RUTGERS
Edward J. Bloustein School
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SANTA FE COUNTY

NEW MEXICO

FISCAL AND COSTS-OF-SPRAWL IMPACTS OF 2010–2030 PROJECTED GROWTH ON THE COUNTY OF SANTA FE AND SANTA FE COUNTY/OTHER PUBLIC SCHOOL DISTRICTS

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SANTA FE COUNTY, NEW MEXICO

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Part A

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INTRODUCTION AND OVERVIEW

INTRODUCTION

The United States is barely coming out of the greatest recession in its history. On September 20, 2010, the National Bureau of Economic Research indicated that the 18-month recession that began in December 2007 ended in June 2009. More than 8 million jobs have been lost nationally from the end of 2007 through the end of 2009, and housing starts are at about one-quarter of their normal levels. Nonresidential construction is below 20 percent of its normal level. Together, the component parts of the construction industry (residential and nonresidential) are performing at levels not seen since the 1940s. Nationwide, slightly less than one-half of the housing units offered for sale comprise troubled properties, properties that are in tax lien, pre-foreclosure, foreclosure, or sheriff's sale.

Median housing prices nationwide are down 21 percent since 2007. There is a 9.5 percent delinquency on all mortgages, and 4.5 percent of all mortgaged houses are in the foreclosure process. This means that 14 percent of all mortgaged properties (46.5 million), or 6.5 million properties, may become delinquent.

For commercial real estate, 2009 and the first nine months of 2010 reflect a lack of financing for projects. Money for projects that have been stalled for two years is just beginning to loosen up. Nonresidential mortgage money is up 12 percent from 2008.

The State of New Mexico is usually less hard-hit in times of recession. As of March 2010, New Mexico overall unemployment rate was 8.8 percent compared with a national average unemployment rate of 9.7 percent. Yet, there were indications that New Mexico was in a much deeper recession earlier in 2009 than originally thought. New Mexico lost 3, 4, and 5 percent of its job base during the first three-quarters of 2009, respectively. In the last two quarters there were more significant declines (by 10–20 percent) than experienced by the nation as a whole. These figures increased for the last quarter of 2009 and the first quarter of 2010. For the first quarter of 2010 unemployment was stated as above—8.8 percent for New Mexico and 9.7 percent for the nation as a whole. The Santa Fe MSA unemployment numbers were about 10 percent less severe than those for the State of New Mexico in 2008; the Santa Fe MSA numbers were 10 percent higher than those of the State of New Mexico in 2009.

Thus, New Mexico's economy is tracking very close to the national economy and has performed this way largely from the first quarter of 2009 to the first quarter of 2010. The Santa Fe MSA is now also following the nation's unemployment trends in a quicker way than the State of New Mexico. This has implications for the finances of the State of New Mexico and also on the finances of Santa Fe County.

The national recession will have the following effects on New Mexico and the Santa Fe County Metropolitan Area:

1) GRT revenues will be significantly reduced due to fewer employees and less GRT per worker, and significantly less retail sales as a major contributor.
2) Property tax revenues will be less due to reduced property values and buyers' diminished ability to purchase.
3) State shared revenues; fees, fines and permits, interest on earnings – all will be down.

Conversely, there will be expenses that continue to increase. These are:

1) Legal fees
2) Health insurance costs
3) Corrections expenditure increases
4) Fire Department expenditure increases

Further, as one moves forward in the fiscal analysis it will become clear that residential development will occasion more negative impacts, and nonresidential development will occasion more positive impacts. Further, often mixed-use development in the City of Santa Fe produces relatively positive impacts compared with largely residential development at the periphery of the Unincorporated Area of the County.

OVERVIEW

The fiscal analysis that follows is an intensive and in-depth look at the impact of 2010 to 2030 growth on the County of Santa Fe. Development is planned for the City of Santa Fe as well as for the Unincorporated County. Different amounts of development take place in five-year increments in sustainable development areas (SDAs) as well as multiple growth management areas (GMAs) of the Unincorporated County and in the City of Santa Fe.

This analysis looks not only at the County but also the Santa Fe Public School (SFPS) District and other local school districts. The analysis provides answers to questions about the public school system's fiscal prosperity subsequent to projected growth.

The fiscal analysis individually projects general fund, special fund, capital fund, debt service fund, and enterprise fund costs. It also projects selected revenues to each of these funds. These revenues are the gross receipts tax (employment-based, local retail, resident spending, business spending, regional retail, construction spending [during

buildout and beyond], and utilities); the property (ad valorem) tax; building permit/plan-review revenues; franchise tax; lodging tax; fees, fines, and interest earnings; and so on.

The analysis looks at full development by SDA/GMA and projects costs and revenues throughout a 20-year buildout.

Finally, the fiscal analysis includes a look at the sprawl savings that will accrue to projected development as a result of its mixed-use and compact-development orientation. The projected growth must meet considerable tests and formidable reviews before it goes forward. Development will be guided by the Sustainable Growth Management Plan (SGMP) and the Sustainable Growth Management Code (SGMC).

Part B

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BACKGROUND

BACKGROUND—COUNTY OF SANTA FE

The County of Santa Fe, New Mexico, contains approximately 8 percent (147,532) of the population of the state (1,875,000). Since 1990, Santa Fe has been growing at a rate of 2.6 percent per year, or about 1.5 times of the rate of the State of New Mexico. In 1990, Santa Fe County's population was 98,928; in 2000, it was 129,292; in 2009, 147,532—an increase of 49 percent over the 19-year period. New Mexico's 1990 population was 1,515,069; in 2000, it was 1,819,046; in 2003, it was 1,874,614; and in 2009, it is 2,009,671, an increase of 33 percent over the 19-year period. Santa Fe County's population growth is about 120 percent higher than the U.S. average growth rate (1.17 percent); New Mexico's state growth is close to 50 percent higher than the U.S. average (figure 1). New Mexico's economy has grown steadily since 2004.

Santa Fe County is growing in both population and labor force. The fastest-growing age groups are the prime working-age groups: 25–44 and 45–64 years of age. The county has an estimated labor force of 78,507 in 2008; labor force is concentrated in state and local government, healthcare, and retail sectors. In 2009, Santa Fe County realized $2.3 billion in retail sales, or about $15,700 per capita.

In 2008, more than 85 percent of the county's population (age 25 and over) had graduated from high school; 38 percent had a bachelor's degree or higher. These figures are 10 percent and 40 percent higher, respectively, than statewide averages. Median household income in Santa Fe County is $53,911 (2008); median housing value (owner occupied) is $296,500. Over 70 percent of local households (63,603 in 2008) live in ownership housing. In the County of Santa Fe, only 14 percent of the population falls below the poverty level. This is 20 percent below the United States average and 50 percent less than the average for the state of New Mexico.

In 2010, the Santa Fe metropolitan region is in a relatively good place economically. Unemployment, as of March 2010, is at 7.7 percent compared to 5.7 percent one year ago; this figure is up slightly from February (7.6 percent). While unemployment has risen in the past year, it is still well below the 2010 state percentage for the period (9.0) and most neighboring states (Arizona, 9.4; Colorado, 8.4; Texas, 8.2). Santa Fe County's residential and nonresidential sectors are both growing slightly, yet the base from which growth is taking place is strong. Future growth must continue if not accelerate these trends. This could happen if the increment of growth were of sufficient scale that development could take place in a form that is more center oriented (around the City and other centers) than typical development locally and one that offers a variety of housing types to encourage more vibrant central areas accessed by both biking and walking.

	County of Santa Fe	*State of New Mexico*
Population (2009)	147,532	2,009,671
Population (2000)	129,292	1,819,046
Population (1990)	98,928	1,514,069
Population Change (%, 1990–2000)	14.1%	10.5%
Population Change (%, 1990–2009)	49.1%	32.6%
Employment (2008)	78,507	951,391
Establishments (2007)	15,507	123,567
Retail Sales (2002)	$1,809,469,000	$18,328,637,000
High School Graduate (2008)	85%	82%
Bachelor's Degree or Higher (2008)	38%	25%
Median Housing Value (2008)	$296,500	$154,900
Median Household Income (2008)	$53,911	$43,202
Percentage of Population Below Poverty Level (2008)	14%	18%

Figure 1. ***Socioeconomic characteristics of the County of Santa Fe, New Mexico, 1990 - 2009***

Projected Growth for Santa Fe County

Over the period 2010 to 2030 there will be development in Santa Fe County of about 24,000 dwelling units and 11,333 employees. Of the above dwelling-unit growth, 12,195 units will be in the Unincorporated Area and 11,715 will be in the City of Santa Fe (Urbanized Area).[1] Of the 11,333 jobs, 3,534 will be in the Unincorporated Area and 7,799 will be in the City of Santa Fe. Thus, 51 percent of the projected dwelling units and 31 percent of the projected employment will be in the Unincorporated Area of the county; 49 percent of the dwelling units and 69 percent of the jobs will be in the City of Santa Fe.

The development of the future is divided into three periods. The first period is seven years; the second period is seven years; and the third period is six years. These periods of development correspond to development within Sustainable Development Areas of which there are also three. SDA 1 involves development of areas immediate to the City; SDA 2 involves development somewhat farther out; SDA 3 involves primarily the rural outlying areas of the County. These are shown on the map (figure 2).

[1] City of Santa Fe (Urbanized Area): An area including the City of Santa Fe; a small area immediately surrounding the City of Santa Fe; and a small area in the north of the County around Española. For the most part, it will be referred to as the City of Santa Fe (Urbanized Area).

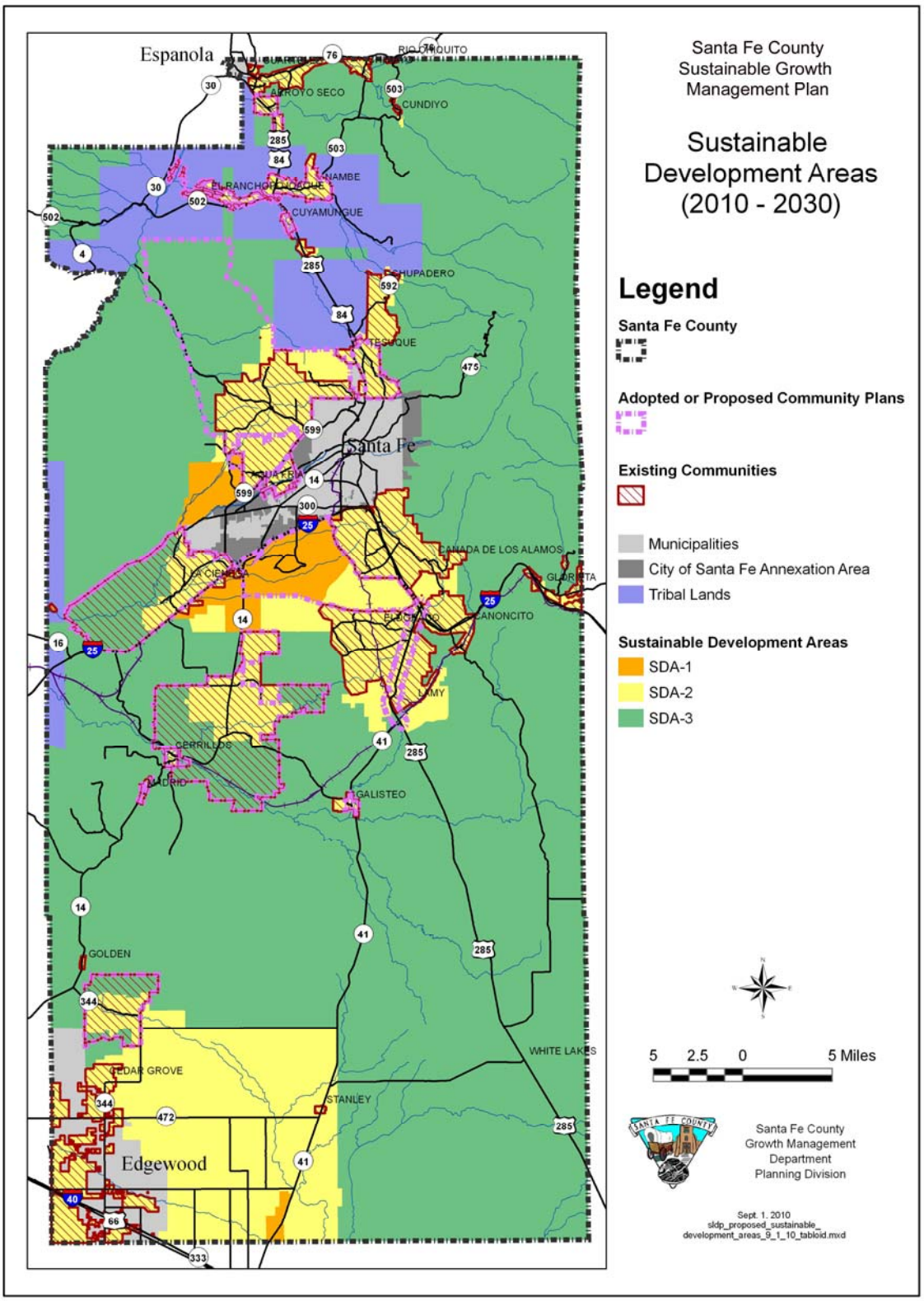

Figure 2. ***Location of the SDAs in Santa Fe, New Mexico***

SDA-1

In SDA-1, the area closest to Santa Fe City, there will be 6,955 residential units (15,546 persons) and 1,987 employees occupying about 953,000 square feet of commercial space. Most of this development will take place during the first seven years of a 20-year growth projection. This represents approximately 57 percent of the residential development in the Unincorporated Area and 59 percent of the nonresidential development of the Unincorporated Area. All of the development in SDAs 1-3 is outside of the City of Santa Fe Urbanized Area in the Unincorporated Area of the County.

SDA-2

In SDA-2, there will be 4,437 residential units (9,297 persons) and 1,237 employees occupying 537,300 square feet of commercial and industrial space. Much but not all of this development will take place between years 8 and 15 of a 20-year growth projection. This represents approximately 36 percent of the residential development in the Unincorporated Area and 37 percent of the nonresidential development of the Unincorporated Area.

SDA-3

In SDA-3, there will be 804 residential units (1,701 persons) and 143 employees occupying 72,600 square feet of commercial and industrial space. Much but not all of this development will take place between years 16 and 20 of the 20-year growth projection. This represents approximately 7 percent of the residential development in the Unincorporated Area and 4 percent of the nonresidential development of the Unincorporated Area.

Projected Growth for the City of Santa Fe

Development in the City of Santa Fe Urbanized Area will also take place in phases: of the projected 11,715 residential units (22,460 persons), 6,677 residential units will take place during the next 7 years (12,802 persons); 4,217 residential units will take place from year 8 to year 14 (8,086 persons); and 820 residential units will take place from year 15 through year 20 (1,572 persons). Similarly, of the 7,799 jobs occupying 3,375,600 square feet to grow over the 20-year period, 4,600 jobs occupying 1,991,604 square feet will take place during the first 7 years; 2,886 jobs occupying 1,248,972 square feet will take place during years 8 to 14; and 312 jobs occupying 135,024 square feet will take place from years 15 through 20.

Summary

Overall, projected growth in Santa Fe County offers both higher density and more compact development than was previously found in conventional development in the County. Future growth is 2.52 times more dense than existing development in the County of Santa Fe (6,300 versus 2,500 persons per square mile). In addition, future growth involves considerable nonresidential development. This represents 13.8 percent of total property value. Density, mixed use, staging, and integration of development distinguish future growth from conventional development and residential annexation. Given the above, future growth should have reasonably significant fiscal and non-sprawl advantages vis-à-vis conventional development. One would expect both positive fiscal revenues and land/infrastructure savings associated with projected future growth.

Part C

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EXECUTIVE SUMMARY: FISCAL IMPACTS OF 2010–2030 PROJECTED GROWTH ON THE COUNTY OF SANTA FE AND SANTA FE COUNTY'S PUBLIC SCHOOLS

EXECUTIVE SUMMARY—FISCAL IMPACTS (Parts I.A and I.B)

Development Composition

The purpose of this analysis is to view the fiscal impact of twenty years of growth projections on the County of Santa Fe. Fiscal impact analysis answers the basic questions of the annual county and school district general fund costs as well as other fund costs and a variety of revenues related to projected growth.

Fiscal impact analysis first sets the development context and then projects the public service *costs and revenues* that will accrue from growth. *Costs and revenues* generated to the school districts (Santa Fe, Española, Moriarty, and Pojoaque Public Schools) as a result of the growth are also calculated. The final product is a numerical comparison of total public costs and revenues generated by the projected growth to each of the public service providers: county and school districts. This is the net fiscal impact of the projected growth on the County of Santa Fe and Santa Fe County's Public School Districts. This fiscal impact analysis is completed with the full percentage of gross receipts and property tax revenues going to meet the expenses of the County.

Development Context

As is the case for all local jurisdictions in New Mexico, in 2010, the County of Santa Fe and the Santa Fe County's Public Schools do not rely heavily on the local property tax base to fund local services. Only 7.1 percent of County revenues and about 0.6 percent of school district revenues come from the property tax.

Throughout its history, the County of Santa Fe has experienced the fiscal challenges brought about by cyclical fluctuations of the gross receipts tax. Susceptible to national and regional recessions, the gross receipts tax as a source of County finance is not the most dependable of revenues. Yet, despite this revenue source, the State of New Mexico and the County of Santa Fe as a whole are in relatively good financial condition. As indicated earlier, however, the national recession has impacted Santa Fe County more severely than originally envisioned.

Persons/Students/Employees of the Projected Growth For Santa Fe County (Summary Exhibit 1)

The 2010–2030 growth projections will add approximately 49,000 persons to a 2010 Santa Fe County population of approximately 149,000—an increase of about 33 percent to the current population. Projected growth will add approximately 9,301 students to the County school-age population of about 28,000 students, an increase of 33.2 percent. The projected growth will add approximately 11,165 full-time employees to the County. This amounts to 17.4 percent of the current 64,250 employees in the County of Santa Fe. Thus, persons and students will be added to Santa Fe County at almost double the rate of employee additions. This obviously has implications for future fiscal impacts.

PERSONS, STUDENTS, AND EMPLOYEES— COUNTY OF SANTA FE (SUMMARY EXHIBIT 1)

Development Scenario/County	*Persons*	*Students*	*Employees*
2010–2030 Projected Growth	49,003	9,301	11,165
County of Santa Fe (2010)	149,000	28,000	64,250
Development Percentage of County	32.9%	33.2%	17.4%

Tax Base of the Projected 2010–2030 Growth and the County of Santa Fe (Summary Exhibit 2)

Projected growth for the period 2010–2030 will have a market value of about $11.675 billion and will add approximately $3.840 billion in assessed valuation. (As of 2010-2011, properties in the County of Santa Fe are assessed at about one-third [0.3333] of market value.) Due to the greater value of new development in the County versus older development, 2010–2030 growth represents a ratable addition of about 58 percent to Santa Fe County's total assessed valuation of approximately $6.6 billion.

TAX BASE—MARKET AND ASSESSED VALUES—
2010–2030 PROJECTED GROWTH ON THE COUNTY OF SANTA FE
(SUMMARY EXHIBIT 2)

Development Scenario/County	*Market Value (2010 $)*	*Assessed Value (2010 $)*
2010–2030 Projected Growth	$11,675,307,462	$3,840,057,385
County of Santa Fe	$20,167,368,534.55	$6,633,131,738
Market and Assessed Value of Growth as a Percentage of Total Value in the County	57.9%	57.9%

PART I.A/I.B: SANTA FE COUNTY AND SCHOOL DISTRICTS

Part I.A — Costs and Revenues of 2010–2030 Projected Growth on the County of Santa Fe (Summary Exhibit 3)

The 2010–2030 projected growth will add considerable new persons and employees to the County of Santa Fe. Additional county services will be required and costs incurred (for operating and capital debt service purposes) to meet the needs of these new persons and employees. In brief, at the end of the projected growth period, the growth will occasion about $18.5 million in annual County general expenditures and will generate $24.5 million in annual County general fund revenues, for a net positive fiscal impact of about $60 million annually. It will also incur, after full development, $62.6 million in annual costs to all funds and return $64.9 million in annual all fund revenues. The fiscal impact to all funds is a positive $2.3 million annually.

THE IMPACT OF 2010–2030 PROJECTED GROWTH
ON THE COUNTY OF SANTA FE
(SUMMARY EXHIBIT 3)

Criterion To Be Met: County of Santa Fe	*Annual Costs (2010$)*	*Annual Revenues (2010$)*	*ANNUAL NET FISCAL IMPACT (2010$)*
Fiscal Impacts (General Fund)	$18,495,680	$24,446,991	+ $5,951,311
Fiscal Impacts (All Funds)	$62,561,670	$64,882,371	+ $2,320,701

Part I.B — Costs and Revenues of 2010–2030 Projected Growth on Santa Fe County and Other Public School Districts (Summary Exhibit 4)

Future public costs to the Santa Fe and other public school districts amount to $108.3 million annually compared with $121.1 million in future public revenues. This produces an annual fiscal surplus to the combined school districts of almost $12.8 million. Each of the individual school districts is positive fiscally in the future, as will be shown in the full analysis to follow.

SANTA FE AND OTHER PUBLIC SCHOOL DISTRICTS' COSTS/REVENUES— NET FISCAL IMPACT OF 2010–2030 GROWTH ON THE COUNTY OF SANTA FE'S SCHOOL DISTRICTS (SUMMARY EXHIBIT 4)

Criterion To Be Met: Santa Fe and Other Public Schools	*Annual Costs (2010$)*	*Annual Revenues (2010$)*	*ANNUAL NET FISCAL IMPACT (2010$)*
Fiscal Impacts (General Operating)	$54,308,208	$55,910,320	+ $2,219,194
Fiscal Impacts (All Funds)	$108,342,719	$121,108,661	+ $12,765,942

SUMMARY: PARTS I.A AND I.B:

Net Fiscal Impact of the Projected Growth 2010–2030 (Summary Exhibit 5)

The net fiscal impact of projected development represents the difference between the growth-generated service costs and growth-contributed revenues. These are shown below for the projected growth period 2010–2030 in Santa Fe County.

PROJECTED ANNUAL NET FISCAL IMPACT
(SUMMARY EXHIBIT 5)

County of Santa Fe: Fiscal Impacts	General Fund (Annual)	All Funds (Annual)
Costs	$18,495,680	$62,561,670
Revenues	24,446,991	64,882,371
Fiscal Impact	+$5,951,311	+$2,320,701

Santa Fe and Other Public Schools: Fiscal Impacts	General Fund (Annual)	All Funds (Annual)
Costs	$54,308,208	$108,342,719
Revenues	55,910,320	121,108,661
Fiscal Impact	+$2,219,194	+$12,765,942

Projected 2010–2030 growth produces a fiscal surplus to the General Fund of the County of Santa Fe of nearly $6 million annually; it produces a fiscal surplus to the sum of all funds of over $2.3 million annually. (Several individual funds experience negative impacts.) The projected growth also produces an annual fiscal surplus of $12.8 million to the Santa Fe and other Public School districts. The overall fiscal surplus to each of the jurisdictions amounts to nearly $8.2 million annually to the General Funds (County and School Districts) and $14.5 million to all funds (County and School Districts).

EXECUTIVE SUMMARY—SPRAWL COMMODITY AND COST SAVINGS (PART II)

Overview

The purpose of this component of the analysis of projected 2010–2030 growth is to view the types of savings that the more-compact, closer-in, mixed-use development employing a greater variety of revenue sources could offer vis-à-vis more traditional development with a limited array of revenue sources. In order to conduct the analysis, commodity and dollar savings from a half-dozen state and regional studies conducted by Rutgers were averaged and expressed on a per-dwelling-unit basis, then multiplied by the number of dwelling units involved in the twenty years of projected growth (12,195 dwelling units) in the Unincorporated Area of Santa Fe County. The results of this exercise are shown below in Summary Exhibit 6.

SGMP VERSUS SPRAWL GROWTH SAVINGS
(SUMMARY EXHIBIT 6)

Area of Savings	Commodity or $ Cost Savings per Dwelling Unit *X 12,195 Dwelling Units =*	*Total Savings over Development Period*
All lands	0.06	731.7 acres
Land cost	$768.54	$9,372,345
Local roads	0.0018	21.951 centerline miles
Local road costs	$1,643.10	$20,037,695
State roads	0.00005	0.60975 centerline miles
State road costs	$132.05	$1,610,350
Water laterals	0.09	1,098
Water lateral costs	$230.05	$2,805,460
Sewer laterals	0.10	1,220
Sewer lateral costs	$207.64	$2,532,170
Housing costs	$8,110	$98,901,450
Fiscal impacts	$195.40	$2,382,903
	Subtotal (To Government)	$135,259,470
	Per Unit	$11,096
	Per Year	$6,762,974

Note: Amounts are expressed in 2010 dollars, per residential unit, multiplied by 12,195 units for Santa Fe County's Unincorporated Area growth from 2010 to 2030.
Source: Center for Urban Policy Research, Rutgers University.

The savings shown in Summary Exhibit 6 are savings to the government, home-buyers and citizens; they are not allocated to any one group. When combined, they are significant.

Over the 20-year period, they amount to approximately $135.26 million−$6.76 million annually, or $11,100 per projected dwelling unit. These savings are based on conserving 732 acres of developable land; not building 22.5 centerline-miles of local roads; savings of $5.33 million related to the water and sewer costs; saving of about $8,100 per dwelling unit in housing development costs; and savings of close to $200 per unit in local fiscal impacts.

The estimated savings in development costs reflect differences in resource consumption and revenue arrays emerging from two different land-development strategies. The first represents traditional development and the current set of revenues; the second, compact development and an expanded array of revenues. Traditional development tends to take place at lower densities and in locations distant from existing development. Uses tend to be segregated; the mode of transportation is almost solely the private automobile. Revenues come from County government sources—taxes on commodities and property. In more compact growth, as development is directed close to the City of Santa Fe and other established centers, a somewhat different form and mixture of development takes place. Density is increased, and a number of different housing options are present that could not take place farther out. Cluster and mixed-use development are part of this development process, and a variety of new transportation measures are implemented. In addition, development financing and repair revenues come from new and existing residents.

Conclusions

The projected growth, which is more compact than traditional development taking place in peripheral locations, is likely to save the citizens and public jurisdictions of the County of Santa Fe region about $135.3 million in land, infrastructure, housing, and public service costs. The projected development under the SGMP will offer not only fiscal benefits but also significant sprawl-reducing benefits that go beyond fiscal impacts and encompass a broad array of man-made and natural-resource savings that would not be possible without this type of development.

Part I

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2010–2030 PROJECTED DEVELOPMENT: FISCAL IMPACT ON THE COUNTY OF SANTA FE AND SANTA FE COUNTY/ OTHER PUBLIC SCHOOL DISTRICTS

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COSTS/REVENUES/NET FISCAL IMPACT

Part I.A

FISCAL IMPACTS—COUNTY OF SANTA FE

THE NATURE OF FISCAL IMPACT ANALYSIS

Fiscal impact analysis is a technique used to measure the potential costs imposed by a development as opposed to the revenues that it will generate. The technique that has emerged over the past two decades is used to obtain an estimate of future service needs associated with new development.

There are a number of procedures that may be used to undertake a fiscal impact analysis. Inherent to all, however, is a basic measurement of development-generated costs versus revenues to the jurisdiction(s) which will be impacted by the development. In New Mexico, fiscal impact analyses usually project impact to the county providers of basic services, i.e., the county, for public safety, corrections, public works, land use and planning, administration, recreation services, and so on; the school district, for primary and secondary educational services.

This study utilizes an average-cost approach, which is the standard for the field. Average-costing techniques concentrate on demand units as the source of future costs. Public service demand units in the form of future persons, students, and employees are predicted, and these are multiplied by the average cost per person, per student, and per employee, respectively, to provide such services. This produces the cost associated with the development. Revenue impacts are derived by estimating the number of new employees, their taxable gross receipts per employee, and thus the gross receipts taxes they will generate. Retail gross receipts for local businesses and utility gross receipts are also projected. Also estimated is the value of improved property to the servicing districts; this figure is multiplied by the current property tax rates that these districts levy. Together with non-tax revenues on a per person basis, including intergovernmental aid and a variety of miscellaneous revenues, these constitute locally generated revenues.

CURRENT SITUATION—PROPERTY VALUE

(FIGURE 3)

The County of Santa Fe, as of 2009, had $4.97 billion in residential valuation and $1.67 billion in nonresidential valuation, for a total of $6.64 billion in real property valuation. The largest component of real property valuation in the County is found in the City of Santa Fe at $3.50 billion; this is followed by the Unincorporated Area at $3.00 billion. Far behind are Edgewood at $82.8 million and Española at $43.9 million. Other taxing authorities vary from a high of $6.3 billion (Santa Fe Community College and School District) to a low of $0.52 billion (Española Schools).

PROJECTED GROWTH—PROPERTY VALUE ADDED

(EXHIBIT 1)

The County of Santa Fe views new property at full value and then assigns an amount taxable at one-third (0.3333) of full value. Full value of projected 2010–2030 growth is $3.84 billion ($3,840,057,385). This comprises $3.44 billion residential and $0.4 billion nonresidential.

The assessed value by SDA is $1.19 billion for SDA-1, $0.78 billion for SDA-2, and $0.1 billion for SDA-3 (exhibit 1). The assessed value of projected growth ($3.84 billion) is approximately 30 percent of the total assessed value of the County of Santa Fe ($12.95 billion) (figure 3).

Government Entity	*Code*	*Residential Values*	*%*	*Non-Residential Values*	*%*	*2009 Valuation*
Santa Fe County		$4,966,458,029	74.9%	$1,666,673,709	25.1%	$6,633,131,738
Santa Fe	C	$2,439,576,224	69.7%	$1,061,084,405	30.3%	$3,500,660,629
Española	18	$30,083,576	68.6%	$13,774,212	31.4%	$43,857,788
Edgewood	8 T	$49,515,683	59.8%	$33,316,585	40.2%	$82,832,268
Unincorporated		$2,447,282,546	81.4%	$558,498,507	18.6%	$3,005,781,053
Other County Taxing Authorities						
Española Schools						*$517,654,271*
Moriarty Schools						*$462,942,624*
Pojoaque Schools						*$168,731,844*
Santa Fe Community College						*$6,307,308,467*
Santa Fe Schools						*$6,307,308,467*

Note: The breakdown of residential and nonresidential values for the communities is based on the 2008 percentage (2009 breakdown unavailable as of report date).

Figure 3A. ***Distribution of residential and nonresidential property in the County of Santa Fe***

EXHIBIT 1
—
Projected County Growth In Property Valuation (2010–2030)

SDA Area 1 Total	Units	Total Value	Assessment Ratio	Assessed Value
Future Residential				
Single Family Detached	5,564	$3,060,027,693	0.333	$1,007,861,848
Single Family Attached	695	$229,502,077	0.333	$75,033,270
Multifamily	695	$153,001,385	0.333	$49,558,539
Residential Total	6,955	$3,442,531,155		$1,132,453,658
Future Nonresidential	Square Feet			
Retail Space	143,039	$28,607,793	0.333	$9,526,395
Office Space	323,824	$77,717,838	0.333	$25,880,040
Industrial	486,068	$58,328,112	0.333	$19,423,261
Nonresidential Total	952,931	$164,653,743		$54,829,697
Total		$3,607,184,899		$1,187,283,354

SDA Area 2 Total	Units	Total Value	Assessment Ratio	Assessed Value
Future Residential				
Single Family Detached	3,771	$2,074,135,085	0.333	$683,144,674
Single Family Attached	444	$146,409,535	0.333	$47,867,045
Multifamily	222	$48,803,178	0.333	$15,807,793
Residential Total	4,437	$2,269,347,799		$746,819,512
Future Nonresidential	Square Feet			
Retail Space	137,419	$27,483,897	0.333	$9,152,138
Office Space	241,413	$57,939,027	0.333	$19,293,696
Industrial	158,466	$19,015,886	0.333	$6,332,290
Nonresidential Total	537,298	$104,438,809		$34,778,124
Total		$2,373,786,609		$781,597,636

SDA Area 3 Total	Units	Total Value	Assessment Ratio	Assessed Value
Future Residential				
Single Family Detached	764	$305,420,826	0.333	$100,178,031
Single Family Attached	40	$9,644,868	0.333	$3,131,367
Multifamily	-	$0	0.333	$0
Residential Total	804	$315,065,695		$103,309,398
Future Nonresidential	Square Feet			
Retail Space	20,718	$3,625,635	0.333	$1,207,337
Office Space	15,717	$3,300,578	0.333	$1,099,093
Industrial	36,197	$3,800,666	0.333	$1,265,622
Nonresidential Total	72,632	$10,726,879		$3,572,051
Total		$325,792,574		$106,881,449

EXHIBIT 1 (continued)
—
Projected County Growth In Property Valuation (2010–2030)

City of Santa Fe (Urbanized Area)	Units	Price per Unit	Total Value	Assessment Ratio	Assessed Value
Future Residential					
Single Family Detached	6,443	$500,000	$3,221,625,000	0.333	$1,059,914,625
Single Family Attached	1,757	$300,000	$527,175,000	0.333	$172,034,775
Multifamily	3,515	$200,000	$702,900,000	0.333	$227,036,700
Residential Total	11,715		$4,451,700,000		$1,458,986,100
Future Nonresidential	Square Feet	Price ft^2			
Retail Space	1,072,331	$275	$294,891,146	0.333	$98,198,752
Office Space	1,466,170	$330	$483,835,945	0.333	$161,117,370
Industrial	837,068	$165	$138,116,289	0.333	$45,992,724
Nonresidential Total	3,375,569		$916,843,380		$305,308,846
Total			$5,368,543,380		$1,764,294,946

Unincorporated Areas Total (SDAs 1–3)	Units	Total Value	Assessment Ratio	Assessed Value
Future Residential				
Single Family Detached	10,098	$5,439,583,605	0.333	$1,791,184,554
Single Family Attached	1,179	$385,556,481	0.333	$126,031,682
Multifamily	917	$201,804,563	0.333	$65,366,333
Residential Total	12,195	$6,026,944,649		$1,982,582,568
Future Nonresidential	Square Feet			
Retail Space	301,176	$59,717,326	0.333	$19,885,869
Office Space	580,954	$138,957,443	0.333	$46,272,829
Industrial	680,730	$81,144,663	0.333	$27,021,173
Nonresidential Total	1,562,860	$279,819,432		$93,179,871
Total		$6,306,764,081		$2,075,762,439

Santa Fe County Total	Units	Total Value	Assessment Ratio	Assessed Value
Future Residential				
Single Family Detached	16,542	$8,661,208,605	0.333	$2,851,099,179
Single Family Attached	2,937	$912,731,481	0.333	$298,066,457
Multifamily	4,432	$904,704,563	0.333	$292,403,033
Residential Total	23,910	$10,478,644,649		$3,441,568,668
Future Nonresidential	Square Feet			
Retail Space	1,373,508	$354,608,471	0.333	$118,084,621
Office Space	2,047,124	$622,793,389	0.333	$207,390,198
Industrial	1,517,799	$219,260,953	0.333	$73,013,897
Nonresidential Total	4,938,430	$1,196,662,813		$398,488,717
Total		$11,675,307,462		$3,840,057,385

DEMOGRAPHIC IMPACT OF THE PROJECTED 2010–2030 GROWTH

Employing the Demographic Multipliers

(EXHIBIT 2)

Demographer Al Pitts has generated household sizes relative to the projection of population and housing units from 2010 to 2030. He has done this for the Unincorporated Area as well as for the City of Santa Fe (Urbanized Area). The latter has lower overall household sizes than the former.

Information from the *American Community Survey* for 2000–2008 was used to produce growth by dwelling type and number of bedrooms. Different distributions of dwelling types were used for the Unincorporated Area versus the City of Santa Fe (Urbanized Area). Average dwelling-unit multipliers vary in 2010 from 2.15 (City of Santa Fe [Urbanized Area]) to 2.61 (Estancia). The average for all GMAs is 2.24.

Demographic multipliers are also developed for nonresidential uses from certificates of occupancy forms, building inspection reports, information from professional management agencies, and energy studies of buildings. These multipliers vary from 3 per 1,000 square feet of office space to 1.5 per 1,000 square feet of industrial space.

Demographic multipliers applied to residential units generate the new population and school-age children associated with projected growth; similar multipliers applied to nonresidential units generate the new employment associated with projected growth.

Projection Information Specific to Santa Fe County

The projection of 2010–2030 growth in Santa Fe County was done in the following way. Santa Fe County Demographer Al Pitts's population projections by Growth Management Area (GMA) and total County were used from 2010 to 2020. This data was combined with his housing-unit projections from 2010 to 2030 to determine average household size over the period. This was obtained by subtracting beginning-of-period from end-of-period population and households and dividing the former result (change in population) by the latter result (change in households) to obtain an average household size over the period 2010–2030.

Growth Management Areas were transformed into Sustainable Development Areas (SDA) by apportioning part of the change in a GMA to the respective SDA. This was accomplished by estimating where and when development would take place in a GMA (from Al Pitts's projections and knowledge of forthcoming development) and

assigning that component of development to an SDA. Al Pitts specified what residential development would take place during what year in a GMA. This growth, taken for a five-year period, was assigned to SDAs using GIS depictions for the two different types of areas.

Housing-unit type was determined by viewing development over the period 2000–2008 in Santa Fe/Palo Alto Counties using the *American Community Survey*. (This is the smallest-scale geographic area wherein housing produced by year can be obtained for the local area.) This information showed that, for the two-county area, about 69 percent of housing was single-family detached, 12 percent was single-family attached, and 18 percent was multifamily/mobile—mostly multifamily for new housing.

This information was used as the base case, and building permit/existing housing distributions were used to determine distributions for SDA-1, SDA-2, SDA-3, and the City of Santa Fe. The extremes of these distributions were the City of Santa Fe on one hand and SDA-3 on the other. The City of Santa Fe had more multifamily (30 percent) and single-family attached (15 percent) units, and fewer single-family detached units (55 percent) to be built. SDA-3 was just the opposite, with predominantly single-family units to be built (95 percent) and fewer single-family attached units (5 percent).

Housing price was determined using local real estate files for neighborhoods comprising SDAs of the Unincorporated Area of the County as well as those of the City of Santa Fe (Urbanized Area). The most expensive future residential development will take place in SDA-1 and SDA-2, followed by the City of Santa Fe, and then by SDA-3. This relates to property on the market during the period January 2010 to September 2010.

For nonresidential development, employment growth was translated into nonresidential space using information on employees per square foot from nonresidential development and management sources (the Urban Land Institute [ULI], the Building Owners and Managers Association [BOMA], the Service Industry Association [SIA], and so on). Nonresidential development by type was determined by viewing 2000 and 2008 employment levels by type. These differences by type were subtracted from Woods and Poole County totals to determine the Unincorporated Area growth. Almost all of the employment growth was assigned to SDA-1 (59 percent) and SDA-2 (37 percent) rather than SDA-3 (4 percent).

The value of nonresidential properties in the City and Unincorporated Area of the County was determined from nonresidential building permit and assessment data and apportioned by SDA and City according to available properties and costs in 2009 and

2010. The highest-cost nonresidential properties were found in the City of Santa Fe, following by SDA-1, and then by SDA-2/SDA-3. Much of the above information is found in figure 3B.

	Base	SDA-1	SDA-2	SDA-3	City of Santa Fe (Urbanized Area)
RESIDENTIAL					
Single-Family Detached	$500,000	$550,000	$550,000	$400,000	$500,000
Single-Family Attached	300,000	330,000	330,000	240,000	300,000
Multifamily	200,000	220,000	220,000	160,000	200,000
DISTRIBUTION (Percentage of Space)					
Single-Family Detached	69	80%	85%	95%	55%
Single-Family Attached	12	10	10	5	15
Multifamily	18	10	5	0	30
NONRESIDENTIAL SPACE					
Retail	$250	$200	$200	$175	$275
Office	300	240	240	210	330
Industrial	$150	120	120	105	165
DISTRIBUTION (Percentage of Space)					
Retail	—	14%	22%	29%	28%
Office	—	49	59	33	56
Industrial	—	37	19	38	16

	SDA-1	SDA-2	SDA-3	Unincorporated Area	City of Santa Fe (Urbanized Area)	TOTAL
POPULATION, HOUSING UNITS, EMPLOYMENT						
Population	15,546	9,297	1,701	26,544	22,459	49,003
Housing Units	6,955	4,437	804	12,195	11,715	23,910
Employment	1,987	1,237	143	3,366	7,799	11,165
PERSONS PER UNIT						
				(average)		(average)
Single-Family Detached (3 BR)	2.39	2.19	2.14	2.30	2.28	2.29
Single-Family Attached (2BR)	1.88	1.72	1.18	1.81	1.79	1.80
Multifamily (1BR)	1.37	1.25	1.22	1.34	1.31	1.31

Source: Al Pitts, Santa Fe County demographer. Demographic data adjusted by SDA—2010.

Figure 3B. ***Projection data, Santa Fe County: Housing price/nonresidential value and distribution of residential and nonresidential development by area, 2010–2030 growth***

EXHIBIT 2
—
Projected Population, Dwelling Units, and Households, by Growth Management Area—2000–2050

YEAR	El Norte	El Centro	SF Urban Area	Galisteo	Estancia	Total County	Total Unincorporated
POPULATION							
2000	16,778	14,933	76,572	12,522	9,121	129,926	53,354
2005	17,516	18,465	82,042	13,942	9,566	141,531	59,489
2010	18,254	21,341	87,615	14,640	10,023	151,873	64,258
2015	19,047	25,413	93,182	15,805	10,554	164,001	70,819
2020	19,876	29,592	98,914	17,022	11,110	176,514	77,600
2025	20,739	33,908	104,845	18,278	11,686	189,456	84,611
2030	21,495	37,730	110,074	19,387	12,190	200,876	90,802
2035	22,240	41,483	115,204	20,478	12,687	212,092	96,888
2040	22,982	45,239	120,349	21,568	13,186	223,324	102,975
2045	23,740	49,049	125,579	22,676	13,685	234,729	109,150
2050	24,464	52,685	130,552	23,732	14,169	245,602	115,050
DWELLING UNITS							
2000	7,292	5,947	35,539	5,650	3,474	57,902	22,363
2005	7,682	7,389	38,236	6,345	3,678	63,330	25,094
2010	7,977	8,571	40,721	6,640	3,839	67,748	27,027
2015	8,380	10,298	43,541	7,215	4,070	73,504	29,963
2020	8,806	12,123	46,520	7,824	4,314	79,587	33,067
2025	9,250	14,027	49,630	8,458	4,568	85,933	36,303
2030	9,651	15,744	52,436	9,030	4,797	91,658	39,222
2035	10,050	17,453	55,227	9,600	5,025	97,355	42,128
2040	10,454	19,184	58,054	10,177	5,256	103,125	45,071
2045	10,868	20,959	60,953	10,769	5,491	109,040	48,087
2050	11,269	22,679	63,762	11,342	5,721	114,773	51,011
HOUSEHOLDS							
2000	6,532	5,432	32,355	5,190	3,156	52,665	20,310
2005	6,880	6,748	34,811	5,827	3,340	57,606	22,795
2010	7,143	7,826	37,073	6,096	3,486	61,624	24,551
2015	7,504	9,403	39,628	6,625	3,696	66,856	27,228
2020	7,884	11,068	42,336	7,183	3,917	72,388	30,052
2025	8,281	12,806	45,160	7,765	4,148	78,160	33,000
2030	8,639	14,373	47,711	8,290	4,355	83,368	35,657
2035	8,996	15,932	50,246	8,813	4,562	88,549	38,303
2040	9,356	17,511	52,816	9,342	4,772	93,797	40,981
2045	9,726	19,130	55,452	9,885	4,984	99,177	43,725
2050	10,086	20,699	58,003	10,411	5,193	104,392	46,389

EXHIBIT 2 (continued)
—
Projected Population, Dwelling Units, and Households, by Growth Management Area—2000–2050

YEAR	El Norte	El Centro	SF Urban Area	Galisteo	Estancia	Total County	Total Unincorporated
EMPLOYMENT							
2010	2,666	4,904	54,162	1,341	741	64,250	9,653
2015	2,849	5,341	56,161	1,450	808	67,083	10,448
2020	3,036	5,797	58,127	1,563	877	69,916	11,274
2025	3,229	6,272	60,060	1,680	950	72,750	12,131
2030	3,428	6,766	61,960	1,802	1,025	75,583	13,020
PPH							
2000	2.57	2.75	2.37	2.41	2.89	2.47	2.63
2005	2.55	2.74	2.36	2.39	2.86	2.46	2.61
2010	2.56	2.73	2.36	2.40	2.88	2.46	2.62
2015	2.54	2.70	2.35	2.39	2.86	2.45	2.60
2020	2.52	2.67	2.34	2.37	2.84	2.44	2.58
2025	2.50	2.65	2.32	2.35	2.82	2.42	2.56
2030	2.49	2.63	2.31	2.34	2.80	2.41	2.55
avg	2.53	2.69	2.34	2.38	2.85	2.44	2.59
PPDU							
2000	2.30	2.51	2.15	2.22	2.63	2.24	2.39
2005	2.28	2.50	2.15	2.20	2.60	2.23	2.37
2010	2.29	2.49	2.15	2.20	2.61	2.24	2.38
2015	2.27	2.47	2.14	2.19	2.59	2.23	2.36
2020	2.26	2.44	2.13	2.18	2.58	2.22	2.35
2025	2.24	2.42	2.11	2.16	2.56	2.20	2.33
2030	2.23	2.40	2.10	2.15	2.54	2.19	2.32
avg all	2.267	2.460	2.133	2.185	2.586	2.224	2.356
avg new	2.258	2.442	2.126	2.176	2.576	2.217	2.347
avg existing	2.29	2.50	2.15	2.21	2.61	2.24	2.38

Note: Data provided for 2000 and 2005 are actual. Figures after 2005 are projected.

Source: Al Pitts, Santa Fe County Demographic Study, Summer 2009

New Residents (Persons), School-Age Children (Students), and Workers (Employees) of the Projected 2010–2030 Growth

(EXHIBIT 3)

For 2010–2030 projected growth, added residents (persons), school-age children (students), and workers (employees) are contained in exhibit 3. New residents (persons) that will arrive in Santa Fe County over the period number about 49,000. Within this resident (person) count are about 9,300 new school-age children (students). In addition, there are 11,165 new workers (employees). New persons, students, and employees by location are as follows:

SDA-1—15,546 new persons, including 2,990 new students. There will be 1,987 employees permanently associated with new nonresidential development.

SDA-2—9,297 new persons, including 1,996 new students; 1,237 employees will be associated with new nonresidential development.

SDA-3—1,701 new persons, including 390 new students. There will be 143 permanent employees in this phase.

Total Unincorporated—26,544 new persons, including 5,377 students. There will be a total of 3,366 employees associated with 2010–2030 growth in the Unincorporated Area.

City of Santa Fe (Urbanized Area)—22,459 new persons, including 3,925 students. There will be 7,799 employees associated with 2010–2030 growth in the City of Santa Fe (Urbanized Area).

Total County—49,003 new persons, including 9,301 new students. There will be 11,165 employees associated with 2010–2030 growth.

It is estimated that these new persons will arrive over a 20-year period, with much of SDA-1 being built out first, much of SDA-2 being built out second, and much of SDA-3 being built out third.

EXHIBIT 3
—
Projected Population Associated with Structures, by Type (2010–2030)

SDA Area 1 Total

	Persons	Students
Future Residential		
Single Family Detached	13,291	2,782
Single Family Attached	1,305	139
Multifamily	949	70
Residential Total	15,546	2,990
Future Nonresidential	Employees	
Retail Space	286	
Office Space	971	
Industrial	729	
Nonresidential Total	1,987	

SDA Area 2 Total

	Persons	Students
Future Residential		
Single Family Detached	8,256	1,886
Single Family Attached	763	89
Multifamily	278	22
Residential Total	9,297	1,996
Future Nonresidential	Employees	
Retail Space	275	
Office Space	724	
Industrial	238	
Nonresidential Total	1,237	

SDA Area 3 Total

	Persons	Students
Future Residential		
Single Family Detached	1,633	382
Single Family Attached	68	8
Multifamily	-	-
Residential Total	1,701	390
Future Nonresidential	Employees	
Retail Space	41	
Office Space	47	
Industrial	54	
Nonresidential Total	143	

EXHIBIT 3 (continued)
—
Projected Population Associated with Structures, by Type (2010–2030)

Unincorporated Areas Total (SDAs 1–3)

	Persons	Students
Future Residential		
Single Family Detached	23,181	5,049
Single Family Attached	2,136	236
Multifamily	1,227	92
Residential Total	26,544	5,377

Future Nonresidential	Employees
Retail Space	602
Office Space	1,743
Industrial	1,021
Nonresidential Total	3,366

City of Santa Fe (Urbanized Area)

	Persons per Unit	Children per Unit	Persons	Students
Future Residential				
Single Family Detached	2.28	0.50	14,718	3,222
Single Family Attached	1.79	0.20	3,154	351
Multifamily	1.31	0.10	4,587	351
Residential Total			22,459	3,925

Future Nonresidential	Employees/ 1,000 ft^2	Employees
Retail Space	2.0	2,145
Office Space	3.0	4,399
Industrial	1.5	1,256
Nonresidential Total		7,799

Santa Fe County Total

	Persons	Students
Future Residential		
Single Family Detached	37,899	8,271
Single Family Attached	5,290	587
Multifamily	5,814	443
Residential Total	49,003	9,301

Future Nonresidential	Employees
Retail Space	2,747
Office Space	6,141
Industrial	2,277
Nonresidential Total	11,165

CALCULATING COSTS: COUNTY OF SANTA FE

The County of Santa Fe has seven funds that contain expenditures and revenues in FY2011. These are the General Fund ($63.15 million); the Special Fund ($98.33 million); the Capital Fund ($40.33 million); the Debt Service Fund ($77.00 million); and the Enterprise Fund ($5.26 million). These funds total $224.07 million, which is the total cost/revenues of all county operations. This is a cost of $1,475 per person. All of the other funds, except the General Fund, are "special purpose," which means that, for the most part, revenues flowing within these funds are restricted to certain purposes and cannot be spent for a variety of purposes. The fund that both the property tax and gross receipts tax support is the General Fund. The property tax also supports the Debt Service Fund at multiple times the level that it supports the General Fund.

	Specific County Fund	*Costs per Person*
1.	General Fund	$415.81
2.	Special Fund	647.45
3.	Capital Fund	265.55
4.	Debt Service Fund	111.94
5.	Enterprise Fund	34.62
		Costs
	Total per Person	$1,475.37
	General Fund = $63,150,000	$415.81

Figure 4. ***Distribution of per person county costs and revenues (County of Santa Fe, FY 11)***

Source: County of Santa Fe County Budget, FY-11

In order to calculate costs for the projected development on the County of Santa Fe, the calculation uses both the "General Fund" and "All Funds." Total expenditures amount to $224.07 million for all County funds. The reason that the procedure is so encompassing is due to the presence of the property (ad valorem) tax in two funds. As figure 4 indicates, the only differences between per person costs and per person non-tax revenues are in: (1) the General Fund, which in addition to non-property tax revenues receives both all of the gross receipts tax revenue and about one-quarter of the property tax revenue; and (2) the Debt Service fund, which receives three-quarters of the property tax revenue. For County cost purposes, General Fund costs amount to $415.81 per person; total costs (All Funds) amount to $1,475 per person.

Each of the funds is treated separately, and their costs and revenues are viewed individually, summed, and presented as "Total General Fund" and "Total All Funds." These two total categories are kept separate for analytic purposes. Per person costs are charged against each fund, and per person non-tax revenues are credited against each fund. In those funds that are contributed to by either the property tax or gross receipts tax (Debt Service and General Fund), or by both, these calculated revenues augment per person non-tax revenues. These two funds can produce a fiscal impact labeled here as "All Funds" that is kept separate from the General Fund fiscal impact.

County of Santa Fe—Costs

In its simplest form, in order to calculate costs, the number of persons generated by growth must be multiplied by costs per person. To calculate costs per person for the County of Santa Fe, the county's General Fund and All Funds budgets for Fiscal Year 2011 (2010)—$63.5 million and $224.1 million—are divided by the number of persons (151,873 in 2010) in the County. These are the figures shown in the left-hand column of exhibit 3.

In this calculation certain costs must be assigned to residential uses and their demand units (persons), while other costs must be assigned to nonresidential uses and their demand units (employees). Over the period of time that fiscal impact analysis has been practiced, the split of costs between residential and nonresidential has been decided based on the split between valuation and parcels. These are as follows:

Valuation			
Residential		*Nonresidential*	
$4,966,458,029	(75%)	$1,666,673,709	(25%)
Parcels			
Residential		*Nonresidential*	
	(85%)		(15%)
Average	*(80%)*	*Average*	*(20%)*

Figure 5. ***Residential and nonresidential value, Santa Fe County***

Eighty percent of the costs of any individual fund is assigned to residential uses and divided by the number of persons in 2010 (151,873) to determine a per person cost figure. Twenty (20) percent of the costs of any individual fund is assigned to nonresidential uses and divided by the number of employees in 2010 (64,250) to determine a per-employee cost figure. These figures are shown below:

	Costs		*Revenues*	
	Per Person	*Per Employee*	*Per Person*	*Per Employee*
General Fund	$332.65	$196.58	$44.30 + (Property Tax) 0.00467(R); 0.01185 (NR)	$132.73
Special Fund	$357.40	$590.70	$313.16	$516.70
Capital Fund	$263.50	$5.00	$178.26	$5.00
Debt Service Fund	$97.16	$47.68	$20.17 + (Property Tax) 0.00193 (R & NR)	$47.68
Enterprise Fund	$34.60	-	$32.60	-

Figure 6. ***Per person and per employee costs, Santa Fe County***

Projecting County Costs: County of Santa Fe

The projection of county costs for Santa Fe County for the General Fund and All Funds involves the individual costs per person and per employee applied to the full estimated forthcoming persons/employees from 2010–2030 growth. The projected costs are taken at their full incidence rate (100 percent).[2]

Costs of 2010 – 2030 Growth – Santa Fe County Unincorporated Area; City of Santa Fe
—
Calculating Costs by Expenditure Fund

	General Fund	*Special Fund*	*Capital Fund*	*Debt Service Fund*	*Enterprise Fund*	*All Funds*
SDA 1	$5,561,913	$6,729,656	$4,106,304	$1,605,173	$537,892	$18,540,938
SDA 2	$3,335,772	$4,053,311	$2,455,943	$962,266	$321,676	$11,128,969
SDA 3	$593,925	$692,338	$448,928	$172,082	$58,855	$1,966,128
Unincorporated Area	$9,491,611	$11,475,305	$7,011,176	$2,739,521	$918,422	$31,636,034
City of Santa Fe	$9,004,069	$12,633,582	$5,956,940	$2,553,962	$777,081	$30,925,636
Total (Standard)	$18,495,680	$24,108,887	$12,968,116	$5,293,483	$1,695,504	$62,561,670
Total (Smart Growth)	$17,546,519	$22,961,357	$12,968,116	$5,293,483	$1,695,504	$60,464,978

Figure 7. ***Costs of future growth: total costs by expenditure funds***

The above figures reflect costs of growth in Santa Fe County. SDAs 1–3 sum to the Unincorporated Area; the Unincorporated Area (SDAs 1-3) plus the City of Santa Fe sum to the County cost growth total.

[2] Except for street maintenance, which is taken at 75 percent.

What is obvious from the above is that about 58.5 percent of the Unincorporated Area cost growth will take place in SDA-1 ($5.56 million – General Fund and $18.54 million – All Funds); 35 percent in SDA-2 ($3.34 million – General Fund and $11.13 million – All Funds); and 6.5 percent in SDA-3 ($0.59 million – General Fund and $1.97 million – All Funds). The Unincorporated Area of the County will incur 51.4 percent of all future growth in costs ($9.49 million – General Fund and $31.64 million – All Funds). The City of Santa Fe will incur 48.6 percent of all future growth in costs ($9.00 million – General Fund and $30.93 million – All Funds).

Total cost growth related to growth under standard development will be $18.50 million to the General Fund and $62.56 million to All Funds. Under a smart growth strategy, costs to the General Fund would be reduced by about $1 million to $17.55 million, and All Funds would be reduced by about $2 million to $60.46 million (exhibit 4). This is due to savings available from development taking place at higher densities and closer in to existing development, which will reduce the cost of servicing such development.

CALCULATING REVENUES: COUNTY OF SANTA FE

County Revenues That Are Individually Calculated

Gross Receipts Tax

Gross Receipts Tax revenues are projected on a per employee basis. Gross Receipts Tax revenues are found primarily as sources of revenues within the General Fund (Infrastructure and certain of the General 1/16 and Environmental Funds), and Special Funds (Environmental, Corrections, EMS, Fire Operations).

Their total amounts in each fund are selected out and divided by the number of employees in the county. This enables exact projection rather than calculating an average GRT per worker and multiplying this by the new number of employees.

The Gross Receipts Tax expressed on a per employee basis is a compilation of gross receipts based on retail spending of new households and businesses, utilities consumed by new residents and businesses, and the construction materials involved in the building of new residences and businesses.

Other Revenues

Revenues such as fees from building permits, plan review, and inspections; franchise taxes; lodgers taxes; and fees, fines and interest earnings are projected within individual funds on a per person basis.

EXHIBIT 4
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Costs of Future Growth: Total Costs by Expenditure Funds

SDA Area 1	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$4,421,330	$4,750,288	$3,502,241	$1,291,377	$459,877	$14,425,112
Single Family Att.	$434,238	$466,546	$343,970	$126,832	$45,166	$1,416,752
Multifamily	$315,809	$339,306	$250,160	$92,241	$32,848	$1,030,365
Residential Total	$5,171,377	$5,556,140	$4,096,371	$1,510,449	$537,892	$16,872,229
Nonresidential						
Retail Space	$56,237	$168,986	$1,430	$13,640	$0	$240,294
Office Space	$190,972	$573,849	$4,857	$46,320	$0	$815,998
Industrial	$143,327	$430,680	$3,646	$34,764	$0	$612,416
Nonresid. Total	$390,536	$1,173,516	$9,933	$94,724	$0	$1,668,708
Total	$5,561,913	$6,729,656	$4,106,304	$1,605,173	$537,892	$18,540,938

SDA Area 2	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$2,746,455	$2,950,798	$2,175,533	$802,181	$285,668	$8,960,635
Single Family Att.	$253,874	$272,763	$201,100	$74,151	$26,406	$828,294
Multifamily	$92,318	$99,187	$73,127	$26,964	$9,602	$301,198
Residential Total	$3,092,647	$3,322,748	$2,449,760	$903,297	$321,676	$10,090,127
Nonresidential						
Retail Space	$54,028	$162,347	$1,374	$13,104	$0	$230,854
Office Space	$142,371	$427,807	$3,621	$34,532	$0	$608,331
Industrial	$46,727	$140,409	$1,188	$11,333	$0	$199,657
Nonresid. Total	$243,125	$730,563	$6,184	$58,969	$0	$1,038,842
Total	$3,335,772	$4,053,311	$2,455,943	$962,266	$321,676	$11,128,969

SDA Area 3	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$543,368	$583,795	$430,414	$158,706	$56,517	$1,772,801
Single Family Att.	$22,470	$24,142	$17,799	$6,563	$2,337	$73,311
Multifamily	$0	$0	$0	$0	$0	$0
Residential Total	$565,838	$607,937	$448,214	$165,269	$58,855	$1,846,112
Nonresidential						
Retail Space	$8,145	$24,476	$207	$1,976	$0	$34,804
Office Space	$9,269	$27,852	$236	$2,248	$0	$39,605
Industrial	$10,673	$32,072	$271	$2,589	$0	$45,606
Nonresid. Total	$28,088	$84,401	$714	$6,813	$0	$120,015
Total	$593,925	$692,338	$448,928	$172,082	$58,855	$1,966,128

EXHIBIT 4 (continued)
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Costs of Future Growth: Total Costs by Expenditure Funds

Unincorporated Areas	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$7,711,153	$8,284,882	$6,108,188	$2,252,264	$802,062	$25,158,548
Single Family Att.	$710,582	$763,451	$562,869	$207,546	$73,910	$2,318,357
Multifamily	$408,127	$438,493	$323,287	$119,205	$42,451	$1,331,563
Residential Total	$8,829,862	$9,486,826	$6,994,344	$2,579,015	$918,422	$28,808,469
Nonresidential						
Retail Space	$118,411	$355,810	$3,012	$28,720	$0	$505,952
Office Space	$342,612	$1,029,509	$8,714	$83,100	$0	$1,463,934
Industrial	$200,727	$603,161	$5,105	$48,686	$0	$857,679
Nonresid. Total	$661,749	$1,988,479	$16,832	$160,506	$0	$2,827,566
Total	$9,491,611	$11,475,305	$7,011,176	$2,739,521	$918,422	$31,636,034

City of Santa Fe	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$4,895,880	$5,260,146	$3,878,144	$1,429,983	$509,236	$15,973,389
Single Family Att.	$1,049,117	$1,127,174	$831,031	$306,425	$109,122	$3,422,869
Multifamily	$1,525,989	$1,639,526	$1,208,772	$445,709	$158,723	$4,978,719
Residential Total	$7,470,986	$8,026,847	$5,917,947	$2,182,116	$777,081	$24,374,977
Nonresidential						
Retail Space	$421,598	$1,266,852	$10,723	$102,258	$0	$1,801,431
Office Space	$864,659	$2,598,199	$21,993	$209,721	$0	$3,694,571
Industrial	$246,826	$741,684	$6,278	$59,867	$0	$1,054,656
Nonresid. Total	$1,533,083	$4,606,736	$38,994	$371,846	$0	$6,550,658
Total	$9,004,069	$12,633,582	$5,956,940	$2,553,962	$777,081	$30,925,636

County Total	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Costs
Residential						
Single Family Det.	$12,607,033	$13,545,028	$9,986,332	$3,682,247	$1,311,298	$41,131,938
Single Family Att.	$1,759,699	$1,890,625	$1,393,900	$513,971	$183,032	$5,741,227
Multifamily	$1,934,116	$2,078,019	$1,532,059	$564,914	$201,174	$6,310,282
Residential Total	$16,300,848	$17,513,672	$12,912,291	$4,761,131	$1,695,504	$53,183,446
Nonresidential						
Retail Space	$540,008	$1,622,662	$13,735	$130,978	$0	$2,307,383
Office Space	$1,207,271	$3,627,708	$30,707	$292,821	$0	$5,158,506
Industrial	$447,553	$1,344,845	$11,383	$108,553	$0	$1,912,335
Nonresid. Total	$2,194,832	$6,595,215	$55,825	$532,351	$0	$9,378,224
Total (Standard)	$18,495,680	$24,108,887	$12,968,116	$5,293,483	$1,695,504	$62,561,670
Total (Smart Growth)	$17,546,519	$22,961,357	$12,968,116	$5,293,483	$1,695,504	$60,464,978

		Units/Ft^2	Average Unit Value Cost per ft^2	Total Value	Assessment Ratio	Assessed Value
SDA-1						
	Residential	6,955	$495,000	$3,442,531,155	0.333	$1,132,453,658
	Nonresidential*	952,931	$173	$164,653,743	0.333	$54,829,697
	Total			$3,607,184,899	0.333	$1,187,283,354
SDA-2						
	Residential	4,437	$511,500	$2,269,347,799	0.333	$746,819,512
	Nonresidential	537,298	$194	$104,438,809	0.333	$34,778,124
	Total			$2,373,786,609	0.333	$781,597,636
SDA-3						
	Residential	804	$392,000	$315,065,695	0.333	$103,309,398
	Nonresidential	72,632	$148	$10,726,879	0.333	$3,572,051
	Total			$325,792,574	0.333	$106,881,449
Total Unincorporated						
	Residential	12,195	$494,214	$6,026,944,649	0.333	$1,982,582,568
	Nonresidential	1,562,860	$179	$279,819,432	0.333	$93,179,871
	Nonresidential			$6,306,764,081	0.333	$2,075,762,439
Santa Fe City						
	Residential	11,715	$380,000	$4,451,700,000	0.333	$1,458,986,100
	Nonresidential	3,375,569	$272	$916,843,380	0.333	$305,308,846
	Total			$5,368,543,380	0.333	$1,764,294,946
County Total						
	Residential	23,910	$438,254	$10,478,644,649	0.333	$3,441,568,668
	Nonresidential	4,938,430	$242	$1,196,662,813	0.333	$398,488,717
	Total			$11,675,307,462	0.333	$3,840,057,385

* Based on Recession Projections of 70 percent of demographer's projections for housing units and 80 percent of *Woods & Poole's* projections for employment growth

Woods & Poole Economics, CEDDS 2010, Volume 3, County Data by State. Washington, DC: Woods & Poole, ©2009.

Figure 8. ***Projected future development: 20-year projection (Santa Fe County), 2010–2030***

Property (Ad Valorem) Tax (figure 8)

The property tax calculation for the County of Santa Fe involves multiplying the market, or sales, value of forthcoming properties by the equalization ratio (0.3333) and then by the property tax rate for residential and nonresidential properties in the County. The property tax rate for the County is 0.00467 (residential properties) and 0.01185 (nonresidential properties). Within each of the above county rates, there is a debt service component amounting to 0.00193 for both residential and nonresidential properties. This is already subtracted from the above tax rates before property tax revenues offset costs in the General Fund.

The above rate for the Debt Service fund (0.00193) cannot be used for County General Fund expenditures. It is strictly available to use to pay off General Obligation (G.O.) bonds or as a source of property tax rate leveling. There is also a business personal property tax that is assigned to the value of equipment in structures at the lowered nonresidential tax rates. Equipment in buildings is typically valued at 10 percent of the structure value of the nonresidential use.

Projecting County Revenues: County of Santa Fe

The projection of County revenues for Santa Fe County for the General Fund and All Funds involves per employee and per resident Gross Receipts Tax Revenues and Other Revenues, respectively, projected along with the increase in property tax revenues. Projected revenues are taken at their full incidence rate (100 percent), as shown in figure 9.

Revenues of 2010–2030 Growth – Santa Fe County
Unincorporated Area; City of Santa Fe
Calculating Revenues by Expenditure Fund

	General Fund	*Special Fund*	*Capital Fund*	*Debt Service Fund*	*Enterprise Fund*	*All Funds*
SDA 1	$6,890,666	$5,894,889	$2,781,148	$2,699,743	$506,800	$18,773,246
SDA 2	$4,475,782	$3,550,490	$1,663,458	$1,754,973	$303,082	$11,747,786
SDA 3	$619,103	$606,512	$303,933	$247,403	$55,453	$1,832,404
Unincorporated Area	$11,985,552	$10,051,891	$4,748,538	$4,702,120	$865,334	$32,353,435
City of Santa Fe	$12,461,440	$11,062,887	$4,042,513	$4,229,933	$732,163	$32,526,936
Total (Standard)	$24,446,991	$21,114,778	$8,791,051	$8,932,053	$1,597,498	$64,882,371
Total (Smart Growth)	$24,446,991	$21,114,778	$9,265,905	$9,001,643	$1,597,498	$65,426,815

Figure 9. ***Revenues of future growth: total revenue by expenditure funds***

The above revenues reflect revenue growth due to standard development in Santa Fe County: SDAs 1–3 sum to the Unincorporated Area; the Unincorporated Area (SDAs 1–3) plus the City of Santa Fe sum to the County revenue growth total.

What is obvious is that about 57.5 percent of the Unincorporated Area revenue growth will take place in SDA-1 ($6.89 million – General Fund and $18.77 million – All Funds); 37.3 percent in SDA-2 ($4.48 million – General Fund and $11.75 million – All Funds); and 5.2 percent in SDA-3 ($0.62 million – General Fund and $1.83 million – All Funds). The Unincorporated Area of the County will incur 49.0 percent of all future growth in revenues ($11.99 million – General Fund and $32.35 million – All Funds). The City of Santa Fe will incur 57.0 percent of all future growth in revenues ($12.46 million – General Fund and $32.53 million – All Funds).

Total revenue growth related to growth under standard development will be $24.45 million to the General Fund and $64.88 million to All Funds. Under a smart growth strategy, revenues to the Capital Fund would be increased to $9.27 million and All Funds would be increased to $65.43 million (exhibit 5). This reflects additional sources of funds including impact fees, PID revenues, and Special Assessment District revenues.

Projecting County Fiscal Impacts: County of Santa Fe (Standard Development)

The projection of County fiscal impacts for Santa Fe County for the General Fund and All Funds involves a comparison of costs versus revenues relating to the full estimated forthcoming persons/employees from 2010–2030 growth. The projected fiscal impacts are full revenues at the end of the projection period minus full costs at the end of the projection period (figure 10).

Fiscal Impacts of 2010 – 2030 Growth – Santa Fe County
Unincorporated Area; City of Santa Fe
Calculating Fiscal Impacts by Expenditure Fund

	General Fund	*Special Fund*	*Capital Fund*	*Debt Service Fund*	*Enterprise Fund*	*All Funds*
SDA 1	(+) $1,328,754	(-) $834,767	(-) $1,325,157	(+) $1,094,570	(-) $31,092	(+) $232,208
SDA 2	(+) $1,140,010	(-) $502,821	(-) $792,486	(+) $792,707	(-) $18,594	(+) $618,817
SDA 3	(+) $25,177	(-) $85,828	(-) $144,995	(+) $75,321	(-) $3,402	(-) $133,724
Unincorporated Area	(+) $2,493,941	(-) $1,423,413	(-) $2,262,637	(+) $1,962,599	(-) $53,088	(+) $717,401
City of Santa Fe	(+) $3,457,371	(-) $1,570,695	(-) $1,914,428	(+) $1,675,971	(-) $44,918	(+) $1,603,300
Total (Standard)	(+) $5,951,311	(-) $2,994,109	(-) $4,177,065	(+) $3,638,570	(-) $98,006	(+) $2,320,701
Total (Smart Growth)	(+) $6,900,472	(-) $1,846,578	(-) $3,702,211	(+) $3,708,160	(-) $98,006	(+) $4,961,837

Figure 10. ***Fiscal impacts of future growth—total fiscal impact by expenditure funds***

EXHIBIT 5
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Revenues of Future Growth: Total Revenues by Expenditure Funds

SDA Area 1	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$5,295,517	$4,162,284	$2,369,283	$2,213,257	$433,294	$14,473,635
Single Family Att.	$408,234	$408,796	$232,697	$171,144	$42,556	$1,263,427
Multifamily	$273,495	$297,306	$169,234	$114,797	$30,950	$885,783
Residential Total	$5,977,247	$4,868,385	$2,771,214	$2,499,199	$506,800	$16,622,844
Nonresidential						
Retail Space	$132,078	$74,710	$1,430	$32,026	$0	$240,245
Office Space	$404,429	$380,555	$4,857	$96,268	$0	$886,111
Industrial	$376,912	$571,238	$3,646	$72,251	$0	$1,024,046
Nonresid. Total	$913,420	$1,026,503	$9,933	$200,545	$0	$2,150,402
Total	$6,890,666	$5,894,889	$2,781,148	$2,699,743	$506,800	$18,773,246

SDA Area 2	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$3,556,040	$2,585,540	$1,471,758	$1,484,998	$269,155	$9,367,491
Single Family Att.	$257,348	$239,000	$136,045	$107,776	$24,880	$765,049
Multifamily	$86,116	$86,909	$49,471	$36,107	$9,047	$267,650
Residential Total	$3,899,504	$2,911,449	$1,657,274	$1,628,882	$303,082	$10,400,191
Nonresidential						
Retail Space	$130,202	$84,671	$1,374	$30,768	$0	$247,015
Office Space	$314,599	$334,678	$3,621	$71,769	$0	$724,668
Industrial	$131,477	$219,693	$1,188	$23,554	$0	$375,912
Nonresid. Total	$576,278	$639,042	$6,184	$126,091	$0	$1,347,595
Total	$4,475,782	$3,550,490	$1,663,458	$1,754,973	$303,082	$11,747,786

SDA Area 3	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$540,193	$511,532	$291,177	$226,291	$53,251	$1,622,443
Single Family Att.	$17,615	$21,154	$12,041	$7,406	$2,202	$60,419
Multifamily	$0	$0	$0	$0	$0	$0
Residential Total	$557,809	$532,685	$303,219	$233,696	$55,453	$1,682,862
Nonresidential						
Retail Space	$17,164	$11,122	$207	$4,306	$0	$32,799
Office Space	$17,900	$18,984	$236	$4,369	$0	$41,490
Industrial	$26,230	$43,722	$271	$5,032	$0	$75,254
Nonresid. Total	$61,294	$73,827	$714	$13,707	$0	$149,542
Total	$619,103	$606,512	$303,933	$247,403	$55,453	$1,832,404

EXHIBIT 5 (continued)
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Revenues of Future Growth: Total Revenues by Expenditure Funds

Unincorporated Areas	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$9,391,749	$7,259,355	$4,132,218	$3,924,546	$755,700	$25,463,569
Single Family Att.	$683,198	$668,949	$380,783	$286,327	$69,638	$2,088,895
Multifamily	$359,613	$384,215	$218,705	$150,904	$39,997	$1,153,433
Residential Total	$10,434,560	$8,312,519	$4,731,707	$4,361,776	$865,334	$28,705,897
Nonresidential						
Retail Space	$279,445	$170,503	$3,012	$67,100	$0	$520,059
Office Space	$736,930	$734,217	$8,714	$172,407	$0	$1,652,268
Industrial	$534,618	$834,652	$5,105	$100,837	$0	$1,475,212
Nonresid. Total	$1,550,991	$1,739,372	$16,832	$340,343	$0	$3,647,538
Total	$11,985,552	$10,051,891	$4,748,538	$4,702,120	$865,334	$32,353,435

City of Santa Fe	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$5,601,800	$4,609,030	$2,623,583	$2,342,493	$479,801	$15,656,707
Single Family Att.	$943,116	$987,649	$562,196	$395,639	$102,814	$2,991,416
Multifamily	$1,263,482	$1,436,581	$817,740	$530,708	$149,548	$4,198,059
Residential Total	$7,808,399	$7,033,260	$4,003,519	$3,268,841	$732,163	$22,846,183
Nonresidential						
Retail Space	$1,341,117	$690,859	$10,723	$291,782	$0	$2,334,481
Office Space	$2,455,180	$2,125,334	$21,993	$520,678	$0	$5,123,183
Industrial	$856,744	$1,213,434	$6,278	$148,633	$0	$2,225,089
Nonresid. Total	$4,653,041	$4,029,627	$38,994	$961,092	$0	$9,682,753
Total	$12,461,440	$11,062,887	$4,042,513	$4,229,933	$732,163	$32,528,936

County Total	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Revenues
Residential						
Single Family Det.	$14,993,549	$11,868,386	$6,755,801	$6,267,040	$1,235,501	$41,120,277
Single Family Att.	$1,626,314	$1,656,598	$942,980	$681,966	$172,452	$5,080,311
Multifamily	$1,623,094	$1,820,796	$1,036,445	$681,612	$189,545	$5,351,492
Residential Total	$18,242,959	$15,345,779	$8,735,226	$7,630,619	$1,597,498	$51,552,080
Nonresidential						
Retail Space	$1,620,562	$861,362	$13,735	$358,881	$0	$2,854,540
Office Space	$3,192,110	$2,859,551	$30,707	$693,084	$0	$6,775,451
Industrial	$1,391,362	$2,048,086	$11,383	$249,470	$0	$3,700,300
Nonresid. Total	$6,204,033	$5,768,999	$55,825	$1,301,434	$0	$13,330,292
Total (Standard)	$24,446,991	$21,114,778	$8,791,051	$8,932,053	$1,597,498	$64,882,371
Total (Smart Growth)	$24,446,991	$21,114,778	$9,265,905	$9,001,643	$1,597,498	$65,426,815

EXHIBIT 6
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Fiscal Impacts of Future Growth: Total Fiscal Impact by Expenditure Funds

SDA Area 1	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	$874,187	-$588,004	-$1,132,958	$921,881	-$26,582	$48,523
Single Family Att.	-$26,004	-$57,750	-$111,273	$44,312	-$2,611	-$153,325
Multifamily	-$42,314	-$42,000	-$80,926	$22,556	-$1,899	-$144,583
Residential Total	$805,869	-$687,755	-$1,325,157	$988,749	-$31,092	-$249,385
Nonresidential						
Retail Space	$75,841	-$94,276	$0	$18,386	$0	-$49
Office Space	$213,458	-$193,294	$0	$49,948	$0	$70,112
Industrial	$233,585	$140,558	$0	$37,487	$0	$411,630
Nonresid. Total	$522,884	-$147,012	$0	$105,821	$0	$481,693
Total	$1,328,754	-$834,767	-$1,325,157	$1,094,570	-$31,092	$232,308

SDA Area 2	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	$809,584	-$365,258	-$703,775	$682,817	-$16,513	$406,856
Single Family Att.	$3,474	-$33,763	-$65,055	$33,626	-$1,526	-$63,245
Multifamily	-$6,201	-$12,278	-$23,656	$9,143	-$555	-$33,548
Residential Total	$806,857	-$411,299	-$792,486	$725,586	-$18,594	$310,064
Nonresidential						
Retail Space	$76,174	-$77,677	$0	$17,664	$0	$16,161
Office Space	$172,229	-$93,129	$0	$37,237	$0	$116,337
Industrial	$84,749	$79,284	$0	$12,221	$0	$176,255
Nonresid. Total	$333,153	-$91,521	$0	$67,122	$0	$308,753
Total	$1,140,010	-$502,821	-$792,486	$792,707	-$18,594	$618,817

SDA Area 3	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	-$3,174	-$72,264	-$139,237	$67,584	-$3,267	-$150,358
Single Family Att.	-$4,854	-$2,988	-$5,758	$843	-$135	-$12,893
Multifamily	$0	$0	$0	$0	$0	$0
Residential Total	-$8,028	-$75,252	-$144,995	$68,427	-$3,402	-$163,250
Nonresidential						
Retail Space	$9,018	-$13,354	$0	$2,330	$0	-$2,006
Office Space	$8,632	-$8,868	$0	$2,121	$0	$1,884
Industrial	$15,556	$11,649	$0	$2,443	$0	$29,648
Nonresid. Total	$33,206	-$10,573	$0	$6,894	$0	$29,527
Total	$25,177	-$85,826	-$144,995	$75,321	-$3,402	-$133,724

EXHIBIT 6 (continued)

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Fiscal Impacts of Future Growth: Total Fiscal Impact by Expenditure Funds

Unincorporated Areas	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	$1,680,597	-$1,025,527	-$1,975,970	$1,672,283	-$46,362	$305,021
Single Family Att.	-$27,384	-$94,502	-$182,085	$78,781	-$4,272	-$229,462
Multifamily	-$48,515	-$54,278	-$104,582	$31,698	-$2,454	-$178,130
Residential Total	$1,604,698	-$1,174,307	-$2,262,637	$1,782,762	-$53,088	-$102,572
Nonresidential						
Retail Space	$161,034	-$185,307	$0	$38,380	$0	$14,107
Office Space	$394,318	-$295,291	$0	$89,307	$0	$188,334
Industrial	$333,891	$231,491	$0	$52,151	$0	$617,533
Nonresid. Total	$889,243	-$249,107	$0	$179,837	$0	$819,973
Total	$2,493,941	-$1,423,413	-$2,262,637	$1,962,599	-$53,088	$717,401

City of Santa Fe	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	$705,920	-$651,116	-$1,254,561	$912,511	-$29,436	-$316,682
Single Family Att.	-$106,001	-$139,525	-$268,835	$89,215	-$6,308	-$431,453
Multifamily	-$262,507	-$202,945	-$391,032	$84,999	-$9,175	-$780,660
Residential Total	$337,412	-$993,586	-$1,914,428	$1,086,725	-$44,918	-$1,528,795
Nonresidential						
Retail Space	$919,520	-$575,993	$0	$189,524	$0	$533,050
Office Space	$1,590,521	-$472,865	$0	$310,957	$0	$1,428,612
Industrial	$609,917	$471,749	$0	$88,766	$0	$1,170,433
Nonresid. Total	$3,119,958	-$577,109	$0	$589,246	$0	$3,132,095
Total	$3,457,371	-$1,570,695	-$1,914,428	$1,675,971	-$44,918	$1,603,300

County Total	General Fund	Special Fund	Capital Fund	Debt Service Fund	Enterprise Fund	Total Fiscal Impact
Residential						
Single Family Det.	$2,386,517	-$1,676,643	-$3,230,531	$2,584,793	-$75,798	-$11,661
Single Family Att.	-$133,384	-$234,027	-$450,920	$167,996	-$10,580	-$660,915
Multifamily	-$311,022	-$257,223	-$495,614	$116,697	-$11,629	-$958,790
Residential Total	$1,942,111	-$2,167,893	-$4,177,065	$2,869,487	-$98,006	-$1,631,366
Nonresidential						
Retail Space	$1,080,554	-$761,300	$0	$227,903	$0	$547,157
Office Space	$1,984,839	-$768,157	$0	$400,263	$0	$1,616,946
Industrial	$943,808	$703,241	$0	$140,917	$0	$1,787,965
Nonresid. Total	$4,009,201	-$826,216	$0	$769,083	$0	$3,952,068
Total (Standard)	$5,951,311	-$2,994,109	-$4,177,065	$3,638,570	-$98,006	$2,320,701
Total (Smart Growth)	$6,900,472	- $1,846,578	- $3,702,211	$3,708,160	$98,006	$4,961,837

The above fiscal impact differences reflect fiscal impacts resulting from standard development in Santa Fe County. SDAs 1–3 sum to the Unincorporated Area; the Unincorporated Area (SDAs 1–3) plus the City of Santa Fe sum to the County fiscal impacts total.

The above conveys that about 53.25 percent of the Unincorporated Area's fiscal impact surpluses will take place in SDA-1 (+$1.33 million – General Fund and +$0.23 million – All Funds); 45.75 percent in SDA-2 (+$1.14 million – General Fund and +$0.62 million – All Funds); and 1.0 percent in SDA-3 (+$0.025 million – General Fund and -$0.134 million – All Funds). The Unincorporated Area of the County will receive 41.85 percent of all future growth's fiscal surpluses (+$2.49 million – General Fund and +$0.72 million – All Funds). The City of Santa Fe will receive 58.15 percent of all future growth's fiscal surpluses (+$3.46 million – General Fund and +$1.60 million – All Funds).

Total positive fiscal impact differences related to growth under standard development will be +$5.95 million annually (at period end) to the General Fund and +$2.32 million annually to All Funds. Under a smart growth strategy, positive fiscal impacts to the General Fund would be increased to +$6.90 million annually (at period end) and All Funds would be increased to +$4.96 million annually (exhibit 6). This reflects development servicing efficiencies under smart growth as well as assistance in funding development costs from other than County sources.

Conclusions

Projected development in the County of Santa Fe, New Mexico over the period 2010–2030 will meet the test of fiscal solvency. The fiscal analysis counts all costs in the General Fund and all costs in All Funds. It includes a full range of services provided to all new residents and employees over the period.

Against costs are projected revenues, which in many cases are limited in their counting. Gross Receipts Tax revenues are projected at ambient rather than at high growth levels. Cash balances liberally applied at the end of a fiscal year are not applied here. In all, projected growth from 2010 to 2030 will meet all of the challenges and will pass the test in both standard development and smart growth formats. Growth will meet the test of fiscal solvency at the County level and must now be evaluated for its other local impacts. It is time now to turn to the costs/revenues of development to the County's school districts.

Part I.B

FISCAL IMPACTS—SANTA FE COUNTY AND OTHER PUBLIC SCHOOL DISTRICTS (MORIARTY, POJOAQUE VALLEY, ESPAÑOLA)

OVERVIEW

The fiscal impact analysis undertaken for the Santa Fe County and Other Public School Districts is based on a detailed projection of the demographic impacts of projected growth from 2010 to 2030 in these districts by type, size, and price of unit for residential development and by price (reflecting type) for nonresidential development. The impact on the school system is not a required part of the fiscal analysis to the County but is being provided to assure Santa Fe County public officials that the projected growth from 2010 to 2030 will more than pay its way when school costs versus revenues are considered.

The analysis uses information from the FY 2010-11 Santa Fe and Other School Budget and from student estimates as of June 2010. The analysis begins with cost calculations.

CALCULATING COSTS: SANTA FE AND OTHER PUBLIC SCHOOLS

Total and Per Student Costs

For cost procedures for the Santa Fe and Other Public Schools, similar procedures for independently modeling individual funds, as used for the County of Santa Fe, were employed. The four various school districts (Santa Fe, Moriarty, Pojoaque, and Española) each have four active funds that contain expenditures and revenues. These four active funds are the General Operating Fund, the Special Revenue Fund, the Debt Service Fund, and the Capital Fund. Costs associated with the General Operating Fund are as follows: Santa Fe Public Schools (SFPS), $99.8 million; Moriarty Public Schools (MPS), $26.4 million; Pojoaque Public Schools (PPS), $17.0 million; and Española Public Schools (EPS), $37.5 million. The Special Revenue Fund totals are: SFPS, $23.8 million; MPS, $4.8 million; PPS, $4.9 million; and EPS, $10.3 million. Lastly, the Capital Fund totals are: SFPS, $38.6 million: MPS, $12.9 million; PPS, $3.6 million; and EPS, $5.4 million. The Debt Service Fund totals are: SFPS, $41.4 million; MPS, $6.5 million; PPS, $2.0 million; and EPS, $6.2 million. These funds total $203.6 million for SFPS; $50.6 million for MPS; $27.5 million for PPS; and 59.4 million for EPS. Total figures translate to a cost of $15,079 per student for SFPS; $14,951 per student for MPS; $13,961 per student for PPS; and $13,449 per student for EPS (figure 11).

Costs of 2010 – 2030 Growth – Santa Fe County and Other School Districts
Per Pupil Costs
Calculating Costs by Expenditure Fund

	General Fund	*Special Fund*	*Capital Fund*	*Debt Service Fund*	*All Funds*
Santa Fe Schools					
Total (in $ Millions)	$99.8	$23.8	$38.6	$41.4	$203.6
Per Student	$7,397	$1,761	$2,856	$3,065	$15,079
Moriarty Schools					
Total (in $ Millions)	$26.4	$4.8	$12.9	$6.5	$50.6
Per Student	$7,813	$1,404	$3,800	$1,934	$14,951
Pojoaque Valley Schools					
Total (in $ Millions)	$8,630	$2,460	$1,845	$1,027	$13,961
Per Student	$17.0	$4.9	$3.6	$2.0	$27.5
Española Schools					
Total (in $ Millions)	$8,483	$2,325	$1,227	$1,414	$13,449
Per Student	$37.5	$11.3	$5.4	$6.2	$59.4

Figure 11. ***Costs to Santa Fe and other public schools***

All of these funds, except for the General Operating Fund, are "special purpose," which means that revenues flowing within these funds are restricted to certain purposes and cannot be spent for General Operating Fund purposes. The property tax minimally supports the General Operating Fund with tax rates (per thousand dollars of assessed value) of $0.119 (residential) and $0.391 (nonresidential) in SFPS; $0.359 (residential) and $0.500 (nonresidential) in MPS; $0.167 (residential) and $0.410 (nonresidential) in PPS; and $0.163 (residential) and $0.178 (nonresidential) in EPS. Property tax heavily supports the Capital and Debt Service Funds. The Capital Fund is supported with rates of $3.500 (residential and nonresidential) in SFPS; $2.000 (residential and nonresidential) in MPS; and $2.000 (residential and nonresidential) in PPS. Española Public Schools do not support the Capital Fund with property tax. Debt Service Funds are supported with rates of $3.419 (residential and nonresidential) in SFPS; $8.964 (residential and nonresidential) in MPS; $9.574 (residential and nonresidential) in PPS; and $5.520 (residential and nonresidential) in EPS (figure 12).

Projected Santa Fe and Other School District Costs

In order to calculate costs for projected 2010–2030 growth on the Santa Fe and Other Public Schools, the calculation begins with All Funds and All Costs for each district. This is $203.6 million for SFPS; $50.6 million for MPS; $27.5 million for PPS; and 59.4 million for EPS million for the four active funds. The reason that the procedure is so encompassing is due to the presence of the property (ad valorem) tax in three funds in addition to projected growth in four separate school districts. As figure 13 indicates, the only difference between per student costs and per student non- tax revenues is in: (1) the General Operating Fund; (2) the Debt Service Fund; (3) the Capital Fund, all of which receive some percentage of property tax revenue. For school district operating purposes, costs per student are $15,079 per student for SFPS; $14,951 per student for MPS; $13,961 per student for PPS; and $13,449 per student for EPS. Non-tax revenues are $11,931 per student for SFPS; $13,490 per student for MPS; $13,143 per student for PPS; and $12,866 per student for EPS. The difference between the two is $3,148 per student in SFPS; $1,461 per student in MPS; $818 per student in PPS; and $582 per student in EPS; this equates to the amount of the locally raised property tax.

	Santa Fe		*Moriarty*		*Pojoaque*		*Española*	
Specific School District Fund	*Costs per Student*	*Non-Tax Revenues per Student*	*Costs per Student*	*Non-Tax Revenues per Student*	*Costs per Student*	*Non-Tax Revenues per Student*	*Costs per Student*	*Non-Tax Revenues per Student*
1. General Operating Fund	$7,397	$7,213	$7,813	$7,761	$8,630	$8,612	$8,483	$8,464
2. Special Revenue Fund	1,761	1,755	1,404	1,404	2,460	2,460	2,325	2,325
3. Debt Service Fund	2,856	1,297	1,934	788	1,027	396	1,414	850
4. Capital Fund	3,065	1,666	3,800	3,538	1,845	1,675	1,227	1,227
	Costs	*Non-Tax Revenues*	*Costs*	*Non-Tax Revenues*	*Costs*	*Non-Tax Revenues*	*Costs*	*Non-Tax Revenues*
Total per Student	$15,079	$11,931	$14,951	$13,490	$13,961	$13,143	$13,449	$12,866

Figure 13. ***Distribution of per student school district costs and nontax revenues (Santa Fe and Other Public Schools, FY 2010–11)***

Source: Santa Fe and Other Public Schools, FY2010-11.

School District	*County (Code)*	*Operational Levy*			*Capital Improvements SB-9 Levy*			*Capital Improvements HB-33 Levy*			*Debt Service Levy*	*Education Tech. Debt Service*	*Total Rate*		
		Residential	Non-residential	Copper, Oil and Gas	Residential	Non-residential	Copper, Oil and Gas	Residential	Non-residential	Copper, Oil and Gas			Residential	Non-residential	Copper, Oil and Gas
Española	Rio Arriba (#45)	0.163	0.178	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.545	0.975	5.683	5.698	0.000
	(+#18 Santa Fe)	0.163	0.178	0.000	0.000	0.000	0.000	0.000	0.000	0.000	4.545	0.975	5.683	5.698	0.000
Moriarty	Torrance (#8)	.0359	0.500	0.000	2.000	2.000	0.000	0.000	0.000	0.000	8.964	0.000	11.323	11.464	0.000
	(+#8T Bernalillo)	.0359	0.500	0.000	2.000	2.000	0.000	0.000	0.000	0.000	8.964	0.000	11.323	11.464	0.000
	(+#24 Bernalillo)	.0359	0.500	0.000	2.000	2.000	0.000	0.000	0.000	0.000	8.964	0.000	11.323	11.464	0.000
	(+#8T Santa Fe)	.0359	0.500	0.000	2.000	2.000	0.000	0.000	0.000	0.000	8.964	0.000	11.323	11.464	0.000
Pojoaque	Santa Fe (#1)	0.167	0.410	0.000	2.000	2.000	0.000	0.000	0.000	0.000	9.574	0.000	11.741	11.984	0.000
Santa Fe	Santa Fe (#C)	0.119	0.391	0.000	2.000	2.000	0.000	1.500	1.500	0.000	3.419	0.000	7.038	7.310	0.000
Statewide Average		0.326	0.458	0.142	1.905	1.892	0.581	0.429	0.441	0.194	5.066	0.467	8.118	8.241	1.074

Figure 12. ***District property tax rates (per $1,000 assessed value): 2009–10 operating budget***

	General Fund Santa Fe	*Other Districts*	*Special Fund Santa Fe*	*Other Districts*	*Capital Fund Santa Fe*	*Other Districts*	*Debt Service Fund Santa Fe*	*Other Districts*	*Total Costs Santa Fe*	*Other Districts*	*County Total*
SDA 1	$17,365,105	$619,673	$4,132,069	$128,214	$6,702,061	$256,170	$7,192,649	$133,372	$35,382,885	$1,137,429	$36,520,314
SDA 2	$5,525,128	$6,147,207	$1,315,399	$1,548,600	$2,133,529	$1,799,856	$2,289,702	$994,193	$11,263,757	$10,489,857	$21,753,614
SDA 3	$1,551,140	$611,931	$369,289	$154,516	$598,973	$178,207	$642,818	$98,542	$3,162,220	$1,043,196	$4,205,416
Unincorporated Area	$24,432,373	$7,378,811	$5,816,757	$1,831,330	$9,434,563	$2,234,233	$10,125,169	$1,226,107	$49,808,862	$12,670,482	$62,479,344
City of Santa Fe	$22,497,023	$0	$5,355,997	$0	$8,687,227	$0	$9,323,129	$0	$45,863,375	$0	$45,863,375
Total	$46,929,396	$7,378,811	$11,172,753	$1,831,330	$18,121,790	$2,234,233	$19,448,297	$1,226,107	$95,672,237	$12,670,482	$108,342,719

Figure 14. ***Santa Fe and Other School District costs: Unincorporated Area; City of Santa Fe—calculating costs by expenditure fund***

Each of the funds is treated separately, and then costs and revenues are presented by the General Operating Fund and All Other Funds. Per student costs are charged against each fund, and per student non-tax revenues are credited against each fund. In those funds, which are contributed to by the property tax (General Operating Fund, Debt Service Fund, Capital Fund), these calculated additional revenues related to the residential and nonresidential uses of projected 2010–2030 projected growth are added to per student non-tax revenues.

School district costs per student are determined by taking the school district All Funds budget and dividing this by the number of students in each of the Public School Districts. The number is broken down by fund, as indicated in figure 14. (Only 95 percent of costs are taken, to account for non-proportional impacts in school administration costs). These numbers are applied to the projections of students by type of residential unit, and costs are derived. They generate annual school district costs engendered by the projected growth.

Costs to the Santa Fe and Other Public Schools General Operating Fund from projected 2010–2030 growth amount to $54.3 million annually to educate and provide administrative services to 7,612 additional students. This is the General Operating Fund cost of $7,135 per student, taken at 95 percent of full value. Ninety-five (95) percent of full value means that one-half of the Santa Fe and Other Public School administrative personnel would be increased in a directly proportional manner. This is typical of the increase of support personnel relative to instructional personnel in school districts. All other instructional and support personnel would be increased proportionally. Of the $54.3 million in Santa Fe and Other Public School annual costs, $46.9 million is contributed by SFPS; $2.5 million by MPS; $4.4 million by PPS; and $0.5 million by EPS.

Other costs to the Special Revenue, Debt Service, Capital, and Enterprise Funds, in the aggregate, amount to $54.0 million. Contributors to these costs are the Capital Fund ($20.4 million); Special Revenue Fund ($13.0 million); and the Debt Service Fund ($20.7 million). The total costs of all funds to all school districts is $108.3 million annually. Of this, SFPS is $95.7 million annually; MPS is $4.8 million annually; PPS is $7.1 million annually; and EPS is $0.8 million annually (figure 14, exhibit 7).

EXHIBIT 7
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School District Costs of Future Growth: Total Costs by Expenditure Funds

COSTS	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Costs
SDA Area 1					
Santa Fe Schools					
Residential	$17,356,105	$4,132,069	$6,702,061	$7,192,649	$35,382,885
Nonresidential					
Total	$17,356,105	$4,132,069	$6,702,061	$7,192,649	$35,382,885
Monarity Schools					
Residential	$457,865	$82,272	$222,672	$113,359	$876,168
Nonresidential					
Total	$457,865	$82,272	$222,672	$113,359	$876,168
Pojoaque Valley Schools					
Residential	$145,875	$41,575	$31,193	$17,357	$236,002
Nonresidential					
Total	$145,875	$41,575	$31,193	$17,357	$236,002
Española Schools					
Residential	$15,932	$4,367	$2,305	$2,656	$25,259
Nonresidential					
Total	$15,932	$4,367	$2,305	$2,656	$25,259
SDA Area 1 Total					
Residential	$17,975,778	$4,260,283	$6,958,231	$7,326,021	$36,520,314
Nonresidential	$0	$0	$0	$0	
Total	$17,975,778	$4,260,283	$6,958,231	$7,326,021	$36,520,314
SDA Area 2					
Santa Fe Schools					
Residential	$5,525,128	$1,315,399	$2,133,529	$2,289,702	$11,263,757
Nonresidential					
Total	$5,525,128	$1,315,399	$2,133,529	$2,289,702	$11,263,757
Monarity Schools					
Residential	$1,887,694	$339,192	$918,035	$467,357	$3,612,277
Nonresidential					
Total	$1,887,694	$339,192	$918,035	$467,357	$3,612,277
Pojoaque Valley Schools					
Residential	$3,840,106	$1,094,450	$821,152	$456,928	$6,212,637
Nonresidential					
Total	$3,840,106	$1,094,450	$821,152	$456,928	$6,212,637
Española Schools					
Residential	$419,408	$114,958	$60,669	$69,909	$664,943
Nonresidential					
Total	$419,408	$114,958	$60,669	$69,909	$664,943
SDA Area 2 Total					
Residential	$11,672,335	$2,863,999	$3,933,385	$3,283,895	$21,753,614
Nonresidential	$0	$0	$0	$0	
Total	$11,672,335	$2,863,999	$3,933,385	$3,283,895	$21,753,614

EXHIBIT 7 (continued)
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School District Costs of Future Growth: Total Costs by Expenditure Funds

COSTS	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Costs
SDA Area 3					
Santa Fe Schools					
Residential	$1,551,140	$369,289	$598,973	$642,818	$3,162,220
Nonresidential					
Total	$1,551,140	$369,289	$598,973	$642,818	$3,162,220
Monarity Schools					
Residential	$184,470	$33,147	$89,713	$45,671	$353,001
Nonresidential					
Total	$184,470	$33,147	$89,713	$45,671	$353,001
Pojoaque Valley Schools					
Residential	$385,371	$109,833	$82,406	$45,855	$623,465
Nonresidential					
Total	$385,371	$109,833	$82,406	$45,855	$623,465
Española Schools					
Residential	$42,089	$11,537	$6,088	$7,016	$66,730
Nonresidential					
Total	$42,089	$11,537	$6,088	$7,016	$66,730
SDA Area 3 Total					
Residential	$2,163,071	$523,805	$777,180	$741,359	$4,205,416
Nonresidential	$0	$0	$0	$0	
Total	$2,163,071	$523,805	$777,180	$741,359	$4,205,416
Unincorporated Area Total					
Residential	$31,811,185	$7,648,087	$11,668,796	$11,351,276	$62,479,344
Nonresidential	$0	$0	$0	$0	
Total	$31,811,185	$7,648,087	$11,668,796	$11,351,276	$62,479,344
Santa Fe City (Santa Fe Schools)					
Residential	$22,497,023	$5,355,997	$8,687,227	$9,323,129	$45,863,375
Nonresidential					
Total	$22,497,023	$5,355,997	$8,687,227	$9,323,129	$45,863,375
County Total					
Residential	$54,308,208	$13,004,084	$20,356,024	$20,674,404	$108,342,719
Nonresidential	$0	$0	$0	$0	
Total	$54,308,208	$13,004,084	$20,356,024	$20,674,404	$108,342,719
School Districts					
Santa Fe Schools					
Residential	$46,929,396	$11,172,753	$18,121,790	$19,448,297	$95,672,237
Nonresidential	$0	$0	$0	$0	$0
Total	$46,929,396	$11,172,753	$18,121,790	$19,448,297	$95,672,237
Monarity Schools					
Residential	$2,530,029	$454,610	$1,230,419	$626,387	$4,841,446
Nonresidential	$0	$0	$0	$0	$0
Total	$2,530,029	$454,610	$1,230,419	$626,387	$4,841,446
Pojoaque Valley Schools					
Residential	$4,371,353	$1,245,859	$934,752	$520,140	$7,072,104
Nonresidential	$0	$0	$0	$0	$0
Total	$4,371,353	$1,245,859	$934,752	$520,140	$7,072,104
Española Schools					
Residential	$477,429	$130,861	$69,062	$79,580	$756,932
Nonresidential	$0	$0	$0	$0	$0
Total	$477,429	$130,861	$69,062	$79,580	$756,932

CALCULATING REVENUES: SANTA FE AND OTHER PUBLIC SCHOOLS

Property Tax and Per Student Revenues

The major source of revenue to the Santa Fe and Other Public Schools is from the State of New Mexico through the Public Education Department. The uses of these funds include teacher and support staff salaries and benefits, supplies, custodial needs, utilities, student transportation, and instructional materials. In the FY 2010-11 General Operating Fund for Santa Fe Public Schools, which amounts to $98,410,305, $88,005,526 comes from the State of New Mexico in the form of a State Equalization Guarantee (SEG) and $2,338,642 comes from the State in the form of a Transportation Distribution. The total amounts to 92 percent of Santa Fe Public Schools General Operating Expenditures paid for by the State of New Mexico. These percentages for the other districts are 90 percent, 76 percent, and 88 percent for MPS, PPS, and EPS, respectively.

Another source of income received is that from the property tax. The property tax contributes 1.07 percent of the General Operating Fund revenue for SFPS; 0.67 percent for MPS; 0.21 percent for PPS; and 0.22 percent for EPS. Property tax revenue to Santa Fe and Other Public Schools is calculated by multiplying one-third of the market value of residential properties by the local millage rate applied to both residential and nonresidential properties. (This calculation is ultimately the assessed value, based on sales price, multiplied by the county's property tax rate.) The overall tax rates on residential and nonresidential properties are reduced by amounts flowing to funds other than the General Operating Fund. In SFPS, 3 percent goes to the General Operating Fund; 51 percent to the Capital Fund; and 46 percent to the Debt Service Fund. In MPS, 4 percent goes to the General Operating Fund; 18 percent to the Capital Fund; and 78 percent to the Debt Service Fund. In PPS, 2 percent goes to the General Operating Fund; 21 percent to the Capital Fund; and 77 percent to the Debt Service Fund. Finally, in EPS, 3 percent goes to the General Operating Fund; 0 percent to the Capital Fund; and 97 percent to the Debt Service Fund.

Projecting School District Revenues

Revenues to the Santa Fe and Other Public Schools General Operating Funds come largely from non-property-tax sources (mostly state intergovernmental transfers) and are expressed on a per student basis ($7,213 in SFPS, $7,761 in MPS, $8,612 in PPS, and $8,464 in EPS) (figure 15). Total non-tax revenues to the various districts are $48,171,601 in SFPS; $2,645,271 in MPS; $4,591,978 in PPS; and $501,471 in EPS.

Revenues of 2010 – 2030 Growth – Santa Fe County and Other School Districts
Per Pupil Revenues
Calculating Revenues by Expenditure Fund

	General Fund		*Special Fund*	*Capital Fund*		*Debt Service Fund*	
	Revenue per Student	Tax Rate per Value	Revenue per Student	Revenue per Student	Tax Rate per Value	Revenue per Student	Tax Rate per Value
Santa Fe Schools							
Residential	$7,213	$0.119	$1,755	$1,297	$3.500	$1,666	$3.419
Nonresidential		$0.391			$3.500		$3.419
Total							
Moriarty Schools							
Residential	$7,761	$0.359	$1,404	$3,538	$2.000	$788	$8.964
Nonresidential		$0.500			$2.000		$8.964
Total							
Pojoaque Valley Schools							
Residential	$8,612	$0.167	$2,460	$1,675	$2.000	$396	$9.574
Nonresidential		$0.410			$2.000		$9.574
Total							
Española Schools							
Residential	$8,464	$0.163	$2,325	$1,227		$850	$5.520
Nonresidential		$0.178					$5.520
Total							

Figure 15. ***Revenues per student and property tax rates by fund***

With regard to property tax revenue, almost all come from residential uses 97 to 99 percent for each of the various districts); only 1 to 3 percent annually comes from the nonresidential property tax. In terms of the distribution of total revenues to the school districts, $103,554,050 comes from SFPS; $6,472,215 comes from MPS; $10,151,296 comes from PPS; and $931,099 comes from EPS. In addition to the $48.7 million in revenues in the General Operating Fund, there is another $54.9 million in the "All Other funds" grouping in SFPS. About 43 percent of these funds come from the property tax component of the Capital and Debt Service Funds. The remaining 57 percent constitutes per capita revenues. In MPS, Capital and Debt Service property tax accounts for 48 percent of "All Other Funds"; in PPS, Capital and Debt Service property tax accounts for 56 percent of "All Other Funds"; and in EPS, Capital and Debt Service property tax accounts for 39 percent of "All Other Funds" (figure 16, exhibit 8).

EXHIBIT 8
—
School District Revenues of Future Growth: Total Revenues by Expenditure Funds

Revenues	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Revenues
SDA Area 1					
Santa Fe Schools					
Residential	$17,945,975	$4,333,768	$7,040,714	$7,864,372	$37,184,829
Nonresidential	$18,322	$0	$164,009	$160,213	$342,544
Total	$17,964,297	$4,333,768	$7,204,723	$8,024,585	$37,527,373
Monarity Schools	$0	$0	$0	$0	$0
Residential	$488,550	$86,602	$272,994	$294,029	$1,142,175
Nonresidential	$2,721	$0	$10,885	$48,789	$62,396
Total	$491,271	$86,602	$283,880	$342,818	$1,204,571
Pojoaque Valley Schools	$0	$0	$0	$0	$0
Residential	$154,557	$43,763	$45,605	$82,662	$326,587
Nonresidential	$933	$0	$4,549	$21,777	$27,259
Total	$155,489	$43,763	$50,154	$104,439	$353,846
Española Schools	$0	$0	$0	$0	$0
Residential	$16,878	$4,597	$2,426	$6,524	$30,424
Nonresidential	$45	$0	$0	$1,395	$1,440
Total	$16,922	$4,597	$2,426	$7,919	$31,864
SDA Area 1 Total	$0	$0	$0	$0	$0
Residential	$18,605,959	$4,468,730	$7,361,739	$8,247,587	$38,684,016
Nonresidential	$22,021	$0	$179,443	$232,174	$433,638
Total	$18,627,980	$4,468,730	$7,541,183	$8,479,761	$39,117,654
SDA Area 2					
Santa Fe Schools					
Residential	$5,716,140	$1,379,608	$2,336,434	$2,596,436	$12,028,617
Nonresidential	$6,441	$0	$57,655	$56,321	$120,417
Total	$5,722,581	$1,379,608	$2,394,089	$2,652,757	$12,149,034
Monarity Schools	$0	$0	$0	$0	$0
Residential	$2,017,355	$357,044	$1,143,080	$1,291,005	$4,808,485
Nonresidential	$638	$0	$2,551	$11,435	$14,624
Total	$2,017,993	$357,044	$1,145,632	$1,302,440	$4,823,109
Pojoaque Valley Schools	$0	$0	$0	$0	$0
Residential	$4,071,341	$1,152,053	$1,232,908	$2,330,995	$8,787,298
Nonresidential	$6,284	$0	$30,653	$146,737	$183,674
Total	$4,077,625	$1,152,053	$1,263,561	$2,477,732	$8,970,971
Española Schools	$0	$0	$0	$0	$0
Residential	$444,586	$121,008	$63,862	$181,669	$811,126
Nonresidential	$303	$0	$0	$9,400	$9,703
Total	$444,889	$121,008	$63,862	$191,070	$820,829
SDA Area 2 Total	$0	$0	$0	$0	$0
Residential	$12,249,422	$3,009,713	$4,776,284	$6,400,105	$26,435,525
Nonresidential	$13,666	$0	$90,860	$223,893	$328,418
Total	$12,263,088	$3,009,713	$4,867,144	$6,623,998	$26,763,944

EXHIBIT 8 (continued)
—
School District Revenues of Future Growth: Total Revenues by Expenditure Funds

Revenues	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Revenues
SDA Area 3					
Santa Fe Schools					
Residential	$1,601,310	$387,315	$554,316	$629,662	$3,172,604
Nonresidential	$375	$0	$3,355	$3,277	$7,007
Total	$1,601,685	$387,315	$557,671	$632,939	$3,179,611
Monarity Schools					
Residential	$195,968	$34,891	$105,167	$96,858	$432,885
Nonresidential	$508	$0	$2,033	$9,110	$11,651
Total	$196,476	$34,891	$107,200	$105,969	$444,536
Pojoaque Valley Schools					
Residential	$407,544	$115,614	$111,362	$174,732	$809,252
Nonresidential	$589	$0	$2,875	$13,762	$17,227
Total	$408,134	$115,614	$114,237	$188,495	$826,479
Española Schools					
Residential	$44,504	$12,144	$6,409	$14,439	$77,496
Nonresidential	$28	$0	$0	$882	$910
Total	$44,533	$12,144	$6,409	$15,321	$78,406
SDA Area 3 Total					
Residential	$2,249,327	$549,964	$777,255	$915,692	$4,492,236
Nonresidential	$1,501	$0	$8,262	$27,032	$36,795
Total	$2,250,827	$549,964	$785,517	$942,723	$4,529,031
Unincorporated Area Total					
Residential	$33,104,708	$8,028,408	$12,915,278	$15,563,383	$69,611,777
Nonresidential	$37,188	$0	$278,566	$483,098	$798,852
Total	$33,141,896	$8,028,408	$13,193,844	$16,046,482	$70,410,629
Santa Fe City (Santa Fe Schools)					
Residential	$23,266,131	$5,617,440	$9,259,051	$10,323,603	$48,466,224
Nonresidential	$119,376	$0	$1,068,581	$1,043,851	$2,231,808
Total	$23,385,506	$5,617,440	$10,327,632	$11,367,454	$50,698,032
County Total					
Residential	$56,370,839	$13,645,848	$22,174,329	$25,886,986	$118,078,002
Nonresidential	$156,563	$0	$1,347,147	$1,526,949	$3,030,659
Total	$56,527,402	$13,645,848	$23,521,476	$27,413,936	$121,108,661
School Districts					
Santa Fe Schools					
Residential	$48,529,556	$11,718,132	$19,190,515	$21,414,072	$100,852,274
Nonresidential	$144,514	$0	$1,293,600	$1,263,662	$2,701,776
Total	$48,674,069	$11,718,132	$20,484,115	$22,677,734	$103,554,050
Monarity Schools					
Residential	$2,701,873	$478,537	$1,521,242	$1,681,893	$6,383,545
Nonresidential	$3,867	$0	$15,469	$69,334	$88,671
Total	$2,705,740	$478,537	$1,536,711	$1,751,227	$6,472,215
Pojoaque Valley Schools					
Residential	$4,633,442	$1,311,430	$1,389,875	$2,588,389	$9,923,137
Nonresidential	$7,806	$0	$38,077	$182,276	$228,159
Total	$4,641,248	$1,311,430	$1,427,953	$2,770,665	$10,151,296
Española Schools					
Residential	$505,968	$137,749	$72,697	$202,632	$919,046
Nonresidential	$377	$0	$0	$11,677	$12,054
Total	$506,344	$137,749	$72,697	$214,309	$931,099

	General Fund Santa Fe	*Other Districts*	*Special Fund Santa Fe*	*Other Districts*	*Capital Fund Santa Fe*	*Other Districts*	*Debt Service Fund Santa Fe*	*Other Districts*	*Total Revenues Santa Fe*	*Other Districts*	*County Total*
SDA 1	$17,964,297	$663,683	$4,333,768	$134,962	$7,204,723	$336,460	$8,024,585	$455,176	$37,527,373	$1,590,281	$39,117,654
SDA 2	$5,722,581	$6,540,507	$1,379,608	$1,630,105	$2,394,089	$2,473,055	$2,652,757	$3,971,242	$12,149,034	$14,614,909	$26,763,943
SDA 3	$1,601,685	$649,142	$387,315	$162,649	$557,671	$227,846	$632,939	$309,784	$3,179,611	$1,349,421	$4,529,032
Unincorporated Area	$25,288,563	$7,853,333	$6,100,691	$1,927,716	$10,156,483	$3,037,361	$11,310,281	$4,736,201	$52,856,018	$17,554,611	$70,410,629
City of Santa Fe	$23,385,506	$0	$5,617,440	$0	$10,327,632	$0	$11,367,454	$0	$50,698,032	$0	$50,698,032
Total	$48,674,069	$7,853,333	$11,718,132	$1,927,716	$20,484,115	$3,037,361	$22,677,734	$4,736,201	$103,554,050	$17,554,611	$121,108,661

Figure 16. ***Santa Fe and Other School District revenues: Unincorporated Area, City of Santa Fe—calculating revenues by expenditure fund***

	General Fund Santa Fe	*Other Districts*	*Special Fund Santa Fe*	*Other Districts*	*Capital Fund Santa Fe*	*Other Districts*	*Debt Service Fund Santa Fe*	*Other Districts*	*Total Fiscal Impact Santa Fe*	*Other Districts*	*County Total*
SDA 1	$608,192	$44,010	$201,700	$6,748	$502,661	$80,290	$831,936	$321,804	$2,144,488	$452,852	$2,597,340
SDA 2	$197,453	$393,300	$64,209	$81,505	$260,561	$673,199	$363,055	$2,977,048	$885,277	$4,125,052	$5,010,329
SDA 3	$50,545	$37,211	$18,026	$8,132	-$41,302	$49,638	-$9,878	$211,242	$17,391	$306,224	$323,615
Unincorporated Area	$856,189	$474,521	$283,935	$96,386	$721,920	$803,127	$1,185,112	$3,510,094	$3,047,156	$4,884,129	$7,931,285
City of Santa Fe	$888,483	$0	$261,444	$0	$1,640,404	$0	$2,044,325	$0	$4,834,656	$0	$4,834,656
Total	$1,744,673	$474,521	$545,378	$96,386	$2,362,325	$803,127	$3,229,437	$3,510,094	$7,881,813	$4,884,129	$12,765,942

Figure 17. ***Santa Fe and Other School District fiscal impact: Unincorporated Area, City of Santa Fe—calculating fiscal impact by expenditure fund***

THE NET FISCAL IMPACT OF PROJECTED 2010–2030 GROWTH ON SANTA FE AND OTHER PUBLIC SCHOOLS

Fiscal Impact of Santa Fe and Other Public Schools

The Santa Fe and Other Public Schools receive a $12,765,942 annual fiscal surplus to all funds including a $2,219,194 annual fiscal surplus to its General Operating Fund. All of the districts produce a positive General Fund fiscal impact relative to future growth. These are as follows: SFPS, +$7.9 million annually; MPS, +$1.6 million annually; PPS, +$3.1 million annually; and EPS, +$0.2 annually. These figures also include positive fiscal impacts in Santa Fe and Other School Districts for the Capital Fund of +$3.2 million; the Special Fund, +$0.6 million; and the Debt Service Fund, +$6.7 million (figure 17, exhibit 9).

CONCLUSION

Projected 2010–2030 growth provides an annual surplus to the Santa Fe and Other Public Schools of approximately $12.8 million annually. Of this amount, approximately

$2.2 million annually would appear as a General Fund surplus, about $10.6 million as an Other Funds annual surplus. The surplus will continually build up from the current year and will be achieved at its full amount at the end of the twenty-year growth period. With a successfully implemented and updated SGMP and the associated sharing of revenue obligations, the projected surplus is likely to increase beyond these estimates into the future.

EXHIBIT 9
—
School District Fiscal Impacts of Future Growth: Total Fiscal Impact by Expenditure Funds

Fiscal	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Fiscal Impact
SDA Area 1					
Santa Fe Schools					
Residential	$589,870	$201,700	$338,653	$671,722	$1,801,944
Nonresidential	$18,322	$0	$164,009	$160,213	$342,544
Total	$608,192	$201,700	$502,661	$831,936	$2,144,488
Monarity Schools					
Residential	$30,685	$4,330	$50,322	$180,670	$266,007
Nonresidential	$2,721	$0	$10,885	$48,789	$62,396
Total	$33,406	$4,330	$61,208	$229,459	$328,403
Pojoaque Valley Schools					
Residential	$8,681	$2,188	$14,412	$65,304	$90,585
Nonresidential	$933	$0	$4,549	$21,777	$27,259
Total	$9,614	$2,188	$18,961	$87,081	$117,844
Española Schools					
Residential	$945	$230	$121	$3,868	$5,165
Nonresidential	$45	$0	$0	$1,395	$1,440
Total	$990	$230	$121	$5,263	$6,605
SDA Area 1 Total					
Residential	$630,181	$208,448	$403,508	$921,565	$2,163,702
Nonresidential	$22,021	$0	$179,443	$232,174	$433,638
Total	$652,202	$208,448	$582,951	$1,153,739	$2,597,340
SDA Area 2					
Santa Fe Schools					
Residential	$191,012	$64,209	$202,905	$306,734	$764,860
Nonresidential	$6,441	$0	$57,655	$56,321	$120,417
Total	$197,453	$64,209	$260,561	$363,055	$885,277
Monarity Schools					
Residential	$129,662	$17,852	$225,046	$823,648	$1,196,208
Nonresidential	$638	$0	$2,551	$11,435	$14,624
Total	$130,300	$17,852	$227,597	$835,083	$1,210,832
Pojoaque Valley Schools					
Residential	$231,235	$57,603	$411,756	$1,874,067	$2,574,661
Nonresidential	$6,284	$0	$30,653	$146,737	$183,674
Total	$237,519	$57,603	$442,409	$2,020,804	$2,758,335
Española Schools					
Residential	$25,178	$6,050	$3,193	$111,761	$146,182
Nonresidential	$303	$0	$0	$9,400	$9,703
Total	$25,481	$6,050	$3,193	$121,161	$155,886
SDA Area 2 Total					
Residential	$577,087	$145,714	$842,900	$3,116,210	$4,681,911
Nonresidential	$13,666	$0	$90,860	$223,893	$328,418
Total	$590,753	$145,714	$933,760	$3,340,103	$5,010,329

EXHIBIT 9 (continued)

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School District Fiscal Impacts of Future Growth: Total Fiscal Impact by Expenditure Funds

Fiscal	General Fund	Special Fund	Capital Fund	Debt Service Fund	Total Fiscal Impact
SDA Area 3					
Santa Fe Schools					
Residential	$50,170	$18,026	-$44,657	-$13,156	$10,384
Nonresidential	$375	$0	$3,355	$3,277	$7,007
Total	$50,545	$18,026	-$41,302	-$9,878	$17,391
Monarity Schools					
Residential	$11,497	$1,745	$15,454	$51,187	$79,883
Nonresidential	$508	$0	$2,033	$9,110	$11,651
Total	$12,006	$1,745	$17,487	$60,297	$91,534
Pojoaque Valley Schools					
Residential	$22,173	$5,781	$28,956	$128,877	$185,787
Nonresidential	$589	$0	$2,875	$13,762	$17,227
Total	$22,762	$5,781	$31,831	$142,640	$203,014
Española Schools					
Residential	$2,415	$607	$320	$7,424	$10,766
Nonresidential	$28	$0	$0	$882	$910
Total	$2,443	$607	$320	$8,305	$11,676
SDA Area 3 Total					
Residential	$86,255	$26,159	$74	$174,332	$286,821
Nonresidential	$1,501	$0	$8,262	$27,032	$36,795
Total	$87,756	$26,159	$8,337	$201,364	$323,615
Unincorporated Area Total					
Residential	$1,293,523	$380,321	$1,246,482	$4,212,108	$7,132,434
Nonresidential	$37,188	$0	$278,566	$483,098	$798,852
Total	$1,330,711	$380,321	$1,525,048	$4,695,206	$7,931,285
Santa Fe City (Santa Fe Schools)					
Residential	$769,108	$261,444	$571,823	$1,000,474	$2,602,849
Nonresidential	$119,376	$0	$1,068,581	$1,043,851	$2,231,808
Total	$888,483	$261,444	$1,640,404	$2,044,325	$4,834,656
County Total					
Residential	$2,062,631	$641,764	$1,818,305	$5,212,582	$9,735,282
Nonresidential	$156,563	$0	$1,347,147	$1,526,949	$3,030,659
Total	$2,219,194	$641,764	$3,165,452	$6,739,531	$12,765,942
School Districts					
Santa Fe Schools					
Residential	$1,600,159	$545,378	$1,068,725	$1,965,775	$5,180,037
Nonresidential	$144,514	$0	$1,293,600	$1,263,662	$2,701,776
Total	$1,744,673	$545,378	$2,362,325	$3,229,437	$7,881,813
Monarity Schools					
Residential	$171,844	$23,927	$290,822	$1,055,506	$1,542,099
Nonresidential	$3,867	$0	$15,469	$69,334	$88,671
Total	$175,711	$23,927	$306,292	$1,124,840	$1,630,769
Pojoaque Valley Schools					
Residential	$262,089	$65,572	$455,123	$2,068,249	$2,851,033
Nonresidential	$7,806	$0	$38,077	$182,276	$228,159
Total	$269,895	$65,572	$493,201	$2,250,525	$3,079,192
Española Schools					
Residential	$28,538	$6,887	$3,635	$123,053	$162,113
Nonresidential	$377	$0	$0	$11,677	$12,054
Total	$28,915	$6,887	$3,635	$134,730	$174,167

Part II
—
COSTS OF SPRAWL ANALYSIS RELATED TO 2010–2030 GROWTH IN SANTA FE COUNTY (Combined Savings to Government and Individuals)

INTRODUCTION

Over the past two decades, a number of costs-of-sprawl studies have been undertaken in individual states and nationwide. These studies have similarly posed two alternative scenarios for the governing entity: one representing current (historical) development patterns and financing mechanisms; the second representing more compact development patterns and the use of "pay as you grow" fees, PIDs, and public infrastructure zones. The latter would be analogous to development within Santa Fe County according to the binding principles of the SGMP. Obviously, these savings are more accurately specified by doing an actual costs-of-sprawl study for Santa Fe County. Completion of these studies involves years of analysis and many hundreds of thousands of dollars. This "back-of-the-envelope" sketch serves the purpose of providing an estimate for the likely magnitude of such savings.

The results of these studies in such diverse locations as Delaware, Florida, Kentucky, Michigan, New Jersey, and South Carolina—as well as for the United States as a whole—on either a per unit or percentage basis, have had remarkably similar results. This has enabled a series of commodity savings (land, infrastructure) and cost savings (housing and fiscal impact) coefficients to be calculated that represent the differences between historical and more compact development in a particular area.

The basis of these coefficients is difference: the difference between developing in a spread versus compact development fashion. The application of these coefficients to projected residential development enables a prediction to be made about the likely costs-of-sprawl savings resulting from the Santa Fe County Sustainable Growth Management Plan (SGMP). Obviously, these savings are more accurately specified by doing an actual costs-of-sprawl study for Santa Fe County.

The section that follows pulls together all of the analyses that have been conducted on alternative growth patterns or costs-of-sprawl studies. It draws on this information to calculate the likely savings of the 12,195 housing units that will be developed as projected growth in the Unincorporated Area over the period 2010-2030. The analysis begins with a series of sections on calculating specific types of sprawl-engendered costs. It follows the outline below:

COMMODITY COST CALCULATION PROCEDURES AND POTENTIAL COSTS-OF-SPRAWL SAVINGS

- Land Conversion
- Road Construction
- Water/Wastewater Service
- Structure Costs (Residential and Nonresidential)
- Fiscal Impacts

COMMODITY/COST CALCULATION PROCEDURES

Land Conversion

There is no question that Santa Fe County has a reasonable amount of vacant land. In the northern part of the County, Hispanic families live in agricultural communities; Native Americans live in pueblos. These areas are relatively stable. In the southern part of Santa Fe County, however, irrigated farms and ranches are being replaced by sprawl emanating from Albuquerque. Significant lands are being consumed by development. Given this, there has been concern about the loss of land to development. In 1996, New Mexico counties were given the authority to bond for open space. In 1998, Santa Fe County became the first county to exercise this authority. In that year and in 2000, the County approved bond measures for its Open Space and Trails Program. In 2002, the County increased its Gross Receipts Tax revenues, which provided an additional $1.2 million for open space and trails. Much of this effort was spearheaded by the Trust for Public Land.

In addition to the above, the Santa Fe Conservation Trust has protected 33,000 acres of land throughout the County through voluntary land protection agreements, known as conservation easements. In the Galisteo Basin Preserve, another 13,500 acres (60 percent conservation, 36 percent privately held properties) are protected from further development. Four (4) percent of the acreage will be subject to future development (roads and buildings).

In 2009 the New Mexico Land Conservancy was given title to the 262-acre Petchesky Ranch, a landmark property near Santa Fe Community College. The Land Conservancy has protected Las Acequias Farm (65 acres) located within the Village of Nambé in Santa Fe County through conservation easements. In addition, the Land Conservancy has protected 8,200 acres of ranchland and wildlife habitat at the Deer Canyon Preserve in Torrance County and a 1,700-acre Bioresearch Ranch in the Peloncillo Mountains of Hildago County. The New Mexico Land Conservancy has protected more than 60,000 acres of land since 2002.

These levels of land conservation and protection are extraordinary. This protection is achieved occasionally through public taxpayer cost or through the generosity of individual citizens. On a regular basis, it could come from the saving of land as part of the usual development process. This would take place by developing at higher densities and in a more clustered development pattern. Both of these strategies are

recommended as part of the Santa Fe County Sustainable Growth Management Plan (SGMP). This is an integral component of costs-of-sprawl studies.

The land conversion savings relative to development is projected using a simulation model. This model translates households and employment projections to the demand for residential and nonresidential land. The model accounts for both vacancy of structures and inefficient use as well as other land development requirements that consume extra land. The model uses different development locations and densities for sprawl development patterns versus more compact growth development patterns, calculates the land converted under each development alternative, and expresses these, as well as their differences, in acres. The model employs historic information to determine the location and density of development under the sprawl conditions and the new development forms and density under more compact growth development patterns. Sprawl conditions are what would have happened had there been this amount of development under the present development pattern; more compact growth is what will happen under the SGMP. The savings of more compact, closer-in development are shown in the results column.

Savings Noted From Costs of Sprawl Studies		
Land Savings and Costs	*Number of Units*	*Results*
0.06 acres / unit	12,195	731.7 acres
$768.54	12,195	$9,372,345

Road Construction

The State of New Mexico has 2,553 miles of rural roads and 382 miles of urban roads for a total of 2,935 miles of roads that are part of the National Highway Systems and open to traffic. Of these, 844 miles of rural roads and 156 miles of urban roads for a total of 1,000 miles of roads are Interstate Roadways. All of the Interstate Roadways and other National Highway system roads are paved.

Improvements have been made by the NMDOT in the past years in the maintenance programs and deficiencies have decreased from a high of about 6,000 miles of deficient highways noted in 1997 to a 2004 figure of about 3,200 miles. In the "Unit Performance Plans for Fiscal Year 2004," the Federal Highway Administration (FHWA)

established a strategic initiative to increase the percent of Vehicle Miles of Travel (VMT) to an acceptable ride quality of 93 percent. In 2004, New Mexico exceeded the FHWA's goal by achieving a percentage of 97.6.

Because of New Mexico's rural character, traffic delay and congestion occur infrequently and are confined to the few larger cities and surrounding areas. According to the "State of the Pavement Report," an average of $1.5 billion will be required to maintain 90 percent of the pavement at its current level of serviceability over the next eight years. This is considerably above the amount provided in the NMDOT's State Transportation Improvement Program (STIP). This plan also projects that the five-year highway needs are between $6 and $8 billion for preservation and capacity, alone. Revenues for this same period are only projected to be about $3.5 billion with half of that set aside for maintenance and operations. Over the next 20 years highway needs could top $16 billion in today's dollars, while revenues are only projected at half that amount.

The Rutgers Road Model, utilized in this fiscal impact analysis, incorporates a relationship between lane-mile density and population density. The relationship is nonlinear and convex. This means that higher-density areas will require fewer new roads than lower-density areas. The relationship between centerline roadway density and population density is best described by a power function. Major and minor collector (non-subdivision) roads are in the model.

$$\text{LocalRoadDensity} = 0.2897 * \text{PopDensity}^{0.4639}$$

Where:

R-square	=	0.802
d.f.	=	558
F-statistic	=	2809.93
Significant	=	0.000

The underlying assumption in the road estimation analysis is that there is a nonlinear relationship between population density and local road density. Such a model does not depend on the network-based traditional four-step transportation planning process of trip generation, distribution, modal split, and traffic assignment. The results of the two scenarios appear below.

Savings Noted From Costs of Sprawl Studies		
County Road Savings and Costs	*Number of Units*	*Results*
0.0018 centerline miles/unit	12,195	21.951 centerline miles
$1,643.10/unit	12,195	$20,037,605
Savings Noted From Costs of Sprawl Studies		
State Road Savings and Costs	*Number of Units*	*Results*
0.00005 centerline miles/unit	12,195	0.60975 centerline miles
$132.05/unit	12,195	$1,610,350

Water/Wastewater Service

Drinking water and wastewater pose significant issues in the State of New Mexico. Water will ultimately pose a restriction on development expansion. Wastewater will also determine where future development is/is not possible.

The State of New Mexico is heavily dependent on both the Colorado River and Rio Grande for drinking water and major diversions are underway from both sources. The state must also protect its aquifers so future septic systems will only be permitted on large lots and community water systems will be used for normal subdivisions. The above facts pertain both to the State of New Mexico and to the County of Santa Fe.

Water infrastructure comprises several components: the water source, the treatment facility, storage facilities, and the distribution system. The cost of supplying water to new developments varies because infrastructure needs differ depending on the type of location in which development is occurring. In rural and ex-urban areas, infrastructure typically is nonexistent and costly to extend. Therefore, new water infrastructure in the form of drilled groundwater wells and septic systems is required. In close-in areas, new developments can be connected via laterals to existing public or private utility water and sewer service. In fringe communities, community package sewer treatment systems may be required. The first step in determining water infrastructure costs is to isolate the different potential areas where development could take place.

When water treatment plants and distribution systems are designed, their size is determined by the number of houses or buildings they will serve, with costs calculated on the number of laterals required. For new residential development, the number and type of new dwelling units is projected. To calculate the number of laterals required to service the new dwelling units, a water-cost model assumes that each detached single family unit

will require a lateral. Clustered single-family and single-family attached units have fewer laterals than the number of units because they share the lateral network. The second step in estimating water costs is calculating the number of laterals required to service projected new development. The number of laterals equals the total number of detached units, the number of attached units divided by two, and the number of multifamily units divided by four. The water model is also capable of calculating the cost of a drilled well replacing a water lateral in rural areas and the cost of a septic system replacing a sewer lateral, also in rural areas.

In New Mexico, the cost of bringing water and sewer to the curb is about $2,500 per single-family unit. The portion of the trunk water/sewer lines assignable to the unit could be an additional $7,500 to $10,000 depending on the width of the property. Drilling a well to serve a single-family unit could cost $7,500 to $50,000 depending on the depth of the well. Installing a septic field could cost $2,500 to $15,000 per unit depending on soil characteristics affecting the breadth of the field.

The calculation employed here reflects savings due to more individual laterals or more wells/septic systems required in rural areas that are sprawled compared with rural areas that have more intense or clustered rural development. The savings are expressed in "per-lateral saved" even though, for the rural development portion of these analyses, the savings compare the cost of water and sewer laterals closer in to well and septic systems farther out.

The water-cost model assumes that new development in close-in areas will be served by an expansion of surface water treatment facilities. New development in more distant locations will generally require new wells, septic fields, or community sewer treatment facilities with distribution systems. A reduction in individual laterals (suburban areas) or dug wells/septic systems (rural areas) contributes to the savings noted below. Existing facilities serving communities are generally built to serve a specified number of homes in a development. Thus, it can be assumed that they are operating at capacity, or are too distant, to effectively serve new developments within a reasonable cost structure.

Savings Noted From Costs of Sprawl Studies			
	Lateral Savings and Costs	*Number of Units*	*Results*
Water	0.09 laterals/ unit	12,195	1,097.55 laterals
	$230.05/unit	12,195	$2,805,460
Sewer	0.10 laterals/ unit	12,195	1,220 laterals
	$207.64/unit	12,195	$2,532,170

Structure Cost

The State of New Mexico is ranked 38 of 51 states (including Washington, D.C.) in terms of median owner housing costs (2007 U.S. Census). New Mexico's monthly average is $1,130; the lowest monthly ownership housing cost is $881 in West Virginia; the highest monthly ownership housing cost is $2,314 in California. In terms of housing costs as a percentage of income, New Mexico is ranked 31 of 51 states with 34.0 percent of its households paying more than 30 percent of their income for housing. The lowest percentage of those who pay more than 30 percent of their income for housing is North Dakota, at 21.4 percent; the highest percentage of those who pay more than 30 percent of their income for housing is California, at 53.0 percent.

Santa Fe County housing costs are significantly higher than the average for the State of New Mexico. Monthly average ownership costs are $1,680 (versus $1,130). The percentage of households paying more than 30 percent of their income for housing is about at the state average of 34 percent. The latter means that both housing costs and personal resources (including income) are 50 percent higher than the statewide average in Santa Fe County.

The Rutgers Structure Cost Model calculates changes in the price of residential and nonresidential structures related to the location, mix, and density at which these structures are developed. Typically, in close-in areas, densities and floor area ratios (FARs) are higher and the mix of housing types is greater. This lowers the land cost as a percentage of total property development costs and occasionally, to a lesser degree, the price of developed properties. In rural undeveloped areas, densities and FARs are lower and usually only single-family development is present. This raises the land share of total property costs and often the average size and price of developed properties in these outer-areas as opposed to inner locations.

The model is sensitive to the types of changes in housing units and density taking place under each alternative development scenario. The model stores property value by location and further calculates changes in property values relative to changes in housing mix and density of development. These differences—location, mix, and density—are the basic differences between more compact (SGMP) and sprawl development scenarios. An array of property prices is determined for the two scenarios of growth, and differences between the alternatives are viewed in light of property-type differences in the locations in which households and employees have settled.

Savings Noted From Costs of Sprawl Studies		
Housing Cost Savings	*Number of Units*	*Results*
$8,110/unit	12,195	$98,901,450

Fiscal Impacts

An analysis of the net costs of public service provision involves three basic steps: the calculation of (1) costs, (2) revenues, and (3) net fiscal impact. This is done for the primary local service provider (Santa Fe County) using its information on basic fiscal indices.

Fiscal impacts have been calculated earlier on in detail for Santa Fe County and the Santa Fe County Public School District/Other School Districts. This costs-of-sprawl fiscal analysis supplements the earlier analysis of the fiscal impacts of development on Santa Fe County by attempting to estimate the additional savings if more public service–sensitive land development were to take place, as recommended by the Sustainable Growth Management Plan (SGMP). This public service–sensitive land development would emphasize bringing new development closer in, clustering development, having higher-density development, and attracting additional participants to pay for development—the latter requiring special assessments for existing residents, and impact fees and public improvement districts (PIDs) for new residents.

The main fiscal analysis as part of this report shows two results—one for development under the SGMP and a second with other-than-traditional forms of revenues available. The latter shows a $2.3 million savings due to a combination of additional revenues and reduced costs. The analysis contained here, employing another method, corroborates the level of savings found earlier.

The fiscal savings noted here are tallied using a near $200-per-unit saving in fiscal impacts applied to Santa Fe County Unincorporated Area growth for the period 2010–2030. The savings that are applied come from an average of fiscal savings in six costs-of-sprawl fiscal studies undertaken earlier by Rutgers University. While these represent very different existing contexts and very different alternative planning solutions, the percentage savings usually amount to a similar 8 to 10 percent of overall costs. This is what was found here. The analysis results reported below should be viewed as a corroboration of the earlier-found differences between more traditional growth and

growth supported by new patterns of development and additional forms of new development infrastructure financing and maintenance revenues.

In order to calculate future per capita local costs, information on expenditures is taken from the county budget. Annual expenditures for County services is then divided between services rendered to local residences and businesses, using information on the distribution of land parcel value between residences (single family and apartments) and businesses (commercial and industrial). The percentage value distributions for residential properties are averaged and applied to the expenditures for county services and divided by the existing population to derive non-educational expenses incurred by residents. This is the first component of future per capita County costs. As a subset of this procedure, the remaining portion of County cost is divided by the existing amount of "at-place" employment, and the results are expressed as the cost per new employee.

Revenues for the County are calculated as follows: Gross receipt taxes are estimated from gross receipts per employee multiplied by the number of employees. Property tax revenues are calculated to supplement gross receipt revenues, relating to the assessed value of properties and the local property tax rate. Non-tax revenues are expressed per capita and are projected into the future relative to the increment of population.

Fiscal impacts are determined by subtracting all costs from all revenues. Calculated fiscal impacts recur annually.

Savings Noted From Costs of Sprawl Studies		
Fiscal Impacts	*Number of Units*	*Results*
$195.40/unit	12,195	$2,382,903

Overall Costs-of-Sprawl Savings Related to 2010–2030 Growth

Sustainable smart growth and its component activities have quantifiable public- and private-sector savings. These savings are achieved by reducing consumption of roads and water/sewer infrastructure, agricultural and environmentally fragile lands, lowering the costs of residential and nonresidential property development, and lowering the cost of providing basic public services such as public safety, public works, and public education.

Figure 18 provides a summary of the pooled results of findings from studies conducted in New Jersey, Michigan, South Carolina, Florida, and the Delaware Estuary, as well as a national study on the costs of sprawl. The estimated differences in resource consumption between more compact growth and sprawl development reflect the different conditions of the numerous localities where these studies have been undertaken. This average difference is expressed per dwelling unit and is applied to the future growth of housing units in the Santa Fe County Unincorporated Area over the next twenty years (estimated to be about 12,195 dwelling units).

Area of Savings	*Commodity or $ Cost Savings Per Dwelling Unit*	*Total Savings over Growth Period*
All lands	0.06 acres	731.7 acres
Land cost	$768.54	$9,372,345
Local roads	0.0018 road miles	21.951 centerline miles
Local road costs	$1,643.10	$20,037,695
State roads	0.00005	0.60975 centerline miles
State road costs	$132.05	$1,610,350
Waterlaterals	0.09 water laterals	1,098
Water lateral costs	$230.05	$2,805,460
Sewer laterals	0.10 sewer laterals	1,220
Sewer lateral costs	$207.64	$2,532,170
Housing costs	$8,110	$98,901,450
Fiscal impacts	$195.40	$2,382,903
	SUBTOTAL	
	(To Government)	$36,358,020
	TOTAL	$135,259,470
	PER UNIT	$11,096
	PER YEAR	$6,762,974

Figure 18. ***SGMP versus sprawl growth savings***

Note: Amounts are expressed in 2009 dollars, per residential unit, multiplied by 12,195 units for Santa Fe County's Unincorporated Area growth from 2010 to 2030. *Source:* Center for Urban Policy Research, Rutgers University.

The savings shown in figure 18 are savings to government, homebuyers and citizens; they are not allocated to any one group. When combined, however, they are significant. Over the 20-year period, they amount to approximately $135.26 million—$16.75 million annually, or $11,100 per dwelling unit. These savings are based on conserving 732 acres of developable land; not building 22.5 centerline miles of local and state roads; savings of $5.33 million related to water and sewer costs; savings of about

$8,100 per unit in housing development costs; and savings of close to $200 per unit in local fiscal impacts.

Again, as earlier stated, site-specific costs-of-sprawl studies involve considerable time and money to develop and calibrate models to a specific setting and development plan. This has not been provided here. Instead, one is able to use the averaged results of other studies to obtain a glimpse of the magnitude of savings available through a "smart growth" development strategy enacted in this location. These savings are considerable, as indicated in figure 18. As such, they should not be ignored. Although they are a snapshot of future costs based on the averaged savings from analyses undertaken in other locations, there is no reason to believe that the averaged savings noted elsewhere would be significantly different in Santa Fe County.

Santa Fe County is experiencing sprawled development that can be improved through more rational and sustainable goals for future growth. Prior studies have measured the savings and expressed them per unit of development. This information suggests a potential savings of $135.25 million over a 20-year development period in Santa Fe County. Certainly this is significant enough to warrant serious consideration of an alternative to current practice and beginning of the process to move toward more sensitive and resource-conserving growth.

Part III

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DEMOGRAPHIC MULTIPLIERS FOR IMPACT ANALYSIS

INTRODUCTION

Demographic multipliers such as those found in the preceding fiscal impact assessment are used to predict the total population and total school-age children that will result from new housing development. The derivation of accurate demographic multipliers and the proper application of these multipliers are therefore essential prerequisites for an accurate impact analysis.

This section first examines the technical aspects of demographic multipliers—their nature and type, historical evolution, and the data sources from which they are derived. It then discusses sources of demographic information for the fiscal impact assessment of the projected 2010 – 2030 growth in Santa Fe County, New Mexico.

The definitions of this study and its findings are as follows:

1. For the purpose of this study, demographic multipliers indicate the average number of persons (household size multipliers) and students (student multipliers) in different types of housing units.

2. Over time, the basis for the derivation of demographic multipliers has become more sophisticated and accurate. Originally derived from small-scale anecdotal surveys, today demographers obtain information on demographic multipliers from comprehensive, large-scale data bases, the most prominent of which was the *Public Use Microdata Sample* of the decennial *Census of Population and Housing* (now the *Public Use Micro-data Sample* of the *American Community Survey*). The *Public Use Micro-data Sample* (PUMS) provides detailed information on the characteristics of both households and housing units and is thus a good source for developing demographic profiles.

3. The impact analysis of the projected growth employs household size and school-age children demographic multipliers that have their origin in the 2000 *Public Use Microdata Sample* (encompassing units built 1990–2000). To improve the accuracy, multipliers are specified by:

   housing size — one- to three-bedroom units—the size of the detached and attached units contemplated for the projected growth.

   housing type — detached, attached, and multifamily units of varying sizes—the units contemplated for the projected growth.

housing price — The data analyzed are for housing priced comparably to the units contemplated for the projected growth. These are $400,000 to $550,000 for single-family detached units; $240,000 to $330,000 for single-family attached units; and $160,000 to $220,000 for multi-family units. The units of the projected growth are at the top of the pricing scale for New Mexico.

area — The data analyzed are for households in the State of New Mexico.

DEMOGRAPHIC MULTIPLIERS

Demographic multipliers are used to predict the populations that will result from new housing development in order to project public service requirements and costs. Multipliers calculate the number of the two principal users of local services: people or persons, for county services; and school children or students, for school services. The multipliers for household size represent the average number of persons living in a housing unit; the multipliers for school-age children represent the average number of students (of school age) living in a unit.

Demographic multipliers vary according to the size, type, and price of housing units. Size is expressed by number of rooms or, more typically, bedrooms; housing type refers to single-family (detached) homes, town houses, and multifamily units. As one might expect, detached single-family homes have, on average, larger household sizes and more school-age children than single-family, attached, or multifamily units, and larger units (more rooms or bedrooms) have more household members and school-age children than their more compact equivalents. Multipliers may also vary by the price of the housing unit, although this is less significant a factor than are housing type and size, especially the latter.

The reliability of the demographic multipliers is important for accurately estimating the additional service demands posed by new housing development. Reflecting the importance of demographic multipliers, their derivation has become increasingly sophisticated over the last two decades. The following section traces how demographic multipliers have been calculated from the early approaches to the methods currently in place.

HISTORICAL BACKGROUND

Initial efforts to derive demographic multipliers in the early 1960s employed survey samples of different types of dwelling units at specific sites to estimate both household size and numbers of the school-age children. For multipliers for high-rise units, studies were undertaken by Del Guidice of the Urban Land Institute (1963), and by Fairfax County, Virginia (1965) and Montgomery County, Maryland (1966).[1] For garden apartments, studies were conducted by the Rolde Company for the National Association of Home Builders (1962) and by Sternlieb of Rutgers University (1964).[2] The majority of these studies were summarized by Holley for the American Society of Planning Officials in 1966.[3]

These studies became the classics for demographic multipliers and were used by planning practitioners throughout the nation in local impact analyses. Yet, there were a number of drawbacks to these early studies: most did not report total household size multipliers, nor did they disaggregate student multipliers by housing-unit size. After these early efforts, Stuart and Teska of Barton-Aschman Associates studied single-family homes (1971), and Burchell of Rutgers University surveyed town houses.[4] These surveys and most subsequent work reported both total household size and school children multipliers by housing type and size.

The next phase in the evolution of demographic multipliers occurred when Burchell and Sternlieb of Rutgers University summarized the progress to date and supplemented the numbers with an extensive statewide (New Jersey) survey. The Rutgers findings were published in the monograph, *Housing Development and Municipal Costs* (1971), and in the Urban Land Institute's *Urban Land* magazine, with the title "The Numbers Game: Forecasting Household Size" (1974).[5] During the course of this work, Rutgers undertook a number of parallel studies.[6] Using multivariate statistical analyses, linkages were sought between household size and schoolchildren and a number of variables describing the socioeconomic profiles of those who occupied housing of certain types, as well as other housing structure and development characteristics. The variables included dwelling-unit size (measured by number of bedrooms or rooms), rent or value of the dwelling unit, occupant race, development size and age, unique development features (density, access to recreational amenities, quality of the neighborhood), and geographical location.[7] This type of analysis attempted to show the linkage or association between a dependent variable—household size or number of students—with a series of "explanatory" independent variables such as the size of a housing unit.

The researchers found that for garden units, high-rise apartments, single-family homes, and town houses, the dominant factor impacting on the number of persons and students per unit was the physical size of the dwelling unit. The best indicator of the number of occupants that a dwelling unit would have was number of bedrooms or rooms. In fact, the unit size variable was so robust that it dominated housing type as an indicator of household size: the number of persons or students occupying a dwelling unit was more similar for different housing types of the same size than it was for the same housing type of different sizes. Simply put, to calculate the number of persons or students that will reside in a county because of proposed new development, the size of the dwelling units must be known. This variable, expressed in either rooms or bedrooms, is the best index of the population to be introduced by the new housing. The inclusion of other characteristics such as the value of a unit, however, can further refine the magnitude of the demographic profile.

Up to 1980, practitioners depended on demographic multipliers derived from local/field surveys to project future population. Since that time, however, a robust procedure for determining demographic multipliers has emerged. This procedure uses the *U.S. Census Public Use Microdata Sample* (PUMS) to estimate demographic multipliers by housing type, value, and so on. The PUMS used to be part of the decennial U.S. *Census of Population and Housing*; it is now part of the *American Community Survey* (ACS) for individual and summed years.

The *Public Use Microdata Sample* (PUMS) is invaluable to demographers. To understand why this is the case, it is important to understand the type of information that was available from the decennial Census (exhibit 19).

The older *Censuses of Population and Housing* contained both published summary data and computer-tape Public Use microdata. In the summary data (i.e., the published Census volumes), the basic unit was an identified geographic area, and information on persons and housing was presented by geographic area (i.e., Santa Fe County, New Mexico). The published data were readily usable, but use was limited to the information as presented; it was not possible to specify cross-tabulations of housing by demographic variables (i.e., to examine the association between housing and population characteristics). For instance, while average household size for a community was available from the published summary data, Census publications did not indicate household size for detached single-family three-bedroom homes selling for $400,000–$550,000; single-family attached two-bedroom units selling for $240,000–$330,000; or

multifamily one-bedroom units selling for $160,000–$220,000, and so on—information essential for an accurate demographic impact study.

By contrast, the *Public Use Microdata Sample* (PUMS) does permit cross-tabulation by one variable by any other desired variables. The basic unit in the *Public Use Microdata Sample* is a housing unit and its occupants (see exhibit 10). This disaggregated data can be summarized by the analyst and, most importantly, permits detailed study of relationships between housing and population characteristics. The *Public Use Microdata Sample* permits cross-tabulations of size of household (including the number of house-hold members who attend school) by the type, size (expressed in terms of the number of bedrooms in the housing unit), and value of the housing unit. (Such detailed cross-tabulation is not available from the published Census data; see exhibit 10). Due to the rising costs of sample surveys and the possibility of bias due to sample design or administration, employment of the *U.S. Census Public Use Microdata Sample* is becoming the increasingly applied method. This was true for the decennial U.S. Census until the year 2000 and for the annual *American Community Survey* (ACS) thereafter (2005, 2006, 2007, 2008, 2009).

The procedure for determining demographic multipliers based on the *Public Use Microdata Sample* has been discussed at length in several Rutgers studies, *The Fiscal Impact Handbook* (1978)[8] and *The Development Impact Assessment Handbook* (1994).[9] These monographs calculated and displayed national demographic multipliers for common housing types of different sizes that could be used to calculate total household size and students. Furthermore, they put forth a methodology that planning practitioners could adopt to derive appropriate demographic multipliers from the *Public Use Microdata Sample* that could be applied in local analyses. These and national demographic multipliers based on the Public Use Microdata Sample were updated by Rutgers in 1980, 1985, and 1994.[10] An additional set of multipliers was produced for every state for the Fannie Mae Foundation in 2006. These were posted on their website at http://www.dataplace.org/newsarticle.html?aid=59 but are no longer found there due to the downsizing of the Fannie Mae Foundation.

The population and school-age children impact assessment of the projected growth in Santa Fe, New Mexico, utilizes demographic information derived from the PUMS and from projections by Al Pitts, the Santa Fe County Demographer. Information from the 2000 Census on the PUMS was released in October 2003. It has been supplemented by information from the ACS in 2005, 2006, 2007, 2008, and 2009; this is put together and summarized in a December 2010 ACS file.

EXHIBIT 10

Comparison of Summary Data with Data in the Public Use Microdata Sample (PUMS)

SUMMARY DATA — PUBLISHED CENSUS DATA

- Basic unit is an identified geographic area
- Data summarized on persons and housing in areas
- Data published and presented by geographic area
- Must be used as presented

ILLUSTRATIVE SUMMARY DATA

COUNTY	TOTAL POPULATION	OCCUPIED HOUSING UNITS	NUMBER OF PERSONS PER UNIT
County A	110,938	49,426	2.2
County B	21,970	7,261	3.1
County C	17,152	5,494	2.7

PUBLIC USE MICRODATA SAMPLE (PUMS)

- Basic unit is an unidentified housing unit and its occupants
- Disaggregated data to be summarized by the user
- Allows detailed study of relationship among characteristics
- Data may be produced by housing type
- Can be cross-tabulated by any other desired variable

ILLUSTRATIVE MICRODATA

	STATE OF RESIDENCE	STATE	PERSONS IN HOUSE-HOLD	NO. OF UNITS IN STRUCTURE	NO. OF ROOMS	NO. OF BED-ROOMS	HOUSING TYPE
HOUSING UNIT #1	New Mexico	35	3	12	5	2	Multifamily

Source: Adapted from the *Public Use Microdata Sample* from the 2000 Census, Washington, D.C.: Bureau of Census, October 2003.

DATA SOURCES AND ANALYSIS

Public Use Microdata Sample

As noted, the *Public Use Microdata Sample* (PUMS) contains detailed information on population and housing. It is available every year from the *American Community Survey* (ACS) and represents a recurring sample (5 percent of 1 in 9, or about 1 in 200) from the *American Community Survey* on the current status of the U.S. population. At the time of initial study, the most accurate macro demographic data nationally were based on the 2000 *Public Use Microdata Sample* from the decennial U.S. Census. This could be replaced by the 2010 PUMS from the 2005–2009 *American Community Survey,* to be released in December 2010. Because it contains data from 2005 to 2009, it will be labeled as the 2007 PUMS.

The *Public Use Microdata Sample* (PUMS) is available for different levels of geographic detail such as the nation, state, and counties/county groups. (The United States Census Bureau is enjoined from releasing *Public Use Microdata* samples for geographic areas containing fewer than 100,000 persons.) The selection of a specific geographic area for analysis using the *Public Use Microdata* file is influenced by consideration of the objective of the inquiry as well as the need for adequate sample size. In the case to be summarized here, the entire State of New Mexico was used.

Once having defined the State of New Mexico as the appropriate basis for the analysis, the next step is developing modular demographic data from this sample and then linking this modular information with the specific housing units contained in the growth projection. Housing units are specified by type, size, and price. The specification by price follows the price intervals available in the growth projection (e.g., single-family homes from $400,000 to $550,000, townhouses from $240,000 to $330,000, and multifamily units from $160,000 to $220,000). As indicated earlier, the specification of area (at the state level) primarily takes into consideration the need to obtain a statistically reliable sample size. Although state data are shown following this section, as seen on the next page, the data used in the analysis come from Santa Fe County Demographer Al Pitts. The numbers used in this analysis are lower than the Census PUMS numbers.

For nonresidential uses, demographic multipliers for employees cannot be derived in exactly the same way. They are developed by surveys of employers and from other sources of national data. They are typically available on industry or trade associations' websites.

In short, the analysis uses data from the PUMS for units comparable in type, size, and price to those contemplated in the projected growth, further taking into consideration sample size and PUMS data specification (e.g., price ranges).

Exhibit 11 shows the household size and school-age children by type and size of housing unit (number of bedrooms) applied in the fiscal analysis.

EXHIBIT 11

Housing Type Demographics Used in the Analysis
(Santa Fe County, 2010–2030)

Housing Type	PUMS-Derived Demographics	
	Household Size† *(Persons)*	*School-Age Children (Students)*
RESIDENTIAL USES		
Single-Family Detached (1,850–3,200 ft.²)		
3 Bedrooms ($400,000–$550,000)	2.29	0.41
Single-Family Attached (1,750 ft.²)		
2 Bedrooms ($240,000–$330,000)	1.80	0.16
Multifamily (1,100 ft.²)		
1 Bedroom ($160,000–$220,000)	1.31	0.08
NONRESIDENTIAL USES	*Employees per 1,000 ft.²*	
Office Space		
Office	3.0	0.0
Retail (Community)	2.0	0.0
Industrial	1.5	0.0

Note: † Population change divided by housing-unit change, 2010–2030.

Source: Al Pitts, Santa Fe County Demographer (2008) (residential).
Center for Urban Policy Research, Rutgers University (nonresidential).

NOTES

1 Dominic Del Guidice, "Cost–Revenue Implications of High Rise Apartments," *Urban Land,* February 1968, p. 305; Fairfax County Planning Division, *Student Contribution From Apartments and Mobile Homes* (Fairfax, VA: Fairfax County Planning Division, 1966); Maryland, National Capital Park and Planning Commission, "Dwelling Unit Density, Population, and Potential Public School Enrollment Yield by Existing Zoning Classification for Montgomery and Prince Georges Counties" (Silver Spring, MD: National Capital Park and Planning Commission, 1965).

2 Rolde Company, *Garden Apartments and School-Age Children* (Washington, D.C.: National Association of Home Builders, 1962); George Sternlieb, *The Garden Apartment Development: A County Cost–Revenue Analysis* (New Brunswick, NJ: Bureau of Economic Research, Rutgers University, l964), condensed in *Urban Land,* September 1964.

3 Paul N. Holley, *School Enrollment by Housing Type,* Planning Advisory Service Report No. 210 (Chicago, IL: American Society of Planning Officials, 1966).

4 Barton–Aschman Associates, *The Barrington, Illinois, Area: A Cost–Revenue Analysis of Land Alternatives* (Chicago, IL: Barton–Aschman Associates, 1970), condensed by Darwin B. Stuart and Robert B. Teska in "Who Pays for What: A Cost–Revenue Analysis of Suburban Land Use Alternatives," *Urban Land,* March 1971, pp. 3–16; Robert W. Burchell, *Planned-Unit Development: New Communities American-Style* (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1972).

5 George Sternlieb et al., *Housing Development and County Costs* (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1972); portions reproduced in George Sternlieb and Robert W. Burchell, "The Numbers Game: Forecasting Household Size," *Urban Land,* January 1974, pp. 3–20.

6 Sternlieb et al., *op. cit.,* Chapter 3.

7 Robert W. Burchell and David Listokin, *The Fiscal Impact Handbook* (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1978).

8 *Ibid.*

9 Robert W. Burchell, David Listokin, and William R. Dolphin, *The Development Impact Assessment Handbook* (Washington, DC: The Urban Land Institute, 1994).

10 Robert W. Burchell and David Listokin, *Practitioner's Guide to Fiscal Impact Analysis* (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1980); Robert W. Burchell, David Listokin, and William R. Dolphin, *The New Practitioner's Guide to Fiscal Impact Analysis* (New Brunswick, NJ: Rutgers University, Center for Urban Policy Research, 1985); Robert W. Burchell, David Listokin, and William R. Dolphin, *The Development Impact Assessment Handbook* (Washington, DC: The Urban Land Institute, 1994).

Appendix A

NEW MEXICO (1--1) ALL PERSONS IN UNIT: TOTAL PERSONS AND PERSONS BY AGE (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PERSONS	AGE							
		0-4	5-13	14-17	18-24	25-44	45-64	65-74	75+
Single-Family Detached, 2 BR									
All Values	2.47	0.19	0.34	0.12	0.16	0.72	0.64	0.19	0.11
Less than $81,000	3.08	0.29	0.63	0.20	0.24	0.98	0.55	0.13	0.06
$81,000 to $131,500	2.30	0.19	0.29	0.09	0.15	0.78	0.53	0.16	0.10
More than $131,500	2.11	0.09	0.12	0.08	0.08	0.38	0.88	0.30	0.17
Single-Family Detached, 3 BR									
All Values	2.72	0.23	0.41	0.14	0.15	0.91	0.67	0.14	0.07
Less than $107,500	3.21	0.34	0.66	0.21	0.26	1.18	0.43	0.07	0.06
$107,500 to $155,000	2.67	0.25	0.39	0.12	0.14	0.98	0.58	0.14	0.06
More than $155,000	2.45	0.11	0.26	0.12	0.08	0.63	0.97	0.20	0.08
Single-Family Detached, 4 BR									
All Values	3.60	0.32	0.75	0.37	0.20	1.10	0.74	0.09	0.04
Less than $155,000	3.95	0.41	0.85	0.40	0.35	1.19	0.67	0.06	0.02
$155,000 to $215,000	3.57	0.32	0.75	0.37	0.14	1.19	0.67	0.08	0.05
More than $215,000	3.26	0.22	0.64	0.33	0.11	0.89	0.93	0.11	0.04
Single-Family Detached, 5 BR									
All Values	4.11	0.29	1.09	0.39	0.25	1.13	0.83	0.09	0.04
Less than $215,000	4.41	0.23	1.24	0.43	0.38	1.42	0.57	0.10	0.03
$215,000 to $334,000	3.94	0.26	1.00	0.35	0.21	1.09	0.91	0.10	0.02
More than $334,000	4.08	0.40	1.09	0.42	0.17	0.87	0.97	0.03	0.12
Single-Family Attached, 2 BR									
All Values	1.96	0.09	0.15	0.07	0.15	0.70	0.49	0.20	0.11
Less than $85,000	2.02	0.07	0.25	0.03	0.17	0.76	0.56	0.10	0.08
$85,000 to $107,500	2.07	0.14	0.12	0.16	0.18	0.77	0.50	0.10	0.09
More than $107,500		Insufficient Sample							
Single-Family Attached, 3 BR									
All Values	2.76	0.36	0.42	0.16	0.26	0.93	0.43	0.13	0.07
Less than $90,500		Insufficient Sample							
$90,500 to $107,500	2.63	0.33	0.36	0.10	0.32	0.99	0.50	0.02	0.00
More than $107,500	2.28	0.19	0.22	0.13	0.20	0.66	0.43	0.32	0.13
Single-Family Attached, 4 BR									
All Values		Insufficient Sample							
Less than $106,000		Insufficient Sample							
$106,000 to $155,000		Insufficient Sample							
More than $155,000		Insufficient Sample							
5+ Units–Own, 1 BR									
All Values		Insufficient Sample							
Less than $71,500		Insufficient Sample							
$71,500 to $81,000		Insufficient Sample							
More than $81,000		Insufficient Sample							
5+ Units–Own, 2 BR									
All Values		Insufficient Sample							
Less than $107,500		Insufficient Sample							
$107,500 to $155,000		Insufficient Sample							
More than $155,000		Insufficient Sample							
5+ Units–Own, 3 BR									
All Values		Insufficient Sample							
Lowest third		Not Applicable							
$155,000 to $334,000		Insufficient Sample							
Highest third		Not Applicable							

Appendix A (continued)

NEW MEXICO (1--2) ALL PERSONS IN UNIT: TOTAL PERSONS AND PERSONS BY AGE (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PERSONS	AGE 0-4	5-13	14-17	18-24	25-44	45-64	65-74	75+
5+ Units–Rent, 1 BR									
All Values	1.57	0.09	0.13	0.03	0.34	0.57	0.20	0.04	0.16
Less than $500	1.58	0.07	0.23	0.06	0.39	0.45	0.23	0.05	0.10
$500 to $650	1.58	0.15	0.06	0.03	0.38	0.66	0.20	0.05	0.05
More than $650	1.53	0.05	0.09	0.01	0.25	0.58	0.17	0.03	0.36
5+ Units–Rent, 2 BR									
All Values	2.15	0.24	0.18	0.08	0.52	0.69	0.33	0.04	0.08
Less than $600	2.58	0.47	0.35	0.12	0.68	0.62	0.22	0.03	0.08
$600 to $750	2.10	0.18	0.16	0.04	0.60	0.78	0.28	0.03	0.04
More than $750	1.79	0.09	0.04	0.10	0.26	0.66	0.47	0.06	0.11
5+ Units–Rent, 3 BR									
All Values	3.54	0.35	0.99	0.27	0.62	0.94	0.27	0.04	0.07
Less than $500					Insufficient Sample				
$500 to $850					Insufficient Sample				
More than $850					Insufficient Sample				
2-4 Units, 1 BR									
All Values	1.50	0.09	0.12	0.06	0.34	0.50	0.13	0.18	0.07
Less than $30,000					Insufficient Sample				
$30,000 to $51,000					Insufficient Sample				
More than $51,000					Insufficient Sample				
2-4 Units, 2 BR									
All Values	2.29	0.40	0.26	0.05	0.46	0.90	0.08	0.09	0.05
Less than $46,000	2.03	0.44	0.28	0.03	0.47	0.61	0.10	0.06	0.02
$46,000 to $67,000	2.21	0.24	0.35	0.05	0.59	0.73	0.13	0.04	0.09
More than $67,000	2.63	0.51	0.14	0.08	0.29	1.39	0.01	0.18	0.03
2-4 Units, 3 BR									
All Values					Insufficient Sample				
Less than $37,000					Insufficient Sample				
$37,000 to $76,500					Insufficient Sample				
More than $76,500					Insufficient Sample				
Mobile, 2 BR									
All Values	2.71	0.29	0.43	0.14	0.31	0.84	0.46	0.15	0.10
Less than $26,500	2.67	0.27	0.44	0.13	0.38	0.82	0.40	0.12	0.10
$26,500 to $52,500	2.59	0.27	0.37	0.11	0.28	0.81	0.47	0.18	0.10
More than $52,500	2.93	0.34	0.49	0.18	0.28	0.89	0.51	0.13	0.10
Mobile, 3 BR									
All Values	3.28	0.35	0.68	0.23	0.31	1.05	0.48	0.10	0.07
Less than $36,000	3.44	0.38	0.83	0.29	0.32	1.11	0.35	0.09	0.07
$36,000 to $71,500	3.24	0.39	0.62	0.20	0.33	0.99	0.52	0.10	0.08
More than $71,500	3.20	0.27	0.62	0.22	0.27	1.08	0.57	0.11	0.05
Mobile, 4 BR									
All Values	4.35	0.38	1.14	0.50	0.38	1.39	0.47	0.05	0.03
Less than $62,000	4.60	0.50	1.23	0.45	0.56	1.30	0.53	0.03	0.00
$62,000 to $90,500	4.38	0.34	1.13	0.59	0.36	1.50	0.34	0.06	0.06
More than $90,500	4.05	0.31	1.06	0.44	0.21	1.35	0.59	0.07	0.01

Source: Fannie Mae *DataPlace,* Residential Demographic Multipliers.
http://www.dataplace.org/resources/datasets?bt=

Appendix B

NEW MEXICO (2--1) ALL SCHOOL CHILDREN:
SCHOOL AGE CHILDREN (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL SAC	GRADE K–2	3-6	7-9	10-12	Gr. 9 Only
Single-Family Detached, 2 BR						
All Values	0.45	0.11	0.17	0.09	0.09	0.03
Less than $81,000	0.82	0.21	0.32	0.16	0.14	0.05
$81,000 to $131,500	0.38	0.09	0.14	0.08	0.07	0.02
More than $131,500	0.21	0.04	0.05	0.03	0.08	0.00
Single-Family Detached, 3 BR						
All Values	0.55	0.13	0.19	0.13	0.10	0.04
Less than $107,500	0.87	0.20	0.32	0.21	0.14	0.07
$107,500 to $155,000	0.51	0.12	0.18	0.12	0.09	0.03
More than $155,000	0.37	0.07	0.12	0.10	0.08	0.04
Single-Family Detached, 4 BR						
All Values	1.12	0.21	0.35	0.28	0.28	0.09
Less than $155,000	1.25	0.23	0.43	0.29	0.30	0.10
$155,000 to $215,000	1.12	0.20	0.35	0.29	0.27	0.10
More than $215,000	0.97	0.20	0.26	0.24	0.26	0.07
Single-Family Detached, 5 BR						
All Values	1.48	0.21	0.55	0.43	0.30	0.09
Less than $215,000	1.67	0.21	0.65	0.51	0.29	0.14
$215,000 to $334,000	1.35	0.20	0.46	0.42	0.27	0.08
More than $334,000	1.51	0.21	0.58	0.36	0.35	0.07
Single-Family Attached, 2 BR						
All Values	0.22	0.07	0.04	0.04	0.07	0.00
Less than $85,000	0.28	0.06	0.12	0.07	0.03	0.00
$85,000 to $107,500	0.29	0.07	0.00	0.06	0.16	0.00
More than $107,500		Insufficient Sample				
Single-Family Attached, 3 BR						
All Values	0.58	0.12	0.20	0.12	0.14	0.01
Less than $90,500		Insufficient Sample				
$90,500 to $107,500	0.46	0.08	0.21	0.11	0.07	0.03
More than $107,500	0.35	0.16	0.06	0.00	0.13	0.00
Single-Family Attached, 4 BR						
All Values		Insufficient Sample				
Less than $106,000		Insufficient Sample				
$106,000 to $155,000		Insufficient Sample				
More than $155,000		Insufficient Sample				
5+ Units–Own, 1 BR						
All Values		Insufficient Sample				
Less than $71,500		Insufficient Sample				
$71,500 to $81,000		Insufficient Sample				
More than $81,000		Insufficient Sample				
5+ Units–Own, 2 BR						
All Values		Insufficient Sample				
Less than $107,500		Insufficient Sample				
$107,500 to $155,000		Insufficient Sample				
More than $155,000		Insufficient Sample				
5+ Units–Own, 3 BR						
All Values		Insufficient Sample				
Lowest third		Not Applicable				
$155,000 to $334,000		Insufficient Sample				
Highest third		Not Applicable				

Appendix B (continued)

NEW MEXICO (2--2) ALL SCHOOL CHILDREN: SCHOOL AGE CHILDREN (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL SAC	GRADE K–2	3-6	7-9	10-12	Gr. 9 Only
5+ Units–Rent, 1 BR						
All Values	0.16	0.04	0.06	0.04	0.03	0.01
Less than $500	0.29	0.09	0.10	0.04	0.06	0.00
$500 to $650	0.09	0.00	0.05	0.03	0.01	0.02
More than $650	0.10	0.03	0.03	0.03	0.01	0.00
5+ Units–Rent, 2 BR						
All Values	0.27	0.10	0.07	0.04	0.06	0.02
Less than $600	0.47	0.19	0.12	0.07	0.09	0.03
$600 to $750	0.19	0.09	0.06	0.02	0.02	0.01
More than $750	0.14	0.01	0.02	0.04	0.07	0.03
5+ Units–Rent, 3 BR						
All Values	1.25	0.32	0.47	0.27	0.20	0.06
Less than $500		Insufficient Sample				
$500 to $850		Insufficient Sample				
More than $850		Insufficient Sample				
2-4 Units, 1 BR						
All Values	0.19	0.03	0.05	0.08	0.03	0.04
Less than $30,000		Insufficient Sample				
$30,000 to $51,000		Insufficient Sample				
More than $51,000		Insufficient Sample				
2-4 Units, 2 BR						
All Values	0.31	0.16	0.06	0.05	0.04	0.01
Less than $46,000	0.32	0.23	0.06	0.01	0.02	0.01
$46,000 to $67,000	0.39	0.10	0.12	0.15	0.02	0.02
More than $67,000	0.22	0.14	0.00	0.00	0.08	0.00
2-4 Units, 3 BR						
All Values		Insufficient Sample				
Less than $37,000		Insufficient Sample				
$37,000 to $76,500		Insufficient Sample				
More than $76,500		Insufficient Sample				
Mobile, 2 BR						
All Values	0.56	0.15	0.20	0.10	0.11	0.02
Less than $26,500	0.58	0.17	0.18	0.10	0.13	0.01
$26,500 to $52,500	0.48	0.11	0.19	0.11	0.08	0.03
More than $52,500	0.66	0.20	0.23	0.08	0.15	0.02
Mobile, 3 BR						
All Values	0.91	0.24	0.29	0.21	0.17	0.06
Less than $36,000	1.12	0.28	0.36	0.25	0.22	0.07
$36,000 to $71,500	0.82	0.22	0.27	0.18	0.15	0.05
More than $71,500	0.84	0.23	0.24	0.22	0.15	0.07
Mobile, 4 BR						
All Values	1.64	0.38	0.49	0.41	0.37	0.13
Less than $62,000	1.68	0.36	0.59	0.42	0.32	0.14
$62,000 to $90,500	1.72	0.42	0.45	0.42	0.43	0.16
More than $90,500	1.50	0.34	0.44	0.36	0.37	0.07

Source: Fannie Mae *DataPlace,* Residential Demographic Multipliers.
http://www.dataplace.org/resources/datasets?bt=

Appendix C

NEW MEXICO (3--1) ALL PUBLIC SCHOOL CHILDREN: SCHOOL AGE CHILDREN IN PUBLIC SCHOOL (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PSAC	PUBLIC SCHOOL GRADE K-2	3-6	7-9	10-12	Gr. 9 Only
Single-Family Detached, 2 BR						
All Values	0.44	0.10	0.16	0.08	0.09	0.02
Less than $81,000	0.78	0.19	0.31	0.14	0.14	0.05
$81,000 to $131,500	0.37	0.08	0.14	0.08	0.06	0.02
More than $131,500	0.20	0.04	0.05	0.03	0.08	0.00
Single-Family Detached, 3 BR						
All Values	0.48	0.10	0.17	0.12	0.09	0.04
Less than $107,500	0.83	0.19	0.31	0.20	0.14	0.07
$107,500 to $155,000	0.43	0.09	0.15	0.10	0.09	0.03
More than $155,000	0.30	0.05	0.09	0.08	0.07	0.03
Single-Family Detached, 4 BR						
All Values	0.92	0.16	0.29	0.23	0.24	0.08
Less than $155,000	1.16	0.20	0.40	0.28	0.29	0.09
$155,000 to $215,000	0.91	0.16	0.28	0.23	0.24	0.09
More than $215,000	0.68	0.12	0.18	0.17	0.20	0.04
Single-Family Detached, 5 BR						
All Values	1.18	0.14	0.47	0.33	0.25	0.06
Less than $215,000	1.49	0.15	0.63	0.41	0.29	0.12
$215,000 to $334,000	1.04	0.15	0.38	0.29	0.22	0.04
More than $334,000	1.10	0.12	0.43	0.30	0.25	0.05
Single-Family Attached, 2 BR						
All Values	0.21	0.06	0.04	0.04	0.07	0.00
Less than $85,000	0.28	0.06	0.12	0.07	0.03	0.00
$85,000 to $107,500	0.29	0.07	0.00	0.06	0.16	0.00
More than $107,500		Insufficient Sample				
Single-Family Attached, 3 BR						
All Values	0.54	0.10	0.19	0.11	0.14	0.01
Less than $90,500		Insufficient Sample				
$90,500 to $107,500	0.40	0.05	0.21	0.08	0.07	0.03
More than $107,500	0.35	0.16	0.06	0.00	0.13	0.00
Single-Family Attached, 4 BR						
All Values		Insufficient Sample				
Less than $106,000		Insufficient Sample				
$106,000 to $155,000		Insufficient Sample				
More than $155,000		Insufficient Sample				
5+ Units–Own, 1 BR						
All Values		Insufficient Sample				
Less than $71,500		Insufficient Sample				
$71,500 to $81,000		Insufficient Sample				
More than $81,000		Insufficient Sample				
5+ Units–Own, 2 BR						
All Values		Insufficient Sample				
Less than $107,500		Insufficient Sample				
$107,500 to $155,000		Insufficient Sample				
More than $155,000		Insufficient Sample				
5+ Units–Own, 3 BR						
All Values		Insufficient Sample				
Lowest third		Not Applicable				
$155,000 to $334,000		Insufficient Sample				
Highest third		Not Applicable				

Appendix C (continued)

NEW MEXICO (3--2) ALL PUBLIC SCHOOL CHILDREN: SCHOOL AGE CHILDREN IN PUBLIC SCHOOL (2000)

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PSAC	PUBLIC SCHOOL GRADE K-2	3-6	7-9	10-12	Gr. 9 Only
5+ Units–Rent, 1 BR						
All Values	0.16	0.03	0.06	0.04	0.03	0.01
Less than $500	0.29	0.09	0.10	0.04	0.06	0.00
$500 to $650	0.09	0.00	0.05	0.03	0.01	0.02
More than $650	0.09	0.01	0.03	0.03	0.01	0.00
5+ Units–Rent, 2 BR						
All Values	0.26	0.09	0.06	0.04	0.06	0.02
Less than $600	0.47	0.19	0.12	0.07	0.09	0.03
$600 to $750	0.17	0.09	0.05	0.01	0.02	0.01
More than $750	0.14	0.01	0.02	0.04	0.07	0.03
5+ Units–Rent, 3 BR						
All Values	1.25	0.32	0.47	0.27	0.20	0.06
Less than $500		Insufficient Sample				
$500 to $850		Insufficient Sample				
More than $850		Insufficient Sample				
2-4 Units, 1 BR						
All Values	0.19	0.03	0.05	0.08	0.03	0.04
Less than $30,000		Insufficient Sample				
$30,000 to $51,000		Insufficient Sample				
More than $51,000		Insufficient Sample				
2-4 Units, 2 BR						
All Values	0.30	0.14	0.06	0.05	0.04	0.01
Less than $46,000	0.31	0.22	0.06	0.01	0.02	0.01
$46,000 to $67,000	0.39	0.10	0.12	0.15	0.02	0.02
More than $67,000	0.19	0.11	0.00	0.00	0.08	0.00
2-4 Units, 3 BR						
All Values		Insufficient Sample				
Less than $37,000		Insufficient Sample				
$37,000 to $76,500		Insufficient Sample				
More than $76,500		Insufficient Sample				
Mobile, 2 BR						
All Values	0.54	0.15	0.19	0.09	0.11	0.02
Less than $26,500	0.57	0.17	0.17	0.10	0.13	0.01
$26,500 to $52,500	0.46	0.10	0.19	0.10	0.07	0.03
More than $52,500	0.63	0.19	0.22	0.07	0.14	0.02
Mobile, 3 BR						
All Values	0.86	0.22	0.27	0.20	0.17	0.06
Less than $36,000	1.04	0.25	0.34	0.24	0.22	0.07
$36,000 to $71,500	0.79	0.21	0.26	0.17	0.15	0.05
More than $71,500	0.79	0.21	0.22	0.21	0.15	0.07
Mobile, 4 BR						
All Values	1.53	0.33	0.44	0.39	0.36	0.12
Less than $62,000	1.62	0.35	0.55	0.41	0.32	0.14
$62,000 to $90,500	1.63	0.39	0.41	0.42	0.42	0.16
More than $90,500	1.32	0.24	0.38	0.35	0.34	0.06

Source: Fannie Mae *DataPlace,* Residential Demographic Multipliers. http://www.dataplace.org/resources/datasets?bt=

Part IV
—
THE ACCURACY OF THE DEMOGRAPHIC MULTIPLIERS

THE ACCURACY OF DEMOGRAPHIC MULTIPLIERS OBTAINED FROM THE PUBLIC USE MICRODATA SAMPLE (PUMS)

Part I. General Overview

The following is summary analysis on the accuracy of the calculated demographic multipliers if the PUMS were used. Since the PUMS is the underlying base that was adjusted by Santa Fe County Demographer Al Pitts's projections, the discussion is included here. Because a sample (1 in 5 sample of the 1 in 10 Long Form) was involved in the original data, the first question that arises is how representative the U.S. Census sample is of the universe. The U.S. Census provides procedures that enable this calculation to be linked with another issue of sample size reduction as unit type, bedroom, and price comparisons narrow the sample. This will be discussed in detail subsequently. Suffice it to say, however, that household size and other data are within ±10 percent, 90 percent of the time. School-age children data are within ±40 percent, 90 percent of the time.

The first point to be discussed is how accurate the sample is in comparison to the larger U.S. Census-obtained information. This is embedded in the calculations contained below when sample size varies from the original sample. In order to look at this at full sample size, various data elements will be compared for hypothetical counties using information from the U.S. Census long form (Summary File–SF-3) and from the 5-Percent Public Use Microdata Sample (PUMS).

Exhibit 12 contains averaged information on household size, school-age children, income, housing value, and other socioeconomic characteristics (a total of 14 variables). These are done for several hypothetical counties (of population 145,000 to 885,000 each) and for the sum (population approximately 2,000,000). One can see that information averages do not vary significantly (mostly less than 2 percent) in each of the locational contexts. The U.S. Census Public Use Microdata Sample's averages are within 1 to 2 percent of the U.S. Census Long Form's averages across each component of information, both individually for the four counties and scrutinized for the four-county area as a whole. As a confirming note, the PUMS rather than the Long Form data is almost always used in Rutgers' fiscal impact analyses. The data reliability is almost interchangeable and the PUMS's ability to parse the data is much more reliable.

Part II. Specific Calculation

For sample sizes less than those used in the PUMS, because data are parsed by type, size, and price of dwelling unit, another procedure is required. The U.S. Census *Public Use Microdata Sourcebook* provides a formula for calculating the statistical reliability of data that has been averaged with a reduced-size sample.

Exhibit 12
Comparison of the Accuracy of the Public Use Microdata Sample (PUMS) with the Census Long Form (SF-3)

Geography	*Total population: Total*	*% white*	*% Owner*	*% Single Family Detached*	*% Single Family Attached*	*% built 90-2000*	*Specified renter-occupied housing units paying cash rent: Median gross rent*	*Specified owner-occupied housing units: Median value*	*Number of Owner-Occupied Units*	*Households: Median household income in 1999*	*% Households-Family households*	*% Hslds move 90-2000*	*Household Size*	*School - Age Children*
Summary File (SF3) Results														
County A	884,118	78.20%	67.18%	55.33%	3.92%	5.88%	872	250,300	178,352	65,241	71.39%	55.06%	2.64	0.447
County B	470,212	87.13%	76.01%	69.32%	6.85%	13.50%	883	257,400	117,273	77,340	74.05%	59.37%	2.72	0.494
County C.	489,049	62.26%	55.64%	43.37%	4.39%	5.30%	747	190,600	69,245	49,210	73.49%	60.31%	2.92	0.554
County D	144,166	95.99%	82.66%	80.68%	4.22%	11.27%	790	157,700	37,812	65,266	76.62%	56.59%	2.80	0.597
TOTAL	1,987,545	77.68%	67.73%	57.81%	4.74%	7.95%			402,682		72.87%	57.39%	2.73	0.493
Public Use Microdata Sample (PUMS) Results														
County A	881,557	78.60%	68.17%	56.45%	4.06%	5.62%	860	225,000	180,223	65,000	71.41%	54.64%	2.63	0.444
County B	469,889	86.94%	76.88%	70.06%	6.84%	13.12%	873	275,000	119,014	77,000	74.02%	59.42%	2.71	0.497
County C.	491,559	61.99%	56.27%	44.09%	4.41%	5.61%	746	187,500	69,760	48,900	73.46%	60.59%	2.94	0.537
County D	143,084	96.03%	83.18%	82.46%	4.42%	11.10%	808	162,500	37,849	65,400	76.91%	56.21%	2.78	0.598
TOTAL	1,986,089	77.72%	68.55%	58.66%	4.83%	7.78%	822		406,846	63,500	72.89%	57.26%	2.73	0.489
Ratio of PUMS to SF3														
	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3	PUMS / SF3
County A	1.00	1.01	1.01	1.02	1.03	0.96	0.99	0.90	1.01	1.00	1.00	0.99	1.00	0.99
County B	1.00	1.00	1.01	1.01	1.00	0.97	0.99	1.07	1.01	1.00	1.00	1.00	1.00	1.01
County C.	1.01	1.00	1.01	1.02	1.01	1.06	1.00	0.98	1.01	0.99	1.00	1.00	1.00	0.97
County D	0.99	1.00	1.01	1.02	1.05	0.99	1.02	1.03	1.00	1.00	1.00	0.99	0.99	1.00
TOTAL	1.00	1.00	1.01	1.01	1.02	0.98			1.01		1.00	1.00	1.00	0.99

Source: U.S. Census 2000 Summary File 3; U.S. Census 2000 - Public Use Microdata Sample

Average household size and school-age children are shown in exhibit 12. The results of the Census formula are shown in exhibit 13. This exhibit indicates that, at the sample level used to calculate the demographic multipliers, in 90 percent of the cases these numbers can vary (up or down) by the amount stated. Thus, for the 3- and 2-bedroom detached/attached dwellings, and for the 1-bedroom multifamily ownership units, household size and school-age children multipliers are first produced. These are indicated in exhibit 13.

EXHIBIT 13

PUMS-Derived Household Size and School-Age Children Multipliers

Unit Type/Size		*Household Size*	*School-Age Children*
Detached Single-Family	(3 BR)	2.45	0.37
Attached Single-Family	(2 BR)	1.96	0.22
Multifamily		1.79	0.14

The interval around each average is 1.65 times the Standard Error (see definition at end). Thus, household size and school-age children multipliers for attached/detached dwelling units could vary as indicated in exhibit 14. Another way of expressing this is that household size and school-age children multipliers will be within the specified range, 90 percent of the time. These numbers have an equal chance of being either above or below the mean.

EXHIBIT 14

Variation Around the PUMS-Derived Multipliers

Unit Type/Size	***Household Size***	***School-Age Children***
Detached Single-Family		
3 Bedrooms	2.45 ± 0.23	0.37 ± 0.18
Attached Single-Family		
2 Bedrooms	1.96 ± 0.19	0.22 ± 0.08
Multifamily	1.79 ± 0.18	0.14 ± 0.06

CONCLUSIONS

The answer to the accuracy of the demographic multipliers has multiple parts.

First, as a whole, derived data from the PUMS is within 1 to 2 percent of derived data from the U.S. Census Long Form (SF-3). The PUMS at full sample is an accurate representation of Long Form data.

Second, the most accurate procedures are used to calculate demographic multipliers. From a large sample, the most recent household size and school-age children multipliers are taken from the U.S. Census by type of unit (attached/detached single-family units and multifamily units), number of bedrooms (1 to 3), and price of unit ($400,000–$550,000 for detached single-family units; $240,000–$330,000 for attached single-family units; and $160,000–$220,000 for multifamily units).

What does the above analysis mean? It means that even though market-unit multipliers could vary between ±10 percent for household size and ±40 percent for school-age children, these multipliers have an equal chance of varying upward or downward. Their use is a reasonable approximation of those likely to occupy the specified types of dwellings.

Definitions

Standard Deviation	The square root of the squared deviation of the scores around the mean, divided by N. This is the most commonly used measure of dispersion. Two-thirds of the cases within an accepted range fall within this distribution.
Standard Error	The standard deviation of a sampling distribution of sample means. This represents the way in which a number of separately calculated means of a variable from a sample distribute themselves.
Confidence Level	The probability that a value falls within a calculated range. Ninety (90) and 95 percent are accepted standards. This is a measure similar to standard deviation, but at 90 and 95 percent, these are much more exacting standards.

Source: Healey, Joseph F. 2005. *Statistics: A Tool for Social Research*. New York: Wadsworth Publishing Company.

Part V

—

REVENUE PROJECTIONS AND FISCAL IMPACTS (Different Finance Mechanisms)

Cumulative Fiscal Surplus to County with Normal Finance Mechanisms:	**$24,591,443 (Exhibit 15)**
Cumulative Fiscal Surplus to County with Additional Finance Mechanisms:	**$52,242,922 (Exhibit 16)**

EXHIBIT 15
—
ANNUAL FISCAL IMPACTS AT YEAR STATED - NORMAL FINANCE MECHANISMS*

		2017			2024			2030		
Area	Type of Development	Fiscal Impact	Units	SQ FT	Fiscal Impact	Units	SQ FT	Fiscal Impact	Units	SQ FT
SDA-1	Residential	-$103,857	2,896	317,170	-$181,055	5,049	651,954	-$249,385	6,955	952,931
	Nonresidential	$160,325			$329,554			$481,693		
	Total	$56,469			$148,499			$232,308		
SDA-2	Residential	$77,494	1,109	178,188	$223,679	3,201	367,001	$310,064	4,437	537,298
	Nonresidential	$102,394			$210,894			$308,753		
	Total	$179,887			$434,573			$618,817		
SDA-3	Residential	-$31,463	155	25,440	-$79,688	392	50,860	-$163,250	804	72,632
	Nonresidential	$10,342			$20,676			$29,527		
	Total	-$21,121			-$59,012			-$133,724		
Total Unincorp.	Residential	-$57,826	4,160	520,798	-$37,064	8,642	1,069,815	-$102,572	12,195	1,562,860
	Nonresidential	$273,061			$561,123			$819,973		
	Total	$215,235			$524,059			$717,401		
Santa Fe City	Residential	-$521,474	3,996	1,207,355	-$1,083,010	8,299	2,386,811	-$1,528,795	11,715	3,375,569
	Nonresidential	$1,120,270			$2,214,654			$3,132,095		
	Total	$598,797			$1,131,644			$1,603,300		
CountyTotal	Residential	-$579,300	8,156	1,728,153	-$1,120,074	16,941	3,456,627	-$1,631,366	23,910	4,938,430
	Nonresidential	$1,393,331			$2,775,778			$3,952,068		
	Total	$814,031			$1,655,703			$2,320,701		

Summary

(1) 2.3 million annual Santa Fe County fiscal surplus building to 2030

(2) Residential negative of -$1.6 million covered by nonresidential positive of $3.95 million

(3) Unincorporated County negative of $0.7 million covered by Santa Fe City positive of $1.6 million

(4) Unincorporated County is negative throughout the 20 year period

* Current distribution of revenues in each County fund

EXHIBIT 16
—
ANNUAL FISCAL IMPACTS AT YEAR STATED - PIDS, IMPACT FEES, UTILITY DISTRICTS

		2017			2024			2030		
Area	Type of Development	Fiscal Impact	Units	SQ FT	Fiscal Impact	Units	SQ FT	Fiscal Impact	Units	SQ FT
SDA-1	Residential	$471,358	2,896	317,170	$821,725	5,049	651,954	$1,131,844	6,955	952,931
	Nonresidential	$215,866			$443,720			$648,564		
	Total	$687,224			$1,265,444			$1,780,408		
SDA-2	Residential	$283,938	1,109	178,188	$819,566	3,201	367,001	$1,136,083	4,437	537,298
	Nonresidential	$136,846			$281,852			$412,637		
	Total	$420,784			$1,101,418			$1,548,720		
SDA-3	Residential	-$2,336	155	25,440	-$5,916	392	50,860	-$12,120	804	72,632
	Nonresidential	$14,546			$29,080			$41,528		
	Total	$12,210			$23,164			$29,408		
Total Unincorp.	Residential	$752,960	4,160	520,798	$1,635,375	8,642	1,069,815	$2,255,807	12,195	1,562,860
	Nonresidential	$367,257			$754,651			$1,102,729		
	Total	$1,120,218			$2,390,026			$3,358,536		
Santa Fe City	Residential	-$521,474	3,996	1,207,355	-$1,083,010	8,299	2,386,811	-$1,528,795	11,715	3,375,569
	Nonresidential	$1,120,270			$2,214,654			$3,132,095		
	Total	$598,797			$1,131,644			$1,603,300		
County Total	Residential	$231,487	8,156	1,728,153	$552,364	16,941	3,456,627	$727,012	23,910	4,938,430
	Nonresidential	$1,487,528			$2,969,305			$4,234,824		
	Total	$1,719,014			$3,521,670			$4,961,837		

Summary

(1) 5 million annual Santa Fe County fiscal surplus building to 2030

(2) Residential negative of $0.7 million covered by nonresidential positive of $4.2 million

(3) Unincorporated County positive of $3.4 million joins with Santa Fe City positive of 1.6 million

(4) Result: Unincorporated County is positive fiscally throughout the 20 year period

* New revenues simulated by reducing costs in General and Special Funds by 10% (impacts of PIDs and costs of sprawl savings) and increasing revenues by 15% in Debt Service, Capital Outlay, and Enterprise Funds (impacts of impact fees, infrastructure zones, and utility districts)