

*Economic / Policy Research*

**Growth - Interdependence - Cooperation**

**The City of Colorado Springs  
and its  
Surrounding Communities**

Prepared by  
David Bamberger & Associates

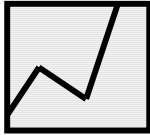
Prepared for  
The Palmer Divide Water Group

**October 18, 2006**

*Final Report*

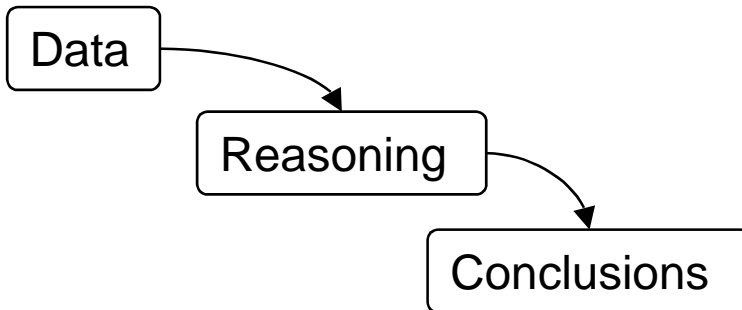
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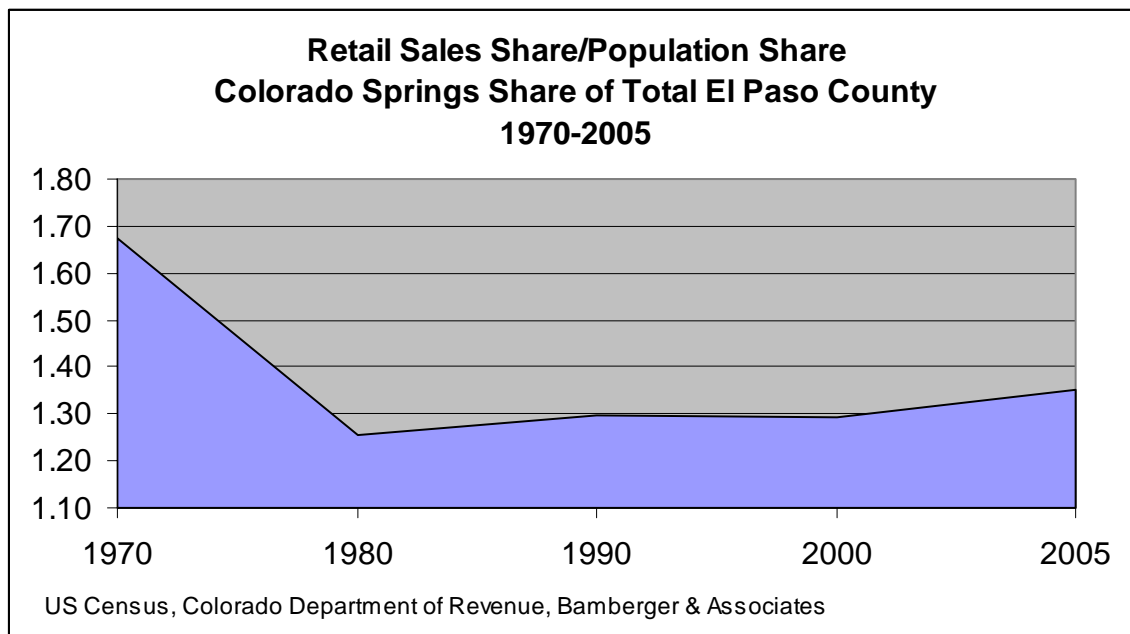
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## **Executive Summary**

This report uses empirical evidence and economic research to meet a three-part objective. The first part of the objective is to assess the fiscal impact of suburban El Paso County on the City of Colorado Springs. The second part is to examine up-to-date research on the dynamics of metropolitan economic growth. And thirdly, the report explores the implications of regional cooperation between cities and suburbs, especially with regard to water supply issues.

The report begins by examining long-term trends in population, property assessment, and retail sales in Colorado Springs and El Paso County. In 2005, Colorado Springs had 67% of the County population, 74% of its assessed property value, and 88% of its retail sales. Between 2000 and 2004, Colorado Springs captured 75% of the County-wide increase in retail sales, although it captured only 51% of the County-wide population growth. This resulted in the retail sales per capita in Colorado Springs relative to total El Paso County to increase. The change between 2000 and 2004 is a continuation of a long-term trend since 1980 where Colorado Springs captured a higher level of retail sales than it does population. As shown below, the ratio of Colorado Springs' share of El Paso County's retail sales to its share of population has grown from 1.26:1 to 1.35:1 since 1980, after declining dramatically during the 1970's.



The study continues by analyzing commuting patterns between Colorado Springs and the surrounding County, so as to estimate the net impact of suburban residents on the City's finances. The empirical evidence shows that residents of El Paso County who live outside the Colorado Springs City limits add costs of \$4.4 million per year to the City budget. They also contribute \$21.2 million annually in sales tax revenue. Consequently, these non-City residents of the County bring a net annual benefit of \$16.8 million to Colorado Springs.

In addressing the second aim of its three-part objective, this report summarizes current academic publications that address the dynamics between cities and their surrounding suburbs. Three independent researchers have conducted econometric investigations using data collected from metropolitan areas in the U.S. Although each study relied on a slightly different set of variables, they all arrived at findings that reinforce one another. The dominant pattern is one in which the municipalities within a metropolitan region either thrive or struggle together. In other words, an economically healthy and successful central city tends to be surrounded by a collection of thriving suburbs. These researchers found no evidence to support the idea that the economic success of suburbs comes at the expense of the central city.

The third section of the report is devoted to the idea of regional cooperation. Examples of current inter-governmental agreements in the Pikes Peak region are presented. To address this issue more fully, the report also draws on the experience of other areas around the country. Collaborative arrangements are emerging due to the desire of policy makers to avoid uncertainty, to meet higher-level mandates, and to create more efficient methods of delivering public services. Cooperative efforts among water providers have gained momentum in recent decades, due to passage of the 1974 Clean Water Act. Increasingly, public officials are finding that regional water supply and distribution efforts generate efficiencies that overcome the proprietary interests of small-scale providers. Also, some resource experts report that it is easier to address water supply issues before they arise, rather than to wait until they have become entrenched in the decision-making process.

Initiatives undertaken by the Colorado Water Conservation Board are consistent with this larger nationwide trend. The board encourages collaborative water-sharing agreements among public service providers so as to ensure reliable supplies in an environment where rainfall amounts are not reliable.

The report concludes with a discussion of land availability and the cost of water supply in El Paso County. To the extent that fragmentation between policy makers might limit the possibility of regional cooperation, there are potential barriers to the sustainable growth of the Colorado Springs metropolitan region.

### ***Introduction***

The Palmer Divide Water Group, an association of water service providers in northern El Paso County, asked David Bamberger and Associates to examine how growth in El Paso County, outside of the City boundary of Colorado Springs, impacts Colorado Springs from a fiscal and economic perspective.

The fundamental question is the degree to which Colorado Springs is positively or negatively impacted by growth occurring outside the City boundaries.

In addition, we were asked to address some broader questions regarding the inter-relatedness of the City of Colorado Springs and non-City portions of El Paso County, as well as the importance of regional collaboration to the metropolitan area.

Members of the Palmer Divide Water Group include the Cherokee Metropolitan District, Donala Water & Sanitation District, the Town of Monument, the Town of Palmer Lake, Triview Metropolitan District, and the Woodmoor Water and Sanitation District. The geographic service boundaries of group members can be found at [www.palmerdividewatergroup.com](http://www.palmerdividewatergroup.com).

The investigation and findings from the study are presented in summary narrative form in the following report. An in-depth

analysis and data upon which this report is based can be found in a Technical Appendix and a separate David Bamberger & Associates report titled *The Fiscal Impact of Suburban El Paso County Residents on the City of Colorado Springs General Fund*. Both of these references are available through the Palmer Divide Water Group's website at [www.palmerdividewatergroup.com](http://www.palmerdividewatergroup.com).

This study puts El Paso County and Colorado Springs growth into a historical context and then summarizes the fiscal impact analysis and other national research focused on central city versus suburban growth. The role of regional collaboration is then considered, both nationally and regionally, especially as it relates to water issues and development. Overall conclusions are then drawn.

### ***Community Profile***

David Bamberger & Associates estimates of 2005 population are 566,000 and 385,000 for El Paso County and the City of Colorado Springs respectively. Based upon these estimates, Colorado Springs City residents comprise about 68% of the total. Non-city residents residing outside the city, but within the County comprise 33% of the total.<sup>1</sup>

Looking at the City of Colorado Springs' share of total El Paso County data in 2004 and 2005, relative to the same data during the first four or five years of the 21<sup>st</sup> century, we see Colorado Springs captured 75% of the increase in total retail sales from 2000 through 2004. In contrast during roughly the same time period, Colorado Springs received 62% of the increase in assessed property values and 51% of estimated population growth. During this same period Colorado Springs received 75% of new residential building permits.

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<sup>1</sup> Population estimates are inconsistent between the U.S. Census Bureau, the Colorado Department of Local Affairs, and the Colorado Springs Budget Office. In this report Census data is used for the long term trend analysis to keep the data source consistent from 1970 – 2005, while the Colorado Department of Local Affairs data is used for the short-term analysis as we consider it to be more accurate. Colorado Springs' Budget Office estimates are used in the impact analysis as this is the estimate officially used by the City of Colorado Springs in their analyses.

## MUNICIPAL SHARE OF COUNTY - KEY INDICATORS

	Colorado Springs	County	C.S. Share of Total County
<b>Last Year Share</b>			
Estimated Population 2004	\$ 380,073	\$ 554,583	69%
Housing Building Permits 2005	\$ 4,715	\$ 6,754	70%
Assessed Value 2005 [1]	\$ 4,103,863	\$ 5,523,826	74%
Retail Sales 2004 [1]	\$ 9,653,119	\$ 11,004,831	88%
Per Capita Retail Sales	\$ 25,398	\$ 19,843	128%
<b>Share of Change</b>			
Estimated Population 2000-04	\$ 19,183	\$ 37,554	51%
Housing Building Permits 2001-05	\$ 24,328	\$ 32,512	75%
Assessed Value 2000-05 [1]	\$ 781,396	\$ 1,253,496	62%
Retail Sales 2000-04 [1]	\$ 1,371,303	\$ 1,819,664	75%
Per Capita Retail Sales	\$ 71,485	\$ 48,455	148%

[1] Numbers in thousands

Sources: Colorado Department of Local Affairs, Regional Building Department, Colorado Department of Revenue, El Paso County Assessor, David Bamberger & Associates

The data shows that, with the exception of housing building permits, Colorado Springs received a smaller share of the change in population and economic activity from 2000 to 2004 than it had in 2004. On a per capita basis the story is reversed. The City's retail sales per capita grew faster than the County. This occurred because the City share of new population dropped faster than the City's share of assessed value and retail sales.

How can Colorado Springs receive 75% of economic growth as measured by building permits and retail sales, but only 51% of population growth? Several factors explain the disproportionate share of economic growth accruing to Colorado Springs. The City is developing at higher densities with smaller households and housing units when compared to the County. This would explain why assessed value falls between population share and building permit share.

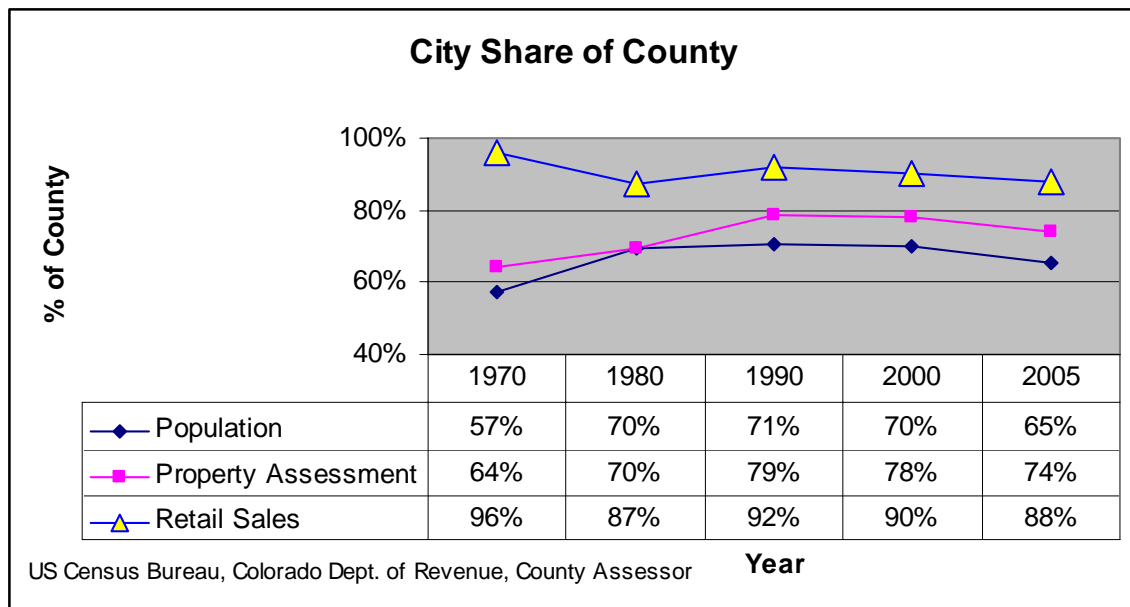
Another explanation is that Colorado Springs serves as the central shopping place for many non-city residents (NCRs) who live in El Paso County. This is evidenced by per capita retail sales. Colorado Springs' per capita retail sales were 128% of the County's level of per capita retail sales in 2004. The incremental change in per capita retail sales (change in retail sales divided by change in population) in

the City from 2000 to 2004 was 148% of the change in the County's per capita retail sales during the same time period. In other words, the average per capita retail sales in Colorado Springs is growing faster than in El Paso County as a whole.

The magnitudes of the change are large. Colorado Springs and El Paso County had incremental per capita retail sales (from population and economic growth) of \$71,485 and \$48,455 respectively. These are almost three times the average per capita sales in 2004 in both areas.

The high level of per capita incremental retail sales to incremental population is indicative of the relative levels of retail spending associated with new population and economic growth. These high increases also raise questions about the population estimates from the Colorado Department of Local Affairs. We believe their estimates are low. Using our population estimates, the incremental per capita retail sales are \$56,877 and \$33,799 in City and County respectively. This results in a City to total County per capita retail sales ratio from economic and population growth of 168% or 1.68:1.

The long-term trends are consistent with trends found since 2000. The following chart depicts the long-term relationship between Colorado Springs and El Paso County.



Using U.S. Census data and for the last 35 years, the population of the City has ranged between 57% and 71% of the total County population. The City share peaked in 1990 and declined slightly between 1990 and 2000. Current Census Bureau estimates show a dramatic decline to 65% in City share between 2000 and 2005. Our research indicates the decline is closer to a 68% share.

Two fiscal indicators, retail sales and assessed property valuation, follow the same trend of peaking in 1990 and declining thereafter.

In 1970, Colorado Springs had a 96% share of County retail sales. By 1980, the City share of retail sales dropped dramatically to 87% before climbing back to over 92% by 1990. With the exception of 1970, the City share of retail sales has always exceeded its share of population by approximately 17% to 23%.

Assessed valuation of real and personal business property runs closer to the City share of population, being identical in 1980. Since 1980, the City share of assessed property valuation has run approximately 8% higher than the City share of population on a fairly consistent basis.

**Colorado Springs  
Share Analysis**

Year	Retail Share to Population Share
1970	1.67
1980	1.26
1990	1.30
2000	1.29
2005	1.35

US Census, Colo. Dept of Revenue, Bamberger & Associates

Overall, the City share of population, property valuation, and retail sales has been rather constant since 1980. However, as shown in the adjacent table, the relationship between the variables has shifted in favor of Colorado Springs. After declining dramatically from 1970 to 1980, the ratio of Colorado Springs share of retail sales to its share of population, grew from 1980 to 1990 and then again, as noted above, from 2000 to 2005. The decline from 1970 to 1980 is largely due to the southwestern annexation which brought the Broadmoor and Skyway areas into Colorado Springs. Colorado Springs gained substantial population without new retail dollars since the annexed areas were already shopping in Colorado Springs. The decline in the City's share of retail sales during that same period could be related to the local gas moratorium, national energy crisis, new retail development outside the City limits, or changes in retail sales reporting.

Overall, the data suggest that property assessment and retail sales share generally follow population share with downward changes in economic indicators such as retail sales and assessed valuation being less dramatic than population changes. This makes sense given that population shifts away from Colorado Springs into El Paso County still results in commercial uses and retail sales in Colorado Springs from the non-city resident population.

### ***Fiscal Impact Analysis Methodology***

The basic methodology for assessing the impact of growth occurring outside the City of Colorado Springs within El Paso County is outlined below. The detailed Fiscal Impact Analysis is presented under separate cover.

1. Estimate the amount of commuting between Colorado Springs and suburban El Paso County on a daily basis in 2006.
2. Estimate the amount of cost placed on the city for providing Police, Fire/EMS and Public Works to non-city resident (NCR) commuters into the City and subtract out the cost savings associated with City resident commuters leaving the City and going to destinations within El Paso County.
3. Estimate the amount of benefit to the city from NCR commuters shopping in the city and paying sales tax. Sales tax represents about one third of the total City revenues, and a little more than half of its general fund revenue.
4. Determine the current net fiscal impact by subtracting the NCR service costs from the NCR tax revenues.

Commuting estimates prepared by the Pikes Peak Area Council of Governments for their transportation model show that, on average,

there are approximately 104,400 trips per day into the City of Colorado Springs by El Paso County NCRs in 2006. At the same time, there were 41,200 trips by City residents into other parts of the County. When combined with intra-City vehicle trip by City residents, a total of 610,200 trips occurred daily by all El Paso County residents traveling within the County to a County destination -- whether the destination was inside the City or outside the City.

**2006 El Paso County Vehicle Trips  
by Type and Points of Origination & Destination**

	Total	Work	Shop	Recreate
Total El Paso County Trips	610,200	270,260	221,850	118,090
County In-Bound to City	104,420	49,780	39,280	15,360
City Out-Bound to County	41,170	32,600	1,570	7,000
In-Bound/Out-Bound Ratio	2.54	1.53	25.02	2.19
Intra-City Trips	464,610	187,880	181,000	95,730
Intra-City as % of Total	76%	70%	82%	81%

Source: PPACG, David Bamberger & Associates

As shown in the table, the share of City residents who traveled only within the City was 76%. Most of these trips were for work, followed closely by shopping trips. Trips for recreation were a distant third when considered in total. The same pattern holds true for non-city residents commuting to Colorado Springs. However, Colorado Springs residents commuting to the County were traveling almost entirely for work. The volume of City residents traveling to the County for shopping was a distant third at only 1,570 compared to 32,600 traveling to work and 7,000 traveling for recreation.

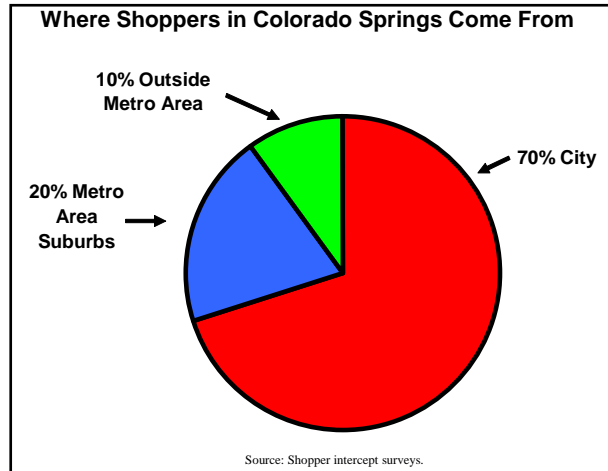
The differences can be seen in the ratio of in-bound (into Colorado Springs) to out-bound trips (from Colorado Springs). The overall ratio is 2:54 in-bound trips to one out-bound trips. In contrast, the ratio is 25.02:1 for shopping.

This daily commuting has both costs and benefits to the City of Colorado Springs. Costs come from providing services to commuters who come into the City. The vast majority of the services fall into three categories -- Police, Fire/EMS, and Public Works (road systems). Similarly, when City residents travel outside the City, to other County destinations, they demand the same services provided by other gov-

ernmental jurisdictions and save costs to Colorado Springs by virtue of being elsewhere.

Using a “share of annual budget” approach it is estimated that the costs to the City of Colorado Springs to provide Police, Fire/EMS, and Public Works services for commuters coming into the City for work, shopping or recreation totaled an estimated \$4.4 million for 2006.

On the benefit side, estimates indicate that City residents only pay approximately 70% of retail sales tax accruing to the City of Colorado Springs government. This conclusion is based upon shopper surveys which show 20% of Colorado Springs shoppers are coming from Colorado Springs suburbs. Given that 2% are Teller County Residents, 18% of City shoppers are El Paso County NCRs.



It is estimated that of the 2005 total of \$5.8 billion in taxable retail sales that occur in the City, about \$850 million are made by these El Paso County NCRs. Applying the 2.5% City sales tax to that figure yields an estimated annual sales tax revenue benefit of about \$21 million. The \$21 million represents about 17% of the \$124 million budgeted 2005 City sales and use tax receipts.

These costs and benefits are summarized in the following graphic.

**Costs & Benefits of El Paso County, Non-City Residents (NCRs) on the City of Colorado Springs**

**COSTS**

Cost of Police, Fire/EMS and Public Works to support NCRs during their commute into the City  
 Less cost savings from City residents commuting to County destinations  
 Equals Net Cost to the City of servicing County NCRs  
**\$4.4 million**

**BENEFITS**

Taxable retail sales made to NCRs equals \$850 million  
 Multiplied times the City retail sales tax rate of 2.5%  
 Equals the Benefit to City from NCRs shopping in the City  
**\$21.2 million**  
Net Fiscal Impact  
\$21.2m - \$4.4m = \$16.8m

Source: David Bamberger & Associates

While the annual costs to the City are significant, our analysis of the costs and benefits generated shows that the estimated cost to serve NCRs is only 21% of the sales tax revenue they generate. County residents who work, shop, and spend leisure time in Colorado Springs prove to be a net financial gain to the City providing the City with a 5:1 benefit to cost ratio.

Growth in El Paso County, outside Colorado Springs has had, and will continue to have, a net positive fiscal impact upon the City. As new residents move to El Paso County, more of those residents will visit Colorado Springs, adding to the existing flows within the region.

***Central City & Suburban Dynamics***

The above analysis has focused exclusively on fiscal impacts to City government from growth outside the City. What about other costs and benefits that might result that do not show up in the City budget? These additional costs and benefits are not readily quantifiable, but there are two areas of research and economic theory which shed light on the overall impact.

The first area centers on the decades old debate about suburban growth at the expense of central cities. This debate has spurred various research endeavors to determine how the location dynamics of urban expansion affect the economic health of metropolitan regions within the United States.

Three recent studies have addressed the question of whether city growth and suburban growth is a zero-sum game, or whether there are externalities, or indirect impacts, associated with metropolitan growth that provide more benefits than would otherwise exist for all residents, whether they are city or non-city residents.

In the first of these studies, Paul Lewis (1996), a research fellow at the Public Policy Institute of California in San Francisco, investigated the effect of cooperation among different political entities within a metropolitan region. Lewis gathered data from large cities within the U.S. to examine the relationship between political fragmentation and land-use patterns. He found that politically fragmented regions are more likely to lose employment from their central business district than are metropolitan areas characterized by a more unified political approach. In addition, his research uncovered a pattern of “edge city” development in areas where there was a lack of cooperation. These outlying edge cities resulted in a greater locational disparity between employment and housing, and therefore in longer commuting times as well.

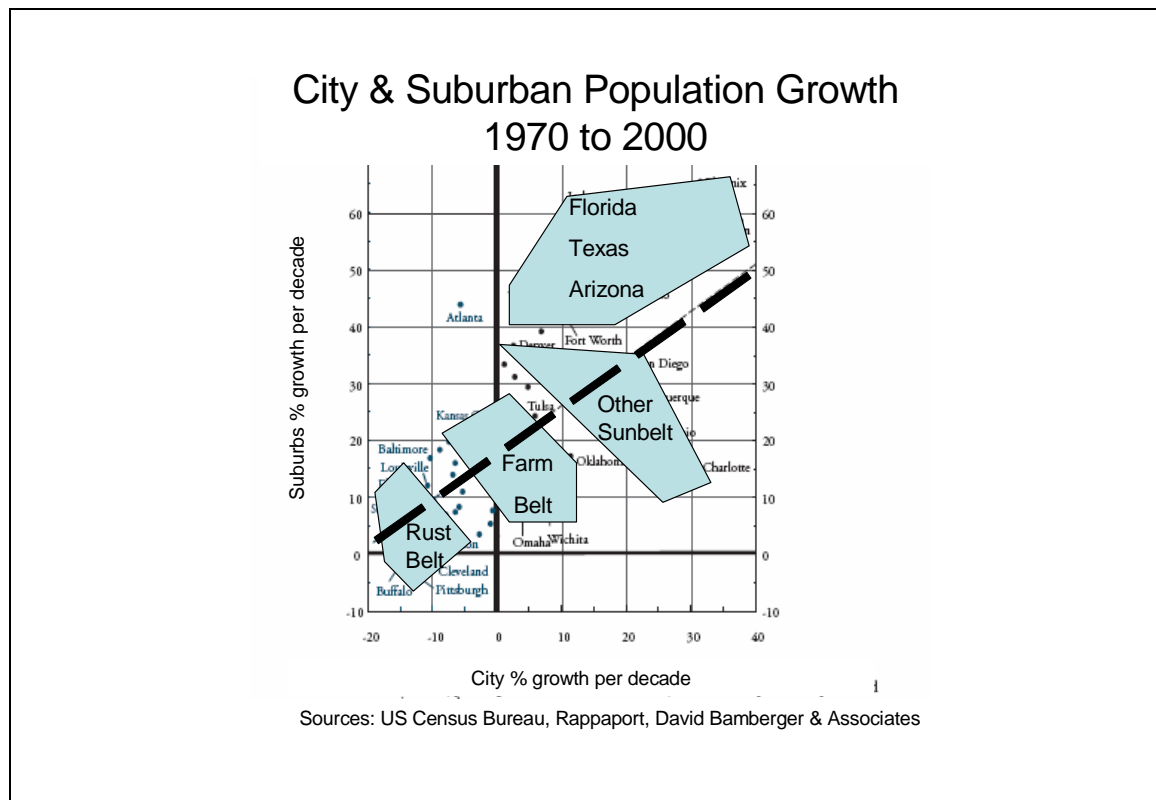
A second report was written by economist Richard Voith (1998), who employed an econometric model to examine the underlying causes of population changes in U.S. metropolitan regions. He finds that aggressive annexation throughout the 1960’s led to a pattern of cities growing at the expense of suburbs during that decade. Since that time, however, the increasing costs of suburbanization have caused central city locations to become relatively more attractive resulting in their ability to grow from market forces as opposed to annexation. Consequently, the current dynamic is one in which prosperous central cities tend to be surrounded by smaller communities which are also prosperous.

Federal Reserve Bank economist Jordan Rappaport (2005) investigated the question of whether outlying communities prosper at the

expense of central cities, or whether urban and suburban economies entwine in such a way that their fortunes parallel one another. His study determined that economically successful cities are most likely accompanied by economically successful suburbs, and vice versa. His findings are summarized in the following graph which shows the correlation of higher suburban growth to central city growth.

Rappaport finds that the best predictor of the growth rate for a given municipality is the metropolitan region in which it is located, rather than knowing whether it is a city or a suburb. He concludes that the regional amenities which define a metropolitan area overwhelm the differences between specific municipal entities in affecting locational decisions of employers and residents.

The following graph is an enhancement of Rappaport's original graph, published by the Federal Reserve Bank of Kansas City. The graph depicts growth in metropolitan suburban areas as opposed to growth in the same metropolitan area's central city. The dashed line reflects the average relationship between suburban and central city growth.

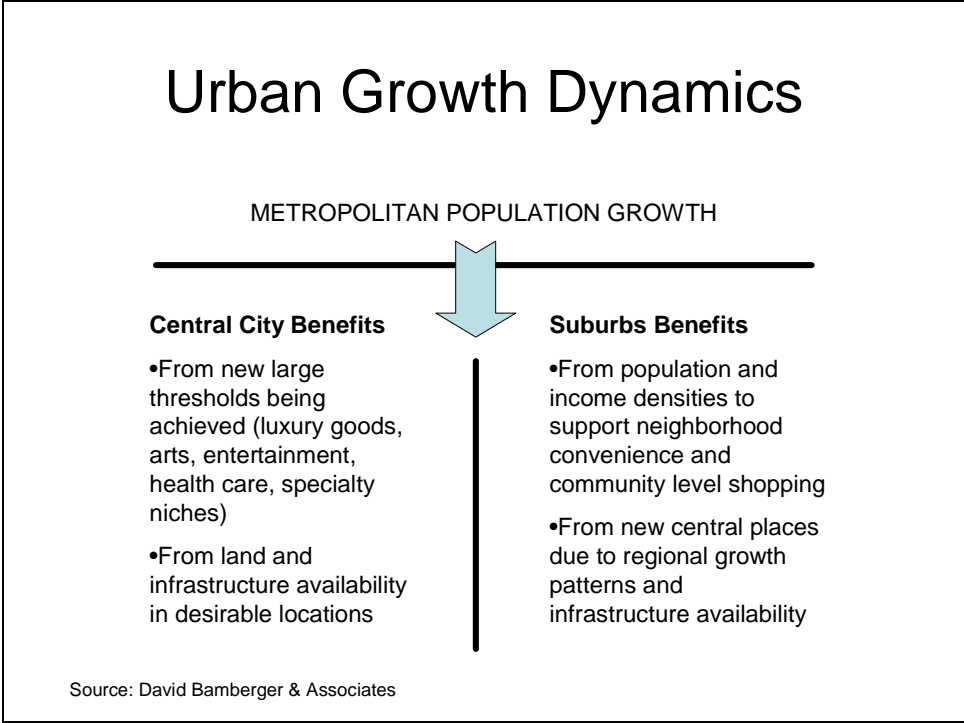


Different regions of the United States experience different metropolitan growth rates. The rust belt experienced negative growth in all central cities with negative to modest growth in suburbs. The farm belt had higher suburban growth and zero to slight growth in the central city. Most metropolitan areas in Florida, Texas, and Arizona experienced high rates of growth in the suburbs with lower levels of strong growth in the central city. Other sunbelt cities (outside Florida, Texas, and Arizona) are more likely to have had strong growth with central city growth equal to the suburban growth.

Research on the topic of growth dynamics related to central cities and suburbs supports long standing urban economic and growth theories. As growth occurs in metropolitan areas as a result of increases in basic economic activity, new population thresholds are achieved. These thresholds allow the metropolitan area to support new services with greater population and income. The new services were not previously supported in the metropolitan area. For instance, a certain threshold size is required to support professional sports teams or regional shopping centers.

When the larger thresholds are reached, new amenities and types of goods and services can be offered in the metropolitan area. Examples of these include everything from sports teams to medical specialists. The delivery of these new goods, services, and amenities tends to be provided from “central places”. These central places are defined relative to the consuming population whether the population consists of people, businesses, or both. The exact location of the central place is further defined by road infrastructure which provides access and egress to and from the central place, as well as geography which can create boundaries and obstacles for the central place.

The central place and threshold theories are highly relevant to projecting future fiscal impacts. Given the heavy reliance of the City of Colorado Springs on sales tax, the future benefit to cost ratio or degree of fiscal impact of County growth on the City will result from a number of dynamics as shown below.



***The Potential for Regional Cooperation***

Given Paul Lewis’ research regarding the impact of political fragmentation on metropolitan growth patterns as outlined in the previous section, it is valuable to consider the degree of cooperation and collaboration on a regional basis nationally, as well as the degree to which collaboration is or is not occurring between the City of Colorado Springs and other governmental jurisdictions within El Paso County and the Pikes Peak Region.

A cursory review of fundamental theories and literature addressing cooperation or competition (fragmentation) finds the following:

1. Conflict theory asserts that all conflicts result from resource shortages, goal interference, and incompatible goals. The choices for conflict resolution range from intense competition or rivalry to strong collaborative efforts focused on common interests among the parties, despite the conflict.

2. Basic economic research concludes entities competing for the same resource or customer group will tend to move towards collaboration over time as they realize more is to be gained (or less will be lost) through cooperation than competition.
  
3. Research by Janet Weiss on cross-agency cooperation points out that the driving dynamics of the competitive/collaborative relationships, which bring about change in those relationships, tend to be based upon:
  - cost-benefit calculations,
  - strong desires to remove future uncertainty,
  - the need to gain regional political leverage at super-regional levels,
  - mandated collaboration from higher political or legal levels (Weiss 1987).

Politicians appear to recognize the value of collaborative approaches and the implications of political fragmentation. A 1999 survey of U.S. large city mayors reveals a strong consensus that the economic health of a metropolitan region depends on greater cooperation between agencies responsible for city services and those serving outlying communities. In addition, there was widespread agreement among politicians that a city's long-term economic prospects are entwined with those of its suburban ring.

Local research and interviews conducted in June, 2006, found the following regional collaborative efforts among governmental and quasi governmental entities in the Pikes Peak Region.

**Regional and Collaborative Governmental and Quasi Governmental Efforts in the Pikes Peak Region**

<b>Organization</b>	<b>Objective</b>	<b>Structure</b>	<b>Revenue Source</b>	<b>Membership</b>
Pikes Peak Rural Transportation Authority	Provide regional transportation and highway infrastructure	Authority, with IGAs	1% sales tax revenue shared by members	Colorado Springs Manitou El Paso County Green Mountain Falls
Pikes Peak Area Council of Governments	Provide aging, environmental, transportation, water quality and air quality planning	Org. of local govts	Member dues	Municipal and county governments in El Paso, Teller and Park Counties

Fountain Valley Authority	Obtain and convey water from the Fry-Ark water project	Authority, with IGAs	Cost sharing between members	Colorado Springs Utilities, Fountain, Security Water & San, Stratmoor Hills Water Distr, Widefield Water Distr
Pikes Peak Library District	Provide library services	Special District	Property tax mill levy	All areas of El Paso County, excl. Manitou and areas within Widefield School District #3
Fountain Creek Watershed TAC	Collaborative forum and technical group to address Fountain Creek issues	Voluntary group under PPACG		El Paso, Pueblo & Teller Counties, municipalities, conservation districts and state & federal government agencies
El Paso County Water Authority	Collaborative forum to address El Paso County water issues	Authority		16 water providers in El Paso County
Palmer Divide Water Group	Collaborative forum to address water issues	Voluntary Group	NA	8 water providers, primarily in Northern El Paso County
Donala, Forest Lakes and Triview WWTF	Cooperative management and operations of wastewater treatment facility	IGA's	Cost sharing	Donala, Forest Lakes and Triview districts
Regional Wastewater Treatment Facility	Potential exists for development of IGAs or other structures to operate several WWTFs as regional facilities	Not yet known	Not yet determined	Various
Southern Delivery System	Efforts underway to plan, permit and construct SDS	Not yet final	Not yet determined	Fountain Valley Authority & Colorado Springs Utilities
Monument and Palmer Lake WWTF	Cooperative management and operations of wastewater treatment facility	IGA's	Cost sharing	Towns of Monument and Palmer Lake
Other Regional Efforts or Potentials	The Osprey Rprt recommends that the Ftn Crk Watershed TAC be supplemented with a Policy Advisory Committee and an effort made to create a partnership	NA	Not yet determined	Likely all communities affected by Fountain Creek Watershed issues in El Paso and Pueblo Counties

While some of the collaborative efforts have a relatively long history, most of the efforts dealing with water and wastewater are relatively new and have not reached the stage of formal Inter-governmental agreements or legal authorities. The most significant recent effort can be found with the Pikes Peak Rural Transportation Authority, which established a pioneering sales tax sharing agreement to pay for transportation maintenance and improvement projects.

## ***Collaboration on Water Issues***

Collaboration over water and wastewater issues on the national level has grown in the past twenty years. It typically comes in the form of comprehensive regional resource and infrastructure planning as well as regionalization of management and assets. The impetus behind the cooperation is in response to greater difficulty developing water resources, including storage and distribution systems, and the higher cost of meeting environmental requirements. Our review of literature addressing water regionalization echoes the findings from a 1996 literature review. It found that the trend in the literature was in favor of regional planning and management to promote economic efficiency and environmental values. (Beecher et al, 1996).

A 2003 study looking at regional approaches to protect Tennessee's water supplies found that collaboration on water policy and development is much easier when local community interests can clearly see the advantage of collaboration. In addition, the author found the range of water dispute experiences worldwide shows that it is easier and cheaper to prevent problems than it is to resolve them afterwards (Feldman, 2003).

The greatest obstacle to water collaboration occurs when citizen stakeholder groups view regionalization as a form of disenfranchisement (Beecher et al, 1996). Given that regions which are net exporters of water are more likely to view market based schemes for allocation with greater disdain than net importers of water (Keenan et al, 1999), we consider opposition from disenfranchisement more likely to exist in areas that are exporters of water.

Beecher's literature review found one study that concluded satisfaction with regional management can be enhanced if participants are informed about the positions of others within the system and about the problems that might be encountered if the regional effort is not successful. The consensus seems to be that comprehensive planning is the key to regionalization, as well as to conservation, because of the need to overcome parochial thinking in both of these areas. An example of how this planning approach can be implemented is found in the state of Connecticut. Utilities are required to incorporate conservation objectives as part of their supply plans (Beecher, 1996).

This sort of collaboration does exist in Colorado as evidenced by the Colorado Water Conservation Board. The CWCB administers the Statewide Water Supply Initiative (SWSI), commissioned by the General Assembly, to help Colorado maintain a reliable and on-going water supply. To help water users and water providers balance resource availability with commercial and residential needs, SWSI intends to identify water supply projects that may require coordination across several planning entities. In 2003, the CWCB published a report about possible responses to drought conditions in the State. Among the suggested arrangements are dry year leases, water banking, operating agreements, exchanges, transfers, interruptible supplies, and water conservation easements.

### ***Conclusions***

Our research findings demonstrate:

- A stable relationship between population, retail sales, and assessed property valuation in the City of Colorado Springs relative to areas outside Colorado Springs within El Paso County.
- The City of Colorado Springs has maintained a relatively stable share of El Paso County's population over the last 35 years.
- A substantial positive impact of County non-City residents on the fiscal well being of Colorado Springs.
- Strong support in national research and urban economic theory supporting a positive symbiotic relationship between growth in and outside the City boundaries of Colorado Springs in El Paso County.
- Regional political fragmentation often leads to changing land use patterns which tends to favor suburban locations. While there are elements of regional cooperation within El Paso County, the collaborations tend to encompass those groups who see the greatest mutual gain emerging from the joint effort.

- Collaboration to promote management efficiency and environmental quality on water issues has increasingly become the norm in the last 30 years since passage of the Clean Water Act of 1974.

Given these findings the question becomes “what is the future likelihood that historical economic relationships will remain relatively constant and the benefits and costs to the City from non-City growth will remain stable?” The following table considers the factors that we think will sustain the status quo versus change it.

<b>FORCES SUSTAINING STATUS QUO</b>	<b>FORCES CHANGING THE STATUS QUO</b>
<ul style="list-style-type: none"> <li>• Ft. Carson and the Air Force Academy prevent continuous growth emanating from the City</li> <li>• Perpetual open space buffers in southern Douglas County prevent growth in northern El Paso County from spilling over north of Monument Hill</li> <li>• Movement of neighborhood and community level retail shopping from the City to non-City areas is likely to be compensated by growth in centrally located specialty and luxury retailers as well as growth along the Powers corridor which will be substantially within the City boundaries</li> </ul>	<ul style="list-style-type: none"> <li>• Securing future water supplies will be much more costly for both the City and other non-City water providers</li> <li>• Western El Paso County growth is now confined to in-fill projects</li> <li>• Colorado Springs has an abundance of non-residential land master planned relative to residential land</li> <li>• High cost of infrastructure development in the Banning Lewis Ranch</li> <li>• 10,000 new troops and 14,600 new dependents at Ft. Carson in southern El Paso County in the coming 4 years</li> <li>• 50,000 lots forecasted for Fountain in southern El Paso County</li> </ul>

The major constraints to changing the historical City share of retail sales and employment are reflected in the urban and natural geography of the metropolitan area. If growth could continue to the north, southwest, and west, then higher thresholds could be achieved in these areas, perhaps creating regional shifts in retail shopping and work commuting patterns. Growth in these locations cannot occur because of the mountains, military installations, and the perpetual greenbelt created along the I-25 corridor in southern Douglas County. Continuation of the dominant northeastern growth pattern is likely to

continue with a shift more towards the east. This will push more regional retail towards the east southeast and northeast; however, most of the Powers Boulevard corridor is within the City boundaries.

Forces which could change the historical relationships fall into two general categories -- land availability and the cost of water development. Colorado Springs is running out of residential land in those areas most desired in the market historically -- west and northeast. This will force future Colorado Springs residential development to the east in the Banning Lewis Ranch. However, the annexation agreement between the City of Colorado Springs and the developer creates a high cost of development. This could favor continued urban leapfrogging of residential and neighborhood retail and service uses into the County. With the near-future, substantial increase in employment at Ft. Carson, and residential lot availability in the Fountain area, the growth impetus could move southeast along the I-25 and Powers corridors. Delays in the Southern Delivery System could worsen the situation in Colorado Springs and dampen residential development in Fountain. On the other hand, water limitations in other areas of El Paso County will drive up the cost of water procurement and delivery in those areas.

Considering these factors, we see no compelling reason to conclude that the growth impacts accruing to the City versus non-City El Paso County will change dramatically in the future. While the next fifteen years is likely to see a continued small shift of population, retail sales, and property assessed valuation from the City of Colorado Springs to other areas in El Paso County, the rate of shift in share should be rather modest. In addition, depending upon how factors play out, there is reasonable potential that the City's share will actually rebound as it has done in the past.

The greater concern comes from the sustainability of historical growth in general. Given national research and the strong correlation between central city and suburban growth, curtailed growth would impact the entire metropolitan area. From this perspective, high water development and delivery costs, combined with what appears to be a significant degree of political fragmentation among governmental jurisdictions within El Paso County, could limit the future of Colorado Springs and El Paso County.