Boundary County Report of Fiscal Impact
Baseline Trends and Scenario Impacts

by

Linette Fox and Stephen Cooke*

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*Extension Support Scientist and Associate Professor in the Department of Agricultural Economics and Rural Sociology, University of Idaho, Moscow, Idaho 83844-2334.

Boundary County Report

I. Introduction

Local public officials in Boundary County are responsible for ensuring the provision of government services. The demand for these services comes from the electorate and the mandates imposed by federal and state governments. To provide the highest level of county services at the lowest possible tax burden, local officials must try to anticipate future economic shocks and determine the potential impacts on county fiscal expenditures and revenues. Although the officials may anticipate possible future events, one is required to have a thorough knowledge of the fiscal system and accurate assumptions about the events to determine potential impacts.

The task of determining the fiscal impact becomes particularly cumbersome when there are multiple impacts such as a decrease in population and an increase in income. When people have higher incomes, they demand and pay for more government goods and services. This impact increases local government expenditures. A decrease in the population means fewer people to service. The reduced demand tends to decrease the amount of money spent on these goods and services.

The Idaho Fiscal Impact Projections Model (IDFIPS Model) is a tool to help determine the total fiscal impacts from private market decisions or public policy changes. The model combines the numerous effects of a single event into the overall impact on specific expenditures and revenues. Local officials can view the direction and magnitude of the total impact on fiscal expenditures and revenues.

This report provides the public of Boundary County with an understanding of the total impacts from two possible events. A series of tables and graphs report the impacts of the scenarios in terms of expenditure, non-local aid, tax base, and demographic data. The graphs of the data help the user to relate the impact from a particular shock to the average growth experienced in the county based on the past average growth.

The IDFIPS Model uses a base year of 1990.[1] The researcher introduces the shock into the model in the year the actual shock did or will occur. The model projects the fiscal impacts of the shock from the date introduced to 1999. The researcher can compare the data two ways, between the date the shock is introduced and the previous year, and between the baseline and the shock model for the year the shock is introduced.

The baseline reflects the past trend of average growth that has occurred in the county. This average growth is based on the growth trend in population and income. The growth in population and income in a county creates a growth in the expenditures and non-local aid.

Population growth occurs incrementally. Thus, the status quo for population is not a constant population but a constant rate of growth in population. This growth is reflective of the average of the past growth for Boundary County. The reader can contrast the average growth rate in each period with the increase from individual events that change the quantity or quality of government services requested.

The first section of this paper focuses on developing the status quo for Boundary County. To develop the status quo, the user must determine the average rates of growth in employment and income. The Regional Economic Information Services annual data provides information for an annual growth rate of income and employment.[2] The average growth creates one possible

scenario -- what happened in the past continues into the future. The tables and graphs display the status quo as the baseline.

One can then compare the status quo with a model that incorporates actual shocks. One such model compares the status quo and the actual events that happened from 1990 to 1993 as a type of forecast. In this case, the forecast is from 1990, even though the events from 1990 to 1993 have already occurred Public policies and market changes in the past have created different combinations of expenditures and revenues in each year than those created by the average growth in income and employment. The user can compare the growth or decline in expenditures and revenues from past events with the average growth represented by the baseline.

The user can analyze a particular event from the recent past three ways. First, the reader can compare assumptions between the baseline and the actual shocks. These assumptions are about the demographic, income, and employment characteristics over time. Next expenditure, revenue, and non-local aid results are compared. The model develops the total impact on expenditures and revenues from all of the different assumptions made. The user can also compare the summary characteristics, which are total expenditures and total non-local aid and the resulting local tax burden.

By adding the actual shocks, the researcher creates the forecasts and updates the model. The forecasts help the user to understand the types of information that the model produces and gain confidence in using the model. The updates are needed to develop future scenarios. Since the base year for the model is 1990, the researcher will need to update the model to the present before adding in potential future shocks.

The primary purpose of the model is to forecast expenditures, revenues, and non-local aid into the future under different sets of assumptions. The user develops a set of assumptions to address a particular issue that is important to the county. The last two sections address important issues in the county. Two different scenarios, developed by the county commissioners, suggest potential future events. The model determines what impact these events have on the fiscal finances of the county. Charts and tables display the status quo projection and the projection using the updates and the public policy and private market changes.

Some of the charts contain actual figures for the expenditure, aid, revenues and demographic data. The reader can compare the actual figures to the average growth rate and the update of the model through the incorporation of the actual events. The differences between the actual values and the predictions of values represent the extent to which Boundary County is substantially different from the statewide average response of counties in Idaho.

II. Baseline Model

What Types of Information Are Used to Develop The Baseline Model?

Two questions are answered in this section: What types of information create the average growth? How are numbers developed from the information to enable the model to create the baseline? The answers to these questions help the reader understand that the status quo is not a fixed level of real income or population, but rather a growth rate in income and population. The baseline trends up to reflect the growth in real income and population for Boundary County.

An increase in population and income per capita increases the demand for government services and the ability to pay for those services. When an increase in population occurs, the county must provide more of a particular service in order to maintain the same level of service to all citizens. An increase in the demand for a service can also occur when peoples' incomes rise. People want and have the ability to pay for both a better quality and a higher quantity of private and government goods. For instance, they want both new cars and more highly maintained roads. In Idaho, this model reveals that both expenditures and revenues increase with real income and population growth. An increase in the tax base is related to population and income growth. An increase in the tax base is related to population and income growth. New houses and apartments become a part of the tax roles, creating a higher tax base. An additional increase in the property tax base also comes from higher incomes. When people have higher incomes, they buy higher valued homes, which increase the property tax base.

A change in population is a reflection of a change in employment. If a new or additional employment demand exists, population changes in a specific ratio to the change in employment.

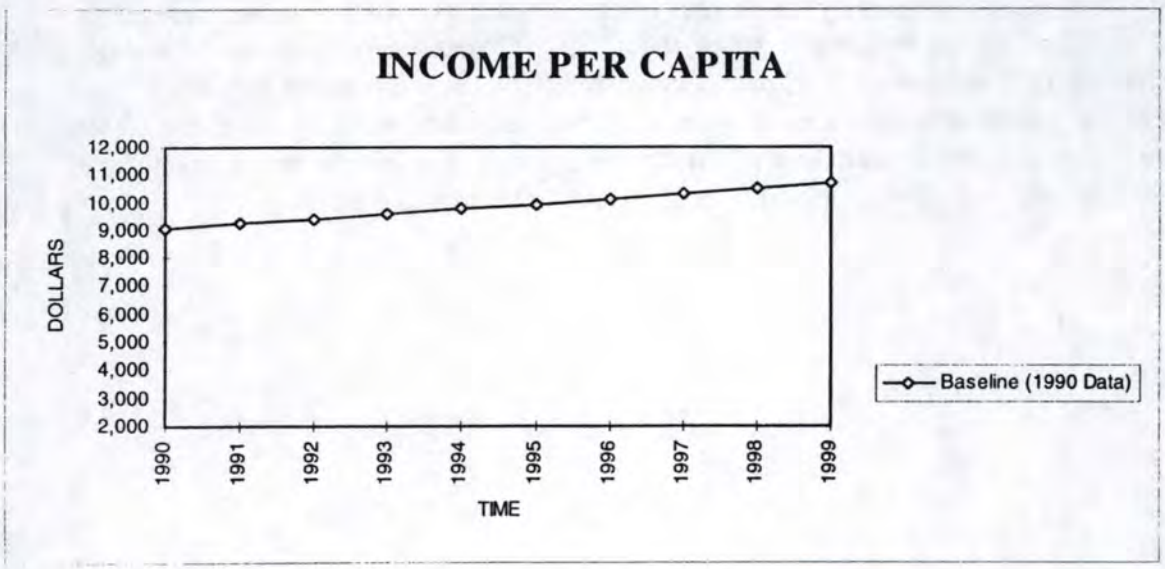
Income per capita also changes by exogenous forces. Incomes per capita increase if human resources become relatively less abundant in the area or the human resources become a higher quality resource through special skills. Thus, the future trend in the growth rate of income per capita is an assumption to the model like the employment growth rates.

How Are the Numbers Developed For The Model To Create a Baseline?

The baseline uses the statewide county average growth of employment and income to develop average growths in population and income. To develop the status quo, one determines an average growth rate in employment and income. The growth rate in income and employment came from the Regional Economic Information Source (REIS), which provides annual information on demographic and economic characteristics of individual counties.[3] REIS data contains information on base and service sector employment and personal income per capita. The growth rates for these variables determine a growth rate for the similar data in the model.

The income figure in the REIS data is personal income. Personal income equals: earnings, dividends, interest, rents, and transfer payments less Social Security contributions paid by the employee.[4] An adjustment to this figure accounts for the place of earnings. In Boundary County, personal income per capita grew from $7949 in 1983 to $13,190 in 1992. Personal incomes per capita, grew in real terms, adjusted for inflation, as well. After adjusting by the consumer price index (1990=100), personal income per capita was $7981 in 1983 and $9401 in 1992. The average Boundary County resident had the ability to buy roughly $1400 more goods and services in 1992 than in 1983. The average percent increase per year in the real personal income per capita was 1.86%. This growth rate is interpreted as the ability for residents to buy 1.86% more goods from one year to the next.

A continuation of the trend forecasts the increase in the income per capita as a 1.86% growth in the following years. This increase is displayed in the diagram on the following page as the baseline increase in income per capita. Projected to 1999, the real income in Boundary County would equal $10,695 per capita.



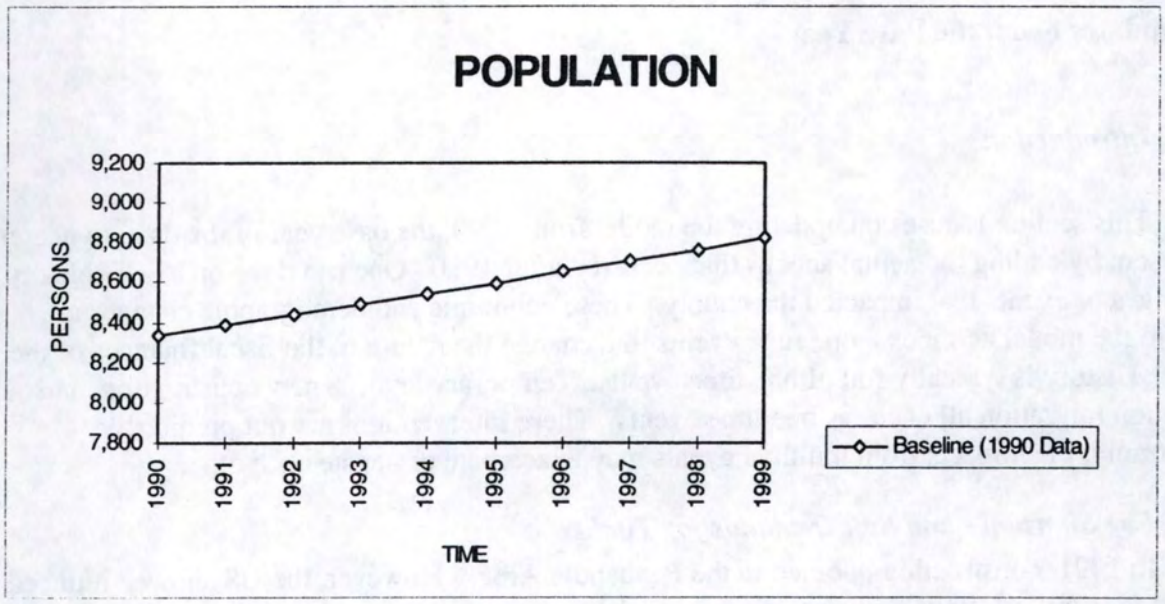
The growth in employment also impacts the model. Employment, however, is a broad term. Different types of employment impact the county in various ways. A more accurate measure of the impact on employment can be derived by splitting employment into two sectors: base and non-base employment. Base employment refers to workers in agriculture, timber, mining, manufacturing and the federal government. These are jobs that provided goods and services that are exported outside the region. The number of base industry jobs in 1983 was 1365 and in 1992 was 1462.[5] The total increase in base employment positions translates into a one percent increase per year. For every 100 base jobs, one new position is created each year.

There has also been a growth in the number of non-base jobs. These are jobs that provide goods and services for local consumption. Non-base jobs depend on base jobs for their existence. Employees in the base industries create the need for people in the non-base employment sector through demand for local goods and services. The marginal multiplier takes the number of jobs in the base industry and converts it into non-base employment. The long-run average of base to non-base jobs may not be a good measure of the marginal multiplier. Non-base jobs are influenced by the level of tourism or whether the area is business district. The historic agricultural or natural resource base may be far from the activity base of today. Thus, a more accurate piece of information is the current multiplier for each industry.

Economic models produce a measure of the direct, indirect, and induced effects of activity in each industry.[6] In particular, these models show the relationship between activity in one industry and activity in other industries through the buying and selling activities of each industry and spending by the workers for household consumption. Examining current relationships between particular base industries and non-base industries allows for a more accurate measure of the marginal multiplier.

The base to total marginal employment multipliers for the government, manufacturing, and agricultural industries are in Boundary County 1.2, 2.1, and 1.6 respectively. On average 1.63 jobs are created by each new base industry job. Non-base employment may increase by more than .63 persons per base employee when the service sector has trade from a substantial number of "retirees" and tourists. Thus, the non-base employment sector should increase or decrease to reflect growth or decline in either area.

The steady increase in base and non-base employment creates a constant growth in population. Population increases by the number of employment positions plus the average number of additional family members. Again, the relationship between the number of additional family members and employment is a linear relationship. The constant rate of growth of employment and the linear relationship between employment and population creates the stable growth rate depicted in the diagram below. At the average rate of growth in employment for 1983 to 1992, Boundary County population in 1999 should be around 8,821.


POPULATION
PERSONS
9,200
9,000
8,800
8,600
8,400
8,200
8,000
7,800
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
Baseline (1990 Data)

III. Updates From the Base Year

Introduction

This section focuses on updating the model from 1990, the base year of the data, to nearer the present by adding the actual shocks that occurred after 1990. One can develop a brief history of changes or events that impacted the county. These economic and demographic changes are added to the model as shocks, one time events that change the nature of the fiscal finances of the county. History is typically full of one time events. Temporary layoffs, new construction, and population migration all occur as one time events. These interventions are not predictable. Furthermore, the impacts from multiple events may exacerbate or negate each other.

Log Shortages and Soft Demands for Timber

In 1991, construction boomed in the Panhandle Area.[7] However, the US showed reduced demand for timber.[8] Raw log prices plunged in the early part of the year and increased in the latter part of the year. Given the reduced demands for timber, it is not surprising that by the last quarter of 1991 the Forest Service had harvested only 27 of the 37 million board feet allowable for sale.[9] Harvest was slow and prices were down, so local mills survived by selling their goods when prices were high and holding when prices were low.

The growth in employment came from the increase in non-base-employment. Many of these employment opportunities do not provide high wage, "family jobs." The average wage rate in lumber manufacturing was $23,998 in 1990, while the average wage rate for the non-base employment sector was only $13,394.[10] These wage rates are for employees that are covered by the Idaho employment security law.

The employment growth could be from people or families in the county taking a second job or people from outside the county moving in to take an employment position. Overall population increased, but it is important to better understand how the population increased. Some of the mill workers that lost their employment may have chosen to leave the county. Twenty-eight people moved out of the county in 1990.[11] Although there was a net migration out of the county, the population grew by 25 people.[12] The number of births exceeded the number of deaths plus the net migration out of the county, generating an overall increase in population. [13]

From the information above, it would be impossible to know if incomes increased or decreased as a result of the population and employment changes. The increase in the population means that a higher total income in the county would be needed to maintain the present income per capita level. In addition there is an employment growth, but the growth in employment is in lower paying jobs. Some of the higher paying jobs are lost, while a greater number of lower paying jobs are gained. The total income gain or loss comes from the impacts of the wage structure change and the total employment to population change.

Overall there were more people employed per capita in Boundary County in 1991 than in 1990. In 1990 46.6% of the population was employed, whereas in 1991 48.2% of the population was employed.[14] Holding everything else constant an increase in the percent of persons employed would increase the total income in the county.

What is not held constant, however, is the type of jobs held by people. One may recall that some timber mill jobs were lost and the growth in jobs came from the non-base employment sector. The non-base employment positions grew by 213 jobs, while only 59 timber mill jobs were lost.[15] By multiplying the average wage in the timber mills times the number of jobs lost, the decrease in the income of the mill employees was $1,415,882. The increase in the non-base employment sector times the average annual income for non-base employment jobs increases the annual income by $2,852,922. Annual income increases, because the increase in the number of jobs outweighs the wage differential between high wage timber mill jobs and low wage service sector jobs.

There are more jobs per capita and more dollars of income created from the new jobs. Not surprisingly, income per capita increased during this period. From 1990 to 1991, the increased demand from outside forces more than compensated for the downturn in the timber industry.

Migration Up, Logging Down

The decline in the timber industry in 1990 and 1991 came primarily from the decline in prices, a market decision. By late 1991, however, prices had climbed upward. The primary concern at this time was to keep the mills running and the logging operations cutting. Some citizens of Boundary County worked on agreements to try to make timber cuts more environmentally friendly in the late 1980's and the early 1990's. By 1992-1993, there were more interests involved and appeasing all interests became much more difficult. Some citizens of Boundary County were frustrated with trying to develop new ways to satisfy the needs of all the people involved. Taking away people's rights in the short run in order to protect their way of life in the long run was a contradiction, to some so also was letting their way of life be destroyed to protect their rights. The issue became how to protect people's rights and their way of life so that everyone won.

Despite the decline in logging in 1992 and 1993, the manufacturing sector, which is predominantly the timber mills, boasted an increase in employment. Services and retail trade also saw an increase in employment. Some of the new workers may have immigrated into the county. The net increase in population from migration was 149 people in 1992.[16] Part of this increase may have been new employees at the mills. Thus, the service sector received new demands from the employees at the time.

Another change that was occurring at this time was a growth in the older population. Fifty new Medicare enrollees became a part of the population in 1992, while the enrollment increase showed only 14 new students.[17] These distributions are not representative of the current population. The growth in the Medicare enrollees is large relative to the expected growth. Furthermore the growth in elementary and secondary school enrollment does not reflect the expected growth for the population increase.

The 1993 figures are not available for population, migration, and Medicare enrollees. Enrollment, however, increased in public schools by 60 new students.[18] The increase in enrollment may be a reflection of a more well distributed population growth. It is possible that the small enrollment growth in 1992, reflected the fact that workers arrive before their families. Thus, some people may have found work in Boundary County in 1992 but did not move their

families to the county until they found suitable living quarters. The increase in enrollment is delayed a year to reflect the time to find suitable housing.

Although the enrollment did increase some in 1993, the high growth segment of the population was the "retiree" population. The number of Medicare enrollees increased by a substantial sum in 1992 and at a rate far greater than the natural aging of the population. This would suggest that some of the older age citizens in Boundary County were in-migrants.

Another important change during this time period was a change in income per capita. Income per capita increased substantially during this time period. Part of this increase may have resulted from having more adult wage earners in the population. The increase in employment far outweighed the increase in population during this time, so more adults per capita were joining the workforce.

In addition, there was an increase in the number of Medicare enrollees. Although many Medicare enrollees are out of the labor force, they often have high incomes through social security, pensions, investments, and part-time work. The net effect of all these changes is an increase in income per capita.

Property Bases and Revenues

Property bases change in response to population and income changes. In addition, private market decisions to sell inventories, buy equipment, lay utility lines, or build warehouses also impact the county's property base.

Population and income changes impact county property bases, in particular real property bases. The real property base increased from $160,145,400 in 1991 to $191,495,677 in 1993, an increase of 20%.[19] This increase stems from a growth in residential, commercial, agricultural, and/or mining property. The real property base may increase from a growth in any one of these types of property or from a combination of growths. Some years the increase may predominantly come from building more houses or improving existing homes. Other years the primary increase in property taxes comes from new businesses. From 1992 to 1993 the residential property base increased by only 7%, while the commercial property base more than doubled.[20] Private market decisions to increase commercial property had a substantial impact on the county property tax base.

The increase of 7% in the residential real property base compares to a growth rate of about 3.5% in population.[21] The residential real property base depends on the number of people in the county and the income level of the people.

The personal property base shows a small growth over the period 1991 to 1993. The personal property base increased by only 5% from 1991 to 1993.[22] Timber and agriculture related businesses use high valued equipment. The uncertainty of the industries may make people delay purchases of major equipment or inventory, thus creating a slower growth in personal property. The personal property base did decrease some between 1992 and 1993.

Utilities and transportation services constitute most of the operating property. The only major change in the operating property tax base was a new pipeline built through the county in the early 1990's. This pipeline increased the operating property base by a considerable sum. The operating property tax base grew by 43% of the 1990 value.[23] The operating property tax base increases sporadically from the growth in the property value of utility companies and railroads.[24]

Forest revenues come from the sales of forest service timber. Forest service funds fluctuate heavily from the increase or decrease in cutting activity and the variation in the price of

raw logs. The price of raw logs increases or decreases according to the building of commercial and residential structures in the nation. Since forest revenues fluctuate heavily, the funds remitted to counties from the forest service also fluctuate heavily. The forest service remits to the counties from which the forest district lies, 25% of the total value of the sales from the district.[25]

The price was rising at the same time that the timber cut was falling for a time in the early 1990s. Thus, the slowdown in the timber industry did not impact forest reserve funds until about 1994. At this time the price had stopped rising and the cut had decreased to about half of the 1989 value.[26] Thus, the value of the sales plummeted.

The period from 1990 to 1993 brought the potential for tough times in the timber industry. From 1990 to 1991 there was actually a decline in the timber industry, but from 1992 to 1993 there was a slight increase in the number of jobs in the mills. The log shortages for the mills and reduced demands for timber had put a crimp on milling activity. The average real income in the county, however, had not fallen -- in fact it increased.[27] The increase came primarily from the in-migration of people that did not require the county and its resources to provide them with a job. In addition, the prospects of the mill were not good, but there was no permanent shut-down of either of the large mills.

IV. Scenario of Timber Loss

What Are the Shocks To Be Added?

The next two sections report the fiscal impacts for two different scenarios. These scenarios were requested by the county commissioners. The first scenario is a 60 percent timber loss. An endangered species listing that has been discussed recently has the potential of reducing allowable cut on federal and private forest land by 60%. Less timber harvested may preclude mills closing or reducing their capacity. The commissioners felt that a permanent reduction in timber harvest would reduce milling activity by 60% as well. With a permanent reduction in milling activity, mills may attempt to reduce their capital and labor inputs. They may sell their property or attempt to have their property devalued to avoid the tax burden. These actions reduce the real and personal property tax base. In addition, fewer employees are needed to cut and mill logs. The mills and logging outfits hire many laborers; thus, the job loss would be substantial.

The local economy also depends on the milling and logging operations for much of the local trade. Loggers and mill workers purchase goods and services locally, supporting the service sector in the local community. The service sector depends on the continued demand for their services from the local base sector and non-local trade.

The researcher is required to make some assumptions about the continued flow of forest revenues from public lands and major tax base fluctuations. This particular scenario must include a change in government funding from public land revenues, because many areas of the federal forest land in Boundary County and the surrounding counties would be limited to uses other than logging. Public lands do not generate tax revenues, but they can provide an alternative source of revenue for the county, forest revenue funds. With a reduction of timber harvest activity by 60%, the national forest funds are assumed to decrease by 60% as well.

A major decrease in forest revenues in the past year stems from the fall in log prices and the decrease in the cut on Federal Forest lands. The timber cut dropped substantially from the high of nearly 50 million board feet to half of that figure in 1994.[28] Forest revenue to the public

works district in Boundary County reached the low of $229,500 in 1994.[29] This figure is down nearly a million dollars from the previous year. Given the large reduction of Forest Reserve Funds that has already taken place, a further reduction in these funds may have relatively little impact. Although federal forest revenues increase or decrease by $500,000 or more, the decrease in Federal Forest Revenues may be perceived as remaining low after the endangered species listing is in effect. It would be difficult to increase the value of timber sales without increasing the allowable cut.

To introduce the scenario of a 60% loss of timber, the assumptions are that 1) cut falls by 60% and 2) timber prices remain constant. This would reduce forest revenues to the Boundary County road and bridge district by $137,700 ($229,500*.6). Thus, a 60% loss of timber translates into a reduction of $137,700 in forest revenues to public works.

The loss in federal forest funds may not appear to be increasing. The scenario assumes a reduction in timber harvest on federal and private lands in the county; thus, fewer loggers are needed to harvest timber. In addition, inventories have been reduced already and the raw logs coming into mills must also decrease. The timber mills reduce their milling activity and need fewer employees. The total employment loss as calculated by IMPLAN remains at 214 jobs in the mill and 115 logging jobs or 329 jobs from the timber industry in total.[30]

The jobs in the mill and logging camps are not the only jobs that are lost. A number of service people base their living off the mill workers and loggers and some of these people would lose their jobs as well. To determine the relationship between the service sector and the mill workers and loggers, the IMPLAN model was used. For each additional timber industry job, the IMPLAN model reported that the community could support 3:2 jobs in timber industry to the service sector ratio. This means that for three additional jobs in the timber mill, there are about two jobs in grocery stores, gas stations, or other services. Over 600 jobs would be lost in the service sector, the timber industry, and other employment.

Many people lose their incomes, which hurts not only those people but the people from which they purchase goods and services. The mill jobs are high paying jobs relative to the county's average income; thus, the loss of income to these people has an even greater impact on the county. The income loss associated with a decrease of 214 mill jobs is $5,350,000. The calculation for this equation is below:

214 Jobs * $25,000/ Job = $5,350,000

The income loss associated with the loss of the 115 logging jobs is only about half this amount. The calculation for the income loss of the loggers is addressed in the equation below:

115 Jobs * $18,000/Job = $2,070,000

The total income loss associated with these jobs is the sum of the income loss from the mill jobs and the logging jobs. The value of the loss is $7,420,000.

Timber Jobs	$5,350,000
Logging Jobs	2,070,000
All Timber Industry Jobs	7,420,000

The people that lose their incomes are financially restricted. Furthermore, the loss in income trickles into the economy as there are fewer people to buy groceries, hardware, and haircuts. Once people lose their incomes they cannot spend money that is not available to them. The lack of alternative employment in natural resource based economies often forces people to seek employment elsewhere. Thus, the workers that lose their jobs may move, reducing the demand for goods and services.

Employment and income influence local government expenditures in the county. If people leave the county, there are fewer people to service with government goods and services, such as public safety and education. The support for these services also decreases when people have less income to spend. The lack of spending in the county, results in a general income loss. When residents have fewer dollars to spend, they will choose to cut expenditures not just on private goods, but government goods as well.

The decline in spending on private goods may also impact the property bases. When people have less income to spend or expect hard times in the future, they may forego building a new house or buying more land. Furthermore, if people are moving out of the county they may try to sell their homes. Thus, there is a large supply and little demand for housing. These income effects are accounted for by the model.

Shocks to the model come from the closing of a mill or the removal of the mill property base from the county. Clearly, the mill owner would not desire to continue paying taxes on unused equipment in the county. The personal property base would decrease as the mills shipped equipment to other mill locations or sold the equipment out of the county. The smaller mills may find it difficult to sell their equipment, but the larger mills would have the opportunity to transfer their equipment to other milling operations. Thus, the loss in the personal property base was calculated as a reduction of 60% of the personal property for these mills. The figure of the dollar value decrease remains undisclosed to protect the privacy of the owners.

There are four mills with a large dollar value of real property. The owners may not be able to sell the mill property even if they completely closed up the mill. The assumption, however, is that even if the owners could not sell the property, they would attempt to devalue the property as quickly as possible. Between devaluation and possibly moving portable facilities, the property tax reduction would be roughly 50%. The real property base was decreased by 50% of all real property owned by the mill companies, excluding forest land held for harvest. This figure also remains undisclosed to protect the privacy of the owners.

What Are The Implications?

From this information, the loss of 60% of the timber base creates a decrease in jobs, income, property base, and forest revenues. The overall impact is described in terms of demographics, employment and income, education, expenditures, non-local aid, tax bases, tax revenues and a summary. The fiscal impact projection model describes these impacts through a set of graphs and tables in this section.

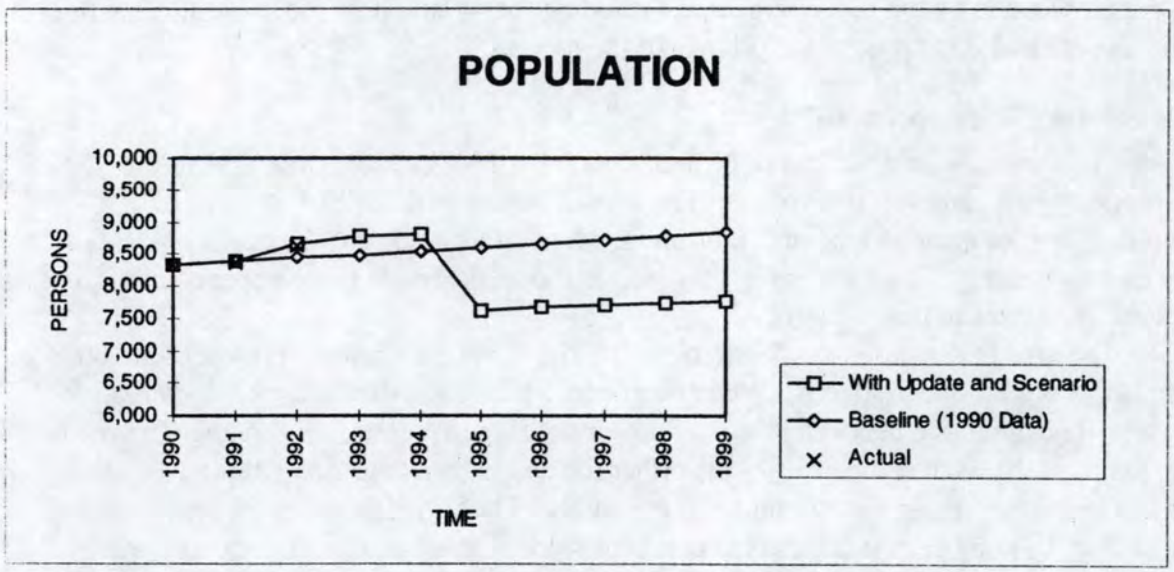
The first area to discuss is the demographics. The direct and indirect impact of the 60% loss of timber was a bit over 600 jobs. When people lose their jobs, they must seek alternative employment. The transition between jobs may take months or, in some cases, years. The model, however, assumes that if the worker loses his or her job and is unable to find alternative employment in the area he or she will move immediately. Thus, the labor force drops immediately by the number of workers plus potential workers that become discouraged with seeking employment.

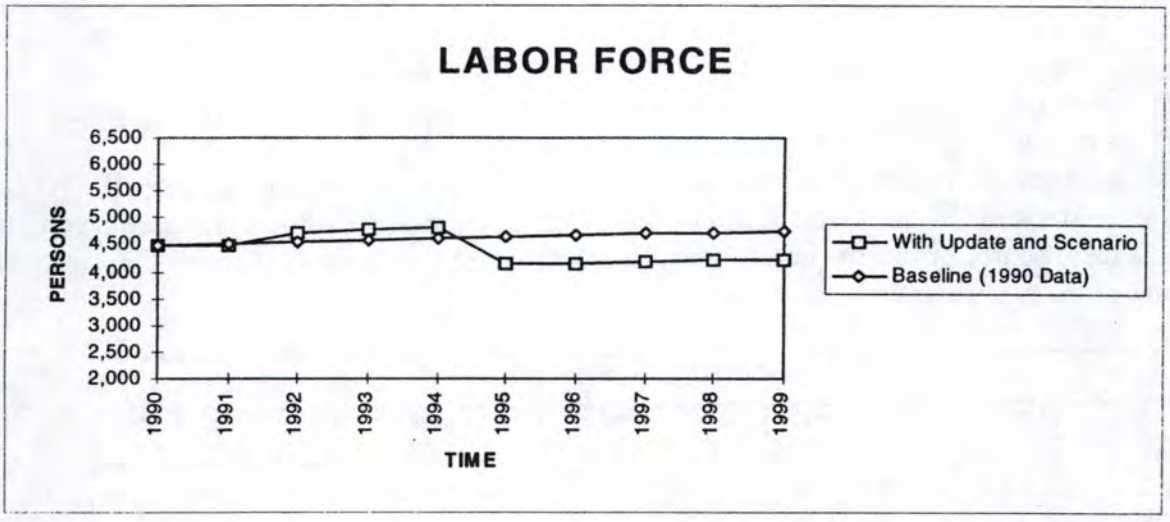
Following the labor force reduction is a decrease in population. The population immediately drops by about 1200 persons. The large migration indicates that more people leave than just those interested in employment in the county -- entire families move. The enrollment decrease by about 350 students is an indication that at least some of the jobs that were lost supported families and the out-migrants are taking their families with them.

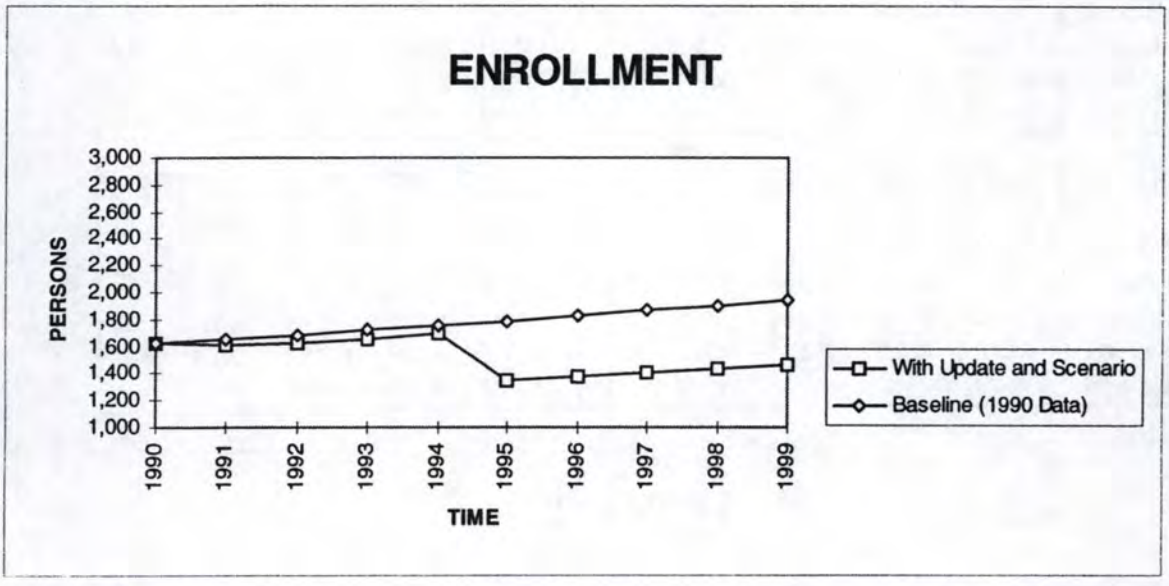
The model also considers the ability of the labor force to seek employment in neighboring counties while living in Boundary County. This option may be available for a few workers. The net commuters in the county, which are out-commuters less in-commuters, only increases by 13 persons. Thirteen employees of the over 600 workers that lost their jobs are able to find work in the area.

The information discussed above is reported in a table below. In addition to the table, a set of graphs has been developed to give a visual context to these shocks. Graphs are included for population, labor force, and enrollment. Population decreases for both adults in the labor force and children enrolled in schools. These two groups of people have very different requirements in terms of the government goods they require and their contribution to paying for these goods and services.

Demographics										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Population	8,332	8,384	8,437	8,490	8,544	8,598	8,653	8,709	8,765	8,821
Labor Force	4,491	4,520	4,549	4,578	4,607	4,637	4,667	4,698	4,729	4,760
Net Commuters	50	49	49	48	48	47	46	46	45	45
Enrollment	1,617	1,650	1,683	1,718	1,753	1,790	1,827	1,865	1,904	1,945
Scenario										
Population	8,332	8,392	8,642	8,766	8,821	7,621	7,658	7,695	7,732	7,769
Labor Force	4,491	4,496	4,707	4,775	4,806	4,147	4,167	4,187	4,208	4,228
Net Commuters	50	48	44	43	43	56	55	55	55	54
Enrollment	1,617	1,616	1,630	1,659	1,696	1,347	1,375	1,404	1,433	1,463
Actual										
Population	8,332	8,357	8,639							







Employment drives the labor force and the population. In turn, population impacts the expenditures of a county. The more people there are to service, the greater the expenditures on government services.

Expenditures may increase when people have the ability to pay for more goods and services. As the income per capita increases, people want both more private and government goods and services. Thus, income per capita is another very important variable in the model.

The employment and income table on the following page displays the large decrease associated with the timber loss scenario. The number of employees drops by over 600 in total. This decrease is fueled by the timber industry, the losses for the timber industry are a large part of the base industry employment loss. A substantial number of employees in the non-base sector lose their employment as a result of the timber industry decline, about 250 jobs are lost.

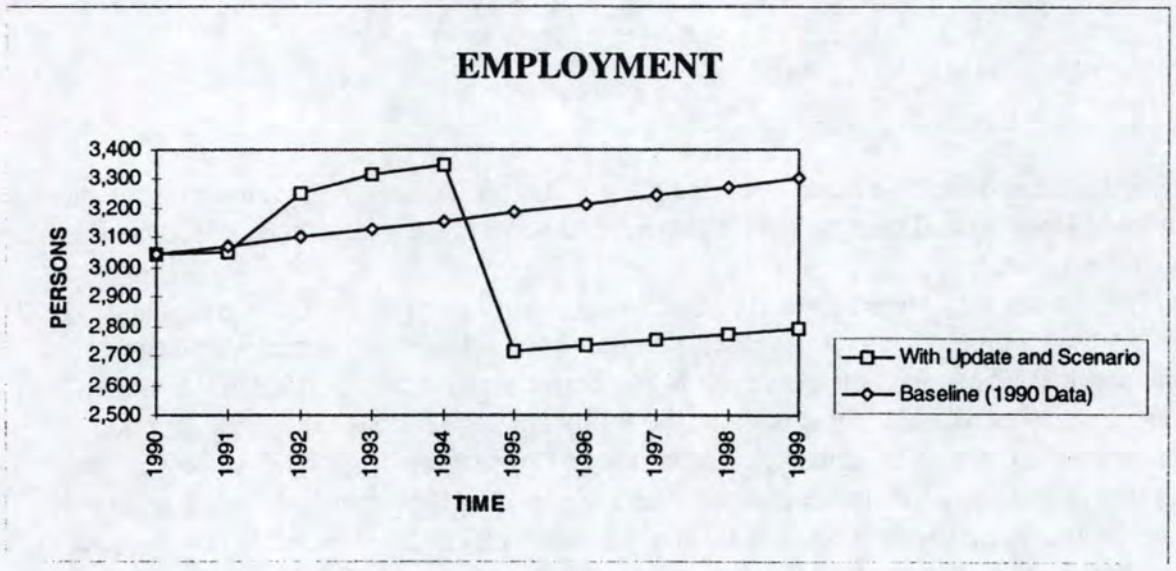
Some of the people that lose their jobs may also close their businesses. Some businesses depend on the timber industry for their livelihoods and may find themselves unable to continue business when the demand for their services decreases. Other businesses that close may be

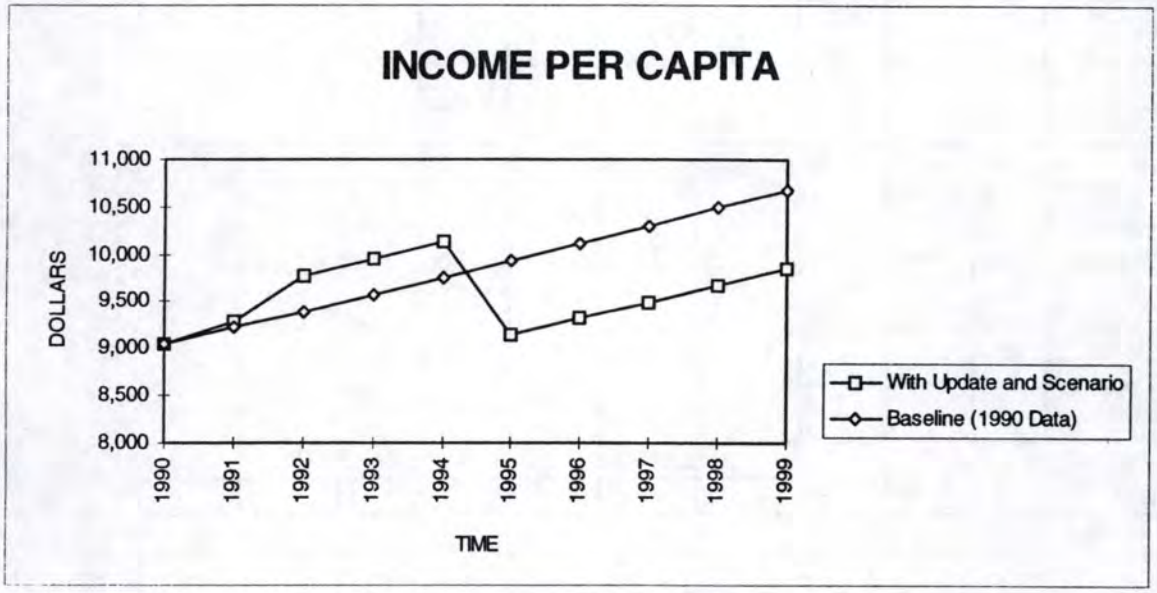
businesses that are more susceptible to economic downturns. Boundary County could lose about thirty businesses.

Income per capita also plays a role in the model. Some individuals lose their incomes entirely, which takes money out of the economy. Less money spent in the county impacts everyone's income. Thus, income per capita decreases by about $1,000.

The graphs of income per capita and employment and the table below can help to visualize the decrease in employment and income. Again, the model assumes that people who lose their main source of income immediately transfer to their next best alternative. Thus, people move out of the county to find employment elsewhere.

Employment and Income										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Employment	3,045	3,073	3,100	3,128	3,157	3,185	3,214	3,243	3,273	3,303
Non-Base Employment	1,999	2,016	2,033	2,051	2,068	2,086	2,104	2,122	2,140	2,159
Base Employment	1,046	1,056	1,067	1,078	1,088	1,099	1,110	1,121	1,133	1,144
No. of Businesses	252	254	255	257	259	261	262	264	266	268
Cont. Labor Force	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237
Income Per Capita	9,054	9,222	9,394	9,569	9,747	9,928	10,113	10,301	10,492	10,687
Scenario										
Employment	3,045	3,050	3,253	3,318	3,347	2,715	2,734	2,754	2,773	2,793
Non-Base Employment	1,999	1,999	2,165	2,219	2,237	1,986	1,998	2,010	2,022	2,034
Base Employment	1,046	1,051	1,088	1,099	1,110	729	736	744	751	759
No. of Businesses	252	257	268	272	274	235	236	237	239	240
Cont. Labor Force	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237
Income Per Capita	9,054	9,298	9,762	9,944	10,129	9,155	9,326	9,499	9,676	9,856





The demographics' section discussed the total enrollment decline from a loss of timber. Total enrollment in Boundary County equals elementary and secondary students. The decline in students is assumed to be proportional to the original distribution. Thus, more elementary students are lost than secondary students.

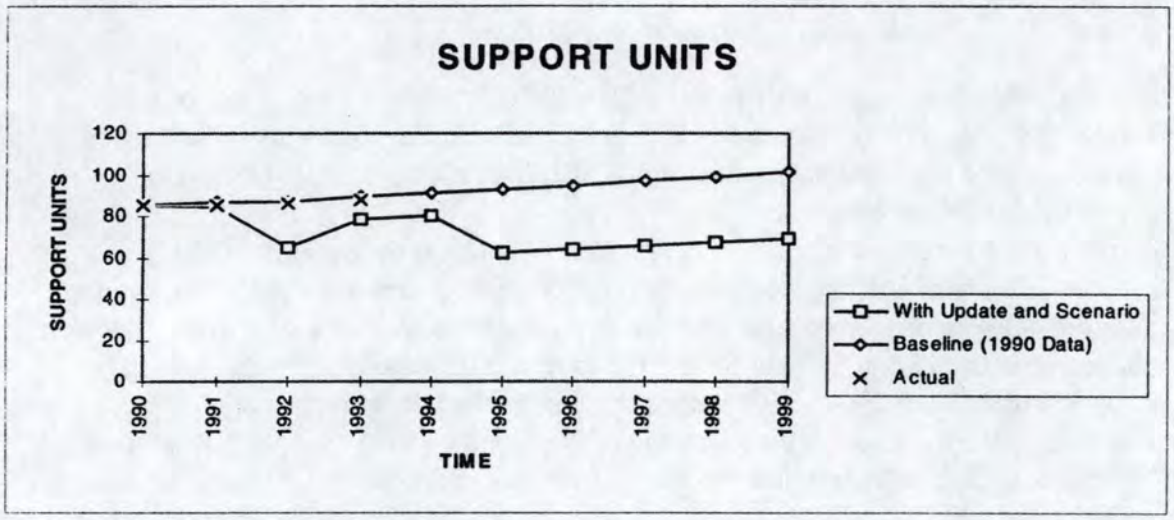
The support units are a calculation of the number of students by grade level in a given school. Since the number of students decrease, the support units decrease as well. The support units are used in the determination of state funding appropriated to each school district. The support units decrease from 80 in 1994 to 62 in 1995 to reflect the enrollment reduction. The decrease in support units from 1994 to 1995 is slightly higher than the real change. The support unit system in Idaho places a floor on the reduction of funding for a given school district in any one year.[31] The floor helps schools adjust to sudden decreases in enrollment, through decreasing funding slowly.

Since enrollment is declining, the enrollment per school also decreases. The number of students per school drops from 283 to 225. Education is a service requiring a large labor input.. The decline in non-local aid resources forces the schools to reduce their teaching staff to reflect the reduction in the number of students.

The graph included for this section is a graph of the support units. The decrease in the number of students in the early 1990's was not immediately reflected by the support units. Under the timber loss scenario, the support units may not decrease immediately. The support unit program contains a floor which holds up the number of support units to allow schools to adjust to rapid reductions in enrollment.

EDUCATION										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Support Units	85	86	87	89	91	93	95	97	99	101
No. of Kindergartners	0	0	0	0	0	0	0	0	0	0
No. of Elementary Students	948	967	987	1,007	1,028	1,049	1,071	1,094	1,117	1,140

No. of Secondary Students	769	785	801	817	834	851	869	887	906	925
Enrollment Per School	323	330	281	286	292	298	304	311	317	324
Scenario										
Support Units	85	85	65	78	80	62	64	65	67	69
No. of Kindergartners	0	0	0	0	0	0	0	0	0	0
No. of Elementary Students	948	948	956	973	995	790	806	823	841	858
No. of Secondary Students	769	769	775	789	807	641	654	668	682	696
Enrollment Per School	323	323	272	277	283	225	229	234	239	244
Actual										
Support Units	85	85	86	88						



Both, population and income, decrease with a 60% timber loss. Thus, there are fewer people to service and the existing residents demand and are able to pay for fewer private and government goods and services when their incomes decrease. The expenditures are county, school district, and public works expenditures. The table on the following page displays the expenditures and their corresponding projections.

Public works expenditures are expenditures to maintain roads and to build new roads. Roads must be maintained regardless of the population in the county. In Idaho, counties with large acreages of public lands often receive a large amount of non-local aid. Seventy percent of the non-local aid from federal forest lands is distributed to public works. The counties which receive much non-local aid from public works have more funds to build roads without using tax moneys. Recently, there has been a large decrease in the forest revenues. This large reduction has already taken place in Boundary County. Public works expenditures show little reduction in 1995 when the population plummets, but decrease by a large amount in 1994 when the forest revenue funds declined by over a million dollars.

Administrative expenditures are a residual. These expenditures include the salaries for many of the persons in the courthouse, such as the clerks, treasurers, appraisers, and

commissioners and the grant or extra services component. The grant or extra services component of administrative expenditures is the upkeep and maintenance of fairgrounds, the ambulance service, the restorium support, and funds to special programs.

According to the model, administrative expenditures, which includes the special programs declines rapidly when population and income decreases. Although the expenditures for public works and administration are nearly the same in 1994, the expenditure for public works decreases by less than $200,000, while the administrative expenditures decrease by $350,000.

Public safety expenditures also decrease. With a decline in population, there are less people to protect. The model predicts public safety expenditures will be reduced.

One would expect more demands on the county as a source of last resort when incomes decline. Using a cross section data set, it becomes obvious that more urban counties tend to have higher incomes per capita than less urban counties. Even though loggers and farmers go through financially restrictive years, they are less likely to ask for public assistance.[32] Thus, dollars of public assistance are traditionally low in rural areas, where incomes are also low. As incomes decrease in rural areas some people may be forced to ask for public assistance; thus, the predictions from the cross sectional data set may be less than adequate for this expenditure.

For this scenario, the model predicts welfare expenditures to decrease by a little less than one third. Welfare expenditures decrease as incomes and population decrease.

The education expenditures are for a primary and secondary students in public education. Even during the time period when the population grew rapidly, the enrollment numbers grew at a much slower rate. Boundary county has many private schools and many children that are home-schooled. The decisions of parents to home-school or put their children in private schools also has an impact on the public school enrollment.

Under the loss of timber scenario the enrollment decreases by roughly 350 students. With fewer students to service, it is not surprising that the education expenditures decrease. Education expenditures decrease by nearly a million dollars from this large decrease in the number of students. The school district now has the task of educating only 79% of the students they had in 1994. A large proportion of the dollars spent in education are personnel costs; moreover, personnel are hired to provide a service to the students on a per student, per class basis. Some classes could be consolidated when there are fewer students to service. Fewer teachers would be needed to teach fewer classes.

Predictions for solid waste costs are also based on a cross sectional data set. Therefore, population and income are the primary driving forces behind the rise in costs. The predictions do not account for federal mandates in the area of solid waste disposal. These mandates have required some counties in Idaho to dispose of solid waste outside the county boundaries. The fiscal impact model does not directly account for the large increase in costs of disposing of solid waste created by new federal mandates.

Since population and income are only loosely related to the solid waste expenditure level, the drop in solid waste expenditures is fairly small, roughly $35,000. This reduction in expenditures is generally due to fewer people to service with garbage disposal.

Health District expenditures are paid by the county to the Health District for services such as the WIC program, restaurant and sewer system inspections, family medical services, and school health care programs.[33] Health District programs draw funds from state and federal governments and rely on counties for about 18% of their support.[34] The Health District covers a

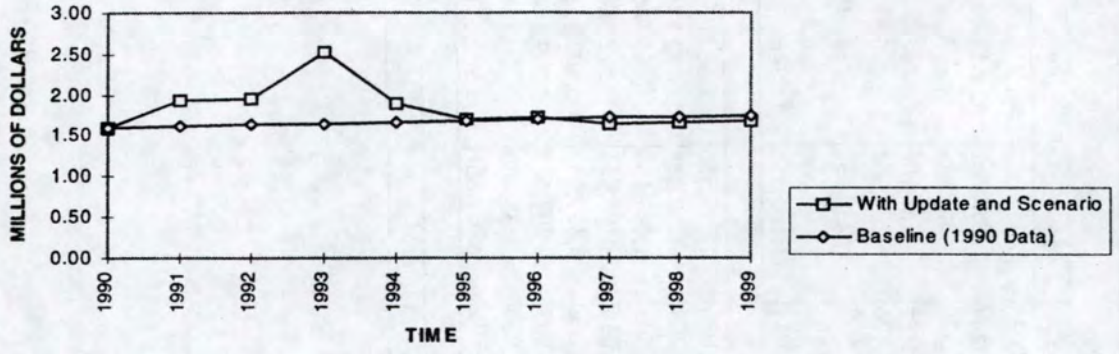
region of the state, approximately six counties, and draws funds from each of those counties according to the population of the county and the market value of the property within the county.

Since there is a sharp reduction in the number of people and the market value of the property in the county, county Health District expenditures decline. The reduction in this case is over $8000 or about 18%. Population, however, decreases only 13.5%. Thus, the property base reduction creates an even larger drop in the Health District expenditures.

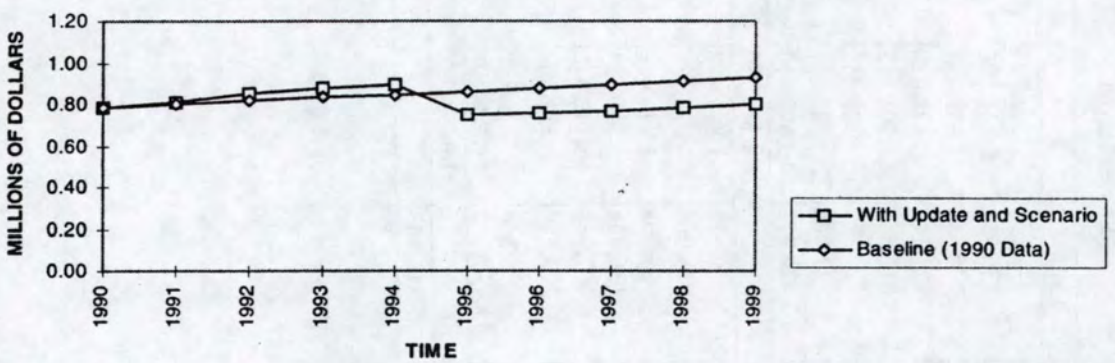
Overall, the total county expenditures drop from over $11 million to around $9.5 million. County expenditures decline by about 2% more than the percent decrease in population.

Expenditures										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Public Works	1,599,564	1,614,563	1,629,918	1,645,637	1,661,730	1,678,207	1,695,078	1,712,353	1,730,043	1,748,159
Public Safety	787,078	801,258	815,803	830,722	846,026	861,725	877,829	894,350	911,299	928,687
Administrative	1,690,240	1,725,388	1,761,461	1,798,486	1,836,487	1,875,492	1,915,526	1,956,619	1,998,799	2,042,095
Welfare	111,674	115,710	119,855	124,110	128,480	132,967	137,574	142,305	147,163	152,151
Education	5,559,971	5,643,051	5,725,262	5,812,348	5,901,545	5,992,909	6,086,496	6,182,365	6,280,575	6,381,190
Solid Waste	215,191	217,199	219,250	221,345	223,485	225,671	227,905	230,187	232,519	234,903
Health	39,800	40,536	41,291	42,064	42,857	43,669	44,502	45,356	46,232	47,130
Total County	10,003,518	10,157,705	10,312,840	10,474,712	10,640,610	10,810,640	10,984,911	11,163,536	11,346,631	11,534,314
Scenario										
Public Works	1,599,564	1,928,663	1,955,554	2,520,675	1,894,478	1,709,025	1,722,026	1,646,566	1,660,061	1,673,863
Public Safety	787,078	806,609	854,092	875,036	891,385	744,833	757,209	769,888	782,875	796,180
Administrative	1,690,240	1,738,930	1,854,927	1,905,798	1,946,469	1,598,637	1,629,501	1,661,130	1,693,545	1,726,767
Welfare	111,674	117,270	130,588	136,438	141,124	101,503	105,034	108,654	112,366	116,171
Education	5,559,971	5,673,852	5,897,911	6,067,962	6,146,345	5,188,274	5,259,206	5,329,532	5,403,799	5,479,797
Solid Waste	215,191	217,844	223,468	229,350	231,609	204,231	205,909	207,622	209,371	211,157
Health	39,800	40,804	43,329	44,455	45,300	37,186	37,820	38,469	39,134	39,815
Total County	10,003,518	10,523,972	10,959,869	11,779,713	11,296,709	9,583,688	9,716,705	9,761,861	9,901,151	10,043,749
Actual										
Education	5,559,971	6,282,955	6,069,754	7,311,843						

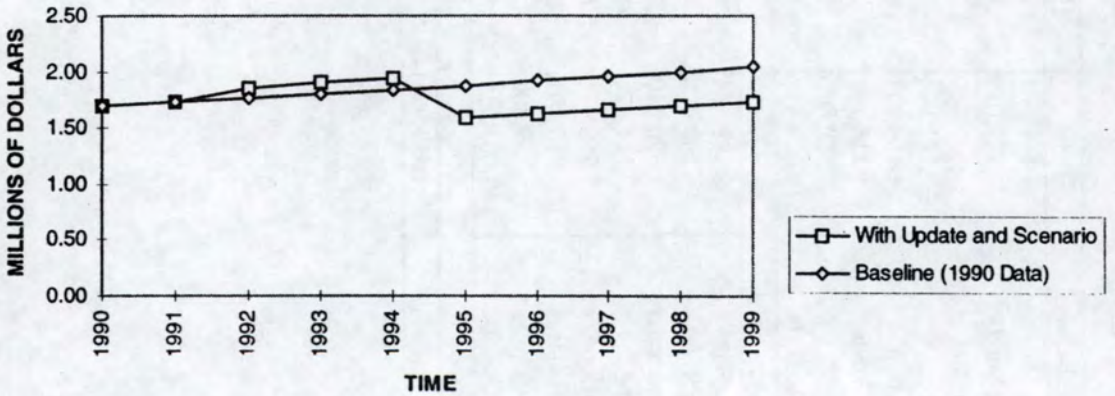
PUBLIC WORKS EXPENDITURES



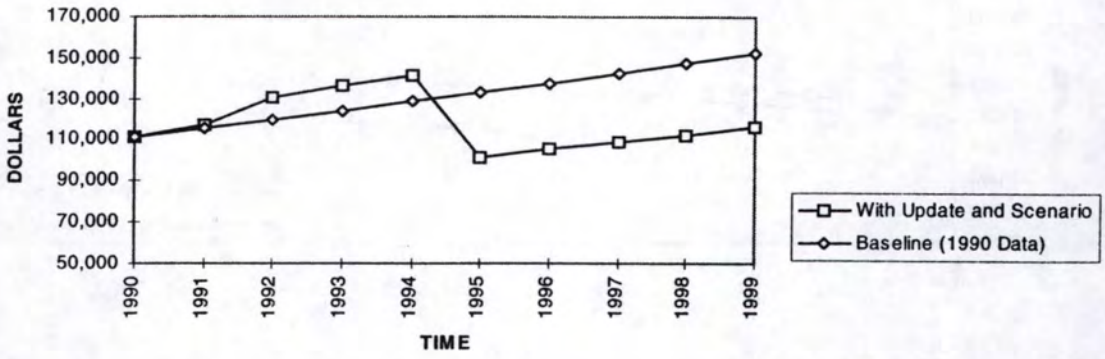
PUBLIC SAFETY EXPENDITURES



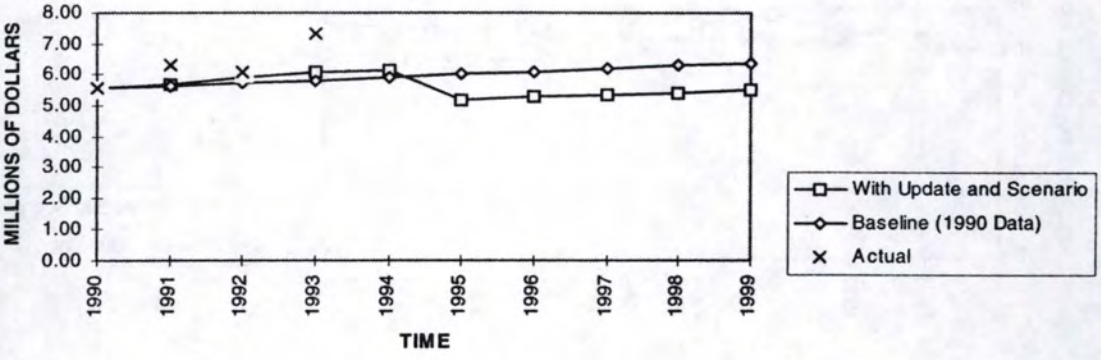
ADMINISTRATIVE EXPENDITURES



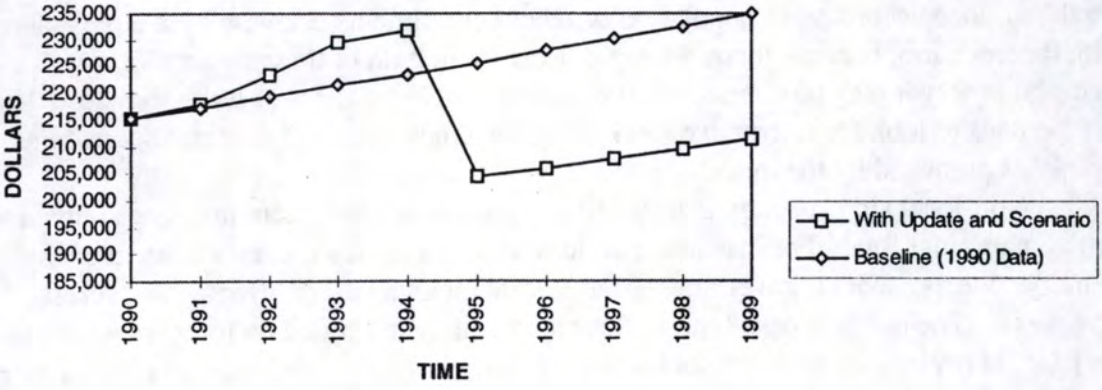
INDIGENT AND CHARITY EXPENDITURES

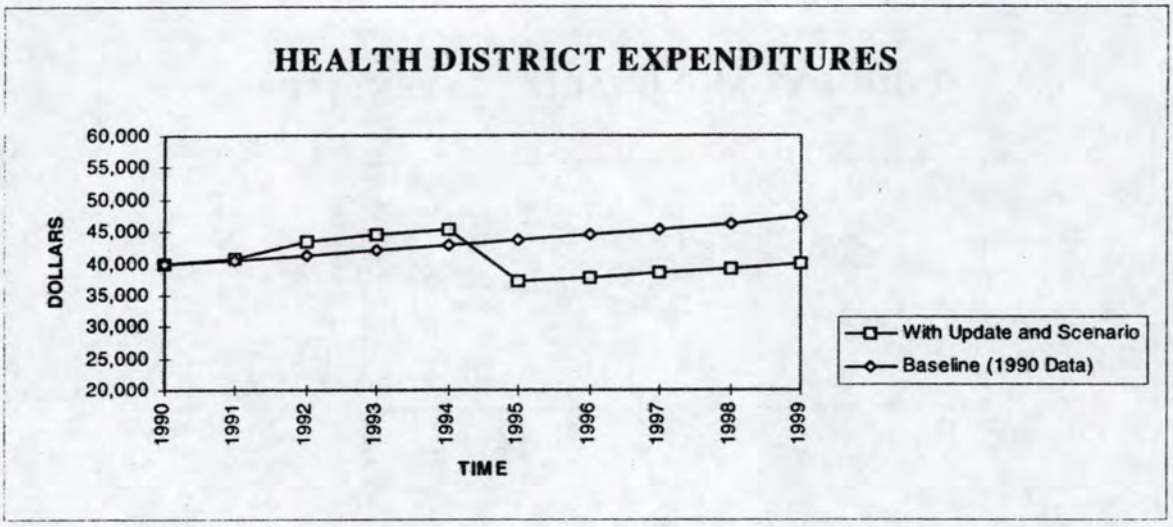


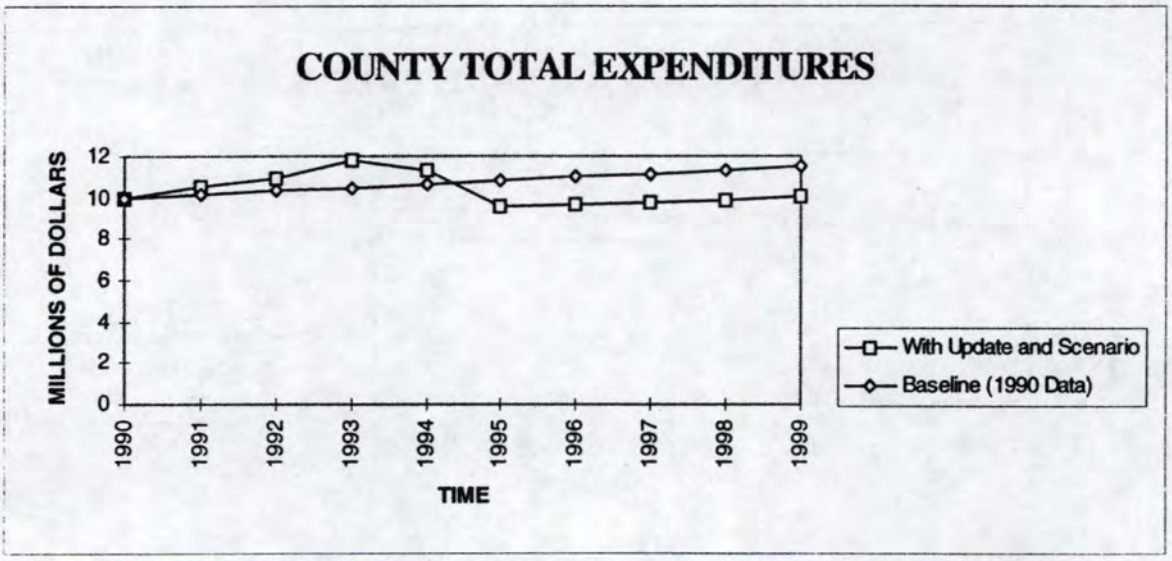
EDUCATION EXPENDITURES



SOLID WASTE EXPENDITURES







Both expenditures and non-local aid decrease Some sources of non-local aid are tied to the entire population or a particular segment of the population. Other sources of non-local aid are distributed equally to all counties or are based on characteristics of the county such as the number of improved road miles. Those sources of non-local aid that are determined according to population or school enrollments decrease by a large amount with this scenario, because there is a rapid decrease in both of these figures. These changes, however may be overstated. If people do not leave the area when they lose their job, perhaps to look for alternative work in the area, non-local aid does not decrease as rapidly as predicted by the model.

Non-local aid is usually distributed to a particular fund, more than one source may go to a particular fund. For instance, public works non-local aid comes from three primary sources: federal government grants, state highway users revenue, and forest revenues.[35] The public works fund in Boundary county has relied on forest revenues in the past. However, forest revenues fluctuate from year to year, depending on the price of

timber and the volume of the cut sold in that year. Forest revenues dropped in 1994 from $1.3 million to roughly $.3 million.[36] The decrease in forest revenues reduces public works non-local aid in that year; furthermore, there is no indication that the non-local aid from the forest service will return to the 1993 level.

State highway users revenue and federal grants are not based on population or income either. Overall, non-local public works aid decreases and increases based on factors other than income and population.

Non-local aid to courts depends on the number and type of court cases in the county. Courts in the county receive a portion of the fees rendered from payments for court fees.[37] Furthermore, for each particular type of court fee, the county receives a specific portion. Crime tends to be higher in more densely populated areas.[38] Thus the model predicts that with the decrease in population, non-local court aid reduces to less than half the original value.

The administrative non-local aid comes from state sales tax funds, PILT moneys, and grant funds. Grant funds are usually tied to specific programs, such as the DARE program. People may choose to discontinue these programs when their incomes are lower. If the program is eliminated, grant funds associated with the program are eliminated. Other administrative non-local aid forms are state sales tax funds and PILT funds. These funds decline when the county loses a part of their population base. The state sales tax funds are allocated, in part, according to the population of the county.

The total decline in administrative aid is $250,000. Non-local aid declines by $100,000 less than the decline in expenditures. The non-local aid support for services declines and residents do not vote to increase tax revenues to continue the provision of the services at the same level. Tax revenues decrease as a sum, but possibly not per capita.

There is also a decrease in the aid to indigent and charity. The aid to indigent and charity comes primarily from the reimbursements from the state government, but some are reimbursements from individuals that need a temporary loan. State reimbursement is given when counties temporarily loan individuals funds for housing, food, or medical services and receive reimbursement from Medicaid or AFDC when those persons are established as eligible for these programs.[39] The model predicts a decrease in all sources of non-local aid by about $3,000.

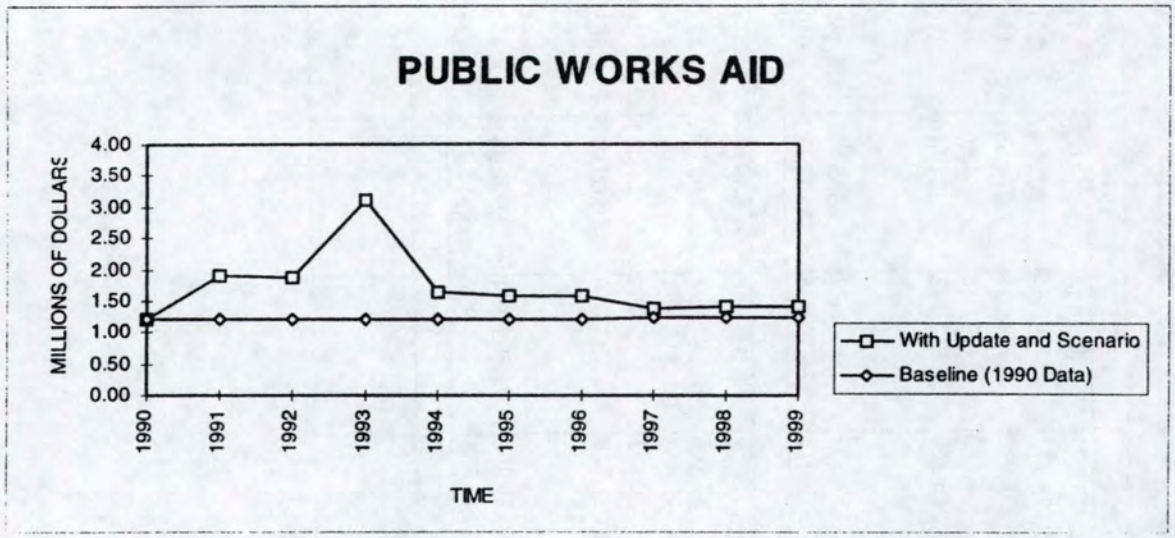
The state government supports education to a larger extent than the federal government. Under this scenario, the state education aid, excluding capital sources, drops by approximately $650,000.

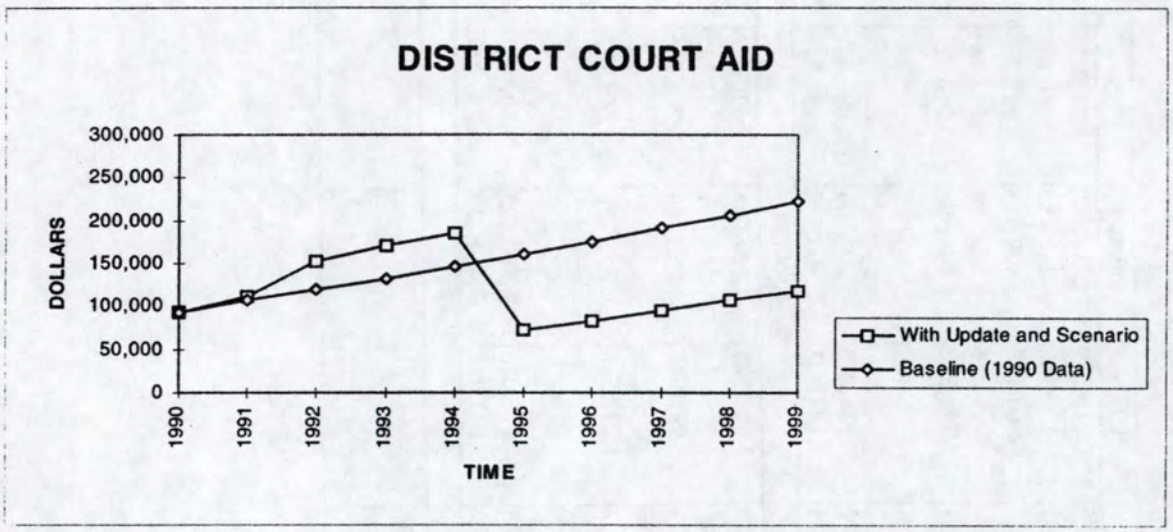
The state education aid without capital decreases due to fewer support units, 62 support units compared to 80. Support units may not fall as rapidly as suggested, because there is a floor to the reduction in the support units for a given year. In reality, the decrease in non-local aid is spread out over several years, giving the school district the opportunity to cut their costs slowly.

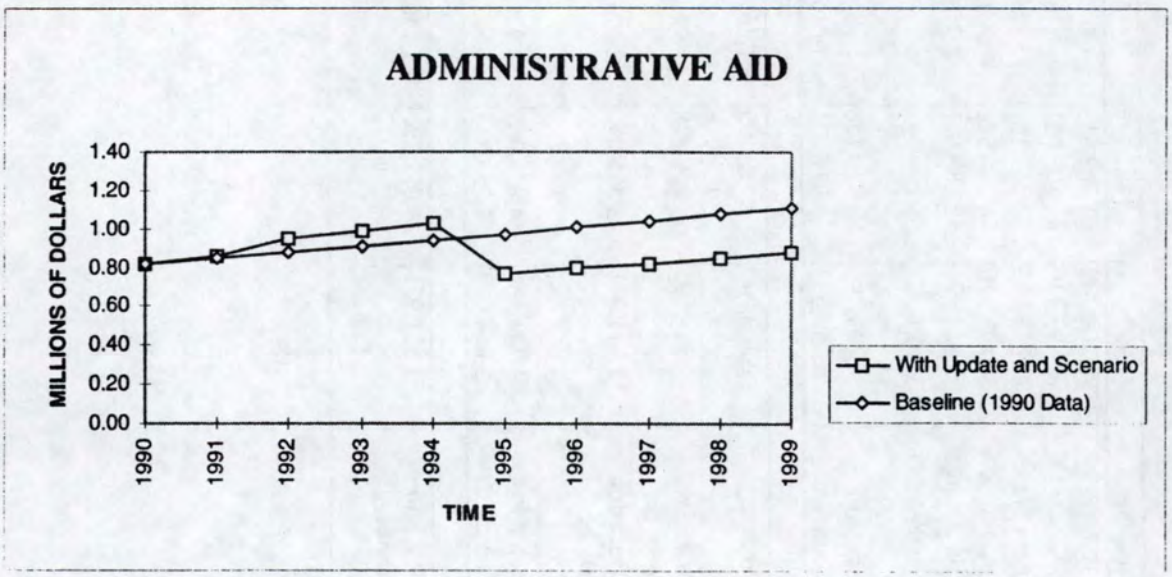
The total non-local education aid consists of all state and federal sources of money. Total education aid falls by $750,000. With fewer children, there will be less funding for the school lunch program and other federally funded activities housed in the primary and secondary schools.

Total county aid drops by roughly $1.2 million. Over half of the decrease is absorbed by the school district. The decrease in population means fewer people to service, and people are willing and able to purchase fewer government goods and services.

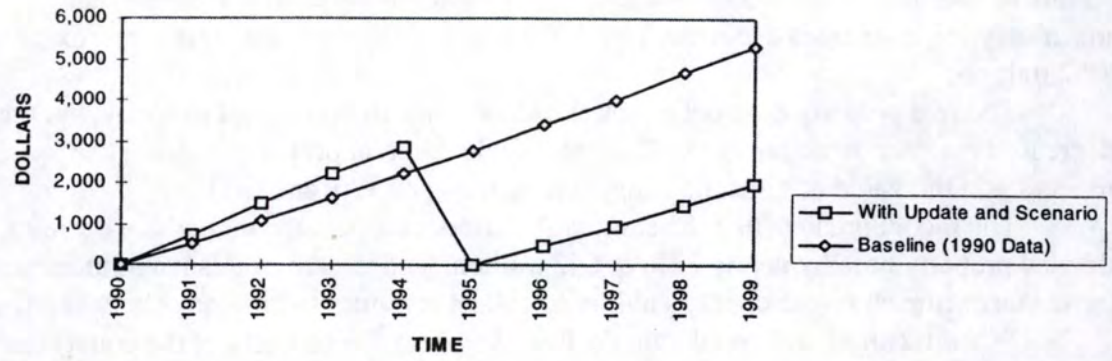
Non-Local Aid										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Public Works	1,200,242	1,203,513	1,206,875	1,210,329	1,213,878	1,217,525	1,221,273	1,225,123	1,229,080	1,233,146
Courts	93,110	105,871	118,991	132,482	146,352	160,612	175,273	190,346	205,842	221,773
Administrative	818,095	847,167	877,047	907,756	939,318	971,755	1,005,093	1,039,355	1,074,567	1,110,755
Welfare	0	528	1,060	1,618	2,193	2,785	3,393	4,018	4,662	5,323
State Education Aid Without Capital	3,611,971	3,688,911	3,715,057	3,794,823	3,876,594	3,960,424	4,046,366	4,134,478	4,224,816	4,317,441
Education Aid	4,743,186	4,820,126	4,846,272	4,926,038	5,007,809	5,091,639	5,177,581	5,265,693	5,356,031	5,448,656
Total County	6,854,633	6,977,205	7,050,245	7,178,223	7,309,550	7,444,316	7,582,612	7,724,535	7,870,182	8,019,653
Scenario										
Public Works	1,200,242	1,910,109	1,861,413	3,102,185	1,637,035	1,590,614	1,593,998	1,394,786	1,398,095	1,401,485
Courts	93,110	111,014	151,836	169,551	184,487	71,115	82,408	93,998	105,892	118,097
Administrative	818,095	858,878	951,744	991,945	1,025,869	766,516	792,363	818,879	846,080	873,985
Welfare	0	744	1,510	2,226	2,843	0	471	955	1,451	1,961
State Education Aid Without Capital	3,611,971	3,598,095	2,673,902	3,272,518	3,357,356	2,603,933	2,667,729	2,733,076	2,800,012	2,868,579
Education Aid	4,743,186	4,873,068	3,925,973	4,776,056	4,560,895	3,807,472	3,871,268	3,895,304	3,962,241	4,030,808
Total County	6,854,633	7,753,814	6,892,476	9,041,964	7,411,129	6,235,717	6,340,508	6,203,922	6,313,759	6,426,336
Actual										
State Education Aid Without Capital	3,611,971	4,092,726	3,746,965	3,611,971						


PUBLIC WORKS AID
MILLIONS OF DOLLARS
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)

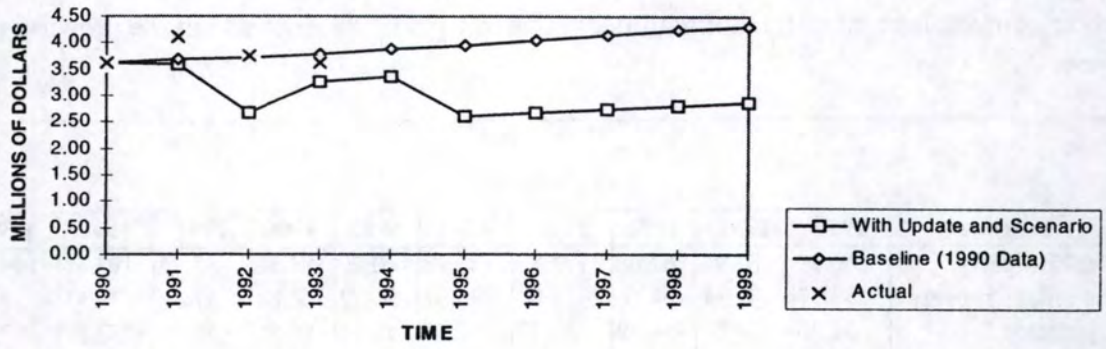

DISTRICT COURT AID
DOLLARS
300,000
250,000
200,000
150,000
100,000
50,000
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)


ADMINISTRATIVE AID
MILLIONS OF DOLLARS
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)

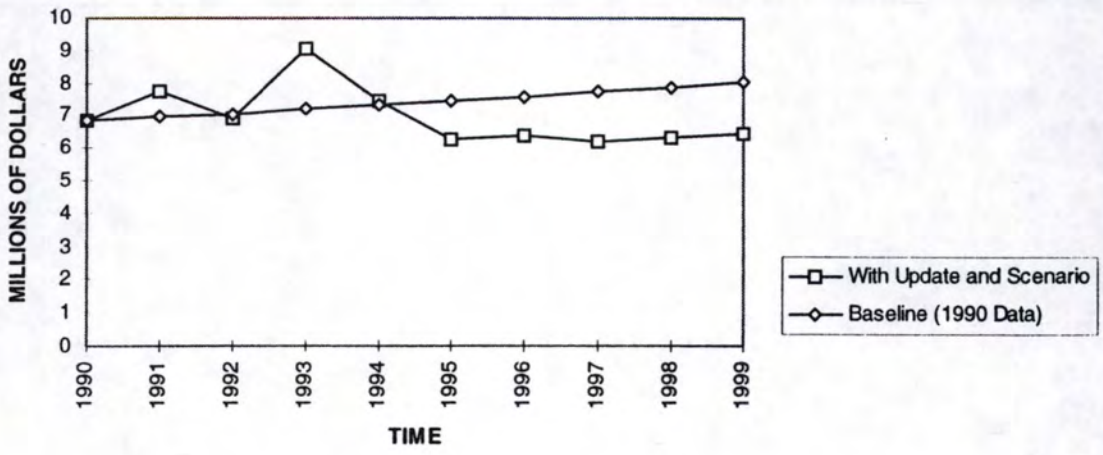
INDIGENT AND CHARITY AID



STATE EDUCATION AID WITHOUT CAPITAL



COUNTY TOTAL AID



The model predicts a decrease in property bases. The discussion of the assumptions of the scenario already included the loss of personal and real property in the mills. The personal property decreases by the value of property sold to mills outside the county or transferred to another location. In addition, the value of inventories and machinery for businesses declines. The dollar value of the decrease equals approximately $9.2 million.

The real property base decreases at a slower rate than personal property, but the decrease is greater by dollar value. The total decline in real property includes the reduction in the value of mills, housing, commercial property and land..

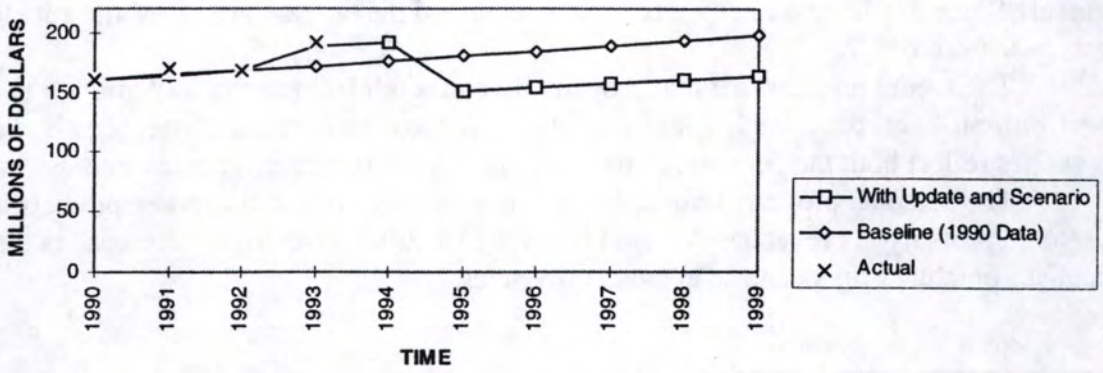
The model predicts that the cumulative effect of all the reductions is a decrease in the real property base by nearly 22% or $42 million. A decrease of this magnitude can have a large impact on the county's ability to collect revenues to provide county services.

When incomes and population decline, the operating property of the county does not fluctuate as much as real or personal property. Operating property decreases by about $7 million.

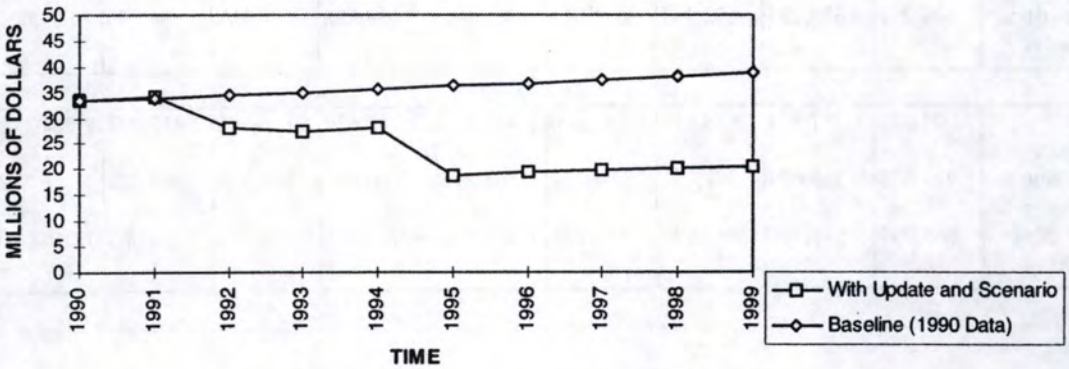
Overall the property base decreases nearly 20%, a larger decrease than the decrease in the counties obligations to pay for services. The change in total expenditures less the change in non-local aid sources nets roughly $500,000. This decline is only about thirteen percent of the obligation, compared to the 20% decrease in the property tax base.

Tax Base (In Millions)										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Real Property	160.15	163.95	167.86	171.87	175.98	180.20	184.52	188.96	193.51	198.19
Personal Property	33.37	33.91	34.46	35.04	35.62	36.22	36.84	37.48	38.13	38.79
Operating Property	54.26	54.62	54.99	55.37	55.75	56.14	56.55	56.95	57.37	57.80
Scenario										
Real Property	160.15	165.38	168.22	187.82	192.23	150.30	153.61	157.00	160.47	164.03
Personal Property	33.37	34.11	27.92	27.41	28.01	18.82	19.27	19.72	20.18	20.66
Operating Property	54.26	54.74	59.78	76.89	77.35	70.96	71.30	71.65	72.01	72.38

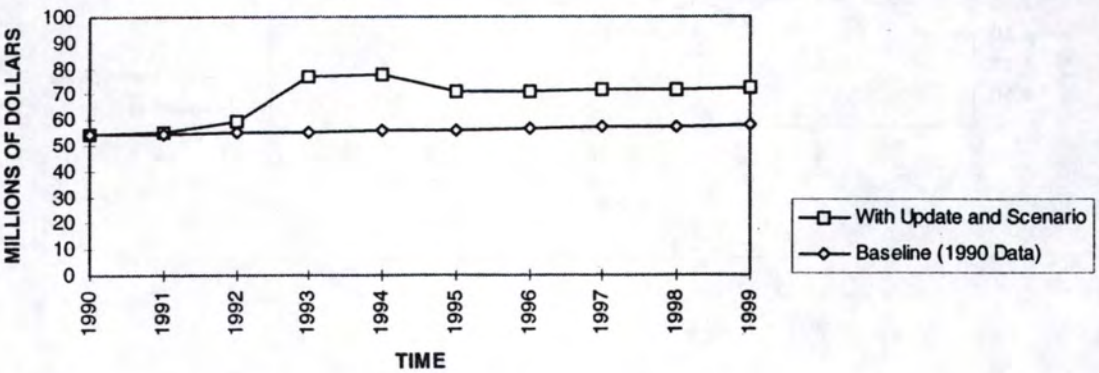
REAL PROPERTY TAX BASE



PERSONAL PROPERTY TAX BASE



OPERATING PROPERTY TAX BASE



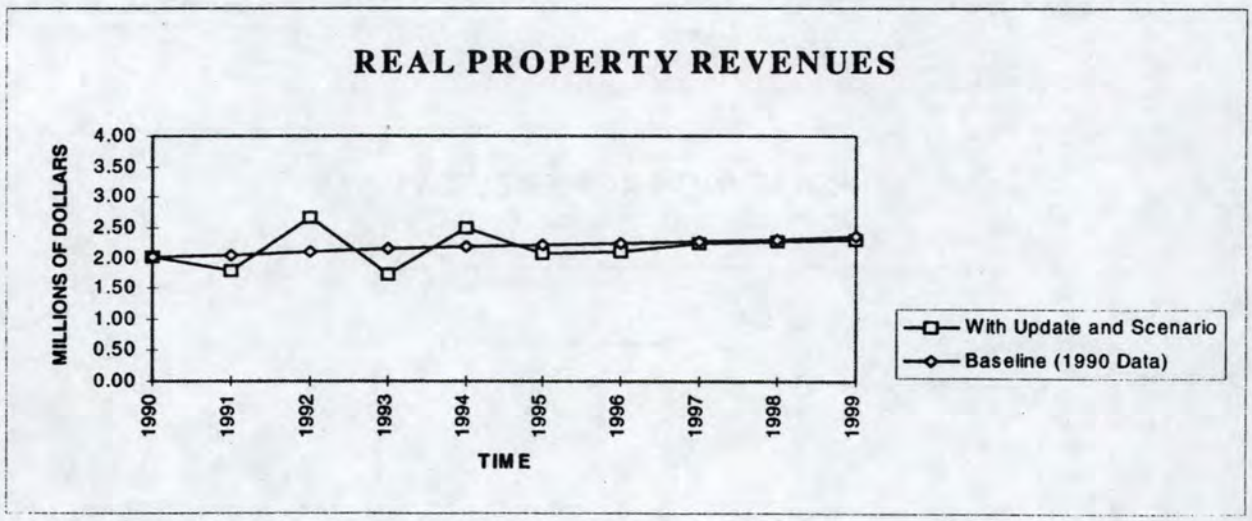
The table on the following page shows tax revenues for all the tax bases. The tax revenues reflect both the change in the tax base and the change in the tax rate. The tax revenues decrease from 1994 to 1995 for all property tax bases.

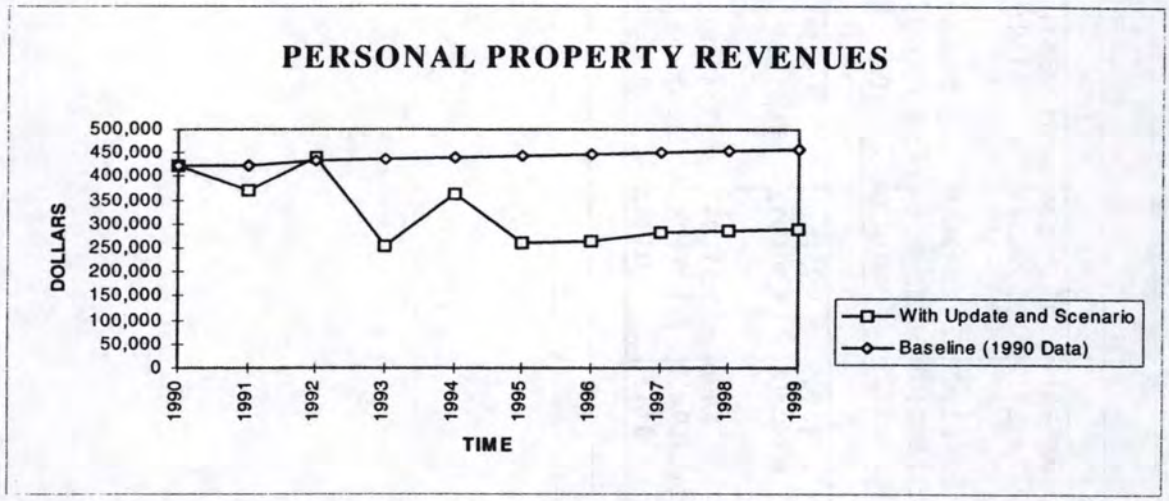
The operating tax revenues decrease only slightly, about $20,000 according to the model. Since the decrease in the tax base is small and the tax rate increases, the net effect was nearly zero.

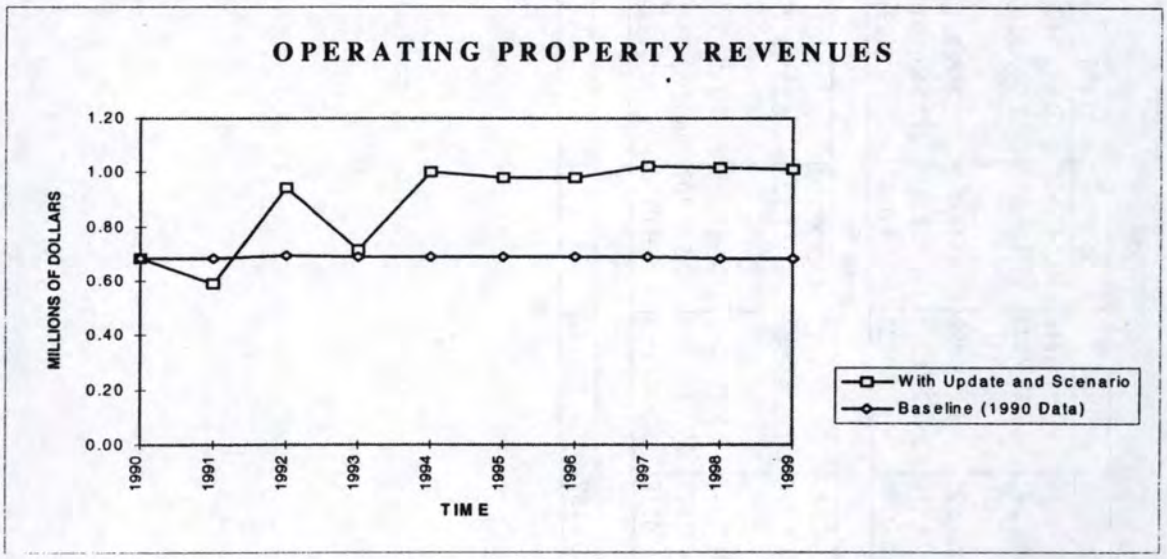
The model predicts that real property revenues fell from nearly $2.5 million to $2.1 million. This decrease is slightly smaller than the drop in the tax base, because the revenues reflect both the decrease in the tax base and the increase in the tax rate.

The personal property base decreased as well. As a result, the model predicts that personal property tax revenues decrease by over $100,000. Overall, the decrease in the tax base precludes the decrease in the tax revenues.

Tax Revenues										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Real Property	2,021,035	2,050,742	2,113,455	2,144,952	2,176,972	2,209,529	2,242,636	2,276,305	2,310,550	2,345,387
Personal Property	421,073	424,121	433,926	437,254	440,668	444,171	447,764	451,450	455,230	459,108
Operating Property	684,791	683,233	692,381	691,011	689,696	688,438	687,238	686,099	685,022	684,009
Scenario										
Real Property	2,021,035	1,787,334	2,658,614	1,743,600	2,492,812	2,082,627	2,110,300	2,235,087	2,264,143	2,293,631
Personal Property	421,073	368,694	441,250	254,452	363,215	260,836	264,678	280,729	284,787	288,913
Operating Property	684,791	591,570	944,820	713,775	1,003,146	983,204	979,551	1,020,083	1,016,040	1,012,057





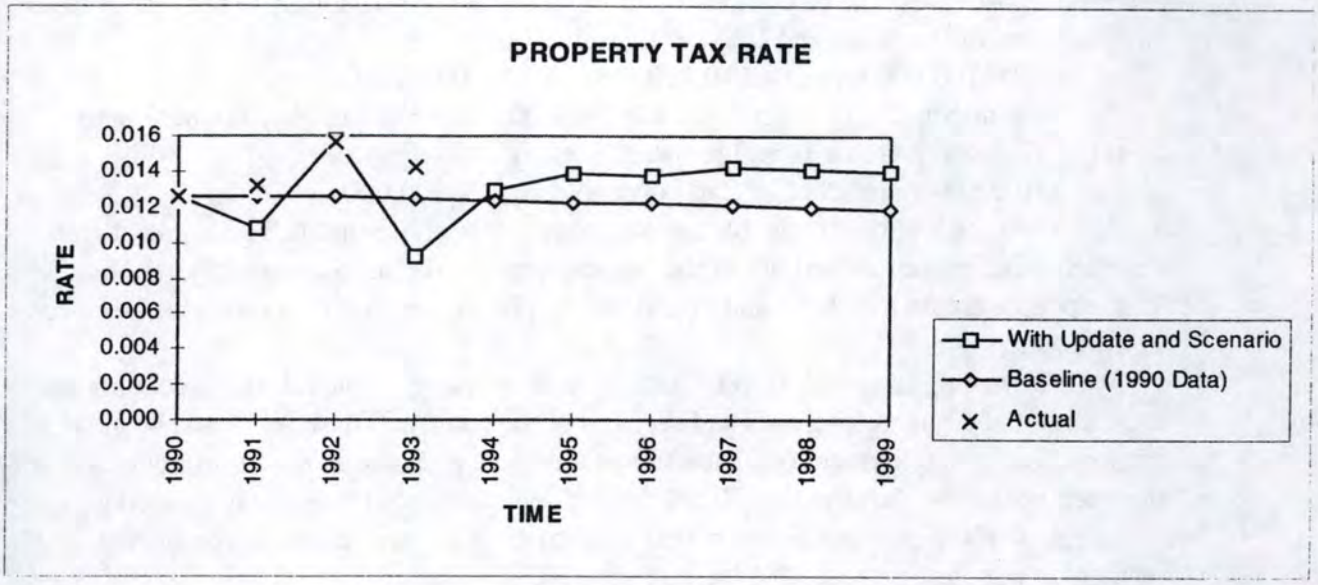


Overall, the model predicts decreases in expenditures, non-local aid, and the value of the tax base. Expenditures decrease by approximately $1.7 million, while non-local aid decreases by $1.2 million. The tax base decreases as well. The net effect is that the tax rate must increase to pay for the local government goods and services desired by the county residents. Unfortunately, residents have fewer resources to pay for these goods and services.

If the unemployed workers move from the county immediately, fewer people require government services. More likely, enrollments and population will remain high for months or even years after the downsizing or closing of the mill or mills. A slow decline in population leads to more demands on government goods and services, but less decrease in the value of real property in the area and some forms of non-local aid.

People continue purchasing local goods and services in the area, which helps local businesses to adjust to the changes. In addition, incomes may decrease less rapidly as people continue to purchase basic goods and services.

Summary										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Total Expenditures	10,003,518	10,157,705	10,312,840	10,474,712	10,640,610	10,810,640	10,984,911	11,163,536	11,346,631	11,534,314
Total Non-Local Aid	6,854,633	6,977,205	7,050,245	7,178,223	7,309,550	7,444,316	7,582,612	7,724,535	7,870,182	8,019,653
Local Tax Burden	3,148,885	3,180,500	3,262,595	3,296,489	3,331,060	3,366,324	3,402,298	3,439,001	3,476,449	3,514,661
Property Tax Base	247,773,250	252,484,437	257,315,810	262,270,571	267,352,007	272,563,494	277,908,503	283,390,599	289,013,443	294,780,799
Property Tax Rate	0.0126	0.0125	0.0126	0.0125	0.0124	0.0123	0.0122	0.0120	0.0119	0.0118
Scenario										
Total Expenditures	10,003,518	10,523,972	10,959,869	11,779,713	11,296,709	9,583,688	9,716,705	9,761,861	9,901,151	10,043,749
Total Non-Local Aid	6,854,633	7,753,814	6,892,476	9,041,964	7,411,129	6,235,717	6,340,508	6,203,922	6,313,759	6,426,336
Local Tax Burden	3,148,885	2,770,158	4,067,393	2,737,749	3,885,580	3,347,972	3,376,196	3,557,940	3,587,392	3,617,413
Property Tax Base	247,773,250	254,231,407	255,914,147	292,115,049	297,588,707	240,085,037	244,180,437	248,374,783	252,670,596	257,070,458
Property Tax Rate	0.0126	0.0108	0.0158	0.0093	0.0130	0.0139	0.0137	0.0142	0.0141	0.0140
Actual										
Property Tax Rate	0.0126	0.0131	0.0157	0.0142						



V. Resident Inflow Scenario

What Are the Shocks To Be Added?

The resident inflow scenario presents another concern of the county commissioners. In the recent past, there has been a large inflow of migrants into Boundary County. Local public service personnel helped to identify some of the characteristics of the new residents. About half of the new residents are at least 40 to 45 years old, retired or semi-retired. They move to Boundary County to acquire a small town environment. They typically build a home in the area from savings established elsewhere. Their current income comes from social security, pensions, and/or wages and salaries from labor contracted outside the county.

The other half of the new residents have fewer financial resources.[40] Their incomes pivot around the poverty line.[41] They do not build a new home; thus, they rent older homes in the area, apartments, or subsidized housing units. On average, 2.3 persons live in a household on an annual income of $12,500 per year. Employment for these residents is sporadic, coming from seasonal jobs in the spring, summer, and fall. Some of their income flows into the county as transfer payments or contract labor outside the county.

The shocks added to the model are a real property base increase, an employment and enrollment growth, and a personal income per capita gain. The real property base increases when the first group of new residents purchase agriculture and timber land and convert it to urban uses. Assuming two persons per household for this group of residents, each household builds one new home. On average the couple adds $90,000 to the real property base. The figure includes a $40,000 plot of land and a $100,000 home. The

owner in most cases will be entitled to a 50% homeowner exemption. Thus, the taxable market value of the home and land per household is:

(.50*$100,000 home) + $40,000 plot = $90,000 market value.

Two hundred fifty households add $90,000 to the real property tax base in the county. The total increase in real property value is:

$90,000 per household * 250 households = $22,500,000.

The new "retiree" residents maintain one job per household. These jobs do not depend on the economic activity of the county, because the services are exported out. These people create jobs for county residents by placing demands on goods and services in the county.

The in-migrants with fewer financial resources also create jobs in the county by increasing the demand for goods and services in the county. These residents, however, are looking for employment opportunities in the county. Some of the in-migrants will fill the open positions. In-migrants fill only about one quarter of these newly created jobs. Thus, many of the new positions created by migration become available for current residents. For this increase, 274 jobs are created.

Employment and population grow far faster than enrollment. The 500 retired or semi-retired residents have no children in school, but the people with fewer financial resources do use the public school system. The population increase of 500 new people consists of 400 new residents who are not school age and 100 new residents that attend public school in Boundary County. Following the current enrollment division of elementary and secondary students, slightly more children attend elementary school than secondary school.

With only 10% of the new in-migrants enrolled in school, the ratio of children to the entire population decreases. Thus, the age distribution of the entire population shifts to a population with more adults.

Adults typically have more financial resources than school children. Furthermore, the in-migrants generate income from outside the county, so they are generating income to flow into the county. Both a large increase in adult residents and adult residents that transfer income into the county will tend to increase income.

The increase in income for the county can be described as the sum of the increase in income generated from the group with fewer financial resources and the "retiree" group. The group with fewer financial resources have an average annual income of $12,500 per household. The total income generated by these 218 households is:

218 households * $12,500 per household = $2,725,000.

The "retirees" generate a substantially higher personal income. These people have some combination of current wages or salaries, pensions, investment income, and social security. Each two person household makes $26,380 per year. The total inflow into the county is:

250 households * $26,380 per household = $6,595,000.

The total personal income inflow is the combination of income from each type of in-migrants. The total increase is:

$2,725,000 + $6,595,000 = $9,320,000.

The $9 million in added income generates even more income as the 1000 new in-migrants purchase goods and services in the county.

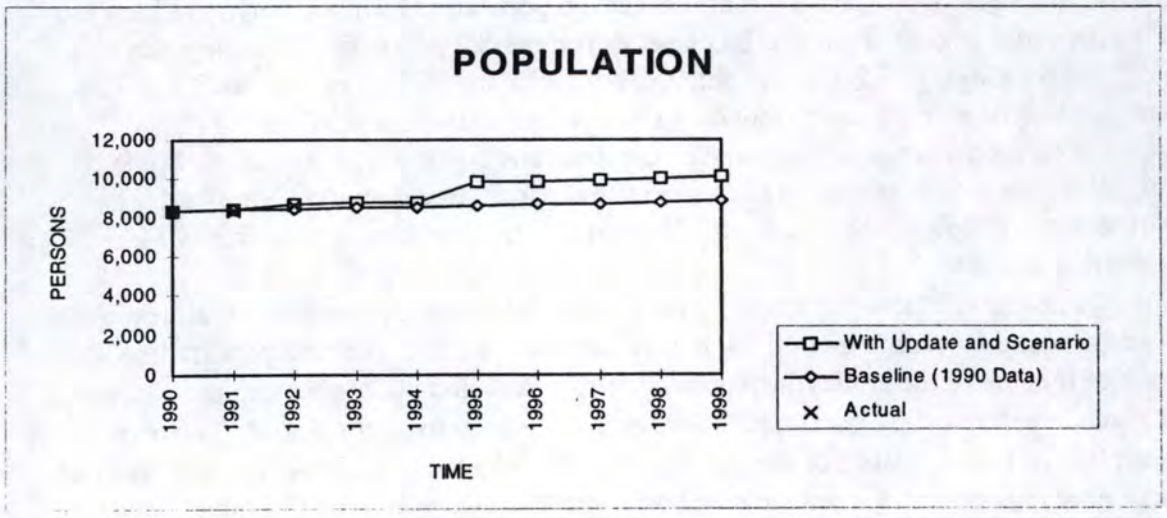
What Are The Implications?

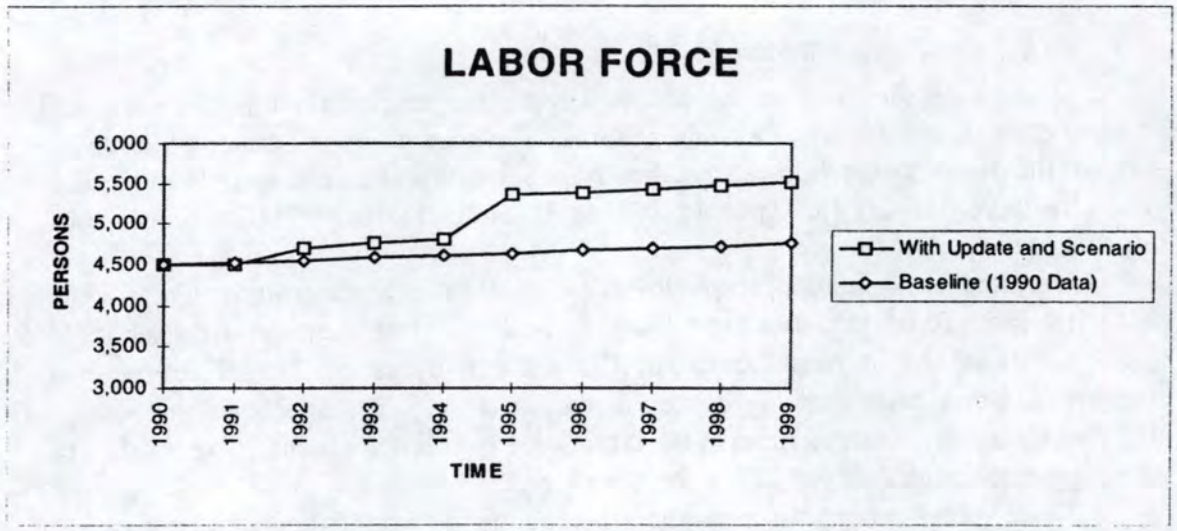
The resident inflow scenario creates a population and employment increase, and changes expenditure and non-local aid patterns. The previous discussion highlighted some of the demographic figures, specifically population and enrollment. Population grows by approximately 1,000 people, and enrollment increases by 100 students. This information is part of the scenario.

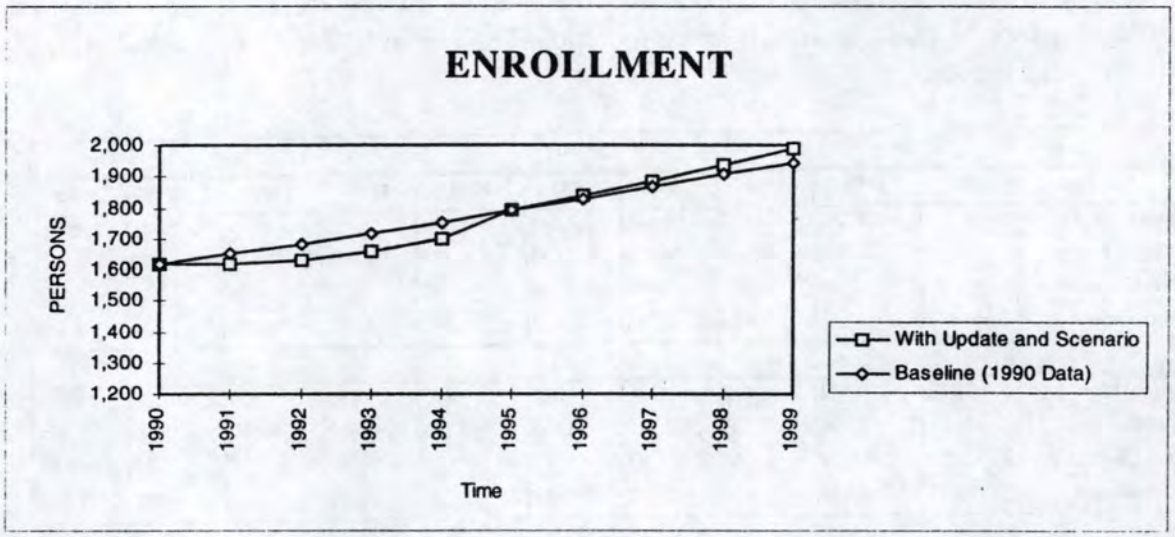
To increase population, employment must increase. Since employment is a large part of the labor force, the labor force grows as well. The total increase in the labor force nearly equals the employment increase of 250 base employees and 274 service sector employees. Some people may enter the job market, when job prospects rise; thus, a slightly larger increase in increase in the labor force over employment is expected. The model predicts an increase of 547 in the labor force.

Fewer people commute to neighboring counties to work, when jobs become available in their own county. People that had waited for an opportunity in the county to arise may receive that opportunity when more jobs become available. Net commuters drops by 13 persons.

Demographics										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Population	8,332	8,384	8,437	8,490	8,544	8,598	8,653	8,709	8,765	8,821
Labor Force	4,491	4,520	4,549	4,578	4,607	4,637	4,667	4,698	4,729	4,760
Net Commuters	50	49	49	48	48	47	46	46	45	45
Enrollment	1,617	1,650	1,683	1,718	1,753	1,790	1,827	1,865	1,904	1,945
Scenario										
Population	8,332	8,392	8,642	8,766	8,821	9,818	9,886	9,954	10,024	10,094
Labor Force	4,491	4,496	4,707	4,775	4,806	5,353	5,390	5,428	5,466	5,504
Net Commuters	50	48	44	43	43	30	30	29	28	27
Enrollment	1,617	1,616	1,630	1,659	1,696	1,790	1,838	1,887	1,937	1,988
Actual										
Population	8,332	8,357	8,639							





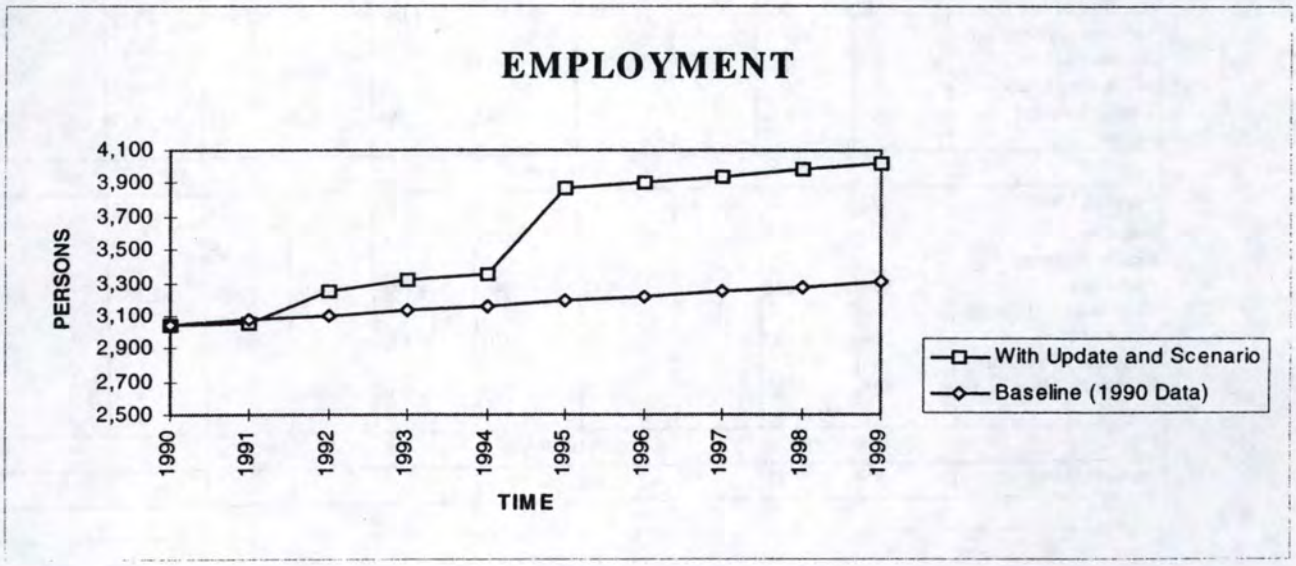


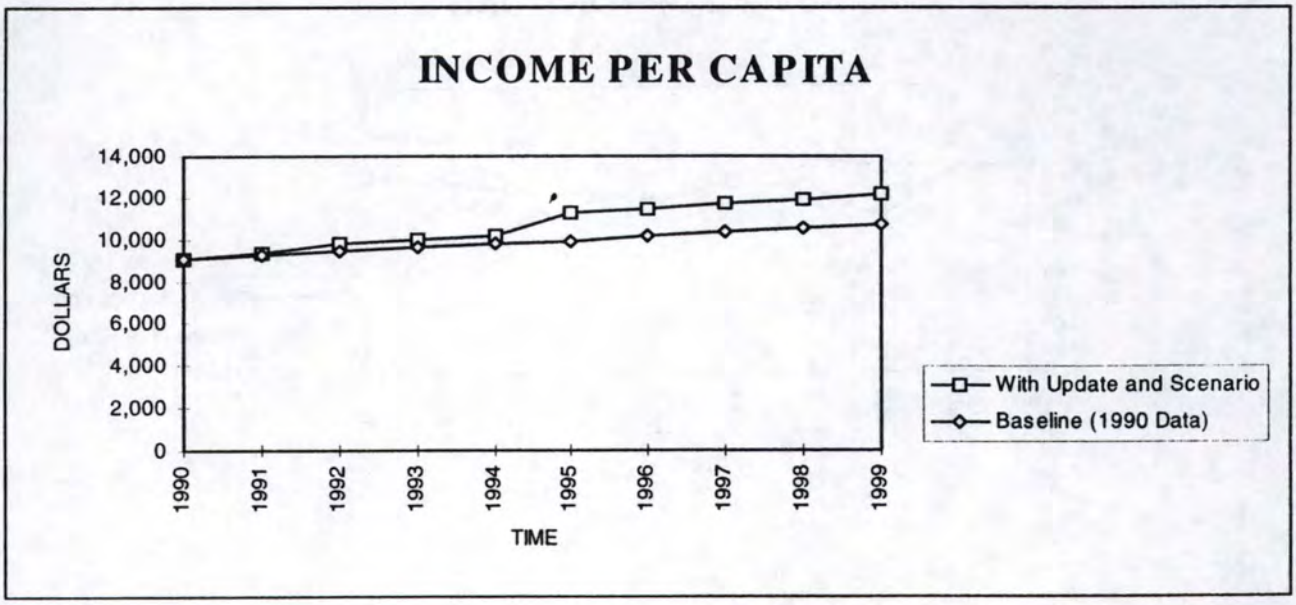
As discussed previously income and employment increase with the resident inflow. These impacts spread through the entire population. The employment increase stays the same, but the income effect spreads throughout population. Employment increases by roughly 525 jobs in total, 250 base jobs and 275 service sector jobs. The total number of employees in Boundary County increases from 3,347 to 3,872.

The model predicts that some of the new jobs create new businesses. Some businesses need only expand to accommodate the increased demand. New businesses start to accommodate other demands. The number of businesses grows from 274 to 309 under this scenario.

The income flow generated by the in-migrants increases income for all residents. Even though the average income for half of the in-migrants is near the poverty line, the average income of the county increases by over a thousand dollars per capita. The in-migrants are demanding goods and services from the county, but not jobs. One may recall that only one quarter of the 274 new jobs went to the new residents; thus, most of these new jobs generate a new income source for current residents. The table and graphs on the following page define the employment and income changes.

Employment and Income										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Employment	3,045	3,073	3,100	3,128	3,157	3,185	3,214	3,243	3,273	3,303
Non-Base Employment	1,999	2,016	2,033	2,051	2,068	2,086	2,104	2,122	2,140	2,159
Base Employment	1,046	1,056	1,067	1,078	1,088	1,099	1,110	1,121	1,133	1,144
No. of Businesses	252	254	255	257	259	261	262	264	266	268
Cont. Labor Force	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237
Income Per Capita	9,054	9,222	9,394	9,569	9,747	9,928	10,113	10,301	10,492	10,687
Scenario										
Employment	3,045	3,050	3,253	3,318	3,347	3,872	3,908	3,944	3,980	4,017
Non-Base Employment	1,999	1,999	2,165	2,219	2,237	2,512	2,534	2,556	2,579	2,602
Base Employment	1,046	1,051	1,088	1,099	1,110	1,360	1,373	1,387	1,401	1,415
No. of Businesses	252	257	268	272	274	309	311	313	315	318
Cont. Labor Force	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237	22,237
Income Per Capita	9,054	9,298	9,762	9,944	10,129	11,267	11,476	11,690	11,907	12,129

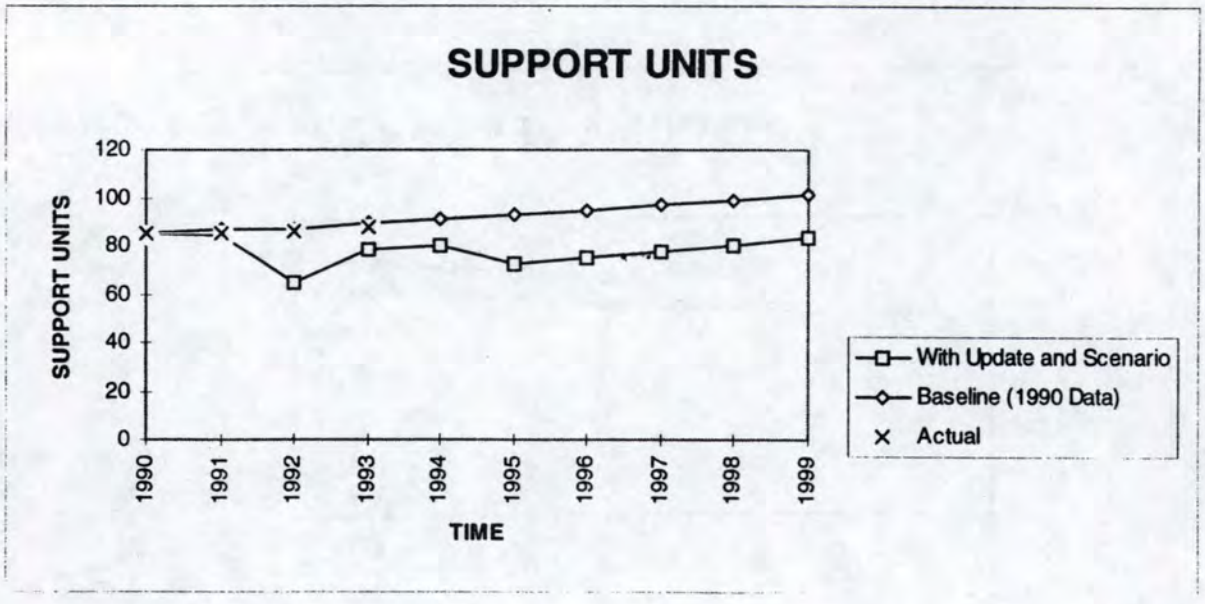




Employment grows proportionally more than enrollment. Employment and enrollment growth are a factor of the age and avocations of the people migrating into the county. The 500 "retiree" in-migrants do hold jobs but are not in the age group to enroll in public schools. The 500 in-migrants with fewer financial resources are a mixture of people of all ages. This population has the same proportion of school age children as the current population. Fifty-five elementary school age children, 45 secondary school age children, and 400 non-school age persons constitute the new population.

Support units normally increase when enrollment increases. The model, however, prediction decline in support units, because population increases much more rapidly than enrollment. Thus, the support units decrease by seven units.

EDUCATION										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Support Units	85	86	87	89	91	93	95	97	99	101
Number of Kindergartners	0	0	0	0	0	0	0	0	0	0
Number of Elementary Students	948	967	987	1,007	1,028	1,049	1,071	1,094	1,117	1,140
Number of Secondary Students	769	785	801	817	834	851	869	887	906	925
Enrollment Per School	323	330	281	286	292	298	304	311	317	324
Scenario										
Support Units	85	85	65	78	80	73	75	78	80	83
Number of Kindergartners	0	0	0	0	0	0	0	0	0	0
Number of Elementary Students	948	948	956	973	995	1,050	1,078	1,106	1,136	1,166
Number of Secondary Students	769	769	775	789	807	852	874	898	921	946
Enrollment Per School	323	323	272	277	283	298	306	314	323	331
Actual										
Support Units	85	85	86	88						



The model predicts an increase in most government goods and services to serve the larger and wealthier population. Public works expenditures pay for the maintenance and building of roads and bridges. The funding for roads and bridges comes from several sources, including taxes. Boundary County residents provide little funding for many of the maintenance and improvement activities for roads and bridges from taxes. If tax moneys are required to increase public works expenditures, residents may choose not to increase these expenditures despite the growth in population. The model predicts an 11.3% growth in population and an 11.2% increase in income per capita creates a 9.9% growth in public works expenditures. Public works expenditures increase less than $200,000 from 1994 to 1995.

As people gain more wealth, they may desire more protection for their goods. The model predicts that this additional protection requires an increase of 17.7% in public safety expenditures. Despite a large percent increase, the dollar value increases by only $150,000.

Administrative expenditures include: salaries for office personnel, funds for special programs, and funds for services not broken out into special categories. An increase in population corresponds to an increase in the number of services that must be provided. The cost of providing many of these services falls under administrative expenditures.

The model predicts a total increase in administrative expenditures of roughly $383,000 or 17.7%. Administrative expenditures account for a large portion of the budget. Thus, a moderate percentage increase translates into a high dollar value increase.

According to the model, welfare expenditures increase by the largest percent. Although welfare expenditures are a very small part of the budget, the expenditures increase nearly $45,000, approximately 31.5% of the budget. Boundary County citizens choose to be charitable. When the per capita income rises, they choose to give even more to the less fortunate in the county. This result is clearly consistent with the newspaper articles and the social surveys conducted in the county.[42] People live in Boundary County because it has a high social quality of life.

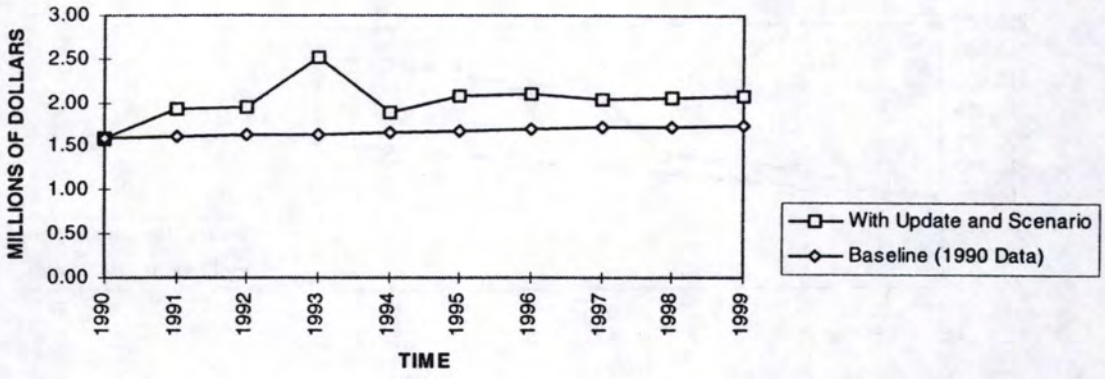
Education expenditures contribute the most to the total county expenditures, including school and road and bridge districts. Education expenditures increase by roughly one million dollars. The million dollar increase, however, translates into only a 15% increase. Under this scenario, the student population does not increase by the same percent as the general population. The expenditure increases by a large dollar value but not a large percent.

Solid waste expenditures increase in response to changes in the federal mandates for handling waste materials. The model predicts an increase in solid waste expenditures of only 9.5%. This small increase in solid waste expenditures is a reflection of the low correlation between population and income and solid waste expenditures.

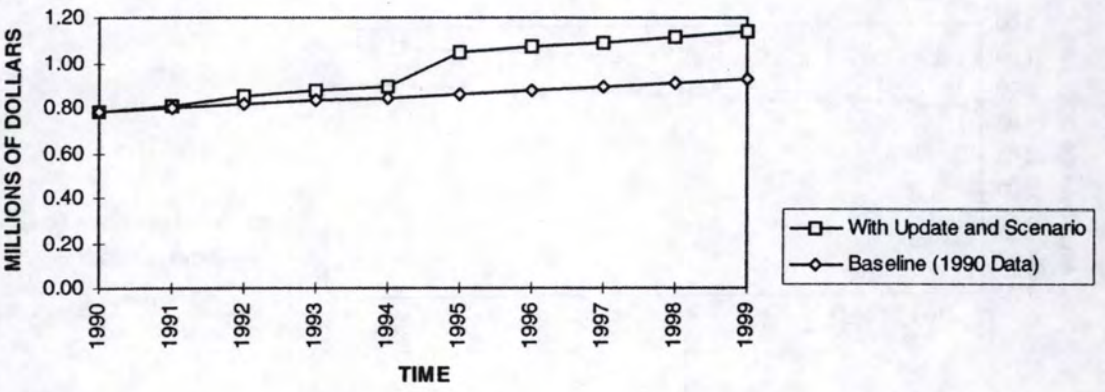
The county pays the health district in its area to provide health services. Health services include primary care for people that have fewer financial resources, sewer inspections, and annual restaurant inspections. The county pays according to the population and market value of property within the county. Population grows and the market value of property increases under this scenario. The model predicts an increase in health district expenditures by $7,500.

Expenditures										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Public Works	1,599,564	1,614,563	1,629,918	1,645,637	1,661,730	1,678,207	1,695,078	1,712,353	1,730,043	1,748,159
Public Safety	787,078	801,258	815,803	830,722	846,026	861,725	877,829	894,350	911,299	928,687
Administrative	1,690,240	1,725,388	1,761,461	1,798,486	1,836,487	1,875,492	1,915,526	1,956,619	1,998,799	2,042,095
Welfare	111,674	115,710	119,855	124,110	128,480	132,967	137,574	142,305	147,163	152,151
Education	5,559,971	5,643,051	5,725,262	5,812,348	5,901,545	5,992,909	6,086,496	6,182,365	6,280,575	6,381,190
Solid Waste	215,191	217,199	219,250	221,345	223,485	225,671	227,905	230,187	232,519	234,903
Health	39,800	40,536	41,291	42,064	42,857	43,669	44,502	45,356	46,232	47,130
Total County	10,003,518	10,157,705	10,312,840	10,474,712	10,640,610	10,810,640	10,984,911	11,163,536	11,346,631	11,534,314
Scenario										
Public Works	1,599,564	1,928,663	1,955,554	2,520,675	1,894,478	2,081,278	2,103,668	2,037,846	2,061,190	2,085,107
Public Safety	787,078	806,609	854,092	875,036	891,385	1,049,359	1,070,568	1,092,339	1,114,685	1,137,622
Administrative	1,690,240	1,738,930	1,854,927	1,905,798	1,946,469	2,329,286	2,382,183	2,436,504	2,492,291	2,549,582
Welfare	111,674	117,270	130,588	136,438	141,124	185,453	191,583	197,879	204,347	210,990
Education	5,559,971	5,673,852	5,897,911	6,067,962	6,146,345	7,066,221	7,188,372	7,311,328	7,439,675	7,571,246
Solid Waste	215,191	217,844	223,468	229,350	231,609	253,669	256,531	259,459	262,453	265,514
Health	39,800	40,804	43,329	44,455	45,300	53,857	54,953	56,078	57,231	58,415
Total County	10,003,518	10,523,972	10,959,869	11,779,713	11,296,709	13,019,123	13,247,858	13,391,432	13,631,871	13,878,476
Actual										
Education	5,559,971	6,282,955	6,069,754	7,311,843						

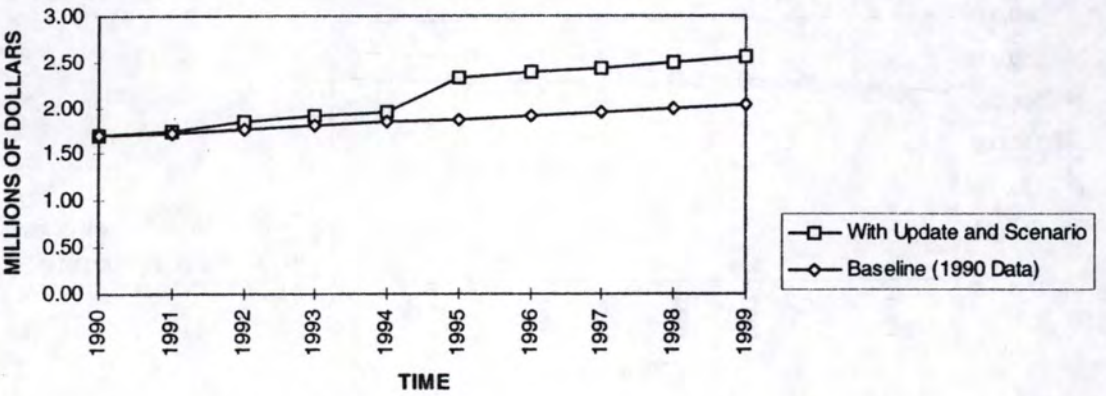
PUBLIC WORKS EXPENDITURES



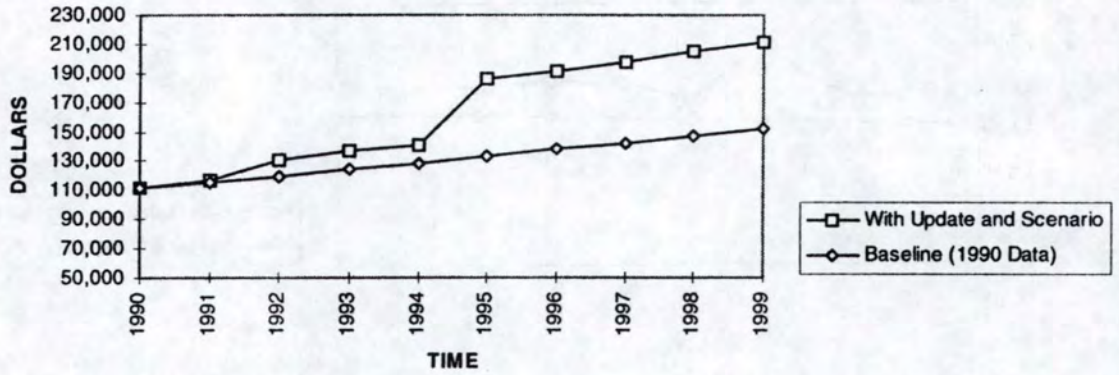
PUBLIC SAFETY EXPENDITURES



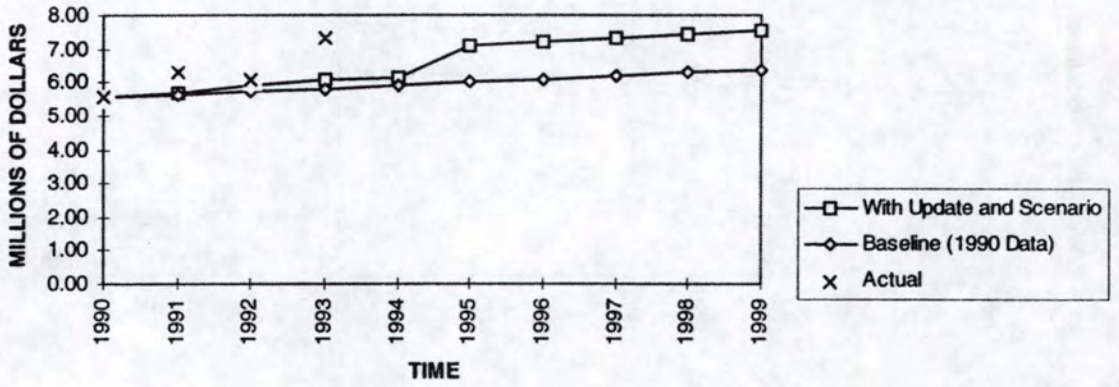
ADMINISTRATIVE EXPENDITURES



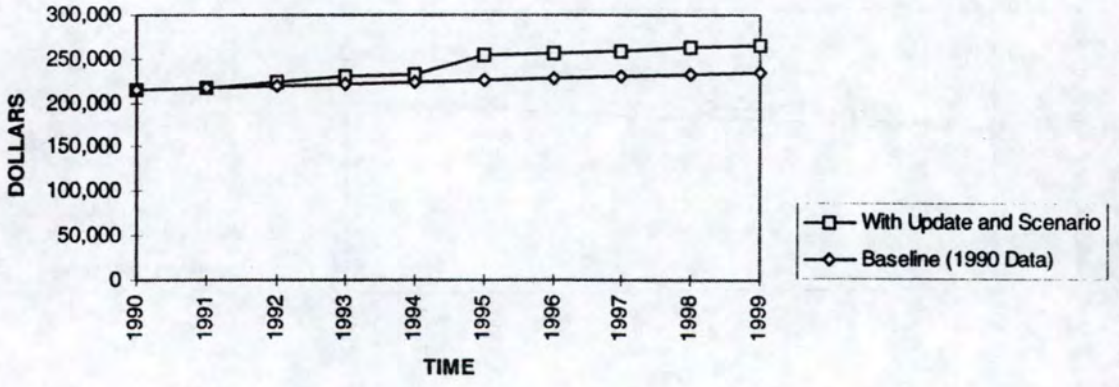
INDIGENT AND CHARITY EXPENDITURES

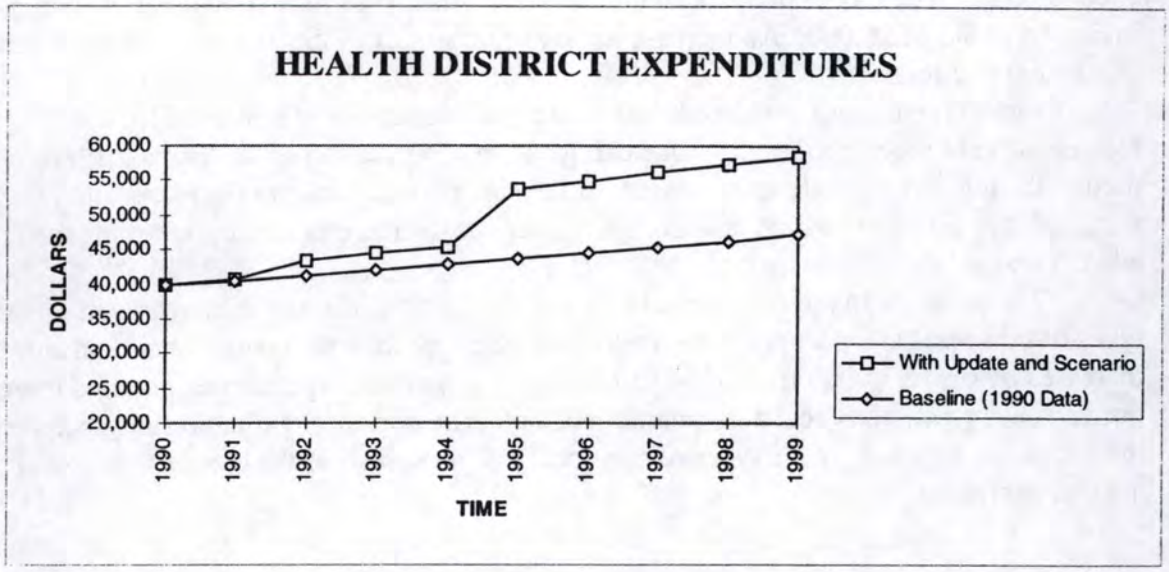


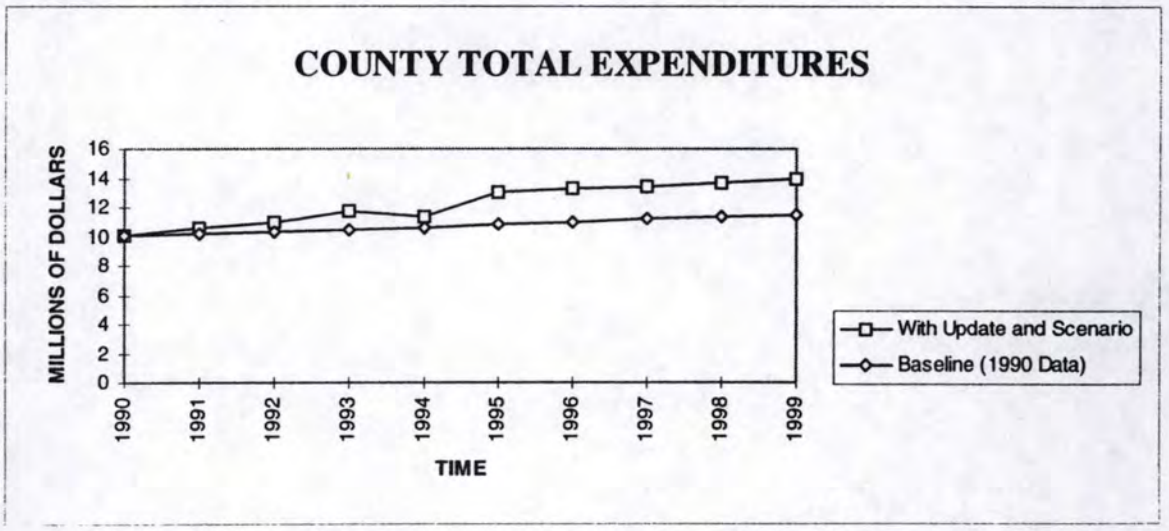
EDUCATION EXPENDITURES



SOLID WASTE EXPENDITURES







Some forms of non-local aid increase as well. The model predicts an increase in public works aid of only $50,000. The aid increases by only small percent of the $1.6 million base.

The model predicts a large increase in court aid. Fines from any citations made within the county directly impact court aid. A portion of the fine comes back to the county to help pay for court services in the county. Court services increase as the number of people in the county grows.

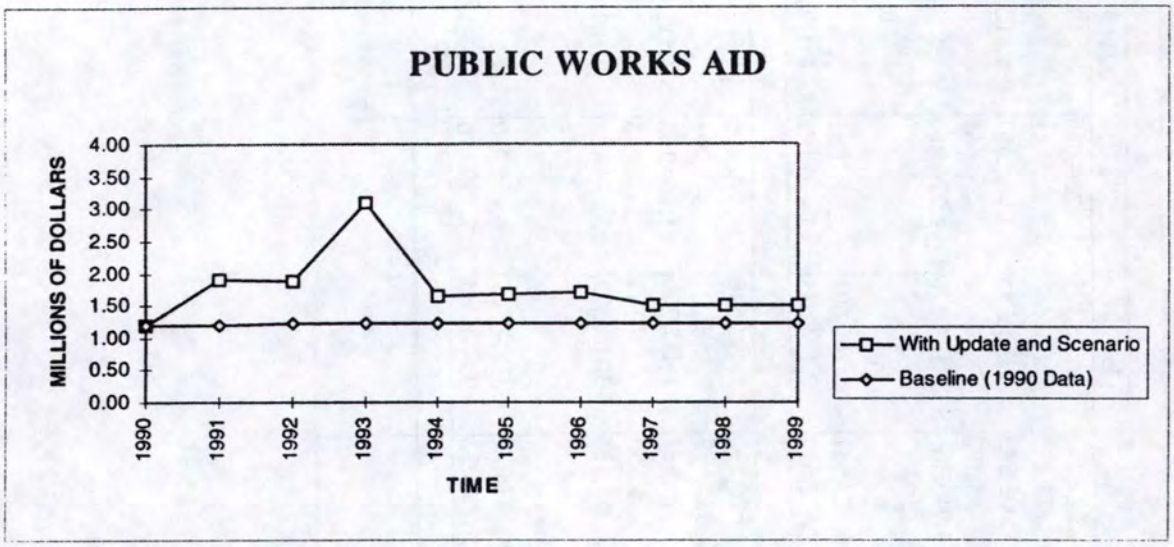
Administrative aid comes from grants for special programs, state inventory phase out, state revenues, PILT moneys, and state liquor tax revenues. According to the model, administrative aid in the county grows by nearly $300,000. The increase in non-local aid is slightly lower than the increase in administrative expenditures. The citizens of county have a slightly higher tax burden to pay for the increased services. However, the increase in the total tax burden does not necessarily mean an increase in the tax burden per capita. The increased tax base generates revenues to pay for the new expenditures.

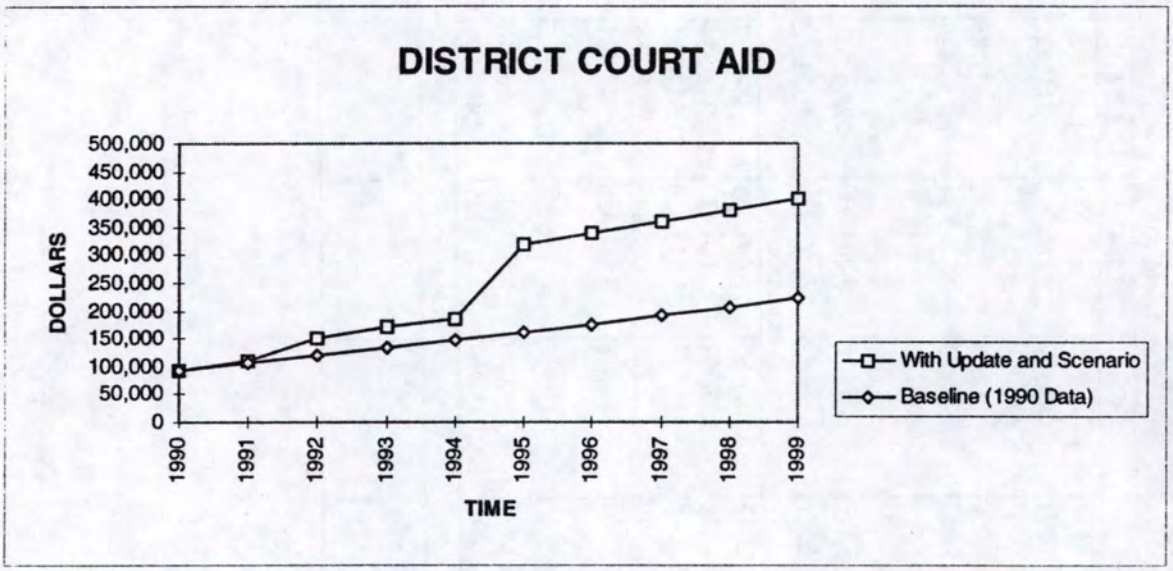
Non-local aid contributes little to the payment for indigent and charity expenditures. The model predicts an increase in expenditures of $45,000 and an increase in non-local aid of $6,000. An increase in taxes funds most of the growth in indigent and charity expenditures.

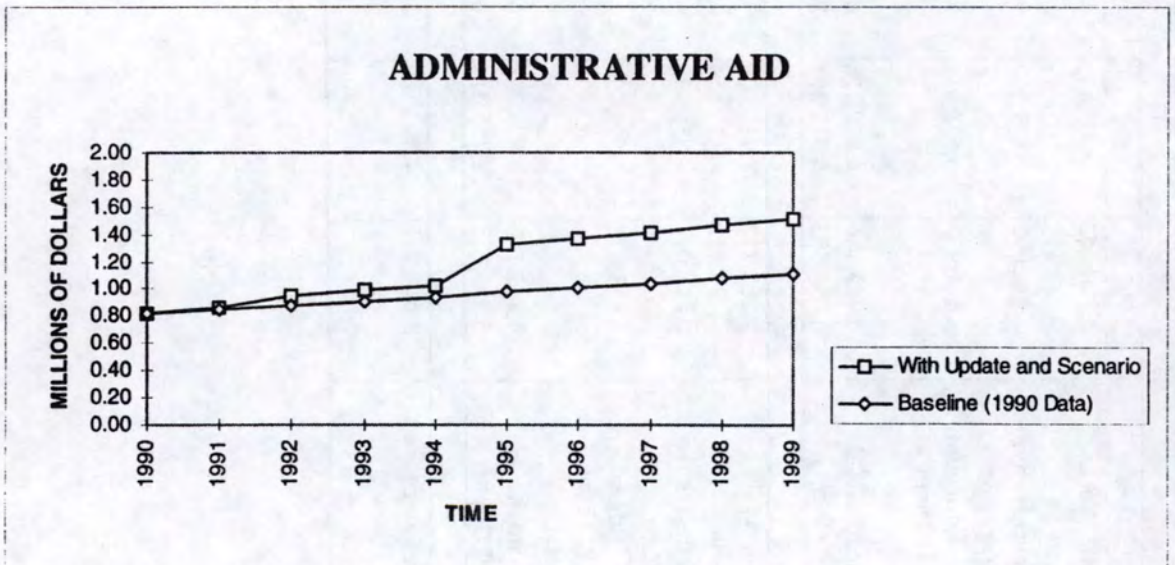
Model predictions for the education expenditures could be improved by a recalculation of the support units. One can recall that the support units decreased, even though the number of students increased. If the support units had not decreased, non-local aid may remain constant or decrease. Given the decrease in the support units the educational aid does decrease by over $400,000.

The decrease in the educational non-local aid nearly offsets the increases in other types of non-local aid. Despite the growth in population, the total county non-local aid increases by only $78,000 from 1994 to 1995. The growth in expenditures requires more tax revenues when non-local aid remains constant. The non-local aid table and graphs on the following pages show the types of non-local aid increases and the types of non-local aid that decreased.

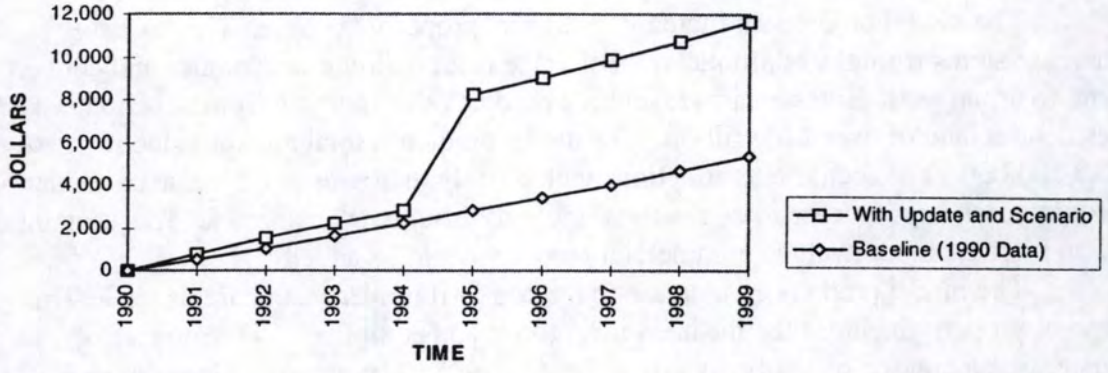
Non-Local Aid										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Public Works	1,200,242	1,203,513	1,206,875	1,210,329	1,213,878	1,217,525	1,221,273	1,225,123	1,229,080	1,233,146
Courts	93,110	105,871	118,991	132,482	146,352	160,612	175,273	190,346	205,842	221,773
Administrative	818,095	847,167	877,047	907,756	939,318	971,755	1,005,093	1,039,355	1,074,567	1,110,755
Welfare	0	528	1,060	1,618	2,193	2,785	3,393	4,018	4,662	5,323
State Education Aid Without Capital	3,611,971	3,688,911	3,715,057	3,794,823	3,876,594	3,960,424	4,046,366	4,134,478	4,224,816	4,317,441
Education Aid	4,743,186	4,820,126	4,846,272	4,926,038	5,007,809	5,091,639	5,177,581	5,265,693	5,356,031	5,448,656
Total County	6,854,633	6,977,205	7,050,245	7,178,223	7,309,550	7,444,316	7,582,612	7,724,535	7,870,182	8,019,653
Scenario										
Public Works	1,200,242	1,910,109	1,861,413	3,102,185	1,637,035	1,684,554	1,690,390	1,493,696	1,499,490	1,505,435
Courts	93,110	111,014	151,836	169,551	184,487	318,314	337,979	358,201	378,995	400,378
Administrative	818,095	858,878	951,744	991,945	1,025,869	1,327,151	1,371,561	1,417,220	1,464,162	1,512,424
Welfare	0	744	1,510	2,226	2,843	8,238	9,053	9,891	10,753	11,640
State Education Aid Without Capital	3,611,971	3,598,095	2,673,902	3,272,518	3,357,356	2,947,401	3,053,532	3,162,532	3,274,481	3,389,458
Education Aid	4,743,186	4,873,068	3,925,973	4,776,056	4,560,895	4,150,940	4,257,071	4,324,761	4,436,710	4,551,687
Total County	6,854,633	7,753,814	6,892,476	9,041,964	7,411,129	7,489,196	7,666,052	7,603,768	7,790,110	7,981,564
Actual										
State Education Aid Without Capital	3,611,971	4,092,726	3,746,965	3,611,971						


PUBLIC WORKS AID
MILLIONS OF DOLLARS
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)

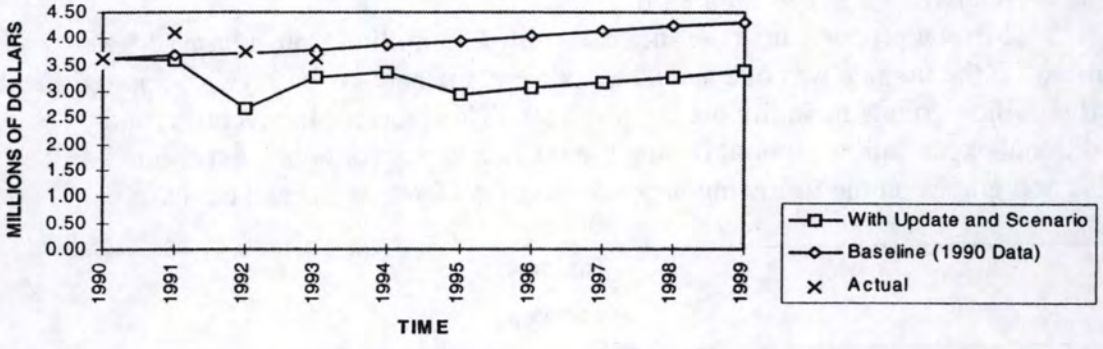

DISTRICT COURT AID
DOLLARS
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
50,000
0
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)


ADMINISTRATIVE AID
MILLIONS OF DOLLARS
2.00
1.80
1.60
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
TIME
With Update and Scenario
Baseline (1990 Data)

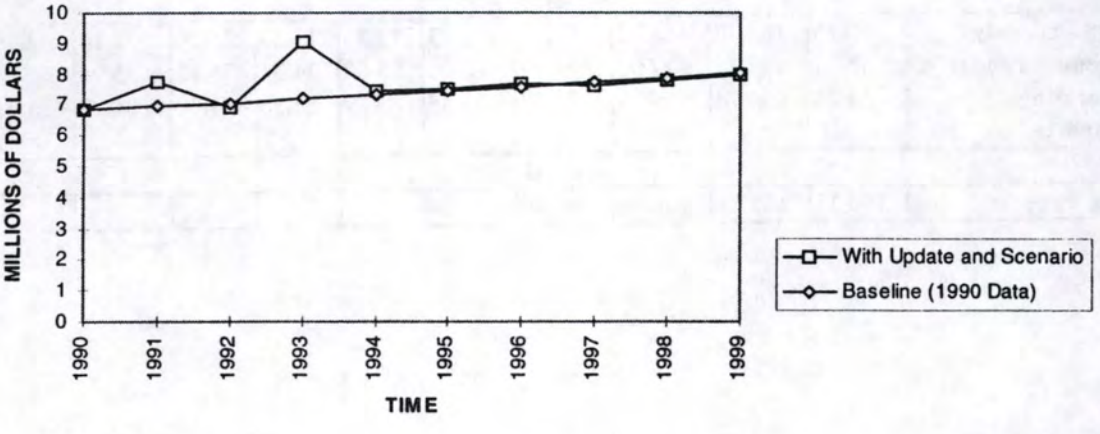
INDIGENT AND CHARITY AID



STATE EDUCATION AID WITHOUT CAPITAL



COUNTY TOTAL AID



Under this scenario, the expenditures increase, but the non-local aid remains relatively unchanged. Tax revenues increase to pay for the growth in expenditures. Increased tax revenues come from higher tax rates on the existing market value of property or the same tax rate applied to a higher market value of all property. The increase in the property tax base keeps the tax rate small.

The model predicts an increase in the real property tax base. The tax base increase stems from the additional market value from building new homes and converting land to urban uses. The scenario assumes a market value increase from new homes and residential land of over $20 million. The model predicts a total market value increase of $22,500,000. The scenario assumptions include only increases in the value of residential property, not any increase in commercial property from new businesses. The assumption of an increase in real valued commercial property could be added.

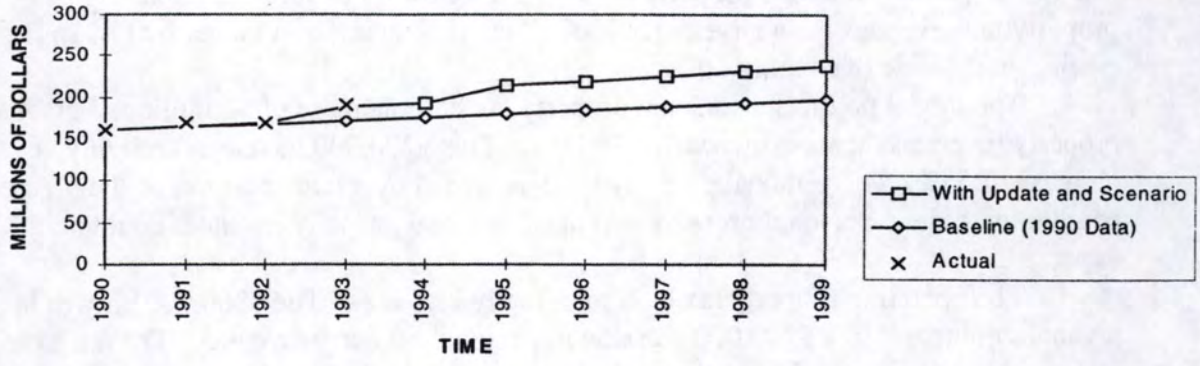
The model predicts an increase in the personal property tax base as well. This type of property includes the business inventories and equipment. The number of businesses increased by thirty-five from 1994 to 1995. The growth in businesses increases inventories and business equipment. The model predicts a tax base increase of about $6 million.

The model predicts an operating property tax base increase from this expansion as well. The increase is small relative to the total operating property base, a $6 million increase relative to a $77 million base.

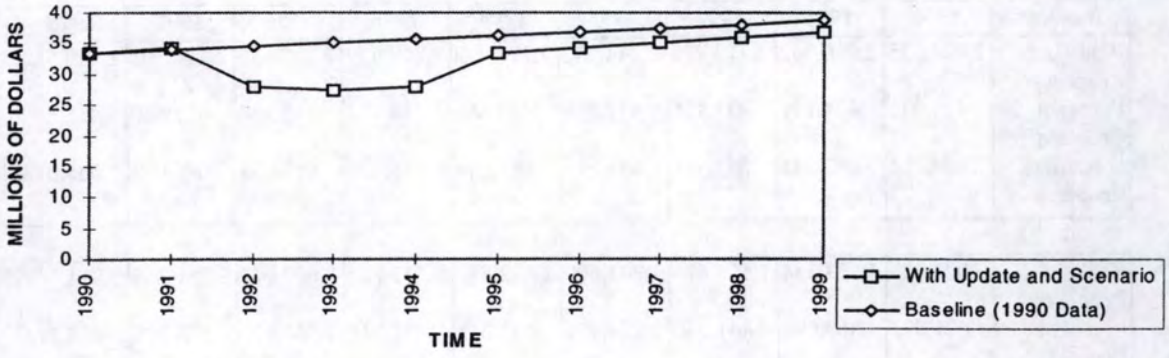
The total property tax base increases only $33 million from a base of $300 million. If the tax rate was one and a half percent, the new tax base yields approximately half a million dollars in additional tax revenues. This increase in revenues funds additional expenditures without raising the tax rate to pay for public expenditures. The table and graphs on the following pages display the increases in each tax base.

Tax Base (In Millions)										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Real Property	160.15	163.95	167.86	171.87	175.98	180.20	184.52	188.96	193.51	198.19
Personal Property	33.37	33.91	34.46	35.04	35.62	36.22	36.84	37.48	38.13	38.79
Operating Property	54.26	54.62	54.99	55.37	55.75	56.14	56.55	56.95	57.37	57.80
Scenario										
Real Property	160.15	165.38	168.22	187.82	192.23	213.73	219.39	225.20	231.17	237.29
Personal Property	33.37	34.11	27.92	27.41	28.01	33.52	34.31	35.12	35.95	36.80
Operating Property	54.26	54.74	59.78	76.89	77.35	83.19	83.78	84.38	84.99	85.61
Actual										
Real Property	160.15	169.81	168.69	191.50						

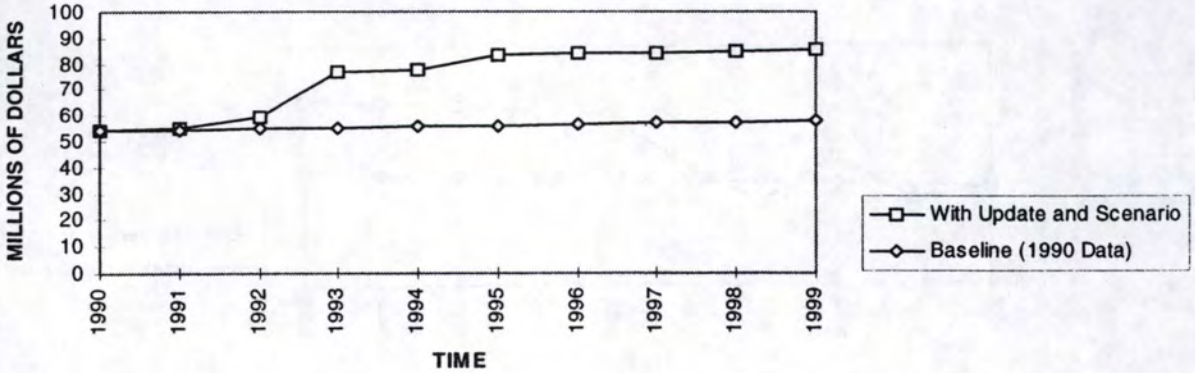
REAL PROPERTY TAX BASE



PERSONAL PROPERTY TAX BASE



OPERATING PROPERTY TAX BASE



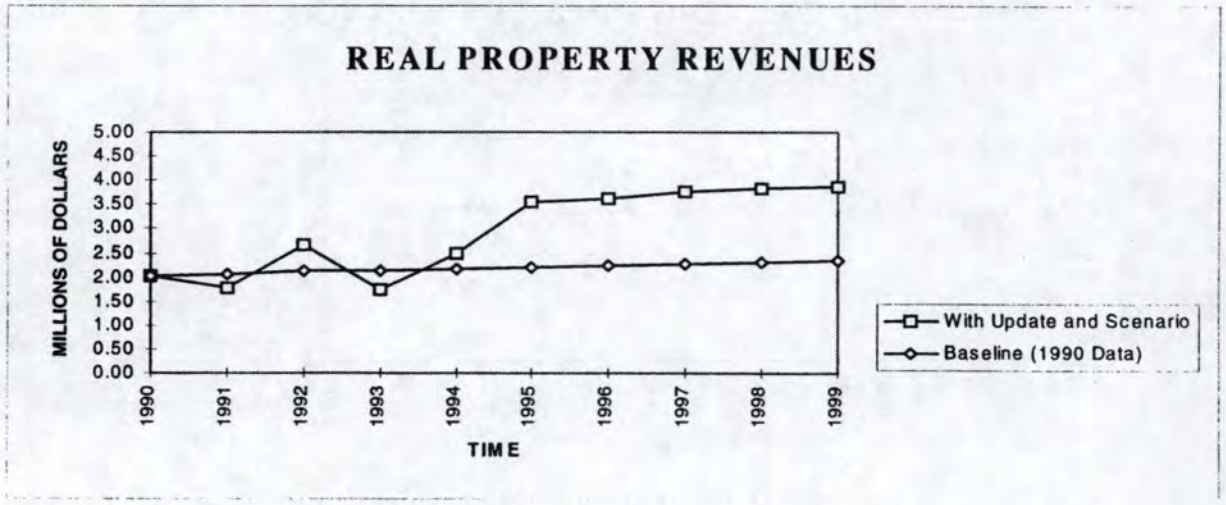
Tax revenues depend on the tax base and the tax rate. The tax base increases by roughly $33 million. Under this scenario, tax revenues must increase to cover the growth in public expenditures of about $1.7 million.

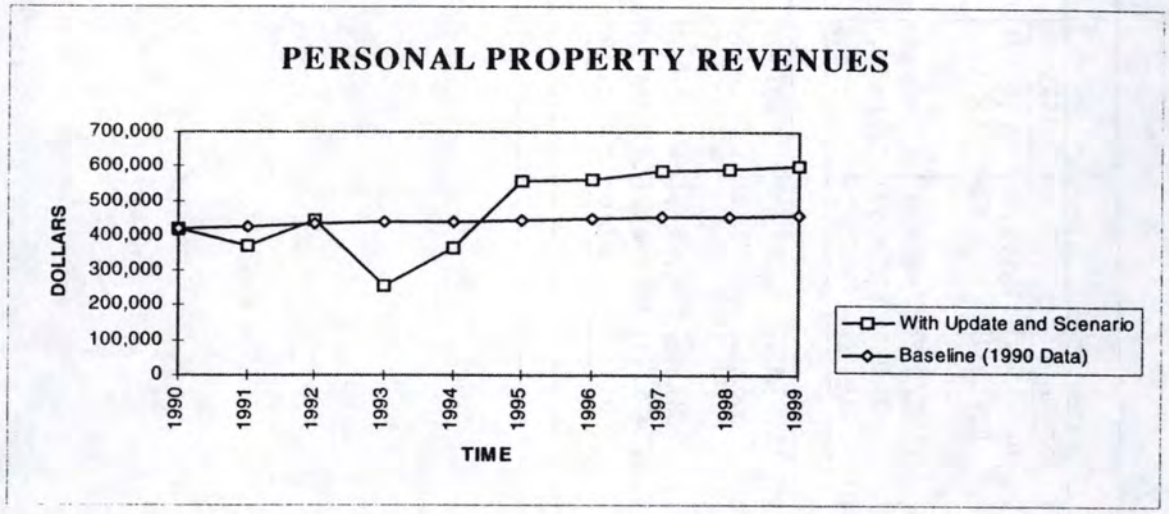
The value of real property is roughly two-thirds of the total value of all property. The model predicts that real property tax revenues grow by about $1 million. Real property tax revenues are a large percent of all tax revenues, so an increase of $1 million creates an increase of roughly 40%.

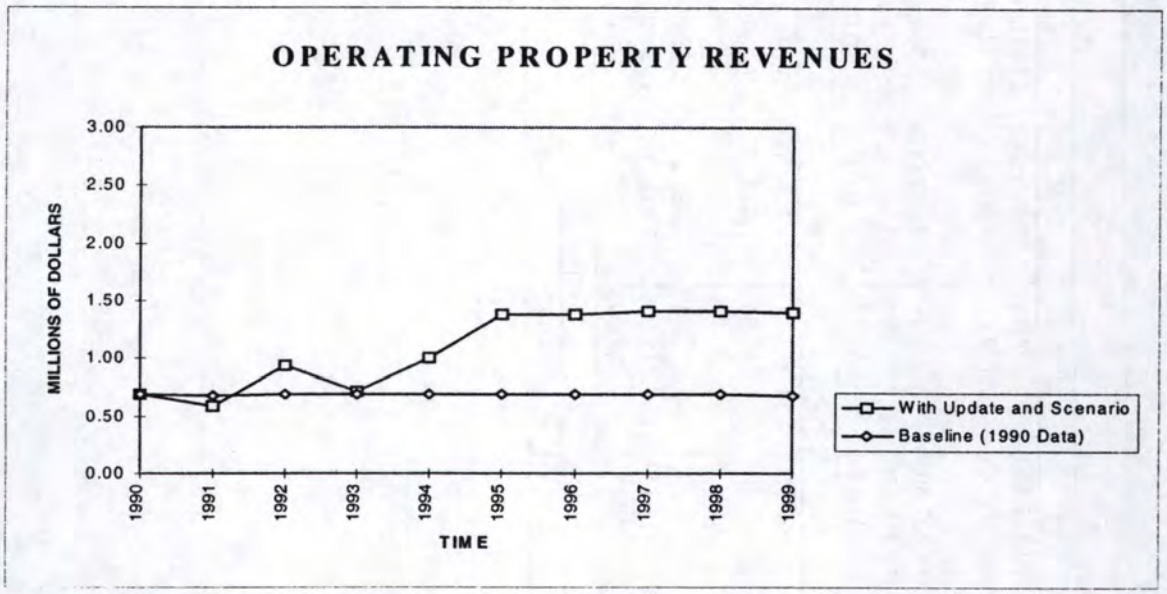
The model predicts a personal property tax base increase of $5 million. Personal property revenues increase by nearly $200,000. This $200,000 increase is roughly an increase of 55%. The personal property base increased by a large percent, so the greater percent increase in personal property revenues than real property revenues could be expected.

The operating property tax base marginally increases. The $300,000 growth in revenues compares to a $200,000 increase in personal property revenues. The tax base for operating property is $77 million compared to $28 million for the personal property base. The tax revenue increase came mostly from an increase in the tax rate for operating property. The table below presents the information for the growth in tax revenues.

Tax Revenues										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Real Property	2,021,035	2,050,742	2,113,455	2,144,952	2,176,972	2,209,529	2,242,636	2,276,305	2,310,550	2,345,387
Personal Property	421,073	424,121	433,926	437,254	440,668	444,171	447,764	451,450	455,230	459,108
Operating Property	684,791	683,233	692,381	691,011	689,696	688,438	687,238	686,099	685,022	684,009
Scenario										
Real Property	2,021,035	1,787,334	2,658,614	1,743,600	2,492,812	3,557,741	3,609,172	3,761,266	3,814,769	3,869,024
Personal Property	421,073	368,694	441,250	254,452	363,215	558,031	564,422	586,520	593,212	600,032
Operating Property	684,791	591,570	944,820	713,775	1,003,146	1,384,832	1,378,266	1,409,290	1,402,536	1,395,936



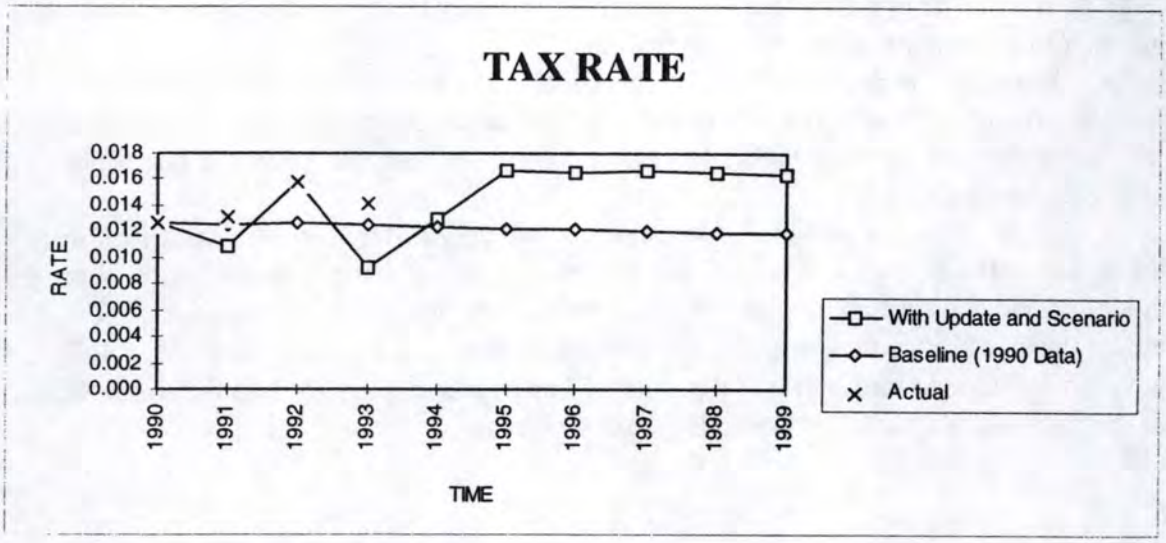




The influx of residents creates a growth in expenditures, non-local aid, and the tax base. Public expenditures grow to accommodate the demands from both rising incomes and an increasing population. Total non-local aid increases by only $78,000 despite the increase in expenditures. Non-local aid , however, does increase for all but educational aid. The decrease in non-local educational aid offsets the increases for other forms of non-local aid. Funds to cover the expanding cost of these services come from additional tax revenues. The property tax base does expand under this scenario, but the property tax rate must also rise.

Part of the increase in expenditures, however, stems from a greater willingness to pay for more or better quality government services. The model predicts that the income per capita in Boundary County increases by over $1,000. Thus, people have the ability to buy $1,000 more goods and services than in the past. Some of these goods and services come form the private market and some a government goods and services. Thus, local government expenditures increase.

Summary										
Baseline	**1990**	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**
Total Expenditures	10,003,518	10,157,705	10,312,840	10,474,712	10,640,610	10,810,640	10,984,911	11,163,536	11,346,631	11,534,314
Total Non-Local Aid	6,854,633	6,977,205	7,050,245	7,178,223	7,309,550	7,444,316	7,582,612	7,724,535	7,870,182	8,019,653
Local Tax Burden	3,148,885	3,180,500	3,262,595	3,296,489	3,331,060	3,366,324	3,402,298	3,439,001	3,476,449	3,514,661
Property Tax Base	247,773,250	252,484,437	257,315,810	262,270,571	267,352,007	272,563,494	277,908,503	283,390,599	289,013,443	294,780,799
Property Tax Rate	0.0126	0.0125	0.0126	0.0125	0.0124	0.0123	0.0122	0.0120	0.0119	0.0118
Scenario										
Total Expenditures	10,003,518	10,523,972	10,959,869	11,779,713	11,296,709	13,019,123	13,247,858	13,391,432	13,631,871	13,878,476
Total Non-Local Aid	6,854,633	7,753,814	6,892,476	9,041,964	7,411,129	7,489,196	7,666,052	7,603,768	7,790,110	7,981,564
Local Tax Burden	3,148,885	2,770,158	4,067,393	2,737,749	3,885,580	5,529,927	5,581,806	5,787,664	5,841,761	5,896,912
Property Tax Base	247,773,250	254,231,407	255,914,147	292,115,049	297,588,707	330,440,344	337,475,501	344,694,947	352,103,677	359,706,823
Property Tax Rate	0.0126	0.0108	0.0158	0.0093	0.0130	0.0166	0.0165	0.0167	0.0165	0.0163
Actual										
Property Tax Rate	0.0126	0.0131	0.0157	0.0142						



VI. Summary

This report provides the reader with a description of the status quo, the updates to the model, and the results of two scenarios. Tables and graphs are included, so that the reader may compare the status quo with the results of the scenarios. In addition, the discussion and the tables give the reader the opportunity to compare the increases (or decreases) in expenditures with corresponding increases (or decreases) in aid or tax base information.

The two scenarios describe two very different possibilities in the future of Boundary County. The first scenario is the loss of 60% of the harvestable timber. The model predicts that the timber loss has many impacts on Boundary County. The value of the property tax base decreases, non-local aid decreases, and expenditures decrease. The property tax base decreases due to the loss in market value from the downsizing of the mills and the decline from decreasing population and income. The expenditures and non-local aid also decrease when the population and income decrease. Expenditures decrease by more than the non-local aid, but the tax base also decreases. Thus, tax rates must be increased to maintain the level of expenditures predicted by the model.

Under this scenario, the population decreases. On average Boundary County citizens lose income when the timber workers lose their jobs. Thus, population and income both decrease. The demand for local government services decreases when there area less people demanding services and the people require less services because they have less disposable income.

The resident inflow scenario produces nearly opposite results. There is an increase in the number of citizens in Boundary County. The county must increase the level of goods and services provided to maintain the same level of goods and services to all residents. In addition, the residents desire more goods and services and have the ability to pay for more goods and services. The expenditures in this case increase by a

large amount. The non-local aid also increases, but only the types of non-local aid that are distributed according to county population.

Again the tax rate increases. In this case, the residents have a higher level of income, so the increase may be do to the fact that the residents desire more government goods and services for their higher level of income. The increase in the tax rate is not necessarily negative.

These scenarios provide information on two very different possibilities for future the future of Boundary County. No one is certain what will happen in the future, but the model provides information on the fiscal impacts from two different scenarios. The model takes into account some of the relationships that exist between the local government expenditures. Hopefully, this will provide some insight into fiscal functions of the county under different possible future scenarios.

End Notes

[1] The data for the county is given in "Data For The Idaho Fiscal Impact Model of County Public Services, Including School and Roads and Bridges," by Stephen Cooke and Linette Fox, AERS 95-3, April 11, 1995 pages 16-33.

[2] US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[3] US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[4] For a more complete definition of personal income see the "BEA User's Guide." US Department of Commerce, Economics, and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[5] REIS county detail data. Base employment equals the sum of federal civilian, federal military, farm, agricultural services, forestry, fisheries, and other mining and manufacturing for 1983 and 1992. US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[6] Miller, Ronald E. and Peter D. Blair, "Input-Output Analysis: Foundations and Extensions," 1985,([Englewood Cliffs, NJ]: Prentice Hall). Chapter One.

[7] "Lumber Prices Close W-I Mill," Bonners Ferry Herald, 8 August 1990.

[8] "Softwood Lumber Use Expected to Decline,: Bonners Ferry Herald, 3 October 1990.

[9] "Timber Appeals Have Heavy Impact," Kootenai Valley Times, 12 September 1991.

[10] Idaho Department of Employment, Research and Analysis, "1990 Annual Average Employment in Idaho" an d "Annual 1990 Wages in Idaho (Thousands of Dollars)," 1993, ([Boise, ID]: Idaho Department of Employment).

[11] Internal Revenue Service, Statistics of Income Division, "IRS County to County Migration Flow Data," 1994, unpublished data.

[12] US Department of Commerce, Bureau of Census, Population Estimates for Counties and Metropolitan Areas: July 1, 1991, 1994,([Washington, DC]: GPO).

[13] Idaho Department of Health and Welfare, Cooperative Center for Health Statistics, Vital Statistics, various years, ([Boise, ID]: Idaho Department of Health and Welfare), Internal Revenue Service, Statistics of Income Division, "IRS County to County Migration Flow Data," 1994, unpublished data, and US Department of Commerce, Bureau of Census, Population Estimates for Counties and Metropolitan Areas: July 1, 1991, 1994, ([Washington, DC]: GPO).

[14] US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[15] US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division. CD-ROM 1995. "1969-1992 Regional Economic Information System Data."

[16] Internal Revenue Service, Statistics of Income Division, "IRS County to County Migration Flow Data," 1994, unpublished data.

[17] US Department of Health and Human Services, Bureau of Data Management and Strategy, Health Care Financing Administration, "Enrollment Summarized by State and County," various years, ([Baltimore, MD]: Health Care Financing Administration) and Boundary County School District No. 101, Fall Enrollment Figures, reported by the Boundary County School District No. 101.

[18] Boundary County School District No. 101, Fall Enrollment Figures, reported by the Boundary County School District No. 101.

[19] State Tax Commission, "Fiscal Year 1991 Values W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1991 Abstract and 1990 Sub-rolls" and "Fiscal Year 1993 Values W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1993 Abstract and 1992 Sub-rolls," 1993 and 1991, ([Boise, ID]: State Tax Commission).

[20] State Tax Commission, "1992 Values by Major Category with Homeowners Exemption, 1992 Real and Personal Roll Plus 1991 Sub-roll Only" and "1993 Values by Major Category with Homeowners Exemption, 1993 Real and Personal Roll Plus 1992 Sub-roll Only," 1992 and 1993, ([Boise, ID]: State Tax Commission).

[21] US Department of Commerce, Bureau of Census, Population Estimates for Counties and Metropolitan Areas: July 1, 1991 and Population Estimates for Counties and Metropolitan Areas: July 1, 1992, ([Washington, DC]: US Department of Commerce, Bureau of Census, 1993 and 1994).

[22] State Tax Commission, "Fiscal Year 1991 Values W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1991 Abstract and 1990 Sub-rolls" and "Fiscal Year 1993 Value W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1993 Abstract and 1992 Sub-rolls," 1991 and 1993, ([Boise, ID]: State Tax Commission).

[23] State Tax Commission, "Fiscal Year 1991 Values W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1991 Abstract and 1990 Sub-rolls" and "Fiscal Year 1993 Values W/O Homeowners Exemption - Real, Personal, and Operating Property Values 1993 Abstract and 1992 Sub-rolls," 1991 and 1993, and ([Boise, ID]: State Tax Commission).

[24] University of Idaho, Bureau of Public Affairs Research, 1991, "Handbook For County Officials in Idaho," ([Moscow, ID]: University of Idaho).

[25] "ATI Newsletter," Associated Tax Payers of Idaho, September 1994, page 2.

[26] "Timber Report Raises Questions," Bonners Ferry Herald, 17 November 1993 and "EBC, Backpackers Plan Continued Negotiations," Bonners Ferry Herald, 1 June 1988.

[27] US Department of Commerce, Economics and Statistics Administration, Bureau of Analysis, Regional Economic Measurement Division, CD-ROM 1995, "1969 - 1992 Regional Economic Information System Data."

[28] "Timber Report Raises Questions," Bonners Ferry Herald, 17 November 1993 and "EBC, Backpackers Plan Continued Negotiations," Bonners Ferry Herald, 1 June 1988.

[29] "County Road Finance Report For FY 1994," spreadsheet produced by Idaho Transportation Department, State of Idaho, ([Boise, ID]: Transportation Department).

[30] Minnesota IMPLAN Group, INC., Micro IMPLAN Version 91-F, 1993, ([Stillwater, MN]: Minnesota IMPLAN Group).

[31] Idaho State Department of Education and the Idaho School Boards Association, "Idaho's Public School Support Program and Public School Funding, "September 1987, ([Boise, ID]: State Department of Education).

[32] Telephone Conversation October 1994 with Carol Moehrle, Director of the North Central District Health Department.

[33] "North Central District Health Department," 1994, pamphlet produced by the North Central District Health Department.

[34] "Idaho's Seven Public Health Districts,: Pamphlet produced by the Conference Office for the Public Health District, 1994, ([Boise, ID]: Conference Office for the Public Health District) .

[35] This becomes clear when looking at the county, city, and highway districts road finance reports for multiple fiscal years. "County Road Finance Report for FY 1993" or "County Road Finance Report for FY 1992" spreadsheets produced by the Idaho Department of Transportation 1992-1993, ([Boise, ID]: Idaho Department of Transportation).

[36] "County Road Finance Report for FY 1994" or "County Road Finance report for FY 1993" spreadsheets produced by the Idaho Department of Transportation 1993-1994, ([Boise, ID]: Idaho Department of Transportation).

[37] Idaho Code 31-3201A,1994, compiled under the supervision of the Idaho Code commission Philip M. Barber, B. Newal Squyers, Jr. and M. Allyn Dingel, Jr., ([Charlottesville, VA]: The Mitchie Company Law Publishers), Volume 6.

[38] State of Idaho , Bureau of Criminal Identification, Department of Law Enforcement 1990, Crime in Idaho, ([Boise, ID]: Department of Law Enforcement).

[39] Latah County Social Services Office Conversation October 1994.

[40] Although different distributions may have been used, several public service persons indicated that a distribution of 50% retirees and 50% new residents with fewer financial resources is representative of the current inflow.

[41] The 1992 poverty line was $9,137 for a family of two and $11,186 for a family of three. "National Center for Children in Poverty," newsletter Winter/Spring 1995., ([New York, NY]: Columbia University School of Public Health).

[42] "Survey Finds Common Threads," Bonners Ferry Herald, 7 May 1990 and "Survey Reveals Community Pride," Bonners Ferry Herald, 24 January 1990.