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## Memorandum

To: Jeff Winston, Winston & Associates  
From: Ford Frick, BBC Research & Consulting  
Re: Grand Junction Comprehensive Plan: Fiscal Consequences of Development Options  
Date: July 2, 2008

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As per your request, this memorandum offers observations about the economic and fiscal implications of the different land use organizing concepts being considered in the Grand Junction comprehensive planning process. This memo addresses how land use patterns, specifically density and mixed-use projects, influence the cost of local government services, and corresponding municipal revenues.

### Background

**Alternative Land Use Patterns in Grand Junction.** We have read the *Valley Wide Scenarios Description* and the *Characteristics of Alternatives* (Winston, May 2008), which suggest consideration of alternative land use patterns as part of the comprehensive planning process. The prospective future land use patterns, presumably shaped by both development restrictions and incentives, vary by differences in the concentration of business activities; the community's support for mixed-use projects; emphasis on the downtown as the community heart; and the general density of new residential development. We recognize that these alternatives are broad concepts and would not be so strictly enforced as to prohibit all traditional patterns of growth or purposely force development out of the Grand Valley. We also acknowledge that certain land uses are very inflexible in terms of development patterns. For example, industrial and distribution sites generally require large acreages, and highway and rail access; similarly, some businesses cluster around airports, highway interchanges, hospitals or civic centers and require that proximity for their success. These land uses would presumably continue in the manner required.

The alternatives proposed generally vary in the level of density and the amount of mixed use. The concepts are hypothetical and not specific to particular locations or parcels. The observations presented below are also generalized, exploring the broad consequences of varying land use forms for local government costs and revenues.

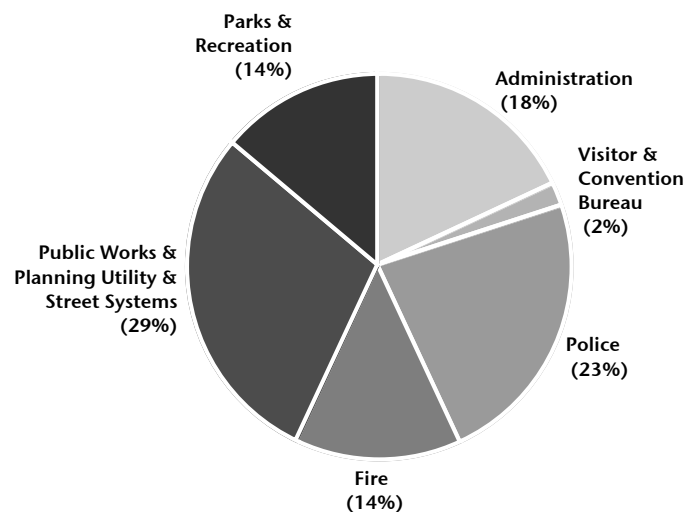
As the city looks forward, it should recognize that any alternative land use scenario selected as part of the comprehensive plan process will likely have only a modest impact on the city's overall fiscal position. The subtle differences between the alternative land use scenarios will take decades to manifest themselves in city operating budgets because the city's existing land use patterns are the result of many decades of development and existing zoning, entitlements and development rights ensure that this pattern will not be altered overnight. The city's role as a regional service center also de-emphasizes the importance of land use as a consideration for ensuring future productive operating revenue generation.

Nevertheless, there are clear benefits to developing in denser urban configurations. Benefits include potential savings in capital infrastructure investment (e.g., utility line extensions, satellite fire stations), lower per-unit private land development costs and providing opportunity for more housing diversity.

The fiscal and economic implications of differing land use patterns in Grand Junction are discussed in greater detail in the *Observations* section on the following page.

**City Service Cost Overview.** Exhibit 1 offers an overview of Grand Junction's general fund expenditure categories. Grand Junction operates with a \$56 million general fund, which provides for most direct city services. The city is also in the process of a major capital improvements program, primarily associated with the Riverside Highway project. These capital commitments significantly increase overall annual outlays but also represent known future costs that are not influenced by differing land use patterns.

**Exhibit 1.  
Grand Junction General Funds  
Operating Budget, 2008  
(\$56.0 million)**



The most expensive city services are police, street maintenance and public works, which is a common spending profile for Colorado communities.

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## Observations

We offer the following five observations.

- (1) Perhaps the most compelling argument for allowing or promoting greater residential density and more reliance on mixed use projects is the savings in private development costs, and thus the land and capital investment efficiencies that have the potential for significantly reducing housing cost.**

If a large tract of land purchased at a fixed cost can accommodate additional residential and business activity, the per unit cost of land as well as per unit on-site water, sewer and road investments will decline proportionally. These cost savings can be significant depending on the density increases. As a rule, raw land, entitlement process and on site infrastructure investment will run between 25 and 30 percent of the full cost of a home. If for example, these costs can be spread over twice as many units, e.g. 16 units per acre, rather than 8 per acre, then the cost of each unit can be reduced by 12-15 percent. If this denser land use pattern is replicated on a large enough scale, it could have effects on overall housing affordability in Grand Junction.

- (2) Regardless of cost savings, providing opportunity for higher density and housing diversity is sound community planning in anticipation of what appears to be growing market pressure for alternatives to sprawl.**

It is likely that the private market will move toward smaller homes, reduced commuting times and infill projects, as a logical response to new energy expenses, transportation costs and demographic change. Under these circumstances, providing opportunity for higher density is simply sound planning in preparing to accommodate market pressure. Demographic data suggests that a large share of Grand Junction residents will be retiring in the next decade and the city will likely continue to enjoy an influx of retirees from elsewhere. Elsewhere across the county, retiring Baby Boomers have shown an interest in alternative forms of housing and more “urban” living patterns. It is simply a logical process that Grand Junction accommodates greater diversity of housing options, particularly when that housing diversity appears to be in line with economic and demographic trends and may allow retention of productive long-term residents.

- (3) As a rule, local government revenues and the quality of local public services are driven by many factors besides land use patterns or residential density. Grand Junction is particularly subject to regional economic influences that shape the city’s revenue and spending profile.**

Local government costs vary widely depending on many factors. A community’s wealth (household income), land values and willingness to pay for services are certainly influential factors. Demographics (population age, family composition, historic development patterns) and community values are also important considerations in determining the demand for services. Economic ties with neighboring communities can also radically shift cost and revenues.

Grand Junction is a regional service center. The city attracts business from large area beyond the city limits. The community also benefits from a large tourism and transient guest industry as well as many day visitors for retail and regional services, such as health care, professional services and education (e.g. Mesa State College). More recently, the region’s gas extraction business has been an important economic influence on Grand Junction, even though drilling activity and a large

share of direct employment occurs elsewhere in the region. These external influences produce a large share of the city’s sales taxes and influence service provision costs, but these economic factors are not particularly sensitive to the alternative forms of development within the city. In short, more than most communities, Grand Junction’s revenues, and some of the city’s costs, are relatively insensitive to changes in city land use patterns.

**(4) There is great variability in public service costs and their relationship to local land use characteristics and mixed-use activities. Generalization is often inaccurate.**

Many government services, such as administration services, are relatively insensitive to anything but overall community size (i.e. population, commercial activity). Other services, such as sewer line expenses or road costs, generally decline (on a per unit basis) as density increases. Some services, such as police and fire, have mixed responses to density. Police patrol costs, on a per unit basis, may decline as density increases, but often police incidents increase with denser or mixed-use developments, which tend to put residents into more frequent contact with other residents.

As a rule, density brings capital investment efficiency but little change in ongoing service costs. Per unit capital costs decline with infill, as the same length of water, sewer or road infrastructure serves more units, although treatment plant operating costs are generally driven by volume. Fire stations are a particularly good example where sprawling development may force expensive and duplicative investment in multiple stations in order to maintain adequate response times. Parks and recreation may be an exception, as high-density residential development, which suggests fewer or smaller private yards, may place greater demands on public open space and parklands. Obviously, there is a tipping point where capital efficiency ends and additional density requires additional utility investment. It is also notable that sewerage treatment, water treatment and raw water acquisition—all very expense elements of facility development—are all correlated to the number of units served not necessarily their configuration.

Exhibit 2 provides a general barometer for the fiscal benefits of compact development in the provision of local services based on BBC experience in various communities around the west.

**Exhibit 2.  
Fiscal Effects of Compact Development for Local Governments**

	Spending Category							
	Water	Sewer	Roads	Transit	Admin.	Police	Parks	Fire
Capital Costs:	+	+	+	+	=	=	<b>M</b>	+
Operating Costs:	=	=	+	+	=	<b>M</b>	=	=

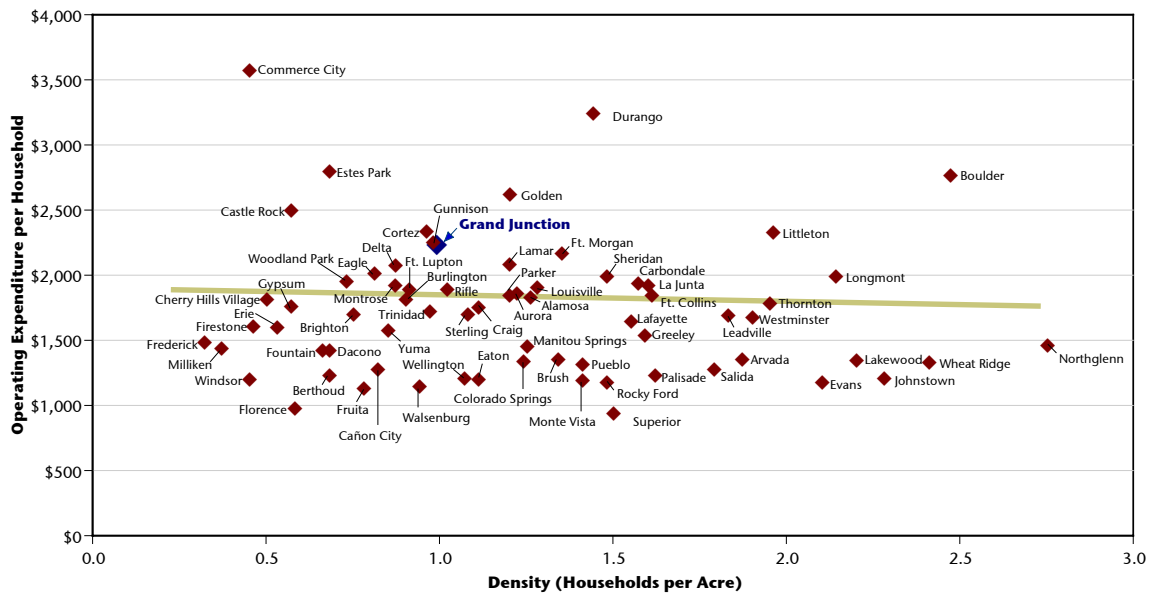
**Legend:** + Positive; = Neutral; **M** Mixed; — Negative

**(5) Density alone is not an indicator of public cost efficiency.**

Exhibit 3 portrays data from the Colorado Department of Local Affairs’ database that collects spending data from all Colorado communities. BBC has arrayed these general fund operating

costs (expressed as expenditures per household) by the density of the community. There is no apparent relationship between density and overall community service delivery costs. These data are from 2003, but the relationships are still valid, and the information is from a common database where efforts have been made to create uniformity in reporting. Resort communities were removed as their unusual household characteristics skew the data.

**Exhibit 3.  
Operating Expenditure by Density**



Source: Colorado Department of Local Affairs, BBC Research & Consulting; all data are for 2003.

Exhibit 4 on the following page displays similar data for street maintenance and operations. For this particular service, density appears to offer significant considerable savings as, presumably more units share the common costs of street repair and maintenance.



**(6) Changes in land use patterns of any significant magnitude will take decades to occur and any economic consequences will take similar amounts of time.**

Fundamental change in land use patterns will take a long time to manifest itself and thus impacts will not be immediate. The city's existing land use patterns are the result of many decades of development and existing zoning, entitlements and development rights ensure that this pattern will not be altered overnight. Nevertheless, it is appropriate in a comprehensive planning process to explore options and consequences, particularly as other economic forces, most notably increases in energy and housing costs, may be driving land use changes, regardless of community preferences or consequences.