

DFW Airport East-West Connector

FY2020

Attachment 1 - Project Narrative



North Central Texas
Council of Governments



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1. PROJECT DESCRIPTION

The North Central Texas Council of Governments (NCTCOG), in cooperation with the Dallas Fort Worth International Airport (DFW Airport), Texas Department of Transportation (TxDOT), and the City of Euless, is seeking funding assistance of approximately **\$13.3 million** through the Fiscal Year (FY) 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant Program to construct a long-planned new-location four-lane divided thoroughfare in eastern Tarrant County, Texas. This new regionally significant arterial (RSA), identified as the East-West Connector, would connect the intersection of State Highway (SH) 360 at East Harwood Road to the intersection of State Highway Spur 97 (International Parkway) at Rental Car Drive. The **DFW Airport East-West Connector Project** proposed in this BUILD Grant application will construct the ultimate layout and cross-section of the 1.27 mile-long roadway facility between the two termini, comprising a footprint of approximately 26.3 acres on generally undeveloped land predominantly owned by DFW Airport. The built facility, consisting of travel lanes, median, curbs, curb offsets and buffers, guardrails, bicycle/pedestrian side paths, retaining walls, graded slopes, drainage infrastructure, and other functional assets, would be approximately 150 feet in width through most of the project’s length. **Exhibit 1** is an aerial photograph illustrating the extent of the project corridor.

Exhibit 1 – Project Corridor





The surface transportation network connecting DFW Airport to/from the regional roadway system is composed of multiple major limited-access facilities, including Interstate Highway (IH) 635 and SH 114 to the north, SH 360 to the west, SH 161/President George Bush Turnpike (PGBT) to the east, and SH 183 to the south. International Parkway, which bisects the airport in a north-south direction just west of the Dallas/Tarrant County boundary, provides direct access to/from passenger terminals, interior cargo facilities, business/service centers, and primary parking lots, and is supported by parallel frontage roads in each direction. Major arterials are also located within the northern, central, and southern portions of the DFW Airport property. Airfield Drive is among the most prominent of those arterials, providing both east-west and north-south connectivity to/from various airport land uses, and other than a missing section in the northeastern part of the property it circumnavigates the four main north-south runways surrounding the passenger terminals. However, Airfield Drive does not fully traverse airport property, and turning movements to/from intersecting roadways like Mid-Cities Boulevard and Walnut Hill Lane are required for continuous east-west trips across the airport between the cities of Euless (Tarrant County) and Irving (Dallas County). In fact, there are currently no uninterrupted arterials transecting DFW Airport in the east-west direction.

With a total of seven operating runways and a diversity of large commercial and industrial land uses, DFW Airport is presently the second largest airport in the United States by land area and fourth largest in the world, covering approximately 26.9 square miles. Its location near the geographic center of the Dallas-Fort Worth Metropolitan Area, as well as its situation among numerous neighboring cities with dense roadway networks and multiple traffic generators or attractions, creates a significant obstacle for convenient and consistent accessibility and through movements. Additionally, each of the limited-access facilities circumnavigating airport property are among the busiest freeways/tollways within the North Central Texas region. Chief among those corridors is SH 183 where the segment between SH 360 and SH 161/PGBT at the southern periphery of DFW Airport is currently ranked as the 36th most congested roadway in Texas. The close spacing of major interchanges, including the south DFW Airport entrance/exit opportunity provided by International Parkway, as well as the lack of nearby parallel routes providing any alternate accessibility or incident management options for SH 183, are the primary contributing factors for the ongoing congestion.

The need and purpose of proposed improvements outlined for the DFW Airport East-West Connector Project can be defined as follows:

- Improve connectivity and accessibility within the southern portion of DFW Airport
- Enhance regional mobility for the transportation network surrounding DFW Airport
- Provide congestion relief and incident management capabilities for SH 183 via an alternate parallel route approximately one mile north of the freeway corridor
- Develop a continuous major east-west thoroughfare across DFW Airport connecting East Harwood Road in the City of Euless with West Northgate Drive in the City of Irving via existing Rental Car Drive just east of International Parkway
- Create opportunities for local/regional traffic to utilize a potential construction bypass of SH 183 pending a subsequent implementation phase of the North Tarrant Express (NTE) public-private partnership (PPP) concession project by TxDOT and North Tarrant



Express Mobility Partners (NTEMP), stretching between SH 121 in the City of Bedford to Belt Line Road in the City of Irving

- Address the expected increase in economic activity and traffic associated with new industrial, commercial, and mixed-use development currently planned across the southern portion of DFW Airport, of which approximately 237 acres would be directly accessible from the proposed roadway

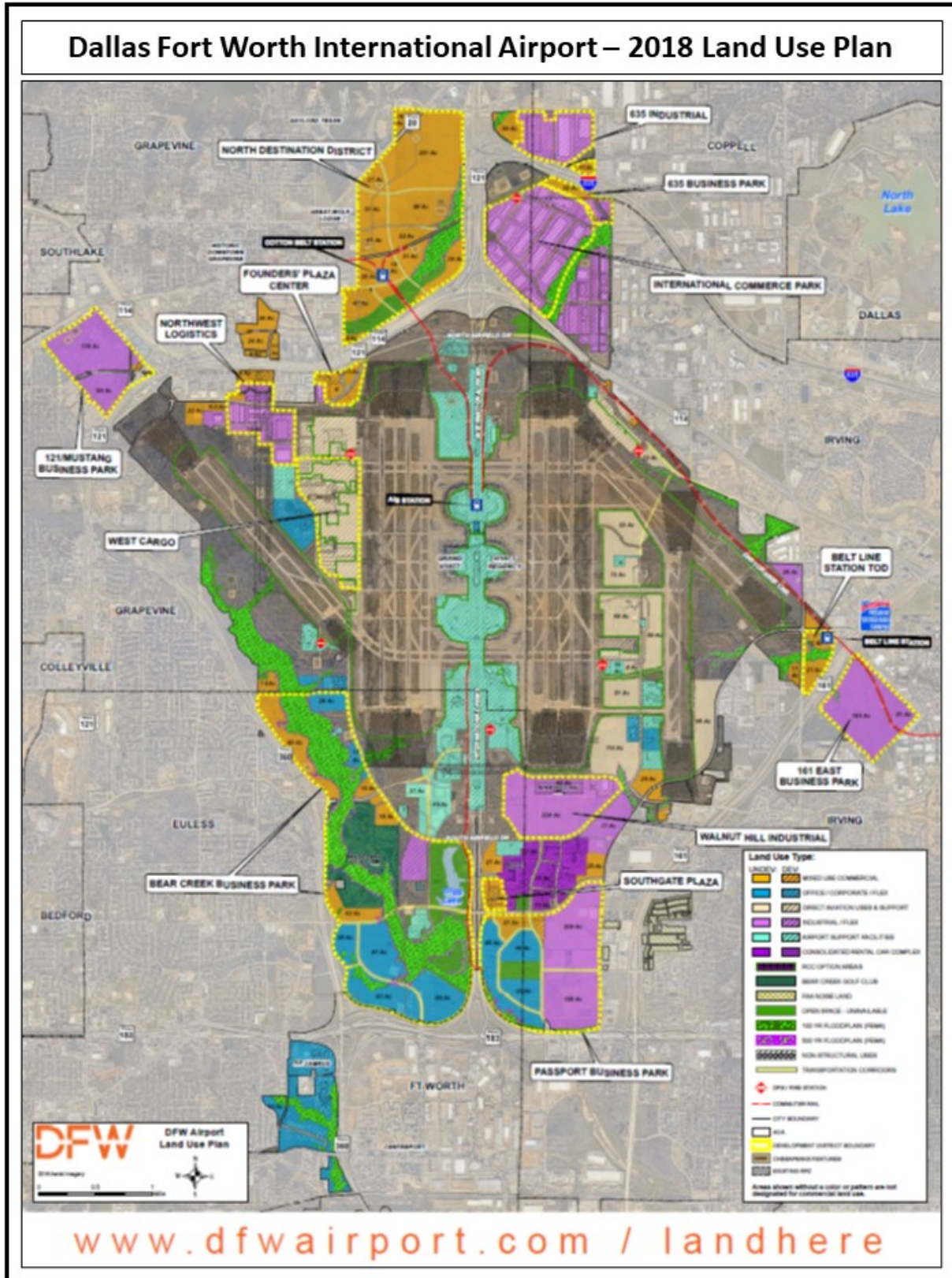
1.1. Project History and Context

Comprehensive planning and coordinated development of the DFW Airport East-West Connector Project has been consistently endorsed in each of the sixteen Metropolitan Transportation Plan (MTP) documents (including associated amendments and updates) published and enacted by NCTCOG since its founding in 1974. DFW Airport itself also opened in 1974, and while large-scale urbanization did not yet encompass the new facility at the time, planners had already envisioned its large size (initially a world record), its central location between the cities of Dallas and Fort Worth, and its massive development potential would ultimately increase accessibility needs in years to come. By 2019, DFW Airport had risen to fruition as the ubiquitous economic engine for North Central Texas and a leading hub for domestic and international air travel. Ranked 15th globally for total enplaned passengers and 4th for total flight operations, DFW Airport alone is responsible for generating \$37 billion in economic impact and supporting nearly 230,000 full-time jobs (including almost 60,000 employees at the airport itself) across the surrounding area.

The economic output and attractiveness of DFW Airport had also contributed to the rapid and relentless growth of the North Central Texas region, expanding to the nation's 4th largest metropolitan area with an estimated 12-county population of nearly 7.5 million people in 2019. Major expansion projects had occurred on nearly all the regional limited-access facilities surrounding the airport. Despite those improvements, many adjacent corridors like SH 183 remained among the State's most highly congested. Large land parcels immediately north and south of SH 183 near International Parkway had been transformed into substantial industrial, commercial, and mixed-use development districts such as the 1,300-acre CentrePort Business Park in Fort Worth, the 200-acre Riverwalk development in Euless, and the 600-acre Passport Business Park in Irving. This activity has substantially increased pressure on approximately 600 acres on developable land at the southwest corner of DFW Airport, much of which would be immediately accessible following the construction of the DFW Airport East-West Connector Project. Additionally, the new roadway would provide alternate connectivity to/from each of the other nearby developments as well, and this would result in considerable future congestion relief for the parallel SH 183 corridor. The current DFW Airport Land Use Plan, shown in **Exhibit 2**, highlights the proximity of those developments to the two east-west corridors, as well as their relation to the primary airfield functions situated to the north.



Exhibit 2 – DFW Airport 2018 Land Use Plan





Formal advanced planning for east-west corridors north of SH 183 through DFW Airport property was first initiated in December 2008 as the result of a collaborative preliminary engineering study involving DFW Airport, NCTCOG, TxDOT, the North Texas Tollway Authority (NTTA), the cities of Euless and Irving, Federal Highway Administration (FHWA), and the Federal Aviation Administration (FAA). Two corridors were identified as a “North Option” and a “South Option”, and several alternative alignments were evaluated within each option. Preferred alternatives for each corridor were ultimately recommended upon the study’s conclusion in February 2011. The preferred “North Option” calls for a future direct thoroughfare link between Mid-Cities Boulevard and Walnut Hill Lane that would connect at an existing International Parkway grade separation north of the South Airfield Drive interchange. The “North Option” remains as a future project in DFW Airport’s *Master Thoroughfare Plan* to coincide with planned perimeter taxiway connections between the primary runways at the southern end of the airfield. The “South Option” was determined, however, to have the greatest regional benefit among the two corridors, especially because its proximity to SH 183 resulted in a more viable means for congestion relief, plus improved accessibility to more developable DFW Airport property at its southern end. The preferred “South Option” alignment, Alternative F in the study, was identified as a four-lane thoroughfare beginning at East Harwood Road at SH 360 via a route heading east parallel to the Bear Creek Golf Club property lease line, though not immediately adjacent to the golf course itself. The route then passed on the north side of an existing natural gas well pad site, as well as to the north of the existing reclaimed water pump station for DFW Airport, and then curved to pass on the south side of the Trigg Lake Dam to tie into the existing Rental Car Drive bridge over International Parkway. This preferred alignment advanced into the formal National Environmental Policy Act (NEPA) process beginning in November 2013 following coordination and project classification between the FAA and FHWA.

The DFW Airport East-West Connector Project proposed in this BUILD Grant application is the result of continued refinements to the “South Option” preferred alignment, and a draft Environmental Assessment (EA) has been developed in order to study the potential environmental consequences of constructing the proposed project. While the most recent public involvement opportunity for the project was conducted in the City of Euless during July 2015, stakeholder efforts have persisted to finalize the EA in anticipation of new funding opportunities. By March 2020, and through efforts to ensure stimulation of near-term economic activity for DFW Airport, despite reduced traffic resulting from worldwide Coronavirus (COVID-19) mitigation, local partners had initiated a quarterly modification to the project’s current FY2019-2022 Transportation Improvement Program (TIP) listing securing means to implement a two-lane interim improvement package. Simultaneously, and given the compatibility of Federal and non-Federal funding shares identified to date, the recently announced solicitation of projects for the FY2020 BUILD Discretionary Grant Program offered an alternate yet timely opportunity to seek delivery for the project’s ultimate scope. Though preparations to enable construction of the interim improvement plan proceed in tandem and without interruption, NCTCOG staff is pleased to submit this application and advocate on behalf of DFW Airport that streamlined delivery of the ultimate East-West Connector facility is indeed a worthy BUILD Grant award candidate.



1.2. Project Costs

The estimated total cost to complete the ultimate scope of the DFW Airport East-West Connector Project is **\$48,895,573** (in 2019 dollars), and the proposed allocation of Federal and non-Federal funding sources by project activity type is illustrated below in **Exhibit 3**. **\$13,264,258** in requested BUILD Grant funds via this application will be targeted entirely for project construction, and that amount is fully encapsulated within the total cost identified for that activity category. Notably, the estimated cost shown below does not include right-of-way (ROW) cost because the entire project exists on property currently owned by either DFW Airport or TxDOT.

Exhibit 3 – Estimated Project Cost and Funding by Activity Type

Activity Category	Cost	Funding Source	
		Federal (Percent)	Non-Federal (Percent)
Design/Engineering	\$4,745,000	35%	65%
Right-of-Way	N/A	0%	0%
Utility Relocation	\$2,460,250	0%	100%
Construction	\$41,690,323	80%	20%
TOTAL PROJECT COST	\$48,895,573	71%	29%

1.3. Targeted Transportation Challenges

The DFW Airport East-West Connector Project exemplifies a unique opportunity for the North Central Texas region to implement an innovative and efficient process for addressing urban transportation needs while simultaneously balancing costs and impacts to the community and to the environment. The project also represents an expedited means to stimulate multiple economic sectors increasingly, yet justifiably, tempered by public health efforts to eradicate the ongoing COVID-19 pandemic. The project is expected to significantly relieve congestion, as well as improve mobility, connectivity, and reliability not just within the immediate project area or across the southern portion of DFW Airport property, but also along the SH 183 corridor through western Dallas and eastern Tarrant Counties.

1.3.1. Relieving Congestion

Since 2010, the Texas A&M Transportation Institute (TTI) has prepared and published an annual report on behalf of TxDOT that details a comprehensive congestion analysis and ranking of major roadway segments across the State of Texas. The recently released 2019 edition of the Texas “100 Most Congested Road Sections,” included updated information and new rankings for a total of 1,854 major roadway segments of varying lengths and functional classifications. As calculated in the new report, the SH 183 section, stretching 2.6 miles from SH 360 to SH 161/PGBT (approximately one mile south and parallel to the DFW Airport East-West Connector Project and its terminal arterial connections), ranked as the 36th most congested roadway segment statewide accounting for all vehicles, and the 51st worst based solely on truck congestion. Adjacent SH 183 corridor sections are also ranked highly among the State’s congested roadways. To the east, the SH 183 section extending



5.9 miles from SH 161/PGBT to Loop 12 placed 193rd in overall vehicle congestion (176th based on trucks). To the west, the 3.7-mile segment between SH 360 and SH 121 was recorded in 68th place in the overall rankings (77th accounting only for trucks). **Exhibit 4** displays the calculated rankings for three SH 183 segments, as well as figures for additional congestion measures such as annual hours of delay and cost of congestion both for all vehicles and for trucks.

Exhibit 4 – Texas Roadway Segment Congestion Rankings, Delay, and Cost

Congestion Measure	SH 183 Segments		
	SH 121 – SH 360	SH 360 – SH 161	SH 161 – Loop 12
2019 Overall Rank	68	36	193
2019 Truck Delay Rank	77	51	176
Annual Overall Delay (person-hours)	739,407	782,772	644,223
Annual Truck Delay (person-hours)	41,821	40,884	37,873
Annual Overall Congestion Cost (\$)	\$15.6 million	\$16.4 million	\$13.6 million
Annual Truck Congestion Cost (\$)	\$2.3 million	\$2.2 million	\$2.1 million

Source: Texas Transportation Institute, 2019 (<https://mobility.tamu.edu/texas-most-congested-roadways/>)

The three SH 183 sections described above have a total combined length of 12.2 miles, a figure much greater than the actual 1.27-mile extent of the DFW Airport East-West Connector Project. However, the continuous thoroughfare that results when the project connects East Harwood Road at its western terminus and Rental Car Drive at its eastern terminus (also including Northgate Drive through the City of Irving), also extends the same overall east-west distance. Additionally, upon completion of the ultimate project, the contiguous arterial would gain the attribute of being the closest parallel facility both north or south of SH 183 to travel that full distance, as well as the distinction of having an uninterrupted capacity of at least two travel lanes in each direction. In considering potential alternate routes for incident management purposes, or in determining additional or redundant accessibility options to/from DFW Airport and other nearby major activity centers, the proposed East-West Connector provides a critical system link benefitting multiple cities served by the SH 183 corridor.

This facet of the DFW Airport East-West Connector Project is even more distinguished given the fact the SH 183 corridor has, and will continue to, be both benefited and impeded by major reconstruction efforts. Over the past decade, and with almost no period of interruption, nearly all SH 183 infrastructure assets and right-of-way (ROW) between Dallas and Fort Worth has been transformed as the result of staged improvements implemented through two significant PPP outputs. The first project was the \$2.1 billion initial phase of the



NTE which rebuilt and expanded thirteen miles of IH 820 and SH 183 from IH 35W to just east of SH 121 (<https://ntetexpress.com/>). Occurring between October 2010 and October 2014, the construction project doubled the freeway’s original capacity and opened the first Tarrant County segment of tolled managed lanes (known locally as “TEXpress lanes”). Beginning in April 2015 and concluding in April 2019, the comprehensive development agreement (CDA) consortium of TxDOT and SouthGate Mobility Partners delivered the first phase of the Midtown Express (www.txdot.gov/inside-txdot/projects/studies/dallas/sh183.html).

This \$848 million project brought major improvements to an additional fifteen miles of SH 183 from east of SH 121 to IH 35E, and it opened a continuous link between the Tarrant County and Dallas County network of TEXpress lanes. Despite these remarkable achievements, it is important to note both projects are recognized as interim improvements, and the SH 183 segment closest to the DFW Airport East-West Connector Project (SH 360 to SH 161/PGBT) received little in extra capacity compared to neighboring sections. Considering the fact the short segment already suffers from discontinuous frontage roads, few and inconsistent local access ramp opportunities in each direction, as well as the tight stacking of three critical freeway/tollway system interchanges, it is not surprising the segment’s latest TTI congestion ranking was both inferior to any upstream/downstream section and worse than in previous years.

Within the brief lull of activity after completion of the two projects described above, the expanded system of TEXpress lanes combined with the region’s surging growth resulted in ridership and revenue milestones being surpassed earlier than had been projected, according to the TxDOT/NTEMP concession agreement. By May 2020, NTEMP had proposed that a nearly \$1.3 billion second phase of the NTE project, financed entirely without new public funds, get underway as early as late 2022 if authorized by TxDOT’s FY2021 Unified Transportation Program (UTP)¹. While this new staged project, among other attributes, would finally build ultimate improvements planned for SH 183 segment at the south end of DFW Airport, the construction complexities are sure to create congestion stresses unlike any previous effort. New TEXpress lane viaducts and elevated ramps, as well as depressing the SH 183 general purpose lanes as much as 30 feet for over a mile between DFW Airport and Euless Main Street ramp connections, may require planning for alternate routes covering much greater distances during construction. However, expedited delivery of the East-West Connector at its full planned capacity would result in a more accessible and convenient parallel travel option, particularly for residents and businesses immediately east and west of DFW Airport.

1.3.2. Enhancing Mobility, Connectivity, and Reliability

Mobility 2045: The Metropolitan Transportation Plan for North Central Texas (www.nctcog.org/trans/plan/mtp/2045) is the defining vision for the multimodal transportation system within the DFW MPA. The focus of *Mobility 2045* is providing

¹ Regional Transportation Council (RTC) May 14, 2020 Meeting Presentation – Page 30
(<https://www.nctcog.org/nctcg/media/Transportation/Committees/RTC/2020/presentations-may.pdf?ext=.pdf>)



transportation choices. North Central Texas is a dynamic, diverse, and rapidly growing region whose residents increasingly require a range of transportation options to serve their varied travel needs. As the region grows to an estimated 11.2 million people by 2045, it will require a maturing transportation system of roadways, public transportation options, and bicycle and pedestrian facilities, all complemented by local policies and programs enhancing investment possibilities toward preserving or optimizing existing assets and strategically adding new infrastructure. These efforts will provide essential and all-inclusive transportation choices to the traveling public and improve the overall quality of life necessary to sustain the growth of the region.

In considering transportation needs for locations having such extreme and sustained rates of growth like North Central Texas, it is equally important to estimate and comprehensively prepare for the potential effects of future mobility and reliability challenges. Given the current ozone non-attainment status designated for the Dallas-Fort Worth-Arlington Urbanized Area, it is additionally vital to ensure future congestion is addressed not solely with new capacity, but also through a balanced management plan that considers optimization of travel demand reduction, operational efficiency, multimodal integration, asset performance, and sustainable development initiatives. These various needs and mitigation strategies are outlined in NCTCOG’s Congestion Management Process (CMP) documentation (www.nctcog.org/trans/manage). The latest 2013 CMP Update includes corridor rankings, identified deficiencies, and potential improvement recommendations for 93 individual segments across the Dallas-Fort Worth Metropolitan Planning Area. Based on projected travel conditions by the year 2035, the SH 183 segments east and west of SH 360 (the western terminus of the East-West Connector), were ranked 25th and 33rd areawide, respectively, and the 2013 CMP Update indicated additional modal options and system demand reduction measures would be required to more effectively address congestion. Proposed improvements outlined above for the DFW Airport East-West Connector Project specifically target each of these parameters, and thus the project’s expedited delivery should prove both a welcome relief and substantial benefit to the SH 183 corridor.

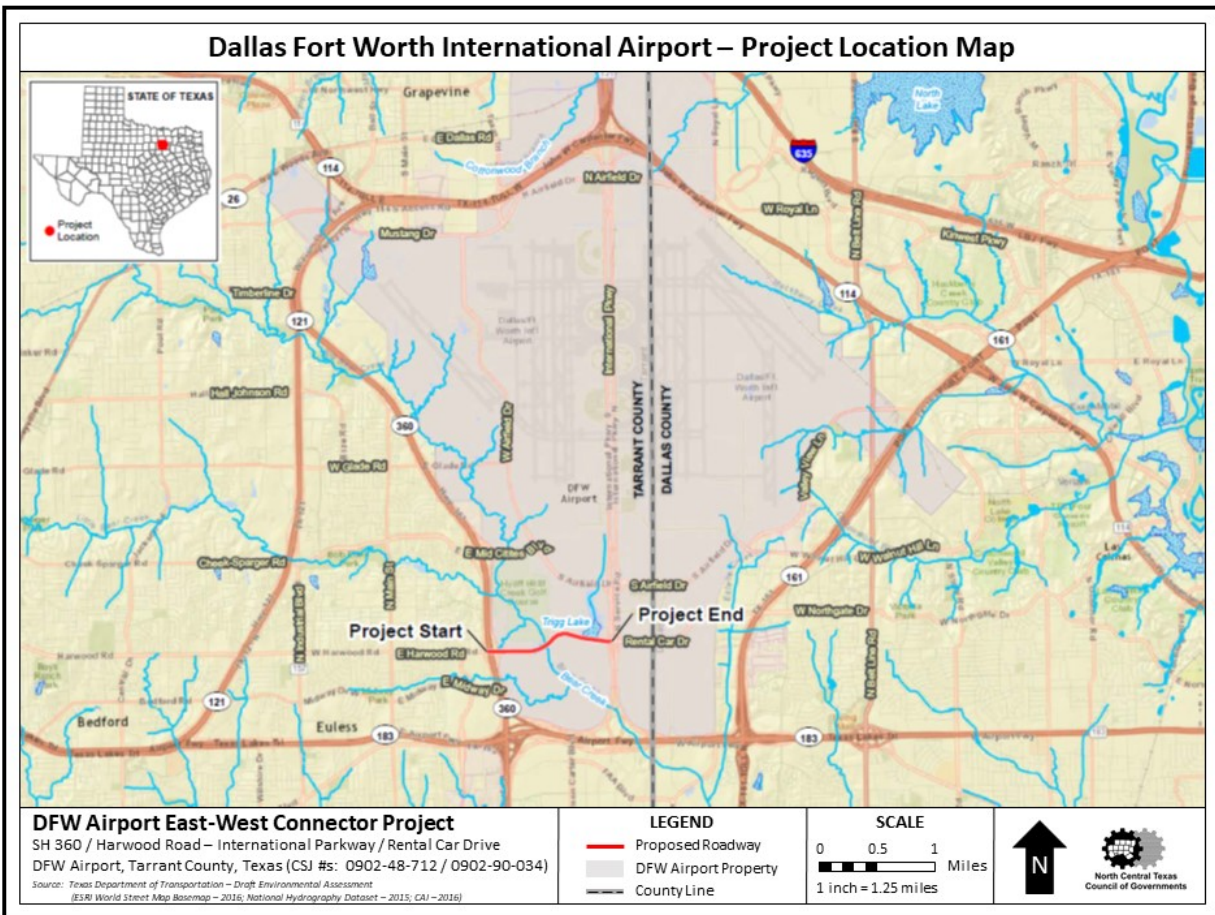
The project is a major regionally significant component in *Mobility 2045*, and as such, the proposed improvements are not only included/consistent with MTP recommendations, but also with the inherent CMP initiatives as well. As stated in Section 1.3.1, the project will construct a missing thoroughfare link and create a suitable long-distance, contiguous, and parallel four-lane arterial to help relieve SH 183 corridor congestion. Additionally, the project will result in improved mobility, reliability, and accessibility for motorists and freight movements traveling in, out, and through DFW Airport. Integrated multimodal design elements will support increased use of transit, bicycle, and pedestrian modes in both the immediate project area and along SH 183 (to be further described in Section 4.5), particularly important since the combined thoroughfare provides convenient “back-door” connectivity to existing/planned activity centers adjacent to the freeway.



2. PROJECT LOCATION

The DFW Airport East-West Connector Project is located in the far eastern portion of Tarrant County, Texas. The project limits occur predominantly on DFW Airport property within the City of Euless, and the jurisdiction is fully incorporated within the United States (US) Census-designated Dallas-Fort Worth-Arlington Urbanized Area (ID 22042). **Exhibit 5** illustrates the extent of the proposed project in Tarrant County and its relation to the cities and local/regional roadway network surrounding DFW Airport.

Exhibit 5 – Project Location Map



The DFW MPA is one of the fastest growing metropolitan regions in the country. The population of the 12-county North Central Texas region has increased from 2.4 million people, as measured in the 1970 US Census, to nearly 7.5 million people, according to the latest 2018 US Census estimate, a staggering increase of 213 percent. A significant part of this growth has occurred in areas of both Dallas County and Tarrant County surrounding DFW Airport. **Exhibit 6** highlights both the past trends and future forecasts for population growth within each of the cities adjacent to DFW Airport, Dallas County, Tarrant County, and the 12-county MPA.

Given the short length of the project itself, an evaluation of micro-level information prepared for NCTCOG’s 2045 Demographic Forecast was conducted to identify current/future



population and employment within traffic survey zones, fully or partially, within one mile of the corridor centerline. The year 2018 population for that geographic area was approximately 18,200 people. Comparatively, year 2045 population is projected to be almost 25,600, a growth of about 41 percent. Employment within that same area is forecasted to increase from more than 17,200 jobs in 2018, to about 34,800 in 2045, a growth of 103 percent. This information demonstrates that although the North Central Texas urbanized area continues to expand outward, the convenience, attractiveness, and vitality of DFW Airport is likely to draw sustained investment and growth within the heart of the region as it has since inception.

Exhibit 6 – Population Trends and Forecasts for Project-Related Locations

Location	1990 Census ¹	2000 Census ¹	2010 Census ¹	2020 Forecast ²	2045 Forecast ³	Growth 2010-2045
Coppell	16,881	35,958	38,659	41,460	43,831	13%
Euless	38,149	46,005	51,277	54,725	73,456	43%
Fort Worth	447,619	534,697	741,206	960,824	1,412,326	91%
Grapevine	29,202	42,059	46,334	52,243	59,509	28%
Irving	155,037	191,615	216,290	259,186	395,150	83%
Southlake	7,065	21,519	26,575	31,192	41,900	58%
Dallas County	273,525	432,976	2,368,139	2,587,960	3,445,204	45%
Tarrant County	1,170,103	1,446,219	1,809,034	2,004,609	3,263,622	80%
NCTCOG MPA	4,111,750	5,309,277	6,539,950	7,612,993	11,246,531	72%

Sources: ¹ US Census 2010 PL94-171, NCTCOG (February 2011).

² Texas Water Development Board, 2021 Regional Water Plan Populations Projections for 2020-2070 for Cities, Utilities, and County, Region C (March 2019).

³ NCTCOG 2040/2045 Demographic Forecast (May 2015), <http://rdc.nctcog.org/index.aspx> (at county level only)

Exhibit 7 shows existing average daily traffic counts and future traffic projections for specific freeway and arterial locations near the project area. Despite the fact Mid-Cities Boulevard is, and will continue to be, a six-lane arterial for a greater distance to the west, its traffic growth over time is projected to be modest compared to Harwood Boulevard. This can be directly attributed to the East-West Connector given that Mid-Cities Boulevard traffic does not have the ability to travel continuously to/from DFW Airport or other points to/from the east, and additionally the facility is twice as far from the influence and intense land uses of the SH 183 corridor. It is equally important to note traffic growth along SH 183 is estimated to remain strong, and therefore having the Harwood Boulevard-Rental Car Drive-Northgate Drive linkage through DFW Airport property is essential to relieve SH 183 from being overburdened by both local and regional travel demands. The DFW Airport East-West Connector Project provides the redundant east-west capacity and extra connectivity necessary to accommodate latent travel demands across this critical gateway through the heart of the DFW MPA.

The type, intensity, distribution, and availability of specific land uses is an important determinant for identifying travel demand characteristics and prioritizing transportation needs.



Exhibit 7 – Project Area Current and Future Daily Traffic Volumes

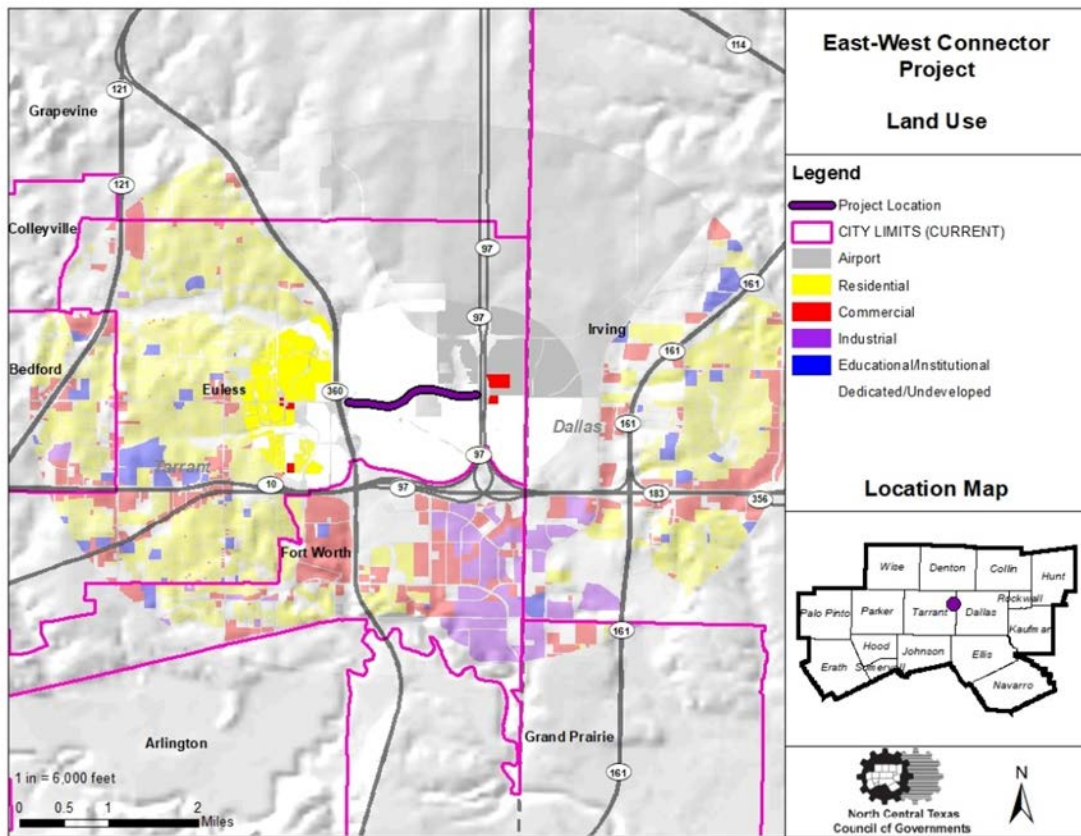
Location	Daily Traffic Volume		Change	
	2018	2045	Numeric	Percent
Mid Cities Boulevard at SH 360	23,900	25,500	1,600	7%
Harwood Boulevard at SH 360	26,400	35,000	8,600	33%
SH 183 – SH 360 to International Parkway	300,200	352,400	52,200	17%

Source: NCTCOG travel demand model (*Mobility 2045 Plan*)

Daily volumes include general-purpose lanes, frontage roads, collector-distributors, and managed lanes

Exhibit 8 illustrates the predominant land uses for various development tracts in and around the southern portion of DFW Airport. Notably, areas in both the cities of Irving and Euless immediately east or west of DFW Airport property and the surrounding freeways are predominantly residential in nature. Vehicle trips produced in these locations traveling to, from, or through DFW Airport may certainly become beneficiaries of the continuous thoroughfare link the East-West Connector would provide, especially once dedicated land uses north of SH 183 develop according to the DFW Airport Land Use Plan.

Exhibit 8 – Project Area Land Use Distribution

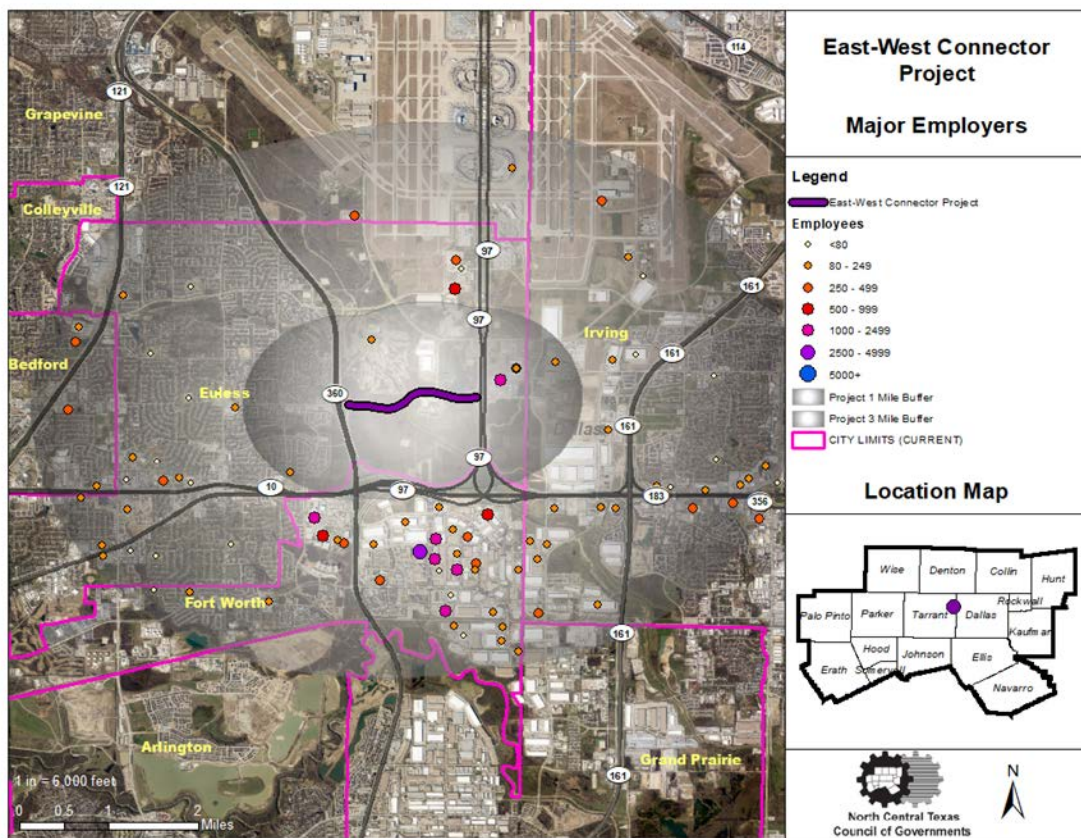


Another distinctive area is the concentration of industrial and commercial land uses south of SH 183. That location is primarily composed of warehouses, distribution centers, and large offices

associated with the CentrePort development, as well as the recently opened American Airlines Corporate Campus. Given the proximity of those high-intensity land uses to both SH 183 and DFW Airport, it is clear how any new closely-spaced parallel route would provide positive accessibility outcomes.

Exhibit 9 elicits additional details concerning the size and proximity of major employers within those clustered non-residential land uses, and the density and color of the marked locations illustrate the economic significance of the area. AMR Corporation, Bank of America, Chase Auto Finance, Dialog Direct, and the U.S. Small Business Administration are just a few of the large corporations housed in the CentrePort development south of DFW Airport. One final area of importance are several locations pinpointed just across International Parkway from the eastern terminus of the East-West Connector Project. Those sites refer to DFW Airport’s Consolidated Rental Car Center and a new 32-acre mixed-use development called Southgate Plaza, which as of February 2018, became the relocated home for the airport’s administrative headquarters, business offices, and a new U.S. Postal Service processing facility.

Exhibit 9 – Project Area Major Employers



3. GRANT FUNDS, SOURCES AND USES OF PROJECT FUNDS

Exhibit 10 outlines funding sources and estimates (in 2019 dollars) by activity type for the proposed DFW Airport East-West Connector Project. The requested \$13,264,258 in FY 2020



BUILD Grant funds is dedicated solely for project construction and allocated non-Federal funds meet or exceed minimum share requirements both per activity type and for the overall project.

Exhibit 10 – DFW Airport East-West Connector Project Funding Summary

FUNDING SOURCE	TYPE	FUNDING AMOUNT	PERCENT
Local	DFW Airport – Engineering	\$3,085,000	6.3%
Local	DFW Airport – Utility Relocation	\$2,460,250	5.0%
Local	City of Euless – Construction	\$110,000	0.2%
Local	Regional Toll Revenue (RTR) – Construction	\$3,316,065	6.8%
Local	DFW Airport – Construction	\$5,000,000	10.2%
Non-Federal Funding Sources – Subtotal		\$13,971,315	28.6%
Federal/MPO	STBG Funds – Engineering	\$1,660,000	3.4%
Federal/MPO	STBG Funds – Construction	\$20,000,000	40.9%
Federal	BUILD Grant – Construction	\$13,264,258	27.1%
Federal Funding Sources – Subtotal		\$34,924,258	71.4%
PROJECT FUNDING – TOTAL		\$48,895,973	100.0%

4. SELECTION CRITERIA

Per requirements outlined in the FY 2020 BUILD Grant Notice of Funding Opportunity (NOFO), information contained in this portion of the narrative concerning the DFW Airport East-West Connector Project addresses primary and secondary selection criteria. Sections 4.1 through 4.5 below are directed toward the primary selection criteria, including safety, state of good repair, economic competitiveness, environmental sustainability, and quality of life considerations. Sections 4.6 and 4.7 are focused on the secondary selection criteria for attributes related to innovation and partnership.

4.1. Safety

Exhibit 11 provides a detailed summary of crashes by crash type for the DFW Airport East-West Connector Project study area based on information obtained via TxDOT’s Crash Records Information System (CRIS). Within the study area defined for the project, shown graphically below in **Exhibit 12**, a total of 473 vehicular crashes were recorded within the latest five-year analysis period between 2014 and 2018, including 205 collisions determined likely or confirmed on-site to have caused injuries.

As a foundational matter, NCTCOG and TxDOT are both strongly committed to the primacy of safety for all transportation activities, programs, and projects. In its role as the Metropolitan Planning Organization (MPO) policy-making body for the North Central Texas region, the Regional Transportation Council (RTC) approved Resolution R19-01 in February 2019 (www.nctcog.org/trans/about/committees/regional-transportation-council) to support and affirm federally-required Highway Safety Improvement Program performance

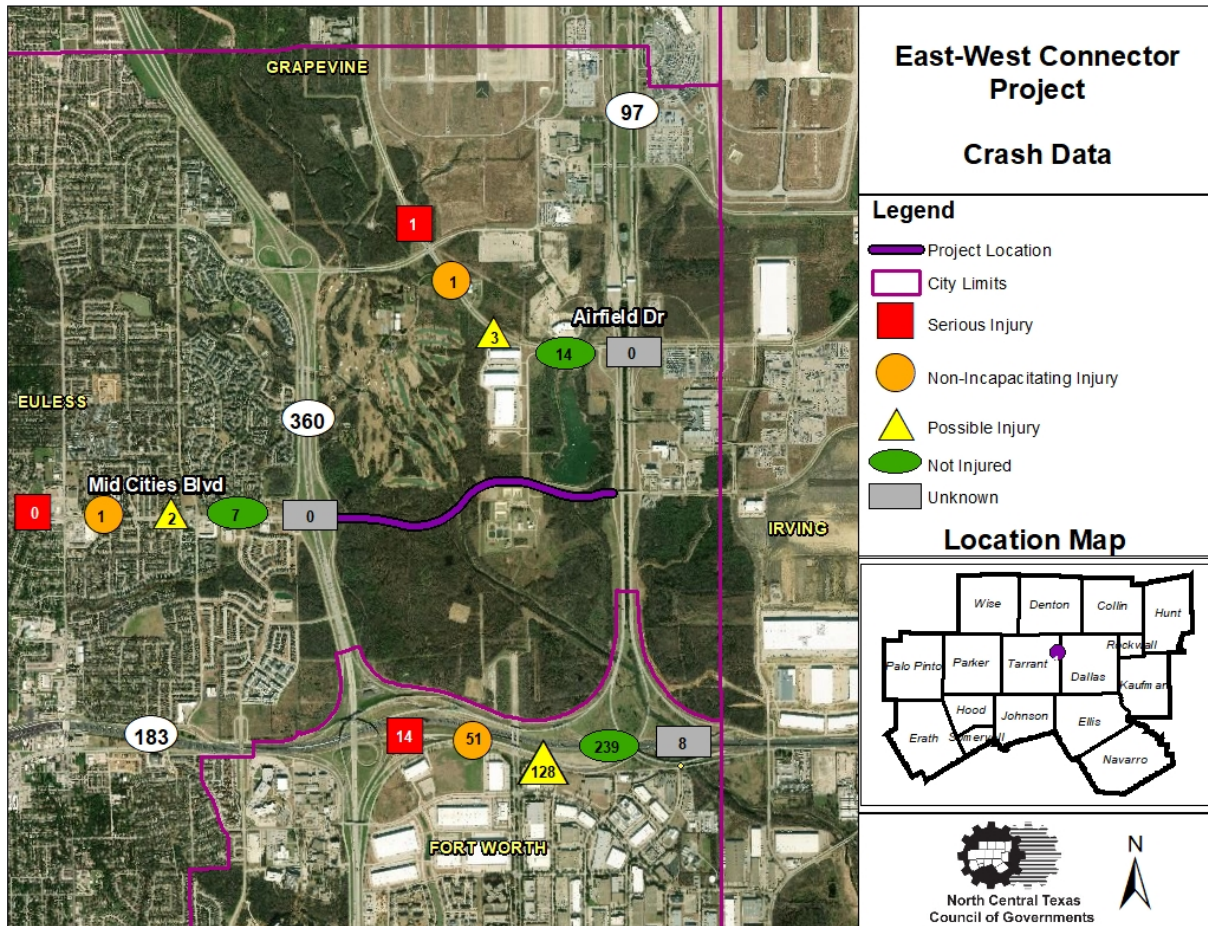


targets as adopted by TxDOT for the years 2018-2022. The Resolution also adopted the regional aspiration goal declaring even one death occurring on the transportation system is

Exhibit 11 – Project Study Area Crash Data Analysis (2014 – 2018)

Severity	Crashes
Fatal Injury	4 (.85%)
Serious Injury	15 (3.17%)
Non-Incapacitating Injury	53 (11.21%)
Possible Injury	133 (28.12%)
Not Injured	260 (54.97%)
Unknown	8 (1.69%)
Total	473

Exhibit 12 – Project Study Area Crash Data Map (2014 – 2018)



unacceptable, and NCTCOG staff will aggressively work with all its government partners and transportation providers to develop projects, programs, and policies that can assist in eliminating serious injuries and fatalities across all travel modes.

As illustrated in the preliminary schematic and typical section drawings included as separate attachment within this BUILD Grant application (Attachment 4), the DFW Airport East-West



Connector Project incorporates comprehensive safety measures TxDOT included among its numerous projects for many years. Many of those treatments and/or strategies are integrated directly from research and guidance memorandums which inform and promote the Federal Highway Administration’s (FHWA) Proven Safety Countermeasures². Specific aspects of this project will improve corridor safety by addressing the following four safety categories as included within the Texas Strategic Highway Safety Plan, FHWA Proven Safety Countermeasures, and the FHWA Everyday Counts initiative:

- Intersection Safety:
 - Dedicated turn lanes and turn-lane channelization at the east and west termini where the corridor will intersect with existing frontage roads and thereby minimize collisions and improve driver expectancies
 - Medians separating opposing traffic directions to control and optimize left-turn or ingress/egress driveway movements, and minimize collisions
 - Upgrade existing traffic signalization
- Bicycle/Pedestrian Safety:
 - Five-foot sidewalks in each direction along corridor and seven-and-a-half-foot sidewalks on bridge structure.
 - Curbs and clear zones to separate sidewalks from vehicle lanes
 - Paved islands and/or barriers, dedicated signals including a leading pedestrian interval (LPI), safety signage, and lighting to provide extra protection, visibility, and crossing priority for pedestrians at all intersections
 - 14-foot outside travel lanes for shared use by vehicles and bicycles
 - One-foot wide combined traffic and pedestrian safety guardrail along bridge structure
 - Metal beam guard fencing along the outer edge of sidewalks in lieu of two-foot wide outside buffer at approaches to the Bear Creek bridge and Trigg Lake Dam emergency spillway
- Horizontal Curve Safety:
 - Enhanced pavement delineation and signage on/along curved sections
- Corridor Access Management:
 - Dedicated turn lanes and turn-lane channelization at the east and west termini to minimize collisions, improve driver expectancies, and enhance entry/exit control efficiency to/from adjacent properties
 - Medians separating opposing traffic directions to control and optimize left-turn or ingress/egress driveway movements, and minimize collisions
 - Retaining walls to limit access in areas with high topography challenges

Though many of the countermeasures described above will produce various qualitative benefits for the proposed project, some have ability to be consolidated and quantified for inclusion in the benefit-cost analysis (BCA). Details regarding the methodology and direct benefit calculations are discussed in the BCA, **Attachment 2A**.

² Federal Highway Administration (2020) – <https://safety.fhwa.dot.gov/provencountermeasures/>



4.2. State of Good Repair

In November 2018 following extensive research, analysis, and consultation between NCTCOG and TxDOT, the RTC took official action supporting statewide pavement and bridge condition targets for the NHS as part of National Highway Performance Program rules established by the Fixing America’s Surface Transportation (FAST) Act. Through its action, the RTC also directed NCTCOG staff to regularly collaborate with TxDOT on measures to expedite programming for regional NHS bridges and off-system NHS pavements in poor condition. This effort, combined with similar initiatives from other Texas MPOs, has ushered in a new evolution of cooperation, data collection/exchanges, and other innovative tools/measures shared through TxDOT meant to address performance and accountability in the project selection/prioritization process. As these agencies are each required to regularly document how substantial progress toward performance targets is achieved, and because this information must be linked and verified through a risk-based financial plan incorporated with a state’s Transportation Asset Management Plan (TAMP), significant and consistent multi-lateral oversight must be in place to account for infrastructure lifecycle considerations at both the project and network levels. NCTCOG developed a comprehensive web page highlighting background data/information, meeting materials, status updates, and added links/resources to readily demonstrate its partnership commitments for the holistic linking of asset/performance management and traditional project/system planning (www.nctcog.org/trans/data/info/measures/system).

With the DFW Airport East-West Connector designated as a regionally significant arterial, RSA and TxDOT as the project sponsor, under normal circumstances operations and maintenance costs would be borne by local and/or State government entities during the project’s lifecycle. However, since the project is located on DFW Airport property, additional funding sources ranging from natural gas lease revenues, gate fees, bond sales, and other mechanisms are available to help maintain a state a good repair.

4.3. Economic Competitiveness

The speed, duration, and robustness of growth in North Central Texas has been and continues to be tied to the region’s economic competitiveness. Though remaining the fourth largest U.S. metropolitan area by population over the past decade, the region’s estimated numeric growth of over 1.2 million people since the 2010 U.S. Census has outranked all other metropolitan areas throughout the nation³. Translating that growth in financial terms, the DFW MPA is currently responsible for one-third of the gross domestic product (GDP) for the State of Texas, and its overall economic output is ranked 11th worldwide when compared across all major metropolitan centers internationally⁴.

Much of that economic vitality can be attributable to the logistics advantage of North Central Texas being centrally located within the lower 48 U.S. states. Such convenience and efficiency have certainly contributed to DFW Airport receiving over 73 million passengers

³ U.S. Census (2019) – <https://www.census.gov/newsroom/press-releases/2020/pop-estimates-county-metro.html>

⁴ U.S. Bureau of Economic Analysis (2018) – <https://www.bea.gov/data/gdp>



during FY 2019, over six percent more compared to the previous year, and new non-stop service was added or announced to/from 30 destinations (14 internationally) during that time⁵. Similarly, with air cargo shipments can be flown between DFW Airport and nearly every domestic airport within three hours, and as a growing international hub with air cargo services to/from cities on six continents, diverse commodities are shipped in greater quantities and frequency each year. In FY 2019, DFW Airport handled approximately 971,000 tons of cargo, also more six percent above the previous year, and additionally during that time the airport became one of only two North American airports to achieve International Air Transport Association (IATA) Center of Excellence for Independent Validators (CEIV) community status⁶. As a certification set aside to improve the handling and transport by air of perishable products, DFW Airport has positioned itself to capitalize on cold chain capabilities and time-sensitive goods distribution. Such a proficiency outside of the health care realm may not be considered more of a necessity given recent global experiences as a result of the COVID-19 pandemic. The DFW Airport East-West Connector Project can provide additional service boosts to address that and other logistical concerns.

As mentioned above in Section Two (Project Location), major developments surrounding the southern end of DFW Airport like CentrePort and Passport Business Park are geared toward improved freight and distribution operations. With congestion and the likelihood for new construction along SH 183 continuing to grow, new connectivity options for passenger, freight, or local trips to/from or across DFW Airport are critical to sustain mobility and reliability. Such outcomes would be achieved with the expedited delivery of the DFW Airport East-West Connector. Additionally, with substantial amounts of developable land immediate accessible from the proposed new roadway link, businesses of all types can gain greater tactical advantages via improved proximity and efficiency.

4.4. Environmental Sustainability

The Environmental Assessment for the DFW Airport East-West Connector Project, as well as recent local partner coordination in preparation for this BUILD Grant proposal, identifies the following strategies that would implement environmental sustainability.

4.4.1. Natural Environmental Effects

Congestion mitigation strategies would reduce energy use and air or water pollution near the proposed project. These strategies include:

- Single-occupancy vehicle and public transportation improvements
- Signalization
- Mobility assistance
- Intelligent transportation system improvements

The EA identifies strategies that would avoid adverse environmental impacts to air or water quality, wetlands, and endangered species. The DFW Airport East-West Connector Project

⁵ <http://dfwairport.mediaroom.com/2019-10-28-DFW-Airport-Welcomes-New-Non-Stop-Service-to-Auckland>

⁶ <http://dfwairport.mediaroom.com/news-releases?item=123016>



crosses Bear Creek and three of its unnamed tributaries. Trigg Lake is located outside the northern bounds of the project corridor; the south side of the lake features a wetland fringe to about the northern boundary of the project corridor. Water quality certification under Section 401 of the Clean Water Act would be met by implementing best management practices (BMPs) to control erosion through sodding or re-seeding, control sedimentation by using silt fences, and control post-construction total suspended solids by installing mulch filter socks and compost filter socks at drainage inlets. No wetlands have been observed within the project corridor, but additional steps would be taken to protect Trigg Lake and the wetland fringe on the northern project corridor boundary. Engineered facility drainage and stormwater management controls would protect waters within and beyond the corridor's boundaries. Runoff from the proposed project would not discharge directly into a Section 303(d)-listed threatened or impaired water, or into a stream within five miles upstream of a 303(d)-listed threatened or impaired water. A Stormwater Pollution Prevention Plan will be prepared and implemented for project construction. A proposed bridge over Bear Creek would span the 100-year flood hazard area and permit 100-year flood conveyance.

The proposed project would disturb up to 26.1 acres of terrestrial and avian vegetation and 0.2 acres of aquatic habitat, which provide habitat for birds and other wildlife. Migratory bird BMPs would be included in construction plans. No eagles, nests or preferred eagle habitat have been observed within the proposed project corridor. No suitable habitat is present for federally listed species. Suitable habitat is present for one state-listed species that could potentially be found in Tarrant County and for two Species of Greatest Conservation Need (SGCN) that could potentially be found in the Texas Blackland Prairies Ecoregion. BMPs to protect these species include advising contractors of the species' potential occurrence, avoiding unnecessary impacts to dens and burrows, and scheduling construction and ground-disturbing activities around mating season and burrowing season, respectively. These species include:

- Timber rattlesnake (*Crotalus horridus*) – State Threatened
- Texas garter snake (*Thamnophis sirtalis annectens*) – SGCN
- Plains spotted skunk (*Spilogale putorius interrupta*) – SGCN

The project would provide environmental benefits including management of contamination and re-vegetation. Any glycol-contaminated soils encountered in the vicinity of glycol reclamation ponds will be managed according to applicable federal and state regulations. Any subsurface contamination resulting from the project's proximity to an active natural gas gathering pipeline and high-density polyethylene glycol pipeline would be managed according to applicable Federal/State regulations. Debris, trash, and any potential hazardous materials present in portions of the corridor and an unnamed tributary would be removed and disposed of. Landscaping/re-vegetation of disturbed areas would use regionally native and non-invasive plants to the extent practicable.



4.4.2. Social Environmental Effects

The draft EA for the DFW Airport East-West Connector Project evaluates the presence of environmental justice communities within a half-mile of the project corridor. Two Census tracts have minority environmental justice communities. Minority environmental justice communities are those where at least 50 percent of a Census tract population self-identifies as a minority, or at least twice the percentage of the area's population self-identifies as a minority. None of the populated Census block groups has low-income environmental justice communities. Low-income communities are those with a median annual household income below the national poverty level for a family of four. No adverse impacts to minority or low-income environmental justice populations are anticipated as a result of construction of the project. The project's improved transportation connectivity would benefit all populations.

Up to 20.8 percent of individuals within one-half mile of the proposed project self-report as possessing limited English proficiency, according to Census block group data. The native language for most of these individuals is Spanish.

4.5. Quality of Life

Unlike the northern portion of DFW Airport, the southern portion has numerous roadways that currently do not connect to existing DFW Airport or regional surface transportation networks. The DFW Airport East-West Connector Project will connect the area's two major north-south travel corridors of SH 360 and SH 161/PGBT via a continuous east-west thoroughfare through the south side of DFW Airport. This would provide an alternate parallel route for the traffic-congested SH 183, as well as a redundant option for enhanced accessibility, connectivity and mobility to/from or through DFW Airport property. Portions of the arterial corridor east of International Parkway, such as Northgate Drive and Rental Car Drive, have been completed to increase connectivity to surrounding non-airport land uses and improve mobility for regional commuters. The proposed project to connect Rental Car Drive west of International Parkway to an existing SH 360 interchange with Harwood Road will be the final segment to create a contiguous multi-lane long-distance thoroughfare linking multiple cities in the heart of the North Central Texas region. The project will improve access to new corporate and commercial developments and address the increased traffic associated with expected demographic and economic growth. Additionally, the project will provide new access to/from numerous existing/planned activity centers characterized by substantial employment opportunities, improved freight and supply chain logistics, and venues supporting education, medical, shopping, and entertainment outlets.

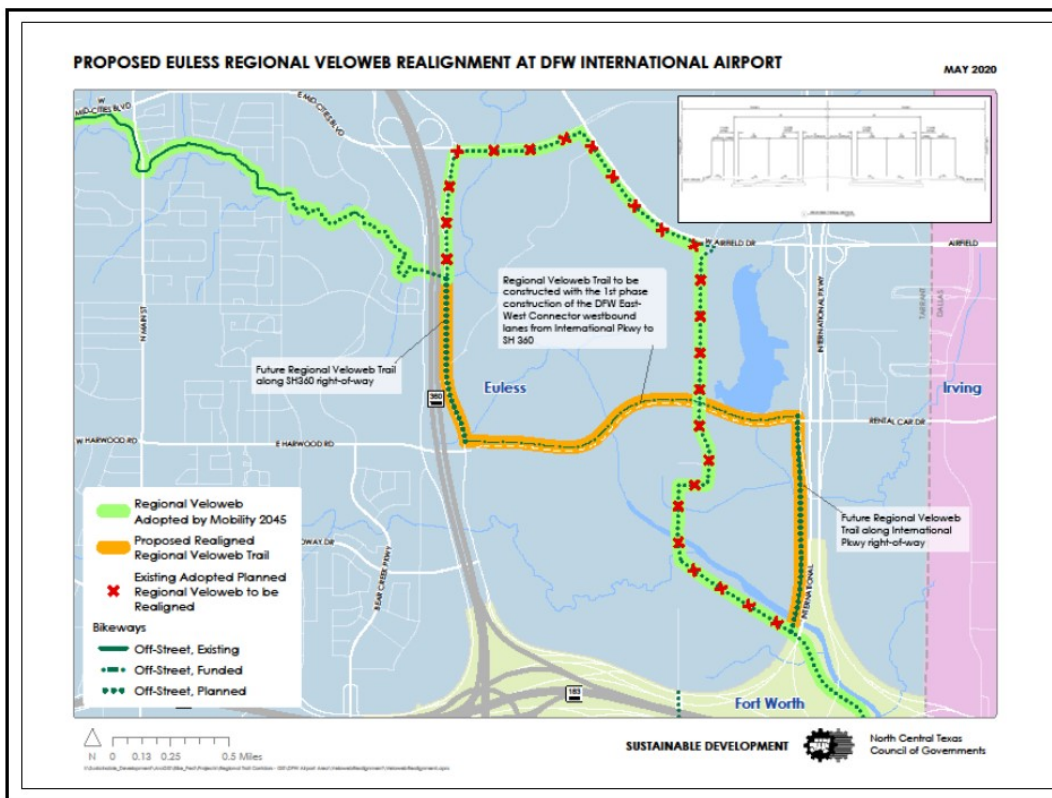
Assets to be constructed as part of the DFW Airport East-West Connector Project will complement the corridor's environmental features through various aesthetic, safety, and resiliency components. The project's ROW will border Trigg Lake and traverse Bear Creek. A 990-foot long aerial structure will span the floodplain and rise approximately 34 feet above the ordinary high water mark of Bear Creek. The bridge will include a provision of a one-foot wide combined traffic and pedestrian safety guardrail along the north and south sides of the facility's aerial structure. The alignment will also traverse the Trigg Lake Emergency Spillway just south of the existing earthen dam. The spillway and associated berms will be



regraded for the installation of cast-in-place box culverts to allow for the passage of anticipated flows. A new 12-foot gravel maintenance access road will be constructed along the southern base and an un-paved vehicle turn-out on the north and east side of the dam. The surrounding access points will allow for periodic lake water sampling, dam inspection or other maintenance activities. Construction away from the Trigg Lake Dam will decrease construction costs and minimize adverse impacts to surrounding land.

New provisions for active transportation choices will also accompany the proposed project. Based on the current schematics, the DFW Airport East-West Connector Project will accommodate bicyclists by including a 14-foot wide outside shared-use vehicle and bike lane in each travel direction, and pedestrians will be afforded five-foot sidewalks in each direction that will expand to 7.5-foot widths on bridge structures. Alternatively, as discussed above in Section 4.4.1, an option for the project to incorporate a realigned Regional Veloweb trail that would otherwise be constructed in a longer and potential more impactful path adjacent to the channel of Bear Creek, is under consideration by project partners. In that instance, the project ROW would be reconfigured to contain a path ranging from 10 to 12 feet in width, and the outside vehicular lanes in each direction would be reduced to a 12-foot width. The potential Veloweb Trail realignment is illustrated in **Exhibit 13**.

Exhibit 13 – DFW Airport East-West Connector Veloweb Trail Option



For either active transportation option, however, the sidewalks/paths, crosswalks, and signals would be built to comply with the Americans with Disability Act (ADA). These accommodations will provide a net benefit to active transportation accessibility in the area,



particularly to/from Southgate Plaza which recently became the relocated headquarters for all DFW Airport administrative and business office personnel. Other current/future office, commercial, and industrial locations in the southern portion of DFW Airport property such as Bear Creek Business Park and Passport Business Park will also benefit through increased connectivity, and any future office or commercial development that may be proposed by DFW Airport in its southern areas. Such provisions for multimodal travel, both through and across the linked Harwood Road-Rental Car Drive-Northgate Drive corridor, encourage more diverse travel choices and improved markets for both transportation and land development.

Efforts to support noise reduction are also important livability considerations. As part of the DFW Airport East-West Connector EA, a traffic noise impact analysis will be conducted to calculate design year 2045 traffic noise levels for the operational phase of the proposed project. Land use activity areas adjacent to the corridor currently consist primarily of vacant and undeveloped lands with some light industrial land uses and no residential or sensitive areas, however the noise analysis will be performed with consideration these conditions may dramatically change given the project's inherent economic and quality of life benefits.

4.6. Innovation

Information described in this section highlight how various attributes and conditions concerning the DFW Airport East-West Connector Project can address three distinctive innovation parameters, including technology, project delivery, and financing.

4.6.1. Innovative Technologies

The North Central Texas region has already invested significant resources to produce a wealth of technology infrastructure supporting transportation mobility, safety, and reliability, and a large amount of available information is shared through the existing 511DFW apparatus (<http://511dfw.org/>). From that platform, critical information regarding transportation asset performance and/or traffic conditions is collected, analyzed, and distributed by individual providers throughout the DFW MPA including TxDOT, various transit entities, and local governments. Traveler information regarding closures, incidents, congestion levels, and specific weather-related warnings are processed and communicated via numerous media outlets and transmitted in the field through active intelligent transportation system (ITS) infrastructure, including dynamic message signs, warning lights, and automatic barricades. Such technological applications can be seamlessly integrated into the proposed East-West Connector and effectively linked with specific physical improvements and CMP-oriented strategies. For example, the combination of ITS elements, new frontage roads, relocated ramps, and auxiliary lanes planned for deployment as part of NTEMP's imminent second phase of SH 183 improvements, all provide a unified front in gaining quicker responses from first responders and law enforcement to help detect, manage, and clear potential incidents. This innovative marriage between design and technology will be essential for the SH 183 corridor, and the combined Harwood Road-Rental Car Drive-Northgate Drive thoroughfare as an alternate route, to function effectively as future traffic volumes, trip purposes, and vehicle types/classification continue to surge both in size and complexity.



Additional innovation may also be realized through the project’s actual construction process and resource composition. According to modeling performed by the Texas Commission on Environmental Quality (TCEQ), construction equipment contributes approximately eight percent (8%) of all ozone-forming NO_x releases as calculated via the 2017 emissions inventory for North Central Texas⁷. The use of NCTCOG’s Clean Construction Specification⁸ will be encouraged for inclusion with this project to increase potential sustainability benefits, including reductions in air pollutants and petroleum consumption. Investment in newer construction equipment and/or diesel retrofit technologies will result in use of cleaner burning engines in place of higher polluting equipment. This will minimize criteria emissions, including ozone-forming NO_x from construction equipment, which is critical for further progress toward attainment of the federal ozone standard. Additional reductions are anticipated in particulate matter and diesel exhaust. These reductions positively impact human health, which is negatively impacted by exposure to ozone, fine particulate matter, and diesel exhaust. Furthermore, because newer equipment often has better fuel economy than older engines and incorporates technologies allowing for minimized idling and other efficiencies, use of the specification could yield reductions in petroleum consumption.

DFW Airport itself has built a strong reputation on the development and incorporation of innovative technologies. Over the past year, new applications in security, baggage handling, quality care for time-sensitive commodities, and various other amenities/services have resulted in several major awards including the distinction as Air Transportation World’s 2019 Global Airport of the Year. Another recent example of potential technological innovation may also be realized as a direct result of the East-West Connector’s expedited delivery. NCTCOG, DFW Airport, and other public/private partners teamed together in the past year to respond to the Virgin Hyperloop One Request for Proposals regarding the construction of a Hyperloop Certification Center. A map displaying the general alignment of the preferred “DFW Airport to Arlington” corridor is shown in **Exhibit 14**⁹. Should NCTCOG’s proposal be selected for implementation, scheduled to begin by late 2021, the proposed facility’s northern terminus is a location within the planned Bear Creek Business Park. This location, plus any ancillary assets, would be directly accessible from the new roadway.

4.6.2. Innovative Project Delivery

TxDOT and NCTCOG have taken advantage of two innovative federal programs to streamline the environmental review and permitting process for accelerated project delivery. Despite being on DFW Airport property, with TxDOT as the project sponsor, these strategies can be applied to the East-West Connector Project to help ensure fulfillment of the BUILD Discretionary Grant Program’s aggressive schedule requirements for funding obligation. These programs help expedite the project review but do not allow permitting, approval processes, and/or regulations to be circumvented.

⁷ TCEQ, *2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State Implementation Plan*

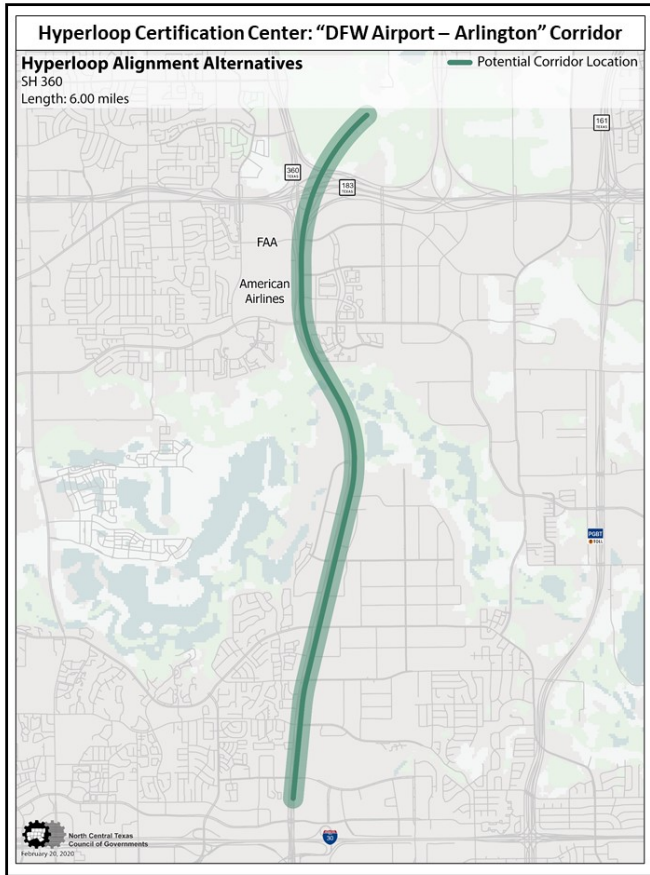
⁸ <https://www.nctcog.org/trans/quality/air/for-government/construction-fleets>

⁹ Regional Transportation Council (RTC) Meeting Packet (February 27, 2020):

<https://www.nctcog.org/nctcg/media/Transportation/Committees/RTC/2020/agenda-packet-feb.pdf?ext=.pdf>



Exhibit 14 – Proposed Hyperloop Corridor Map



- Under the Surface Transportation Project Delivery Program (23 US Code 327), TxDOT applied and was granted responsibility for review, consultation, and approval of National Environmental Policy Act (NEPA) documents for highway projects. As the second State DOT to assume NEPA responsibility for environmental documentation, the delegation eliminated a governmental review layer allowing direct consultation with Federal/State resource agencies.
- Many projects require a Section 404 permit under the Clean Water Act from the U.S. Army Corps of Engineers (USACE). The time needed to receive the permit varies by the permit type, magnitude of project impacts to wetlands and waters of the U.S., and complexity of the project. Section 214 of the Water Resources Development Act of 2000 allows the USACE to accept

funds from non-federal public entities to give priority to the evaluation of the USACE permit applications. Under this Act, NCTCOG and USACE have had a Memorandum of Agreement to fund a position at the USACE, to expedite permitting for regional priority transportation projects in the Dallas-Fort Worth region, since 2008. The opportunity for advanced coordination has resulted in permitting time, mitigation cost, and impact reductions.

4.6.3. Innovative Financing

The massive task of supporting the dynamic and rapid growth of the North Central Texas region is made possible through decades of collaboration, innovation, and diligence among multiple transportation partners, local governments, and NCTCOG in leveraging Federal funds for the timely delivery of numerous transportation projects. Since 2000, the DFW MPA has leveraged over \$30.1 billion in Federal, State, regional, and private sector funds through an array of financing strategies to build many freeway, toll road, managed lane, and major interchange projects at rates exceeding those of most other large urbanized areas.

DFW Airport will likely utilize an innovative A+B Bidding Process for construction of the East-West Connector Project. It is a method that rewards the winning contractor for completing the project as quickly as possible while minimizing the cost to the public. A+B Bidding Process is a cost-plus-time bidding process. By providing the cost for each working day, the bidding contractor combines the cost to perform the work (A component) and the cost of



the impact to the public (B component). Monetizing the road user cost provides an incentive to complete the project in a timely manner. The total cost (A) plus the cost to the user (B) is combined and the lowest bid is then selected. This could allow contactors with a higher bid amount to be competitive if they can complete the job quicker. Additionally, this process recognizes and reduces the impact the project can have on the traveling public.

4.7. Partnership

The DFW Airport East-West Connector Project is a multi-jurisdictional effort between NCTCOG, DFW Airport, TxDOT, and the City of Euless. Each of the partners have a strong history of working together on cooperative roadway construction projects, including recent large initiatives along SH 183 for the Midtown Express and NTE projects. The partners had also recently worked together to streamline delivery and construction mitigation for SH 360 and local street improvements related to the opening of the new American Airlines Corporate Campus, at the southwest corner of the SH 183/SH 360 interchange. The roles of NCTCOG, DFW Airport, TxDOT, and the City of Euless are described below, as well as considerations of any interests/action by the FAA.

North Central Texas Council of Governments (Grant Applicant)

NCTCOG serves as the applicant for this BUILD grant. NCTCOG is a voluntary association of cities, counties, school districts, and special districts established in January 1966 to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development. NCTCOG serves a 16-county metropolitan region surrounding the urban centers of Dallas and Fort Worth and consists of 229 member governments including 16 counties, 167 cities, 19 independent school districts, and 27 special districts. Since 1974, NCTCOG has served as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth area. NCTCOG's Transportation Department is responsible for the regional planning process for all transportation modes and provides technical support and staff assistance to the Regional Transportation Council (RTC) and its technical committees, that comprise the MPO policy-making structure. The department also provides technical aid to local governments and transportation providers in planning, coordinating, and implementing transportation decisions.

DFW Airport (Grant Recipient/Implementing Agency)

Project construction would be executed by DFW Airport upon receipt of a potential BUILD Grant award. Initially opened in 1974, DFW Airport welcomed more than 75 million customers in 2019, making it one of the most frequently visited airports in the world. With a capacity of 164 gates and seven operating runways, customers have expediency and flexibility to choose among 193 domestic and 67 international nonstop destinations, and DFW Airport elevates the customer experience with modernized facilities, convenient services, and updated amenities. Centered between the owner cities of Dallas and Fort Worth, DFW Airport also serves as a major North Texas economic generator, producing more than \$37 billion in economic impact each year by connecting people through business and leisure travel. Planning, operations, and management are governed by the DFW Airport Board which is comprised of twelve members, including the Mayor plus six appointees from



the City of Dallas, the Mayor plus three appointees from the City of Fort Worth, and a non-voting seat rotating among the airport's host cities of Coppell, Euless, Grapevine, and Irving.

TxDOT (Project Sponsor)

Texas Legislature originally established TxDOT in 1917 as the Texas Highway Department, TxDOT has a workforce of more than 12,000 employees and is made up of engineers, administrators, designers, environmental professionals, accountants, maintenance workers, and many other professionals. Headquartered in Austin, TxDOT has 25 district offices and 21 divisions. This project is located in the Fort Worth District, which plans, designs, builds, operates, and maintains the state transportation system in the following counties: Erath, Hood, Jack, Johnson, Palo Pinto, Parker, Somervell, Tarrant, and Wise. As the project sponsor, TxDOT would facilitate EA completion, review, and approval, as well as coordinate construction access within TxDOT-owned ROW at the project termini intersections.

City of Euless (Funding Partner)

The City of Euless is a Council/Manager form of government. This form of government combines the strong political leadership of elected officials and the strong professional experience of a City Manager. Incorporated in 1953, and its charter adopted in 1962, Euless today is a dynamic city with over 54,000 residents centrally located with the Dallas-Fort Worth Metroplex. Beautiful tree-lined streets, a wide range of housing options, excellent educational and workforce opportunities, a robust business-friendly environment, a dedication to historic preservation, and strong community leadership and partnership help make this great city "*Simply FabEuless*"!

Federal Aviation Administration (Cooperating Agency)

Proposed Federal action for the DFW Airport East-West Connector Project would require FAA approval to a revision to the DFW Airport Layout Plan (ALP). Pursuant to 49 U.S.C. Section 47107(a)(16), the FAA Administrator, under authority delegated from the Secretary of Transportation, must approve any revision or modification to an ALP that FAA believes may adversely affect the safety, efficiency, or utility of DFW Airport before the revision or modification takes effect. FAA has been invited to participate as a Cooperating Agency in the development and approval of the DFW Airport East-West Connector Project Environmental Assessment. While FAA Order 1050.1F, *Environmental Impacts: Policy and Procedures*, allows FAA to adopt another Federal agency's EA, FAA maintains responsibility for independent review of the proposed project's environmental documents to assess whether standards of adequacy under NEPA have been met, including consideration of all actions and impacts. FAA's review and approval of the proposed project as a revision to the DFW Airport ALP will be included in EA documentation prior to the project's anticipated letting date.

5. PROJECT READINESS

Per requirements outlined in the FY 2020 BUILD Grant Notice of Funding Opportunity (NOFO), documentation outlined in this portion of the narrative describe capabilities and risks for local partners to meet and/or exceed delivery requirements.



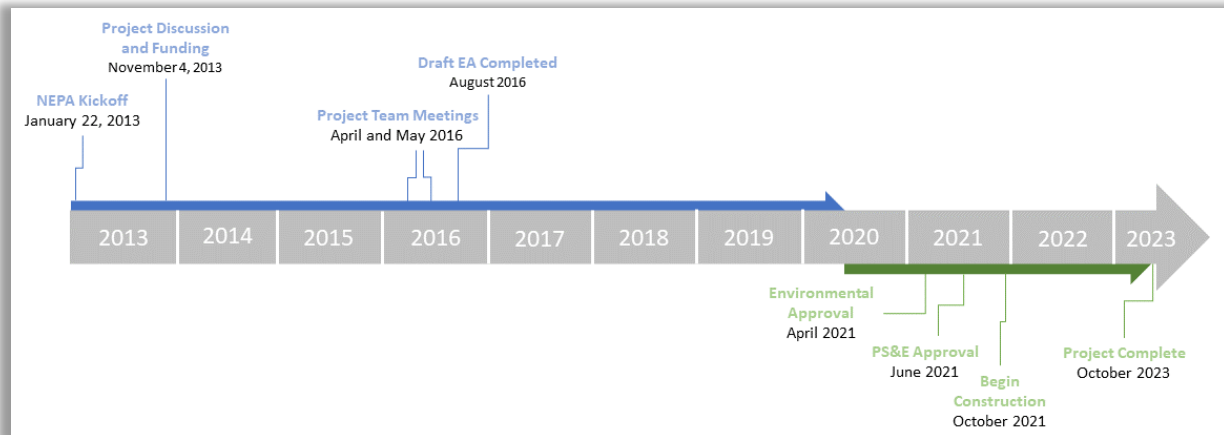
5.1 Technical Feasibility

The DFW Airport East-West Connector Project has been developed over the last five years with the current EA starting in 2013. Even though the current efforts started in 2013, the project has been a part of every NCTCOG MTP since its inception, and advanced project planning began in 2008. The current environmental effort included the preparation of environmental documents, public involvement, traffic analysis, and schematic (60% complete). The project has included a kick-off meeting in December 2008, three Multi-Agency Coordination meetings in 2009 and various project NEPA and schematic meetings in 2012, 2013, and 2016. Capital cost estimates included in this application were developed by performing a quantity takeoff of the schematic design. Recent standard TxDOT unit prices for bid items were applied to the quantities to develop the project construction cost and included a 12 percent contingency. All ROW cost would be supplied by TxDOT and DFW Airport. Additional items such as aesthetics, mobilization, and traffic control were estimated using a percentage of the construction cost based on standard TxDOT roadway experience.

5.2 Project Schedule

The East-West Connector Project is set for complete approval before the BUILD requirement of September 30, 2022, and all funds would be utilized by the required date of September 30, 2026. The project schedule shown in **Exhibit 15** indicates obligation of funding and construction beginning in October 2021. Construction is expected to take two years and the new facility would open to traffic in the October 2023.

Exhibit 15 – DFW Airport East-West Connector Project Schedule



All necessary activities will be complete to allow BUILD funds to be obligated sufficiently in advance of the statutory deadline and any unexpected delays will not put the funds at risk of expiring before they are obligated. The project can begin construction quickly upon obligation of BUILD funds, and the grant funds will be spent expeditiously once construction starts. No right-of-way is anticipated to be acquired since all property is owned by DFW Airport and TxDOT. If any additional property is needed, right-of-way acquisition will be acquired in a timely manner in accordance with 49 Code of Federal Regulations (CFR) part 24, 23 CFR part 710, and other applicable legal requirements.



5.3 Required Approvals

5.3.1 Environmental Status and Approvals

The DFW Airport East-West Connector Project EA is expected to receive environmental clearance through TxDOT with a Finding of No Significant Impact (FONSI) by April 2021. TxDOT and DFW Airport will begin acquiring easements (if needed) and relocating utilities once the FONSI has been received. Because the North Central Texas region is a non-attainment area for ozone, the proposed project is required to be part of the *Mobility 2045 Plan*. The project is currently in *Mobility 2045 Plan* as Regionally Significant Corridor (RSA ID 2.435.325). The *Mobility 2045 Plan* was approved by the Regional Transportation Council (RTC) in June 2018 with conformity approval in November 2018.

5.3.2 State and Local Approvals

The permits involving waters of the U.S. will be permitted under nationwide Section 404 permits with an anticipated Nationwide Permit 14 with no preconstruction notification recommended. No major Section 404 (of the Clean Water Act) issues have been identified. The project is currently included in the FY2019-2022 Transportation Improvement Program (TIP). A revision to the TIP will be necessary to add BUILD Grant funding to the project. The modification will be coordinated between NCTCOG and TxDOT during a quarterly TIP/STIP modification cycle. It is anticipated that the revision would occur in February 2021 (assuming grant award in December 2020).

5.4 Project Risks and Mitigation Strategies

Any roadway project has potential risks associated with its design and construction. **Exhibit 16** outlines potential risks to cost and schedule for the DFW Airport East-West Connector Project, as well as potential strategies to help mitigate those risks.

To keep up with the tremendous population growth, TxDOT has used innovation project delivery methods (i.e., design-build, comprehensive development agreements) to build projects faster. As a result, TxDOT has gained experience and expertise in the planning, design, procurement, and implementation of innovative and unique project delivery methods. The proposed project will pursue a design-build process to combine the design and construction process to minimize project time. If design-build is not available, a traditional design-bid-build process will be used.

While the proposed work is not environmentally cleared, it is currently under process and no significant environmental impacts have been recorded. Additionally, previous studies along the corridor have not identified any considerable environmental impacts.



Exhibit 16 – Identified Risks and Opportunities

Risk/ Opportunity	Likely Impacts		Potential Mitigation Strategy
	Cost	Schedule	
Unplanned Work (changed orders)	Minor	Minor	Working with stakeholders to develop a complete schematic and PS&E.
Additional FAA requirements	Minor	None	Continue working with FAA to assure all criteria is addressed.
Third Party Impacts (permits, utilities, railroad, etc.)	Minor	Minor	Early coordination with all third-parties
Vegetation Impacts	Minor	Minor	Large trees identified in the corridor will avoided or preserved.
Other Environmental Discovery Impacts	Minor	Moderate	Thorough environmental study to cover all projects aspects. Utilize previous project area studies to identify environmental impacts.

6. BENEFIT COST ANALYSIS

Anticipated benefits and costs for the DFW Airport East-West Connector Project are monetized in the BCA prepared for this BUILD Grant application. A summary of all the quantifiable benefits identified for the project are shown in **Exhibit 17**. The net present value of the specific benefit/cost ratio is displayed in **Exhibit 18**. Applied to a total project lifecycle cost of \$51 million, a positive overall benefit is achieved assuming a seven percent discount rate. Based on a project lifespan through the horizon of the *Mobility 2045 Plan*, this transportation investment will result in a positive net value of approximately **\$68 million**, and a **3.20** benefit/cost ratio that signifies high cost-effectiveness. Details concerning the specific methodologies, assumptions, and/or other inputs used to determine this total are discussed further in the BCA Appendix, **Attachment 2A**.

Exhibit 17 –Total Project Benefits

Benefit Category	Benefits
	7% Discount Rate
O&M Costs	(\$2,065,852)
Time Savings	\$273,748,910
Air Quality Emission Savings	\$391,985
Safety	\$94,197,298
Residual Value	\$28,359,432



Exhibit 18 – Net Project Benefits

Discount Rate	Net Present Value of Total Benefits	Rounded Net Present Value of Total Benefits	Benefit/Cost Ratio
7 Percent	\$67,616,807	\$68 million	3.20

The DFW Airport East-West Connector will provide a new roadway link between SH 360 and International Parkway, and generate a long-distance thoroughfare parallel to the congested SH 183 corridor connecting Harwood Road, Rental Car Drive, and Northgate Drive. The proposed roadway will offer accessibility to existing and planned developments such as CentrePort (Fort Worth), Riverwalk (Euless), Bear Creek Business Park (Euless), Passport Business Park (Irving), and the recently relocated administrative/business headquarters for DFW Airport at Southgate Plaza. Accessibility to these businesses will facilitate new sources of jobs and economic vitality in each of the cities proximate to DFW Airport’s south entrance/exit. Assisting in development potential and connectivity in the project area will enhance safety, improve air quality through reduced emissions, increase auto and commercial vehicle travel-time savings, and increase land values. Calculation of regional benefits from reduced congestion and travel times associated with the proposed roadway is included in the Benefit-Cost Analysis. The net present value of travel time savings to transportation system users is \$79 million.

DFW Airport East-West Connector

FY2020

Attachment 2A - Benefit-Cost Analysis Methodology



North Central Texas
Council of Governments



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1.0 METHODOLOGY

The following description provides the methodology for the Benefit Cost Analysis (BCA) conducted for the Dallas Fort Worth International Airport (DFW Airport) East-West Connector Project as part of the FY2020 Better Utilizing Infrastructure to Leverage Development (BUILD) Discretionary Grant Program. This BCA includes detailed calculations of the various benefits and costs of the proposed project for the years between 2021 and 2045, for each cost and benefit factor. Benefits are assumed to incur after project completion in 2024, for a 20-year life span of the project, to 2045.

Traffic forecasts were conducted for build and no-build conditions in 2045 using the North Central Texas Council of Governments' (NCTCOG) Dallas-Fort Worth Regional Travel Demand Model for the Expanded Area (DFX). The DFX software application is a collection of components that implements a trip-based, four-step travel demand model on the TransCAD 5.0 platform. The DFX is NCTCOG's official travel demand model, and the software is developed and maintained by the Model Development Group in the Transportation Department at NCTCOG.

DFX accepts the following input files: demographic data, roadway network including toll roads and HOV, transit supply system including rail and park-and-ride, airport enplanements, and external stations forecasts. It produces traffic volumes and speeds on roadways and transit usage data on the transit system. In addition to flexible coding tools, a smooth menu system for performing model runs and extensive reports, the software provides a comprehensive file management system for the organization of input and output data.

This version of the travel demand model and the no-build transportation networks were used for *Mobility 2045: The Metropolitan Transportation Plan for North Central Texas (Mobility 2045 Plan)*. The project is included in the build network scenarios for the horizon year 2045.

1.1 Project Cost

Proposed construction and operations and maintenance (O&M) costs were obtained from the Texas Department of Transportation (TxDOT), Fort Worth District. The project costs are detailed in the BCA Excel Table, **Attachment 2B**.

1.2 Travel Time (Mobility) Benefit

Travel time benefits were calculated based on travel demand modeling conducted for the project. Travel time benefits were calculated using the DFX travel demand model using the *Mobility 2045 Plan* networks for the target year 2045. Performance reports of roadway alternative model runs performed on these networks, using *Mobility 2045 Plan* demographics, indicated a net reduction in daily vehicle hours of congestion delay across the region. These translate into travel time benefits reflecting the reduced traffic congestion experienced by all users of transportation facilities in the region, including all commercial motor vehicles, improving mobility and quality of life.



The number of commercial motor vehicles was calculated using estimates taken from TxDOT’s Statewide Planning Map:

www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.html

Equation for Annual Travel Time Benefit:

$$\begin{aligned}
 & \text{Annual Travel Time Benefit (AUTO)} \\
 & = (\text{Daily Vehicle Hours of Congestion Delay (Build Network)} \\
 & \quad - \text{Daily Vehicle Hours of Congestion Delay (No Build Network)}) \\
 & \times 365 \text{ days} \times 1.68 \frac{\text{Occupants}}{\text{AUTO}} \times \frac{\$16.60}{\text{hour}}
 \end{aligned}$$

$$\begin{aligned}
 & \text{Annual Travel Time Benefit (TRUCK)} \\
 & = (\text{Daily Vehicle Hours of Congestion Delay (Build Network)} \\
 & \quad - \text{Daily Vehicle Hours of Congestion Delay (No Build Network)}) \\
 & \times 365 \text{ days} \times \frac{\$29.50}{\text{hour}}
 \end{aligned}$$

1.3 Safety Benefits

The proposed new roadway will help alleviate congestion by providing a direct thoroughfare link between Harwood Road at SH 360 and Rental Car Drive at International Parkway. This will improve response time from emergency vehicles and provide an alternate route for vehicles during traffic incidents.

Observed crash data was provided by TxDOT for the years 2014–2018. This crash data included the number of crashes for the different crash severity types (fatal, incapacitating, non-incapacitating, etc.). The crash data is shown in **Exhibit 11** in the Project Narrative, **Attachment 1**.

Although the DFW Airport East-West Connector Project will provide many safety benefits, for purposes of this BCA, a conservative approach was applied, using only the benefits realized by the construction of outside curbs (shoulder treatments) on the proposed new roadway. This benefit is calculated by applying a crash modification factor (CMF) of 0.64, as illustrated on the following Federal Highway Administration website:

www.cmfclearinghouse.org/detail.cfm?facid=34. This CMF was applied to the five-year average of the crash rates for all crash types, to estimate the build condition crash rate for the KABCO rating system.

The benefit of the proposed roadway with curb construction was then calculated by subtracting the total observed crashes, by the total estimated crashes from the CMF calculation.



Equation for Annual Crash Reduction Benefit:

$$\begin{aligned} \text{Annual Crash Reduction Benefit} &= \text{Total Reduction in Crashes} \times \text{KABCO Crash Reduction Rate} \\ &\times \text{KABCO to AIS Conversion} \times \text{Monetized Value}_{\text{By AIS Type}} \end{aligned}$$

1.4 Air Quality Benefits

Air Quality benefits for this project are derived from reduced vehicle miles traveled (VMT) across the North Central Texas region based on DFX modelling results. The emissions reduction is the difference in emissions between the build and no-build for each target year. The methodology used to calculate the total emissions for each scenario is consistent with NCTCOG’s 2018 Transportation Conformity document, Chapter 7: www.nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/Chapter-7_Emission-Factors_MOVES-Model.pdf.

Annual estimates were calculated for both Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs). The emissions difference for years in between target years was calculated via linear interpolation. The annual regional reduction of emissions in short tons is multiplied by the value of that reduction in short tons, to yield the value of the benefit for each year.

Emission Calculations:

$$\text{Emissions}_{\text{No-Build}} = \text{VMT}_{\text{No-Build}} \times \text{EmissionFactor}_{\text{vehicletype}} \times \text{VMTMix}_{\text{vehicletype}}$$

$$\text{Emissions}_{\text{Build}} = \text{VMT}_{\text{Build}} \times \text{EmissionFactor}_{\text{vehicletype}} \times \text{VMTMix}_{\text{vehicletype}}$$

Emission Reduction Benefit:

$$\text{Emissions}_{\text{Build}} - \text{Emissions}_{\text{No-Build}}$$

1.5 Residual Value

The proposed new roadway will have a remaining service life beyond the 20-year benefit calculation period in this BCA. Consistent with the US Department of Transportation BCA guidance, the project cost was adjusted by the total value of the asset and the remaining service life, at the end of the analysis period. Value remaining after the end of the service life calculation was added to the benefit calculation. All project elements with life spans beyond the project are included in the BCA Excel Tables, **Attachment 2B**.

2.0 ANALYSIS

The anticipated benefits and costs for this project were monetized in this BCA. The project benefits are shown in **Exhibit 1**. The net present value of the DFW Airport East-West Connector



Project is shown in **Exhibit 2**. Applied to a total project lifecycle cost of approximately \$51 million, a benefit is achieved assuming a discount rate of seven percent. Based on a 20-year project life, the overall effect of this transportation investment will result in a positive net value of \$68 million.

Calculations used to determine this total are illustrated in more detail in the BCA Excel Tables, **Attachment 2B**.

Exhibit 1: Total Project Benefits

Benefit Category	Benefits
	7% Discount Rate
O&M Costs	\$(2,065,852)
Time Savings	\$273,748,910
Air Quality Emission Savings	\$391,985
Safety	\$94,197,298
Residual Value	\$28,359,432

Exhibit 2: Net Project Benefits

Discount Rate	Net Present Value of Total Benefits	Rounded Net Present Value of Total Benefits	Cost/Benefit Ratio
7 Percent	\$67,616,807	\$68 million	3.20

This project will provide continuous east-west movement in a corridor midway between SH 183 to the south and Mid-Cities Boulevard/Airfield Drive to the north. It will provide access to a rapidly developing economic center. Assisting in development potential and connectivity in the project area will result in benefits to all users including reduced vehicle emissions, auto and commercial vehicle travel-time savings, and increased land values. Calculation of regional benefits from reduced congestion and travel times associated with the new roadway is also included in the BCA. The net present value (NPV) of travel time savings to transportation system users is nearly \$79 million.

Increased access to current and future developments will facilitate new sources of jobs and economic vitality within DFW Airport itself, as well as among each of the cities proximate to the facility’s southern entrance/exit. Much of that growth will occur in existing and planned developments such as CentrePort (Fort Worth), Riverwalk (Euless), Bear Creek Business Park (Euless), Passport Business Park (Irving), and around DFW Airport’s new administrative/business headquarters at Southgate Plaza.



3.0 SUMMARY

The anticipated benefits and costs contained within this BCA were derived using travel demand model data, assumptions from TxDOT safety and performance data/documents, NCTCOG demographic and economic trends/forecasts, and additional relevant information from all levels of government. The BCA summarizes the NPV and the benefit-cost ratio (BCR) utilizing a seven percent discount rate scenario. Net benefits of \$68 million over the 20-year time horizon are attainable with a BCR of 3.20. **Exhibit 3** outlines a summary of benefits and costs for the Dallas Fort Worth International Airport East-West Connector Project.

Exhibit 3: Benefit-Cost Analysis Summary Results

Benefit-Cost Summary Results			Average Annual	Total Over 20 Years
Life-Cycle Costs	\$(50,961,425)	ITEMIZED BENEFITS		
Life-Cycle Benefits	\$396,697,625	Travel Time Savings (mil. \$)	\$13.5	\$269.7
Net Present Value	\$67,616,807	Safety (mil. \$)	\$4.9	\$98.7
BENEFIT-COST RATIO	3.20	Emissions Cost Savings (thousands \$)	\$20.9	\$392
		TOTAL BENEFITS (mil. \$)	\$19.83	\$396.7
		Person Hours of Delay Saved	2,911,854	58,237,086

NOTE: The BCA Excel Tables are included as **Attachment 2B**.

DFW Airport East-West Connector

FY2020

Attachment 3 - Letters of Support



North Central Texas
Council of Governments

United States Senate

WASHINGTON, DC 20510-4305

May 1, 2020

The Honorable Elaine Chao
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Dear Secretary Chao:

I am writing to express my support for North Central Texas Council of Governments' (NCTCOG) application submitted to the Department of Transportation for the BUILD grant for the Dallas Fort Worth (DFW) International Airport East-West Connector project.

As you and your staff review the proposal, I trust you will give full consideration to the many strengths of this application. As you know, DFW International Airport is a critical component of our regional, national, and global economy. The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. If funded, the approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

I would appreciate your efforts to ensure that I am kept informed of the progress of this application. Please contact Holten Stringer (Holten.Stringer@cornyn.senate.gov), my Grants Coordinator, with any developments regarding this proposal as soon as they are available.

Thank you for your assistance and consideration.

Sincerely,



JOHN CORNYN
United States Senator

ERIC JOHNSON
Mayor of Dallas



May 8, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

The City of Dallas is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas/Fort Worth (DFW) International Airport East-West Connector Project**.

The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of the nation's fourth-busiest airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, thereby improving connectivity and alleviating traffic congestion on highways around the airport.

DFW International Airport, the second-largest airport in the nation by landmass, is a critical component of our regional, national, and global economy. The airport provides nearly 60,000 on-site jobs while supporting an additional 228,000 regional jobs. With nearly 6,000 acres of land designated for commercial and industrial development, it has yet to unlock its full economic potential.

At present, east-west travelers must use the heavily congested SH 183 freeway to traverse around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.

We greatly appreciate your time and consideration for this project, and if you have any questions, please contact Dina Colarossi, dina.colarossi@dallascityhall.com, 214.671.9062.

Sincerely,

A handwritten signature in black ink, appearing to read "E. Johnson", with a long horizontal stroke extending to the right.

Eric Johnson



May 18, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

The City of Fort Worth is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas Fort Worth (DFW) International Airport East-West Connector Project**.

The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

DFW International Airport is a critical component of our regional, national, and global economy. It provides nearly 60,000 on-site jobs, while supporting an additional 228,000 regional jobs, and with nearly 6,000 acres of land designated for commercial and industrial development it is the second largest airport in the nation by land area. At present, east-west traffic must use the heavily congested SH 183 freeway to travel around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.

Again, the City of Fort Worth fully supports the 2020 BUILD Discretionary Grant application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact Chelsea Adler at 817-392-6118.

Sincerely,

Mayor Betsy Price
City of Fort Worth

BETSY PRICE, MAYOR

CITY OF FORT WORTH ★ 200 TEXAS STREET ★ FORT WORTH, TEXAS 76102
(817) 392-6118 ★ FAX (817) 392-2409



May 1, 2020

Linda Martin
MAYOR

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: 2020 BUILD Grant Application

Dear Secretary Chao:

The City of Euless is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas Fort Worth (DFW) International Airport East-West Connector Project**.

The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

DFW International Airport is a critical component of our regional, national, and global economy. It provides nearly 60,000 on-site jobs, while supporting an additional 228,000 regional jobs, and with nearly 6,000 acres of land designated for commercial and industrial development it is the second largest airport in the nation by land area. At present, east-west traffic must use the heavily congested SH 183 freeway to travel around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.

Again, the City of Euless fully supports the 2020 BUILD Discretionary Grant application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at 817-685-1437 or lmartin@eulesstx.gov.

Sincerely,

Linda Martin
Mayor

May 4, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

The City of Irving is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas Fort Worth (DFW) International Airport East-West Connector Project**.

The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

DFW International Airport is a critical component of our regional, national, and global economy. It provides nearly 60,000 on-site jobs, while supporting an additional 228,000 regional jobs, and with nearly 6,000 acres of land designated for commercial and industrial development it is the second largest airport in the nation by land area. At present, east-west traffic must use the heavily congested SH 183 freeway to travel around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.

Again, the City of Irving fully supports the 2020 BUILD Discretionary Grant application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. We greatly appreciate your time and consideration for this project.

Sincerely,



Richard H. Stopfer
Mayor
City of Irving



Congress of the United States
House of Representatives

Congressman
Kenny Marchant

24th District
Texas

May 14, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao,

I am writing you today in support of the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the Dallas Fort Worth (DFW) International Airport East-West Connector Project.

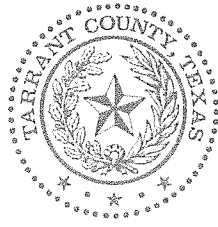
SH 360 is a vital transportation corridor for the 24th District and for the State of Texas. This highway provides a tremendous benefit to our regional and state economy, allowing the numerous Texans living within the mid-cities access to the nearly 300,000 regional jobs supported by Dallas-Fort Wirth International Airport.

This project would construct the approximately 1.27-mile thoroughfare, connecting the existing International Parkway at Rental Car Drive to the current intersection of SH 360 and East Harwood Road. The new roadway, a four-lane divided arterial, will provide a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport. Running parallel and approximately one mile north of the existing SH 183, this project addresses the existing connectivity gaps within the area. Currently, east-west traffic must utilize the heavily congested freeway to travel around the airport's southern end. Furthermore, this project addresses the existing lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. These improvements will enhance accessibility to areas west of the airport, priming the area for vital economic development opportunities.

Thank you for your time and consideration of the 2020 BUILD Discretionary Grant application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. I greatly appreciate your time and consideration for this project and look forward to seeing it come to fruition. Should you have any questions, please do not hesitate to contact Rhett Gum of my staff at rhett.gum@mail.house.gov.

Sincerely,

Kenny Marchant
Member of Congress



TARRANT COUNTY

May 12, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

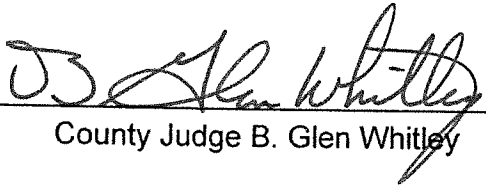
Tarrant County is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas Fort Worth (DFW) International Airport East-West Connector Project**.


The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. Initially built with two lanes as part of an ultimate four-lane divided arterial cross-section, the new roadway would provide a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

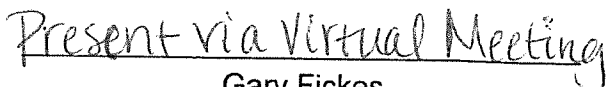
DFW International Airport is a critical component of our regional, national, and global economy. It provides nearly 60,000 on-site jobs, while supporting an additional 228,000 regional jobs, and with nearly 6,000 acres of land designated for commercial and industrial development it is the second largest airport in the nation by land area. At present, east-west traffic must use the heavily congested SH 183 freeway to travel around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.


Tarrant County fully supports the 2020 BUILD Discretionary Grant application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. We greatly appreciate your time and consideration for this project.

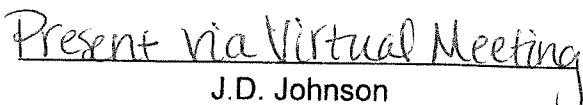
Sincerely,


County Judge B. Glen Whitley


Roy Charles Brooks
Commissioner, Precinct 1


Gary Fickes
Commissioner, Precinct 3


Devan Allen
Commissioner, Precinct 2


J.D. Johnson
Commissioner, Precinct 4



The Transportation Policy Body for the North Central Texas Council of Governments
(Metropolitan Planning Organization for the Dallas-Fort Worth Region)

May 7, 2020

The Honorable Elaine L. Chao
Secretary of Transportation
United States Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Secretary Chao:

On behalf of the Regional Transportation Council (RTC), which serves as the Metropolitan Planning Organization (MPO) for the Dallas-Fort Worth (DFW) area, I am pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **Dallas Fort Worth (DFW) International Airport East-West Connector Project**.

The DFW International Airport East-West Connector Project is a new location roadway facility that will improve regional mobility on the southern side of Dallas Fort Worth International Airport. The approximately 1.27-mile thoroughfare would connect the existing intersection of State Highway (SH) 360 at East Harwood Drive and the existing intersection of International Parkway at Rental Car Drive. The new roadway would be a four-lane divided arterial that provides a continuous route for surface transportation within the southern portion of the airport, improving connectivity and alleviating traffic congestion on highways around the airport.

DFW International Airport is a critical component of our regional, national and global economy. It provides nearly 60,000 on-site jobs, while supporting an additional 228,000 regional jobs, and with nearly 6,000 acres of land designated for commercial and industrial development, it is the second largest airport in the nation by land area. At present, east-west traffic must use the heavily congested SH 183 freeway to travel around the airport on its southern end. Located parallel to and approximately one mile north of SH 183, the new roadway would address the lack of connectivity between SH 360 and SH 161/President George Bush Turnpike, the area's two major north-south limited-access facilities. This alternate route would provide benefits to regional commuters and open areas west of the airport to opportunities for economic development.

This project is included in Mobility 2045: The Metropolitan Transportation Plan for North Central Texas. All federally funded surface transportation projects must also be included in the Transportation Improvement Program. If the project is successful in receiving funds, the RTC will support its inclusion in the 2021-2024 Transportation Improvement Program for North Central Texas.

Secretary Elaine Chao
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May 7, 2020

Again, the RTC fully supports the 2020 BUILD application submitted by NCTCOG for the Dallas Fort Worth (DFW) International Airport East-West Connector Project. Thank you for your time and consideration of this project. If you have any questions, please contact me at (817) 695-9241 or mmorris@nctcog.org.

Sincerely,

A handwritten signature in black ink that reads "Michael Morris". The signature is written in a cursive style with a large, sweeping initial "M".

Michael Morris, P.E.
Director of Transportation, NCTCOG

TB:kw

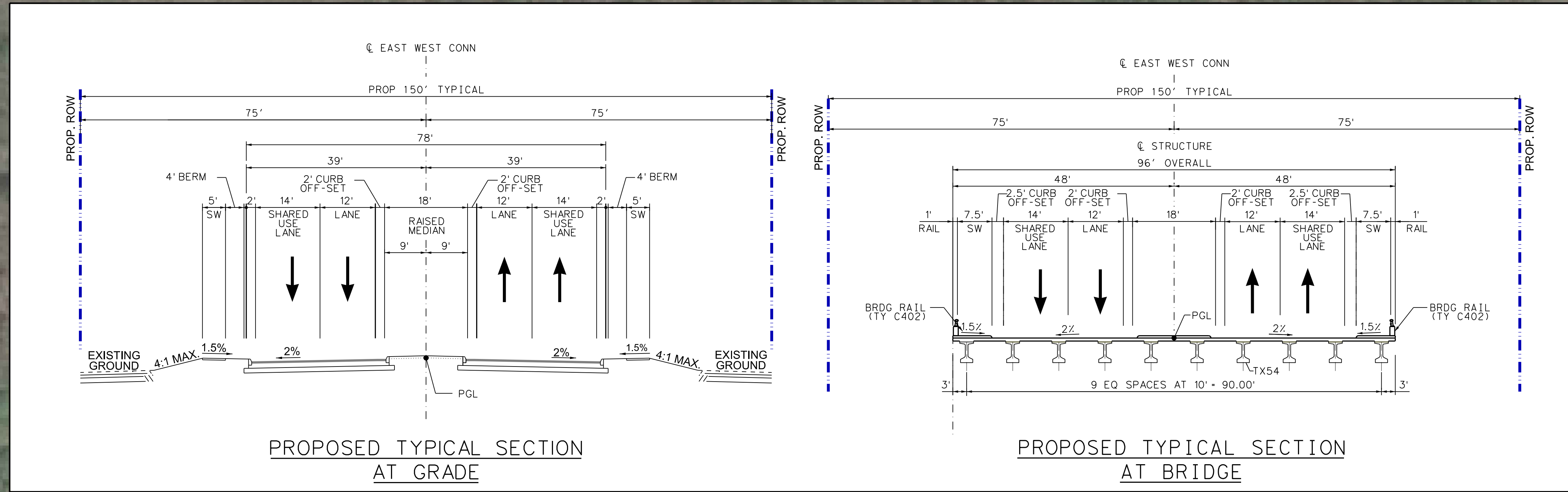
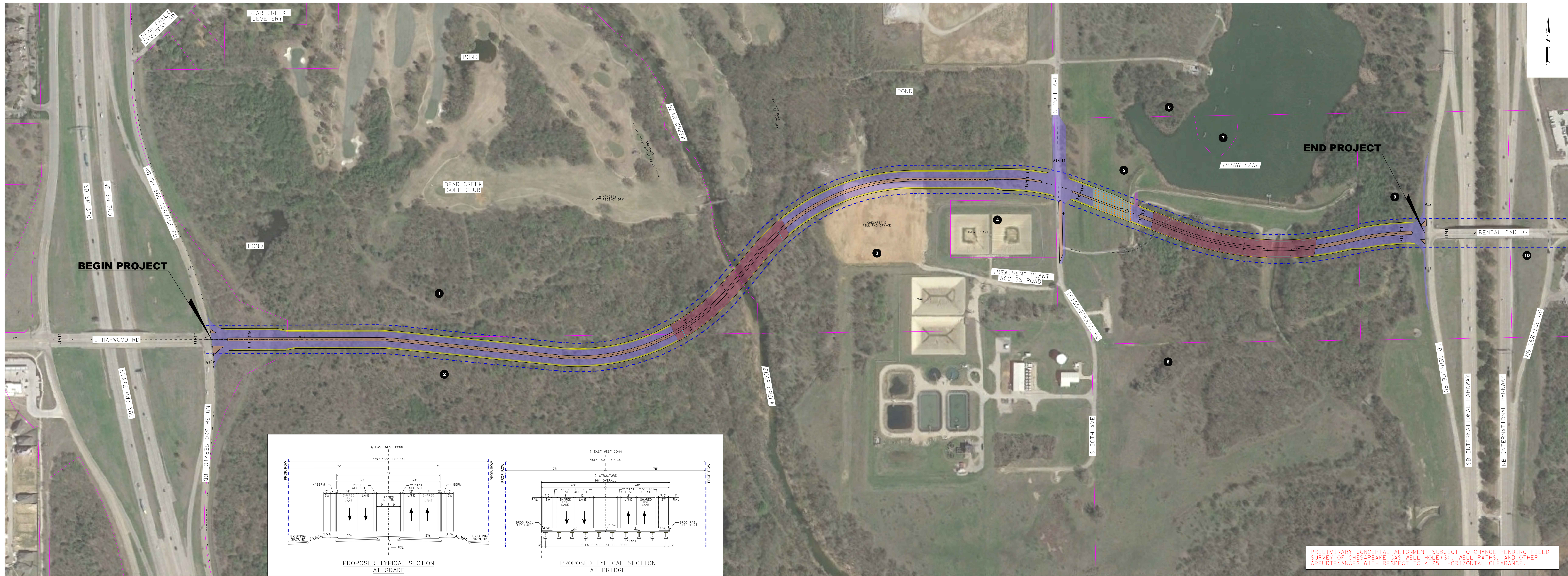
DFW Airport East-West Connector

FY2020

Attachment 4 - Project Schematic



North Central Texas
Council of Governments



PRELIMINARY CONCEPTUAL ALIGNMENT SUBJECT TO CHANGE PENDING FIELD SURVEY OF CHESAPEAKE GAS WELL HOLE(S), WELL PATHS, AND OTHER APPURTENANCES WITH RESPECT TO A 25' HORIZONTAL CLEARANCE.



PRELIMINARY
THIS DRAWING IS A REPRESENTATION OF EXISTING AVAILABLE INFORMATION ONLY. PROPOSED ALIGNMENT IS PRELIMINARY AND SUBJECT TO CHANGE. NOT FOR BID, CONSTRUCTION OR REPRODUCTION.

- CENTER LINES
- - - PROPOSED R/W
- - - EXISTING R/W
- PARCEL LINES
- LEASE BOUNDARY
- LICENSE BOUNDARY

LEGEND

- MAINLANE
- MEDIAN
- SIDEWALK
- CULVERT
- BRIDGE



**DFW EAST-WEST CONNECTOR
PRELIMINARY CONCEPTUAL ALTERNATIVE ALIGNMENT
TARRANT COUNTY - TXDOT FORT WORTH DISTRICT**

