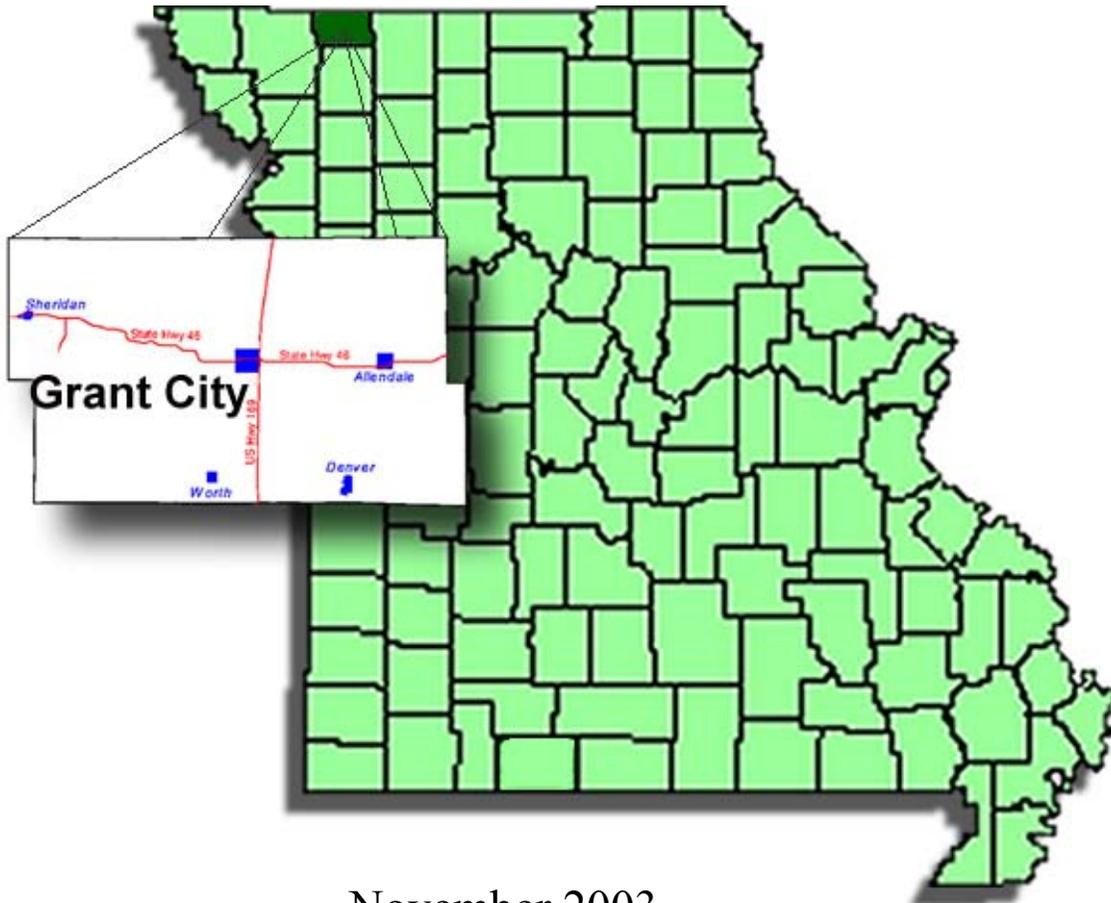


Grant City Baseline 2001-2011



November 2003



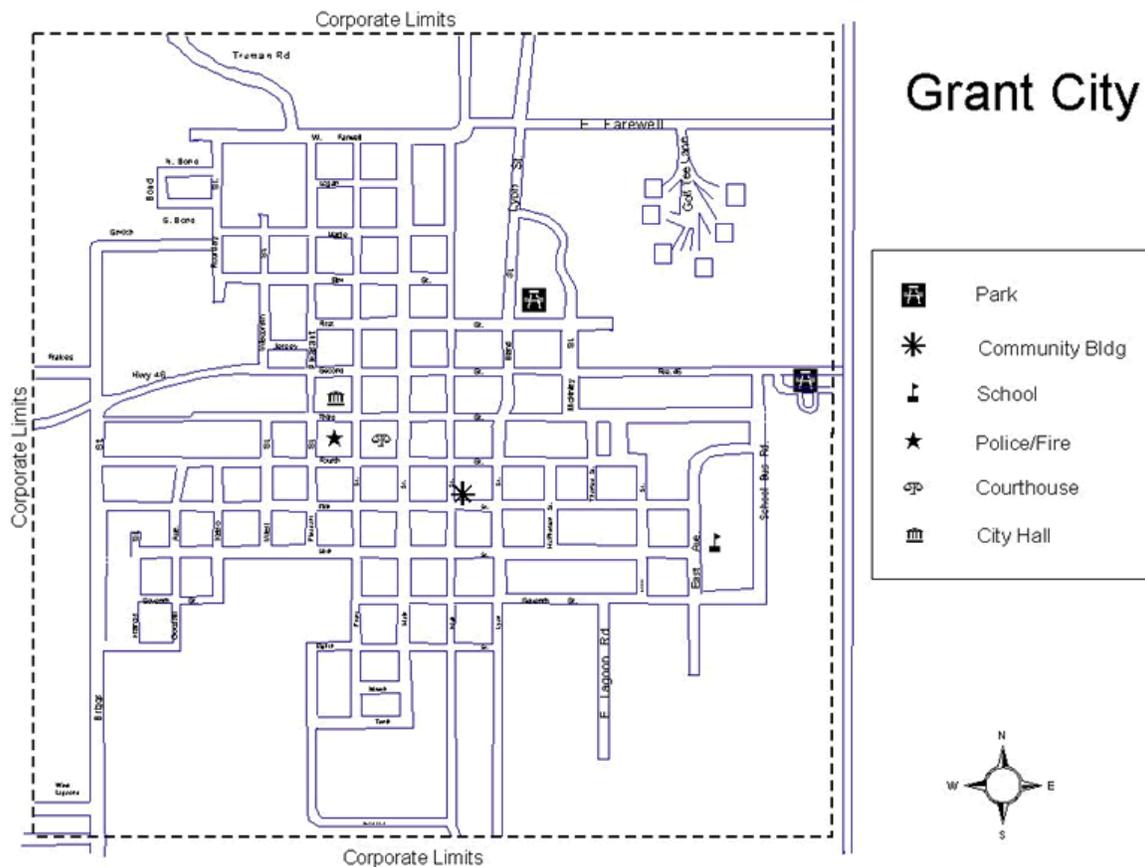
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Grant City Baseline 2001-2011

by

Anna E. Kovalyova



Report BL-2003-05 Community Policy Analysis Center University of Missouri-Columbia

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Grant City Study Advisory Panel

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Linda Gray Smith	Superintendent, Worth County School District
Richard Van Vactor	Van Vactor Lumber Co.
Mary Weaver	Worth County Convalescent Center

These people contributed insights, questions and important comments throughout the project.

Executive Summary

This report describes a set of annual baseline projections¹ on socio-demographic and economic conditions through 2011 for the City of Grant City, Worth County, Missouri. Findings are based on a comprehensive statistical analysis of the most recent secondary data available, as well as important input provided by the Community Advisory Panel. 2001 serves as a base year for the forecasts, since the majority of available data is for 2001. Thus, some of the data in the base year are actual, and some are projected. Dollar figures are reported in constant 2001 terms, with no attempt to estimate future inflation rates. The actual data in the figures accompanying the report are separated from their forecasted counterparts by dotted line. Since the actual data for cities is much more scarce than it is for counties, many charts depict only the data for the Census years with no estimates in between.

The Advisory Panel, using their personal knowledge of economic conditions in the region, came to a consensus on likely key growth rates for variables that guide the forecasts in the statistical model. The forecasts in this report are based on the following projected annual growth rates:

Employment growth rate in Grant City	1.00%	1.20%
Real Per Capita Income growth rate in Grant City	2.00%	2.00%
Employment growth rate in surrounding communities	1.25%	1.25%
Labor Force growth rate in surrounding communities	0.77%	0.77%

where the first set of growth rates is chosen for the first 2 years of the forecast, and the second – for the remaining 8 years of the forecast. Two different growth rates for employment were chosen by the Advisory Panel to reflect a slow-down in the economy in response to the nationwide recession of 2000. The Advisory Panel selected these growth rates after a careful study of trends in these variables over the past 10 years, as well as current economic conditions in the region.

The baseline in this report does not represent a forecast of local economic conditions. Rather, it is a tool designed to help decision-makers see local economic activity as a comprehensive system that is both logically consistent and statistically valid. The model does not account for changes due to the national business cycle or other macroeconomic effects.

¹ For definition of baseline and scenarios, see “Show Me Model and Scenario Development” section.

Findings

- Over the next 10 years, Grant City is expected to experience a small growth in a number of socio-demographic and economic variables.
- If current economic conditions were to prevail, the Grant City population is expected to remain around its 2001 level, growing at an annual rate of less than 0.1 percent.
- The majority of Grant City residents are employed in service sector, even though this sector experienced a 29 percent decline between 1990 and 2000. The only industries that experienced a positive growth in terms of jobs in the last decade were agriculture, construction and transportation.
- Employment by residence in the City is expected to grow at 0.7 percent per year, and employment by workplace – at 1.2 percent per year.
- In the baseline, the number of unemployed persons is expected to decrease to approximately 20 persons (representing a 4.4 percent unemployment rate) by 2006, after which it would level off.
- In the baseline, the Grant City demand for housing is expected to remain around its 2001 level, experiencing a small growth of less than 1 percent per year.
- Per capita income – before inflation – is projected to grow at 2.2 percent annually through 2011. Total personal income is expected to grow from almost \$13,270,000 to just under \$16,280,000 (in 2001 Dollars) over the projection period – a real growth rate of 2.3 percent per year.
- Changes in City income and employment will lead to 1.1 percent in annual growth of taxable retail sales in the baseline.
- Assessed property values are expected to grow at 4.5 percent per year, generating a \$1.7 million increase over the years of the projection.
- Between 2002 and 2011, the City total revenues are expected to grow at about 2.1 percent per year, if current economic conditions in the City prevail.
- The demand for public goods and services is expected to grow at a slow annual rate of 0.25 percent between 2002 and 2011.

Baseline Summary Table, 2001-2011

Grant City (Reported in 2001 Dollars)

Variables	2001	2011	Absolute Change ¹	Annual Growth Rate
Demographics				
Population	900	906	6	0.06%
Persons Younger 16	206	208	1	0.07%
Persons Older 65	222	223	1	0.04%
School Enrollment	415	410	-5	-0.12%
Workforce Characteristics				
Labor force	430	440	11	0.25%
Employment by Workplace ²	232	261	29	1.24%
Employment by Residence	392	421	29	0.74%
Incommuters ³	39	44	5	1.25%
Outcommuters	196	191	-5	-0.24%
Unemployed	38	19	-18	-4.85%
Demand for Housing⁴				
Total	415	417	3	0.06%
Owner-Occupied	295	297	2	0.06%
Renter-Occupied	120	120	1	0.06%
Economics				
Real Per Capita Income (\$)	\$14,744	\$17,972	\$3,229	2.19%
Real Total Personal Income (\$1,000)	\$13,289	\$16,277	\$3,008	2.27%
Assessed Property Value (\$1,000)	\$3,794	\$5,504	\$1,709	4.51%
Taxable Retail Sales (\$1,000)	\$5,118	\$5,668	\$549	1.07%
Revenues Sources (\$1,000)				
City Property Tax Receipts	\$64	\$81	\$17	2.66%
City Sales Tax Receipts	\$57	\$61	\$4	0.76%
Intergovernmental Revenues	\$104	\$148	\$43	4.15%
Other Revenues	\$697	\$732	\$35	0.50%
Total Revenues (\$1,000)⁵	\$922	\$1,022	\$100	1.08%
Total Demand for Expenditures (\$1,000)⁶	\$967	\$927	(\$40)	-0.41%
Revenues minus Expenditures (\$1,000)⁶	(\$45)	\$94	\$139	

1. The term 'Absolute Change' denotes the absolute difference (i. e., in numerical terms) between the two numbers. This is in contrast to the 'Relative Change' that calculates the change in percentage terms.

2. Employment by Workplace includes second jobs.

3. Census 2000 only released the data for the outcommuters for places but not the incommuters. Therefore, CPAC used its own estimate for incommuting 2000.

4. This represents demand, and not supply of housing, and as such does not reflect the vacant units.

5. Excludes Operating Transfers.

6. Often, actual spending alternates from a budget surplus to a deficit.

However, on average, Missouri local governments must operate from a balanced budget.

Project Overview

The Grant City Baseline was generated as part of the “Housing Profile and Needs Assessment” protocol developed as a result of the Outreach Development Fund (ODF)² program. The “Housing Profile” protocol has been a collaborative effort between the City and the ODF Project Partners (CPAC, CARES, HSEW and NWMORCOG)³. Its essential part, the Grant City Baseline, has been developed as a result of collaboration between the City of Grant City and the Community Policy Analysis Center. The Advisory Panel met on a regular basis during the course of the study to form background information and basic assumptions for the study. The forecasts on socio-demographic and economic conditions through 2011 described in this report will assist public officials and community residents in addressing economic changes. Its findings are the result of an extensive analysis of the local economy, achieved through discussion with key public and private sector leaders throughout the community, and use of the Show Me Community Model, developed by CPAC.

Grant City is the county seat for Worth County that lies in the northwestern part of the State. Grant City is situated 34 miles northeast of Maryville and 23 miles northwest of Albany. Two highways intersect the community: US Highway 169 and State Highway 46. Grant City is the largest community in the county (it comprises 39 percent of the county population) and serves as a hub for the area’s agricultural economy. Grant City understands the necessity of taking a proactive role in planning for its future in order to provide the adequate quality of life to its future generations.

Findings in this report are discussed in four separate sections. The first section describes future socio-demographic characteristics in the City of Grant City when no major changes are introduced into a local economy. The second section reports on labor market, and the third – on economic characteristics in Grant City under the same conditions. The fourth section examines related fiscal implications for city government in the same settings.

Regional economic development brings both opportunities and challenges. As future population and income levels in the City increase, this will lead to new demands for both public and private sectors. For example, if the number of housing starts in the community rise, it will place new pressures on water and sewage treatment systems. Local governments will need to play a more active role in developing public infrastructure as part of the overall economic development to assure drinking water quality, adequate school and transportation systems, and to address housing issues among other things, for its residents. This will ensure that the City of Grant City remains a nice place to work and live in the 21st century.

² ODF is funded by the University Outreach and Extension (UO/E), MU.

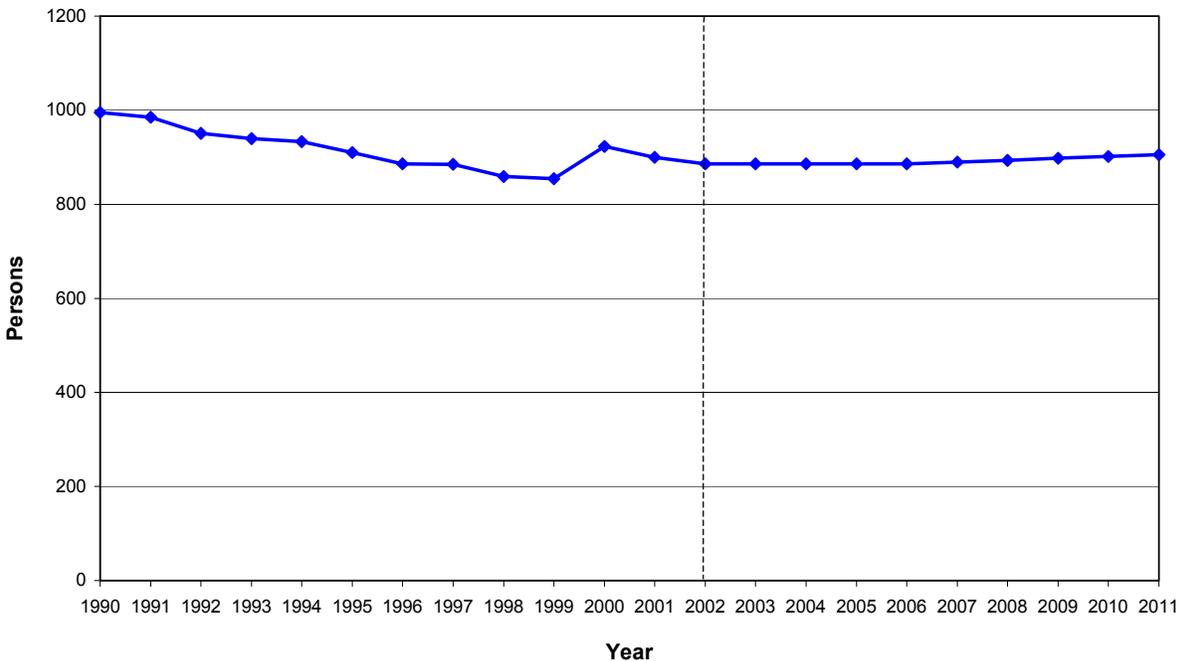
³ CPAC, CARES, HSEW and NWMORCOG stand for Community Policy Analysis Center, Center for Agricultural, Resource and Environmental Systems, Housing and Sustainable Environment Group, and North-West Missouri Regional Council of Governments, respectively.

Forecasts and Analysis

I. Socio-Demographic Characteristics

The following population figure can help citizens understand trends in their community that can be used to analyze future service needs for community's population.

**Figure 1. Grant City
Total Population, 1990-2011**



Source: US Census Bureau
Analysis by CPAC

Figure 1 illustrates the population change in the City since 1990. According to Census 2000 (July estimate), Grant City has 923 persons⁴. Grant City population declined by 7.5 percent between 1990 and 2000. Note that the chart also shows intercensal estimates for population⁵ from 1990 to 1999 derived by the Census Bureau. However, the Bureau estimates “undershot” the actual data as evident from comparing 1999 estimate with 2000 Census data. Census Bureau is yet to interpolate its population estimates between 1990 and 2000 in order to make them consistent with 2000 figures.

Grant City accounted for about 41 percent of total population in Worth County in 1990 and 39 percent – in 2000. According to Census 2000, the median age in the City is about 42 years, same as in Worth County, vs. 36 years for the State of Missouri. In 1990, median age in Grant City was 43 years.

Note, that the Census Bureau has already released the population estimates for places for years 2001 and 2002. According to these estimates, Grant City population experienced a

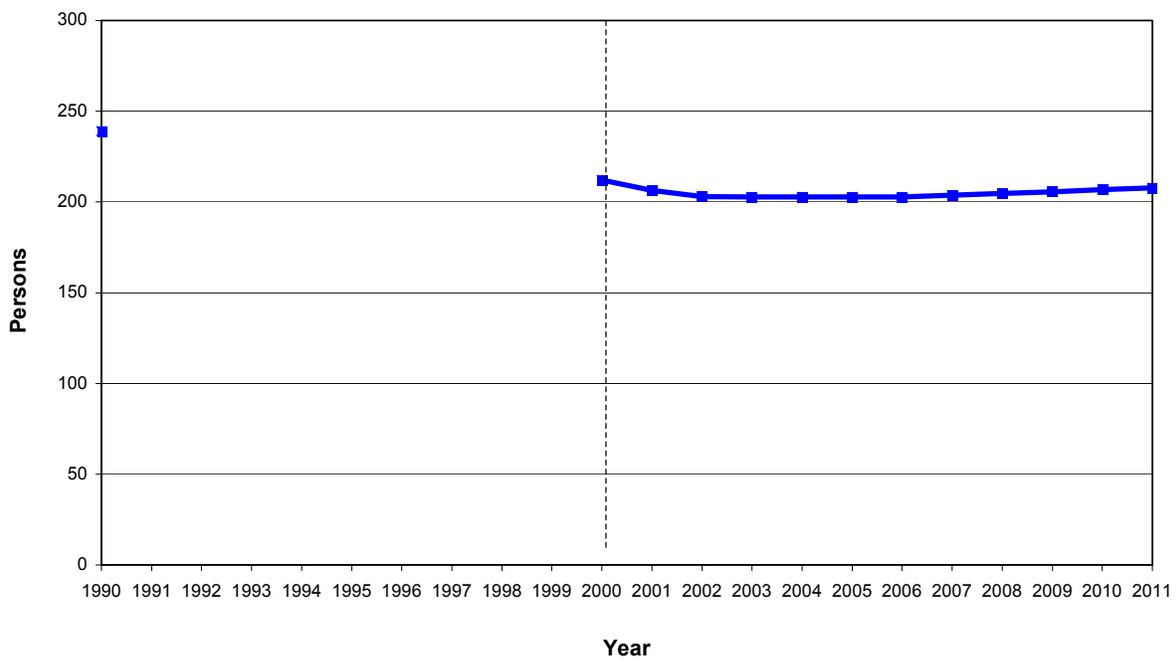
⁴ April estimate of Census 2000 reported 926 persons in Grant City.

⁵ Intercensal estimates represent an extrapolation, or a projection of the variable from the known observation forward (say, beginning with Census 1990 figure). Interpolation, on the other hand, is the projection between the two end points (say, between Census 1990 and 2000 data).

further decline of 2.5 percent between 2000 and 2001, and 1.6 percent – between 2001 and 2002. In the baseline, Grant City population is expected to remain around its 2001 level, growing at an annual rate of less than 0.1 percent. For comparison, the annual population growth rate for the State of Missouri was 0.77 percent since 1990.

We also examined the two population groups that are generally not part of the labor force: young persons in the City (people younger than 16), as well as older population (persons over 65). The young people usually do not make moving/allocation decisions themselves, but rather follow their families. The older part of the population typically constitutes retirees who may, and often do, have a profound effect on the community’s economy. In 2000, young population comprised 23 percent of the total population in Grant City, and retirees – about 25 percent.

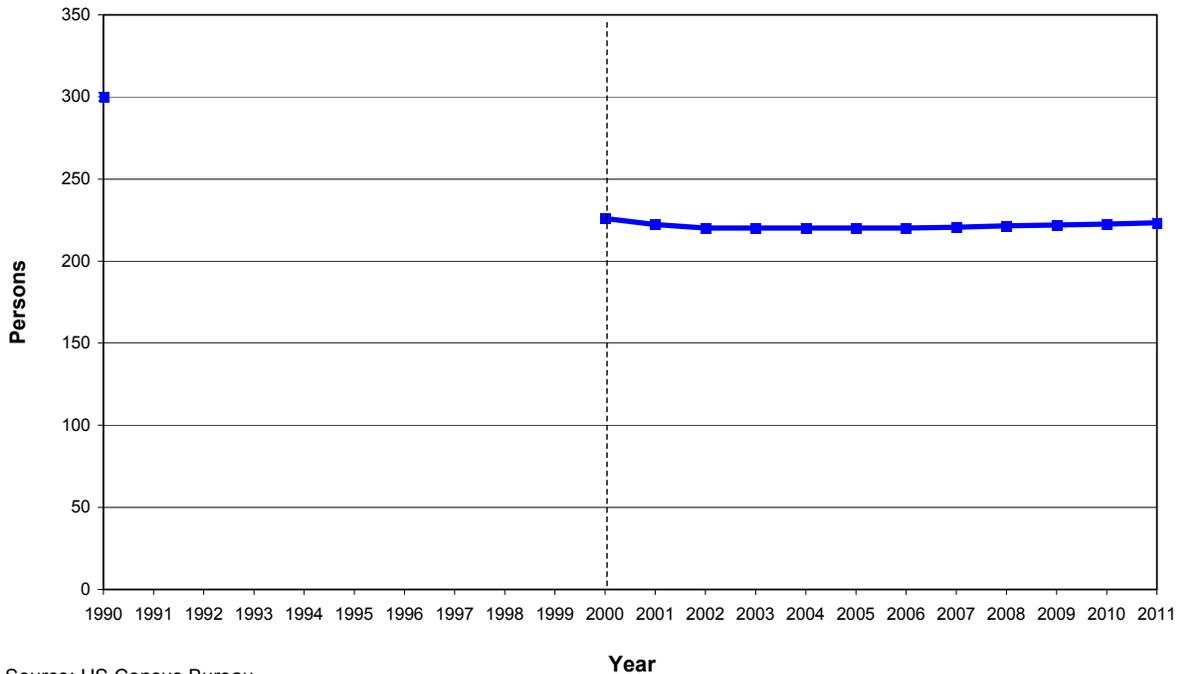
**Figure 2. Grant City
Persons Younger than 16, 1990-2011**



Source: US Census Bureau
Analysis by CPAC

Figure 2 illustrates the change in persons younger than 16 in the City for years 1990 and 2000-2011. In examining the actual data for this segment of the population, one can notice, that its 2000 level is 11 percent smaller than its 1990 level. In the baseline, “young” population in the City is expected to remain around its 2001 level, growing at an annual rate of less than 1 percent.

**Figure 3. Grant City
Persons over 65, 2000-2011**



Source: US Census Bureau
Analysis by CPAC

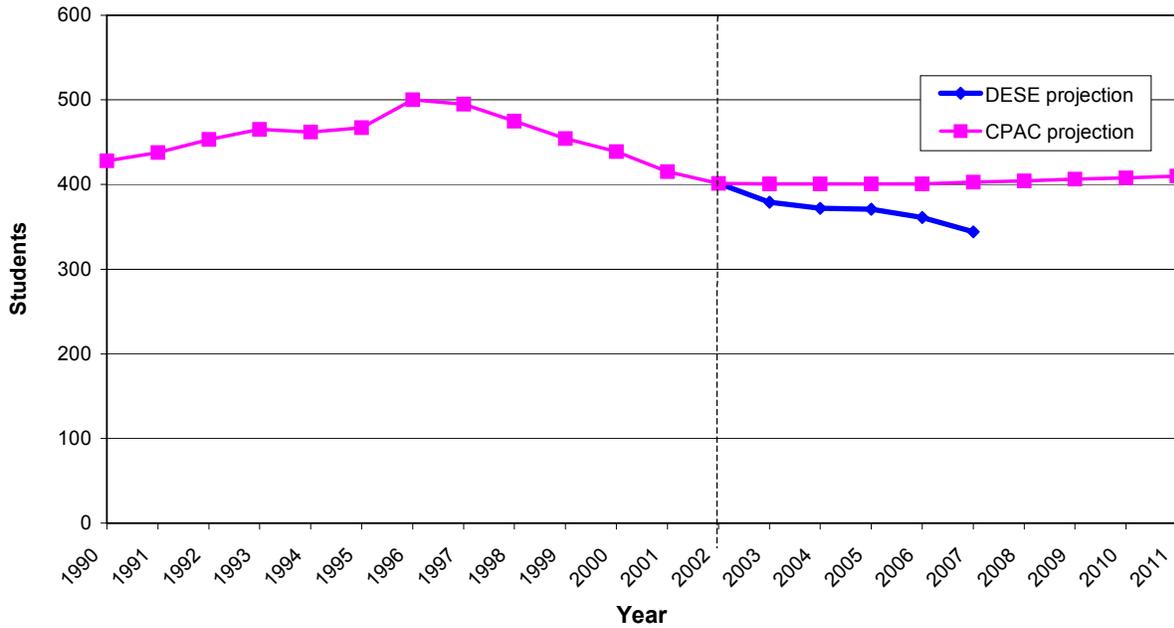
Figure 3 represents the changes in persons over 65 in the City for years 1990 and 2000-2011. In examining the actual data for this segment of the population, one can notice that its 2000 level is 25 percent smaller than its 1990 level (vs. 11 percent for “young” persons, as observed earlier) – supporting Panel’s observation that the community’s retirees are dying off. In the baseline, the “older” population in the City is expected to remain around its 2001 level, growing at a very slow annual rate of 0.04 percent.

If the actual population grows through the baseline period as expected, this growth will lead to continuous demands for housing, health services, higher and continuing education, and family recreation activities.

Figure 4 shows the actual and projected growth in public school enrollment, corresponding to the population trends in school age children. Actual school enrollment in Grant City has experienced a continuous decline between the years of 1996 and 2002, decreasing by 20 percent in this time period. The figure also depicts 5-year school enrollment projections generated by DESE. DESE’s projection shows a continuous decline in the school enrollment in accordance with the historical trend of the last 6 years. In our baseline, school enrollment is increasing slowly between 2002 and 2011 at 0.25 percent per year, but remains smaller than its 2001 level.⁶

⁶ Note that the baseline summary table compares 2001 and 2011, thus reporting a small negative growth in school enrollment of 0.12 percent per year.

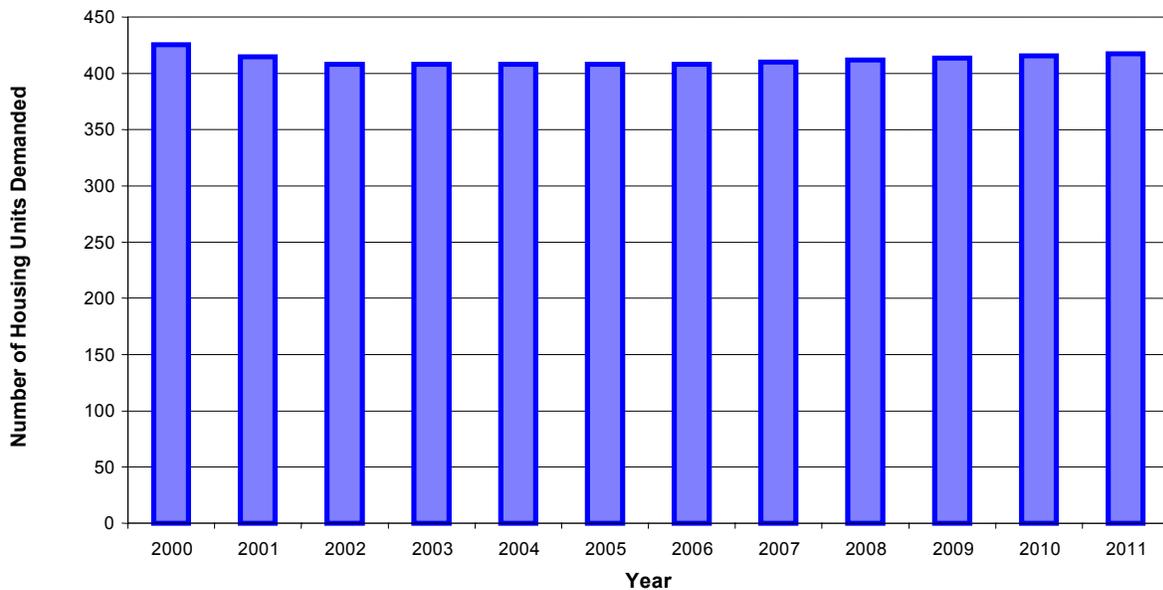
**Figure 4. Grant City
School Enrollment, 1990-2011**



Source: Missouri Department of Elementary and Secondary Education (DESE)
Analysis by CPAC

Housing was mentioned by the Advisory Panel as one of the issues faced by the City.

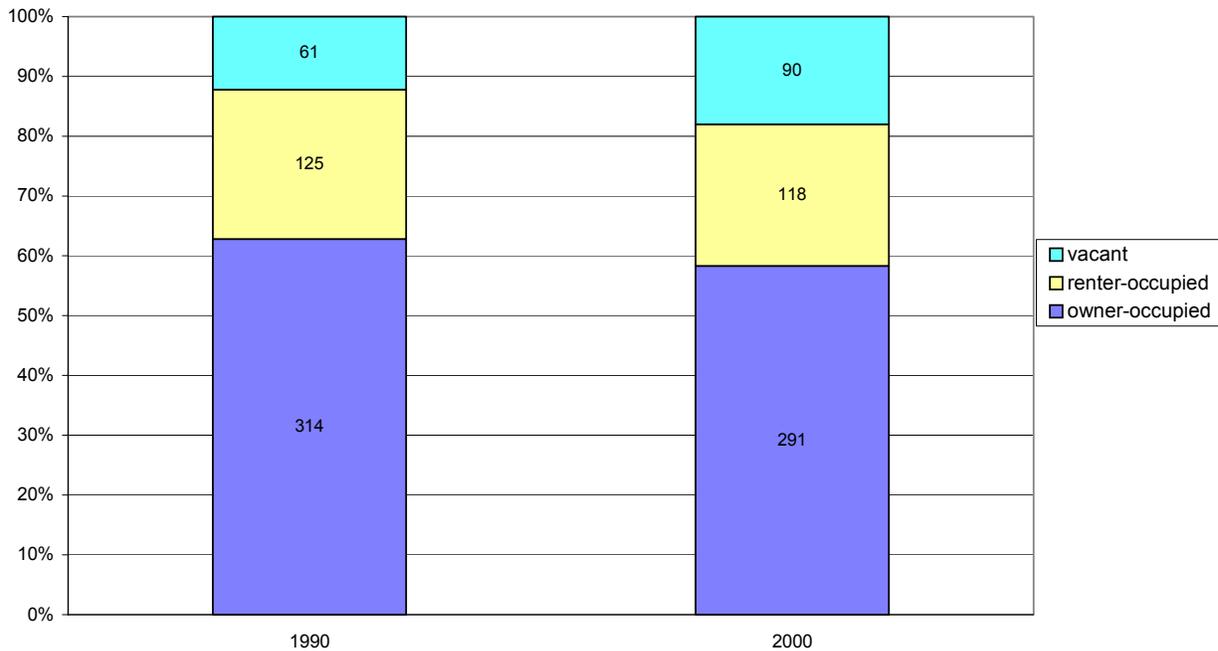
**Figure 5. Grant City
Demand for Housing, 2000-2011**



Note: The chart reflects the demand, and not the supply of housing, and as such represents occupied housing only, and excludes vacant housing
Analysis by CPAC

According to Census 2000, there are 2.5 persons per household in the State of Missouri, and 2.17 persons per household in Grant City. Figure 5 represents the overall⁷ forecasted demand for housing for years 2001 – 2011. In the baseline, the Grant City demand for housing is expected to remain around its 2001 level, experiencing a small growth of less than 1 percent per year. Housing projection follows that of the population.

**Figure 6. Grant City
Housing Units by category as percent of total, 1990 and 2000**



Source: US Census Bureau
Analysis by CPAC

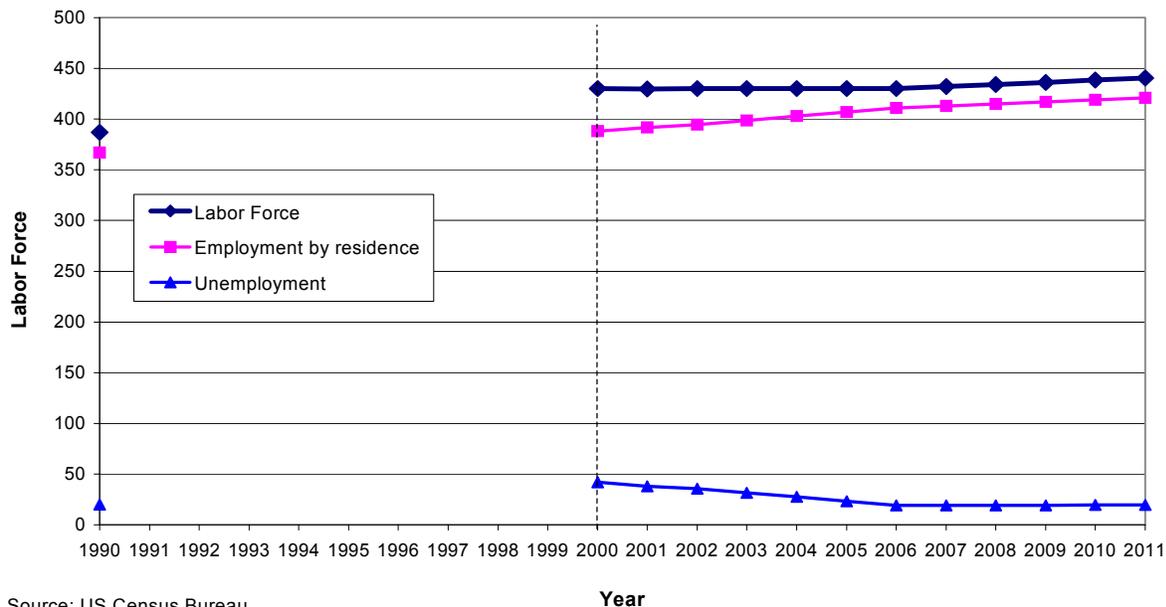
Figure 6 compares the existing housing stock in Grant City in 1990 with that of 2000. The total number of housing units in the last decade remained virtually the same – 500 and 499 units in 1990 and 2000, respectively. However, the number of vacant units increased by 48 percent, due to the reduction in both renter- and owner-occupied units.

⁷ i.e., the demand for both existing and new housing units. By housing units, we mean any type of dwelling, be it houses, apartments, mobile homes, condos, etc.

II. Labor Market Characteristics

Workforce characteristics include the labor force, employment and unemployment levels, and commuting patterns.

**Figure 7. Grant City
Labor Force, Employment, Unemployment
1990-2011**



Source: US Census Bureau
Analysis by CPAC

Figure 7 illustrates expected growth in the civilian labor force – the number of adults who live in the City and are now either gainfully employed or actively seeking work. Between 1990 and 2000, actual labor force in Grant City grew by 43 persons, or 11 percent, reflecting, among other things, the national trend of increased labor force participation in the early 1990s. In the baseline, the labor force is expected to grow at a rate of 0.25 percent annually through 2011. This increase is composed of growth in both local labor force and the number of incommuters.

The three largest employers in Grant City (in order of largest to smallest) are: Worth County R-III school district, Convalescence Center and Worth County Government. These organizations employ a total of about 148 employees, or 34 percent of the city labor force.⁸

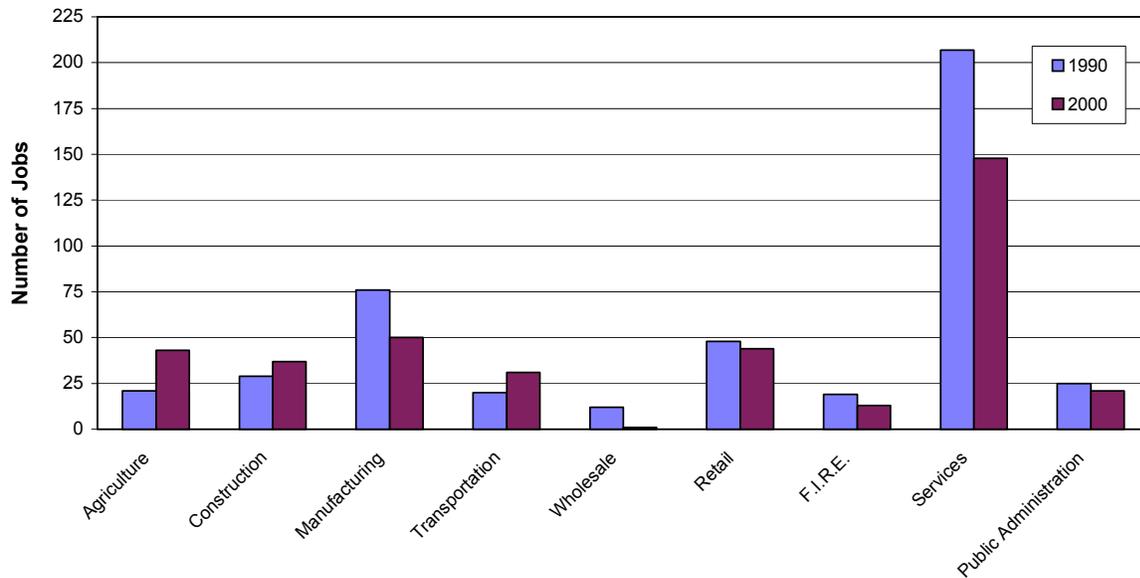
Figure 7 also represents employment by residence (i.e., the number of Grant City residents who hold jobs, regardless of where these jobs are located: inside or outside the city limits). Employment by residence data is equal to Labor Force - Unemployment (i.e., it already accounts for the net commuting). Between 1990 and 2000, Grant City employment by residence increased by 21 persons, or 6 percent. In the baseline, the employment by residence is expected to increase by approximately 30 employees between 2001 and 2011 – at an annual growth rate of over 0.7 percent.

Figure 8 represents Grant City employment by major industry for years 1990 and 2000. Service sector provides the largest number of jobs in the City, even though it experienced a 29 percent decline between 1990 and 2000. In fact, the only industries that experienced a positive growth

⁸ Source: NW MO Regional Council of Governments, Online Community Profiles, <http://www.nwmorcog.org/profiles/gc/employment.htm>

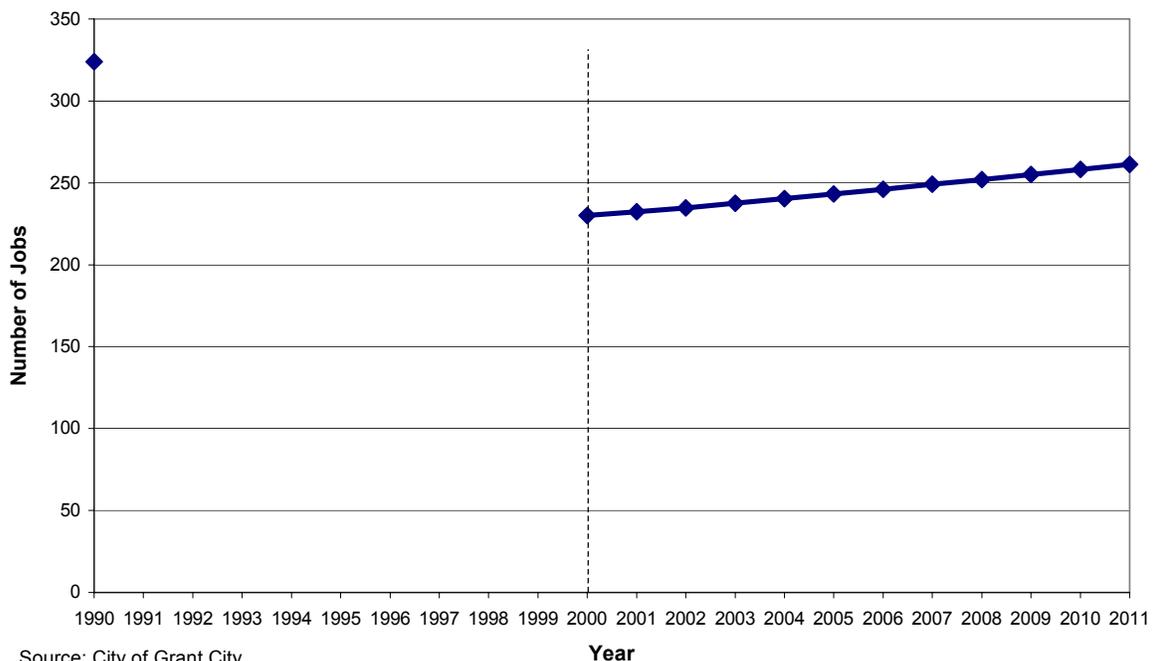
in terms of jobs in the last decade were agriculture, construction and transportation. Nationally, employment is growing the fastest in the services and retail trade sectors.

**Figure 8. Grant City
Employment by Major Industry, 1990 and 2000**



Note: Agriculture includes Ag. services, forestry, fishing, hunting and mining;
 Transportation category includes Transportation and warehousing and utilities;
 F.I.R.E. stands for Finance, Insurance, Real Estate, Rental and Leasing; Services excludes Public Administration
 Source: US Census Bureau
 Analysis by CPAC

**Figure 9. Grant City
Employment by Workplace, 1990-2011**



Source: City of Grant City
 Analysis by CPAC

Figure 9 depicts employment by workplace, i.e., the number of jobs located in the City regardless of *who* is taking those jobs – local residents or in-commuters. Between the years 1990 and 2000, Grant City employment experienced a 29 percent decline, or a loss of 94 jobs.⁹

In 1990, there were 324 jobs in Grant City.¹⁰ However, in 2000, there were only 230 jobs in the City (City estimates), or a 29 percent job decline. Most of the job losses could be attributed to the closure of the GC Cap Factory that was located in Grant City and was producing headgear. Significant production lay-offs at the factory took place in 1996-97. Last production worker left the factory in October 1999 (although by that time the employment force was less just a few people). Thus, whereas economically, the factory closed in 1996-97, officially, the factory closed at the end of 1999. Grant City experienced a significant loss in the number of jobs after the closing of the plant. However, according to the Advisory Panel, even though the Cap factory was employing a lot of workers, it had low wages and provided no benefits to their workers.

The job loss in Grant City over the last 10 years does not mean that the community is likely to continue experiencing job losses in the near future. The following economic changes took place in the community in the last three years¹¹:

2001:

“CNC Trucking” firm has moved its main office to Grant City in May 2001 and, as of 2003, has 3 office staff members and several truckers. The number of truckers depends on the economy - within 2-10 job range, as quoted by the company.

2002:

Dollar General (convenience/grocery store) opened up in Fall 2002 and has around 7-9 employees.

City Limits has expanded in Fall 2002 to include Country Corners, a gas station that has 3-5 employees.

2003:

A new factory, the American Walnut Company, whose production is starting in Fall 2003 will employ 13 people (with projections of hiring 50 people total in five years). The company will be producing wood gunstocks. American Walnut Company is one of the leading hardwood lumber mills in the United States, with its main office in Kansas City, KS. The company has a manufacturing facility in St. Joseph, MO.¹²

Recent school budget cuts have not seemed to affect any educator’s jobs in Grant City – they remain steady.

Orilla's Way (one of the care centers in Grant City) plans to add 2-3 employees in the next 5 years.

⁹ Note that there is no secondary data available for employment by workplace on a city level. Census Bureau only publishes employment by residence for places (i.e., for cities, towns and villages). The Grant City numbers for employment by workplace were provided by the North-West Missouri Regional Council of Governments.

¹⁰ At that time, the GC Cap Factory was still up and running. Grant City experienced a significant loss in the number of jobs after the closing of the plant. In 2000, the City had an intern who estimated the employment in Grant City at 230 jobs. Her estimate was based on the number of jobs at the Cap factory, and the fact that no significant jobs were created to replace the loss after the factory had closed down.

¹¹ The following information was gathered by Chauncey Anderson, North-West Missouri Regional Council of Governments.

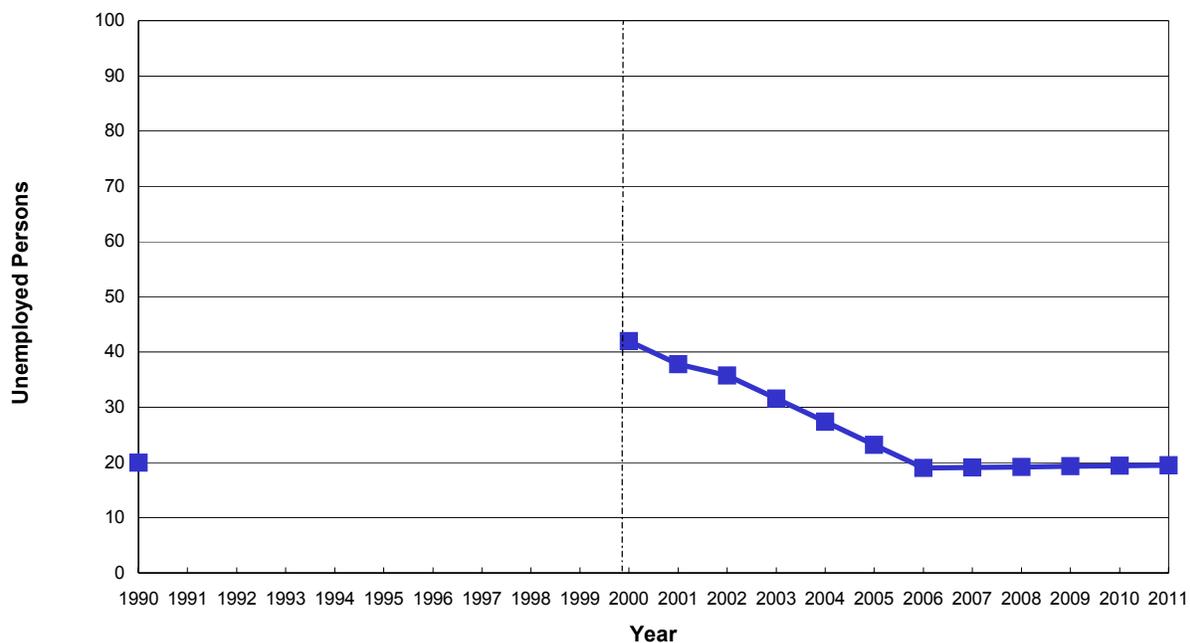
¹² For more information on the company, visit: <http://www.americanwalnut.com/index.shtml>

After considerable discussion, members of the Advisory Panel concluded that, considering the recent changes in the local economy, the future rate of employment growth would be a positive one, despite the negative growth over the last decade. More specifically, the Panel decided that it is reasonable to expect that employment would grow at a rate of 1.00 percent per year for the first two years of the projection, and at a faster annual rate of 1.20 percent for the remaining years of the projection. Thus, in the baseline, employment by workplace is expected to gain about 30 jobs by 2011 over its 2001 level.

There are a couple of points worth mentioning with regards to data interpretation:

1. Employment data by workplace includes both full- and part-time jobs and therefore, represents number of jobs, not number of people. Thus, data for employment by workplace does not report employment in FTE (full time equivalent), and as such, tend to overestimate actual employment; and
2. In our model, we explicitly consider commuters, rather than implicitly accounting for net commuters, i.e. we use the following identity: Labor Force = Employment (by workplace) + Unemployment + Outcommuters – Incommuters.

**Figure 10. Grant City
Unemployment, 1990-2011**

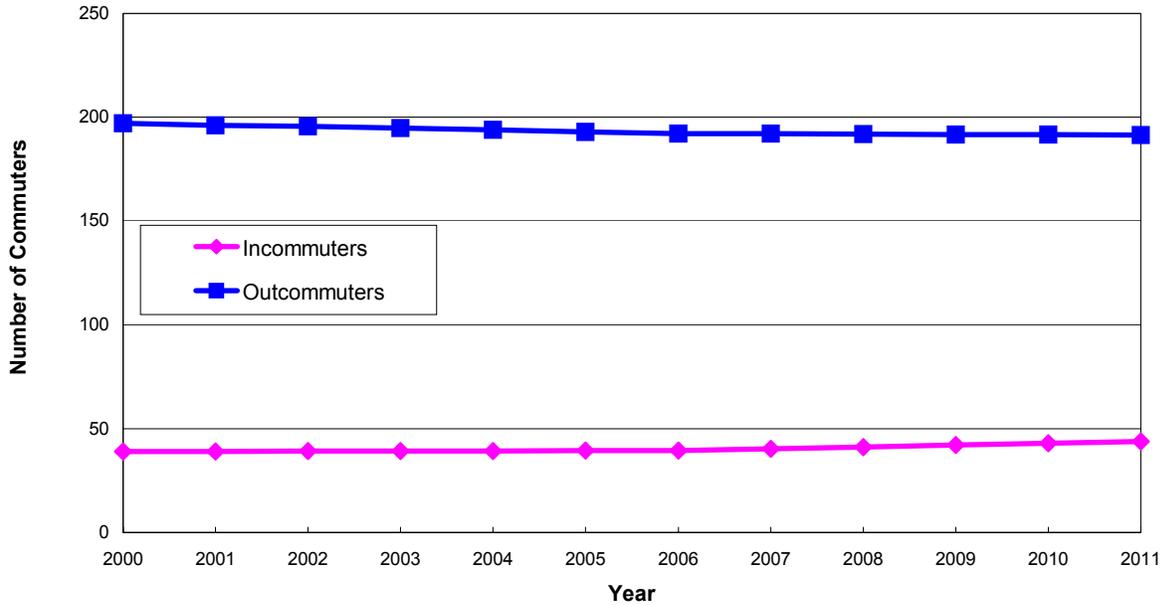


Source: US Census Bureau
Analysis by CPAC

Figure 10 shows the number of unemployed adults in the Grant City labor force. From the actual portion of the data, the City level of unemployment increased by 22 persons, or 110 percent between 1990 and 2000. It is worth noting that in 1993 high unemployment was occurring throughout the state. In the baseline, the number of unemployed persons is expected to decrease to approximately 20 persons by 2006, after which it would level off.¹³

¹³ Unemployment rate in Grant City was almost 10 percent in 2000, but only 5 percent in 1990. Since Grant City has recently gained jobs, an assumption was made that the City unemployment rate would not remain at a 10 percent level, but rather would gradually decrease until it reaches the natural rate of unemployment (around 5 percent).

**Figure 11. Grant City
Commuting, 2000-2011**



Source: US Census Bureau
Analysis by CPAC

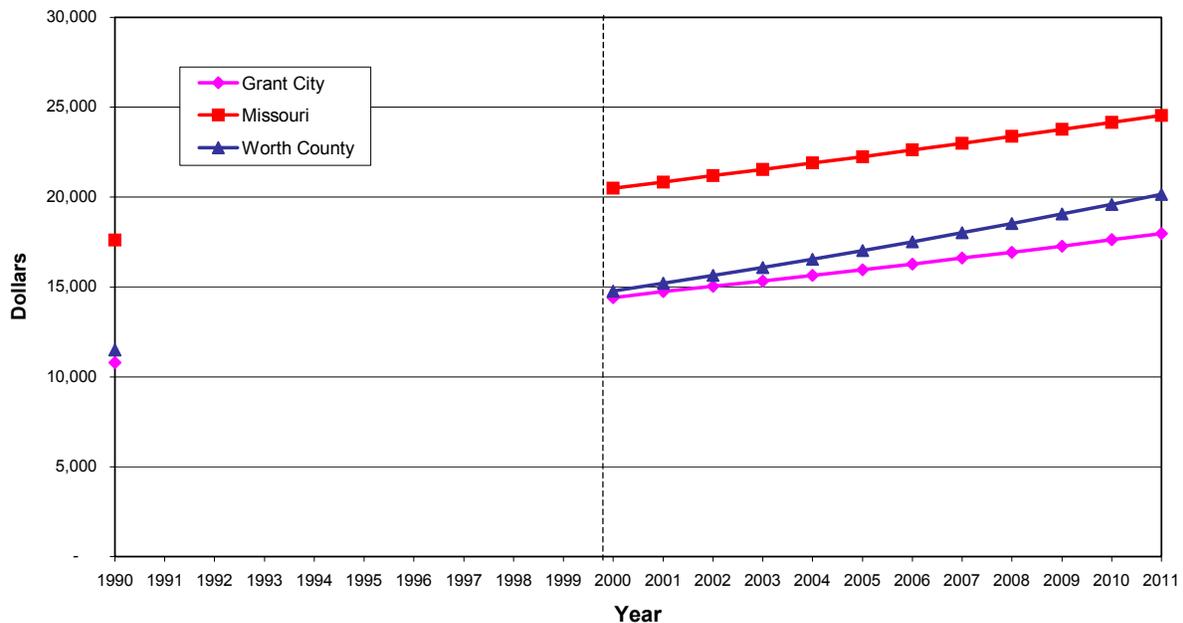
Figure 11 represents expected changes in the number of commuters in the baseline. Incommuters are people who live outside of the community, but whose place of employment is within the community. Outcommuters are residents of Grant City who work outside of the city. On the graph, notice a large gap between in- and outcommuters. Commuting patterns in the City changed tremendously since 1990. In particular, in 2000, outcommuting increased by over 60 percent over its 1990 level.¹⁴ According to Chauncey Anderson, NWRCOG, since Grant City experienced such a drastic job loss in the last decade, people began outcommuting to work in the nearby communities. Most people took up working in Maryville. Some took work in Albany, MO; Bethany, MO; and Creston, IA.

Forecasts of commuting patterns are especially important in estimating changes in retail sales. In the baseline, forecasted incommuting experiences an annual growth of 1.25 percent through 2011. As more employment opportunities arise in the City, outcommuting is expected to decline at 0.24 percent per year over the years of the forecast. However, the gap between in- and outcommuters is expected to converge only slightly over the years of the projection. Outcommuting affects employment by residence, resulting in different behavior.

¹⁴ Both Census 1990 and 2000 released the data on outcommuters, but not the incommuters on the city level. Therefore, CPAC used its own projections for incommuting between the years 1990 and 2000. CPAC also had to adjust outcommuting data from Census 2000, because the Census data were based on the number of persons employed 16 years and older that answered “yes” to the question: “Were you at work last week?” (i.e., at the time the Census was conducted), not on the *total* employment by residence.

III. Economic Characteristics

**Figure 12. Grant City
Per Capita Income (in 2001 Dollars), 1990-2011**



Source: US Census Bureau

Analysis by CPAC

Missouri PCI projection is based on its historical growth rate of 16.5 percent between 1990 and 2000.

Worth County PCI is projected based on its historical growth rate of 28.7 percent between 1990 and 2000.

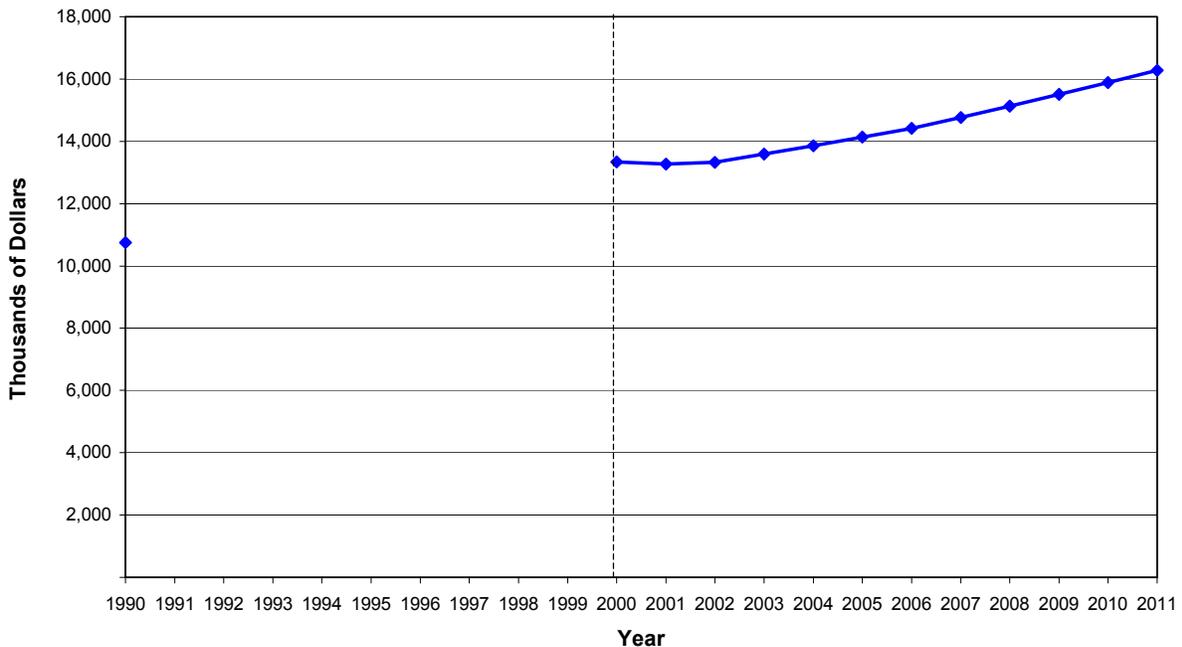
In 2000, Grant City per capita personal income (PCI) was \$14,009 in nominal terms, and \$14,408 in 2001 dollars. For comparison, in 1990, Grant City PCI was \$10,799 (in real 2001 dollars), which is about 25 percent less than its 2000 level. Grant City 2000 PCI was equal to 70 percent of the State average (= \$20,503, in 2001 dollars) and 97 percent of the County average (= \$14,776 in 2001 dollars).

Note that the BEA (Bureau of Economic Analysis, Department of Commerce) and the Census definitions of income differ. In general, the BEA's definition is much more inclusive of different kinds of income than the Bureau's. For example, according to the BEA, Worth PCI in 2000 was \$16,971 (in nominal terms), which is \$2,604 higher than its corresponding Census figure. The personal income of an area is defined by the BEA "as the income received by, or on behalf of, all the residents of the area. It consists of the income received by persons from all sources—that is, from participation in production, from both government and business transfer payments, and from government interest (which is treated like a transfer payment)." For comparison, the definition of income used by the Census Bureau "reflects money income before taxes and does not include the value of noncash benefits such as employer-provided health insurance, food stamps, or medicaid." Here, we use the Census figures for Grant City because PCI from other data sources is not available on a place (i.e., city, town, village) level.

Figure 12 shows a projected increase of \$3,230 in Grant City real per capita income over the next ten years. Grant City per capita income will remain below the expected per capita income for both the State of Missouri and Worth County, if no major additional changes will take place in the community's economy. As mentioned previously, all dollar figures are standardized to 2001 dollars to discount any changes in income caused by inflation.

Income measures are an important part of community's profile. Changes in income can give important indications about the well being of the community. The per capita income indicator is often used to measure both local quality of life and productivity growth in a local economy. Typically, *real* per capita income growth of one percent per year is considered desirable in most areas. The Advisory Panel selected the per capita income growth rate of 2.0 percent (for all the years of the projection) after considerable discussion. The rate chosen by the Panel exceeds the desirable one percent figure. If the growth rate included inflation (i.e., if it were given in nominal terms), the rate would be higher. For example, if inflation were measured at 2 percent per year, the *nominal* per capita income growth would be 4.0 percent.

**Figure 13. Grant City
Total Personal Income (in 2001 Dollars), 1990-2011**

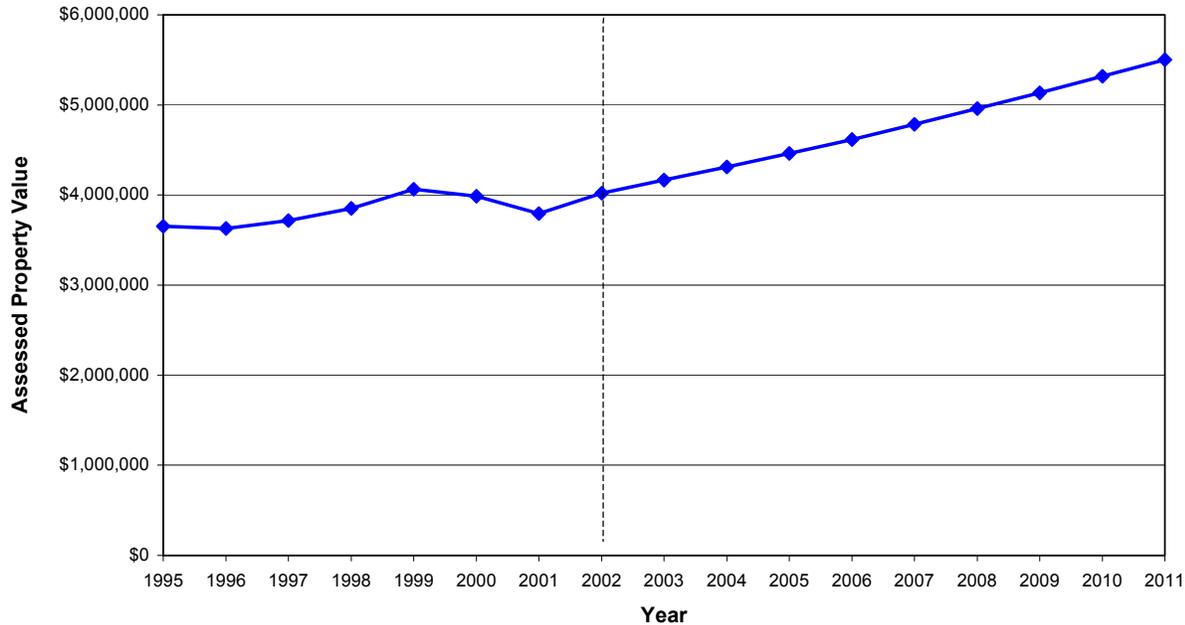


Source: US Census Bureau
Analysis by CPAC

Figure 13 shows the Grant City total personal income (TPI) in 2001 dollars, again in accordance with the Census definition of income. TPI serves as an indication of the size of the local economy, vs. PCI is an indication of growing well-being of individuals. Grant City TPI 2000 increased by 24 percent over its 1990 level (in real terms). In the baseline, Grant City TPI is growing through the projection period at a rate of almost 2.3 percent annually. This growth is the result of the growth in both population and real per capita income in the City.

Because of their direct link to the city financial statement, knowing the levels of assessed property values and total taxable retail sales and in the city can play an important role in the planning process.

**Figure 14. Grant City
Assessed Property Values (in 2001 Dollars), 1995-2011**



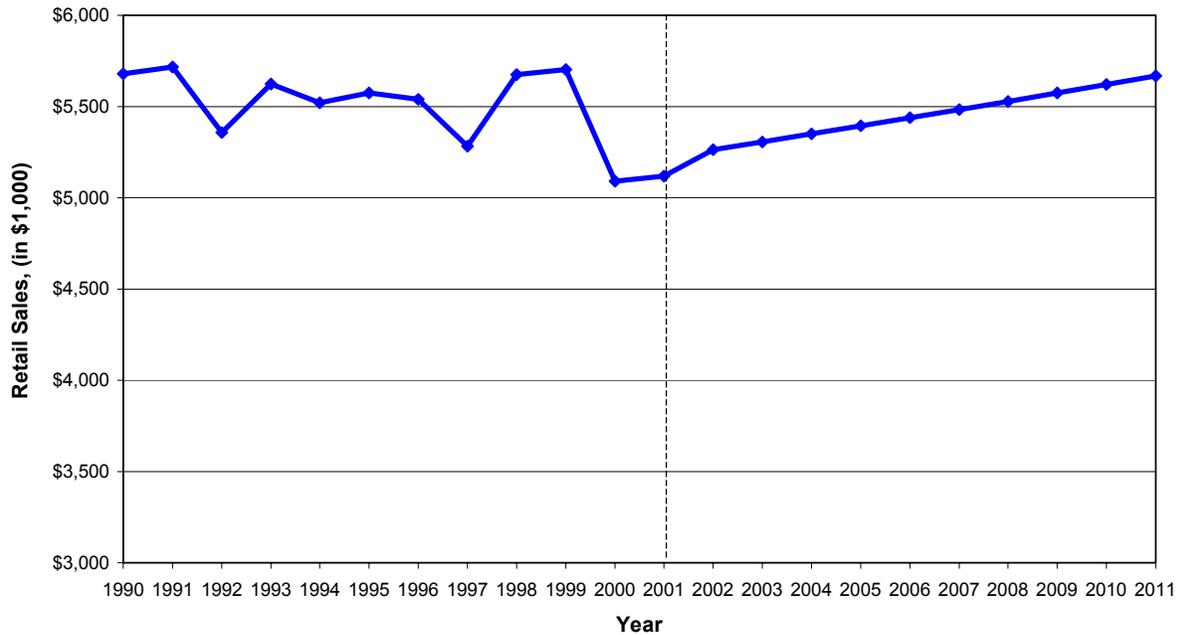
Source: Missouri State Auditor's Office
 Note: Data for Property Values include real and personal property, and utilities.
 Analysis by CPAC

Figure 14 represents the value of assessed real and personal property in Grant City. Between 1995 and 1999, the assessed property value in the city increased by about 11 percent (in real terms). However, between 1999 and 2001, the assessed property value in the city declined by 7 percent (again, in real terms). Note, that in nominal terms, assessed value in 2000 was higher than in 1999, but not high enough to offset the effect of inflation. The Advisory Panel attributed a decline in property values in Grant City between 2000 and 2001 - both in real and nominal terms - to the economic conditions in Worth County during that time. In particular, there was a decline in personal property; and people weren't turning in their assessment sheets on time (thus, there were more than usual delinquencies that year). The closure of the GC Cap Factory in October 1999 also contributed to the decline of total assessed property value.¹⁵ Moreover, Grant City has a lot of homes that are depreciating because of their age and condition; and there is a lack of construction in the city. The assessed property value experienced a 6 percent increase between 2001 and 2002 (in 2001 dollars).

In the baseline, the assessed property value is expected to increase by 4.5 percent annually between 2001 and 2011. The increased valuation is projected as if the reassessment were to take place each year. Actual assessed valuation will vary according to the assessment process. Property reassessment in Grant City takes place every two years.

¹⁵ For further information, call Assessor Carolyn Harley (660)-564-2153.

**Figure 15. Grant City
Total Taxable Retail Sales (in 2001 Dollars), 1990-2011**



Source: Missouri Department of Revenue
Analysis by CPAC

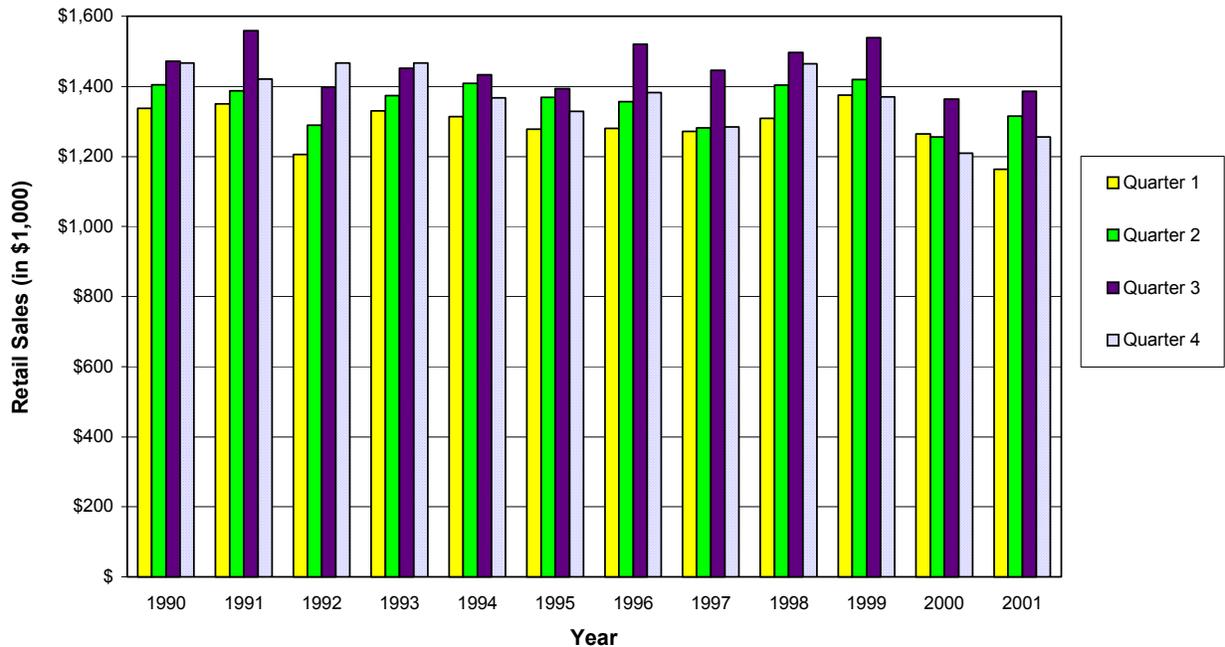
Figure 15 represents the actual and anticipated levels of *taxable* retail sales¹⁶ in Grant City, measured in 2001 dollars. Grant City retail sales appear to be volatile over time. Retail sales declined throughout Missouri during the economic recession in the early 1990s. In general, the growth of retail sales in Missouri is highly correlated with the growth in personal income. However, this correlation is affected by the business cycle. For example, during the 1992 recession, Missouri retail sales declined faster than total personal income, whereas, during economic upturns, retail sales have grown much faster than personal income. This observation suggests that local governments have a challenge in balancing their budgets during economic downturns. It also suggests that retail centers can take certain advantage of these fluctuations during economic boom by expanding/diversifying their retail operations, but will have to be wary of potential losses as the economy slows down.

Between the years 1999 and 2000, city retail sales have declined by approximately 11 percent. According to the Advisory Panel, this decline was primarily due to the closure of the Cap Factory – when the factory was still operating, its workers were buying lunches and groceries in Grant City. Over the next 10 years, taxable sales in the City are expected to grow at an annual rate of almost 1.1 percent. Changes in employment and population size, changes in commuting patterns, and growth in personal income all contribute to changes in retail sales.

¹⁶ According to Missouri statute Chapter 144, RSMo 1986 and 1993 Supplement, sales taxes in Missouri must be paid on the gross receipts of tangible personal property, admission to entertainment and athletic events, utilities, restaurant meals, hotel accommodations, and rental of tangible personal property. There are three major categories exempt from paying or charging sales taxes. First, non-profit or governmental organizations do not pay any sales tax on items that are otherwise considered taxable. Second, businesses that purchase retail items for further resale are also exempt from paying sales tax. Finally, sales tax may not be charged on selected services and commodities, such as medical services, vehicle repair, and household maintenance and repair.

One should keep in mind that nationally, taxable retail sales are a declining portion of personal income, because more and more people spend more money on non-taxable sales, such as services¹⁷ and Internet sales.

**Figure 16. Grant City
Total Taxable Retail Sales by Quarter (in 2001 Dollars), 1990-2001**



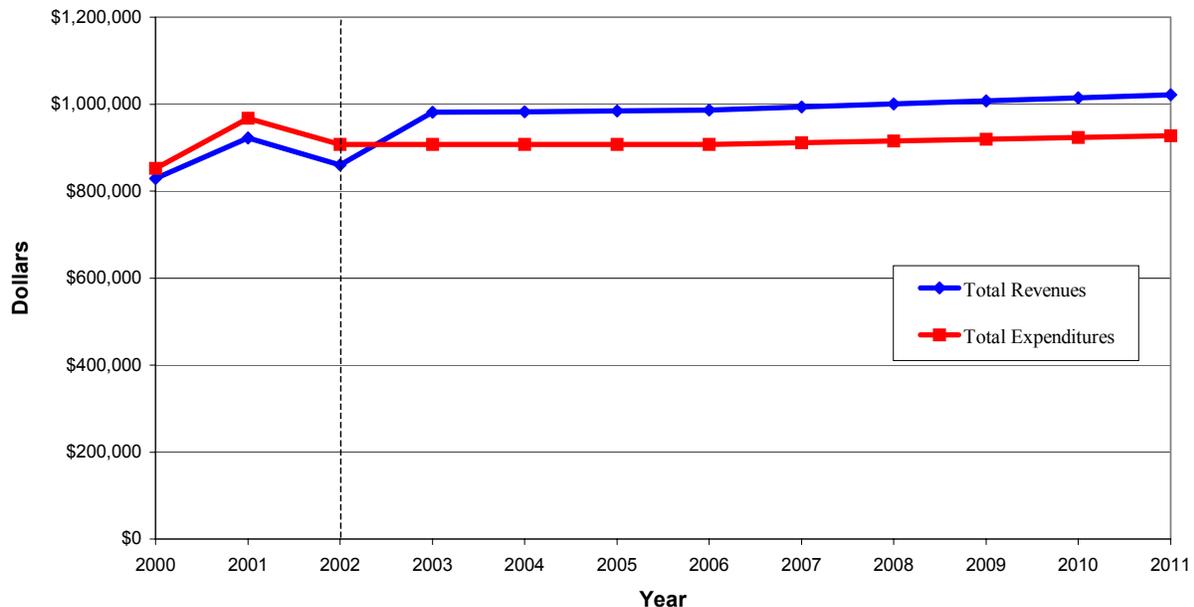
Source: Missouri Department of Revenue
Analysis by CPAC

Figure 16 shows total taxable retail sales by quarter for Grant City for years 1990-2001 in 2001 dollars. The first-quarter retail sales for Grant City appear to be always the smallest (with the exception of 2000), and the third-quarter retail sales – the largest (except years 1992 and 1993), thus displaying seasonality in sales' behavior.

¹⁷ such as legal, health, personal services, etc.

IV. Fiscal Characteristics

**Figure 17. Grant City
Total Revenues and Expenditures (in 2001 Dollars), 2000-2011**



Source: City Clerk

Note: Data reflects governmental and proprietary fund types. Grant City's governmental funds consist of general and special revenue funds. City proprietary funds are represented by the enterprise funds.

Analysis by CPAC

Figure 17 represents the actual as well as the expected growth in total revenues and *demand* for total expenditures for Grant City government in 2001 dollars. In the baseline, total revenues (i.e., revenues from city property tax, sales tax, fines, licenses and fees, as well as from intergovernmental transfers, and other revenues) are expected to increase at an annual rate of about 1.1 percent between 2001 and 2011 (see Baseline Summary Table at the beginning of the report). Note, however, that there was a spike in the actual data in 2001. Thus, if we consider the growth between 2002 (the year for which the most recent fiscal data is available) and the last year of the projection, then the revenues are expected to grow at about 2.1 percent per year. Similarly, the *demand* for public goods and services is expected to grow at a slow annual rate of 0.25 percent between 2002 and 2011.

If the future demand for public goods and services were to grow faster, it might challenge the city government to deliver public services more efficiently, as well as to generate new sources of government revenues.

Note that all Missouri counties receive sales tax revenues two months behind, which largely depends on when the businesses turn in their reports. A similar lag exists for Missouri cities. In practical terms it means that if some businesses in a county decided to "hold on" to their sales tax at the end of the year, then those funds would be reflected in sales tax revenue increase at the beginning of next year.

In conclusion, this report examines current and potential future socio-demographic and economic conditions in Grant City under the assumption that no major changes will occur in the local economy. The report will assist local policy-makers and community residents in understanding the current trends and will serve as a basis for making informed decisions.

Show Me Model and Scenario Development

The Show Me model uses statistically estimated relationships to forecast changes in economic, social, and fiscal conditions for Missouri communities under alternative economic settings. The heart of the model is a series of labor market relationships—the demand for workers (local and nearby jobs), and the supply of workers (local and external labor forces). The labor market module allocates all members of the available labor force between local jobs, external jobs, and unemployment. The fiscal module measures: 1) the costs of providing public services, 2) the demand for public services, and 3) the size of the local tax base. Together these estimates of public costs and revenues lead to forecasts of changes in fiscal deficits or surpluses. The forecasts generated by the model are also shown in a series of graphs for ease of interpretation. The model does not account for changes due to the national business cycle or other macroeconomic effects.

By employing the Show Me model, alternative scenarios can be compared to baseline projections. *Baselines* are typically 10-year projections that assume no changes in policy or economic trends in the community. *Scenarios*, on the other hand, reflect a shock (a real or a hypothetical one) that is expected in the local growth rates of independent variables (employment, external labor force, external employment and total personal income). Questions such as: “Something just happened or is about to happen in our community...what does it mean?” or “How important is this industry to our economy?” can be answered with the creation of a scenario. Both baselines and scenarios are developed collaboratively with residents of the community. The baseline does not represent a forecast of local economic conditions. Rather, it is a tool designed to help decision-makers see local economic activity as a comprehensive system that is both logically consistent and statistically valid.

The basic calculations underlying baselines and scenarios are frequently generated from sources outside the Show Me model. Trend analysis is often used to make preliminary estimates of baselines. Input-output models such as IMPLAN are frequently used to generate estimates of total employment and income changes associated with certain scenarios. These total employment and income changes/effects consist of the direct, indirect and induced effects. *Direct* effects are changes in the industry directly affected; *indirect* effects are changes in inter-industry purchases (ex: inputs); and *induced* effects are the changes in the spending of disposable income.

Once a scenario is created, the employment and income impacts are used as inputs into the baseline model, creating new forecasts for variables included in the model. On the graphs generated by the model, two lines would exist for each variable – one representing the level of the variable with the change, and one – without a change. This process of examining the impact of various policy choices provides a valuable method for community residents to understand the consequences of current trends and alternative policies.

The Community Policy Analysis Center provides objective analysis and policy decision support for Missouri Communities. Located at the University of Missouri-Columbia, CPAC is part of the Social Sciences Unit of MU's College of Agriculture, Food and Natural Resources. Significant funding for the Center is provided by University of Missouri Outreach and Extension.

CPAC scientists work closely with state and local government leaders, local businesses and community groups to provide research and educational programs that will inform key decisions, and assist them in understanding how policy decisions at all levels of government affect their community's quality of life.

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