

Denver Metropolitcs:
A Regional Agenda for Community and Stability

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A Report to the Metro Mayors Caucus (MMC)
and the Denver Regional Council of Governments (DRCOG)

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FOREWORD

This report was a project of the Metropolitan Area Research Corporation (MARC). It was made possible with the support of the Metro Mayors Caucus (MMC), the Denver Regional Council of Governments (DRCOG), and the City and County of Denver.

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Since 1995, with the support of over fifteen of the nation's leading philanthropies—including the Ford, Rockefeller, and MacArthur foundations—and the U.S. Department of Housing and Urban Development, and in partnership with dozens of universities and research centers, the Metropolitan Area Research Corporation (MARC) has conducted studies of socioeconomic separation and sprawl in twenty-two regions of the United States.¹ MARC has developed a process to analyze these regional trends that combines quantitative socioeconomic data with qualitative information gathered at the local level. MARC's studies demonstrate that 1) social separation and sprawl are occurring in both small and large regions across the country; 2) in any region, communities classified as "suburbs" represent a diverse group of communities whose current conditions and future prospects differ greatly; and 3) coalitions can be forged in any region between elected officials and social organizations from the central city *and* suburban communities—a partnership previously thought to be unlikely—to support and implement regional reforms in the best interests of all the citizens of the region.

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. The cities and counties are political units with land-use planning powers and are the true units of regional competition or cooperation. 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. The 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 are presented at the municipality and county level. This is done in recognition of the common problem that 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. While they may have a good sense of what is happening within their own jurisdiction, they 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, elected officials are often not aware of the number of other communities that are facing similar challenges. A major purpose of this report is to help provide this information and allow local elected officials to recognize the benefits of a regional approach to planning and policy-making.

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I. THE PATTERN OF METROPOLITAN DEVELOPMENT: SOCIOECONOMIC SEPARATION AND SPRAWL

The populations of metropolitan areas across the United States are becoming increasingly separated from each other—both socially and economically. Growth patterns, which have caused metropolitan regions to expand significantly in size since the 1970's, are continually expanding development at the edges of the region—urbanizing rural landscapes, increasing pressure on limited natural resources and draining taxpayer money to build infrastructure and community services. In many of the fastest growing regions, highways are becoming increasingly congested as greater numbers of people choose to commute longer distances to their places of work.

The effects of regional socioeconomic separation and sprawling development exact costs both at the local and regional level. Among these costs are the deterioration and isolation of much of the region's core communities, increased fiscal stress for the central city, inner suburbs *and* many edge communities, inefficient use of infrastructure and land, loss of agricultural land and fragile ecological systems, increased congestion and air pollution from increases in vehicle miles traveled and the wasting of valuable human and public resources. What is becoming increasingly apparent from the research that MARC has done throughout the country however, is that these problems of poverty, fiscal stress, sprawling development and environmental degradation are not independent of each other. Rather, they are intimately connected with residential settlement patterns, school demographics, local land-use policies, fiscal zoning, competition for public amenities, private investment patterns and the construction of public infrastructure.

The patterns of socioeconomic separation and sprawling development have their origin in the concentration of social and economic need in a region's central city. As these needs intensify, residential settlement patterns in the central city begin to change. Middle-class households with choices, seeing increasing poverty in many central-city schools, weakening retail markets and stagnant or declining property values begin to avoid these areas. Soon after, many who already live in these neighborhoods move out. Schools and neighborhoods lose their stability and become caught up in a cycle of decreasing property values and increasing poverty. Ultimately, this concentrated poverty multiplies the severity of problems faced by both communities and poor individuals.² As neighborhoods become dominated by joblessness, racial segregation, and single-parentage, they become isolated from middle-class society and the private economy.³ Individuals, particularly children, are deprived of local successful role models and connections to opportunity outside the neighborhood.⁴ Generally, approximately 20 to 40 percent of a region's population live in the central city.

The mythic dichotomy of urban decline and suburban prosperity holds that the social and economic decline of central cities described above stops neatly at central city borders. Nothing could be further from the truth. As poverty and social instability cross into communities just outside of the central city, poverty in local schools increases rapidly and disinvestment by the middle class and local business tends to accelerate and intensify. Lacking the strong central business district, high-end housing market, parks, culture and amenities that a central city has—and without a large police department and social service agencies to respond to growing social stress—these communities and their schools become poor faster and the local retail tends to

evaporate more rapidly. In many regions, older satellite cities have much the same experience as these older inner suburbs: they face increasing social needs with few local resources and amenities with which to address their needs. Those who live in declining inner suburbs and satellite cities usually represent approximately 20-30 percent of most metropolitan regions.

Next, in a related pattern, middle-class communities begin to experience increases in socioeconomic stresses such as poverty and stagnant property values—placing them at risk to become the troubled communities of the future. These places include some inner suburbs as well as many fast-growing, low property value second- and third-tier cities. In most regions, these communities are home to another 20 to 40 percent of the regional population.

Meanwhile, 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 find themselves trading one set of problems for another. When they move out of neighborhoods and schools of increasing social stress, they often move into communities with enormous financial stress. This financial stress can be caused by a number of factors—often starting with a lack of resources to develop long-term land-use plans and resulting in the low-density housing developments and large school-age populations that dominate these areas. By building at such low densities, many more miles of roads and sewer lines are required. With such large populations of students, the need for new schools grows. Because this infrastructure must be both built *and* maintained, the increased tax burden on property owners becomes a long-term problem. In an effort to reduce these tax burdens, local officials must compete with similarly-situated suburbs to attract limited commercial developments (which usually generate much more tax revenue than residential properties), often by offering tax breaks or public subsidies that reduce the impact on property taxes. Further, these commercial developments often create unintended side-effects that can be costly to remediate, such as increased traffic congestion, noise or crime.

At the very edges of the metropolitan area, cities too far out to attract much high-end residential or commercial/industrial development cannot afford the expensive sewer extensions that their growing commuter population would normally require. Because these communities often allow septic-tank development to occur on land poorly suited for sewer effluent, groundwater, rivers and lakes can become polluted. If wells are a local source of water, public health can be 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 insufficient to handle the increased 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 in the first place.

Finally, upper-income suburbs 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 property

and sales 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 15 to 30 percent of the regional population live in places such as these.

As these affluent communities achieve the enviable position of having the region's largest base of tax resources and the least need for social services, they become the most desirable places in the region to live. 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 affluent 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 community looking to increase their tax base. Thus, such well-intentioned actions to halt growth can actually make the problems associated with sprawl worse rather than better.

POST-WAR DEVELOPMENT PATTERNS OF AMERICAN METROPOLITAN AREAS

Students of American metropolitan housing markets, from Homer Hoyt through John S. Adams, have shown that American metropolitan areas often developed in distinct socioeconomic sectors, or wedges, that reach out from central city neighborhoods deep into suburbia.⁵ When these cities first developed, they were relatively small and densely populated—due largely to the difficulty in transporting people and goods over long distances. Initially, according to this literature, the working class of this time settled within walking distance of industrial sites. The middle class formed neighborhoods "upwind (or at least not downwind)"⁶ from these heavy transport and manufacturing areas on sites close to white-collar, downtown jobs. Finally, the upper class settled in neighborhoods removed from the other two groups, often on land with attractive topographical features.

With changes in transportation technology (from walking to streetcars to the modern automobile), the ability to live further from the crowded central cities and commute to jobs in the region's core became possible. Already separated geographically along class lines, the original neighborhoods began to extend outward along streetcar lines and other transportation corridors into the growing areas of the metropolitan area. 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.

When a household moves to a new unit away from the core of the city, it creates a vacancy at its old address which is filled by another household, which leaves a vacancy at its old address and so on. The building of new housing at the edge of a city or region sets in motion vacancy chains reaching far back into the central core. Thus, the rapid growth of new housing at the edges of a region creates low demand at the center of the region. As demand declines, so does price, increasing housing opportunities for poor families and resulting in predominantly low-income, rather than mixed-income, neighborhoods.

In such a way, middle-class neighborhoods at the core of a region are the first to become impoverished and ultimately ghettoized. As these neighborhoods become poorer, social and economic decline accelerates and pushes the middle class out at the same time as edge development is pulling them away. Working- and upper-class neighborhoods, because of less growth and turnover, tend to remain stable longer than middle-class sectors. However, when they decline, they do so rapidly. Ironically, as the various classes move up and/or flee from central city areas, all the social and economic changes that occur in the core of their sectoral housing markets eventually follow them through the vacancy chains into the suburbs.

Further, racial discrimination in the housing market serves to separate families within a region, both in the form of the personal choices of many white families to leave neighborhoods when people of color move in, and in its more institutional forms—redlining by banks and insurance companies, steering by real estate agents, exclusionary zoning and related practices in many suburban communities. Both institutional and personal racial discrimination in the housing market have severely limited the ability of middle-class people of color, particularly blacks and Hispanics, to move into the suburbs where the most economic and educational opportunities are located.

II. A REGIONAL AGENDA

Only through a strong, multifaceted, regional response can social and economic separation and wasteful development patterns be countered. A growing core of scholars; national, state, and local government officials; and advocates 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.

REGIONAL REFORM IN THE UNITED STATES

In the 1970s, moderate 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.⁷ 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 Brookings Institution, Vice-President Al Gore announced a federal agenda "to help encourage smarter growth and more livable communities all across America".⁸ Later that year, 240 state and local measures related to conservation, parklands and smarter growth were put on ballots across the country. The great majority—72 percent—of these were passed, resulting in more than \$7.5 billion in additional state and local conservation spending.⁹ The most far-reaching of

these was in New Jersey, where \$98 million a year will be set aside to help protect one million acres of the state's developable land.

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.¹⁰ 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.¹¹ On another front, David Rusk, former mayor of Albuquerque, New Mexico, has simply and effectively connected the issues of metropolitanism and social equity.¹² 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.¹³

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.¹⁴ 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 that metropolitan areas with the smallest gap between city and suburban incomes had the greatest regional job growth.¹⁵

These and other scholars argue that cities and suburbs within a metropolitan area are interdependent; and that when social and economic separation 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.¹⁶ Representing over 50 percent of the American population, 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 communities and low tax base developing places, 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.

EFFORTS AT A REGIONAL APPROACH TO PLANNING & POLICY-MAKING IN THE DENVER REGION

In the Denver region, there has been a growing recognition of the benefits of a regional approach to addressing metropolitan problems.¹⁷ One example of this was the creation of the Metro Denver Network—an organization of business interests and local government that formed after the region's oil industry collapsed in the 1980's. Because the local economy was in shambles, these groups recognized the need to diversify the regional economy and promote economic development in the region (particularly in the City and County of Denver) with a unified effort. The most visible result of this regional cooperation was the annexation of land in Adams County by the City and County of Denver and the construction of Denver International Airport (DIA). Other economic development in Denver during this period included the creation of regional taxing bodies, including the Scientific and Cultural Facilities District and the Metropolitan Stadium District. All of these efforts were the result of a recognition that focusing economic development in the central city was better for the region than having suburban cities compete for public amenities and diffuse the economic benefit of such development.

More recent efforts at regional cooperation have been initiated primarily because of increasing public concern over sprawling development and forecasts of significant population growth in coming years. Growth management, air and water quality, transportation and land use have been major concerns of a number of regional organizations, including the Metro Mayors Caucus, the Denver Regional Council of Governments (DRCOG), the Regional Air Quality Council, and the Colorado Public Interest Research Group (CoPIRG). These concerns were also major issues in the re-election of Governor Roy Romer in 1994—signifying increasing public interest in growth-related issues. Debates over growth-related issues have also become a regular occurrence in the Colorado legislature—the “Developer’s Bill of Rights” (HB 1280) and the Colorado Responsible Growth Act (CRGA) being two examples.

Throughout the 1990's, DRCOG had been working on an update of its long-term transportation and land-use plans that address many growth-related issues. By 1997, it had adopted its Metro Vision 2020 plan—which recognizes “the shared costs and benefits of growth and the difficulties local governments face in addressing issues which transcend their municipal boundaries.” Among its objectives are an intent to control the extent of urban development, protect open space, provide an efficient, multimodal transportation system and create urban centers of vibrant retail, employment and housing activities. DRCOG however, lacks the regulatory power to provide much more than recommendations on regional growth issues. And without the sense of urgency brought on by the economic recession of the 1980's, voluntary compliance with Metro Vision 2020 has been slow in coming. A report released by DRCOG a year and a half after the adoption of the Metro Vision 2020 plan showed that only two out of the six counties in the region had intergovernmental agreements concerning growth in place and less

than half of 20 cities had addressed urban growth boundaries.¹⁸ At least part of this reluctance is due to the local tax structure, which promotes competition among municipalities for high-end retail commercial and residential developments. As one Denver-area mayor put it, “if we can’t address the revenue issue then we can’t implement [Metro Vision 2020], because the current revenue structure is counter to it.”¹⁹

III. DENVER METROPOLITICS

“Denver Metropolitcs” reports on regional social, economic, and growth trends in the Denver area and outlines policy strategies for regional reform.²⁰ Its purpose is threefold: 1) to identify and document social and economic separation and sprawl in the Denver region; 2) to identify jurisdictions in Denver region with similar problems and; 3) to introduce policy strategies for addressing the problem of regional socioeconomic separation and wasteful development patterns. It is MARC’s hope that this study will help to further the processes of metropolitan reform in the Denver region.

This report begins with a presentation of evidence of regional socioeconomic separation and sprawling land use in the Denver metropolitan area. Much of this evidence follows similar patterns that MARC has seen in its studies of other U.S. metropolitan areas. A unique, subregional analysis developed by MARC is described and used to help illustrate similarities between jurisdictions within the Denver region and facilitate the creation of effective political and social unions. The report concludes with a brief discussion of policy strategies for regional reform aimed at reducing socioeconomic separation and wasteful land-use patterns. Examples from other areas of the country are used to show how Denver might be able to implement some of these reforms. Tax-base sharing, one of these recommended reforms, is discussed in greater detail in Appendix A.

ABOUT THE DATA AND MAPS IN THIS REPORT

The maps used in this report to illustrate patterns of socio-economic separation and regional sprawl 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 data are color-coded on the maps using shades of red and blue. In most cases, the value for the entire region is at the break between these red and blue categories. Thus, on each map, orange and red jurisdictions are below average for the region in that particular measure and blue jurisdictions are above average. Break points among the blue categories and among the orange and red categories 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. Thus, jurisdictions that are shaded light orange are more similar in that particular measure to each other than they are to jurisdictions that are shaded dark orange.

REGIONAL SEPARATION, SPRAWL AND THE DENVER REGION

Metropolitan areas throughout the United States are constantly challenged with a wide array of issues. Some of these have been around for many years—such as crime, poverty and racial segregation.²¹ Others have only recently been brought to the nation’s attention, such as the increasingly detrimental environmental and fiscal effects of sprawling growth at the edges of our metropolitan areas. In its studies of regions across the United States, MARC has found numerous similarities in the interaction of these problems with each other and their effect on the social and economic development of metropolitan regions.

For many metropolitan regions, the 1990’s have been a period of strong and sustained economic growth. Denver has certainly been among these and there are many signs that the region as a whole is doing very well economically. The population of the region continues to increase steadily. The construction of Denver International Airport (DIA) has spurred a great deal of economic development, including the “Gateway Area” at the intersection of I-70 and Pena Boulevard. Significant investments have been made in downtown Denver, including the Denver Pavillions open air mall, Coors Field and the Lower Downtown area of Denver (LoDo) in general. Other areas of the region have also enjoyed significant economic development—including the development of Park Meadows Mall in unincorporated Douglas County, the ambitious redevelopment of the vacant Cinderella City mall into a mixed-use, transit oriented area, the Inverness office park on SE I-25, and the Interlocken office park in Broomfield which is part of a growing concentration of high-tech employment on the Highway 36 corridor.

In addition to these developments that have already occurred, there are several major opportunities in the Denver region for continued economic development. The redevelopment of the old Stapleton airport and Lowry AFB present exciting opportunities for further economic growth. Construction of light-rail lines continues to be a topic of interest in the region.

Even as the economic boom of the 1990’s continues however, it is important to look more broadly at the social and environmental aspects of this growth—and more specifically at where the benefits and costs of growth are being experienced. For instance, how have social needs changed and where are these needs strongest? How do school demographics affect residential settlement patterns? Is the economic growth in metropolitan regions benefiting all jurisdictions or leaving some of them behind? As the population of the Denver region expands into fast developing suburbs, how are older suburbs and the central city affected? Is the tax base of fast-developing jurisdictions able to keep pace with the increased demand on their schools, roads and other infrastructure? How does the improvement of local highways affect patterns of development and contribute to urban sprawl? These are some of the questions that this report attempts to address and bring to the forefront of public policy discussions in the Denver region.

I. DENVER METROPOLITAN SUBREGIONS

Figure 1: Denver Subregions

MARC has developed three criteria that help to identify jurisdictions in the Denver region with similar problems. The three components of this subregion analysis are:²² 1) the fiscal capacity of a jurisdiction; 2) the level of social stress that a community faces, and; 3) the stage of

development that a jurisdiction has reached. From an analysis of these three criteria, all of the municipalities and unincorporated county areas of the Denver region (except Denver) have been divided into eight subregions (Figure 1).²³ These subregions and the communities that make up each are:²⁴

Low Tax Capacity			
<u><i>Developed</i></u> <i>< 1%*</i>	<u><i>Developed, Stressed</i></u> <i>2%*</i>	<u><i>Developing</i></u> <i>19%*</i>	<u><i>Developing, Stressed</i></u> <i>24 %*</i>
<ul style="list-style-type: none"> • Edgewater • Jamestown • Lakewood • Lyons • Mountain View • Nederland • Ward 	<ul style="list-style-type: none"> • Deer Trail • Federal Heights • Northglenn • Sheridan • Westminster 	<ul style="list-style-type: none"> • Arvada • Bennett • Broomfield • Larkspur • Morrison • Superior • Unincorporated Arapahoe County 	<ul style="list-style-type: none"> • Aurora • Brighton • Erie • Lafayette • Longmont • Thornton
High Tax Capacity			
<u><i>Developed</i></u> <i>4%*</i>	<u><i>Developed, Stressed</i></u> <i>6%*</i>	<u><i>Developing</i></u> <i>18 %*</i>	<u><i>Developing, Stressed</i></u> <i>4%*</i>
<ul style="list-style-type: none"> • Bow Mar • Cherry Hills Village • Columbine Valley • Foxfield • Golden • Greenwood Village • Littleton • Lone Tree • Wheat Ridge 	<ul style="list-style-type: none"> • Boulder • Englewood • Glendale 	<ul style="list-style-type: none"> • Castle Rock • Lakeside • Louisville • Parker • Unincorporated Douglas, Jefferson and Boulder counties 	<ul style="list-style-type: none"> • Commerce City • Unincorporated Adams County

*Percent of 1998 Regional Population (US Census Bureau estimates). Denver contains 23 percent of the regional population, and is not included in the subregions above)

THE FISCAL CAPACITY COMPONENT

The fiscal capacity component of the subregion analysis is determined by examining the capacity of a community to generate revenues necessary for local services. Here, sales and property tax capacity are used as measures of local fiscal capacity because together they are the primary source of local revenue for cities and counties in the Denver region.²⁵ Thus, changes in these tax capacities can have a significant effect on the ability of local government to raise the revenue necessary for local services. Further, unlike most of the other major sources of city and county revenue—such as state and federal aid—tax revenue sources (and competition among jurisdictions for them), are often intimately tied to city and county land-use decisions.

In many regions across the country, low-capacity communities do not have adequate resources with which to address growing social needs and infrastructural needs. If they are developing, they will often engage in bidding wars that they cannot afford in order to attract land uses that require the least city services and generate the most sales or property tax revenue. Conversely, high-capacity communities often have adequate resources to address their social and infrastructural needs, unless they are particularly stressed. For those communities lucky enough

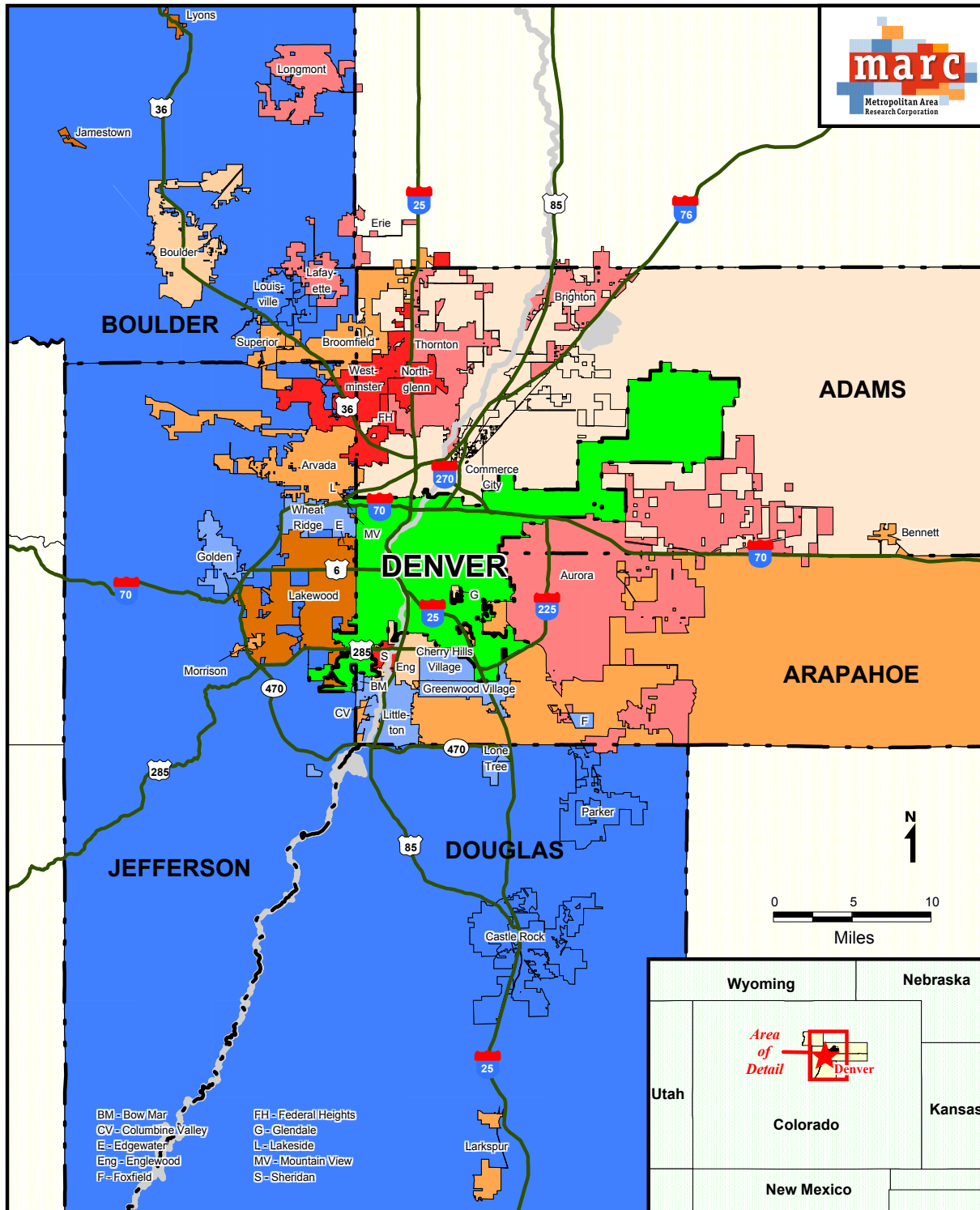


Figure 1: Denver Subregions

Subregions	
■ Low Capacity, Developed, Stressed	(5)
■ Low Capacity, Developing, Stressed	(6)
■ Low Capacity, Developed	(7)
■ Low Capacity, Developing	(7)
■ High Capacity, Developed, Stressed	(3)
■ High Capacity, Developing, Stressed	(2)
■ High Capacity, Developed	(9)
■ High Capacity, Developing	(7)
■ Central City	(1)

Data Sources: State of Colorado Department of Local Affairs, Division of Property Taxation, *27th Annual Report*, 1997 (1997 property taxbase and property tax revenue data); State of Colorado Department of Revenue, Office of Tax Analysis (1998 retail sales and local sales tax revenue data); tax departments of the region's home rule cities (1998 sales tax revenue data); Denver Regional Council of Governments (1997 and 1998 household estimates, 1998 developed and incorporated area figures); and State of Colorado Department of Education (1997 elementary school free and reduced meal eligibility and enrollment data).

Note: Municipalities and county unincorporated areas were considered "developed" if more than 80% of their total square mileage was composed of the following: commercial, office, or industrial land use; residential land use with more than one dwelling unit per acre; or, in rural areas, residential land use with no more than 11 acres per dwelling unit.

Note: The municipalities of Ward (Low capacity, developed), Nederland (Low capacity, developed), and Deer Trail (Low capacity, developed, stressed) were included in the subregions calculations but are not shown on the map.

to have a high tax capacity and few social stresses, tax revenues can go much further and the city is able to provide their residents and businesses with an adequate level of service.

THE SOCIAL STRESS COMPONENT

We use percentage of students eligible for free and reduced-cost lunch as a measure of social stress because schools are the first victim and the most powerful perpetrator of metropolitan separation. Local schools become socio-economically distressed before neighborhoods themselves become poor. Hence, increasing poverty among a community's schoolchildren is a prophecy for the community. This will be discussed in greater detail in the Schools section of this report.

In schools where the student body is becoming poorer, a downward spiral of decline is set in place. When middle-class families with choices as to where they live in the region see an increase in school poverty, they begin to feel that the quality of education is declining for their children and begin to move to communities with fewer poor children. As the middle-class opt out of communities because of their schools, housing values decline—creating greater housing opportunities for poor families. The process then becomes self-reinforcing—the school becomes more impoverished as stable middle-class families take their children out in greater and greater numbers. Thus, stressed communities are places that have above average rates of children eligible for free lunches in their schools.

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 cities overrun by urban sprawl, it actually began to accelerate and intensify. Many older transitioning suburbs on the south and west sides of Chicago and in communities such as Camden, New Jersey and Compton, California suffer much more severe segregation, deprivation, and intense levels of crime than the cities they adjoin.²⁶ The stressed communities of the Denver region (particularly those that have low fiscal capacity and are fully developed) are most at risk of this type of transition.

THE STAGE OF DEVELOPMENT COMPONENT

Whether a city is fully-developed or has room for growth (and therefore room for additional property and sales tax base) will greatly influence its perception of its future and its receptivity to a regional cooperation on land use, fiscal, and governance policies. If a city is fully developed, unless it can afford the costs associated with redevelopment, it has far fewer development options than greenfield developing communities. Fully-developed cities, particularly if they are stressed and of low fiscal capacity, can have great difficulty competing in a metropolitan environment with more advantaged communities. These types of communities, also are more likely to support growth controls since they have little land to be developed. If these communities can be identified, they are far easier to convince of the need for regional cooperation and can form a nucleus for further coalition building. On the other hand, developing cities, even if stressed, often feel that they can grow their way out of problems by creating a more

aggressive fiscal zoning policy and by competing harder for commercial development. These places are less likely to recognize the benefits of regional cooperation and support metropolitan reform policies.

II. EVIDENCE OF SOCIOECONOMIC SEPARATION

This section highlights some of the most important indicators of socioeconomic separation and describes how they are changing the Denver region and shows where they are most pronounced. In metropolitan regions across the country, this socioeconomic separation leads to the poorest and least advantaged residents of a given region being left behind in areas ill-equipped to deal with such problems. By contrast, residents of the region who are the most economically stable and upwardly mobile select jurisdictions where they can enjoy the benefits of living in a metropolitan area without sharing in the social problems of the region. It is commonly believed that all suburbs share these characteristics and have few problems with poverty and social decline. Efforts to address inner-city poverty tend to view the battle as the central-city vs. “The Suburbs.” In studying Denver and other metropolitan areas in the country however, MARC has found that the relationship is not so simple.

While many suburbs indeed have few social problems, there are a growing number of inner suburbs that are experiencing disinvestment and growing social stress. In addition, there are a number of suburbs and satellite cities that face a different sort of problem—they are growing too fast and are unable to provide cost-effective, orderly infrastructure development. Finally, there are some suburbs who do indeed represent the best of what the region has to offer, with few social or fiscal problems. Contrary to the limited view of “The Suburbs” however, there are relatively few of these types of communities in most regions. The data and maps that follow in this report help to break down the view of all suburbs as one unit and provide evidence that regional reform can be supported by a majority of jurisdictions in the Denver metropolitan area.

CONCENTRATED POVERTY

There are two aspects of poverty that are particularly important to the development of a metropolitan region: 1) the percentage of a region’s people living under the poverty line located within certain subregions (the regional concentration of poverty) and; 2) the number and location of census tracts with at least 20 percent of their people living under the poverty line (the spread of concentrated poverty). When a subregion contains a growing percentage of the region’s poor, region-wide poverty can be said to be concentrating in that subregion. Similarly, when the number of tracts with a poverty rate of at least 20 percent increases, the concentration of poverty can be said to be spreading.

As poverty concentrates in central cities and social disorganization in these places increase²⁷—neighborhoods surrounding these high poverty areas begin to feel the effects. Eventually, even inner suburbs can see increasing social distress and poverty.²⁸ Schools begin to experience challenges related to poverty that they are ill-equipped to handle without more resources. As these and other signs of decline become more visible, working and middle-class

families begin to move to neighborhoods or suburbs even further out—causing declines in the value of the property and homes they leave behind. Businesses in these communities—facing declining property values, a loss of customers, increasing taxes and other competitive disadvantages—find it increasingly difficult to make a profit and either relocate or go out of business. In the poorest metropolitan neighborhoods, basic private services, even grocery stores, disappear.²⁹ Incidences of crime not previously seen in these surrounding neighborhoods become more frequent.

All of these changes lower the tax base of affected cities, increasing the strain on their limited resources. Facing rising social needs in their neighborhoods and schools, but lacking the commercial and high-value residential tax base of the central city, these inner suburban cities and school districts are forced to do more with limited tax capacity.³⁰ As the ability of these cities to effectively address this social distress declines, the flight of the middle class and the private economy accelerates. Larger industrial and service businesses are disadvantaged by deteriorating public infrastructure, crime, loss of property market value, lack of room for expansion or parking, lack of rapid access to radial highways, and the cost of remediation of polluted land.³¹

Meanwhile, the zoning policies of many jurisdictions throughout the metropolitan region help to ensure that the region's poorest residents remain in poor neighborhoods of the central city and declining inner suburbs. By requiring low maximum building densities, the zoning codes of many 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, and intensify the socioeconomic segregation of the entire metropolitan area.

CONCENTRATED POVERTY IN THE DENVER METROPOLITAN AREA

Figures 2 and 3: Percentage Persons in Poverty by Census Tract, 1980 and 1990

From 1980-1990, the number of people in poverty in the entire Denver metropolitan area increased by over 34 percent—from 8.4 to 9.9 percent of the regional population. The city and county of Denver continued to have the greatest share of the regions poor population in 1990, with 43.8 percent.

In addition to having the greatest share of the region's poverty, the city and county of Denver also had more census tracts with poverty rates greater than 20 percent than were in the rest of the region combined. In 1980, there were 39 of these tracts. Twenty-four of these tracts were located in the city and county of Denver, including all seven tracts in the region with poverty rates greater than 40 percent. By 1990, tracts of concentrated poverty had increased to 66—41 of which were located in the city and county of Denver. Nine of these tracts had a poverty rate of more than 40 percent. Thus, while the city and county of Denver saw its overall share of regional poverty decline, it continues to have the most concentrated poverty in the metropolitan area. These tracts of concentrated poverty are mostly located in northern and western areas of the city.

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

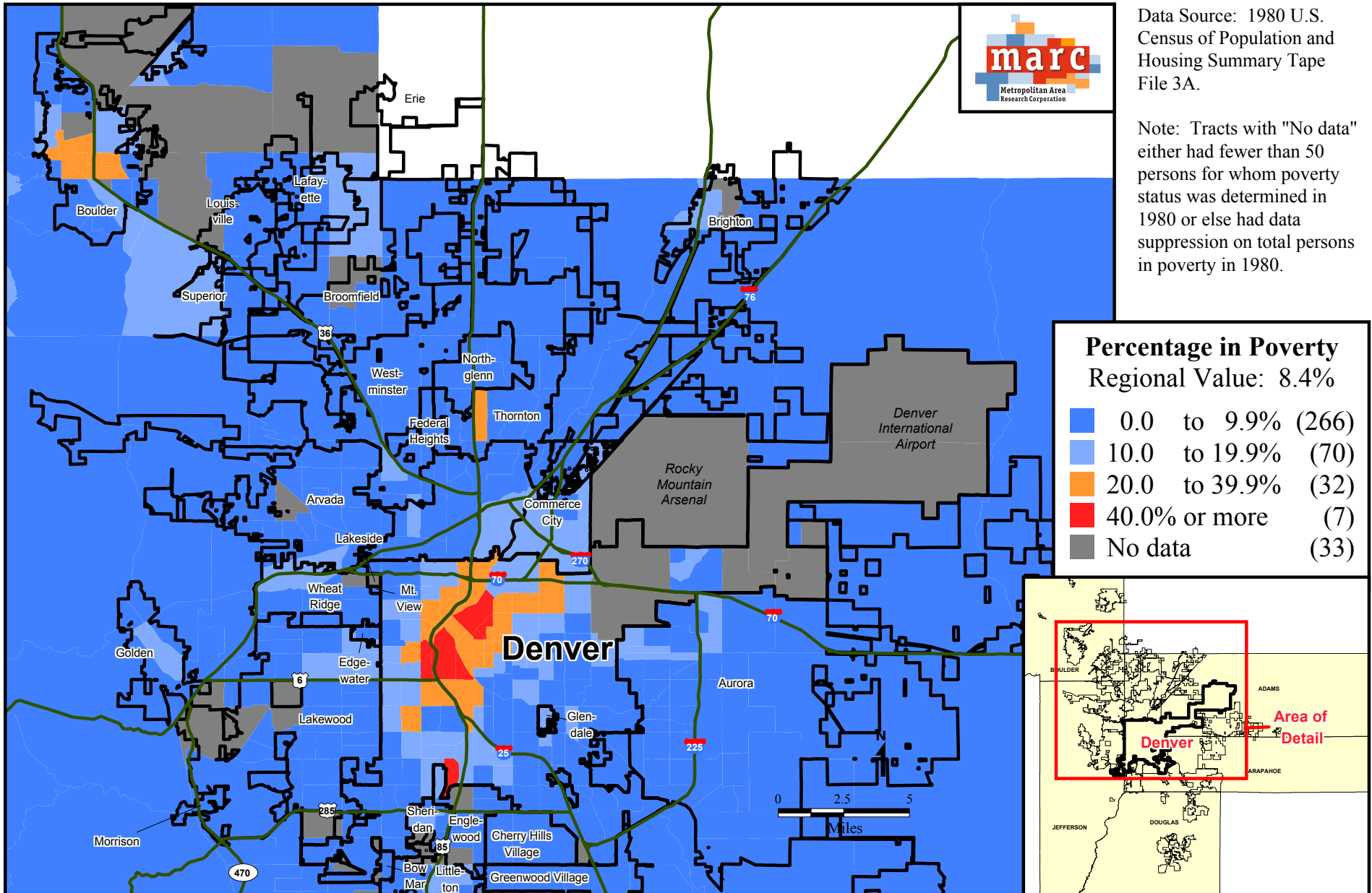
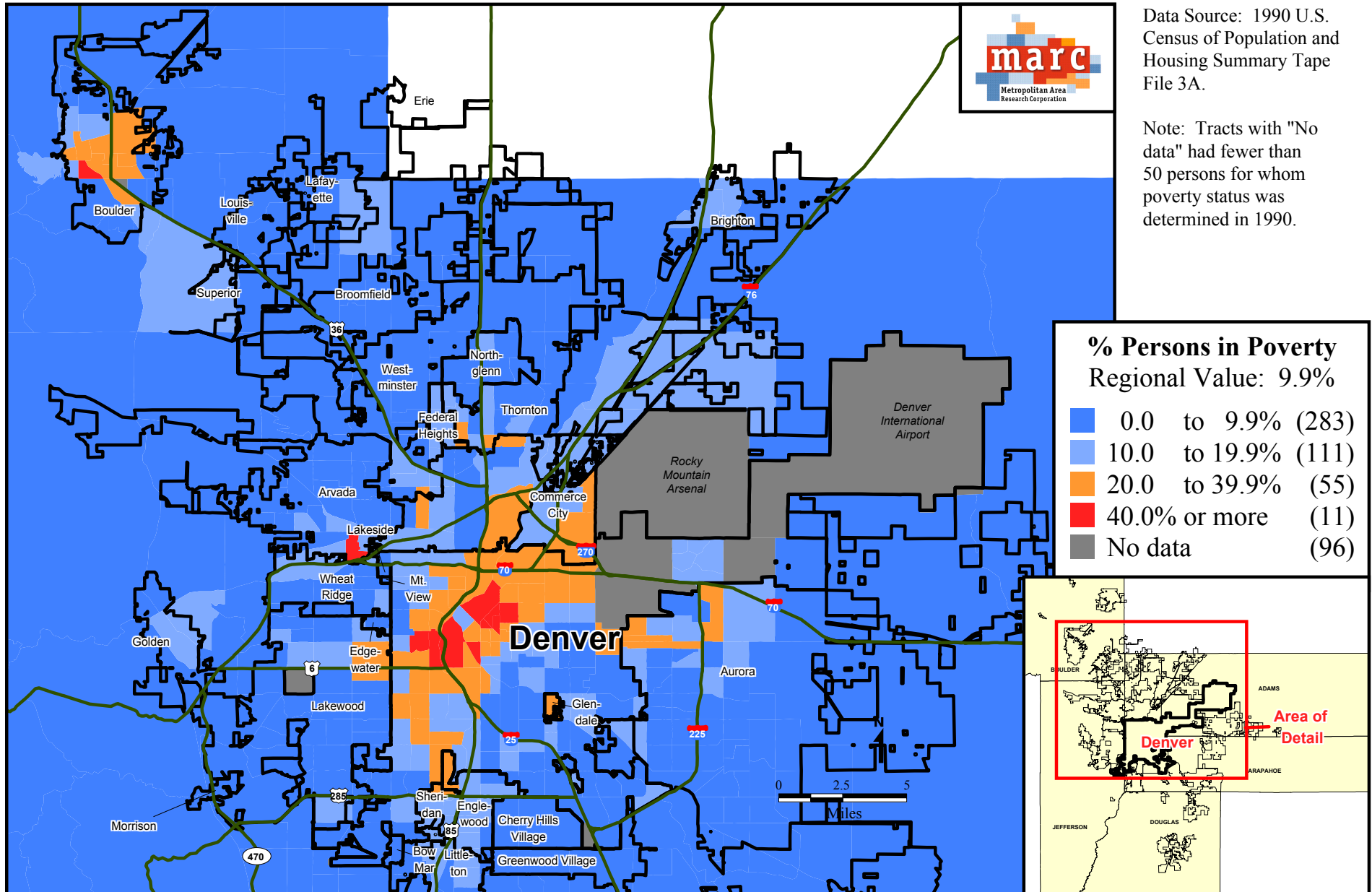


Figure 3: Percentage Persons in Poverty by Census Tract, 1990



Outside of the City and County of Denver, a number of inner suburban communities contain census tracts with at least a 20 percent poverty rate. Among these inner suburban communities, the number of such tracts increased from only one in 1980 to sixteen in 1990.³² One of these tracts, in Arvada, had a poverty rate greater than 40 percent. Inner suburban jurisdictions containing census tracts of concentrated poverty include Thornton, Federal Heights, Aurora, Commerce City, Lakewood, Sheridan, Glendale and Englewood.

From a regional perspective then, the inner suburbs gained nearly as many transitional poverty tracts during the 1980's as the city and county of Denver did, suggesting that social stress and poverty is spreading into older, inner suburbs. Thus, while the inner suburbs still have relatively little concentrated poverty, social stresses and poverty in certain neighborhoods are increasing.

FEMALE-HEADED HOUSEHOLDS

The percentage of female-headed households in a city is an effective measure of socioeconomic separation for several reasons. The first is that poverty rates among single-parent female-headed households are much higher than the national poverty rate for all persons.³³ Also, even when technically not considered to be in poverty, female-headed households have much lower median incomes than other families (\$19,691 in 1995 as compared to \$30,358 for male-householders and \$47,062 for married-couple families)³⁴. In addition to the relationship between female-headed households and income, these families also tend to face additional challenges in the responsibility of raising children—a daunting enough challenge for two parents who are economically stable. For these and other reasons, the percentage of female-headed households contributes to a thorough understanding of socioeconomic separation within a metropolitan region.

FEMALE-HEADED HOUSEHOLDS IN THE DENVER METROPOLITAN AREA

Figure 4: Female-Headed Households with Children as a Percentage of Total Households with Children by Place, 1990

In 1990, female-headed households accounted for 19 percent of all households with children in the Denver region. Within the jurisdictions of the region, rates of female-headed households could be seen anywhere between 3.8 and 41.5 percent.

Those jurisdictions with the highest rates of female-headed households were largely developed suburbs at the core of the region. Among these were Edgewater (32.7 percent), Federal Heights (27.9 percent) and Englewood (22.2 percent). Other inner suburbs, such as Commerce City (31.9 percent) and Aurora (21.1 percent), also had above average rates of female-headed households.

Places where rates of female-headed households were below the regional average were in the outer suburban areas of the region, clustered mostly in the high growth areas located southeast and northwest of the city and county of Denver. A number of newly developing areas

in Jefferson County also were among the jurisdictions with low rates of female-headed households. In all, six jurisdictions had less than 10 percent of their households with children headed by single females. These included Louisville (7.3 percent), Cherry Hills Village (5.0 percent) and Bow Mar (3.8 percent).

Figure 5: Change in Percentage Points—Female-Headed Households with Children as a Percentage of Total Households with Children by Place, 1980-1990.

The percentage of households with children headed by females in the Denver region increased by 3.1 percentage points from 1980 to 1990—from 15.9 to 19.0 percent. This growth however, was distributed in such a way that more jurisdictions ended the decade with above average rates of female-headed households than began it. Further, the number of jurisdictions with especially high rates (150% of the regional average) increased from three to five over the same period.

Many of the jurisdictions where rates of female-headed households grew slowly or declined were southeast and northwest suburbs with low rates to begin with in 1980. On the other hand, places where rates of female-headed household increased the greatest were either at the core of the region or satellite communities at the edge. These trends suggest that female-headed households are locating more often in places with already high rates of such households or are at the core of the region. Many outer suburbs and places where rates of these households were already low, by contrast, are experiencing declines in their percentages of female-headed households. Female-headed households in the Denver region are located unevenly among the region's jurisdictions and are becoming more so.

MEDIAN HOUSEHOLD INCOME

Median household income is one of the most direct measures of economic disparity among households in a metropolitan area. The degree of difference between high and low household income cities gives evidence of how separated households in the region are economically. A high degree of economic separation is indicated when most of the region's income wealth or most of the region's low-income households are concentrated in a few cities. A metropolitan region with more evenly distributed household income would show relatively little variation between cities with lower household incomes and those with higher incomes.

Median household income can also provide clues as to the value of homes in a particular area and the general desirability of certain cities. Since households with above-average incomes have more choices of where to live in the region, places where large numbers of these households are located signifies that the city is relatively attractive and desirable. Conversely, places where household incomes are well below average provide evidence that housing values are low and that city is relatively unattractive to those who are able to choose where they live.

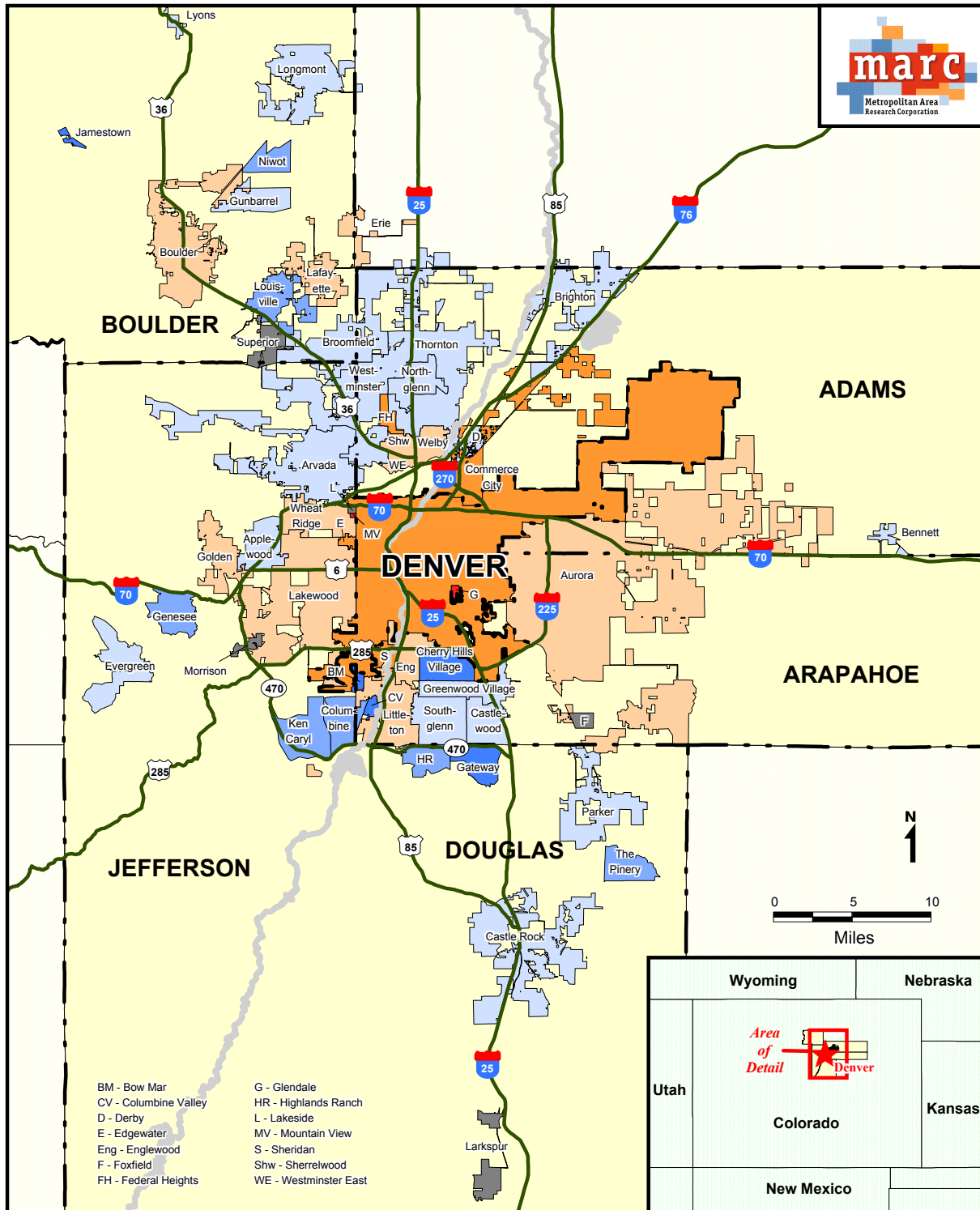


Figure 4: Female-headed Households with Children as a Percentage of Total Households with Children by Place, 1990

% Female-headed HH's
Regional Value: 19.0%

0.0 to 5.2%	(6)
6.4 to 10.1%	(7)
11.5 to 18.8%	(18)
19.0 to 23.3%	(12)
27.6 to 32.7%	(7)
38.9% or more	(2)
No data	(6)

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

Note: Places with "No data" either had fewer than 50 households with children or else did not exist in 1990.

Note: The places of Byers, Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

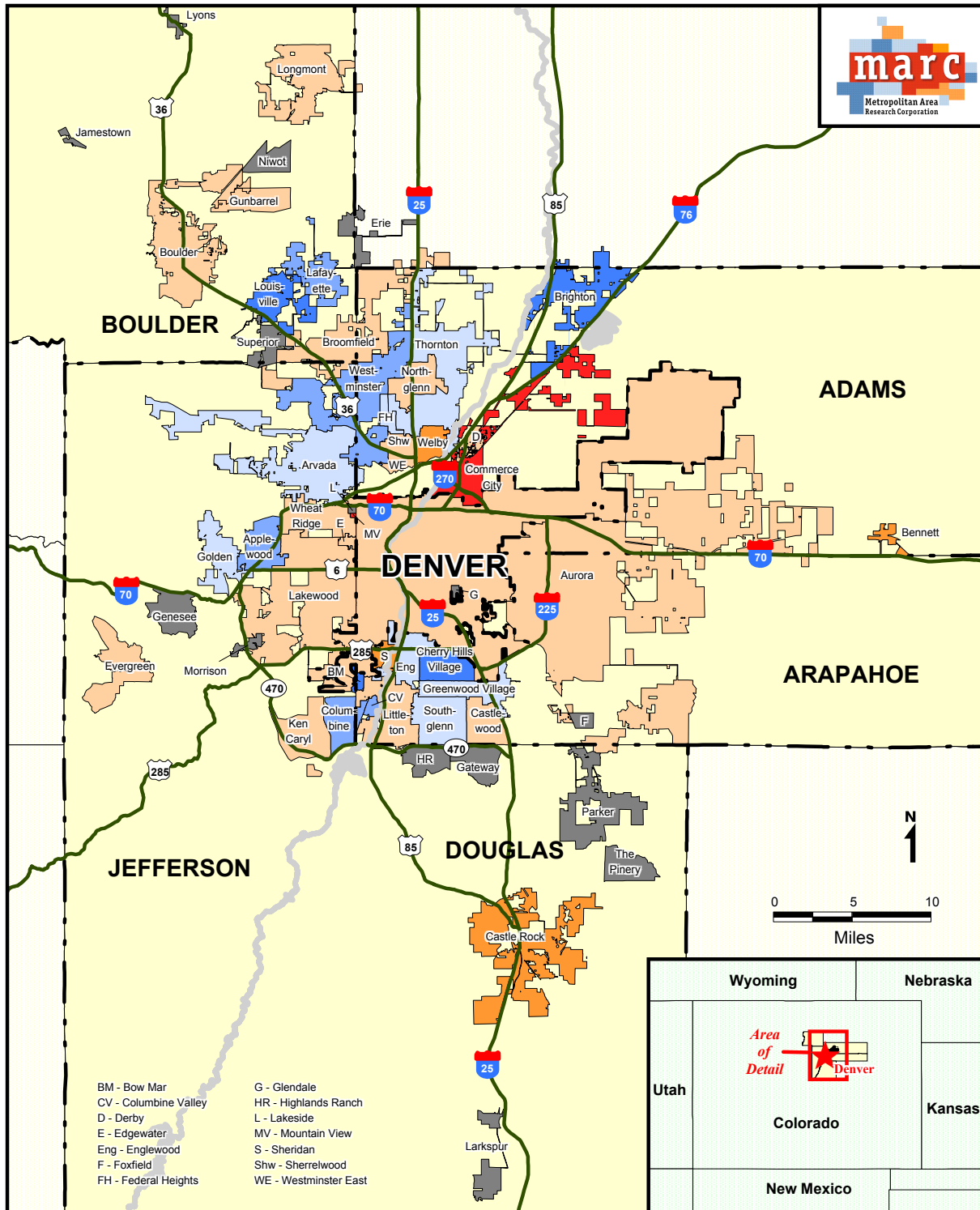
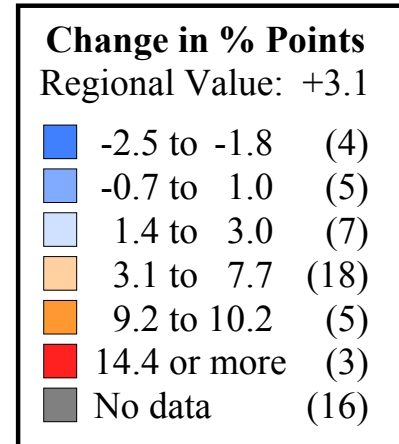


Figure 5: Change in Percentage Points - Female-headed Households with Children as a Percentage of Total Households with Children by Place, 1980-1990



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

Note: Places with "No data" either had fewer than 50 households with children in 1980 or 1990, had data suppression on total households with children in 1980, or else did not exist in 1980 or 1990.

Note: The places of Byers, Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

MEDIAN HOUSEHOLD INCOME TRENDS IN THE DENVER METROPOLITAN AREA

Figure 6: Median Household Income by Municipality, 1995

In 1995 the estimated regional median household income for the Denver metropolitan area was \$43,573.³⁵ Among the 38 jurisdictions of the region with more than 50 households, median household incomes ranged from \$22,439 to \$133,430.

As is shown in Figure 6, jurisdictions with lower than average median household incomes were found almost entirely at the core of the region and in satellite towns at the edges of the region. The city and county of Denver's median household income in 1995 was \$31,746. Seven jurisdictions had lower median household incomes than the city and county of Denver, including inner suburbs such as Federal Heights (\$28,138) Commerce City (\$25,711), Sheridan (\$25,038) and Glendale (\$22,439).

On the other hand, above average median household incomes could be found in cities south of the city and county of Denver in Arapahoe and Douglas counties and along the US 36 corridor toward Boulder. Eight of these jurisdictions had median household incomes greater than \$50,000, including Cherry Hills Village (\$133,430), Columbine Valley (\$106,053), Louisville (\$56,914) and Broomfield (\$51,014).

Figure 7: Percentage Change in Median Household Income by Municipality, 1989-1995

Median household incomes across the Denver region grew by almost 30 percent between 1989 and 1995 when adjusted for inflation (from \$33,490 to \$43,573). However, the number of Denver region jurisdictions with below average median household incomes nearly doubled during this period, from 12 to 23. By contrast, the number of jurisdictions with above average median household incomes was reduced from 26 to 15 over the same period. In other words, in 1989, the percentage of Denver region jurisdictions with below average household incomes *increased* from 29 to 61 percent while the percentage of jurisdiction with above average incomes *decreased* from 68 to 32 percent.

Even more dramatic separation can be seen when looking at the distribution of extremely high and extremely low median household incomes. In 1989, only three jurisdictions had median household incomes below 75 percent of the regional average. By 1995, the number of these jurisdictions had tripled to nine. On the other hand, the number of jurisdictions with median household incomes greater than 150 percent of the regional value decreased from six to four. These figures provide evidence that there is a growing separation between high and low income jurisdictions in the Denver region and that the regional growth in household incomes did not benefit all areas of the region equally. The region's wealth is concentrating in a relatively small percentage of the metropolitan area, leaving the majority of the region's jurisdictions further behind.

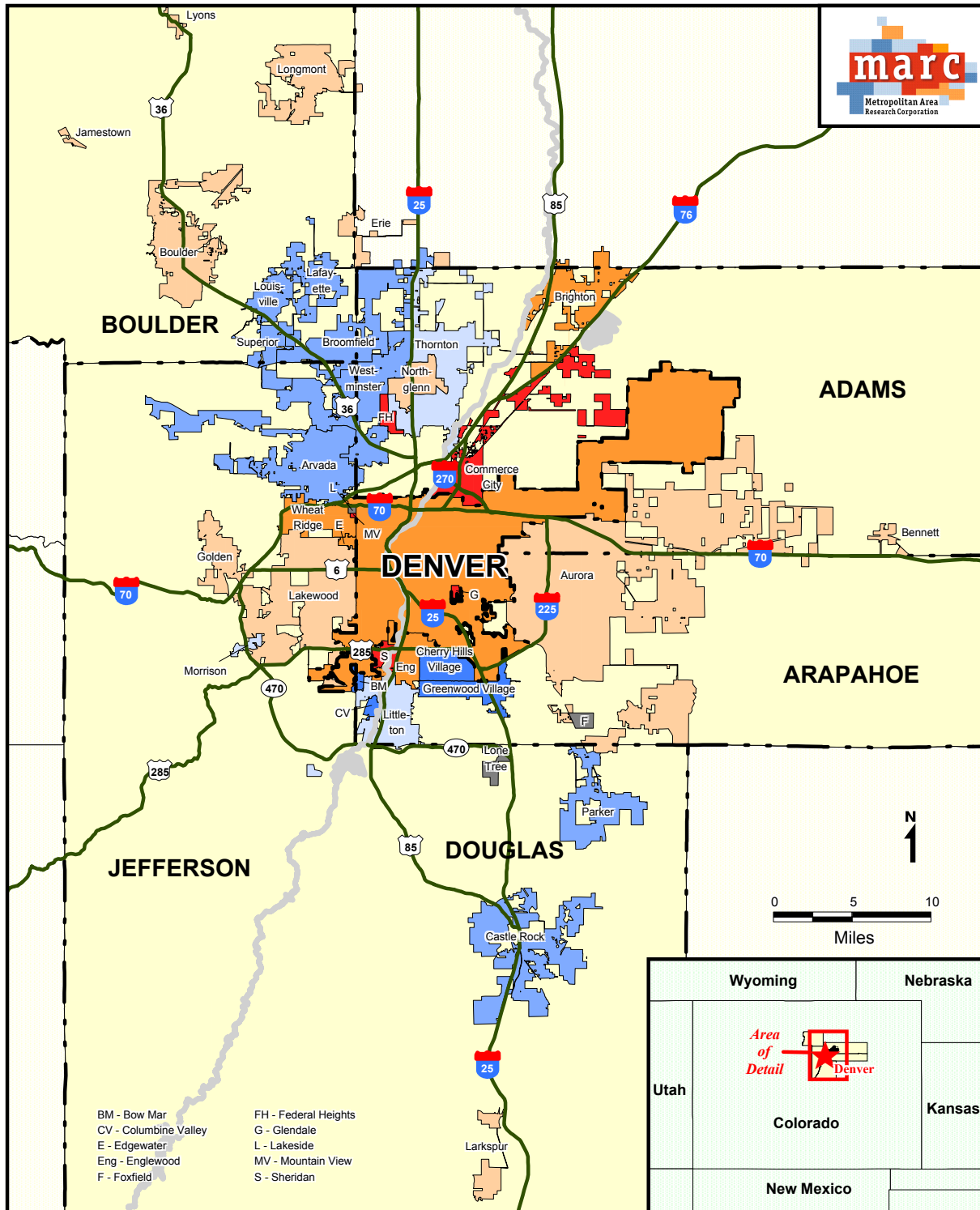


Figure 6: Median Household Income by Municipality, 1995

Median HH Income
Regional Value: \$43,573

Red	\$22,439 to \$28,138	(6)
Orange	\$30,234 to \$35,625	(7)
Light Orange	\$37,683 to \$43,385	(11)
Light Blue	\$43,573 to \$44,167	(3)
Blue	\$46,695 to \$59,266	(8)
Dark Blue	\$87,586 or more	(4)
Grey	No data	(3)

Data Source: Denver Regional Council of Governments.

Note: Municipalities with "No data" had fewer than 50 estimated households in 1995.

Note: The municipalities of Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

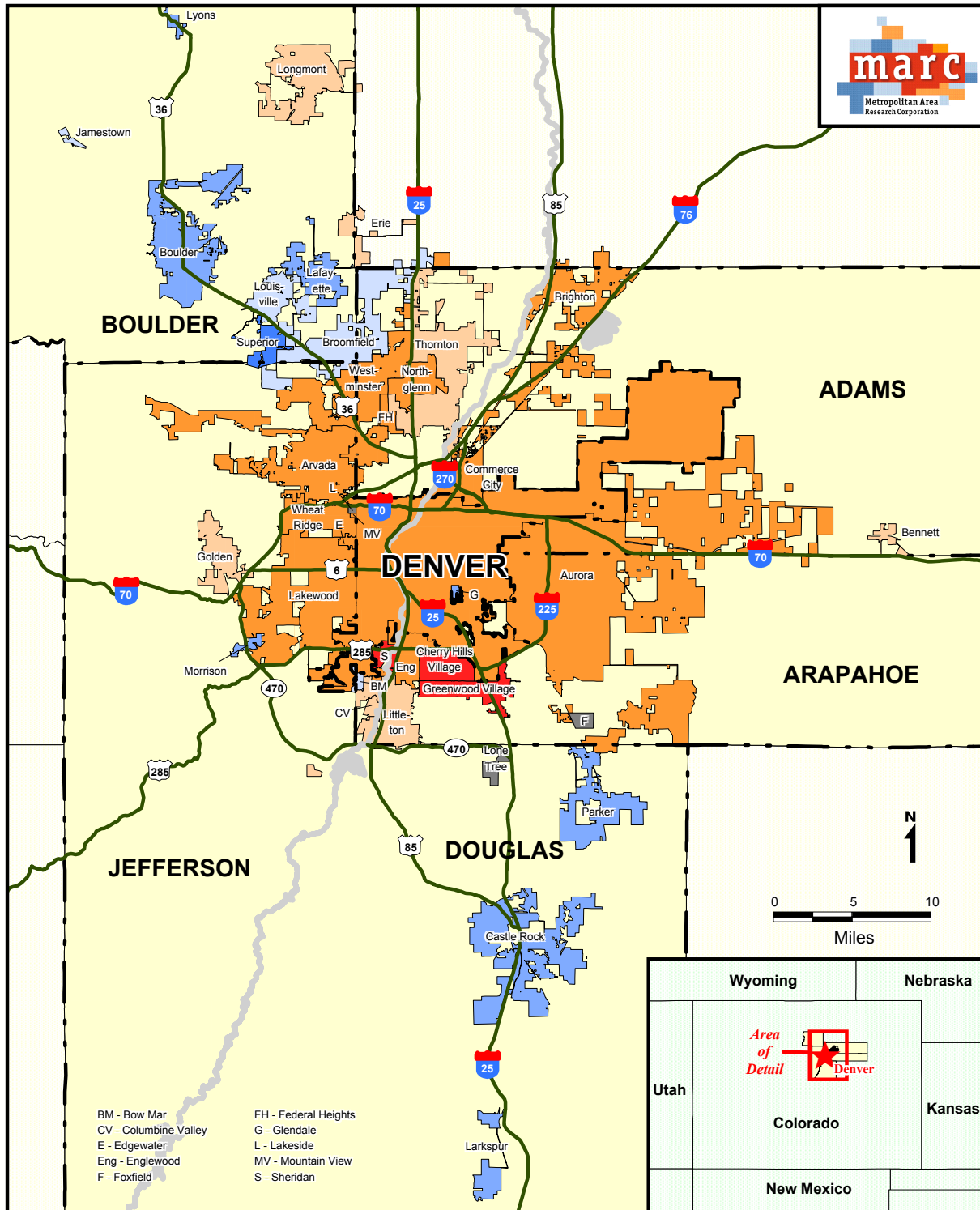


Figure 7: Percentage Change in Median Household Income by Municipality, 1989-1995 (Adjusted by CPI)

Data Sources: Denver Regional Council of Governments, *1995 Area Income and Household Estimates*; 1990 U.S. Census of Population and Housing Summary Tape File 3A (1989 income figures and 1990 households).
 Note: Places with "No data" either had fewer than 50 households in 1990 or 1995, or else did not exist in 1990.

Note: The municipalities of Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

Note: 1989 incomes were adjusted upwards by a factor of 1.2379 to convert to 1995 dollars.
 1989 Consumer Price Index: 124.0
 1995 Consumer Price Index: 153.5
 (Base Year: 82-84 = 100)

SCHOOLS

Schools are the first victim and the most powerful perpetuator of metropolitan separation. Socioeconomic distress shows up in school enrollment patterns before it shows up in neighborhoods. Further, as the burdens associated with this increasing distress rise, middle-class families look to move to school districts with fewer social and economic stresses. As more and more middle-class families leave or avoid these schools and poorer families with few alternatives move in, schools are faced with an increasing percentage of poor children with greater needs. Most school districts facing these increasing challenges do not have an adequate tax base to properly address these new challenges—especially when property values decline as the middle-class moves away. Thus, an increasing number of poor children in a school can signal the start of a process that eventually leads to increasing poverty and social decline.

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.³⁶ Fast-track, well-funded schools with 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.³⁷ Monolithically poor central city or inner-suburban schools with a large number of students in poverty are streams moving toward failure, with currents that reinforce anti-social behavior, drifting, teenage pregnancy, and dropping out.³⁸

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

SCHOOL TRENDS IN THE DENVER METROPOLITAN AREA

Figures 8 and 9: Percentage of Elementary Students Eligible for Free Lunch by School District and by Elementary School, 1997

Across all nineteen school districts of the Denver region, the percentage of elementary school children eligible for the free lunch program in 1997 was 24.5 percent (Figure 10).³⁹ This figure ranged from 1.8 to 57.1 percent. Districts of more than one school with the highest percentage of students eligible for free lunches were found exclusively in the core of the region, including the Denver, Aurora (Adams-Arapahoe), Adams and Westminster school districts. Those with the lowest rates were found in a crescent stretching south and east from Boulder Valley School District in the northwest to Douglas and Cherry Creek school districts in the southeast.

Figure 9 show even more clearly how schools with high concentrations of children eligible for free lunches are centered around the core of the region. Of the twenty-nine schools in the region with more than 70 percent of their students eligible for free lunches, twenty-eight were located in the Denver School District. Another 120 schools had higher than average eligibility

rates, most of which were located in inner suburban communities—particularly those in the Aurora, Jefferson and Westminster school districts.

Figures 10 and 11: Change in Percentage Points—Elementary Students Eligible for Free Lunch by District and by Elementary School, 1994-1997

Between 1994 and 1997 the school districts of the region increased in students eligible for the free lunch program by 0.8 percentage points (Figure 11). The highest increases, again, were found almost exclusively in school districts located at the core of the region, including the Aurora (Adams-Arapahoe) and Englewood districts. The Jefferson School District also saw above average increases in student eligibility for free lunches, although its overall rate remains well below average for the region.

Individual schools in the region that experienced the greatest percentage point increases in student eligibility for free lunches were also located primarily in the core cities of the region. Of schools that increased by more than 10 percent (25 schools), fifteen were found in the Denver School District and another four were located in the Aurora School District. Seventeen of these twenty-five schools had eligibility rates greater than 50 percent by 1997—up from nine in 1994. By contrast, there were at least 194 schools with relatively stable or declining rates of students eligible for free lunches.⁴⁰ Sixty-four percent of these were located in Boulder Valley, Cherry, Douglas, Jefferson and St. Vrain Valley schools—districts with the lowest rates of students eligible for free lunches.

The combination of high eligibility and relatively large increases of free lunch eligibility in schools at the core of the region shows that impoverished students are becoming more concentrated in places with already high eligibility for free lunches. By contrast, those schools and school districts with already low eligibility among their students are seeing relatively stable or declining rates of eligibility. Students eligible for free lunches are becoming more separated from students who are not.

CRIME

Crime is important to a discussion of metropolitan separation because it can have such a powerful influence on where households choose to locate within a region. Research on crime in metropolitan areas has shown a high correlation with concentrations of poverty.⁴¹ If a neighborhood or city has a reputation for high crime or experiences significant increases in serious crimes, households will avoid living in those areas as much as possible. As these families move out and poor families unable to afford other housing move in, social stresses in these neighborhoods increase and neighborhood stability is weakened. People in these high concentrations of poverty then become more likely to be victims of crime—largely because the forces that lead to concentrated poverty create an environment where crime can flourish. Thus, high rates of crime can be viewed as an important starting point for socioeconomic separation and sprawl in a metropolitan region.

Figure 8: Percentage Elementary Students Eligible for Free Lunch by School District, 1997

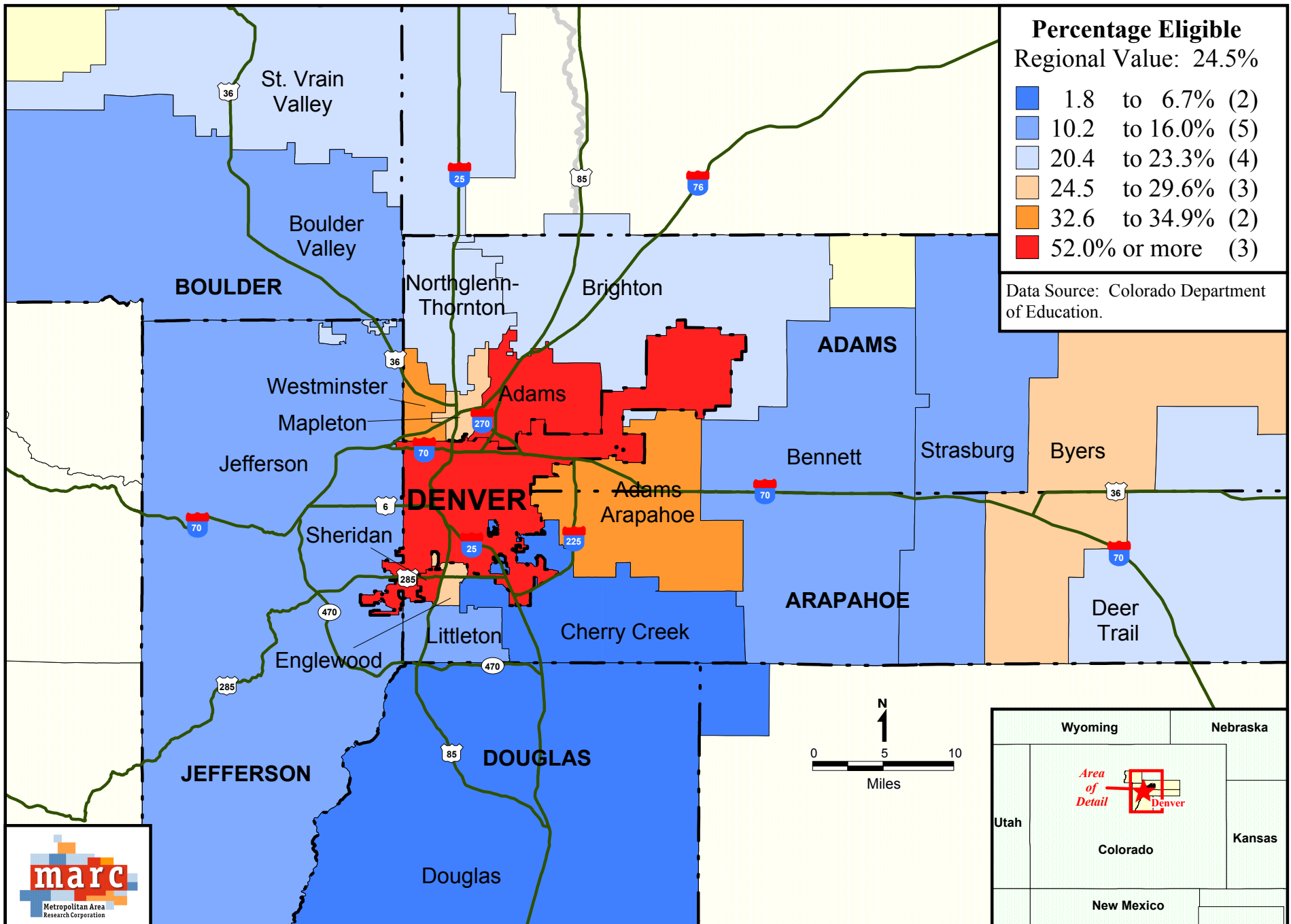


Figure 9: Percentage of Elementary Students Eligible for Free Meals by Elementary School, 1997

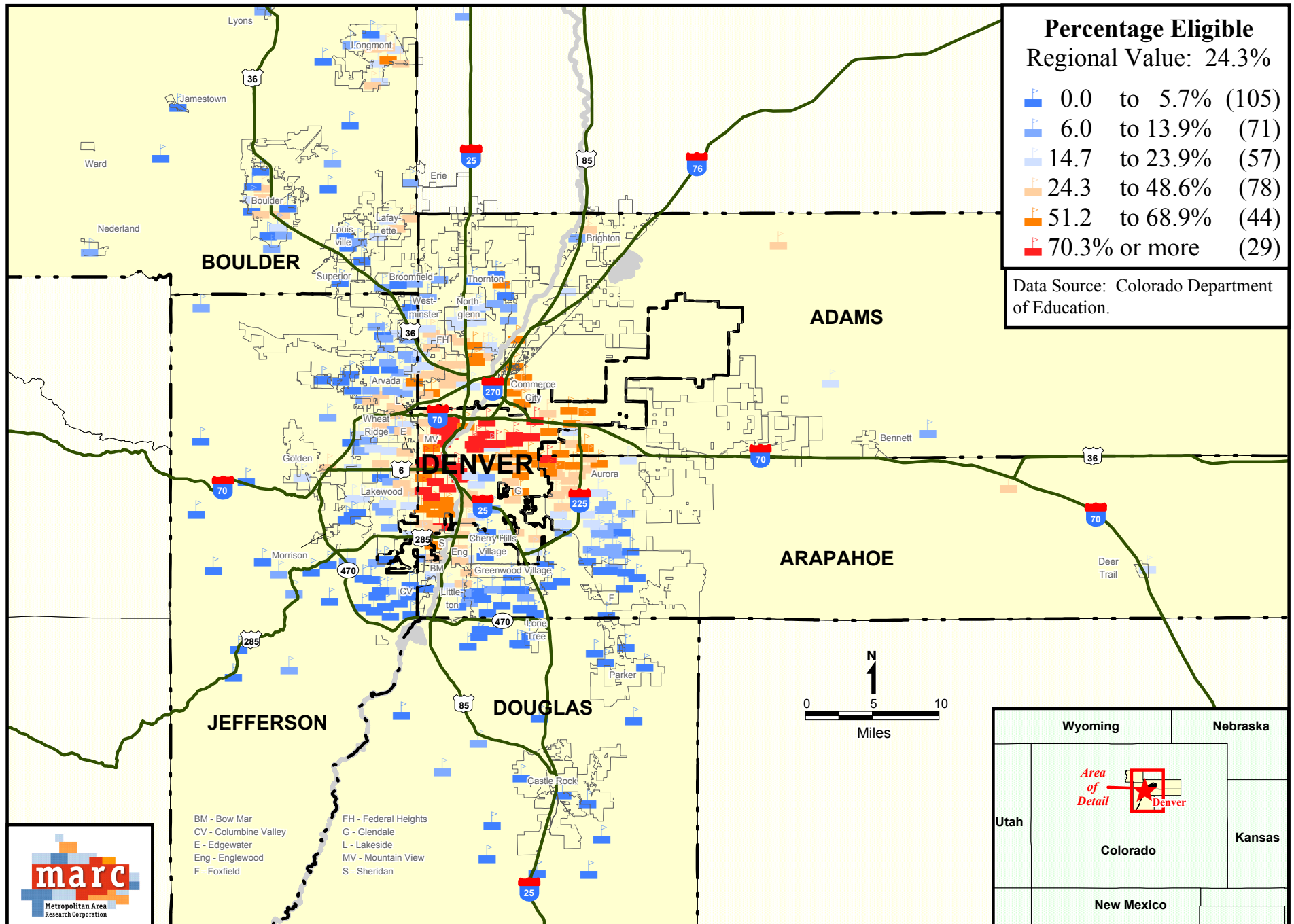


Figure 10: Change in Percentage Points - Elementary Students Eligible for Free Lunch by School District, 1994-1997

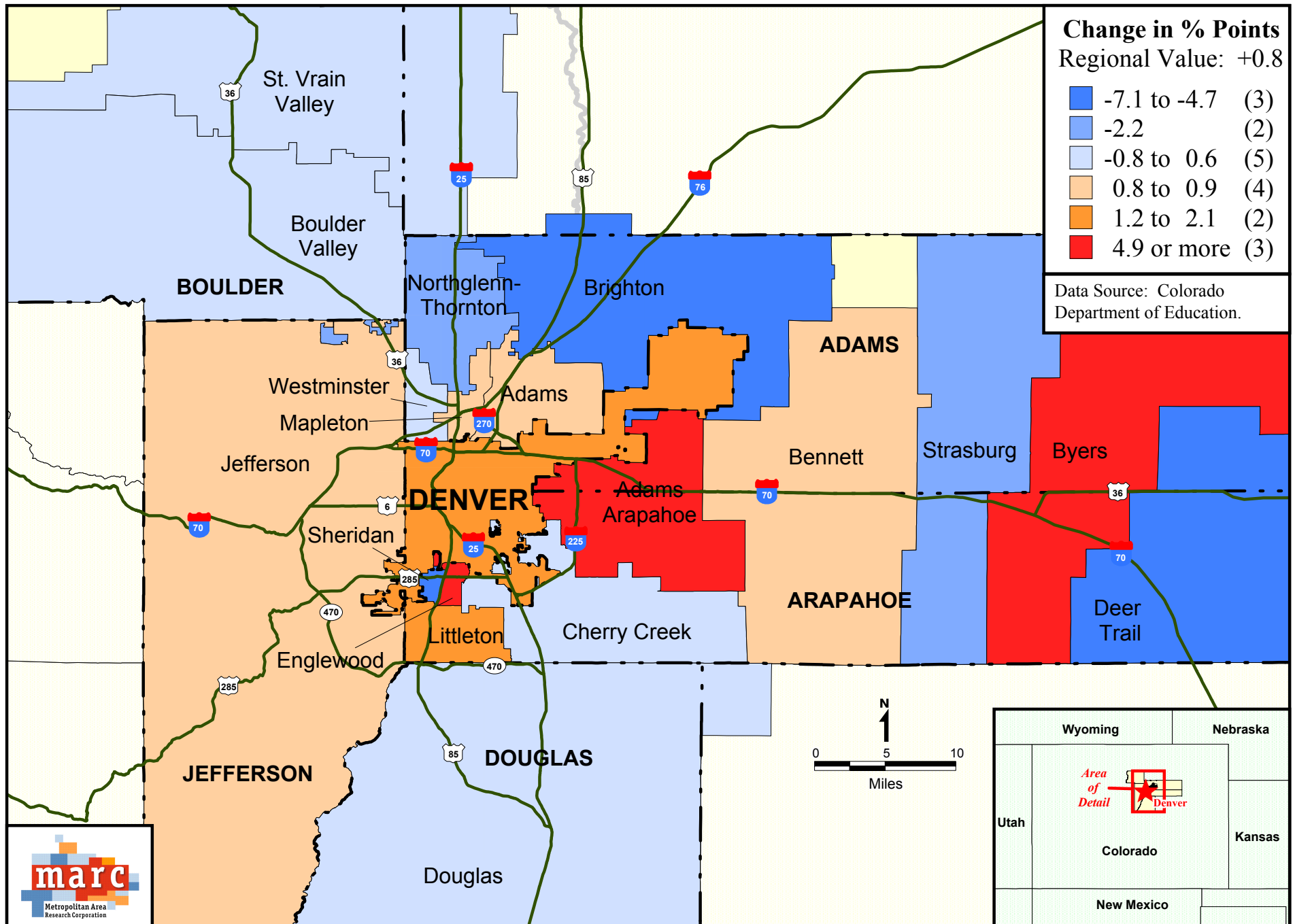
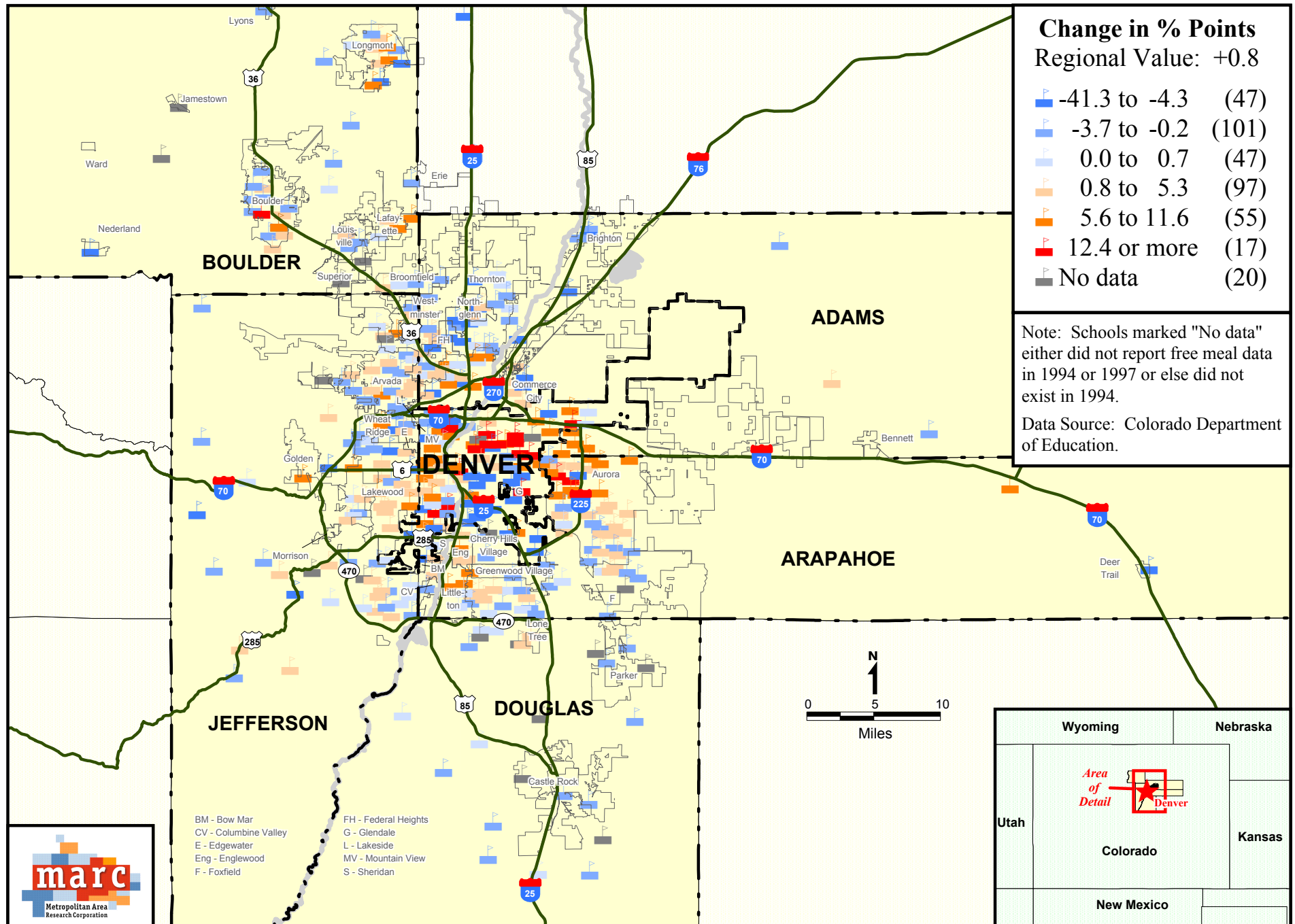


Figure 11: Change in Percentage Points - Elementary Students Eligible for Free Meals by Elementary School, 1994-1997



The most dramatic increases in crime usually occur in neighborhoods of concentrated poverty. These concentrations of poverty contribute to social instability in neighborhoods by causing distrust among neighbors and reducing contact outside of close family and friends. As this distrust and isolation increase, conditions for crime become more prevalent and crime begins to feed on itself—further isolating household in these neighborhoods from the rest of the region.

CRIME TRENDS IN THE DENVER METROPOLITAN AREA

Figure 12: Part I Crimes per 100,000 Population by Police Jurisdiction, 1997

In 1997, the overall Part I crime rate for the six-county region was 4,693.3 crimes per 100,000 persons.⁴² Likewise, violent crimes were measured at 392.6 violent crimes per 100,000 persons. The highest rates of Part I crime per 100,000 persons in the region could be found in Glendale (16,744) and Commerce City (10,221). A number of inner-suburban communities to the south of Denver also had relatively high rates of crime. Rates of violent crime in these cities were also among the highest in the region.

At the other end of the spectrum, the lowest Part I crimes were located in the southeast and northwest regions of the metropolitan area, including Louisville (3,107) Westminster (1,339), Castle Rock (2,232) and Parker (3,007). These low poverty places also had particularly low incidences of violent crime.

Figure 13: Percentage Change in Part I Crimes per 100,000 Population by Police Jurisdiction, 1986-1997

Between 1986 and 1997, the overall Part I crime rate in the Denver region declined by 37.4 percent—meaning that nearly every police jurisdiction in the region for which crime was reported saw a decrease during this period. However, the number of jurisdictions with above average Part I crime rates increased from 13 to 17 over this period. At the same time, places with below average crime rates decreased from 20 to 16.

Places where Part I crime rates decreased at a slower rate than the regional average were located almost exclusively to the north and east of the city and county of Denver—mostly in Adams and Arapahoe counties. These jurisdictions included Aurora (7,732 to 6,711), Commerce City (12,776 to 10,221), Broomfield (3,879 to 3,289) and Arvada (4,479 to 3,942). Lafayette actually saw an increase in its Part I crime rate, jumping from 4,340 to 5,952 per 100,000 population. Even with decreasing Part I crime rates across the region however, reports of these crimes were still highest in the core communities of the region, making them somewhat less desirable for potential homebuyers and residents than the outer suburban communities of the region.

JOBS

From the perspective of a local jurisdiction, jobs represent the presence of commercial or industrial properties. Since these properties can be taxed at a higher rate than residential

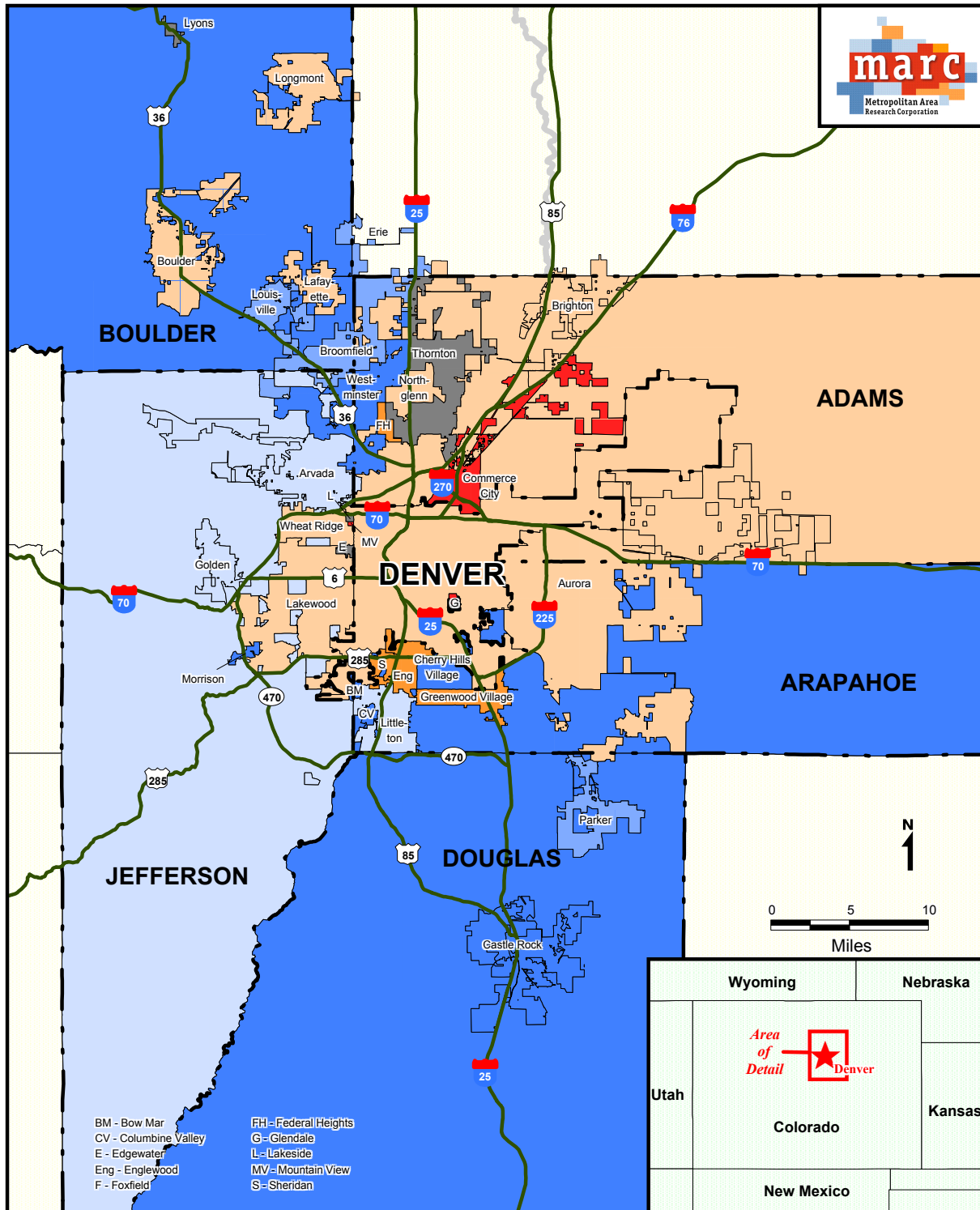


Figure 12: Part I Crimes per 100,000 Population by Police Jurisdiction, 1997

Note: Part I crimes as defined by the FBI include murder, rape, robbery, aggravated assault, burglary, theft, auto theft, and arson.

Note: Police jurisdictions marked "No data" did not report crime data in 1997.

Data Sources: Colorado FBI, Department of Public Safety (crime statistics); Denver Regional Council of Governments (population estimates).

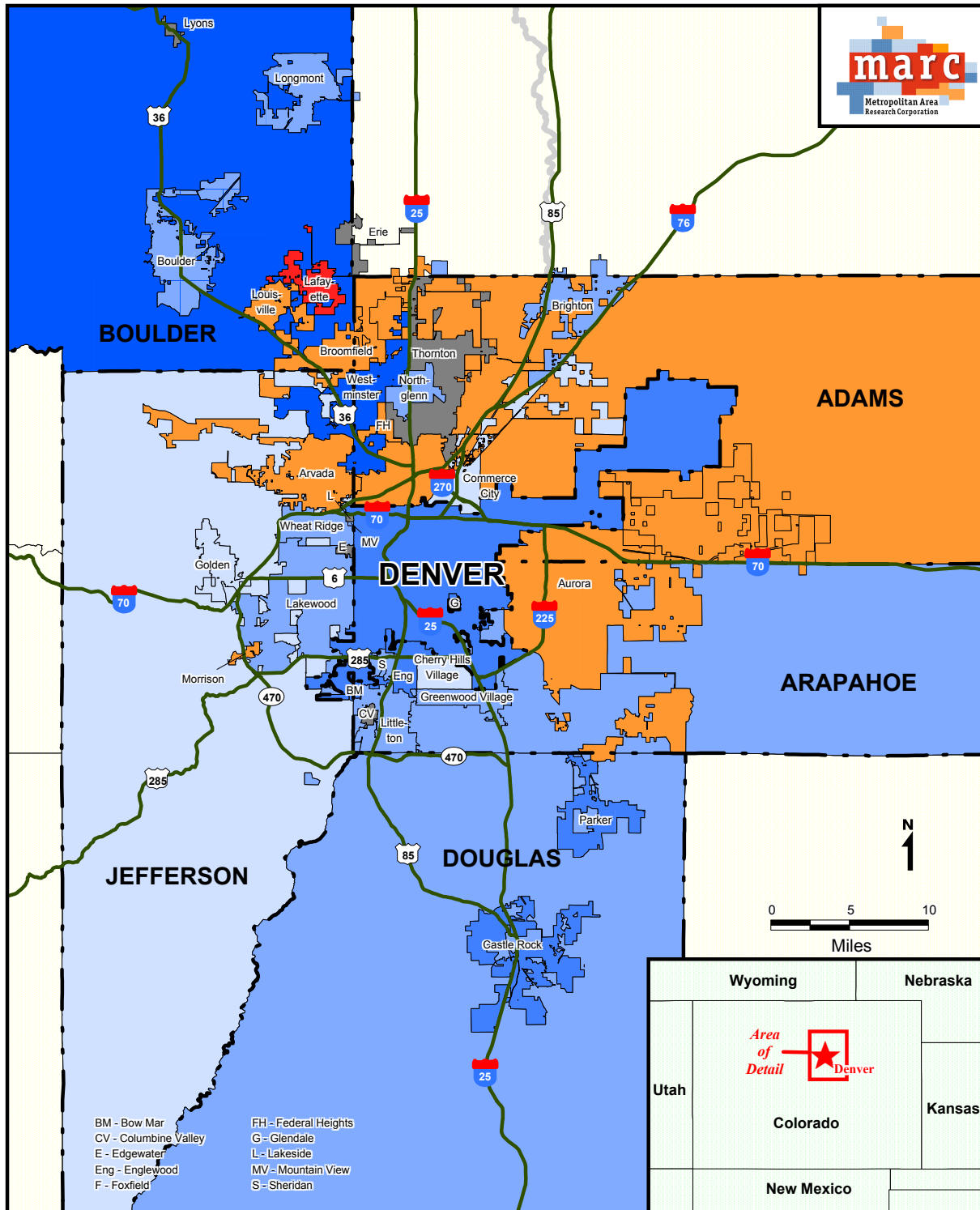


Figure 13: Percentage Change in Part I Crimes per 100,000 Population by Police Jurisdiction, 1986-1997

Note: Part I crimes as defined by the FBI include murder, rape, robbery, aggravated assault, burglary, theft, auto theft, and arson.

Note: Police jurisdictions marked "No data" did not report crime data in 1986 or 1997 or else did not exist in 1986.

Data Sources: Colorado FBI, Department of Public Safety (crime statistics); Denver Regional Council of Governments (population estimates).

properties and are likely to raise sales tax revenue in many cases, relatively large numbers of jobs in a community can signify a relatively high tax capacity. Thus, the ability of a local jurisdiction to attract commercial and industrial businesses has a significant effect on their tax capacity and their ability to provide local services while keeping taxes low.

JOB TRENDS IN THE DENVER METROPOLITAN AREA

Figure 14: Employment per 100 Persons by Municipality, 1996

In 1996, the Denver region as a whole had 62.6 jobs per 100 persons.⁴³ Across the region, employment in jurisdictions ranged from 1.5 to 356.5 jobs per 100 persons.

The lowest employment per 100 persons in the region were found in northwest suburbs such as Superior (10.3) and Erie (2.2) and outlying satellite cities such as Deer Trail and Jamestown. Six of the eight jurisdictions with the lowest employment per 100 persons were considered to have low property and sales tax capacity.

Places with the highest employment per 100 persons were employment centers at the core of the region, including the city and county of Denver, Glendale and Greenwood Village. Boulder Golden and Louisville also had higher than average employment rates. The impact of these employment centers on these jurisdictions tax bases is apparent, with eight of the ten above average places considered to be high capacity suburbs.

Figure 15: Percentage Change in Employment per Capita by Municipality, 1990-1996

Despite the concentration of jobs in the densely developed core of the region, Figure 15 shows that employment per 100 persons in the city and county of Denver is actually decreasing. At the same time, suburban communities to the southeast and northwest of the city and county of Denver are increasing in employment faster than the regional average. Thus, while the strength of the regional economy has continued to create jobs and raise property tax bases across the region, it is doing so at a faster rate in southeast and northwest suburbs.

Jurisdiction experiencing the greatest declines in employment were mostly satellite and bedroom communities, such as Larkspur (30.3 to 14.2), Deer Trail (22.6 to 4.9), Bow Mar (10.8 to 5.4) and Columbine Valley (38.2 to 20.4). On the other hand, high levels of growth in employment per 100 persons could be found in a crescent reaching from I-25 to the north of Denver south and west to I-25 southeast of Denver. Jurisdictions here included Mountain View (38.4 to 74.2), Golden (53.9 to 96.6—79.2 percent), Greenwood Village (275.9 to 356.5—29.2 percent), Boulder (87.3 to 97.8—12.0 percent) and Wheat Ridge (57.6 to 60.5—5.0 percent).

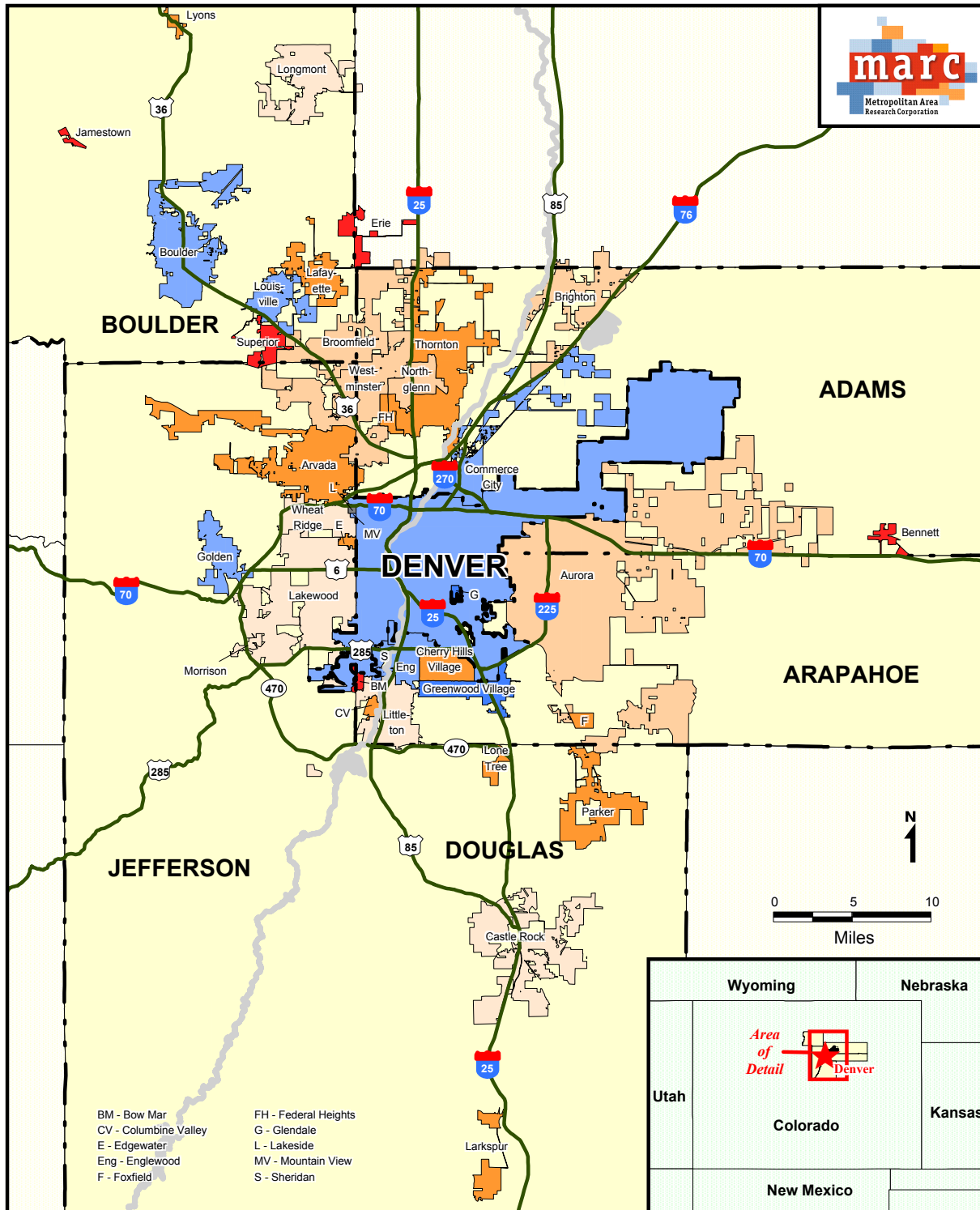


Figure 14: Employment per 100 Persons by Municipality, 1996

Employment per 100 Persons	
Regional Value: 62.7	
■	1.5 to 10.3 (7)
■	14.2 to 31.7 (13)
■	35.4 to 37.6 (5)
■	48.8 to 61.9 (6)
■	62.7 to 114.4 (8)
■	180.0 or more (2)
■	No data (1)

Data Source: Denver Regional Council of Governments.

Note: The municipalities of Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

Note: Municipalities with "No data" had fewer than 50 estimated persons in 1996.

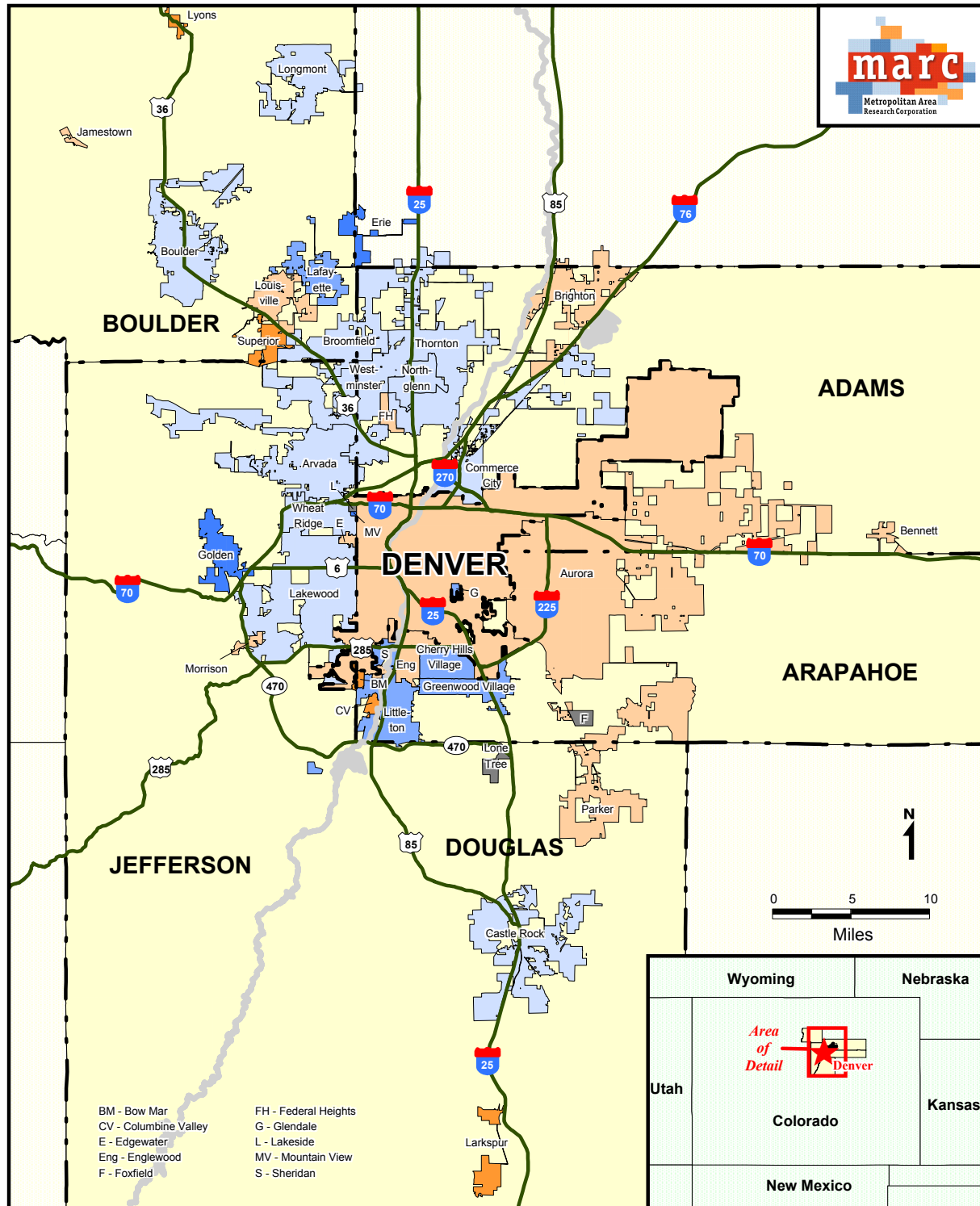


Figure 15: Percentage Change in Employment per Capita by Municipality, 1990-1996

Data Source: Denver Regional Council of Governments.

Note: The municipalities of Deer Trail, Nederland, and Ward were included in the calculations, but are not shown on the map.

Note: Municipalities with "No data" either had fewer than 50 estimated persons in 1996 or else had no employment data in 1990.

III. FISCAL DISPARITIES

When the property tax and local sales taxes are basic revenue sources for local governments with land-planning powers, competition for this tax base occurs as jurisdictions compete for property wealth and sales tax revenue. Since large homes and commercial and industrial properties generally create the largest tax base with the lowest social needs, cities have an obvious incentive to attract these properties rather than lower-valued developments with greater social needs, such as multi-family housing. Thus, through a process known as “fiscal zoning”, newly developing cities predominantly zone for these higher valued developments with low social service needs.⁴⁴ In such a way, they wall out lower-cost housing and associated social needs and keep demands on tax base low. Spreading these controlled needs over a broad, rich property tax base further reduces property tax rates.

The dynamic of fiscal zoning creates three sets of mutually reinforcing relationships. First, the wealthier jurisdictions that have little or no affordable housing and have large tax resources continue to attract more and more business, continually increasing that city’s base of assessed values and tax revenues to the city. Because of low social needs, these places can provide higher quality local services than can most other cities.

A second reinforcing relationship involves those jurisdictions that have increasing social needs on a declining base of assessed property values and taxable sales. This combination leads to declining consumer demographics, increased tax rates,⁴⁵ and decreased local revenue, resulting in fewer and less adequate public services. All of these factors are large negatives in terms of business location and retention. Often, central cities and inner, older suburbs spend a great deal of money on unsuccessful efforts to become more socio-economically stable, as their property tax base and their sales tax revenues evaporate out from under them.

The third relationship concerns the developing jurisdictions that lose the battle of fiscal zoning. These are fast-growing suburbs that have been unable to attract business or executive housing and must pay for their schools, police, parks, curbs, and gutters with fewer resources. In order to generate adequate revenue to address their growing needs, they are forced to abandon long-range thinking and build lower-valued homes and multi-family units rejected by the wealthier jurisdictions. These decisions, in the long run, catch up with working- and middle-class suburbs and they become the declining suburbs of tomorrow. Further, in a perhaps futile attempt to remain competitive, developing communities often suppress local expenditures on public services, particularly on schools.

The increase of property and sales tax wealth in some communities and the stagnancy or decline of property values and taxable sales transactions in the central cities and older, inner 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 separation. 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.

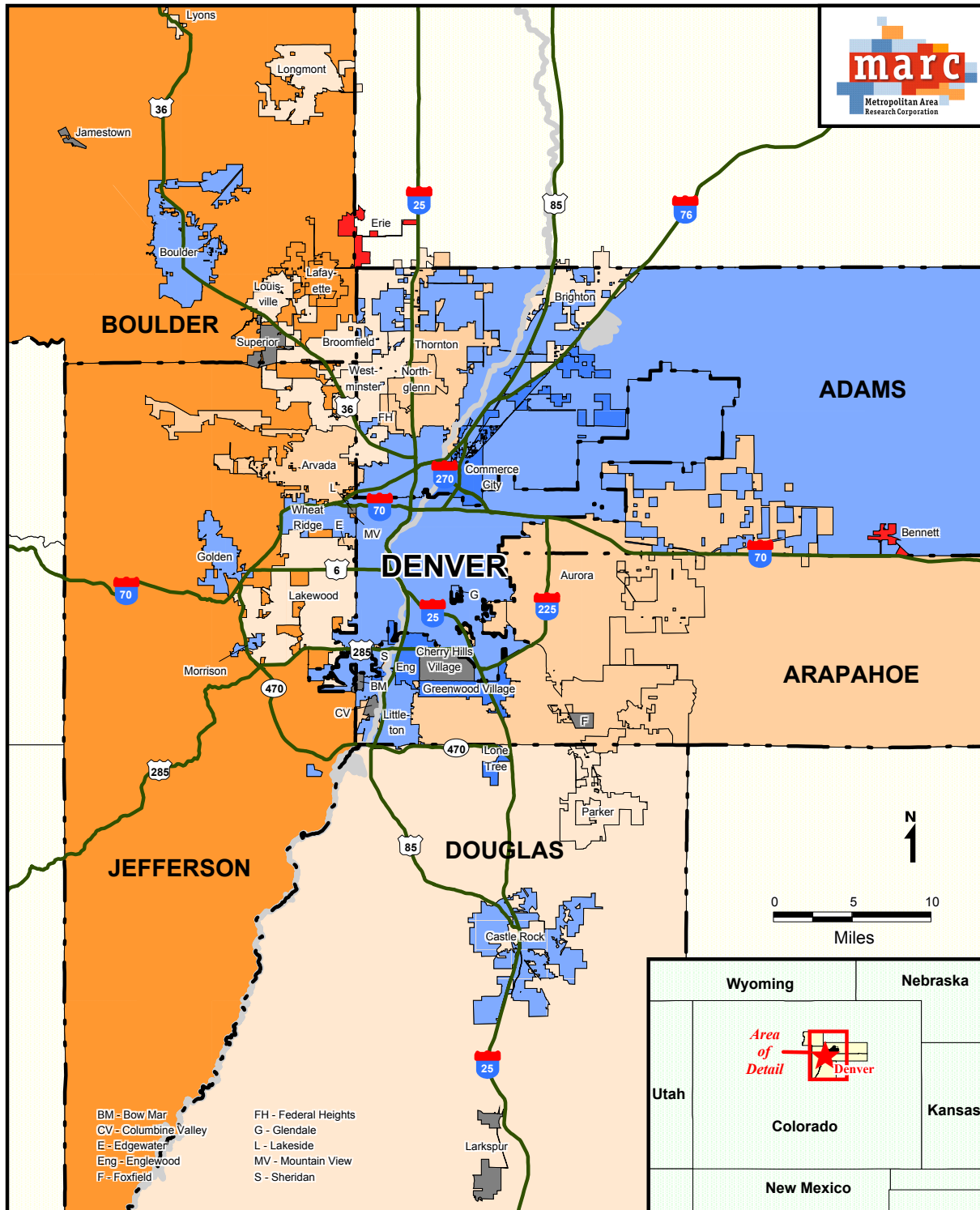


Figure 16: Retail Sales per Household by Municipality and County Unincorporated Area, 1998

Sales per Household	
Regional Value: \$55,658	
Red	\$6,392 to \$15,911 (3)
Orange	\$24,093 to \$28,653 (4)
Light Orange	\$32,118 to \$39,197 (8)
Light Yellow	\$43,811 to \$53,229 (9)
Light Blue	\$55,658 to \$109,763 (10)
Dark Blue	\$128,755 or more (4)
Grey	No data (9)

Data Sources: State of Colorado Department of Revenue, Office of Tax Analysis (1998 retail sales data); and Denver Regional Council of Governments (1998 household estimates).

Note: Municipalities with "No data" either had fewer than 50 estimated households or else had no reportable retail sales in 1998.

Note: The municipalities of Ward, Nederland, and Deer Trail were included in the calculations, but are not shown on the map.

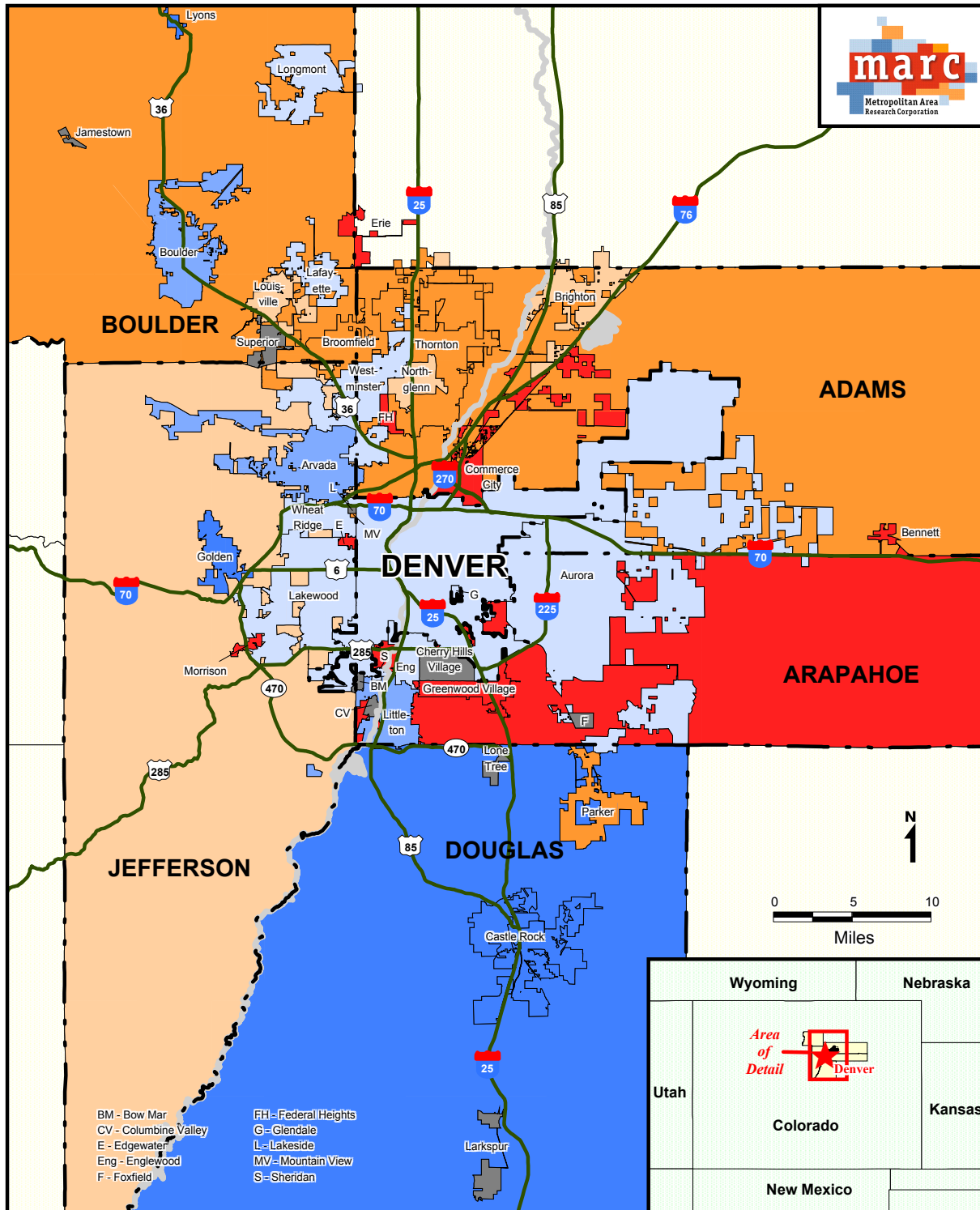


Figure 17: Percentage Change in Retail Sales per Household by Municipality and County Unincorporated Area, 1993-1998 (Adjusted by CPI)

Percentage Change	
Regional Value: 11.6%	
Red	-57.5 to -13.8% (10)
Orange	-4.7 to 2.8% (7)
Light Orange	6.1 to 11.3% (4)
Light Blue	11.6 to 22.4% (9)
Blue	25.0 to 39.8% (3)
Dark Blue	52.5% or more (4)
Grey	No data (10)

Data Sources: State of Colorado Department of Revenue, Office of Tax Analysis (1993 & 1998 retail sales data); Denver Regional Council of Governments (1993 & 1998 household estimates).

Note: 1993 dollars were adjusted upwards by a factor of 1.1280 to convert to 1998 dollars. 1993 CPI=144.5; 1998 CPI=163.0 (Base Year: 1982-1984 CPI=100)

Note: Municipalities with "No data" either had fewer than 50 estimated households or else had no reportable retail sales in 1993 and/or 1998.

Note: The municipalities of Ward, Nederland, and Deer Trail were included in the calculations, but are not shown on the map.

SALES TAX DISPARITIES IN THE DENVER METROPOLITAN AREA

Figure 16: Retail Sales per Household by Municipality and County Unincorporated Area, 1998

Retail sales per household in 1998 in the Denver region amounted to \$55,658 per household.⁴⁶ These figures varied widely across jurisdictions of the region and could be found as low as \$6,392 and as high as \$226,360.

Less than average retail sales per household included places to the northwest of the city and county of Denver and unincorporated areas of Boulder, Jefferson, Douglas and Arapahoe counties. These jurisdictions include Parker (\$53,229), Arvada (\$34,073), Northglenn (\$34,121) and Westminster (\$44,322). Most of these places low in retail sales were also considered low tax capacity jurisdictions. The remaining five were high capacity, developed suburbs. The highest retail sales in the region were found in jurisdictions located mostly in an area extending through the city and county of Denver from the southeast suburbs to those to the northeast. Boulder and Castle Rock—two communities somewhat separated from the retail markets at the core of the region also had relatively high retail sales per household.

Figure 17: Percentage Change in Retail Sales per Household by Municipality and County Unincorporated Area, 1993-1998 (Adjusted by CPI)

Between 1993 and 1998, retail sales per household in the Denver region increased by 11.6 percent. However, this increase was not distributed equally throughout the region, with some jurisdictions seeing declines of as much as 57.5 percent and increases as much as 147.2 percent. Thus, not all areas of the region have benefited from growth in retail sales in the same way.

The most significant increases in retail sales per household could be found in fast-growing Douglas and Boulder counties, where significant commercial developments have taken place in the last few years. Denver, also buoyed by commercial redevelopment efforts, increased at a faster rate than the regional average. However, many jurisdictions located in the core of the region began to see declines in their retail sales, possibly a result of competition from new suburban shopping centers in other parts of the region and the popular Lo-Do area in the city and county of Denver. These include Edgewater (\$50,777 to \$37,998), Sheridan (\$95,866 to \$72,578) and Federal Heights (\$42,695 to \$34,972).

FISCAL LIMITS ON LOCAL GOVERNMENT IN COLORADO

Colorado has a number of constitutional and statutory limits on local district revenue, spending and debt. These limits affect how much control local officials and elected boards have in setting tax rates and overall budgetary spending for any particular district. Thus, determining and analyzing fiscal disparities in the Denver metropolitan area is more complicated than in many other metropolitan areas throughout the country. For instance, competition among local districts is focused much more on retail properties than residential—largely due to limits on residential tax rates and municipalities relative dependence on sales taxes for local revenue.

In particular, there are three primary limitations on local budgetary control—a 5.5 percent limitation on property tax revenue increases, the so-called “Gallagher” amendment and the Taxpayers Bill of Rights (TABOR). The 5.5 percent limitation (which includes a factor for growth in taxable value) of property tax revenue increases requires that local jurisdictions lower their mill levy in the event that their revenue exceeds that growth rate. The Gallagher Amendment⁴⁷ limits residential property’s share of total property tax revenues to 45 percent. The effect of this amendment has been to consistently lower the tax rate which municipalities may levy for residential properties while raising it for commercial/industrial property. Finally, TABOR⁴⁸ places additional limits on property tax revenue, fiscal year spending and allowable tax rates and mill levies.⁴⁹ All of these limits can be waived if approved by local voters.

While the effect of these fiscal limits on local government is complex, it does raise a few concerns in particular. One of these concerns is that certain jurisdictions are more susceptible to significant revenue losses as a result of these limitations. For instance, a jurisdiction consisting mostly of residential property is hurt much more by the decreasing residential assessment rates that the Gallagher amendment requires than are those with more commercial/industrial properties. With TABOR, this jurisdiction is unable to make up for the lost revenue by increasing tax rates in other areas of the budget and must either operate with less money or appeal to voters to allow a tax increase.⁵⁰ Those residential communities with low property values are particularly vulnerable to this loss in revenue—as opposed to residential communities with high property values. In a similar concern, many wonder what will happen to local revenue in the event that Colorado’s economy experiences a downturn, and taxable value decline even further. Again, those local districts with already low property values will be hurt much more than more affluent districts.

Thus, while these limitations on local districts fiscal affairs affect every local district, it places increased burden on communities that already have low tax capacity. These communities—which arguably have the greatest need for increased public spending—are severely limited in their ability to pay for the rising social and infrastructural needs that they face. These costs might include police and fire protection, schools and after-school programs, road maintenance and construction and other infrastructure improvements. On the other hand, more affluent communities often have sufficient tax capacity to pay for the services they require—which are often less than less affluent communities. This could have the effect of increasing fiscal disparities between cities and further separating municipalities in the Denver region. Even with the ability to waive these limits through a vote, residents of low capacity communities with high social needs are often less able to afford the increases in tax rates that these votes often require.

Despite these unique fiscal limitations in the Denver metropolitan area, we continue to use local tax capacity as a measure of the fiscal standing of individual municipalities. Even with limitations on spending, revenue and tax rates—differences in municipal tax capacity provide evidence of the types of properties in a jurisdiction and the value that they have. This tax capacity is based on retail sales per household (sales tax base) and total property value per household (property tax base). We did not look at property or sales tax *revenues*. We simply present the *base* in order to illustrate the resources from which each city has to draw, relative to other cities in the region.

PROPERTY TAX DISPARITIES IN THE DENVER METROPOLITAN AREA

Figure 18: Actual Total Property Value per Household by Municipality and County Unincorporated Area, 1997

In 1997 the total property tax base in the Denver region was \$157,067 per household.⁵¹ Among individual jurisdictions, total property tax base ranged from \$41,916 to \$659,222 per household.

Nearly the entire core of the region had total property tax base below the regional value in 1997. This was primarily due to the extremely high property values in a few jurisdictions located just south of the city and county of Denver. These four jurisdictions combined accounted for 25 percent of the region's assessed property value per household with values up to 420 percent of the regional value. Places where total property value per household was especially low were in inner suburbs such as Sheridan (\$110,680), Aurora (\$105,188), Edgewater (\$79,138) and Federal Heights (\$48,646).

Figure 19: Percentage Change in Actual Total Property Value per Household by Municipality and County Unincorporated Area, 1993-1997

Over the period from 1993-1997, the Denver region as a whole increased its total property value per household by 28.5 percent—from \$122,227 to \$157,067. Ranging from a 68.2 percent decline to a 92.7 percent increase, it is apparent that this regional growth did not benefit all jurisdictions equally.

In general, areas where total property value per household increased at the fastest rates included the incorporated areas of Douglas County, most of Boulder County and the unincorporated areas of Jefferson County. Growth of total property values in the city and county of Denver were nearly equal to the regional average. By contrast, below average increases in total property value could be found throughout much of the core of the region as well as unincorporated areas in Adams, Arapahoe and Douglas counties.

Among individual jurisdictions, only three actually experienced decreasing total property value per household. These were Commerce City (\$129,438 to \$121,077), Morrison (\$135,960 to \$102,651) and Deer Trail (\$131,653 to \$41,916). At the other end of the spectrum, the fastest growing property values could be found in Castle Rock (\$106,972 to \$189,304), Erie (\$85,369 to \$148,614), Lafayette (\$87,242 to \$140,483) and Jamestown (\$105,884 to \$169,097). All of these places were located either in Boulder or Douglas County.

DISPARITIES IN SCHOOL SPENDING IN THE DENVER METROPOLITAN AREA

Figure 20: Expenditures per Student by School District, 1996

Disparities between school districts can be shown by levels of per pupil spending. This measure provides an indication of a number of socioeconomic indicators, including property value, willingness and ability of residents to pass education funding and the effect of state school

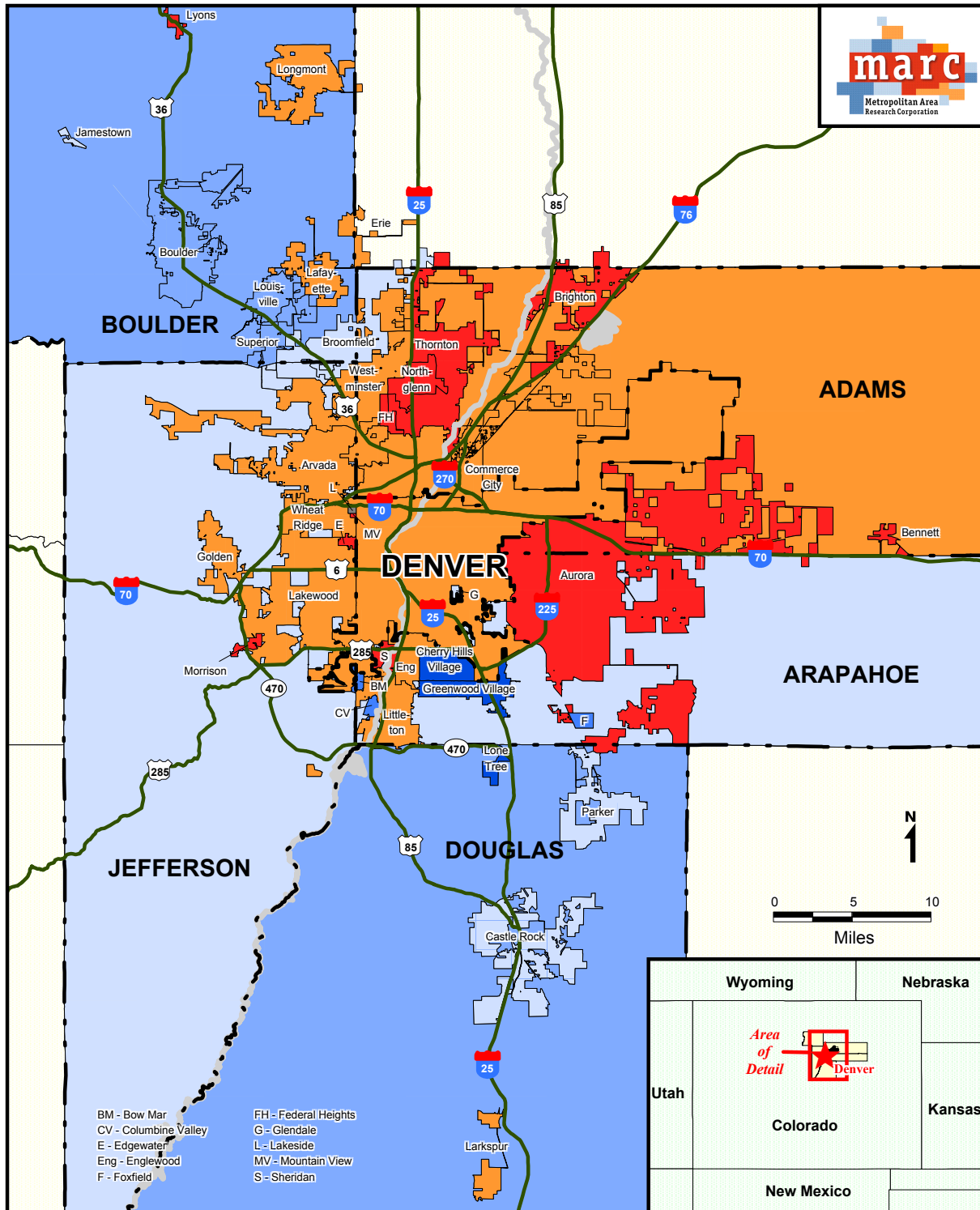


Figure 18: Actual Total Property Value per Household by Municipality and County Unincorporated Area, 1997

Property Value per Household

Regional Value: \$157,067

Red	\$41,916 to \$110,680	(13)
Orange	\$121,077 to \$155,885	(14)
Light Blue	\$157,067 to \$209,609	(8)
Medium Blue	\$224,258 to \$248,417	(5)
Dark Blue	\$292,170 to \$319,852	(3)
Blue	\$433,794 or more	(3)
Grey	No data	(1)

Data Sources: State of Colorado Department of Local Affairs, Division of Property Taxation, *27th Annual Report*, 1997 (1997 taxbase data); and Denver Regional Council of Governments (1997 household estimates).

Note: Municipalities with "No data" had fewer than 50 estimated households in 1997.

Note: The municipalities of Ward, Nederland, and Deer Trail were included in the calculations, but are not shown on the map.

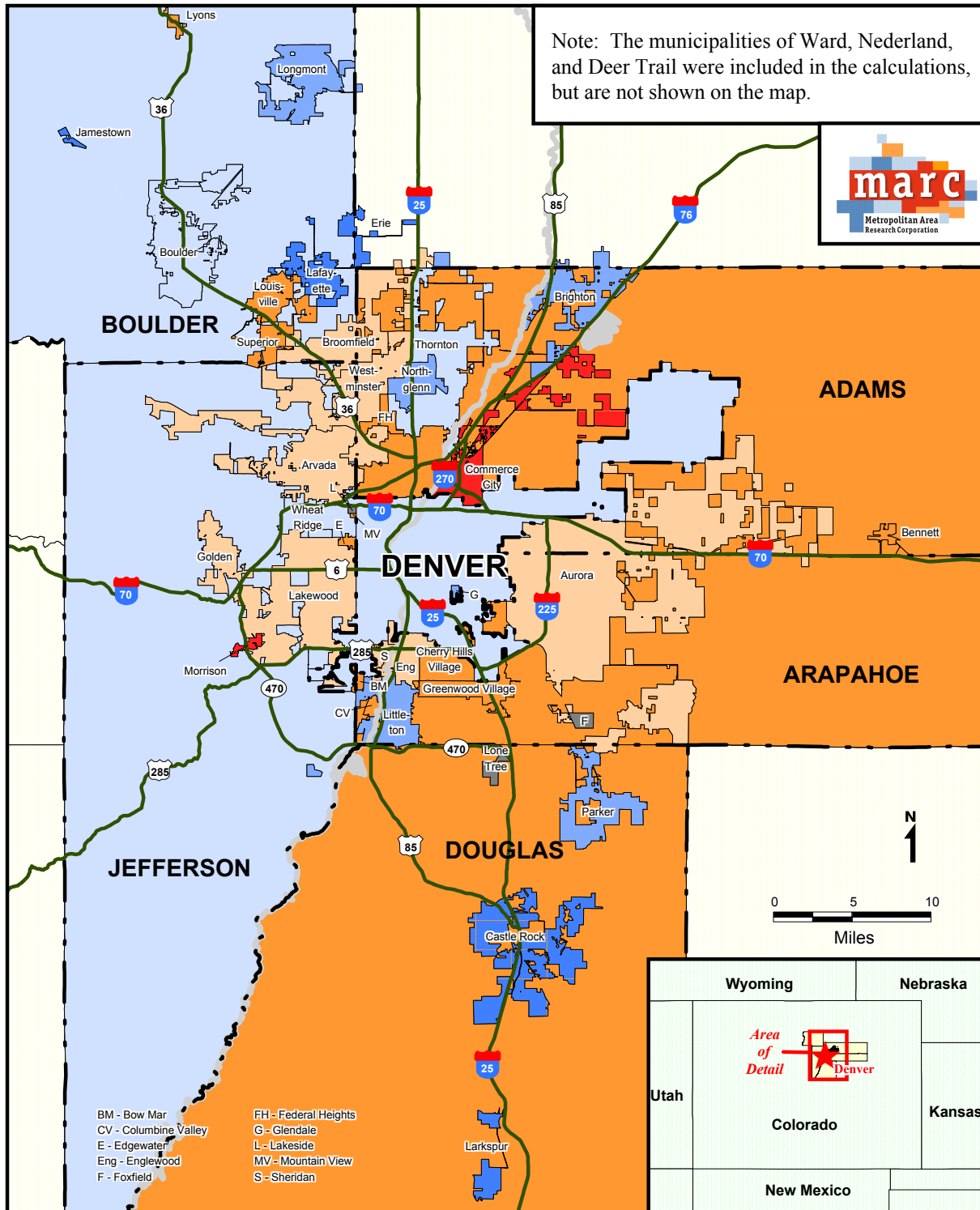


Figure 19: Percentage Change in Actual Total Property Value per Household by Municipality and County Unincorporated Area, 1993-1997

Data Sources: State of Colorado Department of Local Affairs, Division of Property Taxation, *23rd Annual Report, 1993* and *27th Annual Report, 1997* (1993 and 1997 taxbase data); and Denver Regional Council of Governments (1993 and 1997 household estimates).

Note: Municipalities with "No data" either had fewer than 50 estimated households in 1993 or 1997 or else did not exist in 1993.

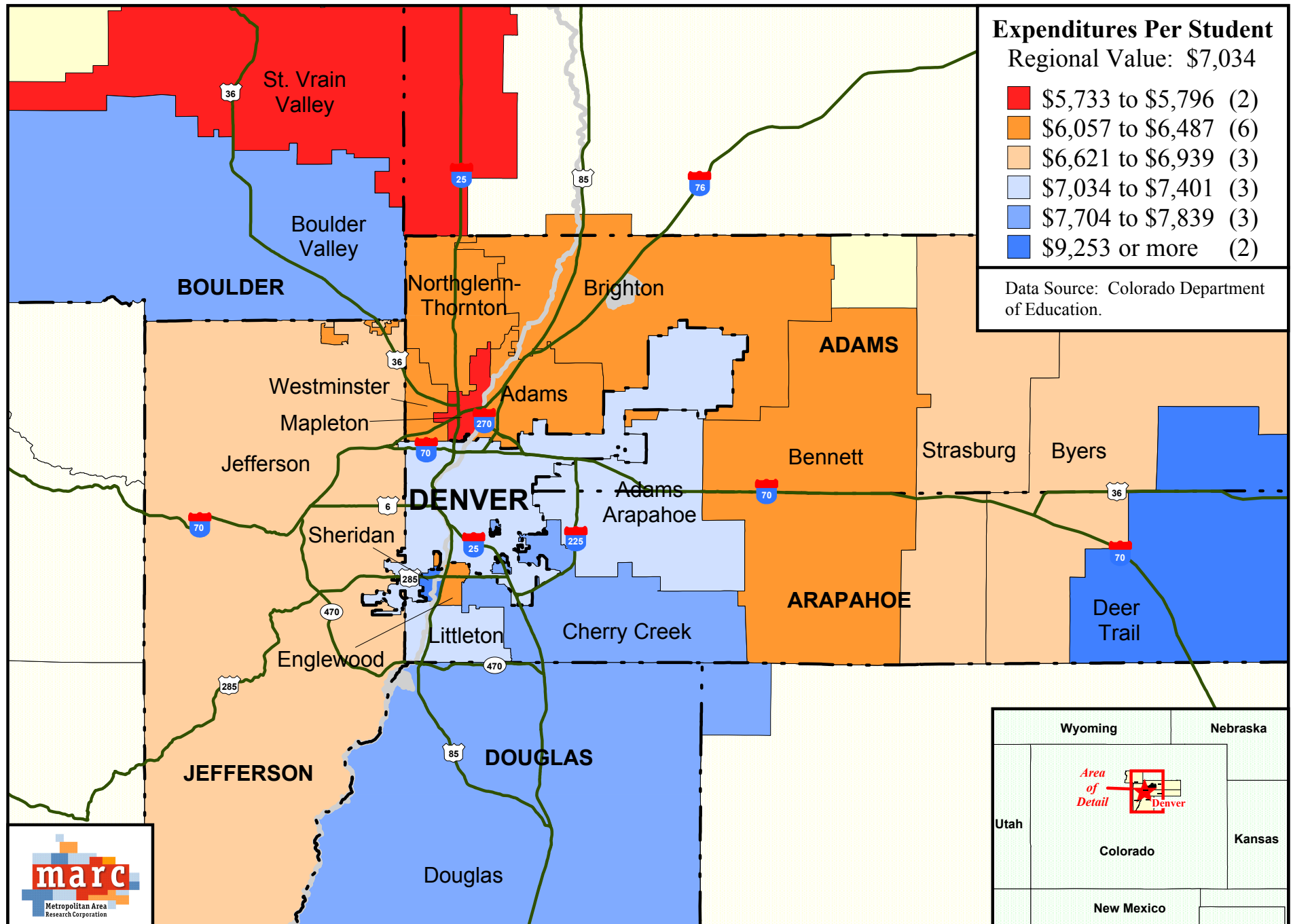
Note: 1993 dollars were adjusted upwards by a factor of 1.1107 to convert to 1997 dollars.
 1993 CPI=144.5; 1997 CPI=160.5
 (Base Year: 1982-1984 CPI=100)

equity spending. Places with low per pupil spending are often fast-growing suburbs with large populations of students and relatively low tax bases.

Per pupil spending across all school districts in the Denver region in 1996 was measured at \$7,034. The lowest per pupil spending in the region could be found in St. Vrain Valley (\$5,796) and Mapleton (\$5,733) school districts. These and other school districts with below average per pupil spending are located in the fast growing middle-class areas of the region—including the Brighton (\$6,487), Northglenn-Thorton (\$6,337) and Jefferson (\$6,621) school districts. In the most affluent areas of the region—Douglas (\$7,817), Cherry Creek (\$7,704) and Boulder Valley (\$7,839) school districts—per pupil spending is well above average.

The core school districts of the region, including Denver (\$7,376), Aurora (Adams-Arapahoe) (\$7,241) and Sheridan (\$9,253) all have per pupil spending above the regional average. These are likely as high as they are because of state equity formulas, which provide extra money for school districts with high percentages of students eligible for free lunches. These types of districts also 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.

Figure 20: Expenditures per Student by School District, 1996



IV. LAND USE & TRANSPORTATION

The vast supply of developmental infrastructure that many regions put into communities on the region's fringe—many of which are restrictively zoned and allow 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 offer development incentives and zone in ways that attempt to capture the most tax base.⁵² 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 the number of automobile trips made.

In *Costs of Sprawl Revisited*, Robert Burchell and colleagues synthesized approximately 500 studies that measured the costs of sprawl. They found broad agreement in the studies that sprawl development as opposed to compact development generates more miles of vehicle travel and more automobile trips (and fewer trips using other modes of transportation).⁵³ These transportation-related impacts are caused by lower levels of density and more segregated land uses. 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. When homes, shops, and workplaces are clustered together, as under higher-density, planned forms of development, fewer trips by 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.

HIGHWAY SPENDING

Scholars and commentators say regional governance is impossible in the United States. 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 sources. Today these highway projects are some of the largest governmental public works programs in the nation. The billions of dollars that build and maintain regional highway systems belong indivisibly to every citizen in the region—as much to the residents of Denver, Thornton or Greenwood Village as to the residents of Boulder, Aurora or Arvada. It is money that could be spent on enhancing the core communities of the region or on expanding the region's boundaries. It is money that could rebuild the infrastructure in Denver's older suburbs or help urbanize previously undeveloped parts of Adams or Douglas County. In most areas, it is the Metropolitan Planning Organization (MPO) that gets to decide where and how this money is spent.

In MARC studies throughout the nation, the largest share of new highway construction dollars tend to be spent on radial highways leading out of the core of the region (the employment basin) to the heart of the developing quarter.

There is a constant debate between those advocating for denser growth patterns and those supporting highway construction about whether highway investment follows growth or causes it. It does both. Generally the road segments that are prioritized are the most congested. However,

when the signal is given to increase capacity, the land use on the outward edge of the corridor responds with more growth, more housing, more commercial development, and more jobs. Often, these edge city communities *only* build expensive housing and job generating facilities. This causes congestion both on the radial roads leading out from where the workers can afford to live in the city and inner suburbs, and increasingly on roads even further out beyond those new suburban office centers. Once a large concentration of jobs becomes established on the periphery, it expands the size of the region another 20-40 minutes of commute time from the edge city centers. The broad decentralization of employment is one of the biggest agents of sprawl.

Given existing land-use patterns and the competition among communities for high-valued housing and income-producing commercial properties, the massive public works dollars spent on highway-capacity improvements—theoretically to reduce congestion—only seem to reinforce a system of growing jobs/housing imbalance (discussed further below) and sprawl that makes congestion worse and dramatically increases the size of the region (also discussed further below) and the threat to open space and productive agricultural lands.

STUDY FINDS INCREASED CAPACITY DOES NOT REDUCE CONGESTION

Recently, 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 congestion.⁵⁴ 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.

New highway capacity also does not necessarily serve the community 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.

HIGHWAY SPENDING TRENDS IN THE DENVER METROPOLITAN AREA

Figure 21: Spending on Highway Improvement Projects, 1992-1998

With the significant economic growth that has occurred in the Denver region since the early 1990's, highway spending has taken on increased importance. Between 1992 and 1998, spending on major highway improvement projects in the region totaled \$526 million.⁵⁵ A large share of this money (about \$82.4 million, or 16 percent) went for improvements to State Highway 85 (Santa Fe Drive) connecting high tax capacity, developed southern suburbs such as Littleton and Columbine Valley with the City and County of Denver. Another \$1 million was spent improving the stretch of Highway 85 between developing Castle Rock and Highway 470—

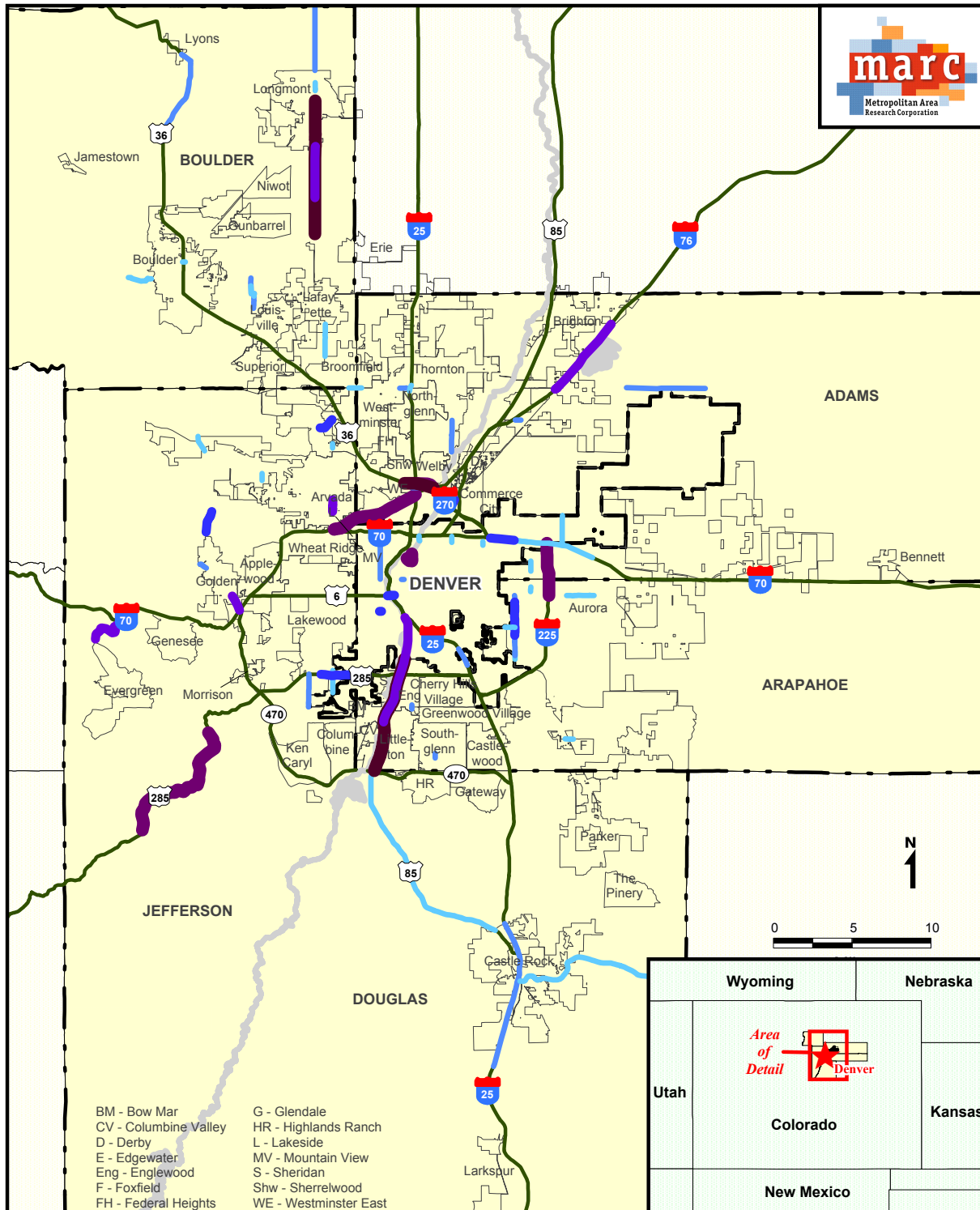


Figure 21: Past Spending on Highway Improvement Projects, 1992-1998

Data Source: Denver Regional Council of Governments.

Note: Highway improvement projects shown are for projected new construction, widenings, lane additions, and bridge replacements between 1992 and 1998 which cost \$500,000 or more.

further improving access between Castle Rock and unincorporated Douglas County and the central city. Other large construction and improvement projects that primarily benefit outlying suburbs and unincorporated areas included construction and improvements to US Highway 287 between Longmont and Lafayette (\$52.4 million), the construction of State Highway 74 connecting Bergen Park with I-70 and the widening of US Highway 285 in unincorporated Jefferson County.

Another part of the region that experienced heavy investment was in the area where US Highway 36, I-76 and I-25 converge. Over \$107 million (20 percent of total spending) was spent connecting US Highway 36 with I-25, I-76 and I-25 with Wadsworth Boulevard at I-70. All of these improve access from the developing corridor along US 36 to downtown Denver. Another \$28.5 million was spent widening I-225 from 6th Avenue in Aurora to I-70—easing congestion between the fast-growing southern suburbs and developing Aurora with Denver International Airport (DIA). In all, these previously mentioned projects, which primarily benefit developing areas of the region, accounted for over 60 percent of total highway improvement spending.

The largest single highway construction project in the region, of course, is the E-470 toll road beltway that connects the southeast suburbs with DIA. This \$654 million project is sure to affect development patterns in the already fast-growing southeast area of the region—as well as in Aurora and unincorporated Adams County, where much of the land through which the beltway runs is undeveloped. As residential and commercial development increases near this beltway, it is likely that many suburbs at the core of the region will find it difficult to retain or attract the most valuable commercial and residential properties. Further, disinvestment in these inner suburbs could become a significant concern—largely due to the construction of new roads in undeveloped areas of the region.

The rationale behind spending on new capacity is two-fold. First, an increase in highway capacity is needed in the fast-developing and economic growth areas of Douglas County, Arapahoe County south of Denver, and Boulder County. Second, the construction of new highways through areas that have low tax capacities, such as Aurora and Westminster 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 1992 and 1998 came from the taxpayers of the entire Denver region, yet will primarily benefit the people and industries of Douglas County, Arapahoe County south of Denver, Adams County around the airport and Boulder County, places with already very high tax bases and relatively low social needs. Second, the building of these large new highways encourages growth at the fringes of the metropolitan area by improving access between cities of the region and increasing development pressure. This pressure is likely to intensify the economic and environmental problems that are associated with sprawling growth—an issue that is of significant concern to most Colorado voters.⁵⁶

The construction of light rail lines and other transit alternatives has received a lot of attention over the last few years in the Denver region and represents at least one way to re-direct transportation spending and help to improve the movement of people and goods around the

metropolitan area. The recommended construction of a new light rail line along I-25 south of Denver, for instance, is projected to handle the transit needs of the area at half the cost of the alternative (adding ten new lanes of highway).⁵⁷ As state officials draft a new 20-year transportation plan, it is important to look to alternatives such as these throughout the metropolitan area so that the growth and transportation needs of the Denver region can be handled in an equitable and cost-effective manner—without contributing to the increasing socioeconomic separation of the region.

JOBS-HOUSING MISMATCH

The continual increase in highway capacity in growing outer communities intensifies the mismatch between the location of jobs and workers, and increases the overall socioeconomic separation occurring among communities of the region.⁵⁸ In many regions, homeowners who choose to buy in communities developing on the fringes of urbanized areas sometimes have very long commutes to their places of work in the city or in other growing suburbs, increasing the strain on the transportation system.

Meanwhile, for many people the opposite problem holds true: their place of work moves to the suburbs, but the high housing costs in those communities prevents them from moving there as well. Twenty-five years ago, John Kain, an economist at Harvard, argued for the existence of this “spatial mismatch” between affordable housing and available jobs.⁵⁹ 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.⁶⁰

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.⁶¹ In addition, essentially all of the net growth in jobs with low educational requirements is occurring in the suburbs.⁶² 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.⁶³

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.⁶⁴ Cervero suggests fair housing, including barrier removal, as one of the most important ways to reduce freeway congestion.⁶⁵ Although the effectiveness of jobs-housing balance in reducing freeway congestion has been hotly 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.⁶⁶

JOBS-HOUSING TRENDS IN THE DENVER METROPOLITAN AREA

Figure 22: Ratio of Moderate Income Jobs to Moderately Priced Housing by Municipality and County Unincorporated Area, 1999

Figure 22 shows the ratio of moderate income jobs to moderately priced housing in each of the region's cities and unincorporated areas.⁶⁷ This data provides evidence of the imbalance that exists within many Denver regional cities between where people earning moderate incomes live and work. According to data from DRCOG, cities that have a high-ratio of jobs to housing are primarily concentrated in the wealthier suburbs to the south of Denver, including Englewood, Littleton and Parker, and in Boulder County, including Boulder and Louisville. These cities all have 2 to 3 times as many jobs that pay moderate-wages as they do homes affordable to these employees.

By contrast, cities that contain a low jobs/housing ratio can be found primarily to the north of Denver. These cities, which include Thornton, Arvada, Northglenn and Aurora, house more moderate-income employees than they have available jobs. Cities with the lowest ratio, which have fewer than 0.3 jobs for every moderate-income home, include Superior, Erie, Federal Heights, and Edgewater. The geographical divide that exists between places where moderately-priced housing and moderate-wage jobs are available suggests that increasing pressure is being placed on regional freeways as many of these workers must travel significant distances from their homes to their work.

HIGH DEVELOPMENT COSTS ON THE FRINGE & CHANGE IN URBANIZED AREA

Typically, the course of development in growing communities at the region's fringe follows an all too familiar pattern. As the social and economic decline of the region's core increases, middle-class families begin to look for more desirable homes in the suburbs, which offer more open space, lower taxes, less crime and relatively low land prices. In order to capture the tax revenue that these new homes can provide, local governments—competing with other developing cities—are pressured to develop the urban infrastructure needed to attract these homes. Loans for this infrastructure—including sewer lines, municipal water pumps, roads, schools and basic public services such as fire and police protection—then must be paid back with revenues generated largely from local taxes. From the perspective of a growing community faced with significant infrastructural costs then, the most desirable development is that which generates the greatest tax revenue and costs the least in terms of public services—development that “pays its way.”

Generally, non-residential uses are more profitable than residential uses with variable levels of return within each of these categories.⁶⁸ Fringe cities, again facing competition from other growing cities in the region, will create incentives to attract these types of development—typically 3-4 bedroom homes on large lots and large commercial developments such as office parks. By contrast, they also seek to prevent development of low-cost homes that do not generate significant taxes—such as mobile home parks, apartments and townhomes—by structuring their zoning laws to require large lots, strict building codes, or other restrictive measures.

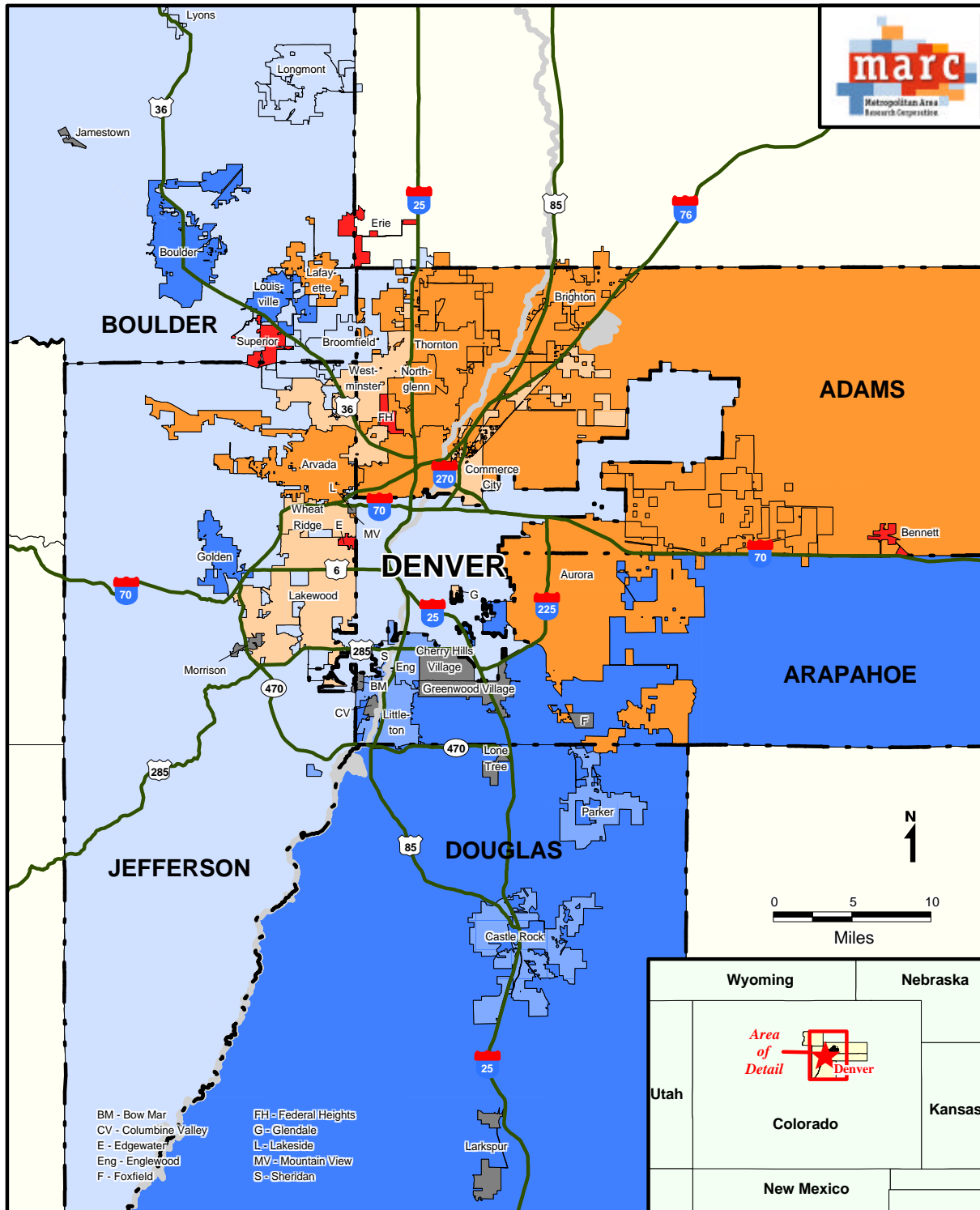


Figure 22: Ratio of Moderate Income Jobs to Moderately-Priced Housing by Municipality and County Unincorporated Area, 1999

Note: "Moderate Income Jobs" are defined as those jobs which pay between \$7.50 and \$10.00 per hour; "Moderately-Priced Housing" is defined as housing which costs \$800 a month or less to purchase or rent. Places with ratio values of less than 1.000 have more estimated moderately-priced housing than estimated moderate income jobs; places with ratio values greater than 1.000 have more jobs than housing.

Data Sources: Denver Regional Council of Governments (1999 moderate income jobs and moderately-priced housing estimates).

Note: Municipalities with "No data" had fewer than 50 estimated moderately-priced housing units in 1999.

Note: The municipalities of Ward, Nederland, and Deer Trail were included in the calculations, but are not shown on the map.

Unless a city is able to attract enough of these types of development to pay for their growing costs, such low-density, minimally planned development begins to take its toll. At the local level, providing infrastructure such as sewer service and adequate roads at low densities becomes very difficult to build and maintain over the long-term. When the financial crunch begins to be felt—which may not happen for several years—cities often will begin to accept previously undesirable types of development just to generate more tax revenue. They may also cut back on those essential services—such as public schools, road maintenance and parks—that often made them so desirable in the first place. These actions can signal the start of a decline that becomes self-reinforcing—school quality declines, property values fall, tax revenues erode and the community becomes less and less desirable to current and perspective businesses and middle-class homeowners—further reducing property values and local tax revenue.

By contrast, well-planned, compact, efficient communities promote economic and social stability over the long-term. Recent studies have found that under compact, planned development, public infrastructure costs were 75 to 95 percent of the cost for unplanned, sprawl-type development.⁶⁹ Similarly, these studies found higher aggregate land costs under sprawl-type development than under compact, planned development.⁷⁰ Another 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 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.⁷¹

In addition to the high costs of infrastructure, sprawling development also exacts costs in terms of the regional landscape—often destroying or degrading fragile ecological lands and farms as rural lands becomes urbanized. Robert Burchell’s research has found broad agreement among the studies he examined that more agricultural and fragile lands are lost under sprawl development than under compact, planned development. In essence, the studies found this to be so because more lands are needed for low density development on the edges of metropolitan regions. When land just beyond the developed area of a region becomes highly sought after, those who own it experience tremendous pressure to sell. Because land on the edge of the region is so valuable—both to the seller and to the local jurisdiction once it is developed—and because development there often lacks coordinated planning, it is 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 United States since colonial times, or 55 percent of originally documented wetlands.⁷² When these fragile lands are developed and later fail, the damage—to people, homes, and communities—is often devastating and the financial costs exorbitant.

LAND TRUSTS AND URBAN SPRAWL

Probably the most intensive effort to protect agricultural and fragile lands in the United States 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 changing the nature of U.S. development patterns. In order to purchase potentially developable land from land

owners, these trusts secure large amounts of money from public and private sources. As the land trusts occupy philanthropic and community energy and commitment (much like community development has occupied the field of urban poverty) trend-shaping action that systemically affects regional social separation and sprawling land-use patterns—goals that are more controversial and difficult to accomplish but yield more effective, long-term results—are almost entirely ignored.

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.⁷³ 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.⁷⁴ 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).⁷⁵ 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 state land-use legislation like the Oregon Land Use Act. From a regional perspective, metropolitan regions would be much better served by a regional land use plan and development standards that protect land. Our challenge is not to unilaterally prevent growth, but to decide where and when growth is appropriate.

EXPANSION OF THE DENVER URBANIZED AREA

Figure 23: Change in Urbanized Area, 1970-1990

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.⁷⁶ By comparing the change in population between census periods within a designated urbanized area and the change in the size of the land area that is defined as urbanized, we can determine whether that area as a whole is becoming more compact or is sprawling as it develops.

In 1990 the Denver urbanized area, which covers the City and County of Denver and most of the incorporated parts of Adams, Arapahoe, Douglas, and Jefferson Counties surrounding the city, was settled at a density of 3,308.6 persons per square mile.⁷⁷ This was a decrease in population density from 1970 of 7.5 percent. In that year, the population density in the area was 3,577.0 persons per square mile. Put another way, the number of people living in the urbanized area surrounding Denver increased by 44.9 percent (from 1,047,311 to 1,517,977), while the land area they occupied increased by 56.7 percent (from 292.8 to 458.8 square miles).

There are also designated urbanized areas around the cities of Boulder and Longmont. Because the Longmont area was designated as urbanized for the first time in 1990 (meaning that it did not reach a population density of more than 1,000 persons per square mile until 1990), comparative data are not available to determine whether that area has become more or less dense in the past decades. The Boulder urbanized area, however, decreased considerably in population density between 1970 and 1990, from 4,868.0 persons per square mile to 3,071.7 persons. During this period the number of people living in the Boulder area increased by 44.1 percent (from

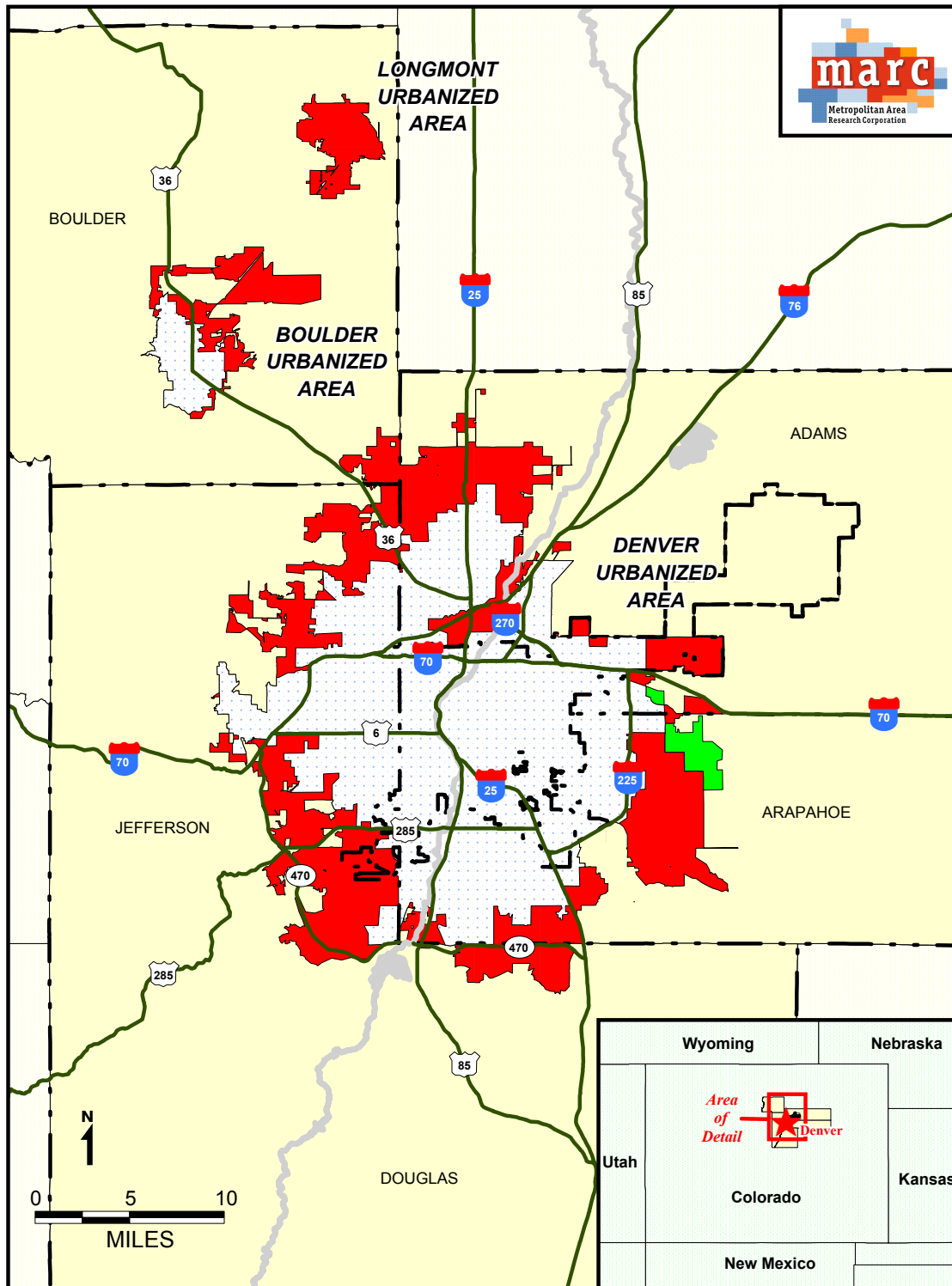





Figure 23: Change in Urbanized Area, 1970-1990

LEGEND

-  Urbanized area in both 1970 and 1990.
-  Growth - Change from non-urbanized area in 1970 to urbanized area in 1990.
-  Reduction - Change from urbanized area in 1970 to non-urbanized area in 1990.

Population Density in Urbanized Area (per square mile)

	<u>1970</u>	<u>1990</u>	<u>% Change</u>
Boulder	4,868.0	3,071.7	-36.9%
Denver	3,577.0	3,308.6	-7.5%
Longmont*	-	3,801.7	-

* The Longmont urbanized area did not exist in 1970.

Data Sources: 1995 U.S. Census Bureau Tiger Files (1990 map); 1990 CPH-S-1-2 "1990 Census of Population and Housing Supplementary Reports Urbanized Areas of the United States and Puerto Rico", dated 12/93 (1990 data); "1970 Census of Population, Volume 1, Characteristics of the Population, Part A, Number of Inhabitants, Section 1, United States, Alabama-Mississippi" dated 2/72 (1970 data and maps).

68,634 to 98,910), while the land they occupied more than doubled (from 14.1 to 32.2 square miles—a 128.4 percent increase).

METROPOLITAN SOLUTIONS

The foregoing patterns demonstrate the need for a regional approach to stabilize the central city and other declining communities of the region. As social separation continues, it creates an increasingly rapid decline in many stressed jurisdictions of the region. 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 other stressed communities, these places, forced to compete with communities that have few social needs and significant tax resources, can do little to stabilize.

Fragmented land-use control and unhealthy, unequal competition for sales tax revenues institutionalize separation, lead to wasteful infrastructure policy, and squander valuable natural resources. Some developing communities with low property and sales tax capacity 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 the 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.

I. EQUITY

Local government tax resources are very frequently the basis of land-use decisions. This reality forces local jurisdictions to compete for commercial development, high valued homes, and office parks and avoid land uses that generate less revenue but require more city services, 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 number of states have progressive school equity systems which eliminate much of the burden of local schools from the central city and other older, declining communities. The state of

Colorado, for example, has an equalization system to help localities fund their public schools. This system is based on a formula that guarantees a minimum level of funding per pupil. For school districts whose share of the state-distributed property taxes are not sufficient to meet that minimum funding level, the state provides the difference from its general fund.⁷⁸ In this way, school funding and educational opportunity are made at least somewhat more equitable and less dependent on local wealth.

School equity systems such as the one in Colorado, help to reduce disparities among school districts, lessen the burden on communities that receive few tax revenues, 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 where a portion of the tax revenue collected by the state is redistributed to jurisdictions based on a formula that takes into consideration local wealth and/or social need. A few states have created regional equalizing mechanisms where local tax resources in the metropolitan area are pooled and redistributed based on local wealth and/or social need. Some states have two or more of the above systems operating together.

Unlike a statewide school equity system or a general revenue sharing system, metropolitan equity responds to both intra-metropolitan competition for tax base and to the unique cost of living and property valuation in a particular regional setting. MARC believes that regional equity reform is premised on a system that shares some part of an existing state or local revenue source. This is done by pooling a portion of local property values or taxable transactions (or both), redistributing the pool to the jurisdictions based on need, and then taxing the new amount in each jurisdiction at an area-wide rate. In Colorado, of course, this sharing of tax base would be affected significantly by TABOR limits and would likely require voter approval to make use of the shared resources. Given the success of votes to relax TABOR limits among jurisdictions when it involves their own money, it is even more likely that voters would approve a tax-base sharing scheme that would allow them to spend extra money without having to tax themselves further. By pooling the base rather than revenues, not only can the same rate be applied across jurisdictions (as discussed above), but cities, counties, schools, and other taxing districts would all benefit from that shared base.

In any region, a regional equity system such as this must be fully modeled (or simulated) before discussion begins, so that all parties participating can understand its impact. In order for such a system to succeed, the proposed reform must add tax base to jurisdictions in which approximately two-thirds of the regional population lives. A substantial portion, if not a majority, of residents who live outside the central city (as well as in the central city) should see increased local revenues for their community and thus, better local services. MARC has modeled several property and sales tax equity proposals for the Denver metropolitan region and will discuss two of them in Appendix A. Both of these models result in increased tax base for a majority of the region's population.

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 Denver, places where social needs are substantial and growing, tax base (property and sales) 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 and sales tax wealth in the region can become available to meet the legitimate needs of all local government. Regional tax-base sharing, one way to move away from dependence on local tax base, is discussed further in Appendix A.

COMPETITION FOR TAX BASE AND FISCAL ZONING

Intra-metropolitan competition 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 regional 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 that lack adequate local resources to meet the immediate needs of their residents, as well as from affluent communities that 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 that has few social stresses 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.

LAND USE PLANNING

When social decline and local fiscal stress “push” people and businesses out of older declining communities, the pressure on developing communities on the edge of the region to accommodate these people and businesses increases. As natural landscapes and farmland are subdivided into large lots, the need for public infrastructure and services such as streets, sewers, parks, wells, schools, police and fire increases. Many communities incur significant debt to help pay for these services and infrastructure. In order to pay off these debts, they are forced to build their tax base—through high-priced residential properties or commercial and industrial developments if they can successfully attract it. More commonly, this increase in tax base is achieved by accepting whatever development will come. In competing with similar cities throughout the region, these cash-strapped places often approve large-lot subdivisions and/or

offer subsidies to businesses to attract them to their city, placing greater strain on their infrastructure costs, destroying the open spaces that attracted residents and businesses in the first place, straining their local tax base and pushing them to try and grow even more.

Cities faced with this cycle of debt, competition and growth often do not have the time or resources to create a community land use plan that will provide for efficient and balanced development of their city. Sometimes they simply have no choice given the existing fiscal demands. In any case, the result is that developing cities look for whatever development will help them to pay their bills now. In many cases this means developing on inadequate infrastructure and/or cutting back on local services such as schools or police protection. When cities do consider the long term infrastructure costs associated with later sewer and other infrastructure remediation, it has been MARC's experience that most local officials would much prefer to build at typical suburban densities with appropriate sewer and road infrastructure that is provided at state or regional expense and is put in place *before* development occurs.

Greater fiscal equity in the Denver region can help to alleviate some of these pressures and allow communities to create an orderly and efficient *regional* land use plan by: 1) easing the fiscal crisis in older, declining communities and allowing them to re-invest in their community; 2) taking the pressure off growing communities to spread local debt costs through poorly-managed growth and unneeded public subsidies; and 3) undermining fiscal incentives encouraging low-density sprawl.

In the Minneapolis-St. Paul 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.⁷⁹ 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 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 taxable property value 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.

REINVESTMENT IN THE CORE

An important corollary of equity is the creation of a regional fund for reinvestment in the central city and/or declining older suburban neighborhoods. Reinvestment in these communities also helps to create fiscal equity. Central cities and declining older communities, already fiscally stressed with high social needs and inadequate public funds, 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 (this will be discussed further in the structural reform section below).

The creation of a regional fund in the Denver region, including one for reinvestment in the central city and inner suburbs, is complicated by the presence of the TABOR amendment mentioned previously in this report. According to TABOR, cities may not raise *or spend* more revenue than an allowed amount above spending in the previous year without voter approval. Thus, any regional revenue sharing would be considered unconstitutional unless voters agreed to allow cities to spend more money than they had collected during the previous year. Under TABOR in its current form, the creation of a regional fund or tax-base sharing plan can only work if voters in every metropolitan city were to allow their local government to spend any funds that they received through these methods.

II. SMART GROWTH

As has been shown throughout this report, the costs of inequitable, inefficient, sprawling growth seen in so many regions throughout the country, including Denver, are many. If central cities, older suburbs and other fiscally stressed developing communities are allowed to continue in a downward spiral, the economic and social stability of the region—including those communities with high tax capacity and few social problems—will be at great risk. Worsening traffic congestion, increased energy consumption and pollution, loss of valuable open space and habitat and increasing social separation are just a few of the results that the Denver region and other regions throughout the country have experienced already. These unintended consequences of growth are already degrading the quality of life for many residents in the region, and are likely to worsen the quality of life for many more people if left unchecked.

Smart Growth is an alternative that has addressed many of these issues and provides a way for regions to weather the unpredictable economic changes that can occur so quickly in an expanding global economy. While Smart Growth often means different things to different people, several common themes run through most of the efforts being conducted throughout the country. These themes include: 1) some form of growth control mechanism—usually a physical boundary outside of which urban development will not be allowed; 2) compact and timely development—methods that ensure that adequate infrastructure is in place before land is developed and that the development will make efficient use of that infrastructure; 3) affordable and life-cycle housing—a balanced mix of housing types and costs throughout the region that allows employees to locate near to their jobs rather than across the area and allows individuals and families to stay in their home community when they experience life-cycle changes; 4) an efficient transportation system—the transportation system (including public transit) should allow the greatest number of people and goods to move throughout the region and the lowest cost. None of the characteristics are mutually independent, but rather, must be seen as a comprehensive whole.

Oregon leads the nation in regional Smart Growth. 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.

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.⁸⁰

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 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, each 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 the Portland metropolitan area, the housing rule designed to help achieve the state's housing goal, requires all of the jurisdictions of the region 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.⁸¹

In Washington County, Oregon, the most affluent of the Portland region's 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.⁸² 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.⁸³ Without the growth boundary and housing rule, the same number of housing units would have consumed an additional 1,500 acres of land.⁸⁴ 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.⁸⁵

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.

LOCAL LAND-USE PLANS

If local governments are to be required to develop a comprehensive land-use plan that addresses regional or statewide 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.

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, but 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.

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.

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.

REGIONAL AFFORDABLE HOUSING

An increased commitment to affordable housing in the developing part of a region is also a component of a smart regional growth plan. Affordable housing allows people to live closer to new jobs created in outlying areas of the region and thus relieves congestion on the highways. It provides opportunities for parents with school-age children and the elderly to remain in their community and their school district—where they have an established support system—when their life situation changes, such as through divorce, death of a partner, long-term illness, or retirement. It allows young adults to live close to the places where they grew up. Finally, a gradually increasing commitment to affordable housing in the developing ring slowly relieves the concentration of social need growing in the city and declining older suburban neighborhoods. There are three components to regional affordable 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.

III. 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.

ISTEA, TEA-21, AND THE POWER OF MPO'S

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 to MPO's 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.

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.

CONCLUSION

The Denver metropolitan region is becoming increasingly separated along social and economic lines. Sprawling development patterns are contributing to this separation and damaging valued natural resources.

The jurisdictions of the Denver region are participating in a wasteful zero-sum competition 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 separate the region socially, economically 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 Denver 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 Denver region, despite its recent and continuing economic growth, still suffers from a series of problems that are too massive for the central city and individual communities to confront alone.

APPENDIX A: 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 declining 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 larger regionalism effort in the Denver region would be greatly advanced if the City and County of Denver and its struggling surrounding communities united around their shared interest in fiscal equity.

THE POLITICS OF TAX-BASE SHARING

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.”⁸⁶ Under this program, each city in the region contributes forty percent of the growth of its commercial and industrial property tax *value* (not *revenue*) acquired after 1971 to a regional pool. This pooled tax base is then distributed to each jurisdiction on the basis of inverse net commercial tax capacity and taxed at an area-wide tax rate. A highly equalizing system, the fiscal disparities program reduces tax base disparities among jurisdictions of the region 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 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.

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.⁸⁷ 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 separation 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 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 separation can be built elsewhere.

TAX-BASE SHARING IN THE DENVER REGION

At the outset, clearly the numbers add up to a viable coalition for tax-base sharing in the Denver region. Over 75 percent of the regional population live in jurisdictions that could gain new tax base under a properly structured proposal. While the Denver 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 increase their tax revenues and give them greater levels of service.

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. The Metropolitan Area Research Corporation has created models of several possible regional tax-base sharing scenarios for the Denver region. Most of the scenarios produced positive results for at least 60 percent of the region's population. A few scenarios would actually provide lower taxes and better services for as much as 75 percent of the people of the Denver region. In other words, under these models, anywhere from 60 to 75 percent of the regional population would be the recipients of new 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, we present here two of the most promising examples. In both of these cases over 75 percent of the total population of the Denver region receives new tax base. The following paragraphs describe two of these hypothetical tax-base sharing scenarios—one that shares property tax base and one that shares retail sales tax base—and what such a system potentially could do for the region (see Appendices C and D for spreadsheets containing complete descriptions of how these tax-base sharing models were calculated and their results).

Figure 24: Sales Tax Base Sharing Scenario

In the second tax-base sharing scenario, each of the cities and the county unincorporated areas of the region are required to contribute to the tax-base pool, 40 percent of the increase in their sales tax base (retail sales) from 1993 to 1997. This tax base pool was redistributed back out to the communities based on a formula giving preference to those communities with a low per capita tax base. In this model run we did not limit the amount of new tax base the cities of Denver and Aurora could receive.

This particular model run produced new tax base for 24 of the region's 38 communities that existed in 1993 and reported retail sales in 1993 and 1997—75.8 percent of the total population of the Denver region. Many of the biggest recipients under this formula were the same as in the previous run. Other cities that particularly benefit from this scenario are Commerce City (\$2,809 per capita), Sheridan (\$2,344 per capita) and Broomfield (\$944 per capita). In this run, Denver received \$710 per capita in new tax base and Aurora received \$607 per capita.

Figure 25: Commercial/Industrial Tax Base Sharing Scenario

In the first example of tax-base sharing, each of the cities and the county unincorporated areas of the region are required to contribute to the tax-base pool, 40 percent of the increase in their commercial/industrial property tax base from 1993 to 1997. This tax-base pool is then redistributed back out to the communities based on a formula giving preference to those places with a low total property value per capita. Thus, those places with little growth and low per capita property value receive additional tax base from the pool, while those places with much growth and high per capita property value contribute to the worse-off areas. Further, in this run

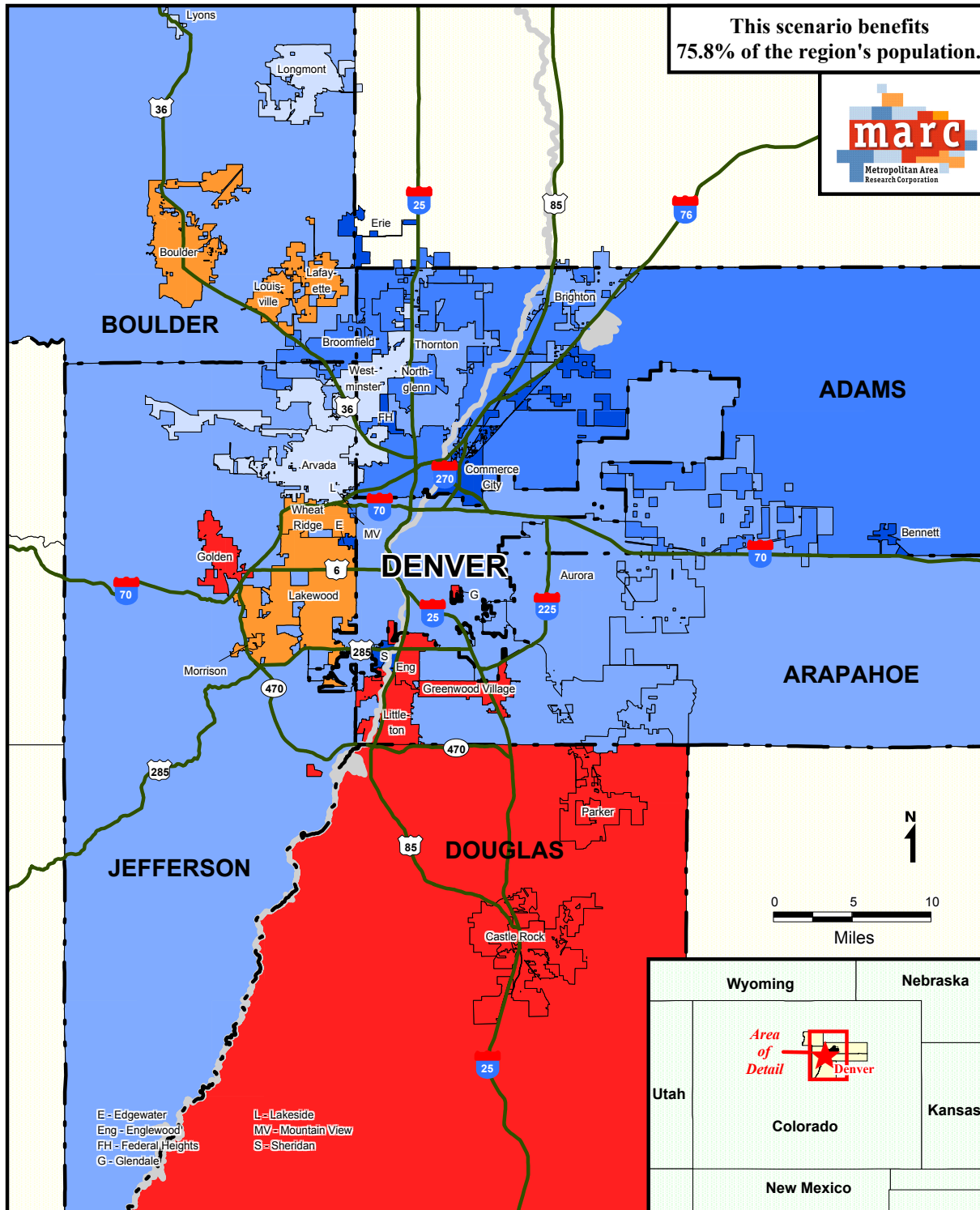
we limited the amount the cities of Denver and Aurora can receive from the pool to \$100 million each.⁸⁸ This is done to make a larger percentage of the tax-base pool available to be distributed to the other struggling communities in the region.

This run provided new tax base for 31 of the region's 45 communities that existed in 1993—76.1 percent of the regional population. Some of the biggest recipients were low capacity, developed, stressed suburbs such as Deer Trail (\$3,154 per capita), Federal Heights (\$2,222 per capita) and Northglenn (\$1,087 per capita). Low capacity, developing communities also had a number of relatively high recipients, including Bennett (\$1,706 per capita), Larkspur (\$1,241) and Arvada (\$661 per capita). Denver and Aurora each received the maximum allowed them, \$100 million, which amounts to receipts of \$201 per capita for Denver and \$407 per capita for Aurora.

This scenario benefits
75.8% of the region's population.



Figure 24: Redistribution of 40% of Growth in Retail Sales 1993-1997 According to per Capita Income by Municipality and County Unincorporated Area



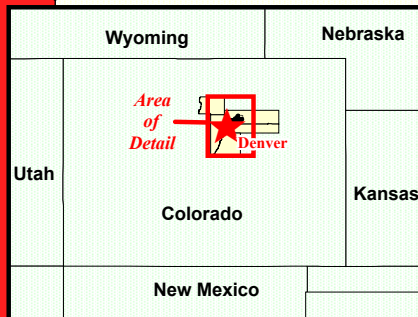
Change per Capita	
Red	-\$12,480 to -\$2,930 (8)
Orange	-\$1,250 to -\$170 (6)
Light Blue	\$60 to \$360 (5)
Medium Blue	\$550 to \$730 (7)
Dark Blue	\$910 to \$1,470 (5)
Dark Blue	\$1,810 or more (7)

Data Sources: State of Colorado Department of Revenue, Office of Tax Analysis (1993 & 1997 retail sales data); Denver Regional Council of Governments (1997 population estimates); 1990 U.S. Census of Housing and Population (1990 population & income data).

Note: 1993 dollars were adjusted upwards by a factor of 1.1107 to convert to 1997 dollars. 1993 CPI=144.5; 1997 CPI=160.5 (Base Year: 1982-1984 CPI=100)

Note: The municipalities of Bow Mar, Cherry Hills, Columbine Valley, Foxfield, Jamestown, Larkspur, Superior, and Ward did not report any retail sales to the State Office of Tax Analysis in 1997; therefore, for the purposes of this map, they were treated as a part of their respective county's unincorporated areas.

Note: The municipalities of Nederland and Deer Trail were included in the calculations, but are not shown on the map.



E - Edgewater
Eng - Englewood
FH - Federal Heights
G - Glendale
L - Lakeside
MV - Mountain View
S - Sheridan

This scenario benefits
76.1% of the region's population.

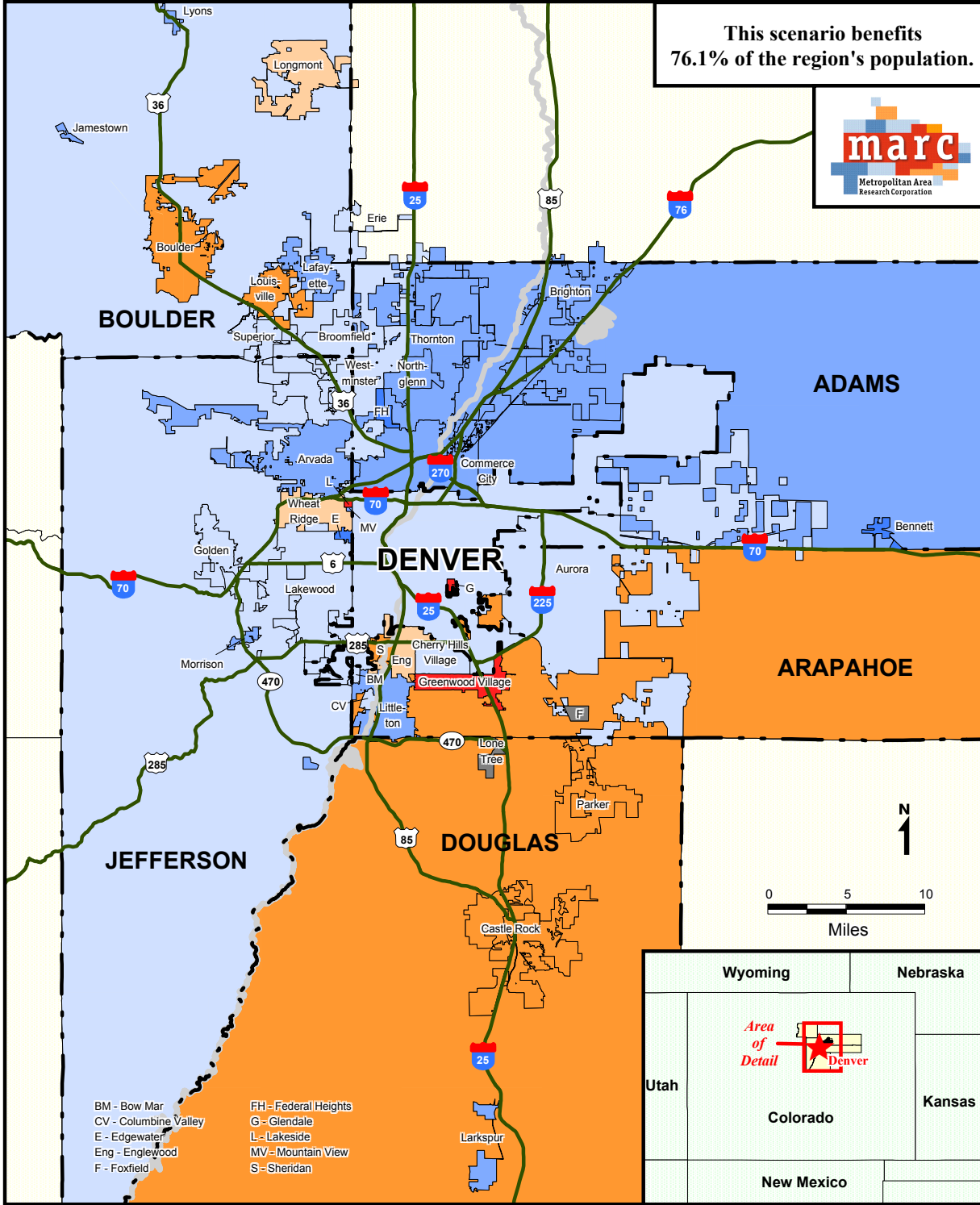


Figure 25: Redistribution of 40% of Actual Commercial/Industrial Property Value Growth 1993-1997 According to Actual Total Property Value per Capita by Municipality and County Unincorporated Area with \$100 Million Caps on Denver and Aurora

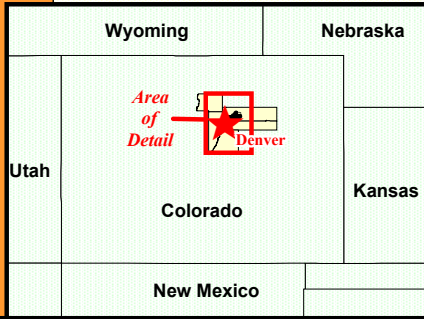
Change per Capita	
Red	-\$222,598 to -\$12,536 (3)
Orange	-\$1,548 to -\$700 (7)
Light Orange	-\$412 to -\$193 (4)
Light Blue	\$36 to \$520 (13)
Medium Blue	\$647 to \$1,256 (13)
Dark Blue	\$1,510 or more (5)
Grey	No data (2)

Data Sources: State of Colorado Department of Local Affairs, Division of Property Taxation, *23rd Annual Report*, 1993, and *27th Annual Report*, 1997 (1993 and 1997 taxbase data); and Denver Regional Council of Governments (1997 population estimates).

Note: Municipalities with "No data" did not exist in 1993.

Note: The municipalities of Ward, Nederland, and Deer Trail were included in the calculations, but are not shown on the map.

Note: 1993 dollars were adjusted upwards by a factor of 1.1107 to convert to 1997 dollars. 1993 CPI=144.5; 1997 CPI=160.5 (Base Year: 1982-1984 CPI=100)



BM - Bow Mar
CV - Columbine Valley
E - Edgewater
Eng - Englewood
F - Foxfield
FH - Federal Heights
G - Glendale
L - Lakeside
MV - Mountain View
S - Sheridan

APPENDIX B: THE EFFECTS OF CONCENTRATING 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.⁸⁹ Surrounding these severely distressed neighborhoods are transitional neighborhoods with 20 to 40 percent of their population in poverty.⁹⁰ 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 311.⁹¹ During the 1980s, ghettoization rapidly increased in Chicago, Detroit, and many of the secondary cities of the Northeast and Midwest.⁹² 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.⁹³ In Midwestern cities as a whole, the number of ghettoized tracts doubled in the 1980s.⁹⁴ Throughout these two decades, the concentration of poverty grew at a much faster pace than poverty itself. Poverty rates in U.S. metropolitan areas remained stable, increasing by only 0.9 percentage points, yet persons in poverty living in high-poverty areas almost doubled in this period – increasing by 98.0 percent.⁹⁵

The expansion of extreme and transitional poverty tracts is not just confined to these large urban centers of the Northeast and Midwest. MARC have found that these trends, while more severe in some cities than in others, are present and worsening in all of the 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 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.⁹⁶ As neighborhoods become dominated by joblessness,

racial segregation, and single-parentage, they become isolated from middle-class society and the private economy.⁹⁷ Individuals, particularly children, are deprived of local successful role models and connections to opportunity outside the neighborhood.

Studies have found that poor individuals living in concentrated poverty are far more likely to become pregnant as teenagers,⁹⁸ drop out of high school,⁹⁹ and remain jobless¹⁰⁰ 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 attendant social isolation leads to the development of speech patterns increasingly distinct from mainstream English.¹⁰¹ These speech differences make education, job search, and general interaction with mainstream society difficult.¹⁰²

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*,¹⁰³ 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.¹⁰⁴ His research established that the low-income women who moved to the suburbs “clearly experienced improved employment and earnings, even though the program provided no job training or placement services.”¹⁰⁵ Very rapidly after the moves, the suburbanites were about 15 percent more likely to be employed.¹⁰⁶ 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).¹⁰⁷ 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 percent¹⁰⁸) and went to college at a rate of 54 percent, compared with 21 percent who stayed in the city.¹⁰⁹ In terms of employment, 75 percent of the suburban youth had jobs compared to 41 percent in the city.¹¹⁰ Moreover, the suburban youth had a significant advantage in job pay and were more likely to have a prestigious job with benefits.¹¹¹ Finally, 90 percent of the suburban youth were either working or in school compared with 74 percent of the city youth.¹¹²

As poverty concentrates in central cities and inner communities and social disorganization increases, crime grows, and waves of middle-class flight and business disinvestment surrounding those places intensify. At the same time city resources decline. 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.¹¹³ Social needs begin to accelerate, while the resources to address those needs decline. These cities become pressed to provide more with less.¹¹⁴ As the quality of services declines in the least desirable parts of the region, the flight of the middle class and the private economy accelerates. Larger industrial and service businesses are disadvantaged by deteriorating public infrastructure, crime, loss of property market value, lack of room for expansion or parking, lack of rapid access to radial highways, and the cost of remediation of polluted land.¹¹⁵ 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 jurisdictions help to ensure that the region's poorest residents remain in poor neighborhoods of the central city and declining inner suburbs. By requiring low maximum building densities, the zoning codes of many 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 and sales tax wealth in affluent suburbs and the stagnation or decline of local resources in central city and inner-suburban communities represents, in part, an interregional transfer of tax resources. As such, the loss of value and increased fiscal stress in older, poorer communities is a cost of regional separation 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.¹¹⁶ Physical rehabilitation programs, while they improve the quality of shelter and neighborhood appearance, do little to attack the underlying “tangle of pathology”¹¹⁷ associated with concentrated poverty.

In terms of business development, areas of concentrated poverty have great difficulty competing with developing suburbs that offer middle-class customers, low crime rates, increasing property market 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.¹¹⁸

David Rusk recently studied the effects of several of the largest and most successful inner-city focused, antipoverty initiatives in the country.¹¹⁹ 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 study does indicate that central-city, antipoverty efforts alone are woefully inadequate in the face of the enormous force of metropolitan separation.

Proposed solutions to the problem of concentrations of poverty differ widely in approach. The debate 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-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 suburban jobs and schools located in the affluent communities of the region and, at the same time, the revitalization of existing low-income neighborhoods 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.

APPENDIX C: HYPOTHETICAL PROPERTY TAX-BASE SHARING RUN.

Redistribution of 40 percent of Commercial/Industrial Property Value Growth from 1993-1997 According to Total Property Value Per Capita by Municipality and County Unincorporated Area with \$100 Million Caps on Denver and Aurora

	Municipality / County Unincorporated Area	Subregion	Net Distribution	Estimated Population, 1997	Per Capita Won/Lost
1	Deer Trail town	Low capacity, developed, stressed	\$1,854,362	588	\$3,154
2	Federal Heights city	Low capacity, developed, stressed	\$21,689,561	9,763	\$2,222
3	Bennett town	Low capacity, developing	\$3,470,760	2,035	\$1,706
4	Ward town	Low capacity, developed	\$268,921	177	\$1,519
5	Edgewater city	Low capacity, developed	\$7,138,801	4,728	\$1,510
6	Commerce City city	High capacity, developing, stressed	\$23,818,212	18,971	\$1,256
7	Larkspur town	Low capacity, developing	\$416,997	336	\$1,241
8	Thornton city	Low capacity, developing, stressed	\$78,348,643	71,092	\$1,102
9	Northglenn city	Low capacity, developed, stressed	\$30,652,031	28,186	\$1,087
10	Lyons town	Low capacity, developed	\$2,226,436	2,303	\$967
11	Morrison town	Low capacity, developing	\$785,177	843	\$931
12	Mountain View town	Low capacity, developed	\$511,231	579	\$883
13	Uninc. Adams county	Low capacity, developing, stressed	\$57,823,096	69,167	\$836
14	Littleton city	High capacity, developed	\$31,918,614	40,396	\$790
15	Lafayette city	Low capacity, developing, stressed	\$14,914,220	19,406	\$769
16	Brighton city	Low capacity, developing, stressed	\$14,058,413	18,980	\$741
17	Arvada city	Low capacity, developing	\$63,670,866	96,330	\$661
18	Jamestown town	Low capacity, developed	\$187,004	289	\$647
19	Bow Mar town	High capacity, developed	\$480,824	924	\$520
20	Superior town	Low capacity, developing	\$1,980,644	4,009	\$494
21	Erie town	Low capacity, developing, stressed	\$947,415	2,017	\$470
22	Westminster city	Low capacity, developed, stressed	\$41,899,403	90,149	\$465
23	Uninc. Boulder county	High capacity, developing	\$21,149,991	51,093	\$414
24	Aurora city	Low capacity, developing, stressed	\$100,000,000	245,881	\$407
25	Golden city	High capacity, developed	\$4,361,209	15,395	\$283
26	Cherry Hills Village	High capacity, developed	\$1,528,423	6,053	\$253
27	Columbine Valley town	High capacity, developed	\$274,349	1,185	\$232
28	Denver city	Central city	\$100,000,000	497,625	\$201
29	Lakewood city	Low capacity, developed	\$19,570,602	139,270	\$141
30	Broomfield city	Low capacity, developing	\$2,148,462	32,747	\$66
31	Uninc. Jefferson county	High capacity, developing	\$6,518,812	181,807	\$36
32	Englewood city	High capacity, developed, stressed	(\$6,222,828)	32,320	(\$193)
33	Nederland town	Low capacity, developed	(\$263,294)	1,237	(\$213)
34	Wheat Ridge city	High capacity, developed	(\$8,283,295)	29,909	(\$277)
35	Longmont city	Low capacity, developing, stressed	(\$24,023,158)	58,274	(\$412)
36	Sheridan city	Low capacity, developed, stressed	(\$3,902,417)	5,576	(\$700)
37	Boulder city	High capacity, developed, stressed	(\$86,333,227)	90,704	(\$952)
38	Parker town	High capacity, developing	(\$12,544,380)	13,071	(\$960)
39	Uninc. Arapahoe county	High capacity, developing	(\$139,256,247)	143,696	(\$969)
40	Castle Rock city	High capacity, developing	(\$14,177,570)	13,932	(\$1,018)
41	Uninc. Douglas county	High capacity, developing	(\$114,798,201)	96,783	(\$1,186)
42	Louisville city	High capacity, developing	(\$28,048,645)	18,121	(\$1,548)
43	Glendale city	High capacity, developed, stressed	(\$37,734,683)	3,010	(\$12,536)
44	Greenwood Village city	High capacity, developed	(\$176,354,358)	12,320	(\$14,314)
45	Lakeside town	High capacity, developing	(\$2,671,176)	12	(\$222,598)

Percentage of regional population living in winning municipalities / county unincorporated areas: 76.1%

Municipalities that did not exist in 1993:

Foxfield town	High capacity, developed	- 732	-
Lone Tree city	High capacity, developed	- 3,160	-

Note: 1993 dollars were adjusted upwards by a factor of 1.1107 to convert to 1997 dollars.
1993 CPI=144.5; 1997 CPI=160.5 (Base Year: 1982-1984 CPI=100)

Data Sources: State of Colorado Department of Local Affairs, Division of Property Taxation, *23rd Annual Report*, 1993 and *27th Annual Report*, 1997 (1993 and 1997 tax base data); Denver Regional Council of Governments (1997 population estimates).

Methodology:

Each municipality is required to contribute 40% of its 1993-1997 commercial/industrial property tax base growth 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 property tax base per capita to the municipality's property tax base 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.

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. Denver and Aurora were the only municipalities in the region whose populations were significant enough to consider capping.

Step 1: 1993-1997 municipal commercial/industrial property tax base growth * 0.40 = Municipal Contribution

Step 2: municipal population * ((region's property tax base / region's population) / (municipal property tax base / 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 Denver's and Aurora's Municipal Net Distributions < \$100 million, model run ends

or

Step 7: If Denver's and/or Aurora's Municipal Net Distributions > \$100 million, rerun Step 1 without Denver and/or Aurora

Step 8: Subtract \$100 million each from Municipal Contribution for Denver's and/or Aurora's net distributions

Step 9: Rerun Steps 2-5, excluding Denver and/or Aurora

APPENDIX D: HYPOTHETICAL SALES TAX-BASE SHARING RUN.

Redistribution of 40 percent of Growth in Retail Sales 1993-1997 According to Per Capita Income by Municipality and County Unincorporated Area.

Municipality / County Unincorporated Area	Subregion	Net Distribution	Estimated Population, 1997	Per Capita Won / Lost
1 Commerce City city	High capacity, developing, stressed	\$53,283,140	18,971	\$2,809
2 Deer Trail town	Low capacity, developed, stressed	\$1,465,748	588	\$2,493
3 Sheridan city	Low capacity, developed, stressed	\$13,067,787	5,576	\$2,344
4 Bennett town	Low capacity, developing	\$4,611,987	2,035	\$2,266
5 Federal Heights city	Low capacity, developed, stressed	\$19,556,913	9,763	\$2,003
6 Edgewater city	Low capacity, developed	\$9,074,158	4,728	\$1,919
7 Erie town	Low capacity, developing, stressed	\$3,655,808	2,017	\$1,812
8 Lakeside town	High capacity, developing	\$17,625	12	\$1,469
9 Unincorporated Adams county	Low capacity, developing, stressed	\$87,317,149	69,167	\$1,262
10 Northglenn city	Low capacity, developed, stressed	\$31,189,575	28,186	\$1,107
11 Broomfield city	Low capacity, developing	\$30,905,617	32,747	\$944
12 Mountain View town	Low capacity, developed	\$526,782	579	\$910
13 Thornton city	Low capacity, developing, stressed	\$51,612,887	71,092	\$726
14 Denver city	Central city	\$353,453,227	497,625	\$710
15 Unincorporated Boulder county	High capacity, developing	\$37,824,099	55,563	\$681
16 Brighton city	Low capacity, developing, stressed	\$12,739,384	18,980	\$671
17 Unincorporated Arapahoe county	High capacity, developing	\$92,426,348	151,625	\$610
18 Aurora city	Low capacity, developing, stressed	\$149,152,274	245,881	\$607
19 Unincorporated Jefferson county	High capacity, developing	\$101,350,987	182,045	\$557
20 Arvada city	Low capacity, developing	\$34,193,967	96,330	\$355
21 Longmont city	Low capacity, developing, stressed	\$19,711,934	58,274	\$338
22 Lyons town	Low capacity, developed	\$484,443	2,303	\$210
23 Westminster city	Low capacity, developed, stressed	\$5,982,963	90,149	\$66
24 Nederland town	Low capacity, developed	\$73,911	1,237	\$60
25 Lakewood city	Low capacity, developed	(\$24,829,870)	139,270	(\$178)
26 Lafayette city	Low capacity, developing, stressed	(\$3,751,526)	19,406	(\$193)
27 Louisville city	High capacity, developing	(\$11,313,260)	18,121	(\$624)
28 Wheat Ridge city	High capacity, developed	(\$20,353,764)	29,909	(\$681)
29 Morrison town	Low capacity, developing	(\$775,732)	843	(\$920)
30 Boulder city	High capacity, developed, stressed	(\$113,373,793)	90,704	(\$1,250)
31 Littleton city	High capacity, developed	(\$118,503,584)	40,396	(\$2,934)
32 Parker town	High capacity, developing	(\$39,531,504)	13,071	(\$3,024)
33 Castle Rock city	High capacity, developing	(\$44,759,092)	13,932	(\$3,213)
34 Unincorporated Douglas county	High capacity, developing	(\$384,412,628)	97,119	(\$3,958)
35 Golden city	High capacity, developed	(\$64,121,561)	15,395	(\$4,165)
36 Englewood city	High capacity, developed, stressed	(\$175,011,424)	32,320	(\$5,415)
37 Greenwood Village city	High capacity, developed	(\$75,376,504)	12,320	(\$6,118)
38 Glendale city	High capacity, developed, stressed	(\$37,564,472)	3,010	(\$12,480)

**Percentage of regional population living in winning areas:
75.8%**

Note: 1993 dollars were adjusted upwards by a factor of 1.1107 to convert to 1997 dollars.
1993 CPI=144.5; 1997 CPI=160.5 (Base Year: 1982-1984 CPI=100)

Data Sources: State of Colorado Department of Revenue, Office of Tax Analysis (1993 and 1997 retail sales data); Denver Regional Council of Governments (1997 population estimates); 1990 U.S. Census of Population and Housing (1990 population and income figures).

Note: The municipalities of Bow Mar, Cherry Hills, Columbine Valley, Foxfield, Jamestown, Larkspur, Lone Tree, Superior, and Ward did not report retail sales to the Office of Tax Analysis in 1993 or 1997, and were therefore, for the purposes of these runs, treated as a part of their respective county unincorporated areas.

Methodology:

Each municipality is required to contribute 40% of its 1993-1997 growth in retail sales 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 income per capita to the municipality's income 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: 1993-1997 municipal growth in retail sales * 0.40 = Municipal Contribution
- Step 2: $\text{municipal population} * ((\text{region's aggregate income} / \text{region's population}) / (\text{municipal aggregate income} / \text{municipal population})) = \text{Distribution Index}$
- Step 3: $\text{Distribution Index} / \text{sum of Distribution Indexes} = \text{Municipal Share of tax base to be distributed}$
- Step 4: $\text{Municipal Share} * \text{sum of Municipal Contributions} = \text{Municipal Distribution}$
- Step 5: $\text{Municipal Distribution} - \text{Municipal Contribution} = \text{Municipal Net Distribution}$

ENDNOTES

¹ MARC projects either completed or in process include: Atlanta, Baltimore, Central Valley of California, Chicago, Detroit, Grand Rapids (MI), Houston, the State of Kentucky, Los Angeles, Milwaukee, Minneapolis-St. Paul, Philadelphia, Phoenix, Pittsburgh, Portland (OR), Saginaw, San Diego, San Francisco Bay Area, Seattle, South Florida (Miami), St. Louis, and Washington DC.

² 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).

³ 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).

⁴ See Appendix B for a discussion of the effects of concentrated poverty on people who live in those neighborhoods.

⁵ 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.

⁶ Adams, "Sectoral Dynamic."

⁷ 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.

⁸ United States Vice President Al Gore, Brookings Policy Series, September 2, 1998.

⁹ Phyllis Myers, "Livability at the Ballot Box: State and Local Referenda on Parks, Conservation and Smarter Growth, Election Day 1998," A Discussion Paper Prepared for The Brookings Institution Center on Urban and Metropolitan Policy, January 1999.

¹⁰ 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.

¹¹ Neal Peirce, *Citistates: How Urban America Can Prosper in a Competitive World* (Washington, D.C.: Seven Locks Press, 1993).

¹² David Rusk, *Cities Without Suburbs* (Washington, D.C.: Woodrow Wilson Center Press, 1993).

¹³ Downs, *New Visions*.

¹⁴ 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).

¹⁵ William R. Barnes and Larry C. Ledebur, *City Distress, Metropolitan Disparities, and Economic Growth* (Washington, D. C.: National League of Cities, 1992).

¹⁶ 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.

¹⁷ Allan Wallis, "Voluntary Coordination of Regional Growth: The Case of Denver's Urban Growth Boundary," *The Regionalist* (Fall 1998): 21-28, "CoPIRG Outlook," Colorado Public Interest Research Group," Summer 1999, Denver Regional Council of Governments, "Metro Vision 2020 Plan," July 1997

¹⁸ Wallis, "Voluntary Coordination of Regional Growth: The Case of Denver's Urban Growth Boundary"

¹⁹ Wallis, "Voluntary Coordination of Regional Growth: The Case of Denver's Urban Growth Boundary." The Metro Mayor's Caucus convened a Task Force in March of 1997 to examine the benefits and burdens of municipal revenue sharing and is encouraging a dialogue between cities and counties on intergovernmental agreements to reduce competition and limit ex-urban development.

²⁰ The Denver region is defined in this study as the five-county area designated by the U.S. Census Bureau as the Denver Primary Metropolitan Statistical Area (PMSA)—Adams, Arapahoe, Denver, Douglas and Jefferson as well as the Boulder-Longmont PMSA—Boulder County.

²¹ According to Douglas S. Massey and Nancy A. Denton, in their book *American Apartheid* (Harvard University Press, Cambridge, Massachusetts, 1993), racial segregation is an issue that has dropped almost completely from the nation's attention since the 1970's and 1980's. Nonetheless, the authors contend that racial segregation continues to play an important role in metropolitan development patterns.

²² Only a few of the variables MARC studied were used in defining these subregions. This was done both to make the analysis simpler and because the subregions are intended only to give a general picture of similarities and differences among metropolitan cities. The rest of the variables examined in this study are summarized in following sections of this report.

²³ First, a weighted regional property tax *rate* is calculated from the total of all the jurisdiction's property market values and property tax revenues. This rate is then applied to each jurisdiction's total property market value per household to determine its property tax capacity. Next, a weighted regional local sales tax rate is calculated from the total of all the jurisdiction's retail sales values and local sales tax revenues. This rate is then applied to each jurisdiction's retail sales per household to determine its local sales tax capacity. Each jurisdiction's two tax capacity figures are then summed together to produce a property and local sales tax capacity figure. 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, a z-score is determined for the percentage of students eligible for free lunch to reflect the stress factor. A z-score is the normalized deviation from the average. So, for example, a jurisdiction whose percentage of students eligible for free lunch falls at exactly average for the region would have a free lunch eligibility 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.

Finally a stage of development component value is assigned to each jurisdiction based on the percentage of the jurisdiction's total land area that has been developed (80 percent or more developed land = Developed, less than 80 percent developed land = Developing). Each jurisdiction is then assigned to one of the eight subregion categories based on their stress score, fiscal capacity score, and stage of development score.

1997 percentage of students eligible for free lunch data are from the Colorado Department of Education; 1997 assessed property values are from the state of Colorado Department of Local Affairs, Division of Property Taxation and were converted to property market values by MARC; 1998 property tax revenues are from the Colorado Department of Local Affairs; 1998 retail sales and local sales tax revenues are from the State of Colorado Department of Revenue, Office of Tax Analysis; 1998 household estimates and developed land figures are from the Denver Regional Council of Governments.

²⁴ The central city of Denver is discussed independently of the other subregions throughout this report, although it was included in the subregion analysis (it fell into the high capacity, developing, stressed subregion). This is done because one of the main purposes of this study is to highlight similarities and differences among suburban jurisdictions and including Denver in these subregions would distort this analysis.

²⁵ In Colorado, there are several limitations placed on the amount of tax revenue local governments can generate and how much they can spend. While these limitations affect how much of a jurisdiction's sales and property tax capacity can actually be used to generate revenue and spending, it does not affect assessed property values or the amount of taxable retail value in a jurisdiction. Thus, analyzing the tax capacity still provides an understanding of how much each local government could potentially generate relative to one another in the absence of the limitations. This is important because many jurisdictions have not yet reached their revenue and spending limits, stimulating competition among jurisdictions for tax base. Further, tax capacity helps to illustrate how property is valued within each community.

²⁶ 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.

²⁷ Appendix B contains a more detailed discussion of the effects of concentrated poverty on those who live in high poverty neighborhoods.

²⁸ For example, 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 (>40 percent poverty rate) and from 33 to 40 transitional tracts (20-40 percent poverty rate), 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 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.

²⁹ Gary Orfield, "Ghettoization and Its Alternatives," in ed. Paul Peterson, *The New Urban Reality* (Washington, D.C.: Brookings Institution, 1985): 163.

³⁰ 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).

³¹ 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.

³² Boulder also saw an increase in the number of such census tracts, from seven in 1980 to nine in 1990, including one that grew to a poverty rate greater than 40 percent. These census tracts are not considered in the same way as those in the core of the Denver region because much of Boulder's poor population consists of college students. This section is concerned more with the pervasive poverty prevalent in the core of the region.

³³ U.S. Bureau of the Census, *Statistical Abstract of the United States: 1997* (117th edition.) Washington D.C., 1997, Table 742. In 1995, 36.5 percent of female-headed households were below the poverty level—as compared to 13.8 percent of all families, 11.2 percent of white families and 29.3 percent of black families.

³⁴ U.S Bureau of the Census, *Statistical Abstract of the United States: 1997* (117th edition.) Washington D.C., 1997, Table 730.

³⁵ Denver Regional Council of Governments, *1995 Area Income Estimates*.

³⁶ 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.”

³⁷ Ibid.

³⁸ 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*; 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).

³⁹ Free lunch data and total enrollment figures were provided by the Colorado Department of Education. Data on students eligible for reduced-cost lunch was not available.

⁴⁰ Data on change in free lunch eligibility was either unavailable or suppressed for twenty schools.

⁴¹ See Massey and Denton, *American Apartheid*, pp.137-139 for a discussion of how concentrated poverty and crime interact.

⁴² Crime data for the region are from the Colorado FBI, Department of Public Safety. 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. This data does not reflect all crimes that have occurred—only those that have been reported to the police.

⁴³ All employment data are from the Denver Regional Council of Governments.

⁴⁴ 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.”

⁴⁵ Although in Colorado, due to TABOR and other limitations, tax rates cannot increase without voter approval.

⁴⁶ Retail sales figures were obtained from the State of Colorado, Department of Revenue, Office of Tax Analysis.

⁴⁷ Article X, Sec. 3(1)(b), Colo. Const.

⁴⁸ Article X, Sec. 20, Colo. Const.

⁴⁹ The TABOR formula limits local government spending in any given year to spending in the previous year multiplied by the sum of inflation (the CPI index for the Denver metropolitan area) and local growth—which refers to the net growth of actual real property value in a district (or percentage change in student population when referring to a school district).

TABOR spending limit = Previous year’s spending limit * [1 + CPI (percent) + Local Growth (percent)]

⁵⁰ There is some debate over how to interpret TABOR’s restriction on mill levy or tax rate increases. Most local governments have adhered to the conservative interpretation—increases in the mill levy or tax rate are prohibited (without voter approval)—regardless of its effect on total revenue. The more liberal interpretation allows these tax rates and/or mill levies to adjust without voter approval as long as total tax revenue does not exceed the local governments TABOR spending limit.

⁵¹ 1997 property tax base data from the State of Colorado Department of Local Affairs, Division of Property Taxation, 27th *Annual Report*, 1997.

⁵² 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.

⁵³ Burchell, et. al., *Costs of Sprawl Revisited*.

⁵⁴ 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.

⁵⁵ 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 \$526 million figure does not include improvement projects that cost less than \$500,000. Data is from DRCOG.

⁵⁶ A survey conducted by Talmey-Drake Research & Strategy, Inc. in early 1998 and released by the Colorado Public Interest Research Group (CoPIRG) found, for instance, that 64 percent of survey respondents thought the state legislature was doing only fair or poor in "addressing growth, sprawl and their impacts." 59 percent answered in the same way when asked to rate their local county and city officials on the same issue.

⁵⁷ "CoPIRG Seeks State Backing for Transit," *CoPIRG Outlook*, Summer 1999

⁵⁸ Yale Rabin, "Highways as a Barrier to Equal Access," *Annals of the American Academy of Political Science* (1974). See generally Metropolitan Planning Council of Chicago, "Trouble in the Core."

⁵⁹ John Kain, "Housing Segregation, Negro Unemployment, and Metropolitan Decentralization," *Quarterly Journal of Economics* 82 (May 1968): 175-97.

⁶⁰ John D. Kasarda, "Urban Industrial Transition and the Underclass," *Annals of the American Academy of Political and Social Sciences* 501 (January 1989): 36.

⁶¹ Ibid.

⁶² Ibid.

⁶³ 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.

⁶⁴ Robert Cervero, "Jobs-Housing Balance and Regional Mobility," *American Planning Association Journal* (Spring 1989).

⁶⁵ Ibid.

⁶⁶ Robert Cervero, "Jobs-Housing Balance Revisited," *American Planning Association Journal* (Autumn 1996).

⁶⁷ Data is from DRCOG. "Moderate Income Jobs" are defined as those that pay up to \$10 per hour. "Moderately Priced Housing" is defined as housing that whose monthly rent or mortgage payment is \$800 or less.

⁶⁸ 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).

⁶⁹ 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*.

⁷⁰ 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*.

⁷¹ Burchell, *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan*.

⁷² Thomas E. Dahl, *Wetlands Losses in the United States: 1780s - 1980s* (1990).

⁷³ Henry R. Richmond, "Program Design: The American Land Institute". a report to the Steering Committee, American Land Institute, August 29, 1997.

⁷⁴ Trust for Public Land newsletter, September 22, 1996.

⁷⁵ Richmond, "A Land Use Policy Agenda for 21st Century America".

⁷⁶ Also included in the urbanized area are large concentrations of non-residential urban area, such as industrial parks, office areas, and airports.

⁷⁷ 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 "1970 Census of Population Supplementary Report, Population and Land Area of Urbanized Areas: 1970 and 1960" (February 1972).

⁷⁸ The TABOR spending limits apply to school districts as well. Thus, school districts must show that by receiving this state money they will not exceed their TABOR spending limit.

⁷⁹ Alan Dale Albert, "Sharing Suburbia's Wealth: The Political Economy of Tax Base Sharing in the Twin Cities," BA Thesis, Harvard University, March, 1979.

⁸⁰ Downs, *New Visions*, pp. 180--81.

⁸¹ 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.

⁸² Ibid.

⁸³ 1000 Friends and Home Builders, "Managing Growth"; Robert Liberty, *Oregon's Comprehensive Growth Management*.

⁸⁴ 1000 Friends and Home Builders, "Managing Growth".

⁸⁵ Ibid.

⁸⁶ 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 country. In addition to its regional tax-base sharing system, Minnesota also has a statewide general revenue system and a school equity system.

⁸⁷ *Burnsville v Onischuk*, 301 Minn. 137, 22 N.W.2d 523 cert. denied 420 U.S. 916 (1974).

⁸⁸ Once the net distribution for each community is determined, the shares distributed to the cities of Denver and Aurora are examined. If the share calculated for either of these cities is less than the maximum allowed, no adjustments are made. If the net distribution to either is greater than the maximum allowed, the model is run again. This time, that city is excluded from all of the calculations; instead, it is 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.

⁸⁹ 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.

⁹⁰ Ibid.

⁹¹ Kasarda, "Concentrated Poverty," 261.

⁹² Kasarda, "Concentrated Poverty"; Paul A. Jargowsky, "Ghetto Poverty Among Blacks," *Journal of Policy Analysis and Management* 13, no. 2 (1994): 288-310.

⁹³ Kasarda, "Concentrated Poverty," 261.

⁹⁴ Ibid., 260.

⁹⁵ Paul A. Jargowsky, *Poverty and Place*.

⁹⁶ 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).

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

108 Ibid., 5.

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112 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.

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