

**THE INTERACTION BETWEEN FISCAL
POLICY AND GROWTH IN FOUR COLORADO
COUNTIES**

By
Jody Kennedy

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Daniel J. Evans School of Public Affairs
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The Interaction Between Fiscal Policy and Growth in Four Colorado Counties

EXECUTIVE SUMMARY

Sprawl has grown into a household name to represent the poorly planned, cookie cutter development projects replacing once rural landscapes. In addition to the physical changes noticeable from our car windows, sprawl leads to less visible impacts on local governments and the quality of public services. The development patterns common to the suburbs include large lot sizes and greater distances between development projects, which can require greater expenditures for public services than condensed urban neighborhoods. Colorado offers an example of a state grappling with the costs of less efficient development patterns combined with the pressures of rapid population growth. Between 1990 and 2000, Colorado's population grew by 31 percent while the national average was 13 percent. The absence of geographic barriers and statewide growth management policies has allowed new development to spread across Colorado's Front Range, rapidly consuming agricultural lands and connecting the Denver Metro region to once rural communities. In this paper, I investigate the fiscal impacts of this development in an attempt to better understand the interaction between fiscal policies and growth practices in four Colorado counties.

This report explores the varying impacts of growth on public spending that occur across county lines. These boundaries can mark stark differences in the funding levels of public services. Based on the findings of this analysis, urban counties tend to have higher social costs, while rural counties tend to have higher infrastructure costs. In addition, changes in county budgets suggest that counties are not generating enough property tax revenues to cover the increasing expenditures associated with population growth. As a result, counties are adopting sales taxes to help pay for services. Extensive research documents

that a reliance on sales tax revenues can encourage local governments to promote inefficient forms of development associated with sprawl.

The gap between property tax revenues and expenditures is tied to Colorado tax policies that limit government spending, prohibit tax increases without voter approval and restrict taxes paid by residential property owners. The following analysis examines the link between tax policies and land use practices. The findings offer support for reforming existing fiscal policies in order to allow local governments to promote more thoughtful and regional growth management strategies without compromising local revenue sources.

INTRODUCTION

On Colorado's Front Range, the rapid expansion of low-density development across rural landscapes is undermining many of the qualities that draw people to the region. A rich environment, high quality of life, and relatively low cost of living helped make Colorado the third fastest growing state throughout the 1990s. While growth brought new businesses, new opportunities and energy, it also generated traffic congestion, crowded mountain trails and lost vistas. These are the externalities that accompany not just population growth but modern trends in development that are land-intensive and poorly planned. The urban expansion Denver experienced in the 1990s spread out from downtown like spokes on a wheel, developing open space at more than twice the rate of population growth.¹ According to a Sierra Club report, Colorado's effectiveness in land use planning during this period ranked 29th relative to other states. By 1998, Colorado residents considered urban growth the number one concern facing the state, above education quality and crime.²

In response to citizen concerns, the Colorado State Legislature has debated possible growth management policies for the past several years. In 2000, citizens proposed legislation to mandate urban planning and slow growth in the rural areas that surround cities. Yet to date, no measure has passed to effectively grapple with growth related issues.³ In 2001, under pressure from citizens and environmental organizations, the Colorado legislature approved growth related legislation, but the measure was dubbed by the planning community as "baby steps."⁴ The bill includes language that permits local governments to assess the value of impact fees imposed on developers in order to help cover the infrastructure costs of new development. Yet even this provision has been criticized because it prohibits the use of fees for funding K-12 public education-related

¹ Colorado Department of Local Affairs (2000).

² Growth related issues have polled as the number one concern facing a majority of voters since 1998. Ciruli (2001). Talmey-Drake Research Poll (1999, 2001), Pew Center for Civic Journalism (1999).

³ Colorado Center for Healthy Communities (2003).

⁴ Meck (2002).

expenses and it only allows fees to be used for capital facilities, prohibiting use for equipment, services or open space.

Colorado's struggle to enact statewide growth management policies is rooted in strong local control politics and common fears that enacting growth management could cause harm to the Colorado economy.⁵ Colorado's local control ideology is ingrained in its history as a western state. Colorado local governments are often open and interested in working together on growth related problems. However, they shy from state directed mandates on land use. In addition, growth is strongly associated with economic prosperity from bringing new people and new jobs to the state. Finding solutions for growth related concerns without threatening local control or discouraging economic development presents a significant challenge for Colorado's leadership.

Despite the economic prosperity that accompanied growth in the 1990s, there are also signs of negative economic impacts. Current trends in development may be potentially damaging to the state's long-term economic prosperity.⁶ This is because increasing traffic, rising housing prices, and diminishing environmental quality threaten Colorado's quality life, which attracts new residents and businesses. The increasing costs associated with growth also places quality of public services at risk. This is because population growth is occurring in rural areas where infrastructure is inadequate. As local governments are faced with increasing expenditures, they are finding it harder to afford the same quality of public services.

The economic consequences of rapid unmanaged growth have varied from county to county. While some counties have prospered from new technology centers that provide quality jobs and an increasing tax base, others have witnessed a rapid increase in new residents who shop, work and spend tax dollars in other jurisdictions. Generally, local governments are finding it harder to pay for public services because growth is not

⁵ Ciruli (2001).

⁶ Colorado Association of Commerce and Industry (2001).

generating enough new tax revenue to cover the associated costs.⁷ This is in part because of the inefficiencies associated with urban expansion on the fringe that ensue because lower density developments require more infrastructure than condensed structures. In addition, this is because of Colorado's complicated tax system that limits the state and local governments' ability to manipulate tax revenues. This paper investigates the economic impacts of growth under the current tax structure by analyzing the fiscal behavior of local governments. To do this, I look at the financial statements for four Colorado counties along the north Front Range. These are Larimer, Weld, Boulder, and Adams. Using census data and county budgets for 1990 and 2000, I review the revenues and expenditures for each county while asking the following three questions:

1. What changes occurred in county service-dollars spent per person in these counties over the ten-year period?
2. Is there evidence to support the claim that population growth is not generating enough revenue to sustain the associated expenditures?
3. How do the State spending measures, TABOR and Gallagher influence changes in county revenues and expenditures?

Sprawl

Sprawl is commonly known as the expansion of housing developments and strip malls on the fringe of cities. However, not all rural expansion is sprawl. The development patterns that define sprawl have three primary characteristics: first it is low-density; second, it expands outward into previously undeveloped open space and agricultural lands; and third, sprawl has a tendency to "leapfrog" farms and plots of open space, creating a checkerboard development pattern.

Unlike the condensed development found in urban centers, sprawl is associated with numerous negative externalities that reduce the attractiveness and livability of a region.⁸

⁷ Greenwood (2002).

⁸ Duany (2000)

The first of these is the fiscal impacts on local governments. As development projects spread farther out into agricultural lands, the costs to governments for building new infrastructure and providing services increases. The second major impact is to quality of life and the environment, which speaks to impacts such as increasing traffic and smog, loss of open space, and diminishing water quality. The final externality considered is social inequality between jurisdictions in the region. Growing suburbs can pull valuable economic resources from urban centers, increasing economic disparities between them.

The costs of expanding suburbs on quality of life and the environment have been well documented. Studies have found sprawl to be correlated with a diminishing sense of community, increasing traffic congestion, reduced air and water quality, and loss of wildlife habitat.⁹ Sprawl can harm community charm by replacing neighborhoods with isolated development projects that are often surrounded by fences and accessible by only once entrance point. Sprawl can also increase traffic by causing greater distances between houses and work places, commercial centers, and other services. As traffic levels rise, so does road rage, air pollution, run-off, and wildlife fragmentation. In addition, sprawl tends to be more consumptive of natural resources.

Larger houses on larger lots require greater water consumption and impervious surface area.¹⁰ Because of harmful impacts to riparian areas, impervious surface area has become a major indicator for environmental degradation. The term is defined as a land cover type that is impenetrable by water. Most commonly in the form of streets, parking lots, and rooftops, this surface blocks rain water from penetrating the surface and allows it to mix with pollutants before joining with groundwater, streams, and rivers. Sprawling development caused the per capita percentage of impervious surface area to grow faster in the 1990s than any other decade in history.¹¹

⁹ USDA (2001).

¹⁰ Since the 1990s, Colorado's open space and agricultural land has been developed at a rate of 10 acres an hour, 3 times the rate of population growth. Colorado Department of Local Affairs, US Census (2000).

¹¹ Alberti (2003).

Sprawl can exacerbate social inequalities between urban centers and suburbs in regions governed by financially independent jurisdictions. This occurs when wealthier residents chose to locate in the suburbs, pulling the tax base out of areas with high social costs. In *American Metropolitcs* (2002), Myron Orfield draws a picture of the inequalities associated with growth. Orfield identifies four types of communities: central cities, at-risk suburbs, bedroom-developing suburbs, and affluent job centers. He then describes how the revenues and expenditures within each of these community types can become unbalanced under conditions of population migration to the suburbs. This is because the affluent populations tend to concentrate in communities where the social problems are relatively small. As a result, the costs for providing government services tend to be less and governments can afford to lower property taxes. Revenues tend to be higher where residents are wealthier, while the need for public expenditures tends to be greater in areas where the tax base is lower. This imbalance can result in inefficiencies in services, further perpetuating the fiscal challenges of the region.

Colorado's Sprawling Front Range

The unanticipated consequences associated with sprawl are threatening Colorado. Between 1990 and 2000, over one million people moved to the state, increasing the population by 30 percent.¹² Much of the development to accommodate the newcomers occurred on unincorporated county lands, where infrastructure was inadequate and capital projects are now backlogged.¹³ This growth has been low-density and land-intensive. The national average for suburban density equals 3,250 people per square mile, while the average density in the six Metro Denver counties is 411.¹⁴ The spillover effects of this low-density, rapid growth are reflected in the polls where citizens continue to stress the need for growth management. In addition, growth has played a key role in what are now considered crisis situations for Colorado's school system and water supply.

¹² US Census (2000).

¹³ Greenwood (2002).

¹⁴ If the 6 county urban area was built up to typical suburban density, then it could house over 14.5 million people. Danish (1998).

Colorado's boom resulted in a fast-growing school age population that drove education costs up faster than revenues. Since 1992, state spending on public K-12 education per pupil has dropped from being ranked 13th in the nation to 39th.¹⁵ Classes are flowing out of over-tapped buildings into doublewide trailers, class sizes are increasing and multiple core programs, such as art and sports are being cut.¹⁶ In addition, Colorado schools are becoming more segregated. Over the last 30 years, Denver school district school enrollment dropped from 64 percent white to 20 percent white. This is due, in part, to the end of busing in Colorado in 1995; however, the percentage of Caucasian to minority students is still lower today than it was before the U.S. Supreme Court mandated busing in 1973, and therefore increasing inequalities across jurisdictions might also play a role.¹⁷

According to Myron Orfield's study, Denver was one of many metropolitan areas in the U.S. to experience increasing inequality between urban centers and surrounding suburbs during the 1990s.¹⁸ According to his research, 34 to 55 percent of the Denver Metro region's population growth has been in what he terms, "at-risk low-density" areas, characterized by high social needs and relatively limited and potentially decreasing public resources. In addition, he found that only 3 percent of Metro Denver's poor population lives in communities he coins as "affluent job-centers."

Another impact of rapid growth in the suburbs is increasing cost and demand for Colorado's scarce water resources. Economies of scale offer an explanation for the increasing costs associated with providing water and public sewer in sprawling suburbs. The less dense the development, the more infrastructure, in the form of pipes and water distribution mains, is needed to provide the service. The findings of a study by Cameron Speir and Kurt Stephenson at the Department of Agricultural and Applied Economics at Virginia Tech support this theory. Speir and Stephenson found that public expenditure on water and sewer infrastructure is greater for residences on lots that are larger in size and

¹⁵ National Center for Education Statistics (2001).

¹⁶ Whaley (2003).

¹⁷ Arakawa and Scheopner (2003).

¹⁸ Orfield (2002).

are a greater distance from service centers.¹⁹ A joint study by American Rivers, NRDC, and Smart Growth America found low-density development with larger lot sizes demands greater water supplies and compounds the negative impacts of drought conditions.²⁰

The average American uses about 140 gallons a day from the municipal water supply. The average Coloradoan uses 196 gallons. From 1999 to 2001, Colorado received below-average precipitation and summer stream flows fell below the 1950 drought levels, the lowest on record. During this time, Colorado ramped up its investment in seeding the clouds (a process intended to increase snowfall) to \$1.3 million annually. While growth rates continued at levels of 15 percent higher than the national average, reservoir storage was dropping. On May 1, 2002 reservoir levels were at 86 percent of average, by June 1st of the same year, they were at 73 percent. In July, Denver Water, the region's largest water provider, issued a ban on all outside watering to be effective October 1.²¹ By April 2003 the State legislature was debating whether to ask voters to approve a spending package worth \$10 billion to construct new dams and reservoir systems. Faced with dying lawns and fears of another summer of restrictions and brown golf courses, Colorado residents are eager to increase the water supply.

In addition to the costs imposed on public education and the water supply, sprawl is increasing the financial burden on local governments, threatening the quality of public services.

Fiscal Impacts of Sprawl

“Even at relatively low population densities, sprawl tends not to pay for itself financially and consumes land at an alarming rate, while producing insurmountable traffic problems and exacerbating social inequality and isolation.”

Duany et. al.

¹⁹ Speir (2002).

²⁰ A University of Washington study (1997) found that large suburban “estate” properties can consume up to 16 times more water than smaller, more traditional lots. Otto et al (2002).

²¹ Quillen (2003).

Low-density growth costs more for local governments to service than condensed projects that adjoin existing infrastructure.²² This is largely due to economies of scale. One mile of road that serves a thousand people costs less to construct per resident than a mile that serves ten. Low-density, leapfrogging development requires more roads, more pipes, and greater response times for policeman and fire fighters. The State of Florida and the Urban Land Institute completed a study that demonstrated that the infrastructure costs associated with “sprawl” are 25 percent greater than more compact designs for roads, 15 percent greater for utilities and 5-7 percent greater for school construction.²³ Governments faced with these increasing costs are forced to either raise revenues or decrease spending.

Extensive research has documented the high costs of sprawling development in regions across Colorado.²⁴ American Farmland Trust (AFT) has completed several studies demonstrating that low-density residential development costs more money in public services than it generates through taxes. Conversely, AFT has found that open space and agricultural land provide more revenue to the county than they require in return for services.²⁵ As agricultural land and open space disappear to make way for sprawl, many local governments are facing increasingly tight budgets.

A result of the fiscal strain on local governments is increasing annexations and competition for new sales tax revenue through commercial development. In an effort to increase tax revenues, municipalities have been pushing their borders toward highway corridors, where super stores draw sales dollars from commuters. Increasing competition for commercial development has been a driving force in land management decisions, oftentimes trumping smart land use decisions. Colorado Governor, Bill Owens addresses

²² Numerous studies since the 1970s have documented that the infrastructure costs associated with sprawl cost more to local governments, than they generate in Revenue. Real Estate Research Corporation (1973). Burchell (1998).

²³ Greenwood (2002).

²⁴ Burchell (1998)

²⁵ American Farmland Trust (2001).

this problem on the State of Colorado web page. As cities grow to include attractive commercial centers, development increases on previously rural landscapes.²⁶

Economics of Sprawl

There are multiple theories on why sprawl occurs. The Tiebout Model developed in 1956 by Charles Tiebout, demonstrates individual mobility between multi-jurisdictions. The model suggested that mobile households will chose to locate in jurisdictions where there preferences are better represented, either through higher levels of government expenditures and/or lower taxes. Jan Brueckner, Professor of Economics at the University of Illinois at Urbana-Champaign, coined this behavior as “voting with one’s feet” where high-income households congregate in localities with higher local government spending and better quality services.²⁷ Brueckner indicates that in some metro areas, wealthy individuals are in a sense, “fleeing” central districts, leaving these areas with a poorer tax base and poorer quality of services, perpetuating the flow of tax revenues to the urban fringe and the decay of urban centers. An example of a public service that responds to and influences the local revenue pool is education. Families with the financial freedom to choose where they live, have an incentive to move to jurisdictions with better school systems.

Both market and government failures are responsible for the proliferation of sprawl. Market failure stems from the multiple costs of growth not always reflected in the price of new homes. While developers and homebuyers avoid these costs, communities pay for them with increasing traffic congestion, smog, and lost vistas. The market fails to capture the full costs of urban expansion for three primary reasons. First, there is a barrier to negotiations between community members and developers. Private property rights often prohibit community members from influencing new development. Second, community members often lack information about where new housing projects will be located, the scope of the projects, and how extensive the impacts will be on their community. The

²⁶ Owens (1999).

²⁷ Brueckner (2000).

third and primary reason is the presence of an incentive structure that encourages developers to build on the fringe and to not incorporate the external costs to communities in the price of homes.

Developers prefer sprawl because land is less expensive and because space exists for large projects of like-houses, which generate greater profits than condensed housing projects in already developed areas. Developers prefer not to disclose the details of a project or increase the price of the housing units because both would be bad for business. In addition, in most Colorado counties, developers are not responsible for providing for the full costs of infrastructure required to service new housing projects. Therefore, these costs are not reflected in the selling price.

Government failure is also responsible for the proliferation of sprawl. Zoning laws can often enforce large lot sizes or restrict the density and height of buildings. Projects are often approved on a piece meal or ad hoc basis, without any meaningful planning or consideration for long-term consequences and cumulative effects. As a result, it can be difficult for community members to anticipate or react to the possible negative changes in their environments resulting from new development projects. In addition, in Colorado, evidence exists that the tax code further promotes low density and rural development.

The Colorado Tax System

Colorado employs a three-legged tax system with income, property and sales taxes. The bulk of the State budget is funded through income tax revenues while cities' budgets are funded primarily by sales tax and counties' by property taxes. Generally, property and income taxes tend to be more stable and predictable over time, while sales tax fluctuates with the economy. Both sales and property taxes are regressive in Colorado. According to a report by the Institute on Taxation and Economic Policy (2003), the poorest 20 percent pay 8.9 percent of their income on property and sales taxes, while wealthiest 20 percent pay 5.4 percent. Even though it is regressive, sales tends to be a popular tax because it

gets paid, not just by local residents, but also by tourists who frequent Colorado's international airport, national parks and ski resorts.

Colorado's tax system is driven by two amendments to the State constitution: TABOR and Gallagher. The Tax Payers Bill of Rights (TABOR), which passed as a citizen's ballot initiative in 1992, prevents State and local governments from increasing taxes without voter approval. The amendment's primary objective is to "restrain most the growth of government" (Colorado Constitution, Article X, Sec. 20 (1)). According to the amendment, annual government expenditures by the State are allowed to increase by the Consumer Price Index (CPI) plus the percent growth in population. For local governments, expenditures can grow by the CPI plus the percent grow in real property values.²⁸ Tax revenues collected that exceed these levels must be returned to the taxpayers unless voters approve increased spending levels. According to a report by the Bell Policy Center (2002), the State exceeded TABOR limits for the first time in 1997. For that year the TABOR limit on growth was 6.6 percent while the actual growth in state revenue restricted under TABOR was 8.9 percent. The difference was refunded to the voters in the form of refunds and tax credits. The State continued to exceed TABOR limits through 2000, by which time, the TABOR growth limit had fallen to 4.4 percent and actual growth had increased to 17.4 percent. As of 2002, Colorado had refunded over \$2.322 billion to tax payers.

TABOR was passed on the platform that government should be accountable to the taxpayers. At the time the initiative was approved, the policy shared broad support from Colorado voters and elected officials. Now, during a fiscal crisis spawned by 9/11 and three years of returning excess revenues to taxpayers, support for TABOR is waning. Concerns are growing over the "ratchet effect", the inability of the State and local governments to save for a "rainy day", and the interaction between TABOR and the Gallagher Amendment.

²⁸ The Bell Policy Center (2002).

2002 was the first time since implementation in 1993, that the TABOR Amendment caused a “ratchet effect” on the Colorado State budget. This speaks to the impact of the 2001 decline in the State economy. According to a National Conference of State Legislatures (NCSL) survey completed in November 2002, Colorado has the third worst budget gap in the country. The amount of revenues the State collects has declined by about \$1 billion.²⁹ Under TABOR, the base year from which state expenditures are allowed to grow has to be re-calibrated to current levels. In other words, there is no way for the State to build its budget back to pre 2001 levels without gaining approval from the voters. The ratchet effect also discourages the State from saving revenues for potential hard economic times in the future, commonly referred to as a “rainy day” fund. This is because any money saved would decrease expenditure levels and trigger a ratchet effect.

Another unanticipated consequence of TABOR is its interaction with the Gallagher Amendment, legislation named after its author and legislator, Denis Gallagher. This amendment, which passed the legislature in 1982, locks property tax revenues in a 45:55 percent split respectively between residential and commercial properties, and sets the commercial property assessment rate at 29 percent. The purpose of Gallagher was to create a balanced distribution of property taxation between businesses and residences. However, once TABOR passed, the Gallagher Amendment forced governments to lower residential tax revenues in order to remain within spending limitations.³⁰

Property taxes are set by a locally controlled tax rate multiplied by a percentage of the assessed property value (assessment rate). Between 1992 and 2000, rapid population growth and an economic boom drove up housing prices, which in turn, drove up property tax revenues faster than TABOR limitations allow. Because Gallagher locks the commercial assessment rate, residential property taxes had to be adjusted downward in order to meet the TABOR and Gallagher guidelines. As residential property taxes fell, commercial properties picked up a greater share of the tax burden. In less than ten years, the property tax assessment rate dropped by 56 percent: from 21 percent when TABOR

²⁹ Colorado’s budget gap was 9.2 percent, while the national average was 3.6%. Projected revenues for 2003 are \$980.6 million less than they were in 2001. Hedges (2003).

passed to 9.15 percent in 2001. According to a Department of Local Affairs report (2001), local governments lost about \$70 billion in property tax revenues between 1993 and 2001. According to the 2000 annual report presented by the Division of Property Taxation, residential taxpayers have saved approximately \$5 trillion since the Gallagher Amendment was passed in 1982.³¹ For 2004, the property tax assessment rate has already been dropped to below 8 percent.³²

In addition to these complex requirements, there is also a 5.5 percent limit on the annual growth rate for property tax revenues. This rule applies to the State and most statutory local governments; however it does not apply to home-rule counties unless their charters mandate it. The limit is based on property tax revenues by population, excluding the increased valuation attributed to annexation, new construction or inclusion of additional land. This measure has not made much of an impact in recent years because the TABOR limit has been less than 5.5 percent.³³

The relationship between tax policy and land use decisions is difficult to grasp and more research is necessary to better understand the connection. However, evidence exists that the tax code in its current form provides incentive for low-density development patterns. This is primarily because of the increasing reliance on commercial property and sales tax revenues at the local level, which leads to interjurisdictional competition for retail development.

Municipalities, who largely depend on sales tax revenues, have an incentive to attract and incorporate commercial development. This is apparent in growth patterns that congregate around the two major interstates that run through Denver. Along I-25, which runs north-south, municipal boundaries form long narrow ovals that intersect at the interstate. Along these corridors, gas stations and strip malls have popped up for 100 miles in both directions from central Denver. This kind of revenue seeking might also help to explain

³⁰ Colorado Municipal League (1999).

³¹ Residential taxpayers have saved approximately \$5,099,489,599 since 1982, in part because of the shift of the tax burden onto commercial property. Colorado Department of Local Affairs (2000).

³² Colorado Assessors Office (2001).

why Denver has the highest percentage of commercial development per capita in the nation.³⁴ Counties are encouraged to promote commercial development because of the higher property tax revenues generated from this land classification. As stated in the Colorado Businesses Blueprint (2001), “Residential development is hardly ever the primary local government focus when growth strategies are established, because, unless accompanied by significant commercial or retail development, the economic drain will generally outstrip the economic benefits resulting from the growth.”

Revenue seeking behavior has been correlated with inefficient development patterns.³⁵ As highlighted in the American Planning Association (2003) Legislative Guidebook, “typically, in larger, older metropolitan areas with many local governments, reliance on a local (as opposed to a regional) tax base has produced patterns of interregional polarization and sprawling, inefficient land use.” Annexations can promote sprawl by incorporating large areas of previously undeveloped land. Once incorporated, developers have an incentive to build in these areas where the city picks up much of the infrastructure costs.

This study attempts to analyze the impacts of fiscal policies, population growth and inefficient land use on a local government budgets. Combined, these factors determine the amount of resources local governments have available for providing services and infrastructure to the community.

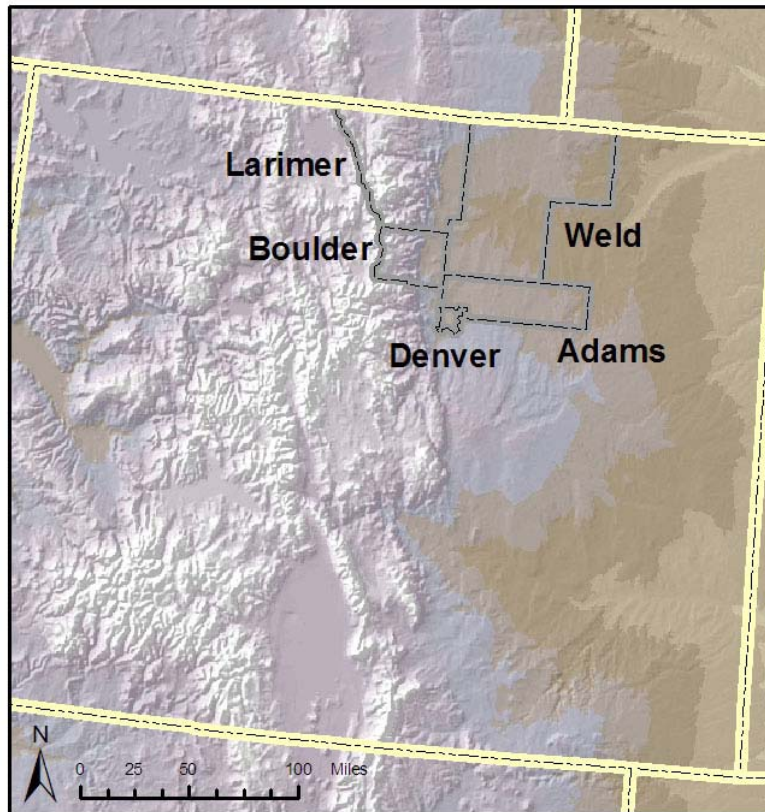
³³ The Bell (2002).

³⁴ Fujimoto (2001).

³⁵ Meck (2003)

RESEARCH & METHODOLOGY

Figure 1. The study area.



The Four Counties

The four counties included in this analysis are Larimer, Weld, Boulder, and Adams (see figure 1). Located north of Denver, they offer a model for understanding fiscal differences between counties within the same region (see Table 1). Even though they share borders, interstates and watersheds, they are managed separately between two Metropolitan Planning Organizations (MPOs). Larimer and Weld make up the North Front Range Transportation and Air Quality Council. Adams, Denver, and Boulder are three of the nine counties overseen by the Denver Regional Council of Governments (DRCOG). These are voluntary associations of county and municipal governments,

committed to addressing issues of regional concern, such as transportation and economic development.

Table 1. County Demographics for 2000. Source: US Census Bureau 2000.

	Population	Median Household Income	Median House Value	Density: houses per sq ml	Growth Rate (1990-2000)
Colorado	4,417,714	\$47,203	\$166,600	17.40	30.60%
Boulder	291,288	\$55,861	\$241,900	161.50	29.27%
Larimer	251,494	\$48,655	\$172,000	40.50	35.11%
Adams	363,857	\$47,323	\$149,800	111.20	37.28%
Weld	194,949	\$42,321	\$140,400	16.60	37.26%

Adams County, which is predominantly urban/ suburban, has the largest population of the four counties, with about 360,000.³⁶ Adams ranks close to the State on both average household income and price of a median house.³⁷ The second most populated county in the study is Boulder, with about 290,000 residents. Growth restrictions protecting a high quality environment combined with the University of Colorado and above average public schools have made Boulder a very attractive place to live and locate businesses. According to the 2000 Census, both median household income and median house value are far above state averages.

Larimer and Weld counties are further away from Denver’s central district and have mixed-economies, including suburb-bedroom communities, small urban centers, and agricultural lands. Both counties are witnessing a rapid transition of farmlands into suburban houses. Larimer County is unique in that it spans from the eastern plains to Rocky Mountain National Park. The region draws millions of visitors every year to enjoy the outdoor recreation opportunities. Based on the 2000 census, the county is the third most populated in the group with approximately 250,000 residents. The median household income and house value are slightly above the State average. Weld is located on the eastern plains and has a population of about 195,000 according to census

³⁶ US Census Bureau (2000).

³⁷ US Census Bureau (2000).

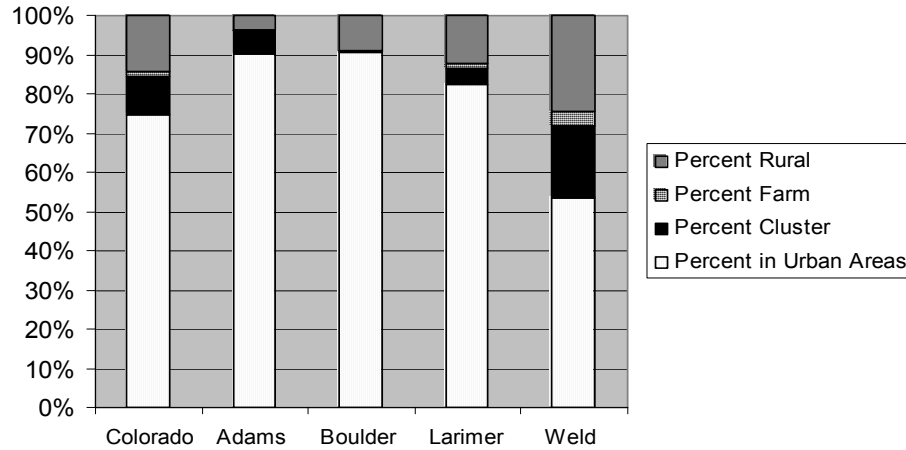
estimates. The median house value and median household income are the lowest out of the four counties. Weld's poor rural communities on the eastern plains drag the county's average income and housing prices down below the State averages. Out of the four counties, Weld is the only one that is classified as "home-rule" under the state constitution. There is little difference between home-rule and statutory counties, except that the former is not mandated to impose the 5.5 percent property tax revenue growth limit.

Based on the 2000 Census, the density (number of houses per square mile) of suburban development was lowest in Weld and Larimer counties. Larimer and Weld also had a smaller percentage of buildings with 10 or more housing units.³⁸ This is partially because they have more agricultural lands and open space available for development. In addition, these counties are further from Denver, where land can be less expensive depending on the neighborhood and the commuting time to the central district and other job centers. Adams and Boulder also have higher percentages of mass transit use with of 4 percent in both counties. Conversely, in Larimer and Weld, less than one percent of the population used mass transit in 2000 (see Appendix A). All of these counties, except Boulder, grew faster between 1990 and 2000 than the state average. Adams and Weld grew the fastest with a 37 percent growth rate, Larimer was just slightly lower with a 35 percent rate and Boulder was just below the State with 29 percent.

As depicted in Figure 2, Weld County has the highest percentage of rural lands out of the four counties with 25 percent. Adams has the least with 4 percent. The lands in each county are classified as rural, cluster, urban and farm (see Appendix B for actual figures). These classifications are based on the 2000 US Census. Urban areas are classified as "densely settled territories that contain 50,000 or more people." The Census defines dense as one or more census blocks with at least 1,000 residents per square mile. This definition includes surrounding census blocks that have at least 500 residents per square mile and census blocks that connect to one or more blocks with this same population

density. An urban cluster is considered an area outside urban areas that house at least 2,500 people but less than 50,000.

Figure 2. Population living in urban areas in 2000. Source: US Census Bureau 2000.



Before looking at the expenditures and revenues of these counties, it is worth considering local efforts to mitigate the spending limitations under TABOR and Gallagher.³⁹ Weld is the only county that has been unsuccessful at passing a referendum or citizens' initiative to raise taxes and/or lift spending limits. Larimer County has lifted spending restrictions to raise taxes and/or lift spending limits. Larimer County has lifted spending restrictions to purchase open space and to help finance county facilities, infrastructure and pay back debt. Adams lifted limits to fund a public library and to help finance roads and bridges. Boulder has passed multiple spending limit waivers and tax increases for the purchase and management of open space, recycling projects, nonprofit funding, capital facilities, and transportation projects. These initiatives allow for local governments to increase public spending despite the limits imposed by the state tax system. The majority of the measures are temporary, restricted for a specific purpose and not enough to cover costs for an entire project (see Appendix C). Voters have demonstrated greater confidence approving new spending that will help the government finance an agreed upon project for a limited period of time, typically 20 years or less.

³⁸ Adams and Boulder both match the state average with about 15 percentage of residential housing with 10 or more units. 9 percent of Larimer's and 7.7 percent of Weld's buildings had 10 or more housing units (US Census Bureau 2000).

Methods

In order to analyze the fiscal impacts of population growth, this report looks at changes in county government revenues and expenditures per capita from 1990 to 2000. Per capita is found by dividing total expenditures and revenues by the total population in the county. In addition, I calculate the changes in expenditures and revenues as a percentage of the total budget. This helps to draw a more complete picture of changes in the budget because per capita expenditures can be influenced by economies of scale. For example, the cost per capita for maintaining roads could decline over time not because fewer roads are being constructed, but because the growing population reduces the cost per person.

This analysis is based on the expenditures and revenues of the four counties using figures from the adopted county budgets for 1990 and 2000. Special focus is applied to the primary categories of the operating budget, which covers the ongoing expenses and revenues associated with the delivery of programs and services. Combined, these funds make up 80 to 90 percent of the operating budgets for the four counties studied:

General Government: Operating expenditures associated with the tasks of running the local government, including management and administration.

Total Public Safety: Operating expenditures associated with protecting persons and property within the county, including the police force, prisons and fire protection. Additional responsibilities include the coroner's office, building inspections and civil defense.

Roads and Highways: The operating expenditures of servicing roads and highways make up the majority of Public Works expenditures. They include maintaining and administering streets, highways, and bridges. Related expenses include equipment, traffic services, lights, snow removal, and administration.

³⁹ Colorado Counties Inc (2002).

Social Services: Operating expenditures related to the administration of public assistance and institutional care for individuals who are unable to provide for themselves.

All adopted budget figures are based on the Colorado Department of Local Affairs' County Financial Compendium and Colorado Economic and Demographic Information System (CEDIS). In addition, the study uses population and demographic data from the US Census Bureau's 2000 Census. All 1990 figures are adjusted for inflation.⁴⁰

Analysis

2000 Revenues

Stark differences were found in the revenues between the four counties in the north Denver region (see Table 2). Most notably, Adams and Weld generated lower revenues per capita from property taxes than Larimer and Boulder. Adams County earned the least in property tax revenue with \$168 per capita with Weld County a close second at \$176 per capita. These relatively low property tax revenues are not surprising given that Adams and Weld also share the lowest median property values. Drawing a very different fiscal picture, Boulder County generated \$249 per capita in property tax revenues.

Table 2. Revenues per capita 2000. Source: Colorado Department of Local Affairs.

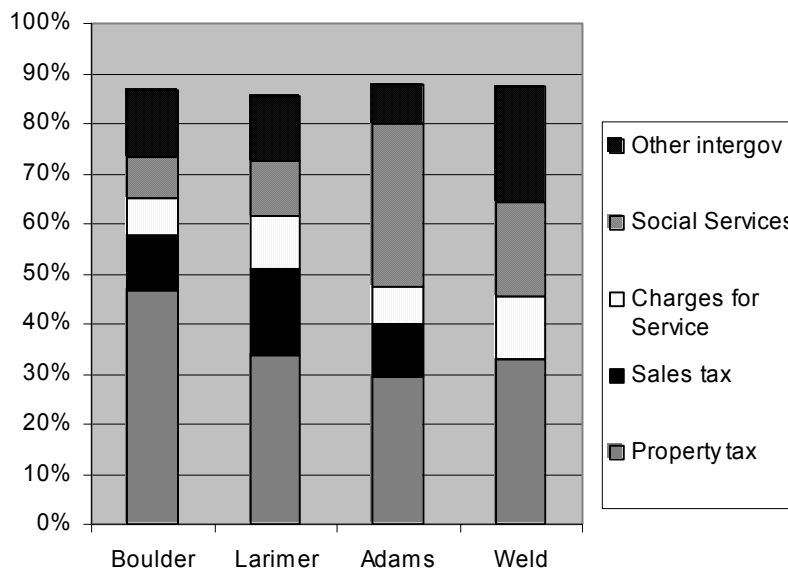
	Boulder	Larimer	Adams	Weld
Property tax	248.96	198.48	168.19	175.51
Sales tax	23.41	101.41	62.17	0.00
Charges for Service	39.12	62.16	40.99	56.43
Social Services	43.30	65.83	187.64	82.34
Other intergov	72.65	74.75	46.34	103.90

Sales tax makes up a smaller portion of county budgets, but is still a significant revenue source, especially in Larimer and Adams counties. Larimer generated about \$100 per

⁴⁰ The rate is .0366, found by averaging the Denver-Boulder-Greeley inflation rate for the ten year period between 1990 and 2000. http://www.state.co.us/gov_dir/leg_dir/lcs/Econ/CPItest.htm

capita in sales tax revenue, far above the other counties.⁴¹ Weld is the only county without sales tax revenue. In 2000, Weld attempted to pass a 10 year sales tax/ spending limit waiver for the preservation of open space and wildlife habitat, but the measure failed by 66 percent.⁴²

Figure 3. Revenues as a percentage of the total budget for 2000. Source: Colorado Department of Local Affairs Financial Compendium.



Another primary source of revenue is intergovernmental grants, with Social Services making up the largest portion of these funds. This revenue source grew significantly after 1995 federal block grants transferred much of the fiscal responsibility for certain services to the states. Adams, who spent the most on Social Services, also received the most revenue for these services. Weld County paid the most out of county generated revenues (not including intergovernmental funds) for Social Services.⁴³ Figure 3 displays the different revenue sources as a percentage of the total budget for each county. The graph

⁴¹ The sales tax rates in 2000 were 0.7 in Adams, 0.4 in Boulder, 0.8 in Larimer, and 0.0 in Weld (Colorado Department of Local Affairs CEDIS).

⁴² Colorado Counties Inc. (2002).

⁴³ Weld spends \$85 per capita on Social Services expenditures, while the other counties spend between \$20 and \$24. (Colorado Department of Local Affairs CEDIS)

highlights the differences in revenue sources between the counties, illustrating the fiscal differences between them.

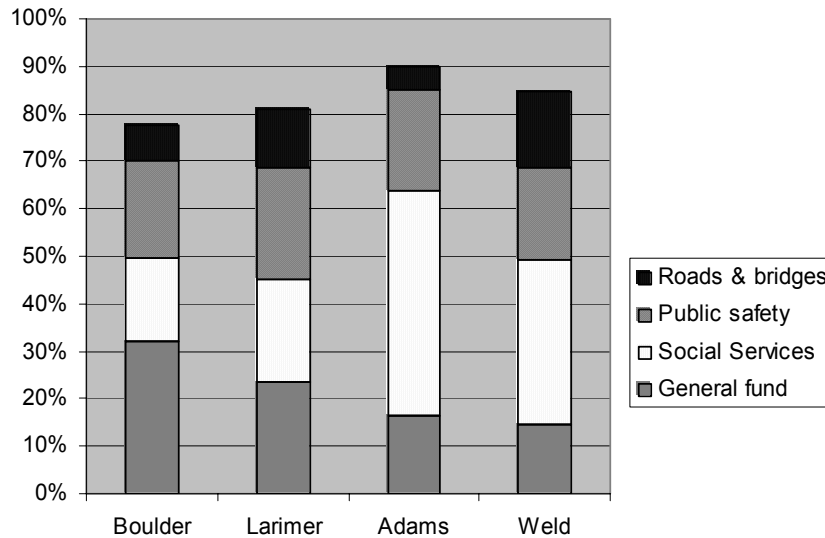
Table 3. Expenditures per capita 2000 Source: Colorado Department of Local Affairs

	Boulder	Larimer	Adams	Weld
General Government	125.21	97.96	72.90	69.86
Social Services	67.67	90.18	207.49	163.88
Public safety	79.75	98.08	93.29	92.08
Roads & bridges	29.10	50.50	21.12	77.26

2000 Expenditures

County expenditures offer another perspective on the fiscal differences between these four counties. Looking at the major county expenditures for 2000, several differences are apparent (see Table 3).

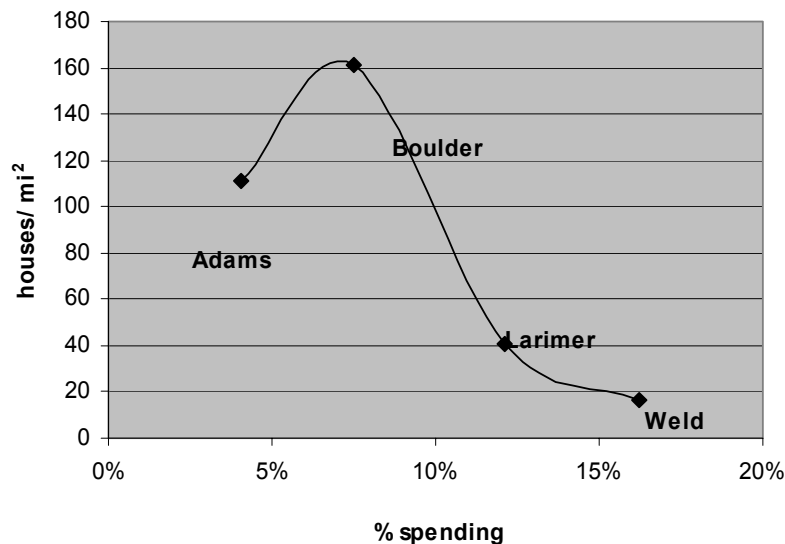
Figure 4. Allocation of expenditures in 2000 as a percentage of the total budget. Source: Colorado Department of Local Affairs Financial Compendium.



The counties with lower median incomes paid substantially more for Social Services. Adams spent \$207.49 per capita on Social Services. Conversely, Boulder spent \$68 per

capita. The same does not appear to be true for Public Safety. Adams County is the most urban, yet spends the same on Public Safety as the relatively rural Weld County (see Figure 4). Possible explanations may be that Adams is a geographically smaller county, where residential housing is more concentrated, requiring less response times for policemen, fire fighters, and ambulances. Boulder, the densest county with the highest median income paid the lowest of the four counties for Public Safety.

Figure 5. Density compared to county spending on Roads and Bridges fund in 2000. Sources: Colorado Department of Local Affairs Financial Compendium and US Census Bureau 2000.



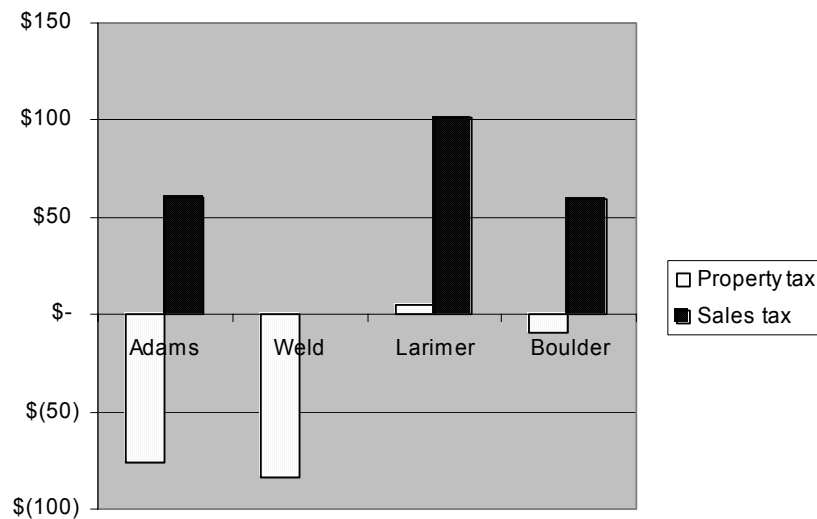
Looking at the Roads & Bridges fund, the lower density counties, Larimer and Weld paid more for roads and bridges. As illustrated in Figure 5, the percent of the budget allocated toward financing highways is greater in counties with fewer houses per square mile. Also, in Larimer and Weld, a smaller percentage of the population utilizes mass transit. These findings support existing research that larger counties with lower density residential development and more car dependent populations require more miles of roads and bridges and therefore greater expenditures. Similar results were found when considering the Total Public Works fund, which includes Roads and Bridges and Solid Waste services (see Appendix D).

Changes Since 1990

Between 1990 and 2000 multiple trends in budgetary behavior draw attention to signs of improvement and decay for various areas of the four county budgets. These changes are largely driven by modifications in two of the primary revenue sources: property and sales tax. As demonstrated by Figure 6, changes in these revenues vary widely between counties. Most noticeably, Adams and Weld, the counties with lowest median incomes and property values experienced the greatest decline in property tax revenue. Conversely, property tax revenues barely declined in Boulder and increased slightly in Larimer. Revenues received by the State and Federal governments also declined during the ten-year-period (see Appendix E). Conversely, sales tax revenues jumped sharply in Larimer and climbed in Adams and Boulder. In 1990, sales tax was not a significant percentage of county budgets. The rapid decline in property tax revenues that ensued after TABOR passed encouraged a greater reliance on sales tax at the county level.

Figure 6. Change in tax revenues per capita from 1990 to 2000 (adjusted for 2000).

Source: Colorado Department of Local Affairs Financial Compendium.



Both Weld and Adams Counties experienced greater increases in median house value than Larimer County, yet Larimer was the only county that experienced an increase in property tax revenues. This is at least partially attributed to Larimer's success at retaining and raising revenues at the ballot box. Boulder also had success lifting spending restrictions, plus it experienced the fastest growing median house value – 34% above the State average. In addition to avoiding large declines in property tax revenues, Boulder and Larimer counties had the lowest property taxes out of the four counties.⁴⁴

Changes in expenditures per capita are depicted in Figure 7. With the exception of Public Safety and Larimer's General Government, expenditures per capita decreased across all the major operating expenditure categories. These findings do not demonstrate that service costs per capita increase under conditions of rapid population growth. There are many possible explanations for this outcome. These include economies of scale, where growing population numbers decrease the average costs of service. Another reason could be that counties are responding to declining property tax revenues and/or increasing costs of public safety. Tightening crime laws and increasing prison populations are driving up the costs of public safety. In addition, the backlog for necessary highway projects is growing. For example, Larimer County has accumulated a backlog of road projects with costs exceeding \$1 million. Furthermore, capital expenditures increased by over 100 percent in Larimer, almost 200 percent in Weld and over 1000 percent in Adams and Boulder from 1990 to 2000.⁴⁵ These expenditures are for the purchase of capital goods, including land acquisition and equipment purchases associated with roads and other infrastructure. Social services spending per capita decreased more for Boulder and Larimer than the other counties. As a percent of total expenditures, Social Services spending increased in Adams and Weld, while decreasing in Boulder in Larimer.⁴⁶

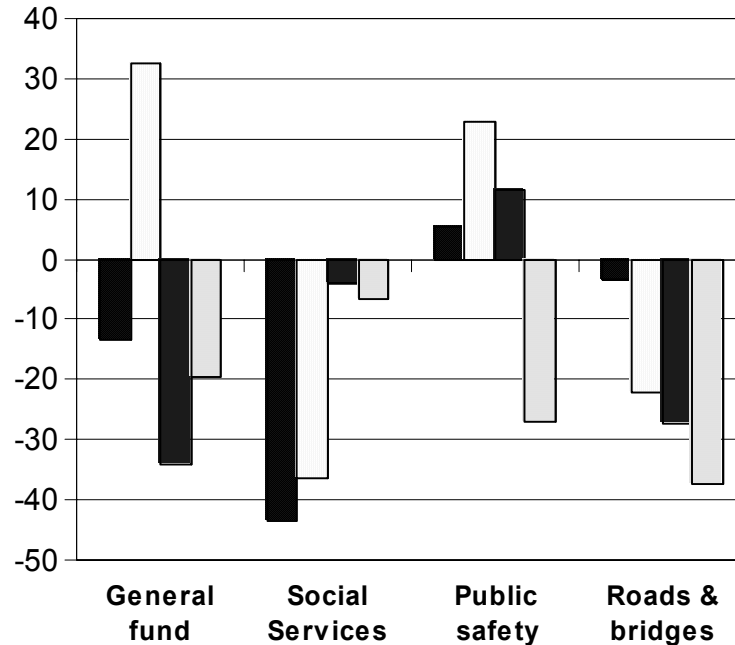
⁴⁴ In 2000, Boulder had the lowest mill levy set at 19.68, while Adams County has the highest at 25.27 (Colorado Department of Local Affairs CEDIS).

⁴⁵ Capital outlay expenditures from 1990 to 2000, adjusted for inflation, increased 1180% in Adams County, 1506% in Boulder, 126% in Larimer and 179% in Weld (Colorado Department of Local Affairs CEDIS).

⁴⁶ Social Services spending as a percentage of the total budget between 1990 and 2000 decreased by 8.32% in Boulder, decreased by 8.71% in Larimer, increased by 6.45% in Adams, and increased by 9.36% in Weld. (Colorado Department of Local Affairs, Financial Compendium)

Figure 7. Change in per capita expenditures from 1990 to 2000 (adjusted for 2000).

Source: Colorado Department of Local Affairs.



	General fund	Social Services	Public safety	Roads & bridges
■ Boulder	-13.31	-43.60	5.28	-3.28
□ Larimer	32.61	-36.56	22.88	-22.06
■ Adams	-33.98	-4.07	11.38	-27.32
□ Weld	-19.73	-6.59	-26.95	-37.31

Opportunity costs

The high costs of social services found in Adams and Weld might help to explain why they invest less in other non-critical budgetary items. For example, in Boulder County, where social service costs are relatively low, spending on culture and recreation was far greater than in the other counties.⁴⁷ In addition, spending on General Government was less in the counties with higher social service costs. This fund pays for government employees and services, including the assessors' office and land management planning.

⁴⁷ Culture and Recreation was allocated over 6 percent of Boulder's total expenditures in 2000, 2 percent of Adam's expenditures and 0.2 percent of Weld's (Colorado Department of Local Affairs)

Trends demonstrate that the portion of the budget allocated toward this category is increasing Larimer and Boulder while decreasing in Adams and Weld.

Even though they lie next to each other, jurisdictional boundaries distinguish these counties from one another by the value of public services provided, including the quality of schools, the levels of traffic congestion, and the response times of police and firemen. According to a Colorado Children's Campaign report (2003), the counties with higher incomes performed higher on indicators of child and family welfare. Boulder and Larimer beat the state average on the percent of low birth weight births, the number of teen births, and the number of births to moms with no high school diploma. Conversely, Weld and Adams counties scored worse than the state average on these measures. Based on these findings, further evidence supports the research of Myron Orfield and Charles Tiebout, which suggest that households with the financial freedom to move chose to locate in counties where public services are stronger and property taxes are lower. Of the four counties studied, the counties with lower average household incomes had greater expenditures for social problems and greater difficulty increasing their revenue base; as a result, they have less to invest in the services that might help to pull them into stronger fiscal conditions.

FINDINGS

Research Questions

In order to present my findings, I return to the research questions presented in the introduction.

1. What changes occurred in county service-dollars spent per person in these counties over the ten-year period?

According to my analysis of county budgets, changes in service-dollars indicate that capital expenditures and fiscal disparities increased while per capita expenditures decreased for all primary operating funds except Public Safety. Even though capital projects increased, the per capita operating cost for roads declined in all four counties. However, the denser counties spent much less per capita on roads in both 1990 and 2000 than rural counties. In addition, capital expenditures associated with roads and infrastructure grew faster than the population growth in all four counties.

Signs of inequalities are demonstrated by different changes in social spending between counties. Counties with higher median incomes and housing prices decreased spending on Social Services and increased them in the areas of culture, recreation, planning, and open space. Conversely, the counties with lower incomes and housing prices increased spending for Social Services.

2. Is there evidence to support the claim that population growth is not generating enough revenue to sustain the associated expenditures?

Determining whether or not growth is paying for itself is a difficult task. This is because it is hard to connect the costs of growth with the associated revenues. There are three well established tools for achieving this objective: fiscal impact analysis, cost-benefit analysis,

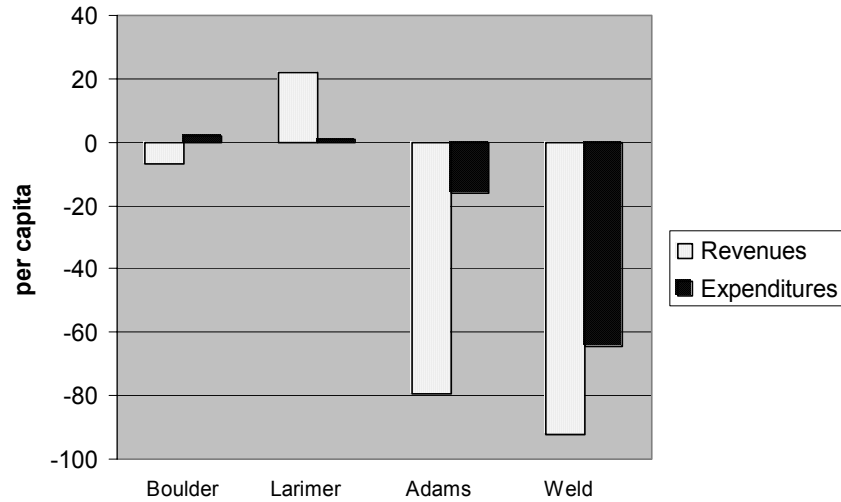
and cost of community services studies (COCS).⁴⁸ Fiscal impact analysis focuses on the net cash flow to the public from new development, incorporating multiplier effects associated with new economic activity that are not captured in budgets. This method does not account for nonmarket goods, such as environmental impacts. These factors are captured in cost-benefit analysis, which aims to quantify and compare impacts of growth, accounting for a consumer's willingness to pay to preserve positive impacts and avoid negative ones. COCS studies compare the revenues and expenditures for specific land uses, such as agriculture, residential and commercial.

Since this analysis focuses on county budgets, the costs of population growth are spread across all expenditure categories. For example, growth affects the Roads and Bridges budget because new houses require new roads. In addition, increasing population raises the costs for public safety because there is more crime and more people to protect. In order to better understand whether new residents are generating enough revenue to pay for these costs, the change in per capita expenditures for these two categories are compared with the change in property tax revenues and service charges. Property taxes are the most direct way for residents to pay for public services in the county. Sales taxes are another; however, these are a less reliable source of income and are paid by all consumers, not just residents.

Figure 8 provides a representation of the changes in revenues and expenditures related to growth by comparing changes in per capita revenue for property taxes and charges for service with the change in per capita operating expenditures for Roads and Bridges and Public Safety. This graph does not cover all the expenditures associated with growth; however, it provides a representation of those costs for the purposes of the comparison. This figure demonstrates that the revenues from property taxes and fees are not keeping pace with these two expenditure items in three of the four counties. Furthermore, the largest gap between these revenues and expenditures is in Adams County, where social costs are the greatest.

⁴⁸ USDA (2001).

Figure 8. Selected revenues and expenditures compared for 2000. Source: Colorado Department of Local Affairs Financial Compendium.



3. How do the State spending measures, TABOR and Gallagher influence changes in county revenues and expenditures?

My analysis suggests that TABOR and Gallagher are making it harder for growth to pay for itself by reducing property tax revenues. From Figure 8, it is evident that property tax revenues are declining, except in Larimer County where ballot initiatives have lifted spending limits. Counties are making up for some of this loss by imposing sales taxes. Combined with the greater tax burden on commercial property, these findings suggest an increasing reliance on commercial development to help pay for population growth. As discussed above, this reliance is correlated with less efficient development patterns. When considering the rate of population growth, the incentive to approve and promote commercial development is increasing for Colorado local governments. Nonresidential development in rural areas is not constructed in the same condensed form as historic neighborhood shopping districts. Instead of growing up, these projects tend to grow out

in the form of land-intensive strip malls and super stores. The result is greater negative impacts to the environment and quality of life.⁴⁹

In addition, TABOR and Gallagher are decreasing flexibility in local government budgets. This means that cities and counties cannot build revenues from new residents to help pay for the services they require. Another result of this is increasing disparities between counties that are fiscally conservative at the ballot box and those that are not. Based on the counties in this study, the poorer counties have more difficulty gaining voter approval for spending measures. This makes it harder for struggling counties to invest in quality of life items such as open space preservation.

Policy Implications

Based on the findings of this analysis, changes in county budgets suggest that Colorado counties are not generating enough new revenues to cover increasing expenditures associated with population growth. As a result, counties are turning to new revenue sources from commercial and retail development to cover expenses. Even with new sales tax revenue and the economic boom of the late 1990, the operating expenditures of most county departments are not keeping pace with inflation. As long as counties continue to face declining revenues there will be an incentive to base land use decisions on competitive revenue seeking behavior rather than regional planning. For this reason, the State should consider reform of Colorado's fiscal policies.

⁴⁹ Duany et. al. (2000).

POLICY ANALYSIS

Reforming fiscal policies offers an opportunity for slowing the rate of sprawl without compromising local control and economic growth. Furthermore, the State is already looking to reform fiscal policies in reaction to the current budgetary crisis. Changes to monetary policies require intervention at the state level. This is in part because tax policies, such as TABOR and Gallagher are written into the State constitution, but also because gradual changes at the local level risk missing the regional picture that is critical to effective land use policies. As stated in *Suburban Nation* by Duany, Plater-Zyberk, and Speck:

“In Sum: the federal government is distant, local government is myopic, and regional government is lacking. In this context, state government is best able to promote regional planning. Whether it is purchasing land for conservation, mandating urban boundaries, or restricting low-density development, state leadership is needed to foster awareness and to sponsor smart growth.”

Before jumping into possible solutions, a policy analysis will help to define a clear policy objective and the criteria for success. The elements of an effective policy analysis include defining the problem, constructing alternative policy solutions and selecting criteria for which to judge the outcomes of these alternatives.⁵⁰ These steps are based on the principles developed by Eugene Bardach in his book, *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*.

Objective

The overarching objective of policy intervention is to reform the current tax system to ensure that it does not discourage regional cooperation and thoughtful land use practices. Through fiscal reform, existing tax policies that promote revenue chasing can be corrected to offer local governments greater incentive to develop in a manner that is more

equitable, less damaging to the natural environment, less consumptive of natural resources, and less costly to local governments and taxpayers.

Based on the concerns raised in this paper regarding the negative impacts of current land use practices and their connection to fiscal policy, each potential policy solution must share the following goals:

- Stable and reliable revenue source for local jurisdictions.
- Fair system of distributing costs and revenues.
- Stronger connection between regional housing needs and associated revenues generated.
- Broad support from state leadership and community stakeholders.

Criteria

Choosing the best policies to accomplish the stated objective and underlying goals requires first establishing a set of criteria for which to measure each possible solution and their effectiveness in achieving the desired outcome. These are:

1. Quality of Life, Environment and Sustainability. Ratings under this criterion are measured by their ability to reduce the number of acres developed per capita, thereby reducing the development of open space and agricultural land.
2. Social Equity. This criterion measures the change in economic disparity between jurisdictions. Greater equality requires equal opportunity to the same revenue sources across jurisdictional boundaries.
3. Fiscal Impacts. High rankings under this criterion are earned by increasing revenue-raising options for local jurisdictions while decreasing the high costs of infrastructure associated with low-density development.
4. Political Feasibility. This criterion is measured by the ability of the policy alternative to gain momentum in the Colorado State Legislature.

⁵⁰ Bardach (2000).

These criteria provide a means for measuring the outcome of each alternative for their effectiveness in solving the problems of the current fiscal system. These problems stem from the low-density, leapfrogging development, that causes harm to quality of life and the environment, diminishes social equity, and increases costs to local governments. In order to measure effectiveness, alternatives receive a rating under each criterion on a sliding scale from high to low with medium-high, medium, and medium-low in-between.

Support for focusing on quality of life and the environment is found in a report developed by Colorado businesses in 2000, called the *Colorado Millennium Blueprint*. Built from round table discussions of Colorado business leaders, this document presents the policy recommendations of the business community for promoting economic growth in the region. According to the report, “the preservation and enhancement of Colorado’s historically high quality of life is a primary tool for recruitment and retention of businesses and ensuring an adequate supply of qualified workers for those businesses.”⁵¹ Measures of quality of life focus on outcomes and reflect community values, which include efficient and convenient transportation options, access to open space and outdoor recreation activities, and the environment.

Elements such as air and water quality, greenhouse gas emissions, wildlife habitat, and sustainable consumption of natural resources are fundamental to quality of life in Colorado. Sustainability is an important aspect to be considered when measuring environmental impacts because it emphasizes the need to factor in future generations. The classic definition of sustainable development crafted by the Brundtland Commission (1987) is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" In addition, social equity should be considered in devising fiscal policies. Based on Myron Orfield’s research and the findings in this study, current growth patterns are increasing the economic disparity between urban jurisdictions and suburban neighbors. State fiscal policies need to ensure that they are not promoting the benefit of one jurisdiction at the expense of another.

⁵¹ Colorado Businesses (1999).

Fiscal policies must also prioritize creating a stable and reliable source of revenue. Without a consistent, dependable revenue stream, public services would be in jeopardy. Policy alternatives need to ensure that revenues continue while considering methods for increasing efficiency and stability of the existing tax system. In addition, policy alternatives need to be politically feasible. Without the support of community members and leadership, proposed policies remain ideas rather than becoming actual directives for government processes.

Alternatives

Based on the policy objectives outlined above, this analysis considers three possible policy alternatives that would change the current tax collection system in Colorado. Other non fiscal policies, such as urban growth boundaries, regional planning, and open space preservation, offer additional policy tools that can be very effective at promoting growth management. Boulder implemented an urban growth boundary and successfully concentrated urban development within a central core, preserving lands on the periphery for open space and agriculture. On a regional level, urban growth boundaries are especially effective, as demonstrated in Portland, Oregon. In Colorado, comprehensive planning and urban growth boundaries were key parts of the citizen's ballot initiative in 2000 that failed under heavy fire from development interests, local governments and Colorado leadership. Fiscal policy presents another approach to mitigating the impacts of sprawl. In combating harmful development trends, these alternatives would be most effective if enacted in conjunction with policies such as urban growth boundaries.

Three policy alternatives are chosen for this analysis. These policies specifically address the existing tax structure and offer viable alternatives under the chosen criteria. Based on existing research, these choices offer possible solutions for achieving the desired goals and objectives for reforming Colorado tax policy.

1. Fiscal Regionalism. Jurisdictional taxes are collected at the regional level and then redistributed based on need.
2. TABOR/ Gallagher Reform. Rewrites these amendments to reduce the restrictions on government spending and ease the tax burden on commercial development.
3. Land Tax. Changes assessment value used for property taxation from improved structures to a land value that reflects acreage.

Fiscal Regionalism

“We are finding that building more livable communities is often about encouraging greater regional cooperation, and that the places that are successful are those most willing to reach out to neighboring communities. Many issues-- such as transportation, air pollution, and economic development--transcend defined borders, and so should our solutions.”

Vice President Al Gore

Regional revenue sharing is a widely respected policy tool for promoting cooperation between jurisdictions on issues of land use. The policy is often considered part of what planners and researchers have coined the “new regionalism”. This term speaks to a holistic approach to land use that integrates the ideas of planners, political leaders, architects, and environmental scientists. Instead of revolving around political boundaries, regionalism works at a scale defined by land use objectives⁵². The primary goals of “new regionalism” are gaining a competitive advantage in the global economy, addressing the negative externalities that accompany fragmented governing structures, and increasing fiscal equity between new wealthy suburbs and decaying urban centers.⁵³ The concept of regionalism is not a new idea. Local governments, such as San Francisco, Detroit, and Washington, D.C. began seeking ways to address regional concerns and declining urban centers as early as the 1950s. However, such thinking is an enormous shift for many of Colorado’s communities whose history and ideology are strongly tied to local control.

⁵² Wheeler (2002).

⁵³ Frisken (2001).

Revenue sharing is a fiscal policy that transforms local economic goals into regional goals. As well as eliminating inter-jurisdictional competition for revenues, this policy encourages local governments to work together toward the common good. Myron Orfield applied a simulation model to demonstrate that regional revenue sharing is an effective policy tool to promote more thoughtful land use planning and greater social equity. The State of Minnesota instituted a tax-based revenue sharing in Minneapolis-St. Paul in 1971. This policy pools 40 percent of municipal growth in commercial and industrial real estate valuation (about \$200 million in 2000) into a fund that is redistributed back to the municipalities according to a need-based formula. Since the inception of this tax-base sharing, fiscal disparities between jurisdictions have declined.⁵⁴

In Colorado, the practice of intergovernmental agreements is increasing, yet revenue sharing is not generally a part of these agreements. There is one example where the City of Louisville and the Town of Superior located in Boulder County, engaged in a revenue sharing compact in 1997. These municipalities agreed to share the economic benefits of an area along U.S. Highway 36 that they were both hoping to annex into their jurisdictions. They agreed to share the land under the conditions that they limit the amount of residential development, encourage commercial growth and share the construction costs for a new interchange and the new revenues from the municipal sales tax imposed on businesses.

The potential benefits of fiscal regionalism lead the Denver Regional Council of Governments (1999) to recommend revenue sharing and tax reform in a guide for future development in the Denver area, called *Metro Vision 2020*. In addition, the Colorado Millennium Blueprint states that, “local governments should be encouraged to consider regional tax base sharing as a potential means of mitigating tax policy-motivated growth planning.”⁵⁵

⁵⁴ Studies have found that the economic disparities in Minneapolis-St Paul dropped from a ratio of 50:1 to 12:1, since enacting revenue sharing. Miller (2000).

When compared against the criteria outlined in this study, (see Policy Matrix) the effectiveness of fiscal regionalism varies. For quality of life and environment, this policy rates medium-high. This is because this policy promotes greater cooperation and eliminates the need for revenue seeking that often drives low-density development in the suburbs. Revenue sharing presents the best policy option of the three for promoting social equity and ranks high for this criterion. Pooled revenues are redistributed to assist economically struggling jurisdictions. This is demonstrated in Minneapolis-St Paul where revenue sharing reduced inequalities between the tax-bases of the two cities by 20 percent from 1987 to 1995.⁵⁶

Revenue sharing receives a low ranking when considering political feasibility because of its potential threat to local control. The Minnesota Governor Wendell R. Anderson faced resistance to fiscal regionalism on the bases of local control in 1971. Anderson managed to overcome these concerns by limiting the revenue pool to “new revenues” only. In addition, he emphasized the policy benefits of generating stronger economic growth for the region and relief from burdensome infrastructure costs associated with new development.

These same strengths grant revenue sharing a medium-high rating for fiscal impacts. This rank is not high because by redistributing funds, one jurisdiction potentially loses out to another. One method for bypassing this trade-off, which is being tested in Ohio, stipulates that every participating jurisdiction shares the potential benefits of regional economic growth. Only funds earned in excess of an established net gain are redistributed based on need. Except for under economic boom conditions, this alteration reduces the potential benefits of poorer communities.

⁵⁵ Colorado Association of Industry and Commerce (2001).

⁵⁶ Miller (2000).

TABOR/ Gallagher Reform

The Colorado Millennium Blueprint stated that consideration for potential revision of Colorado's state tax policy "*should place a pronounced focus on addressing the largely unintended impacts of the state's tax policy on land use and growth patterns and decisions across the state.*" This clause speaks directly to TABOR/ Gallagher's impacts on land use.⁵⁷

As explained above, the TABOR/Gallagher dynamic has resulted in numerous negative consequences for Colorado, most notably by reducing the total amount of tax revenues jurisdictions are permitted to spend and by shifting the tax burden away from residential property to commercial property and retail. As a result, local jurisdictions have a strong incentive to chase commercial development. In addition, these tax policies have led to greater inequity between poor and well-off jurisdictions and discourage the State and local governments from saving revenue for an economic downturn. Now faced with a seemingly intractable budget crisis, the State is considering if and how it should attempt to amend these laws. Such change would require voter approval.

Five proposals are now being considered for reforming TABOR/ Gallagher. The first, presented by State Treasurer Mike Kaufman would save a portion of future revenues received that exceed TABOR limits for a "rainy day fund". Rather than refunding revenues received in excess of TABOR spending levels to the voters, these funds are rolled into a savings account that can be used during economic downturns. This policy could help Colorado avoid major budget cuts during recessions. Political leaders from both parties support this proposal, even though it would do little to ease the current budget crunch.

A second proposal would change TABOR from a constitutional amendment to a state statute. By law, Colorado's constitution cannot be altered without voter approval. By making TABOR a statute, this bill would grant the legislature the power to manipulate

⁵⁷ Colorado Association of Commerce and Industry (2001).

fiscal policy without voter approval. This proposal died in the legislature, but is still being debated by policy leaders. Another proposal that died in committee by Republican majority would have locked the residential property assessment rate at 9.5 percent. Voters will have the opportunity to vote on this same measure with a ballot initiative this fall. The current property assessment is at 9.15 and is expected to drop below 8 by next year's budget.

The fourth proposal, presented by the Attorney General Ken Salazar, would eliminate the TABOR spending limitations but preserve the voter's right to vote on all new tax increases. Democrats generally support this measure because it would eliminate the ratchet effect and allow the State to maintain current property assessment values, protecting local governments' revenue base.

In order to achieve the stated objective and meet criteria goals, TABOR/ Gallagher reform needs to address existing incentives for local governments to chase commercial tax revenues. None of these proposals specify this policy change. In response, this analysis proposes that either the State adopts measure two to make TABOR a statute amendable by the legislature or measure four to lift spending limitations. In addition, this policy alternative must include a clause that requires more equitable distribution between residential and commercial property tax revenues.

Even with this addition, this policy offers no guarantee that the legislature will take advantage of their new powers. Given that residential property tax revenues are continuing to decline without any indication of leveling out, this analysis assumes that the legislature will eventually decide to raise spending limits before residential property taxes drop to zero. Based on this assumption, this alternative is rated as medium on the criteria for quality of life and the environment. A higher rating is not obtained because, unless this policy alternative is adopted immediately, property tax revenues will continue to fall, placing local governments in further fiscal strain.

In addition, even by correcting for the reliance on commercially based tax revenues, the outcome of this alternative will do little if anything to combat the social inequalities between jurisdictions. As a result, this alternative rates medium for social equity. Furthermore, reliance on property taxes is less equitable because lower class populations generally spend a higher percentage of their net worth on property taxes than the upper class. This alternative does, however, eliminate some of the urgency for gaining voter approval for increasing spending limits. Since poorer jurisdictions find it harder to pass spending measures at the ballot box, this will help to place these localities on more equitable ground.

In regard to criteria for fiscal impacts and political feasibility, reforming TABOR/Gallagher rates high. This alternative will increase legislative control to respond to fiscal crisis. In addition, the State and local governments will no longer have to manage declining property tax revenues. Budgets will become more stable and the administration costs involved with calculating taxes will likely decrease. For these same reasons, this policy alternative rates strong on feasibility. Political leaders concerned about the current fiscal crisis are willing to consider reforming the tax system.

Land Tax

A land tax is intended to act as “incentive” property taxation by placing a greater percentage of property tax on the land and less on structures. The objective is to shift the tax burden onto land-extensive uses associated with urban sprawl, such as parking lots, one-acre or greater housing sites and strip malls, while reducing the tax burden on land-intensive uses such as apartments and office buildings. In addition to spawning new development interest in urban centers, taxing land rather than structures might encourage more investment in building design and quality.

Simulation models have shown that a land tax would generate comparable revenues as the conventional property tax.⁵⁸ Under existing tax policy, sprawling development can

⁵⁸ England (2003).

generate relatively low property tax revenues while requiring greater government services expenditures. A land tax would help to match these expenditures more accurately with revenues.

Richard W. England, a professor of economics and natural resources at the University of New Hampshire completed an in depth simulation study of the property tax system in New Hampshire (2003). His study found that taxing land encourages greater development on smaller urban lots and less in the suburbs. England concluded that a shift from property to land value taxation would have positive short and longer-term effects on states with economies similar to New Hampshire.

Thomas Gihring, a Seattle based planning consultant, performed a study exploring the benefits of a land-based tax in Seattle and Vancouver, Washington and found similar results.⁵⁹ Using county property assessment files and hypothetical tax applications, Gihring simulated a heavy tax on land values and a light tax on improvement values. The study's analysis suggested that the efforts of King and Clark County planners to curb urban sprawl could “be reinforced if legislators and other governmental departments would join in revising the property tax system to offer built-in financial incentives.”

The best example of this policy in practice is in Pittsburgh, where the land is taxed five to six times the tax on buildings. Despite the economic consequences of a declining steel industry, construction and development within the downtown district has been increasing – and faster than in the neighboring suburbs. These trends are not shared by neighboring cities with conventional property taxation schemes.⁶⁰

When compared with the objectives and established criteria outlined above, the land tax receives strong marks overall. This policy ranks high on quality of life and the environment because it aims directly at reducing the number of acres developed per capita by economically penalizing land-intensive development. In addition, this policy

⁵⁹ Gihring (1999).

⁶⁰ Sprawl Watch (1998).

would promote greater investment in the urban centers while simultaneously reducing the tax burden on the inner city, helping to alleviate the fiscal inequalities between jurisdictions. As a result, the land tax alternative ranks high for social equity.

Based on existing research, applying a greater percentage of the property tax toward land rather than improvements provides an incentive for developers to build on smaller lots, which require lower infrastructure expenditures. In addition, a more land-intensive tax has not been proven to lower overall revenues; as a result, this policy generates a medium-high rating on fiscal impacts. The rank is not high because, given the necessary restructuring of the tax system, this policy would likely increase administration costs, at least initially. The greatest downside to the land tax under the established criteria is that it ranks low on political feasibility. A strong proposal for a land-based tax has not been seriously considered by the Colorado legislature and faces certain opposition from developer interest groups.

Policy Matrix

In the following matrix, each policy alternative is rated for the quality of its outcome under the chosen criteria. The rating scale ranges from low to high with the following intermediate stages: medium-low, medium and medium-high.

	Quality of Life & Environment	Social Equity	Fiscal Impacts	Political Feasibility
Fiscal Regionalism	Medium-high: eliminates the need for revenue seeking that often drives low-density development in the suburbs.	High: would lead to greater equity through redistribution of revenues.	Medium-high: would increase revenues for poorer jurisdictions.	Low: carries a perceived threat to local control
TABOR/ Gallagher Reform	Medium: does not promote greater density of urban development.	Medium: increases reliance on property tax, without redistribution.	High: increases revenue-raising abilities for the State and local governments.	Medium-high: reform is likely, although, possibly not in the most desired form.
Land Tax	High: promotes incentive for more condensed development within urban centers.	High: promotes urban investment while lowering urban property taxes.	Medium-high: decreases expenditures without jeopardizing revenues.	Low: not likely to gain ground in the legislature in the near future.

Recommendation and Implementation

Based on this policy analysis, I recommend that the stakeholders and decision makers advocate for the reform of TABOR and Gallagher. Given that local leaders and special interest groups are already building momentum to review the current tax system, reforming TABOR/ Gallagher should be the centerpiece of efforts to pursue a more equitable fiscal policy.

The other alternatives, fiscal regionalism and the land tax rank stronger on the environment and fiscal equality than reforming TABOR/ Gallagher. Combined with other growth management strategies, such as mandatory land use planning, urban growth boundaries and open space preservation, these policies would effectively shape Colorado's land use policies to prioritize the environment and quality of life. In addition, by increasing the density of development, these policies would reduce the fiscal strains on local governments for financing infrastructure. This is especially true of the land tax. Revenue sharing would generate a similar effect, but by encouraging regional cooperation.

Reforming TABOR/ Gallagher ranks relatively low compared to the other policy alternatives on its ability to promote environmental preservation and quality of life. However, this policy would start the State down the path of protecting quality of life and the environment. Changes to these tax measures can promote more thoughtful regional approaches to growth management by helping to mitigate the current incentives for revenue seeking behavior. This is primarily because of two effects; first, restrictions on tax revenues are lifted and second, a balance between residential and commercial property revenues is restored. As a result, local governments will not be under as much financial pressure to chase revenues at the cost of responsible land use practices. In addition, new property owners will be paying more of their share of the infrastructure costs they impose on local governments.

In order for these environmental benefits to be fully realized, TABOR and Gallagher need to be reformed to restore declining residential property tax assessment rates. At this time, political leaders are not paying enough attention to the impacts of these amendments on local land use decisions. Failing to consider the critical link between the state's economic prosperity and more responsible development would be a serious mistake for the future of Colorado.

CONCLUSION

In conclusion, opportunities exist for using fiscal policies to encourage more thoughtful development practices in Colorado. Currently, the State implements one of the most restrictive tax systems in the country.⁶¹ Under TABOR and Gallagher, local governments do not have a choice about how much money they can spend on the services their communities need. In many of Colorado's counties, populations are doubling every 10 to 15 years, demanding new schools, libraries, roads and other infrastructure. While the state economy continues to grow, county operating budgets cannot keep pace with inflation. This creates a fiscal strain on local governments that promotes greater reliance on sales and commercial property tax revenues to make up the difference. As a result, local governments' incentive to promote responsible development is compromised by the need to raise revenues.

This paper explores changes in county budgets under current fiscal policies and their effects on regional growth patterns. In poll after poll, Colorado residents have confirmed that growth is a threat to their quality of life and environment. Regional governments, Colorado businesses, and local leaders are calling for growth management policies. If current trends in development do not change, Front Range cities will grow together in a continuous urban block of low density housing and poorly defined urban centers.⁶² In order to stop the sprawl, Colorado needs policy solutions that address the combined impacts of current fiscal policies and rapid urban expansion. Ignoring a regional vision of growth patterns and relying too much on sales and commercial property tax revenue to pay for sprawling development will rapidly erode the quality of life that Colorado residents cherish.

⁶¹ Hedges (2003)

⁶² Northern Colorado Regional Communities (1999)

FUTURE RESEARCH

The analysis presented in this report provides a glimpse into the budgets of Colorado local governments and how they have changed under intense population growth and restrictive tax policies. This report documents how fiscal policies may be contributing to harmful growth patterns and presents a case for why these policies need to be reformed with consideration for their impacts on land use. These findings set a foundation for further exploration and offer justification for more in depth analysis into how these local governments balance raising revenues with directing growth.

This analysis focused on the changes in budgetary behavior from 1990 to 2000. Looking at only two years of data provides a clear look into expenditures and revenues for county governments in most respects. However, budgets can vary from to year and take unusual form in some years due to unexpected expenses. For example, the construction of a major highway project might inflate the Roads & Bridges budget for one year to uncharacteristically high levels. One way to capture these changes is to look at multiple years of data or a ten-year average.

Other ideas for more research include using spatial analysis and simulation models to create a visual relationship between revenues and land development patterns. Such models can connect the multiple factors directing growth and offer insight into the likely impacts of policy interventions. Furthermore fiscal equalization efforts, urban growth boundaries, and regional planning could be tested through models with minimal investment and relative accuracy.

In addition, new policies for how local governments develop budgets offer opportunity for better understanding the fiscal impacts of growth. Under a new rule, known as the Government Accounting Standards Board (GASB) 34, local governments are required to expand the formulas used to calculate assets and liabilities. The provision increases the depth of local government budgets to include more descriptive accounting for the value

of capital goods within the jurisdiction. This includes depreciating the declining quality of roads and adding the value for open space. The rule passed in 1999 and is just now being implemented into the budgeting process. These standards provide a new measure from which to compare the fiscal condition of Colorado local governments with others across the country.

Finally, more research is needed into how TABOR and Gallagher have impacted land use practices in Colorado. Currently there is very little data that directly relates these tax amendments to the revenue seeking behavior and inefficient development on the Front Range. Such a study would be especially useful given that these policies are currently being reviewed, by allowing political leaders to make more informed decisions.

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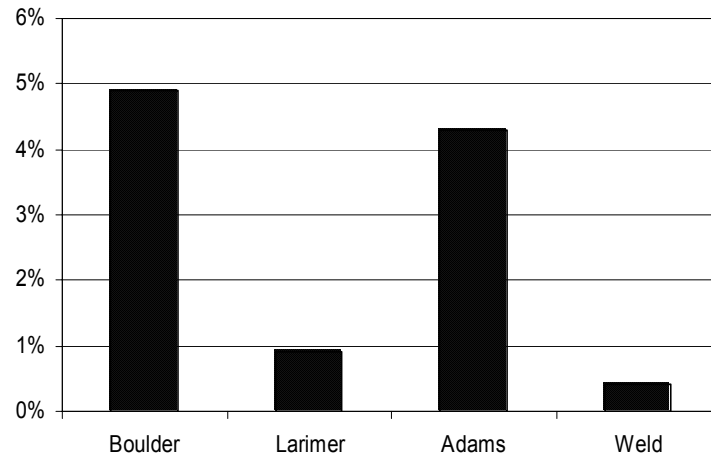
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Rich McClintock. Program Director, Livable Communities Support Center

APPENDICES

Appendix A. Percent of Population Using Mass Transit in 2000. Source: US Census Bureau 2000.



Appendix B. Population Living in Urban Areas 2000. Source: US Census Bureau 2000.

County	Total	Urban	Percent in	Percent	Percent	Percent
	Population		Urban Areas	Cluster	Rural	Farm
Colorado	4,301,261	3,213,253	74.7%	9.8%	14.4%	1.1%
Adams	363,857	328,426	90.3%	5.8%	3.7%	0.2%
Boulder	291,288	264,455	90.8%	0.0%	8.9%	0.3%
Larimer	251,494	207,008	82.3%	4.2%	12.4%	1.1%
Weld	180,936	96,415	53.3%	18.6%	24.5%	3.7%

Appendix C. Adopted County Ballot Measures that affect TABOR 1993-2001. Source: Colorado Counties Inc (2002).

ADAMS COUNTY

Year	Type	Spending Limit Waiver	Debt Increase	Sales & Use Tax/Mill Levy Increase	5.5% limit	Revenue Change	Use
1993	Sales Tax Increase			0.05%			Justice center
1997	Spending Extension			Extended 0.5% for 4 years			Jail
1999	Sales Tax Increase			0.2% sales tax			Open space
2000	Spending Limit Waiver	Collect & retain revenues			x		County revenues
2001	Spending Limit Waiver			Extend 0.5% for 7 years			Roads & bridges

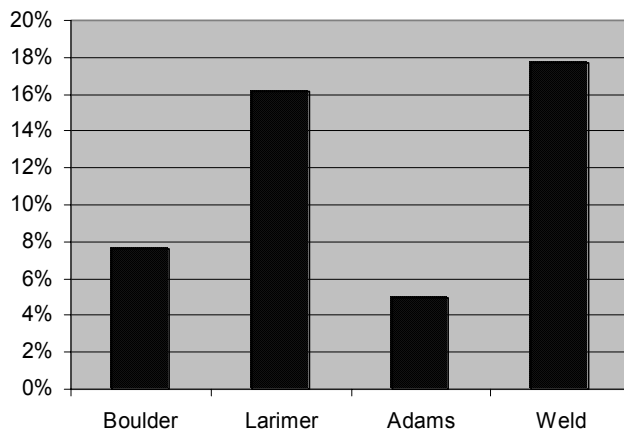
BOULDER COUNTY

Year	Type	Spending Limit Waiver	Debt Increase	Sales & Use Tax/Mill Levy Increase	5.5% limit	Revenue Change	Use
1993	Sales Tax Increase			0.25%			Open space
1994	Sales Tax Increase			.01% for 7 years			Recycling
1995	County Debt Increase		\$35 million			x	Open space
1996	Spending Limit Waiver	Collect & retain revenues					Recycling
1997	Spending Limit Waiver	Retain revenues				x	Justice center
1997	Spending Limit Waiver	Retain revenues				x	Recycling
1997	County Debt Increase		\$35 million				Open space
1998	Sales Tax Increase			0.2% for 2 years			ER services
1999	Sales Tax Increase			Continuation of existing sales tax			Open space
2000	Sales Tax Extension	Collect & retain revenues				x	County revenues
2000	Sales Tax Extension/Debt Increase			0.1% for 8 years; \$80.8 million		x	Open space
2000	Spending Limit Waiver	Collect & retain revenues					
2001	Sales and Use Tax Increase			0.05 % for 3 years			Firefighting facilities
2001	Sales and Use Tax Increase			0.1% for 7 year			Transportation

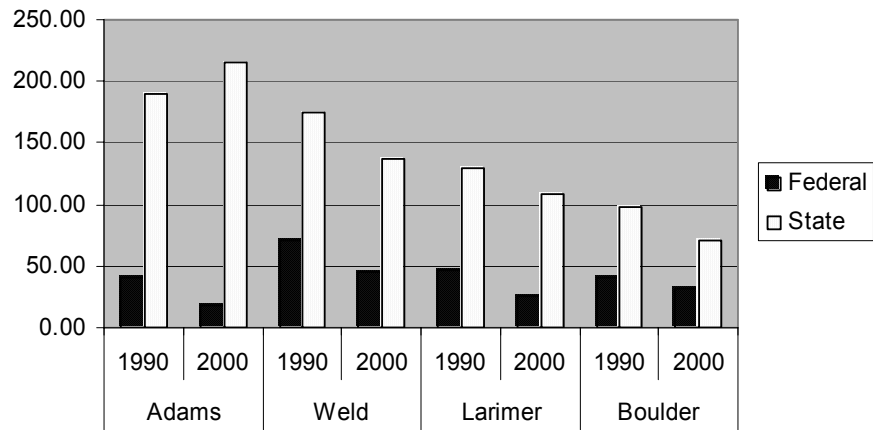
LARIMER COUNTY

Year	Type	Spending Limit Waiver	Debt Increase	Sales & Use Tax/Mill Levy Increase	5.5% limit	Revenue Change	Use
1994	County Debt Increase			Mill levy to pay debt			
1995	Sales Tax Increase/ Spending Limit waiver	Collect, retain & expend excess revenue w/o limit		.25% for 8 years		x	Open space
1997	Sales Tax Increase/ Spending Limit waiver	Initiated, collected & administered		0.2% for 15 years			County facilities
1997	Sales Tax Increase/ Spending Limit waiver	Initiated, collected & administered		0.2% for 17 years			County jail
1998	Sales Tax Increase/ Spending Limit waiver	Collect, retain & expend excess revenue		0.1% for 1 year			Event center
1999	Sales Tax Increase			Continuation of sales tax and debt increase		x	Open space
1999	Sales Tax Increase			0.15%		x	Event center, community bldg. & fairgrounds
1999	Sales Tax Exemption						Farm equipment
1999	Spending Limit Waiver	Collect, retain & expend excess revenue					
2001	Mill Levy Increase	Collect, retain & spend		0.75 mill levy	x	x	developmental disabilities
2001	Spending Limit Waiver	Extend sales tax for 6 mo.					Fairgrounds

Appendix D. Public Works spending as a % of the 2000 Budget. Source: Colorado Department of Local Affairs Financial Compendium.



Appendix E. Intergovernmental Revenue Per Capita (adjusted for 2000). Source:
 Colorado Department of Local Affairs Financial Compendium.



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