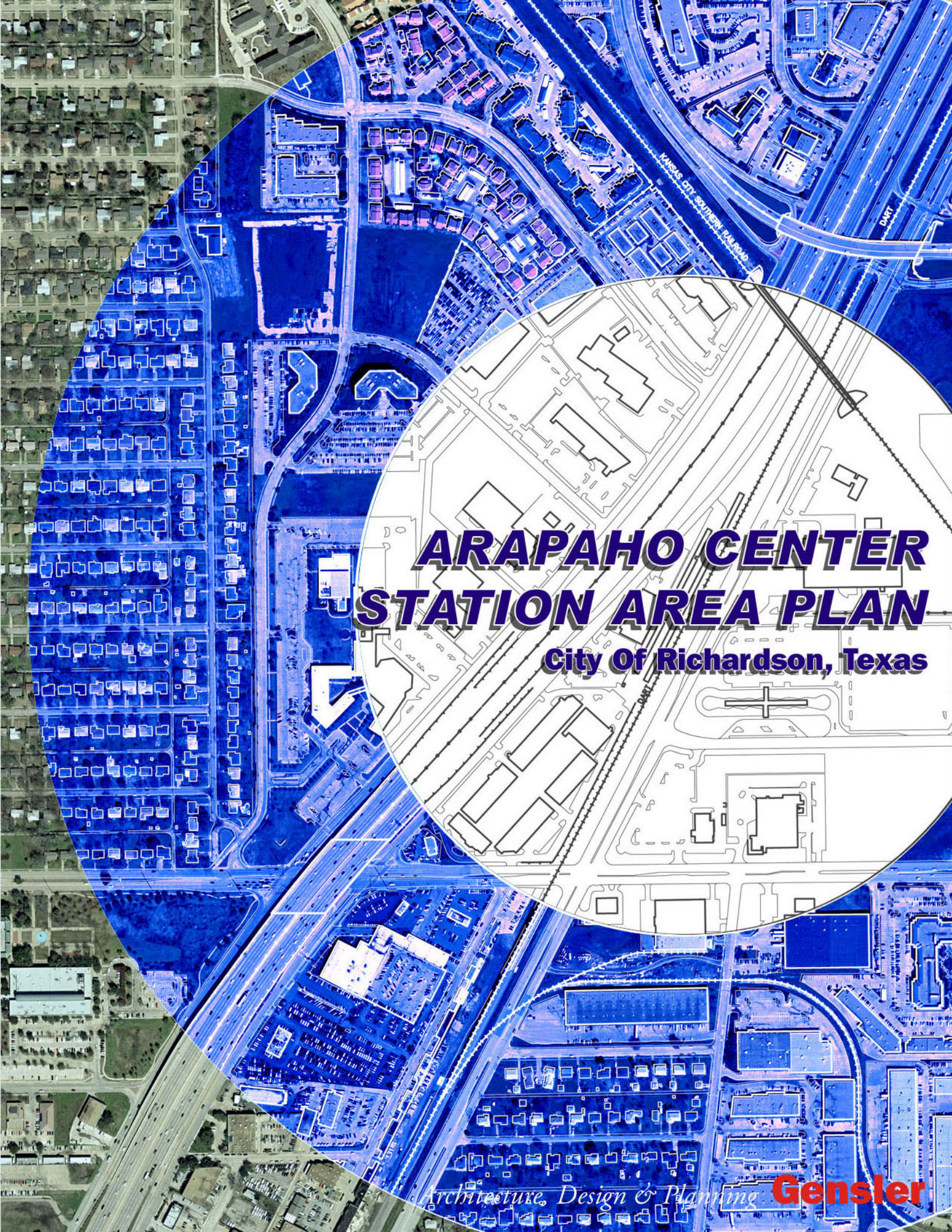

ARAPAHO CENTER STATION AREA PLAN

City Of Richardson, Texas

Architecture, Design & Planning Gensler

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INTRODUCTION

ARAPAHO CENTER STATION AREA PLAN

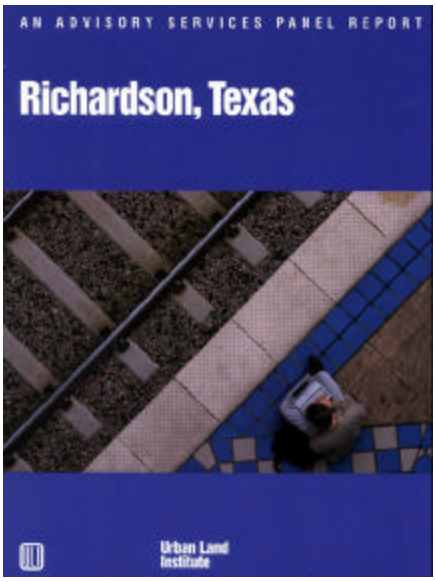
In the spring of 2001, Richardson solicited proposals to prepare Station Area Plans for the development of areas surrounding the Spring Valley, Main Street, and Arapaho Center DART light rail stations. The development plans were to be based on a market analysis in conjunction with the concept of Transit Oriented Development (TOD).

In the winter of 2001, Richardson retained the services of Economics Research Associates (ERA) to provide a market analysis, and Gensler to establish a master development plan for the area surrounding DART's Arapaho Center light rail station. The city embarked on this endeavor in order to ensure that development near the station is compatible with its surroundings and mutually supportive in terms of the objectives of the city's and DART relative to land use, urban design, transportation, and economics.

Geographically, the Arapaho Center light rail station is Richardson's middle station. It is located directly west of Greenville Avenue and the Richardson Transit Center, north of Arapaho Road, and east of North Central Expressway (US75). A pedestrian tunnel under Greenville Avenue connects DART's transit center with the station. The transit center has parking available for approximately 1,200 cars. The station is expected to serve approximately 1,800 light rail passengers per day by 2010.

URBAN LAND INSTITUTE (ULI)

The Station Area Plans were developed in part in response to recommendations developed by a ULI Advisory Services Panel Report.



In 2000, Richardson invited a ULI panel to examine the unique opportunities for transit oriented development and/or redevelopment in the vicinity of its five Dallas Area Rapid Transit (DART) stations—Spring Valley, Main Street, Arapaho Center, Galatyn Park, and Bush Turnpike. The panel approached this assignment recognizing that it must recommend development strategies that

would maximize opportunities around these station areas while preserving, reinforcing, and enhancing the city's unique neighborhood characteristics.

Upon examining the five stations, it became clear to the panel that its recommendations for development and redevelopment should reflect each station's unique character, market conditions, and environmental and physical features.

After a review and analysis of the Arapaho Center station area, the panel recommended that the city encourage commercial development as the dominant land use near the Arapaho Center station. They also recommended that the city should be flexible in its policies to allow for a mix of land uses. Larger parcels could incorporate retail and residential uses, as well as office development. The panel recommended that these options be left open, to allow prospective developers to respond to market demands.

In addition, the panel felt that as the area around the Arapaho Center station develops, the air rights over the transit facility might become desirable for development. The panel recommended that the City consider this possibility in its plans for the area around the Arapaho Center station.

As concluded by the ULI panel, the City of Richardson is well-positioned to attract high-quality development around its existing and future DART light-rail stations. It has a unique opportunity to foster positive economic growth while protecting its quality of life by providing leadership, creating a vision, and implementing a strategy for new growth and development around the DART stations.

CURRENT DEVELOPMENT PATTERNS

A number of factors have brought about a reconsideration of growth patterns over the last 50 years. Since World War II, development patterns have been dictated by the relationship between people and their automobiles. Living outside the central city in the suburbs has been viewed as "making it."

Development within the suburbs has been an exercise in segregating land uses and activities. While the automobile has allowed people the freedom to live farther from where they work, creating a perceived increase in the quality of life, it must be recognized that the auto is not necessarily a great panacea.

With the influx of people moving to the suburbs, development patterns have changed dramatically. While people tend to favor the ability to drive their own cars where they want to, they are often resentful of having to share the road with other drivers. As a result, the street systems in many suburban neighborhoods have been designed to limit the encroachment of outside traffic. This, by its nature, has also created an environment where neighborhood traffic is funneled to specific roads (collector streets) in order to minimize neighborhood impacts.

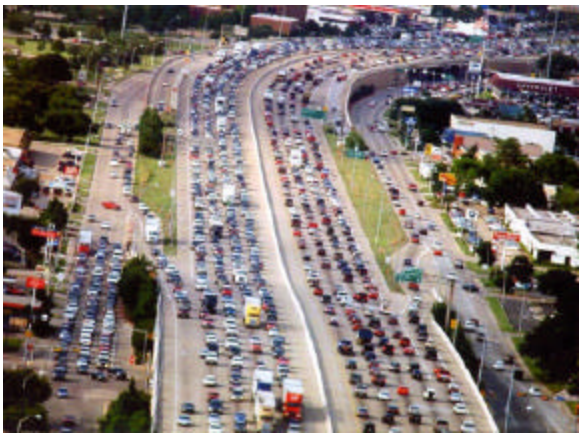
These collector streets are designed with a larger traffic capacity. Since more than one neighborhood typically has access to the collector streets, they, in turn, funnel traffic to even larger arterial streets so that fluid traffic movement can be achieved.

Since customers have moved to the suburbs, retail and commercial development has followed. In order for these businesses to provide services to the largest number of people in the most cost-effective manner, they prefer to locate on the roads that carry the most traffic. While this concentration of

activity is positive from a business perspective, there are potential conflicts.

The concentration of employees' and customers' cars, suppliers' trucks, noise, trash, odor, etc. creates an environment that can be disruptive for many neighborhoods if not carefully managed. As a result, residential and nonresidential uses tend to be segregated. This segregation in turn, helps to exacerbate some of the same problems since now most people have to drive from their neighborhoods to get something as simple as a gallon of milk or a dozen eggs.

Between 1982 and 1996, the average yearly commuter delay time due to road congestion in the Dallas area increased from 8 hours to 32 hours and subsequently to 46 hours in 1999. It is estimated that by 2025, the cost of this ever-increasing congestion to the region will be over $8.2 billion.



In addition to the financial impacts described above, this congestion has a direct impact on air quality, which also will have a direct financial impact on the region if current trends continue. The current peak ozone levels in Dallas have been measured at 164 parts per billion (ppb). The federally acceptable maximum level of ozone is presently 124 ppb. This overabundance of ozone has the potential to result in the reduction in the amount of federal transportation dollars that the region receives.

Finally, there has been an ongoing concern with regard to development sprawl. As growth continues throughout the region and cities' populations increase by 25%-30% on an annual basis, terms such as "smart growth" and "neotraditional planning" continue to come to the forefront. The issue of sprawl is not simply about housing being built farther and farther from the urban core. It is also about the businesses that spring up to serve those residents. It is this combination that, when repeated over and over again, leads to sprawl.

This is especially true in a region such as the Metroplex, where growth is predicted to continue for the foreseeable future. In fact, the North Central Texas Council of Governments (NCTCOG) predicts that 2.6 million new people will move into the region by 2025, and 1.7 million new jobs will be added.

As the region struggles with these issues from a general perspective, Richardson must address them directly. Growth in the fringe suburbs is not only the result of new people moving to the region, but is also due to people in Dallas and the inner suburbs (such as Richardson) migrating outward.

Population outflow has the potential to have a spiraling affect on a community. If people leave a community and new residents do not take their place, businesses tend to follow. As the businesses move, the remaining residents now have farther to go to have their needs met. Consequently, these people must decide whether it is in their best interest to move as well.

Many residents of the region's inner suburbs are presently going through this decision-

making process. In order for these inner suburbs to not only survive, but also thrive, alternative development patterns may be necessary. If automobile-driven development has created the "inconveniences" that abound today, perhaps de-emphasizing the automobile may help reverse the trend.

Since 1996, when Dallas Area Rapid Transit (DART) opened the first leg of the "Red Line," a light rail, mass transit line adjacent to Central Expressway, the rationale for a "new" development pattern has emerged. This "new" land use pattern is known as transit-oriented development (TOD).

TRANSIT-ORIENTED DEVELOPMENT (TOD)

Transit-oriented development (TOD) focuses a mix of land uses, such as residential, office, shopping, civic uses, and entertainment, within easy walking distance of a transit station. This mix of uses, combined with thoughtfully designed community spaces, plazas, etc., forms a vibrant village-like neighborhood where people can live, work, and play. Such a village is compact in size, pedestrian-friendly in design, can be customized to offer a wide variety of housing options, with convenient access to jobs, and additional transportation alternatives.

The concept behind TOD is simple: Land use patterns that attract jobs and housing to transit will cause people to use cars less and to walk and ride transit more.

Residents of transit-oriented neighborhoods are not necessarily car-free, though ideally they could do without cars if they chose to.

TOD may be viewed as a means of taking advantage of superior transit accessibility while reducing the need for automobile use and fostering investment within areas relatively close to a transit station.

While TOD may seem different from our current auto-oriented development patterns, it does not require people to make wholesale changes to their daily lives in order for it to succeed.

ECONOMIC RESEARCH

Prior to the start of the planning processes the city retained the services of a nationally recognized economic research firm with offices in Dallas and San Francisco, Economic Research Associates (ERA) undertook the task of studying several of the Richardson station areas as well as the entire city relative to past and future trends. As a result they provided to the planners absorption projections for various land uses, upon which the plans were developed.

PLAN DEVELOPMENT PROCESS

Prior to developing a plan for the area around the Arapaho Center station, a compilation and analysis of the current area conditions was undertaken. This examination analyzed current ownership and development patterns, identified area strengths for emphasis, and constraints that need to be overcome.

EXISTING ZONING

The predominant zoning for land in the Arapaho Center station area, east of Central Expressway, is Industrial. This zoning category allows for a wide variety of uses that range from office and limited retail to distribution and light assembly.

The area immediately west of Central Expressway is zoned for commercial and office uses. This is to be expected, due to the regional emphasis of the highway and the established multi- and single-family zoning in the immediate vicinity.

EXISTING LAND USE

Although the majority of the land east of Central Expressway is zoned for industrial uses, a wide range of activities actually takes place on these properties. The predominant uses are technology oriented in nature.

Assembly and distribution uses are located throughout the area, primarily south of Arapaho Road.

In addition, uses in this area range from automobile dealerships and service facilities to office development and institutional uses, such as Richardson Independent School District's Technology Magnet School and the Arapaho Center Station. There also exist a number of large, vacant tracts of land available for immediate development.

In the corridor immediately west of Central Expressway, automobile dealerships coexist with office development, as well as institutional uses such as the First Baptist Church of Richardson and the Richardson Municipal Complex, which houses the city hall/civic center and the public library.

Established residential neighborhoods exist at both the western and southern edges of the study area. While the southern neighborhood is single-family in nature, the residential development in the western neighborhood covers the complete spectrum, including apartments, condominiums, retirement housing, and single-family homes.

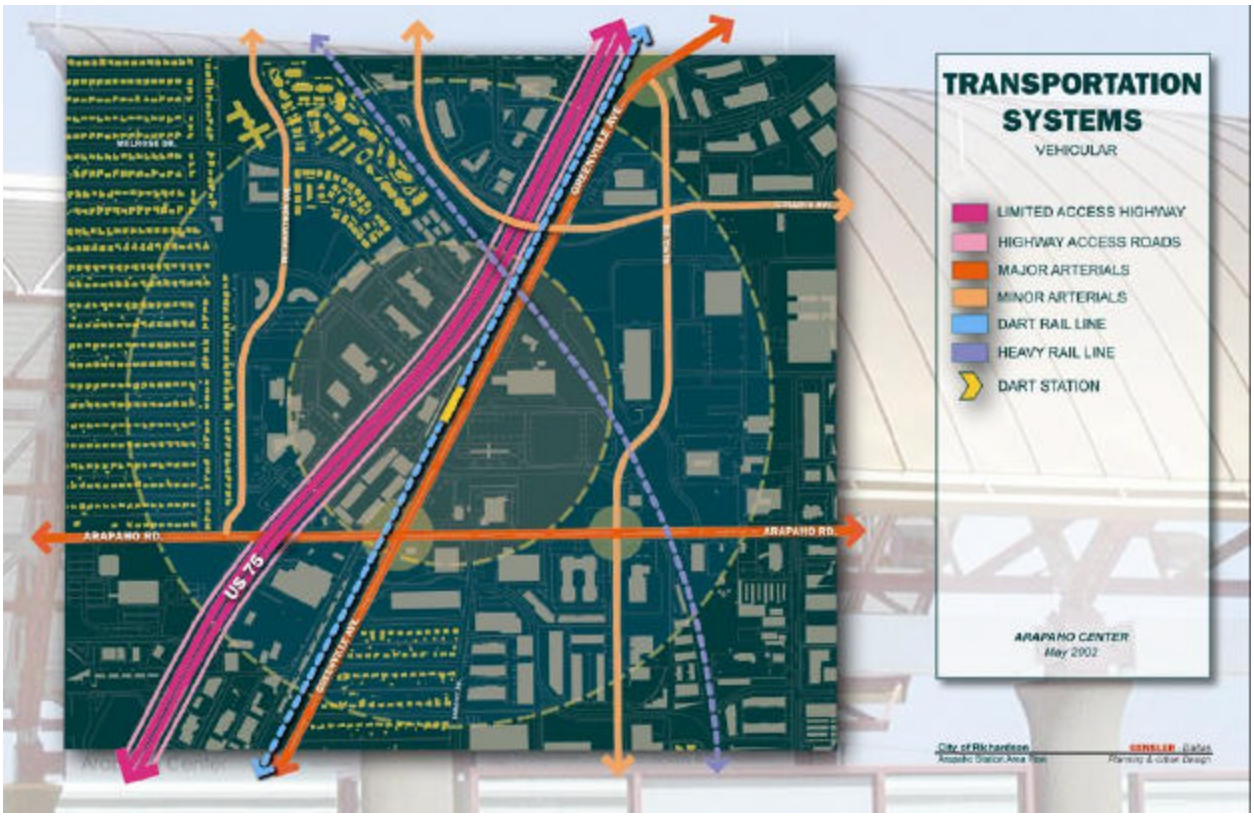
VEHICULAR TRANSPORTATION SYSTEMS

The Arapaho Center station area is well served by the existing street system. Central Expressway provides the primary access to the area. This regional highway is one of the predominant north-south transportation spines for the region. With its eight main traffic lanes, four lanes of frontage roads, and planned high occupancy vehicle lanes, it is anticipated that this roadway will continue to have a major impact on this portion of the region.

While Greenville Avenue and Arapaho Road also provide regional access, they are the primary city-wide vehicular routes serving the station area. Greenville Avenue is a six lane, divided road that runs adjacent to the rail station and provides access to the area from both the north and the south. Arapaho Road is a six lane, divided east-west roadway that provides a direct route to the station.

Numerous other streets such as Alma Road, Collins Boulevard and Richardson Drive accommodate local traffic to and through the station area.

In addition to the DART Red Line, the Kansas City Southern Railroad also serves the station area. At present, this rail line is used for freight service. In the future, it could be utilized for commuter rail service. This scenario would seem to lend itself to a commuter rail station being located in the immediate vicinity of the transit center and could lead to the creation of a transportation hub served by light and commuter rail, as well as local and regional roadways.



PEDESTRIAN TRANSPORTATION SYSTEMS

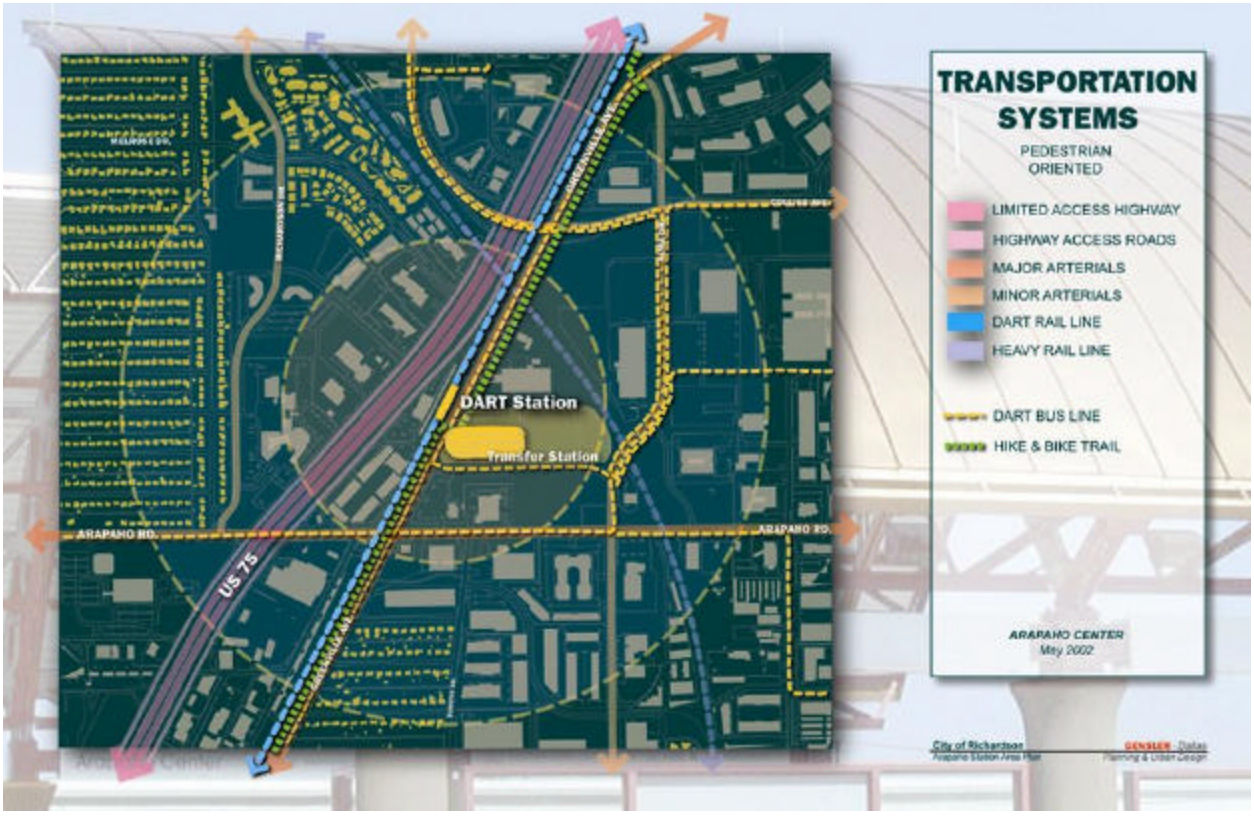
While vehicular access to the station area is excellent, pedestrians are not as well served. The station itself is isolated due to its specific location. Since the DART rail line is sandwiched between Central Expressway and Greenville Avenue, the only protected pedestrian access to the station is by way of a tunnel under Greenville Avenue, which ties into the transit center.

Richardson is in the process of developing a hike and bike trail along Greenville Avenue. This trail will have a much-needed positive impact on pedestrian access to the area. This trail should be the first step in the process of providing interconnectivity not only within the station area, but also to other parts of the community.

The Kansas City Southern Railroad, which is approximately 25' higher than the adjacent property is another disruption to connectivity. This railroad is a formidable barrier between the station and existing and potential development within the station area north and east of the rail line.

Arapaho Road, which carries approximately 42,000 vehicles per day, creates a challenge for accessibility between the Arapaho Center station and the residential and nonresidential development to the south.

Finally, Central Expressway isolates nearly half of the station area to the west. Due to the distances that would have to be traveled on foot from these residential areas, and the fact that DART's only bus route serving this portion of the community runs along Arapaho Road, persons west of Central Expressway would likely drive to the transit center even though they are within walking distance.



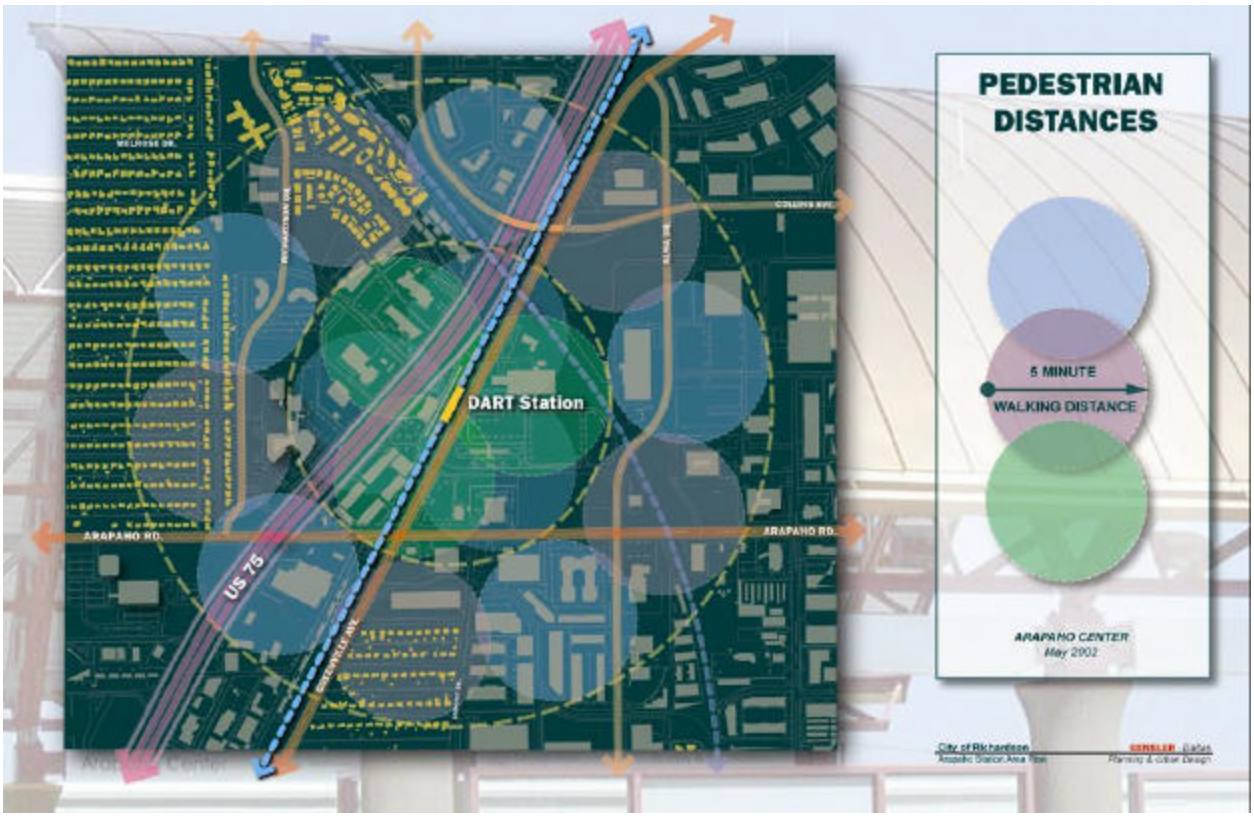
PEDESTRIAN DISTANCES

One of the keys to successful transit-oriented development is to provide for sustainable activity within a reasonable walking distance from the transit facility. For most people, this distance has been estimated at ¼ mile, which a person can comfortably walk in five minutes. Within TOD the most intense development activity usually takes place within this ¼ mile radius from a station.

The area within ½ mile of the station, or the distance most people can reasonably walk in 10 minutes, will also be influenced by the presence of the rail station, albeit to a lesser degree. Those two distances are typically shown as concentric circles around a transit facility, such as the Arapaho Center light rail station.

Physical barriers (Central Expressway, Arapaho Road, Kansas City Southern Railroad) have the potential to greatly minimize the ability to walk to the Arapaho Center station, even though a person may be within a five- or 10-minute walk of the station.

Providing an additional mode(s) of transportation in conjunction with a five minute walk has the potential to expand access to the station from anywhere in the station area. This creates the potential for residents and employees in the western and southern portions of the station area to have much more convenient access to the DART light rail station, thereby increasing usage.



DEVELOPMENT OPPORTUNITIES

The physical benchmarks in transit-oriented development are the five-minute and 10-minute walks. Financial analyses have been done that show a marked increase in property values for land within ¼ and ½ mile with a transit station when compared to properties with similar characteristics that are further from a station.

The world, however, is not laid out in ¼-mile and ½-mile concentric circles. The impact zone of a transit facility is influenced much more by physical constraints, such as streets, highways, and rail lines, than by a simplified pattern of five- or 10-minute walks.

In the Arapaho Center station area, parcel sizes are relatively large and the number of property owners, some of whom are regularly involved in the development process, is limited. In addition, a number of significant pieces of property are either undeveloped or could be redeveloped with reasonable ease. This situation provides ample opportunity for the light rail station to have a direct impact on the type, size, and timing of development in the station area.

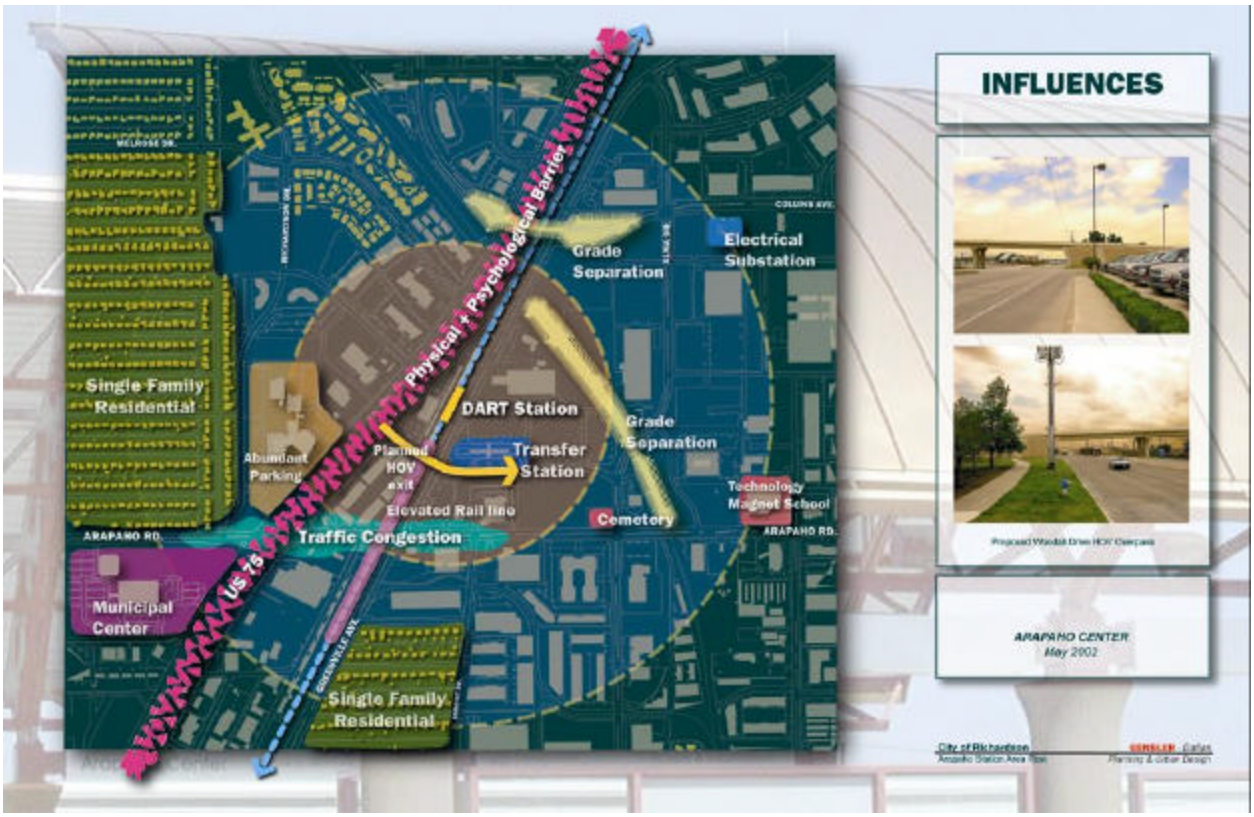
INFLUENCES

Many factors influence property development. Some, such as market and economic conditions, are broad in nature and not easily controlled. Others, such as site accessibility and parcel size, are much more finite and can be more easily influenced.

There are numerous physical influences within the station area that have the potential to create disjointed development. Unless systems can be put into place to overcome features such as Central Expressway and the Kansas City Southern Railroad, the benefits of TOD may otherwise not reach their full potential in this station area.

This is especially important for existing residents in the study area, who stand to benefit the most from transit-oriented development. Yet, if interconnectivity cannot be achieved, even residents within a 10-minute walk of the station may relate to the station no differently than persons who live ten miles away.

While the ease of accessibility between "sectors" within the study area is somewhat problematic, the ability for interaction between the station area and the balance of Richardson is very much enhanced due to the existing road system, recently revised bus routes, and the DART light rail line.



COMMUNITY INVOLVEMENT

When developing a plan such as this, it is essential that there is community buy-in. And ultimately, the plan must be implementable.

To solicit buy-in, a process was established that would involve all sectors of the community, including the property owners within the study area that would be most directly affected development around the station, the general community, and representatives from the public sector, such as the City, the school district, the Chamber of Commerce, and DART.

A visioning session was held in May 2002 to establish the primary development vision for the station area. This meeting was attended by community and business leaders, as well as by the major landowners within the study area.

Following that session, a design charette with city staff and representatives of ERA was held. The purpose of this charette was to develop a preliminary design concept that fell within the market realities identified by ERA. (Please see Appendix for ERA Arapaho Center Station Recommendations.)

A second meeting took place to provide the stakeholders with an update of the design concept. Feedback was solicited to allow for the discussion of ideas and plan direction.

Additional refinements were made to the plan and a preliminary plan was presented to the community in September 2002. Once again, input was solicited and feedback provided.

Finally, the preliminary plan was presented to the City Council in September 2002. Their thoughts and insight were provided and incorporated into the plan.

The Arapaho Center Station Area Plan was developed through this interactive process. It reflects the views of the community and adheres to good planning principles and the realities of the real estate and development markets.

STATION AREA LAND PLAN

Historically, land plans have focused on allowed types of uses for definitive geographic areas. The specific location of the various activities of the various activities is normally determined by a number of factors, such as relationship to existing uses, accessibility, the size of parcels that are available for development or redevelopment, etc.

From that perspective, the Arapaho Center Station Area Plan is fairly traditional. The plan identifies where it is deemed appropriate to develop specific categories of uses within the station area.

What makes the plan unique is that it anticipates that DART's Arapaho Center light rail station will fundamentally change the form of development within ¼ to ½ mile of the station.

In all likelihood, uses will not be segregated from other uses, as is the case in more traditional land plans. Interrelationships will exist both horizontally and vertically. These combinations of uses on the same site should make for an interesting and more functional development.

Due to the nature of this type of development, the characteristics of specific uses are just as important as their location. For example, uses that are auto-dependent, such as drive-through windows, car washes, etc., should be discouraged. Uses that generate pedestrian activity, particularly at ground-floor level, such as shops, services, and offices, should be encouraged. Special traffic generators, such as cultural and civic anchors that act as destinations should also be encouraged to remain and to be located in the station area.

It is anticipated that the various elements of the station area will strengthen and reinforce each other. Housing will mean more people to support daytime and nighttime businesses. People who work in station area offices will use restaurants, retail, and personal services. Over time, the station will become increasingly self-sufficient, sustaining a full range of businesses, housing, and basic services, and becoming an even more attractive place to live and work.

To fully embrace the mixed-use concept, compatible home occupations should be encouraged in the residential sectors of the station area. Encouraging home occupations helps to reduce vehicle trips outside the community, particularly during rush hour. Benefits include reduced peak hour vehicle emissions and reduced traffic congestion. Home-based work also benefits the community by increasing resident and worker presence throughout the day, resulting in a safer environment and providing an all-day market for service and retail uses.

The following are the land use categories proposed for the Arapaho Center Station Area.

LAND USES

DART Transit: This land use category specifically identifies the property within the study area that accommodates the Arapaho Center transit facility and its accompanying parking in its ultimate configuration.

Special Mixed Use: This land use category identifies the true heart of the Arapaho Center station area. This area is intended to develop with mid-rise entertainment, restaurant, and specialty retail uses. An integration of public gathering places is essential for uses in this category to be complementary.

Hospitality/Mixed Use: The flexibility of this land use category allows for market conditions to have a more direct impact on the type of development appropriate for this area. If a hospitality use focuses on this station, this area lends itself well for development. Mid-rise offices and associated uses such as retail and service uses are also well suited for this land use category.

Retail/Service: The intent of this category is to provide for limited retail and/or service uses aimed particularly at the day-to-day needs of transit patrons and nearby office occupants. This does not, however, preclude others from using these establishments.

Office: The office category is intended to accommodate a variety of mid- and high-rise office developments. Limited retail, incidental to the main uses, may also be appropriate within property developed for this land use.

Office/Urban Residential: The flexibility of this land use category allows market conditions to have a more direct impact on the type of development appropriate for this area. With a pedestrian connection traversing beneath the Kansas City Southern Railroad, a mid-rise "urban" type residential development is appropriate in this area. If the connection does not occur, or if the market dictates otherwise, mid- to high-rise office is an appropriate use for this category.

Office/Tech: This land use category is typically associated with businesses whose focus is research and technology-related in an office environment. Light assembly and/or limited manufacturing uses are regularly associated with this category as well.

Commercial/Office: Uses typically associated with this category are commercial uses of a medium intensity, such as auto dealerships. In addition, mid-rise, professional office developments are appropriate uses on land designated for this land use category.

Public: This category represents nonprofit, public, or semi-public uses such as churches, public or private schools, and government-operated facilities.

Residential/Multi-Family: This land use designation reflects existing multi-family neighborhoods within the station area.

Residential/Single Family: This land use designation reflects existing single-family neighborhoods within the station area.

Special Opportunity: Due to the challenging configuration of property designated for this use, a wide variety of uses may be appropriate for this category,

including office, open space, and office/tech. A detailed analysis of any proposed project should take place prior to development.

Open Space: This category represents both privately and publicly-owned land that creates gathering places, plazas, transportation elements, sidewalks, walking paths, and passive landscape areas.

PLAN HIGHLIGHTS

The Arapaho Center station area has many attributes that will encourage stable, long-term, mixed-use development.

Not only is the Arapaho Transit Center a focal point of this community, the area is also well served by a road system that will enable people who do not have access to the rail system to use their automobiles to patronize the uses in this station area. It is anticipated that this broad accessibility will be a strength for this station area.

In addition to the easy accessibility into and out of the area, the large parcels of undeveloped and underdeveloped land create attractive opportunities for new growth.

Existing Residential Areas

The concentrations of residential uses within the station area are focused north of Arapaho Road in the neighborhoods west of Central Expressway and south of Arapaho Road, in the neighborhoods east of Central Expressway. Both of these areas have sizeable physical barriers separating them from DART's light rail station, even though they are both within a 10-minute walk of the station.

As development around the station takes place, these neighborhoods will be attractive for substantial rejuvenation. It is vital that these neighborhoods be connected to the light rail station by some form of shuttle system in order for this revitalization to take place.

Western Commercial and Office Areas

The nonresidential areas west of Central Expressway are developed primarily with smaller scale office developments and automobile dealerships.

While these uses are viable today, if growth takes place within the station area as anticipated, these large parcels of land may be much better suited for higher intensity mixed-use, office, and commercial developments.

Southern Office/Tech Area

The nonresidential development south of Arapaho Road is principally of an office/tech/warehouse character. While many of the businesses in this area are

small, most are very viable, especially as support to larger companies nearby.

A shuttle system connecting these businesses with the light rail station and the other activities north of Arapaho Road will help to integrate this section of the station area with the more active sections.

Eastern Office/Tech Area

The majority of the land east of the Kansas City Southern Railroad and north of Arapaho Road is owned by one entity. A number of parcels in this area are undeveloped and this may be considered underutilized. This increases the potential for long-term new development and redevelopment. While the primary focus of this quadrant should remain as office/tech development, the opportunity for some mid- to high-density residential development is also present.

In order for this quadrant to be more integrated with the remainder of the station area, it is recommended that a shuttle system be incorporated throughout the development. In addition, a direct pedestrian linkage should be created through the Kansas City Southern Railroad embankment. This will allow area workers and residents to walk to the station and to frequent the businesses within the special mixed use area. This linkage will be especially crucial if the Kansas City Southern railroad is ever used as a commuter rail line.

Nonresidential Area North of Arapaho Road

While the land between the DART facilities and Arapaho Road has excellent direct access to the rail station, its accessibility to Arapaho Road and US 75 is also a major benefit.

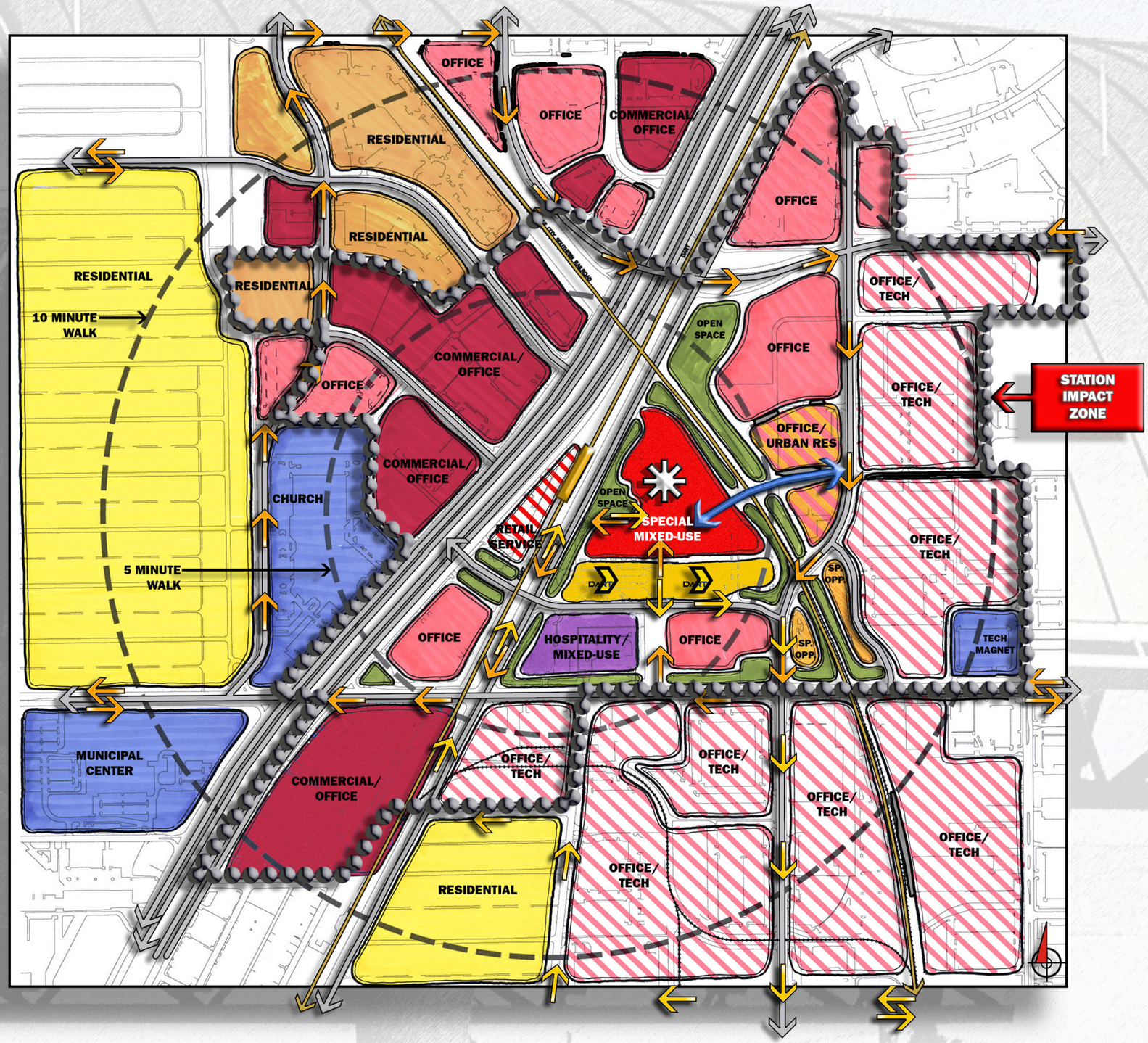
Development on surrounding properties should capitalize on this multi-modal accessibility. Examples of appropriate uses could include mid- to high-rise office developments or a hotel.

The area immediately west of the Arapaho Center light rail station is recommended for retail and services uses, which are an important component of a transit-friendly community. Uses that would typically be in such an area are dry cleaners, shoe repair, and a sandwich or donut shop, with access from both Central Expressway and the rail station.

Open Spaces

Open spaces are interlaced throughout the station area. These open spaces, whether built or natural, active or passive, help create distinctive areas. Plazas, squares, and social gathering places should be emphasized within the special mixed use area.

Other publicly accessible open spaces, such as the extension of the city's hike and bike trail system, contribute to the aesthetic quality of the surrounding area and to the feeling of "community" that fosters a strong sense of place.



STATION AREA LAND PLAN

- DART TRANSIT
- SPECIAL MIXED-USE
- HOSPITALITY / MIXED-USE
- RETAIL / SERVICE
- OFFICE
- OFFICE / URBAN RESIDENTIAL
- OFFICE / TECH
- COMMERCIAL / OFFICE
- PUBLIC
- RESIDENTIAL / MULTI-FAMILY
- RESIDENTIAL / SINGLE FAMILY
- SPECIAL OPPORTUNITY
- OPEN SPACE
- POTENTIAL SHUTTLE ROUTES
- PEDESTRIAN LINKAGE

Special Mixed-Use Area

Designing a more sustainable community begins with defining the core of the district. The Special Mixed-Use area is intended to be the core of the Arapaho Center Station community.

The Special Mixed-Use area is appropriate for a significant level of development that will provide a mix of businesses and services near the transit center, creating a lively and active environment and an engaging entrance into Richardson from the transit center.

This Special Mixed-Use area is envisioned as a place where people will instinctively walk. It is an active and attractive pedestrian environment, defined by special paving, street furniture, and landscaping.

The goal for this area is to create a sense of place that people will want to instinctively come back to. In order to accomplish this, the development must evoke an atmosphere of energy and vitality.

While specific uses such as restaurants or a movie theater may be the initial reason for patrons visiting the development, a synergy should exist with the public places to create a vibrant atmosphere. Architectural treatments such as balconies, prominent staircases, and plazas should be utilized to bridge the private and public spaces.

In order for this area to be an integral part of the Arapaho Center community, it is recommended that the northern one-half of the existing Arapaho Transit Center parking lot be incorporated into the mixed-use area. As a result, a parking structure will need to be constructed in the southeastern portion of the DART property. It is anticipated that this parking structure will provide the parking that DART feels is necessary to adequately serve the transit, along with parking for the mixed-use area to the north and perhaps for development south of the transit center. Based on the uses anticipated in the mixed-use area, it is expected that a large amount of shared parking spaces will take place.

Arapaho Area Transit Station Concept Plan

Richardson, Texas

Gensler

URBAN DESIGN

The goal of having a transit-friendly environment is not solely to improve access to public transit ridership but also to build communities. To encourage commuters to rely on modes of transportation other than the car to get to the rail station, the physical environment needs to be designed to support pedestrian and bicycle access.

This can be successfully accomplished by reinforcing a sense of community through design that is sensitive to human scale and activates the sidewalks with pedestrians. When a successful pedestrian environment is created, people are encouraged to use the space, which contributes to the quality of the environment, attracting even more people to the area.

Site and building design standards play a major role in creating a successful development, which in turn will reinforce street activity.

For example, mixed uses create a diversity of activity that draws people to an area for different reasons and at different times of the day and week. Having window transparency and frequent entries from buildings onto the street improves the interaction between the public space of the street and the private uses in the buildings.

Successful environments, whether new or old, have a number of common traits that enhance the pedestrian experience. For instance, limits on block size enhance a feeling of human scale while shortening walking trips by creating more direct routes. Placing parking lots and garages away from sidewalk edges to the interior of the block greatly reinforces the pedestrian's importance since there is now a direct relationship between the pedestrian on the sidewalk and the immediately adjacent storefronts.

Building design and architecture also play important but subtler roles in creating places with human scale and environments that encourage walking. Architectural massing and treatments such as awnings and arcades provide visual interest and a variety of experiences to the person on foot or bike. At the same time, they contribute to the character and quality of a place.

Architectural variety between buildings relieves the monotony of large or repetitious environments. Appropriate building materials reinforce the scale and use of buildings and communicate a sense of durability and quality.

Window treatments and the number of windows add human scale to the façade and also ensure that "eyes on the street" will provide casual but critical surveillance.

Glass type and glazing transparency affects a building's look and identity, as well as the adjacent street's quality of life. Heavily tinted or highly reflective glass deprives the pedestrian of visual interest or causes uncomfortable glare.

DESIGN GUIDELINES

These guidelines are recommendations for the architectural treatment and organization of buildings and open space within the station area.

These standards are unified by a simple goal: to use appropriate site planning and building design to enhance the pedestrian experience.

Building/Site Relationship

Individual street-facing ground floor retail uses should have an entry visible and directly accessible from the street.

A change in materials, color, and/or wall plane should be provided at all entries in order to emphasize these façade focal points.

Building setbacks lines should be reduced to allow buildings to front streets and public spaces. Windows and doors should greet the pedestrian at street level as opposed to expansive blank walls.

Office and service uses should have at least one primary entrance oriented to the street. Secondary entrances may orient to parking lots and/or common open areas.

Building design should respond to the hot summers. A porch or overhang should protect entries, particularly the front door.

Large commercial entries should be clearly articulated to provide façade interest and to clearly direct pedestrians to the entryway.

Small front yard setbacks are encouraged to bring dwellings close to the street and to provide human scale and visual interest.

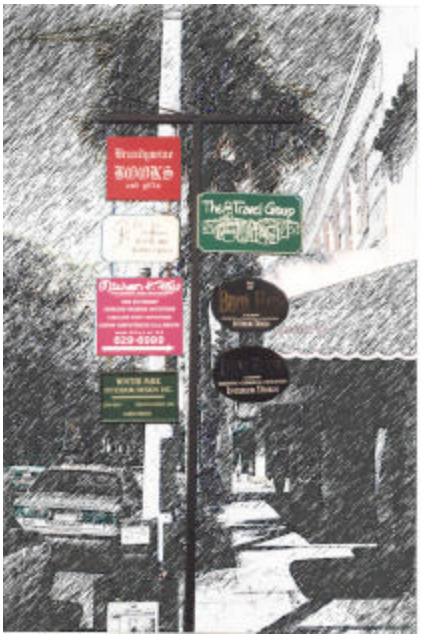
Sidewalks should be wide enough to accommodate groups of people as well as outdoor seating for eateries, sidewalk sales, etc.

Visitor drop-off areas and on-street parking should be provided at public building entries.

Blank walls, fences, or rows of garage doors fronting the street and providing minimal access or visual interest should be avoided.

Corner parcels should be encouraged to incorporate special features such as enhanced corner entrances and other architectural elements, display windows, etc.

A variety of architectural styles, details, and materials should be permitted. Such flexibility creates unique, memorable places that become part of the community identity.



Signage should be integrated into architectural design.

All refuse containers should be located within enclosed refuse areas.

Pedestrian Experience

Planting strips, street trees, public art, and on-street parking should be used to create a buffer between cars and pedestrians.

Pleasant walkways and bicycle paths should be built between the station area and surrounding neighborhoods, with "connections" that reach far into the community.

Streets should be human-scaled and pedestrian oriented.

Where sidewalks are attached to the curb, landscaping should be located behind the sidewalk, except in cases where the sidewalk is greater than eight feet wide and designed to accept trees in tree wells.

Trees, street lamps, benches, planters, statues, and sculptures should be arranged to create "outdoor rooms" along the streets where people are more likely to pause and enjoy these pleasant and lively corridors.

Care should be used when selecting street tree species. Canopy size and breadth should be should be considered to minimize conflicts with signage. Trees with vertical root growth patterns should be emphasized to minimize paving conflicts.

Kiosks should be utilized throughout the station area to allow for the public sharing of information in a pedestrian setting.

Parking Treatments

Large surface parking lots should be discouraged in favor of structured, underground, or below-building parking. On-street parking should be encouraged, where appropriate.

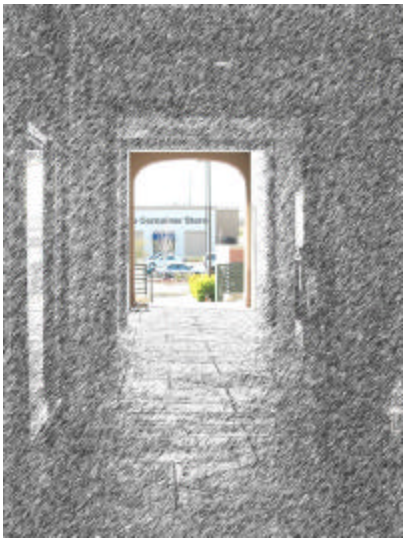
The functionality and aesthetics of parking structures should be increased by wrapping, stacking, or otherwise integrating these facilities with other uses such as retail, housing, and office.

Garage entrances should be set back farther from streets and drives when compared to adjacent buildings.

Shared parking should be encouraged for complementary uses which will alternate peak hours throughout the day, such as an office building and a movie theater or restaurant.

Surface parking should be located to the rear of buildings, away from public view.

Broad, landscaped, and well lighted pedestrian connections from parking areas to building entries at public streets should be encouraged.



Harsh pedestrian environments should be softened with street furniture, trees, etc. along driveways, driving aisles, and pedestrian connections.

RECOMMENDATIONS AND IMPLEMENTATION

The success of any project is determined by how well the investment of time, money, good will, etc., achieves the objectives of the various participants involved in the process. One of the first steps in attaining the goal is to implement a plan.

The Arapaho Center Station Area Plan was developed with a number of participants, each with his or her own objectives. First and foremost, the input/direction of affected property owners was sought. Secondly, public agencies, such as the City of Richardson and DART were involved in the development of the plan. Finally, input from the general public was solicited.

The successful development and redevelopment of land within the Arapaho Center Station Area will be achieved if the goals and objectives of the involved participants can be interconnected and mutually achieved.

For example, the goal of the landowner may be to develop his property. This goal coincided with the City's goal of encouraging economic development and DART's aim of increasing ridership. These goals must be related to those of neighboring property owners, which would likely include minimizing the negative impacts of adjacent uses.

A number of strategies and mechanisms can be developed to achieve success. Some of these tools are identified below.

LAND USE AND ZONING

It is recommended that an overlay zoning district be created to implement the Arapaho Center Station Area Plan.

Conventional zoning has long been viewed as a means of promoting the "health, safety, and general welfare" of the community by establishing districts, enumerating land uses within each district, and establishing other regulations such as building location, height of structures, bulk, parking, etc.

Over the years, traditional zoning has been criticized for not responding to economic, social, environmental, or real estate market changes. As a result, various techniques have been developed that increase the flexibility of zoning in an effort to more effectively manage land development.

One of those techniques is known as overlay zoning. Overlay zoning is generally used when there is a desire to promote special public interest that cannot be achieved through with traditional zoning. It typically applies to a specific geographic area with requirements that are either more or less restrictive than those in the underlying traditional zoning district regulations.

Instead of creating a new zoning category, an overlay zone is superimposed over the traditional area and establishes additional regulations. These regulations may also reduce or extend existing uses. While the underlying zone or zones identify permitted land uses, the overlay zone might also require design restrictions, reduced setbacks, or other exceptions to the base district regulations.

An overlay zoning district should have no negative impact on existing businesses, but instead should act as a catalyst for landowners since development standards for mixed-use development will be in place.

The intent of such a district is to create a level playing field so that land owners, developers, and the city understand that the quality of each new development has a

dynamic, positive impact on those developments that follow and most importantly, that the integrity of their investments are on par with their neighbors. This results from the fact that development standards for the area are consistent, irrespective of the base zoning on the property.

The process of establishing such a district should include meetings with city staff, property owners, and business and community leaders, so that a consensus can be achieved that will benefit all involved.

FINANCIAL TOOLS

Transit-oriented development in many instances has been a joint development involving both the private and public sector participants. While the long-term goal of the community may be to encourage the private sector to take an active lead in the development of land within the station area, the community's continuing willingness to be an active participant in the process is vital for success.

As an example, Richardson retained the services of Economic Research Associates (ERA) to conduct a market analysis for the DART rail corridor. This task is typically accomplished by the private sector.

The development community sees a proactive response such as this in a very positive light. It is an indicator that the community wants to be a partner. This partnership, however, does not have to rely on the city providing specific funding solely for analyses or infrastructure.

In fact, the City has a number of programs in place that have served it well with respect to providing incentive for new development. These include tax abatements and fee waivers.

Other positives that Richardson should continue to emphasize are its historically low ad valorem tax rate and the fact that the city does not charge impact fees for new development.

Two additional points, which are not financially oriented will also have an impact on the perceived viability of development within the station area need to be focused on.

First, the City's willingness to not only initiate the planning process for the station areas, but also to implement zoning and development criteria that will allow for atypical development will be positively perceived by the development community and the finance industry

Secondly, the City's ability to cooperate with other political and quasi-political entities will be vital. Richardson should take the lead in this endeavor. This will establish a hierarchy to ensure that those most impacted by new development, i.e., the property owner and the city, will be leading the way and not reacting to agendas developed by other parties.

A limited number of additional tools exist to assist the development community.

Tax Increment Financing (TIF)

Tax Increment Financing is a tool that local governments can use to publicly finance needed improvements and enhanced infrastructure within a defined area. These improvements are usually undertaken to promote the viability of existing businesses and to attract new commercial enterprises.

The cost of improvements to the area is repaid by the contribution of future tax revenues. Specifically, a taxing unit can

choose to assign all or a portion of the tax revenue that is attributable to the increase in property values to improvements within the reinvestment zone. The additional tax revenue that is received from the affected properties is referred to as the tax increment.

Communities have used this tool not only to directly pay for infrastructure, but also to leverage the sale of bonds for infrastructure improvements.

There are some practical limitations to this strategy since school districts are not allowed to participate; however, in instances where an influx of new development is expected to take place in a relatively short time period, the rapid increase in property values makes this tool viable, even without the school district's participation.

Chapter 380 Grants and Loans

Chapter 380 of the Local Government Code allows Texas municipalities significant legislative authority in the area of economic development. This statute allows the city to provide grants or loans in order to stimulate business and commercial activity. This technique can be used to help developers minimize up-front costs for new projects, for example under the terms of a Chapter 380 loan, the City receives the tangible benefits of new development, while the developer obtains a loan from the city to cover infrastructure costs. In the case of a grant, the money does not have to be repaid. In either case, the city must ensure that the public purpose of economic development is accomplished.

Chapter 380, however, does not provide any express authorization for the city to finance these grants or loans through the issuance of debt or bonds.

DART

The active involvement of DART, politically materially and financially, is vital for successful implementation of the Arapaho Center Station Area Plan.

As previously mentioned, some of the land that is designated for "Special Mixed Use", truly the lynch pin of the Arapaho Center station area, is presently being used as parking for the transit center.

In order for this land to be utilized in a manner that will be more beneficial to all involved, a parking structure needs to be built. The cost of the structure should be shared by all of the parties that will benefit, i.e. the private sector, the city, and DART.

Since a portion of the land designated for "Special Mixed Use" is owned by DART, a lease agreement between the transit agency and the private sector will most likely need to be executed if this property is to be developed.

On a broader scale, in accordance with DART's existing policies, a circulator/distributor shuttle service agreement should be entered into with the business parks located throughout the station area. This mechanism allows for DART to pay up to 50% of the cost of providing shuttle service between nearby businesses and the transit center/rail station. The availability of such a system should make the area more attractive to new businesses and will encourage existing operations to remain in place.

CONCLUSION

"Area Traffic Worsening, Studies say; Clogged Roads Linked to Lack of Mass Transit" *Fort Worth Star Telegram*

"Yes Your Commute to work is Longer" *Dallas Morning News*

"The personal costs of congestion is enormous" *The Public Transportation Partnership*

These headlines address an issue in the minds of drivers everyday. Traffic studies performed in major Texas metropolitan areas indicate that both work-related and non-work travel activities have grown steadily over the last three decades. According to the Texas Transportation Institute study, in 2000, the cost of congestion in terms of lost hours and wasted fuel was $68 billion. Non-work activities now account for three-fourths of all household vehicle trips and have become a major travel purpose, even during off-peak times.

As individuals strive for more efficient use of their time, non-work travel is increasingly linked into trip chains involving several stops. Because of its magnitude, non-work travel has important implications for transportation and land use policies, particularly in the form of transit-oriented development.

Creating destinations with multiple attractions at light rail stations, as is being proposed at the Arapaho Center Station, can reduce the number of non-work trips needed by area residents.

The Economic Research Associates (ERA) market analysis, commissioned by the City of Richardson, recognizes the impact of the northern DART rail line and supports the recommendations of this report. The ERA study does suggest "a significant destination mixed-use development occupying the largest single tract of land in the area." The proposed complex is perfectly located considering the proximity to the existing DART facilities, and provides potential public-private development opportunities.

This complex and the proposed residential, service and employment land uses surrounding it are, like most transit-oriented development, a response to the impacts of metropolitan growth and its effects, including traffic congestion and the resultant environmental impacts. Transit-oriented development that allows for living and working within easy access of entertainment and service providers is a valid answer to concerns regarding the livability and anticipated redevelopment of the community.

APPENDIX

ECONOMICS RESEARCH ASSOCIATES ARAPAHO CENTER STATION RECOMMENDATIONS

As an integral part of Richardson's station area planning effort, Economics Research Associates (ERA) was retained to provide a real estate market assessment of development potential around three of Richardson's DART light rail stations—Spring Valley, Main Street, and Arapaho Center. ERA's analysis focused on the land area within approximately one-half mile of each station and looks out to the year 2020. ERA began by looking at city-wide development potential, examining current development levels and projected demand. The team then narrowed their focus to development along the light rail corridor, and more specifically the three southerly stations, dividing potential development between the three stations based on development patterns and area character. Following is an excerpt from the report *Richardson DART Station Area Market Analysis* with information specific to the Arapaho Center station.

Economic and Market Outlook

The Dallas regional economy has performed exceptionally well over the past ten to 15 years with employment growth rates consistently above the national average. Rapid growth of the Telecom Corridor, which has been the dominant driver of the Richardson economy, contributed mightily to the region's success. However, burdened by too much capacity and too much debt, the telecommunications sector has been undergoing retrenchment during the past two years. This retrenchment period for the telecom sector is affecting Richardson's near term economic outlook.

Buoyed by supportive government policies, an abundance of land, a productive labor force and a $200 billion Department of Defense contract to build the new joint-strike fighter at Lockheed-Martin in Fort Worth, the Dallas regional economy is already resuming its expansion. Once it has weathered this difficult period for the telecom sector, Richardson will also resume its forward progress. The DART line and its five Richardson stations will provide long-term stimulus for development, particularly as automobile traffic congestion builds with regional growth. By 2020, ERA projects that Richardson will have 116,000 in total population and 125,000 in total employment. The city's current population is approximately 95,000 and current employment is estimated at 97,000. Based upon these forecasts and considering the current excess capacity in the office and hotel sectors, ERA's citywide market demand forecasts for Richardson are as follows:

Citywide Market Demand	2002-2020
Office Development (SF)	1.5 to 3.0 million
Retail/Restaurant Space (SF)	1.5 to 1.7 million
Cinema Screens	20 to 25
Hotel Rooms	900 to 950
Apartment Units	5,000
Condominium/Townhouse Units	1,500

Arapaho Center Station Opportunities

The Arapaho station area has some clear advantages for future development, and the include:
1) great visibility from US-75, 2) not only terrific north-south access but excellent east-west access due to Arapaho Road, 3) extensive transit parking that can be used as overflow parking for private development during evenings and weekends, 4) larger land parcels to facilitate developments of significant scale, and 5) ability to build off the new high quality image being established by the Galatyn Park station due to its proximity. The market potential for this station is as follows:

Arapaho Center Station New Demand	**2002-2020**
Office Development (SF)	300,000 to 400,000
Retail/Restaurant Space (SF)	20,000 to 50,000
Cinema Screens	12 to 14
Hotel Rooms	300 to 450
Apartment Units	250
Condominium/Townhouse Units	150

ERA envisions the centerpiece for this station area to be a cinema and restaurant complex with some retail uses totaling 80,000 to 100,000 square feet. This type of development, because of its evening and weekend patronage, will be able to derive substantial financial benefit from the unused transit parking during its peak periods. Favorable liquor laws will help ensure a higher level of success in the proposed entertainment district.

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