



**FISCAL IMPACTS OF
THE GRANITE DELLS RANCH
ANNEXATION AREA
ON THE CITY OF PRESCOTT**

FEBRUARY 5, 2009

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EXECUTIVE SUMMARY

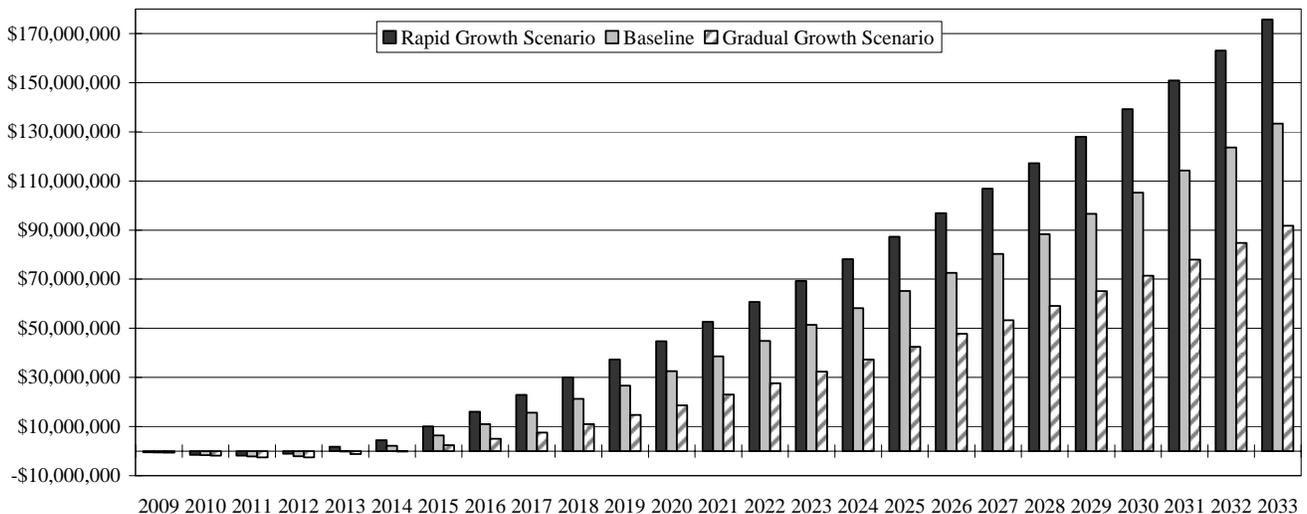
This analysis demonstrates the potential socioeconomic and fiscal impacts of the proposed Granite Dells Ranch annexation area on the City of Prescott. Granite Dells Ranch includes a 340 acre undeveloped area that is located just south of the airport area along State Route 89A to the east of Side Road. Future development plans proposed by the property owner, Cavan Development Group, include retail, service and office uses.

The following is a summary of the net fiscal impacts of the proposed annexation area on the City of Prescott. The fiscal impacts include the General Fund, Water Fund, Wastewater Fund, Water and Wastewater Impact Fee Funds, and the Streets and Street and Open Space Funds. The analysis covers a 25 year period from 2009 to 2033, during which all of developable land would be absorbed. This detailed cost benefit analysis is required by the City of Prescott for all annexations greater than 250 acres.

The master plan for the annexation area includes 114 acres of retail, 158 acres of office and 68 acres of service uses. Development is expected to occur between 2011 and 2020. The office and service uses are projected to build out by 2017, with retail development continuing through 2020. All absorption projections used in this analysis are based on information provided by Cavan Development Group.

Overall, for the funds included in this analysis the annexation would have a positive net present value impact of \$81.4 million over the 25 year period under the baseline scenario. This would result in a payback of the city's initial investment in approximately six years. There are infrastructure improvements that are required up front and it will take some time for revenues from the development to catch up, particularly since construction is not expected to begin until 2011. However, over the long term the amount of revenues generated significantly offsets these up front costs.

**FIGURE 1
CUMULATIVE NET FISCAL IMPACTS***



*Impacts include general fund, water, wastewater, streets, streets and open space and water and wastewater impact fee funds.

In order to test the impact of changes in some of the underlying assumptions, we have performed a series of sensitivity analyses. They include: (1) a 25 percent increase or decrease in the rate of development in the annexation area; (2) a 10 percent increase or decrease in the occupancy rate; (3) a 20 percent increase or decrease in retail sales per square foot; (4) a 10 percent increase or decrease in infrastructure costs; and (5) a 25 percent

increase or decrease in impact fee revenues. The details regarding each of these sensitivity analyses are included in Appendix D. Figure 1 above shows the combined impacts of an increase or decrease in all of these variables at once on the cumulative net fiscal impact. If development occurs at a faster rate than assumed in the baseline scenario with higher occupancy, higher retail sales, lower infrastructure costs and higher impact fee revenues, as shown in the rapid growth scenario, this would result in a net present value fiscal impact of \$107.9 million over 25 years. As such, the payback period on the city's initial investment would be reduced to five years. By comparison, the gradual growth scenario would result in a net present value fiscal impact of \$55.0 million over 25 years and a payback period of seven years. Although the net present value impact is significantly lower under the gradual growth scenario, it is still highly positive and the payback period is only extended by one year compared to the baseline scenario.

1.0 INTRODUCTION

This analysis demonstrates the potential socioeconomic and fiscal impacts of the Granite Dells Ranch annexation area on the City of Prescott. This area includes a total of 340 gross acres located just south of the airport area along State Route 89A and east of Side Road in Yavapai County. The proposed annexation will include a mix of nonresidential uses with 110 acres of retail, 158 acres of office and 68 acres of service uses. Development is projected to occur between 2011 and 2020. Note that this analysis assumes that the proposed mix of development is feasible in this location. The sensitivity analyses presented in Chapter 4 address the impacts of an increased or decreased rate of development.

The impact analysis for the Granite Dells Ranch annexation covers a 25 year time period, during which the area would be completely built out. Assumptions regarding phasing and absorption were provided by Cavan Development Group. The analysis extends a full 25 years through 2033 to illustrate the long term impacts of this potential annexation on the City. Projected development in the area could increase the current amount of employment in the city by close to 4,800.

The information and observations contained in this report are based on our present knowledge of the components of development, and of the current physical, socioeconomic and fiscal conditions of the affected areas. Projections made in this report are based on hypothetical assumptions and current public finance policies. However, even if the assumptions outlined in this report were to occur, there will usually be differences between the projections and the actual results because events and circumstances frequently do not occur as expected. This analysis is based on the best available information and is intended to determine the fiscal impact of the proposed annexation. All dollar figures should be interpreted as order of magnitude estimates only. In no way will Applied Economics be held responsible or have any liability or be subject to damages as a result of this analysis. This report may be used only for the purposes that it was intended.

1.1 General Approach

The impact assessment includes revenues and expenditures associated with new development in the annexation area. The analysis includes operating impacts as well as impact fees and projected capital costs associated with water, wastewater and transportation improvements. The funds that would be impacted by this annexation include the General Fund, Water and Wastewater Operating Funds, Water and Wastewater System Impact Fee Funds, Streets and Streets and Open Space. All data is shown in constant dollars based on an annual inflation rate of 2 percent, with the exception of road construction costs that are inflated at a rate of 5 percent per year.

The basic approach for the analysis is to determine the level and character of existing and future development (measured in non-residential square footage, employment, road miles, etc.), and then to model the revenues and expenditures likely to be associated with that development. Current and historical budgets for the city were reviewed to identify revenue and expenditure line items that would be impacted by the annexation. Once identified, each line item was analyzed to identify a socioeconomic factor that could be used to predict a corresponding impact for the annexation area. For example, road miles are a good indicator of the cost of street maintenance. Therefore, by knowing the number of new road miles in the annexation area at any point in time, one could estimate the related costs in the traffic and street maintenance departments. Many of the services provided by the city are utilized by both residents and businesses, thus population and employment are drivers for a number of revenue and expenditure items.

1.2 Report Organization

The balance of this report is divided into two sections. Section 2.0 details the methodology and assumptions used in calculating the development characteristics and the fiscal assumptions used to develop the model. Section 3.0 presents the results of the fiscal impact calculations for the annexation area on an annual basis over the 25 year analysis period. Detailed tables on the socioeconomic and fiscal impact results are included in the appendices following Section 3.

1.3 Non-quantifiable Impacts

As with any proposed annexation or development project, the Cavan Annexation may include both favorable and contrary impacts that cannot be quantified in this fiscal analysis. This broader range of socioeconomic impacts that should be considered in the final review of this prospective annexation include quality of life, new job creation, additional shopping opportunities and synergy for additional development in the airport area. No specific aggravating factors have been identified at this time that are not already quantified in the analysis.

2.0 METHODOLOGY

This chapter describes the methodology and assumptions used in developing the fiscal impact model and the absorption projections.

2.1 Development Characteristics

The annual impact of development for the annexation area can be described in terms of employment, square footage, assessed value, taxable sales, construction expenditures and street miles, based on assumptions about the development and the level of growth that could be expected to occur on an annual basis over the 25 year period. The absorption rates used in this analysis are based on information provided by the Cavan Development Group.

Although the master development plan indicates commercial/employment zoning for Granite Dells Ranch, more specific land use designations must be applied in order to accurately calculate the fiscal impacts. The land use mix shown in this analysis is based on the assumptions used in the transportation infrastructure analysis provided by Lima and Associates in August 2008. It is assumed that commercial/employment development would include 40 percent retail, 36 percent office and 24 percent service uses.

The following sections briefly describe the other assumptions used to estimate each of the major characteristics of the new development.

Office Development. The office portion of the annexation area would include 157.6 acres. Office development is projected to begin in 2011, with all office land being absorbed by 2017 (Figure 2). Total employment generated at build out is estimated at approximately 2,600 jobs (Figure 3). These employment estimates are based on the number of acres by land use, floor-area ratios (the ratio of building area to land area), occupancy rates and per employee square footage requirements (Figure 4). All density assumptions are consistent with those used in the transportation infrastructure analysis. The office portion of Granite Dells Ranch could result in approximately 1.29 million square feet of space when fully developed and close to \$225.7 million in assessed value by 2033.¹ For the purpose of this analysis, it is assumed that the office portion of the development would include 100 percent multi-tenant leased space. Initial annual lease rates are estimated at \$18 per square foot per year, based on current market rates for the City of Prescott. These commercial leases could generate approximately \$33.5 million per year in taxable sales for the city by 2033.

Retail Development. The second largest portion of the development would be community retail. According to Cavan Development Group, the 114.0 acres of retail would start to develop in 2011 and reach build out by approximately 2020. This area would support about 745,000 square feet and 1,300 jobs at build out. Assessed value associated with the retail component of the development is estimated at \$92.2 million by 2033. The mix of retail and non-retail uses in this annexation area is particularly significant to the fiscal impact. Retail development generates taxable sales which currently make up about 43 percent of total city general fund revenues. In addition, this analysis assumes that 100 percent of the retail space would be leased at an average annual lease rate of \$16 per square foot, generating additional sales tax revenues for a combined total of \$286.8 million in taxable sales per year by 2033. The sales tax revenues generated by retail development help to fund city services for the surrounding residential development that provides the market base to support local retail.

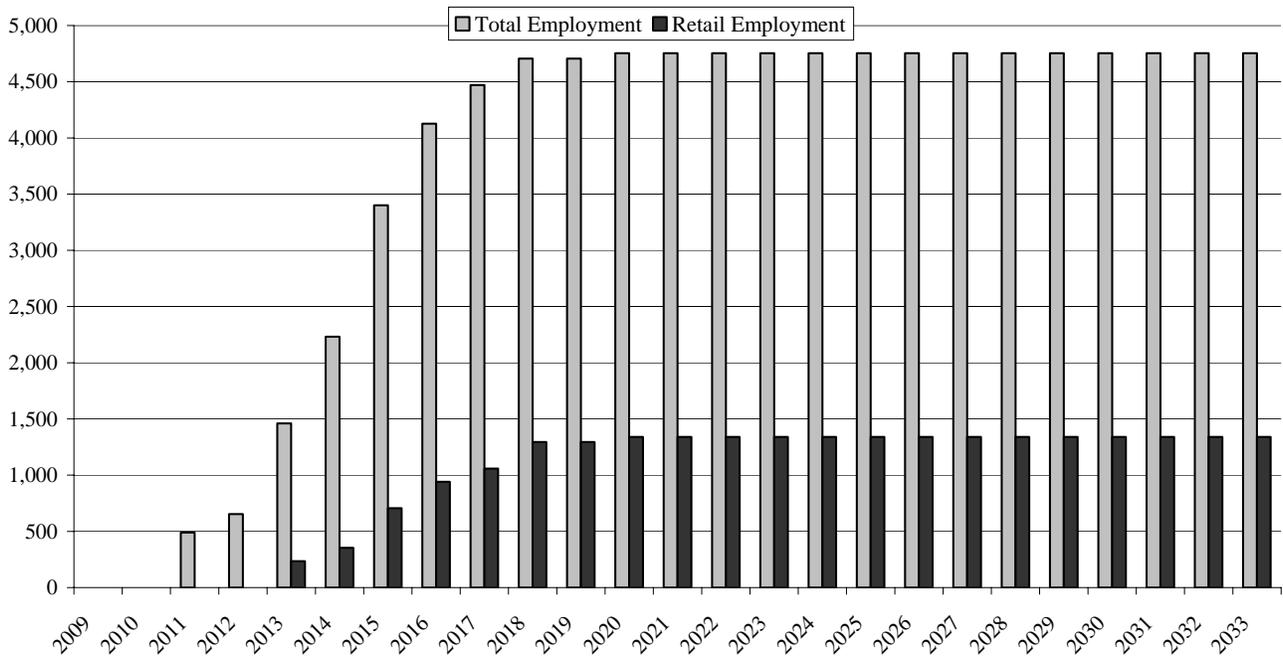
Service Development. In addition to office and retail, the annexation area is expected to include about 68.4 acres of service uses. The project development timeline for service uses extends from 2013 to 2017. These new service businesses would occupy an estimated 559,000 square feet and support close to 840 new jobs. Assessed value associated with the service portion of the development is estimated at \$95.0 million by 2033. This analysis assumes that 100 percent of the service square footage would be leased at an annual rate of \$12 per square foot, generating \$50.1 million in annual taxable sales for the city by 2033.

¹ Assessed value is assumed to be equal to approximately 82 percent of market value based on construction costs from R.S. Means that are specific to each type of development (office, retail and service) and specific to the City of Prescott. Construction costs and assessed value are inflated at a rate of 2 percent per year. Taxable sales and leases are also inflated at 2 percent per year.

**FIGURE 2
ABSORPTION ASSUMPTIONS
GRANITE DELLS RANCH**

Land Use	Cumulative Acres Absorbed											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Commercial												
Community Retail	0.00	0.00	0.00	0.00	20.00	30.00	60.00	80.00	90.00	110.00	110.00	114.00
Office	0.00	0.00	30.00	40.00	60.00	100.00	120.00	150.00	157.60	157.60	157.60	157.60
Neighborhood Oriented/Service	0.00	0.00	0.00	0.00	20.00	20.00	60.00	60.00	68.40	68.40	68.40	68.40
Vacant	340.00	340.00	310.00	300.00	240.00	190.00	100.00	50.00	24.00	4.00	4.00	0.00
Total Lane Miles	0.00	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28

**FIGURE 3
CUMULATIVE EMPLOYMENT IMPACTS**



**FIGURE 4
DEVELOPMENT ASSUMPTIONS**

Land Use	Square Feet per Employee	Floor Area Ratio	Occupancy	Taxable Sales per Sq Ft	Retail Share	Construction Cost	Annual Lease	Percent Leased
Nonresidential						Per Sq Ft		
Office	450	0.25	90%	\$0.00	0%	\$110.00	\$18.00	100%
Retail	500	0.20	90%	\$250.00	100%	\$75.00	\$16.00	100%
Service	600	0.25	90%	\$100.00	50%	\$105.00	\$12.00	100%
Vacant						Value Per Acre		
All	0	na	na	na		\$50,000	na	na

Source: Lima & Associates, "Granite Dells Ranch Transportation Infrastructure Analysis", August 2008 (Sq Ft per Employee, Floor Area Ratio); R.S. Means, Construction Cost Calculator, 2008 (Construction Cost); Loopnet.com (Lease Rate); Urban Land Institute, "Dollars and Cents of Shopping Centers," 2008 (Taxable Sales); Yavapai County Assessor, 2008 (Land Value).

Other Assumptions

Inflation Rate for Revenues and Expenditures	2.00%
Inflation Rate for Road Construction	5.00%
Effective Long Term Interest Rate	1.50%
Effective Long Term Borrowing Rate	5.52%
Net Present Value Rate	3.00%

Source: City of Prescott Finance Department, 2008.

2.2 Fiscal Assumptions

The fiscal model created to assess the impacts of the Granite Dells Ranch annexation area was based on current and historical budgets for the City of Prescott. Historical trends were analyzed for the 2003-2004 fiscal year through the 2007-2008 fiscal year. Revenue and expenditure line items in the General Fund, Water, Wastewater, Water/Wastewater System Impact Fees, Streets, and Streets and Open Space were included since these funds will be most impacted by the annexation. The Solid Waste Fund and the Transient Occupancy Tax Fund are also noted in the city's cost benefit analysis guidelines, however, these funds are not impacted by the types of land uses proposed for Granite Dells Ranch.

In order to create the model, several years of historical budget information and socioeconomic data were collected. Various drivers were tested for each of the revenue and expenditure items in the model. In this way, consistent rates were developed that could be applied to the socioeconomic data for the proposed annexation area. In many cases an average of rates over the past several years was used. However, some revenue and expenditure items increased at rates that were less consistent over time, or experienced permanent increases or decreases due to operational or other changes. In these cases, rates from more current budget years were used to accurately reflect current conditions.

Many of the revenue and expenditure line items are driven by population, or by "service population", which includes both population and employment. This is because many of the services provided by the City, as well as the various types of revenues that local governments depend on, are proportional to the number of people living and working there. In some cases, population may be weighted more heavily than employment since some services are used proportionally more by residents. Although there is no population associated with this annexation, current citywide population and employment are used as a basis for developing the rates that can then be applied to projected employment in the annexation area.

Major line items that are not driven by population or employment include property tax which is a function of assessed value; sales tax which is a function of retail square footage, retail share, sales per square foot, lease rates per square foot and occupancy rates; and a variety of building and planning permits and service charges that are a

function of annual construction costs. On the expenditure side, community development is a function of annual construction value and population. Street operations are a function of the number of street lane miles added. Human resources, insurance, budget and finance and administrative services are a function of city staff size. Water sales, wastewater usage charges, connection fees and meter reading revenues as well as wastewater treatment plant and wastewater treatment expenditures are based on the number of connections. In order to estimate the projected number of connections in the annexation area, citywide data on the number of water and wastewater connections by customer class was collected from the 2008 Water and Wastewater Rate and Impact Fee Study. For nonresidential customers, the number of connections was compared to current employment in the city to estimate the rate of nonresidential connections per employee. This rate was then applied to employment in the annexation area to estimate the number of nonresidential water and wastewater connections. Production, distribution and alternative water charges in the water operating fund are based on a share of costs per account by customer class using data provided in the 2008 Water and Wastewater Rate and Impact Fee Study.

The model also incorporates assumptions about future inflation. All revenues and expenditures are inflated at a rate of 2.0 percent annually including property tax and sales tax revenues.² The inflation rate was provided by the City Finance Director. If there is a positive cumulative net impact, interest will accrue in each fund at a rate of 1.5 percent per year times the cumulative net impact. Conversely, if there is a negative cumulative net impact, finance charges will accrue at a rate of 5.52 percent per year.

In addition to the budget data, the fiscal analysis also includes capital improvements schedules (Figure 5). Based on Exhibit E from the Granite Dells Ranch Utility Analysis and input from the City Utilities Director, annual expenditures for required capital improvements related to water and wastewater were calculated. These schedules were included as expenditure line items in the water and wastewater system impact fee funds. In addition, there are some improvements that will be paid for through normal water user charges in the water operations fund. These are noted under water operations in Figure 5 and are included in the impact analysis for the water fund.

The cost of initial Granite Dells Parkway transportation improvements related to the Granite Dells Ranch annexation were provided by Parsons. Relative to the State Route 89A interchange, the City is obligated to build a traffic interchange at or near State Route 89A/Side Road by the Country Dells amended settlement of litigation approved in June 2007, with or without the Granite Dells Ranch annexation. The package of associated improvements to begin construction in 2009 includes the traffic interchange structures, Granite Dells Parkway approaches from the north and south, Granite Dells Parkway between the south approach and Centerpointe East Drive, Centerpointe East Drive, and the termination of existing Side Road at State Route 89A. Since the City is obligated as such, the cost of the traffic interchange as well as the value of any right of way dedicated for this purpose have been excluded from the analysis. The City will recover the cost of the Side Road (Granite Dells Parkway) traffic interchange via sales tax generated by economic activity resulting from development of the annexation property; financial participation of the Country Dells successor(s), Yavapai County, and Arizona Department of Transportation pursuant to existing and pending agreements; and/or prospectively through a citywide traffic impact fee, additional construction sales tax, or other growth-financing mechanism(s).

Other future road improvements, however, do need to be addressed in the cost/benefit evaluation. According to a traffic study performed by Jacobs Engineering and subsequent analysis by the City Traffic Engineer, as the area approaches build out, certain segments of Granite Dells Parkway will need to be widened based on projected traffic volumes. Using the absorption projections for the Granite Dells Ranch annexation, traffic volumes were projected for each segment of Granite Dells Parkway running through the annexation area. Standards for acceptable traffic volume were applied: 0 to 16,000 trips for 3 lanes; 16,001 to 32,000 for 5 lanes; 32,001 to 48,000 for 7 lanes. When the regional traffic volume exceeds these levels the roads will need to be widened. The City Engineer provided current costs for widening each roadway segment from 3 to 5 lanes and 5 to 7 lanes that were inflated at a rate of 5 percent per year. In cases where the level of development necessitated road widening, the amount allocated to Granite Dells Ranch was equal to their share of regional traffic volume in the year of widening.

The final item to be considered is the land dedication by the Cavan Development Group. Cavan has agreed to dedicate, at no cost to the City and without consideration of potential future development credits, 37.25 acres of property. The value of this land, although considerable, is not available to offset costs to the City associated with the annexation, hence, it has not been included in the analysis.

² Note that road construction costs are inflated at a rate of 5 percent per year.

**FIGURE 5
CAPITAL IMPROVEMENT SCHEDULES AND LAND DEDICATION**

Fund/Project	2009	2010	2011	2015	2016	2017	Cavan Share*
Water System Impact	\$339,655	\$699,386	\$685,899	\$0	\$0	\$0	
Airport Zone 12 Tank Reservoir Transmission Piping	\$267,515	\$178,075	\$0	\$0	\$0	\$0	14%
Airport Zone 12 New Tank Reservoir & Booster Station	\$72,139	\$249,251	\$0	\$0	\$0	\$0	10%
Zone 101 Tank Reservoir Transmission Piping	\$0	\$113,467	\$31,433	\$0	\$0	\$0	5%
Zone 101 New Tank Reservoir and Transmission Piping	\$0	\$12,000	\$63,900	\$0	\$0	\$0	4%
Airport Zone State Route 89A Main Crossings	\$0	\$26,880	\$0	\$0	\$0	\$0	14%
Airport Zone Main Feed - New Intermediate Storage	\$0	\$44,111	\$251,989	\$0	\$0	\$0	14%
Airport Zone New Zone 12 Pump Station	\$0	\$75,603	\$338,577	\$0	\$0	\$0	14%
Water Operations	\$37,739	\$67,502	\$65,618	\$0	\$0	\$0	
Airport Zone 12 Tank Reservoir Transmission Piping	\$29,724	\$19,786	\$0	\$0	\$0	\$0	14%
Airport Zone 12 New Tank Reservoir & Booster Station	\$8,015	\$27,695	\$0	\$0	\$0	\$0	10%
Airport Zone State Route 89A Main Crossings	\$0	\$6,720	\$0	\$0	\$0	\$0	14%
Airport Zone Main Feed - New Intermediate Storage	\$0	\$4,901	\$27,999	\$0	\$0	\$0	14%
Airport Zone New Zone 12 Pump Station	\$0	\$8,400	\$37,620	\$0	\$0	\$0	14%
Wastewater Impact	\$89,789	\$163,253	\$243,459	\$0	\$0	\$0	
Wastewater Infrastructure North & South of State Route 89A	\$89,789	\$163,253	\$243,459	\$0	\$0	\$0	16%
Streets & Open Space	\$0	\$0	\$0	\$307,910	\$108,368	\$134,191	
Granite Dells Pkwy S of Airport Blvd - Widen from 3 Lane to 5 Lane with Median	\$0	\$0	\$0	\$0	\$0	\$18,887	10%
Granite Dells Pkwy N of State Route 89A - Widen from 3 Lane to 5 Lane with Median	\$0	\$0	\$0	\$307,910	\$0	\$0	100%
Granite Dells Pkwy N of State Route 89A - Widen from 5 Lane to 7 Lane with Median	\$0	\$0	\$0	\$0	\$0	\$115,304	20%
Granite Dells Pkwy S of State Route 89A Interchange - Widen from 5 Lane to 7 Lane with Median	\$0	\$0	\$0	\$0	\$108,368	\$0	40%
Annual Total Capital Improvements	\$467,183	\$930,141	\$994,976	\$307,910	\$108,368	\$134,191	

Source: City of Prescott; Carollo Engineers; Parsons.

*Cost estimates shown in table represent Cavan's share.

Future developments in Granite Dells Ranch will also pay water and wastewater system impact fees and water resource fees that will offset the cost of water and wastewater infrastructure. Since these fees are based on meter size, they are very difficult to project for nonresidential development using information on number of acres by land use as a basis. As a basis for modeling nonresidential impact fees per acre, the city provided information on the number of meters by meter size by land use in the airport area. Using this data, and the impact fee rate schedule, it was possible to calculate the average impact fees per acre by land use, based on the typical number and mix of meter sizes. This data shown below was used as the basis for the impact fee revenue calculations in Granite Dells Ranch (Figure 6). Note that the impact calculations are based on the new impact fee schedule that will be in effect by the time construction begins in this area. Actual impact fee revenues will depend upon the mix of non-residential uses, and more specifically, the sizes of water meters installed to serve development in the annexation area. Since the impact fees vary exponentially by meter diameter, the results may be significantly different than those shown in this analysis.

**FIGURE 6
NONRESIDENTIAL IMPACT FEE REVENUES**

Zoning	Granite Dells Land Use	Fee Revenues Per Acre		
		Water Resource	Water Impact	Wastewater
Business General	Office, Retail	\$6,303	\$8,519	\$4,491
Business Regional	None	\$866	\$1,171	\$617
Light Industrial	None	\$2,094	\$2,830	\$1,492
Industrial Transition	None	\$843	\$1,139	\$601
Neighborhood Oriented Business	Service	\$2,598	\$3,511	\$1,851

Because the annexation area is nonresidential, the water needed to serve the development will be provided as each project is approved. Pursuant to the City of Prescott Water Management Policy 2005-2010, as amended, only individual development projects requiring more than five acre-feet per year require a formal allocation of water from the City. All other development is served by water supplies that have already been included in prior residential allocations. Each residential dwelling unit is allocated 0.35 acre-feet per year, 0.25 acre-feet for the actual residential use and 0.10 acre-feet for community-wide nonresidential development. As nonresidential projects are developed, their water use is factored into the overall pumping of the City. No purchase of additional water to serve this annexation area, and the future development within it, will be necessary.

3.0 IMPACT RESULTS

3.1 Fiscal Impact Results

This chapter describes the results of the fiscal impact analysis by fund. Overall, for the funds included in this analysis Granite Dells Ranch would have a positive net present value impact of \$81.4 million over the 25 year period.³ Detailed impact results are shown in the appendix.

The **general fund** shows a positive impact throughout the modeling period. The annual net impacts range from \$17,000 to \$137,000 in 2011 and 2012 when development is projected to begin to \$2.7 million in 2033 (Figure 7). Since there is new construction activity from 2011 through 2020, there are non-recurring sales tax revenues during those years. However, retail sales also increase annually though that period as the retail portion of the development approaches build out. Once construction is complete, annual sales tax revenues are about \$3.0 million to \$3.7 million, including both retail sales and taxes on office, service and retail leases. Sales taxes are by far the most significant source of revenues to the general fund throughout the 25 year period. By comparison, property taxes total only about \$172,000 per year by 2033, based on the City's share of property tax revenues from the approximately \$376.2 million in assessed value generated by development in the annexation area. Over the 25 year period, Granite Dells Ranch would have a cumulative *net present value* impact of \$27.5 million in the general fund.

FIGURE 7
SUMMARY OF ANNUAL NET IMPACTS BY FUND
GRANITE DELLS RANCH
CONSTANT DOLLARS

Year	General Fund	Water Fund	Wastewater Fund	Water/WW Impact Fees	Streets, Street & Open Space	Net Impact All Funds	Cum Impact All Funds
2009	\$5,416	(\$37,739)	\$0	(\$511,672)	\$0	(\$543,996)	(\$543,996)
2010	\$5,605	(\$67,502)	\$0	(\$1,056,059)	(\$3,345)	(\$1,121,301)	(\$1,665,298)
2011	\$137,132	(\$46,492)	\$5,248	(\$856,946)	\$218,286	(\$542,772)	(\$2,208,069)
2012	\$16,573	\$5,720	\$5,911	(\$19,296)	\$110,353	\$119,261	(\$2,088,808)
2013	\$600,652	\$31,703	\$5,629	\$428,742	\$876,157	\$1,942,884	(\$145,924)
2014	\$696,478	\$29,508	\$10,062	\$484,630	\$1,129,977	\$2,350,654	\$2,204,730
2015	\$1,479,004	\$45,630	\$5,337	\$723,680	\$1,932,411	\$4,186,063	\$6,390,793
2016	\$1,596,294	\$25,375	\$5,897	\$575,401	\$2,440,030	\$4,642,996	\$11,033,789
2017	\$1,710,348	\$7,874	\$3,633	\$253,585	\$2,666,790	\$4,642,230	\$15,676,019
2018	\$2,024,012	\$2,505	\$647	\$258,327	\$3,308,502	\$5,593,992	\$21,270,011
2019	\$2,004,191	(\$8,633)	(\$39)	\$4,206	\$3,393,972	\$5,393,696	\$26,663,707
2020	\$2,132,200	(\$6,612)	(\$474)	\$57,953	\$3,692,071	\$5,875,138	\$32,538,844
2021	\$2,160,376	(\$9,072)	(\$650)	\$5,138	\$3,869,027	\$6,024,820	\$38,563,664
2022	\$2,204,550	(\$9,253)	(\$685)	\$5,215	\$4,074,096	\$6,273,923	\$44,837,587
2023	\$2,248,572	(\$9,438)	(\$722)	\$5,294	\$4,288,235	\$6,531,940	\$51,369,527
2024	\$2,293,542	(\$9,627)	(\$759)	\$5,373	\$4,511,823	\$6,800,352	\$58,169,880
2025	\$2,339,413	(\$9,820)	(\$797)	\$5,454	\$4,745,256	\$7,079,506	\$65,249,385
2026	\$2,386,201	(\$10,016)	(\$837)	\$5,535	\$4,988,945	\$7,369,828	\$72,619,213
2027	\$2,433,925	(\$10,216)	(\$878)	\$5,618	\$5,243,316	\$7,671,765	\$80,290,979
2028	\$2,482,604	(\$10,421)	(\$920)	\$5,703	\$5,508,816	\$7,985,782	\$88,276,761
2029	\$2,532,256	(\$10,629)	(\$963)	\$5,788	\$5,785,908	\$8,312,360	\$96,589,121
2030	\$2,582,901	(\$10,842)	(\$1,007)	\$5,875	\$6,075,075	\$8,652,002	\$105,241,123
2031	\$2,634,559	(\$11,059)	(\$1,053)	\$5,963	\$6,376,819	\$9,005,229	\$114,246,352
2032	\$2,687,250	(\$11,280)	(\$1,100)	\$6,053	\$6,691,662	\$9,372,585	\$123,618,938
2033	\$2,740,995	(\$11,505)	(\$1,148)	\$6,143	\$7,020,149	\$9,754,634	\$133,373,572
Total	\$44,135,049	(\$151,841)	\$30,331	\$415,702	\$88,944,331	\$133,373,572	\$133,373,572
Net Present Value	\$27,531,028	(\$107,307)	\$28,754	(\$3,254)	\$53,931,735	\$81,380,957	\$81,380,957

³ The net present value calculations use a discount rate of 3.0 percent.

The **water fund** shows a very small negative impact in most years. The magnitude of the negative impact relative to the level of accuracy of the model makes this impact fairly insignificant. This fund includes water operations as well as the alternative water fund. Water-related impact fees are not included in this fund. Water revenues were modeled based on the estimated number of connections and the current average cost per connection. However, the number of connections could vary depending on the exact nature of future development in this area. Production and distribution expenditures are modeled based on average cost per nonresidential account. There are also some capital improvements that are allocated to this fund. The net present value impact in the water fund over 25 years is (\$107,000).

The **wastewater fund** is similar to the water fund in terms of the modeling challenges. There were no specific capital improvements allocated to this fund. The results for this fund show a neutral result with a net present value impact over 25 year of \$29,000.

The **street and streets and open space funds** are combined for the purpose of this model. The primary revenues in the streets fund include Highway User Revenue Funds and Local Transportation Assistance Funds that are distributed based on population, thus none of these revenues are included for this annexation. Granite Dells Ranch would generate a small amount of street light fees to help offset the cost of street light maintenance. The primary revenue source in the streets and open space fund is a 1% sales tax.⁴ By the time the retail component of the proposed development is complete, Granite Dells Ranch could generate \$4 million to \$6 million per year in sales tax revenues to the streets and open space fund. The employees working in Granite Dells Ranch would generate a small on-going impact on street operations expenditures and there are additional small expenditures for road widening in 2015 through 2017. Based on projected revenues, these infrastructure costs can be paid for out of sales tax revenues in the years they are incurred. Since sales tax revenues continue to accrue throughout the 25 year period, this fund shows a significant positive cumulative impact in 2033. The net present value impact in the streets and streets and open space funds over the 25 year period is \$53.9 million.

For the purpose of this model the **water resource, water system impact and wastewater system impact fee funds** are combined. The impact fee revenues are calculated as described in the previous section. The expenditures are based on capital improvement cost schedules presented in Chapter 2. Since all of the improvements occur in the first three years, while development is not projected to begin until 2011, there is a timing difference between revenues and expenditures in this fund. However, over time the amount of fees collected is sufficient to pay off the capital improvement costs and accumulated finance charges by 2018. The ending balance in 2033 is \$416,000. It will be the case that fees per acre vary depending on the exact type of future development, although the revenue projections presented here are based on the best available data at this time.

3.2 Summary

Over the long term, the Granite Dells Ranch annexation would have a significant positive impact on the city, based on the assumptions used in this analysis. This is mainly due to positive impact in the general fund and streets and open space funds. Since this area would be exclusively nonresidential, the on-going demands on city services are much less than for residential development. Additionally, the proposed development plan includes a significant amount of retail development that would generate enough sales tax revenue to create a large positive impact in the general fund. The water and wastewater operating funds and impact fee funds would have essentially neutral impacts. The streets and streets and open space funds would yield a significant positive impact in the long run that would greatly exceed the cost of transportation improvements required for development.

Overall, the cumulative net impact in all funds combined remains positive from 2014 forward. Negative impacts in the early years are due the fact that most of the infrastructure improvements occur in the first three years while the development will not begin to generate revenues for six or seven years. Overall, the mix of land uses in the proposed annexation area would generate a significant positive impact to the city over the long run.

⁴This dedicated sales tax is set to sunset in December 2015. For the purpose of this analysis, it is assumed the tax will be renewed through 2040.

A succession of future, incremental annexations of Granite Dells Ranch (Cavan) property in proximity to State Route 89A/Granite Dells Parkway is anticipated. Since much of the major infrastructure will be built in the current (first) phase, updating the cost-benefit analysis at the time of each new annexation is recommended to afford a more complete picture of cumulative financial feasibility as the mix of land uses is refined.

4.0 SENSITIVITY ANALYSIS

The following chapter describes the impact of modifying various underlying assumptions in the cost/benefit analysis. These include absorption, occupancy rates, retail sales and infrastructure costs. The results of both an increase and decrease in each factor are shown. In order to clearly delineate the impacts, the sensitivity analyses for individual assumptions are shown separately.

Each of these changes in assumptions impact different line items and funds. The intent is to illustrate how the overall fiscal impacts may change if one or more of these variables are different in terms of actual development. There will usually be differences between the projections and the actual results because events and circumstances frequently do not occur as expected. Since it is impossible to project exactly how future development will occur, it is most important to understand the magnitude of the difference in the fiscal results if one or more of the underlying assumptions changes.

4.1 Absorption

In order to increase or decrease the absorption schedule by 25 percent, the number of years of development for each land use was increased or decreased by 25 percent. The revised absorption schedules are shown in Appendix D. Absorption has the most wide spread impacts of all of the sensitivity variables in terms of the number of line items that are affected by this change. Absorption changes result in employment increasing 25 percent faster or slower, so all of the line items that are driven by employment will also increase correspondingly faster or slower. However, the impact is on both revenues and expenditures in most cases so the difference from the baseline results is small. The differences would be much more significant if the mix of land uses changed, rather than just the speed of development.

Overall, increasing the absorption rate by 25 percent results in only a 1.7 percent difference in the cumulative net impact for all funds combined. The cumulative net impact becomes positive in 2012 compared to 2014 under the baseline scenario. Slowing the absorption rate by 25 percent results in a 5.4 percent decrease in the cumulative net impact for all funds combined. The differences are most significant in the water and wastewater operating and impact fee funds. In the water and wastewater impact fee funds, slower absorption means that impact fees will be paid later, thus the financing costs in the water and wastewater impact fee fund are increased. Capital improvements in these funds are not paid off until 2020, versus 2018 under the baseline scenario.

4.2 Occupancy

The occupancy rate for office, retail and service uses is set at 90 percent in the baseline, which is consistent with current market trends in the Prescott area. For this portion of the sensitivity analysis, occupancy is adjusted up or down by 10 percent. Thus for the aggressive scenario we assume 100 percent occupancy, and for the conservative scenario we assume 80 percent occupancy for all land uses. The occupancy rate will increase the number of employees well as taxable leases and retail sales. It will not have any impact on variables related to construction such as impact fees.

Increasing the occupancy rate to 100 percent results in a 10.6 percent difference in the cumulative net impact for all funds combined, however the payback period is unchanged in terms of the number of years required for the cumulative impact to turn positive. The differences are most significant in the streets fund and general fund where sales taxes represent the major source of revenues. While 100 percent occupancy is not realistic from a market perspective, this exercise does illustrate the magnitude of difference that a 10 percent increase in occupancy rates could have on the fiscal impact. Decreasing the occupancy rate to 80 percent results in a 10.6 percent decrease in the cumulative net impact for all funds combined.

4.3 Retail Sales

The level of taxable retail sales is set at \$250 per square foot in the baseline. For this portion of the sensitivity analysis, retail sales per square foot are adjusted up or down by 20 percent with no change in the amount of retail

square footage. Thus for the aggressive scenario we assume sales per square foot of \$300, and for the conservative scenario we assume \$200 per square foot. Note that these sales per square foot figures represent initial levels and retail sales are inflated over time as are all other revenues. This modification will increase or decrease sales tax revenues in the general fund and streets and open space fund.

Increasing retail sales per square foot to \$300 results in a 16.1 percent difference in the cumulative net impact for all funds combined. The differences are in the streets fund and general fund where sales taxes represent the major source of revenues, however the payback period is unchanged in terms of the number of years required for the cumulative impact to turn positive. Decreasing retail sales per square foot to \$200 results in a 16.1 percent decrease in the cumulative net impact for all funds combined.

4.4 Infrastructure Costs

Infrastructure cost estimates in the baseline scenario are based on the best available current information. However, it is possible that materials costs could change resulting in increased costs, or other factors could change that may result in a decreased cost. For the purpose of the sensitivity analysis, transportation and water and wastewater infrastructure costs are adjusted up or down by 10 percent. For the higher scenario this means that the cost of transportation improvements would be \$605,000 and the total cost of water and wastewater improvements would be \$2.6 million. For the lower scenario this means that the cost of transportation improvements would be \$495,000 and the total cost of water and wastewater improvements would be \$2.2 million. Transportation improvements are scheduled in 2015 thru 2017 and are paid for through the streets and open space fund. Water and wastewater improvements are spread across the water operating fund and the water and wastewater impact fee funds in 2009 through 2011.

Increasing the infrastructure costs by 10 percent results in only a 0.5 percent decrease in the cumulative net impact for all funds combined. The cumulative impact becomes positive in 2013 instead of 2014 under the baseline scenario. There is no impact in the general fund. The impacts are in the water and wastewater impact fee fund and the streets fund. Decreasing infrastructure costs by 10 percent results in a 0.4 percent increase in the cumulative net impact for all funds combined, with the cumulative impact becoming positive in 2014.

4.5 Water and Wastewater Impact Fee Revenues

Water and wastewater impact fee estimates in the baseline scenario are based on the best available current information. However, since the actual impact fees are based on meter size and it is impossible to know the number of tenants and their meter sizes at this point, there is significant potential for variation in impact fee revenues. For the purpose of the sensitivity analysis water resource fees, water system impact fees and wastewater system impact fees are adjusted up or down by 25 percent. For the higher scenario this means that \$8.1 million in impact fee revenues would be collected between 2011 and 2020, and for the lower scenario total impact fee revenues would be only \$4.6 million.

Increasing the impact fee revenues by 25 percent results in only a 1.0 percent increase in the cumulative net impact for all funds combined, but a 308.4 percent increase in cumulative net impacts in the water and wastewater impact fee fund, or about \$1.3 million. There are no impacts on any other funds. As a result of this increase in revenues, the cumulative net impact for all funds becomes positive in 2013. Decreasing infrastructure costs by 25 percent results in a 1.6 percent decrease in the cumulative net impact for all funds combined, but a 508.5 percent decrease in the net impact in the water and wastewater impact fee funds resulting in a \$1.7 million shortfall over 25 years. Under this scenario there would not be sufficient impact fee revenues to cover required infrastructure costs based on fees from this annexation alone.

In summary, the sensitivity analysis provides some useful guidelines as to how the fiscal impact will likely vary as plans change. This information can be carried forward and used as part of the planning process for developing this annexation area. In general, factors that affect sales tax revenues such as occupancy rates, retail sales per square foot or any change in the amount of square footage devoted to retail uses will have the greatest impact on the fiscal results.

APPENDICES

**APPENDIX A
SOCIOECONOMIC IMPACTS
GRANITE DELLS RANCH**

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Housing Units	-	-	-	-	-	-	-	-	-	-	-	-	-
Population	-	-	-	-	-	-	-	-	-	-	-	-	-
Employment (Non-Construction)	-	-	490	653	1,460	2,231	3,401	4,126	4,471	4,706	4,706	4,753	4,753
Retail Square Feet	0	0	245,025	326,700	620,730	1,012,770	1,372,140	1,747,845	1,875,258	2,005,938	2,005,938	2,032,074	2,032,074
Police Officers	0	0	0	0	1	1	2	2	3	3	3	3	3
City Full Time Equivalents	0	0	2	2	5	8	13	15	16	17	17	17	17
Taxable Sales (millions)	\$0.00	\$0.00	\$4.13	\$5.62	\$52.32	\$76.48	\$154.37	\$197.95	\$225.90	\$267.81	\$273.17	\$286.41	\$292.14
Taxable Construction (millions)	\$0.00	\$0.00	\$18.23	\$6.20	\$31.61	\$29.31	\$49.02	\$27.44	\$14.42	\$7.61	\$0.00	\$1.58	\$0.00
Assessed Value (millions)	\$17.00	\$17.34	\$0.00	\$18.04	\$43.29	\$51.13	\$96.49	\$137.45	\$209.73	\$249.92	\$274.04	\$289.85	\$294.38
City Maintained Park Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City Maintained Road Lane Miles	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

Sources: Applied Economics, 2008.

Note: City FTE's are based on a rate of 0.00368 per (population * 2 + employment). This is equivalent to 75% of the citywide average rate over the past 7 years to account for the difference in marginal increases versus average increases in overall staffing based on growth. Police officers are based on a rate of 0.0006 per (population * 2 + employment). This is equivalent to the citywide average rate over the past 5 years.

**APPENDIX A
SOCIOECONOMIC IMPACTS
GRANITE DELLS RANCH**

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Housing Units	-	-	-	-	-	-	-	-	-	-	-	-
Population	-	-	-	-	-	-	-	-	-	-	-	-
Employment (Non-Construction)	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753	4,753
Retail Square Feet	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074	2,032,074
Police Officers	3	3	3	3	3	3	3	3	3	3	3	3
City FTEs	17	17	17	17	17	17	17	17	17	17	17	17
Taxable Sales (millions)	\$297.98	\$303.94	\$310.02	\$316.22	\$322.54	\$329.00	\$335.57	\$342.29	\$349.13	\$356.11	\$363.24	\$370.50
Taxable Construction (millions)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Assessed Value (millions)	\$302.85	\$308.65	\$314.82	\$321.11	\$327.54	\$334.09	\$340.77	\$347.59	\$354.54	\$361.63	\$368.86	\$376.24
City Maintained Park Acres	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
City Maintained Road Lane Miles	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3

Sources: Applied Economics, 2008.

**APPENDIX B
FISCAL IMPACT ASSUMPTIONS***

GENERAL FUND	Rate	Basis
REVENUES		
Local Taxes		
Property Tax	0.1991%	Net assessed value
Sales Tax	1.00%	taxables sales and lease, 65% construction
Utility Franchises	\$21.321	svc population (population + employment)
Licenses and Permits		
Building Permits & Plan Checks	\$0.0004	new construction
Animal Licenses	\$0.8823	per person
Other Licenses	\$0.5639	per person/employee
Intergovernmental Revenues		
State Sales Tax	\$93.392	per person (Census year only)
Urban Sharing	\$128.855	per person (Census year only)
Auto Lieu Tax	\$62.303	per person
Library	7.43%	library expenditures
Charges for Services		
Animal Control	\$0.400	per person
Plan Reviews, Inspections, Filing Fees	\$0.00007	new construction
Fire Department Fees	\$0.00005	new construction
Library and Recreation Fees	\$11.032	per person
Fines and Forfeitures		
Code Enforcement	na	not modeled
Animal Control Fines	\$0.054	per person
Court Fines	\$0.673	service pop (pop*2) (25% of citywide rate)
Library Fines	\$0.815	per person
Miscellaneous		
Interest	1.50%	previous years net impact
Other Revenues	na	not modeled
EXPENDITURES		
Mayor and Council	na	not modeled
City Clerk	\$0.569	service pop (pop*2)
City Court	\$3.316	service pop (pop*3) (25% of citywide rate)
City Manager	\$1.444	service pop (pop*2)
Legal	\$1.294	service pop (pop*2)
Economic Development	\$19.536	employment growth
Human Resources	\$395.309	city FTE employees
Insurance & Retirements	\$993.136	city FTE employees
Budget & Finance	\$1,053.848	city FTE employees
Administrative Services	\$547.411	city FTE employees
Community Development	\$0.00043	construction value
	\$5.774	svc population (pop*2)
Park Maintenance	\$2,709.035	park acres
Recreation & Library	\$102.874	per person
Police	\$144,432.058	officers
Fire	\$66.262	service pop (pop*2)

**APPENDIX B
FISCAL IMPACT ASSUMPTIONS***

WATER FUND	Rate	Basis
REVENUES		
Water Sales	\$550.732	connections
Connection Fees	\$542.961	new connections
Interest	1.50%	previous years net impact
Misc	\$3.025	service pop
Effluent Recharge Fee	\$0.000	not impacted
Alternative Water Source Fees	9.17%	water sales

EXPENDITURES		
Water Utility Billing	1.55%	water sales
Meter Reading	\$24.580	connections
Water Utilities Administration	19.22%	prod/dist expenditures
Water Production	46% * \$521.336	46% of cost per nonresidential account
Water Distribution	24% * \$521.336	24% of cost per nonresidential account
Alternative Water	30% * \$521.336	30% of cost per nonresidential account
Legal	\$9.638	connections
Water Improvements	na	schedule

WASTEWATER FUND	Rate	Basis
REVENUES		
User Charges	\$245.411	connections
Interest	1.50%	previous years net impact
Plan Reviews and Inspection Fees	\$0.00001	new construction
Wastewater Connections	\$23.154	new connections (new units)

EXPENDITURES		
Administration and Legal	18.25%	share of operating expenses
	\$50.238 * (330.02%*retail/service connections) + (132.33%*office connections)	weighted connections (share of volume/share of connections)
Wastewater Treatment Plant		
	\$43.861 * (330.02%*retail/service connections) + (132.33%*office connections)	weighted connections (share of volume/share of connections)
Wastewater Collection		
Wastewater Improvements	na	schedule

SYSTEM IMPACT FEES AND RESOURCE DEVELOPMENT FEES

	Rate	Basis
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REVENUES		
Water System Impact Fees	see figure 6	cost per acre
Water Resource Development Fees	see figure 6	cost per acre
Wastewater System Impact Fees	see figure 6	cost per acre
Interest	1.50%	previous years ending balance

EXPENDITURES		
Capital Outlay - Water System Impact	na	schedule
Capital Outlay - Resource Development	na	schedule
Capital Outlay - Wastewater System	na	schedule
Legal	19.148%	share of capital outlay
Finance Cost	5.52%	previous years ending balance

**APPENDIX B
FISCAL IMPACT ASSUMPTIONS***

STREETS, STREETS & OPEN SPACE	Rate	Basis
REVENUES		
Highway User Revenue Funds	\$84.005	population
Street Light Fee	\$6.360	per employee
Intergovernmental	5.96%	highway user revenue funds
Local Transportation Assistance Funds	\$4.774	population
Engineering Inspection Fees	\$100.201	center miles
Interest	1.50%	previous years net impact
1% Sales Tax	1.00%	taxable sales
Partnering	\$200.000	single family unit
EXPENDITURES		
Streets Projects	na	schedule
Streets Operations	\$27.646	service pop (pop*2)
	\$1,538.507	lane miles
Open Space Projects	\$1,028.815	open space acres
Transportation Services	\$25.358	population
Finance Cost	5.52%	previous year net impact

**Note that all rates are subject to 2 percent annual inflation.*

**APPENDIX C-1
ANNUAL FISCAL IMPACT
GENERAL FUND
GRANITE DELLS RANCH**

Revenues/Expenditures	2009	2010	2011	2012
REVENUES	\$ 5,416	\$ 5,605	\$ 249,088	\$ 146,285
Local Taxes				
Property Tax	\$ 5,416	\$ 5,524	\$ -	\$ 5,747
Sales Tax	\$ -	\$ -	\$ 223,568	\$ 118,137
Utility Franchises	\$ -	\$ -	\$ 10,871	\$ 14,784
Licenses and Permits				
Building Permits & Plan Checks	\$ -	\$ -	\$ 10,732	\$ 3,722
Animal Licenses	\$ -	\$ -	\$ -	\$ -
Other Licenses	\$ -	\$ -	\$ 287	\$ 391
Intergovernmental Revenues				
State Sales Tax	\$ -	\$ -	\$ -	\$ -
Urban Sharing	\$ -	\$ -	\$ -	\$ -
Auto Lieu Tax	\$ -	\$ -	\$ -	\$ -
Library	\$ -	\$ -	\$ -	\$ -
Charges for Services				
Animal Control	\$ -	\$ -	\$ -	\$ -
Plan Reviews, Inspections, Filing Fees	\$ -	\$ -	\$ 2,005	\$ 695
Fire Department Fees	\$ -	\$ -	\$ 1,316	\$ 447
Library and Recreation Fees	\$ -	\$ -	\$ -	\$ -
Fines and Forfeitures				
Code Enforcement	\$ -	\$ -	\$ -	\$ -
Animal Control Fines	\$ -	\$ -	\$ -	\$ -
Court Fines	\$ -	\$ -	\$ 224	\$ 305
Library Fines	\$ -	\$ -	\$ -	\$ -
Miscellaneous				
Interest	\$ -	\$ 81	\$ 84	\$ 2,057
Other Revenues	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ -	\$ -	\$ 111,956	\$ 129,712
Mayor and Council	\$ -	\$ -	\$ -	\$ -
City Clerk	\$ -	\$ -	\$ 290	\$ 395
City Court	\$ -	\$ -	\$ 1,690	\$ 2,299
City Manager	\$ -	\$ -	\$ 736	\$ 1,001
Legal	\$ -	\$ -	\$ 660	\$ 897
Economic Development	\$ -	\$ -	\$ 9,961	\$ 3,387
Human Resources	\$ -	\$ -	\$ 742	\$ 1,009
Insurance & Retirements	\$ -	\$ -	\$ 1,864	\$ 2,534
Budget & Finance	\$ -	\$ -	\$ 1,978	\$ 2,689
Administrative Services	\$ -	\$ -	\$ 1,027	\$ 1,397
Community Development	\$ -	\$ -	\$ 15,090	\$ 8,133
Park Maintenance	\$ -	\$ -	\$ -	\$ -
Recreation & Library	\$ -	\$ -	\$ -	\$ -
Police	\$ -	\$ -	\$ 44,136	\$ 60,025
Fire	\$ -	\$ -	\$ 33,783	\$ 45,945
ANNUAL NET IMPACT	\$ 5,416	\$ 5,605	\$ 137,132	\$ 16,573
as percent of revenue	100.0%	100.0%	55.1%	11.3%
25 year NPV :	\$27,685,995			

Source: Applied Economics, 2008.

**APPENDIX C-1
ANNUAL FISCAL IMPACT
GENERAL FUND
GRANITE DELLS RANCH**

Revenues/Expenditures	2013	2014	2015	2016	2017
REVENUES	\$ 918,459	\$ 1,168,332	\$ 2,215,944	\$ 2,471,712	\$ 2,659,952
Local Taxes					
Property Tax	\$ 18,372	\$ 22,550	\$ 45,390	\$ 66,545	\$ 103,363
Sales Tax	\$ 839,289	\$ 1,057,906	\$ 2,033,957	\$ 2,253,962	\$ 2,403,228
Utility Franchises	\$ 33,703	\$ 52,527	\$ 81,661	\$ 101,057	\$ 111,688
Licenses and Permits					
Building Permits & Plan Checks	\$ 19,361	\$ 18,312	\$ 31,246	\$ 17,840	\$ 9,561
Animal Licenses	\$ -	\$ -	\$ -	\$ -	\$ -
Other Licenses	\$ 891	\$ 1,389	\$ 2,160	\$ 2,673	\$ 2,954
Intergovernmental Revenues					
State Sales Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Urban Sharing	\$ -	\$ -	\$ -	\$ -	\$ -
Auto Lieu Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ -	\$ -	\$ -	\$ -	\$ -
Charges for Services					
Animal Control	\$ -	\$ -	\$ -	\$ -	\$ -
Plan Reviews, Inspections, Filing Fee	\$ 3,618	\$ 3,422	\$ 5,838	\$ 3,333	\$ 1,786
Fire Department Fees	\$ 2,282	\$ 2,116	\$ 3,539	\$ 1,981	\$ 1,041
Library and Recreation Fees	\$ -	\$ -	\$ -	\$ -	\$ -
Fines and Forfeitures					
Code Enforcement	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Control Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Court Fines	\$ 695	\$ 1,083	\$ 1,683	\$ 2,083	\$ 2,302
Library Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous					
Interest	\$ 249	\$ 9,026	\$ 10,470	\$ 22,239	\$ 24,028
Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 316,695	\$ 470,318	\$ 733,360	\$ 869,840	\$ 940,648
Mayor and Council	\$ -	\$ -	\$ -	\$ -	\$ -
City Clerk	\$ 900	\$ 1,402	\$ 2,180	\$ 2,697	\$ 2,981
City Court	\$ 5,241	\$ 8,168	\$ 12,698	\$ 15,715	\$ 17,368
City Manager	\$ 2,282	\$ 3,557	\$ 5,530	\$ 6,843	\$ 7,563
Legal	\$ 2,045	\$ 3,188	\$ 4,956	\$ 6,133	\$ 6,778
Economic Development	\$ 17,064	\$ 16,630	\$ 25,732	\$ 16,276	\$ 7,889
Human Resources	\$ 2,300	\$ 3,584	\$ 5,572	\$ 6,896	\$ 7,621
Insurance & Retirements	\$ 5,778	\$ 9,005	\$ 13,999	\$ 17,325	\$ 19,147
Budget & Finance	\$ 6,131	\$ 9,555	\$ 14,855	\$ 18,384	\$ 20,318
Administrative Services	\$ 3,185	\$ 4,963	\$ 7,716	\$ 9,549	\$ 10,554
Community Development	\$ 30,188	\$ 33,755	\$ 54,784	\$ 45,655	\$ 39,856
Park Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Recreation & Library	\$ -	\$ -	\$ -	\$ -	\$ -
Police	\$ 136,839	\$ 213,267	\$ 331,554	\$ 410,306	\$ 453,471
Fire	\$ 104,742	\$ 163,242	\$ 253,783	\$ 314,062	\$ 347,102
ANNUAL NET IMPACT	\$ 601,764	\$ 698,014	\$ 1,482,583	\$ 1,601,872	\$ 1,719,304
as percent of revenue	65.5%	59.7%	66.9%	64.8%	64.6%
25 year NPV :					

Source: Applied Economics, 2008.

**APPENDIX C-1
ANNUAL FISCAL IMPACT
GENERAL FUND
GRANITE DELLS RANCH**

Revenues/Expenditures	2018	2019	2020	2021	2022
REVENUES	\$ 3,036,764	\$ 3,027,440	\$ 3,188,970	\$ 3,236,048	\$ 3,301,851
Local Taxes					
Property Tax	\$ 124,512	\$ 137,175	\$ 145,406	\$ 147,910	\$ 152,168
Sales Tax	\$ 2,754,242	\$ 2,731,669	\$ 2,879,942	\$ 2,921,382	\$ 2,979,810
Utility Franchises	\$ 119,916	\$ 122,314	\$ 126,007	\$ 128,527	\$ 131,098
Licenses and Permits					
Building Permits & Plan Checks	\$ 5,149	\$ -	\$ 1,115	\$ -	\$ -
Animal Licenses	\$ -	\$ -	\$ -	\$ -	\$ -
Other Licenses	\$ 3,171	\$ 3,235	\$ 3,333	\$ 3,399	\$ 3,467
Intergovernmental Revenues					
State Sales Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Urban Sharing	\$ -	\$ -	\$ -	\$ -	\$ -
Auto Lieu Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ -	\$ -	\$ -	\$ -	\$ -
Charges for Services					
Animal Control	\$ -	\$ -	\$ -	\$ -	\$ -
Plan Reviews, Inspections, Filing Fee	\$ 962	\$ -	\$ 208	\$ -	\$ -
Fire Department Fees	\$ 550	\$ -	\$ 114	\$ -	\$ -
Library and Recreation Fees	\$ -	\$ -	\$ -	\$ -	\$ -
Fines and Forfeitures					
Code Enforcement	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Control Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Court Fines	\$ 2,472	\$ 2,521	\$ 2,598	\$ 2,650	\$ 2,703
Library Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous					
Interest	\$ 25,790	\$ 30,526	\$ 30,247	\$ 32,179	\$ 32,606
Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 1,001,719	\$ 1,010,977	\$ 1,043,703	\$ 1,062,335	\$ 1,083,582
Mayor and Council	\$ -	\$ -	\$ -	\$ -	\$ -
City Clerk	\$ 3,201	\$ 3,265	\$ 3,363	\$ 3,431	\$ 3,499
City Court	\$ 18,647	\$ 19,020	\$ 19,594	\$ 19,986	\$ 20,386
City Manager	\$ 8,120	\$ 8,283	\$ 8,533	\$ 8,703	\$ 8,877
Legal	\$ 7,277	\$ 7,423	\$ 7,647	\$ 7,800	\$ 7,956
Economic Development	\$ 5,492	\$ -	\$ 1,143	\$ -	\$ -
Human Resources	\$ 8,183	\$ 8,346	\$ 8,598	\$ 8,770	\$ 8,946
Insurance & Retirements	\$ 20,558	\$ 20,969	\$ 21,602	\$ 22,034	\$ 22,475
Budget & Finance	\$ 21,814	\$ 22,251	\$ 22,922	\$ 23,381	\$ 23,849
Administrative Services	\$ 11,331	\$ 11,558	\$ 11,907	\$ 12,145	\$ 12,388
Community Development	\$ 37,550	\$ 33,126	\$ 35,182	\$ 34,808	\$ 35,505
Park Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Recreation & Library	\$ -	\$ -	\$ -	\$ -	\$ -
Police	\$ 486,875	\$ 496,613	\$ 511,609	\$ 521,841	\$ 532,278
Fire	\$ 372,671	\$ 380,125	\$ 391,603	\$ 399,435	\$ 407,424
ANNUAL NET IMPACT	\$ 2,035,045	\$ 2,016,463	\$ 2,145,267	\$ 2,173,712	\$ 2,218,269
as percent of revenue	67.0%	66.6%	67.3%	67.2%	67.2%
25 year NPV :					

Source: Applied Economics, 2008.

**APPENDIX C-1
ANNUAL FISCAL IMPACT
GENERAL FUND
GRANITE DELLS RANCH**

Revenues/Expenditures	2023	2024	2025	2026	2027
REVENUES	\$ 3,367,820	\$ 3,435,176	\$ 3,503,879	\$ 3,573,957	\$ 3,645,436
Local Taxes					
Property Tax	\$ 155,127	\$ 158,230	\$ 161,394	\$ 164,622	\$ 167,915
Sales Tax	\$ 3,039,406	\$ 3,100,194	\$ 3,162,198	\$ 3,225,442	\$ 3,289,951
Utility Franchises	\$ 133,720	\$ 136,394	\$ 139,122	\$ 141,905	\$ 144,743
Licenses and Permits					
Building Permits & Plan Checks	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Licenses	\$ -	\$ -	\$ -	\$ -	\$ -
Other Licenses	\$ 3,536	\$ 3,607	\$ 3,679	\$ 3,753	\$ 3,828
Intergovernmental Revenues					
State Sales Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Urban Sharing	\$ -	\$ -	\$ -	\$ -	\$ -
Auto Lieu Tax	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ -	\$ -	\$ -	\$ -	\$ -
Charges for Services					
Animal Control	\$ -	\$ -	\$ -	\$ -	\$ -
Plan Reviews, Inspections, Filing Fee	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Department Fees	\$ -	\$ -	\$ -	\$ -	\$ -
Library and Recreation Fees	\$ -	\$ -	\$ -	\$ -	\$ -
Fines and Forfeitures					
Code Enforcement	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Control Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Court Fines	\$ 2,757	\$ 2,812	\$ 2,868	\$ 2,925	\$ 2,984
Library Fines	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous					
Interest	\$ 33,274	\$ 33,939	\$ 34,617	\$ 35,310	\$ 36,016
Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 1,105,253	\$ 1,127,359	\$ 1,149,906	\$ 1,172,904	\$ 1,196,362
Mayor and Council	\$ -	\$ -	\$ -	\$ -	\$ -
City Clerk	\$ 3,569	\$ 3,641	\$ 3,713	\$ 3,788	\$ 3,863
City Court	\$ 20,794	\$ 21,210	\$ 21,634	\$ 22,067	\$ 22,508
City Manager	\$ 9,055	\$ 9,236	\$ 9,421	\$ 9,609	\$ 9,801
Legal	\$ 8,115	\$ 8,277	\$ 8,443	\$ 8,612	\$ 8,784
Economic Development	\$ -	\$ -	\$ -	\$ -	\$ -
Human Resources	\$ 9,125	\$ 9,307	\$ 9,493	\$ 9,683	\$ 9,877
Insurance & Retirements	\$ 22,924	\$ 23,383	\$ 23,850	\$ 24,327	\$ 24,814
Budget & Finance	\$ 24,326	\$ 24,812	\$ 25,308	\$ 25,814	\$ 26,331
Administrative Services	\$ 12,636	\$ 12,888	\$ 13,146	\$ 13,409	\$ 13,677
Community Development	\$ 36,215	\$ 36,939	\$ 37,678	\$ 38,431	\$ 39,200
Park Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -
Recreation & Library	\$ -	\$ -	\$ -	\$ -	\$ -
Police	\$ 542,923	\$ 553,782	\$ 564,858	\$ 576,155	\$ 587,678
Fire	\$ 415,572	\$ 423,884	\$ 432,362	\$ 441,009	\$ 449,829
ANNUAL NET IMPACT	\$ 2,262,567	\$ 2,307,817	\$ 2,353,973	\$ 2,401,053	\$ 2,449,074
as percent of revenue	67.2%	67.2%	67.2%	67.2%	67.2%
25 year NPV :					

Source: Applied Economics, 2008.

**APPENDIX C-1
ANNUAL FISCAL IMPACT
GENERAL FUND
GRANITE DELLS RANCH**

Revenues/Expenditures	2028	2029	2030	2031	2032	2033
REVENUES	\$ 3,718,344	\$ 3,792,711	\$ 3,868,566	\$ 3,945,937	\$ 4,024,856	\$ 4,105,353
Local Taxes						
Property Tax	\$ 171,273	\$ 174,698	\$ 178,192	\$ 181,756	\$ 185,391	\$ 189,099
Sales Tax	\$ 3,355,750	\$ 3,422,865	\$ 3,491,322	\$ 3,561,148	\$ 3,632,371	\$ 3,705,019
Utility Franchises	\$ 147,638	\$ 150,590	\$ 153,602	\$ 156,674	\$ 159,808	\$ 163,004
Licenses and Permits						
Building Permits & Plan Checks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Licenses	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Licenses	\$ 3,905	\$ 3,983	\$ 4,062	\$ 4,144	\$ 4,226	\$ 4,311
Intergovernmental Revenues						
State Sales Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Urban Sharing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Auto Lieu Tax	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Library	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Charges for Services						
Animal Control	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Plan Reviews, Inspections, Filing Fee	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire Department Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Library and Recreation Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fines and Forfeitures						
Code Enforcement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Animal Control Fines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Court Fines	\$ 3,044	\$ 3,104	\$ 3,166	\$ 3,230	\$ 3,294	\$ 3,360
Library Fines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous						
Interest	\$ 36,736	\$ 37,471	\$ 38,220	\$ 38,985	\$ 39,764	\$ 40,560
Other Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 1,220,289	\$ 1,244,695	\$ 1,269,589	\$ 1,294,981	\$ 1,320,880	\$ 1,347,298
Mayor and Council	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
City Clerk	\$ 3,941	\$ 4,020	\$ 4,100	\$ 4,182	\$ 4,266	\$ 4,351
City Court	\$ 22,958	\$ 23,417	\$ 23,886	\$ 24,363	\$ 24,851	\$ 25,348
City Manager	\$ 9,997	\$ 10,197	\$ 10,401	\$ 10,609	\$ 10,821	\$ 11,038
Legal	\$ 8,960	\$ 9,139	\$ 9,321	\$ 9,508	\$ 9,698	\$ 9,892
Economic Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Human Resources	\$ 10,074	\$ 10,276	\$ 10,481	\$ 10,691	\$ 10,905	\$ 11,123
Insurance & Retirements	\$ 25,310	\$ 25,816	\$ 26,333	\$ 26,859	\$ 27,396	\$ 27,944
Budget & Finance	\$ 26,857	\$ 27,394	\$ 27,942	\$ 28,501	\$ 29,071	\$ 29,653
Administrative Services	\$ 13,951	\$ 14,230	\$ 14,514	\$ 14,805	\$ 15,101	\$ 15,403
Community Development	\$ 39,984	\$ 40,784	\$ 41,599	\$ 42,431	\$ 43,280	\$ 44,146
Park Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Recreation & Library	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Police	\$ 599,431	\$ 611,420	\$ 623,648	\$ 636,121	\$ 648,844	\$ 661,821
Fire	\$ 458,825	\$ 468,002	\$ 477,362	\$ 486,909	\$ 496,647	\$ 506,580
ANNUAL NET IMPACT	\$ 2,498,055	\$ 2,548,016	\$ 2,598,977	\$ 2,650,956	\$ 2,703,975	\$ 2,758,055
as percent of revenue	67.2%	67.2%	67.2%	67.2%	67.2%	67.2%
25 year NPV :						

Source: Applied Economics, 2008.

**APPENDIX C-2
ANNUAL FISCAL IMPACT
GRANITE DELLS RANCH
SYSTEM IMPACT FEES AND
RESOURCE DEVELOPMENT FEES**

Revenues/Expenditures	2009	2010	2011	2012	2013	2014	2015	2016
Beginning Balance	\$ -	\$ (511,672)	\$ (1,567,732)	\$ (2,424,678)	\$ (2,443,974)	\$ (2,015,231)	\$ (1,530,602)	\$ (806,922)
REVENUES	\$ -	\$ -	\$ 336,901	\$ 114,546	\$ 563,650	\$ 595,870	\$ 808,169	\$ 619,944
Water System Impact Fees	\$ -	\$ -	\$ 265,888	\$ 90,402	\$ 444,845	\$ 470,271	\$ 637,827	\$ 489,270
Water Resource Development Fees	\$ -	\$ -	\$ 196,732	\$ 66,889	\$ 329,142	\$ 347,956	\$ 471,930	\$ 362,014
Wastewater System Impact Fees	\$ -	\$ -	\$ 140,169	\$ 47,657	\$ 234,507	\$ 247,914	\$ 336,240	\$ 257,930
Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 511,672	\$ 1,056,059	\$ 1,193,847	\$ 133,842	\$ 134,907	\$ 111,241	\$ 84,489	\$ 44,542
Capital Outlay - Water System Impact	\$ 339,655	\$ 699,386	\$ 685,899	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Outlay - Resource Development	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Outlay - Wastewater System	\$ 89,789	\$ 163,253	\$ 243,459	\$ -	\$ -	\$ -	\$ -	\$ -
Legal	\$ 82,229	\$ 165,176	\$ 177,951	\$ -	\$ -	\$ -	\$ -	\$ -
Finance Cost	\$ -	\$ 28,244	\$ 86,539	\$ 133,842	\$ 134,907	\$ 111,241	\$ 84,489	\$ 44,542
Ending Balance	\$ (511,672)	\$ (1,567,732)	\$ (2,424,678)	\$ (2,443,974)	\$ (2,015,231)	\$ (1,530,602)	\$ (806,922)	\$ (231,520)
ANNUAL NET IMPACT	\$ (511,672)	\$ (1,056,059)	\$ (856,946)	\$ (19,296)	\$ 428,742	\$ 484,630	\$ 723,680	\$ 575,401
25 year NPV :								

(\$3,254)

WASTEWATER FUND

Revenues/Expenditures	2009	2010	2011	2012	2013	2014	2015	2016
REVENUES	\$ -	\$ -	\$ 11,197	\$ 14,001	\$ 33,136	\$ 50,315	\$ 78,311	\$ 94,761
User Charges	\$ -	\$ -	\$ 9,915	\$ 13,484	\$ 30,740	\$ 47,910	\$ 74,482	\$ 92,174
Interest	\$ -	\$ -	\$ -	\$ 79	\$ 167	\$ 252	\$ 403	\$ 483
Plan Reviews and Inspection Fees	\$ -	\$ -	\$ 347	\$ 120	\$ 625	\$ 592	\$ 1,009	\$ 576
Wastewater Connections	\$ -	\$ -	\$ 935	\$ 318	\$ 1,603	\$ 1,562	\$ 2,417	\$ 1,529
EXPENDITURES	\$ -	\$ -	\$ 5,949	\$ 8,091	\$ 27,506	\$ 40,253	\$ 72,974	\$ 88,865
Administration and Legal	\$ -	\$ -	\$ 918	\$ 1,249	\$ 4,246	\$ 6,213	\$ 11,264	\$ 13,717
Wastewater Treatment Plant	\$ -	\$ -	\$ 2,686	\$ 3,653	\$ 12,419	\$ 18,173	\$ 32,946	\$ 40,120
Wastewater Collection	\$ -	\$ -	\$ 2,345	\$ 3,189	\$ 10,842	\$ 15,866	\$ 28,764	\$ 35,027
Wastewater Improvements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ANNUAL NET IMPACT	\$ -	\$ -	\$ 5,248	\$ 5,911	\$ 5,629	\$ 10,062	\$ 5,337	\$ 5,897
as percent of revenue	na	na	46.9%	42.2%	17.0%	20.0%	6.8%	6.2%
25 year NPV :								

\$28,754

**APPENDIX C-2
ANNUAL FISCAL IMPACT
GRANITE DELLS RANCH**

STREETS, STREETS & OPEN SPACE

Revenues/Expenditures	2009	2010	2011	2012	2013	2014	2015	2016
REVENUES	\$ -	\$ 233	\$ 236,081	\$ 133,245	\$ 923,654	\$ 1,201,958	\$ 2,350,155	\$ 2,683,460
Highway User Revenue Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Street Light Fee	\$ -	\$ -	\$ 3,243	\$ 4,410	\$ 10,054	\$ 15,669	\$ 24,360	\$ 30,146
Intergovernmental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Transportation Assistance Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering Inspection Fees	\$ -	\$ 233	\$ 238	\$ 242	\$ 247	\$ 252	\$ 257	\$ 262
Interest	\$ -	\$ -	\$ -	\$ 3,224	\$ 4,879	\$ 18,022	\$ 34,971	\$ 63,958
1% Sales Tax	\$ -	\$ -	\$ 232,601	\$ 125,368	\$ 908,474	\$ 1,168,014	\$ 2,290,566	\$ 2,589,093
Partnering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ -	\$ 3,578	\$ 17,795	\$ 22,892	\$ 47,497	\$ 71,981	\$ 417,744	\$ 243,430
Streets Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 307,910	\$ 108,368
Streets Operations	\$ -	\$ 3,578	\$ 17,745	\$ 22,892	\$ 47,497	\$ 71,981	\$ 109,834	\$ 135,062
Open Space Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Finance Cost	\$ -	\$ -	\$ 50	\$ -	\$ -	\$ -	\$ -	\$ -
ANNUAL NET IMPACT	\$ -	\$ (3,345)	\$ 218,286	\$ 110,353	\$ 876,157	\$ 1,129,977	\$ 1,932,411	\$ 2,440,030
as percent of revenue	na	-1435.4%	92.5%	82.8%	94.9%	94.0%	82.2%	90.9%
25 year NPV :		\$53,931,735						

Source: Applied Economics, 2008.

**APPENDIX C-2
ANNUAL FISCAL IMPACT
GRANITE DELLS RANCH**

STREETS, STREETS & OPEN SPACE

Revenues/Expenditures	2017	2018	2019	2020	2021	2022	2023	2024
REVENUES	\$ 2,949,908	\$ 3,468,180	\$ 3,556,843	\$ 3,859,817	\$ 4,040,128	\$ 4,248,619	\$ 4,466,248	\$ 4,693,397
Highway User Revenue Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Street Light Fee	\$ 33,318	\$ 35,772	\$ 36,488	\$ 37,589	\$ 38,341	\$ 39,108	\$ 39,890	\$ 40,688
Intergovernmental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Transportation Assistance Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering Inspection Fees	\$ 268	\$ 273	\$ 278	\$ 284	\$ 290	\$ 296	\$ 301	\$ 307
Interest	\$ 100,558	\$ 140,560	\$ 190,187	\$ 241,097	\$ 296,478	\$ 354,513	\$ 415,625	\$ 479,948
1% Sales Tax	\$ 2,815,765	\$ 3,291,574	\$ 3,329,890	\$ 3,580,846	\$ 3,705,019	\$ 3,854,702	\$ 4,010,432	\$ 4,172,453
Partnering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 283,119	\$ 159,678	\$ 162,871	\$ 167,746	\$ 171,101	\$ 174,523	\$ 178,013	\$ 181,573
Streets Projects	\$ 134,191	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Streets Operations	\$ 148,928	\$ 159,678	\$ 162,871	\$ 167,746	\$ 171,101	\$ 174,523	\$ 178,013	\$ 181,573
Open Space Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Finance Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ANNUAL NET IMPACT	\$ 2,666,790	\$ 3,308,502	\$ 3,393,972	\$ 3,692,071	\$ 3,869,027	\$ 4,074,096	\$ 4,288,235	\$ 4,511,823
as percent of revenue	90.4%	95.4%	95.4%	95.7%	95.8%	95.9%	96.0%	96.1%
25 year NPV :								

Source: Applied Economics, 2008.

**APPENDIX C-2
ANNUAL FISCAL IMPACT
GRANITE DELLS RANCH**

STREETS, STREETS & OPEN SPACE

Revenues/Expenditures	2025	2026	2027	2028	2029	2030	2031	2032	2033
REVENUES	\$ 4,930,461	\$ 5,177,854	\$ 5,436,003	\$ 5,705,357	\$ 5,986,380	\$ 6,279,556	\$ 6,585,389	\$ 6,904,404	\$ 7,237,146
Highway User Revenue Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Street Light Fee	\$ 41,502	\$ 42,332	\$ 43,178	\$ 44,042	\$ 44,923	\$ 45,821	\$ 46,738	\$ 47,672	\$ 48,626
Intergovernmental	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Transportation Assistance Funds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering Inspection Fees	\$ 314	\$ 320	\$ 326	\$ 333	\$ 339	\$ 346	\$ 353	\$ 360	\$ 367
Interest	\$ 547,626	\$ 618,805	\$ 693,639	\$ 772,289	\$ 854,921	\$ 941,709	\$ 1,032,836	\$ 1,128,488	\$ 1,228,863
1% Sales Tax	\$ 4,341,020	\$ 4,516,397	\$ 4,698,860	\$ 4,888,694	\$ 5,086,197	\$ 5,291,679	\$ 5,505,463	\$ 5,727,884	\$ 5,959,290
Partnering	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXPENDITURES	\$ 185,205	\$ 188,909	\$ 192,687	\$ 196,541	\$ 200,472	\$ 204,481	\$ 208,571	\$ 212,742	\$ 216,997
Streets Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Streets Operations	\$ 185,205	\$ 188,909	\$ 192,687	\$ 196,541	\$ 200,472	\$ 204,481	\$ 208,571	\$ 212,742	\$ 216,997
Open Space Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transportation Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Finance Cost	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
ANNUAL NET IMPACT	\$ 4,745,256	\$ 4,988,945	\$ 5,243,316	\$ 5,508,816	\$ 5,785,908	\$ 6,075,075	\$ 6,376,819	\$ 6,691,662	\$ 7,020,149
as percent of revenue	96.2%	96.4%	96.5%	96.6%	96.7%	96.7%	96.8%	96.9%	97.0%
25 year NPV :									

Source: Applied Economics, 2008.

APPENDIX D-SENSITIVITY ANALYSIS

This appendix provides additional detail on the sensitivity analysis. The annual net impacts by fund are included for each of the sensitivity variables.

Absorption

In order to increase or decrease the absorption schedule by 25 percent, the number of years of development for each land use was increased or decreased by 25 percent. The revised absorption schedules are shown in Figures D-1 and D-2. This particular variable, while important to the overall results is more difficult to adjust while preserving the integrity of the original annual absorption rates. Absorption rates are not evenly distributed across years in terms of the number of acres. The adjusted absorption schedules are shown in Figures 8 and 9. Retail development that was originally scheduled to occur over 8 years would occur over 6 years in the compressed scenario or 10 years in the expanded scenario. Service development that was originally scheduled to occur over 5 years would occur over 3.75 years in the compressed scenario and 6.25 years in the expanded scenario. Office development that was originally scheduled to occur over 7 years would occur over 5.25 years in the compressed scenario and 8.75 years in the expanded scenario.

**FIGURE D-1
ABSORPTION ASSUMPTIONS
GRANITE DELLS RANCH
ABSORPTION RATE INCREASED 25 PERCENT**

Land Use	Cumulative Acres Absorbed													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Commercial														
Community Retail	0.00	0.00	0.00	0.00	20.00	30.00	60.00	90.00	110.00	114.00	114.00	114.00	114.00	114.00
Office	0.00	0.00	30.00	60.00	100.00	120.00	157.60	157.60	157.60	157.60	157.60	157.60	157.60	157.60
NOB/Service	0.00	0.00	0.00	0.00	20.00	40.00	60.00	68.40	68.40	68.40	68.40	68.40	68.40	68.40
Vacant	340.00	340.00	310.00	280.00	200.00	150.00	72.40	24.00	4.00	0.00	0.00	0.00	0.00	0.00

**FIGURE D-2
ABSORPTION ASSUMPTIONS
GRANITE DELLS RANCH
ABSORPTION RATE DECREASED 25 PERCENT**

Land Use	Cumulative Acres Absorbed													
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Commercial														
Community Retail	0.00	0.00	0.00	0.00	20.00	20.00	40.00	60.00	60.00	80.00	90.00	100.00	110.00	114.00
Office	0.00	0.00	30.00	40.00	50.00	70.00	100.00	120.00	140.00	150.00	157.60	157.60	157.60	157.60
NOB/Service	0.00	0.00	0.00	0.00	20.00	20.00	40.00	50.00	50.00	60.00	68.40	68.40	68.40	68.40
Vacant	340.00	340.00	310.00	300.00	250.00	230.00	160.00	110.00	90.00	50.00	24.00	14.00	4.00	0.00

Overall, increasing the absorption rate by 25 percent results in only a 1.7 percent difference in the cumulative net impact for all funds combined (Figure D-3). The differences are most significant in the impact fee funds that are closely tied to the pace of new construction. There are larger percent differences in selected years simply due to the significantly increased amounts of construction in particular years versus the baseline absorption schedule.

**FIGURE D-3
GRANITE DELLS RANCH
ABSORPTION RATE SENSITIVITY
ANNUAL NET IMPACT BY FUND
CONSTANT DOLLARS**

Year	General Fund		Wtr & WW Operating Funds		Water/WW Impact Fees		Streets, Street & Open Space		Total All Funds*	
	+25%	-25%	+25%	-25%	+25%	-25%	+25%	-25%	+25%	-25%
2009	\$5,416	\$5,416	-\$37,739	-\$37,739	-\$511,672	-\$511,672	\$0	\$0	-\$543,996	-\$543,996
2010	\$5,605	\$5,605	-\$67,502	-\$67,502	-\$1,056,059	-\$1,056,059	-\$3,345	-\$3,345	-\$1,121,301	-\$1,121,301
2011	\$137,132	\$137,132	-\$41,244	-\$41,244	-\$856,946	-\$856,946	\$218,286	\$218,286	-\$542,772	-\$542,772
2012	\$109,939	\$16,573	\$28,210	\$11,631	\$209,797	-\$19,296	\$264,305	\$110,353	\$612,251	\$119,261
2013	\$671,685	\$552,946	\$56,521	\$28,875	\$675,063	\$311,905	\$1,062,267	\$795,996	\$2,465,535	\$1,689,721
2014	\$733,966	\$425,531	\$35,269	\$17,225	\$370,751	\$120,658	\$950,629	\$722,786	\$2,090,614	\$1,286,200
2015	\$1,434,171	\$1,033,095	\$57,393	\$45,238	\$857,387	\$596,949	\$2,171,694	\$1,598,700	\$4,520,646	\$3,273,981
2016	\$1,678,605	\$1,265,083	\$16,695	\$30,336	\$397,683	\$468,974	\$2,554,609	\$1,720,091	\$4,647,592	\$3,484,485
2017	\$1,982,479	\$1,157,946	\$3,253	\$16,004	\$254,227	\$200,746	\$3,150,827	\$1,999,561	\$5,390,786	\$3,374,257
2018	\$2,044,266	\$1,615,005	-\$6,631	\$22,536	\$56,703	\$399,045	\$3,338,858	\$2,605,508	\$5,433,196	\$4,642,094
2019	\$2,075,259	\$1,783,684	-\$9,160	\$12,084	\$5,954	\$258,043	\$3,501,161	\$2,940,200	\$5,573,214	\$4,994,012
2020	\$2,117,314	\$1,897,891	-\$9,366	-\$1,046	\$6,043	\$129,371	\$3,689,415	\$3,336,941	\$5,803,407	\$5,363,157
2021	\$2,159,587	\$2,122,704	-\$9,576	-\$2,717	\$6,134	\$137,519	\$3,886,030	\$3,765,090	\$6,042,175	\$6,022,596
2022	\$2,202,778	\$2,218,410	-\$9,790	-\$7,245	\$6,226	\$58,541	\$4,091,353	\$4,038,056	\$6,290,567	\$6,307,762
2023	\$2,246,833	\$2,250,385	-\$10,009	-\$9,987	\$6,319	\$3,567	\$4,305,751	\$4,230,333	\$6,548,895	\$6,474,298
2024	\$2,291,770	\$2,296,274	-\$10,233	-\$10,211	\$6,414	\$3,620	\$4,529,603	\$4,453,053	\$6,817,553	\$6,742,737
2025	\$2,337,605	\$2,342,125	-\$10,462	-\$10,439	\$6,510	\$3,674	\$4,763,302	\$4,685,605	\$7,096,956	\$7,020,965
2026	\$2,384,358	\$2,388,967	-\$10,696	-\$10,673	\$6,608	\$3,730	\$5,007,261	\$4,928,398	\$7,387,531	\$7,310,422
2027	\$2,432,045	\$2,436,746	-\$10,935	-\$10,911	\$6,707	\$3,786	\$5,261,907	\$5,181,861	\$7,689,725	\$7,611,482
2028	\$2,480,686	\$2,485,481	-\$11,178	-\$11,155	\$6,808	\$3,842	\$5,527,686	\$5,446,440	\$8,004,001	\$7,924,608
2029	\$2,530,299	\$2,535,190	-\$11,428	-\$11,403	\$6,910	\$3,900	\$5,805,061	\$5,722,596	\$8,330,843	\$8,250,283
2030	\$2,580,905	\$2,585,894	-\$11,682	-\$11,658	\$7,013	\$3,958	\$6,094,516	\$6,010,813	\$8,670,752	\$8,589,008
2031	\$2,632,523	\$2,637,612	-\$11,942	-\$11,917	\$7,119	\$4,018	\$6,396,551	\$6,311,593	\$9,024,251	\$8,941,306
2032	\$2,685,174	\$2,690,364	-\$12,208	-\$12,182	\$7,225	\$4,078	\$6,711,690	\$6,625,458	\$9,391,882	\$9,307,718
2033	\$2,738,877	\$2,744,172	-\$12,479	-\$12,453	\$7,334	\$4,139	\$7,040,478	\$6,952,952	\$9,774,210	\$9,688,810
Total	\$44,699,278	\$41,630,232	(\$116,919)	(\$96,555)	\$496,258	\$280,090	\$90,319,897	\$84,397,327	\$135,398,514	\$126,211,094
	1.3%	-5.7%	3.8%	20.5%	19.4%	-32.6%	1.5%	-5.1%	1.5%	-5.4%
25 Year NPV	\$27,986,315	\$25,588,168	(\$71,525)	(\$65,174)	\$109,226	(\$184,181)	\$54,971,042	\$50,595,633	\$82,995,058	\$75,934,447
	1.7%	-7.1%	-8.9%	-17.0%	-3457.0%	5560.7%	1.9%	-6.2%	2.0%	-6.7%

The results for the general fund show a 1.3 percent difference in the cumulative net impact over 25 years. This is due to construction sales tax accruing earlier in the period and sales tax from new retail development coming on line earlier.

For the water and wastewater operating funds, which are combined for the sensitivity analysis, there is a 3.8 percent difference in the cumulative net impact over 25 years. In the water fund, there are capital improvements in the first 3 years. The accelerated absorption schedule results in more connections in earlier years, thus revenues are available sooner to pay for the up front capital improvements. In the wastewater fund, revenues and expenditures generally increase proportionally, but the small positive impacts in the early years are slightly larger.

In the water and wastewater impact fee funds, accelerated absorption means that impact fees will be paid earlier, thus the financing costs in the water and wastewater impact fee fund are reduced. The result is a 19.4 percent greater cumulative net impact over 25 years.

More rapid development of retail results in slightly more cumulative sales tax revenues over 25 years, thus increasing the revenues in the streets and streets and open space funds. In these particular funds, the impact of more rapid employment growth on street operations expenditures is smaller than the increase in sales tax revenues. The capital improvements associated with road widening are also shifted forward 1 to 2 years to be consistent with the timing of development in the alternative absorption schedule. The result is a 1.5 percent greater cumulative net impact over 25 years.

Slowing the absorption rate by 25 percent results in a 5.4 percent decrease in the cumulative net impact for all funds combined. The differences are most significant in the water and wastewater operating and impact fee funds. There are larger percent differences in 2013 through 2020 for all funds simply due to the lower levels of

construction in those years versus the baseline absorption schedule.

The results for the general fund show a 5.7 percent decrease in the cumulative net impact over 25 years. The most significant differences are in 2014 through 2020, due to slowed retail development, taxable sales are much lower during those years than in the baseline analysis. Since sales taxes are by far the largest source of general fund revenues, slower retail development translates into significantly lower general fund revenues in the first 8 years. Expenditures are slightly lower in the early years due to lower employment, but not enough to offset the difference in sales tax revenues. The resulting cumulative net impact, while less than the baseline, is still highly positive however at \$41.6 million over 25 years.

For the water and wastewater operating funds there is a 20.5 percent increase in the cumulative net impact over 25 years. In both the water and wastewater funds revenues decrease slightly more than expenditures during the development period (2013 to 2018) and thus the net impact is actually less negative with a slower absorption rate. However, neither of these funds has a significantly sized positive or negative impact compared to the other funds in the analysis.

In the water and wastewater impact fee funds, slower absorption means that impact fees will be paid later, thus the financing costs in the water and wastewater impact fee fund are increased. Capital improvements are not paid off until 2020, versus 2018 under the baseline scenario. The result is a 32.6 percent decrease in the cumulative net impact over 25 years, resulting in a \$280,000 impact versus \$416,000 under the baseline scenario.

The slower development of retail results in less cumulative sales tax revenues over 25 years, thus decreasing the primary source of revenues in the streets and streets and open space fund. The reduction in street operations expenditures in the early years is much smaller than the decrease in sales tax revenues. The capital improvements associated with road widening are also shifted back 1 year (2014 to 2016) to be consistent with the timing of development in the alternative absorption schedule. The result is a 5.1 percent lower cumulative net impact over 25 years. However, even with slower absorption, these funds still yield a positive cumulative impact of \$76.1 million over 25 years.

Occupancy

The occupancy rate for office, retail and service uses is set at 90 percent in the baseline, which is consistent with current market trends in the Prescott area. For this portion of the sensitivity analysis, occupancy is adjusted up or down by 10 percent. Thus for the aggressive scenario we assume 100 percent occupancy, and for the conservative scenario we assume 80 percent occupancy for all land uses. The occupancy rate will increase the number of employees well as taxable leases and retail sales. It will not have any impact on variables related to construction such as impact fees.

Increasing the occupancy rate to 100 percent results in a 10.6 percent difference in the cumulative net impact for all funds combined (Figure D-4). The differences are most significant in the streets fund and general fund where sales taxes represent the major source of revenues. While 100 percent occupancy is not realistic from a market perspective, this exercise does illustrate the magnitude of difference that a 10 percent increase in occupancy rates could have on the fiscal impact. Under this scenario, projected employment in 2033 increases from 4,753 to 5,281 compared to the baseline scenario, and taxable sales and leases increase from \$370.5 million in the baseline to \$411.7 million.

**FIGURE D-4
GRANITE DELLS RANCH
OCCUPANCY RATE SENSITIVITY
ANNUAL NET IMPACT BY FUND
CONSTANT DOLLARS**

Year	General Fund		Wtr & WW Operating Funds		Water/WW Impact Fees		Streets, Street & Open Space		Total All Funds*	
	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%
2009	\$5,416	\$5,416	-\$37,739	-\$37,739	-\$511,672	-\$511,672	\$0	\$0	-\$543,996	-\$543,996
2010	\$5,605	\$5,605	-\$67,502	-\$67,502	-\$1,056,059	-\$1,056,059	-\$3,345	-\$3,345	-\$1,121,301	-\$1,121,301
2011	\$131,895	\$142,369	-\$38,574	-\$43,914	-\$856,946	-\$856,946	\$221,854	\$214,718	-\$541,771	-\$543,773
2012	\$10,502	\$22,645	\$12,909	\$10,353	-\$19,296	-\$19,296	\$115,389	\$105,317	\$119,504	\$119,018
2013	\$629,771	\$571,534	\$41,411	\$33,255	\$428,742	\$428,742	\$935,477	\$816,837	\$2,035,401	\$1,850,368
2014	\$737,919	\$655,036	\$43,899	\$35,241	\$484,630	\$484,630	\$1,218,996	\$1,040,958	\$2,485,444	\$2,215,864
2015	\$1,582,794	\$1,375,214	\$56,515	\$45,419	\$723,680	\$723,680	\$2,118,870	\$1,745,953	\$4,481,860	\$3,890,266
2016	\$1,734,940	\$1,457,648	\$34,677	\$27,865	\$575,401	\$575,401	\$2,686,623	\$2,193,436	\$5,031,642	\$4,254,351
2017	\$1,872,977	\$1,547,718	\$12,801	\$10,269	\$253,585	\$253,585	\$2,957,343	\$2,376,236	\$5,096,706	\$4,187,808
2018	\$2,227,231	\$1,820,792	\$3,664	\$2,826	\$258,327	\$258,327	\$3,664,029	\$2,952,974	\$6,153,251	\$5,034,919
2019	\$2,212,657	\$1,795,724	-\$9,411	-\$7,702	\$4,206	\$4,206	\$3,768,933	\$3,019,010	\$5,976,385	\$4,811,239
2020	\$2,352,370	\$1,912,030	-\$7,793	-\$6,288	\$57,953	\$57,953	\$4,097,942	\$3,286,199	\$6,500,472	\$5,249,894
2021	\$2,385,192	\$1,935,560	-\$10,809	-\$8,635	\$5,138	\$5,138	\$4,296,693	\$3,441,361	\$6,676,214	\$5,373,425
2022	\$2,433,867	\$1,975,234	-\$11,050	-\$8,827	\$5,215	\$5,215	\$4,524,523	\$3,623,669	\$6,952,555	\$5,595,291
2023	\$2,482,474	\$2,014,669	-\$11,296	-\$9,024	\$5,294	\$5,294	\$4,762,431	\$3,814,039	\$7,238,903	\$5,824,978
2024	\$2,532,123	\$2,054,962	-\$11,547	-\$9,225	\$5,373	\$5,373	\$5,010,838	\$4,012,809	\$7,536,786	\$6,063,919
2025	\$2,582,765	\$2,096,061	-\$11,804	-\$9,430	\$5,454	\$5,454	\$5,270,183	\$4,220,330	\$7,846,598	\$6,312,414
2026	\$2,634,421	\$2,137,982	-\$12,066	-\$9,640	\$5,535	\$5,535	\$5,540,923	\$4,436,966	\$8,168,812	\$6,570,844
2027	\$2,687,109	\$2,180,742	-\$12,334	-\$9,854	\$5,618	\$5,618	\$5,823,533	\$4,663,099	\$8,503,926	\$6,839,605
2028	\$2,740,851	\$2,224,357	-\$12,608	-\$10,073	\$5,703	\$5,703	\$6,118,508	\$4,899,124	\$8,852,453	\$7,119,111
2029	\$2,795,668	\$2,268,844	-\$12,888	-\$10,296	\$5,788	\$5,788	\$6,426,363	\$5,145,454	\$9,214,931	\$7,409,789
2030	\$2,851,582	\$2,314,221	-\$13,173	-\$10,525	\$5,875	\$5,875	\$6,747,633	\$5,402,517	\$9,591,917	\$7,712,087
2031	\$2,908,613	\$2,360,505	-\$13,465	-\$10,758	\$5,963	\$5,963	\$7,082,878	\$5,670,759	\$9,983,990	\$8,026,469
2032	\$2,966,785	\$2,407,715	-\$13,763	-\$10,996	\$6,053	\$6,053	\$7,432,679	\$5,950,646	\$10,391,753	\$8,353,417
2033	\$3,026,121	\$2,455,869	-\$14,068	-\$11,239	\$6,143	\$6,143	\$7,797,638	\$6,242,660	\$10,815,835	\$8,693,434
Total	\$48,531,649	\$39,738,449	(\$116,016)	(\$126,440)	\$415,702	\$415,702	\$98,616,935	\$79,271,727	\$147,448,270	\$119,299,438
	10.0%	-10.0%	4.5%	-4.1%	0.0%	0.0%	10.9%	-10.9%	10.6%	-10.6%
25 Year NPV	\$30,233,666	\$24,828,390	(\$69,485)	(\$87,208)	(\$3,254)	(\$3,254)	\$59,757,769	\$48,105,702	\$89,918,697	\$72,843,630
	9.8%	-9.8%	-11.5%	11.0%	0.0%	0.0%	10.8%	-10.8%	10.5%	-10.5%

The results for the general fund show a 10.0 percent increase in the cumulative net impact over 25 years. The dip in the net impact in 2012 is simply due to the increase in the amount of office employees in that year from higher occupancy and correspondingly greater expenditures to provide services to those employees prior to additional sales tax revenues from retail development.

For the water and wastewater operating funds there is a 4.5 percent difference in the cumulative net impact over 25 years. These funds are only impacted to the extent that the number of connections is based on employment so there are slightly greater revenues in these funds with the higher level of employment that is implied by 100 percent occupancy.

In the water and wastewater impact fee funds there is no impact since construction costs and square footage do not change.

In the streets and open space fund, the additional sales tax revenues from more retail sales and taxable leases greatly outweigh additional street operations costs associated with higher employment. This results in a 10.9 percent increase in the cumulative net impact in this fund over 25 years.

Decreasing the occupancy rate to 80 percent results in a 10.6 percent decrease in the cumulative net impact for all funds combined. The differences are most significant in the streets fund and general fund where sales taxes represent the major source of revenues. Under this scenario, projected employment in 2033 decreases from 4,753 to 4,225 compared to the baseline scenario, and taxable sales and leases decrease from \$370.5 million to \$329.3 million.

The results for individual funds show the same magnitude of change in cumulative net impact as the increased

occupancy scenario, but in the opposite direction. For example, the impact in the general fund decreased by 10.0 percent instead of increasing by 10.0 percent. The only difference is in the water and wastewater funds where the impact decreased by 4.1 percent because revenues and expenditures do not increase at the same rate in those funds.

Retail Sales

The level of taxable retail sales is set at \$250 per square foot in the baseline. For this portion of the sensitivity analysis, retail sales per square foot are adjusted up or down by 20 percent with no change in the amount of retail square footage. Thus for the aggressive scenario we assume sales per square foot of \$300, and for the conservative scenario we assume \$200 per square foot. Note that these sales per square foot figures represent initial levels and retail sales are inflated over time as are all other revenues. This modification will increase or decrease sales tax revenues in the general fund and streets and open space fund.

Increasing retail sales per square foot to \$300 results in a 16.1 percent difference in the cumulative net impact for all funds combined (Figure D-5). The differences are in the streets fund and general fund where sales taxes represent the major source of revenues.

**FIGURE D-5
GRANITE DELLS RANCH
RETAIL SALES PER SQUARE FOOT SENSITIVITY
ANNUAL NET IMPACT BY FUND
CONSTANT DOLLARS**

Year	General Fund		Wtr & WW Operating Funds		Water/WW Impact Fees		Streets, Street & Open Space		Total All Funds*	
	+20%	-20%	+20%	-20%	+20%	-20%	+20%	-20%	+20%	-20%
2009	\$5,416	\$5,416	-\$37,739	-\$37,739	-\$511,672	-\$511,672	\$0	\$0	-\$543,996	-\$543,996
2010	\$5,605	\$5,605	-\$67,502	-\$67,502	-\$1,056,059	-\$1,056,059	-\$3,345	-\$3,345	-\$1,121,301	-\$1,121,301
2011	\$137,132	\$137,132	-\$41,244	-\$41,244	-\$856,946	-\$856,946	\$218,286	\$218,286	-\$542,772	-\$542,772
2012	\$16,573	\$16,573	\$11,631	\$11,631	-\$19,296	-\$19,296	\$110,353	\$110,353	\$119,261	\$119,261
2013	\$664,306	\$536,999	\$37,333	\$37,333	\$428,742	\$428,742	\$945,058	\$807,257	\$2,075,438	\$1,810,330
2014	\$794,822	\$598,133	\$39,570	\$39,570	\$484,630	\$484,630	\$1,238,537	\$1,021,417	\$2,557,558	\$2,143,749
2015	\$1,679,155	\$1,278,854	\$50,967	\$50,967	\$723,680	\$723,680	\$2,158,814	\$1,706,009	\$4,612,616	\$3,759,510
2016	\$1,869,495	\$1,323,093	\$31,271	\$31,271	\$575,401	\$575,401	\$2,756,461	\$2,123,599	\$5,232,628	\$4,053,364
2017	\$2,024,498	\$1,396,197	\$11,507	\$11,507	\$253,585	\$253,585	\$3,040,870	\$2,292,709	\$5,330,461	\$3,953,998
2018	\$2,415,256	\$1,632,767	\$3,152	\$3,152	\$258,327	\$258,327	\$3,786,859	\$2,830,144	\$6,463,594	\$4,724,390
2019	\$2,404,322	\$1,604,059	-\$8,672	-\$8,672	\$4,206	\$4,206	\$3,898,167	\$2,889,776	\$6,298,023	\$4,489,369
2020	\$2,554,974	\$1,709,426	-\$7,086	-\$7,086	\$57,953	\$57,953	\$4,241,428	\$3,142,714	\$6,847,269	\$4,903,006
2021	\$2,591,825	\$1,728,927	-\$9,722	-\$9,722	\$5,138	\$5,138	\$4,447,560	\$3,290,494	\$7,034,802	\$5,014,838
2022	\$2,644,632	\$1,764,469	-\$9,939	-\$9,939	\$5,215	\$5,215	\$4,683,088	\$3,465,104	\$7,322,997	\$5,224,850
2023	\$2,697,455	\$1,799,689	-\$10,160	-\$10,160	\$5,294	\$5,294	\$4,929,023	\$3,647,447	\$7,621,612	\$5,442,269
2024	\$2,751,403	\$1,835,682	-\$10,386	-\$10,386	\$5,373	\$5,373	\$5,185,800	\$3,837,847	\$7,932,190	\$5,668,515
2025	\$2,806,431	\$1,872,395	-\$10,617	-\$10,617	\$5,454	\$5,454	\$5,453,872	\$4,036,641	\$8,255,139	\$5,903,872
2026	\$2,862,559	\$1,909,843	-\$10,853	-\$10,853	\$5,535	\$5,535	\$5,733,710	\$4,244,179	\$8,590,951	\$6,148,705
2027	\$2,919,811	\$1,948,040	-\$11,094	-\$11,094	\$5,618	\$5,618	\$6,025,804	\$4,460,828	\$8,940,138	\$6,403,393
2028	\$2,978,207	\$1,987,001	-\$11,341	-\$11,341	\$5,703	\$5,703	\$6,330,665	\$4,686,967	\$9,303,234	\$6,668,330
2029	\$3,037,771	\$2,026,741	-\$11,592	-\$11,592	\$5,788	\$5,788	\$6,648,825	\$4,922,992	\$9,680,792	\$6,943,929
2030	\$3,098,526	\$2,067,276	-\$11,849	-\$11,849	\$5,875	\$5,875	\$6,980,836	\$5,169,314	\$10,073,388	\$7,230,616
2031	\$3,160,497	\$2,108,621	-\$12,112	-\$12,112	\$5,963	\$5,963	\$7,327,275	\$5,426,362	\$10,481,624	\$7,528,835
2032	\$3,223,707	\$2,150,794	-\$12,380	-\$12,380	\$6,053	\$6,053	\$7,688,741	\$5,694,583	\$10,906,121	\$7,839,050
2033	\$3,288,181	\$2,193,810	-\$12,654	-\$12,654	\$6,143	\$6,143	\$8,065,858	\$5,974,441	\$11,347,529	\$8,161,740
Total	\$52,632,557	\$35,637,541	(\$121,510)	(\$121,510)	\$415,702	\$415,702	\$101,892,546	\$75,996,116	\$154,819,295	\$111,927,849
	19.3%	-19.3%	0.0%	0.0%	0.0%	0.0%	14.6%	-14.6%	16.1%	-16.1%
25 Year NPV	\$32,768,803	\$22,293,254	(\$78,553)	(\$78,553)	(\$3,254)	(\$3,254)	\$61,711,593	\$46,151,877	\$94,398,590	\$68,363,325
	19.0%	-19.0%	0.0%	0.0%	0.0%	0.0%	14.4%	-14.4%	16.0%	-16.0%

The results for the general fund show a 19.3 percent difference in the cumulative net impact over 25 years. The annual percent difference from the baseline scenario grows as the amount of retail development increases.

In the streets and open space fund, the additional sales tax revenues from higher retail sales results in a 14.6 percent increase in the cumulative net impact in this fund over 25 years.

There is no impact in the water and wastewater operating or impact fee funds since construction costs, square footage and number of connections do not change.

Decreasing retail sales per square foot to \$200 results in a 16.1 percent decrease in the cumulative net impact for all funds combined. The differences are in the streets fund and general fund where sales taxes represent the major source of revenues.

The results for individual funds show the same magnitude of change in cumulative net impact as the increased retail sales scenario, but in the opposite direction. For example, the impact in the general fund decreased by 19.3 percent instead of increasing by 19.3 percent.

Infrastructure Costs

Infrastructure cost estimates in the baseline scenario are based on the best available current information. However, it is possible that materials costs could change resulting in increased costs, or other factors could change that may result in a decreased cost. For the purpose of the sensitivity analysis, transportation and water and wastewater infrastructure costs are adjusted up or down by 10 percent. For the higher scenario this means that the cost of transportation improvements would be \$605,000 and the total cost of water and wastewater improvements would be \$2.6 million. For the lower scenario this means that the cost of transportation improvements would be \$495,000 and the total cost of water and wastewater improvements would be \$2.2 million. Transportation improvements are scheduled in 2015 thru 2017 and are paid for through the streets and open space fund. Water and wastewater improvements are spread across the water operating fund and the water and wastewater impact fee funds in 2009 through 2011.

Increasing the infrastructure costs by 10 percent results in only a 0.5 percent decrease in the cumulative net impact for all funds combined (Figure D-6). There is no impact in the general fund. In the other funds the percentage difference from the baseline, although relatively high in some cases, is somewhat misleading because the magnitude of the impact is relatively small.

**FIGURE D-6
GRANITE DELLS RANCH
INFRASTRUCTURE COST SENSITIVITY
ANNUAL NET IMPACT BY FUND
CONSTANT DOLLARS**

Year	General Fund		Wtr & WW Operating Funds		Water/WW Impact Fees		Streets, Street & Open Space		Total All Funds*	
	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%	+10%	-10%
2009	\$5,416	\$5,416	-\$41,513	-\$33,965	-\$562,840	-\$460,505	\$0	\$0	-\$598,937	-\$489,055
2010	\$5,605	\$5,605	-\$74,252	-\$60,752	-\$1,161,665	-\$950,453	-\$3,345	-\$3,345	-\$1,233,658	-\$1,008,945
2011	\$137,132	\$137,132	-\$47,806	-\$34,682	-\$976,331	-\$737,561	\$218,286	\$218,286	-\$668,718	-\$416,825
2012	\$16,573	\$16,573	\$11,631	\$11,631	-\$34,540	-\$4,052	\$110,353	\$110,353	\$104,017	\$134,505
2013	\$600,652	\$600,652	\$37,333	\$37,333	\$412,657	\$444,828	\$876,157	\$876,157	\$1,926,799	\$1,958,970
2014	\$696,478	\$696,478	\$39,570	\$39,570	\$467,656	\$501,603	\$1,129,977	\$1,129,977	\$2,333,681	\$2,367,627
2015	\$1,479,004	\$1,479,004	\$50,967	\$50,967	\$705,770	\$741,590	\$1,901,620	\$1,963,202	\$4,137,362	\$4,234,764
2016	\$1,596,294	\$1,596,294	\$31,271	\$31,271	\$556,503	\$594,300	\$2,428,731	\$2,451,328	\$4,612,799	\$4,673,194
2017	\$1,710,348	\$1,710,348	\$11,507	\$11,557	\$233,643	\$268,311	\$2,652,739	\$2,680,840	\$4,608,237	\$4,671,056
2018	\$2,024,012	\$2,024,012	\$3,152	\$3,320	\$238,171	\$263,967	\$3,307,660	\$3,309,344	\$5,572,994	\$5,600,642
2019	\$2,004,191	\$2,004,191	-\$8,672	-\$8,464	-\$6,678	\$9,930	\$3,393,117	\$3,394,827	\$5,381,958	\$5,400,484
2020	\$2,132,200	\$2,132,200	-\$7,086	-\$7,004	\$46,637	\$63,763	\$3,691,203	\$3,692,938	\$5,862,955	\$5,881,897
2021	\$2,160,376	\$2,160,376	-\$9,722	-\$9,722	-\$4,472	\$11,036	\$3,868,147	\$3,869,908	\$6,014,329	\$6,031,598
2022	\$2,204,550	\$2,204,550	-\$9,939	-\$9,939	-\$4,719	\$11,201	\$4,073,202	\$4,074,990	\$6,263,095	\$6,280,803
2023	\$2,248,572	\$2,248,572	-\$10,160	-\$10,160	-\$4,979	\$11,369	\$4,287,328	\$4,289,142	\$6,520,760	\$6,538,923
2024	\$2,293,542	\$2,293,542	-\$10,386	-\$10,386	-\$5,254	\$11,540	\$4,510,903	\$4,512,744	\$6,788,804	\$6,807,440
2025	\$2,339,413	\$2,339,413	-\$10,617	-\$10,617	-\$5,544	\$11,713	\$4,744,322	\$4,746,191	\$7,067,573	\$7,086,700
2026	\$2,386,201	\$2,386,201	-\$10,853	-\$10,853	-\$5,850	\$11,889	\$4,987,996	\$4,989,893	\$7,357,494	\$7,377,130
2027	\$2,433,925	\$2,433,925	-\$11,094	-\$11,094	-\$6,173	\$12,067	\$5,242,353	\$5,244,279	\$7,659,011	\$7,679,177
2028	\$2,482,604	\$2,482,604	-\$11,341	-\$11,341	-\$6,514	\$12,248	\$5,507,839	\$5,509,793	\$7,972,588	\$7,993,305
2029	\$2,532,256	\$2,532,256	-\$11,592	-\$11,592	-\$6,874	\$12,432	\$5,784,916	\$5,786,900	\$8,298,706	\$8,319,996
2030	\$2,582,901	\$2,582,901	-\$11,849	-\$11,849	-\$7,253	\$12,618	\$6,074,068	\$6,076,082	\$8,637,867	\$8,659,752
2031	\$2,634,559	\$2,634,559	-\$12,112	-\$12,112	-\$7,654	\$12,808	\$6,375,797	\$6,377,841	\$8,990,591	\$9,013,096
2032	\$2,687,250	\$2,687,250	-\$12,380	-\$12,380	-\$8,076	\$13,000	\$6,690,625	\$6,692,699	\$9,357,419	\$9,380,570
2033	\$2,740,995	\$2,740,995	-\$12,654	-\$12,654	-\$8,522	\$13,195	\$7,019,096	\$7,021,202	\$9,738,916	\$9,762,738
Total	\$44,135,049	\$44,135,049	(\$138,596)	(\$103,916)	(\$162,903)	\$892,835	\$88,873,090	\$89,015,572	\$132,706,640	\$133,939,540
	0.0%	0.0%	-14.1%	14.5%	-139.2%	114.8%	-0.1%	0.1%	-0.5%	0.4%
25 Year NPV	\$27,531,028	\$27,531,028	(\$94,584)	(\$62,150)	(\$466,596)	\$397,911	\$53,878,010	\$53,985,461	\$80,847,858	\$81,852,250
	0.0%	0.0%	20.4%	-20.9%	14240.5%	-12329.5%	-0.1%	0.1%	-0.7%	0.6%

The water and wastewater operating funds show a difference of 14.1 percent; however the magnitude of the difference in dollar terms is only about \$17,000 over 25 years. With the water and wastewater impact fee funds, there is a 139.2 percent decrease in the cumulative net impact over 25 years, since this is the fund where most of the water and wastewater infrastructure costs are allocated. In terms of actual dollars the difference in the cumulative net impact is about \$579,000 over 25 years.

The streets and open space fund also includes some infrastructure costs associated with the annexation area. Increasing those costs by 10 percent results in a 0.1 percent lower cumulative net impact over 25 years, amounting to only about \$71,000.

Decreasing infrastructure costs by 10 percent results in a 0.4 percent increase in the cumulative net impact for all funds combined. The results for individual funds show the same magnitude of change in cumulative net impact as the increased infrastructure cost scenario, but in the opposite direction except for the water and wastewater impact fee funds due to the difference in interest earned versus finance costs.

Water and Wastewater Impact Fee Revenues

Water and wastewater impact fee estimates in the baseline scenario are based on the best available current information. However, since the actual impact fees are based on meter size and it is impossible to know the number of tenants and their meter sizes at this point, there is significant potential for variation in impact fee revenues. For the purpose of the sensitivity analysis water resource fees, water system impact fees and wastewater system impact fees are adjusted up or down by 25 percent. For the higher scenario this means that \$8.1 million in impact fee revenues would be collected between 2011 and 2020, and for the lower scenario total impact fee revenues would be only \$4.6 million.

Increasing the impact fee revenues by 25 percent results in only a 1.0 percent increase in the cumulative net impact for all funds combined, but a 308.4 percent increase in cumulative net impacts in the water and wastewater impact fee fund, or about \$1.3 million (Figure D-7). There are no impacts on any other funds.

**FIGURE D-7
GRANITE DELLS RANCH
IMPACT FEE SENSITIVITY
ANNUAL NET IMPACT BY FUND
CONSTANT DOLLARS**

Year	General Fund		Wtr & WW Operating Funds		Water/WW Impact Fees		Streets, Street & Open Space		Total All Funds*	
	+25%	-25%	+25%	-25%	+25%	-25%	+25%	-25%	+25%	-25%
2009	\$5,416	\$5,416	-\$37,739	-\$37,739	-\$511,672	-\$511,672	\$0	\$0	-\$543,996	-\$543,996
2010	\$5,605	\$5,605	-\$67,502	-\$67,502	-\$1,056,059	-\$1,056,059	-\$3,345	-\$3,345	-\$1,121,301	-\$1,121,301
2011	\$137,132	\$137,132	-\$41,244	-\$41,244	-\$772,721	-\$941,171	\$218,286	\$218,286	-\$458,547	-\$626,997
2012	\$16,573	\$16,573	\$11,631	\$11,631	\$13,990	-\$52,582	\$110,353	\$110,353	\$152,547	\$85,975
2013	\$600,652	\$600,652	\$37,333	\$37,333	\$576,141	\$281,343	\$876,157	\$876,157	\$2,090,283	\$1,795,485
2014	\$696,478	\$696,478	\$39,570	\$39,570	\$648,220	\$321,039	\$1,129,977	\$1,129,977	\$2,514,245	\$2,187,063
2015	\$1,479,004	\$1,479,004	\$50,967	\$50,967	\$949,376	\$497,985	\$1,932,411	\$1,932,411	\$4,411,759	\$3,960,367
2016	\$1,596,294	\$1,596,294	\$31,271	\$31,271	\$766,499	\$384,304	\$2,440,030	\$2,440,030	\$4,834,094	\$4,451,899
2017	\$1,710,348	\$1,710,348	\$11,507	\$11,507	\$342,162	\$140,333	\$2,666,790	\$2,666,790	\$4,730,807	\$4,528,978
2018	\$2,024,012	\$2,024,012	\$3,152	\$3,152	\$336,834	\$141,803	\$3,308,502	\$3,308,502	\$5,672,499	\$5,477,468
2019	\$2,004,191	\$2,004,191	-\$8,672	-\$8,672	\$19,392	-\$43,866	\$3,393,972	\$3,393,972	\$5,408,882	\$5,345,624
2020	\$2,132,200	\$2,132,200	-\$7,086	-\$7,086	\$86,787	-\$6,025	\$3,692,071	\$3,692,071	\$5,903,972	\$5,811,160
2021	\$2,160,376	\$2,160,376	-\$9,722	-\$9,722	\$20,984	-\$46,620	\$3,869,027	\$3,869,027	\$6,040,666	\$5,973,061
2022	\$2,204,550	\$2,204,550	-\$9,939	-\$9,939	\$21,299	-\$49,194	\$4,074,096	\$4,074,096	\$6,290,007	\$6,219,514
2023	\$2,248,572	\$2,248,572	-\$10,160	-\$10,160	\$21,618	-\$51,909	\$4,288,235	\$4,288,235	\$6,548,265	\$6,474,738
2024	\$2,293,542	\$2,293,542	-\$10,386	-\$10,386	\$21,943	-\$54,774	\$4,511,823	\$4,511,823	\$6,816,922	\$6,740,205
2025	\$2,339,413	\$2,339,413	-\$10,617	-\$10,617	\$22,272	-\$57,798	\$4,745,256	\$4,745,256	\$7,096,324	\$7,016,254
2026	\$2,386,201	\$2,386,201	-\$10,853	-\$10,853	\$22,606	-\$60,989	\$4,988,945	\$4,988,945	\$7,386,899	\$7,303,304
2027	\$2,433,925	\$2,433,925	-\$11,094	-\$11,094	\$22,945	-\$64,355	\$5,243,316	\$5,243,316	\$7,689,092	\$7,601,792
2028	\$2,482,604	\$2,482,604	-\$11,341	-\$11,341	\$23,289	-\$67,907	\$5,508,816	\$5,508,816	\$8,003,369	\$7,912,172
2029	\$2,532,256	\$2,532,256	-\$11,592	-\$11,592	\$23,639	-\$71,656	\$5,785,908	\$5,785,908	\$8,330,211	\$8,234,916
2030	\$2,582,901	\$2,582,901	-\$11,849	-\$11,849	\$23,993	-\$75,611	\$6,075,075	\$6,075,075	\$8,670,120	\$8,570,516
2031	\$2,634,559	\$2,634,559	-\$12,112	-\$12,112	\$24,353	-\$79,785	\$6,376,819	\$6,376,819	\$9,023,619	\$8,919,481
2032	\$2,687,250	\$2,687,250	-\$12,380	-\$12,380	\$24,718	-\$84,189	\$6,691,662	\$6,691,662	\$9,391,251	\$9,282,343
2033	\$2,740,995	\$2,740,995	-\$12,654	-\$12,654	\$25,089	-\$88,836	\$7,020,149	\$7,020,149	\$9,773,580	\$9,659,655
Total	\$44,135,049	\$44,135,049	(\$121,510)	(\$121,510)	\$1,697,697	(\$1,698,193)	\$88,944,331	\$88,944,331	\$134,655,567	\$131,259,677
	0.0%	0.0%	0.0%	0.0%	308.4%	-508.5%	0.0%	0.0%	1.0%	-1.6%
25 Year NPV	\$27,531,028	\$27,531,028	(\$78,553)	(\$78,553)	\$988,063	(\$1,482,306)	\$53,931,735	\$53,931,735	\$82,372,274	\$79,901,905
	0.0%	0.0%	0.0%	0.0%	-30467.4%	45457.6%	0.0%	0.0%	1.2%	-1.8%

Decreasing infrastructure costs by 25 percent results in a 1.6 percent decrease in the cumulative net impact for all funds combined, but a 508.5 percent decrease in the net impact in the water and wastewater impact fee funds resulting in a \$1.7 million shortfall over 25 years. Under this scenario there would not be sufficient impact fee revenues to cover required infrastructure costs based on fees from this annexation alone.

Note that the magnitude of the difference in the impacts for the increased impact fee revenue scenario and the decreased impact fee revenue scenario results from the fact that with increased impact fees, the fund carries a positive ending balance from 2021 forward and thus accumulates interest. Under the decreased fee scenario, finance charges accumulate throughout the 25 year period. Finance charges accumulate at a rate of 5.52 percent, where as interest is earned at a rate of only 1.5 percent.

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