











SEPTEMBER 2017

ARLINGTON HIGH-SPEED RAIL STATION AREA PLANNING STUDY



wsp

The Arlington HSR Station Area Planning Study was commissioned by the North Central Texas Council of Governments (NCTCOG) on behalf of the City of Arlington. NCTCOG and the city selected a team of specialists to conduct the study led by WSP, and including Walter P. Moore & Associates, Public Information Associates, Civil Associates and VAI Architects Incorporated.

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Through funding by the North Central Texas Council of Governments (NCTCOG), the Arlington High-Speed Rail Station Area Planning Study serves two purposes:

- Provide NCTCOG with potential High-Speed Rail (HSR) station locations for inclusion and analysis as part of the Draft Environmental Impact Statement (DEIS) for the Dallas Fort Worth Core Express Service (DFWCES), and
- Assist the City of Arlington in creating a second urban center that generates additional economic development activity and supports current Entertainment District activities.

A study area was established that encompassed the area's major attractions and potential routes. The study area is shown in Map 1.

Stakeholder Input

The key to reaching consensus on the stations areas included a series of meetings and outreach efforts with major stakeholders. Those included the City of Arlington, Dallas Area Rapid Transit (DART), The Fort Worth Transportation Authority (FWTA), Tarrant County, The Cordish Companies, The Texas Rangers Baseball Club, the Dallas Cowboys, Six Flags Over



Map 1 Study Area

Texas, Arlington Convention and Visitors' Bureau, (CVB), Texas Health Resources, Moritz Investment Group, Primera Companies, Shopcore (Lincoln Square), CHS Architects, and the Chamber of Commerce. The City of Arlington and NCTCOG participated in each of the meetings in person or via electronic connection.

The result was an open and unbiased evaluation of various HSR routes through Arlington and potential station locations. The input helped establish a high-level analysis that modified a series of potential routes provided by NCTCOG with the elimination of some routes, adjustments to others and the addition of two additional routes for consideration. The analysis also brought into focus four potential station areas that would meet the city's objectives.

Evaluation Process

The same collaborative process that went into the high-level HSR routes and station area analysis was used to establish evaluation criteria to be applied against four potential station areas. A broad set of critical success factors within each of the evaluation criteria was subject to review and comment by city staff and members of a Project Review Committee (PRC). The PRC included representatives from the city, NCTCOG, DART, FWTA and Tarrant County. The input focused the evaluation criteria on those most applicable to the City of Arlington and the project study area. The selected criteria included:

- Complementary Land Uses
- Private sector participation
- Ease of acquisition
- Alignment

The Critical Success Factors were used to evaluate each of the station sites analyzed. Four general station site areas were identified through that evaluation. The station site area locations are shown in Map 2.



Map 2 - Station Site Area Locations

The four areas were then subjected to further evaluation. The Evaluation Scoring included a technical scoring (technical score – by the WSP team and the Project Review Committee (PRC), based on the criteria characterized as an objective process, and a subjective review (weighting - by the city) that addresses the many interests within the city.

The Station Area Evaluation Matrix is provided as Table 1. The matrix includes the technical ranking and the weighting of each of the criteria categories.

The WSP team individually scored the four sites based on the criteria without the weighting. The city's weighted scores were applied against the preliminary scores to generate a composite score. The evaluation results provided a final scoring for the four station areas as follows:

Site A – 96 points Site B –126 points Site C –114 points Site D – 124 points

Criteria Category	Evaluation criteria (Objectives & Values) Proximity to Open Space	Weight Rank from 1 to 5 *5 is highes t	Station Area Technical Ranking of Each Area Technical Performance Score, Scale 1 (low) to 3 (high)			
			West of Collins	South I-30 Location B	6 Flags	East Ballpar
			1.67	3.00	3.00 3.00	2.33
Complimentary Land Uses	Proximity to Civic, Commercial and Entertainment Uses	4				
	High Opportunity for Development to Front Streets	4	2.67	2.67	2.33	2.33
Private Sector Participation	Visibility of Site to / from Regional Roadway	3	3.00	2.67	1.67	1.00
	Potential for Joint Development	5	1.00	2.67	2.00	2.67
raiticipation	High Willingness for Joint Development	5	1.00	2.67	1.67	2.67
	Availability of Nearby Parking	4	1.00	3.00	3.00	2.67
	Low Impacts to Privately Owned Land	3	1.67	2.00	1.67	2.33
Ease of Acquisition	Low Economic Utilization of Parcels	3	1.67	2.33	3.00	2.67
	Low Degree of Fractured Ownership	3	2.00	2.67	3.00	2.00
1	Coincidence with Existing Public ROW	4	3.00	1.67	1.67	2.67
Alignment	Low HSR Operational Impacts (Alignment Curves and Tangents)	4	3.00	3.00	1.67	2.67
	Impact on existing land uses	5	3.00	3.00	3.00	3.00
	Maximum Possible Score	132				
	Technical Performance Score (Sum of All Scores)		26	33	31	32
Weighted Score (Weight x Technical Score)			96	126	114	124
	Percent of Maximum Possible Score	1	73%	96%	86%	94%

Table 1 – Scoring Evaluation Matrix

On June 13, 2017, the City Council of the City of Arlington voted to recommend to NCTCOG potential station location areas B, C and D, with a preference for B. NCTCOG will consider the recommendation as it moves forward with the DEIS for the DFWCES.

STUDY APPROACH

STUDY APPROACH

Introduction/Background

Texas is engaged in a series of efforts to establish High-Speed Rail(HSR) to connect the major metropolitan areas of the state, and beyond, to Oklahoma City, OK. These efforts include the Texas Central Partners' (TCP) private-sector effort to implement Japanese Shinkansen service between Houston and Dallas; the Texas Oklahoma Passenger Rail Study (TOPRS), a conceptual level planning effort to examine improved intercity passenger rail from Fort Worth north to Oklahoma City and HSR south through Austin, San Antonio, to Laredo and the Mexican Border; and the Dallas Fort Worth Core Express Project (DFWCES) connecting The TCP-proposed system from Dallas to the TOPRS system in Ft. Worth via the City of Arlington.

The DFWCES is envisioned to accommodate exclusive use by high-speed trains. The DFWCES alignment through the City of Arlington is planned as a grade-separated alignment with the platform at approximately 35 feet above ground level. The station dimensions are anticipated to be approximately 1,000 feet long and 200 feet wide.

Study Purpose

The North Central Texas Council of Governments (NCTCOG) has led the effort to bring HSR to the Dallas Fort Worth Region. Part of that effort is assisting the Texas Department of Transportation's (TxDOT) preparation of the Draft Environmental Impact Statement (DEIS) for the Dallas to Fort Worth Core Express corridor (DFWCES) to satisfy the requirements under the National Environmental Policy Act (NEPA).

There are two purposes for the Arlington HSR Station Area Planning Study:

- Provide NCTCOG with the station locations for inclusion and analysis as part of the DEIS for the DFWCES.
- Assist the City of Arlington in creating a second urban center that generates additional economic



development activity and supports current Entertainment District activities.

A study area was established that encompassed the area's major attractions, and locations of potential routes as shown on Map 3.

Map 3 Study Area

Goals

Underlying the study's purpose are two principal goals for establishing a HSR station in Arlington:

1. Providing access to HSR destinations located in and adjacent to the Arlington area including:

Corporate headquarters

- American Airlines
- DR Horton

Sports Venues

- AT&T Stadium home of the Dallas Cowboys
- Globe Life Park home of The Texas Rangers Baseball Club

Amusement parks

- Six Flags Over Texas
- Hurricane Harbor

Major Employers

- General Motors Assembly Plant
- Texas Health Resources

Universities and Convention Centers

- The University of Texas at Arlington
- Arlington Convention Center

2. Creation of a second city center around the entertainment district.

The station is envisioned as a multimodal hub, inter-connecting other potential transportation systems that could someday serve the city. For example, other transportation technologies that could connect the HSR station to Dallas-Fort Worth International Airport, the University of Texas at Arlington and other venues, while also serving HSR riders, would benefit from a multimodal hub. As evidenced in other areas across the country and around the world, the new station will support economic development in that sector of the City of Arlington.

The city has a strong interest in economic development. With an elevated station, the city supports the notion of a joint development project, where those using the train would enter a major new development such as a convention center, major hotel or other mixed-use development.

Study Methodology

A two-channel approach was used to identify and evaluate potential station site areas. One channel involved engaging key stakeholders in the study area, while the other consisted of the technical aspects of stations and surrounding areas. The two processes were woven together through discussions that helped identify opportunities and constraints.

Stakeholder Engagement

A Stakeholder Engagement Plan (SEP) was developed to guide discussions with leaders and decisionmakers in the City of Arlington, key local property owners and developers, and regional transportation officials. Four audiences were identified as critical to the discussion:

- 1. Project Review Committee (PRC) comprised of representatives of City of Arlington staff, the NCTCOG, DART, FWTA and Tarrant County;
- 2. City of Arlington elected and appointed officials and staff;
- 3. The Regional Transportation Council (RTC); and
- 4. Major property owners/developers in the study area

Stakeholder activities included five meetings of the PRC; several meetings with City of Arlington staff, administrators and elected officials, and three briefings to the RTC. A presentation was made to the city's citizens' Transportation Advisory Committee. The process also included discussions with property owners, developers, the Arlington Chamber of Commerce and the Convention and Visitors' Bureau.

Technical Process

Previous Studies

The City of Arlington provided a series of reports and studies, some of which applied to the entire City and some related directly to the area. The documents reviewed include:

Arlington, Texas-Economic Development Strategic Plan (September 2014)

The plan identifies the Strengths, Weaknesses, Opportunities and Threats (SWOT) before outlining the action planned around three goals:

- The elevation of Arlington's competitive positioning in the region to capture a larger share of high-wage, high-impact growth;
- The rejuvenation and transformation of key economic centers into vibrant destinations; and
- The creation of the amenities and assets that will secure Arlington's position as a major activity hub in the Metroplex.

TIRZ-5 Entertainment District 2014 Annual Report

Much of the study area is located in an Entertainment District Tax Increment Revitalization Zone 5 (TIRZ-5). The City issued Certificates of Obligations (bonds) in 2008 at the height of the economy before the economic downturn. As with many jurisdictions across the country, the projected increased in development values, and hence tax increment revenues, have fallen seriously short of the bond debt service. The 2014 Annual Report shows the annual bond debt service of \$2,577,431 and tax increment revenues of \$970,343, meaning the City was required to cover the \$1.6 million debt service shortfall.

Division Street Corridor Strategy - Final Report (November 2012)

The Division Street Corridor Strategy map identified Collins Street as the eastern boundary, the Union Pacific Railway as the southern boundary, Cooper Street as the western boundary and North Street as the northern boundary. As the potential station area sites evolved, no sites were identified in the Division Street corridor.

Other City Studies

The city has conducted studies of other areas, including:

- Downtown Plan
- New York Avenue Corridor Strategy
- Tierra Vista Small Area Plan
- Focus 287 Strategic Plan

None of those areas is within the boundaries of the study area for this effort.

Rail Alignments

Early in the process, the NCTCOG provided a series of alternative alignments through Arlington in addition to the alignment along Interstate 30 that is identified in the DFWCES project. The alignments offered new possibilities for the location of the HSR station, and a discussion about how the alignment



Map 4 – NCTCOG Proposed Alignments

and station locations could both accelerate economic development and serve the Entertainment District. The potential HSR alignments are displayed on Map 4.

The technical process and stakeholder engagement merged at PRC and other meetings, prompting an open and unbiased discussion in reviewing the new NCTCOG-prepared alternative alignments. The discussion and input led to the elimination of some alternative alignments, modifications to others, and the addition of two alignments for consideration.

The most southerly route was stated project purposes. One of the routes had an alignment running through the existing ballpark,

which is to be replaced by a new ballpark in the next few years. That alignment offered interesting possibilities, but would require agreement by The Texas Rangers Baseball Club.

In the course of the analysis, the WSP team offered up two additional alignments. One ran along the southern boundary of Six Flags Over Texas and the other showed an adjustment to the I-30 alignment dipping south approximately one-quarter mile generally starting at Ballpark Way on the east and rejoining I-30 generally at Center Street on the west. The two alignments would offer development possibilities on either side of the alignment rather than solely on the southern side, as would be the case with the alignment immediately adjacent to I-30. Map 5 identifies the refined alignment alternatives. The final adjustment to the alignments modified the route that went through the existing ballpark to bypass the ballpark on the north side. That adjustment required a modification to the alignment through one of the parcels owned by the Texas Rangers Baseball Club.



Map 5 – Refined Alignment Alternatives

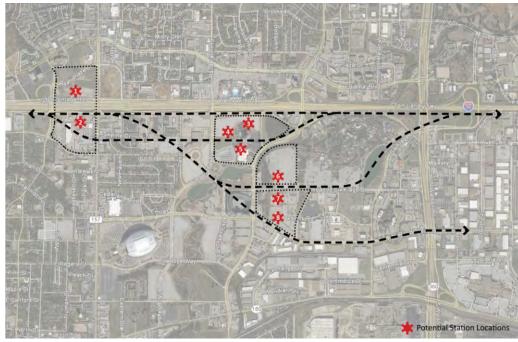
IDENTIFICATION OF STATION AREA SITES

Identification of Station Area Sites

Opportunities and Constraints

Discussions with major stakeholders and property owners in the study area led to the identification of four areas of opportunity physically able to accommodate a rail station platform.

The WSP team then focused on initial analysis of potential station area locations with the greatest level of flexibility, given that the city would be negotiating with the landowners for the site ultimately selected. That approach recognizes a great deal of work will be needed between now and the start of HSR service, including how the site might accommodate a joint venture sought by the city; how the alignment will be engineered; and what road improvements and utility relocations are needed. Providing maximum flexibility will help the city address these and other factors in the future. Map 6 identifies all station areas that were analyzed.



The key to reaching consensus on the opportunity areas was a series of meetings and outreach efforts with the major stakeholders. Those included The Cordish Companies, the **Texas Rangers** Baseball Club, the Dallas Cowboys, Six Flags Over Texas, the

Map 6 - Station Site Areas Analyzed

Arlington CVB, Texas Health Resources, Moritz Investment Group, Primera Companies, Shopcore (Lincoln Square), CHS Architects, and the Chamber of Commerce. The City of Arlington and NCTCOG participated in each of the meetings in person or via electronic connection. For those meetings, a series of maps and graphic images were prepared for the meeting.

The stakeholders generally outlined their land holdings and general development plans or provided insight into development opportunities. They also provided their views on the various HSR alignments under consideration. The discussions addressed the degree to which their sites could accommodate the type of joint development sought by the city and their interest in pursuing such a project. Where alignments might adversely impact on the stakeholder's property or operations, those views were expressed and noted by the WSP team.

After stakeholder discussions, the eight station areas illustrated on Map 6 were ultimately narrowed down to four sites as shown on Map 7. Station areas A and B both include the option of decking over I-30 to increase development potential. After discussions with the Texas Rangers Baseball Club, the route through existing Globe Life Park was altered to skirt north of the Ballpark.

Site Refinement Process A broad range of alternative alignments and site locations were identified as shown on Map 6. The team evaluated how to provide to the City of Arlington a series of sites with the greatest flexibility, both in terms of potential development and modifications to the alignments and initial analysis to begin the process of identifying the ultimate station location. Flexibility was sought as the final location will likely be on privately owned



Map 7 - Station Site Area Locations

property and the exact station location will depend on the development plans of the landowner. The result of the effort are the four general areas identified on Map 7. The Criteria Success Factors, found in the following section, were then applied against the four areas to establish the priority rankings by the city.

STATION AREA SITES EVALUATION

Station Area Sites Evaluation

Critical Success Factors

The WSP team, in coordination with the PRC, developed critical success factors within the evaluation criteria as a first step in defining potential station area locations.

Each success factor includes performance measures, scoring metrics and a basis for its importance in achieving the identified goals. The success factors or criterion are discussed below and included as part of the overall scoring criteria table included within the appendix,

The key critical success factors are described below and include:

Complimentary Land Uses

- o Performance Measures
 - Proximity to open space

Measures existing open space near potential platform locations and assigns a score based on the distance.

One of the core tenants of Transit-Oriented Development (TOD) is establishing a variety of uses within a space to meet the needs of diverse users. Open space helps to meet the social and recreational needs of users, and provides a counter-balance to the development densities typically found at TOD's.

Proximity to civic, commercial and entertainment uses

Measures if there are civic, commercial or entertainment uses near the potential platform locations and assigns a score base on the distances.

TOD works best when built in an active and desirable area where people want to be. If adjacent land uses are already active, TOD can further support these uses. TOD should leverage government buildings, civic centers, theaters, shopping areas, and entertainment centers for success.

Private Sector Participation

- o Performance Measures
 - Opportunity for development to front streets

Measures the total linear feet of a station area that fronts existing streets.

Good TOD development addresses streets with minimal setbacks to facilitate an attractive, active and accessible urban environment. The more sides of a proposed station location that are adjacent to existing street the more TOD development can occur.

Visibility of site to/from major roadway(s)

Measures street visibility of proposed station locations by determining how many sides of the site are adjacent and accessible to an arterial roadway.

For a developer, the visibility of the development from major arterials/interstates/highways is critical.

Potential for Joint Development Evaluates the impact of redevelopment on existing development in the station areas

TOD development is most likely to occur at stations where existing development and structures are impacted the least. Parking lots and vacant parcels are ripe for joint development. Existing commercial centers, civic amenities and entertainment uses are least likely for joint development opportunities.

Willingness for Joint Development

Measures whether current property owners are willing to partner to develop TOD and the HSR facility.

The willingness of current landowners to enter into joint development agreements will facilitate the creation of TOD at the station. Joint development allows for the realization of cost savings for all parties, relative to land acquisition and vertical development costs.

Availability of Nearby Parking

Measures nearby parking that could be shared for future development.

Parking is a major component of any new development. This measure will determine if existing parking can be leveraged for future development and transit needs.

Ease of Acquisition

- Performance Measures
 - Impacts to Privately Owned Land

Measures the number of privately owned parcels that would be impacted by a station location.

Acquiring private property through any means is undesirable though sometimes necessary. This measure will determine which station locations and associated alignments will impact the most privately owned parcels.

Low Economic Utilization of Parcels

Measures the amount of land within a quarter mile that is vacant or underutilized. Any parcel below a value of 1 (as a result of economic analysis) will be considered underutilized.

Ideally, redevelopment will create a higher and better use on a given parcel. This measure will show which station location is a better candidate for redevelopment by determining the number of parcels that are underutilized or vacant near the station area.

Degree of fractured ownership

Measures how fractured ownership is by identifying the average number of parcels per acre within a quarter mile of the proposed platform.

Part of the redevelopment process is meeting with individual landowners to understand their needs and, when necessary, purchase their property in a way that works for them. However, the greater number of owners leads to more coordination and more cost. This measure will determine which station area has the fewest number of parcels per acre (and presumably owners) to help streamline the acquisition process.

Alignment

- o Performance Measures
 - Coincidence with existing public right of way (ROW)

Because the potential platform location necessitates a different track alignment, this measures the percentage of the alignment in linear feet that would be over existing ROW.

TOD development typically fronts streets with minimal setbacks. A rail alignment that is above existing streets will allow new development to front the street and the rail line, providing an attractive, active and accessible urban environment under the rail line and on the street.

HSR Operational Impacts (Alignment Curves and Tangents)

Measures the number of curves and tangents along a specific rail alignment and its associated station location.

Curves and tangents along rail lines result in decreased speeds and increased travel times for HSR patrons, leading to increased costs, lower HSR and transit ridership, and decreased site development efficiencies.

Impact on Existing Land Uses.

Measures impact of alignment on existing land uses with regard to aesthetics and future development/redevelopment opportunities.

Any alignment will impact existing land uses, if only from an aesthetic viewpoint. Any alignment that directly affects private property must secure agreement from the property owner(s) specifically those willing to participate in the desired joint development that incorporates the station.

Existing Conditions

Zoning Ordinances

The zoning in the study area includes a range of single zoning areas corresponding to many existing land uses. Planned Development (PD) is utilized for many large destination uses, including Globe Life Park, parking, and a series of open spaces, including Johnson Creek and Mark Holtz Lake, and a Wal-Mart adjacent to Randol Mill Road. Zoning on a portion of Johnson Creek allows for medium density and multifamily residential, respectively.

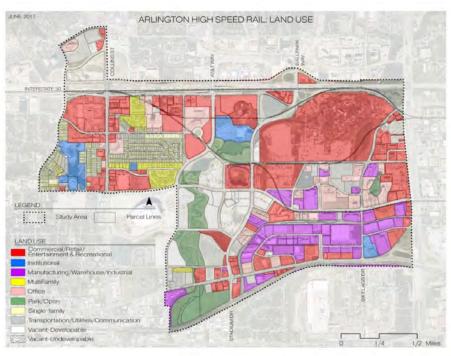
Based on the understanding of the general vision for the area and the master plans that are under way, the addition of a mixed-use zoning overlay district or mixed-use zoning classifications may be appropriate. This would provide integrated development regulations that meet the intended vision and community benefits.

Land Use and Open Space

Land use within the Study Area is defined by five broad categories of use:

- Entertainment/destination
- Highway-oriented commercial
- Parking
- Industrial
- Residential

The major entertainment and destination uses include AT&T Stadium, Globe Life Park, Six Flags over Texas, Six Flags Hurricane Harbor, the Arlington Convention Center, and hotels, including the Sheraton Arlington. The highway-oriented uses include the range of restaurants and retail uses, including Lincoln Square. A large amount of the land use is comprised of surface parking lots providing convenient parking access to the range of nearby venues. Within the southeastern portions of the study area exists a mix of commercial and industrial uses - south of Randol Mill Road and east of Stadium Drive. Residential uses are located west of AT&T



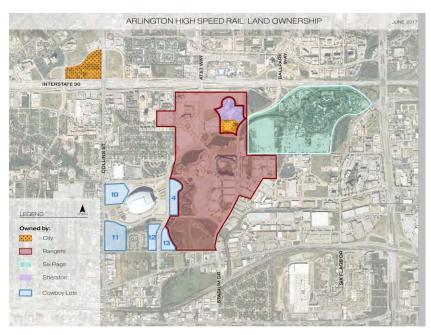


Way and south of Road to Six Flags. Map 8 identifies existing land uses in the study area.

The study area has large water features and floodplain areas that provide significant open spaces. Johnson Creek, which creates Mark Holtz Lake and wetlands, is a significant element that creates public benefit and can be used to enhance mixed-use development along its edges. A series of master plans are being developed that are intended to increase the density of the area, improve the character of the area through the development of urban building and open space typologies, and enhance this area as a regional destination.

Land Ownership

The majority of land area in the study area is under private ownership. There are publicly owned large parcels encompassing portions of Johnson Creek and the lands surrounding the Arlington Convention Center. With public ownership, there may be opportunities to include these lands into an expanded station area or transit-oriented development site. Depending on the ultimate location of the station, this assemblage of parcels could hold a mixed-use development including a convention center, hotel, and supportive commercial and station area facilities. Map 9



Map 9 – Land Ownership

identifies parcel ownership in the study area.

Markets and Economics

A traditional market and economic analysis was overtaken by the revelation that the Texas Rangers Baseball Club owns the vast majority of the Entertainment District, including the parking lot northwest of the Sheraton Hotel along I-30 and the land west and south of the existing convention center along Mark Holtz Lake. The Rangers own the property between AT&T Way and Nolan Ryan Expressway/Pennant Drive from I-30 on the north and AT&T Way on the south as that road swings to the west. The Rangers ownership entities lease Globe Life Park until 2024, and own the site for the new ballpark, the Texas Live! location and surrounding parking lots all extending to Division Street on the south. The Rangers also own the parking lot immediately east of Globe Life Park.

The Cordish Companies is under contract to develop a master plan for the Rangers' properties. While they have not yet released specific development elements, their statements during stakeholder interviews indicate the development will include all aspects, from high-rise residential and office, to hotels, retail and entertainment. The website on the project provides some details for the development of Texas Live! and the land around the site. Those are discussed in more detail later in this report.

The remaining properties within the Entertainment District potentially available for development include the Dallas Cowboys Blue lots 10 and 11, and Silver lots 12 and 13, the Six Flags Over Texas property and parking lot, and the property owned by the city north of I-30. The city site is bordered by I-30 on the south, N. Collins Street on the east, E. Lamar on the north and N. Center Street on the west. All other adjoining properties are various types of residential units or built up commercial location.

The limited number of property owners enhances the potential of integrating development into the multimodal station. Several of the preferred routes and station locations are located within or immediately adjacent the Texas Rangers Baseball Club's properties, which are being incorporated into a master plan.

It is desired that the station be incorporated into a joint development project. That was made clear to each stakeholder. Joint development would be possible at two of the Rangers' land areas, on the north side of their parking lot immediately east of the existing station and as part of their parking lot northwest of the Sheraton Hotel.

Urban Design Analysis

The master planning being done on behalf of the Texas Rangers Baseball Club likely will influence the urban design for the vast majority of potential sites. The Dallas Cowboys have not shared their plans for the conversion of surface parking lots into mixed-uses that include replacement parking for events at AT&T Stadium. Similarly, Six Flags has not indicated a willingness to develop a portion of their western parking lot.

The intent of the study area urban design analysis was to identify significant elements to be leveraged or integrated in the project. Given the large scale of redevelopment that is anticipated in the area, a high-level analysis has been prepared and focuses on elements that could influence general redevelopment opportunities.

Preliminary Development Programs

In an effort to evaluate the development potential and the new property taxes that could be generated by new development, the WSP team utilized either preliminary master plan schematics or applied generally standard development criteria based on acreage to set out the potential development program. It should be understood, that master plans are constantly changing and that this analysis is based on information available at the time of the preparation of the report.

Texas Rangers Baseball Club's Properties

The Cordish Companies' website states the new ballpark will be \$1 billion and that the entertainment, hotel and convention center will be an additional \$250 million. The current website master plan also includes seven high-rise buildings south of the Road to Six Flags, but there is no indication whether the buildings are residential towers, hotels or office buildings. The analysis assumes the development will total approximately 1.4 million square feet.

Class A buildings in the Metroplex cost about \$350 per square foot at the high range. The analysis in this report projects the values at the end of 25 years, as there is no indication of phasing of the developments, other than the comment from The Cordish Companies that the phasing will be in two-year increments.

There are two other general locations in the Cordish master plan. The first is the development between AT&T Way and the Nolan Ryan Expressway/Pennant Drive south of I-30, where it is estimated that 1.48 million square feet of development could occur. For the area east of AT&T Way, between I-30 and the Road to Six Flags, it is estimated 600,000 square feet of development could occur. For those development elements, the per-square-foot value is applied. The development value for the Texas Rangers Baseball Club's property as generally outlined on the website master plan is estimated at \$2.468 billion. Given the broad assumptions used in the analysis, the development value ranges could easily be 15 percent, plus or minus. Given the same caveat, the incremental property taxes from only the city and county could reach over \$2.2 million annually.

Dallas Cowboys' Properties

Surrounding AT&T Stadium are a series of surface parking lots, specifically Blue Lots 10 and 11 and Silver Lots 4, 12 and 13. There has been no indication from the Cowboys when they might begin redevelopment of the parking lots, or to what density levels. This report assumes high-rise development on the Blue Lots, as the parcels sizes and configuration would allow development along with adequate structured parking to serve the new development requirements and replace the spaces lost from the surface parking lots. The development on the Blue Lots are projected at 600,000 square feet. The Silver Lots are more problematic with smaller lots with narrow configurations on both sides of AT&T Way. For those parcels, the development is estimated at 400,000 square feet. The preliminary projected development potential on the Dallas Cowboys' parking lots is \$490 million with \$440,000 in annual incremental property taxes.

Six Flags Over Texas

There is currently no specific indication Six Flags would develop on a portion of their most westerly parking lot, even if the HSR station were located along their southern border. For this analysis, it is assumed that at some time over the next 25 years, a hotel and compatible uses totaling an estimated 300,000 square feet would be constructed on 25 percent of that parking lot.

City Property

For the city-owned site north of I-30, there is an interest by the city to reserve the land for a new corporate headquarters in the future. Two examples on either side of the city site provide excellent designs for the type corporate campus the city envisions for the site. Those are the corporate campus for Texas Health Resources to the west and the plans DR Horton has provided to the city for its 150,000-square-foot corporate campus on the six acres to the east of the city's site. Based on the current DR Horton 150,000 square feet on six acres, the city parcel could accommodate approximately 1 million square feet of corporate headquarters development.

Development Values

Based on the preliminary development potential, the estimated values and the potential property taxes for the City of Arlington and Tarrant County are summarized in Table 1. Current Metroplex Class A construction costs were used and the densities for the City owned property based on existing or proposed corporate headquarters. Table 2 states the tax rates, as provided by Tarrant County.

			ntial Property			
		Value			(City and	County
Value Texas Rangers Properties		0.8988%		(City and County)		
		1 000 000 000	ć			
New Ballpark Texas Live	\$	1,000,000,000		8,988,000	Noto 1	_
	\$	250,000,000		2,247,000	Note 1	
High rise buildings	\$	490,000,000		4,404,120	Note 2	
AT&T /Nolan Ryan	\$	518,000,000		4,655,784	Note 3	
East of AT&T	\$	210,000,000	Ş	1,887,480	Note 4	
Subtotal	\$	2,468,000,000	\$2	22,182,384		
Dallas Cowboys Prop	ertie	S				
Blue lots 10 & 11	\$	210,000,000	\$	1,887,480	Note 5	
Silver lots 4, 12 & 13	\$	140,000,000	\$	1,258,320	Note 6	
Subtotal	\$	350,000,000	\$	3,145,800		
Six Flag						
Parking Lot	\$	105,000,000	\$	943,740	Note 7	
City Property						
Corporate HQ	\$	350,000,000	\$	3,145,800	Note 8	
Total Development	\$	3,273,000,000	\$2	29,417,724		
Note 1: includes ent	ertai	nment, hotel and	со	nvention ce	nter	
Note 2: master plan i						ding
south of Road to Six		-				
Note 3: the develop	-		lva	n and AT&T		
Note 4: the develop			1 -			
Note 5: lots with dev			าร			
Note 6: irregular sha						
Note 7: using one-qu			ea	for a hotel (or mixed-i	lse
Note 8: based on DR			u			

Table 2 – Development Values and Taxes

Property Tax Rates (Source Tarrant County)
	Percent
Arlington	0.6448
Tarrant County	0.2540
School District	1.39008
Hospital District	0.22789
College District	0.14470
Total	2.66147

Table 3 – City and County Tax Rates

Station Area Planning

In addition to the economic analysis and stakeholder outreach activities of the project, the WSP team also conducted pre-concept level technical analyses of the station area sites. The findings further informed the evaluation criteria of the performance of each of the station area sites related to traffic, connectivity to other modes, utilities and compliance with the National Environmental Policy Act (NEPA.

Traffic and Mobility

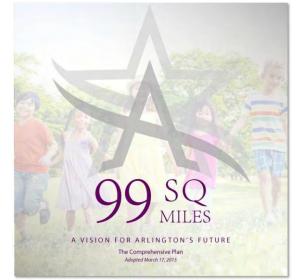
A transportation and circulation analysis provided a guideline for identifying station area sites that connect to surrounding neighborhoods and provide a catalyst for community building.

Improvements proposed by the City of Arlington have some specific recommendations that will affect the study area and could impact the utilization of the station area.

a. Comprehensive Plan: 99 Sq. Miles, A Vision for Arlington's Future

The current comprehensive plan adopted in 2015 was developed to help the city manage changes occurring from population growth and expansion and provide policies for future development. This includes the strategies for improving the transportation system in the city to respond to those changes. The *Get Around* portion of the plan focuses on the city's transportation system and includes the following guidelines:

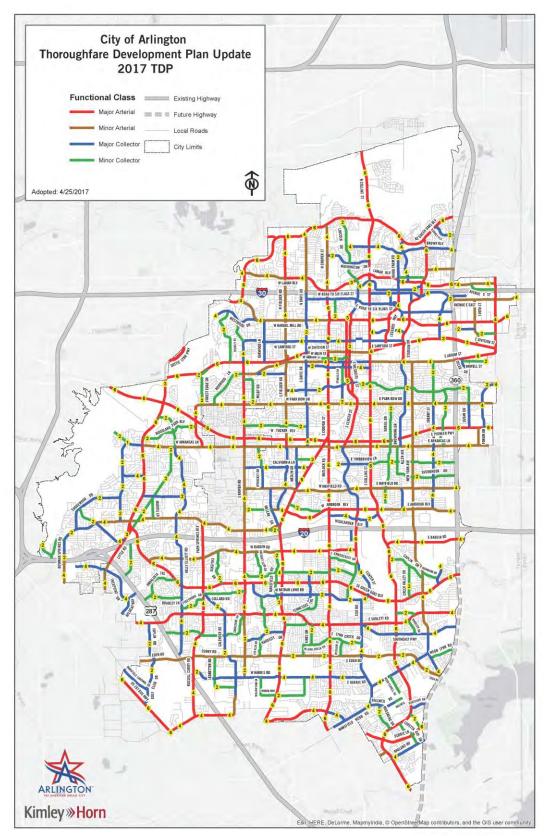
- Maintaining roadway systems and providing a variety of transportation options
- Traffic management during events in the Entertainment District
- Grade-separated railroad crossings
- Increasing connectivity is recommended as roadway improvements.
- Implementing a complete streets policy
- Providing bicycle and pedestrian facilities, improving access to transit, and providing a multimodal transportation system by introducing commuter or light passenger rail



The plan also recommends incorporating transit into the surrounding area to create TOD.

b. Thoroughfare Development Plan

The Thoroughfare Development Plan (TDP), most recently updated in 2017, is a long-range plan that identifies the locations and types of roadway facilities that are needed to meet projected long-term growth within the city. The TDP is shown in Map 10. It serves as a tool to enable the city to preserve future corridors for transportation system development as the need arises. It is not a list of construction projects but rather identifies proposed general alignments for roadways and provides guidelines for the design of each type of roadway.

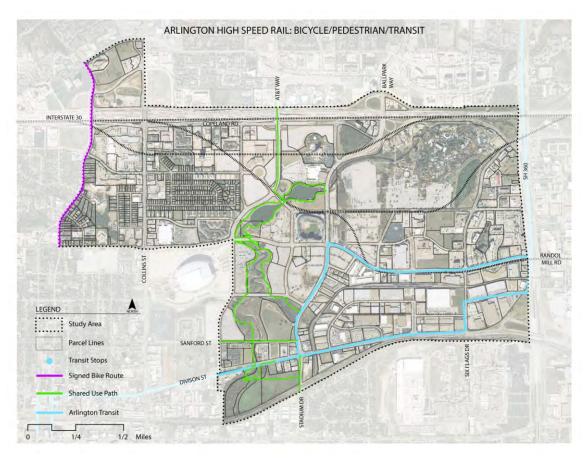


Map 10 -- City of Arlington Thoroughfare Development Plan

c. Hike and Bike System Master Plan

Adopted in 2011, the Hike and Bike System Master Plan provides a transportation and recreation network within Arlington to encourage bicycle and pedestrian use. The plan, as shown in Map 11, recommends separated and shared on-street bicycle facilities, traffic calming, end-of-trip facilities, and intersection-crossing facilities throughout the city. The plan recommends a trail along AT&T Way connecting the existing trail network in the study area to an existing bike lane north of the study area. There also is a recommended bicycle network along Sanford Street and a trail near Stadium Drive to connect with the southern end of the existing trail network.

An increased sidewalk network also is recommended throughout the city and the study area

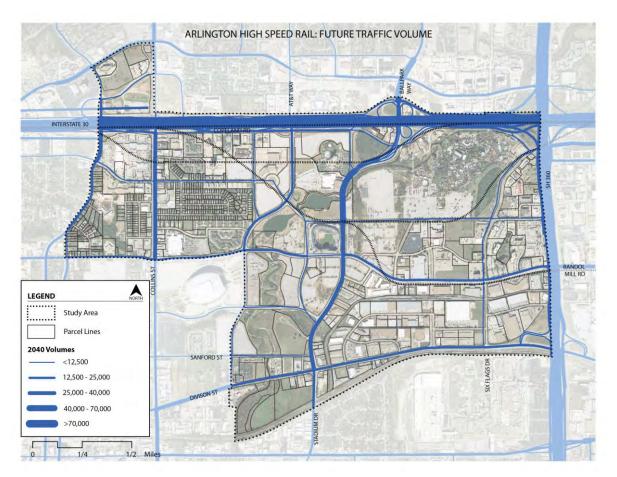


Map 11 – Bicycle, Pedestrian, and Transit Routes

d. Street Network

The current street network in the study area is vehicle-oriented with a suburban context. The street network consists of arterials that are spaced one-half mile apart with a disconnected grid of collectors and local roadways. With the potential of this area as a location of a future HSR station, expanding the network should increase connectivity. As a vibrant location within the DFW Region, the street network surrounding a station area should be developed to accommodate all users, especially pedestrians. Given the mixed land uses within the study area, including entertainment and recreation, many people will be walking from the station to their destinations, making it critical to design for safe pedestrian facilities. The overall impact of the station requires a review and enhancement to the existing street network and

grid. Future traffic volumes are shown in Map 12. These future traffic volumes will need to be integrated into the enhancement of the street network to accommodate a future station.



Map 12 – Future Traffic Volumes

The street network should establish the framework of an integrated system of mixed land uses and development types. This often is referred to as context sensitive design or complete streets approach. There is no typical design for a complete street and each street can be unique depending on the surrounding environment and traffic demand. Context sensitive design takes into account the functional class of the road as well as the surrounding development, future goals for the corridor and demand for different modes of transportation.

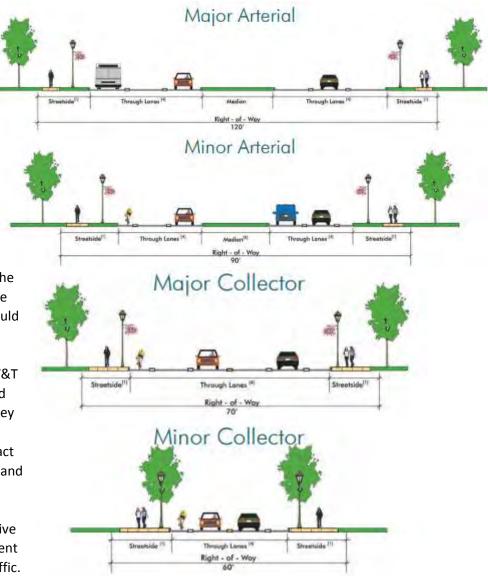
Amenities and Connections

Complete streets allow all users of all ages to share the road through context sensitive design approaches. The Arlington TDP includes the flexible design matrix for corridors as shown in Exhibit 1.

When implementing these best practices for street network design, it will be important to focus on new roadways, and the existing corridors closest to the station area. These streets would include Road to Six Flags, Copeland Road, and Ballpark Way. Randol Mill Road and AT&T Way also should be considered because of the connections they provide to other destinations. The new station area will attract increased pedestrian, bicycle, and vehicle traffic to these major thoroughfares, and it will be critical to apply context sensitive design strategies for the efficient movement of multi-modal traffic.

The following techniques represent complete street design principles that should be

considered for corridors adjacent to the station area locations.







Wide Sidewalks (Source: Great Street, Los Angeles)



On-Street Parking (Source: Complete Street, Decatur GA)



Drop-off and Pick-up Locations (Source: Toronto Pearson International Airport)



ADA Accessible Facilities (Source: National Complete Streets Coalition)



Designated Bus Lanes/High Quality Shelter (Source: CTA Loop Link Station)



Street Wayfinding Elements (Source: New York Wayfinding System)

a. Pedestrian Amenities

Pedestrian amenities near a station area will be more successful if they are attractive, safe, and comfortable to use. A well-connected sidewalk network surrounding the station area will allow users to easily access nearby activity centers and facilities. The path from a station to a destination should be as short and direct as possible. The use of grade changes and stairs should be minimal. Protecting pedestrians from traffic and minimizing conflict points should be a priority and will create a sense of security for users in the area. Clearly marked and identified pedestrian crossings provide guidance for both pedestrians and motorists.

Employing pedestrian ramps and wide sidewalks will ensure accessibility and ease of use for everyone. The introduction of pedestrian-scaled wayfinding signs will help pedestrians orient themselves and reach their destination. Ample street lighting and clear sight lines to the station area also will allow pedestrians to reach their destination. Providing seating and plenty of shade will increase the comfort for pedestrians traveling to and from the rail station as well.



Amenities (Source: Annapolis, MD)



Transit Village (Source: Fruitvale, CA)

b. Transit

Transit has the ability to connect station areas to the wider region. Frequent, reliable transit will encourage people to use these services to travel around the city. Within the study area, the closest local transit stop to a potential station area is more than one-half mile away, which makes it unlikely many people would walk from one to the other. To connect the study area to the rest of the Arlington and the DFW Region, local transit stops should be placed within walking distance of station areas. Transit can increase ridership from the DFW International Airport, Trinity Railway Express (TRE), and DART stations as well.

The design of the local transit stop should reflect the use of the same building materials used for the station. They should be designed with safety and accessibility in mind, providing clear visibility of rail station areas with adequate lighting and furnishings. A local transit stop should be inviting to the pedestrian so as not to deter them from utilizing transit.



Bus Stop Shelter (Source: Houston. Texas)



Metroway Station (Source: Arlington, Virginia)

c. Bicycles

Regarding the complete streets approach, bicycles should be planned for and encouraged as an alternative transportation mode. Providing the necessary on-street or off-street shared-use path bicycle facility will encourage more interaction at the street level and provide connections to the surrounding community.

Bicycle facilities should clearly reflect rider needs with continuous bicycle facilities with carefully placed curb cuts and signage and signals to create an environment that encourages bicycle use. Connections to and from the station should be direct with ample parking available close to station entry locations and in highly visible areas. Bicycle facilities such as bike lockers, bike stations, and changing areas will encourage bicycle use and promote security.



Millennium Park bicycle parking (Source: Chicago, IL)



Manhattan's West Side Bike Path (Source: NYC, NY)

d. Parking

The design of automobile related facilities including parking, transit, drop-off and pick-up locations and ride sharing will be an important aspect to consider along with other modes of transportation. The study area benefits from an abundance of surface parking due to the proximity with Six Flags Over Texas, AT&T Stadium and Globe Life Park.

Each station location should be accessible while not being disruptive especially during peak hours or events. Drop-off and pick-up lanes, as well as car-sharing locations, should be integrated into the street network in close proximity to station entries and pedestrian staging areas.

Currently, surface parking is the dominant type around the entertainment venues in the study area. Structured parking can encourage transit-oriented development around each station location and higher density development, making these areas a destination instead of a park-and-ride facility. Parking structures could be shared with multiple developments in the study area to provide more efficient and better use of the land near a station. Parking facilities should provide pedestrian level amenities including clear sight lines to stations, landscaping, signage and sidewalks. Large surface parking lots should be separated into smaller lots to provide an increased street grid pattern for future infill



Tukwila International Boulevard Station (Source: Seattle, Washington)

development. A thorough parking analysis should accompany future analysis for this area.

HSR Station Mobility Recommendations

Circulation and Connectivity Issues

The study area includes shopping, entertainment, residential, and parkland that must all be served by the roadway network. The study area is bounded by Interstate 30 (Tom Landry Freeway) and State Highway 360. The current I-30 and SH 360 arrangement will soon be replaced with a direct connect interchange that will increase freeway connectivity. State Highway 180 (Division Street) also serves the study area. Randol Mill Road serves as a major arterial running east to west and Ballpark Way/Stadium Drive intersects from north to south. These roadways function as vital thoroughfares to transport people to the various amenities in and surrounding the study area. To improve connectivity the following strategies are recommended:

- Design streets with the context in mind to create complete streets;
- Install wide sidewalks to accommodate all users;
- Ensure all facilities are ADA accessible;
- Create drop-off and pick-up locations; and
- Provide street wayfinding elements.

Pedestrian Access to Streets and Trails

Sidewalks and off-street trails currently function to provide pedestrian accessibility within the study area. The existing sidewalk network is more connected in the central area directly around Globe Life Park and it becomes more disconnected and less widespread farther away from the major attractions. The shared-use trail around the linear park in the center of the study area creates a connection for the north and south of the study area and provides access to many of the major attractions. Pedestrian facility recommendations include:

- Provide short, direct routes to destinations;
- Separate pedestrians from vehicular traffic;
- Utilize pedestrian-oriented wayfinding and clear sight lines;
- Increase the connectivity of the existing sidewalk network; and
- Create plenty of shade along walking routes.

Public Transportation Access to Station

The Metro ArlingtonXpress (MAX) runs through the study area and passes close to a few potential station areas, but there currently are only two stops that are each over a half mile from potential station areas. The MAX provides a connection to TRE (commuter rail line) and DFW International Airport. The current contract with MAX expires on Dec. 31, 2017. No decisions have been made about what comes next, but Rideshare options are being explored.

The Entertainment District Trolley runs throughout the study area and links various attractions, but only provides services to hotel patrons.

Recommendations for increasing transit access to stations areas include:

- Consider a public transportation option that connects directly with the HSR station;
- Provide seating and shelter at stops for people waiting; and
- Design stops using the same materials as the station;

Bicycle Access to Stations

Currently the only designated bicycle route in the study area is on Center Street. This route directly passes the western-most station area. The shared-use trail also is available for bicycle use and provides more access to the other station areas. Suggestions to encourage bicycle use in the area surrounding the stations include:

- Increase the bicycle network around the study area;
- Provide on-and off-street bicycle facilities from the station area to destinations; and
- Provide ample bicycle parking close to the station area.

NEPA - Environmental Factors

A cursory review of a set of reference resources was conducted with the intent of identifying the areas of environmental interest that may be of concern to the four potential HSR station site areas. Resources considered and potential impacts resulting from the implementation of the proposed HSR stations are described below.

Right of Way/Displacements

Based on 2013 aerial photographs, all four of the proposed station areas would displace parking facilities and in some cases, structures. Where an alignment would result in structural displacements, those displaced would be relocated with assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

Farmlands

The project study area is located within an urbanized area and therefore is exempt from the requirements of the Farmland Protection Policy Act and requires no coordination with the Natural Resource Conservation Service.

Community Impacts

Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" requires each Federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

According to 2010 U.S. Census data, there are six census tracts, nine block groups, and 95 blocks within the project study area. There are 18 blocks within the project study area that have greater than a 50 percent minority population.

According to 2016 American Community Survey data, there are no block groups within the project study area that have greater than a 50-percent low-income population.

EO 13166, "Improving Access to Services for Persons with Limited English Proficiency (LEP)," requires federal agencies to examine the services they provide, identify any need for services to those with LEP, and develop and implement a system to provide those services so LEP persons can have meaningful access to them. The EO requires federal agencies to work to ensure recipients of federal financial assistance provide meaningful access to their LEP applicants and beneficiaries. Failure to ensure LEP persons can effectively participate in or benefit from federally assisted programs and activities may violate the prohibition under Title VI of the Civil Rights Restoration Act of 1987 and Title VI regulations against national origin discrimination.

According to 2016 American Community Survey data, there are no block groups within the project study area that have greater than a 50-percent LEP population; therefore, none of the proposed station sites would impact a block group that has greater than a 50-percent LEP population.

Cultural Resources

Texas Historical Commission (THC) 2017 and NCTCOG 2017 data were used to determine the presence of cultural resources within the project study area, as follows:

Cemeteries

Keystone Cemetery is within the study area. None of the four proposed station areas would impact the cemetery.

Cultural Facilities

One cultural facility, Legends of the Game Museum, is within the study area. None of the four proposed station areas would impact the museum.

There are five Texas State Historical Markers within the project study area. None of the four proposed station areas would impact these markers.

Parks and Pedestrian Trails

NCTCOG 2017 data was used to determine the presence of parks and pedestrian trails within the project study area. There are five parks and associated existing pedestrian trails, two funded proposed pedestrian trails, and two unfunded proposed pedestrian trails within the project study area. None of the four proposed station sites would impact a park or an existing or proposed pedestrian trail.

Biological Resources

The project study area is completely urbanized. It is unlikely any proposed station sites would negatively impact any federal or state-listed species or species of concern.

Hazardous Materials

Hazardous materials facilities data from the Environmental Protection Agency (EPA) (<u>https://www.epa.gov/geospatial/epa-geospatial-data</u>) and the Texas Commission on Environmental Quality (TCEQ) (<u>https://www.tceq.texas.gov/gis/download-tceq-gis-data</u>) was used to identify hazardous materials facilities in the project study area. Note that this data does not constitute a complete American Society of Testing Materials (ASTM) database search.

Oil and gas pipeline data obtained from the Texas Railroad Commission (RRC) Pipeline Viewer was used to identify major oil and gas pipelines in the project study area.

Results of the hazardous materials search revealed 19 facilities in the project study area are listed in one or more of the following environmental records.

Aerometric Information Retrieval System Air Facility Subsystem (AIRS AFS) – This database is administered by the EPA and tracks the compliance of facilities with stationary sources of air pollution with EPA regulations.

Integrated Compliance Information System (ICIS) – This database is administered by the EPA and is a case activity tracking and management system for civil, judicial, and administrative federal EPA enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act – Section 313, The toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

National Compliance Data Base (NCDB) – This database is administered by the EPA and supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act and the toxic Substances Control Act. The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

Petroleum Storage Tanks (PST) – This database is administered by the TCEQ. Both underground storage tanks (USTs) and above ground storage tanks (ASTs) are included in this database.

Resource Conservation & Recovery Act Treatment, Storage & Disposal (RCRA TSD) – This database is administered by the EPA and includes non-corrective action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system.

Toxics Release Inventory (TRI) the toxics Release Inventory, provided by the EPA, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

The footprint of Station Area D appears to impact Foxjet, Inc., which is listed as an ICIS facility. It is not likely this facility poses an environmental concern to Station Area D.

The footprint of Station Area D appears to impact Globe Life Park in Arlington - listed as a PST facility. A record review of this facility indicated that the stadium has not been reported as a leaking petroleum storage tank facility. It is not likely this facility poses an environmental concern to Station Area D.

Results of the oil and gas pipeline search revealed that two major gas transmission pipelines in the project study area. None of the proposed station sites would impact these pipelines.

Water Resources

Federal Emergency Management Agency (FEMA) 2014 Flood Insurance Rate Map (FIRM) data, 2014 TCEQ data, 2014 U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map data, and 2013 aerial photographs obtained from WSP were used to identify flood zones, 303(d) list impaired or threatened waters, ponds, lakes, streams, and wetlands in the project study area.

Flood Zones

Johnson Creek and its tributaries cross the project study area. There are areas designated as flood Zone A associated with Johnson Creek and some of its tributaries. None of the proposed station areas are located within a flood zone.

Streams, Ponds, and Wetlands

Johnson Creek, eight tributaries to Johnson Creek, and six wetland/ponds are within the study area. None of the proposed station areas would impact Johnson Creek, ponds, or wetlands; however, a small tributary to Johnson Creek bisects the footprints of Station Site Areas C and D.

Clean Water Action Section 303(d)

One impaired water, Johnson Creek (Segment ID 0841L_01), crosses the study area. The impaired portion of the creek extends from the confluence with the Lower West Fork Trinity River upstream to just south of Mayfield Road in Arlington, Texas. The parameter of concern is bacteria. The runoff from any of the proposed station areas will discharge directly to the Segment 0841L_01. Therefore, coordination with TCEQ will be required.

Utilities

City of Arlington 2017 water, stormwater, and sanitary sewer utility GIS data was reviewed to determine the presence of major utilities that might be impacted by the proposed station area sites. A number of

stormwater drainage lines ranging from 24 inches to 108 inches in diameter, and sanitary sewer lines ranging from 24 inches to 54 inches in diameter, cross the study area. Stormwater and sanitary sewer lines within the four proposed station areas include:

Station Area A – All stormwater lines appear to be associated with I-30.

- Four 24-inch stormwater feeder lines.
- Two parallel 24-inch stormwater lines.
- One parallel 48-inch stormwater lines

Station Area B – All stormwater lines appear to be associated with I-30 or Six Flags Over Texas.

- Eight perpendicular 24-inch stormwater drainage lines.
- One diagonal 33-inch stormwater drainage line.

Station Area C – This station site appears to be near a major sanitary sewer junction.

- Two 27-inch stormwater drainage lines that zigzag across the western portion of the station site.
- One 36-inch water drainage line that zigzags across the western portion of the station site.
- One perpendicular 27-inch sanitary sewer line.
- One parallel 36-inch sanitary sewer line.
- One diagonal 54-inch sanitary sewer line.

Station Area D

- One perpendicular 42-inch stormwater drainage line.
- One perpendicular 36-inch sanitary sewer line.
- One parallel 24-inch stormwater drainage line.
- One parallel 42-inch stormwater drainage line.
- One parallel 48-inch stormwater drainage line.
- One parallel 54-inch stormwater drainage line.
- Two perpendicular 24-inch stormwater drainage lines.
- Two perpendicular 27-inch stormwater drainage lines.
- One 54-inch sanitary sewer line that zigzags across northeastern portion of station area
- One parallel 36-inch stormwater drainage line.
- One perpendicular 27-inch sanitary sewer line.
- One parallel 36-inch sanitary sewer line.
- One diagonal 54-inch sanitary sewer line.

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EVALUATION SCORING AND RECOMMENDATION

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Evaluation Scoring and Recommendation

The set of Critical Success Factors was used to evaluate each of the station sites analyzed. Four general station site areas were identified through that evaluation. The station site area locations are shown in Map 13.



Map 13 - Station Site Area Locations

The four areas were then subjected to further evaluation.

The Evaluation Scoring included a technical scoring (technical score – by the WSP team and the Project Review Committee (PRC), based on the criteria characterized as an objective process, and a subjective review (weighting - by the city) that addresses the many interests within the city.

The Station Area Evaluation Matrix is provided as Table 4. The matrix includes the technical ranking and the weighting of each of the criteria categories.

The WSP team individually scored the four sites based on the criteria without the weighting.

The city's weighted scores were applied against the preliminary scores to generate a composite score. The resulting scores ranked the four sites:

Site A – 96 points Site B –126 points Site C –114 points Site D – 124 points

Criteria Category	Evaluation criteria	Weight Rank from 1 to 5	Station Area Technical Ranking of Each Area Technical Performance Score, Scale 1 (law) to 3 (high)			
citteria category	(Objectives & Values)	* 5 is highes t	West of Collins	South I-30	6 Flags	East Ballpar
	Proximity to Open Space	2	1.67	3.00	3.00	2.33
Complimentary Land Uses	Proximity to Civic, Commercial and Entertainment Uses	4	1.00	2.00	3.00	3.00
Private Sector Participation	High Opportunity for Development to Front Streets	4	2.67	2.67	2.33	2.33
	Visibility of Site to / from Regional Roadway	3	3.00	2.67	1.67	1.00
	Potential for Joint Development	5	1.00	2.67	2.00	2.67
	High Willingness for Joint Development	5	1.00	2.67	1.67	2.67
	Availability of Nearby Parking	4	1,00	3.00	3.00	2.67
1	Low Impacts to Privately Owned Land	3	1.67	2.00	1.67	2.33
Ease of Acquisition	Low Economic Utilization of Parcels	3	1.67	2.33	3.00	2.67
	Low Degree of Fractured Ownership	3	2.00	2.67 3.00	3.00	2.00
Alignment	Coincidence with Existing Public ROW	4	3.00	1.67	1.67	2.67
	Low HSR Operational Impacts (Alignment Curves and Tangents)	4	3.00	3.00	1.67	2.67
	Impact on existing land uses	5	3.00	3.00	3.00	3.00
	Maximum Possible Score	132				
-	Technical Performance Score (Sum of All Scores)		26	33	31	32
	Weighted Score (Weight x Technical Score)		96	126	114	124
	Percent of Maximum Possible Score	1	73%	96%	86%	94%

Table 4 – Scoring Evaluation Matrix (Shown as Table 1 in the Executive Summary)

City Recommendation

On June 13, 2017, the City Council of the City of Arlington voted to recommend to NCTCOG potential station areas B, C and D, with a preference for B. NCTCOG will consider the recommendation as it moves forward with the DEIS for the DFWCES.

North Central Texas Council of Governments Arlington HSR Station Area Planning Study Appendix A

Station Area Framework Analysis

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Station Area Framework Analysis

As part of the Station Area Framework Analysis each station site area – A, B, C, and D – was dimensionally tested, assuming generalized facilities requirements and site constraints, at a planning level, to ensure the site areas could accommodate a multi-modal station that includes HSR. The station site area locations are shown in Map 14.



The Station Area Framework Analysis includes the evaluation of the site to accommodate adequate tangent track and overall footprint length (1000 ft.) to accommodate a 1000-foot HSR platform, 150 feet of tangent track at each end, and a footprint of 200,000 square feet. Station site areas were then evaluated for street and transit service station connectivity. Each level of a station site was evaluated in consideration of possible concourse, platform, and mezzanine levels.

Map 14 - Station Site Area Locations

The sketches included in Appendix A of this report are only for this early examination of feasibility and in no way reflect a conceptual or final station configuration. How the final site might accommodate the joint venture sought by the city, how the alignment would be finally engineered, how road improvements and utility relocations would be implemented cannot be anticipated currently. Providing maximum flexibility will help the city address these and other factors.

The City of Arlington currently is examining possible technologies and concepts in identifying a potential transportation connection between city venues and DFW Airport. The technology and potential alignments are unknown at this time. In general, such a service will connect potential station sites and follow an alignment likely to follow portions of the existing I-30 East and State Highway (SH) 360 corridors. Access to these services likely will be provided at station concourse or platform levels.

All potential station areas would be served by these public and private transportation providers:

- Metro ArlingtonXpress (MAX): Bus transportation from DFW to UTA; possible loop to East Road to Six Flags Drive for HSR connection
- Trolley: Red, Green, and Blue Routes on Ballpark Way; existing stops at Arlington Convention Center, Globe Life Park, and Six Flags Over Texas; possible location for an additional stop; connectivity to the entertainment district
- Handitran: Door to door special transportation for elderly and persons with disabilities; requires advanced scheduling; limited service area
- Taxi/Uber/Lyft
- Trinity Railway Express (TRE)
- Motor coach: Tourism services

Proposed Station Site Area A

The location of proposed Station Site Area A provides convenient access from surrounding roads:

- West: Lincoln Drive
- East: North Collins Street
- North: I-30 Frontage Road
- South: North Center Street

Site

The Site offers an open plan, with potential for commercial growth. More than 250,000 square feet of land is available within Station Site Area A for TOD and 600,000 square feet for surface parking. Site Area A is adjacent to offices and industrial areas, and residential uses in each direction within a one-half-mile radius.

Concourse

The analysis evaluated placing the station directly above I-30 to accommodate DFW Core Express alternative alignments. Access could be provided easily from the I-30 Frontage Road (westbound) and from North Center Street (eastbound). The proximity of this site option to I-30 would provide efficient connectivity to the surrounding city and highways. The Station Concourse offers the potential for convenient access, a passenger pick-up and drop-off loop with staging zones.



PPUDO (Passenger Pick-Up and Drop-Off)

The Concourse level provides opportunity for multiple pick-up and drop-off zones including an access

loop and approximately 1,500 feet of curb length to provide separation between different modes and services. In addition, roughly 500 feet of street-side arrival will be provided along the north side of I-30 Frontage Road (westbound).

Platform

Proposed Station Site Area A provides the recommended footprint of 200,000 square feet. For ease of access to the elevated platform, a side platform configuration is recommended. Site A also accommodates the recommended platform length and 150 feet of tangent track at each end of the platform.



Parking

Proposed Station Area A provides approximately 600,000 square feet of land for use as long-term and/or short-term parking. As an at-grade service lot, this will offer an approximate maximum walking distance of 1,600 feet from the proposed concourse to the furthest possible parking stall.

Pedestrian and Bicycle

Pedestrian crossings currently are limited and will require additional signage and signals, pedestrian crossing and/or a pedestrian bridge to mitigate the off I-30 ramp and from any proposed developments. This location provides the lengthiest option for walking to nearby sports entertainment venues; it is approximately 6,400 feet (1.21 miles / 25-minute walk) to AT&T Stadium or Globe Life Park.

There is an existing connection to a bike path shared with vehicular traffic on North Center Street.

Summary Analysis Proposed Station Site Area A

- Proposed Station Area A: limited ability to leverage dense TOD due to interstate location. Anticipated development opportunity is less than other locations.
- Significant impacts to I-30 the Station will require a plaza structure spanning a significant section of the interstate highway.
- Furthest away from entertainment district activity nodes.
- Impacts adjacent existing developments south of I-30 (Lincoln Square).
- Impacts planned developments north of I-30 (City owned).
- Station infrastructure and operations limited.

Proposed Station Site Area B

The location of proposed Station Site Area B provides convenient access from surrounding roads:

- West: AT&T Way
- East: Ballpark Way
- North: East Copeland Road
- South: Mark Holtz Lake

Site

This site provides connectivity with the Arlington Convention Center. More than 650,000 square feet of land is available within proposed Station Site Area B for TOD, one million square feet of surface parking and a footprint of 100,000 square feet for structured parking. With five decks, this structured parking could provide 500,000 square feet of parking deck or parking for roughly 1,000 cars. Station Site Area B is located about one-half mile walking distance to Texas Ranger's stadium and approximately one mile to AT&T stadium.

Concourse

The analysis evaluated placing the concourse level of proposed Station Site Area B at-grade, south of East Copeland Road. The Station Site provides easy access from Convention Center Drive or AT&T Way while allowing for possible decking over I-30 and connecting to the water park adjacent to and north of I-30. Proposed Station Area B provides the opportunity for surface parking or structure parking to accommodate both the needs of the Convention Center and the HSR station.

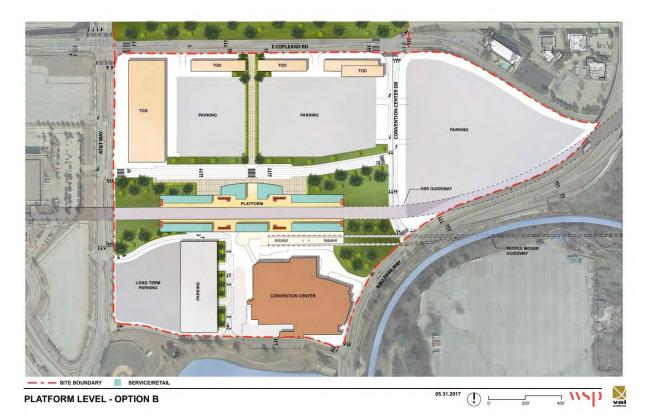


PPUDO (Passenger Pick-Up and Drop-Off)

The concourse level provides opportunity for an access road on the north side with options to stage for multiple pick-up and drop-off zones and additional zones on the south side of the concourse.

Platform

Proposed Station Site Area B provides the recommended footprint of 200,000 square feet. For ease of access to the elevated platform, a side platform configuration is recommended. Station Site Area B also accommodates the recommended platform length and 150 feet of tangent track at each end of the platform.



Parking

Proposed Station Site Area B provides approximately 1.2 million square feet of land for use as long-term and/or short-term parking. As an at-grade service lot, this will offer an approximate maximum walking distance of 1,500 feet from the proposed Concourse to the furthest possible parking stall.

Pedestrian and Bicycle

From the Concourse level, Globe Life Park is approximately at a 5000-foot walking distance and AT&T Stadium is about one mile. Distance to the Six Flags Over Texas entrance is about 1.2 miles.

There is an existing connection to a shared road bike path on AT&T Way, near the west end of the proposed platform.

Summary Analysis Proposed Station Site Area B

- Possibility for adaptive reuse, grand public space, and tiers of future development opportunities. Catalytic development could extend west, south and east to support other development and investment proposed in current planning efforts by the Texas Rangers Baseball Club and The Cordish Companies.
- Excellent ability to leverage dense TOD.
- Station infrastructure and operations not limited.

Proposed Station Site Area C

The proposed location of Station Site Area C provides convenient access from surrounding roads:

- West/North: Ballpark Way
- South: East Road to Six Flags Drive
- East: Six Flags Drive

Site

This proposed location sits south of I-30, west of Six Flags Over Texas, and east of Mark Holtz Lake and Globe Life Park. The current Arlington Convention Center is just west of this site providing opportunity for roughly a 200,00 square-foot footprint, in aggregate, for TOD and connectivity to the entertainment district. As shown in the station layout diagram, this site should be able to provide 150,000 square feet of surface parking and a footprint of 100,000 square feet for structured parking. With five decks, this structured parking could provide 500,000 square feet of parking deck or parking for roughly 1,000 cars.

Concourse

The analysis evaluated placing the concourse level of proposed Station Site Area C, at-grade, south of I-30. Station access is feasible from Ballpark Way (southbound) and from East Road to Six Flags Drive (eastbound and westbound). The proximity of this site option to I-30 allows for efficient connectivity to the surrounding city and highways.



PPUDO (Passenger Pick-Up and Drop-Off)

The Concourse level provides opportunities for multiple pick-up and drop-off zones. Including along the

north and south side (approximately 2200 ft.). The site provides access to the existing Arlington Trolley and in-road bike paths, and sidewalks from the south and west points of the proposed concourse.

Platform

The proposed Station Site Area C provides the recommended footprint of 200,000 square feet. For ease of access to the elevated platform, a center platform configuration is recommended. Site Area C also provides the recommended platform length and 150 feet of tangent track at each end of the platform.



PLATFORM LEVEL - OPTION C

Parking

Proposed Station Site Area C provides approximately 304,000 square feet of land for use as long-term and/or short-term parking. As an at-grade service lot, this will offer an approximate maximum walking distance of 900 feet from the proposed concourse to the furthest possible parking stall.

Pedestrian and Bicycle

From the Concourse level, Globe Life Park is approximately at a 1200-foot walking distance, and AT&T Stadium is about 1.3 miles. Also, Six Flags Over Texas is roughly half-mile away. There is an existing connection to a shared road/bike path on Ballpark Way, near the west end of the proposed platform.

Summary Analysis Proposed Station Site Area C

- Good access and mobility.
- Excellent ability to leverage dense TOD.
- Station infrastructure and operations not limited.

Proposed Station Site Area D

The location of proposed Station Site Area D provides convenient access from surrounding roads:

- West: Ballpark Way
- East: Magic Mile St.
- North: East Road to Six Flags Drive
- South: East Randol Mill Road

Site

This option provides direct integration with the entertainment district and it provides the opportunity for TOD to be directly connected to the station site, creating the opportunity for a destination point for the entertainment district and one million square feet of surface parking.

Concourse

The analysis places the concourse level of proposed Station Site Area D at-grade, south of East Road to Six Flags. Station access is feasible from East Road to Six Flags Drive going east and westbound. The proximity of this site option to I-30 provides efficient connectivity to the surrounding city and highways. For convenient access, a passenger pick-up and drop-off loop with staging zones will be provided within the concourse.



CONCOURSE LEVEL - OPTION D

, 11SD 5

PPUDO (Passenger Pick-Up and Drop-Off)

The south side of the Concourse level provides the opportunity for multiple pick-up and drop-off zones. Approximately 900 feet of curb length can be defined within the drive. In addition to the PPUDO drive, roughly 1000 feet of street-side passenger arrival will be provided north of the Concourse, along East Road to Six Flags Drive. The Station Site Area provides access to the Trolley System, in-road bike paths, and sidewalks from the south and west.

Platform

Proposed Station Site Area D provides the recommended footprint of 200,000 square feet. For ease of

access to the elevated platform, a center platform configuration is recommended. The Station Site Area also provides for the recommended platform length and 150 feet of tangent track also is provided from each end of the platform, allowing for flexibility of rail operations and train maneuverability.



Parking

Proposed Station Site Area D provides approximately 1.2 million square feet of land for use as long-term and/or short-term parking. As an at-grade service lot, this will offer an approximate maximum walking distance of 1,800 feet from the proposed Concourse to the furthest possible parking stall.

Pedestrian and Bicycle

From the Concourse level, Globe Life Park is approximately at a 1200-foot walking distance, and AT&T Stadium is about 1.3 miles. Also, Six Flags Over Texas is roughly one-half mile away. There is an existing connection to a shared road bike path on Ballpark Way, near the west end of the proposed platform.

Summary Analysis Proposed Station Site Area D

- A mirror image to proposed Station Site Area C.
- Excellent ability to leverage dense TOD.
- Station infrastructure and operations not limited.

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North Central Texas Council of Governments Arlington HSR Station Area Planning Study Appendix B

Stakeholder Engagement

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City of Arlington Station Planning

Dallas Fort-Worth Core Express

Stakeholder Engagement Plan

Draft Version 1 January 25, 2017

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1.0 Introduction

1.1 Project Background

Several efforts to study and build passenger rail are under way in the North Central Texas Region. Included is a study of High-Speed Rail (HSR) between Dallas and Fort Worth, called the Core Express Study (CES), with a station planned in Arlington. The Arlington High-Speed Rail Station Planning Study is intended to focus solely on locating the Arlington station, which then will be incorporated into the CES.

Several factors will go into the location decision – the route the train takes, the impacts on the surrounding neighborhoods and businesses, the potential for development or redevelopment, and connections to the region's transportation network. This study will investigate those factors and recommend a preferred station location for the CES alignment.

1.2 Purpose of Stakeholder Engagement Plan

To ensure key local stakeholders and regional transportation leaders are informed and afforded opportunities for discussing rail station planning in Arlington, this Stakeholder Engagement Plan (SEP) has been developed. The plan will help guide communications with the audiences that are critical to involve in the process at this level of planning. Plan goals and activities, along with suggested dates for implementing them are included.

It is highly probable that information about this study will appear in local media, city publications, online and through other information outlets. While this SEP does not call for general public outreach, including meetings, to occur, any member of the public interested in the study may obtain information or attend meetings with key stakeholders.

2.0 Audiences

Four audiences are identified for discussions about high-speed rail station planning in Arlington:

- A Project Review Committee (PRC) comprised of representatives of the City of Arlington, the North Central Texas Council of Governments (NCTCOG), Dallas Area Rapid Transit (DART), and The Fort Worth Transportation Authority (The T);
- 2) The City of Arlington;
- 3) The Regional Transportation Council (RTC); and
- 4) Major property owners/developers.

3.0 SEP Goals

Goals of the SEP are:

- Ensure all key audiences are aware of the study and its differences from the CES
- Offer multiple opportunities for key audiences to obtain information and provide feedback

- Demonstrate how feedback was used in the decision-making process
- Promote collaboration between key audiences

4.0 Activities

4.1 Project Review Committee (PRC)

The PRC will meet monthly to discuss project findings, options, outcomes and process. Members of the PRC will be asked to help coordinate transfer of documents, study results or other data that might be helpful for this study. PRC members will serve as a communication conduit to and from the agencies they serve.

4.2 City of Arlington

Identifying and designing a high-speed rail station in the City of Arlington must involve city leaders, administrators and staff. High-speed rail could have significant impacts on regional transportation, access to Arlington's Entertainment District, and the city's plans for future infrastructure. Communications should take place frequently at varying levels.

In addition to the City of Arlington having a representative on the PRC, sharing information and gathering feedback from city administrators and elected officials will be important for shaping study outcomes.

An initial meeting with appropriate city administrators and high-level staff will take place early in the study. The meeting will offer a chance for sharing information about high-speed rail stations as well as thoughts about Arlington's role in the development of regional rail.

Additional meetings with city administrators will occur as appropriate, and may depend on presenting information and discussing rail station planning with the Arlington City Council. The following is suggested as a schedule of planned communications with council regarding the study.

Council or Subcommittee Meeting	Communication	Purpose
2-14-17	Presentation to Transportation and Infrastructure Subcommittee	Provide project overview and obtain feedback
4-11-17	Presentation at either work session or evening meeting	Provide proposed study outcomes and obtain feedback

Presentations will be made to the city's Transportation Advisory Committee (TAC) as appropriate. Feedback from the TAC will be incorporated into the station planning process as concepts are developed. This likely will include ensuring access to all transportation modes from the HSR station.

4.3 Regional Transportation Council

The RTC is the independent transportation policy body of the DFW-area's Metropolitan Planning Organization (a federally required agency for coordinating transportation and other programs). The RTC's 44 members include local elected or appointed officials from the metropolitan area and representatives from each of the area's transportation providers. The RTC oversees the metropolitan transportation planning process.

The RTC has been informed of the start of the Arlington HSR Station Planning Study, and regular, frequent communications about the study are anticipated to occur. Information will be presented and any issues discussed with either the RTC or its High-Speed Rail Subcommittee as follows:

RTC Meeting Date	Deadline for Materials
3-9-17	3-1-17
5-11-17	5-3-17
6-8-17	5-31-17

4.4 Property Owners/Developers

Key property owners and/or operators, and individuals or companies involved in Arlington development will be identified early in the study. Potential participants include:

- The Texas Rangers
- The Dallas Cowboys
- Six Flags Over Texas
- Arlington Convention & Visitors' Bureau
- The Cordish Companies
- Johnson Development Corporation

To maximize the opportunity for each stakeholder to provide input early in the study, a "HSR Rail Station Day" will be conducted at NCTCOG offices in early March. Exhibits, maps and other informational materials would be set up in a conference room and each stakeholder would be invited to come in at a specified timeframe to learn more about the effort, ask questions, and identify any opportunities or constraints that will be important to consider during the study.

Contact information will be obtained from "HSR Rail Station Day" participants. Updated information will be distributed to the contacts when preferred concepts are identified.

Individual or small-group meetings with specific stakeholders may be conducted as the study narrows station location options.

This Stakeholder Engagement Plan will be updated with a list of property owners and developers invited to participate in the process.

5.0 Informational Materials

In addition to the maps, drawings, data graphics and other information that will be produced by the technical team, an information sheet will be prepared that describes the study, outlines the schedule and illustrates the boundaries of the area being studied. This fact sheet will be distributed to city council and TAC members, city administrators, stakeholders and others.

The information sheet will be updated when preferred concepts are developed. The updated information will be distributed to all participants in the study.

6.0 Input Process

Summary notes from each stakeholder discussion will be documented by team members participating in those discussions. The notes will be reviewed by project leaders and considered as concepts are developed.

The team will track how stakeholder input influences draft concepts, and informational materials will include evidence of that influence.

Project Review Committee

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER:
DATE & TIME:Thursday, January 26, 2017,
1:00 P.M. - 3:00 P.M. CSTMeeting No.:01LOCATION:Arlington City Hall, Public Works Conference Rooms01ATTENDEES:
NCTCOG:
WSP|PB:
City of Arlington:
DART:Kevin Feldt, Dan Lamers, Patricia Rohmer, Sandy Wesch
Bob Brown, Ed Campbell, Mark Briggs, Tom Hester, Tushar Advani, Eric Cox

MEETING MINUTES

Discussion Arlington High-speed Rail Station Planning Kick-off Meeting

Introductions

FWTA:

- Power Point Presentation Kevin Feldt, Ed Campbell, Mark Briggs, Tom Hester, Tushar Advani
 - Kevin Feldt, Ed Campbell, Mark Briggs, Tom Hester, Tushar Advani presented an overview of the project and its relationship to the DFWCES Corridor project.
- Alignments map
 - Kevin Feldt presented current NCTCOG efforts identifying additional HSR alignments through Arlington.
- Discussion
 - The Team including the City of Arlington staff, NCTCOG staff, and the consultant team discussed the overall approach to delivering the project, and discussed concerns from City staff.
 - In providing the project overview Mark Briggs indicated that the Project is for the City of Arlington. The station location must consider industry, entertainment, and sports. TX LIVE has the potential to bring more consumers and businesses. Like LA Live, it could be a huge economic success. Key are definitions of the Study Area and the Station Area. Our initial approach is to evaluate existing conditions related to land use, zoning, and economic potential. As a start the project will look into 4 basic land opportunities:
 - 1. Known projects with contracts
 - 2. Projects presented and likely to execute contract
 - 3. No activity but promising activity within 5 years
 - 4. Areas that can be rethought and developed
 - The City agreed to provide land and project background information
 - The city expressed concern over the new alignment alternatives, the initial analysis will determine the area of a potential station location and require coordination with potential alignment alternatives.

- The consultant Team and NCTCOG provided additional overview of the purpose of the Arlington Station within the context of High Speed Rail Studies being advanced in the state of Texas:
 - \circ $\,$ Dallas Station and Fort Worth are anchor stations for the DFW Region
 - Arlington station requires definition. This study will assist with that.
- The DFWCES Corridor is a collecting and distributing corridor for the DFW Region for access to HSR corridors to Houston from Dallas and to Oklahoma and central /southwest Texas from Ft. Worth. The DFWCES corridor is a mobility corridor and an economic corridor.

The Arlington Station depends on the needs of Arlington. Key to the project is identifying criteria for the station location including consideration of the following:

- Sporting events will likely be important for this Station
- One principal goal is to make the DFWCES a "One Seat Ride" experience. The station will be like an airport terminal for long distance business travelers. The one-seat ride will require FRA regulatory approval.
- Economic Development should be the City of Arlington's most important goal. We need to get the most from this investment. We will also need people mover technology to provide access to DFW airport.
- Identify stability and change. Define the role of the station and point out fatal flaws in the alternatives.
- The UP corridor presents challenges to be considered as an option.
- A discussion of Cost and funding for the Station and DFWCES included:
 - Concern that the cost of the DFWCES could be a deterrent to it happening. The DFWCES is in the early stages of development, costs are not identified as of yet and require significant refinement. An order of magnitude cost by Station typology will be provided.
 - How will it be funded? For the station it is envisioned based on experience that a combination of public and private sources will support construction. When the private companies understand the potential, a deal will likely be made.
- A discussion of alignment and station impacts included:
 - The type of development desired by the city of Arlington? Currently much of the Station Area is largely suburban type development with lots of parking. What areas would be catalytic for growth?
- What is the construction foot print needed for the station for the corridor? 60' with structural pier touchdowns every 100' or so. Within Division Street, it might be possible that these piers could be in the median. Utilities will also require significant consideration
- Future meetings The Consultant will forward calendar invites for all future meetings.

Thursday, March 8, 2017,

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER: DATE & TIME:

Meeting No.: 02

2:30 P.M. – 4:30 P.M. CT Arlington City Hall, Public Works Conference Rooms, 104 W. Abrams, Arlington, TX

ATTENDEES:

LOCATION:

NCTCOG: WSP PB:	Kevin Feldt, Dan Lamers Ed Campbell, Mark Briggs, Tom Hester, Eric Cox, Ken Beehler
•	
City of Arlington:	Alicia Winkelblech, Bruce Payne, Ann Foss
DART:	Chad Edwards
FWTA:	Curvie Hawkins, Jr.
Tarrant County:	Russell Schaffner
Visiting Teams:	Mike Waddell, Carlos Tarazaga, Phil Meaders, Chris Masters, Curtis
	Newton, Craig Elliott, Kelsey Berry, Brandon Palanker, Dean Radeloff
PIA:	Judy Meyer

MEETING MINUTES

Discussion Arlington HSR Station Planning Project Review Committee Meeting

Introductions

1.

-

- NCTCOG Goal-
- o one seat ride
- Study team process
 - o Identify 4-6 station location alternatives
 - o Develop criteria that considers technical, qualitative and social ranking
 - First ranking beginning of April
 - o Draft Final Report in May
 - o Finish project in June
- NCTCOG has developed five route options, of which three are considered viable. Routes on Division Street and on UP Rail line are not likely to work.
- Criteria Matrix discussion (Not included if no notable comments discussed, see Criteria spreadsheet for full list)
 - Complimentary Land Use
 - o Proximity to open space
 - Comments Hard to define
 - Should we prioritize lots of smaller areas or large areas
 - Need to consider programmed open space
 - Proximity to civic use and entertainment nodes
 - Dart What is the purpose of HSR station
 - Both civic and entertainment
 - Need to consider optimum distance from entertainment so there can be space for development

- Urban Form
 - o Should aesthetics be added to this category
 - o Development opportunity
 - We will need to consider air rights
 - We need to consider bulk opportunities
 - o Coincidence with Existing ROW
 - This would make an alignment along the street a positive option
 - o Adjacency to Streets
 - If it is in the middle of the street, it will need to be accessible.
- Private sector participation
 - o Existing Parking Availability
 - There is a great amount of existing parking (40-50%)
 - Are there locations for anchor parking garages?
 - Plans need to have flexibility
- Comments
 - Fatal flaws and environmental challenges should be added
 - o Don't want to rework the EIS process later
 - Add cost or constructability
 - This can be flexible with future opportunity
 - Over IH 30 may be more expensive than over land
 - Tunneling will be more expensive than overhead
 - Environmental Justice
 - o Neighborhood scale
 - This is not commuter traffic
 - There could be pressure to move residents
 - EIS will need to show cumulative impacts to EJ populations
 - Could be beneficial due to complementary transportation services that develop for HSR
 - System Capacity
 - This will probably be a future design consideration
- To Do
 Su
 - Summarize development benefits of High Speed Rail with real world examples
 - o This will help answer the function concern

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER:

DATE & TIME:	Thursday, April 6, 2017,	Meeting No.:	03
	1:30 P.M. – 3:30 P.M. CT		
LOCATION:	Arlington City Hall, Public Works Conference Rooms		

ATTENDEES:

NCTCOG:	Kevin Feldt, Dan Lamers
WSP PB:	Ed Campbell, Mark Briggs, Tushar Advani, Eric Cox
City of Arlington:	Alicia Winkelblech, John Dugan, Ann Foss
DART:	Chad Edwards
FWTA:	Curvie Hawkins, Jr.
Tarrant County:	Russell Schaffner
PIA:	Judy Meyer

MEETING MINUTES

Discussion City of Arlington Project Review Committee Meeting

Introduction

1.

- WSP filled in PRC with progress
- History of findings
 - o Started with NCTCOG initial maps
 - o This developed into a new map with 4 main areas
 - o Criteria scoring
 - o Detailed criteria
- NCTCOG we should look at it as intermodal center. When HSR is installed, it will be ready. Consider the Anaheim Artic station as an example.
- Major Ridership Business travelers
- There will be a people mover connection to the DFW airport
- Questions and Answers
 - Question Are the alignment curves acceptable?
 - Answer This exercise is for the station location. Alignment details have not been designed, but should be able to accommodate the large area options.
 - Question Why is proximity to open space important?
 - Answer This would be helpful for diverse uses. This option was not the highest ranked criteria. Multi-modal often works with public squares. This will also depend on stakeholders. See detail criteria for more information.
 - Question (County): Is it necessary to correlate Intermodal vs. HSR? HSR is often a transportation mode within Intermodal Stations.
 - Answer: These are not the same, but they are compatible. This can be the hub of transportation modes from HSR to other uses. They are synergistic; not opposed. The entertainment district could have a circulator, connection to downtown, and connection to regional rail service. This would all be in the same general area.

- Question (County): If intermodal is build first and HSR is not guaranteed, would stakeholders be able to partner still with the City?
- Answer: Decisions will not be made that fast. HSR could come before the intermodal. The nature of almost all HSR stations is multi-modal. They fit a certain market with the least number of seat transfers.
- Concern (DART): The function of HSR station is different than a multi-modal station. We don't go to an airport to get on a bus.
- Answer: HSR is more attractive than an airport. It can go into the heart of the city without as much space needs.
- Question (DART): would a rider pay for a ticket if it only takes them 5 more minutes in their car?
- Answer: The ridership is further than a commuter rail, with passengers from Houston and Austin etc.
- Concern (County): Arlington is different than most communities for HSR.
- Answer: The modes of connection are still in the works. The planning process if for the HSR station. Automated vehicles could serve as connection.
- Concern (DART): Autonomous vehicles are unproven technology, without safety regulation. Currently only the Airport and Irving have it and it is expensive.
- Answer: We can have flexibility with the options. Connecticut DOT is a great example of automated vehicles separated from other traffic. We are not getting into that level of detail yet. We can set aside space for future connection options.
- Question (DART): There is a line going through SH 360. How will you get through the interchange?
- Answer: The alignments will be decided after the Station location study.
- Question (DART): What is the size of the platform, and will it account for the approaches?
- Answer: 1000 x 200 is the basic platform size, but we will account for space entrance and exit. When the station is provided, NCTCOG will reconsider the line options.
- Question (FWTA): Will there be a public meeting?
- Answer: There will be 2 more PRC meetings and it will go to the council committee. There will be no public meeting at this time.
- Comments/Conclusions
 - We should meet back with stakeholders. Perhaps all together.
 - Arlington City Council Sub-committee on Transportation & Infrastructure meeting will be April 25th between 9:00 am and 12:00 pm
 - Goal: Prepare a recommendation that meets NEPA requirements and stakeholder input.
 - Arlington Location preference 2, 3, or 4
 - Partnership is under consideration
 - Still need Cordish Stakeholder input
 - Arlington will complete the weighted spreadsheet ranking

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER:
DATE & TIME:

DATE & TIME:	Wednesday, May 10, 2017,	Meeting No.:	04
	11:30 A.M. – 1:00 P.M. CT		
LOCATION:	Arlington Parks Board Boardroom, 717 W. Main St	., Arlington, TX	
ATTENDEES:			
NCTCOG:	Kevin Feldt, Dan Lamers		
WSP PB:	Ed Campbell, Mark Briggs		
City of Arlington:	Alicia Winkelblech, Ann Foss, Bruce Payne, Gincy 1	hoppil, Lyndsay Mitcl	hell,
	Keith Brooks		
DART:	Chad Edwards		
FWTA:	Detra Whitmore		
Tarrant County:	Russell Schaffner		
PIA:	Judy Meyer		

MEETING MINUTES

Discussion City of Arlington Project Review Committee Meeting

• Stakeholder Engagement

1.

- Finished with all stakeholder briefings; awaiting feedback from Cordish Companies
- Additional meetings have taken place with city management and elected officials
- City staff continue discussions with the TAC regarding a multi-modal hub (no details of routes or station locations has been provided to the TAC)
- Preliminary Location Analysis/Alignments
 - In the process of completing the scoring with weighted criteria
 - Initial appearance is that Station Area #2 is the first preferred location; Station Area 4 is the second preferred location; and Station Areas 3 and 1 are third and fourth, respectively
 - Alignment likely will need to move south of I-30 in order to get over the new SH 360 interchange with I-30; if the HSR line must be elevated 60-80-feet, it appears difficult yet feasible to for vertical alignment to slope down to the station.
 - Avenue E may provide sufficient space for rail alignment
 - Technical team is meeting with station planning team next week to discuss
 - It is possible there will be two station locations and/or alignments included in the EIS study that is the purpose to advance environmental review of the two locations.
- Next Steps
 - Obtain new alignment considerations
 - Complete technical analysis
 - Prepare final report
 - Share results with City Council, TAC and key stakeholders

- Schedule
 - Complete date moved back slightly; final report to be completed by mid-July; council briefing in June and TAC in early July
- Questions and Answers
 - Question Would the alignment on Avenue E fit into the existing ROW?
 Answer In general, yes. However, but won't know for sure until more detailed analysis and engineering completed
 - Question Avenue E was in the city's 2014 bond election and is scheduled for reconstruction in 2018. Will there be some coordination between rail planners and city? Answer – Yes. One of the reasons why the Core Express EIS and this station planning effort are being expedited is so that coordination can take place on projects that will be impacted.
 - Question What alignments does the EIS include between Dallas and Fort Worth? Answer – The EIS currently has three alignments – along I-30, along the current Trinity Railway Express (TRE) corridor, and a hybrid alignment that would be along I-30 from Fort Worth to Arlington and then north along SH 360 until it connected to the TRE corridor. NCTCOG has continued to analyze possible alignments since the CES project has been on hold. So, there may be some additional alignments to consider when the EIS resumes.
 - Question Is the TRE alignment using SH 360 being discussed?
 Answer Irving has some concerns about HSR being in the TRE corridor; this is another reason NCTCOG is looking at alternative alignments; discussions are not over yet
 - Question Once the final report for this study is complete, how will public input be obtained on the preferred station location?
 Answer – Public involvement activities for the EIS will include showing the station location and obtaining input; there will be several opportunities for people to provide feedback before the EIS is complete
 - Question Who will own the HSR line?
 - Answer: The cities of Dallas and Fort Worth have agreed to partner in a Local Government Corporation (LGC), which would plan, build and operate the rail line. No details about the LGC and how it will operate have been determined. So far, the cities have been working to identify appropriate representatives to negotiate the details.
- Comments/Conclusions
 - Elevated corridors need to be at the edges of the city's neighborhoods and entertainment venues.
 - Visualization techniques would be helpful for understanding the aesthetic impacts. (Note: The consulting team will provide some photos or renderings of how an elevated rail line and corresponding piers would look.)
 - The purpose of this rail line and who it serves remains an unanswered question; it is likely it will have a limited range and purpose and may be a waste of money; a total evolution would need to take place for people to change their commuting and transportation habits in this region; parking will always be an issue here.
 - Station Area No. 2 has better options that some of the other areas.

- It may be worth considering deferring the station until development catches up with the rail line.

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER:			
DATE & TIME:	Thursday, June 1, 2017,	Meeting No.:	05
	1:30 P.M. – 3:30 P.M. CT		
LOCATION:	Arlington City Hall, 101 W. Abram St., Arlington, TX		
ATTENDEES:			
NCTCOG:	Kevin Feldt, Dan Lamers		
City of Arlington:	Alicia Winkelblech, Ann Foss, Bruce Payne, Jennifer Prui	itt, Lyndsay	
	Mitchell, Keith Brooks		
FWTA:	Detra Whitmore		
WSP:	Ed Campbell, Mark Briggs, Bob Brown, Eric Cox		
PIA:	Judy Meyer		

MEETING MINUTES

1.	
Discussion	City of Arlington Project Review Committee Meeting

- Introductions
 - Purpose of meeting
- Presentation PowerPoint WSP
- Discussion
 - Question (Arlington) Please clarify the flexibility of the station location. Should city present one preferred station for inclusion in the EIS?

Answer (NCTCOG) – More than one area for the station is allowed in the EIS. At this stage, it might be good for the city to identify more than one location area to allow maximum flexibility. It's possible to eliminate an undesirable area, but there are different tradeoffs and impacts for each area that should be considered before a final decision is made at the end of the EIS process.

- Comment (Arlington) A is not a point of great interest. C and D are tolerable. B is the preferred option.
- Question/Comment (Arlington) All locations are constrained by ROW. What does it take to construct a station? Where will the alignment be located? This is subject to change. We will have more information with financial consideration in the future. We don't have enough information at this stage.

Answer (WSP) – We are in the general area, but there will be flexibility. We have ranked the locations based on the current information. If financing is available, the decision can be altered before the Record of Decision is reached. The environmental process will get us closer to the target.

- Comment (Arlington) Make sure to emphasize flexibility to the council.
 Response (NCTCOG) Agreed. Arlington is in a good position with flexible options. Further conclusions will be drawn when the Environmental process is complete.
- Question (Arlington) Is the economic development potential for each site included in the final report?

Answer – Yes, estimates of the increase in economic development and the amount of tax revenue generated will be in the final report.

- Outreach
 - City staff have been conducting additional one-on-one discussions with council members
 - Arlington will update the Transportation Advisory Council without a definitive location stressed in the upcoming meeting.

City of Arlington Sessions

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER:

PIA:

DATE & TIME:	Thursday, January 19, 2017,
	8:00 A.M. – 9:00 A.M. CT
LOCATION:	Teleconference
ATTENDEES:	
NCTCOG:	Kevin Feldt
WSP/PB:	Bob Brown, Ed Campbell, Eric Cox
City of Arlington:	Alicia Winkelblech

Judy Meyer

Meeting No.: 01

MEETING MINUTES

1.	
Discussion	Call on Study Approach and City Communications

Study is being sponsored by NCTCOG, but it really is a study for the city to determine how best a station will fit into the city's transportation system. Will require city to consider becoming part of a transit authority.

Ed described the specific steps that will be taken to identify existing conditions, develop base station concepts, transportation strategies and station area framework plans that consider the opportunities and constraints for station location options. The study team also will identify and communicate with key stakeholders and development interests. Ed provided details about the Project Review Committee and the anticipated agenda of the meeting schedule for February 26th.

Alicia noted she would like to invite some other city department managers to the PRC which would bring them up-to-speed on the status of the project and help identify the appropriate city staff who can provide critical information to the study team. Alicia will provide a list of names and work with Judy to determine who will send out an invitation/meeting appointment.

City has appointed a Transportation Advisory Committee (TAC) that is looking at transportation issues, including transit priorities. The committee is about half way through its work and will need to start narrowing options. NCTCOG's Transportation Director Michael Morris presented to the TAC with a focus on high-speed rail and the connections it offers. Next meeting is February 2nd.

Alicia expressed concern about the timing of the TAC's work and the study. It was decided that a onepage information sheet about the Arlington HSR Station Planning should be developed as soon as possible for distribution to the TAC. One-pager should have a map on one side showing the boundaries of the study with street names.

Alicia likely would send the one-pager to city council and city administrators.

City council has a new Transportation and Infrastructure Subcommittee that would be interested in learning more about HSR and receive periodic updates. Alicia is going to check to see if a presentation on the station planning study would be appropriate at the subcommittee's next meeting on February 14th at 9 a.m. Subcommittee does not meet regularly

Alicia noted there will need to be time built into the study schedule to update city administrators.

SharePoint will be used to allow study team members to share files and have a place to store study materials. It is anticipated the study files will be set up by next week. Alicia will provide a list of names from city staff who may need access.

Alicia will have files from previous and current studies uploaded to SharePoint.

Key stakeholders to engage could include:

- Texas Rangers
- Dallas Cowboys
- Six Flags
- Convention and Visitors' Bureau
- Bob Kimball

There may be others, but someone from the city's development department can probably provide additional suggestions.

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER: DATE & TIME:

Monday, February 13, 2017, Meeting No.: 02 3 P.M. - 5:00 P.M. CST LOCATION: City Hall Public Works Conference Room 1, 101 W. Abrams, Arlington, TX ATTENDEES: NCTCOG: Dan Lamers, Kevin Feldt City of Arlington Jim Parajon, John Dugan, Bruce Payne, Jennifer Pruitt, Ginicy Thoppil, Alicia Winkelblech, Ann Foss PB: Bob Brown, Mark Briggs, Tom Hester, Eric Cox

MEETING MINUTES

Work Session

PIA:

Purpose of meeting is to determine what city's vision is for station, and identify locations where it would be of benefit, and identify any locations that are off limits

- It was noted that NCTCOG is performing the project for benefit of the City of Arlington
- City is working to merge entertainment district with downtown and increase density
- Several developments in progress or under consideration •

Judy Meyer

- Texas Live!, expansion of convention center, repurposing Rangers Ballpark, additional hotel, office and retail
- Developers support high-speed rail and may consider becoming partners
- Property ownership and management
 - Hicks property between AT&T Stadium and Ranger's Ballpark sold to Davis and Simpson who have different ideas about what to do with the property
 - Rangers hired Cordish Companies to manage all of their property
 - Blackstone recently purchased Lincoln Square _
 - Transwestern owns Lincoln Square West
 - Eastern Star purchased by Arlington Independent School District (ISD) for facilities (need to review bond proposal to get specifics)
 - City owns the AT&T Stadium and Rangers Ballpark structures; teams owns parking areas
 - Cowboys will fiercely protect parking
 - Six Flags owners are conservative
- Development potential
 - Several developments still in conceptual stages and highly confidential
 - Anticipate Cowboys will build something similar to the Rangers' Texas Live! highly probably that they would need to use some of their parking area to do so and will be looking at alternate parking options
 - Six Flags not likely to expand, but would be very difficult to acquire or partner would need to offer some local transport to attract their interest

- Timing may be good for acquiring Hurricane Harbor site
- Wal-mart near AT&T stadium would probably sell, but it would be very expensive
- Station location
 - Differences in support for placing station in midst of new and planned developments, or placement on periphery
 - Differences of opinion about whether station will function as a transportation mode serving other transportation modes or whether it would bring people to Arlington as a destination
 - Highly likely that both types of passengers would use the system
 - Periphery location more suitable for a station functioning as a transportation mode that connects to other transportation modes
 - Including the station as part of an entertainment or downtown development for a station that serves people arriving at their destination
 - Several different location options on map were discussed
 - Along I-30 offers opportunities for redevelopment and could mean spending less of the city's political capital
 - Arlington is unique in that it is central to the region and offers unique destinations
 - Concerns expressed about public perception of station's purpose and chances that the city will end up investing in a failed system
 - Visual appeal and rider experience as the train enters Arlington should be considered
 - Adjacent land uses will influence rail function
 - Shared parking could benefit both developers and rail system
- City incentives
 - No 4A or 4B funds available to city; voters have turned down proposals; estimated \$14-15 million per year
 - City issued \$30 million TIRZ debt for stadium infrastructure
 - Only Public Improvement Districts (PID) are a tourism PID for all hotels in the city for marketing and advertising and the Veridian development
- Station access
 - Moving people to DFW Airport from the station will be critical
 - People mover likely to be a part of recommendations from the city's Transportation Advisory Committee
 - Transportation in warehouse district can be difficult; trains block roadways
- Stakeholder engagement
 - Study team will work with city to identify key stakeholders who will be invited to attend a briefing about the project on March 10th
 - City staff will let study team know when briefings should occur with the city council and/or city council committee
- Meeting adjourned at 5:25 p.m.

CITY OF ARLINGTON STATION PLANNING

CONTRACT NUMBER: DATE & TIME: Tuesday, February 28, 2017, Meeting No.: 03 8:00 A.M. - 9:00 A.M. CT LOCATION: Arlington City Hall, Public Works Conference Rooms ATTENDEES: NCTCOG: Kevin Feldt, Dan Lamers WSPIPB: Bob Brown, Ed Campbell, Mark Briggs, Tom Hester, Tushar Advani, Eric Cox Alicia Winkelblech City of Arlington: PIA: Judy Meyer

MEETING MINUTES

1.	
Discussion	Call on Potential HSR Station Locations
- Introduction	

- Introduction
 - Arlington has expressed different priorities for station location criteria
 - o Station location in the middle of the entertainment district
 - o The functionality of the station closer to IH 30 is preferred
- Goal
 - One location for the station at the end of this study
 - Have as many stakeholders as possible for March Stakeholder meeting
 - City Staff to Keep City of Arlington Transportation Advisory Committee informed
- Potential Locations (The City will forward plans showing their recommendations)
 - 1. Division Street
 - Generally discussed although discounted as IH30 proximate locations preferred.
 - 2. Through Industrial and divide AT&T and the Ballpark
 - This location is not preferred by City Staft
 - 3. Nolan Ryan Expressway Corridor
 - City of Arlington thought that this could require some changes around properties and liked this option
 - Possible challenges with the old ballpark location
 - 4. IH 30 Corridor

- Favorable option

- 5. Old Vacant area Northwest of IH 30 and Collins
 - Possible location
- 6. Bridge IH 30 and redevelop Lincoln square
 - Redeveloping Lincoln Square will be challenging.
- Conclusion
 - City of Arlington Staff prefer a location closer to I30

Stakeholder Briefings

Stakeholder Briefings Summary

The Arlington High-Speed Rail Station Planning Study included early, one-on-one or small group discussions with representatives of several entities with interests or property in the area being studied. The entities included:

Texas Rangers Arlington Convention & Visitors Bureau Texas Health Resources Primera Companies, Inc. Six Flags Entertainment LP CHS Architects Arlington Chamber of Commerce Dallas Cowboys Moritz Group Lincoln Square owners Cordish Companies (Texas Live!)

Individual discussions included sharing route and potential station location ideas and obtaining feedback. All participants in individual discussions were invited to attend a briefing about the final location recommendation that will be incorporated into the Core Express Service environmental documentation.

Information obtained by the study team during stakeholder discussions, which helped shape the final outcome included:

- The City owns the AT&T Stadium structure
- Teams own parking around the structures; reducing surface parking may be difficult
- Rangers own a large majority of land around the ballpark from IH 30 to south of the site of the new ballpark
- Property ownership around AT&T Stadium more fractured
- Several different ideas about what to do with Globe Life Park
- Options near Globe Life Park and close to Six Flags, Texas Live! and the new ballpark favored
- There is retail incorporated into Globe Life Park currently
- A variety of development under consideration; hotels, new convention center and entertainment venues
- Expect future activity on all four corners of Randol Mill Rd and Ballpark Way
- Redevelopment should include business and not just entertainment
- More green space in downtown and entertainment district is desirable

- I-30 sites are attractive for generating economic development and would not impact Arlington's downtown as much as other options; the further the station goes into the city south of I-30, the more community disruption will occur
- It is critical that HSR offer a connection to DFW International Airport
- Station effort should tie into the city's multi-modal strategy under development that will include transportation options to the airport from HSR
- Walkability will be a key component if locating near entertainment district
- Some concerns expressed about reality of HSR station generating development; sports stadiums were supposed to ignite development, but that has not been the case
- Concerns about creating additional traffic that cannot be absorbed by local street network; traffic on Collins Street only expected to grow
- Options 1 and 2 may pose accessibility issues, but would be the easiest to construct
- Rail and station should not obstruct current views