Section 7: Land Use Element

Land uses are affected by the decisions of individuals, private groups, and public bodies. These include property owners, real estate investors and developers, local residents, City Council, City Staff, local boards and commissions, school districts, county government, the North Central Texas Council of Governments, utility providers, and even state legislators. Land use also affects many decisions facing the community, from where to locate a new home or business, to where to build a road, to the size of a sewer line, to how many elementary schools to build, to projecting the fiscal health of the City, to how to provide water for the area in 50 years, etc.

This section of the McKinney Comprehensive Plan serves as the basis by which the City of McKinney makes land use decisions. This includes the City Council, the Planning & Zoning Commission, and City Staff. This element also serves as the basis for many other plans - water & sewer master plans, thoroughfare plan, parks plan, etc. Because this plan affects so many other plans, changes to it need to be carefully considered.

In addition to serving as a guide for decision making, the land use element serves as the foundation for zoning and subdivision regulations as well as the Capital Improvements Program (CIP).

The pattern of land uses proposed by this element is consistent with the goals and objectives of the Comprehensive Plan and is intended to lead to the type of community desired by the citizens. In developing the element, the goals and objectives had to be balanced and compromises had to be made where one goal conflicted with another. For example, some land uses conflict with one another if in close proximity, yet without both of them, the city's tax base is unbalanced. Weighing the goals to find a balance through compromise and creative solutions will be key when making decisions based on the various plans which make up this element.

The land use element is comprised of text as well as maps that graphically illustrate the concepts of the plan. These include the existing land use plan and the future land use plan element. The future land use plan element includes the future land use plan module, the future land use plan, definitions, the land use table, the locational criteria, etc. Caution should be used so as not to rely too heavily on any one component of the plan.

The entire section, and to some degree the entire Comprehensive Plan, should be referenced when making a decision. To focus on only one statement in the plan or one aspect of a map leads to an incomplete understanding as to the overall goals and objectives of the plan.

Like the entire Comprehensive Plan, the land use element of the plan applies to an area larger than the city limits. The planning area includes the city limits and the City's extraterritorial jurisdiction or ETJ. Though the City's zoning authority extends only to the city limits, many decisions the City makes affect land use throughout the entire area. These decisions include the approval of subdivisions, the construction of public infrastructure, and the expansion of the city limits.

Land use affects many decisions facing the community, such as where to locate a new home or business, where to build a road, determining the size of a sewer line or how many elementary schools to build, projecting the fiscal health of the City, and how to provide water for the area in 50 years, for example.

7.1 Existing Land Use

The existing land use map, along with the zoning map, were shown with a great degree of deference when the land use element and the future land use plan were developed. The existing land use map indicates the uses of property. This map was developed over time using the state tax codes, which are provided by the Collin Central Appraisal District for all parcels of land. This was supplemented through the review of a recent aerial photo, field verification, and grouping of land use types/categories. Changes and modifications were then made as necessary. This information allowed for a database to be created regarding the amount of each land use in the City.

A map showing the existing zoning, excluding "AG" - Agricultural zoning, for undeveloped areas was created to supplement the existing land use map. These areas, although not developed, have existing zoning and development rights. The City Council determined early on to try to honor zoning already present as much as possible and directed staff to consider this when developing the future land use plan. When the zoning of an existing parcel or area significantly conflicts with the goals of the Comprehensive Plan, the City may find it beneficial and necessary to consider rezoning the property into a district (or districts) that better conforms to the goals of the plan.

A review of McKinney's existing land use map and associated land use database served to focus discussion of existing land use issues and how land should be used in the future to continue the positive aspects and mitigate the negative aspects. This review also allowed for an analysis of the factors, both local and regional, which led to the existing land use pattern. This provided insight into which of those factors are anticipated to continue impacting land use. We can also begin to distinguish those factors the City can influence from those the City cannot. The plan can be implemented via the City's regulatory powers and is not dependent on factors beyond the City's control.

Table 7.1: Existing Land Use (2003)

Category	Type	Approximate Acreage	% of Existing City Limits
Undeveloped	Agricultural/Vacant	+/- 22,400 Acres	59%
Developed Open Space	Golf/Private Open Space/Parks	+/- 2,700 Acres	7%
Residential	Single Family/Multi-Family/Townhomes & Duplex	+/- 7,200 Acres	19%
Commercial	Retail/Office	+/- 1,900 Acres	5%
Industrial	Industrial	+/- 1,100 Acres	3%
Public/Semi-Public	Government/Airport/Schools/Utility/ Right-of-Way	+/- 1,900 Acres	5%
Other	Other Uses	+/- 80 Acres	2%
Total Acreage		+/- 37,280 Acres	100%
Extraterritorial Jurisdiction (ETJ)		+/- 36,000 Acres	--

Existing Land Use Table (2003)

The Existing Land Use Table (2003) lists the seven categories of existing land uses, some uses in that category, the approximate acreage of each category for the City limits, the total acreage for the City limits and ETJ, and the percentage of each category for the City limits. The data is as of January 2003.

Existing Land Use Descriptions - 2003

The existing land use map indicates 17 types of land uses. It is anticipated the land designated as agricultural will develop as some other type of use in the future. Although floodplain is shown on the existing land use map, it is not considered a land use type. The floodplain designation overlays a base designation of another land use. The most common designations are vacant and agricultural, given the limited ability to develop land within the floodplain. The following are brief descriptions of each land use type.

Agricultural - Land used for agricultural uses.

Vacant - Undeveloped land and including vacant lots within developed residential and commercial subdivisions.

Golf Course - Public or private golf courses and driving ranges.

Parks - Open space amenities for both active and passive recreation. This category includes sport facilities, open space, playgrounds, recreation centers, and aquatic facilities. It does not include private neighborhood recreation centers.

Private Open Space - Preserved open space under private ownership, including common areas, nature preserves, and private neighborhood parks and recreation facilities, that does not have the ability to be further developed.

Single-Family - Residential development with one detached unit per lot.

Townhouse & Duplex - A single-family dwelling unit on one lot attached to another dwelling unit on a separate lot on one or two sides. A duplex can also be two attached units on a single lot.

Multi-Family - Residential development with multiple units on one lot, or two or more attached units on separate lots. This category includes apartments, three-plexes and four-plexes.

Retail - Commercial development providing goods for sale, such as a grocery store, drug store, restaurant, or department store. Some service providers and offices are grouped with retail when located in a shopping center.

Office - Commercial development providing services for sale such as an accountant or a physician, or providing general office and administrative uses.

Industrial - Commercial development devoted to the processing of raw materials and/or the production of goods and/or wholesale storage of goods.

Government - Includes all developed properties owned by government entities, except public parks including buildings, post offices, jails, etc.

Airport - Land used for an airport both private and government owned.

Schools - Land used for educational uses, both public and private, ranging from kindergarten to high school.

Utility - Land owned by and/or used by public utility that provides for the transfer of utilities, such as transfer stations. This does not include overhead lines or underground pipelines.

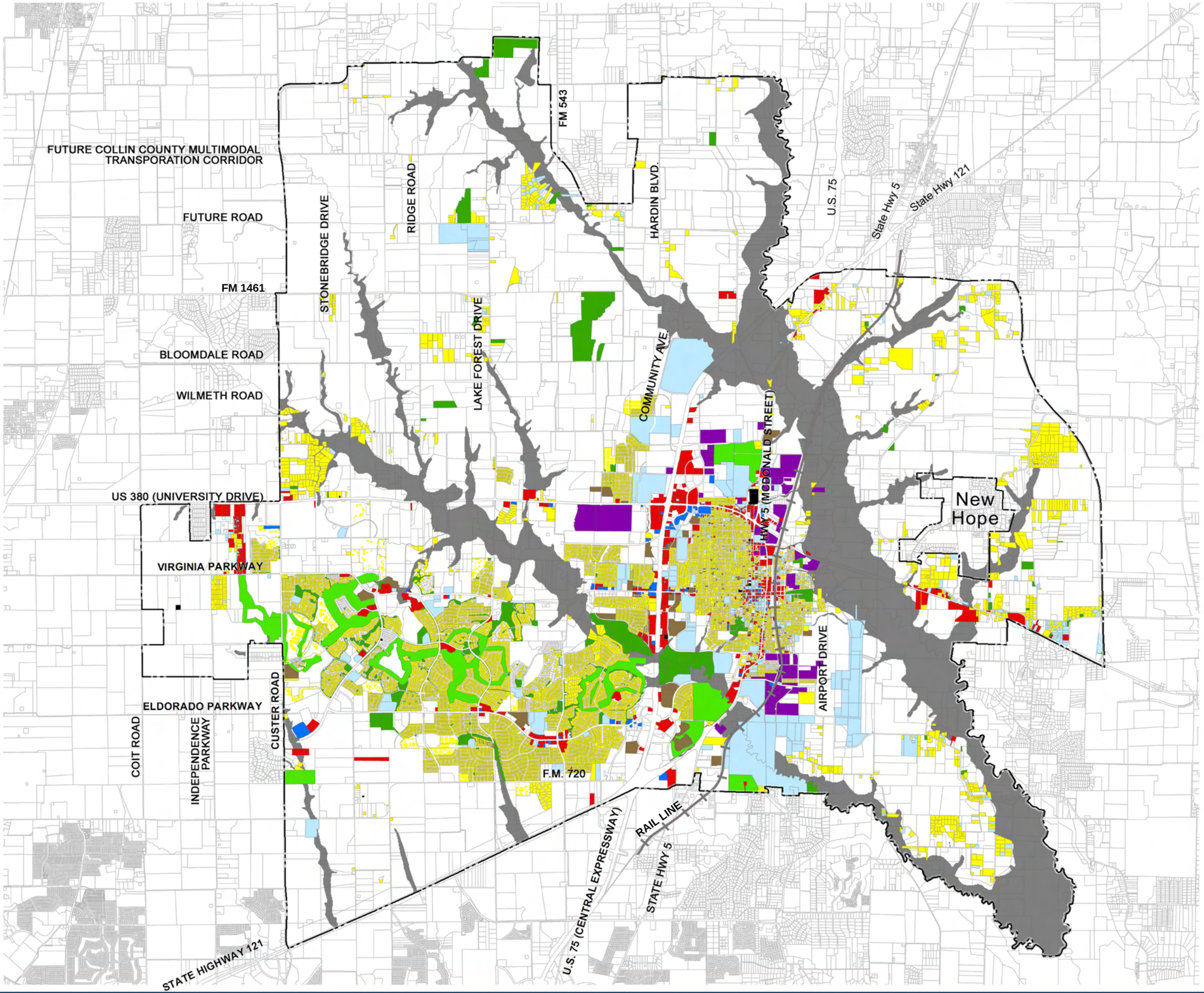
Right-of-way - Land set aside for use as roads and alleys.

Other - Land used for uses other than those categorized above. Primary uses in this category are tax exempt, and include churches, non-profit uses, heritage farms, cemeteries, and institutions of higher learning.

Existing Land Use Map - 2003

The following graphic depicts the existing land use inventory within the City of McKinney and its ETJ. This map is developed using the state tax codes, which are provided by the Collin Central Appraisal District for all parcels of land. This land use inventory was verified using 2003 aerials and accompanied with field observations by McKinney City Staff. The foldout map was developed by City of McKinney GIS personnel and HNTB planners.

EXISTING LAND USE



LEGEND

- Floodplain
- Golf Course
- Parks / Open Space
- Institution (Schools, Government, Church)
- Industrial
- Retail
- Office
- Single Family
- Multi-Family
- Private Utilities

Source Date: March 2003
Source: City of McKinney GIS Department Data

22 March 2004

FIGURE 7.2

1 Square Mile

100 Acres

Feet
0 3,500 7,000

URBAN DESIGN + PLANNING HNTB DALLAS TEXAS

Planning, Civil Engineering, Urban Design, Landscape Architecture & Consensus Development

7.2 Future Land Use System

The future land use system is a major component of the Comprehensive Plan. It is comprised of maps and text indicating the desired use of land. The use of land is a significant part of the community's vision for the future. It is from this plan that other future plans are based and decisions are made. The thoroughfare plan and water and wastewater master plans are all developed from assumptions based upon the type, location, and intensity of development indicated by the future land use system. The future land use plan should be referenced when considering development proposals and the location of public facilities.

McKinney System

The future land use system for McKinney is slightly different from most plans in that it has two maps working together to plan land uses. These two maps are the **McKinney Future Land Use Plan** and the **McKinney Future Land Use Plan Module Diagram**. This system developed as a solution to the problem of trying to plan for all areas of such a fast growing, rapidly changing community. This pace of growth can cause the plan to quickly become less effective as a planning tool. At the same time, the City has a need to plan for its future and a desire to affect the type of community becomes. The combination of the two maps, and supporting text, create a plan with both a clear direction for future development and enough flexibility to respond to changing conditions.

The first step in the development of the plan was an initial review of the current land use map. As part of this effort, factors that have influenced the way McKinney has developed over time were studied. A development suitability analysis was done in order to gain an understanding of features that will influence future development. As the Comprehensive Plan process continued, the goals and objectives were developed and input was received on the city form scenarios. These became the base for documenting the vision of the community and creating a future land use plan.

The most significant challenge to creating the future land use plan was making the plan flexible enough to deal with changing market conditions over a long period of time. With no reliable way to predict market conditions within that long period, the plan has been designed to accommodate a range of possible conditions. It was decided that long range land use plans for such a large area are best when they avoid setting specific details, such as the size and location of commercial properties, and instead provide a range of acceptable options. When a specific development is proposed, the market conditions present at that time can be considered, and the best option within that range can be chosen.

A series of criteria for future development were created to evaluate development proposals. Other aspects were left to the market to determine. These ideas were further refined and developed to create the future land use system for McKinney.

Components

McKinney's future land use system includes three important components that work together and are interdependent. These components are the **Future Land Use Plan**, the **Future Land Use Plan Modules Diagram**, and the **supporting text**.

Future Land Use Plan

The future land use plan map is a graphic illustration of the general land use type mix desired by the City for the entire planning area. It should be noted that the colors shown on the map do not correspond to a particular zoning district and each color designation or module may allow for a range of uses. **This map should be used in conjunction with the module map and the accompanying text, including flexibility factor and locational criteria to assess the types of land uses to be allowed in a particular area.**

The map includes both bold and pastel colors. The bold colors distinguish areas with limited existing development and/or zoning from areas having significant development or zoning, which are represented by the pastel colors. A generalized alignment of major roadways is shown on this map to serve as a point of reference. Refer to the transportation element and thoroughfare plan for information about the location and size of roadways. An examination of the water and wastewater master plans, the parks and open space plan, and hike and bike trail plan should also occur when utilizing this map.

Future Land Use Plan Modules Diagram

The future land use plan module diagram breaks the City and ETJ into 64 planning areas or modules. Each module is characterized by one of eleven dominant or primary land use types indicated by a particular color and land use code (SM - Suburban Mix - yellow, I - Industrial - purple, etc.). Within each module, a variety of land uses are allowed based on its land use mix and locational criteria, which are included as part of the supporting text. Modules that have significant existing development and/or zoning are cross-hatched to distinguish them from modules with less development and/or zoning. This is necessary as the land use mix and locational criteria function differently based on the additional constraints found in these more developed areas.

The boundaries of the modules were determined by natural and man made features such as rivers, creeks, roadways, zoning, and existing land uses. The size of the modules was determined based on the above features, infrastructure/service needs (in the case of Suburban Mix modules the ability to support one elementary school; however, with the final consideration focused on the number of elementary schools being based on density and household size), and the ability to absorb that particular land use types mix of uses.

Supporting Text

In order to utilize the future land use plan and the future land use plan module diagram, the supporting text must be taken into consideration. The supporting text includes the individual module sections, the locational criteria, and the module tables. To some degree, this entire chapter should also be referenced.

The module descriptions include an introduction and a definition of each of the 11 modules. Each individual module section includes an overview, a land use table, a land use description, community form, and locational criteria.

The future land use plan modules table is a record of the land uses percentage and acreage for each module type, which is used to track development in each module. It will be updated on a regular basis as property is zoned and development occurs.

The Process for Utilization section is the "How to" section, describing how the various text components and the two maps are used to make land use decisions and respond to and act on request for zoning changes and plan amendments.

Process for Utilization

There are two processes for utilizing the future land use system, one for areas having significant zoning and development and one for areas that do not. These more developed areas are distinguished on the future land use plan map and the future land use plan modules diagram by pastel colors and cross hatching. The process for more developed areas places more importance on the existing development pattern, not exceeding the existing (or currently planned) infrastructure capacity, and providing transitions between uses. The process for less developed areas puts greater importance on achieving a balanced mix of uses and building the desired city form throughout the module.

Additionally, city policies relating to specific land use types or areas of the city should be utilized in conjunction with this section. The Multi-Family Policy, which was in effect at the time of this update, is incorporated as part of the Comprehensive Plan and is included in the appendix. The Multi-Family Policy should be considered when reviewing any zoning requests for multi-family uses. The Multi-Family Policy discusses various regulations to limit the amont and location of multi-family uses. The ultimate goal of the Multi-Family Policy is to create a 10% city -wide cap on multi-family units. Other specific city policies, as they are developed, should likewise be included when land uses or classifications are being considered.

Significantly Developed Areas

Although not necessarily infill or redevelopment, much of these areas includes property already developed and/or zoned for development. To a large degree, it is assumed that property will develop within the range of land uses allowed by the current zoning. As a result, the future land use plan map designates these areas as it is anticipated that they will develop based on the existing zoning or the adjacent land uses. This was done so that infrastructure could be sized and public facilities could be planned for the most likely uses. That being said, there will clearly be cases where a different set of land uses is not only acceptable but is desirable for economic, land use compatibility, and balanced land use mix reasons. However, the new zoning requested should not contradict the desired existing and anticipated development pattern.

Each rezoning request must be weighed against the goals and objectives of the Comprehensive Plan to determine the degree to which the request is in keeping with or in conflict with them. In most cases, each request will be in keeping with some and at odds with others. In reviewing zoning requests, the positive effects (ones that meet the community's goals) must be weighed against the negative effects (ones that are neutral or contradictory to them). The following is a list of some of the factors to consider:

- Specific Area Plans or Studies: In some cases a more detailed analysis of a particular area may have been conducted, and a specific plan for a neighborhood or area may have been adopted. This plan should be referenced when evaluating land use questions within an area covered by the plan. The plan should be built upon the Comprehensive Plan and provide additional details about the area's goals and expectations.

  The following specific area plans and studies have been completed: Regional Employment Center Study (March 2003), Town Center Study (March 2008).

- Impact on Infrastructure: The water master plan, wastewater master plan and master thoroughfare plan are all based on the anticipated land uses as shown on the future land use plan. Any change in zoning, which will alter the type or intensity of land uses, should also evaluate the degree to which these plans are impacted. It will frequently be necessary for the applicant to conduct a study to determine the effect of the change on the system. This study will be conducted under the supervision of City Staff. Changes should not be approved when there is anticipated to be inadequate capacity and no acceptable method of providing the additional capacity required. Solutions, which negatively impact the level or quality of service, increase costs to the city, or unfairly burden neighboring land owners, are unacceptable. When a proposed potential development would utilize more capacity than is planned, special consideration should be given.

- Impact on Public Facilities/Services: Public services include schools, fire and police, libraries, parks, and sanitation services. Similar to infrastructure, public facilities/services are planned for based on the anticipated land uses. Unlike infrastructure, the negative impacts on public facilities/schools may not be felt immediately. This should not lead one to believe they are any less real. In many instances, the negative implications can be more severe.

- Lack of Compatibility with Existing and Potential Adjacent Land Uses: It is important to have appropriate transition of land uses. However, it will not always be possible to create the most ideal transition between land uses, given current development patterns. Careful consideration should be given to ensure that an acceptable transition is provided. In some cases, specific design elements may be used to mitigate some of these impacts.

- Economic Impact: When weighing the economic impact of a particular land use decision, it is important to weigh not only the short-term implications but also the long term fiscal implications. Although the tax benefits of developed property are positive, undeveloped property has very little cost to the City and school districts for services. A realistic expectation that the property will be able to develop at some point in the future is important. Economic modeling should be done to quantify the fiscal implications. As part of the modeling, assumptions must be made. Although in individual cases, some of the actual costs and benefits may differ, to deviate in a particular case can be problematic. Most often, applicants will have a tendency to emphasize the factors which positively impact the model, causing the results to be skewed and less reliable.

- Over Concentration of a Use: To allow for an over-concentration of a particular land use type sometimes creates long-term problems. An over-concentration is a situation where it can reasonably be expected that many of this type of use will not be viable in the future. That being said, a great deal of deference should be shown to the market to determine the appropriate mix. Economies change over time, and many of these changes cannot be predicted. To try to predict these changes and develop solutions may overly constrain the free market. In cases where there is a concern that an over concentration may occur, the goals and objectives of the plan for the type of community that is desired must be considered and applied cautiously.

Areas with Minimal Development

These areas are characterized by very little existing zoning and limited development other than sparsely scattered estate type development, which has generally occurred over time. Much of the land is still used for agricultural purposes and, in many cases, has not yet been incorporated into the City limits. Although existing land uses should be considered when making land use decisions, an assessment should occur as to whether it is anticipated that those uses will be viable in the long term. The impact of the timing of different types of land uses on future land uses should be considered when making a decision to zone land even for a use allowed within a module.

- Conformance with Desired Land Uses Mix: The percentage mix of land uses within the modules was developed with the goals and objectives of a Comprehensive Plan in mind. This was done for a number of reasons: to plan for infrastructure and public facilities, to achieve a desired mix of land uses, which has economic and quality of life implications. The range of uses provided allows for an acceptable level of flexibility. A proposal for a land use mix beyond the acceptable range should be considered as a request to amend the Comprehensive Plan. Only by reviewing that part of the Comprehensive Plan can all the issues and implications of the proposal be given proper consideration.

- Locational Criteria: The locational criteria provide a guide as to where uses should be located in relation to major roadways, adjacent uses, public facilities, etc. It is understood that some uses require greater visibility from major roadways, a greater ease of access, etc. Certain uses are better able to incorporate natural features as an amenity. Planning for an appropriate transition between uses is important in providing for the quality of life expected by the community. Each module type has a unique set of locational criteria appropriate for that module's land use mix.

- Compliance with Community Form: The community form section describes the character of the built environment in each module. Proposed rezoning requests should be considered in the context of the descriptive narrative of the Community Form. While the land use mix and locational criteria sections are more related to the type of land use, the community form deals more with the way that development relates to the built environment. Community form is the fabric binding the various uses together to foster a sense of place.

- Impact on Infrastructure: The water master plan, wastewater master

plan and master thoroughfare plan are all based on the anticipated land uses as shown on the future land use plan. Any change in zoning, which will alter the type or intensity of land uses, should evaluate the degree to which these plans are impacted. It will frequently be necessary for the applicant to conduct a study to determine the effect of the change on the system. This study will be conducted under the supervision of City Staff. Changes for which there is not anticipated to be adequate capacity and no acceptable solution is proposed should not be approved. Solutions, which have a negative impact on level or quality of service, increased costs to the city or unacceptable implications for other landowners, should not be allowed. When the proposed potential development would utilize more capacity than is planned, careful consideration should be given.

- Impact on Public Facilities: Similar to infrastructure, public facilities and services (schools, fire and police, libraries, parks, and sanitation services) are planned for based on the anticipated land uses. Unlike infrastructure, the negative impacts on public facilities/schools may not be felt immediately. This should not lead one to believe they are any less real. In many instances, the negative implications can be more severe.

  To help establish appropriate fire insurance premiums for residential and commercial properties, insurance companies need reliable information about a municipality's fire protection services. The Insurance Services Office (ISO) - an independent statistical, rating, and advisory organization that serves the property/casualty insurance industry - provides that information through the Public Protection Classification program. ISO collects information on a community's public fire protection, such as the available water supply in the area and its emergency communication facilities and analyzes the data using the Fire Suppression Rating Schedule. The Fire Suppression Rating Schedule is broken down into the following components:

  - 10% - How well the fire department receives and dispatches fire alarms
  - 50% - How well the fire department compares to ISO standards
  - 40% - How well the city's water supply compares to the ISO standards

  In Texas, an extra 5% may be added to the final calculations as a result of Texas Exceptions to the Fire Suppression Rating Schedule.

  ISO then assigns a Public Protection Classification from 1 to 10. Class 1 represents exemplary public protection, while Class10 - the worst rating - represents less than minimum recognized protection.

  According to the McKinney Fire Department, McKinney has a current Public Protection Classification of Class 4, with the last inspection being performed in 1990. In 1990, these exceptions added sufficient points to McKinney's final score, moving the City's score from Class 5 to Class 4. Rating inspections occur approximately every 12 to 15 years, and McKinney will be requesting a reclassification inspection in the second half of 2009. For comparison purposes, other cities in Collin County have the following Public Protection Classification:

  Allen - Class 2

Frisco - Class 1
Plano - Class 1
Richardson - Class 2
Wylie - Class 1

ISO is not the only system that insurance companies use to determine the fire insurance rates charged by a particular insurance company in a community. ISO is the rating company used by most insurance companies to determine the cost of fire insurance. A lower ISO rating in McKinney would have differing impacts of different types of buildings in McKinney. Generally, a lower ISO rating will result in a lower insurance cost for nearly every building in the City.

- Compatibility with Adjacent Land Uses: The issue of compatibility is addressed indirectly as part of the development of the land use mix, locational criteria and compliance with urban form sections and should be consulted when evaluating a zoning request. The specific circumstances should be considered but with the understanding that land use mix needs to be considered in the context of the entire city and the Comprehensive Plan as a whole.

- Timing of the Zoning Request: Many of the modules allow a range of uses. It should be understood that land should be zoned for a secondary use only when it will not impact the ability of the primary land use to develop. In modules designated for regional commercial or office park, it may be necessary to delay the zoning on land for residential uses as the residential uses may preclude or hinder the primary commercial uses from developing. The nonresidential development pattern may need to become established, along with infrastructure such as road alignment, before it can be determined where the residential uses should be located. In some instances, residential may serve as infill development where appropriate.

7.3 Future Land Use Plan Component

The future land use plan map is one of two maps comprising McKinney's future land use system. The text in this portion of the section is designed to support the map, by providing a table of the uses shown on the map and definitions of the uses.

Future Development Patterns

For the purpose of future planning efforts, the planning area has been divided into seven (7) sectors - the Town Center, the Regional Employment Center, the West Side, the Northwest Side, the Southeast, the Northeast, and the Northern Corridor. It is anticipated that the City will continue to conduct more specific sector studies to provide for a closer study of these areas and to plan for their development on a more micro level. These areas were created based on natural and man made features that create boundaries, the time or era of development, a common development or land uses characteristic, or a proposed unique feature.

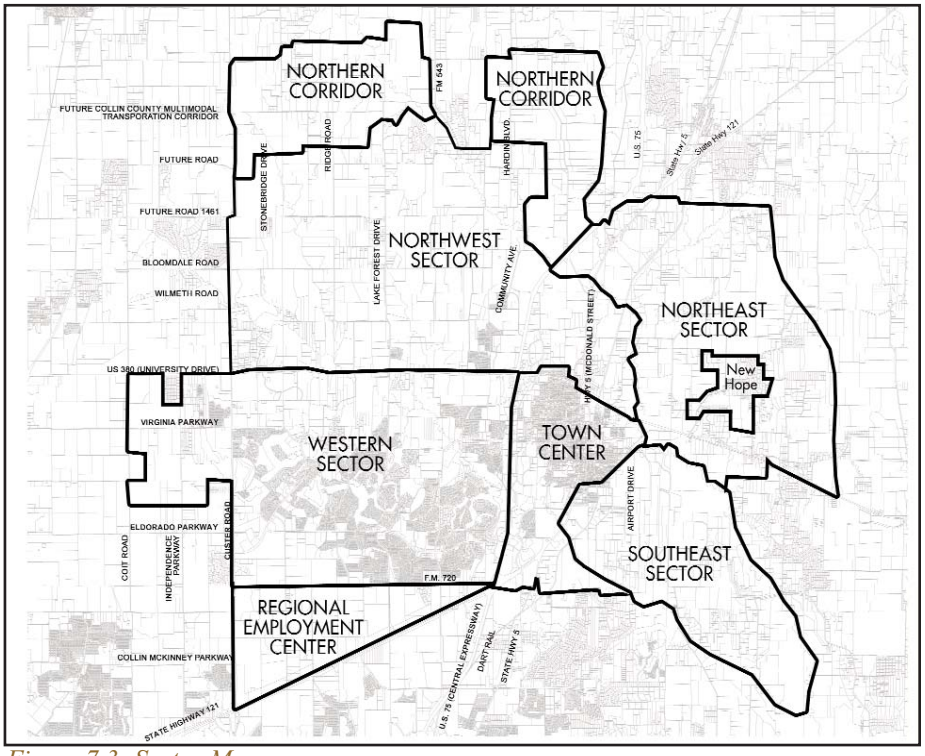


Figure 7.3: Sector Map

1. Town Center - This is a holdover designation from the 1990 Comprehensive Plan. The town center extends generally from US Highway 380 on the north to Elm Street on the south, US 75 on the west to the East Fork of the Trinity River to the east. This area includes the oldest developments in McKinney and is characterized by development patterns that occurred over the first 150 years of the community. Many of the issues facing this area are those associated with redevelopment. Problems typical of gentrification exist in certain areas as well. Planning efforts to focus on transition of uses, development standards that are appropriate given existing constraints, providing adequate infrastructure and public services to accommodate redevelopment, etc.

In August 2006, the City of McKinney initiated the Town Center Study as a proactive approach to addressing the development pressures that were being felt in the Town Center area. With significant involvement from local stakeholders, the City hosted a series of public design workshops exploring how basic urban design principles could be used to foster healthy revitalization and redevelopment in the Town Center. See the Town Center Study Phase 1 Report (adopted March 2008) for additional information.

2. Regional Employment Center - In 1999, the City of McKinney in conjunction with the Gateway Planning Group began development of a sector plan for the Regional Employment Center (REC). So named because it was designated by the 1990 Comprehensive Plan to provide land for corporate campus style headquarters facilities as well as large scale manufacturing and distribution facilities. The REC is a triangularly shaped area of approximately 4,500 acres generally bordered by SH 121, Custer Road, FM 720 and US 75. In the late 1990s, the City began to feel pressure to allow development not in keeping with what was envisioned by the 1990 Comprehensive Plan. Up until that time, a lack of infrastructure had limited the developability of much of the area, residential development from the northeast began to approach, and extension of utilities for similar types of development became more feasible. Concerned that the existing plan for the area was unrealistic, the sector planning effort began.

   After significant property owner involvement, the result that emerged was a radically different plan with enough residential density to support a proposed mix of nonresidential uses. The revised plan, along with public-private partnerships to provide infrastructure, has led to the rapid start of development in the REC. The REC Study was adopted March 2003.

3. Western Sector - The western sector is approximately 25,400 acres and is generally bounded by US Highway 75 on the east, US Highway 380 on the north, FM 720 on the south and on the west by the edge of the McKinney ETJ, future Coit Road. While most of this area is either already developed or is zoned for development, there are still some tracts zoned as "AG" - Agricultural, as well as some areas west of Custer Road, which have not yet been annexed. Nearly half of the area is occupied by the Stonebridge Ranch and Eldorado master planned developments. While most of this area is developed or anticipated to develop for suburban style residential and supporting commercial uses, the areas along US 75 and US 380 have developed for more intensive regional commercial uses. The northeast portion of this sector is anchored by the 196-acre Raytheon facility. Development is generally progressing westward and northwestward.

4. Northwest Sector - Development of this area is generally just beginning, with the exception of scattered estate type development. There are a number of large undeveloped "PD"s - Planned Development Districts, the Crow-Billingsley tract and Franklin Ranch. The area is generally lacking in infrastructure, with water and wastewater lines just beginning to be extended. Many roads have not yet been improved to City standards.

5. Southeast Sector - This area includes the Collin County Regional Airport

as the primary feature and is planned to develop for industrial uses, which desire a location near the airport. This area is bounded by the East Fork of the Trinity River and Wilson Creek to the east and south. There currently exists some estate type development that is scattered throughout the area and is clustered in spots. A lack of infrastructure has limited development in much of this area, but development is anticipated to occur as it is extended.

6. Northeast Sector - Some estate type development exists, but there is very little infrastructure. The East Fork of the Trinity River, which serves as the western boundary of this sector, creates a significant barrier to providing infrastructure to this area. The infrastructure is necessary to allow for more intensive development to occur. This area encircles the Town of New Hope.

7. Northern Corridor - The main feature, a future multi-modal corridor, is still in the early planning stages. The area is generally undeveloped, but some estate type development exists. It is expected that development pressure to allow single-family residential development will occur as development approaches from the south and east. The Northern Corridor also contains a large undeveloped Municipal Utility District (MUD) called Trinity Falls. In 2006, the developer, Marlin Atlantis, proposed this development and entered into various development agreements with the City of McKinney. Trinity Falls is envisioned to be a master-planned development located wholly within the northern reaches of McKinney's ETJ (generally between Weston and US 75), with ultimate build-out of approximately 4,500 single-family residential units and a limited amount of complementary non-residential uses (retail, office, schools, parks, and open space).

Future Land Use Plan Map

The following graphic depicts the future land use plan for the City of McKinney, including McKinney's ETJ. The future land use plan was developed through the City of McKinney Comprehensive Planning process, incorporating the goals and objectives of the community; the guidance of McKinney City Staff and HNTB - the Comprehensive Plan consultants; input solicited from residents through stakeholder interviews, community meetings, public input meetings, telephone surveys, and community questionnaire responses; and the direction provided by the Joint Committee made up of members of the City of McKinney City Council and McKinney Planning and Zoning Commission. The foldout map was developed by City of McKinney GIS personnel and HNTB planners.

CITY OF MCKINNEY
COMPREHENSIVE PLAN

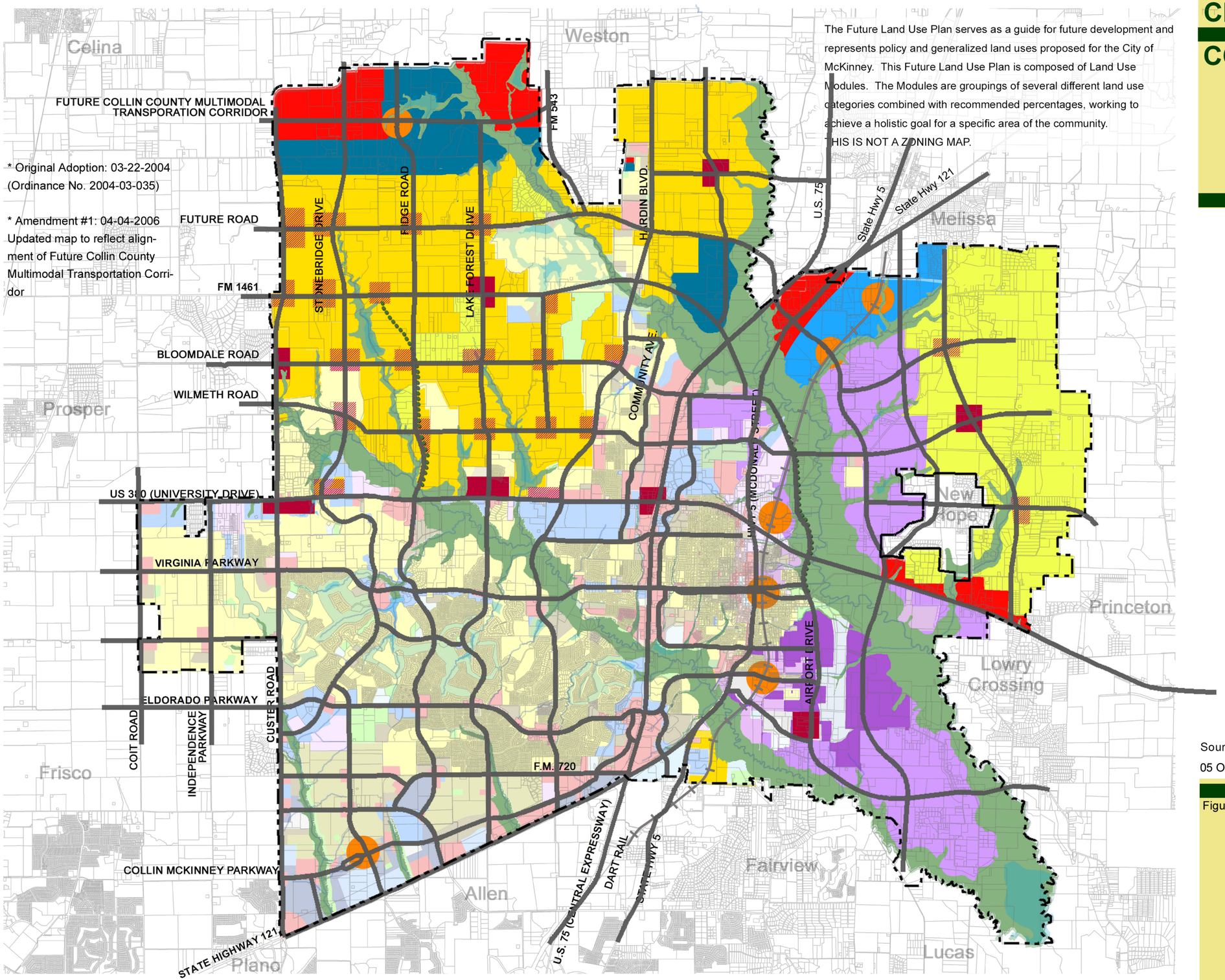
FUTURE LAND USE PLAN

The Future Land Use Plan serves as a guide for future development and represents policy and generalized land uses proposed for the City of McKinney. This Future Land Use Plan is composed of Land Use Modules. The Modules are groupings of several different land use categories combined with recommended percentages, working to achieve a holistic goal for a specific area of the community.

THIS IS NOT A ZONING MAP.

* Original Adoption: 03-22-2004 (Ordinance No. 2004-03-035)

* Amendment #1: 04-04-2006 Updated map to reflect alignment of Future Collin County Multimodal Transportation Corridor



LEGEND

- Thoroughfare
- Greenway Thoroughfare
- Rail
- Floodplain

FUTURE LAND USE MODULES

- Estate Mix
- Suburban Mix
- Town Center
- Transit Village (1/4 mile radius)
- Community Village
- Regional Commercial
- Regional Employment Center
- Regional Employment
- Office Park
- Industrial
- Airport Industrial
- Potential Commercial within the Residential Module (Based on Locational Criteria)

ANTICIPATED LAND USES / ZONING

- Floodplain
- Golf Course
- Park / Open Space
- Government / Schools
- Airport
- Heavy Manufacturing
- Light Manufacturing
- Commercial Historic
- Commercial
- Neighborhood Business
- Mixed Use
- Office
- Residential / Low Denisty
- Residential / Medium Density
- Residential / High Density

Source: City of McKinney GIS Department Data

05 October 2009

Figure 7.4

Miles: 0, 1, 2

100 Acres

1 Square Mile

Future Land Use Plan Module Diagram Definitions

Suburban Mix: The predominant use is single-family detached housing. It also allows for medium density residential as well as neighborhood office and retail facilities, which support the residential component. Community facilities such as schools, parks and churches are also included.

Estate Mix: The primary use is single-family residential on large lots, with a limited amount of more dense single family residential and support office and retail uses.

Town Center: A mix of residential housing types with both neighborhood and regional office and commercial uses as well as significant amounts of community facilities - government offices, churches, schools and parks.

Transit Village: Development based around a transit center and including medium density residential, office and retail uses. Each transit village is anticipated to have a different mix of uses with some composed of regional office and commercial uses and others with greater amounts of entertainment and commercial uses with varying degrees of residential uses.

Community Village: An area of concentrated development. Generally it is a grouping of commercial uses serving a larger region. It includes office, retail, entertainment and community facilities. Some residential uses may be allowed when designed to minimize impacts from and to the primary commercial uses.

Regional Employment: A large scale office and potentially light industrial/research development providing employment on a regional level.

Regional Employment Center (REC): A New Urbanist style development comprised of a wide range of uses. See REC Study (adopted March 2003).

Regional Commercial: An area of large scale commercial development providing for retail and service uses on a regional level.

Office Park: This area is characterized by the primary use, which are office parks. It also includes supporting retail and service uses.

Airport Industrial: Development focused around its proximity to the airport. It Includes a range of industrial and support uses.

Industrial: Development includes industrial, manufacturing, office, distribution, and warehouse uses with support retail and office uses.

For additional information regarding the Town Center and Transit Village modules, refer to the Town Center Study Phase 1 Report (adopted March 2008).

Anticipated Land Use Definitions

Floodplain: Land adjacent to a river, creek, or lake and is susceptible to flooding (100 year floodplain is designated on the plan).

Golf Course: A public or private golf course.

Park/Open Space: Public and private recreation facilities.

Government/Schools: Schools, public or private, municipal and county buildings, etc.

Airport: City owned property associated with the operation of the Collin County Regional Airport.

Heavy Manufacturing: Heavy industrial includes mining, salvage yards, concrete batch plants, and similar intensive manufacturing and processing operations.

Light Manufacturing: Light industrial refers to land and buildings used for the production of some type of goods with minimal outside storage such as electronics, manufacturing, products assembly, etc. Uses should be relatively nuisance free.

Commercial Historic: Commercial uses within the historic downtown.

Neighborhood Business: Land and buildings used for retail sale of convenience goods and personal services such as grocery stores, barber or beauty shops, etc.

Office: These areas provide for office buildings with supportive retail and service uses intended primarily for occupants of such office buildings. It may also include an office park, which is a tract containing multiple office buildings, support uses, and open space designed, planned, constructed, and managed on an integrated and coordinated basis.

Commercial: Uses can include some of the more intensive commercial uses such as hotels, auto dealerships, department and furniture stores, as well as banks, restaurants, large home improvement stores, etc.

Mixed Use: An area of vertically integrated office, retail and residential uses in an urban style development.

Mobile Home Park: Land for the renting or leasing of sites for the location, occupancy, or accommodation of one or more mobile home dwelling.

Residential Estates: Characterized by single-family homes on large lots, generally at least a one acre minimum.

Residential/Low Density:- Typified by single- family homes with a density of up to 3.5 dwelling units per acre. See Suburban Mix Module for density calculation method.

Residential/Medium Density: This category has densities ranging from 5 to 12 dwelling units per acre and may include a variety of residential types such as single family attached units (duplex, triplex, fourplex) row houses, single family cluster or garden home developments, and townhouses.

Residential/High Density: This residential type is characterized by multi-family or apartment buildings, and may have development densities ranging from 12 to 24 dwelling units per acre.

Future Land Use Table

The table below lists the categories of land uses and the amount of area in the City of McKinney and its ETJ designated for each use and the percentage breakdown of each land use.

Table 7.5: Future Land Use

Type	FLUP Acres	Existing Land Use Acres	Total Land Use Acres	% of Total at Buildout Exclusive of Flood Plain
Airport Operations	331.45	324.00	655.45	1.10%
Community Facilities/Open Space	4,641.30	7,299.87	11,941.17	19.96%
Employment Center	337.17	-	337.17	0.56%
Entertainment	425.87	-	425.87	0.71%
Estate Residential	3,193.44	-	3,193.44	5.34%
Flex Office/Warehouse	1,100.91	-	1,100.91	1.84%
Light Industrial/Manufacturing	3,376.33	756.84	4,133.17	6.91%
Lodging	720.16	-	720.16	1.20%
Medium Density Residential	2,726.88	381.93	3,108.81	5.20%
Mixed Use	1,232.99	-	1,232.99	2.06%
Office	1,002.89	149.21	1,152.10	1.93%
Office - Regional	4,137.94	-	4,137.94	6.92%
Office - Urban	297.60	-	297.60	0.50%
Office/Retail Neighborhood	212.90	-	212.90	0.36%
Retail	2,475.59	1,084.80	3,560.39	5.95%
Retail - Regional	2,597.74	-	2,597.74	4.34%
Retail - Urban	124.80	-	124.80	0.21%
Single Family Residential	14,256.11	6,625.16	20,881.27	34.91%
Total Acres	**43,192.07**	**16,621.81**	**59,813.88**	**100.00%**

7.4 Future Land Use Plan Module Diagrams Component

To help maintain McKinney's community values and guide the City's future growth, City officials have worked to devise a method for planning and monitoring development. This method for guiding new development provides City Staff an efficient means to quantify land use changes and provide City Leaders a way to justify future development decisions and their fiscal impact on the City. To help monitor development, City Staff and consultants have developed the Future Land Use Plan Module Diagram component to be used in conjunction with the future land use plan component. The Future Land Use Plan Module Diagram helps to ensure that decisions made on land use issues are based on fiscal realities, thereby avoiding the arbitrary assignment of land uses to areas on the future land uses plan map. By incorporating the Future Land Use Plan Module Diagram into the City's Fiscal Impact Model, both City Staff and City Leaders have a tool to justify decisions and manage the community's growth.

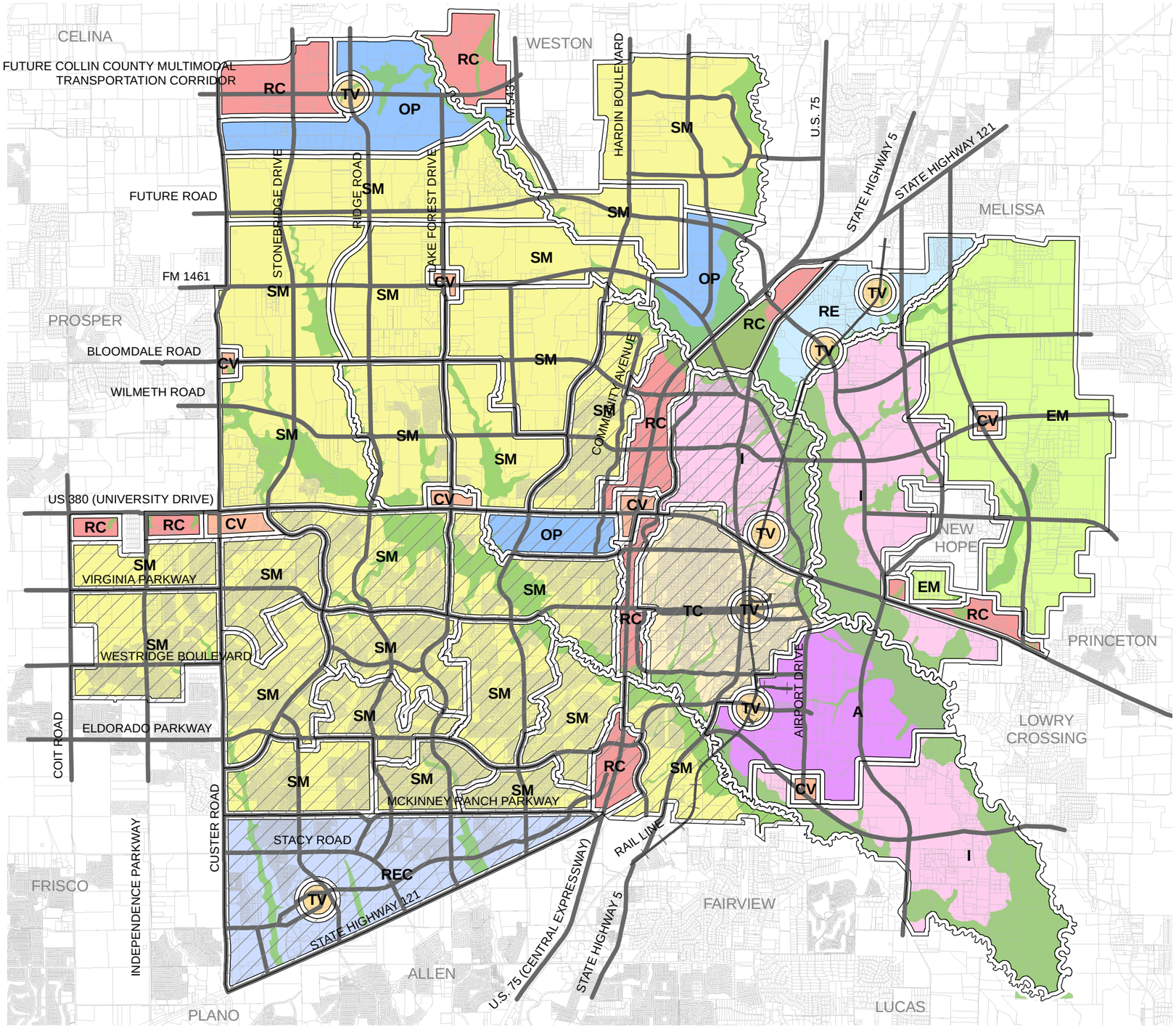
Future Land Use Plan Module Diagram

The following graphic depicts the Future Land Use Plan Modules Diagram for the City of McKinney within McKinney's current city limits and ETJ. The Future Land Use Plan Module Diagram was developed through the City of McKinney Comprehensive Planning process, incorporating the goals and objectives of the community; the guidance of McKinney City Staff; input solicited from McKinney residents through stakeholder interviews, community meetings, public input meetings, telephone surveys, and community questionnaire responses; and the direction provided by the Joint Committee made up of members of the City of McKinney City Council and McKinney Planning and Zoning Commission. The foldout map was developed by City of McKinney Staff and HNTB planners.

CITY OF MCKINNEY

COMPREHENSIVE PLAN

FUTURE LAND USE PLAN MODULE DIAGRAM



Legend

- Existing and Future Thoroughfares
- Rail Line
- Floodplain

FUTURE LAND USE MODULES

- EM — Estate Mix
- SM — Suburban Mix
- TC — Town Center
- TV — Transit Village
- CV — Community Village
- RC — Regional Commercial
- REC — Regional Employment Center
- RE — Regional Employment
- OP — Office Park
- I — Industrial
- A — Airport Industrial

MODULE TYPES

- Existing Modules
- Future Modules

* Original Adoption 3-22-04 (Ordinance No. 2004-03-035)

* Amendment #X XX-XX-XX

Source: City of McKinney GIS Department Data

05 October 2009

FIGURE 7.6

0 5,500 11,000 Feet

1 Square Mile

100 Acres

Future Land Use Plan Module Diagrams Table

The Future Land Use Plan Module Diagrams Table lists the land use modules in the City of McKinney's future land use plan. Along with the land use modules are columns indicating the total acreage for each land use module, and the land use category types within each module with a column for land use category type base percentage and acreage of each land use in the future land use plan. This table or series of tables will be updated by City Staff as land is zoned and developed in order to track the current land use mix.

Future Land Use Mix Category Descriptions

Within the City of McKinney future land use plan, there are nineteen land use categories. The descriptions below have been developed to help provide guidance regarding the City's future development. Floodplain has not been described as it is considered undevelopable due to natural forces and economic limitations.

Estate Residential: Residential properties having one permanent single family detached dwelling unit on a parcel of land ranging in size from greater than two acres to less than ten acres. The size of the residential property is a key consideration for this classification of residential use. This residential use maintains an openness of the land. Estate Residential allows for larger than average lots than can incorporate personal activities and interest, but does not encourage large-scale commercial agricultural endeavors.

Single-Family Residential: One single family detached dwelling unit built on a parcel site. The detached dwelling unit is open on all four sides with the structure centered towards the middle of the parcel. The housing unit provides space for entertaining, habitation, personal cooking, sanitary accommodations, and storage that would be used by members of a family unit or an individual inhabitant.

Single-Family Urban Residential: One or two single family dwelling units built on one or two parcels. The structure is situated in close proximity to the street. The housing unit provides space for entertaining, habitation, personal cooking, sanitary accommodations, a carriage house, and storage that would be used by members of a family unit or an individual inhabitant. The street pattern is typically a modified grid pattern.

Medium Density Residential: Medium density residential is attached housing units and includes townhouses, apartments, and four-plexes.

Retail - Neighborhood: Retail services serving the needs of the surrounding cluster of neighborhoods, generally a trade area of +/- one mile. Retail - Neighborhood provides a location for the selling or offering of consumer goods and services to the public in a non-habitation space. The size of Retail - Neighborhood ranges generally from 1,000 square feet up to 250,000 square feet.

Retail - Urban: A retail building set closer to street curb having shared or reduced parking standards. This retail product supports a street-level, pedestrian-oriented environment within a higher-density location. This use works well with adjacent Office - Urban and Mixed Use structures and can benefit further through the close proximity to a transit station. Retail - Urban structures can be either single-story or up to three-stories in height but frequently must be at least two stories.

Retail - Regional: Retail - Regional serves a trade area of +/- five miles. This use provides a location for the selling or offering of consumer goods and services to the

Table 7.7: Future Land Use Plan Module Diagrams

Land Use Module	Acres in Future Land Use Modules Plan	Land Use	Base Percentages	Acres of Each Land Use in Future Land Use Plan
Suburban Mix	31,539	Single Family Residential	65%	20,500
		Medium Density Residential	10%	3,154
		Office - Neighborhood	5%	1,577
		Retail - Neighborhood	5%	1,577
		Community Facilities	15%	4,731
Estate Mix	4,495	Estate Residential	75%	3,371
		Single Family Residential	10%	449
		Office / Retail Neighborhood	5%	225
		Community facilities	10%	449
Town Center	2,449	Single Family Urban Residential	35%	858
		Medium Density Residential	10%	245
		Mixed Use	10%	245
		Retail - Retail Urban/Regional	10%	245
		Office - Office Urban/Regional	5%	122
		Entertainment	5%	122
		Light Industrial / Manufacturing	10%	245
		Community Facilities	15%	367
Transit Village	841	Mixed Use	40%	336
		Medium Density Residential	20%	168
		Office - Urban	15%	126
		Retail - Urban	10%	84
		Entertainment	5%	42
		Community Facilities	10%	84
Community Village	912	Retail - Regional	45%	411
		Office - Regional	15%	137
		Medium Density Residential	15%	137
		Single Family Urban Residential	10%	91
		Entertainment	5%	46
		Community Facilities	10%	91
Regional Employment	804	Office - Urban	30%	201
		Medium Density Residential	25%	201
		Mixed Use	20%	161
		Retail - Urban	10%	80
		Entertainment	5%	40
		Community Facilities	10%	80
Regional Employment Center	3,705	Single Family Residential	35%	1,297
		Mixed Use	20%	741
		Employment Center	10%	371
		Retail - Regional	10%	371
		Medium Density Residential	5%	185
		Office - Regional	5%	185
		Entertainment	5%	185
		Community Facilities	10%	371
Regional Commercial	4,224	Retail - Regional	55%	2,323
		Retail - Neighborhood	15%	624
		Office - Regional	15%	624
		Entertainment	5%	211
		Lodging	5%	211
		Community Facilities	5%	211
Office Park	2,937	Office - Regional	60%	1,762
		Retail - Regional	15%	441
		Lodging	15%	441
		Medium Density Residential	5%	147
		Community Facilities	5%	147
Airport Industrial	2,119	Airport Operations	25%	530
		Light Industrial / Manufacturing	25%	530
		Office - Regional	15%	318
		Flex Office/Warehouse	15%	318
		Retail Neighborhood	10%	212
		Lodging	5%	106
		Community Facilities	5%	106
Industrial	6,110	Light Industrial / Manufacturing	50%	3,055
		Office - Regional	20%	1,222
		Flex Office / Warehouse	15%	916
		Retail - Neighborhood	10%	611
		Community Facilities	5%	305

public in a non-habitation space. The size of Retail - Regional generally ranges from 250,000 square feet up to 2,500,000 square feet.

Office - Neighborhood: Office - Neighborhood typically represents a single-story office structure that compliments the aesthetic qualities of the surrounding residential neighborhoods. Office - Neighborhood space is attractive for tenants with limited space needs (space needs greater than 5,000 square feet and less than 50,000 square feet). This office space provides either surface or covered parking for tenants and visitors and is appropriate for suburban environment.

Office - Urban: Multiple story office built closer to street curb, attractive for both tenants with limited space needed and tenants with larger space needs. This office product provides either surface or garage parking for tenants and visitors in a suburban environment. In a higher density urban setting parking for tenants and visitors would be available by garage.

Office - Regional: Multiple story office built in a campus style complex of buildings and set back from the roadway. Office - Regional is attractive for tenants with larger space needs and convenient access to regional roadways and transit lines. Access to this office product can be by an entry driveway and parking for tenants and visitors is provided either through surface or garage facilities. Depending on building size, tenant demand, and convenience, support facilities such as drug stores, restaurants, office services, and personal needs can be incorporated into Office - Regional.

Mixed Use: Mixed Use provides two or three uses under the same roof of a multi-story building. This vertical mix of uses incorporates ground floor retail and/or office with residential, office, or lodging above. Combinations for Mixed Use include retail on the lower floors with residential above, retail on the lower floors with office above, retail on the lower floors with lodging above, office on the lower floors with residential above, office on the lower floors with lodging above, a combination of retail and office on the lower floors with residential above, and a combination of retail and office on the lower floors with lodging above.

Research & Development: Research & Development is a concentration of business and educational establishments. This collected partnership works together in a campus setting in the pursuit of scientific and technological breakthroughs and patented applications. Facilities include space for laboratories, research and technology, and offices.

Light Industrial/Manufacturing: Light Industrial/Manufacturing includes facilities used for the receiving, staging, processing, assembly, and shipping of raw materials or goods. Such facilities require reliable access to utility and transportation infrastructure as well as plentiful source of skilled labor.

Flex Office/Warehouse: Flex Office/Warehouse is flexible space for its occupants to conduct their business. This flexibility is in the form of floor space configuration for offices, showrooms, warehouse, distribution, light manufacturing and processing. Because it can meet the needs of warehouse users this space provides amenities associated with stand alone warehouse space.

Airport Operations: This contains the fenced-in area of Collin County Regional Airport, including the airport's terminal, landside and airfield operated maintained in accordance with all federal, state, and city regulations. Also included are the fuel farms and aviation support facilities providing direct access to airport taxiways and runways.

Entertainment: Entertainment types of facilities provide locations for viewing live performances, cinema, and musical productions; for participating in competitive games; and entertainment-related theme establishments that provide a mixture of novelties, entertainment, and shopping. Closely related uses that support and can be part of entertainment include eating establishments.

Lodging: Lodging represents establishments that providing overnight dwelling accommodations and personal services to the traveling public for a fee. Lodging establishments can be categorized by price points, level of services offered, size by total number of units, affiliation, and groups served.

Community Facilities: Community facilities represent public uses that provide for the safety, educational, transit, and spiritual needs of a community. Public safety needs include facilities for police, fire, and emergency workers and equipment. Educational centers include all public or private institutional facilities offering instruction from kindergarten upwards to post-graduate university levels, either in a single structure or spread out with multiple buildings in a campus environment. Transit includes the property, parking facilities, and stations that support the collective movement and distribution of people at a single location. A transit station serves as the focus for bus, light rail, and/or commuter rail transit service within a concentration of higher density uses. It is a stopping point along a transportation route where people embark and disembark in their commutes. A transit station can be a stand-alone facility or integrated with other uses, such as retail, office, and entertainment, to create a seamless, festive urban center to a broader urban village. Religious grounds and buildings are used for gatherings and spiritual awareness. Some structures connected with the main sanctuary are used as gathering halls for banquets, classrooms, meeting halls, recreation centers, and communication centers. In addition, some religious complexes provide residential units for clergy and religious orders.

Employment Center: An Employment Center is a concentration of commercial or industrial developments with employment ranging from 1,000 to 2,500 workers within a single establishment or employment ranging from 2,500 to 5,000 employees within a campus complex of less than 50 acres. Employment Center would be the hub of activity for a much larger area featuring associated and subsidiary businesses.

Future Land Use Plan Module Diagrams Descriptions

There are eleven different future land use plan module types, which are described below. The module descriptions provide more detailed information about the characteristics of each module. This information includes each module's land use table with the flexibility factor, land use notes and recommendations, a brief description of each module's community form, and locational criteria to help guide each module's development patterns.

7.5 Suburban Mix Module

A Suburban Mix module is made up of land uses that promote a neighborhood setting with single-family detached houses as its primary development type. The single-family residential component drives this module with retail and office developments providing convenient access to daily goods and services while promoting a more balanced tax base. Single-family tracts in this module make good use of the rolling terrain and changing topography along McKinney's creek channels. Recreation and leisure amenities, neighborhood schools, parks and other community facilities add to the quality of life for residents within the module.

Below are representative photographs of each specific land use type included in this module.

Single-Family Residential

Medium Density Residential

Retail-Neighborhood

Office-Neighborhood

Community Facilities (Park)

Table 7.8: Suburban Mix Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Single-Family Residential	65%	+/- 5%
Medium Density Residential	10%	- 5%
Retail - Neighborhood	5%	+ 5%
Office - Neighborhood	5%	+ 5%
Community Facilities (Parks, Schools, Churches, etc.)	15%	+/- 5%
Total	100%	

Single-family residential uses generally comprise 65% of a Suburban Mix module. The density of each single-family tract and the total of all single-family tracts in the module should not exceed 3.5 units per acre (gross). In order to take into consideration the topographical differences in property and the impact floodplain, erosion hazard setbacks, and lakes can have on the form of development, density calculations shall consider these factors along with how the design of the residential area is in keeping with the overall goals and objectives of the Comprehensive Plan and the urban design element.

Density shall be calculated based on land used for residential dwellings. Areas used for retail, office, commercial, parks and schools shall not be considered. The density shall generally be 3.2 dwelling units per gross acre of residential property, exclusive of areas of floodplain, erosion hazard setbacks, and lakes. The density may be increased up to 3.4 dwelling units per acre if the principles espoused in the urban design element are incorporated into the design of the subdivision and included as part of the zoning.

Additionally, 2 dwelling units per acre floodplain may be allowed for floodplain up to 35% of the area to be used for residential development not encumbered by floodplain, erosion hazard setbacks, or lakes. To achieve the density credit for floodplain, the entire residential development shall comply with the design principles espoused in the urban design element. This density credit may be awarded even if the area of floodplain is to be dedicated for parkland.

In general the median and mean lot size shall be a minimum of 7,200 square feet.

Medium density residential uses should not exceed 10% of the module's land and should not exceed a density of 8 units per acre. Retail uses should occupy at least 5% of the module. Office uses should also occupy at least 5% of the module. Community facilities, such as parks, schools, and places of worship, should occupy approximately 15% of land area in the module. All the above noted percentages are without any potential flexibility factor.

General notes and recommendations for land uses in the Suburban Mix module:

1. The general module size is based on the number of acres to accommodate the target number of students of an elementary school (approximately 650 students based on 2003 McKinney Independent School District figures) with the modules corresponding density; nevertheless, the number of elementary schools will be based on density and household size.
2. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
3. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while affecting corresponding changes in other categories.
4. The flexibility factors for residential, retail, office, and community facilities allow land use transfer between all categories.
5. The locational criteria defines the physical parameters of how different land uses and their physical parameters come together to shape a neighborhood or commercial development. The locational criteria should be followed as development plans are prepared in McKinney.

Community Form

The form of the built environment in a Suburban Mix module is centered on the suburban-style home and standard traditional neighborhood unit. This traditional neighborhood unit can have commercial land uses (retail and office) located near neighborhoods at the intersections of arterials. Pedestrian connections such as sidewalks and trails are important to provide access from the residential to the commercial uses.

Community form for medium density uses is best described as enclaves. Medium density residential can be either urban or garden style in layout. Urban style medium density buildings have common setbacks and parallel public streets. Garden style housing sites buildings in clusters away from public streets.

Commercial uses should have unified architecture, well planned pedestrian connections linking buildings, parking, and amenities, buildings sited to create pedestrian spaces, and parking fields broken into smaller sizes with the use of landscape.

Community facilities should be sited to act as a transition between land uses that are not directly compatible. Neighborhood parks and open space intended to serve the module's residents should be sited more internally, and pedestrian connections to them from neighborhoods are desirable. Floodplains, heavily-wooded areas, and other land not best-suited for development can be used to provide open space, hike & bike trails, or pedestrian connections.

While McKinney features areas for lower-density housing (e.g. Estate Mix) and higher-density housing (e.g. Town Center, REC), the Suburban Mix modules provide housing for the majority of citizens, and does so at typical suburban densities. The module provides significant opportunities for owner-occupied housing on medium-sized lots, with convenient access to the most frequently needed retail uses.

Locational Criteria

Each module defines a set of locational criteria for the components that comprise that set of land uses. The locational criteria are recommendations for siting these specific land uses together. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to achieve high-quality residential neighborhoods, commercial villages, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following locational criteria are for the Suburban Mix module:

LC1. Retail and office uses are to be located nearest the intersection of two major arterials.

LC2. Retail and office uses should not be organized in a linear form; instead they should be planned as villages. Note: reference community form.

LC3. The future land use plan identifies potential locations of commercial (retail and office) development at intersections of two arterials. This is shown as red lines in a hatched pattern of squares. These areas may be developed as either commercial or residential based on the allowed land use module mix.

LC4. Non-residential low impact development may be located in certain situations at collector-arterial intersections. This low impact development includes vet clinics, professional office, and day-care facilities.

LC5. Parks should be developed in areas to preserve existing trees, wetlands,

or natural habitat. Parks should also work in conjunction with school sites and be accessible by pedestrians, bicycles, and public streets.

LC6. Open space should be used as an amenity for surrounding development. Many times the open space takes the form of a floodplain, wetlands, or stands of existing trees. This integration can occur in many ways - a common method is to have a road front the open space providing a public view, access or "front-door" to the amenity.

LC7. Medium density residential should be located near the intersection of two arterials. This land use can be sited between single family residential and commercial uses.

LC8. This module is anticipated to require one elementary school.

LC9. This module will require at least one neighborhood park. Parks can and should also relate to the quantity and quality of the natural environment in the module.

LC10. This module and the residential neighborhoods will include a variety of lot sizes. The lot sizes need to vary by a meaningful width.

LC11. Public streets should be sensitive to the natural slope of the land in order to maximize views and provide ease of drainage. This is best demonstrated with proposed streets paralleling contours.

LC12. Public streets also need to be aligned to provide interest, variation, and order. A residential neighborhood needs to have a street layout that provides primary linkages to community facilities and amenities.

LC13. Streets in single-family residential areas should be designed primarily to connect the homes to arterials, and not be designed to encourage arterial-to-arterial or "cut-through" traffic.

LC14. Sidewalks and hike & bike trails should be provided to accommodate pedestrians and bicyclists on both sides of public streets.

7.6 Estate Mix Module

The Estate Mix module is focused primarily around low-density residential uses that reflect a rural setting. The lot sizes for estate residential generally range from 2 acres to 10 acres. Single-family residential uses on smaller lots are less frequent and placed adjacent to smaller retail and office centers that serve a broader land area due to the lower densities.

There are two Estate Mix Modules located in the north and northeast corner of the community. The first module borders the City of Weston and the other extends north from US 380 around the east side of the Town of New Hope and continues north to the City of Melissa.

Below are representative photographs of each specific land use type included in this module.

Estate Residential

Single-Family Residential

Retail

Office

Community Facilities (Park)

Table 7.9: Estate Mix Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Estate Residential	75%	+/- 5%
Single-Family Residential	10%	- 5%
Retail &/or Office Neighborhood	5%	+ 5%
Community Facilities (Parks, Schools, Churches, etc.)	10%	+/- 5%
Total	100%	

Land Use

Estate residential comprises 75% of an Estate Mix module. Single-family density residential uses should not exceed 10% of the module's land and should not exceed a density of 3.0 units per acre. Retail and office uses should occupy at least 5% of the module. Community facilities, such as parks, schools, and places of worship, should include approximately 10% of the module. Each of these percentages have a flexibility factor that can been seen in the previous chart.

General notes and recommendations for land uses in the Estate Mix module:

1. The general module size is based on the number of acres to accommodate the target number of students of an elementary school (approximately 650 students based on 2003 McKinney Independent School District figure) with the modules corresponding density; nevertheless, the number of elementary schools will based on density and household size.
2. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
3. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while affecting changes in other categories.
4. The flexibility factors for residential, retail, office, and community facilities allow land use transfer between all categories.
5. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape an area. They should be followed as development plans are prepared in McKinney.

Community Form

The form of the built environment in Estate Mix module should complement and encourage the low density residential and rural commercial uses. The module should concentrate non-residential uses at intersections of arterials locating them within close proximity of the intersection to prevent a sprawling appearance along the arterials.

Agricultural uses not permitted elsewhere in the city are permitted within estate residential, but performance standards should limit them to activities that do not conflict with the enjoyment of residential properties. However, residents should expect the agricultural uses to provide a different character to the area and a different quality of life than other modules. These uses should not be so intense as to be incompatible with residential uses. However, uses allowed in the Estate Mix module are intended for rural areas, and are not typical of what would be planned for in a suburban setting.

The estate residential land use is characterized by single-family residential homes on 2 to 10 acre lots. Auxiliary structures, such as barns and sheds, and limited livestock are permitted on residential lots. There is potential for non-residential uses to be located adjacent to the estate lots due to the agricultural activities common in the module and the large nature of the residential lots.

The form of the built environment in single-family residential developments in the Estate Mix module is similar to but more rural in nature than that found in the Suburban Mix module. The standard single-family development would be located in close proximity to intersections of arterials and adjacent to natural features that would serve as buffers between the residential units and the rural/agricultural uses that are typical in the Estate Mix module. Single-family developments are also

intended to be dispersed throughout the module and much smaller than developments found in the Suburban Mix module. Clusters of single-family residential should not exceed fifty units in any one location.

Commercial uses should be well planned with parking fields broken into smaller sizes with the use of landscape. However, some of the commercial uses within the module may be more agricultural and rural in character, attracting customers from a wider area; the commercial uses are not intended to attract significant volumes of traffic.

Fewer neighborhood parks will be provided in the Estate Mix module due to the spread out nature of the residential units and the rural feel of the module. Floodplains, heavily-wooded areas, and other land not well-suited for development can be used to provide open space, hike & bike trails, or pedestrian connections.

Locational Criteria

Each module defines a set of locational criteria for the components that comprise that set of land uses. The locational criteria are recommendations for siting these specific land uses together. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to achieve high-quality residential neighborhoods, commercial villages, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following locational criteria are for the Estate Mix module:

LC1. Retail and office uses are to be located nearest the intersection of two major arterials.
LC2. The future land use plan map identifies commercial (retail and office) development at intersections of two major arterials. This is shown as red lines in a hatched pattern in the pattern of squares. These areas are generally proposed for commercial development.
LC3. Non-residential low impact development may be located in certain situations mid block along arterials. This low impact development includes: vet clinics, professional offices, and day-care facilities.
LC4. Parks should be developed in areas to preserve existing trees, wetlands, or natural habitat. Parks should also work in conjunction with school sites.
LC5. This module is anticipated to require at least one elementary school.
LC6. This module will require at least one park. Parks can and should also relate to the quantity and quality of the natural environment in the module.
LC7. Suburban residential uses should be dispersed in small clusters of no more than 50 units throughout the module and located in close proximity to arterial intersections.

7.7 Town Center Module

The Town Center module is the historic heart of McKinney and stretches from the earliest developments of the community in and around the historic downtown to land first developed around 1970. The built environment features buildings and structures typical of every style common between 1870 and 1970, from the dense urban pattern of downtown, to smaller lots homes, to the larger lots that would become the suburban style. The land use pattern also reflects those times, with residential uses intermixed with and in close proximity to commercial uses. A great deal of redevelopment and infill is occurring within the Town Center module, with much of the housing being built through the City's affordable housing program. This module extends outwards from McKinney's historic core north to US 380, west almost to US 75, south to Wilson Creek and east to the East Fork of the Trinity River.

UPDATE: The Town Center Study Phase 1 Report (2008) outlines key concepts that should be referenced when considering land use decisions in the Town Center module. For additional information, see the Town Center Study Phase 1 Report (2008).

Single-Family Urban

Medium Density Residential

Mixed Use

Office and Office-Urban/Regional

Retail and Retail-Urban/Regional

Entertainment

Community Facilities (Park)

Unique Relationships

The Town Center module will accommodate the unique issues of planning for an area in its second, third, and even fourth phase of development. While some undeveloped land remains and other properties are being developed for the first time, the vast majority of the module has been developed at least once and much of it has already been redeveloped. Corridor studies may be needed in the future to address the transitions of land uses within the module as continued redevelopment occurs.

The buildings, properties, and public infrastructure have both the benefits of their original design and the burdens associated with age and meeting the demands of modern society. Because this area is so different from any other part of the com-

Table 7.10: Town Center Land Use

Land Use	Existing Percentage of Acreage
Single-Family Urban Residential	35%
Medium Density Residential	10%
Mixed-Use	10%
Retail & Retail Urban/Regional	10%
Office & Office Urban /Regional	5%
Entertainment	5%
Light Industrial	10%
Community Facilities (Parks, Schools, Churches etc.)	15%
Total	100%

munity, a unique module has been created to enhance its assets and address the future.

It should be noted that residential, retail, and office uses can all be allowed in the mixed use category of this table. In acting to change the land use balance on a smaller scale, the function of both the immediate surrounding area and the entire module should be considered. Within the Town Center module, much of the mixed use development is centered around the downtown commercial district.

Land Use

Given that the Town Center module is mostly developed and includes a wide variety of land uses, the percentage of the land area devoted to each use is not as important as the compatibility with existing uses. As a result, the flexibility factor has been removed, but this does not indicate that land use percentages are static.

Community Form

Because the module features a wide variety of land uses in close proximity to each other, the relationship and interaction between them is critical to its function. The variety of land uses function well in the Town Center module due to several factors. A grid street pattern allows for land uses to easily front and/or back each other and therefore limits negative impacts. Appropriate edges and buffers are also important in the placement of these varying land uses. All development within this module needs to use a grid street pattern. Pedestrian sidewalks need to be included for all land uses in this module.

Much of the future development in this module occurs as infill. This infill development is typically at a smaller scale than greenfield development. The infill pattern should be compatible with and complimentary to existing land uses.

Locational Criteria

Each module is defining a set of locational criteria for the elements comprising that set of land uses. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construc-

tion. The goal of the locational criteria is to maintain and enhance high-quality residential neighborhoods, commercial districts, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following locational criteria are for the Town Center module:

LC1. Infill development should be compatible with and complementary to adjacent existing land uses.

LC2. Development should pay special attention to infrastructure capacity. The Town Center module has aging infrastructure that in many cases is over capacity, and new development should not worsen the level of utility services for neighboring land uses.

LC3. Infill development in this module should continue the existing grid street pattern.

LC4. Land use transitions need to occur at the rear of the property. Land use transitions should not occur at the street in the front of development. Example: land uses across the street from each other should be the same, in most occurrences.

7.8 Transit Village Module

The Transit Village module is designed to maximize the potential of a special transportation opportunity, such as a rail station or public transit transfer station. Given the critical transit component, development of these modules will be impacted by the timing of the transit facility. Each of the transit modules will differ in its character based on the type of transit facility, the existing development, and the module type surrounding the transit village. The location of transit villages will be dependant on the infrastructure in the immediate area. Transit villages can be dispersed throughout the city and will not be restricted to possible rail stations.

The REC includes one transit village in the Craig Ranch Town Center. For more information on this site, consult the REC Study and the approved Craig Ranch general development plan. Two transit villages are shown in proximity to the future Collin County Multi modal Transportation Corridor, while five of the transit villages are centered along the rail line running north/south to the east of SH 5. The right-of-way for the rail line has been acquired by the Dallas Area Rapid Transit System (DART). Provision for mass transit will become critical to the future growth and sustainability of the City.

Transit Village modules serve as gateways, marking the entrances into the community along rail or multi-modal corridors. Transit Village modules provide consumer and employment opportunities for residents of McKinney and the region. The modules add to the quality of life of McKinney residents and provide fiscal benefits connecting McKinney businesses to the larger market of North Texas.

Below are representative photographs of each specific land use type included in this module.

Office-Urban

Retail-Urban

Mixed Use

Medium Density Residential

Entertainment

Community Facilities (Park)

Table 7.11: Transit Village Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Mixed Use	40%	+ 10%
Retail - Urban	10%	+/- 5%
Office - Urban	15%	+/- 5%
Medium Density Residential	20%	+/- 5%
Entertainment	5%	+ 5%
Community Facilities (Parks, Schools, Churches, etc.)	10%	+ 5%
Total	100%	

In anticipation of future rail transit, a conceptual illustrative vision for the rail transit village in the Town Center was developed as part of the Town Center Study Initiative. For more information on this site, refer to the Town Center Study Phase 1 Report (2008).

Land Use

The Transit Village is a compact module centered on a significant opportunity to access public transportation. The Transit Village is a multi-modal node, where people can transfer from one mode of transportation to another. People will be walking, riding bikes, driving cars, catching buses and trains, and transferring between these different modes. The module's residents can walk to buses and/or trains, while other citizens may drive there, park, and ride a bus or train to their place of work.

Retail and office uses should not be reduced to less than 55% of the module, and residential uses should comprise at least 15% of it. Entertainment uses are encouraged as they add a recreational character to the module, but the modules in high employment, low residential areas may not be able to sustain entertainment uses. Community Facilities, both publicly maintained and privately maintained, are critical to the module and should not be less than 5%. The distribution of land uses within each module will vary with the character of the surrounding area (residential, commercial, industrial), the verticality proposed (height of buildings, combination of uses & functions), and the level of transportation opportunities (number of bus routes, frequency of trains, commuter park-and-ride convenience). All the above noted percentages are without any potential flexibility factor.

The above criteria is intended to describe in general terms the potential mix of land uses anticipated. However, each transit village is anticipated to have a different character and, as a result, a unique mix of appropriate uses. The existing light rail transit stops in the Cities of Plano, Richardson and Dallas each have a unique character and a different mix of land uses surrounding them. More detailed plans should be developed prior to the zoning of the transit villages so that this mix can be established.

General notes and recommendations for land uses in the Transit Village module:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages with corresponding changes in other categories.
3. The flexibility factors for residential, retail, office, and community facilities provides for land use transfer between all categories.
4. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The built form of a Transit Village module is centered around a "heart" - a public space - in which the transit station(s) are located with frontage facing retail and entertainment uses. The "heart" is surrounded by multi-story buildings, helping to define its boundaries, but important view corridors into and out of the heart should be maintained. Large single-story structures and large surface parking lots should locate outside the periphery of the heart. The module should also accommodate all the modes of transportation converging within it. The module should also feature a visual edge or boundary, making it distinct from the surrounding area. The module's compact size makes access to the different uses within the module efficient.

The land surrounding the heart of the module should accommodate retail, office, entertainment and residential uses, and buildings and interior spaces that are multi-functional are encouraged. The module's transportation facilities for passengers should be incorporated into the heart as well. The periphery of the module can be less dense and intense than the center, with shorter, more horizontal buildings and larger parking areas.

Locational Criteria

Each module is defining a set of locational criteria for the elements that comprise that set of land uses. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction.

However, since each transit village is anticipated to have a different character, a unique set of land use criteria will need to be developed for each of the modules. More detailed plans should be developed prior to the zoning and development of the transit villages so that this mix can be established. The goal of the locational criteria is to plan and construct high-quality residential neighborhoods, commercial districts, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Transit Village module:

LC1. Transit station facilities should be located at the central point within this module.

LC2. Higher density uses such as Mixed Use, Retail - Urban, and Office - Urban should be located near or across from the transit station.

LC3. Uses such as Medium Density Residential and service-oriented Community Facilities (fire stations, community centers, operations centers, parking lots) should be located towards the periphery of the module as appropriate.

LC4. Land uses along the periphery of the modules should be sensitive to the adjacent modules and land uses in order to provide for the appropriate transition between uses.

LC5. Ground-level active uses will have frontage onto public streets, rather than be separated from the street by large parking areas typical of a suburban shopping center.

LC6. Residential housing options should be designed to provide for a variety lifestyle choices.

LC7. Natural features such as streams, wetlands, and groves of trees within the module should be incorporated into the urban fabric.

LC8. Open space amenities within this module such as parks and public plazas should be strategically placed to support the pedestrian street environment and to add emphasis within the module's urban fabric.

LC9. Sidewalks should be placed on both sides of the street.

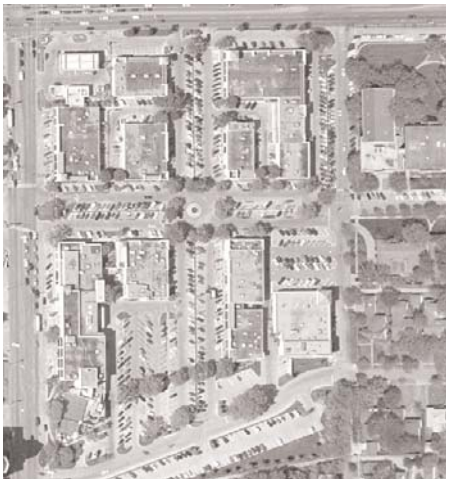
LC10. Transportation facilities and streetscape amenities such as transit stations, bridges, sidewalks, street signage, lighting, should be enhanced to provide interest, variation, and order within this high-density pedestrian friendly urban environment.

LC11. The module should have a minimum of one major arterial fronting a transit station.

7.9 Community Village Module

The Community Village module is intended to concentrate higher-intensity commercial uses and higher-density residential around an arterial-arterial intersection in a suburban residential area. Creating a Community Village module within one or more Suburban Mix modules benefits both the residential and commercial uses in each. The co-location of more intense uses creates opportunities for a sense of place not possible in a more sprawling pattern of commercial uses along an arterial. The module provides for both fiscal and quality of life benefits to the community.

Below are representative photographs of each specific land use type included in this module.



Retail-Regional

Office-Regional

Medium Density Residential

Single-Family Urban

Entertainment

Community Facilities (Park)

Table 7.12: Community Village Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Retail - Regional	45%	+ 5%
Office - Regional	15%	+/- 5%
Medium Density Residential	15%	+ 5%
Single-Family Urban Residential	10%	+/- 5%
Entertainment	5%	+ 5%
Community Facilities (Parks, Schools, Churches, etc.)	10%	+ 5%
Total	100%	

Land Use

The Community Village module is smaller in area than other modules, average size of approximately 100 acres, surrounded by one or more other modules most often Suburban Mix or Estate Mix modules. The Community Village is a separate module from the surrounding area, and its land uses do not count as part of the neighboring modules. Community Village modules combine both residential and commercial uses within a more organized form than typically found in suburban areas. Community Village modules are located at arterial-arterial intersections. Retail - Regional, with uses serving a broader market area than the traditional suburban retail establishments, is the primary use in this module, accounting for 45% of the land area. Secondary uses, such as Office - Regional and Entertainment, account for 15% and 5% respectively of the module's acreage and function as complementary uses with this large retail grouping. Residential uses make up a quarter of the module's land area, with Medium Density Residential accounting for 15% and Single-Family Urban capturing 10% of the acreage. All the above noted percentages are without any potential flexibility factor.

General notes and recommendations for land uses in the Community Village module:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages with corresponding changes in other categories.
3. The flexibility factors for residential, retail, office, and community facilities provides for land use transfer between all categories.
4. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The commercial core of this module will include Retail - Regional, Office - Regional, Entertainment, and pedestrian active Community Facilities (such as post offices and churches). The recommended form for commercial uses is a village concept. This village concept is necessary to soften the impacts of the allowed uses. The village concept is defined through unified architecture; well planned pedestrian connections linking buildings, parking, and amenities; buildings sited to create pedestrian spaces; and parking fields broken into smaller sized with the use of landscape. Ground floor space should respond to the pedestrian sidewalks with display windows and entrances.

In the commercial core of the Community Village, intense commercial buildings may be multi-story (greater the two-stories). Medium Density Residential also may be in large or multi-story buildings. The additional height should be respectful of the adjacent uses and may be limited if it has the potential to negatively impact them. At the periphery of the Community Village will be the residential uses and community facilities. These uses will serve to transition the more intensive uses in the commercial core of the Community Village to the less intensive residential uses outside the module. Medium Density Residential uses in smaller or two-story buildings will buffer the commercial uses in the core of the module while Single-Family Urban uses will be located at the outer edge of the module.

Given the larger area served, access by cars will be significant; however, pedestrian connectivity should be incorporated for those living or working in closer proximity. Pedestrian enhancements should be provided to add emphasis and insure safety along pedestrian corridors. Facilities for public transit stops and pedestrian access to these facilities are also strongly encouraged.

Locational Criteria

Each module is defining a set of locational criteria for the elements that comprise that set of land uses. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to plan and construct high-quality residential neighborhoods, commercial districts, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Community Village module:

LC1. Higher intensive uses such as Retail - Regional, Office - Regional, and Entertainment should be located at the core of this module.
LC2. Single-Family Urban should be located at the periphery of the module.
LC3. Building heights will be stair-stepped from the more intensive commercial uses in the core down to the less intensive residential uses in the periphery.
LC4. Medium Density Residential and Community Facilities (such as schools, churches, community centers, and parks) should be used to transition to less dense residential uses outside of the community village.
LC5. In the module's commercial core, parking fields should be broken into smaller sized areas with the use of landscape.
LC6. Natural features such as streams, wetlands, and groves of trees within the module should be incorporated into the urban fabric.
LC7. Within the commercial core of the module, there should be an interior roadway channeling traffic to the major arterials but not into the module's periphery residential areas.
LC8. Pedestrian-enhanced cut-through walkways and interior courtyards are desirable to link the module's commercial core to the residential periphery.
LC9. There will be minimum of two major arterials crossing within the module or adjacent to the module.

7.10 Regional Employment Module

The Regional Employment module is designed to create an urban-style, multi-use development built around a major regional employment establishment or an agglomeration of major employment establishments. The Regional Employment module fosters a working community within a larger city where residents can enjoy an urban-friendly environment mixing working, shopping and living in close proximity to regional transportation corridors, including major freeways, transit lines, and hike and bike trails.

Below are representative photographs of each specific land use type included in this module.

Office-Urban

Medium Density Residential

Mixed Use

Retail-Urban

Entertainment

Community Facilities (Park)

Table 7.13: Regional Employment Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Office - Urban	30%	+/- 5%
Medium Density Residential	25%	+/- 5%
Mixed Use	20%	+ 10%
Retail - Urban	10%	+/- 5%
Entertainment	5%	+ 5%
Community Facilities (Parks, Schools, Churches, etc.)	10%	+ 5%
Total	100%	

Land Use

The Regional Employment module provides within McKinney a location for a major employment complex to be centered, surrounded by an environment of residential, shopping, entertainment, and community facilities. This module is similar to Legacy Park in Plano and the area around the Telecom Corridor in Richardson.

On average, Office - Urban accounts for 30% of the Regional Employment module; however, this use can be an additional five percentage points higher. Uses, such as Retail - Urban and Entertainment, help support the residential population generated by Medium Density Residential and the Mixed Use complexes. Mixed Use, accounting for 20% of the module, provides a flexibility of uses within a vertical structure, such as retail or office at street-level with residential above, retail at street-level with office above, or retail or office at street-level with lodging above. This combination of uses helps generate an active street environment, both during the business day and after hours.

Community Facilities, both publicly and privately maintained, are critical to the module and should not be less than 10%. The distribution of land uses within each module will vary with the character of the surrounding area (residential, commercial, industrial), the verticality proposed (height of buildings, combination of uses & functions), and the level of transportation opportunities (number of bus routes, frequency of trains, commuter park-and-ride convenience).

Each of these percentages have a flexibility factor that can been seen in the previous chart.

General notes and recommendations for land uses in the Transit Village module:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages with corresponding changes in other categories.
3. The flexibility factors for mixed use, residential, retail, office, and community facilities provides for land use transfer between all categories.
4. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The physical form of the Regional Employment module is focused around one major regional employment establishment or a cluster of major employers. These employment activities can be centered in the module, or in close proximity to a Transit Village module. The employment complex can take the form of a single corporate campus or a cluster of buildings developed around a central focus.

Both supporting and taking advantage of the major employment establishments are residential and commercial uses. While having a higher density than that found in the Suburban Mix module, the densities in the Regional Employment module are lower than those occurring in the Transit Village modules. Retail - Urban, Entertainment, Mixed Use, and pedestrian intensive Community Facilities (such as libraries, post offices, churches) should have unified architecture, well planned pedestrian connections linking buildings, parking and amenities; buildings sited to

create pedestrian spaces, and structured or surface parking.

Medium Density Residential uses should blend into other residential and commercial uses; however, at the periphery of the module only Medium Density Residential and Community Facilities (such as parks, schools, churches) should be allowed. The module's transportation network should link major employment establishments with regional transportation corridors, such as major freeways and regional transit lines, and with regional and local hike and bike trails. Natural features found in the module, such as stream corridors, woodlands, and bluffs, should be incorporated as natural public amenities by providing open space and softening the surrounding built environment.

Locational Criteria

Each module is defining a set of locational criteria for the elements that comprise that set of land uses. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to plan and construct high-quality residential neighborhoods, commercial districts, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria is for the Regional Employment module:

LC1. Major employment structures and complexes will be located towards the interior of the module. Less intense land uses such as medium density residential and community facilities should be located on the periphery of the module to provide a desirable transition of uses.
LC2. Retail, Office, Mixed Use, and Entertainment uses should be located along major arterials linking major employment structures and major employment complexes with nearby transit stations, or in high density clusters built on a system of interconnecting streets functioning as the module's commercial core.
LC3. Uses such as Medium Density Residential and Community Facilities should be located towards the periphery of the module.
LC4. Residential housing options should be designed to provide for a variety lifestyle choices.
LC5. Commercial districts within the Regional Employment Module should provide defined public places and activity centers. This can be accomplished by the utilization of greens, plazas, and other open space.
LC6. Natural features such as streams, wetlands, and groves of trees within the module should be incorporated into the urban fabric.
LC7. Open space amenities within this module such as parks and public plazas should be strategically placed to support the pedestrian street environment and to add emphasis within the module's urban fabric.
LC8. Selected streets should terminate at streets fronting along parks and significant urban buildings (such as government buildings and religious institutions) to add emphasis within the module's urban fabric.
LC9. At least one major thoroughfare should provide direct access from the module's interior to a nearby regional freeway and a transit station.
LC10. Public streets that make up the module's commercial core should be developed in a grid pattern.
LC11. Major thoroughfares should be developed to emphasize and protect important view corridors.
LC12. Sidewalks should be placed on both sides of the street.
LC13. Pedestrian-enhanced cut-through walkways and interior courtyards are desirable within larger urban blocks in the module's commercial core.

LC14. The transportation network within the module should provide right-of-way access for regional and local hike and bike trails to link with major employment structures and complexes and with nearby transit stations.

LC15. Transportation facilities and streetscape amenities such as transit facilities, bridges, sidewalks, street signage, lighting, and bike racks should be enhanced to provide interest, variation, and order within the interior of the module and the module's commercial core.

7.11 Regional Employment Center Module

The Regional Employment Center module is designed to create a pedestrian-oriented environment with employment, retail, office, and residential uses. The Regional Employment Center module follows the REC Overlay Urban Design Standards & Base Zoning Districts which define this area and establish guidelines for development. The module, with its selection of housing choices, is built around a major employment center and the supporting development. The emphasis of the Regional Employment Center module is to establish a community within McKinney where residents can enjoy a lifestyle that mixes work, shopping and living in close proximity to regional transportation modes. For development standards and land use percentages, see the REC overlay zoning district.

Below are representative photographs of each specific land use type included in this module.

Single-Family Residential

Mixed Use

Employment Center

Retail-Regional

Medium Density Residential

Office-Regional

Entertainment

Community Facilities (Park)

7.12 Regional Commercial Module

The Regional Commercial modules provide a significant amount of the shopping opportunities in the city, being heavily dedicated to retail and office uses. The modules provide land for intense retail and office uses and larger structures not appropriate for residential areas. They also provide opportunities for high-traffic generators, such as entertainment and lodging uses. The modules are a critical element to the City of McKinney, providing the fiscal benefit of sales tax revenue to the city and school districts and the quality of life benefit with major shopping opportunities convenient to businesses and visitors.

Below are representative photographs of each specific land use type included in this module.

Retail-Regional

Office-Regional

Retail

Entertainment

Lodging

Community Facility (Church)

Table 7.14: Regional Commercial Land Use

Land Use	Percentage of Acreage	Flexibility
Retail - Regional	55%	Unlimited
Office - Regional	15%	+/- 5%
Retail - Neighborhood	15%	Unlimited
Entertainment	5%	Unlimited
Lodging	5%	Unlimited
Community Facilities (Parks, Schools, Churches, etc.)	5%	+/- 5%
Total	100%	

Land Use

The Regional Commercial modules are dependent on high traffic volumes as they serve both customers from within the city and beyond it. Consequently, they are located along regional connectors, such as US 75, US 380, and the proposed Collin County Multimodal Transportation Corridor. The modules serve a large market area including both residents and businesses in McKinney and surrounding cities. The modules should provide a variety of services including retail, office, entertainment, and lodging opportunities.

These intense retail and office modules provide a fiscal benefit to the community, bringing in property tax and sales tax revenue to the City and the school districts. Typically, these commercial uses have a positive fiscal impact on the City, as the cost of the City services they demand is less than the tax revenue they generate. Similarly for the school districts, they bring in revenue without directly generating more students to be served. Also, their significant shopping opportunities give local consumers more choices and options and provide convenient access to goods and services that otherwise would require a trip outside the city. This provides a quality of life benefit to residents, helps attract large employers, and brings in customers from outside the city.

General notes and recommendations for land uses in Regional Commercial modules:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while corresponding changes in other categories.
3. The flexibility factors for residential, retail, office, and community facilities allows land use transfer between all categories.
4. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The built environment in Regional Commercial modules is oriented around the automobile. Customers arrive and depart by car, and the buildings, sites, signage, and infrastructure should be designed for significant levels of traffic. Buildings should be oriented towards the adjacent regional connectors and are typically large, single story, and with a deep setback from the road. Sites should be designed to facilitate ingress from the arterials without causing excessive friction and reducing their efficiency. Signage should be large enough to be noticeable to passing drivers without creating a cluttered, discordant streetscape. Many of the developments will require extensive lighting across the site, but lighting levels should not be so high as to pollute the night sky or disrupt the enjoyment of nearby residential areas.

Retail uses dominate the Regional Commercial module, but only in combination with other commercial uses does the module function at its best. Office uses broaden the options for consumers. Entertainment uses and lodging opportunities enhance the quality of life of residents and attract consumers from outside the city. It is not expected that Community Facilities would use land in Regional Commercial modules.

Office uses often locate within retail districts, but zoning districts for just office uses can help a module reach the table's distribution of land uses. Regional Commercial should not have more than 20% dedicated to office uses as other modules, like Office Park, allow them at higher levels. Entertainment and Lodging uses can greatly contribute to the success of a Regional Commercial module, but because they have very specific locational criteria, some modules may not be suitable for them. In those cases, their 15% can be redistributed into the Retail and Office categories.

Locational Criteria

Each module defines a set of locational criteria for the elements that comprise that set of land uses. This list of criteria is further developed, defined, and implemented in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to plan and construct high-quality residential neighborhoods, commercial districts, employment areas, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Regional Commercial modules:

LC1. Screens and buffers are needed along the back of many of these commercial land uses, when the adjoining land use is not another commercial use.

LC2. Parking areas need to be connected with the building with pedestrian walkways. These walkways should be landscaped and signed.

LC3. Buildings should be planned in a manner that provides visual sight lines connecting pedestrian access and building front doors. This can be termed, village concept, providing quality site design organization.

LC4. Pedestrian connections need to be provided between adjacent commercial buildings. These walkways provide pedestrians the linkage between buildings.

LC5. Public facilities can be planned as an amenity for this module. These areas can be the focus for planning and site organization. This planning will allow pedestrian linkages to and from public facilities and the adjacent development.

LC6. Intensity of uses should be considered when located on the periphery of the Regional Commercial module to minimize the negative impacts on adjacent land uses.

7.13 Office Park Module

The Office Park module provides significant employment opportunities within the community, housing major employers that need convenient transportation, high quality public services, and a worker friendly environment. In addition to office uses, the modules provide for the supporting uses, such as retail and lodging opportunities. The module also provides for the amenities that employees desire, such as lakes, plazas, and fountains, which make for a more aesthetically-pleasing employment environment.

Below are representative photographs of each specific land use type included in this module.

Office-Regional

Retail-Regional

Medium Density Residential

Lodging

Community Facilities (Park)

Table 7.15: Office Park Land Use

Land Use	Percentage of Acerage	Flexibility Factor
Office - Regional	60%	Unlimited
Retail - Regional	15%	-10%
Medium Density Residential	5%	+/- 10%
Lodging	15%	Unlimited
Community Facilities (Parks, Schools, Churches, etc.)	5%	+ 5%
Total	100%	

Land Use

Office regional comprises 60% of an Office Park module. Retail regional land uses should not exceed 15% of the module's land. Lodging should also occupy at least 15% of the module. Medium Density Residential completes the development pattern with a minimum of 5% land use. Community Facilities, such as parks, schools, and places of worship, should include approximately 5% of the module. Each of these percentages have a flexibility factor that can be seen in the previous table.

General notes and recommendations for land uses in Office Park modules:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while corresponding changes in other categories.
3. The flexibility factors for all retail, office, entertainment, lodging, and community facilities allow land use transfer between all categories.
4. Flexibility factors for land use types that are labeled unlimited offers the greatest opportunity for modifications. The only stipulation is that commercial land uses (office, retail, entertainment, lodging, etc) replace other commercial uses as a switch.
5. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The form of the built environment of Office Park modules will feature mostly moderately sized buildings, though some areas may have buildings of significant height and volume with surface or structured parking. Office areas are often built in campus setting with more landscaping and aesthetic amenities such as lakes, fountains, open spaces, urban forests, and public art than land developed for retail uses.

Office Uses provide some of the most significant employment opportunities within the community. This provides a quality of life benefit to residents, giving them a larger and broader range of job options, and a fiscal benefit to the community, providing tax revenue to the City and school districts and only moderate demands on public services. The module also helps provide the City with a daytime population that shops at local businesses convenient to their place of employment.

Commercial uses should have unified architecture; well planned pedestrian connections linking buildings, parking, and amenities; buildings sited to create pedestrian spaces; and parking fields broken into smaller sizes with the use of landscape.

Community form for medium density uses is best described as enclaves. Medium Density Residential can be either urban or garden style in layout. Urban style medium density buildings have common setbacks and parallel public streets. Garden style housing sites buildings in clusters away from public streets.

Community Facilities should be sited to act as a transition between land uses that are not directly compatible. Parks within Office Park modules should serve as open space for leisure and recreational activities for both the residents and employees in the module. Floodplains, heavily-wooded areas, and other land not well-suited for development can be used to provide open space, hike & bike trails, or pedestrian

connections.

Locational Criteria

Each module defines a set of locational criteria for the components that comprise that set of land uses. The locational criteria are recommendations for siting these specific land uses together. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to achieve high-quality employment areas, commercial villages, residential enclaves, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Office Park module:

LC1. Intensity of uses should be considered when located on the periphery of the Office Park module to minimize any negative impacts on adjacent property and to provide adequate transition of land uses.

LC2. Parking areas need to be connected to the building with pedestrian walkways. These walkways should be landscaped and signed.

LC3. Structured parking facilities must have a façade treatment that is similar and compatible with the façade of the office building.

LC4. Buildings should be planned in a manner that provides visual sight lines connecting pedestrian access and front doors.

LC5. Public facilities can be planned as an amenity for this module. These areas can be the focus for planning and site organization. This planning will allow pedestrian linkages to and from public facilities and the adjacent development.

LC6. Parks should be developed in areas to preserve existing trees, wetlands, or natural habitat. Parks should be accessible by pedestrians, bicycles, and public streets.

LC7. Public streets should be sensitive to the natural slope of the land in order to maximize views and provide ease of drainage. This is best demonstrated with proposed streets paralleling contours.

7.14 Airport Industrial Module

The Airport Industrial module is intended to focus on the opportunities made available by Collin County Regional Airport (TKI), located on McKinney's east side. The airport is a tremendous opportunity to grow a sector of the economy that is unique to all of Collin County. The airport is designated as a reliever airport in the Dallas-Fort Worth Metroplex system. Convenient access to the airport allows people and goods to be efficiently transported throughout the country and even internationally. The module will provide opportunities for those industrial and office uses that desire convenient access to an airport.

The Airport Master Plan Update was approved by the City Council on November 2, 2004, and the FAA approved the Part 150 Noise Study effective on April 28, 2006. The Master Plan calls for a replacement runway to meet federal safety design standards, a replacement air rraffic control tower to enhance the safety of flight, and three (3) taxi lanes to accommodate the movement of aircraft.

Below are representative photographs of each specific land use type included in this module.

Collin County Regional Airport

Light Industrial

Flex Office/Warehouse

Office-Regional

Retail

Lodging

Community Facillities (Park)

Table 7.16: Airport Industrial Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Airport Operations	25%	Unlimited
Light Industrial / Manufacturing	25%	Unlimited
Office - Regional	15%	Unlimited
Flex Office / Warehouse	15%	Unlimited
Retail - Neighborhood	10%	Unlimited
Lodging	5%	Unlimited
Community Facilities	5%	+ 5%
Total	100%	

Land Use

With the exception of Community Facilities, which will occupy generally between 5% and 10% of the area, the acreage percentages are intended to serve as a guide with regard to anticipated mix of land uses. It is anticipated that the development of Airport Operations, Light Industrial/Manufacturing, Flex Office/Warehouse, and Office-Regional will drive the need for retail and lodging facilities.

General notes and recommendations for land uses in the Airport Industrial module:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while corresponding changes in other categories.
3. The flexibility factors for all industrial, office, retail, and community facilities allow land use transfer between all categories.
4. Flexibility factors for land use types that are labeled unlimited offers the greatest opportunity for modifications. The only stipulation is that commercial land uses (industrial, office, retail, etc) replace other commercial uses as a switch.
5. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The built form of areas near the airport will include large buildings scaled toward air travel. Proposed facilities on airport property must adhere to standards that provide for safe aviation facilities, while accommodating future aviation demand. The form of the built environment for industrial uses often features large structures with large floor plates used for manufacturing, shipping, and storing materials and products. These buildings are typically of a single floor with taller than average ceiling heights.

Industrial form includes storage in covered or semi-enclosed structures. Support structures and facilities are common and provide backup electricity, reserve equip-

ment, and maintenance systems. Shipping facilities and docks may also be required for the loading and unloading of trucks or rail cars. Facilities may be secured through fencing and screening walls, and significant lighting may be required to secure the grounds and equipment at night.

Locational Criteria

Each module defines a set of locational criteria for the components that comprise that set of land uses. The locational criteria are recommendations for siting these specific land uses together. This list of criteria is further developed and defined in the City of McKinney's codes and ordinances that regulate land development and construction. This includes completion of the airport master plan. The goal of the locational criteria is to achieve high-quality employment areas, commercial villages, industrial, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Airport Industrial module:

LC1. Retail and service uses should be organized around the intersection of major roadways. This clustering of service type uses is to provide for convenient access from the airport as well as office and industrial users.

LC2. Buffers and screens are important components in industrial development patterns. They are used to minimize the adverse impacts of light, noise, and views of truck traffic, storage yards, movement of freight, and manufacturing processes. They should be used in the planning for industrial development as needed.

LC3. Where adjacent to existing residential areas, the anticipated intensity of proposed land uses should be considered in order to provide a more compatible transition between uses.

LC4. The height of structures and impact of uses (light, smoke, wildlife, etc) on the safety of airport operations should be considered.

7.15 Industrial Module

The Industrial module provides much of the city's opportunities for manufacturing, assembly, and warehouse uses. Industrial uses are dependent on reliable transportation, and the Industrial modules are located along and near major regional access points such as US 380, the Collin County Multimodal Transportation Corridor, and Collin County Regional Airport. Some of them also have access to the existing railroad line in McKinney.

Below are representative photographs of each specific land use type included in this module.

Light Industrial

Office-Regional

Flex Office/Warehouse

Retail

Community Facillities (Park)

Table 7.17: Industrial Land Use

Land Use	Percentage of Acreage	Flexibility Factor
Light Industrial / Manufacturing	50%	Unlimited
Office - Regional	20%	+/- 10%
Flex Office / Warehouse	15%	Unlimited
Retail - Neighborhood	10%	+/- 5%
Community Facilities (Parks, etc.)	5%	+ 5%
Total	100%	

Land Use

Light Industrial/Manufacturing comprises 50% of an Industrial module. Office Regional land uses should account for approximately 20% of the module's land. Flex Office/Warehouse is anticipated to occupy approximately 15% of the module. Retail completes the development pattern with 10% land use. All the above noted percentages are without any potential flexibility factor. It should be noted that the light industrial, office and flex space are anticipated to dictate the amount of support type uses. To some degree the market will also dictate the location of the uses if in keeping with the overall development pattern. Community Facilities, such as park should make up approximately 5% of the module.

The module provides for a combination of uses that support industrial activities. Office uses provide the administrative and management support industrial activities need and are often desirable in close proximity to them. Retail uses within the module provide convenient goods and services to those employed in the industries and office. Industrial uses serve as economic generators within the local economy. The added value is captured within the local economy, multiplying into office jobs, retail goods and services, and residential investment.

General notes and recommendations for land uses in Industrial modules:

1. The proposed land uses in this module are calculated using gross acreage minus the 100-year floodplain.
2. A flexibility factor with (plus/minus) can go upward or downward, a + (plus) can only go up, and a - (minus) can only go downward from the recommended percentages while corresponding changes in other categories.
3. The flexibility factors for all industrial, office, retail, and community facilities allow land use transfer between all categories.
4. Flexibility factors for land use types that are labeled unlimited offers the greatest opportunity for modifications. The only stipulation is that commercial land uses (industrial, office, retail, etc) replace other commercial uses as a switch.
5. The locational criteria defines the physical parameters of how different land uses and their elements come together to shape a neighborhood or commercial development. They should be followed as development plans are prepared in McKinney.

Community Form

The form of the built environment for industrial uses often features large structures with large floor plates used for manufacturing, shipping, and storing materials and products. These buildings are typically of a single floor with taller than average ceiling heights.

Industrial form includes storage in covered or semi-enclosed structures. Support structures and facilities are common and provide backup electricity, reserve equipment, and maintenance systems. Shipping facilities and docks are frequently required for the loading and unloading of trucks or rail cars. Facilities may be secured through fencing and screening walls, and significant lighting may be required to secure the grounds and equipment at night.

Locational Criteria

Each module defines a set of locational criteria for the components that comprise that set of land uses. The locational criteria are recommendations for siting these specific land uses together. This list of criteria is further developed and defined in

the City of McKinney's codes and ordinances that regulate land development and construction. The goal of the locational criteria is to achieve high-quality employment areas, commercial villages, and civic centers while responding sensitively to the natural environment and North Texas ecosystem.

The following criteria are for the Industrial module:

LC1. The impact of potential industrial uses on adjacent existing residential uses and environmentally sensitive areas should be considered when determining the appropriate intensity of uses for particular areas.

LC2. Buffers and screens are important components in industrial development patterns. They are used to minimize the adverse impacts of light, noise, and views of truck traffic, storage yards, movement of freight, and manufacturing processes. They should be used in the planning for industrial development as needed.

LC3. Transportation networks should be well planned to ensure adequate/appropriate levels of service.

LC4. Public facilities can be planned as an amenity for this module. These areas can be the focus for planning and site organization. This planning will allow pedestrian linkages to and from public facilities and the adjacent development.

LC5. Open space should be used as an amenity for surrounding development. Many times, the open space takes the form of a floodplain, wetlands, or stands of existing trees. This integration can occur in many ways. A common method is to have a road front the open space providing a public view, access or "front-door" to the amenity.