SH 114 Frontage Road Gap Project FY 2019 BUILD Grant Application

Attachment 1 – Project Narrative



North Central Texas Council of Governments



TABLE OF CONTENTS

1.	PRC	DJECT	DESCRIPTION	1
	1.1.	Proj	ect History	4
	1.2.	Proj	ect Costs	6
	1.3.	Targ	geted Transportation Challenges	6
	1.3.	1.	Relieving Congestion	6
	1.3.	2.	Enhancing Mobility, Connectivity, and Reliability	8
2.	PRC	DJECT		9
3.	GR/	ANT F	FUNDS, SOURCES AND USES OF PROJECT FUNDS	13
4.	SEL	ECTIO	ON CRITERIA	14
4	4.1.	Safe	ety	14
4	4.2.	Stat	e of Good Repair	16
4	4.3.	Ecor	nomic Competitiveness	17
4	4.4.	Envi	ironmental Sustainability	18
4	4.5.	Qua	lity of Life	19
4	4.6.	Inno	ovation	20
	4.6.	1.	Innovative Technologies	20
	4.6.	2.	Innovative Project Delivery	21
	4.6.	3.	Innovative Financing	22
4	4.7.	Part	nership	23
5.	PRC	DJECT	۲ READINESS	24
!	5.1.	Tecł	hnical Feasibility	24
!	5.2.	Proj	ect Schedule	25
!	5.3.	Req	uired Approvals	26
	5.3.	1.	Environmental Permits and Reviews	26
	5.3.	2.	State and Local Approvals	26
	5.3.	3.	Federal Transportation Requirements Affecting State and Local Planning	26
!	5.4.	Asse	essment of Project Risks and Mitigation Strategies	26
6.	BEN	IEFIT	COST ANALYSIS	27



LIST OF EXHIBITS

Exhibit 1 – Dallas-Fort Worth Metropolitan Planning Area	1
Exhibit 2 – S.H. 114 Project Area – Current Conditions	2
Exhibit 3 – Existing and Proposed S.H. 114 Typical Sections	3
Exhibit 4 – Estimated Project Cost and Funding by Activity Type	6
Exhibit 5 – Texas Roadway Segment Congestion Rankings, Delay, and Cost	7
Exhibit 6 – S.H. 114 Traffic Projections in Vehicle Miles Traveled (VMT) per Day	8
Exhibit 7 – Project Location Map	9
Exhibit 8 – Population Trends and Forecasts for Project-Related Locations	. 10
Exhibit 9 – Project Area Current and Future Daily Traffic Volumes	. 11
Exhibit 10 – Project Area Existing Land Use	
Exhibit 11 – Project Area Existing Population Density	
Exhibit 12 – Project Area Existing Major Employers	. 13
Exhibit 13 – S.H. 114 Frontage Road Gap Project Funding Summary	. 13
Exhibit 14 – S.H. 114 Frontage Road Gap Project Crash Data (2013 – 2017)	. 14
Exhibit 15 – S.H. 114 Crash Data (2013 - 2017) Analysis	. 14
Exhibit 16 – SH 114 Frontage Road Gap Project Existing and Planned Development	
Exhibit 17 – S.H. 114 Project Schedule	. 25
Exhibit 18 – Identified Risks and Opportunities	
Exhibit 19 –Total Project Benefits	. 27
Exhibit 20 – Net Project Benefits	. 28

LIST OF GRANT APPLICATION (SF-424) ATTACHMENTS

Attachment 1: Cover Page and Project Narrative

Attachment 2A: Benefit Cost Analysis Methodology

Attachment 2B: Benefit Cost Analysis Spreadsheet

Attachment 3: Preliminary Schematic and Typical Section Drawings

Attachment 4: Letters of Support

1. PROJECT DESCRIPTION

The North Central Texas Council of Governments (NCTCOG), in cooperation with the Texas Department of Transportation (TxDOT), is seeking funding assistance of **\$25 million** through the Fiscal Year (FY) 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant Program to complete planned capacity, safety, and accessibility improvements along a two-mile segment of State Highway (S.H.) 114 in Denton County and Tarrant County, Texas. This segment of S.H. 114 within the City of Southlake, City of Trophy Club, and the Town of Westlake is notable for the presence of a gap in continuous one-way frontage roads in each direction parallel to the existing controlled-access freeway facility. The S.H. 114 Frontage Road Gap Project proposed in this BUILD Grant application will construct the missing frontage roads, as well as additional transportation improvements including entrance/exit ramp reversals, auxiliary lanes and frontage road U-turns at cross-street intersections between Farm-to-Market Road (FM) 1938 (also known as Davis Boulevard) and Dove Road. S.H. 114 is a designated National Highway System (NHS) facility that serves as a major east/west transportation conduit with critical connections to other regional NHS corridors such as Interstate Highway (I.H.) 35W, S.H. 121, S.H. 360, and I.H. 635, and also provides a primary link to/from the Dallas Fort Worth International Airport (DFW Airport). **Exhibit 1** highlights the project area location with respect to the North Central Texas region, also referred to as the Dallas-Fort Worth (DFW) Metropolitan Planning Area (MPA).



Exhibit 1 – Dallas-Fort Worth Metropolitan Planning Area



Within the immediate project area, S.H. 114 is a controlled-access freeway facility with three general-purpose lanes in each direction, and available right-of-way (ROW) in the median for a fourth general-purpose lane in each direction, if warranted, as a future improvement. As shown in **Exhibit 2**, an existing two-lane frontage road operates in the westbound (WB) direction only between FM 1938 and Solana/Kirkwood Boulevard, but there are no frontage roads between Solana/Kirkwood Boulevard and Dove Road. The existing frontage road facility does not provide sidewalks or wide outside lanes with shared-use accommodation for vehicles and bicycles.



Exhibit 2 – S.H. 114 Project Area – Current Conditions

Source: TxDOT, S.H. 114 Public Meeting, October 23, 2018

Per the typical section diagrams illustrated in **Exhibit 3**, the proposed improvements for S.H. 114 would include construction of continuous two-lane frontage roads, as well as various auxiliary lanes between relocated entrance/exit ramps, to complete the corridor frontage road system. New frontage roads would include a wide outside lane for shared-use accommodations among both vehicles and bicycles. Continuous sidewalks will also be provided along the proposed frontage roads, as well as along each side of the three cross streets intersecting the frontage roads.

Other improvements identified for the S.H. 114 Frontage Road Gap Project include lengthening of the existing FM 1938 bridge over the S.H. 114 general-purpose lanes, as well as widening of the existing WB S.H. 114 general-purpose lane bridge over Solana/Kirkwood Boulevard. These elements are necessary to allow for extra pavement on the freeway facility to accommodate new auxiliary lanes between several relocated entrance/exit ramps. Additionally, new retaining





Source: TxDOT, S.H. 114 Public Meeting, October 23, 2018

walls will be built at each of the three interchanges to accommodate four proposed frontage road U-Turn movements: WB to eastbound (EB) at FM 1938, in both directions at Solana/Kirkwood Boulevard, and EB to WB at Dove Road.

The need and purpose of proposed improvements outlined for the S.H. 114 Frontage Road Gap Project are as follows:

- Provide continuous one-way frontage roads along S.H. 114 consistent with the system operating in adjacent corridor segments
- Provide traffic congestion relief to the S.H. 114 corridor and the surrounding thoroughfare network
- Improve safety and incident management capabilities
- Provide improved and more balanced accessibility by modifying entrance/exit ramps to meet future traffic and land-use development conditions
- Provide more efficient traffic operations at cross street/frontage road intersections
- Address the expected increase in traffic associated with new corporate and commercial developments adjacent to S.H. 114 and minimize the potential likelihood and impact of high traffic flows through nearby residential neighborhoods.

S.H. 114 is an important east/west-oriented on-system roadway traveling nearly 400 miles from a western terminus at the New Mexico border west of Lubbock all the way to an eastern freeway terminus at S.H. 183 in Irving, less than three miles from its merge with I.H. 35E as it

approaches the Dallas Central Business District (CBD). S.H. 114 is a designated NHS facility for a vast majority of its total length across the State, as well as within the project area itself, and it is also a component of the Texas Highway Freight Network as identified in the 2017 Texas Freight Mobility Plan. Within the North Central Texas region, S.H. 114 from west to east, undergoes several significant corridor-type transitions along its route through Wise, Denton, Tarrant, and Dallas Counties. It evolves first from a two-lane rural highway to a four-lane rural expressway as it travels through Wise County, but as S.H. 114 enters Denton County just west of I.H. 35W, it expands dramatically into a wide staged corridor meant to support a future urban freeway configuration. The widened corridor proceeds across much of its remaining path in Denton County solely with continuous frontage roads until just prior to the S.H. 170 junction where it completes its final transition to a fully operational urban freeway facility. S.H. 114 then maintains this functional characteristic for another 25 miles into Tarrant and Dallas Counties until it reaches its eastern terminus at S.H. 183. Corridor transitions such as these are a prominent factor in both historical and development contexts for the proposed project.

1.1. Project History

Comprehensive planning and coordinated development of S.H. 114 as an ultimate freeway facility across much of North Central Texas region is 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. The primary impetus for the recommendation has been, and continues to be, attributed to the construction, rapid growth, and ubiquitous economic attractiveness of DFW Airport. Also opened itself in 1974, and by 2018 ranked as high as 15th globally for total enplaned passengers and fourth for total flight operations, DFW Airport is currently responsible for the generation of \$37 billion in economic impact and supports nearly 230,000 full-time jobs (including approximately 60,000 employees at the airport itself) within the surrounding area. Convenient access and proximity to DFW Airport for decades has been a catalyst in the proliferation of large-scale planned unit development (PUD) centers both east and west of the facility along the S.H. 114 corridor. The 7,000-acre Las Colinas development in the City of Irving is perhaps one of the oldest, most well-known, and widely renowned examples along the corridor, and such urban/suburban centers of varying sizes ultimately become home to multiple corporate headquarters, major lifestyle amenities, and other desirable opportunities or services generating substantial and ever-increasing roadway travel demands. The following information highlights distinct stages in the history of S.H. 114 project area improvements highly correlated with the initiation and impacts of several such massive commercial land-use projects.

The first alteration of S.H. 114 from its initial existence as a two-lane rural highway through the project area occurred in the mid-1980's following construction of the nearly 1,000-acre Solana development, a location which co-exists within the City of Southlake and the Town of Westlake. Though originally built to support a large regional headquarters for International Business Machines, Inc. (IBM) and affected by numerous shifts in corporate presences over the years, Solana is still considered an important legacy development for the area given its unique architectural and landscape characteristics. In fact, the development's



aesthetic qualities were incorporated into the original S.H. 114 four-lane grade separation over Solana/Kirkwood Boulevard TxDOT built in conjunction with Solana's opening. The right-of-way acquired as part of the grade separation project was purposely made wide in anticipation of future upstream/downstream freeway improvements. However, with the westernmost end of S.H. 114 freeway at that time no farther beyond DFW Airport than the Grapevine/Southlake city limit boundary, TxDOT only had sufficient funds for an ancillary project that built a four-lane divided rural thoroughfare extending out to the Solana/Kirkwood Boulevard grade separation.

The next major change for S.H. 114 resulted from a compilation of historic and transformative events spearheaded largely by the entrepreneurial vision of Ross Perot, Jr. and his contributions through the Hillwood Corporation. Imagined even at its inception with economic and social effects potentially surpassing DFW Airport, the Hillwood Corporation first initiated the AllianceTexas development in 1989 with the opening of Fort Worth Alliance Airport, located near the project area along the I.H. 35W corridor south of S.H. 114. Distinctive as the world's first industrial airport, the new facility soon helped incubate numerous nearby industrial/commercial activity linkages and innovative public-private partnership ventures across multiple transportation modes and resource chains. Ultimately this portion of the development became known as the Alliance Global Logistics Hub, but even in its infancy it quickly established itself as the nation's largest inland port. Just prior to the turn of the 21st century, overall growth of the AllianceTexas development was so substantial the Hillwood Corporation also influenced the construction and opening of the nearby Texas Motor Speedway, a stock car and open-wheel car racing facility capable of holding more than 180,000 spectators. The enhanced population growth and mobility challenges resulting from these cumulative effects provided justification for TxDOT to prioritize S.H. 114 funding through a series of projects conducted between 2001 and 2006. By the end of this period, TxDOT was able to acquire new ROW and build new infrastructure extending the S.H. 114 freeway west from the original Grapevine/Southlake terminus through the project area to just east of S.H. 170.

Unfortunately, the need for additional changes in the project area was quickly realized due to two critical factors greatly limiting mobility and reliability benefits following completion of the previous improvement stage. First, a general-purpose lane capacity reduction from three lanes to two lanes in each direction occurred at a point just west of the Solana/Kirkwood Boulevard interchange. This frequently resulted in serious safety and congestion impacts, particularly in the WB direction during evening weekday peak periods and other high-travel situations or special events, but also because the reduction was in the form of a forced left-lane merge condition independent of any upstream/downstream ramp movements. The second factor, lack of continuous frontage roads between FM 1938 and Dove Road, exacerbated the intensity and extent of those impacts, as well as reduced the number and effectiveness of potential traffic management or mitigation options. These two issues persisted together for over a decade, even as continued population growth, increased economic activity, and additional upstream/downstream transportation improvements surged ever-higher daily traffic volumes across the bottleneck. However, a



two-part solution was recently identified to address this next needed improvement stage, including an initial \$25 million project completed in August 2017 extending the third S.H. 114 general-purpose lane in each direction west to the S.H. 170 interchange, providing considerable relief to the area. The proposed S.H. 114 Frontage Road Gap Project as detailed in this BUILD Grant application is anticipated to fulfill the latter half of the two-part solution.

1.2. Project Costs

The estimated total cost to complete the S.H. 114 Frontage Road Gap is **\$46,059,695** (in 2019 dollars), and the proposed allocation of Federal and non-Federal funding sources by project activity type is illustrated below in **Exhibit 4**. The \$25 million in requested BUILD Grant funds via this application will be targeted entirely for project construction, and that amount is fully incorporated within the total cost identified for that activity category.

		Funding Source		
Activity Category	Total Cost	Federal	Non-Federal	
		(Percent)	(Percent)	
Design/Engineering	\$2,735,695	0%	100%	
Right-of-Way	\$500,000	0%	100%	
Utility Relocation	\$2,000,000	0%	100%	
Construction	\$40,824,000	25%	75%	
TOTAL PROJECT COST	\$46,059,695			

Exhibit 4 – Estimated Project Cost and Funding by Activity Type

1.3. Targeted Transportation Challenges

The S.H. 114 Frontage Road Gap Project exemplifies a unique opportunity for the DFW 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 is anticipated to significantly relieve congestion, as well as enhance mobility, connectivity, and reliability not just within the project area, but also along the S.H. 114 corridor at large through Denton and 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 detailing a comprehensive congestion analysis and ranking of major roadway segments across the State of Texas. The recently released 2018 edition of the Texas "100 Most Congested Road Sections," included updated information and new rankings for a total of 1,829 major roadway segments of varying lengths and functional classifications. As calculated in the new report, the S.H. 114 section stretching 6.24 miles from I.H. 35W to FM 1938 (located immediately adjacent to the western project area limit) ranked as the 166th most congested roadway segment statewide accounting for all vehicles, and the 42nd worst based solely on truck congestion. The S.H. 114 section extending 7.79 miles from FM 1938 to S.H. 121



(including the immediate study area as well as some additional mileage to the east) ranked 579th in overall vehicle congestion, and 339th based on trucks. **Exhibit 5** displays the calculated rankings for two 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. While clearly there are a few facilities across the state or DFW MPA more congested than these S.H. 114 segments, it should be noted that last year's overall rankings were considerably worse: 124th west of FM 1938, and 371st east of FM 1938. This difference highlights how the initial step of this ongoing two-part solution stage, alleviation of the general-purpose lane capacity bottleneck, resulted in substantial mobility benefits extending well beyond the immediate project area. It is then reasonable to expect subsequent timely delivery of the S.H. 114 Frontage Road Gap Project will generate additional sizeable benefits as well.

Congestion Measure	S.H. 114 Segment		
Congestion Measure	I.H. 35W – FM 1938	FM 1938 – S.H. 121	
2018 Overall Rank	166	579	
2018 Truck Delay Rank	42	339	
Annual Hours of Overall Delay (person-hours)	808,288	460,295	
Annual Hours of Truck Delay (person-hours)	99,661	23,050	
Annual Overall Congestion Cost (\$)	\$18.6 million	\$9.1 million	
Annual Truck Congestion Cost (\$)	\$5.3 million	\$1.2 million	

Exhibit 5 – Texas Roadway Segment Congestion Rankings, Delay, and Cost

Source: Texas Transportation Institute, 2018 (https://mobility.tamu.edu/texas-most-congested-roadways/)

In considering transportation needs for locations having such extreme and sustained rates of growth like North Central Texas, it's equally important to estimate and comprehensively prepare for the potential effects of future congestion. Given the current ozone non-attainment status designation for the Dallas-Fort Worth-Arlington Urbanized Area, it is additionally critical to ensure future congestion is addressed not solely with new capacity, but also through a balanced management plan considering optimization of travel demand reduction, operational efficiency, multimodal integration, asset performance, and sustainable development initiatives. These various needs and possible mitigation strategies are outlined in NCTCOG's Congestion Management Process (CMP) documentation (<u>www.nctcog.org/trans/manage</u>), and the latest 2013 CMP Update includes corridor rankings, identified deficiencies, and potential improvement recommendations for 93 individual segments across the DFW MPA. Based on projected travel conditions by the year 2035, the S.H. 114 segment which included the project area between FM 1938 and Dove Road was ranked 24th overall, and the 2013 CMP Update indicated additional roadway infrastructure, modal options, and system reliability measures would be required to more effectively address congestion.



Proposed improvements outlined above for the S.H. 114 Frontage Road Gap Project specifically target each of these parameters, and therefore the project's expedited delivery should prove both a welcome relief and substantial benefit to the corridor.

Still, it is abundantly clear continued rapid growth throughout the DFW MPA will translate strongly toward large increases in daily traffic volumes for numerous existing, expanded, and proposed new-location freeways over time. According to recent NCTCOG Travel Demand Model traffic projections prepared for *Mobility 2045: The Metropolitan Transportation Plan for North Central Texas (Mobility 2045)*, and as shown below in **Exhibit 6**, the amount of daily vehicle miles traveled (VMT) along S.H. 114 between FM 1938 and Dove Road is anticipated to increase 54 percent between the 2018 base year and the 2045 horizon year.

	VMT		
Roadway Segment	Year 2018	Year 2045	Percent Increase
S.H. 114 – FM 1938 to Dove Road	294,300	452,100	54%

Much of the projected growth in traffic in the project area will be attributed directly to the continued high increases in population for the cities immediately adjacent to S.H. 114 such as Southlake, Trophy Club, Westlake, and other nearby jurisdictions. Construction of the new frontage roads, ramp improvements, auxiliary lanes, bicycle/pedestrian accommodations, and intersection efficiency enhancements as proposed for the S.H. 114 Frontage Road Gap Project, combined with previous planning/engineering efforts which appear to have preserved capabilities and space for additional future needs, should all certainly serve as valuable collective assets to tackle both the short- and long-term challenges of congestion.

1.3.2. Enhancing Mobility, Connectivity, and Reliability

Mobility 2045 (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 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.

The S.H. 114 corridor is a major roadway component in Mobility 2045, and the S.H. 114 Frontage Road Gap Project is included and consistent with *Mobility 2045* improvement recommendations. As stated in Section 1.3.1, the proposed project will provide new limited-access and surface-street travel lanes to help relieve congestion, and result in improved mobility, reliability, and accessibility for motorists and freight movements. Multimodal design elements also integrated within the project will support increased use of transit, bicycle, and pedestrian modes in both the immediate project area and the corridor at-large (to be further described in Section 4.4).

As previously mentioned, S.H. 114 links to numerous other major freeways such as I.H. 35W, S.H. 121, S.H. 360, and I.H. 635, and the corridor also provides convenient and direct access to large regional economic engines such as DFW Airport, the AllianceTexas development, and other significant employment and entertainment centers. The improvements outlined for the S.H. 114 Frontage Road Gap Project will enhance network interconnectivity with other major freeway/tollway, transit, and bicycle/pedestrian facility assets. The proposed addition of continuous one-way frontage roads will provide a parallel corridor connection between cross streets, facilitate greater local trips outside the general-purpose lanes, improved accessibility and circulation to/from adjacent properties, and an alternate route for safe and more efficient traffic management during general-purpose lane incidents and/or accidents.

2. PROJECT LOCATION

The S.H. 114 Frontage Road Gap Project is located in the far northeastern portion of Tarrant County, with a small portion crossing into extreme southern Denton County. The project limits occur within the Cities of Southlake and Trophy Club, as well as the Town of Westlake, and the jurisdictions are fully incorporated within the United States (US) Census-designated Dallas-Fort Worth-Arlington Urbanized Area (ID 22042). **Exhibit 7** illustrates the extent of the proposed project in Tarrant and Denton County, and among their various local jurisdictions.







Source: TxDOT, S.H. 114 Public Meeting, October 23, 2018

The DFW MPA is one of the fastest growing metropolitan regions in the country. The population of the 12-county North Central Texas region 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, an increase of 213 percent. Much of this growth occurred in areas within and surrounding the project area limits in northern Tarrant and southern Denton County. **Exhibit 8** highlights both the past trends and future forecasts for population growth within the cities adjoining the S.H. 114 project area, Denton County, Tarrant County, and the 12-county MPA.

Exhibit 8 – Population menus una forecusts for Project-Kelated Escations						
Location	1990 Census ¹	2000 Census ¹	2010 Census ¹	2020 Forecast ²	2040 Forecast ³	Growth 2010-2040
Southlake	7,065	21,519	26,575	30,010	36,669 ²	38%
Trophy Club	3,922	6,350	8,024	11,480	14,000 ²	74%
Westlake	185	207	992	1,610	2,609 ²	163%
Denton County	273,525	432,976	662,614	891,063	1,241,681 ³	87%
Tarrant County	1,170,103	1,446,219	1,809,034	2,006,473	2,859,016 ³	58%
NCTCOG 12- County MPA	4,111,750	5,309,277	6,539,950	7,504,200	10,676,844 ³	63%

Exhibit 8 – Population Trends and Forecasts for Project-Related Locations

Sources:

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

² Texas Water Development Board, 2016 Regional Water Plan Populations Projections for 2020-2070 for Cities, Utilities, and County, Region C (December 2015).

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

Upon closer evaluation of micro-level information prepared for the NCTCOG 2040/2045 Demographic Forecast, the 2018 population within traffic survey zones, fully or partially within one mile of the corridor centerline, is approximately 20,000. Year 2045 population across the same geographic area is projected to be almost 43,200 people, a growth of about 115 percent. Employment within that same area is forecasted to increase from more than 18,200 jobs in 2018 to about 38,400 in 2045, a remarkably equivalent growth of 110 percent. This phenomenon of almost identical growth projections for population and employment is indicative of continued large PUD influences near the S.H. 114 project area such as Solana, Westlake Entrada, and the Circle T Ranch (a large component of the overall 26,000-acre AllianceTexas development), as well as the likely sustained trend for such developments to contain high percentages of mixed land uses.

Exhibit 9 shows existing average daily traffic counts and future traffic projections for the freeway segments within the project area. The projected high traffic growth for the S.H. 114 corridor is attributed to forecasted population increases for both adjacent cities and



throughout the North Central Texas region at-large. Additional roadway capacity included as part of the S.H. 114 Frontage Road Gap Project is needed to facilitate the extra travel demands generated by rapid population and employment growth expected in and around the Cities of Southlake and Trophy Club, and the Town of Westlake.

Location	2018 Traffic Volumes	2045 Traffic Volumes	Numeric Change	Percent Change
S.H. 114: FM 1938 to Solana/Kirkwood Boulevard	130,600	204,400	73,800	57%
S.H. 114: Solana/Kirkwood Boulevard to Dove Road	126,700	187,600	60,900	48%

Exhibit 9 – Project Area Current and Future Daily Traffic Volumes

Source: NCTCOG travel demand model (Mobility 2045)-Daily volumes include general-purpose lanes and frontage roads

The type, intensity, distribution, and availability of specific land uses is an important determinant for identifying travel demand characteristics and prioritizing transportation needs. **Exhibit 10** illustrates the predominant land use for various development tracts in and around the S.H. 114 project area. Right at the map's center, the Solana, Westlake Entrada, and Circle T Ranch developments with their highly attractive commercial features are well-displayed.



Exhibit 10 – Project Area Existing Land Use



The overall intensity and distribution of residential and commercial development is further reflected in **Exhibit 11**, which highlights population density. While population density is a key indicator of transportation needs in most other cases, it is not an apparent characteristic in and around the S.H. 114 project area due to substantial acreages of remaining undeveloped land. High traffic movement along the S.H. 114 corridor is governed more because it is the most direct freeway link between DFW Airport to the east and the AllianceTexas development to the west, both among the largest economic engines of the North Central Texas region.



Exhibit 11 – Project Area Existing Population Density

A similar conclusion can be drawn from evaluating the distribution of large employers in and around the proposed S.H. 114 Frontage Road Gap Project. **Exhibit 12** displays the size and proximity of those major employers, and it indicates the closest and most substantial employment cluster is near the S.H. 114 interchanges at Solana/Kirkwood Boulevard and Dove Road. Major corporations represented within that cluster include Sabre/Travelocity, TD Ameritrade, Marriott, Fidelity Investments, and Deloitte University. The next consolidated area lies to the southeast of the project area associated with the popular Southlake Town Center development. Finally, the single red dot west of the project area signifies the recently opened Charles Schwab campus in the Circle T Ranch development, an area where significant portions of its 2,500 acres are preserved, zoned, and marketed for other corporate campus possibilities.



Exhibit 12 – Project Area Existing Major Employers

3. GRANT FUNDS, SOURCES AND USES OF PROJECT FUNDS

Exhibit 13 outlines funding sources and estimates (in 2019 dollars) by activity type for the proposed S.H. 114 Frontage Road Gap Project. The requested \$25 million in FY 2019 BUILD Grant funds is dedicated solely for project construction, and overall allocated non-Federal funds will exceed the minimum 20% requirement.

Funding Source Type		Funding Amount	Percent
State	TxDOT Engineering Funding	\$2,735,695	5.9%
State	TxDOT Utility Funding	\$2,000,000	3.5%
State/MPO	Category 2 – State Match (Construction)	\$2,564,800	5.6%
Local	Local Funds – City of Southlake	Construction: \$3,000,000 Right-of-Way: \$500,000	7.6%
Т	otal of Non-Federal Funding Sources	\$10,800,495	23.4%
Federal/MPO	Category 2 - Federal (Construction)	\$10,259,200	22.3%
Federal	BUILD Grant (Construction)	\$25,000,000	54.3%
	Total of Federal Funding Sources	\$36,859,200	76.6%
	Total Project Funding	\$46,059,695	100.00%

Exhibit 13 – S.H. 114 Frontage Road	l Gap Project	Funding Summary
-------------------------------------	---------------	-----------------



4. SELECTION CRITERIA

4.1. Safety

Within the project area defined for the S.H. 114 Frontage Road Gap Project, shown graphically below in **Exhibit 14**, a total of 138 vehicular crashes were recorded between 2013 and 2017, including 45 determined likely or confirmed on-site to have caused injuries. **Exhibit 15** provides a detailed summary by crash type based on information obtained via TxDOT's Crash Records Information System (CRIS).



Exhibit 14 – S.H. 114 Frontage Road Gap Project Crash Data (2013 – 2017)

Exhibit 15 – S.H. 114 Crash Data (2013 - 2017) Analysis

Severity	Crashes
Fatal Injury	0 (0%)
Serious Injury	4 (3%)
Non-Incapacitating Injury	15 (11%)
Possible Injury	26 (19%)
Not Injured	92 (67%)
Unknown	1 (1%)
Total	138



North Central Texas Council of Governments

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

As illustrated in the preliminary schematic and typical section drawings included as a separate attachment within this BUILD Grant application (**Attachment 3**), the S.H. 114 Frontage Road Gap Project incorporates comprehensive safety measures TxDOT has 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 Countermeasures. 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:
 - Reduction of left-turn conflicts through addition of frontage road U-turns (WB-EB @ FM 1938, WB-EB and EB-WB @ Solana/Kirkwood Boulevard, and EB-WB @ Dove Road)
 - Dedicated turn lanes and turn-lane channelization along frontage roads and cross-streets to minimize collisions and improve driver expectancies
 - Medians separating opposing traffic directions to control and optimize leftturn or ingress/egress driveway movements, and minimize collisions
 - Relocation of nine entrance/exit ramps to add acceleration/deceleration distance to/from intersections and improve weaving conflicts
- Bicycle/Pedestrian Safety:
 - Six-foot sidewalks in each direction along frontage roads and cross-streets
 - o 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 frontage road lanes for shared use by vehicles and bicycles
- Horizontal Curve Safety:
 - Relocation of nine entrance/exit ramps to reduce speed differential for movements between the general-purpose lanes and frontage roads, and improve overall operational efficiency for freight and passenger vehicles
 - Enhanced pavement delineation and signage on/along curved sections



- Auxiliary lanes between entrance/exit ramps on general-purpose lanes and frontage roads, particularly where ramp gores merge/diverge at/near a curve
- Corridor Access Management:
 - Dedicated turn lanes and turn-lane channelization along frontage roads (particularly at locations between entrance/exit ramps) and cross-streets 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 leftturn or ingress/egress driveway movements, and minimize collisions
 - Retaining walls to limit access in areas with high topography challenges
 - Consolidation and/or maximization of space between driveways to optimize through-movements and signalized intersection operations
 - Relocation of nine entrance/exit ramps to increase accessibility to/from adjacent frontage road properties, provide increased queue lengths from cross-street intersections, reduce through demand on frontage road approaches to cross-street intersections, and offer alternate route possibilities for incident management
 - Auxiliary lanes between entrance/exit ramps on general-purpose lanes and frontage roads to reduce speed differentials and weaving friction, add acceleration/deceleration distance to/from intersections and merge/diverge points, protect and prioritize higher-speed through-movements, and improve overall operational efficiency for freight and passenger vehicles.

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 (**Attachment 2A**) accompanying this BUILD Grant application.

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 recently 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).

4.3. Economic Competitiveness

The S.H. 114 Frontage Road Gap Project will help stimulate the local economy in and around the jurisdictions of Southlake, Trophy Club, and Westlake, as well as other nearby communities in northern Tarrant and southern Denton Counties. According to a tracking database maintained by NCTCOG's Regional Data Center, there are a total of 95 existing major developments within a three-mile radius of the project area, and 19 of them are present within a one-mile radius.¹ The existing developments, including many within large PUDs, are comprised of commercial, residential and special use land tracts. The commercial developments include office, lodging and retail establishments totaling over 13 million square feet of space. This includes the recently completed TD Ameritrade 78-acre campus which employs 1,800 people, as well as the Sabre Corporate Headquarters which over 3,545 employees. Residential units total over 800 and predominantly consist of single-family residences. Special use development encompasses over six million acres of land within the three-mile radius of the project area, including several hospitals and schools also within the one-mile radius. Total employment resulting from these existing developments up to three miles from the S.H. 114 project centerline is estimated near 20,000 jobs.² While substantial in of itself, this number will certainly increase if expected new developments described below come to fruition.

Within three miles of the project area, a total of 25 developments have recently been conceptualized, announced, or are under construction, and 13 of those are within one mile. Altogether, these new developments will deliver an extra three million square feet of commercial space and over 2,500 additional residential units. One of the most visible and highly anticipated developments underway is Westlake Entrada³, located at the southeast corner of the S.H. 114/FM 1938 interchange. This 85-acre mixed-use development planned with new office, residential, and retail spaces is expected to employ over 5,000 people.⁴ The geographic distribution of these existing and planned development locations, with respect to the project area, is displayed in **Exhibit 16**.

Given the current and expected population, employment, and economic development to the area surrounding the S.H. 114 frontage roads, traffic is expected to increase. Closing the gap in the S.H. 114 frontage road system, will alleviate the need to used local roads and increase access to current and future developments. It will also improve mobility along the

¹ NCTCOG Regional Data Center: Developments <u>http://datanctcoggis.opendata.arcgis.com/datasets/developments</u>

² NCTCOG Regional Data Center: Employment <u>http://datanctcoggis.opendata.arcgis.com/datasets/employers</u>

³ Westlake Entrada, <u>http://entrada-westlake.com/</u>

⁴ Northwest Metroport Chamber of Commerce <u>https://www.nwmetroportchamber.org/westlake</u>



main lanes of S.H. 114 as local traffic from Southlake, Westlake, and Trophy Club will not have to enter the main lanes to access the developments. Along with access for consumers, bridging the gap in the S.H. 114 frontage road will also provide reliable access to a large employment center.



Exhibit 16 – SH 114 Frontage Road Gap Project Existing and Planned Development

4.4. Environmental Sustainability

Based on analysis performed using the NCTCOG travel demand model, construction of the S.H. 114 Frontage Road Gap Project is expected to lower daily vehicle-hours of congestion delay by nearly 2,400 hours compared to a no-build scenario. Within Tarrant County, where most of the project area is located, the decreased congestion delay as processed via the Environmental Protection Agency's (EPA) Motor Vehicle Emissions Simulator (MOVES) will translate to emissions reductions of 10.99 pounds/day for nitrogen oxides (NO_X), 2.41 pounds/day for volatile organic compounds (VOCs), and 39,262 pounds/day for carbon dioxide (CO₂). While such reductions are small in magnitude compared to the wide array of transportation projects, programs, and policies in *Mobility 2045* aimed to bring the North Central Texas region into attainment for the Federal ozone standard, every effort to improve air quality is an essential step toward environmental sustainability. Additional information concerning inputs and methodology for calculating travel time and emission reduction effects on the project's BCA can be viewed in the BCA Appendix (**Attachment 2**).

Improved sustainability is also dependent on projects which can limit, mitigate, or eliminate a variety of other impacts to the natural environment. Though final review via the National Environmental Policy Act (NEPA) is scheduled to conclude in March 2020, extensive information concerning multiple analysis factors is being obtained. Sensitivity to water quality and wetlands is of particular importance given the project's proximity to Lake Grapevine. With the reservoir identified as an impaired lake, in pH non-attainment, and a designated Category 5C waterbody by the Texas Commission on Environmental Quality (TCEQ), additional data or information will be collected and/or evaluated as part of the NEPA process before a management strategy is selected for implementation during project delivery. Any potential impacts to water quality will be minimized by best management practices per Section 401 of the Clean Water Act. Additionally, though no occurrences of federally listed species have thus far been reported in the vicinity of the proposed project, occurrences of the state-listed threatened mussel species Potamilus amphichaenus (Texas heelsplitter) were reported within a three-mile radius surrounding the project area. However, no adverse impacts are anticipated since freshwater mussel best management practices will be implemented during construction.

4.5. Quality of Life

The S.H. 114 Frontage Road Gap Project will improve mobility, alleviate congestion, and increasing accessibility mobility by completing the missing one-way parallel frontage road links in each direction between FM 1938 and Dove Road. This will provide substantial relief for travelers who today must use local streets to access various destinations in Southlake, Westlake or Trophy Club, additionally residents impacted by the high traffic use on those local streets will experience congestion relief as well. New and existing corporate offices and commercial developments in the area will also benefit from the new frontage roads due to greater connectivity and circulation possibilities, as well as improved abilities to accommodate new travel demands generated through increased economic activities. Filling the gap in the S.H. 114 frontage road system will allow a continuous 11-mile path parallel to the general purpose lanes from west of the S.H. 170 interchange in Roanoke all the way to the north entrance of DFW Airport in Grapevine. This will enable faster emergency vehicle response time and more effective management options for routing traffic through and/or around major incidents on the general purpose lanes. These and other quality of life effects are pivotal in maintaining the rate numerous employers, education outlets, medical services, new parks, shopping options, and entertainment venues continue to appear and thrive in and around the S.H. 114 corridor.

At the same time, the S.H. 114 Frontage Road Gap Project is much more than just another roadway capacity initiative. Some proposed improvements will integrate multimodal considerations to expand ability and geographic accessibility affecting trip choices. Examples include wide outside frontage road lanes allowing improved bicycle accommodations, continuous six-foot sidewalks along frontage roads and cross-streets designed to support and even prioritize more pedestrian use, or intersection elements addressing safety and Americans with Disability Act (ADA) needs for crosswalk movements as much efficiency needs for left-turning vehicle movements. When provisions like these



can help influence transportation choices, travel decisions take on a greater behavioral and/or more broad emotional perspective, and an even stronger quality of life impact is generated.

Other proposed improvements have potential to extend the quality of life effects even further. For instance, the extensive use of retaining walls, in addition to fulfilling drainage and erosion control functions for the rolling landscape surrounding the S.H. 114 corridor, could also provide extra aesthetic connections to complement or even accentuate the unique architecture defining the Solana development. Elsewhere, access management provisions improving operational efficiency between intersections, also may encourage greater placement of more diversified and higher-quality land uses at driveway locations. Such place-making elements can create enormous contributions to area attractiveness and vitality. Though such benefits are often difficult to quantify, the more transportation improvements are designed beyond function so they also can illicit behavior and emotional responses, the quality of life effects may often exceed other potential assets. Such outcomes would be well within reach as a result of the S.H. 114 Frontage Road Gap Project.

4.6. Innovation

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 (<u>http://511dfw.org/</u>). 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 S.H. 114 Frontage Road Gap Project 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 all provide a unified front in gaining quicker response times 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 S.H. 114 corridor to function effectively in the future as traffic volumes, trip purposes, traveler needs, and vehicle types/classification continue to increase both in size and complexity.

Additional innovation may also be realized through the project's actual construction process and resource composition. According to TCEQ modeling, construction



equipment contributes approximately eight percent (8%) of all ozone-forming NO_x releases as calculated via the 2017 emissions inventory for North Central Texas⁵. The use of NCTCOG's Clean Construction Specification⁶ 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 in working 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 fuel economy than older engines and incorporate technologies allowing for minimized idling and other efficiencies, use of the specification could yield reductions in petroleum consumption.

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. These strategies can be applied to the S.H. 114 Frontage Road Gap Project in ensuring fulfillment of the BUILD Program's aggressive schedule requirements for funding obligation. These programs help expedite the review of projects but do not allow the permitting, approval processes, and/or regulations to be circumvented or bypassed.

- 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 TxDOT to directly consult with Federal/State resource agencies. This resulted in shorter review times.
- 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

⁵ Source: Texas Commission on Environmental Quality, 2017 Dallas-Fort Worth 8-hour Ozone Attainment Demonstration State Implementation Plan

⁶ <u>https://www.nctcog.org/trans/quality/air/for-government/construction-fleets</u>

Worth (DFW) region since 2008. The opportunity to coordinate in advance has resulted in reductions in permitting time, mitigation costs, and impacts.

While TxDOT intends to utilize the traditional design-bid-build procurement approach for project construction, the agency also plans to employ a unique combination of incentive/disincentive and cost-plus-time bidding mechanisms to motivate potential contractors for completion ahead of schedule, awards based on minimizing traveler inconvenience or delay, and for delivery with the lowest possible cost. With Texas being one of the nation's leaders in both population growth and number of construction projects simultaneously, TxDOT has devoted numerous resources toward multidisciplinary measures that enable its staff, contracting partners, materials suppliers, equipment manufacturers, workforce specialists, financial institutions, and the public to all work together in achieving consistent expedited construction outcomes. Developed through a 2016-17 statewide series of workshops and information exchanges that also included the Associated General Contractors of Texas and TTI, these provisions as outlined in the Accelerated Construction Guidelines Manual will be incorporated into S.H. 114 Frontage Road Gap Project to ensure streamlined project delivery (www.dot.state.ux.us/cst/construction strategies.htm).

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.

In recent years, the project portfolio described above was further boosted through efforts to address Federal fund leveraging at the State level, providing another mechanism toward assurance of expanded financing opportunities. Significant new transportation revenues were made available as a result of voter-approved legislative actions in 2013 for Proposition One and 2015 for Proposition Seven. Proposition One authorized a constitutional amendment allocating a portion of the Economic Stabilization Fund derived from oil and gas revenues to be deposited in the State Highway Fund (SHF) for non-tolled projects. Proposition Seven enabled another constitutional amendment to dedicate portions of revenues from the State general sales and use tax, as well as from motor vehicle sales and rental taxes, to the SHF for non-tolled projects. Combined with yet another 2015 legislative action eliminating several ongoing diversions of state gas taxes to various agencies and initiatives unrelated to transportation, it is estimated that as of December 2018, the SHF has accumulated nearly \$7.9 billion from these extra funding sources to further address statewide mobility needs (http://ftp.dot.state.tx.us/pub/txdot-info/fin/funding-sources.pdf).

These funds pushed a substantial volume of projects forward in the programming queue, including the S.H. 114 Frontage Road Gap Project, onto a plateau where a prospective BUILD Grant may be the attainable final increment for delivery to move forward.

One other innovative financing application to be utilized for the project is the allowance for right-of-way (ROW) to serve as a funding local match option. For this case, the City of Southlake's ROW commitment to TxDOT is not only compliant with local match criteria for State and Federal funds, but it also allows the city to work directly with property owners to obtain land through donations, taxing discounts, and other various tools at their disposal. This enables TxDOT to focus its project efforts elsewhere and shorten the ROW acquisition phase even without direct capital from a local government partner.

4.7. Partnership

The S.H. 114 Frontage Road Gap Project is a multi-jurisdictional effort between NCTCOG, City of Southlake, City of Trophy Club, Town of Westlake, Tarrant County, and TxDOT. These entities have a strong history of working well together on cooperative roadway construction projects, including most recently the previously mentioned \$25 million investment not only removing the S.H. 114 general purpose lane bottleneck at Solana/Kirkwood Boulevard, but also completed critical direct connector ramps at the S.H. 170 interchanges. As described previously, the proposed project represents the final step of that two-part solution to close the current improvement stage, and upon completion the S.H. 114 corridor will have a consistent capacity and configuration extending from S.H. 170 to the DFW Connector junction with S.H. 121 and S.H. 360 in Grapevine.

Another important collaborator likely to aid in project advancement is the Metroport Cities Partnership. Operating as a public-private non-profit advocacy organization with representation from northeast Tarrant and southwest Denton Counties communities surrounding the project area, the Metroport Cities Partnership provided a legacy of leadership, activism, and resource-building to help achieve every incremental S.H. 114 improvement for the area since the 1980's. The group also focused greatly on economic development accomplishments as well, with the TD Ameritrade campus and Westlake Entrada developments as examples of recent progress. From that perspective the project's continuous frontage roads, relocated entrance/exit ramps, auxiliary lanes, and intersection improvements will certainly serve as a pinnacle toward the next chapter of growth outcomes for the area.

For only those partners expected to be active with funding or implementation tasks/responsibilities supporting the proposed project, the defined roles of NCTCOG, TxDOT, and the City of Southlake are described below.

North Central Texas Council of Governments (Grant Applicant)

NCTCOG serves as the applicant for this proposed BUILD Grant project and will act as a continuing partner for coordination and technical support to aid the recipient and other



project stakeholders throughout the implementation process. NCTCOG is a voluntary association of multiple local government jurisdictions established in January 1966 to assist in planning for common needs, cooperating for mutual benefits, and coordinating for sound regional development. NCTCOG serves a growing metropolitan region comprised around the urban centers of Dallas and Fort Worth, and it consists of 234 members, including 16 counties, 169 cities, 22 independent school districts, and 28 special districts. Since 1974, NCTCOG has served as the MPO for the DFW MPA. The NCTCOG Transportation Department is responsible for the regional planning process for all transportation modes, and it acts as support staff to the RTC and its technical committees, which 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.

TxDOT (Grant Recipient/Project Implementation)

If awarded BUILD Grant funds, TxDOT will facilitate the obligation process and serve as the recipient. TxDOT will also act as the implementing agent and lead overall coordination and compliance activities through the engineering, ROW acquisition, utility relocation, construction, and close-out phases of the project delivery process. The Texas Legislature originally established TxDOT in 1917 as the Texas Highway Department. TxDOT's workforce of more than 12,000 employees is made up of engineers, administrators, designers, environmental professionals, accountants, maintenance workers, and many other professionals. Headquartered in Austin, TxDOT is made up of 25 district offices, 21 divisions, and six regional offices. The proposed S.H. 114 Frontage Road Gap 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.

City of Southlake (Project Partner)

The City of Southlake was incorporated in 1956. The city operates under a Council/Manager form of government through a home rule charter approved on April 4, 1987. The city is located five miles from DFW Airport and eight miles from Fort Worth Alliance Airport. Southlake had a population of 26,575 persons in 2010 as measured by the U.S. Census.

5. PROJECT READINESS

5.1. Technical Feasibility

The S.H. 114 Frontage Road Gap Project, developed over the last two years, derived first out of the comprehensive S.H. 114 corridor freeway conversion process and associated series of incremental improvement projects completed in 2006, and finally as a follow-up phase to a S.H. 114/S.H. 170 widening and bottleneck removal project. Though developed generally to address the immediate mobility, reliability, and accessibility needs of the local communities and stakeholders, the project would help the S.H. 114 corridor achieve a consistent capacity and configuration between S.H. 170 in Roanoke and the DFW Connector in Grapevine. A schematic (90 percent) design is developed and approved. The planning effort thus far has



included the preparation of preliminary environmental documentation, public involvement, and traffic analysis. The project included a Design Concept Conference on July 10, 2017, and three Technical Advisory Work Group Meetings from late fall 2017 to spring 2018. Project capital cost estimates included in this application were developed by performing a quantity takeoff of the schematic design. Recent TxDOT unit prices for bid items were applied to quantities used in estimating the construction cost, plus an assumed 12 percent contingency. All ROW costs are supplied by the City of Southlake. Additional items such as aesthetics, mobilization, and traffic control were estimated using a percentage of the construction cost based on TxDOT experience.

5.2. Project Schedule

The proposed overall development schedule for the S.H. 114 Frontage Road Gap Project is displayed in **Exhibit 17**. As identified in the graphic below, the project is scheduled for environmental approval in March 2020, and this timing will allow other critical preconstruction activities to commence and conclude well before the BUILD Grant obligation deadline of September 30, 2021. The start date for project construction is anticipated by October 2020, and with an expected duration of three years (opening to traffic during fall 2023), the project will be completed substantially earlier than the BUILD Grant expenditure deadline September 30, 2026. The project schedule shown in Exhibit 17 indicates obligation of funding and construction beginning in fall 2020. Construction is expected to take three years and the new facility would open to traffic in the fall of 2023.





As highlighted above, the proposed schedule readily demonstrates how all necessary activities may be completed allowing BUILD Grant funds to be obligated sufficiently in advance of the statutory deadline, and it is unlikely at the current time for any unexpected delays to put the funds at risk of expiring prior to obligation. The project can be advanced to begin construction quickly upon BUILD Grant obligation, and funds will be spent expeditiously once construction starts. All real property and ROW 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 Permits and Reviews

The Environmental Assessment (EA) for the S.H. 114 Frontage Road Gap Project is expected to receive environmental clearance issuance of a Finding of No Significant Impact (FONSI) by March 2020. TxDOT will begin purchasing ROW, acquiring easements, and relocating utilities once the FONSI is received.

Because the DFW MPA is an ozone nonattainment area, the project is required to be included and consistent with recommendations from *Mobility 2045*. The project is listed as a component of interim and ultimate S.H. 114 improvement recommendations indicated as corridor number 37. *Mobility 2045* was regionally approved by the RTC in June 2018 followed by State/Federal air quality conformity approval in November 2018.

5.3.2. State and Local Approvals

Permits involving waters of the U.S. will be authorized under nationwide Section 404 permits. No major Section 404 (of the Clean Water Act) issues were identified.

The project is currently in the 2019-2022 Transportation Improvement Program (TIP) for North Central Texas (www.nctcog.org/trans/funds/tip/transportation-improvement-program/2019-2022-transportation-improvement-program). A revision to the TIP will be necessary to add the BUILD Grant funding to the project once awarded. The modification will be coordinated between NCTCOG and TxDOT during a quarterly modification cycle for the TIP and Statewide TIP (STIP). The revision is anticipated to occur by February 2020 (assuming BUILD Grant award decision in November 2019).

5.3.3. Federal Transportation Requirements Affecting State and Local Planning

At the current stage, the project is included in all local planning documents. As stated in Section 5.3.1, the proposed project is included in *Mobility 2045*, as well as in the 2019-2022 TIP as stated previously in Section 5.3.2 (requiring modification for the additional funds upon potential BUILD Grant award).

5.4. Assessment of Project Risks and Mitigation Strategies

Any roadway project has potential risks associated with its design and construction. **Exhibit 18** outlines a preliminary list of potential risks identified to date for the S.H. 114 Frontage Road Gap Project, as well as potential mitigation measures that limit possible impacts to the estimated project cost and schedule.

While the proposed work is not environmentally cleared, the process is currently in development and no significant environmental impacts have been recorded. Additionally, previous S.H. 114 corridor studies have not identified considerable environmental impacts.

Risk/ Opportunity	Likely Impact to Costs	Likely Impact to Schedule	Potential Mitigation Strategy
Unplanned Work (changed orders)	Minor	Minor	Working with stakeholders to develop a complete schematic and PS&E.
Increased ROW Costs	Minor	None	Working with property owners on a preferred project option. Completing the pre-construction process quickly to reduce inflation cost.
Third Party Impacts (permits, utilities, railroad, etc.)	Minor	Minor	Early coordination with all third-parties
Environmental Discovery Impacts	Minor	Moderate	A thorough environmental study to cover all aspects of the project. Utilizing previous environmental studies within the project area to identify potential impacts.

Exhibit 18 – Identified Risks and Opportunities

6. BENEFIT COST ANALYSIS

Anticipated benefits and costs for the S.H. 114 Frontage Road Gap Project are monetized in the BCA prepared for this BUILD Grant application. A summary of the all the quantifiable benefits identified for the project are shown in **Exhibit 19**. The net present value of the specific benefit/cost ratio is displayed in **Exhibit 20**. Applied to a total project lifecycle cost of nearly \$58 million, a positive overall benefit is achieved assuming a seven percent discount rate. Based on a project lifespan through the *Mobility 2045* planning horizon, this transportation investment will result in a positive net value of nearly **\$47 million**, and a **2.85** benefit/cost ratio which 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**).

Benefit Category	Benefits	
benent category	7% Discount Rate	
O&M Costs	\$(11,961,261)	
Time Savings	\$97,440,932	
Air Quality Emission Savings	\$1,782	
Safety	\$3,598,856	



Exhibit 20 – Net Project Benefits							
Discount Rate	Net Present Value of Total Benefits	Rounded Net Present Value of Total Benefits	Benefit/Cost Ratio				
7 Percent	\$46,711,978	\$47 million	2.85				

SH 114 Frontage Road Gap Project

FY 2019 BUILD Grant Application

Attachment 2A – Benefit Cost Analysis Methodology





TABLE OF CONTENTS

1.0	Met	thodology	1
	1.1	Project Cost	1
	1.2	Travel Time (Mobility) Benefit	1
	1.3	Safety Benefits	2
	1.4	Air Quality Benefits	3
	1.5 F	Residual Value	3
2.0	Ana	lysis	3
3.0	Sum	ımary	4

LIST OF EXHIBITS

Exhibit 1: Total Project Benefits	4
Exhibit 2: Net Project Benefits	4
Exhibit 3: Benefit-Cost Analysis Summary Results	5



1.0 METHODOLOGY

The following description provides the methodology for the Benefit Cost Analysis (BCA) conducted for the S.H. 114 Frontage Road Gap Project as part of the FY 2019 Better Utilizing Infrastructure to Leverage Development (BUILD) Discretionary Grant Program. This BCA will include detailed calculations of the various benefits and costs of the proposed project for the years between 2020 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 projects to 2045.

Traffic forecasts were conducted for build and no-build conditions in 2045 using the NCTCOG DFX Regional Travel Demand Model. The Dallas-Fort Worth Regional Travel Demand Model for the Expanded Area (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 the North Central Texas Council of Governments' (NCTCOG) 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*. 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 TxDOT, Fort Worth District. The project schedule is displayed in **Section 5.2** of the BUILD Grant Application narrative.

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 MTP 2045 networks for the target year 2045. Performance reports of roadway alternative model runs of performed on these networks using Mobility 2045 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, as well as all commercial motor vehicles, decreased hours spent behind the wheel, and increased mobility and quality of life. The number of commercial motor vehicles was calculated using estimates taken from the Texas Department of Transportation Statewide Planning Map: www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.html



Equation for Annual Travel Time Benefit:

Annual Travel Time Benefit (AUTO)
= (Daily Vehicle Hours of Congestion Delay (Build Network)
- Daily Vehicle Hours of Congestion Delay (No Build Network))
× 365 days × 1.68
$$\frac{Occupants}{AUTO}$$
 × $\frac{$14.80}{hour}$

Annual Travel Time Benefit (TRUCK)
= (Daily Vehicle Hours of Congestion Delay (Build Network)
- Daily Vehicle Hours of Congestion Delay (No Build Network))
× 365 days ×
$$\frac{$28.60}{hour}$$

1.3 Safety Benefits

The proposed improvements will fill the gap that currently exists, completing the frontage road system. This will improve the response from emergency vehicles and will also provide an alternate route for vehicles during traffic incidents.

S.H. 114 crash data was provided by TxDOT for the years 2014 through 2018. This crash data provided the number of crashes for the different crash severity types (fatal, incapacitating, non-incapacitating, etc.). The crash data is shown in Exhibit 15 in the Project Narrative.

Although the S.H. 114 Frontage Road Gap Project will provide many safety benefits, for purposes of this BCA, a conservative approach using only the benefits realized by the addition of lanes was used. This benefit (see Table 4) is calculated by applying a Crash Modification Factor (CMF) of 0.65 <u>www.cmfclearinghouse.org/detail.cfm?facid=7932</u>. This CMF was applied to the five-year average of the crash rates for all crashes to estimate the build condition crash rate for the KABCO rating system.

The before and after difference was then calculated by subtracting the total observed crashes by total estimated crashes from the CMF calculation.

Equation for Annual Crash Reduction Benefit:

Annual Crash Reduction Benefit

= Total Reduction in Crashes \times KABCO Crash Reduction Rate \times KABCO to AIS Conversion \times Monetized Value_{By AIS Type}



1.4 Air Quality Benefits

Air Quality benefits for this project are derived from reduced Vehicle Miles Traveled (VMT) across the Dallas-Fort Worth 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, Chapter 7

(<u>https://www.nctcoq.org/nctcq/media/Transportation/DocsMaps/Quality/Air/Chapter-</u> <u>7 Emission-Factors MOVES-Model.pdf</u>) of the 2018 Transportation Conformity document. Annual estimates were calculated for both Nitrogen Oxides (NOX) 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:

Emissions No-Build = *VMT*No-Build × *EmissionFactor*_{vehicletype} × *VMTMix*_{vehicletype}

Emissions $_{\text{Build}} = VMT_{\text{Build}} \times EmissionFactor_{vehicletype} \times VMTMix_{vehicletype}$

Emission Reduction Benefit:

Emissions Build – *Emissions* No-Build

1.5 Residual Value

The new frontage recommended for this project will have a remaining service life beyond the 21-year benefit calculation period in this BCA. Consistent with the USDOT 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 25-year calculation was added to the benefit calculation. All project elements with life spans beyond the project are included in the attached BCA Excel Tables.

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 S.H. 114 Frontage Road Gap project is shown in Exhibit 2. Applied to a total project cost of \$37 million, a benefit is achieved assuming a discount rate of 7 percent. Based on a 20-year project life, the overall effect of this transportation investment will result in a positive net value of \$47million, after netting out the cost of the project. Calculations used to determine this total are discussed in more detail in the BCA Attachment.


Benefit Category	Benefits	
Denent category	7% Discount Rate	
O&M Costs	\$(3,344,000)	
Time Savings	\$97,440,932	
Air Quality Emission Savings	\$1,782	
Safety	\$3,598,856	

Exhibit 1: Total Project Benefits

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	\$46,711,978	\$47 million	2.85

This project will provide continuous movement adjacent to S.H. 114. 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 project users including reduced air quality emissions, auto and commercial vehicle travel-time savings, and increase in land value. Calculation of regional benefits from reduced congestion and travel times associated with the new roadways are also included in the BCA. The net present value of travel time savings to transportation system users is \$47 million.

Increased access to current and future developments will facilitate new sources of jobs and economic vitality in the Southlake, Westlake and Trophy Club areas.

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 net present value (NPV) and the benefit-cost ratio (BCR) utilizing a seven percent discount rate scenario. Net benefits of nearly **\$47 million** over the 20-year time horizon are attainable with a BCR of **2.85**. **Exhibit 3** outlines a summary of costs and benefits for the S.H. 114 Frontage Road Gap Project.



Benefit-Cost Summary	Results		Average	Total Over	
Life-Cycle Costs	\$(58,020,956)	ITEMIZED BENEFITS	Annual	20 Years	
Life-Cycle Benefits	\$381,233,178	Travel Time Savings (mil. \$)	\$17.72	\$345.93	
Net Present Value	\$46,711,978	Safety (mil. \$)	\$0.488	\$10.74	
	2.85	Emissions Cost Savings (thousands \$)	\$0.683	\$14.04	
BENEFIT-COST RATIO		TOTAL BENEFITS (mil. \$)	\$17.33	\$381.23	
		Person Hours of Delay Saved	609,24413	13,403,377	

Exhibit 3: Benefit-Cost Analysis Summary Results

NOTE:

A copy of the Microsoft Excel file is included in the S.H. 114 Frontage Road Gap Project FY 2019 BUILD Grant Application submittal as Attachment 2B.

SH 114 Frontage Road Gap Project FY 2019 BUILD Grant Application

Attachment 3 – Preliminary Schematic and Typical Section Drawings





<u>SHEET INDEX</u> Roll 1: Plan - SH 114 MAINLANES AND FRONTAGE ROADS Roll 2: SH 114 TYPICAL SECTIONS

AERIAL IMAGERY DATE: OCTOBER 2017 TOPOGRAPHICAL DATA DATE: APRIL 2018

NO	FOR CONSTRUCTION
THI	S DOCUMENT IS RELEASED FOR THE
PURP	OSE OF INTERIM REVIEW UNDER THE
AL	THORITY OF KERRY MILLER, P.E.
TEXAS	NUMBER: 67832 DATE: OCTOBER 2018
IT IS	NOT TO BE USED FOR CONSTRUCTION
	BIDDING OR PERMIT PURPOSES

0 100' 200' HORIZONTAL GRAPHIC SCALE: 1" = 100'





PROPOSED DRIVEWAYS BY OTHERS ARE SHOWN FOR INFORMATION ONLY. LANDOWNERS WILL BE REQU TO FOLLOW ALL TXDOT POLICIES AND PROCEDURE FOR OBTAINING A DRIVEWAY PERMIT AND WILL B REQUIRED TO CONSTRUCT FUTURE DRIVEWAYS IN CONFORMANCE WITH THOSE POLICIES. EXISTING FRANCHISE UTILITIES IN CONFLICT WITH THE PROPOSED IMPROVEMENTS WILL BE RELOCATED IN AVAILABLE RIGHT-OF-WAY OR IN PRIVATE EASEMENTS OUTSIDE OF THE PUBLIC RIGHT-OF-WAY PURCHASED BY THE FRANCHISE UTILITY.

as Department of Trans FORT WORTH DISTRICT LOYL C. BUSSELL, P.E. DISTRICT ENGINEER

AERIAL IMAGERY DATE: OCTOBER 2017 TOPOGRAPHICAL DATA DATE: APRIL 2018 NOT FOR CONSTRUCTION THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF KERRY MILLER, P.E. TEXAS NUMBER: 67832 DATE: OCTOBER 2018 IT IS NOT TO BE USED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES

0 100' 200' HORIZONTAL GRAPHIC SCALE: 1" = 100'







EX ROW

EX ROW







SH 114 Frontage Road Gap Project

FY 2019 BUILD Grant Application

Attachment 4 – Letters of Support



North Central Texas Council of Governments



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

July 11, 2019

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 would like to convey our support for the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **State Highway (SH) 114 Frontage Road Gap Project**.

SH 114 is a vital transportation corridor sustaining the local, regional, and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club, and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads. The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth.

Secretary Elaine L. Chao Page Two

The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan</u> <u>Transportation Plan for North Central Texas</u>. All federally funded surface transportation projects must also be included in the Transportation Improvement Program. This project is already included in the <u>2019-2022 Transportation Improvement Program for North Central Texas</u>. If the project is successful in receiving funds, the RTC will support its modification in the 2019-2022 Transportation Improvement Program.

Again, the RTC fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. Thank you for your time and consideration for this project. If you have any questions, please contact please contact Michael Morris, P.E. Director of Transportation for NCTCOG, at (817) 695-9241 or mmorris@nctcog.org.

Sincerely,

uly Kads

Andy Eads, Chair Regional Transportation Council County Judge, Denton County

KR:al

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



GIOVANNI CAPRIGLIONE TEXAS HOUSE OF REPRESENTATIVES District 98

July 10, 2019

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

Dear Secretary Chao:

State Representative Giovanni Capriglione is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045</u>: The Metropolitan Transportation Plan for North Central Texas.

Again, State Representative Giovanni Capriglione fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me.

Sincerely,

aprestime

Giovanni Capriglione Texas House of Representatives



July 9, 2019

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

Dear Secretary Chao:

Denton County is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several vital highways and other major transportation and economic centers, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club, and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan Transportation Plan for North Central Texas</u>.

We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me directly.

Cordially,

andy Lads

Andy Eads Denton County Judge

KENNY MARCHANT 24th District, Texas

COMMITTEE ON WAYS AND MEANS

COMMITTEE ON ETHICS

Congress of the United States House of Representatives Washington, DC 20515–4324

July 7, 2019

WASHINGTON OFFICE: 2369 Rayburn House Office Building Washington, DC 20515 (202) 225–6605

DISTRICT OFFICE: 9901 EAST VALLEY RANCH PARKWAY SUITE 2060 IRVING, TX 75063 (972) 556–0162

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 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor for the 24th District and for the State of Texas which provides a tremendous benefit to our regional and state economy. In addition to this route supporting extensive freight movement, it is also a principal route for local commuters and serves as access to the numerous transportation and economic facilities such as DFW International Airport. This project will relieve traffic congestion along the SH 114 corridor, which poses significant traffic safety and incident management complications due to its lack of continuous frontage. The existing system gap results in all traffic utilizing low capacity local streets for circulation.

The proposed project would eliminate the existing system gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general-purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

These improvements will enhance accessibility and promote development to compliment the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan Transportation</u> <u>Plan for North Central Texas</u>.

Thank you for your time and consideration of the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap 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

PRINTED ON RECYCLED PAPER

P.O. BOX 12068 CAPITOL BUILDING AUSTIN, TEXAS 78711 512/463-0112 FAX: 512/463-0923

DISTRICT OFFICE 1225 S. MAIN STREET, SUITE 100 GRAPEVINE, TEXAS 76051 817/424-3446 FAX: 817/488-6648

E-MAIL: jane.nelson@senate.texas.gov



The Senate of the State of Texas Jane Nelson Senate District 12

July 3, 2019

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 pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas-Fort Worth International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project will construct two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve the SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. The improvements for this section of SH 114 are included in Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

Thank you again for your time and consideration for this important project. If you have any questions or I may be of further assistance, please contact my Capitol Office at (512) 463-0112.

Very truly yours,

June Melson

Senator Jane Nelson

Committees:

FINANCE, CHAIR TRANSITION LEGISLATIVE OVERSIGHT COMMITTEE, CO-CHAIR STATE AFFAIRS LEGISLATIVE BUDGET BOARD LEGISLATIVE AUDIT COMMITTEE PARTNERSHIP ADVISORY COMMITTEE

Board of Directors 2019 Officers

Tracy Martinez, Chairman Texas Health Harris Methodist Hospital Alliance

Glen Wallace, Chair Elect Medical City Alliance

Donald Richmond, Vice Chair Stewardship / Prosperity Fidelity Investments

Greg Thompson, Vice Chair Leadership & Engagement The Thompson Group at Classic Chevrolet

> Sally A. Aldridge, IOM, Secretary Northwest Metroport Chamber of Commerce

Hogan Page, Treasurer First State Bank Roanoke

Tina Patel, Past Chairman Comfort Suites Roanoke

Directors

Jeffrey Ackerson Charles Schwab

Von Beougher G & A/McAdams Co.

> Heather Brown Wells Fargo Bank Heritage Trace

Ashley Cunningham Texas Motor Speedway

> Becky Escott Devon Energy

Jennifer Gibson CoServ Electric

Marianne Henderson *iOffice*

> Ellen lobst Farmer Brothers

Rachel Nobles Baylor Scott and White Medical Center Grapevine

> Chris Wells The Classic at Roanoke



Chamber of Commerce

Argyle Haslet Justin Northlake Roanoke Trophy Club Westlake

Serving the Alliance Region Since 1988

July 10, 2019

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

Dear Secretary Chao:

Northwest Metroport Chamber is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor that directly impacts two communities our chamber represents; Trophy Club and Westlake. It indirectly effects the remaining five communities; Roanoke, Northlake, Argyle, Haslet and Justin. SH 114 is important for sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, **Trophy Club and Westlake**. Other improvements will benefit **safety (recent fatality this month)**, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. **Details on the pending** growth of our region both business and residential are available by visiting our ED website at www.metroportchamber.org.

NW Metroport Chamber fully supports this project and greatly appreciate your time and consideration. If you have any questions, please contact me at 817-837-1000.

Sincerely

Sally A. Aldridge, IOM President/CEO

P.O. Box 74 Roanoke, TX 76262

www.nwmetroportchamber.org

817-837-1000 Phone 817-837-1002 Fax

TAN PARKER

P.O. Box 2910 Austin, TX 78768-2910 (512) 463-0688 TAN.PARKER@HOUSE.STATE.TX.US



800 Parker Square Ste.245 Flower Mound, TX 75028 (972) 724-8477

The State of Texas House of Representatives District 63

July 10, 2019

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 respectfully contacting you to offer my full support of the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development ("BUILD") Discretionary Grant application submitted by the North Central Texas Council of Governments ("NCTCOG") for the State Highway ("SH") 114 Frontage Road Gap Project.

As a senior legislator honored to serve the North Texas region, I have been involved in working with our various government, transportation experts, and communities over the years in ensuring our infrastructure supports the incredible growth in this area. Of course, one of the most significant roadways in the Dallas Fort Worth metroplex is SH 114.

The SH 114 corridor is a primary route not only for local commuters to our larger urban areas, but also serves as the main connector for the Dallas Fort Worth International Airport ("DFW"), which is the busiest airport in our state and one of the top four busiest in the nation. Our economy is largely dependent on being able to access this major international transportation and shipment hub that is a gateway to the world for travelers, services, and goods.

Other notable economic anchors dependent on the mobility of SH 114 include AllianceTexas, a 26,000 acre master planned community that is not only home to several residential neighborhoods, but is a major contributor to our region's prosperity with the Alliance Airport (the world's first industrial airport designed for cargo and corporate aviation), state-of-the-art medical facilities, and a generous corporate and logistics hub with some of the most technically advanced industrial operations in the world.

Furthermore, I am also proud to say that SH 114 supports the Texas Motor Speedway that is one of the largest sports stadiums in the United States and a premier venue with a crowd capacity in excess of 190,000. This entity alone creates hundreds of millions of dollars of an economic impact annually to our North Texas region. Of course, this would not be possible without the SH 114 infrastructure that supports access to this facility along with all the other major developments along this important highway.



(continued)

However, despite the critical importance to our economic vitality and ability for Texas to continue to be a leader in job creation, business growth, and global trade, the most meaningful aspect to addressing this transportation need is the safety and well-being of the hundreds of thousands of people who travel on SH 114 every day. Therefore, it is paramount that we address the lack of continuous frontage roads, traffic safety, incident management congestion, traveler access, and overall circulation of roadway traffic.

This grant is vital in providing for this project that involves a two-mile segment of SH 114 in far northern Tarrant County. Currently, drivers are forced to utilize low-capacity local streets which is not only hampering roadway movement, but also poses a concerning safety risk to drivers and those along these roads such as Farm-to-Market Road ("FM") 1938, Kirkwood/Solana Boulevard, and Dove Road.

There are other safety and connectivity improvements that also should be considered in reviewing the BUILD Discretionary Grant application. These include the reconfiguration of entrance/exit ramps, general-purpose lane and frontage road auxiliary lanes between ramps, along with the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Furthermore, the multimodal and context-sensitive features include much needed sidewalks as well as a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

With the grant award, our transportation leaders would effectively work to eliminate the existing connectivity gap by constructing two and three lane continuous frontage roads in each direction between FM 1938 and Dove Road. By providing this additional capacity, we can preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through the northern Tarrant County area - a fast growing employment and entertainment center that connects the thriving Southlake, Trophy Club and Westlake communities.

There are many important areas of consideration when reviewing the <u>Mobility 2045: The Metropolitan</u> <u>Transportation Plan for North Central Texas</u> that will enhance access to this rapidly growing area and also further bolster attractiveness not only for our regional economic development, but also that of our state. As the U.S. Department of Transportation works through this process, it is my hope that you will consider my full support of the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project.

Thank you for your time and the opportunity to share my thoughts. If I can ever answer questions about this project or be of service in any way, please do not hesitate to contact me directly.

Best regard

Tan Parker State Representative



500 S. Oak Street, Roanoke, Texas 76262

817-491-2411

www.roanoketexas.com

July 9, 2019

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 Roanoke, Texas is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, Alliance Texas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard

and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045</u>: The Metropolitan Transportation Plan for North Central Texas.

Again, the City of Roanoke fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please do not hesitate to contact me directly.

Sincerely,

Carl E. "Scooter" Gierisch Mayor City of Roanoke, Texas



July 10, 2019

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 Southlake Chamber of Commerce is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan Transportation Plan for North Central Texas</u>.

Again, the Southlake Chamber of Commerce fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact Mark Guilbert, President/CEO, at <u>mark@southlakechamber.com</u> or 817-481-8200.

Sincerely,

Mark Jullie

ISOI Corporate Circle, Suite IOO Southlake, Texas 76092

T. 817.481.8200 F. 817.749.8202 July 10, 2019

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 Southlake is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, Alliance, Texas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045</u>: The Metropolitan Transportation Plan for North Central <u>Texas</u>.

Again, the City of Southlake fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact Rob Cohen, our Director of Public Works at 817-748-8098.

Sincerely,

~ m pm

Shawn McCaskill Southlake, Mayor Pro Tem



B. GLEN WHITLEY COUNTY JUDGE of TARRANT COUNTY July 11, 2019

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 want to express my support for the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.

I urge you to approve this request to further improve mobility in Tarrant County and provide economic and quality of life benefits to our outstanding community and its businesses. Thank you for your time and consideration. If you have any questions, please contact my office at any time.

Sincerely. B. Glen Whitley

Tarrant County Judge

County Administration Building, 100 East Weatherford Street Fort Worth, Texas 76196-0101 • (817) 884-1441 • FAX: (817) 884-2793 gwhitley@tarrantcounty.com



July 1, 2019

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 Town of Trophy Club, Texas is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing two- and three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County and Southern Denton County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.

The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan Transportation Plan for North Central Texas.</u>

Again, the Town of Trophy Club fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please contact me at the address or phone number below.

Sincerely,

ende

C. Nick Sanders, Mayor Town of Trophy Club 1 Trophy Wood Drive Trophy Club, TX 76262

682-237-2970 office 214-213-7739 cell

cc. Kyle Roy, Communications Coordinator, North Central Council of Governments - 616 Six Flags Drive – Arlington, TX 76011

Honorable Andy Eads, Chairman RTC of NCTCOG



July 11, 2019

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 Town of Westlake is pleased to support the United States Department of Transportation 2019 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the State Highway (SH) 114 Frontage Road Gap Project.

SH 114 is a vital transportation corridor sustaining the local, regional and State economy. Within North Texas, the corridor also serves as a principal route for local commuters and provides access to several key highways and other major transportation and economic facilities, such as Dallas Fort Worth (DFW) International Airport, AllianceTexas, and Texas Motor Speedway. This project involves a two-mile segment of SH 114 located in far northern Tarrant County where the current lack of continuous frontage roads creates substantial complications for traffic safety, incident management, congestion, access, and circulation. The system gap results in all traffic using nearby commercial destinations to exit at either Farm-to-Market Road (FM) 1938, Kirkwood/Solana Boulevard, or Dove Road; all low-capacity local streets are then used to complete these trips.

The proposed project would eliminate the existing gap by constructing twoand three-lane continuous frontage roads in each direction between FM 1938 and Dove Road. This additional capacity will preserve SH 114 corridor's long-term viability for increased passenger vehicle trips and freight movements through northern Tarrant County, an emerging employment and entertainment center adjoining the communities of Southlake, Trophy Club and Westlake. Other improvements will benefit safety, efficiency, and connectivity, including the reconfiguration of entrance/exit ramps, general purpose lane and frontage road auxiliary lanes between ramps, and the completion of Texas U-turns at the Kirkwood/Solana Boulevard and Dove Road intersections. Multimodal and context-sensitive features will include sidewalks and a wide outside lane to accommodate the shared use of vehicles and bicycles along the frontage roads.



The elements described above will enhance the area's accessibility and attractiveness for development compatible with the region's economic growth. The improvements for this section of SH 114 are included in <u>Mobility 2045: The Metropolitan Transportation Plan for North Central Texas</u>.

Again, Westlake fully supports the 2019 BUILD Discretionary Grant application submitted by NCTCOG for the SH 114 Frontage Road Gap Project. We greatly appreciate your time and consideration for this project, and if you have any questions, please call me at (817) 430-0941 or email at lwheat@westlake-tx.org.

Sincerely,

Laura Met

Laura Wheat Mayor, Town of Westlake