

## Section 6: Economic Development and Fiscal Impact

*The Economic Development and Fiscal Impact section of the Comprehensive Plan provides background on Insight Research Corporation's Development Simulation Model (DSM) that was used to measure the fiscal impacts of the plans developed for the document. The DSM establishes the basis for the economic modeling that will measure costs and benefits associated with new development applications. Assumptions in the DSM are for demonstration and modeling purposes only. This section describes the purpose, methodology, and results of the fiscal modeling performed by Insight Research Corporation.*

*Just as the 1964 City of McKinney General Development Plan included an Economic Forces section to guide land use decisions, the Economic Development and Fiscal Impact section of the Comprehensive Plan provides a tool for updating the Future Land Use Plan and for making land use decisions in the future. However, the economic models created for the Comprehensive Plan are only one of many factors to consider. Both the economic impact and the impact on quality of life must be taken into consideration when making land use decisions.*

### 6.1 Purpose of Performing a Fiscal Analysis of the Comprehensive Plan

The McKinney Comprehensive Plan functions as a guide for decision makers and as a tool for managing McKinney's economic, social, and physical development for achieving one of the goals of McKinney's Comprehensive Plan, which is economic development vitality for a sustainable and affordable community. To ensure the Comprehensive Plan provides the direction and framework for McKinney to achieve the goal of a sustainable and affordable community, Insight Research Corporation was retained to employ its methodology to measure fiscal implications of changes to the Future Land Use Plan.

While some cities may include generalizations about the impacts of various land uses in their comprehensive plans, the DSM used as part of the City of McKinney's Comprehensive Plan provides three separate analyses to be used in the development of the Future Land Use Plan and in making land use decisions in the future.

- 1) Build-Out Scenario Comparison — A comparison of alternate build-out scenarios provides an examination of impacts at ultimate development as:
  - (a) A percent of residential to commercial acres,
  - (b) Property tax base values in current dollars, and
  - (c) Ultimate tax revenue and total city service cost.

These comparisons are used to test the Future Land Use Plan to ensure, at build-out, a balance of tax base that allows the City of McKinney to provide the appropriate levels of service. This comparison was made at 100% build-out in order to compare the two plans using the same assumptions and at the same level of development. This level of build-out, however, will most likely never be achieved because, as a community approaches build-out and the amount of available land diminishes, development slows considerably. No estimate on the timeframe for achieving build-out was made for either plan.

- 2) **Ten-Year Cash Flow** — A cash flow forecast provides ten years of revenues and expenditures under a projected development scenario, which provides a ten-year projection of city finances based on residential and commercial construction forecasts in contrast with traditional budget forecasting standards of five years. This forecast projects the city’s cash flow and aids in the making of short term adjustments in order to provide adequate city services while maintaining current tax rates.
- 3) **Cost/Benefit Potential Comparison** — The cost/benefit potential comparison measures the impact of different hypothetical land uses on twenty acres over ten years, both in tax revenue generated by a use and in the cost to provide city services. Just as a transportation model is run to determine if the planned road network can accommodate the projected number of vehicles, a fiscal model determines if the projected tax revenue from different zoning classifications can pay for the city services required by that zoning. Furthermore, the cost/benefit potential comparison provides a model for the analysis of future zoning and land use decisions associated with new development. Using this model, the City is able to forecast the taxable value and cost of city services on alternate development scenarios for a property.

The City of McKinney is feeling the pressures of a rapidly growing community where every land use decision has significant impact on the community. The DSM provides a clear, comparative link between future land use and its resulting impact on public finances that allows staff, as well as elected and appointed officials, to make informed decisions that benefit the City of McKinney.

## 6.2 Methodology

The City of McKinney contracted Insight Research Corporation to work with City Staff to customize the fiscal modeling portion of the Comprehensive Plan using Insight’s DSM. The DSM forecasts a community’s future growth under different scenarios, calculating the potential new revenue streams and the related public cost associated with each option.

Data was calibrated and methodologies adjusted specific to McKinney were used to achieve the outcomes of the three analyses, including detailed examination of the following historic values:

- Construction and land use
- Public revenue and expense
- Population and employment growth
- Public service cost:
  - The public service cost is the cost to provide city services per consumer.
  - Two methods were used to calculate public service costs: expansion method and full cost method. Each of these methods is valuable in providing information that is used in different stages of the modeling effort. It is important to understand the differences between the two methods to avoid confusion and misuse.

1. **Expansion Method** — The expansion method of calculating public service cost is used for project-specific cost of service. This method is used

to determine the cost to provide city services to a specific development project. It takes into account only those costs directly attributable to that project and, therefore, is a good measure of the impact of a single land use or zoning decision.

2. **Full Cost Method** — The full cost method of calculating public service cost is useful for citywide modeling and forecasting. This method takes the entire city budget into account, including those costs that cannot be attributed to any one project such as administrative costs and debt service on municipal bonds. Because the full cost method takes into account all costs, it is useful in tracking the city budget to determine if the citywide tax revenue is sufficient to pay for the operating costs of the city government.

Many variables went into the development of the DSM, many of which can be modified over time as conditions change to prevent the model from becoming outdated and to allow examination of different development types. In 2007-2008, Insight Research Corporation completed an update of the DSM for the City of McKinney. Insight's DSM variables can be modified to examine different possible outcomes:

- Population Forecasts
- Public Employment Forecasts
- Household Size
- Assessed Values of Land and Improvements
- Sales Taxes from Retail Sales
- Building Permit Revenues
- Future Land Development by Type and Value
- Local Construction Cost
- Allowable Zoning Densities
- Future Capital Needs
- Principal and Interest on Debt Service

The following are the methodologies used for the three (3) specific analyses developed for the Comprehensive Plan update:

- 1) **Build-Out Scenario Comparison** — The comparison of the proposed Future Land Use Plan with the 1990 Future Land Use Plan was completed by preparing value assumptions specific to the City of McKinney.

Staff was directed by City Council to honor existing development and zoning, so the acres of developed land uses and existing zoning were grouped into land use categories and held constant for both future land use plans. Since the existing development and zoning was the same in the two plans, the area that needed to be analyzed and compared was the land within the city limits currently zoned as Agriculture and the undeveloped property in the extraterritorial jurisdiction (ETJ).

The 1990 Future Land Use Plan was divided into the land use categories based on the area shown on the plan. The proposed Future Land Use Plan was divided based on the percentages for each land use allowed in each land use module.

Results from the build-out scenario comparison included the taxable value of the land uses allowed by each plan at a theoretical 100% build-out, the cost to provide city services to those uses, and the balance between the taxable value of residential and commercial uses for each plan.

- 2) Ten-Year Cash Flow — The ten-year cash flow was completed using ten-year city generated estimates the annual residential and commercial land development expectations. The tax revenue for each land use was calculated for each year based on the growth assumptions, and the public service cost was calculated using the full cost method in order to measure the effect on the total city budget.
- 3) Cost/Benefit Potential Comparison — The cost/benefit potential comparison measures the tax revenue against the expansion public service cost to determine the impact various land uses have on the finances of the City. The assumptions that are built into the DSM include the construction and employment estimates specific to the City of McKinney plus the proprietary databases of Insight Research Corporation.

### 6.3 Results

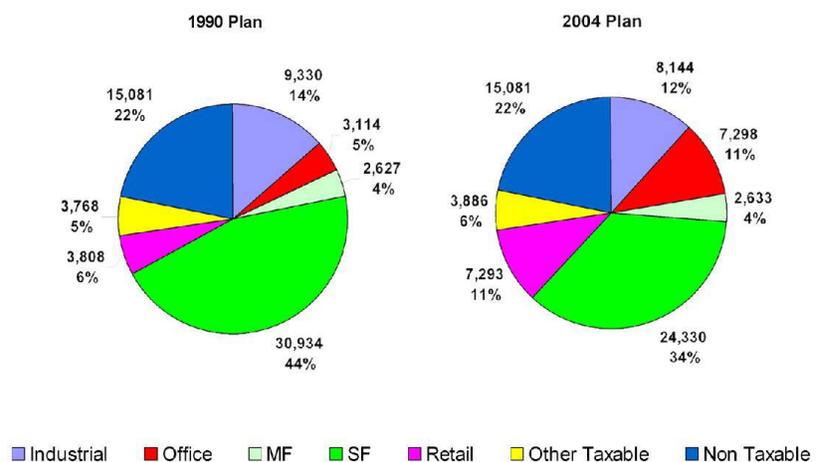
#### 1) Build-Out Scenarios

In 2004, Insight Research Corporation performed a comparison of the new 2004 Future Land Use Plan with the Future Land Use Plan previously adopted in 1990 in the areas of acreage of land uses, property tax value, and ultimate revenue to cost results.

The 2004 Future Land Use Plan reduced the number of acres devoted to single family residential from approximately 30,000 acres to about 24,000 acres. These acres were redistributed primarily to retail and office uses. Much of this was in response to the future Collin County Multi-modal Transportation Corridor that crosses the northern portion of McKinney’s ETJ.

The shift of roughly 6,000 acres of land from residential was a key reason for a corresponding shift in taxable value. The new Future Land Use Plan had a potential

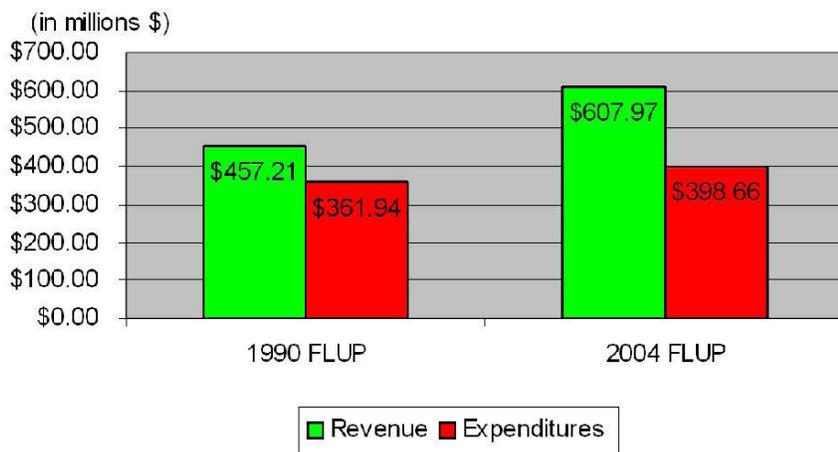
*Figure 6.1: Total Acres by Use - City Limits and ETJ  
1990 and 2004 Future Land Use Plan  
City of McKinney, TX*



taxable value of 60 billion dollars, almost six billion dollars, or about 11% more than the 1990 Future Land Use Plan.

Using the potential taxable value of each of the Future Land Use Plans, potential revenue from property tax, sales tax, franchise fees, development fees, and other revenue sources was determined. Using computations of public service costs, Insight Research Corporation also calculated expenditures, or the cost of providing city services to the land uses at build-out. The 2004 Future Land Use Plan had a potential for over \$650 million in city tax revenue, up from approximately \$480 million in the 1990 plan, a 35% increase.

*Figure 6.2: City Revenue & Expenditure Forecast  
Hypothetical Build-Out of all Acres*



Some areas of the Future Land Use Plan may or may not develop as shown on the Plan. For example, the northernmost east-west commercial corridor is dependent on the construction of the Future Collin County Multi-modal Transportation Corridor (also known as the Outer Loop). In 2006, due to a change in the alignment of the Outer Loop by Collin County, the City of McKinney approved an amendment to the Future Land Use Plan in the area to the southeast of the City of Weston. The change shifted the alignment of the corridor approximately one (1) mile to the north of the alignment that had been shown on the 2004 Future Land Use Plan. Now, as a result, McKinney's ETJ in the area to the southeast of Weston no longer shows a transportation corridor and the Future Land Use Plan in that area has been changed from primarily commercial to residential uses, resulting in a dramatic effect on the balance of future tax values. Based on the 2007-2008 update of the DSM performed by Insight Research Corporation, the 2006 amendment to the Future Land Use Plan (precipitated by the change in the Outer Loop alignment) resulted in a reduction in the percentage of taxable commercial values at build-out from 66.5% to 58.5%. See Figure 6.3 below.

*Figure 6.3: Maximum Build-Out Full Development Simulation  
Modeling Comparison of Potential Taxable Values*

2002 CITY LIMITS & ETJ Maximum Build-Out 2004 Comprehensive Plan				2007 CITY LIMITS & ETJ Maximum Build-Out 2004 Comprehensive Plan with 2006 Amendment			
	ACRES	VALUES (In Billions)	% of Value		ACRES	VALUES (In Billions)	% of Value
Residential	26,962.7	\$20.0	33.5%	Residential	35,938.5	\$28.4	41.5%
Commercial	26,620.8	\$39.7	66.5%	Commercial	21,699.1	\$39.9	58.5%
<b>Total</b>	<b>53,583.5</b>	<b>\$59.7</b>	<b>100.0%</b>	<b>Total</b>	<b>57,637.6</b>	<b>\$68.3</b>	<b>100.0%</b>

Additionally, the area immediately to the east of the East Fork of the Trinity River is designated as Industrial in the 2004 Future Land Use Plan (and in the 1990 Future Land Use Plan), but that area faces many obstacles to the development of industrial uses. At some time in the future, when a detailed study of that area is completed or as development pressures dictate, that area could also resort to a residential land use pattern. Such a change would also have a dramatic effect on the balance of taxable values. Nevertheless, the purpose of the DSM is to measure the Future Land Use Plan as depicted, and any changes to the Future Land Use Plan must be modeled as they are proposed in order to fully understand the fiscal impact.

### 2) Ten-Year Cash Flow

A ten year cash flow analysis provides the City with a reasonable projection of its finances over the next ten years. Based on assumptions about the growth of residential and commercial development in the city, the ten-year cash flow analysis reinforces the importance of the development of the commercial tax base. Due to the conservative nature of the DSM, the output of the cash flow model shows the cost of providing city services constantly above the tax revenue generated by the projected land uses. The cash flow analysis is not intended to provide exact data on future city budgets but, instead, shows a trend of rising city costs created by rapid residential development.

### 3) Cost/Benefit Potential Comparison

Hypothetical land uses on twenty acres were measured to determine the cost to provide city services and the potential tax revenue for the City. The results of the Cost/Benefit Potential Comparison include both the expansion cost and the full cost methods of determining public service cost. Breakdowns of the cost/benefit comparison for both the expansion and full cost methods are included in the Data Sets and Public Presentations Report that accompanies the Development Simulation Modeling for McKinney.

*Figure 6.4: Comparison of Cost/Benefit Potential Development Alternatives for a 20-Acre Tract Over 10 Years  
City of McKinney, TX*

