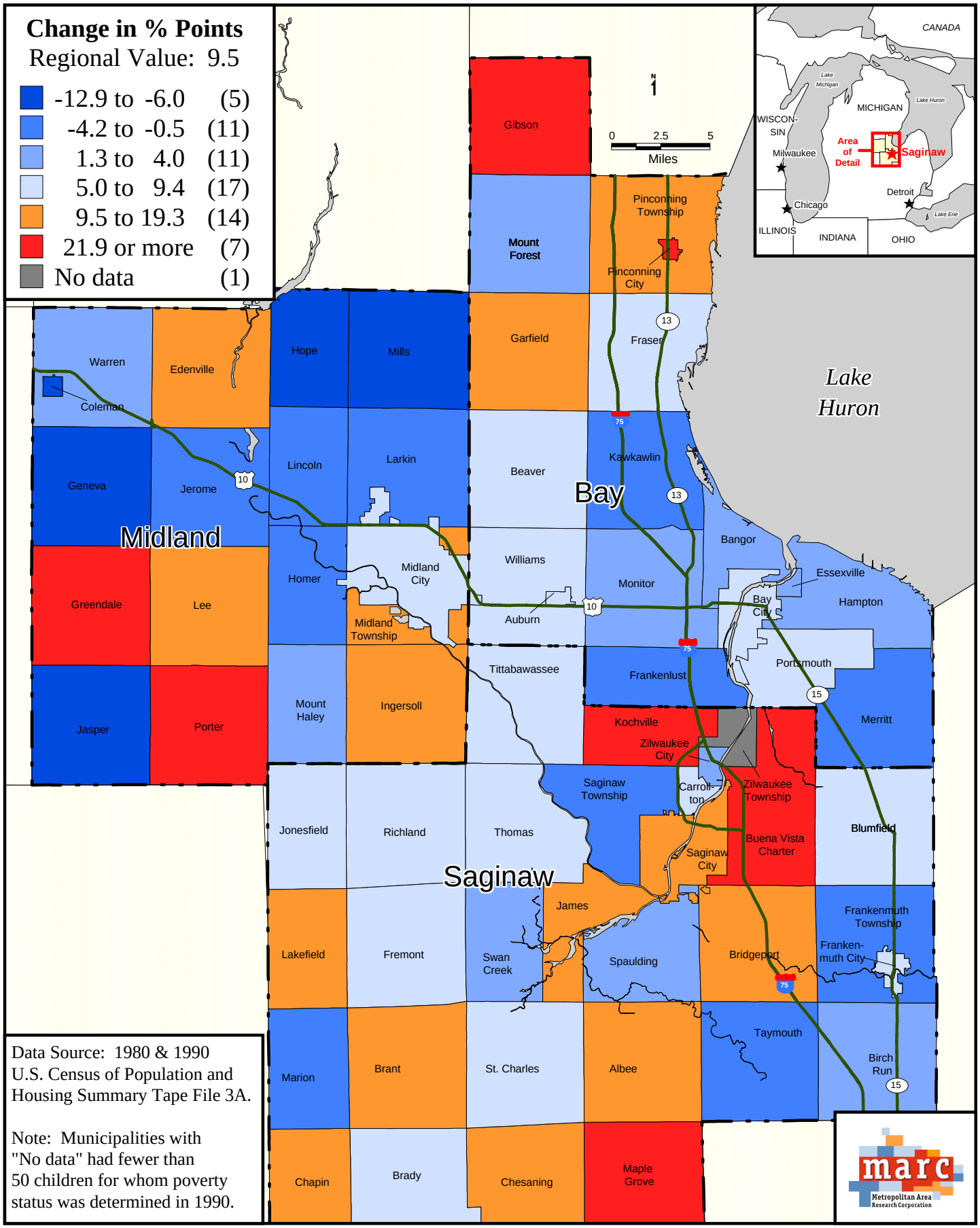
C. Female-Headed Households

MARC uses percent female-headed households as a measure of a city's social and economic stress because it allows the inclusion of a portion of the population that may not necessarily have poverty-level incomes, but nevertheless do have very low incomes and have additional challenges and needs that two-parent families often do not have. Children in homes with one parent have only one adult to care for them and to bear the emotional and interpersonal responsibilities of raising children—a daunting enough task for two people. Further, single-parent households are simply much poorer than two-parent households and hence pay less taxes and are likely to require more services in terms of local school and social welfare expenditures. The Statistical Abstract of the United States shows that in 1995 the nationwide median household income for a married couple with children under 18 was $47,129, for a single father it was $33,534, and for a single mother it was only $21,348.[80] Thus, half of all households headed by single mothers in the U.S. in 1995 made less than $21,348 per year. Further, while nearly 75

79 *Census of Population and Housing, 1980: Summary Tape File 3A* and *Census of Population and Housing, 1990: Summary Tape File 3A.*

80 U.S. Bureau of the Census, *Statistical Abstract of the United States: 1997* (117th edition.) Washington, DC, 1997.

Figure 5: Change in Percentage Points - Children in Poverty by Municipality, 1980-1990



percent of single mothers with children had household incomes below $35,000, only 34 percent of married families with children did.

In the Saginaw region, single mothers headed 22.4 percent of all households with children in 1990 (Figure 6).[81] As a comparison, in the Detroit region 25.1 percent of all households were headed by single mothers and in the Grand Rapids region, 17.2 percent were. In 1990, 47.3 percent of all households with children in the city of Saginaw were headed by single mothers. The High Capacity/Stressed Communities were also far above the regional average, while the Low Capacity and High Capacity Communities were considerably below the regional averages.

Percent Female-headed Households, 1990

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
22.4	47.3	21.6	13.1	32.6	14.2

In 1990, there were seven jurisdictions other than Saginaw with over 20 percent of their households with children headed by single mothers. These included Bridgeport (23.3 percent), Bay City (27.3 percent), and Buena Vista (37.1 percent). On the other hand, there were eight communities with fewer than 7 percent female-headed households. These included Larkin (5.2 percent), Hope (5.0 percent), and Merritt (1.9 percent).

Over the decade, the Saginaw region as a whole increased in percentage female-headed households by 5.9 percentage points, going from 16.5 to 22.4 percent (Figure 7).[82] During this period, the city of Saginaw increased in female-headed households by 10.2 percentage points (from 37.1 to 47.3 percent). The High Capacity/Stressed Communities increased at about the same rate (from 23.4 to 32.6 percent), followed by the Low Capacity/Stressed Communities (from 14.7 to 21.6). Again, the Low Capacity and High Capacity Communities increased at much lower rates.

Change in Percentage Points Female-headed Households, 1980-1990

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
5.9	10.2	6.9	2.6	9.2	3.8

During the 1980's five Saginaw-area communities increased in female-headed households faster than the central city. The most rapidly increasing communities included Albee, which went from 9.4 to 19.8 percent (10.4 percentage points), Buena Vista , which went from 26.3 to 37.1 percent (10.8 percentage points) and Pinconning City, which went from 16.5 to 30.0

81 *Census of Population and Housing, 1990: Summary Tape File 3A.*

82 *Census of Population and Housing, 1980: Summary Tape File 3A* and *Census of Population and Housing, 1990: Summary Tape File 3A.*

Figure 6: Female-Headed Households with Children as a Percentage of Total Households with Children by Municipality, 1990

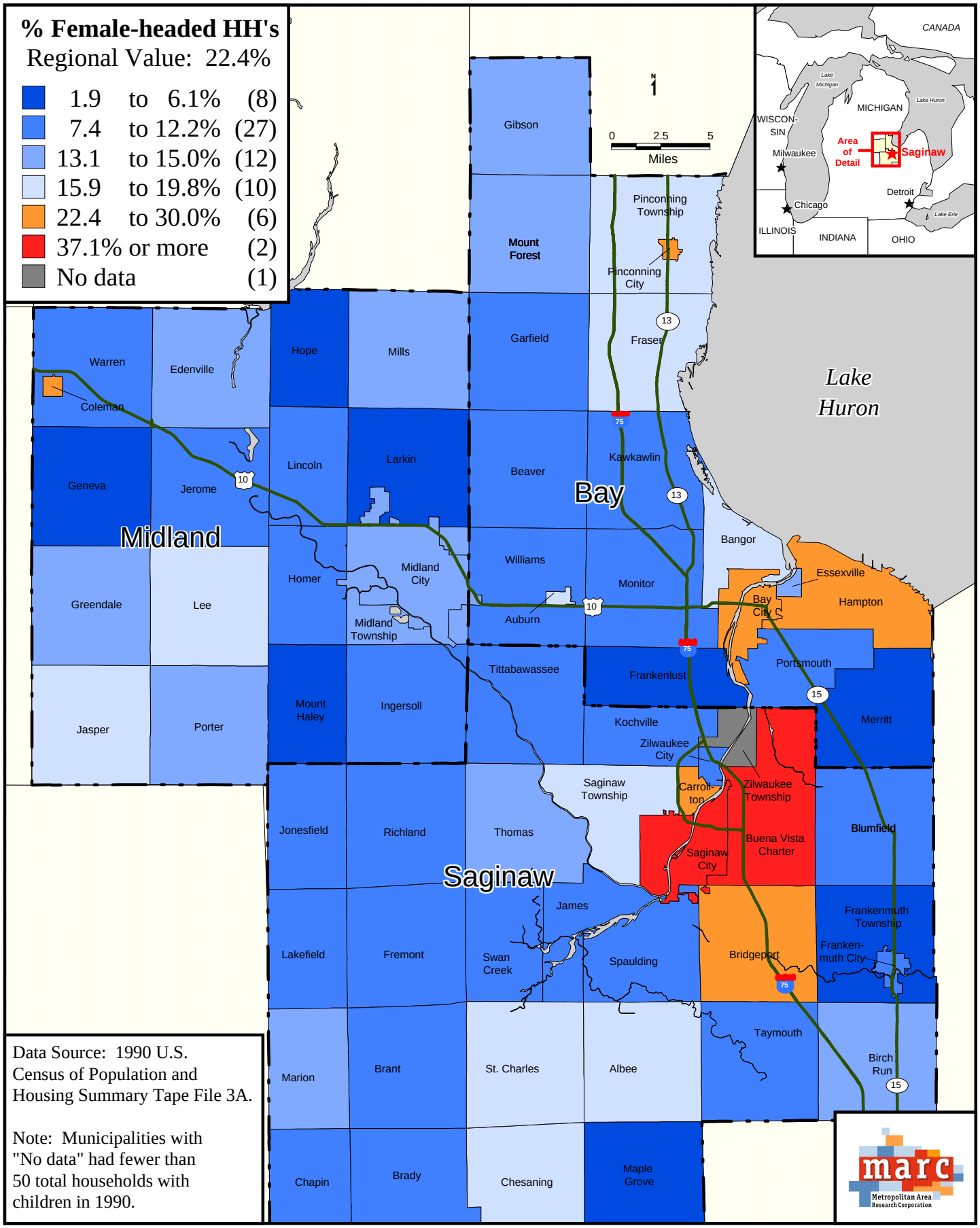
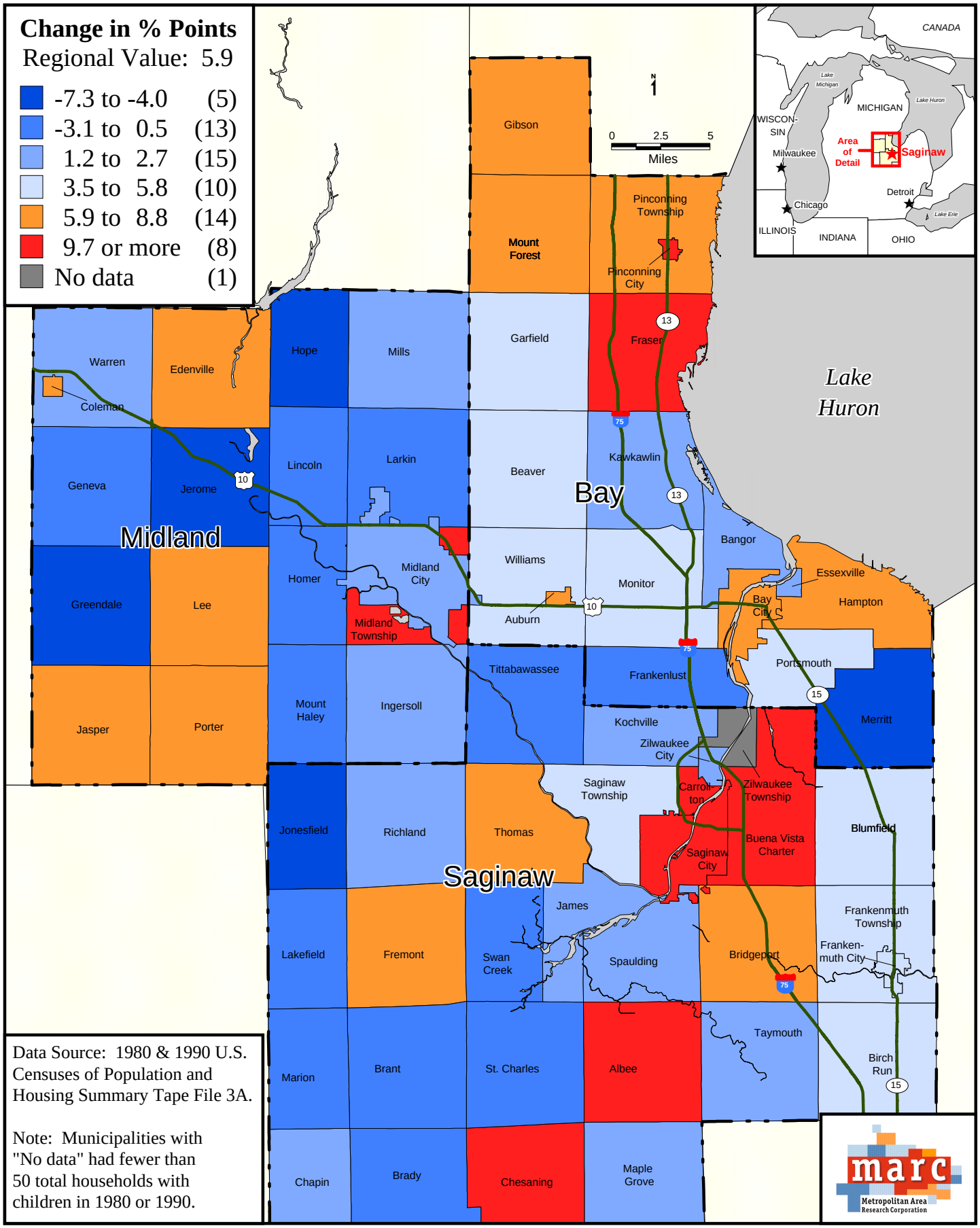


Figure 7: Change in Percentage Points - Female Headed Households with Children as a Percentage of Total Households with Children by Municipality, 1980-1990



(13.5 percentage points). The greatest decreases in female-headed households were primarily in outlying townships, including Jonesfield, which went from 11.8 to 7.7 percent (-4.1 percentage points) and Hope, which went from 12.3 to 5.0 percent (-7.3 percentage points).

D. Median Household Income

In 1989 the median household income in the Saginaw area was $29,087 (Figure 8).[83] In the Detroit region the median was $34,270 and in the Grand Rapids region it was $31,806. The median household income in the city of Saginaw was $17,736, or about 61.0 percent of the regional value. The median household income in the Low Capacity/Stressed and High Capacity/Stressed Communities was also quite low at $25,234 and $23,482, respectively. The Low Capacity Communities' median household income was 110.6 percent of the regional average, while median income in the High Capacity Communities was at 126.7 percent of the regional value.

Median Household Income, 1989

	Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity/ Communities
Value	**$29,087**	**$17,736**	**$25,234**	**$32,179**	**$23,482**	**$36,859**
% of Reg Value	**100**	**61.0**	**86.8**	**110.6**	**80.7**	**126.7**

In addition to Saginaw, there were eight communities with median household incomes below $23,000 in 1989, and almost all were Low Capacity/Stressed Communities in outlying parts of the region or clustered near Saginaw. These included Gibson ($20,341), Coleman ($19,271), and Pinconning City ($18,269). On the other hand, there were eighteen communities with median household incomes above $35,000. Three of these were above $40,000, and over half were High Capacity Communities. The communities with the highest median household incomes in the region were Thomas ($40,330), Frankenmuth Township ($46,080), and Larkin ($47,500).

Over the decade, the regional median household income, adjusted for inflation, decreased by 14.2 percent—from about $33,616 in 1979 to $29,087 in 1989 (Figure 9).[84] During this period, the median household income for the city of Saginaw decreased at the fastest rate in the region, -28.6 percent (from $24,838 to $17,736). While all subregions saw decreases in median income, they were of varying degrees. The High Capacity/Stressed Communities declined almost as much as Saginaw (from $30,718 to $23,482, -23.6 percent). The Low Capacity/Stressed Communities followed with a decrease of -16.7 percent (from $30,282 to $25,234). The Low Capacity Communities decreased by 10.2 percent (from $35,842 to $32,179), while the High Capacity Communities decreased by only 8.1 percent (from $40,106 to $36,859).

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83 *Census of Population and Housing, 1990: Summary Tape File 3A.*

84 *Census of Population and Housing, 1980: Summary Tape File 3A* and *Census of Population and Housing, 1990: Summary Tape File 3A.*

Figure 8: Median Household Income by Municipality, 1989

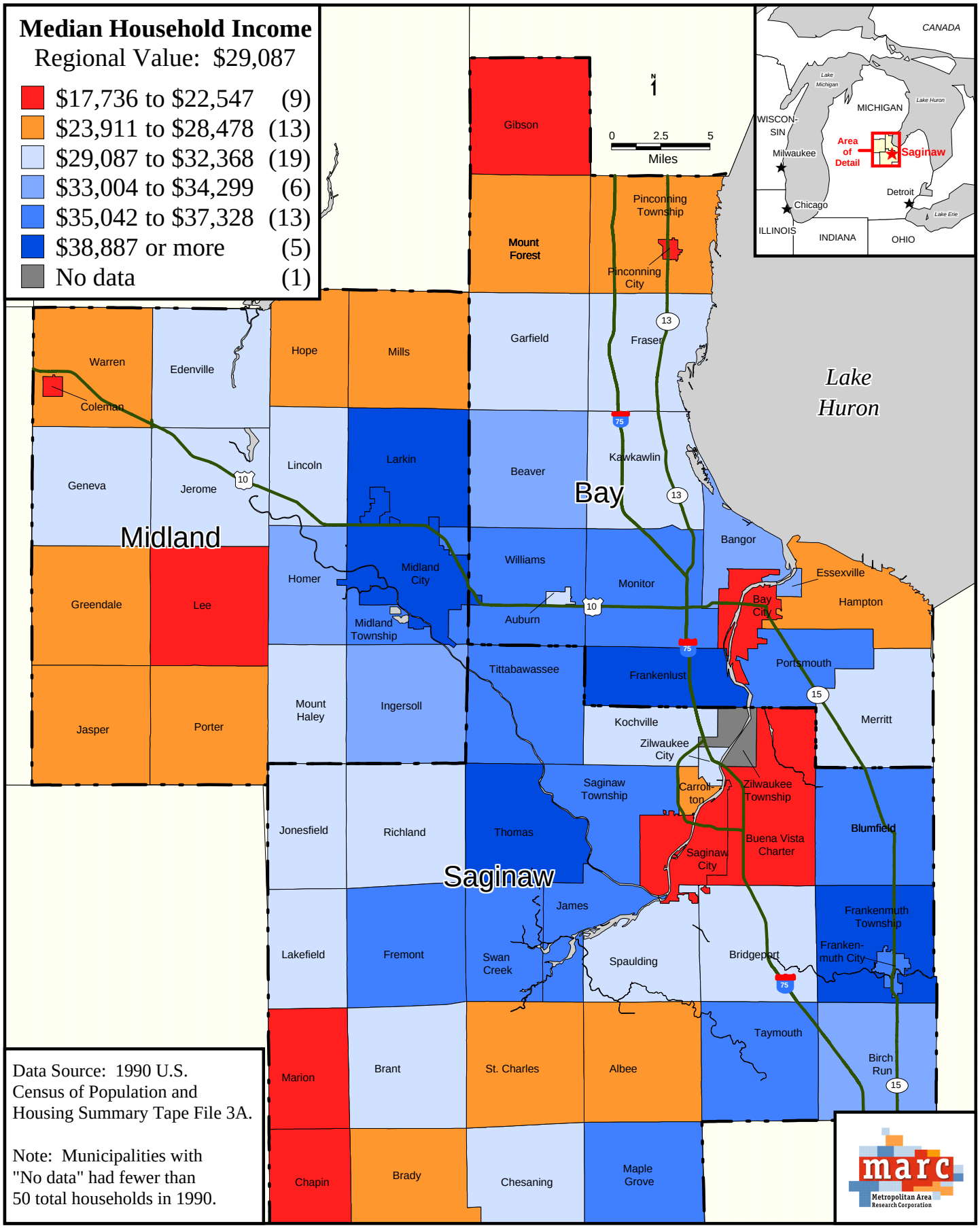
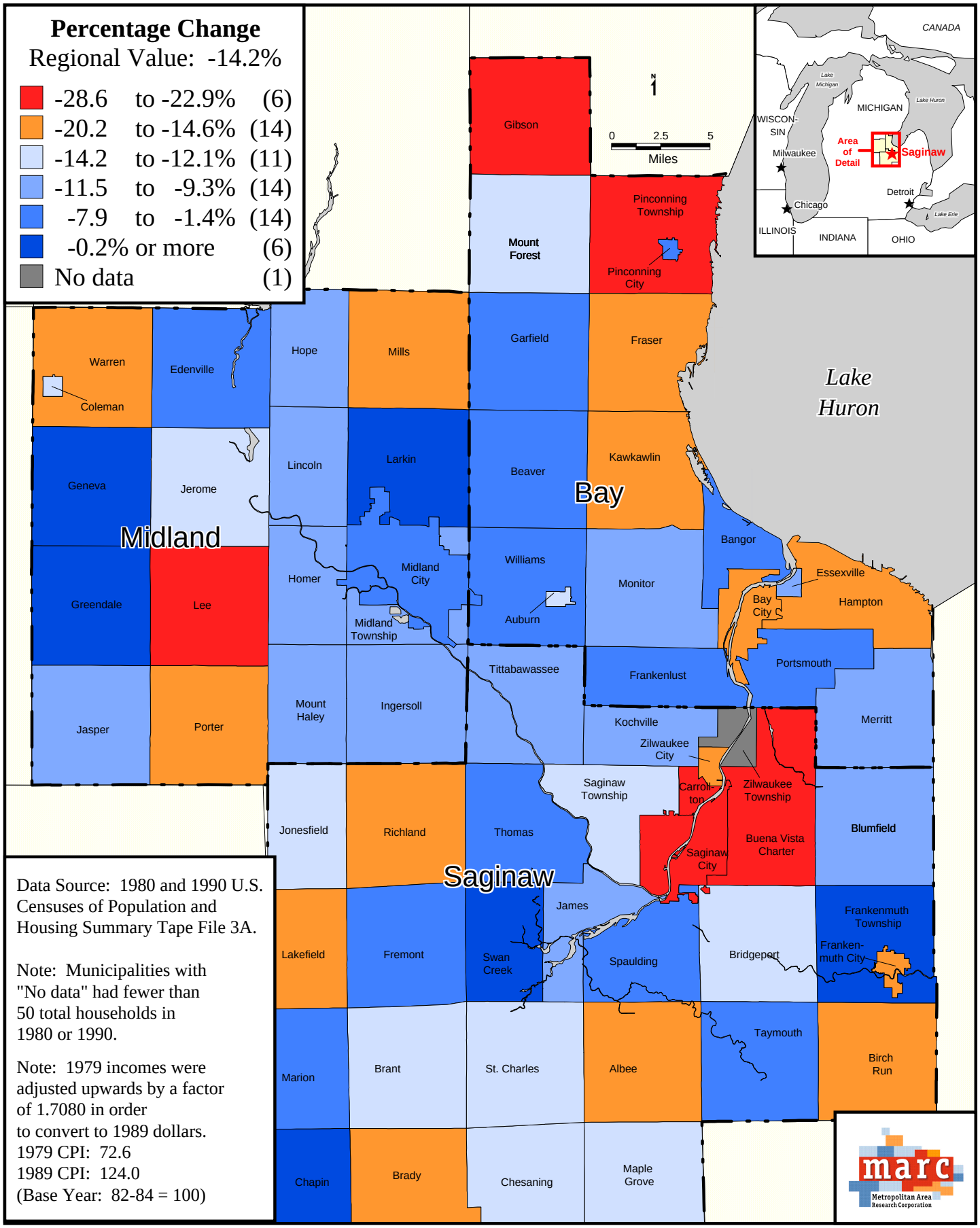


Figure 9: Percentage Change in Median Household Income by Municipality, 1979-1989 (Adjusted by CPI)



Percent Change Median Household Income, 1979-1989

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
-14.2	-28.6	-16.7	-10.2	-23.6	-8.1

Six communities in addition to Saginaw saw decreases in median household income of more than 20 percent. Almost all were Low Capacity/Stressed communities. They included: Carrollton, which went from $35,296 to $27,213 (-22.9 percent); Pinconning Township, which went from $24,307 to $25,509 (-25.6 percent); and Lee, which went from $31,164 to $22,547 (-27.7 percent). In contrast, five communities in the Saginaw region saw increases in median household income between 1979 and 1989. Examples include Swan Creek, which went from $36,054 to $36,512 (1.3 percent); Greendale, which went from $23,420 to $23,911 (2.1 percent); and Larkin, which increased at a comparatively high rate of 17.6 percent (from $40,406 to $47,500).

E. Public Schools

Public schools are the first victim and the most powerful perpetuator of metropolitan polarization. Local schools become socioeconomically distressed before neighborhoods themselves become poor. Hence, increasing poverty in a city's public schools is a prophecy for the city. First, the city's children often become its adults. Second, middle-class families, who form the bedrock of stable communities, will not tolerate high concentrations of poverty in their public schools. The level of social distress in the public schools significantly affects the attractiveness of a neighborhood or city and greatly influences the decisions of middle-class families to live there— particularly the white middle-class. As the public schools become poorer and more racially mixed, middle-class families with choices will frequently depart in search of other educational opportunities for their children.

Alternatively, parents will choose to send their children to private schools, which negatively impacts the public schools and in turn, the neighborhood and city in which those public schools are located. When the public schools reach a certain threshold of poor and minority students, white and middle-class parents who do not want to leave the city will often opt instead to remove their children from the public schools, leaving the poorest students—who require the most in terms of school resources—behind.

Because middle-class departure from the central city and its schools is largely a function of the quality of the local public schools and the types of students who attend those schools, the focus in this report is on public rather than private schools. In this light, this section will show that there is a rapid and dangerous social and economic polarization occurring among the Saginaw region school districts. These places, the central and satellite cities, are struggling under a disproportionate share of concentrated poverty and segregation.

Just as concentrated poverty in schools destabilizes communities, it has a very negative effect on individual access and achievement. Schools are not just instruction and textbooks, but, like neighborhoods, represent a series of reinforcing social networks that contribute to success or

failure.[85] Fast-track, well-funded schools that have a high percentage of students from stable middle- and upper-class families are streams moving in the direction of success, with currents that value hard work, goal setting, and academic achievement.[86] Monolithically poor central city, inner-suburban, or satellite-city schools that have a large number of students in poverty are often environments that reinforce anti-social behavior, drifting, teenage pregnancy and dropping out[87]—making educational success a challenge for even the most dedicated student.

1. Free and Reduced-Cost Meals

Most social scientists use free and reduced-cost meal statistics to measure children in poverty. They believe that it is more realistic than federal poverty standards. Children are eligible for reduced-cost meals if their families' income is not above 185 percent of the federal poverty level, and they are eligible for free meals if their income is not above 130 percent of the poverty level.

The percentage of elementary school children in the entire Saginaw region eligible for free or reduced-cost meals in 1998 was 42.2 percent (Figure 10).[88] As a comparison, this figure was higher than the percentage of students eligible for the program in both the Detroit region (39.2 percent) and Grand Rapids region (36.8 percent) in 1996. In the Saginaw region the percentage of students eligible for free or reduced-cost meals ranged from 69.4 percent in the Saginaw City School District to 8.4 percent in the Frankenmuth District. In addition to Saginaw, the Bridgeport-Spaulding District had more than half—62.0 percent—of its students eligible for free or reduced-cost meals. Seven other districts had at least 40 percent of their students eligible for the program; these districts were near Saginaw and Bay City, and in western Midland County. Other than Frankenmuth, districts with relatively low poverty included Swan Valley (15.3 percent) and Freeland (11.9 percent).

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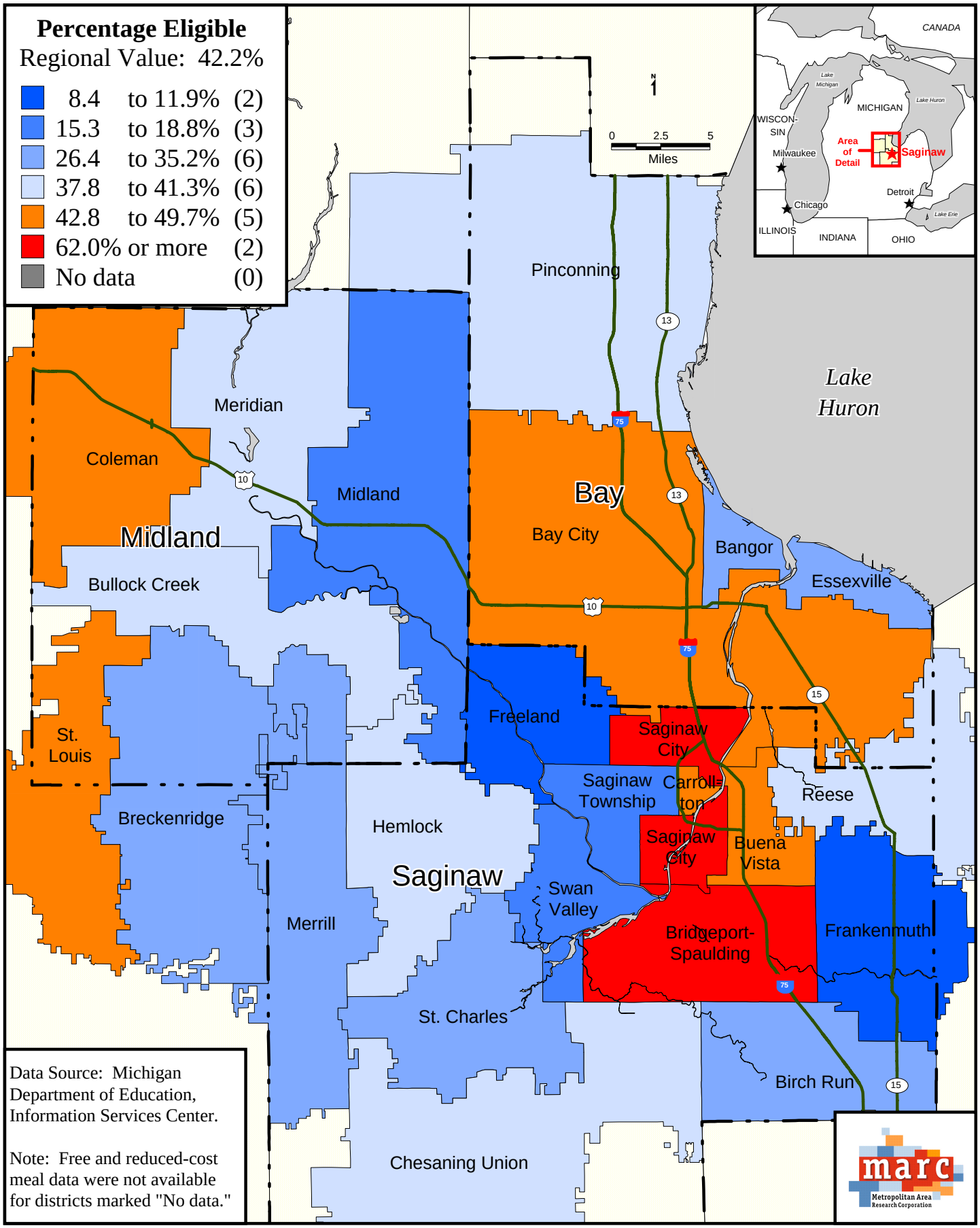
85 Jomills Braddock II and James McPartland, "The Social and Academic Consequence of School Desegregation," *Equity & Choice* (February 1988): 5; see also Gary Orfield and Carole Ashkinaze, *The Closing Door: Conservative Policy and Black Opportunity* (Chicago: University of Chicago Press, 1991): 131; James Rosenbaum, Marilyn Kulieke, and Leonard Rubinowitz, "Low-Income Black Children in White Suburban Schools: A Study of School and Student Responses," *Journal of Negro Education* 56, no. 1 (1987): 35; Rosenbaum, Kulieke, and Rubinowitz, "White Suburban Schools."

86 Ibid.

87 Ibid.; Susan E. Mayer, "How Much Does a High School's Racial and Socioeconomic Mix Affect Graduation and Teenage Fertility Rates?" 321-41 in *The Urban Underclass*, eds. C. Jencks and P. Peterson (Washington, D.C.: Brookings Institution, 1991); Jonathon Kozol, *Savage Inequalities: Children in America's Schools* (New York: Harper Perennial, 1991); Robert Crain and Rita Mahard, "School Racial Composition and Black College Attendance and Achievement Test Performance," *Sociology of Education* 51 no. 2, (1978): 81-101; Peter Scheirer, "Poverty, Not Bureaucracy: Poverty, Segregation, and Inequality in Metropolitan Chicago Schools," (Metropolitan Opportunity Project, University of Chicago, 1989).

88 Free and reduced-cost meal data and total enrollment figures were provided by the Michigan Department of Education, Information Services Center.

Figure 10: Percentage of Elementary Students Eligible for Free and Reduced-Cost Meals by School District, 1998



A look at the region's individual elementary schools gives greater definition to the disparity within some of the larger school districts (Figure 11). In 1998, forty-six of the region's elementary schools had more than 42.7 percent of their students eligible for the free and reduced-cost meal program. Most of these schools were located in districts with overall high eligibility rates, but there are some exceptions. For example, the overall eligibility rate in the Bangor District was 35.2 percent, but one school reached 50.0 percent; and the overall rate in the Bullock Creek District was 38.6 percent, but one school reached 52.7 percent. Likewise, there are districts with comparatively high eligibility rates in which some elementary schools have few poor children. One school in the Saginaw City District and two in the Bay City District had between 15.1 and 21.5 percent eligible students, far below their districts' averages (the Bay City District had an overall rate of 43.8 percent eligible students).

As a whole, the percentage of elementary students eligible for free or reduced-cost meals in the region remained stable between 1995 and 1998, increasing by 0.4 percentage points (Figure 12). The Saginaw City District also remained fairly stable, increasing by only 2.2 percentage points during this period. However, the Carrollton District saw an increase of 13.2 percentage points (from 30.6 percent eligible in 1995 to 43.8 percent eligible in 1998) and the Hemlock District saw an increase of 21.5 percentage points, from 16.7 to 38.2 percent. The greatest decreases in percentage eligible elementary students in the region were in the Bay City District (-5.5 percentage points—from 49.3 to 43.8 percent) and the Merrill District (-7.1 percentage points—from 38.3 to 31.2 percent).

Again, a look at individual elementary schools shows significant differences within larger districts (Figure 13). In the Saginaw City District, four schools saw increases of between 11.7 and 17.6 percentage points, while two schools saw decreases of -11.0 or -12.6 percent. In the Saginaw Township District, which saw an overall decrease of 2.3 percent, three schools saw increases in eligible students of between 2.6 and 3.0 percentage points—between 4.9 and 5.3 points higher than the district average—and one school saw a decrease of 10.5 percentage points.

2. Non-Asian Minority Students

As poverty concentrates, so does the segregation of students in the region's schools. In 1998, the Saginaw region as a whole had 25.1 percent non-Asian minority elementary students in its schools (Figure 14).[89] The Saginaw School District had 72.8 percent non-Asian minority elementary students, and only the Buena Vista District—at 93.7 percent non-Asian minority students—had a higher percentage. Other districts with high percentages of minority students included the Carrollton (31.9 percent) and Bridgeport-Spaulding (45.3 percent) Districts, both

[89] Racial data and total enrollment figures were provided by the Michigan Department of Education, Information Services Center.

Here this report examines only the segregation of non-Asian minority students because national studies show that Blacks and Hispanics, in particular, experience much higher and more persistent levels of racial segregation both in terms of housing and schools than other racial groups, such as Asians. While it is conceivable that some members of the Asian community, particularly more recently immigrated Southeast Asians, experience high levels of segregation, MARC is unable to locate literature on Asian segregation and housing market discrimination equivalent to the powerful evidence of such patterns in terms of Blacks and Hispanics.

Figure 11: Percentage of Elementary Students Eligible for Free and Reduced-Cost Meals by Elementary School, 1998

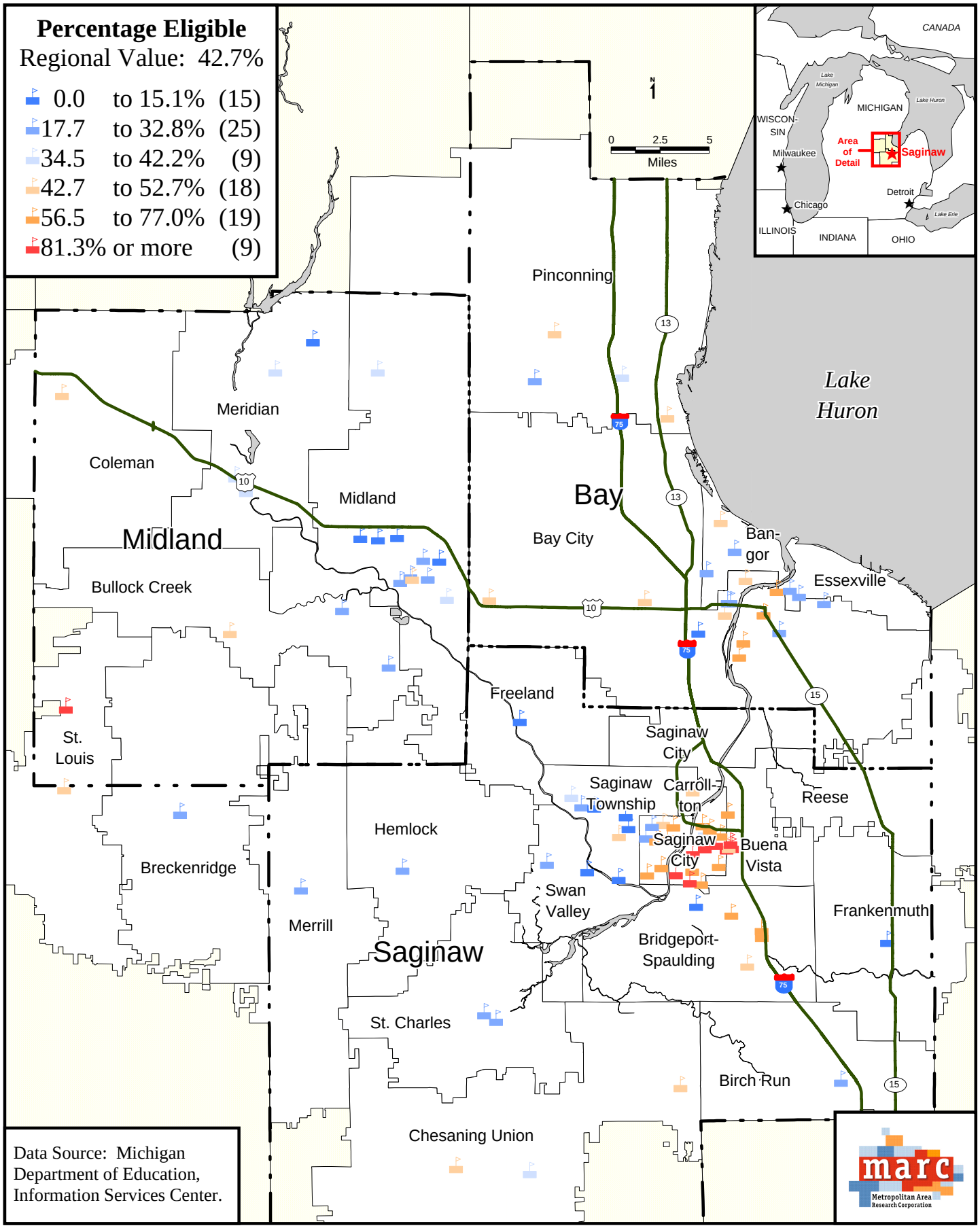


Figure 12: Change in Percentage Points - Elementary Students Eligible for Free and Reduced-Cost Meals by School District, 1995-1998

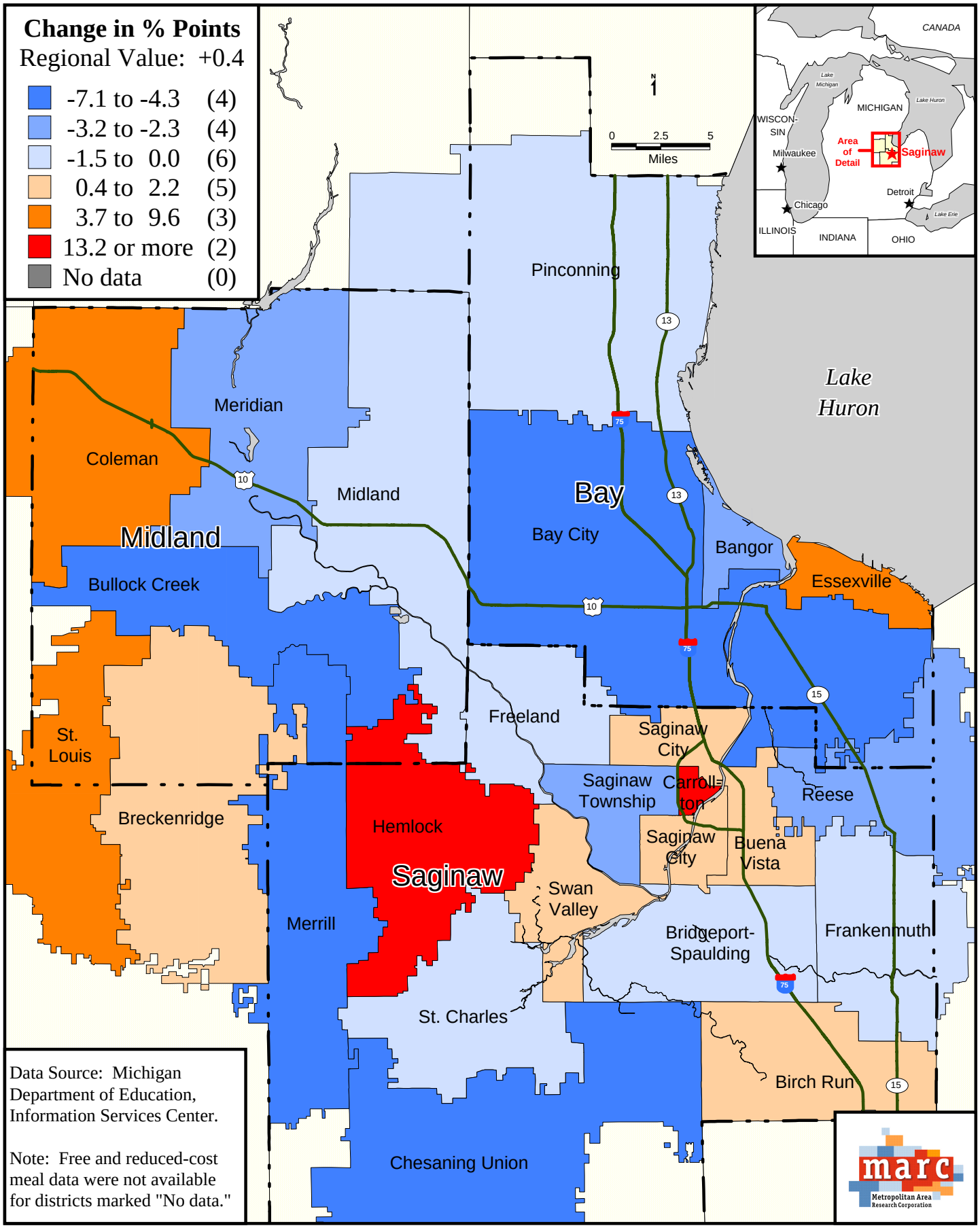


Figure 13: Change in Percentage Points - Students Eligible for Free and Reduced-Cost Meals by Elementary School, 1995-1998

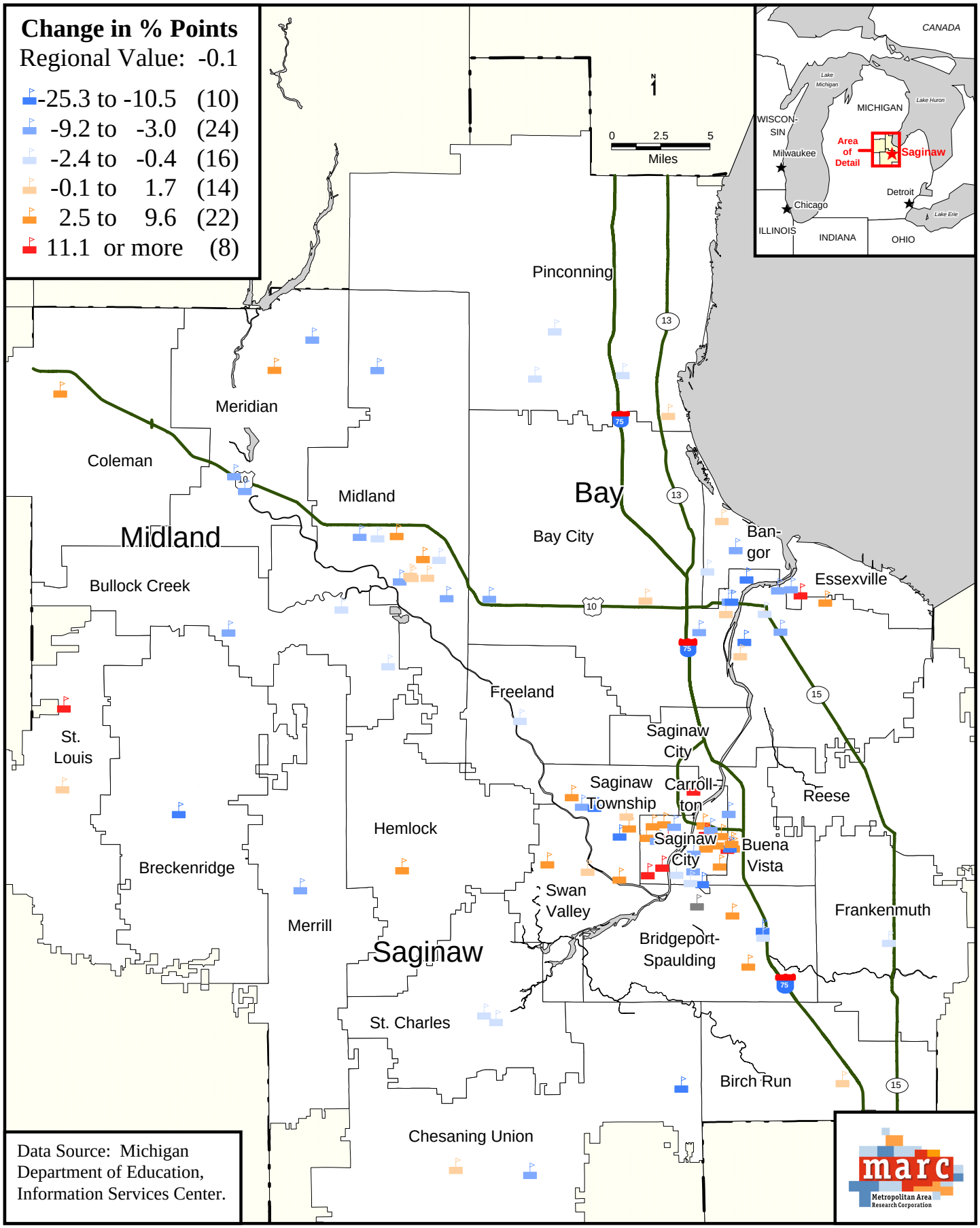
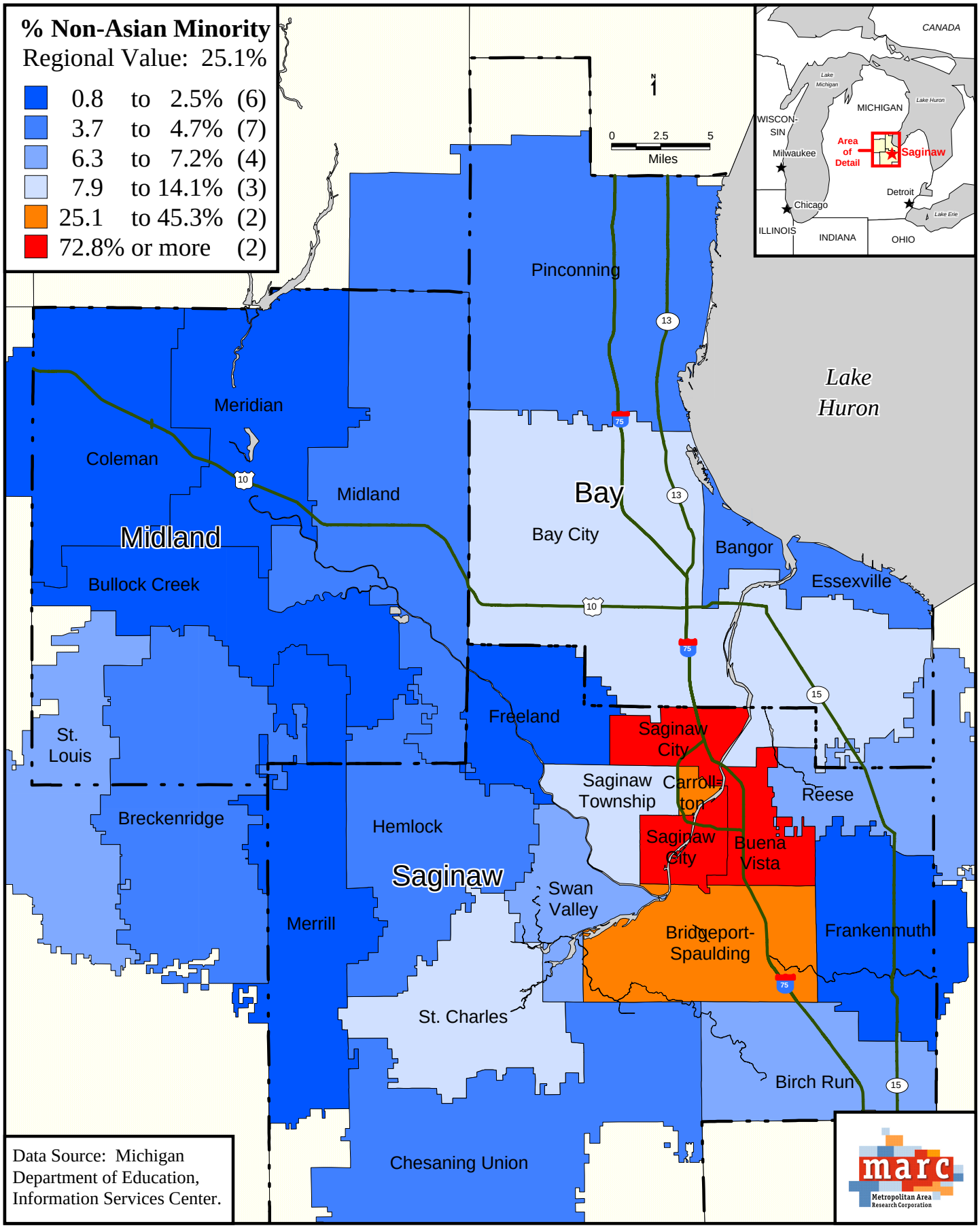


Figure 14: Percentage Non-Asian Minority Elementary Students by School District, 1998



contiguous with the city of Saginaw. Of the twenty-four districts in the region, eleven had less than 2 percent non-Asian minority students, including the Coleman and Frankenmuth Districts, which both had 0.8 percent non-Asian minority students.

There were seventeen individual elementary schools that had over 90 percent non-Asian minority students and six schools that had less than 1 percent non-Asian minority students in 1998 (Figure 15). In particular, the four elementary schools in the Bridgeport-Spaulding District ranged from 30.4 to 65.5 percent; and of the twenty-four schools in the Saginaw City District, four had below 40 percent non-Asian minority students—the lowest was 12.6 percent—and fourteen had over 90 percent non-Asian minority students—the highest was 100 percent.

As a whole, the percentage of non-Asian minority elementary students in the region increased by 1.3 percentage points between 1990 and 1998 (Figure 16). The Saginaw City District saw an increase of 7.0 percentage points during this period, going from 65.8 to 72.8 percent. Two school districts increased in percentage non-Asian minority students at a faster rate than the Saginaw City District: the Saginaw Township District, which went from 6.1 to 14.1 percent non-Asian minority students (8.0 percentage points) and the Bridgeport-Spaulding District, which went from 31.0 to 45.3 percent (14.3 percentage points). There were no substantial decreases in percentage non-Asian minority elementary students in the region. The largest decrease was in Frankenmuth, which decreased by 1.9 percentage points.

Again, when a look at individual elementary schools shows significant differences within larger districts (Figure 17). For example, changes in non-Asian minority students ranged from -5.6 to 29.6 percentage points in the Saginaw City District. Six schools, mostly in the eastern portion of the city, saw decreases in this figure, and three in the western part of the city saw increases of over 20 percent.

3. The Flight of White Preschool Children

The above public school trends are most apparent in and around places where there is a significant loss of white and middle-class families. The best available method to track white, school-related flight is to calculate the net loss of white preschool children between census periods. Because of the high correlation between being white and middle class, it is also a reasonably good surrogate for middle-class family flight.

During the 1980's, the Saginaw region saw a decrease in percentage of white children of 9.7 percent, going from 26,821 white children ages 0 to 4 in 1980 to 24,932 white children ages 10 to 14 in 1990 (Figure 18).[90] The city of Saginaw lost white children during this period at the rate of 32.2 percent (from 3,230 white preschool children in 1980 to 2,190 white children ages 10 to 14 in 1990), and the High Capacity/Stressed Communities saw about the same decrease (from 641 in 1980 to 430 in 1990). The Low Capacity/Stressed Communities lost white children at a rate of 10.1 percent (from 7,410 white preschool children in 1980 to 6,664 white children in

90 *Census of Population and Housing, 1980: Summary Tape File 3A* and *Census of Population and Housing, 1990: Summary Tape File 3A.*

Figure 15: Percentage Non-Asian Minority Students by Elementary School , 1998

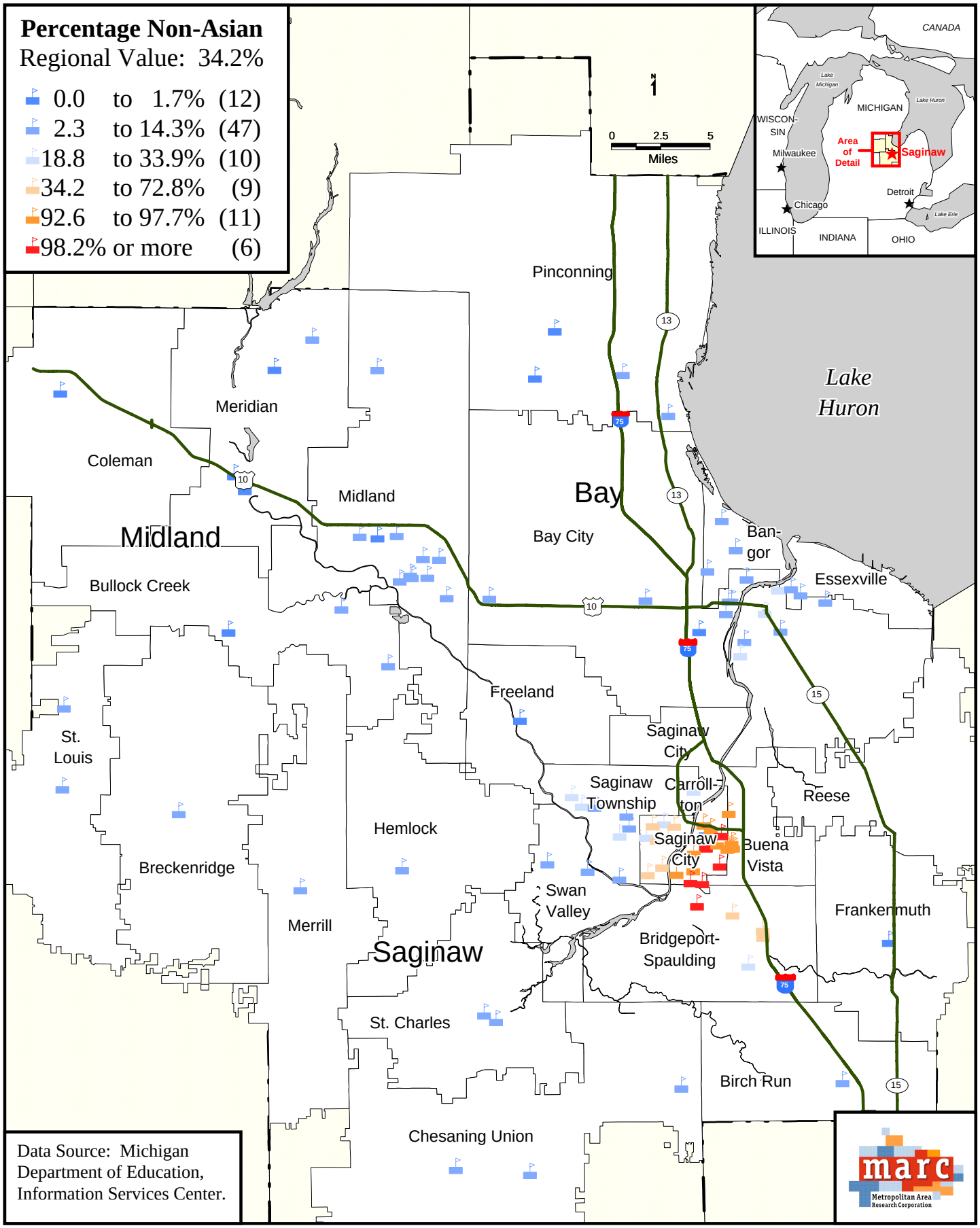


Figure 16: Change in Percentage Points - Non-Asian Minority Elementary Students by School District, 1990-1998

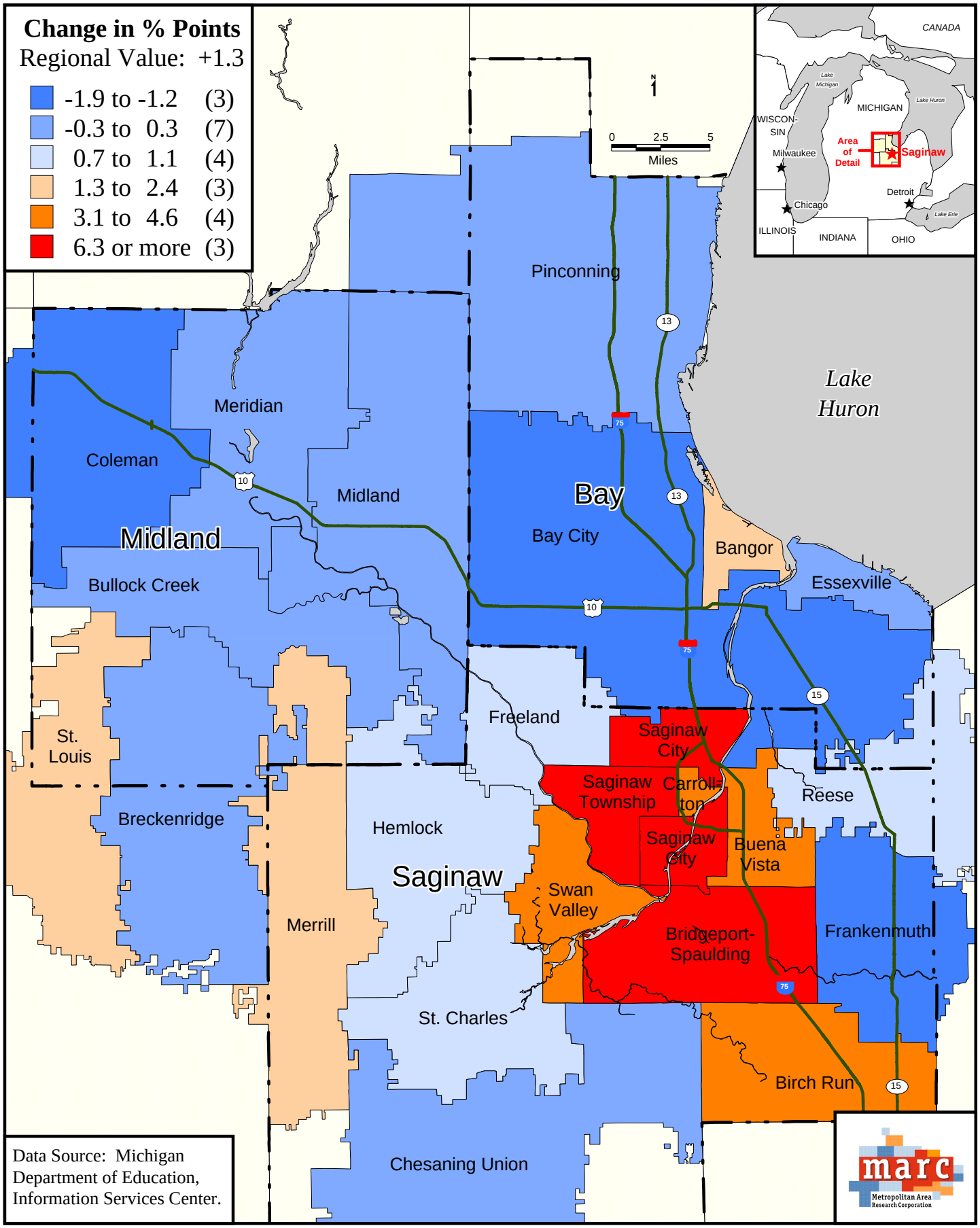
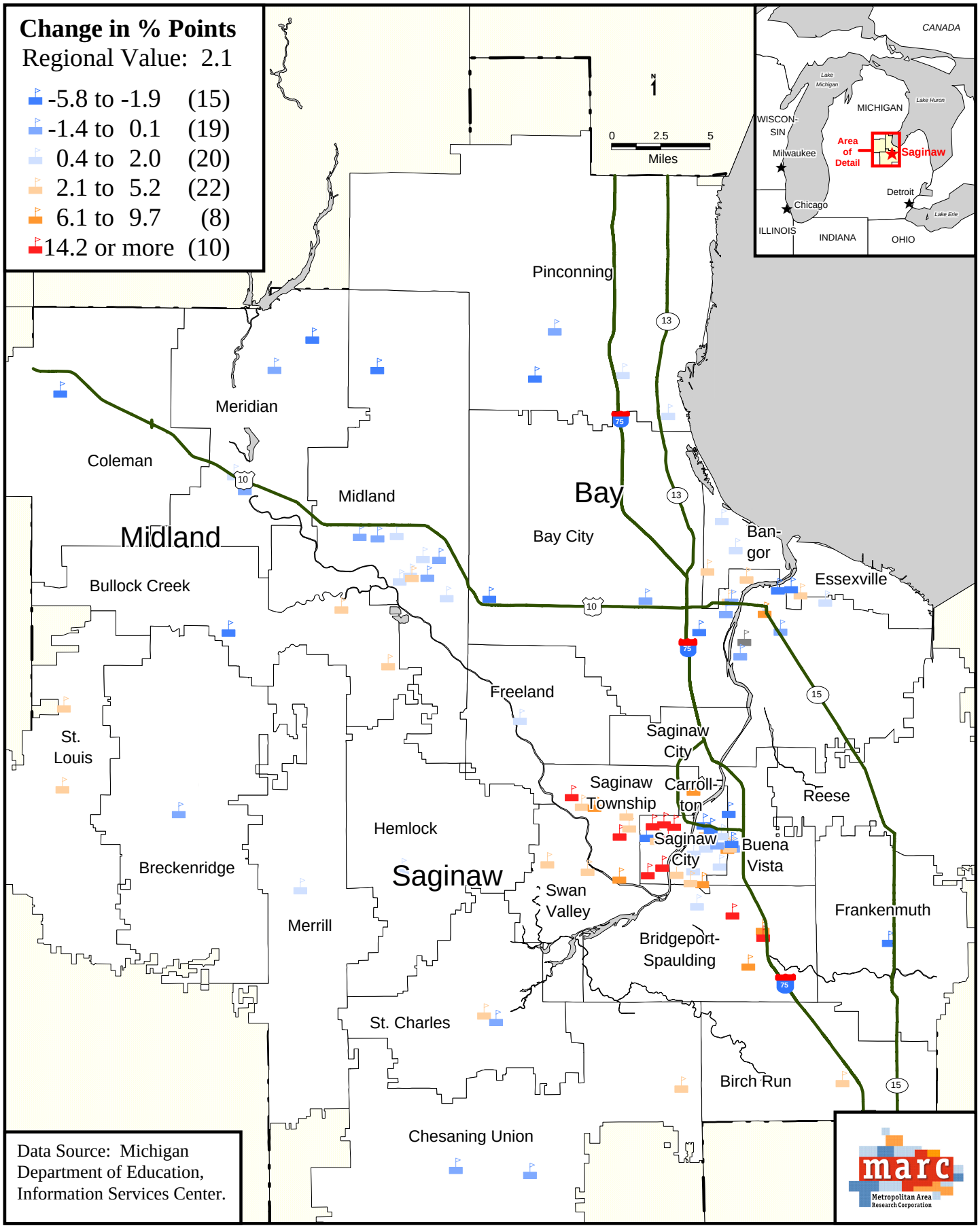


Figure 17: Change in Percentage Points - Non-Asian Minority Students by Elementary School , 1990-1998



1990). The Low Capacity Communities increased in white children by from 6,567 to 6,815 and the High Capacity Communities increased from 5,609 in 1980 to 5,729 1990.

Percentage Change from White Children 0-4 in 1980 to 10-14 in 1990

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
-9.7	-32.2	-10.1	3.8	-32.9	2.1

In addition to Saginaw, nine communities—primarily Low Capacity/Stressed and Low Capacity places —lost at least 20 percent of their white children over the decade. Most of these communities were near Saginaw, Bay City, or Midland City and three of them lost white children at a faster rate than Saginaw: Coleman (from 142 to93 white children, a loss of 34.5 percent); Midland Township (from 167 to 96 white a children, a loss of 42.5 percent); and High Capacity/Stressed Buena Visa (from 461 to 265 white children, also a loss of 42.5 percent).

To where did all of these white children and their families move? It appears many moved to growing Low Capacity Communities throughout the region, as well as a few High Capacity Communities. By 1990, nineteen communities saw increases in their percent of white children, five by more than 20 percent. The three greatest increases were Low Capacity Jerome, which went from 334 white children between 0 and 4 in 1980 to 428 white children between 10 and 14 in 1990 (28.1 percent increase); Low Capacity Richland, which went from 320 white preschool children in 1980 to 439 white children ages 10 to 14 in 1990 (37.2 percent); and High Capacity Blumfield, which went 113 to 170 (50.4 percent).

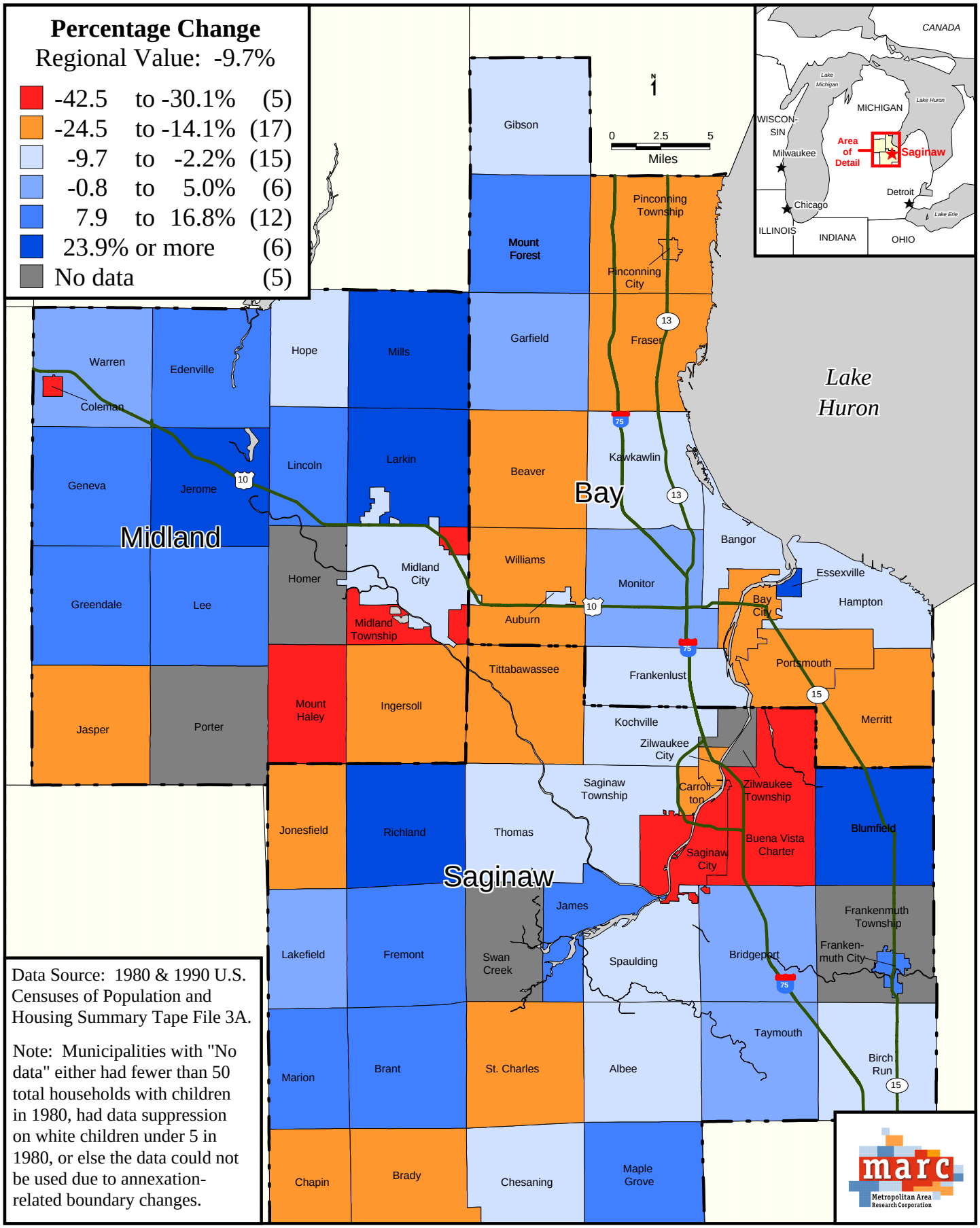
It is important to note that not all of the growth that occurred in these communities during this period was due to people leaving the central city, its suburbs, and other declining places in the region. Growth in developing communities is due to a combination of people relocating from other parts of the region; people migrating from outside of the region; and resident children growing up and buying their first homes in the community rather than moving to another part of the region or out of the region altogether. However, where people come from when they move to the developing communities is not as important as the fact that they *are* moving there—in large numbers—and they are *not* moving to places like Saginaw and Bay City.

F. Crime

In 1997 the overall Part I crime rate for the three-county region (excluding eight jurisdictions for which data were not available in 1997) was 3,986.9 crimes per 100,000 persons (Figure 19).[91] There were 569.8 violent crimes per 100,000 persons across the region in 1997

[91] Crime data are from the Michigan Department of State Police, *Crime in Michigan 1997 Uniform Crime Report*. 1998 population estimates are from the East Central Michigan Planning and Development Regional Commission. Part I crimes as defined by the FBI include murder, rape, robbery, aggravated assault, burglary, larceny, automobile theft, and arson. The violent crimes category is a subset of Part I crime and consists of murder, rape, robbery, and aggravated assault.

Figure 18: Percentage Change from White Children 0-4 in 1980 to 10-14 in 1990 by Municipality



Data Source: 1980 & 1990 U.S. Censuses of Population and Housing Summary Tape File 3A.

Note: Municipalities with "No data" either had fewer than 50 total households with children in 1980, had data suppression on white children under 5 in 1980, or else the data could not be used due to annexation-related boundary changes.

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(Figure 20). The crime rate in the city of Saginaw in that year was 9,263.5 Part I crimes and 2,169.7 violent crimes per 100,000 residents, the highest rates in the region. Other high crime jurisdictions in 1997 included Low Capacity/Stressed Coleman (4,112.6 Part I crimes and 793.7 violent crimes per 100,000 residents), Low Capacity/Stressed Bay City (5,103.6 Part I crimes and 735.5 violent crimes per 100,000 residents), and Saginaw County (5,261.85 Part I crimes and 520.6 violent crimes per 100,000 residents).

On the other hand, there were three jurisdictions that reported crime data in every month of 1997 that had Part I crime rates of less than 1,500 per 100,000 persons. These were Midland County (1,308.2 Part I crimes per 100,000 persons), Bay County (1,264.9 Part I crimes per 100,000 persons) and Low Capacity St. Charles (543.9 Part I crimes per 100,000 persons). In addition, both Midland Township and St. Charles had no violent crimes reported that year.

Between 1990 and 1997 the overall regional Part I crime rate and violent crime rates (excluding nine jurisdictions for which crime data were not available) declined by 25.7 and 31.0 percent, respectively (Figures 21 and 22).[92] During this period, Saginaw saw a 28.3 percent decrease in Part I crimes (from 12,925.8 to 9,263.5 crimes per 100,000 persons) and a 32.8 percent decrease in violent crimes (from 3,229.7 to 2,169.7 crimes per 100,000 persons). Among those jurisdictions that saw the greatest increases were High Capcity Frankenmuth City, which went from 2,631.6 to 3,772.4 Part I crimes per 100,000 persons (43.4 percent); Low Capacity Tittabawassee, which went from 1,318.3 to 2,148.0 Part I crimes per 100,000 persons (62.9 percent); Low Capacity/Stressed Bridgeport, which went from 360.9 to 514.5 violent crimes per 100,000 persons (42.6 percent); and Low Capacity/Stressed Bay City, which went from 485.4 to 735.5 violent crimes per 100,000 persons (51.5 percent). Midland Township, Pinconning City, and Coleman saw extremely high increases in their Part I, violent, and violent crimes respectively, but this is because actual number of crimes reported in those communities was very low (seven or less crimes in 1990).

Jurisdictions with the greatest Part I and violent crime rate decreases included Low Capacity/Stressed Pinconning City, which went from 5,654.5 to 2,137.1 Part I crimes per 100,000 persons (-62.2 percent); Low Capacity St. Charles, which went from 4,593.4 to 543.9 Part I crimes per 100,000 persons (-88.2 percent); and Midland County, which went from 333.9 to 81.4 violent crimes per 100,000 persons (-75.6 percent). Again, some communities experience sharp decreases in crime rates due to the low actual number of crimes committed.

In addition to the eight jurisdictions for which crime data were not available in 1997, there were three jurisdictions that did not report data every month of one or both years: Carrollton, the city of Saginaw, and St. Charles. The crime rates reported for these jurisdictions are based on the months that data were reported.

92 In addition to the eight jurisdictions for which crime data were not available in 1990 or 1997, there were four jurisdictions that did not report data every month of the year: Carrollton, Midland Township, the city of Saginaw, and St. Charles. The crime rates reported for these jurisdictions are based on the months that data were reported.

Figure 19: Part I Crimes per 100,000 Persons by Police Jurisdiction, 1997

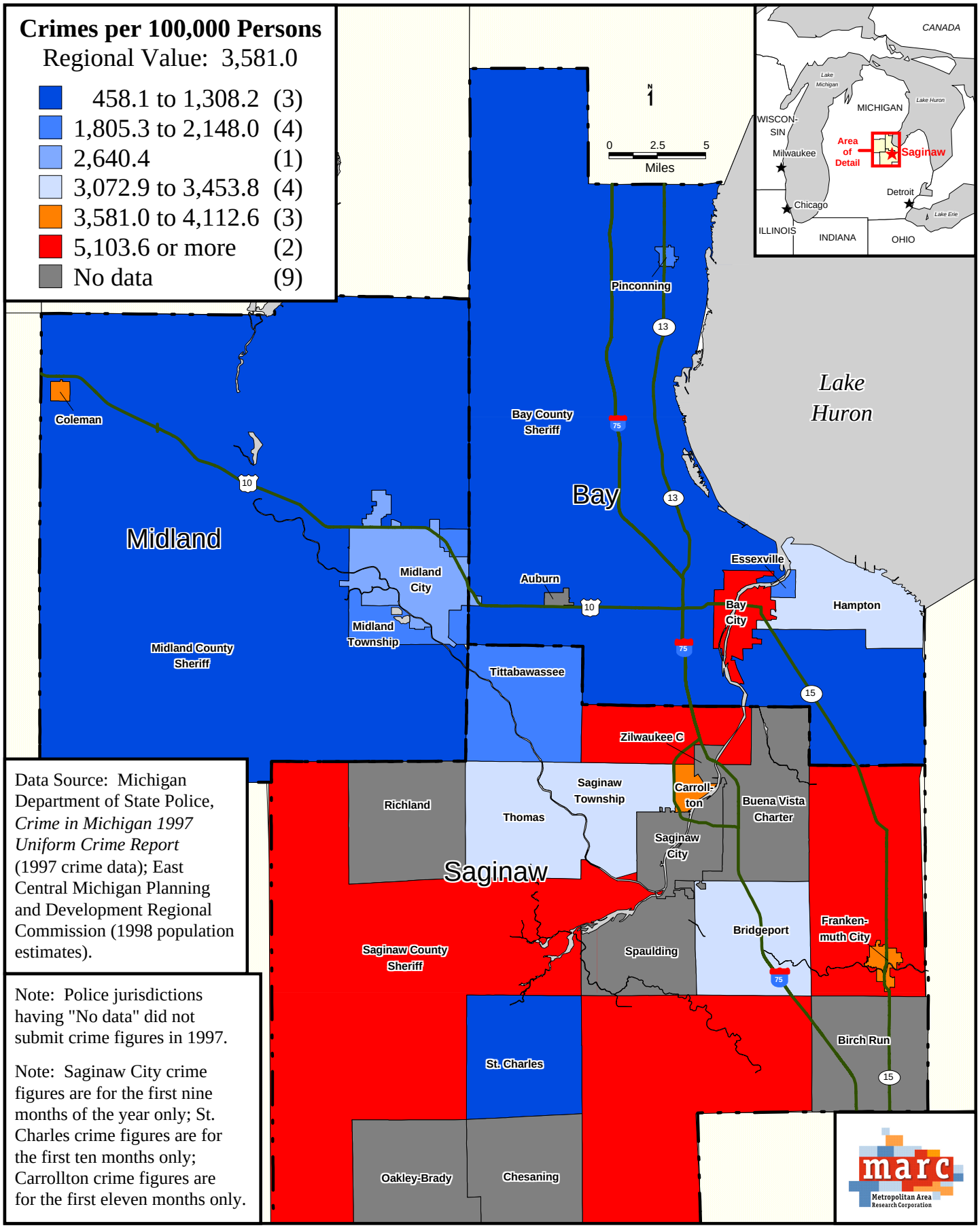


Figure 20: Violent Crimes per 100,000 Persons by Police Jurisdiction, 1997

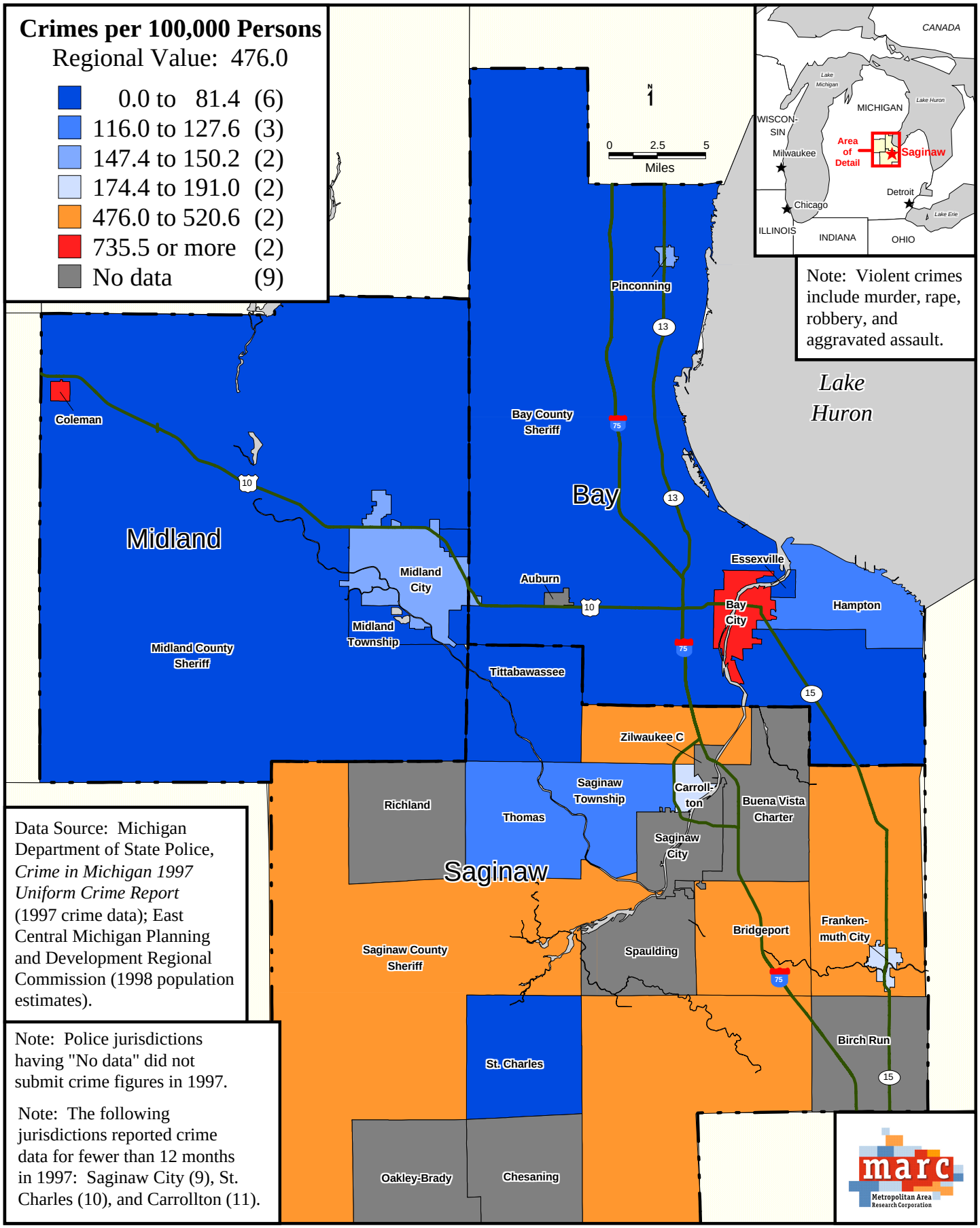


Figure 21: Percentage Change in Part I Crimes per Capita by Police Jurisdiction, 1990-1997

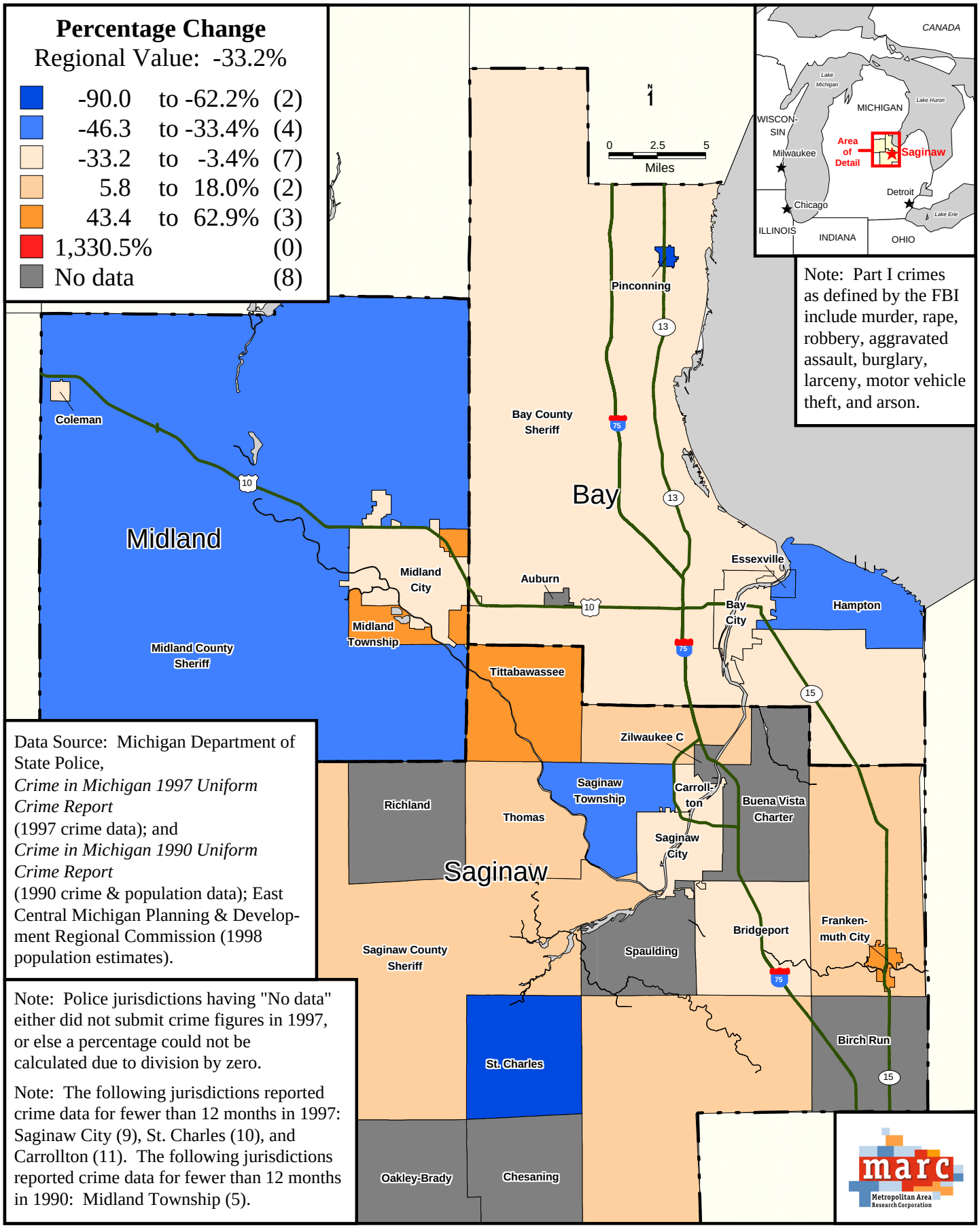
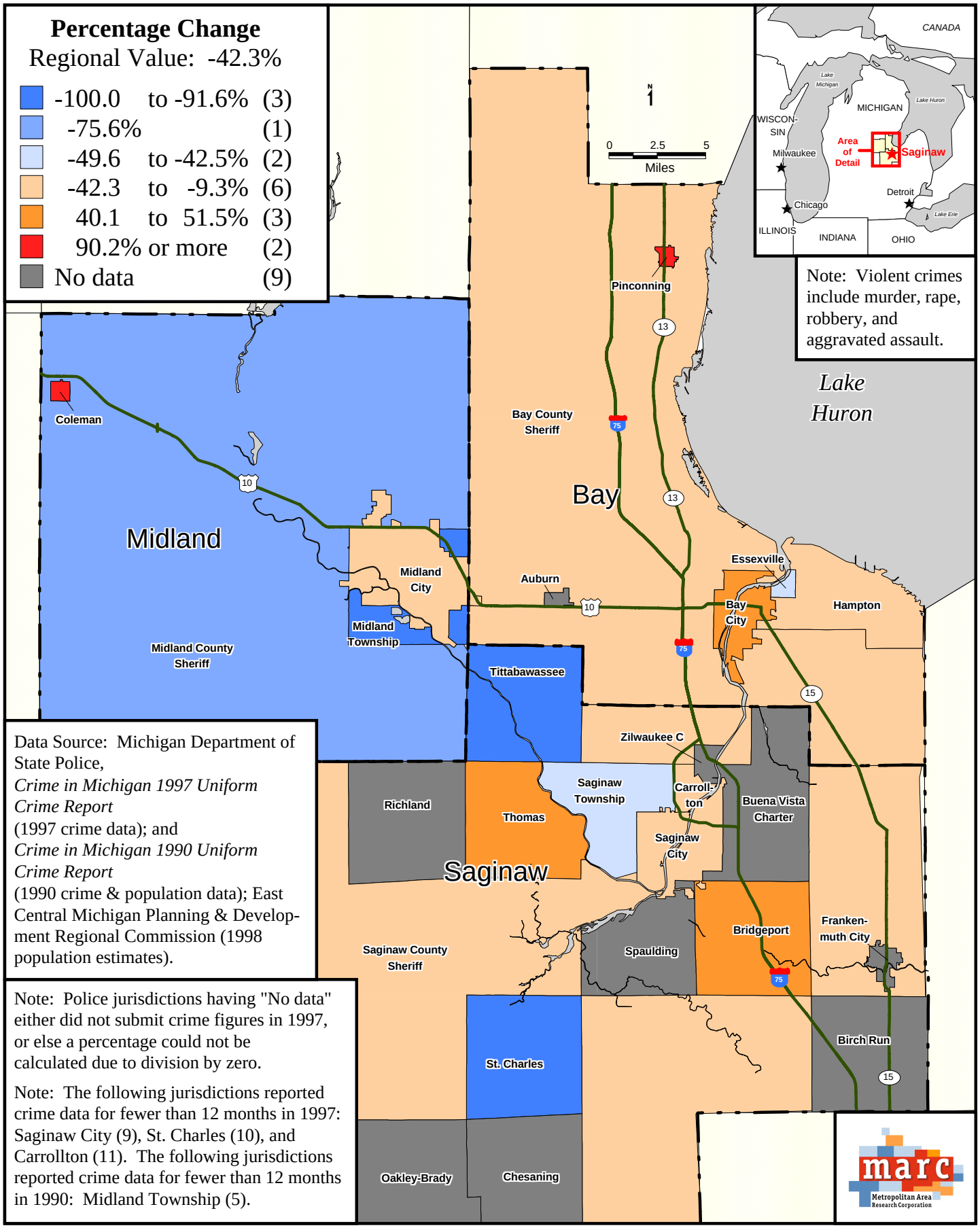


Figure 22: Percentage Change in Violent Crimes per Capita by Police Jurisdiction, 1990-1997



G. Jobs

1. The Spatial Mismatch Hypothesis

Twenty-five years ago, John Kain, an economist at Harvard, argued for the existence of a "spatial mismatch" between affordable housing and available jobs.[93] The theory posits that American cities are undergoing transformations from centers of goods and production to centers of information processing. The blue-collar jobs that once made up the economic backbone of cities have either vanished or moved to the developing suburbs, if not overseas. Central-city low-skilled manufacturing jobs are no longer available. In addition, neighborhood retail businesses that served the middle class have also to a large extent relocated to the suburbs.[94] The spatial mismatch theory states that it is not lack of jobs per se that is the problem, since central-city population growth has been as slow as central-city job growth. The problem is that the percentage of central-city jobs with high educational requirements is increasing, while the average education level of central-city residents is dropping.[95] In addition, essentially all of the net growth in jobs with low educational requirements is occurring in the suburbs.[96] This low-skilled jobs exodus to the suburbs disproportionately affects central-city poor people, particularly minorities, who often face a more limited choice of housing location in job growth areas and a lack of transit services from the urban core to those suburbs.[97]

2. Jobs per 100 Persons

In 1998 the Saginaw region as a whole had 47.5 jobs per 100 persons (Figure 23).[98] In that year, the city of Saginaw had 39.7 jobs per 100 persons. Eleven municipalities had fewer jobs per 100 persons than Saginaw. These were primarily Low Capacity/Stressed Communities,

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93 John Kain, "Housing Segregation, Negro Unemployment, and Metropolitan Decentralization," *Quarterly Journal of Economics* 82 (May 1968): 175-97.

94 John D. Kasarda, "Urban Industrial Transition and the Underclass," *Annals of the American Academy of Political and Social Sciences* 501 (January 1989): 36.

95 Ibid.

96 Ibid.

97 For further discussion of the pros and cons of the spatial mismatch hypothesis, see Joseph Mooney, "Housing Segregation, Negro Employment and Metropolitan Decentralization: An Alternative Perspective," *Quarterly Journal of Economics* (May 1969): 299-311. See Hutchinson (1974); Farley (1987); Inlanfedt and Sjoquist (1990-2); Offner and Saks (1971) Friedlander (1972); Harrison (1974), Leonard (1986); all in Kathy Novak, "Jobs and Housing: Policy Options for Metropolitan Development," (Research Department: Minnesota House of Representatives February 1994); David Elwood, "The Spacial Mismatch Hypothesis: Are the Teenage Jobs Missing in the Ghetto?" in *The Black Youth Employment Crisis* eds. Richard B. Freeman and Harry J. Holzer (1986): 147-90.

98 Jobs data are from the Michigan Employment Service Agency, Labor Market Analysis Section. Population estimates are from the East Central Michigan Planning and Development Commission.

the places where working-class families live. Examples include Pinconning City (36.8 jobs per 100 persons), Greendale (35.8 jobs per 100 persons), and Coleman (34.3 jobs per 100 persons).

On the other hand, the cities with the most jobs per 100 persons were mainly communities surrounding Saginaw and Midland City. They were a mix of communities of different subregions: Low Capacity Midland Township had 55.5 jobs per 100 persons; High Capacity Frankenmuth Township had 56.5 jobs per 100 persons; and High Capacity/Stressed Kochville had 57.1 jobs per 100 persons.

Between 1990 and 1998 the Saginaw region experienced an increase of 8.9 percent in jobs per 100 persons (Figure 24). Despite this overall increase, nine communities lost jobs during this period. These places were located primarily in northeastern Midland County and northern Bay County. They included Low Capacity Mills, which went from 41.3 to 39.0 jobs per 100 persons (-5.6 percent); Low Capacity Lincoln, which went from 47.0 to 43.5 jobs per 100 persons (-7.4 percent); and High Capacity Larkin, which went from 50.9 to 43.1 jobs per 100 persons (-15.3 percent). Places that experienced the most job growth per 100 persons were mostly located around Saginaw and in western Midland County. Low Capacity/Stressed Spaulding increased from 47.1 to 53.6 jobs per 100 persons (14.0 percent); High Capacity/Stressed Buena Vista increased from 36.0 to 41.3 jobs per 100 persons; and Saginaw, with an 18.9 percent increase (from 33.4 to 39.7 jobs per 100 persons) ranked first in job growth during this period.

H. Infrastructure

1. Overview

Pundits say regionalism is impossible in America. But in terms of transportation spending, regionalism has been going on for at least twenty years. Money for highways comes from federal, state, and local coffers. Everyone contributes through their taxes and, theoretically, everyone shares this highway money in the form of highway improvements. But where is the money actually spent? In many regions, a majority of transportation dollars go to outer-ring developing communities. The new infrastructure lures homebuilders, industries, and people who work in all parts of the region. Soon the new highways are crowded and there is an outcry for even more capacity. Inevitably, lanes and new routes are added—enough to meet projected need for 20 years or more. But within a very short period (sometimes just a few months) congestion levels are as high as they were prior to the new additions.

This is because, often, other nearby routes are also congested and drivers start taking the improved route, expecting a faster, less congested commute. Likewise, many who previously used other modes of transportation to speed their commute, return to their cars expecting less congestion on the new route. Indeed, the Surface Transportation Policy Project analyzed highway congestion data from the Texas Transportation Institute for 70 metropolitan areas between 1985 and 1996 and found that large investments in highway capacity did not result in easing

Figure 23: Employment per 100 Population by Municipality, 1998

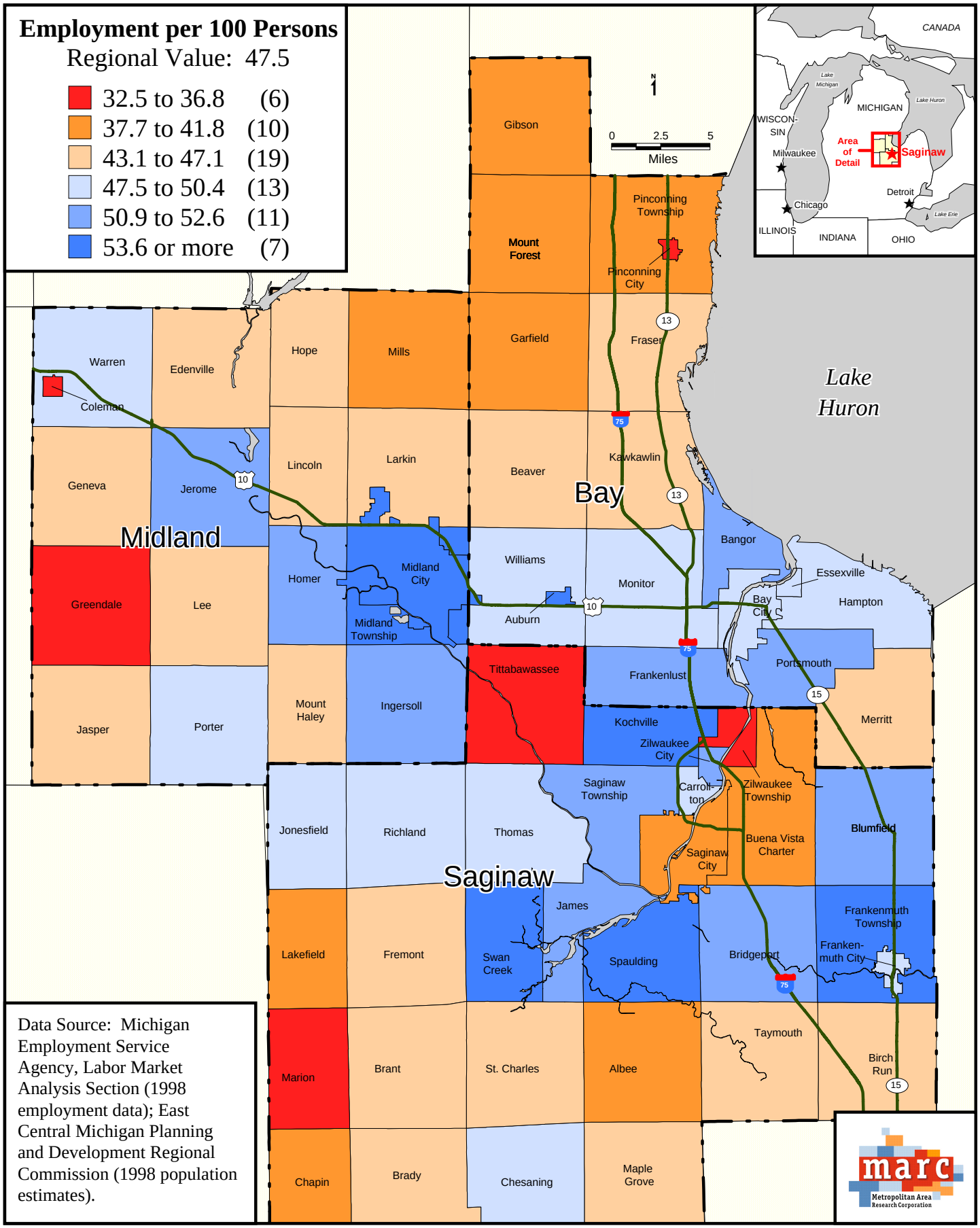
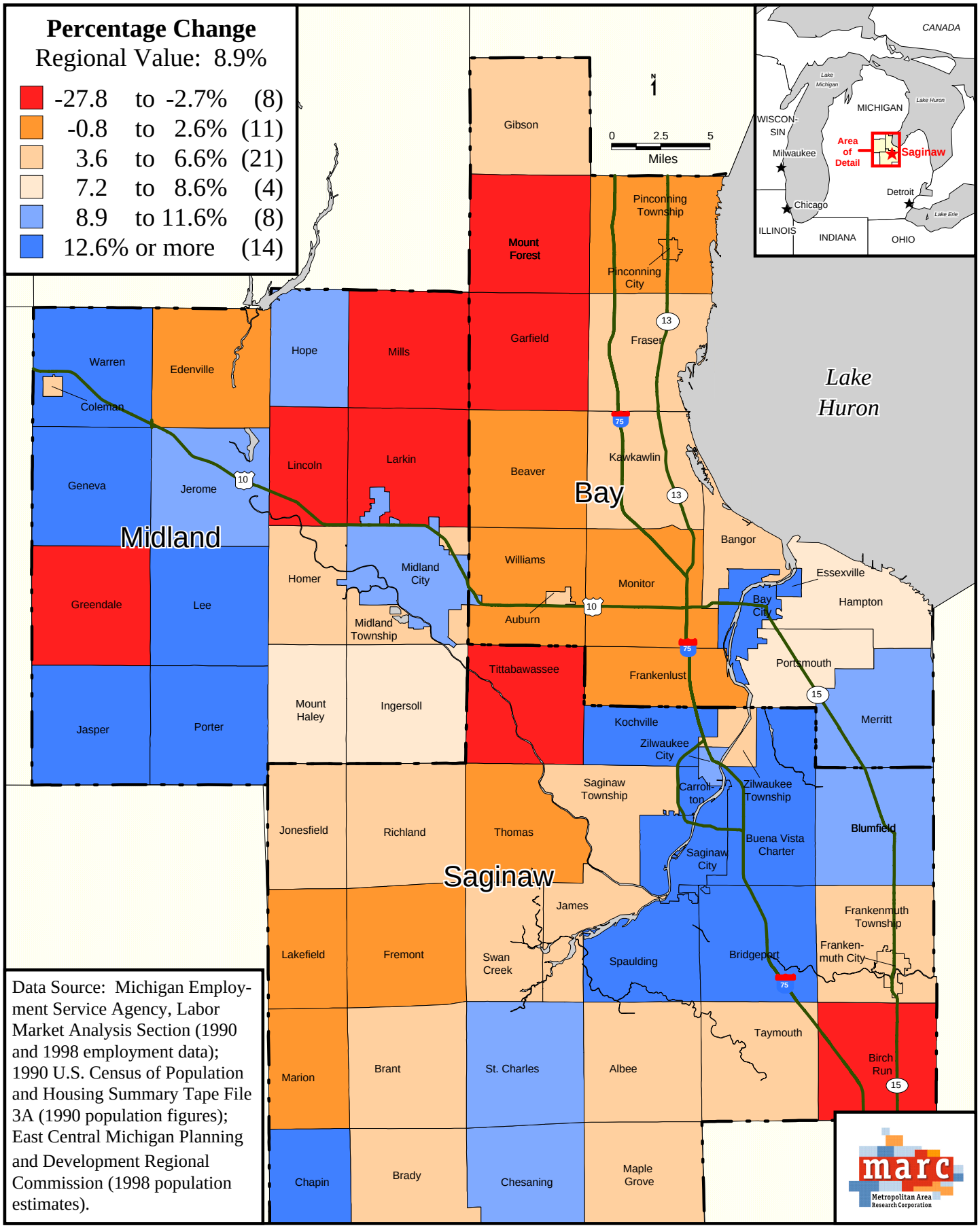


Figure 24: Percentage Change in Employment per 100 Population by Municipality, 1990-1998



congestion.[99] The STPP study compared metropolitan regions that have added significant new highway capacity in an effort to ease congestion to those that added little new capacity and found no difference in traffic congestion by 1996. Moreover, the study found that regions that increased road capacity spent approximately $22 billion more than those that did not increase capacity, but ended up with higher congestion costs per person, more wasted fuel, and increased travel delay.

Meanwhile, for many people the opposite problem holds true: their place of work moves to the suburbs, but the community's restrictions on affordable housing development prevents them from moving there as well. The urban planner Robert Cervero at Berkeley has shown that upwards of forty percent of the automobiles that clog highways at rush hour are driven by people who cannot afford to live close to their work.[100] Cervero suggests fair housing, including barrier removal, as one of the most important ways to reduce freeway congestion.[101] Although the effectiveness of jobs-housing balance in reducing freeway congestion has been debated in recent years, a 1996 study by Cervero found that without coordinated regional planning, the imbalance between location of jobs and workers is more acute.[102]

In addition, new highway capacity does not necessarily serve the city in which the highway construction actually occurs. Freeway lane widenings mean increased traffic, pollution, and encroachment of noise on communities. These neighborhoods must choose between soundwalls and noise, both of which lower property values and quality of life. Instead, the areas that actually benefit from increased new capacity are the areas to which traffic is being directed, improving access for commuters both into and out of the community.

2. Highway Spending

Between 1988 and 1998, spending on major highway improvement projects in the Saginaw region totaled over $84 million (Figure 25).[103] The largest share of this money (about $10.8 million, or 8 percent) was spent in the outskirts of the region improving Highway 20 in western Midland County. Another $8.8 million was spent on a number of improvement projects

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99 Surface Transportation Policy Project, "An Analysis of the Relationship Between Highway Expansion and Congestion in Metropolitan Areas: Lessons from the 15-Year Texas Transportation Institute Study", November 1998.

100 Robert Cervero, "Jobs-Housing Balance and Regional Mobility," *American Planning Association Journal* (Spring 1989).

101 Ibid.

102 Robert Cervero, "Jobs-Housing Balance Revisited," *American Planning Association Journal* (Autumn 1996).

103 Major highway improvement projects refer to new construction, widenings, land additions, and bridge replacements that cost $500,000 or more. These are projects that add new capacity to the system; maintenance is not included here. In other words, the $84 million figure does not include improvement projects that cost less than $500,000. Data is from the Michigan Department of Transportation.

on and around State Highway 10 in the high tax base areas west of Bay City. Additionally, $3.8 million was spent on three separate projects improving Highway 46 leading out of Saginaw into the high capacity cities at the eastern edge of Saginaw County.

The rationale behind spending on new capacity is two-fold. First, an increase in highway spending is needed in the areas with rapid growth, such as Midland City, to increase capacity. Second, the construction of new highways through areas that have low tax capacities, such as those in western Midland County, could theoretically benefit those areas by providing easier access for commuters, which in turn would lead to increased development and economic recovery in those areas.

The negative aspects of these construction projects are also two-fold. First, the money spent on highway improvements between 1988 and 1998 came from the taxpayers of the entire Saginaw region, yet will primarily benefit the people and industries where the improvements take place, places that often have relatively high tax bases and low social needs. Second, the building of these large new highways encourages growth at the fringes of the Saginaw-Bay City region by improving access to jobs in the central city from outlying areas. These spending patterns are likely to intensify the social and economic disparities that are already present in the Saginaw region.

I. Regional Sprawl

According to the U.S. Census Bureau, a city's urbanized area consists of the central city and its adjacent urban fringe, including all contiguous territory settled at the density of at least 1,000 persons per square mile.[104] In the Saginaw region, there were two areas designated by the Census Bureau in 1990 as urbanized—the Saginaw area and the Bay area (Figure 26).[105] Comparing the change in population between census periods within these two designated urbanized areas and the change in the size of the land area that is defined in each as urbanized determines whether those areas are becoming more compact or are sprawling as they develop.

In 1990 the Saginaw urbanized area was settled at a density of 2,175.1 persons per square mile. This was a decrease in population density from 1970 of 35.9 percent. In that year, the population density in the area was 3,392.0 persons per square mile. Put another way, the number of people living in the Saginaw urbanized area decreased by 5 percent between 1970 and 1990 (from 147,552 to 140,079), while the land area they occupied increased by 48.0 percent (from 43.5 to 64.4 square miles). Most of this growth occurred to the northwest and southeast of Saginaw, in Saginaw Township and Bridgeport.

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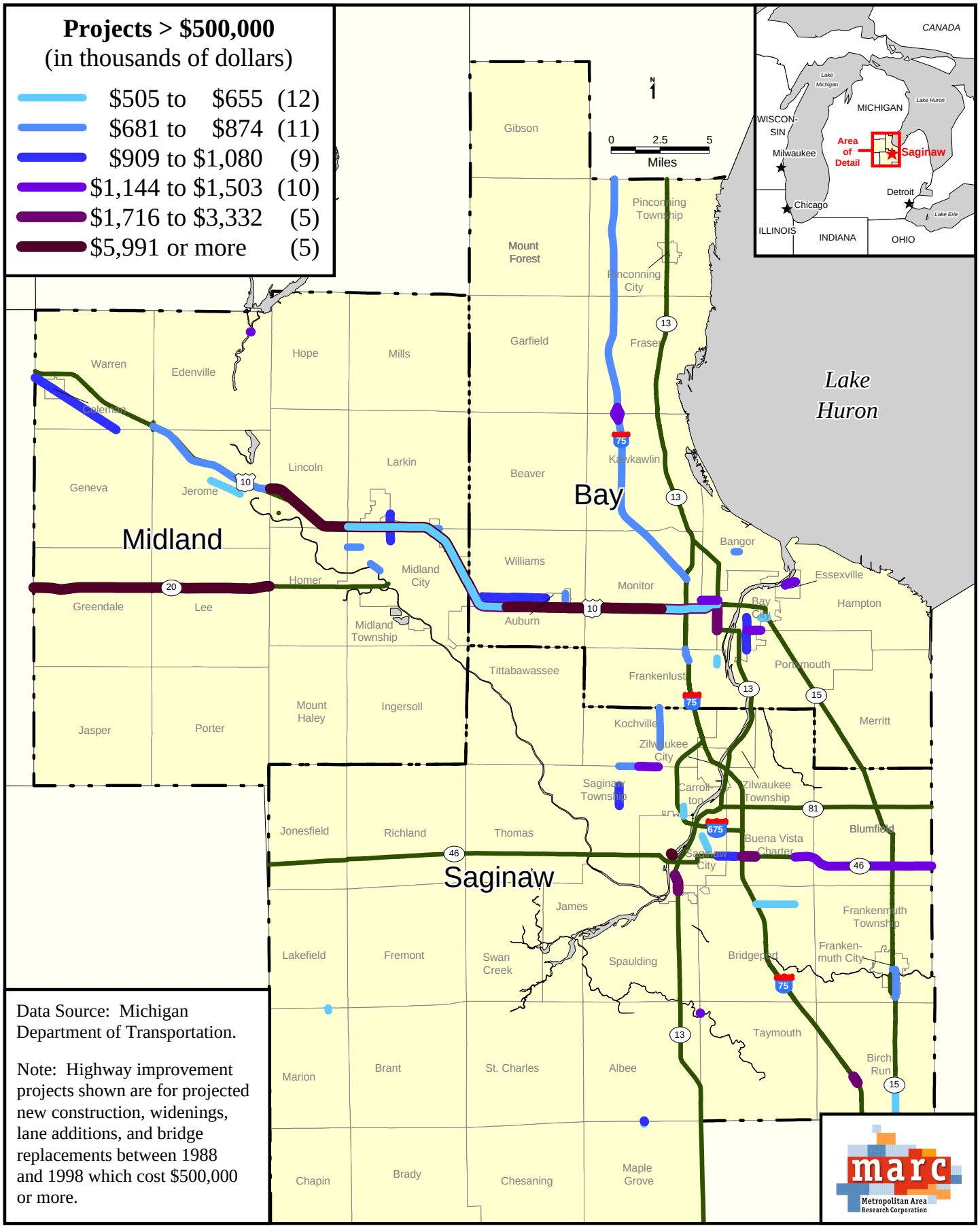
104 Also included in the urbanized area are large concentrations of non-residential urban area, such as industrial parks, office areas, and airports.

105 Population and land area data from the "1990 Census of Population and Housing Supplementary Reports, Urbanized Areas of the United States and Puerto Rico" (December 1993), and the "1980 Census of Population Supplementary Report, Population and Land Area of Urbanized Areas: 1980 and 1970" (February 1984).

Figure 25: Past Spending on Highway Improvement Projects, 1988-1998



The Bay urbanized area also decreased considerably in population density. This urbanized area went from a population density of 2,981.0 persons per square mile in 1970 to 2,053.1 in 1990, a 31.1 percent decrease. Here, population decreased at about the same rate as in the Saginaw urbanized area (5.1 percent, from 78,097 people to 74,118 people), while land area increased by 37.8 percent (from 26.2 to 36.18 square miles). The Bay urbanized area shifted to the east during this period, becoming smaller mainly in the communities of Monitor and Frankenlust, but outpacing that reduction in land area with growth primarily in Hampton, Bangor, and Portsmouth.

J. Fiscal Disparities

1. Overview

When the property tax is a basic revenue source for local governments with land-planning powers, fiscal zoning occurs as jurisdictions compete for property wealth. Through fiscal zoning, cities deliberately develop predominantly expensive homes and commercial-industrial properties with low service needs.[106] In such a way, they keep out social needs associated with lower-cost housing and keep demands on tax base low. Taxes are further reduced by spreading these controlled needs over a broad rich property tax base.

The dynamic of fiscal zoning creates three sets of mutually reinforcing relationships. First, the communities with high tax resources, low tax rates, and little affordable housing continue to attract more and more business, the presence of which continually keeps the overall tax rate comparatively low and increases revenues. Because of low social needs, these cities can provide a few high-quality local services.

A second reinforcing relationship involves those cities that have increasing social needs on a small and often declining property tax base. This combination leads to both declining consumer demographics and increased property tax rates often chasing a declining level of services. All of these factors are large negatives in terms of business location and retention. Often, central and satellite cities and older suburbs spend a great deal on unsuccessful efforts to become more socio-economically stable, as their tax base stagnates or even evaporates out from under them.

The third relationship concerns developing suburbs that lose the battle of fiscal zoning. These are fast-growing suburbs that have not attracted business or executive housing. They must pay for their schools, police, parks, curbs, and gutters with fewer resources. To keep taxes from exploding, they are forced to abandon long-range thinking and build the lower-valued homes and multi-family units rejected by the wealthier suburbs. As they develop, they frequently do not address the expensive issues of sewer systems and road construction. Hence, in addition to low-valued homes and business, they often develop on septic systems that soon have to be remediated

106 D. Winsor, *Fiscal Zoning in Suburban Communities* (1979); B. Rolleston, "Determinants of Restrictive Suburban Zoning: An Empirical Analysis," *Journal of Urban Economics* 21 (1987): 1-21; M. Wasylenko, "Evidence of Fiscal Differentials and Intrametropolitan Firm Relocation," *Land Economics* 56 (1980): 339-56; Cervero, "Regional Mobility."

at a very high cost. Similarly, the narrow country roads soon have to be widened in an already developed community at far greater expense. These decisions, in the long run, catch up with low fiscal capacity developing suburbs, as their wells fail and congestion increases, they ultimately become the declining suburbs of tomorrow. Further, in a perhaps futile attempt to remain competitive in terms of property taxes, working-class developing communities often suppress local expenditures on public services, particularly on schools.

The increase of property wealth in some affluent communities and the stagnancy or decline of value in central and satellite cities and older suburbs represents an interregional transfer of tax base. As such, the loss of value in older poorer communities is one of the costs of economic polarization and urban sprawl. Federal, state, and local governments spend billions of dollars building infrastructure such as schools, freeways, and sewers which add enormous value to growing parts of the region. To the extent that these public expenditures serve to transfer value, they are wasted. Adding to this dysfunction, the infrastructure of new cities is paid for by taxes and fees levied on the residents and businesses of the older parts of the region.

2. Cities

In the Saginaw region, in the places where social needs are greatest, overall total property tax base is comparatively low. The overall average tax base per household in 1998 in the Saginaw region was $54,400 (Figure 27).[107] The tax base per household in the city of Saginaw was $26,762 (49.2 percent of the regional value). The average property tax base per household in the Low Capacity/Stressed Communities was only 65.5 percent of the regional value ($35,617). These places face rapidly growing social needs with few tax-base resources. The property tax base per household in the Low Capacity Communities was also below the regional average ($48,129). The High Capacity/Stressed Communities, on the other hand, were considerably above the regional average at $72,814, and the High Capacity Communities towered about the region with an average property tax base per household of $87,159, 160.2 percent of the regional value.

[107] 1998 population estimates are from the East Central Michigan Planning and Development Regional Commission. 1990 population, households, and group quarters figures are from the U.S. Census of Population and Housing Summary Tape File 3A. 1998 total real, personal, and residential state equalized valuations data were obtained from the Michigan Department of Treasury, State Tax Commission. Here, it is important to keep in mind that in Michigan *equalized value* is not the same as *cash value*. Michigan uses a property-tax equalization system that assesses property values at 50 percent of cash value. This report looks at the state equalized values, not cash value. In addition, in March 1994, Michigan voters, as part of Proposal A, limited future increases in state equalized valuations to the rate of inflation, but not to exceed 5 percent per year. This rate is referred to as the Taxable Valuation and is used in this report to measure 1998 tax base. However, in order to compare 1998 tax-base data to 1986 tax-base data (prior to the tax limitation measure), this report uses 1998 state equalized values, or Assessed Valuation, rather than taxable values.

Zilwaukee Township is categorized as having no data because it had fewer than 50 estimated households in 1998.

Figure 26: Change in Urbanized Area, 1970-1990

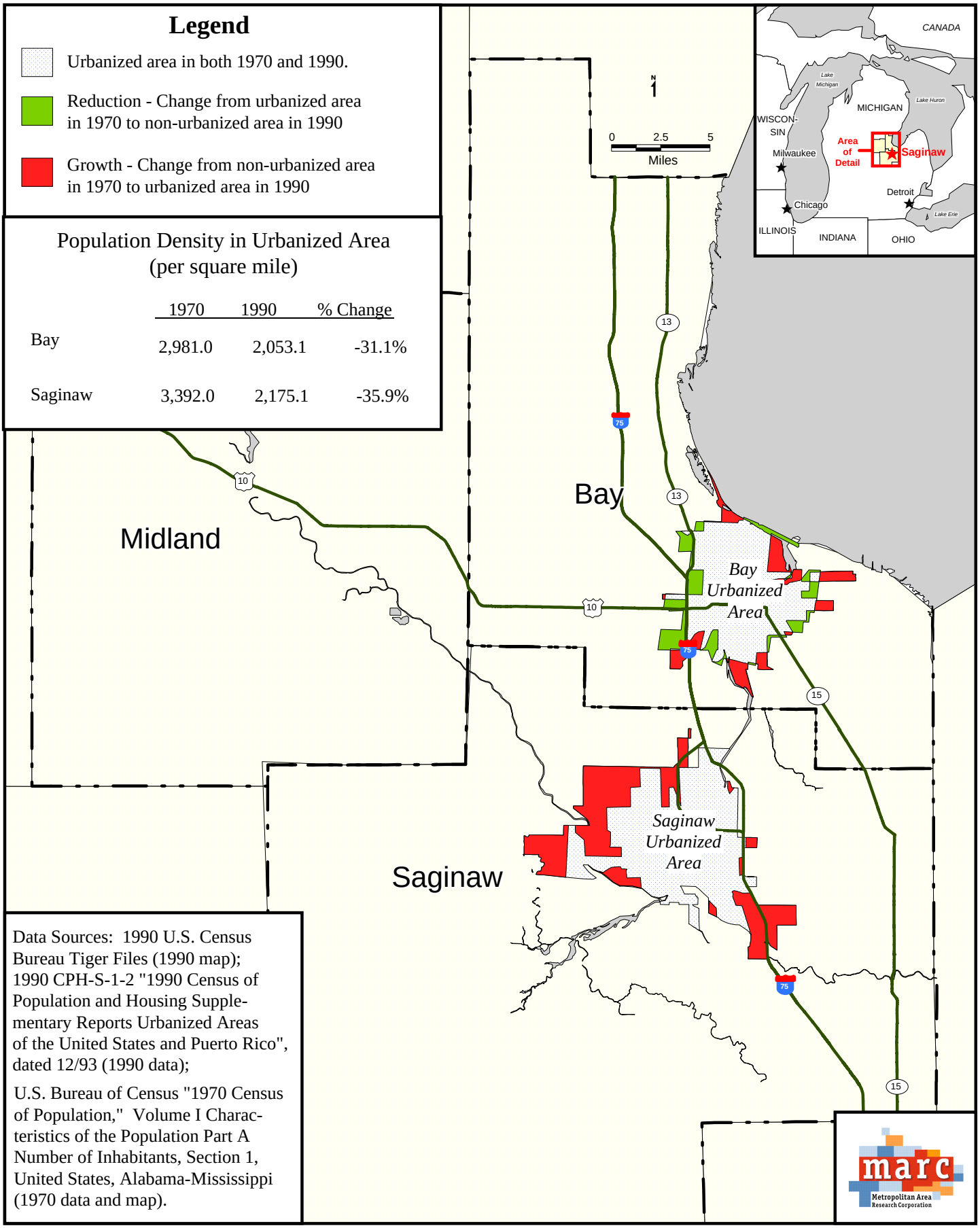
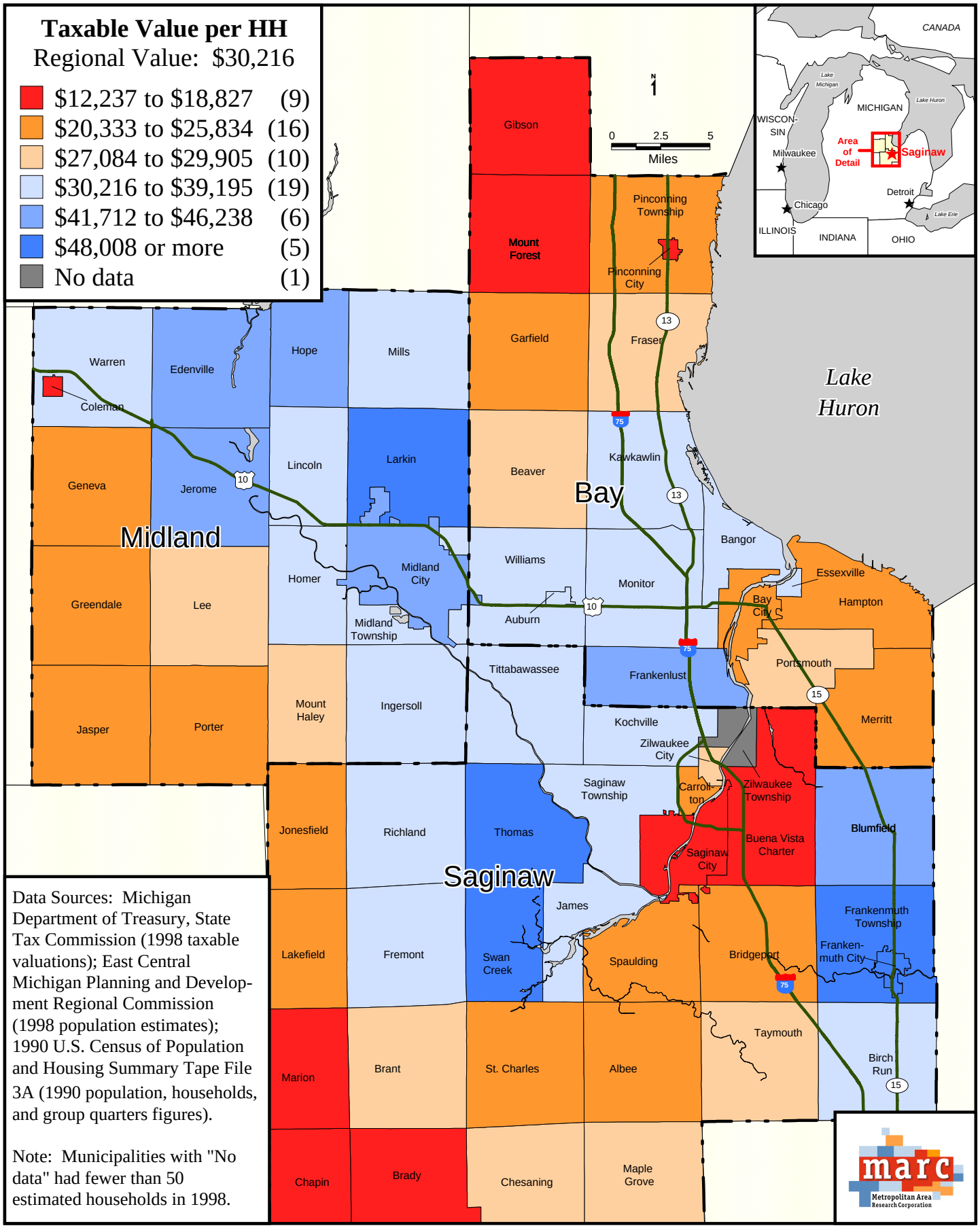


Figure 27: Residential Taxable Valuation per Household by Municipality, 1998



Data Sources: Michigan Department of Treasury, State Tax Commission (1998 taxable valuations); East Central Michigan Planning and Development Regional Commission (1998 population estimates); 1990 U.S. Census of Population and Housing Summary Tape File 3A (1990 population, households, and group quarters figures).

Note: Municipalities with "No data" had fewer than 50 estimated households in 1998.

Total Property Tax Base per Household, 1998

	Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity/ Communities
Value	$54,400	$26,762	$35,617	$48,129	$72,814	$87,159
% of Reg Value	100	49.2	65.5	88.5	133.8	160.2

Other than Saginaw, forty-five communities in the region had property tax bases per household below the regional value and one, Coleman, had a smaller base than the central city ($20,215). Most of these places were in outlying areas of the region, particularly in western Midland County. Among the lowest property tax bases per household were Lee ($32,618), Bay City ($32,105), and Carrollton ($28,574), all Low Capacity/Stressed Communities. At the other end of the spectrum, eight communities, which were virtually all High Capacity places, had tax bases per household greater than $75,000. The three highest-valued communities were Hampton ($96,007), Midland City ($132,719), and Kochville ($134,710).

Between 1986 and 1998 the Saginaw region experienced a 21.7 percent increase in overall tax base per household, from $49,600 in 1986 (in 1998 dollars) to $60,436 in 1998 (Figure 28).[108] During this period Saginaw saw a decrease of 9.9 percent in tax base (from $30,267 to $27,269), while each of the four subregions increased in tax base per household. The High Capacity/Stressed Communities increased the least (from $66,728 to $76,047) followed by the Low Capacity/Stressed Communities (from $33,824 to $39,283). The Low Capacity communities increased from $44,493 to $53,098, and the High Capacity Communities increased in tax base per household from $71,933 to $90,942.

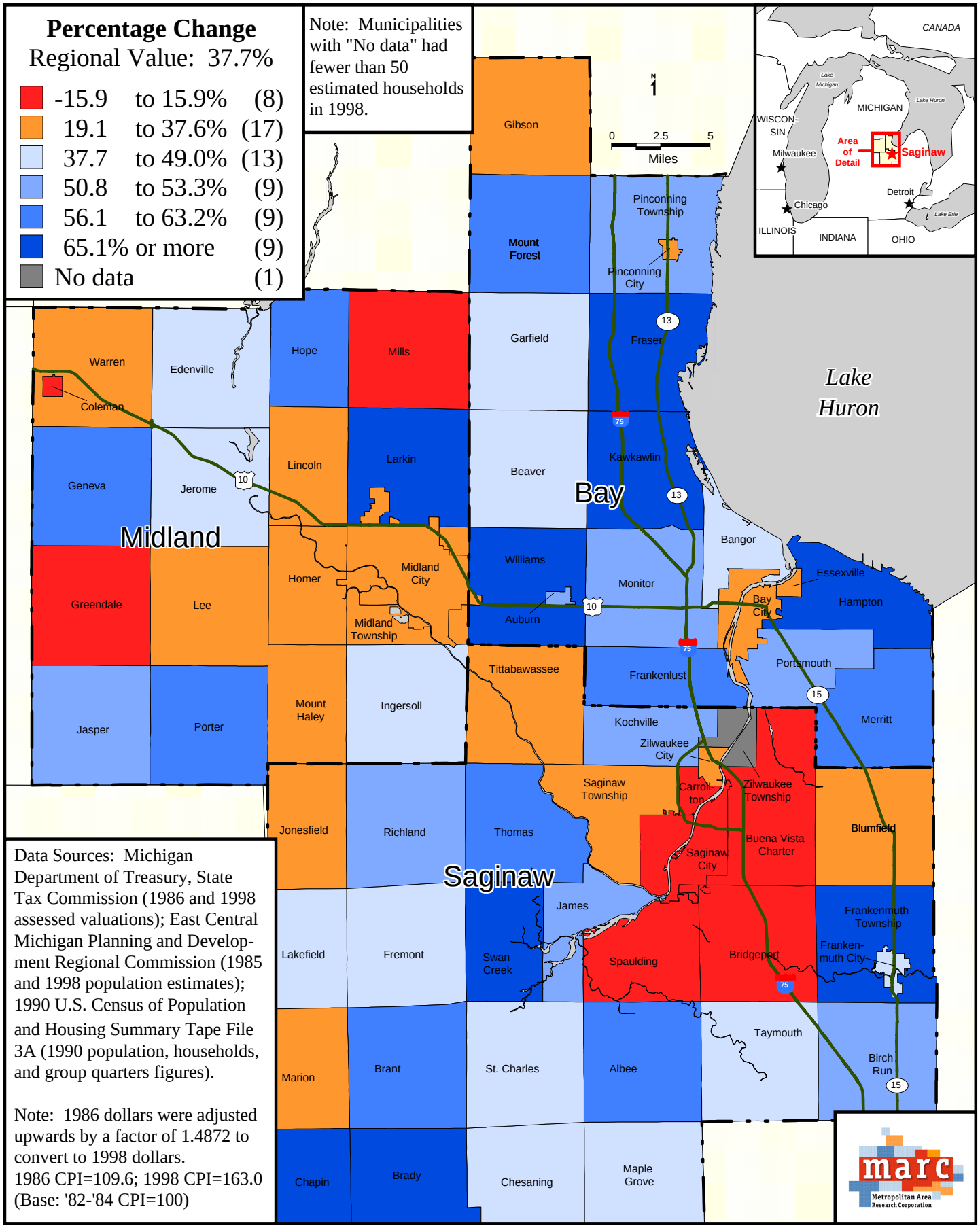
Percentage Change in Total Property Tax Base per Household, 1986-1998

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
21.7	-9.9	16.1	19.3	14.0	26.4

Despite the overall increase in tax base per household across the region, seventeen cities in addition to Saginaw saw a decline in this figure, nine greater than Saginaw. These were mostly outlying communities and included a mix of subregions. Low Capacity/Stressed Gibson, which went from $53,867 to $46,265 (-14.1 percent); High Capacity Hampton, which went from $125,392 to $101,443 (-19.1 percent); and Low Capacity Midland, which went from $74,246 to $57,538 (-22.5 percent). On the other hand, most of the places that experience the greatest increase in tax base over the decade were High Capacity communities near Midland City and in Saginaw County. These included Midland City, which went from $98,369 to $133,312; Swan Creek, which went from $46,818 to $69,230 (47.9 percent); and Thomas, which went from $51,675 to $84,574 (63.7 percent).

108 Change in tax base is here based on Assessed Valuations for 1986 and 1998.

Figure 28: Percentage Change in Residential Assessed Valuation per Household by Municipality, 1986-1998 (Adjusted by CPI)



When one looks at just residential property values, regional economic disparity is even more pronounced. In the absence of current household income estimates for the jurisdictions, this also provides a good way of comparing household wealth among the region's communities. In 1998, the residential property tax base per household for the Saginaw region was $30,216 (Figure 29).[109] In the city of Saginaw and the High Capacity/Stressed Communities, however, it was only $15,021 and $15,691, respectively. The Low Capacity/Stressed Communities also had lower than average residential property tax base at $22,395, while the High Capacity Communities were considerably higher than the regional value—$41,585.

Residential Property Tax Base per Household, 1998

	Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity/ Communities
Value	$30,216	$15,021	$22,395	$32,609	$15,691	$41,585
% of Reg Value	100	49.7	74.1	107.9	51.9	137.6

Individually, nine communities had residential property values per household below $20,000 and four lower than Saginaw. These were mostly outlying cities and townships as well as communities just to the east of Saginaw, including Mount Forest ($18,066), Pinconning City ($16,689), and Buena Vista ($12,237). At the other end of the spectrum, nine High Capacity communities had residential property tax bases above $45,000 per household. These included Thomas ($48,008 per household), Swan Creek ($48,392), Frankenmuth City ($50,770), and Larkin ($67,122).

Between 1986 and 1998, residential property tax base in the region increased by 37.7 percent (Figure 30). During this period the city of Saginaw remained about the same (an increase of 0.8 percent, from $15,268 to $15,385), while each of the subregions saw substantial increases: the High Capacity/Stressed Communities grew from $15,106 to $17,693; the Low Capacity/Stressed Communities increased from $19,486 to $24,859; the Low Capacity Communities from $25,871 to $36,970; and the High Capacity Communities from $31,000 to $44,404.

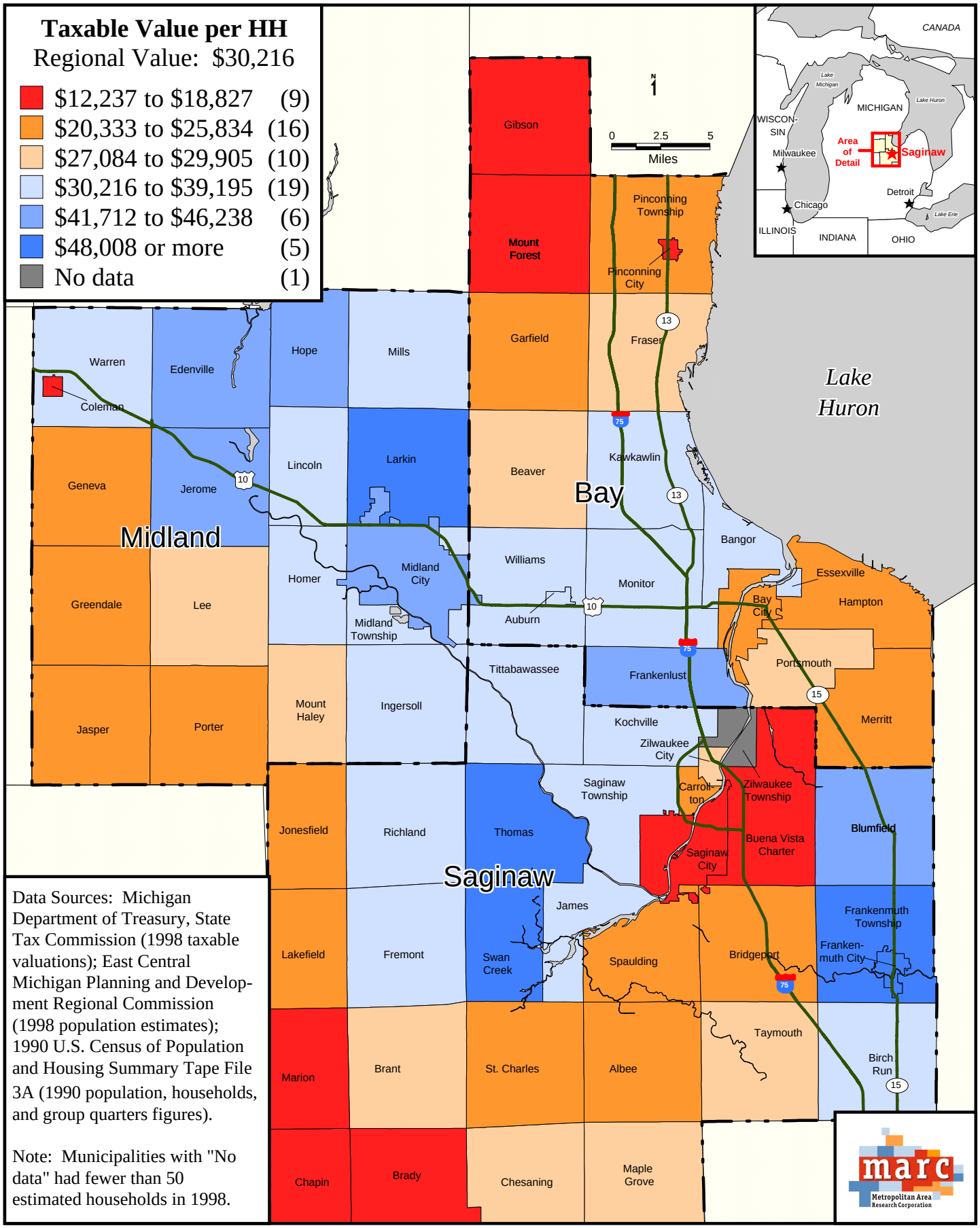
Percentage Change in Residential Assessed Valuation per Household, 1986-1998

Region	Saginaw	Low Capacity/ Stressed Communities	Low Capacity Communities	High Capacity/ Stressed Communities	High Capacity Communities
37.7	0.8	27.6	42.9	17.1	43.2

Between 1986 and 1998 every municipality in the region increased in residential tax base per household except for one already-low tax base township, Greendale, which lost 5.3 percent of

[109] 1998 population estimates are from the East Central Michigan Planning and Development Regional Commission. 1990 population, households, and group quarters figures are from the U.S. Census of Population and Housing Summary Tape File 3A. 1986 and 1998 assessed valuations data were obtained from the Michigan Department of Treasury, State Tax Commission.

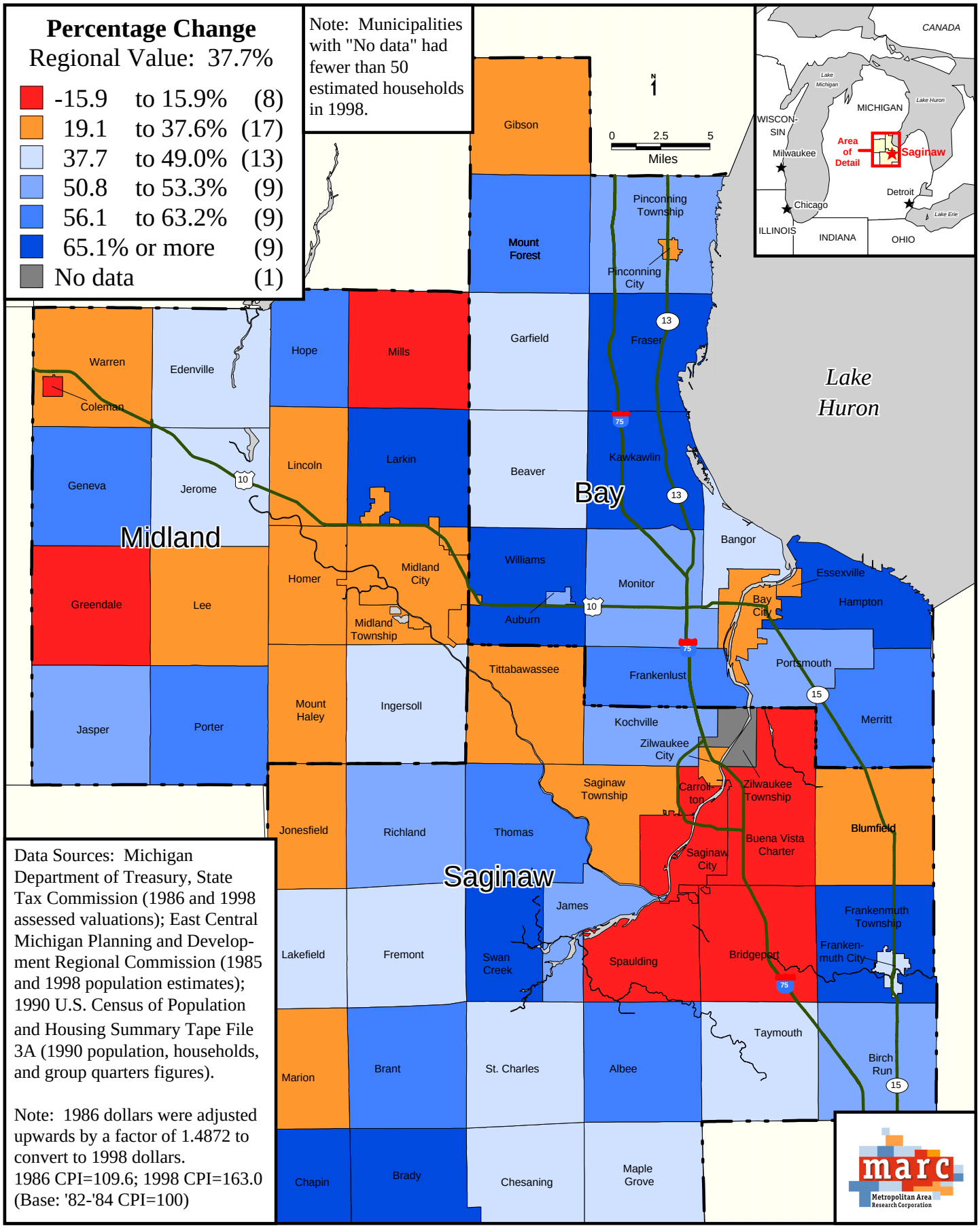
Figure 29: Residential Taxable Valuation per Household by Municipality, 1998



Data Sources: Michigan Department of Treasury, State Tax Commission (1998 taxable valuations); East Central Michigan Planning and Development Regional Commission (1998 population estimates); 1990 U.S. Census of Population and Housing Summary Tape File 3A (1990 population, households, and group quarters figures).

Note: Municipalities with "No data" had fewer than 50 estimated households in 1998.

Figure 30: Percentage Change in Residential Assessed Valuation per Household by Municipality, 1986-1998 (Adjusted by CPI)



its residential tax base (from $29,270 to $27,721). The smallest increases were to the south and east of Saginaw, such as Bridgeport, which saw a gain of 14.3 percent (from $22,417 to $25,630) while the largest increases were primarily in outlying communities. These were places like Williams, which went from $23,824 to $40,076 (68.2 percent) and Brady and Chapin, which had low capacities to begin with. Chapin's tax base increased by 90.0 percent, from $7,490 to $14,228.

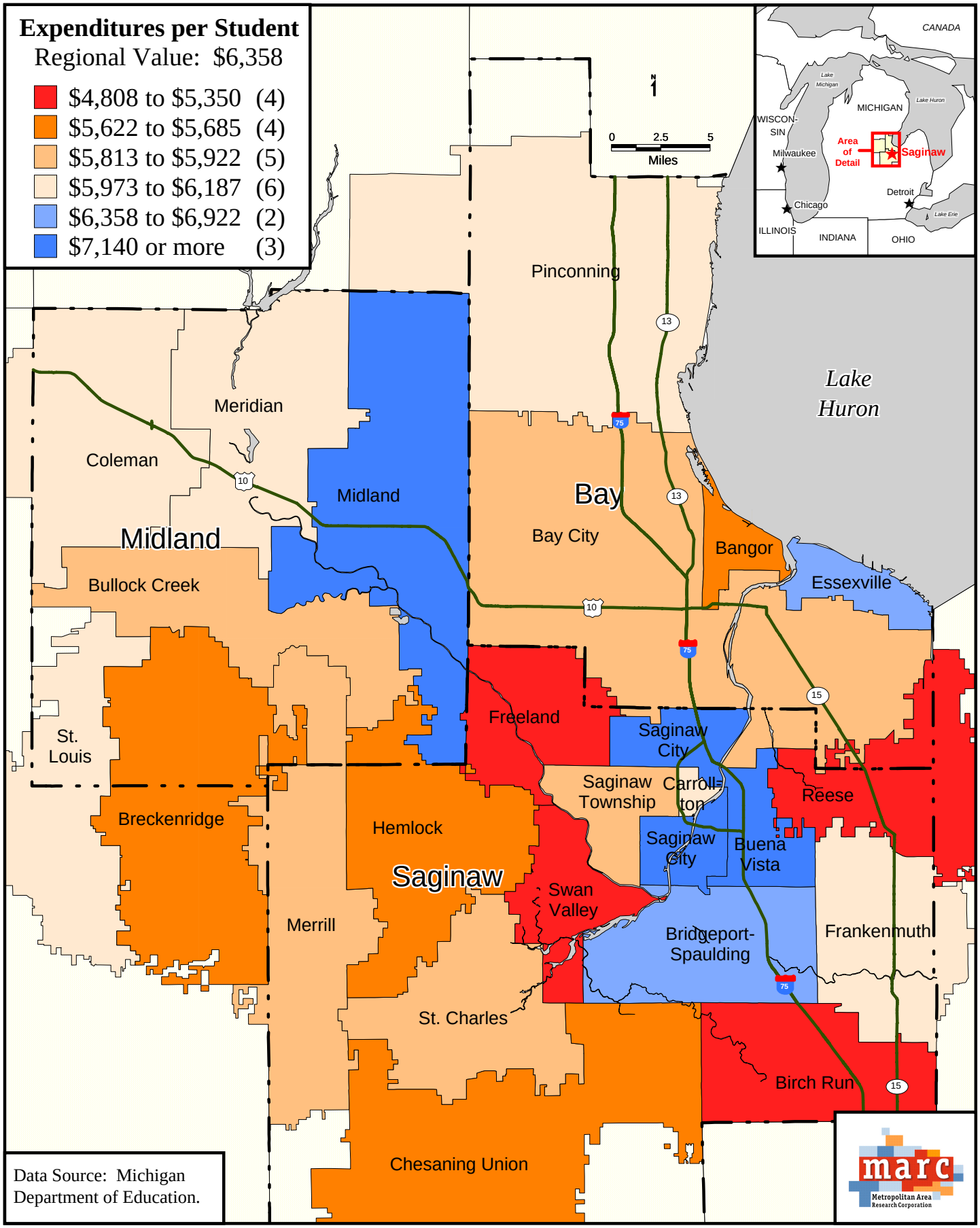
3. School Districts

The average annual spending in the twenty-four school districts of the Saginaw region in 1996 was $6,358 per student, ranging from $4,808 in the Freeland School District to $8,006 in the Buena Vista School District (Figure 31).[110] This rather small disparity in school spending is likely due to Michigan's recently implemented Proposal A. Passed in 1993, the intention of this school financing legislation was to shift the burden of funding education from local jurisdictions to the state. In this way, school resources and the education of Michigan's children were made less dependent on local tax capacity and, instead, were made more equitable through state support. Proposal A will be discussed in greater detail in Section V this report.

Other than Freeland, the districts that spent the least per student were all located relatively close to Saginaw, such as the Swan Valley District ($5,233) and Birch Run District ($5,228). The highest spenders after Buena Vista were Midland ($7,140), a primarily High Capacity district, and Saginaw ($7,345). Central cities often spend a relatively high amount on education due to the fact that these school districts commonly have more money-intensive special education programs—for children with unique challenges such as learning disabilities, physical disabilities, behavioral problems, or speaking English as a second language.

110 1996 school district expenditure data are from the Michigan Department of Education.

Figure 31: Expenditures per Student by School District, 1996



V. Metropolitan Solutions

The foregoing patterns demonstrate the need for a regional approach to stabilize the central city and declining older suburban neighborhoods and to reduce wasteful sprawling development patterns in the Saginaw region. As social separation continues, it creates an increasingly rapid decline in many older neighborhoods of satellite cities and townships and suburbs. Nowhere is this seen more clearly than in the changing social and racial population of the schools. As regional needs concentrate on the limited resources of the central city and older, inner-community neighborhoods, these places, forced to compete with low need, high resource communities, can do little to stabilize. Fragmented land-use control and unhealthy, unequal competition for tax base institutionalize separation, lead to wasteful infrastructure policy, and squander valuable natural resources. Some low fiscal capacity developing communities are not able to finance adequate wastewater, road and other developmental infrastructure. As jobs and executive housing concentrate elsewhere in the region, those places dominate the region's economic growth. Here, because of an increasing mismatch between housing and employment and the fact that road improvements themselves stimulate further development, congestion grows in ways that cannot be solved by widening the highways. Residents in these rapidly developing places, like residents in the declining older communities, become increasingly dissatisfied with the resulting quality of life.

MARC and a growing core of scholars; national, state, and local government officials; and activists from urban, faith-based, business, good-government, and environmental backgrounds, believe that metropolitan social separation and sprawl need a strong, multifaceted, regional response. To combat these trends, there are three areas of reform that must be sought on a regional scale: 1) greater equity among jurisdictions of a region, particularly those with land-use planning powers 2) smarter growth through better planning practices, 3) structural reform of metropolitan governance and transportation planning to allow for fair and efficient transportation and community planning. These reforms are inter-related and reinforce each other substantively and politically.

A. Equity

Local government tax resources are very frequently the basis of land-use decisions. This reality forces local jurisdictions to compete for commercial properties and high valued homes and eschew less revenue generating resources, such as lower valued homes or apartments. Reducing the dependence on local sources of revenue for local government operations, or creating greater regional equity, ameliorates disparities and reduces competition. By lessening the direct fiscal consequences for zoning decisions and by creating a stable base of shared local resources, equity makes it more possible to achieve and sustain regional land-use planning.

Many states and metropolitan areas have implemented strategies for creating greater equity. A few regions have solved this problem through consolidation or annexation. But this is increasingly rare. Some states have progressive school equity systems which eliminate much of the burden of local schools from the central city and other older, declining communities. Both Maryland and Virginia, for example, have school aid programs to help localities fund their public

schools. In each state, the largest aid program (the Current Expense Aid Program in Maryland and the Basic Aid Program in Virginia) is based on a formula that guarantees a minimum level of funding per pupil.[111] Using that minimum funding level, the states determine each school's expenses based on, among other things, school enrollments and special student needs. Then, the states determine the amount each locality is required to contribute to meet the basic funding level and the amount that will be contributed by the state. In both Maryland and Virginia this distribution formula is based, at least in part, on the ability of each locality to raise revenues from local sources. In both cases, local tax base is used as one of the measures of local wealth. In this way, school funding and educational opportunity is made at least somewhat more equitable and less dependent on local wealth. As a result of these school aid programs, approximately 40.3 percent of public school funding in the State of Maryland is contributed by the state and about 55.9 percent is contributed by localities. In Virginia, these figures are 55 percent from the state and 45 percent from the locality.

Michigan has also created a school equity program. From 1973 until 1994, Michigan schools were funded through the "District Power Equalizing" system. Essentially, under this system, the state provided the difference in school funding between a state calculated per pupil allowance (which was based on a state guaranteed millage revenue per pupil) and the amount the district could raise locally through property taxes. Districts that could generate more revenue off of their tax base than the state guaranteed millage revenue received no state aid under the formula. While this system created some equity in school funding, there were still some disparities because part of the formula was based on property value, which can vary considerably among districts, and because some high tax base districts not receiving the state formula aid could tax themselves at a lower rate than districts receiving aid and still raise more revenue.

In response, and to establish a new public school funding mechanism after the Legislature eliminated the local school property tax in 1993, Michigan voters overwhelmingly approved Proposal A in March, 1994. To help fund public schools, Proposal A, among other things, amended the State Constitution to increase the sales, use, and cigarette taxes; to impose a real estate transfer tax; and to allow a local non-homestead property tax and a state education property tax. Proposal A also changed the formula by which state aid to districts is determined. Under the new school aid system, the amount that a district must raise locally to achieve its foundation allowance (an allowed per pupil revenue amount)[112] is the amount it can generate by levying 18 mills on non-homestead property. The state pays the difference between the foundation allowance or $6,500 (whichever is less) and the local revenue on 18 mills (whether the district actually levies the full amount or not). In addition, districts with a foundation allowance of more than $6,500, must raise the excess amount through supplemental millages levied first on homestead and qualified agricultural property.

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111 Virginia Department of Education, Budget Operations Department; Maryland General Assembly, Department of Legislative Services.

112 The 1994-95 Foundation Allowance was based on the previous year's local and state revenue.

As a result of Proposal A, in the 1994-1995 school year, approximately 80 percent of school district revenues came from the state and about 20 percent were raised through local property taxes (primarily from commercial and industrial properties). This compares to 37 percent state funding and 63 percent local funding in the 1993-1994 school year.

School equity systems such as those in Michigan, Maryland and Virginia, help to reduce disparities among school districts, lessen the tax burden on low property-value communities, and equalize educational opportunity, but they do not affect equity among local units of government with land-use powers—cities and counties. To address disparities among these units, some states have created strong statewide general revenue sharing systems and a few places have created regional equalizing mechanisms. Some states have two or more such systems operating together.

The State of Michigan has had a comprehensive system of revenue sharing in place in one form or another since the 1930's. As of 1998, $1.35 billion of general revenue sharing has been distributed. Revenue sharing in Michigan accounts for a very significant portion of many local governments general fund budgets. Based on a 1996 sample of 625 communities, approximately 24 percent of local general fund revenue came from state revenue sharing dollars.[113] In this sample the portion of local revenue accounted for by state revenue sharing funds ranged from a low of 3.3 percent to a high of 79.5 percent.

The Michigan evolution of revenue sharing has been a debate between an approach that awards funds based on a per capita basis versus an alternative approach based on relative tax effort (RTE), or how hard the community has taxed itself in the past. The system has since the 1970s been a mix of both approaches. Per capita distribution has been criticized as providing revenue arbitrarily to units of government that do not necessarily need it. On the other hand, it has been argued that RTE distribution rewards declining high tax rate cities and penalizes low tax, pro-growth areas. From the mid 1970s through Fiscal Year 1995-1996, budgetary pressures lead to several reductions in the amount of funds distributed to local government units which were below the amount determined by statutory guidelines. In general, during this period the per capita distribution method has been favored over the RTE approach.

Prior to late 1998, Detroit, at 11 percent of the state's population, received 24 percent of the pool. This aroused great ire in the other cities of Michigan, particularly in places like Saginaw which was seeing dramatically increasing social needs on a limited base of values. Sadly, politics and the aid system has pitted the high need central cities of Michigan against each other. Rather than joining in coalition for further equity, they fought against each other for a declining share of economic relief.

As 1998 approached two alternative general revenue sharing scenarios were debated. Significantly, both bills sought to replace the RTE component of revenue sharing with a combination of three new distribution formulae based on 1) taxable value per capita (a comparative measure of local available tax resources per person), 2) unit type and population

113 Duprey and Harvey, The Financial Health and Fiscal Capacity of Municipal Governments in Michigan, March 1998, Department of Agricultural Economics, Michigan State University.

(*i*.e., whether the unit of government was a city or township, etc.), and 3) yield equalization (an effort to make sure similar tax rates raised similar revenues in each locality).

The first approach (SB 1181) introduced in the Senate by Rep. Glenn Steil of Grand Rapids would have significantly cut revenue to Detroit and significantly increased revenues to Saginaw and other communities similarly situated. The House approach (HB 5989) was more favorable to Detroit. A compromise was reached on December 10, 1998, just before the lame-duck Democratic-controlled House would surrender to a new Republican majority. The compromise forced an income tax cut in Detroit and at the same time guaranteed the city its present level of funding of $333.9 million for 8.5 years (unless there is an economic downturn, in which case Detroit would receive a reduction comparable to other units of government.) Most other cities received an increase. Distribution to all other units of government is based on a formula that takes into consideration: 1) per capita taxable value of a unit compared to the statewide per capita taxable value; 2) type of unit (township, village, city) and its population; and 3) an equalization of revenue generated by the levy of a mill (which provides that the revenue generated by the levy of a mill not be less than the statewide average of a mill's worth and equalizes the worth of a mill levied up to a maximum of 20 mills).[114] In general this new formula, which recognizes relative tax capacity and the different fiscal needs of different types of governmental units, represents an important improvement over both the old per capita and RTE distribution alternatives.

This type of equity mechanism—statewide general revenue sharing—is highly compatible with metropolitan reform and land-use planning, particularly to the extent that the new distribution formula can gradually supercede in importance the old per capita distribution scheme. There is no doubt that this system could be further reformed in light of the information in this report and in MARC's other studies of the Detroit and Grand Rapids regions.

State revenue sharing and state funding of public schools are very close cousins of metropolitan equity. However, there are some things that these mechanisms cannot do that only metropolitan equity can. School equity systems, such as the one in Michigan, help to reduce disparities among school districts, lessen the tax burden on low property-value communities, and equalize educational opportunity, but they do not affect equity among local units of government with land-use powers—cities and counties. State revenue sharing systems, such as the one in Michigan, help to reduce disparities among jurisdictions across a state, but do not address disparities among jurisdictions within a smaller regional economy, where cost of living and property valuations are much more comparable. Metropolitan equity, on the other hand, responds to both intra-metropolitan competition in a region for tax base and also to the unique cost of living and property valuation in a particular regional setting.

MARC believes that equity reform is premised on a system that shares some part of the *growth* of an existing state or local revenue source. This proposed system must be fully modeled (or simulated) before discussion begins, so that all parties participating can understand its impact The proposed reform must produce lower taxes and better services for approximately two-thirds

[114] From the Michigan Township Association's web page: http://www.mta-townships.org (January 17, 1999).

of the population involved. It must not increase taxes in any community. A substantial portion, if not a majority, of residents who live outside the central city should see lower taxes and better services. No one should see higher taxes or lower services. MARC has modeled several tax equity proposals for the Saginaw metropolitan region and will discuss two of them in Section VI. Both of these models result in lower taxes and better services for a substantial majority of the participating population.

1. Fairness

In a nation committed to equal opportunity for individuals, basic public services such as police and fire, local infrastructure, parks, and schools should be relatively equal on a metropolitan level. Equal opportunity is undercut when people of moderate means have inferior public services because they cannot afford to live in property-rich communities.

In most U.S. regions, including Saginaw, places where social needs are substantial and growing, tax base is insufficient; where the tax base is strong and growing, social needs are stable or declining. By gradually moving away from local tax base as the basis of local services, the growing property wealth in the region can become available to meet the legitimate needs of local government.

2. Competition for Tax Base and Fiscal Zoning

Intra-metropolitan competition among local governments for tax base is harmful to the region. First, it is wasteful for cities or counties to engage in bidding wars for businesses, such as local malls or retail facilities, that have already chosen to locate in the region. In such situations, public monies are used to improve the fiscal position and services of one community at the expense of another. These battles can induce large public subsidies from troubled communities without local resources and from affluent communities than may not need the new businesses to sustain themselves. More often than not the outcome of the struggle is predetermined not by the subsidy, but by the characteristics of the community. Most often the affluent place wins over the troubled one.

On the other hand, some form of gradual inter-local equity, encourages the region to work and compete together against other U.S. and overseas regions. When all of the local governments of a region benefit by attracting a business to any part of the region, they are much more apt to cooperate in ways that can bring meaningful business and employment opportunities to the region.

3. Land Use Planning

While social decline and local fiscal stress “push” people and businesses out of older declining communities, extraordinarily rapid housing construction fueled by local fiscal needs in developing areas “pulls” them. As new communities develop they face large debt burdens in terms of infrastructure, such as streets, sewers, parks, and schools. As the debt comes due, and potential property tax increases threaten, there is tremendous pressure on these communities to

spread these costs through growth. Hence, the very fragmentation of the tax base encourages sprawl.

Low tax base communities sometimes build low valued properties on inadequate infrastructure in order to accumulate enough tax base to pay yesterday's bills. They do this without considering the long term infrastructure costs associated with later sewer and other infrastructure remediation. Often this occurs because these communities do not have adequate local planning resources to evaluate the full cost of development decisions. Sometimes they simply have no choice given the existing fiscal demands. It is MARC's experience that most local officials would much prefer to build at typical suburban densities with appropriate sewer and road infrastructure provided at state or regional expense and put in place before development occurs.

In response, inter-local equity: 1) eases the fiscal crisis in declining communities allowing them to shore up decline; 2) takes the pressure off growing communities to spread local debt costs through poorly-managed growth; and 3) undermines fiscal incentives encouraging low-density sprawl.

In the Twin Cities region in the early 1980's, reformers attempting to pass legislation for metropolitan land-use planning used tax-base sharing as a quid pro quo to gain political support in the low fiscal capacity developing suburbs.[115] When low tax base communities were told that an urban service line was going to be drawn through the middle of their cities and that land outside that boundary would be zoned at agricultural densities, they cried foul. They argued that they needed the land for the development of tax base to keep rising taxes down and to pay for overcrowded schools. Compromise and acceptance was reached when they were shown the potential benefits of a tax-base sharing system, *i.e.* that they would receive new tax base and would actually gain fiscal capacity per capita faster than they would solely through the development of lower-valued residential property. In the end, in Minnesota the low tax base communities accepted land-use planning in exchange for tax-base sharing.

4. Reinvestment in the Core

An important corollary of equity is the creation of a regional fund for reinvestment in the central city and declining older suburban neighborhoods. Reinvestment in these communities also helps to create fiscal equity. Central cities and declining older communities, already fiscally stressed with low tax bases, high tax rates, and minimal services, cannot begin the process of reinvestment that is necessary to remain competitive. Regional funds can be created to clean up older industrial parks and polluted areas (brownfields), rebuild infrastructure such as sewers and roads, rehabilitate housing, replenish and augment urban parks and amenities. Part of the reinvestment strategy includes equitable geographic allocation of transportation investment, which involves a more publicly accountable distribution and balance of highway and transit resources.

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[115] Alan Dale Albert, "Sharing Suburbia's Wealth: The Political Economy of Tax Base Sharing in the Twin Cities," BA Thesis, Harvard University, March, 1979.

B. Smart Growth

Unless the Saginaw region begins to manage the process of growth at the edge, they will undermine any remediative efforts happening in the fully developed parts of the region. If local governments representing only a small percentage of a region can continue to develop only expensive homes and jobs, without worker housing, they will rapidly draw off all the wealth and economic growth of the region. At the same time, the growing parts of the region will commit the entire region to sprawling land use vastly disproportionate to population increases, worsening congestion, worsening consumption of energy, worsening pollution, and growing social separation. Land-use planning requires setting outward limits for growth in the form of an urban growth boundary, staging new infrastructure, such as roads and adequate sewer, together with new housing, developing at a density that will support some minimal form of public transportation, and assuring the provision in all subdivisions of a fair share of affordable housing. Oregon leads the nation in regional land-use planning. Minnesota has adopted a structure to do much of what is outlined in the Oregon model, but has often failed to implement its statutes. Washington, Maryland, Florida, Georgia, Tennessee, and many smaller regions have also adopted smart growth land-use plans, although some have been more effective than others and some are too new to evaluate. An underlying debate on this issue is growing in more than half of U.S. state legislatures.

1. The Oregon Model

In the early 1970s under the leadership of moderate Republican Governor Tom McCall, Oregon instituted the nation's most thoughtful, comprehensive land-use planning system. At the heart of Oregon's system are 19 planning goals that are achieved through comprehensive planning at the city and county level. While MARC believes that the debate about land-use planning throughout the country is extremely positive and that the various solutions that are being created will provide new models and new evidence about how growth management can work, in the long run the Oregon model described below remains the most effective effort to date. It involves the following elements, all of which are necessary components for the most effective land-use planning framework: (a) community-wide planning goals; (b) locally developed land-use plans addressing these goals; (c) review of these plans by a regional entity; (d) an adjudication process; and (e) periodic effectiveness evaluation by an independent entity.[116]

a. Planning Goals and Guidelines

Under the Oregon system, the state promulgates a statement of planning goals applicable to all jurisdictions. The goals include the creation of an urban growth boundary around every city and county (a regional boundary in the case of metropolitan areas), affordable housing (including overall density goals), and coherence with regional plans for transportation, sewerage, parks, and school infrastructure. Any local plans and policies inconsistent with these goals are challengeable in court or in special forums created for such adjudication. In conjunction with these reforms, building standards and maximum turnaround time for local development decisions are then made

[116] Downs, *New Visions*, pp. 180--81.

uniform. These reforms help builders make long-term plans to maximize their resources and foster patterns of region-wide sustainable development.

In terms of the development of a regional or urban growth boundary, the region or city is required to plan for growth at present absorption rates and to draw a line around the area that would accommodate such growth over a set period of time, perhaps twenty years. Growth is deflected from sensitive environmental areas and highly productive farmland and toward areas where urban services are present or could most easily be provided.

The density and affordable housing goals reinforce the barrier-reduction component of fair housing, as discussed below. In Oregon, the housing rules promulgated under this goal require Portland's metropolitan cities to allow for a construction mix that includes at least 50 percent multifamily development and allows development at certain minimum target densities. In the city of Portland, the target density is ten units per buildable acre; in most Portland suburbs, it is six to eight units.[117]

In Washington County, Oregon, the most affluent of the Portland region's three metropolitan counties, 11,110 multifamily units approved in five years nearly equaled the 13,893 units that were planned to be built over twenty years under the pre-housing rule plans. Multiple family housing now makes up 54 percent of new development.[118] Before the housing rule, average lots sizes were 13,000 square feet. Since the rule, two-thirds of the homes are built on lots smaller than 9,000 square feet.[119] Without the growth boundary and housing rule, the same number of housing units would have consumed an additional 1,500 acres of land.[120] Because of the density savings already realized, there will be space for 14,000 additional units within the Portland urban growth boundary. While the price of land has gone up within Portland's urban growth boundary, the housing rule has lowered the cost of housing on a regional basis, and Portland's average housing costs are lower than those of comparable West Coast cities. Seventy-seven percent of the region's households can afford to rent the median-priced two-bedroom apartment, and 67 percent can afford mortgage payments on the median-priced two-bedroom home.[121]

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117 1000 Friends of Oregon and the Home Builders Association of Metropolitan Portland, Managing Growth to Promote Affordable Housing: Revisiting Oregon's Goal 10, executive summary (Portland, Ore., September 1991), p. 3.

118 Ibid.

119 1000 Friends and Home Builders, "Managing Growth"; Robert Liberty, *Oregon's Comprehensive Growth Management*.

120 1000 Friends and Home Builders, "Managing Growth".

121 Ibid.

In addition, increasing building density and housing-type diversity makes mass transit economically and physically possible. Density also saves local infrastructure costs for building new highways and sewer extensions.

b. Local Land-use Plans

If local governments are to be required to develop a comprehensive land-use plan that addresses the regional goals, citizen participation should be required in formulating these plans as is required under Oregon's system. Planning and revision would remain in the hands of local governments, which helps preserve local autonomy, but within the context of a broader regional framework.

c. Plan Review

Under Oregon's plan, a special state land-use agency reviews all local plans to ensure consistency with the goals and suggest revisions of any inconsistencies. This entity has the power to withhold approval from local plans, which prevents the municipality from receiving beneficial services such as regional roads, sewers, or other aid from state and federal governments. The same entity coordinates local transportation, utility regulation, environmental protection, and activities of other governmental units that have a regional significance. This ensures that all actions of state agencies within the region are consistent with regional plans, local plans, and other agency decisions.

Transportation is particularly important in this regard. Land-use policy needs to govern decisions about new infrastructure. All land-use and infrastructural decisions must be coordinated in a way that maximizes the use of existing roads, sewerage, and other infrastructure. Today, in transportation planning, congestion and demand (perhaps also political power) are the main criteria for providing new infrastructure. This means that a growing community receives new sewers or roads even if an adjacent community has excess paid-for capacity. Infrastructure-on-demand, costs less for the new community, perpetuates leapfrogging, low-density patterns at the periphery, and the entire metropolitan region pays. Moreover, affordable housing near new jobs can relieve commuter congestion on regional roads.

d. Adjudication Process

The Oregon system includes an adjudication process to settle disputes between the local governments and the state land-use agency and between developers and local governments. A special court, or a quasi-judicial administrative agency is designed to do this, without resorting to state and federal courts. This allows localities to develop an expertise in these matters and be more efficient, it also costs less and renders faster decisions than the courts.

e. Independent Review

Finally, an independent entity, not the state structure, periodically evaluates the effectiveness of the coordinated plan.

In the end, such a system does not involve a prohibition on growth or even growth control, but is a system of sustainable, planned growth. It recognizes the new housing needs of a growing regional population, but also that growth must be anticipated and planned. Through planning, the region maximizes the use of existing public infrastructure, reduces stress on highways and sewers, allows individuals access to opportunity in communities where it is plentiful, reduces regulation and its costs for the building industry, and stabilizes the region's core communities.

2. Affordable Housing

Another component of smart regional land-use planning is ensuring that housing that is affordable to families of all income levels is available in all parts of the region. The provision of affordable housing throughout the region helps to reduce the concentration of poverty, reduce racial segregation, and stem the polarization occurring among the region's communities. Regional affordable housing gets workers closer to new jobs, helps reduce congestion on roadways, and allows older people and young divorced mothers and fathers to remain in their communities as their financial and physical conditions change. There are three components to fair housing: (a) reducing non-rational barriers in zoning codes, development agreements, and development practices; (b) creating a regional funding source to provide subsidies for housing throughout the region; and (c) providing a system of testing to first understand, then eliminate, the pattern of housing discrimination in the region. Montgomery County, Maryland has been a national leader along the first two steps through its moderately-priced dwelling unit program. Oregon, Massachusetts, Minnesota, and New Jersey have taken important steps here as well. Social science data exist on the third problem, but no state has actively taken steps in this direction.

3. Transportation Planning

Coordinated transportation planning helps a region grow smarter. At the federal level, with the implementation of the 1991 Intermodal Surface Transportation and Efficiency Act (ISTEA), and more recently, the 1998 Transportation Equity Act for the 21st Century (TEA-21), large federal resources were made available for transit and other forms of investment which would strengthen the viability of the core of many U.S. regions. ISTEA has been a significant help to places with a strong commitment to public transportation and, if properly implemented, TEA-21 could be an equally important piece of legislation. Of particular importance to regional stability, TEA-21 includes an increase in funds for highway system improvements and a decrease in new capacity funds. TEA-21 includes a job access program which is intended to help people coming off welfare get to their new jobs located throughout a metro area. TEA-21 also includes a community preservation pilot program that addresses the integration of transportation and land use. A significant part of a regional agenda in any metropolitan area includes making sure that state legislation conform to take full advantage of the flexibility of TEA-21, making regional decision makers that allocate TEA-21 funds more accountable to all the citizens of a given region, and allowing representatives from the older, inner communities—places that have very different transportation/transit needs than those living on the region's fringe—to be full participants in decisions involving the allocation of transportation dollars.

C. Metropolitan Structural Reform

Metropolitan Planning Organizations, already set up to develop regional transportation plans and allocate enormous federal and state transportation resources, should be made more representative and accountable to the regions they serve. Presently, these MPO's make region-shaping decisions without detailed discussion concerning the impact of their transportation decisions on the social health of the older part of the region. Often there is not significant public input. Perhaps older communities and city neighborhoods and groups committed to these areas do not believe there is a large enough constituency in the region to provide a corrective to the status quo. This report argues that there is the basis for such a constituency.

Ultimately, with the participation of such groups, MPO's should evolve into bodies that much more explicitly weigh the effects of their decisions on the social health of the older parts of the region and the fiscal and environmental health of the developing areas. To do this effectively, MPO's should evolve into structures with proportional representation that fully takes into account the different types of regional communities and their varied needs. Over time, more fairly apportioned bodies, representing the only entity with the proper geographic scope for regional land-use planning, should assume growing responsibility for implementing the initiatives discussed above. MARC believes that these bodies should ultimately be directly elected.

VI. A Closer Look at Tax-base Sharing

Tax-base sharing is an important first step in regional reform, as it helps build relationships and coalitions which will serve to advance other regional reforms. In Minnesota, when the central city and older suburban areas could be united on common shared fiscal interests, they overcame some of the more intense barriers created by race and class that had long divided these subregions. The regionalism effort in the Saginaw region would be greatly advanced if Saginaw, its struggling surrounding communities, and declining outlying cities and townships could unite.

A. The Politics of Tax-base Sharing

1. The Twin Cities Fiscal Disparities System

In 1971, the Minnesota Legislature adopted a regional tax-base sharing system for the Twin Cities metropolitan area, commonly referred to as "the fiscal disparities program."[122] Under this program, each city in the region contributes forty percent of the growth of its commercial and industrial property tax base acquired after 1971 to a regional pool. Tax base is then distributed from this pool to each city on the basis of inverse net commercial tax capacity. A highly equalizing system, the fiscal disparities program reduces tax base disparities on a regional level from 50-to-1 to roughly 12-to-1. Presently about 393 million dollars, or about 20 percent of the regional tax base, is shared annually.

While Minnesota's fiscal disparities program produces powerful equalizing effects, the formula is still not perfect. Fiscal zoning and competition for tax base continues. In this light, while a partial tax-base sharing system like the Minnesota program does not end regional competition, it does make it marginally more fair. A system that shares a larger percent of the regional tax base would be much more effective in reducing competition.

There are also some inequities. Communities in the Twin Cities metropolitan area with a higher than average commercial base, but with low-valued homes and increasing social need, contribute tax base. On the other hand, cities dominated by high-valued homes that have eschewed commercial development, but have large per-household tax bases, receive money from the system. A system that shares high-valued residential tax base as well as commercial and industrial tax base would reduce this problem.

In the 1995 session, the Minnesota legislature passed, but the governor vetoed, Fiscal Disparities II: The Metro Area Tax Cut Act. Under this bill, metropolitan jurisdictions would

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122 Many states have a statewide general revenue sharing system and many have school equity systems that eliminate much of the burden of local schools from the central city and older suburbs, but do not affect local units of government—cities and counties—with land-use powers. Currently the State of Minnesota is the only state in the nation that has a tax-base sharing system in place to provide fiscal equity among cities and counties in a metropolitan region, although this policy is currently being debated in a number of state legislatures across the county. In addition to its tax-base sharing system, Minnesota also has a statewide general revenue system and a school equity system.

share the growth on the increment of value above $200,000 on high-valued homes. Short of total sharing, this expanded fiscal disparities system would have counterbalanced the inequities of the present system, undermined fiscal zoning and competition for tax base, and greatly expanded the tax-base sharing system. In addition, with only 17 percent of the region contributing tax base and fully 83 percent receiving, it was a most popular proposal among local governments.

The bill was called the Metro Tax Cut Act because its provisions required communities receiving new tax base under it, for the first two years, to use half of this new tax base for a property tax cut. The bill was "sold" as the largest single property tax cut offered by the legislature that year. The northern low tax base suburbs strongly supported the bill and it passed with bipartisan support.

2. Is Tax-base Sharing Possible Only in Minnesota?

There is a broadly shared belief that tax-base sharing came out of some cosmic consensualism in progressive Minnesota that cannot be duplicated elsewhere in the nation. This is not true.

First, tax-base sharing in Minnesota has always been controversial. Many suburban governments at first feared loss of tax base and local control. But legislative leaders realized the high degree to which property wealth was concentrated. To help convince other elected officials of the benefits of sharing the tax base, they developed computer runs that showed the projected amount of tax base cities would actually gain. Most of the older and developing middle-class suburbs were potential recipients. When officials from these suburbs realized that tax-base sharing was likely to substantially increase their tax base and stabilize their future fiscal situation, they became supporters. As one legislator put it, "before the (simulated tax-base sharing) runs, tax-base sharing was communism, afterwards it was 'pretty good policy.'"

The legislative debate surrounding the fiscal disparities program was hardly consensual. Legislators from recipient communities supported tax-base sharing and legislators from contributing communities opposed it. When the bill became law, contributing communities brought suit against the state and litigated unsuccessfully all the way to the United States Supreme Court.[123] Contributors remain opposed, and every session their representatives introduce bills to either limit their contribution to the system or abolish the program entirely. Thus the Minnesota experience with tax-base sharing should not be viewed as a rarefied consensus, but as a strategy model for creating political coalitions to influence regional reform.

It is often said that Minnesota is different from the rest of the nation because it does not have any social or racial divisions. In response, Minnesota and the Twin Cities can be placed on a continuum. While the social and economic declines and polarization are clearly not as severe as New York, Chicago, or Detroit, they are worse than most younger and smaller regions and even than some of similar size, age, and complexity. The public schools of the central cities of Minneapolis and Saint Paul have 60 percent poor and non-white/non-Asian students in their

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123 *Burnsville v Onischuk,* 301 Minn. 137, 22 N.W.2d 523 cert. denied 420 U.S. 916 (1974).

public schools—only ten points behind Chicago—and more rapidly growing concentrated poverty. A recent regional debate on fair housing was marred by divisive discussions of race and class. Further, while the Twin Cities has the rudiments of regional cooperation, it has an unusually high number of local governments with land-use powers (187) and school districts (49) that must cooperate. In the end, the same basic dynamics that have divided and conquered older, larger regions are firmly rooted in the Twin Cities. Likewise, the local coalitions that are beginning to take action in the Twin Cities in response to regional polarization can be built elsewhere.

B. Tax-base Sharing in the Saginaw Region

At the outset, clearly the numbers add up to a viable coalition for tax-base sharing in the Saginaw region. Between 65 and 75 percent of the Saginaw region live in communities that could gain new tax base under a properly structured proposal. While the region is divided like most regions across a variety of issues, proponents of tax-base sharing have to remember that all they are asking of the majority of communities is support for an arrangement that would give them both better levels of service and lower property taxes.

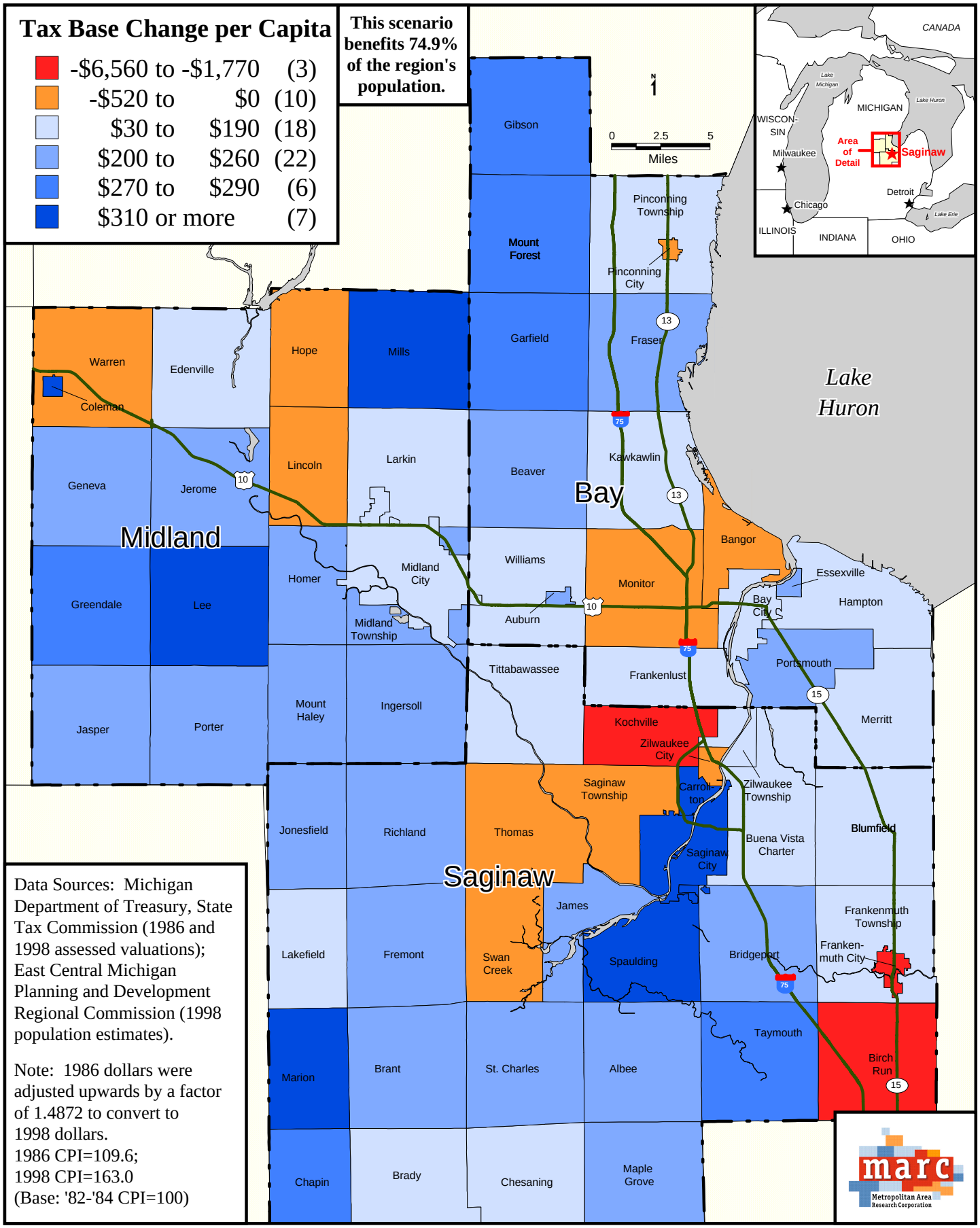
Equity mechanisms must be forged in the give and take of each local community. They must ultimately reflect the political situation and the balance of political power present in a given place at a given time. MARC has created models of several possible regional property tax-base sharing scenarios for the Saginaw region. Most of the scenarios produced positive results for at least 50 percent of the region's population. In other words more than half of the regional population would be the recipients of new property tax base, thus receiving lower taxes and better local services at the same time.

While there are countless formulas that could be used in a tax-base sharing system, this report presents two examples. In the first run, each of the sixty-six municipalities in the region contributes 40 percent of its growth in commercial/industrial assessed value from 1986-1998 into the tax-base sharing pool. This pool is then redistributed back out to these jurisdictions based on their total assessed value per capita in 1998. Thus, those places with low tax base receive additional tax base from the pool, while those places with high tax base contribute to the worse-off areas. This particular model run produced new tax base for 74.9 percent of the region's population (Figure 32). The places that gained the most new tax base were a mix of Low Capacity/Stressed communities and Low Capacity Communities. Coleman received the largest distribution, at $478 per capita, followed by Saginaw ($407 per capita), Carrollton ($358 per capita), and Lee and Marion (both received $336 per capita). See Appendix B for a spreadsheet that gives a complete description of how this tax-base sharing model was calculated and that shows how much each jurisdiction contributed to, or received from the pool.

The second run shares 15 percent of the region's 1998 total assessed value and redistributes the pool according to the percentage of housing built before 1950. This run limits the amount of money Saginaw and Bay Cities can receive to $50 million.[124] Those places with a

[124] Once the net distribution for each community is determined, the share distributed to the cities of Saginaw and Bay is examined. If the share calculated for these cities is less than the maximum allowed, no adjustments are

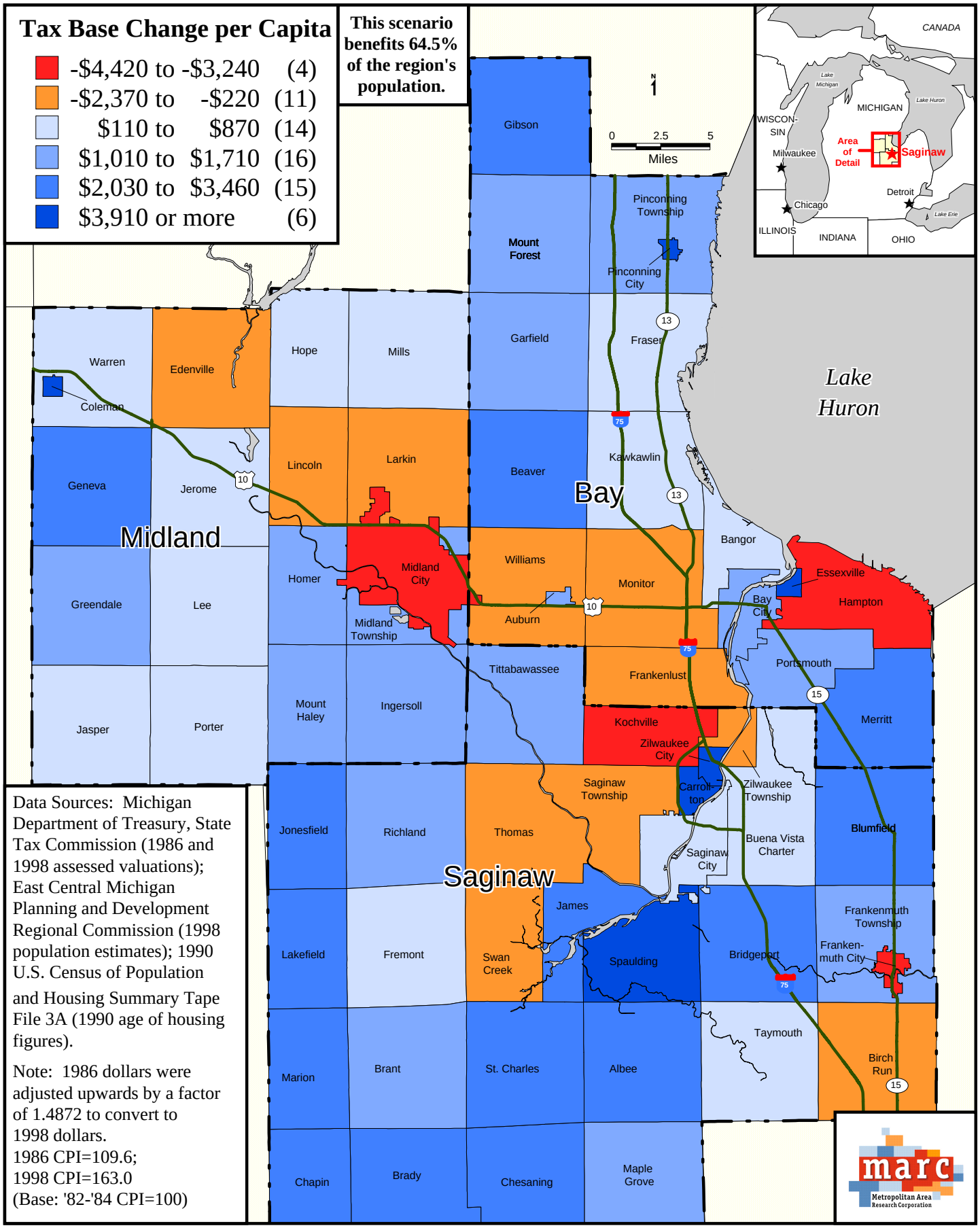
Figure 32: Redistribution of 40% of Growth in Commercial / Industrial Assessed Value 1986-1998 According to Total Assessed Value per Capita



larger proportion of older housing stock receive additional tax base from the pool, while those places with a larger proportion of newer housing stock contribute to the worse-off areas. This particular model run produced new tax base for 64.5 percent of the region's population (Figure 33). The places that gained the most new tax base were again a mix of Low Capacity/Stressed and Low Capacity communities. Some of the largest gainers included Carollton ($4,190 per capita), Zilwaukee City ($4,213), Essexville ($4,590 per capita), Spaulding ($4,807), and Coleman ($5,881). Saginaw received $788 per capita. See Appendix C for a spreadsheet that gives a complete description of how this tax-base sharing model was calculated and that shows how much each jurisdiction contributed to, or received from the pool.

made. If the net distribution is greater than the maximum allowed, the model is run again. This time, Saginaw and Bay are excluded from all of the calculations; instead, they are given a net distribution equal to the maximum allowed out of the tax base pool. A final net distribution for each of the other communities is then determined.

Figure 33: Redistribution of 15% of 1998 Total Assessed Value According to Percentage of Housing Built Before 1950 with $50 Million Caps on Bay City and Saginaw City



Data Sources: Michigan Department of Treasury, State Tax Commission (1986 and 1998 assessed valuations); East Central Michigan Planning and Development Regional Commission (1998 population estimates); 1990 U.S. Census of Population and Housing Summary Tape File 3A (1990 age of housing figures).

Note: 1986 dollars were adjusted upwards by a factor of 1.4872 to convert to 1998 dollars.
1986 CPI=109.6;
1998 CPI=163.0
(Base: '82-'84 CPI=100)

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VII. Conclusion

The Saginaw metropolitan region is not prepared to meet the future.

The region’s development is characterized by sprawling inefficient land use, worsened by wasteful zero-sum competition among local governments in a single regional economy. Over time, this pattern produces growing disparities between local governments, neighborhoods and the citizens of the region. In so doing, it serves to polarize the region socially, economically, racially, and politically—each year making cooperation necessary to solve vital present and future problems less feasible. The status quo represents a divisive system that wastes money, energy, time, human potential and in some cases even people’s lives. It is preventing the greater Saginaw region from reaching its full potential in terms of economic growth, social stability, environmental stewardship, and quality of life.

This report represents the beginnings of an agenda designed to deal with growing regional instability and disparities. While it is controversial, it represents only a best first effort, subject to the negotiation, reformation, and synthesis that occurs in all political progress. While the issues will be difficult, it is MARC's hope that this region can work together—reason together—to solve its mutual problems.

The real importance of this discussion is the realization that the Saginaw region is suffering from a series of problems that are too massive for the central city and individual communities to confront alone.

Appendix A: Calculations Used in Determining Subregions

Municipality	Fiscal Capacity, 1998	Fiscal Capacity Compared to Regional Average	% Non-Asian Minority Elementary Students, 1998	Non-Asian Minority Z-Score	% Eligible for Free / Reduced-Cost Meals, 1998	Free / Reduced Meals Z-Score	Combined Social Stress Z-Score	Stress Z-Score Compared to Regional Average	Combined Fiscal Capacity / Stress Z-Score
Albee township	$199	Low Capacity	8.1%	0.15711	45.1%	-0.59701	-0.21995	Above	Low Capacity, Stressed
Bay City city	$142	Low Capacity	13.4%	-0.10698	51.4%	-1.01676	-0.56187	Above	Low Capacity, Stressed
Brady township	$171	Low Capacity	2.4%	0.44112	47.2%	-0.73693	-0.14790	Above	Low Capacity, Stressed
Bridgeport township	$172	Low Capacity	45.7%	-1.71640	62.1%	-1.72967	-1.72303	Above	Low Capacity, Stressed
Carrollton township	$126	Low Capacity	31.9%	-1.02879	43.8%	-0.51040	-0.76959	Above	Low Capacity, Stressed
Chapin township	$161	Low Capacity	2.3%	0.44611	48.1%	-0.79689	-0.17539	Above	Low Capacity, Stressed
Coleman city	$89	Low Capacity	0.8%	0.52085	45.2%	-0.60368	-0.04141	Above	Low Capacity, Stressed
Geneva township	$177	Low Capacity	0.8%	0.52085	45.2%	-0.60368	-0.04141	Above	Low Capacity, Stressed
Gibson township	$184	Low Capacity	5.0%	0.31157	48.2%	-0.80356	-0.24599	Above	Low Capacity, Stressed
Greendale township	$141	Low Capacity	2.6%	0.43116	50.5%	-0.95680	-0.26282	Above	Low Capacity, Stressed
Jasper township	$231	Low Capacity	6.5%	0.23683	43.6%	-0.49707	-0.13012	Above	Low Capacity, Stressed
Lee township	$144	Low Capacity	1.0%	0.51088	50.0%	-0.92348	-0.20630	Above	Low Capacity, Stressed
Maple Grove township	$217	Low Capacity	8.1%	0.15711	45.1%	-0.59701	-0.21995	Above	Low Capacity, Stressed
Mount Forest township	$168	Low Capacity	4.9%	0.31656	48.1%	-0.79689	-0.24017	Above	Low Capacity, Stressed
Pinconning city	$166	Low Capacity	5.7%	0.27669	42.2%	-0.40380	-0.06355	Above	Low Capacity, Stressed
Pinconning township	$190	Low Capacity	5.6%	0.28168	42.5%	-0.42379	-0.07105	Above	Low Capacity, Stressed
Portsmouth township	$190	Low Capacity	10.1%	0.05745	42.3%	-0.41046	-0.17650	Above	Low Capacity, Stressed
Saginaw city	$118	Low Capacity	72.5%	-3.05178	69.2%	-2.20271	-2.62725	Above	Low Capacity, Stressed
Spaulding township	$152	Low Capacity	45.3%	-1.69647	62.0%	-1.72300	-1.70974	Above	Low Capacity, Stressed
Warren township	$227	Low Capacity	0.8%	0.52085	45.2%	-0.60368	-0.04141	Above	Low Capacity, Stressed
Zilwaukee city	$199	Low Capacity	72.8%	-3.06673	69.4%	-2.21604	-2.64138	Above	Low Capacity, Stressed
Brant township	$214	Low Capacity	6.4%	0.24181	34.2%	0.12922	0.18551	Below	Low Capacity
Chesaning township	$211	Low Capacity	4.5%	0.33649	35.3%	0.05593	0.19621	Below	Low Capacity
Edenville township	$228	Low Capacity	0.9%	0.51586	38.3%	-0.14395	0.18596	Below	Low Capacity
Essexville city	$201	Low Capacity	7.5%	0.18700	31.6%	0.30244	0.24472	Below	Low Capacity
Fraser township	$201	Low Capacity	1.8%	0.47102	34.1%	0.13588	0.30345	Below	Low Capacity
Fremont township	$232	Low Capacity	5.2%	0.30161	24.1%	0.80214	0.55188	Below	Low Capacity
Garfield township	$170	Low Capacity	0.0%	0.56071	43.5%	-0.49041	0.03515	Below	Low Capacity
Homer township	$180	Low Capacity	3.9%	0.36638	27.3%	0.58894	0.47766	Below	Low Capacity
Ingersoll township	$224	Low Capacity	4.2%	0.35143	29.7%	0.42903	0.39023	Below	Low Capacity
James township	$214	Low Capacity	6.7%	0.22687	15.3%	1.38846	0.80766	Below	Low Capacity
Jerome township	$206	Low Capacity	1.4%	0.49095	39.8%	-0.24389	0.12353	Below	Low Capacity
Jonesfield township	$207	Low Capacity	2.5%	0.43614	31.2%	0.32909	0.38262	Below	Low Capacity
Kawkawlin township	$227	Low Capacity	2.7%	0.42618	21.5%	0.97537	0.70077	Below	Low Capacity
Lakefield township	$226	Low Capacity	2.5%	0.43614	31.2%	0.32909	0.38262	Below	Low Capacity
Lincoln township	$233	Low Capacity	2.2%	0.45109	30.0%	0.40905	0.43007	Below	Low Capacity
Marion township	$152	Low Capacity	2.7%	0.42618	31.2%	0.32909	0.37764	Below	Low Capacity

Municipality	Fiscal Capacity, 1998	Fiscal Capacity Compared to Regional Average	% Non-Asian Minority Elementary Students, 1998	Non-Asian Minority Z-Score	% Eligible for Free / Reduced-Cost Meals, 1998	Free / Reduced Meals Z-Score	Combined Social Stress Z-Score	Stress Z-Score Compared to Regional Average	Combined Fiscal Capacity / Stress Z-Score
Midland township	$242	Low Capacity	4.1%	0.35642	21.5%	0.97537	0.66589	Below	Low Capacity
Mills township	$175	Low Capacity	2.6%	0.43116	34.2%	0.12922	0.28019	Below	Low Capacity
Mount Haley township	$188	Low Capacity	3.0%	0.41123	29.7%	0.42903	0.42013	Below	Low Capacity
Porter township	$221	Low Capacity	3.6%	0.38133	32.4%	0.24914	0.31524	Below	Low Capacity
Richland township	$215	Low Capacity	3.7%	0.37635	19.8%	1.08864	0.73249	Below	Low Capacity
St. Charles township	$193	Low Capacity	6.6%	0.23185	32.2%	0.26247	0.24716	Below	Low Capacity
Taymouth township	$177	Low Capacity	6.4%	0.24181	28.2%	0.52897	0.38539	Below	Low Capacity
Tittabawassee township	$213	Low Capacity	1.4%	0.49095	11.9%	1.61499	1.05297	Below	Low Capacity
Auburn city	$189	Low Capacity	4.2%	0.35143	28.3%	0.52231	0.43687	Below	Low Capacity
Bangor township	$242	Low Capacity	4.9%	0.31656	36.1%	0.00262	0.15959	Below	Low Capacity
Beaver township	$207	Low Capacity	3.5%	0.38631	30.0%	0.40905	0.39768	Below	Low Capacity
Buena Vista Charter township	$260	High Capacity	85.5%	-3.69954	64.7%	-1.90289	-2.80122	Above	High Capacity, Stressed
Kochville township	$596	High Capacity	70.6%	-2.95711	68.5%	-2.15608	-2.55659	Above	High Capacity, Stressed
Zilwaukee township	$701	High Capacity	70.6%	-2.95711	68.2%	-2.13609	-2.54660	Above	High Capacity, Stressed
Birch Run township	$300	High Capacity	5.6%	0.28168	25.8%	0.68888	0.48528	Below	High Capacity
Blumfield township	$390	High Capacity	4.0%	0.36140	27.9%	0.54896	0.45518	Below	High Capacity
Frankenlust township	$323	High Capacity	7.8%	0.17206	34.5%	0.10923	0.14064	Below	High Capacity
Frankenmuth city	$404	High Capacity	0.8%	0.52085	8.4%	1.84818	1.18451	Below	High Capacity
Frankenmuth township	$400	High Capacity	0.8%	0.52085	8.4%	1.84818	1.18451	Below	High Capacity
Hampton township	$425	High Capacity	4.2%	0.35143	28.1%	0.53564	0.44354	Below	High Capacity
Hope township	$253	High Capacity	0.5%	0.53580	35.1%	0.06925	0.30252	Below	High Capacity
Larkin township	$344	High Capacity	3.3%	0.39628	11.4%	1.64830	1.02229	Below	High Capacity
Merritt township	$297	High Capacity	6.0%	0.26175	30.4%	0.38240	0.32207	Below	High Capacity
Midland city	$587	High Capacity	5.0%	0.31157	18.9%	1.14860	0.73009	Below	High Capacity
Monitor township	$254	High Capacity	2.3%	0.44611	21.4%	0.98203	0.71407	Below	High Capacity
Saginaw township	$256	High Capacity	14.1%	-0.14186	15.6%	1.36847	0.61331	Below	High Capacity
Swan Creek township	$270	High Capacity	7.3%	0.19697	24.2%	0.79548	0.49622	Below	High Capacity
Thomas township	$350	High Capacity	4.7%	0.32652	16.4%	1.31517	0.82084	Below	High Capacity
Williams township	$298	High Capacity	4.2%	0.35143	28.3%	0.52231	0.43687	Below	High Capacity
Regional Value:	**$252**	**Averages:**	**11.3**		**36.1**				
		Standard Deviation:	**20.1**		**15.0**				

Data Sources: Michigan Department of Treasury, State Tax Commission (1998 taxable valuations and property tax rates); East Central Michigan Planning and Development Regional Commission (1998 population estimates); 1990 U.S. Census of Population and Housing Summary Tape File 3A (1990 population, households and group quarters figures); Metropolitan Area Research Corporation (1998 household estimates); Michigan Department of Education, Information Services Center (1998 race, free and reduced meals and enrollment figures).

Appendix B: Hypothetical Tax-base Sharing Run 1. Redistribution of 40% of Growth of Commercial/ Industrial Assessed Value 1986-1998 According to Total Assessed Value per Capita

	Municipality	Subregion	Net Distribution	Estimated Population, 1998	Per Capita Gain / Contribution
1	Coleman	Low capacity, high stress	$662,499	1,386	$478
2	**Saginaw C**	**Central city**	**$25,835,235**	**63,464**	**$407**
3	Carrollton	Low capacity, high stress	$2,250,220	6,283	$358
4	Lee	Low capacity, high stress	$1,388,071	4,129	$336
	Marion	Low capacity, low stress	$328,005	975	$336
6	Spaulding	Ligh capacity, high stress	$801,983	2,521	$318
7	Mills	Low capacity, low stress	$628,072	1,987	$316
8	Greendale	Low capacity, high stress	$497,723	1,748	$285
9	Mount Forest	Low capacity, high stress	$450,940	1,591	$283
10	Garfield	Low capacity, low stress	$541,917	1,921	$282
11	Taymouth	Low capacity, low stress	$1,328,360	4,729	$281
12	Chapin	Low capacity, high stress	$256,633	915	$280
13	Gibson	Low capacity, high stress	$315,752	1,168	$270
14	Mount Haley	Low capacity, low stress	$465,466	1,817	$256
15	Beaver	Low capacity, low stress	$734,023	2,942	$249
16	Portsmouth	Low capacity, high stress	$957,898	3,918	$244
17	St. Charles	Low capacity, low stress	$849,224	3,493	$243
18	Brant	Low capacity, low stress	$483,804	2,006	$241
19	Albee	Low capacity, high stress	$592,478	2,504	$237
20	Homer	Low capacity, low stress	$1,106,830	4,688	$236
21	Maple Grove	Low capacity, high stress	$676,806	2,904	$233
22	Essexville	Low capacity, low stress	$884,889	3,822	$232
23	Auburn	Low capacity, low stress	$436,936	1,900	$230
24	James	Low capacity, low stress	$465,131	2,061	$226
	Jonesfield	Low capacity, low stress	$391,562	1,733	$226
	Porter	Low capacity, low stress	$264,589	1,169	$226
	Richland	Low capacity, low stress	$979,558	4,337	$226
28	Fremont	Low capacity, low stress	$506,024	2,259	$224
29	Ingersoll	Low capacity, low stress	$659,885	2,956	$223
	Jerome	Low capacity, low stress	$1,041,551	4,679	$223
31	Bridgeport	Low capacity, high stress	$2,697,907	12,245	$220
32	Fraser	Low capacity, low stress	$812,709	3,721	$218
33	Jasper	Low capacity, high stress	$241,435	1,128	$214
34	Geneva	Low capacity, high stress	$226,771	1,077	$211
35	Midland T	Low capacity, low stress	$496,875	2,432	$204
36	Buena Vista Charter	High capacity, high stress	$1,921,958	10,294	$187
37	Bay City	Low capacity, high stress	$6,336,230	35,485	$179
38	Merritt	High capacity, low stress	$248,344	1,494	$166
39	Williams	High capacity, low stress	$714,227	4,538	$157
40	Larkin	High capacity, low stress	$762,771	4,926	$155
41	Lakefield	Low capacity, low stress	$142,284	1,017	$140
42	Blumfield	High capacity, low stress	$270,564	1,960	$138
43	Brady	Low capacity, high stress	$331,390	2,450	$135
44	Frankenlust	High capacity, low stress	$331,250	2,491	$133
45	Frankenmuth T	High capacity, low stress	$258,240	2,125	$122
46	Edenville	Low capacity, low stress	$317,652	2,697	$118
47	Kawkawlin	Low capacity, low stress	$577,173	5,011	$115
48	Hampton	High capacity, low stress	$983,666	9,535	$103
49	Pinconning T	Low capacity, high stress	$278,974	2,772	$101
50	Tittabawassee	Low capacity, low stress	$681,396	6,890	$99
51	Midland C	High capacity, low stress	$3,215,213	39,956	$80
52	Zilwaukee T	High capacity, high stress	$5,602	77	$73

	Municipality	Subregion	Net Distribution	Estimated Population, 1998	Per Capita Gain / Contribution
53	Chesaning	Low capacity, low stress	$174,559	4,868	$36
54	Hope	High capacity, low stress	($11,104)	1,272	($9)
55	Swan Creek	High capacity, low stress	($24,578)	2,416	($10)
56	Warren	Low capacity, high stress	($131,658)	1,863	($71)
57	Monitor	High capacity, low stress	($903,074)	9,940	($91)
58	Lincoln	Low capacity, low stress	($282,257)	2,239	($126)
59	Thomas	High capacity, low stress	($1,587,163)	11,752	($135)
60	Zilwaukee C	Low capacity, high stress	($286,507)	1,759	($163)
61	Pinconning C	Low capacity, high stress	($295,853)	1,357	($218)
62	Saginaw T	Low capacity, low stress	($16,058,293)	38,804	($414)
63	Bangor	Low capacity, low stress	($8,326,546)	16,135	($516)
64	Frankenmuth C	High capacity, low stress	($8,122,180)	4,586	($1,771)
65	Birch Run	High capacity, low stress	($15,295,950)	6,004	($2,548)
66	Kochville	High capacity, high stress	($17,484,090)	2,669	($6,551)

Percentage of regional population living in winning municipalities: 74.9%

Data Sources: Michigan Department of Treasury, State Tax Commission (1986 and 1998 assessed valuations); East Central Michigan Planning and Development Regional Commission (1998 population estimates).

Note: 1986 dollars were adjusted upwards by a factor of 1.4872 to convert to 1998 dollars. 1986 Consumer Price Index = 109.6; 1998 Consumer Price Index = 163.0 (Base: 1982-1984 Consumer Price Index = 100)

Methodology:

Each municipality is required to contribute 40% of its growth in commercial / industrial assessed value from 1986 to 1998 into a tax-base pool. (For the purposes of these taxbase sharing run calculations, the unincorporated areas within each county were treated as if they were municipalities; therefore, the terms "municipality" and "municipal" should be taken to refer to both the actual incorporated municipalities and the surrounding county unincorporated areas). Then, a "distribution index" is calculated to determine what percentage share each municipality will get back out of the pool. This distribution index is equal to the municipality's population multiplied by the ratio of the metropolitan region's total assessed value per capita to the municipality's total assessed value per capita. Each municipality's distribution index is then divided by the sum of all the distribution indexes to arrive at each municipality's percentage share of the tax-base pool. This percentage is then multiplied by the tax-base pool amount to determine the actual amount the municipality receives back. Finally, the amount the municipality contributes is subtracted from the amount the municipality receives to arrive at the net distribution to the municipality.

Step 1: 1986-1998 municipal commercial / industrial assessed value growth * 0.40 = Municipal Contribution
Step 2: municipal population * ((region's total assessed value / region's population) / (municipal total assessed value / municipal population)) = Distribution Index
Step 3: Distribution Index / sum of Distribution Indexes = Municipal Share of tax base to be distributed
Step 4: Municipal Share * sum of Municipal Contributions = Municipal Distribution
Step 5: Municipal Distribution - Municipal Contribution = Municipal Net Distribution

Appendix C: Hypothetical Tax-base Sharing Run 2. Redistribution of 15% of 1998 Total Assessed Value According to Percentage of Housing Built Before 1950 with $50 Million Caps on Bay City and Saginaw City

	Municipality	Subregion	Net Distribution	Estimated Population, 1998	Per Capita Gain / Contribution
1	Coleman	Low capacity, high stress	$8,150,578	1,386	$5,881
2	Spaulding	Ligh capacity, high stress	$12,117,627	2,521	$4,807
3	Essexville	Low capacity, low stress	$17,542,608	3,822	$4,590
4	Zilwaukee C	Low capacity, high stress	$7,411,328	1,759	$4,213
5	Carrollton	Low capacity, high stress	$26,323,452	6,283	$4,190
6	Pinconning C	Low capacity, high stress	$5,305,843	1,357	$3,910
7	Chesaning	Low capacity, low stress	$16,818,502	4,868	$3,455
8	Jonesfield	Low capacity, low stress	$5,817,092	1,733	$3,357
9	St. Charles	Low capacity, low stress	$11,400,248	3,493	$3,264
10	Blumfield	High capacity, low stress	$6,086,142	1,960	$3,105
11	Chapin	Low capacity, high stress	$2,668,617	915	$2,917
12	Brady	Low capacity, high stress	$6,924,469	2,450	$2,826
13	Gibson	Low capacity, high stress	$2,975,778	1,168	$2,548
14	Merritt	High capacity, low stress	$3,793,610	1,494	$2,539
15	James	Low capacity, low stress	$5,145,423	2,061	$2,497
16	Beaver	Low capacity, low stress	$7,130,656	2,942	$2,424
17	Albee	Low capacity, high stress	$5,995,389	2,504	$2,394
18	Marion	Low capacity, low stress	$2,240,260	975	$2,298
19	Geneva	Low capacity, high stress	$2,330,746	1,077	$2,164
20	Lakefield	Low capacity, low stress	$2,137,807	1,017	$2,102
21	Bridgeport	Low capacity, high stress	$24,939,986	12,245	$2,037
22	Homer	Low capacity, low stress	$7,992,907	4,688	$1,705
23	Maple Grove	Low capacity, high stress	$4,735,850	2,904	$1,631
24	Mount Haley	Low capacity, low stress	$2,595,031	1,817	$1,428
25	Bay City	Low capacity, high stress	$50,000,000	35,485	$1,409
	Greendale	Low capacity, high stress	$2,463,646	1,748	$1,409
27	Ingersoll	Low capacity, low stress	$4,059,416	2,956	$1,373
28	Richland	Low capacity, low stress	$5,919,505	4,337	$1,365
29	Garfield	Low capacity, low stress	$2,604,685	1,921	$1,356
30	Pinconning T	Low capacity, high stress	$3,682,980	2,772	$1,329
31	Tittabawassee	Low capacity, low stress	$8,788,451	6,890	$1,276
32	Frankenmuth T	High capacity, low stress	$2,543,449	2,125	$1,197
33	Midland T	Low capacity, low stress	$2,906,282	2,432	$1,195
34	Brant	Low capacity, low stress	$2,247,255	2,006	$1,120
35	Auburn	Low capacity, low stress	$2,044,728	1,900	$1,076
36	Mount Forest	Low capacity, high stress	$1,627,415	1,591	$1,023
37	Portsmouth	Low capacity, high stress	$3,972,247	3,918	$1,014
38	Taymouth	Low capacity, low stress	$4,080,498	4,729	$863
39	Fraser	Low capacity, low stress	$3,076,610	3,721	$827
40	**Saginaw C**	**Central city**	**$50,000,000**	**63,464**	**$788**
41	Porter	Low capacity, low stress	$779,769	1,169	$667
42	Warren	Low capacity, high stress	$1,147,492	1,863	$616
43	Buena Vista Charter	High capacity, high stress	$6,326,621	10,294	$615
44	Jasper	Low capacity, high stress	$669,077	1,128	$593
45	Fremont	Low capacity, low stress	$1,073,682	2,259	$475
46	Kawkawlin	Low capacity, low stress	$2,255,630	5,011	$450
47	Hope	High capacity, low stress	$548,789	1,272	$431
48	Jerome	Low capacity, low stress	$1,664,179	4,679	$356
49	Bangor	Low capacity, low stress	$4,689,294	16,135	$291
50	Lee	Low capacity, high stress	$577,506	4,129	$140
51	Mills	Low capacity, low stress	$226,545	1,987	$114
52	Williams	High capacity, low stress	($1,009,513)	4,538	($222)

	Municipality	Subregion	Net Distribution	Estimated Population, 1998	Per Capita Gain / Contribution
53	Lincoln	Low capacity, low stress	($500,137)	2,239	($223)
54	Swan Creek	High capacity, low stress	($807,684)	2,416	($334)
55	Monitor	High capacity, low stress	($3,465,032)	9,940	($349)
56	Birch Run	High capacity, low stress	($2,217,581)	6,004	($369)
57	Zilwaukee T	High capacity, high stress	($85,301)	77	($1,108)
58	Frankenlust	High capacity, low stress	($3,064,952)	2,491	($1,230)
59	Larkin	High capacity, low stress	($7,240,118)	4,926	($1,470)
60	Edenville	Low capacity, low stress	($4,555,359)	2,697	($1,689)
61	Thomas	High capacity, low stress	($21,376,857)	11,752	($1,819)
62	Saginaw T	Low capacity, low stress	($91,784,928)	38,804	($2,365)
63	Kochville	High capacity, high stress	($8,652,337)	2,669	($3,242)
64	Frankenmuth C	High capacity, low stress	($14,999,552)	4,586	($3,271)
65	Hampton	High capacity, low stress	($32,172,381)	9,535	($3,374)
66	Midland C	High capacity, low stress	($176,623,970)	39,956	($4,420)

Percentage of regional population living in winning municipalities: 64.5%

Data Sources: Michigan Department of Treasury, State Tax Commission (1998 assessed valuations); East Central Michigan Planning and Development Regional Commission (1998 population estimates); 1990 U.S. Census of Population and Housing Tape File 3A (1990 age of housing figures).

Methodology:

Each municipality is required to contribute 15% of its 1998 total assessed value into a tax-base pool. (For the purposes of these taxbase sharing run calculations, the unincorporated areas within each county were treated as if they were municipalities; therefore, the terms "municipality" and "municipal" should be taken to refer to both the actual incorporated municipalities and the surrounding county unincorporated areas). Then, a "distribution index" is calculated to determine what percentage share each municipality will get back out of the pool. This distribution index is equal to the municipality's population multiplied by the ratio of the municipality's percentage of housing built before 1950 to the metropolitan region's percentage of housing built before 1950. Each municipality's distribution index is then divided by the sum of all the distribution indexes to arrive at each municipality's percentage share of the tax-base pool. This percentage is then multiplied by the tax-base pool amount to determine the actual amount the municipality receives back. Finally, the amount the municipality contributes is subtracted
from the amount the municipality receives to arrive at the net distribution to the municipality.

At this point, the net distributions of municipalities with significant populations are examined to determine if any caps need to be imposed. If the net distributions of these municipalities are all less than $100 million,
no further adjustments are made. If there are municipalities with significant populations whose net distributions are greater than $100 million, the model is run again. This time, those municipalities are excluded from all of the calculations; instead, they are given net distributions of $100 million out of the tax-base pool. (This is done in order to make available a larger percentage of the tax-base pool to be distributed to the other area communities.) Steps 2-5 are then run again, excluding municipalities with significant populations whose net distributions were greater than $100 million from the calculations. For this run, Bay City and Saginaw City were capped.

Step 1: 1998 municipal total assessed value growth * 0.15 = Municipal Contribution
Step 2: municipal population * ((region's total assessed value / region's population) / (municipal total assessed value / municipal population)) = Distribution Index
Step 3: Distribution Index / sum of Distribution Indexes = Municipal Share of tax base to be distributed
Step 4: Municipal Share * sum of Municipal Contributions = Municipal Distribution
Step 5: Municipal Distribution - Municipal Contribution = Municipal Net Distribution
Step 6: If Bay City's and Saginaw City's Municipal Net Distributions < $50 million, model run ends
or
Step 7: If Bay City's and Saginaw City's Municipal Net Distributions > $50 million, rerun Step 1 without Bay City and Saginaw City

Municipality	Subregion	Net Distribution	Estimated Population, 1998	Per Capita Gain / Contribution
Step 8: Subtract $50 million each from Municipal Contribution for Bay and Saginaw Cities' net distributions				
Step 9: Rerun Steps 2-5, excluding Bay City and Saginaw City				