

The Fiscal Cost of Sprawl

How Sprawl Contributes to Local Governments' Budget Woes

A REPORT BY THE



RESEARCH AND POLICY CENTER

William Coyne
Land Use Advocate
Environment Colorado
Research and Policy Center

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Environment Colorado Research and Policy Center
1530 Blake Street, Suite 220
Denver, CO 80202

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Executive Summary

THE high cost of providing and maintaining infrastructure for sprawling development hurts taxpayers and contributes to the fiscal crises facing many Colorado local governments.

Sprawling development does not generate enough tax revenue to cover the costs it incurs on local municipalities to provide new infrastructure and public services. Local governments and their taxpayers end up footing the bill to provide public services to sprawling developments.

Research by Colorado State University found that in Colorado, “dispersed rural residential development costs county governments and schools \$1.65 in service expenditures for every dollar of tax revenue generated.”

Additionally, **the cost to provide public infrastructure and services for a specific population in new sprawling development is higher than to service that same population in a smart growth or infill development.** Sprawling and “leapfrog” developments (those built far away from the current urban area) tend to be dispersed across the land, requiring longer public roads and water and sewer lines to provide service. Such developments also impose higher costs on police and fire departments and schools.

Research from around Colorado demonstrates the high fiscal cost of sprawl relative to compact development:

- Research conducted by the Denver Regional Council of Governments (DRCOG) in the planning process for the Metro Vision 2020 update found that sprawling development would cost Denver-area governments \$4.3 billion more in infrastructure costs than compact smart growth through 2020.
- DRCOG found that a 12-square-mile expansion of the Urban Growth Boundary around Denver to accommodate additional sprawling growth would cost taxpayers \$293 million dollars, \$30 million of which would be subsidized by the region as a whole.
- University of Colorado at Denver researchers determined that future sprawling development in Delta, Mesa, Montrose, and Ouray Counties

would cost taxpayers and local governments \$80 million more than smart growth development between 2000 and 2025.

- New research from the Center for Colorado Policy Studies at the University of Colorado at Colorado Springs points to infill development and increased residential densities as important factors contributing to the substantial savings in infrastructure costs in Colorado Springs between 1980 and 2000.
- A Federal Transit Administration report conducted by the Transit Cooperative Research Program estimates that smart growth would save the Denver-Boulder-Greeley area \$4 billion in road and highway construction over 25 years – a savings of 21 percent.

The costs of building and servicing infrastructure for new sprawling development is ultimately subsidized by the whole community. Local government generally bills the cost of new services and infrastructure on an average basis, rather than an incremental basis. That is, new costs are spread evenly among all taxpayers rather than charged only to those who generate the costs. This is, in effect, a subsidy from the whole community to new development. Existing residents, who were sufficiently served by the established infrastructure, must pay a share of the costly new infrastructure required to meet the expected demand of newcomers.

WHY DO WE SUBSIDIZE SPRAWL?

Communities end up subsidizing sprawl for a number of reasons.

First, most local governments, and by extension their citizens, do not know the true cost of development decisions. Most cities and counties do not conduct fiscal impact analysis. For example, the cities of Denver, Longmont and Castle Rock, along with Arapahoe, Douglas and Jefferson Counties, do not regularly conduct fiscal impact analysis. Of the local governments that do conduct some cost analysis, specific development decisions are rarely linked with fiscal plans. If a fiscal analysis is conducted for a specific development, the research is often narrow in scope. These analyses often ignore costs imposed by the development, like expansion of arterial roads or development of new water facilities.

They also usually ignore geographic differences in the costs of development—such as the higher cost to provide longer sewer lines to developments farther from a sewage plant.

Second, many local governments approve sprawling development projects out of dire need for tax revenue. Some local governments get caught in a cycle wherein they approve development projects to generate new tax revenue to pay the costs of old development. This quickly becomes a dangerous practice.

Many expensive projects are approved because the costs are hidden in a variety of state and federal subsidies. Federal and state incentives, such as federal highway dollars and federal Community Development Block Grants for new infrastructure, promote expensive growth-related infrastructure projects by effectively reducing the price of providing public services. These subsidies enable sprawling developments, which typically require more costly infrastructure investments and might otherwise prove to be prohibitively expensive. Unfortunately, after the initial investment, these subsidies do not cover the long-term costs of maintenance and operation for that infrastructure.

Finally, Colorado's tax system plays an important role in promoting growth. The multitude of taxing jurisdictions pit local governments against each other in competition for tax revenue. Constitutional requirements under TABOR, the Taxpay-

ers Bill of Rights which limits how Colorado governments can raise and spend taxes, also favor real estate development. The only way that local governments can increase their revenue limits under TABOR is to increase the total value of all real estate within their jurisdiction. This gives local governments an incentive to promote new construction, rather than to support infill development or rehabilitation of older neighborhoods.

POLICY FINDINGS

To reduce the fiscal impact of new development on local governments and their taxpayers, as well as promote compact, smart growth communities, Colorado policy makers at the local, regional and state levels should take steps to:

- Encourage regional comprehensive cost-of-development analysis and regular fiscal impact analysis of proposed developments that examine the cost to local governments and taxpayers of providing infrastructure to serve new developments.
- Make new development pay its own way for both infrastructure and services.
- Cut direct state and local subsidies for sprawling development.
- Amend sprawl-inducing tax structures included in the TABOR and Gallagher Amendments. ■



Sprawling Development Hurts Taxpayers and Local Governments

RESIDENTS of Colorado, especially those of us along the Front Range, have become very familiar with the negative impacts of sprawling development: traffic congestion, loss of open space, air and water pollution, and long commutes. What most people do not know is that this development directly costs them money.

Sprawling growth typically does not generate enough tax revenue to pay for the public infrastructure and services it requires. Thus, existing residents end up subsidizing sprawling development by paying the remaining costs.

Research nationally and from around Colorado demonstrates the higher costs of providing infrastructure and services to sprawling development than for smart growth.

SPRAWL REQUIRES MORE INFRASTRUCTURE SPENDING THAN SMART GROWTH

All new development requires investments in infrastructure — the “publicly owned and maintained land, hardware, or structures” that enable delivery of public services. Roads, schools, water and sewer pipes and plants, police and fire stations, parks, and libraries all make up the system of public infrastructure.¹ For a variety of reasons sprawling development tends to require more costly investments in infrastructure than more compact development patterns.

Roads

All new subdivisions require roads, but those with larger lot sizes and more convoluted layouts require more paving. Additionally, many new developments have roads that are significantly wider than the streets in traditional neighborhoods.

This difference translates into huge costs for local governments and taxpayers. In general, the cost of building local roads is estimated to be 25 percent lower in compactly developed areas than in sprawling areas, and clustering units can create a 50 percent to 75 percent reduction in road length, and thus cost.² A Federal Transit Administration report conducted by the Transit Cooperative Research Program estimates that smart growth would save the Denver-Boulder-Greeley area \$4 billion in

road and highway construction over 25 years—a savings of 21 percent.³

Water and Sewer Infrastructure

Depending on the municipality and the development, the cost of constructing water and sewer lines is assumed by the public, the developer, or a combination of the two. In some cases, the developer pays for and installs new lines, typically passing the costs on to new homebuyers. In other cases, the water district pays and charges all residents in the district a share of the cost. In many instances local governments pay the entire cost of installing water and sewer lines to service new development.

Whether the developer, the new homebuyer, or the local government pays the costs for new sewer and water hookups, water and sewer services constitute a large portion of the capital costs of new communities. However, sprawl can inflate the costs of this new infrastructure by 20 to 40 percent.⁴ These costs are substantial: Denver Water is projected to need over \$31 million by 2005 in order to address capital improvement needs for new and existing users.⁵

Emergency Services

Communities also need ambulance service and police and fire protection. Response time — the time from when an emergency call is made to when help arrives — is key.⁶ In sprawling developments, fewer houses are within the acceptable response time of four to six minutes of the fire station than would be the case in a more compactly developed area. As a result, sprawling communities often require more fire and police stations per capita than those in more compactly developed areas.

Communities establish service standards that determine the placement of fire stations according to response time. For instance, a community decides a single station cannot serve more than seven square miles and maintain a 5-1/2-minute response time. However, a station needs to receive at least 450 calls per year, which requires a service area of at least 9,000 people, or one house for every 1.6 acres. Theoretically, one station could serve 30,000 people, but a more realistic population base would be 12,000 people.⁷ The cost of a new station with one engine

and the necessary equipment is \$1.5 million.⁸ Thus, a town of 50,000 developed at the minimum density of one home per 1.6 acres would need six fire stations, for a total capital cost of \$9 million. Living in a town developed more compactly, that same population could be served by just three or four stations, for a capital cost of \$6 million to \$7.5 million.

Schools

Sprawling development can impact school costs in two ways. First, because many sprawling developments on the urban fringe are located in communities that had been sparsely populated, the developments often require the construction of entirely new school facilities. Second, the spread-out nature of sprawl imposes significant transportation costs on school districts.

The construction of new schools in outlying areas has often occurred even when existing schools in more densely populated areas have sufficient available capacity. For example, Minneapolis-St. Paul had to build 78 new suburban schools between 1970 and 1990. In the same period, the cities closed 162 urban schools that were in good condition.⁹ The state of Maine spent \$334 million constructing and expanding schools in fast-growing areas from 1970 to 1995, even as the total number of students dropped by 27,000 during the same period.¹⁰

In the Denver area, a new 600-student elementary school costs approximately \$9.4 million. This does not include the cost of fees, permits, or interior finishings and equipment, which can add \$4 million. Land acquisition costs are an additional expense, though developers normally donate land for schools or pay fees in lieu of land.¹¹ The alternative to building a school is to bus children to an existing school. Operating a bus twice a day, once to carry 60 grade school students and once to carry 40 high school students to and from school, costs \$35,000 per year. This does not include the bus purchase, which can range from \$92,000 for a new diesel bus to \$120,000 for a compressed natural gas vehicle.¹²

Infill and compact development can reduce these costs. In infill development, children may have the option of attending existing or expanded schools, while more compact forms of development can reduce transportation costs or eliminate the need for busing of some students entirely.

HOW IT ADDS UP IN COLORADO

Several studies from around Colorado demonstrate the substantial increase in cost of providing infra-

structure to service sprawling development when compared to smart growth.

Sprawl Costs More

The Denver Regional Council of Governments (DRCOG) has conducted research indicating that sprawling development costs taxpayers and local governments more than compact development.

DRCOG research conducted in the mid-1990s during the planning process for the Metro Vision 2020 update found that sprawling development would cost Denver area governments \$4.3 billion more in infrastructure costs than compact smart growth through 2020. This estimate included only capital construction costs for sewer and water infrastructure and local roads. Not included in the estimates were capital construction costs for schools, libraries, police, parks, or any predicted differences in operation and maintenance costs.¹³

In 2001, economists at DRCOG examined the costs of a potential extension of the urban growth boundary (UGB) around Denver. Their research demonstrates that even a 12-square-mile increase in the urban growth area would result in changes in the overall density of development and a \$293 million increase in the total cost of public infrastructure.

An expansion of the UGB would result in an overall reduction in the average density of development within the areas of expansion. In 2001, the portion of the growth area considered suburban was estimated to be about 65 square miles of developed land. By the year 2020, this suburban area is predicted to grow to 101 square miles of developed land, with an average density of 4 units per acre. Under a proposed expansion of the UGB, the area would grow to 113 square miles, with a density of 3.8 units per acre.

DRCOG's analysis suggests that the total increased expense resulting from an extension of the UGB will be about \$293 million dollars. This represents a 5 percent increase in costs for new development areas of the region. Of the \$293 million, \$30 million would be borne directly by regional and state infrastructure projects and programs.¹⁴ (The analysis did not incorporate schools, emergency services, or social/recreation services. The research did acknowledge that a less dense development pattern would increase the costs of service primarily through increased transportation costs and a reduction in response times.)

Western-Slope Studies. A study of projected infrastructure costs from new development in three West-Slope communities reached similar conclusions. University of Colorado at Denver (UCD) researchers determined that future sprawling development in Delta, Mesa, Montrose, and Ouray counties would cost taxpayers and local governments \$80 million dollars more than smart growth development between 2000 and 2025.

The study analyzed the costs of providing services to new development under four different potential growth scenarios: business-as-usual (sprawling), rural clustered development, a protected land scenario, and an urban growth boundary scenario.

All four of the model’s scenarios allocate the same number of new people. Differences in the net costs of providing services to new development under the different scenarios can be attributed to the pattern of the growth. According to the study, “any savings associated with one scenario must be seen as an opportunity for greater efficiency in service provision county-wide—efficiencies that translate directly into either a reduced tax burden or an opportunity for a greater quality of life via public expenditures in other areas.”

Protecting Land Can Pay Off. Another important conclusion of the UCD study of West-Slope communities was the illustration of the fiscal benefit of preserving open space. The analysis revealed that policies aimed at open space protection (exemplified by the *non-business-as-usual* scenarios) generate fiscal efficiencies as well as physical ones. Indeed, if the unrecovered cost of growth is financed over 25 years, the business-as-usual scenario costs literally millions of dollars (in some cases, tens of millions) more than the more efficient, land-protecting scenarios. These “fiscal efficiencies” represent tax dollars that need not be collected or, if collected, could be spent on police and fire protection rather than on roads and sewer pipes.

Sprawling Development Doesn’t Pay Its Own Way

Research conducted by the Colorado State University Cooperative Extension illustrates that dispersed rural residential development has a net negative fiscal impact on school district and county government budgets. In Colorado, “dispersed rural

residential development costs county governments and schools \$1.65 in service expenditures for every dollar of tax revenue generated.” All but one county in Colorado that has any dispersed rural residential development showed a net fiscal loss from that development.

CSU researchers analyzed the relative cost of providing services to farmland, forestland, and open space versus dispersed rural residential development. The analysis summarized the statistical analysis of school revenues and school expenditures and for total county revenue and expenditures in Colorado.

The American Farmland Trust (AFT) has conducted hundreds of Cost of Community Service Studies around the country that demonstrate the net negative fiscal impact of residential development and the cost-benefit of preserving farmland and open space. AFT’s collective studies showed that residential development requires \$1.15 in community services for every \$1 of tax revenue it contributes. On the other hand, farm and forest land requires only \$0.35 for every \$1 in tax revenue generated. Commercial and industrial uses demand even less relative to their contributions, \$0.27 for each \$1 generated.

The United States Department of Agriculture (USDA) found similar results in their own national research. The USDA found that residential devel-

opment requires \$1.24 in community services for every \$1 in tax revenue generated. Agricultural land uses demand only \$0.38 in services for every \$1 contributed.

IMPACT FEES AND DEVELOPER CONTRIBUTIONS ONLY RECOUP SOME OF THE COSTS

Many argue that impact fees, or system development charges, already compel growth to pay its own way. This is not so in Colorado.

A 2001 change in the law governing impact fees in Colorado allows the fees to only recover the costs

Type of Development	Montrose County	Mesa County	Delta County
Business As Usual	No savings	No savings	No savings
Rural Clusters	\$4,187,759	\$17,767,837	\$669,251
Land Protection	\$4,923,587	\$8,610,867	\$3,922,660
Urban Growth Areas	\$29,257,637	\$49,419,720	\$3,282,463

Colorado Springs Infrastructure Efficiency

Researchers at the University of Colorado at Colorado Springs recently reported that between 1980 and 2000 the city of Colorado Springs saw substantial savings in infrastructure costs, in part due to smart growth infill development and increased residential densities.

Between 1980 and 2000 developed land area increased 32 percent within Colorado Springs and population grew by 68 percent. As a result population per square mile increased by 27 percent.

The high level of development within city limits and thus near existing public infrastructure produced substantial cost savings to the city in several categories. Per capita spending on transportation infrastructure fell dramatically between 1980 and 2000.

Overall city expenditures per capita declined after adjustment for inflation. Between 1980 and 2000 city spending dropped 7 percent per resident. The overall tax base increased but was outpaced by the growth in spending.

of capital infrastructure. Under the legal definition of "capital infrastructure," fees could be challenged when used to purchase new equipment such as trucks or snowplows.

Impact fees are also often calculated on an average basis and seldom reflect the higher cost of supplying distant locations or capital asset replacement costs.¹⁶ Impact fees do not help local governments and their utilities recoup the increased cost of pro-

viding services to sprawling development, which may impose a higher cost than compact development.

Finally, laws regarding impact fees severely restrict the types of local governments that can assess fees and the activities for which fees can be assessed. In Colorado, special districts, including utility districts and school districts, do not have the authority to assess impact fees. ■



Why Do We Subsidize Sprawl?

LOCAL governments, and the taxpayers who support them, bear much of the cost burden of providing new infrastructure and public services to service new development.

While developers and purchasers of new homes often pay some costs of development through impact fees or excise taxes, these fees and taxes are rarely sufficient to recoup the total cost of new infrastructure and cannot recoup the cost of services. When impact fees are not assessed, or do not recover the full cost of all capital improvements, the remainder of the cost is paid by the local government, and thus the entire existing community.

Existing residents also subsidize the cost of providing services to new sprawling development. As discussed in the previous section, providing services to sprawling development is more expensive than servicing compact smart growth or infill development. Local government generally bills the cost of new services on an average basis, rather than an incremental basis. That is, new costs are spread evenly among all taxpayers rather than charged to those who generate the costs. Existing residents, who were sufficiently served by the established, less expensive infrastructure, find themselves paying a share of the costly new infrastructure required to meet the expected demand of the newcomers.

Thus, existing residents subsidize growth by helping to pay the cost of both building new infrastructure and providing additional general public services

The real question is, why is this happening?

Communities end up subsidizing sprawl for a number of reasons.

First, most local governments, and by extension their citizens, do not know the true cost of development decisions. While some cities and counties conduct fiscal impact analysis, most local governments do not. Of the local governments that do conduct some cost analysis, the research is often narrow in scope and ignores geographic differences in the costs of development.

But lack of knowledge of the cost of development is only part of the reason that subsidies for growth exist. Many local governments approve

sprawling development projects out of dire need for tax revenue. Some local governments get caught in a cycle wherein they approve development projects to generate new tax revenue to pay the costs of existing development – which becomes a dangerous practice.

Many expensive projects are approved because the costs are hidden in a variety of state and federal subsidies. Many federal and state incentives promote expensive growth projects, far from existing infrastructure. Direct subsidies exist for infrastructure projects including roads, schools, and water and sewer infrastructure.

Finally, Colorado’s tax system plays an important role in promoting growth. The multitude of taxing jurisdictions pit local governments against each other in competition for tax revenue. Constitutional requirements under TABOR also favor real estate development by allowing for increases in tax revenue limitations only when real estate values increase.

FISCAL ANALYSIS BARELY EXISTS

One important reason that local governments in Colorado continue to make bad investments is that they do not have proper information regarding the fiscal costs and benefits of proposed development projects. Most local governments do not conduct the analysis required to determine potential fiscal impacts of a proposed development.

Fiscal Impact Analysis (FIA) is described as “A projection of the direct, current, public costs and revenues associated with residential and non-residential growth to the local jurisdiction in which the growth is taking place.”¹⁷ By assessing the fiscal impacts of a proposed project, municipalities 1) can better understand what considerations are important for the community while planning the project, 2) will make more rational decisions concerning provision of services, and 3) ensure sound, long-term growth policies.

FIA occurs on a very limited level in Colorado. The limited analysis that does occur is conducted around the formulation of individual impact fees or the consideration of specific annexation proposals. Analysis conducted for specific proposed im-

pact fees only identifies the fiscal costs of the infrastructure improvements covered by the fees. Thus, while an impact fee FIA may provide the city with information about the costs of sewer and water infrastructure, it may not provide information about police and fire protection costs.

Many cities, including Denver, Longmont and Castle Rock, do not regularly conduct FIA of a proposed development. Counties, such as Arapahoe, Douglas and Jefferson, also do not regularly conduct FIA when reviewing a proposed development project.¹⁸

The limited fiscal impact analysis occurring rarely furnishes a comprehensive picture of future costs and benefits of a development. Analysis often narrowly evaluates only the capital infrastructure costs that could be covered by impact fees and ignores services, which make up the bulk of the costs associated with a new development.

Another significant problem with FIA as conducted today is that it often ignores cost differences between geographies. There are clear cost differences between providing public infrastructure and service to a home or business that is close to existing infrastructure when compared to distant, spread-out development. For example, a house that is three miles from the water-treatment plant will require more miles of pipe to service it, thus costing more.

Instead, most FIA employs what is called a per capita multiplier method, which determines growth's revenues and expenditures based on the projected increase in population from a growth projection. This type of projection assumes that the costs associated with a new person moving into a new subdivision are the same as the costs of the average person in the town. If much of the population lives in a compact downtown area, then the average cost of providing public infrastructure per capita may be much lower than the actual cost of providing infrastructure to a new sprawling subdivision located outside of town.

Finally, FIA that does occur neglects to predict fiscal costs and benefits far enough into the future. Most analyses, such as those conducted by Colorado Springs, estimate costs ten years out, thus failing to capture much of the maintenance and replacement costs for infrastructure 15 or 20 years down the road.

GROWING BLIND: HOW BAD GROWTH DECISIONS DRIVE MORE BAD DECISIONS

Local governments, forever searching for new revenue sources, often find new development projects appealing. Picture this: you are the mayor of a medium-sized city in Colorado. A trend of low tax revenues during the past couple of years has left your city scrambling for money. You have several projects you would love to start but instead you are facing budget cuts. Suddenly, the city is approached by a developer who wants to put a thousand-unit subdivision right on the fringe of the city. The developer offers to pay for roads and sewer lines in the subdivision, give land to the city for a new school and pay hefty development fees for the expansion of a wastewater treatment facility. Sounds like a great deal, right?

But what is not readily apparent are the costs that the new development will impose on the municipality in years to come. Up front, there will be immediate costs to the city. Increased usage of city roads due to the increased population could make improvements necessary. The city will have to provide services to the new area including water, sewer, trash removal, police and fire protection, etc. In all likelihood, the new development will not generate enough property taxes to pay for the services it requires. Further down the road, all of the new infrastructure, originally paid for by the developer, will need maintenance and repair. Roads will have to be repaved, sewer pipes will have to be replaced, and new police cars will need to be purchased. Eventually, the development becomes a net negative for the city budget, and a bad investment.

But why does this happen? In general, many communities depend on the revenue from new development to keep the lights on.

Michael Kinsley and Hunter Lovins of the Rocky Mountain Institute offer four dynamics that drive growth. These factors might be called Hungry, Rusty, Debtor, and Booster. For simplicity, these can be described as separate towns; in reality towns face a mixture of these factors:

Hungry towns want growth in order to save themselves from a stagnant or declining economy. Rusty towns seek growth to upgrade old, deteriorating infrastructure and substandard public services. Debtor towns are growing, but can't seem to keep up financially with expansions in infrastructure and public services required and

demanded by new residents. As costs rise, they look to more growth to keep up with lagging revenues. Booster towns are riding a wave of prosperity. They see growth as the reason for their success and continue to promote it.

Unfortunately, as mentioned previously, revenues from new growth are often insufficient to meet the costs of new demand for public services such as schools, police, fire, roads, and sewers. As a result, existing taxpayers unknowingly subsidize much of the community expansion, especially the residential subdivision of unoccupied land.

This confuses and frustrates many citizens and local officials. For years growth boosters have assured them that the solution to a community's economic problems is to increase the tax base. The next big expansion, say growth advocates, will produce enough tax revenue to fix local problems without paying taxes. Many of us accept these assertions.¹⁹

As a result, many Colorado communities find themselves caught in this dangerous cycle, dependent on growth. When sales-and-use tax revenue fueled largely by growth declined last year, Fort Collins found itself \$5 million short of its revenue projections. With 54 percent of the city's general fund coming from taxes and fees linked to growth, the weak economy caught Fort Collins off guard.

Berthoud, Colorado has experienced similar fiscal problems in the wake of a slow-growth period. The town's finances were so dependent on revenue from new development that when development permits fell off in 2003, it had trouble finding the cash to pay its bills.

A recent California study conducted by an unusual coalition of an environmental group, a state agency, an affordable housing group, and Bank of America found that "unchecked sprawl has shifted from an engine of California's growth to a force that now threatens to inhibit growth and degrade the quality of life."²⁰

GROWTH SUBSIDIES

Numerous subsidies for growth are furnished by the federal and state governments in the form of direct spending on infrastructure, as well as grants and low-interest loans available to local governments in Colorado.

The largest federal subsidy for growth is the money spent on highways each year by the U.S. Department of Transportation.²¹ While developers usually pay for the roads within their subdivisions, and occasionally contribute to adjacent feeder roads, they are not required to pay for state or federal highway construction and expansion required to service that growth.

In the year 2000, the latest for which figures are available, the United States Department of Transportation spent \$126 billion on highways nationally, while user fees generated revenue of only \$100 billion, leaving a \$26 billion gap.²²

Colorado receives over \$300 million each year from the federal government for transportation projects, the majority of which are highways. Additionally, state spending on transportation makes up 6.3 percent of Colorado's annual budget, about \$1 billion.²³

Thus, new development in Colorado is not required to pay the full costs of road development. (See page 14 for more information on sprawl subsidies.)

THE TAX STRUCTURE

Tax policy does not just determine how much we pay in taxes. Colorado's tax structure is part of the economic engine that drives sprawling growth.

Our tax system affects growth in two important ways. First, regional planning is very difficult in Colorado because of the nearly 1,900 different taxing entities in the state. While overall state and local taxes in Colorado are below the national average, local taxes are among the highest in the nation. Our local governments rely primarily on sales tax, which while fostering local control, has the negative effects of deterring regional cooperation and encouraging competition between local governments for retail and commercial establishments.²⁴

Second, constitutional amendments such as TABOR and Gallagher encourage new development, but make it difficult for new developments to pay the associated costs.²⁵

Differential assessment rates on commercial and residential property make it difficult to pay for growth. The 1982 Gallagher amendment requires that residential owners pay no more than 45 per-

Other State and Federal Subsidies

THE federal and state governments also provide subsidies to local governments for public infrastructure development and private individuals and companies for housing development. Below is a sampling of programs that provide subsidies to developers and local communities for development.

State Subsidies

Colorado Department of Local Affairs – Colorado Housing Private Activity Bond Program

This program provides private industry with tax-exempt Private Activity Bonds for a variety of economic development projects including residential rental projects, multi-family housing projects, water, sewer, and solid waste disposal facilities. Recent awards include \$11 million to the Village at Avon and \$2 million to the Highland Garden Village for rental housing.

Governor’s Office of Economic Development And International Trade – Infrastructure Grant Program

Grants are provided for the construction of publicly owned water and wastewater facilities and lines, roadways, railroad spurs, lighting, sidewalks, natural gas lines, or electrical services. The City of Dacono recently received \$300,000 to extend water, sewer, electrical, and gas lines and to improve roadways.

Drinking Water Revolving Fund

This fund provides low-interest state funds later capitalized with federal dollars for drinking water projects.

Colorado Water Resources and Power Development Authority – Small Water Resources Projects Program

This state program helps local governments finance storage reservoirs, water and wastewater treatment, distribution, wells, and pumping stations.

Colorado Water Resources and Power Development Authority Planning or Design Grant

Grants to assist communities with populations under 10,000 trying to get grants for DWRF or WPCRF projects.

Colorado Water Conservation Board Construction Fund

Provides state funds for low-interest loans for water-resource projects.

Colorado Water Conservation Board Small Project Loan Program

Provides loans of up to \$1 million for small projects for new raw water facilities or repairs of existing facilities.

Federal Subsidies

U.S. Economic Development Administration – Distressed Community Economic Development Grants

Awards grants for public works projects to assist economic development, including water and sewer facilities primarily to serve industry and commerce. Awards can be up to \$1 million.

U.S. Department of Housing and Urban Development – Community Development Block Grants

The state administers these federal funds to local governments for a variety of purposes including public facilities, housing activities, and economic development. Grants in Colorado are usually less than \$500,000.

U.S. Economic Development Administration – Public Works and Development Facilities Program

These federal grants are awarded for water and sewer facilities serving industry and commerce including access roads to industrial sites or parks and business incubator buildings.

USDA Rural Development

These federal grants and loans are awarded to communities under 10,000 for construction and replacement of water, wastewater, storm sewer, and solid waste facilities.



cent of the total statewide property tax; meaning that businesses pay 55 percent. Since total residential property value increased much more rapidly than commercial and agricultural property value during the last two decades, the taxes assessed on residences are now only on 7.5 percent of market value compared to 21 percent of value in the early 1980s.

In search of revenue, communities end up competing to attract commercial property, assessed at 29 percent of market value, in order to finance the services needed primarily by households. Thus, such retailers as Wal-Mart and Target, because they produce high sales-tax revenues, become popular recruitment options for local decision makers.

Colorado's system of sales tax revenue also influences growth. Locally assessed sales taxes are levied in almost 300 individual jurisdictions across the state. Local governments again compete to receive the sales tax revenue from people who live in other jurisdictions. These shoppers drive home to the cities and counties that provide services to them, leaving their sales tax dollars behind. Flat Irons Mall is in Boulder County, but many of its customers live in Denver and Adams counties. The mall contrib-

utes to traffic congestion in Adams County, but its sales-tax revenues go entirely to Boulder County.²⁶

The competition for sales tax has grown even more fierce in recent years as constitutional requirements push local governments to rely increasingly on the sales tax. The 1992 TABOR amendment reduces property tax collections. It requires mill levies to fall when collections increase by more than inflation plus new growth, but does not allow them to rise when the reverse is true. The limit TABOR sets on local government revenues is a complex measure of local area growth based on property values, but does not include more population or higher incomes. Since the extra tax dollars generated by new growth cannot be spent by local governments without first asking voters, growth cannot automatically pay for itself under TABOR.

The TABOR amendment also encourages city and county annexations. The only way that local governments can increase their revenue limits under TABOR is to increase the total value of all real estate within their jurisdiction. This gives local governments an incentive to annex new areas and promote new construction, rather than to support infill development or rehabilitation of older neighborhoods. ■

Policy Findings

DIRECT and indirect subsidies, tax incentives, and healthy doses of misunderstanding and misconception drive the market for land development and encourage sprawl in Colorado. To reduce sprawling development and protect the financial health of taxpayers and local governments, public policies must level the playing field for development in all areas and end subsidized growth.

The path toward dismantling the engine that drives sprawling development in Colorado is not an easy one. There are several steps: 1) improve cost-of-development analysis so that local decision makers understand the fiscal and economic implications of their decisions, 2) use impact fees and graduated utility rates to their full extent to make growth pay its own way, 3) halt direct subsidies for growth, and 4) amend the tax structure's favoritism for sprawling growth.

IMPROVE COST-OF-DEVELOPMENT ANALYSIS

The first step toward improving the fiscal health of Colorado's communities and ending taxpayer subsidies for sprawl is to improve the quantity and quality of the analysis of fiscal impacts of development.

Local governments should conduct thorough fiscal analysis of any new proposed development or proposed expansion of public infrastructure.

At the same time, regional government associations, such as DRCOG and the Pikes Peak Area Council of Governments, should conduct macro-scale reviews of the cost of development. These studies should analyze development patterns and make recommendations to member governments about the costs and benefits of alternative development patterns.

Cost-of-development analysis should:

- Look far into the future to account for the cost of repairing decaying infrastructure.
- Calculate costs on an incremental (rather than average) basis to capture differences in costs by geography and land-use type.
- Include capital expenditures, equipment, operations, and maintenance.

- Include all relevant public costs—schools, fire, police, water, sewer, parks and recreation, etc.

MAKE NEW GROWTH PAY THE FULL COSTS IT IMPOSES ON LOCAL GOVERNMENTS

New growth should pay its own way. When governments fail to adequately or accurately account for the costs of growth, they skew the market and cause inefficient and expensive allocation of resources.

Residential and commercial development should pay both the full up-front cost of new public infrastructure as well as the full incremental cost, adjusted for geography and other factors, of providing them with public services.

Developers should pay the costs of all initial required capital infrastructure projects and improvements. Local governments should bill for the whole actual cost of the specific project, not for an average per capita cost of infrastructure.

To aid local governments in billing developers for these costs, the jurisdiction of impact fees should be expanded. All levels of government providing infrastructure should have the authority to assess fees for any type of infrastructure required by a new development. State, regional and local governments, special districts, utility districts, and school districts should all both be able to actually assess fees for the costs imposed on them by new infrastructure.

Graduated Utility Rates and Excise Taxes

Utility customers should pay the actual cost of the services they are receiving. Today, most utilities charge their customers the same rates. However, the cost for a utility to provide service to any one customer could be much greater or lower than the average cost. For instance, if a person owns a house that is located very close to a sewage treatment plant, he imposes a relatively small cost on the utility for maintenance and operations of the sewer system. His sewage only travels down a relatively short pipe. On the other hand, a homeowner in a subdivision on the outskirts of town may be many miles from the sewage plant, and might impose a relatively high cost on the utility for his service. If all utility customers are paying the same rate, the customer on the outskirts of town is effective-

tively being subsidized by the customer who lives near the plant.

Graduated utility rates will erase this subsidy. Under graduated rates, the utility will charge customers something closer to what it actually costs in their area to provide them with service.

Excise taxes can be applied with greater flexibility than impact fees. Where impact fees are collected to cover specific, public capital improvement costs associated with a private development, an excise tax can be charged on existing development. Excise tax rates do not have to be clearly linked to the costs imposed by a particular development.²⁷ If a development two miles out of town on farmland has costs twice those of a new project in the vicinity of existing development, the impact fee charged to the rural development could be only twice as much. With an excise fee, however, the local government could charge five times as much to the outlying development to cover its costs and discourage growth in areas it wishes to preserve.

Collected revenues can be deposited in a city or county's general fund and used for any purpose.²⁸ This allows a local government in Colorado to collect money from a development anywhere in the county, for example, and then spend it on maintaining existing infrastructure, constructing new infrastructure, or buying open space. In this way, excise taxes can support current smart growth policies.

Furthermore, because there is no time limit on spending excise tax money, local government does not face the use-it-or-lose-it conundrum that can force infrastructure construction – and undermine sprawl-control efforts – even when there is not demand for an entire new facility.

END STATE AND LOCAL SPRAWL SUBSIDIES

Numerous direct subsidies, in the forms of grants and loans, are also available to local governments, special districts, and other infrastructure providers to service new development. While many of these subsidies enable infrastructure to service sprawling



growth, there are still some that provide aid to smart growth economic development projects and other beneficial uses.

Colorado decision makers should apply a smart growth “screen” to all infrastructure subsidies. In many cases, this will mean cutting grant and loan programs entirely. In other cases, such as federal pass-through programs, the state should channel money toward smart growth economic development projects.

The same screen should be applied when evaluating specific projects to receive funding. When evaluating whether a project should receive a subsidy, several questions should be asked. Can the community afford to maintain the infrastructure in the long term? Does the project benefit the community as a whole?

ALTER THE TAX STRUCTURE

Colorado should amend the TABOR and Gallagher amendments to reduce incentives for sprawl and make it easier for state and local governments to adjust tax policy to changing times and needs. Colorado policymakers should also encourage regional tax revenue-sharing programs that reduce competition for development between taxing entities.

Colorado should get rid of the provisions in the TABOR amendment that allow local governments to increase their tax revenue limits solely by increas-

ing real estate value. This provision encourages revenue-starved local governments to approve sprawling development.

Colorado should also abandon the Gallagher Amendment. The Gallagher Amendment encourages big-box commercial development and reduces local government flexibility and control over revenue.

Local governments in Colorado should also investigate tax revenue-sharing partnerships. The most effective solution to increasing equity in property taxes and reducing competition for development projects is a regional mechanism of revenue sharing.

Tax base revenue sharing is a mechanism that pools property taxes of all municipalities of a region and redistributes the funds based on needs.

Revenue sharing has shown success in aiding growth management in several states and metropolitan areas. The most common mechanism of revenue sharing is among school systems, such as the system in place in Colorado. In Colorado, revenue sharing at the state level for schools guarantees a minimum level of funding per pupil. For school districts whose share of the state-distributed property taxes are not sufficient to meet that minimum funding level, the state provides the difference from the general fund.²⁹ ■

Notes

- ¹Ann Livingston and Elizabeth Ridlington, *The Costs of Sprawl*, Environment Colorado, March 2003.
- ²Robert Burchell, et al., *Costs of Sprawl – Revisited*, Transit Cooperative Research Program, Federal Transportation Administration, 1997.
- ³Linda Tharp, “Ten Eyck Kicks in More Than \$22,000 for 2A Campaign,” *Arvada Sentinel*, 31 October 2002.
- ⁴*Building Livable Communities*, Clinton-Gore Administration, 2000; Burchell, Robert, et al., *Costs of Sprawl – Revisited*, Transit Cooperative Research Program, Federal Transportation Administration, 1997.
- ⁵Denver Water, *Water for Tomorrow: An Integrated Water Resource Plan*, July 1997.
- ⁶Kevin Kline, Colorado State Fire Chiefs Association, personal communication, 6 March 2003.
- ⁷Jim Drummond, Community Safety Services Chief, Parker Fire Protection District, personal communication, 10 March 2003.
- ⁸Jim Drummond, Community Safety Services Chief, Parker Fire Protection District, personal communication, 10 March 2003.
- ⁹Sierra Club, *Sprawl Costs Us All: How Your Taxes Fuel Suburban Sprawl*, Spring 2000.
- ¹⁰Maine State Planning Office, *The Costs of Sprawl*, May 1997.
- ¹¹Richard Cosgrove, Director of Construction Services for Denver Public Schools, personal communication, 7 March 2003.
- ¹²Earl Lamberg, California Air Resources Board, personal communication, 4 October 2002.
- ¹³*Evaluation Criteria Report: MetroVision Urban Form Alternatives*, Denver Regional Council of Governments, 1995, p. 67.
- ¹⁴Terence Quinn and Jeff Romine, DRCOG Memorandum, “Costs associated with a change of the GB Area”, 6 November 2001.
- ¹⁵Muller, Bertron, Yin, *Alternatives for Future Growth in the Tri-River Region: How Policies Affect Growth and the Cost of Services in Delta, Mesa, Montrose, and Ouray Counties, Colorado*, American Farmland Trust and The University of Colorado at Denver, March 2002.
- ¹⁶James E. Frank, “Pricing Strategies in the Promotion of Less Costly Development Patterns,” February 1989.
- ¹⁷Burchell and Listokin, *The Fiscal Impact Handbook*, 1988.
- ¹⁸Steve Gordon, City of Denver, personal communication, November 2003; Ryan Kragerud, Longmont Planning Department, personal communication, November 2003; Deborah Petty, Castle Rock Development Services Department, personal communication, November 2003; Arapahoe County, Development Services Department, personal communication, December 2003; Don Moore, Douglas County Planning Department, personal communication, November 2003; John Wolfe, Jefferson County Planning Department, personal communication, December 2003.
- ¹⁹Michael Kinsley and L. Hunter Lovins, *Paying for Growth: Prospering from Development*, Rocky Mountain Institute, 2000.
- ²⁰Fulton, William and Moss, Steven, *Beyond Sprawl: Patterns of Growth to Fit The New California*, 1995.
- ²¹Ohio Association of Rail Passengers, *Facts About Transportation Subsidies*, <http://www.trainweb.org/moksrail/advocacy/resources/subsidies/transport.htm>.
- ²²U.S. Department of Transportation, Federal Highway Administration, *Highway Studies 2000: Funding for Highways and Disposition of Highway-User Revenues, all Units of Government*, 2000.
- ²³Colorado Department of Transportation, *Colorado’s Transportation Challenge: The Funding Dilemma Facing Colorado*, 2000.
- ²⁴Daphne Greenwood, “‘Smart growth’ and Colorado tax policies,” *The Denver Post*, 25 March 2001.
- ²⁵Daphne Greenwood, “‘Smart growth’ and Colorado tax policies,” *The Denver Post*, 25 March 2001.
- ²⁶Daphne Greenwood, “‘Smart growth’ and Colorado tax policies,” *The Denver Post*, 25 March 2001.
- ²⁷Jonathan Coupal and Jack Cohen, Howard Jarvis Taxpayers Association, *Water Rates Under Proposition 218*, downloaded from www.hjta.org/content/ARC000025D_Prop218.htm, 7 April 2003.
- ²⁸Stanley Longhofer, Wichita State University, *The Economics of Development Impact Fees: An Analysis of the Derby Excise Tax*, Derby Chamber of Commerce, December 1999.
- ²⁹Myron Orfield, *Denver Metropolitcs: A Regional Agenda for Community and Stability*, April 2000.

