



3.0 *BASELINE ANALYSIS REPORT*

The Baseline Analysis report is the first of the four major sections of the Comprehensive Plan and contains the following elements:

- Physical Factors Influencing Development
- Demographic Profile
- Employment and Economic Development
- Housing
- Utilities and Infrastructure
- Existing Land Use
- Public Services and Facilities
- Urban Design and Community Character
- Parks, Recreation and Open Space
- Transportation System

Each section contains information pertaining to the subject topic, as well as graphic support as appropriate. Also included is identification of other issues that should also be addressed in the formulation of the Plan. The Baseline Analysis report provides the information which is the initial basis of the comprehensive planning process in Irving. It presents an overview of the City's physical, social and economic characteristics. The primary objective of the Baseline Analysis report is to document current conditions in Irving and to define the opportunities and constraints the community must consider in addressing and shaping its future form and character. The secondary objective is to ensure that the information being used in the planning process accurately portrays the community. The Baseline Analysis report was completed in May, 1995 (see *Baseline Analysis, A Context for Planning*, May 1995 by J. T. Dunkin & Associates, et. al.) and is summarized in the following sections.



3.1 PHYSICAL FACTORS INFLUENCING DEVELOPMENT

3.1.1 Regional Context

Irving is completely surrounded by adjacent jurisdictions and has little or no area left to expand its physical boundary. Six municipal entities and DFW Airport surround Irving:

- Dallas
- Grand Prairie
- Fort Worth
- Farmers Branch
- Carrollton
- Coppell

DFW Airport covers over 27 square miles and is the second busiest airport in the United States. The Airport anticipates doubling the number of passenger gates by the year 2010.

Issue: What compatible land uses should be planned for areas adjacent to the Airport and those areas affected by noise?

Issue: What programs or strategies should be developed to protect and enhance existing residential and nonresidential areas?

Many important regional generators exist in Irving, including:

- Texas Stadium and the Dallas Cowboys headquarters and training facilities
- Irving Mall
- Las Colinas/Urban Center
- DFW Freeport
- The Las Colinas Sports Club and Four Seasons Resort
- Dallas Stars training facility
- University of Dallas; Northlake College
- Irving Healthcare System
- Studios at Las Colinas
- The old Downtown area

Issue: How should these major activity generators be linked or connected?



3.1.2 Topography, Terrain and Hydrology

Irving is characterized by a variety of soils and undulating terrain. Most of the areas with steeper slopes occur north of Northgate Drive. The soils and geologic areas with the most limitations generally occur north of State Highway 183.

Issue: *Should areas characterized by constrained geologic and/or soil conditions (i.e., Eagle Ford Shale and Trinity-Frio, Houston Black-Heiden, and Ferris-Heiden soils) be considered for special development controls?*

Issue: *Although topographic conditions pose few limitations to urban growth, features such as the slopes and higher elevations contribute to Irving's visual environment (e.g., by providing opportunities for scenic vistas) and should be considered in siting new development.*

The Trinity River is the major river in Dallas County and two forks of the river, the Elm Fork and West Fork, form the eastern and southern boundaries of Irving and have significant adjacent flood prone areas.

Issue: *The environmental values of river and stream areas should be protected. To what extent should these areas be considered for special development controls?*

Issue: *Large parts of south Irving (e.g., adjacent to Belt Line and Hunter-Ferrell Roads) are currently undeveloped as they are located within the 100-year floodplain. Reclamation of these areas to make them available for development is problematic because of the extent and interjurisdictional nature of the floodplain (which is partly located in Grand Prairie and Dallas). A coordinated strategy is needed which integrates flood control, land use and economic development, and preservation of open space and environmental values including the proposed Trinity River greenway.*

3.1.3 Other Physical Factors

Las Colinas is a master planned development covering about 12,000 acres along S.H. 114 and I.H. 635. This mixed use project was originally started in 1973 by Ben H. Carpenter and now is one of the premier locations for corporate headquarters in the metroplex.



Many areas of Irving are already developed; consequently, little vacant land is left to develop. Due to the existing development and surrounding entities, it is important that the remaining areas are carefully developed.

Issue: How the developed and undeveloped areas are included in the ultimate “fabric” of the City will surely determine, to a large degree, the visual appearance of the City, as well as its economic vitality. How should the Comprehensive Plan address these areas and features?

Issue: How can the remaining vacant areas be efficiently and effectively developed?

Issue: What should the remaining future land uses be along the Freeway corridors?

Issue: How should the redevelopment of older or obsolete areas be addressed?

Issue: How should the development or redevelopment of areas adjacent to the Airport be addressed?

3.2 DEMOGRAPHIC PROFILE

Although the regional advantages of Irving are important, its people will continue to be the most important resource in the community. The following are important demographic characteristics of the City:

- Irving has grown in population at least 17 percent per decade since 1920.
- Irving has also grown faster or captured an increasing percentage of the County’s growth since 1920.
- Irving has grown as fast or faster than many cities in the metroplex.
- Over 57 percent of Irving’s population is between 25 and 64 years of age.
- Irving’s elderly population is increasing.
- Irving’s population is becoming more ethnically diverse.
- People in Irving have a high educational attainment; over 56 percent have some college education.
- The median family income in Irving is over \$37,000.
- Almost 54 percent of the total population in Irving resides south of State Highway 183.



3.3 ECONOMIC DEVELOPMENT

Irving has been, and continues to be, an economic development engine for the central part of the Dallas/Fort Worth Metroplex since the mid-1970s. This economic prosperity has been greatly influenced by many factors, one of which is Irving's proximity to Dallas/Fort Worth International Airport. The Airport has propelled the City's employment base from 31,052 in 1970 (just four years prior to DFW's opening) to 107,230 workers in 1990. The greatest increase in employment was in the service and retail sectors. The Las Colinas and DFW Freeport areas contain most of the employment in Irving. Less than 12 percent of Irving's total available office space is located south of State Highway 183. The employment gains projected for the City — a widely accepted measure of economic development — indicate a faster rate of growth in number of jobs than in residential population. Irving's employment is projected to reach 199,200 by the year 2015. Such growth, while economically desirable, needs to be directed so that all of Irving's citizens profit and prosper from the increase.

Issue: There is a need for clearly stated goals and objectives, and a generally accepted definition of economic development (ED).

Issue: How should City officials identify and support the best vehicles for advancing city-wide ED (when it is defined)?

Issue: Economic development strategies should be closely coordinated with approved land use strategies.

Issue: How should the perception (outside Irving) that the Irving Independent School District is inferior when compared to neighboring school districts (competitors for ED growth) be addressed?

Issue: How should the perception that certain geographical parts of Irving are suffering from existing or pending blight be addressed? (This perception is not universally held).

Issue: A reassessment of City policies governing incentives for ED is needed.

Issue: The City and its ED partners need to be aware of the assets offered by younger generations. How can their needs and desires be addressed?

Issue: How should the City support the Irving Economic Development Foundation in addressing the following actions?



- ***More aggressively promote Irving.***
- ***Be more research-oriented, conduct more economic base research, make findings and research available to interested citizens and businesses, and disseminate collected data to targeted industrial audiences.***
- ***Intensify marketing (industrial recruitment) efforts.***
- ***Communicate more broadly its accomplishments, as well as its plans and strategies for the future.***
- ***Retain a full-time fund raiser so that the Executive Director can have more time to perform specialized economic development activities.***

Issue: The need for an economic development ombudsman/expediter at City Hall should be evaluated. There appears to be some business support, as well as general support for city employment of an economic development specialist (professional) for this task.

Issue: There is a need to examine the City's policies on development participation for infrastructure improvements. The City can promote specific economic objectives by participating in specific capital projects which benefit those objectives.

3.4 Housing

In 1995, Irving had an estimated population of 165,000 in 79,785 residential dwelling units. Over 58 percent (46,579) of the total dwellings were multi-family type units. In 1980, the percentage was about 38 percent multi-family. In 1995, this percentage was higher than any city in the Metroplex with a population of over 10,000. Over 63 percent of the total occupied units are renter-occupied, the preponderance of which reside in multi-family dwellings.

Irving's housing stock is of relatively recent construction, most of which is less than 30 years old. In 1990, approximately 65% of the owner-occupied housing was valued between \$50,000 and \$100,000.

Most of Irving's single-family housing stock is in good or sound structural condition. A large percentage (76%) of this, however, is in need of minor maintenance, which will require special housing strategies to ensure that these neighborhoods continue to be an asset to the City. Most multi-family complexes are well-maintained although some (less than 6% of the total structures) need major repair or maintenance. Nearly all of the residential structures (including multi-family and single-family) needing attention are located south of S.H. 183.



Issue: *How can existing single-family neighborhoods be preserved and stabilized?*

Issue: *Opportunities for infill areas should be identified.*

Issue: *How can renovation/preservation of single-family units in south Irving be encouraged?*

Issue: *How can housing quality in areas adjacent to or impacted by the new runway at DFW Airport be protected or upgraded?*

Issue: *What voluntary housing maintenance programs should be considered to maintain or improve housing quality?*

Issue: *What is the need for affordable housing in Irving?*

3.5 UTILITIES AND INFRASTRUCTURE

A general analysis of Irving's utilities, municipal service center, and solid waste system was performed as part of the City's Baseline Studies process.

3.5.1 Water System

The City of Irving's water system receives water treated and supplied by the City of Dallas and distributes it to Irving customers. Dallas water enters the Irving system through two supply lines. One supply line is located generally along State Highway 183 and is jointly owned by Irving and Grand Prairie. A second supply line is located in the northern portion of the City and delivers water to the Hackberry Pump Station. The available supply capacity from the two Dallas supply lines is 67 million gallons per day (mgd). The average daily use is between 30 mgd and 40 mgd.

Issue: *There is a need to ensure adequate water supply volume.*

Water supply volume is a concern which is reviewed daily. Adequate future supply relies on expanding the supply delivery to both the Hackberry Storage facilities, as well as the proposed south storage and pump facilities. This future storage and pump facility is a major part of the City's future plans for water transmission and distribution. A 48-inch to 65-inch supply main is proposed to convey water to the Hackberry Storage facilities. Portions of this line have already been installed and construction plans call for the installation to continue toward the City of Dallas Elm Fork Treatment Plant. However, while right-of-way acquisitions continue, negotiation with other water districts could modify the



final destination of the supply line and thus provide the City with two separate sources for water. These negotiations were made possible due to the City's ownership of raw water at Cooper Reservoir (in east Texas) and the desire of the other Districts to utilize that water within their system.

Issue: There is a need to address aging infrastructure and preventive maintenance.

Some water system infrastructure is deteriorating at a faster rate than it is being rehabilitated, maintained, and replaced. The City's water line replacement program, at its current pace, is not sufficient to renew the system and keep it in a reliable, maintainable state. Additionally, the current preventive maintenance program is unable to keep up with system maintenance needs. These problems are most acute in the older portions of the City. Areas in South and Central Irving are already experiencing the effects of aging water lines. Symptoms of water system deterioration include water line breaks, leaks, and reduction of line carrying capacity.

The water system infrastructure is extremely important to the City in not only encouraging new and second level growth (redevelopment), but in maintaining the existing economic base. While the City's water line replacement, rehabilitation, and maintenance programs are in place, their function is related to the funding that can be provided. With the growth in the mid-1980's, emphasis and funding were concentrated on expanding the distribution system to meet this growth. With projected new growth in the 1990's and the anticipated second level growth within the older sections of the City, funding will be a major emphasis in ensuring both the quality and the quantity of the water distribution and supply system.

Issue: Dead-end water lines are affecting water quality.

Existing dead-end water lines contribute to water quality problems in several areas of the City. A need exists to extend and loop these water lines to provide continuous circulation. Dead-end lines need periodic flushing to address water quality concerns. This effort consumes presently stretched labor resources because of the sheer number of dead-end lines; therefore, flushing is not performed as frequently as needed.

3.5.2 Wastewater System

Irving's wastewater system is a collection-only system. The City does not treat wastewater, but instead collects and conveys wastewater to Trinity River Authority (TRA) facilities. TRA's Central Wastewater Treatment Plant located in Grand Prairie eventually receives and treats Irving's wastewater. The City maintains



and operates approximately 588 miles of 6" to 45" sewer lines and nine (9) lift stations. An additional lift station, "Jefferson at Valley Ranch," is proposed for construction.

Issue: An Aging Infrastructure and Preventive Maintenance Program is needed.

While rehabilitation and replacement of the wastewater system infrastructure is an on-going major function of the Water Utility Division, it is difficult to keep up with the needs of an aging system. Many older lines in the system are in need of rehabilitation or replacement. These lines are primarily in the older parts of the City. The City's sewer line replacement program (similar to the water line replacement program) is based on funds available which sometimes hampers its ability to plan for replacements of major lines. Additionally, the current preventive maintenance program is unable to keep up with system maintenance needs. Clearing roots and removing grease from lines are important maintenance functions that, when neglected, contribute to the occurrence of line stoppages. Stoppages, in turn, require an emergency response and consume labor resources otherwise used for preventive maintenance.

Issue: A comprehensive Wastewater Plan is needed.

The City is in need of a formalized, comprehensive wastewater plan to assess such needs as expansions/extensions, replacements, infiltration/inflow problems, and rehabilitation.

Issue: Wastewater system mapping is needed.

The City's sewer line replacement program (similar to the water line replacement program) is based on funds available which sometimes hampers its ability to plan for replacements of major lines. The absence of such mapping hampers operations, maintenance, and planning efforts.

Issue: Future funding of the system must be ensured.

Methods to insure that the City has the ability to install major future facilities, not only for wastewater but for water facilities, need to be evaluated. One funding source the City can consider is adopting a capital improvements plan in conjunction with an impact fee program.

3.5.3 Storm Drainage System

The City's drainage system consists of inlets, drainage pipes, flumes, channels, lakes, detention basins, and retention basins. These components collect and convey storm water runoff to local creeks and eventually the Elm Fork or West Fork of the Trinity River. Irving is comprised of eight (8) major recognized and



named watersheds: Delaware Creek, West Irving Branch, Dry Creek, Estelle Creek, Bear Creek, Cottonwood Branch, Hackberry Creek, and Grapevine Creek. Stream 7C2 in the eastern portion of the City crossing Loop 12 north of the RAILTRAN Railroad is also a FEMA-designated and studied watershed.

Issue: Drainage standards and policies need to be evaluated.

The City's drainage policies, criteria and standards need to be evaluated, and possibly updated, to reflect a shift in focus from structural controls toward more environmental and aesthetic approaches to design and development of the respective watersheds. There is a perceived need to balance water quality, erosion control, aesthetics, and cost in planning and approving future drainage system improvements. Part of the evaluation should also address City participation in developer drainage costs.

Issue: An updated Drainage Master Plan is needed.

Irving lacks up-to-date, system-wide drainage system planning information. Previous studies do not include the entire City as it exists today, and the recommended improvements were based on drainage criteria that are now outdated. An updated drainage plan could also address the items outlined in the previous issue and resolve drainage system upgrade needs. One such need is to determine whether undersized storm drains should be paralleled, replaced, or ignored. An updated master drainage plan could also identify and prioritize future drainage system projects, including erosion control projects.

Issue: NPDES regulations must be implemented.

The City is responsible for implementing the National Pollutant Discharge Elimination System (NPDES) standards including industrial discharge compliance and permitting. To control and reduce pollutant loadings at major outfalls, the City will need to monitor industrial and construction sites to ensure that proper permitting applications are filed and that measures are taken to reduce pollutant loading. The City's role and effort to comply with and enforce NPDES regulations will require significant resource allocation. In addition, procedures must be designed, organized, and implemented to manage compliance with these regulations.

Issue: Drainage projects need to be identified and prioritized.

The City identifies and prioritizes drainage projects based on information compiled within the Engineering Division of the Department of Public Works. During flood events, complaints received from the public are compiled and broken into several categories. These categories are:

1. Flooding within the homes from natural drainage features such as streams and channels;



2. Flooding in homes based on surface flow;
3. Flooding of public streets and alleys which require roadways to be closed in order to eliminate dangerous situations to the traveling public; and
4. Flooding of streets and alleys within neighborhoods wherein parked vehicles are damaged.

Based on these categories, the Engineering Division prepares a list of miscellaneous drainage improvements which is presented to the City Council for their consideration. These improvements are proposed within the Street Division's budget, or within the Municipal Utility Division's budget.

3.5.4 Solid Waste

The City of Irving owns and operates its own landfill in the southern portion of the City. The landfill is located on East Hunter-Ferrell Road on 227 acres of City-owned land.

The landfill was permitted in late 1980 and began accepting waste in 1981. The City currently collects residential and some commercial/industrial solid waste. Private haulers also collect commercial and industrial waste in the City, but do not use the city landfill.

Issue: The Solid Waste Management Plan must be brought into conformance with new regulations and NCTCOG's Regional Plan.

Solid waste regulations have changed since the 1988 Management Plan was completed. In addition, a Regional Solid Waste Management Plan was developed and adopted by the North Central Texas Council of Governments (NCTCOG) in 1992. Therefore, the 1988 Solid Waste Management Plan is in need of updating to bring it into conformance with current regulations and the NCTCOG Regional Plan.

Issue: The economics of city solid waste operations are affected by privatization and/or franchise agreements.

Private haulers control much of the lucrative commercial and industrial waste collection business in Irving. The reduction in commercial and industrial customers that the City can serve affects the economics of Irving's operations since the City is left with the more costly residential collection operations. This results in smaller operating margins that may eventually require rate increases for residential customers. In the past, income from commercial and industrial customers partially subsidized the cost of residential curbside collection.



Issue: *The projected life of the landfill should be monitored.*

According to recent studies, the life of the Hunter-Ferrell landfill is approximately 83 years. The life of the landfill depends on several factors warranting study, such as: (1) the effectiveness of recycling and waste minimization efforts, (2) the potential future uses of alternate disposal methods such as composting and/or waste-to-energy facilities, (3) the nature and impact of current and future regulations, and (4) the availability of regional and sub-regional landfill space.

3.6 Existing Land Use

Irving's present city boundary contains over 68 square miles. The original community was generally situated between State Highway 183 and Sixth Street along the Chicago Rock Island Railroad (now RAILTRAN) and covered less than ten square miles in 1958. Irving's present or dominant land use type is residential. Approximately 22 percent, or 9,848 acres, are single-family and 4.3 percent or 1,864 acres are multi-family. Although a substantial amount of the remaining vacant land is in flood plains, Irving still has some developable vacant land. The following are characteristics of Irving's existing land use pattern:

1. The majority of single-family land use is located between Northgate Drive and the southern boundary of the City.
2. State Highway 183 and Belt Line Road are the most intensively development arteries in the community. Generally commercial, retail, and related service uses are located along the frontage of these arterials. There is very little residential use adjacent to these arterials.
3. Many industrial areas are adjacent to residential areas.
4. Residential is the largest category of land use and DFW Airport is the second largest user of land in the City. Much of the land adjacent to DFW Airport is still undeveloped.
5. Several freeways still have substantial undeveloped areas adjacent to them which provide opportunities for future land use direction. Interstate Highway 635, portions of State Highway 114, and State Highway 161 all have undeveloped areas adjacent to them.
6. Major arterials and highways tend to isolate or create barriers which segregate land uses of different types.
7. Many of the residential areas developed since 1970 have a curvilinear street system. Many of the areas developed prior to 1970, and principally those south of State Highway 183, have a more rectangular, or "grid-like" street pattern.



8. Two industrial areas appear to have taken advantage of the available railroad service in Irving: (1) North of State 183 at the Burlington Line; and (2) the area just north of the old Rock Island Railroad in the vicinity of the old Downtown area.
9. One of the original entryways into Irving, State Highway 356 (Irving Boulevard) is still heavily used as access to and from Irving and has a substantial amount of older commercial development along it, particularly east of the Civic Complex. The area (west) between the Civic Complex and State Highway 183 is newer and has less nonresidential development adjacent to it.
10. Las Colinas is the single largest concentration of office-style development in the City.
11. Four major golf courses exist: (1) Hackberry Creek Golf Course; (2) Las Colinas Sports Club and Four Seasons Resort; (3) Las Colinas Country Club; and (4) Twin Wells Park and Golf Course.
12. Irving Mall, at State Highway 183 and Belt Line Road, is the single largest concentration of retail development.
13. Most of the industrial land uses are located in the eastern portions of the City.

Issue: What is the appropriate balance between residential and non-residential land uses in Irving?

Issue: What is the appropriate balance between single-family and multi-family residential uses?

Issue: What are the appropriate future uses of undeveloped lands remaining in the City?

Issue: Are there areas in the City that should be redeveloped for different uses?

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3.7 PUBLIC SERVICES AND FACILITIES

3.7.1 Public Facilities and Buildings

Irving's public facilities and buildings include:

- City Hall/Civic Center
- Police
- Fire Stations
- Libraries
- Service Center
- Other City facilities such as the Irving Community Network, Irving Arts Center and Human Services

Most city facilities are generally adequate at this time although expansion would be necessary in several areas as the population increases. Little or no areas exist for substantial expansion within many of the existing facilities.

Issue: Relocation of the Automobile Pound on Shady Grove Road (in Grand Prairie) to a site in Irving should be evaluated.

3.7.2 PUBLIC EDUCATIONAL FACILITIES

Irving is served by five independent school districts (ISD):

- Irving ISD
- Coppell ISD
- Carrollton/Farmers Branch ISD
- Grapevine/Colleyville ISD
- Grand Prairie ISD

The Irving ISD serves the major portion of the City while the Coppell and Carrollton/Farmers Branch ISDs serve the northern area; the other districts serve very little area. The Coppell ISD has one existing elementary school at Rodeo Drive and Valley Ranch Parkway, and one site for a middle school located at Valley Ranch Parkway and Santa Fe Trail. The Carrollton/Farmers Branch ISD has one existing elementary school in the Hackberry Creek area. In addition, it has one existing elementary school in Valley Ranch, with a middle school site and a high school site located there, as well. The Irving ISD presently has three high schools, six junior high schools, and eighteen elementary schools.



A large majority of property within the Irving ISD is developed, and short-term needs are presently adequately met, although slight overcrowding is occurring in some elementary schools. Large undeveloped areas and the potential for more residential development will likely require additional schools in the northern portion of the community within the Carrollton/Farmers Branch and Coppell ISDs. Comprehensive planning efforts will allow the City and School Districts to cooperatively anticipate future population and serve future residents more effectively.

A number of factors affect school enrollment and the locations of future schools. Although an important objective of most school districts throughout the State is to achieve fair and equitable racial integration in the present system, good site selection for long-term service should also be a part of the goal for providing an adequate geographic distribution of educational facilities. The standards for site selection and attendance zones should be reviewed frequently to ensure that educational objectives are being achieved.

As Irving grows, each independent school district affected will be challenged in the future to provide either new facilities or renovated facilities in an efficient manner consistent with a high level of quality service. Although demographic changes will complicate the ability to predict the enrollment trends, logical site selection will maximize investments in physical improvements and facilities.

Issue: Enrollment growth has increased by 5,000 students over the last 10 years in the Irving ISD and some overcrowding is occurring in the southern areas.

Issue: In the Irving ISD, low-income families comprise a growing percentage of the District. Many children are now on school lunch programs.

Issue: Due to the Airport expansion, there is a potential of a 2.5 million tax base loss because of Airport expansion. This tax base reduction will reduce the income to the School Districts.

Issue: Is there a need for schools in new locations, particularly in the northern portion of Irving?

Issue: Should the neighborhood school concept be re-evaluated?

Issue: There should be an effort to increase the corporate interests in education and participation in related programs.



3.8 URBAN DESIGN AND COMMUNITY CHARACTER

Irving's physical and community character is defined by the following major components:

- The Downtown District
- Older Residential Areas
- Highway-Oriented Commercial Corridors
- Industrial Areas
- Corporate Employment Areas
- Planned Unit Developments
- Dallas/Fort Worth International Airport

Other important urban design elements include corridors (regional arterial roadways, local connectors, and rail rights-of-way), public and semi-public institutions such as the Irving Arts Center and University of Dallas, and major "viewsheds." It will be important in the future to address the visual appeal of Irving's residential and nonresidential areas. Some areas have excelled at creating pleasing environments (e.g., Las Colinas, DFW Freeport) while other areas have little landscaping and other site development amenities (e.g., building design standards).

Issue: Irving has a dual character: new versus old, north versus south. Should this dual character be reinforced or policies developed to better integrate the two halves of the City?

Issue: The traditional residential fabric in the south has been divided by intensely developed freeways (corridors) and other automobile-oriented development (regional shopping centers). Combined with the frequent juxtaposition of inappropriate land uses (e.g., industrial next to residential), this has resulted in a lack of identifiable neighborhoods.

Issue: Some areas are experiencing deterioration of aging housing stock (see Housing element). This is counterbalanced to some extent by newer developments which have been constructed in some older residential areas, signaling a willingness to reinvest in these neighborhoods.

Issue: The northern part of the City is characterized by high quality, master planned developments. However, the development pattern is fragmented with a lack of continuity and physical connections between the developments.



Issue: *The quality of the visual environment varies. The visual image of Irving is dominated by its automobile-oriented commercial corridors. Should other areas of Irving receive similar landscape treatment as do areas in the north?*

Issue: *Stronger controls are needed to regulate new corridor development, such as along S.H. 161 north of the Airport Freeway, and along Belt Line Road in southwestern Irving which may experience development pressure due to its adjacency to the Race Track in Grand Prairie.*

Issue: *There is no unified system of open spaces. Irving's parks are unevenly distributed throughout the City.*

Issue: *Public amenities (Twin Wells Park and Golf Course, Trinity View Park, and other parks along the Trinity River) and major institutions (Texas Stadium, University of Dallas, National Museum of Communications, The Film Studios of Las Colinas, North Lake College, Las Colinas Equestrian Center) are isolated from each other.*

Issue: *Access to the commuter rail service in the Trinity Railway Express corridor is limited.*

Issue: *The portion of northwest Irving adjacent to the D/FW International Airport lacks definition and is affected by issues such as the recent openings of both the new airport runway and S.H. 161 (including a planned future extension to the south).*

Urban design opportunities include the following:

- MacArthur Boulevard could be developed as the City's principal "access" roadway linking "urban villages."
- The proposed Downtown District improvements provide an opportunity to recreate Irving's historic downtown as a "place to go."
- A continuous greenway system could be developed along the Trinity River and major streams to connect parks, open spaces, and institutional amenities city-wide.
- Transit-related improvements could be developed along the Trinity Railway Express corridor to maximize the potential benefit of proposed commuter rail service between Dallas and Fort Worth. For example, station locations could be identified to best serve Irving's potential transit-user population (two or possibly three stations are now planned).
- Identifiable residential neighborhoods could be created which include neighborhood amenities such as walkable shopping areas, local parks, and schools.



- Context-sensitive infill development could be encouraged in certain residential areas.
- Public infrastructure investment (landscaping along roadways, improvements to parks and waterways, etc.) could be targeted to counteract the perceived “divide” between the private developments of the north and the relatively older areas of the south.
- “Gateways” could be created at principal entry points to mark Irving’s identity and enhance its visual image.

3.9 PARKS, RECREATION AND OPEN SPACE

Irving currently has 2,573 acres of public park land plus various recreational centers, and buildings/facilities. Much of this acreage is owned by the City, but some (over one-third of the acreage) is leased from other entities. Based on national standards, the City is deficient in some areas or facilities. Although Irving should develop its own recreation standards, the national (1990 National Recreation and Park Association, NRPA) minimum standards indicate acreage deficiencies in five of the seven geographical planning areas in Irving.

Issue: Acquisition and development of local neighborhood and community-serving park land has not kept pace with Irving’s rapid growth. This results in deficits which are particularly severe in the North, Northeast, Southwest, and West planning areas; small parks serving local neighborhoods are a particularly scarce resource. Although the amount of regional park land meets the overall objective set by the 1990 Park Land Needs Assessment, the park land is not evenly distributed within the City. If the water portion of North Lake Park is excluded, there is a current deficit in regional park land which is projected to increase by 2010.

Issue: The 1990 Park Land Needs Assessment is a good initial effort that defines standards to guide park land acquisition. However, the standards are somewhat low compared to those recommended by the National Recreation and Parks Association and those used in some other communities.

Issue: A high proportion of Irving’s park land is leased with many of the properties having cancellation clauses which do not favor the City. As a long-term goal it would be desirable to have all parks be publicly owned to ensure that they are maintained for recreational purposes.



Issue: *The Trinity River and Irving's major streams such as Delaware Creek provide an opportunity for developing a comprehensive greenway system (perhaps with recreational trails) which could link parks and other public facilities and institutions located throughout the City. The open space of private developments such as Hackberry Creek and Valley Ranch could also connect to this system.*

One problem with this concept is the past conversion of Delaware Creek and other streams to concrete channels making it difficult and costly to restore them to a semi-natural condition.

Issue: *The deficiency in neighborhood and community park land with Irving's rapid growth suggests that a high priority be placed on land acquisition for recreation and open space. A parks and recreation general obligation bond fund of \$19.4 million approved in 1994 includes \$3 million for park land acquisition. In addition, money is dedicated for park land acquisition through the water bill "Voluntary Contribution Program." However, high land values limit the amount of land that can be purchased through these programs. A variety of mechanisms should be considered if a wide-ranging park land acquisition and development program is to be implemented. Examples of available options include:*

- *agreements to develop recreational facilities on other publicly-owned land (e.g., elementary schools and well sites).*
- *state and federal grant programs.*
- *an ordinance requiring dedication of land or in-lieu of impact fees.*
- *other regulatory mechanisms such as cluster development provisions.*
- *facility user fees.*

Issue: *Comments by residents during the scoping interviews indicate that the range of facilities available within the parks system should be expanded to provide recreational opportunities for people of all interests, age groups, and abilities. Examples of suggested facilities range from new recreation centers (two are programmed for the northern part of the City) and neighborhood parks to facilities and programs serving youths and special needs populations.*



Issue: Although the Parks and Recreation Department does a good job with available resources, staffing levels have not increased commensurate with the growth of the City and expansion of the park system. A study would be helpful to evaluate staffing and fiscal resources required to support the recreational needs of a growing community.

3.10 TRANSPORTATION SYSTEM

The City of Irving is served by the following major freeways:

- Interstate 635 (LBJ Freeway)
- State Highway 114 (John W. Carpenter Freeway)
- State Highway 161
- State Highway 183 (Airport Freeway)
- Loop 12 (Walton Walker Boulevard)

Within Irving, a network of arterial streets provides for movement throughout the City. This thoroughfare system is mostly gridlike in the southern half of the City and more curvilinear in the northern portion of the City. Several major roadways serve to provide traffic movement for both north/south and east/west travel. North/south movement is generally accommodated on Belt Line Road, MacArthur Boulevard, Valley View Lane, Esters Road, Story Road, and O'Connor Road/Boulevard. Of those, Belt Line Road and MacArthur Boulevard serve as spines that serve cross-town movements. East/west movement is accommodated on Irving Boulevard, Shady Grove Road, Grauwylar Road, Pioneer Drive, Rochelle Road/Boulevard, Northgate Drive, Walnut Hill Lane, and Royal Lane. East/west movement is, however, primarily provided by State Highways 183 and 114 (freeways) and Interstate 635.

Access to the City from roadways other than the freeway network is sufficient in east/west connections; however, Irving is limited in the number of connections from the north and the south. Currently, through access is provided only by Belt Line Road, MacArthur Boulevard, or Valley View Lane for both the north and the south. This is primarily a result of development constraints of the West Fork and Elm Forks of the Trinity River, North Lake, and DFW Airport. Access has been increased somewhat with the completion and opening of the Meyers Road/I-30 interchange in late 1994. In the north, the future S.H. 190/S.H. 161 connector freeway will provide significant additional access capacity to areas north of Irving, although this improvement is not anticipated to be completed for several years.



3.10.1 Traffic Volumes

Traffic volumes for the freeway system within Irving were reviewed to assess relative growth in the freeway corridors and to determine critical areas of traffic demand. The data revealed, as expected, that a considerable increase in traffic volume (6 to 117 percent) occurred at all count stations over the past 10 years. More specifically, a review of the data revealed that:

- Traffic volumes at various count locations on S.H. 183 increased between 33 and 62 percent over the past ten year period. Between 1992 and 1993, volumes increased from two to seven percent with the largest increases occurring throughout the corridor east of S.H. 356 (Irving Boulevard). West of S.H. 356, volumes increased by two percent.
- Loop 12 experienced a slight decrease in volume ranging from one to nine percent between 1992 and 1993. The largest decrease (nine percent) occurred north of S.H. 114. Over the past 10 years, traffic volumes increased from 2 to 21 percent in this corridor.
- S.H. 114 had a substantial increase in volume over the past ten years (82 to 117 percent) at various count locations, but experienced a minimal decrease over the past year (one to four percent in 1994). Traffic volume fell by four percent just west of Loop 12.
- I.H. 635 increased in traffic volume by over 100 percent over the 10 year period. Between 1992 and 1993, an increase of three to ten percent was recorded at various locations in this corridor. The ten percent increase occurred at a count station just east of S.H. 161.

Additional analysis revealed several areas throughout Irving where demand exceeded capacity or approached capacity (90 percent) during the AM and PM peak hour. These areas included:

- S.H. 183 and S.H. Loop 12 through Irving and S.H. 114 from S.H. 183 to Spur 348.
- Many of the north/south approaches to interchanges along S.H. 183 including Valley View Lane, Belt Line Road, Story Road, MacArthur Boulevard, and O'Conner Road.
- Several of the east/west approaches to interchanges along Loop 12 including Grauwlyer Road, Irving Boulevard, Shady Grove Road.
- S.H. 114 at the MacArthur Boulevard and O'Connor Boulevard interchanges.



- Belt Line Road between Pioneer Drive and Walnut Hill Lane, Belt Line Road at Valley View Lane, MacArthur Boulevard at Northgate Drive, Northgate Drive at O'Connor Boulevard, and Irving Boulevard near Nursery Road.

Evaluation of journey-to-work data revealed that over two-thirds of the total daily work trips either originated in Irving (24 percent) or were imported to Irving (42 percent). The remaining 33 percent of the work trips were those that departed from Irving. Of the trips that originated in Irving, about 40 percent remained in Irving.

3.10.2 Development Trends

Several development trends in Irving have already influenced traffic growth to the area. A significant amount of current development can be credited to the influence of Las Colinas. In particular, the Urban Center has fostered employment growth that currently accommodates about one-third of Irving's work force. Currently, developments within the Urban Center employ almost 30,000 persons. Based on remaining land capacity within the Urban Center alone, the potential for growth could range from 3 to 5 times that of existing levels.

The continued growth potential of the S.H. 114 corridor (exclusive of the Urban Center) will also influence traffic growth to the region. It is estimated that 28,000 persons are currently employed at developments (more is anticipated) within the corridor, and growth is anticipated to continue due to the availability of land and the attractiveness of the campus-style developments situated there.

Other development trends influencing traffic growth include the development of single and multi-family housing in north Irving and the Valley Ranch area, potential growth in the S.H. 161 corridor, and potential expansion of Texas Stadium. The abundance of undeveloped land along S.H. 161 has increased the attractiveness of this corridor for commercial and retail interests. A proposal to expand Texas Stadium, increasing seating capacity by 40,000 seats, and developing complementary uses will require special traffic demand considerations for events.

The development of employment centers in Irving is important to the vitality and growth of Irving. Economic growth should be encouraged to the maximum extent, while at the same time being cognizant of the community infrastructure available to meet growth needs. The various analyses performed revealed that, under current development conditions, system constraints exist. This is due in part to regional traffic using the system and in part to employment generators in Irving. Alternative transportation systems planning will be critical in order to accommodate new development. Facilities planning should include the investigation of the Trinity Tollway, transit initiatives, and transportation systems man-



agement. The protection of future transportation system investments is critical to the viability of the Irving area for future growth and development.

Issue: The impact of travel growth in Irving needs to be accurately assessed.

Issue: Transportation plans and strategies should be developed based on influencing factors.

Issue: The transportation system should accommodate the full development of potential employment generators.

Issue: The impacts of potential freeway upgrades and new tollways need to be evaluated.

Issue: The transportation system should be planned to meet needs and desires of development.

Issue: The role of transit in achieving the development goals of the community should be increased.

Issue: Investments in roadway capacity should be protected.