

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 1 – Project Narrative



North Central Texas Council of Governments



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1.0 Project Description

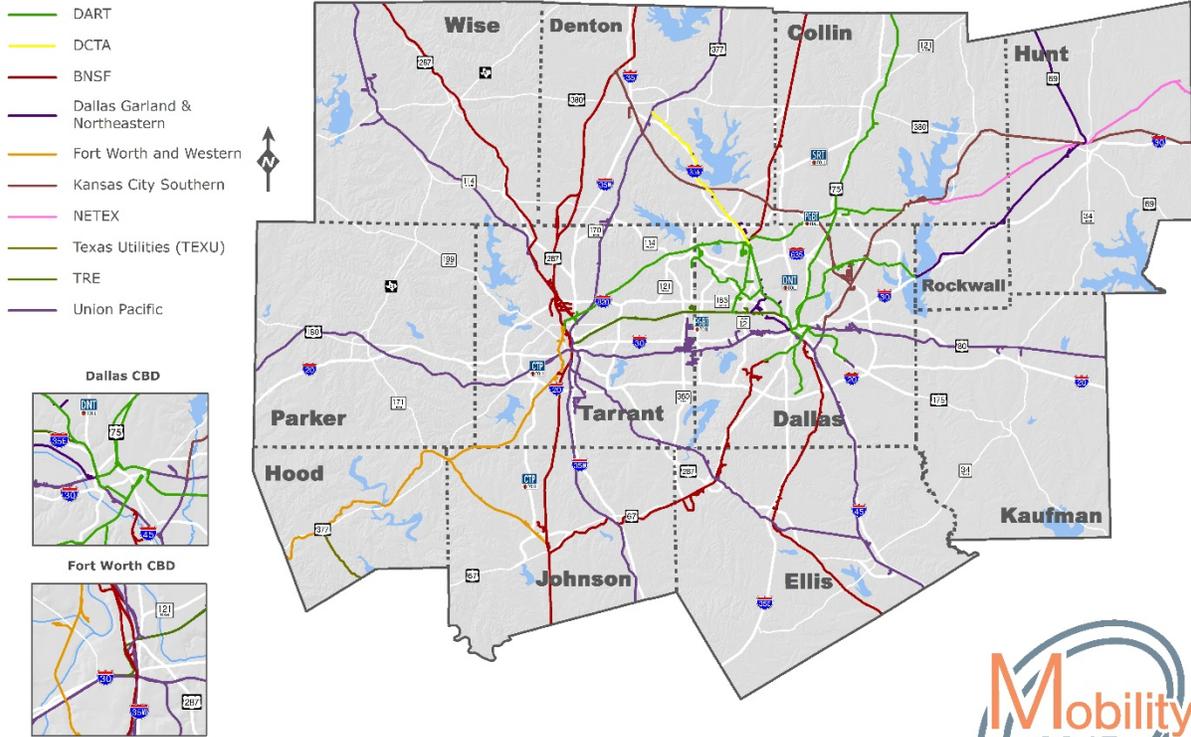
The North Central Texas Council of Governments (NCTCOG) and its partners, Dallas Area Rapid Transit (DART), Trinity Metro (TM) and Trinity Railway Express (TRE) are pleased to submit this application for a Better Utilizing Investments to Leverage Development (BUILD) discretionary grant for rail improvements on the commuter rail network owned by DART and operated by DART, TM and the Trinity Railway Express commuter service. *The North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (NT MOVES) is a long-range plan for increasing freight and passenger mobility in Dallas–Fort Worth (DFW) through strategic investment in rail capacity to improve multimodal transportation.*

NT MOVES is a program of road and railway improvements in the North Central Texas region intended to enhance freight and passenger mobility across all modes. See **Exhibit 1** for an overview of the North Central Texas regional rail system. *This NT MOVES application is a portion of the system of projects, validated by computer simulation modeling and input from the public and private sectors, that adds capacity to facilitate freight movement on the Fort Worth and Dallas freight routes, and commuter operations between Fort Worth and Dallas.*



Exhibit 1: Regional Rail Network

Regional Rail Network Owners



The following NT MOVES projects highlight three components in a commuter and freight rail corridor connecting Dallas and Fort Worth in North Central Texas. The project’s components include:

- **Project 1: Double Track Medical Market Center to Stemmons Freeway**
- **Project 2: Double Track Handley Ederville Road to Precinct Line Road**
- **Project 3: Implement Clear Path Technology**

Project 1: Double Track Medical Market Center to Stemmons Freeway (see Exhibits 2, 3, and 4). Double Track Medical Market Center to Stemmons Freeway (milepost 639.5) to the beginning of the existing double-tracked section west of Medical Market Center Station (approximately milepost 640.7), a distance of about 1.2 miles. Rehab the existing bridge over Inwood Road (milepost 640.41) and add adjacent bridge for new second track. Add new bridge at Knights Branch (milepost 640.32) for a new second track. Replace current Noble Branch Bridge and add adjacent bridge for second track (milepost 639.62). *This project has been*



pursued previously as part of a BUILD grant submitted by NCTCOG in 2019 and is being submitted for simultaneous consideration under the 2020 INFRA Grant Program. Preliminary engineering of this project is complete, and it is eligible for a NEPA Categorical Exclusion.

Exhibit 2: DT Medical Market Center to Stemmons Freeway, Inwood Bridge



Exhibit 3: Medical Market Center to Stemmons Freeway, Knights Branch Bridge





Exhibit 2: Medical Market Center to Stemmons Freeway, Noble Branch Bridge



Project 2: Double Track Handley Ederville Road to Precinct Line Road – Replace bridges at Walkers Creek (milepost 620.60) and Mesquite Creek (milepost 621.06), and construct 2.4 miles of new second track from east of Handley Ederville Road to east of Precinct Line Road (milepost 618.7 to milepost 621.1).

Project 3: Implement Clear Path™ Technology – Design, develop concept of operations, and implement hardware and software structure that will enable all agencies and users of the DFW regional rail system to exchange timely, accurate, and actionable information on train movements in the terminal complex. This system will increase capacity of the DFW rail network by facilitating inter-carrier operations and enhancing the flow of passenger and freight trains through the complex.

The **NT MOVES** projects are being submitted by the Regional Transportation Council (RTC) of the North Central Texas Council of Governments. The RTC is the independent policy body of 44 elected or appointed officials for the Metropolitan Planning Organization (MPO) of the DFW region. The RTC is coordinating with DART and the Fort Worth Transportation Authority (Trinity Metro) to complete the components of the NT MOVES projects to improve service in this rail corridor, consistent with the MPO's transit improvement recommendations in [Mobility 2045: The Metropolitan Transportation Plan for North Central Texas](#).

The TRE is a 34-mile **commuter rail corridor** in the Dallas–Fort Worth Metropolitan area, established by an interlocal agreement between DART and Trinity Metro. Please see **Exhibit 5**. Each transit authority owns approximately a 50% stake in the joint commuter rail system, which began operating in December 1996. The TRE currently provides passenger rail services to more



The multiple components of the NT MOVES Program have been combined into one application as the components are interdependent and provide a foundation for the benefits outlined in this grant application. Where possible, the benefits and costs for each component have been calculated separately. However, so that we may provide a benefit significant to the region, the components do not have independent utility sufficient to warrant a standalone application. All components impact the same corridor and improvements to headway and connectivity, described below, rely on all components of the project proceeding at the same time.

1.2 Project History and Context

The North Texas MOVES program is a unique, multimodal public-private funding partnership to improve rail and roadway transportation in the region. The program was born from the Texas Freight Mobility Plan and a Texas Department of Transportation (TxDOT) initiative to improve freight and passenger rail mobility in the DFW region. The computer simulation modeling completed by NCTCOG, and the computer simulation modeling performed under the TxDOT study, indicate the necessity of the rail capacity improvements identified in this application to ensure near-term fluidity of freight movement across the publicly-owned rail network. TxDOT's modeling indicates the public network investment must accompany BNSF's planned capacity improvements to protect the public benefits generated by the BNSF investment. It is also appropriate to consider the DFW complex as a central node in BNSF's Texas freight network, with fluidity of freight operations over the publicly-owned network as vital to its overall health and successful growth.

1.3 Transportation Challenges Addressed

The NT MOVES program creates a unique opportunity for the Dallas-Fort Worth region to implement an innovative and efficient means for addressing urban transportation needs while balancing costs and impacts to the community and to the environment. ***The projects are anticipated to significantly help relieve congestion; enhance mobility, connectivity, and reliability; improve regional air quality; and improve safety along the TRE corridors.***

1.3.1 Relieving Congestion

Rail congestion is an ongoing and critical issue impacting the movement of goods and passengers in the DFW region. NT MOVES projects submitted in this grant focus on the congestion entangling the TRE and DFW rail subdivisions. This subdivision is already experiencing high levels of congestion due to the unique capital investment and operating environment of a Class I railroad on a publicly-owned commuter route. Rail improvements on the public network are needed now to curb future congestion issues. The proposed projects for NT MOVES begin the process of reducing congestion by adding capacity, signaling, and technology that benefits all users of these corridors.

The components of this project will address needs for additional capacity on track infrastructure and bridges in this shared passenger and freight rail corridor. Some portions of the corridor are single-tracked while others have already been double-tracked. The project components strategically address the capacity constraints of a few locations and will have a



positive impact on passenger and freight travel in this corridor by reducing passenger and freight delay. This corridor is important as a central connection between the downtowns of Dallas and Fort Worth and between key north-south freight corridor connections in the region.

1.3.2 Enhancing Mobility, Connectivity, and Reliability

The TRE and DFW subdivisions are a vital component of the regional long-range transportation plan (*Mobility 2045*, www.nctcog.org/trans/plan/mtp/2045). This corridor provides opportunities for a more efficient use of existing rail network and is a more appropriate response to growing environmental and fiscal constraints in addressing transportation needs. Improving freight rail mobility and reliability are important freight planning initiatives for the North Central Texas region. It is what lead to the creation of the NT MOVES program and is a notable component of rail planning in DFW. As congestion grows and reliability of the roadways worsens, the role that rail plays in moving goods will become a greater economic driver in the future. Improvements to these corridors would 1) make higher speed movements available to all corridor users; 2) create opportunities to add new freight and passenger services; and 3) create revenue generation (from additional freight movement over the public network as well as passenger rail) to pay for ongoing corridor operation and maintenance needs.

1.3.3 Improving Air Quality

Ten counties in the Dallas-Fort Worth area are classified as nonattainment for ozone. While regional air quality has improved, the region still does not meet the federal standard. Failure to meet federal standards for air quality could result in additional emission control requirements that negatively affect local businesses.

The NT MOVES program will improve the operations of both freight and passenger rail movements that will reduce emissions from traditional vehicle trips due to the mode shift. As congestion along the corridors is reduced, locomotive idling time can decline by several hours every day.

The collaborative, targeted, and model-driven approach utilized to identify NT MOVES projects translates to a far-reaching impact on train movement efficiency throughout the region. This combined with the benefits of Clear Path™ implementation will reduce the amount of emissions that result from delay and congestion across the regional rail network.

1.3.4 Enhancing Safety

Safety is a significant driver of all projects, both highway and rail. NT MOVES is focused on rail operational improvements that will reduce accidents and increase safety by upgrading older rail infrastructure and inducing a mode shift through additional passenger service. The improvements will also lessen the interaction between passenger and freight rail trains on a single shared-use track.

In addition, the bridge replacements and rehabilitation included in this grant proposal will support an increase in the state of good repair and thus improved safety for rail assets in this



region. With the rehabilitation, performance restrictions (speed limits for freight trains) currently in place can be removed. The three bridges to be replaced are past their useful life and there are two segments of the corridor with speed restrictions that will be removed after the improvements funded by this grant. The bridges include Walkers Creek Bridge, which annual inspections, by Trinity Metro, indicate in 2018, it was downgraded to Priority 2, which means “protected by reduced train speeds or other measures to avoid unplanned bridge outage”. Mesquite Creek Bridge, which was constructed in 1988. The bridge inspection team in the annual inspection process indicate this bridge was “protected by reduced train speeds or other measures to avoid unplanned bridge outage”. There has not been any comprehensive repair, replacement, or rehabilitation work similar to proposed in this scope of work since they were built for either the Walker Creek or Mesquite Creek Bridges. The next bridge, Noble Branch Bridge, based on the results of a recent engineering analysis determine the capacity load rating, the Noble Branch Bridge was determined the truss could not adequately support the required freight railroad loadings of the heavier cars that are being used by the railroads at the authorized timetable speed. The bridge is due for a whole replacement. Inwood Bridge has had small scale of repairs on ballast retained, post piles and wingwall boards. The Inwood bridge is due for partial replacement and rehabilitation. The new bridges will have a useful life of fifty years.

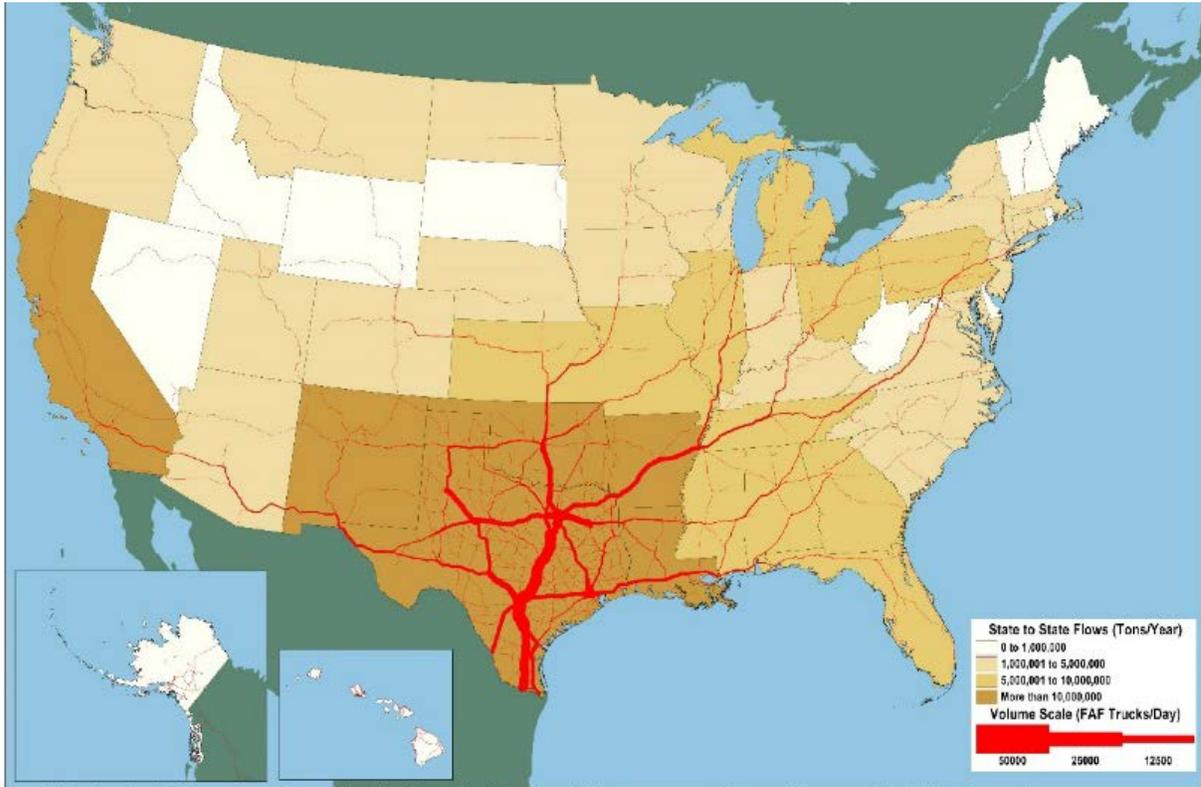
A major benefit is the reduction in dwell time occupying at-grade crossings, thanks to improvements in rail movement forecasting brought about by the Clear Path™ System. The proposed improvements mean fewer encounters between cars, pedestrians and trains and faster response times for emergency vehicles that must cross the tracks to reach their destination. This is critical in smaller cities because of the limited number of rail crossings. The planned improvements of NT MOVES will result in mode shifts for both passenger and freight rail, resulting in fewer crashes on the surrounding highways. Streamlined freight operations through rail expansion are anticipated throughout the region, not just in the project corridors. This means more freight rail movements and fewer trucks on the highways, lessening the number of truck-involved incidents in the areas served by freight rail, near project improvement locations. Improved passenger rail operations will make rail travel more appealing, consequently reducing the number of cars on the roadways and therefore fewer crashes in these areas.

1.3.5 Enhancing Economic Competitiveness (National and Regional Significance)

As the fourth largest metropolitan area in the US, the Dallas-Fort Worth region is responsible for one-third of the Gross Domestic Product of the State of Texas. The North Central Texas region is centrally located within the lower 48 states making it a logistical sweet spot for a primary distribution center or inland port for the southwestern US and the nation (see **Exhibit 6**). Trucks leaving the region can reach the majority of the nation within 72 hours. This area is situated at the crossroads of east/west rail lines from the ports of Los Angeles/Long Beach to the eastern US and the north/south rail lines from Mexico and the Port of Houston to the Upper Midwest.



Exhibit 4: National Freight System Impact



Note: Major flows include domestic and international freight moving by truck on highway segments with more than twenty five FAF trucks per day and between places typically more than fifty miles apart.
 Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 4.3, 20

Transporting freight is a key component of the regional economy. Over 750,000,000¹ tons of freight move to and from the region in a single year. Moving this much freight through the region requires a well-developed rail system.

Three Class 1 railroads (BNSF, UPRR and KCS) and two short lines, as well as the Trinity Railway Express and Amtrak, operate in the region. A key component to this system is freight and passenger movement on the corridors identified in the NT MOVES program. In addition to the importance of these corridors in the success of rail movements in the North Central Texas area, there are state and national impacts on the movement of goods across the country.

2.0 Project Location

The Dallas-Fort Worth metropolitan area is one of the fastest growing areas in the country. The population of the North Central Texas region has increased from 2.4 million in 1970 to over 7.2 million in 2017, an increase of 200 percent. A significant part of this growth has occurred in the project areas. **Exhibit 7** highlights both the past trends and future forecasts for population

¹ All tonnage numbers come from FHWA FAF4.



growth within the adjoining cities along project corridors, Dallas County, Tarrant County and the 12-county NCTCOG Metropolitan Planning Area (MPA).

Exhibit 5: Population Trends in the Project Area

Location	1980 Census ¹	1990 Census ¹	2000 Census ¹	2010 Census ¹	2020 Forecast	2040 Forecast	Growth 2010-2040
Dallas	904,078	1,006,877	1,188,580	1,197,816	1,141,059	1,420,781	19%
Fort Worth	385,164	447,619	534,697	741,206	960,824	1,499,216	102%
Tarrant County	860,880	1,170,103	1,446,219	1,809,034	2,020,278	3,094,649	71%
Dallas County	1,556,390	1,852,810	2,218,899	2,368,139	2,600,408	3,357,469	42%
NCTCOG MPA	3,030,053	4,013,418	5,197,317	6,417,724.00	7,612,993	10,183,523	59%

Notes:
 All historical data derived from the 2010 US Census:
<https://www.census.gov/programs-surveys/decennial-census/decade.2010.html>
 All future City data derived from the Texas Water Development Board, 2021 Regional Water Plan - Population Projections for 2020-2070 for Water User Groups by Region, County, and Basin in Texas:
http://www2.twdb.texas.gov/ReportServerExt/Pages/ReportViewer.aspx?%2fProjections%2f2022+Reports%2fpop_Region_se
 All Future County data derived from:
<https://data-nctcogis.opendata.arcgis.com/datasets/2040-nctcog-demographic-forecast-tsz>

While forecasted city populations are expected to slow as they approach build out within their jurisdictions, growth elsewhere in the region (particularly in Dallas County) and the strong economic draw of the area will continue to attract significant traffic surges over time. The projected high traffic growth for this corridor, attributed to forecasted population increases for both adjacent cities and the North Central Texas region at-large.

NT MOVES projects for this grant are located in the State of Texas in Dallas County, Tarrant County, and the Dallas-Fort Worth-Arlington Urbanized Area. Dallas and Fort Worth serve as two urban anchors to this North Central Texas region. The Trinity Railway Express commuter railroad connects these two anchors and serves as a connection point to the Dallas Fort Worth International Airport (DFW Airport).

On the west end of the corridor, the TRE has two stops in downtown Fort Worth. Over 45,000 employees work in downtown Fort Worth where there are more than 13 million square feet of office space, over 2,500 hotel rooms, and more than 7,500 downtown residents (www.dfw.org). Residents and employees in downtown Fort Worth may connect to DFW Airport using the TRE, and travelers coming to downtown Fort Worth may connect to additional destinations using Trinity Metro’s downtown circulator, *Molly the Trolley*, the bus network, bike share, and transportation network companies. Downtown Fort Worth is also a connection point for TEXRail commuter rail service, serving northern Fort Worth, several suburbs, and a connection to the north entrance of DFW Airport.

Existing stops in the TRE corridor include:

- Richland Hills Station, where facilities include a drop-off and pick-up area, bicycle racks, and free commuter parking;



- Bell Station, convenient to Bell Helicopter main plant employees and connecting bus service;
- CentrePort/DFW Airport Station, centrally located for many mid-cities commuters and the businesses in this airport development area including the American Airlines headquarters;
- West Irving Station, where facilities include a drop-off and pick-up area, bicycle racks, and free commuter parking, with connecting bus service;
- Downtown Irving/Heritage Crossing Station, connecting to the redeveloping downtown Irving area and bus service to employment throughout the City of Irving;
- Medical/Market Center Station, connecting to the medical district including Parkland Hospital, UT Southwestern Medical Center, and other major employers via shuttle service; and
- Victory Station, adjacent to American Airlines Center, the host for all Dallas Stars and Dallas Mavericks home games and many concerts/special events throughout the year, and direct connections to DART's extensive light rail network, as well as connecting bus service.

The TRE line terminates at Union Station in downtown Dallas. This is a current Amtrak station and will be a connection point to access future high speed rail service between Dallas and Houston. Union Station also conveniently connects customers to DART light rail, the Dallas streetcar, the downtown circulator (D-Link), numerous bus routes, bike share, and transportation network companies. Downtown Dallas has 135,000 employees and more than 9,000 residents in the city center. In the greater Dallas downtown area, there are over 45,000 residents, more than 420 restaurants and bars, and over 170 shops, according to www.downtowndallas.com. The TRE is clearly an important access point and economic driver for residents, employees, and visitors.

2.1 Map of the Project's Location and Connections to Regional Rail Network

Exhibit 8 illustrates the TRE rail line location in Dallas and Tarrant Counties, and the connections to other existing freight rail lines.



Exhibit 6: Regional Rail Network Connection



2.2 Geospatial Data Describing Project Locations

The following milepost-based descriptions in **Exhibit 9** provide detailed geospatial information for each project component location. The component numbering corresponds to the project map that is included following these descriptions for reference purposes.



Exhibit 7: NT MOVES Project Locations



1 – Replacement of the bridge over Noble Branch and Double Track Medical Market Center to Stemmons Freeway as described in the Project Description Section: double Track Medical Market Center to Stemmons Freeway (milepost 639.5) to the beginning of the existing double-tracked section west of Medical Market Center Station (approximately milepost 640.7), a distance of about 1.2 miles. Rehab the existing bridge over Inwood Road (milepost 640.41) and add adjacent bridge for new second track. Add new bridge at Knights Branch (milepost 640.32) for a new second track. Replace current Noble Branch Bridge and add adjacent bridge for second track (milepost 639.62).

2 – Double Track Handley Ederville Road to Precinct Line Road as described in the Project Description Section: replace bridges at Walkers Creek (milepost 620.60) and Mesquite Creek (milepost 621.06); and construct 2.4 miles of new second track from east of Handley Ederville Road to east of Precinct Line Road (milepost 618.7 to milepost 621.1).

3 – (Not Shown on map) Clear Path™ - Design and develop a concept of operations for this rail traffic management application and implement the hardware and software backbone structure of Clear Path™ Technology, enormously successful in the nation’s busiest freight rail hub, Chicago. Clear Path Technology will empower all agencies and users of the DFW metroplex rail system to exchange timely, accurate, and actionable information on train movements in the terminal complex.



3.0 Grant Funds, Sources and Uses of Project Funds

3.1 Project Budget

The total project budget for the NT MOVES projects is \$55 Million, which includes a \$25 Million BUILD grant request, \$2 Million other federal funding, and \$28 Million in non-federal funding. Each component of the grant has its own total cost, BUILD request, other federal funding, and non-federal funding as described in the following table. Additional detail is available in **Attachment 3**. Please see **Exhibit 10**.

Exhibit 8: NT MOVES Funding Table

BUILD Rail Projects Funding Table				
Potential Project	Cost	Non-Federal	Other Federal	Build Request
DT Medical Market Center to Stemmons Freeway	\$23,500,000	\$14,000,000*	\$2,000,000	\$7,500,000
Double Track Handley Ederville Road to Precinct Line Road	\$29,000,000	\$14,000,000	\$ -	\$15,000,000
Implement Clear Path™ Technology	\$2,500,000	\$ -	\$ -	\$2,500,000
Total	\$55,000,000	\$28,000,000	\$2,000,000	\$25,000,000
* Includes \$2 Million Dollar BNSF Contribution				

The table above illustrates each projects’ funding source distribution for non-federal, other federal, and BUILD funding requests. The source of other federal funds is combination of Service Transportation Block Grant funds and Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds programmed by the North Central Texas Council of Governments (project applicant).

The source of the non-federal match for DT Medical Market Center to Stemmons Freeway is \$12 million from DART local revenues (primarily sales tax) and a \$2 million contribution of private capital from BNSF. Documentation of this non-federal source for DT Medical Market Center to Stemmons Freeway is located in the attached excerpt from DART’s FY 2020 Business Plan (**Attachment 5**) and includes funds from items on page 226. The source of the non-federal match for the D Handley Ederville Road to Precinct Line Road from Trinity Metro. The non-



federal sources of funds in this grant proposal satisfy the statutory cost-sharing requirements of the BUILD grant dollars and the other federal dollars to be used. In terms of the BUILD grant budget, the BUILD federal request is \$25 million. *Twenty-eight million in non-federal funds have been committed to the project for a federal/local split of 49% federal and 51% non-federal, which exceeds the 20% local match requirement for urban BUILD projects.* This cost share split is documented in **Attachment 3**.

3.2 Project Cost

In summary, NT MOVES projects construction costs include funds for all five projects that will be needed to achieve the benefits described in this application. Taking all of those costs into account, the project construction costs have the following breakdown: \$25 million BUILD federal (45% of total), \$2 million other federal (4% of total), and \$28 million non-federal (51% of total). Details on the project costs and how each source of funds will be spent are included in **Attachment 3**. The details are provided as a total and separated per project components. **Exhibit 11** details the total project budget cost, by major construction activity.

Exhibit 9: Project Cost Summary by Major Construction Activity in Percent

Major Construction Activity	BUILD Request	Other Federal	Non-Federal	Total
Administrative and legal expenses	\$200,000	\$45,500	\$264,500	\$510,000
Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0
Relocation expenses and payments	\$0	\$0	\$0	\$0
Architectural and engineering fees	\$1,946,500	\$704,500	\$2,724,000	\$5,375,000
Other architectural and engineering fees	\$100,000	\$0	\$425,000	\$525,000
Project inspection fees	\$900,000	\$500,000	\$1,075,000	\$2,475,000
Site work	\$905,000	\$500,000	\$2,145,000	\$3,550,000
Demolition and removal	\$641,000	\$0	\$564,000	\$1,205,000
Construction	\$15,500,000	\$0	\$15,310,000	\$30,810,000
Equipment	\$1,425,000	\$0	\$300,000	\$1,725,000
Miscellaneous	\$677,500	\$250,000	\$1,322,500	\$2,250,000
Contingencies	\$2,705,000	\$0	\$3,870,000	\$6,575,000
Total in Dollars	\$25,000,000	\$2,000,000	\$28,000,000	\$55,000,000

Exhibit 12 illustrates the project cost summary by major construction activity percentage.



Exhibit 10: Project Cost Summary by Major Construction Activity in Percent

Major Construction Activity	BUILD Request	Other Federal	Non-Federal	Total
Administrative and legal expenses	39%	9%	52%	100%
Land, structures, rights-of-way, appraisals, etc.	0%	0%	0%	0%
Relocation expenses and payments	0%	0%	0%	0%
Architectural and engineering fees	36%	13%	51%	100%
Other architectural and engineering fees	19%	0%	81%	100%
Project inspection fees	36%	20%	43%	100%
Site work	25%	14%	60%	100%
Demolition and removal	53%	0%	47%	100%
Construction	50%	0%	50%	100%
Equipment	83%	0%	17%	100%
Miscellaneous	30%	11%	59%	100%
Contingencies	41%	0%	59%	100%
Total	45%	4%	51%	100%

The funding for the entire NT MOVES project and for each project component is grouped into three categories: non-federal, BUILD, and other federal. **Attachment 3** illustrates how each funding source will share in each major construction activity per project component, and the data is presented in dollars (“Detailed Cost Table – Dollars” pages 3 and 4) and in percentages (“Detailed Cost Table – Percent” pages 5 and 6). All costs provided in these tables are future costs and do not include costs already incurred on any of the projects. In addition, costs are shown in Year of Expenditure (YOE) dollars. These tables also include the anticipated YOE by major construction activity (to the right-hand side of the table) and in a summary of per-project cost by major construction activity, and by year given in 2018 real dollars.

The costs in 2018 real dollars were used as input to the benefit-cost analysis. The total capital construction cost for this grant is approximately \$43 million (discounted 2018 dollars). Details on the capital construction costs can be found in the “Costs Lifecycle” of **Attachment 2B**, and the methodology for calculating that cost is further defined in **Attachment 2A**, Benefit Cost Analysis Methodology.

In addition, the BCA analysis includes an Operating and Maintenance (O&M) cost estimate, which includes the costs as described below. Following the BCA guidance, the O&M costs include only the incremental cost of the “build” scenario, which are the costs required to provide the service levels used in the BCA benefits calculations. Overall O&M costs will increase in real dollars, accounting for the increased headways in the TRE corridor and the increased cost to maintain additional double-track funded by this grant. The total O&M cost for this grant



is approximately \$15M (discounted 2018 dollars). Details on the O&M cost can be found in the “Costs lifecycle” section of **Attachment 2B** and the methodology for calculating that cost is further defined in **Attachment 2A**.

4.0 Selection Criteria

The selection criteria section is separated into two sections, the primary and the secondary. The primary selection criteria include all required criteria (Safety, State of Good Repair, Economic Competitiveness, Environmental Sustainability and Quality of Life). These criteria are answered and articulated with information from the BCA. The secondary criteria include innovation and partnership.

4.1 Primary Selection Criteria

4.1.1 Safety

The NT MOVES projects contribute to transportation safety by improving freight and transit frequency, reducing travel time, and promoting transit-oriented development in the TRE corridor, thus encouraging a mode shift from travel in personal automobiles to travel by transit. Based on current crash rates and the projected number of trips diverted away from personal automobiles, this project is forecast to prevent \$34 million (discounted 2018 dollars) in losses from vehicle crashes. This value represents the savings on only one parallel freeway corridor and does not include the potential regional savings. Details on the quantifiable safety benefit can be found in the “Safety” tab of the attached Benefit-Cost Analysis (BCA) Excel file, **Attachment 2B**, and the methodology for calculating that benefit is further defined in the **Attachment 2A**.

The bridge replacement and construction elements of this project boost the potential for incidental safety benefits as well. The replacement of bridges over Inwood Road provides an opportunity to work with the relevant jurisdictions to provide expanded shoulders, widened lanes, or other safety features that might reduce the likelihood of crashes on those roads.

4.1.2 State of Good Repair

Maintaining transportation facilities in a state of good repair is vital for delivering on commitments to provide safe, efficient, and reliable transit services. NT MOVES projects will promote and maintain good repair on the rail networks, with one of its four elements devoted to rehabilitating or replacing three aging bridges along the corridor. The current state of disrepair on these bridges is imposing significant maintenance costs and, due to speed restrictions, is creating considerable delays on freight and passenger movements while consuming resources that could be utilized to enhance service. With replacement and rehabilitation, the annual maintenance costs will decrease considerably.

This project is anticipated to produce more than \$985,000 (discounted 2018 dollars) in maintenance savings over its lifetime, as the proposed bridges are past their useful life and command above normal maintenance costs at present. The BCA for this project accounts for



the additional operational and maintenance expense needed to maintain a state of good repair on these assets. The cost estimate includes a mid-life rehabilitation for the Trinity Lakes Station, to support a continuing state of good repair. The benefits associated with eliminating delays, due to the poor condition of several bridge assets, are described further in the **Economic Competitiveness section**. Details on the quantifiable maintenance savings benefit can be found in the “Maintenance Savings” section of **Attachment 2B** and the methodology for calculating that benefit is further defined in **Attachment 2A**.

4.1.3 Economic Competitiveness

NT MOVES projects will provide a significant boost to economic competitiveness in the TRE corridor. First, by replacing or upgrading bridges and double-tracking portions of the corridor, the project will increase reliability and decrease travel time of train movements, not only in the short term, but far beyond the life cycle of the project. Based on travel-time estimates prepared by NCTCOG, travel time for freight trains in this corridor is expected to decrease by 10.25 minutes per trip across the entirety of the corridor, while travel time for commuter trains is expected to decrease by 6 minutes per trip, leading to benefits worth \$7.6 million and \$17 million respectively (discounted 2018 dollars) through 2045.

Finally, this project promotes the region’s economic competitiveness by emphasizing long-lasting capital improvements. Between the various bridge improvements and Clear Path™ technology, the improvements included in this project are expected to have a residual value of nearly \$3.5 million (discounted 2018 dollars) in 2045, the end of the benefits analysis period for this grant application. These improvements will help maintain the economic competitiveness of the region for decades to come. Furthermore, incremental freight movement over the TRE, enabled by additional track capacity, results in revenue growth for DART and Trinity Metro that can be utilized to reinvest in their network, since freight carriers pay a car-mile fee to utilize the trackage, in accordance with TRE contracts.

Details on the quantifiable economic competitiveness benefits described above can be found in the following tabs of the attached BCA Excel file: **TRE_TravelTime**, **RR Freight_TravelTime**, **Truck Freight_TravelTime**, **CongestionDelay_Savings**, **DriverCost_Savings**, and **Residual_Value**. The methodology for calculating these benefits is further defined in **Attachment 2B**.

4.1.4 Environmental Sustainability

The NT MOVES projects improve air quality due to increased ridership on the TRE and modal diversion to transit trips over the 20-year analysis period. The quantifiable emissions benefits from the roadway emissions reduction related to TRE travel combined, total approximately \$138,000 (discounted 2018 dollars) through 2045. Details on the quantifiable emissions benefit can be found in the **Emissions** section of **Attachment 2B** and the methodology for calculating that benefit is further defined in **Attachment 2A**.



4.1.5 Quality of Life

The NT MOVES projects will boost the quality of life for residents in the region in a number of ways. Commuters on the TRE will benefit from the reduced travel times and increased service frequency allowed by the bridge rehabilitation/replacement and double-tracking portions of the project. TRE passengers will also experience a shorter total trip time from Texas & Pacific Station in Fort Worth to Dallas Union Station, following implementation of improvements. This was calculated based on the transit trip time savings generated by the travel model across all origin and destination pairs, represented by the three project segments that will allow improved travel times due to double tracking and bridge replacements. Existing riders are counted at the full travel time value of \$14.80 per hour while forecast new riders, attracted by reduced headways, are valued at \$7.40 per hour, as described in USDOT BCA 2020 Guidance. The quantifiable passenger travel-time savings from this grant total is \$15.6 million (discounted 2018 dollars). Details on the quantifiable passenger travel-time savings benefit can be found in the **TRE_TravelTime** tab of the attached BCA Excel file, and the methodology for calculating that benefit is further defined in **Attachment 2A**.

A more complete and efficient transit system, that would be completed through the NT MOVES projects, allows greater access to medical care and systems. As the TRE system is completed and service improves, so does the users' access to the entire region, including medical facilities and medical care systems. TRE users will enjoy a more consistent and quicker ride to and from stations along the corridor. Thus, this improves their access to medical care, and this improves their quality of life.

4.2 Secondary Selection Criteria

4.2.1 Innovation

The NT MOVES program is committed to innovation to ensure the rapid implementation of new rail capacity assets and the full utilization of those assets. This grant submittal *includes the implementation of Clear Path™ technology, developed by Railinc, to increase velocity and efficiency among freight and passenger users in the DFW complex*. This platform, a centerpiece of the Chicago terminal improvement program (CREATE), has proven its effectiveness in improving throughput, safety, and on-time performance in congested, urban rail corridors. Freight carriers in DFW will gain visibility and a clear view of all inbound, through and outbound rail traffic on the shared-use public infrastructure to understand the likely availability of train "slots" through the complex for their traffic. At the same time, DART controlled dispatchers of the shared-use assets will be able to see inbound freight demand far enough in advance to provide clearance to traverse the complex with the confidence those through freight movements will not impact passenger on-time performance.

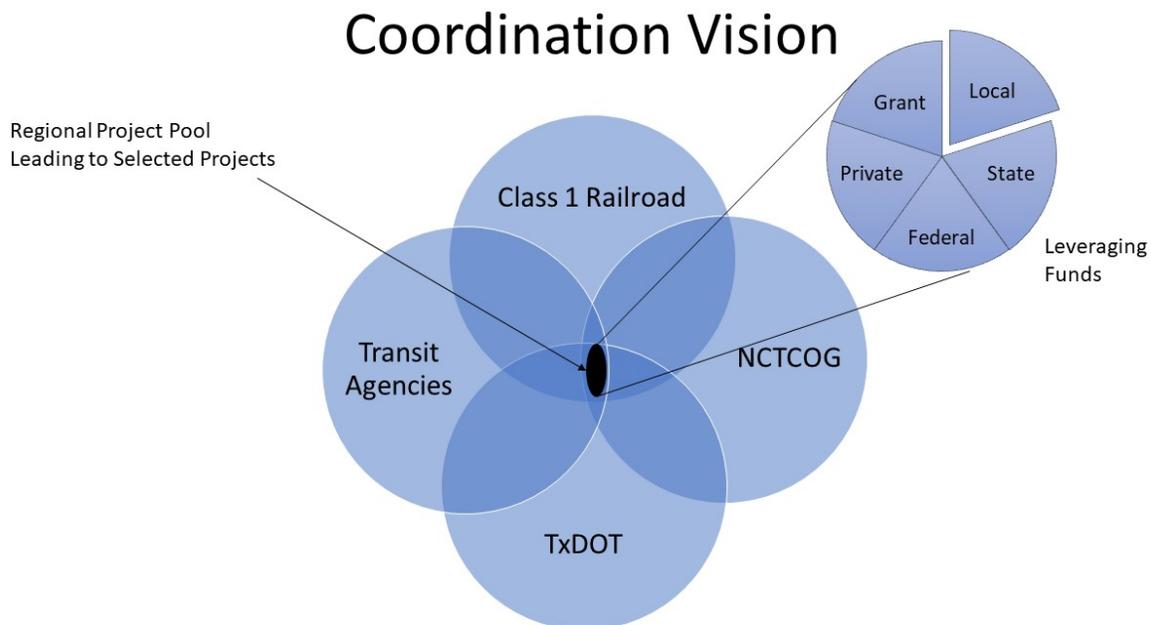
4.2.2 Partnership

The NT MOVES Program is an ambitious and innovative approach to resolving long-standing congestion issues with freight and passenger rail integration in the DFW region. TxDOT Rail

Division, NCTCOG and the private rail sector have come together to develop a regional rail study to help identify and resolve rail bottle necks and operational issues within the North Central Texas region. While working with local transit and private freight rail providers, it was determined that this study would be best developed and implemented in two phases. Phase 1 focused on freight and passenger rail integration congestion issues and Phase 2 will focus on rail/highway interaction issues. This method has resulted in a systemwide analysis of the rail network in the DFW region and systemized approach to resolving rail issues.

Through Rail Traffic Controller modeling, with input from UPRR, BNSF and local transit agencies, the proper projects are being identified and are being addressed as soon as possible. The full study will be completed later this year, while Phase 1 has resulted in the North Texas MOVES program. This approach allows for regional rail partners to come together quickly and work to identify funds to be used for the projects. DART and BNSF have identified opportunities to work together on design and track construction. TxDOT is also supporting the effort through assistance with engineering, design and environmental study support. This collaboration helps to reduce the soft cost, construction timelines and track outages during implementation. The regional partners are now working together on projects that are the highest priority for all. Please see **Exhibit 13**.

Exhibit 11: NT MOVES Coordination Vision





NCTCOG (Submitting Agency)

NCTCOG is a voluntary association of cities, counties, school districts, and special districts established in January 1966 to assist local governments in planning for common needs, cooperating for mutual benefit and coordinating for sound regional development. NCTCOG has 229 member governments, including all 16 counties, 167 cities, 19 independent school districts, and 27 special districts. Since 1974, NCTCOG has served as the Metropolitan Planning Organization (MPO) for the 12-county Dallas-Fort Worth MPA. NCTCOG's Transportation Department is responsible for the regional planning process for all transportation modes. The department provides technical support and staff assistance to the Regional Transportation Council (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.

Dallas Area Rapid Transit (Grant Recipient and Railway Implementation)

Dallas Area Rapid Transit (DART) operates in the City of Dallas and 12 other surrounding cities with an extensive network of DART Light Rail, Trinity Railway Express commuter rail, bus routes and paratransit services which move more than 220,000 passengers per day across a 700-square-mile service area.

Trinity Metro (Grant Recipient and Railway Implementation)

Trinity Metro (TM) was created in 1983 as a regional transportation authority of the State of Texas and is not an agency or department of any of its member cities. The agency annually provides nearly 10 million passenger trips on buses, vanpools and the Trinity Railway Express, which it jointly owns and operates with Dallas Area Rapid Transit. The governing body is an eleven-member board of directors, with eight appointed by the Fort Worth City Council and three appointed by the Tarrant County Commissioners Court.

Trinity Railway Express

Trinity Railway Express (TRE) began operations in December of 1996. It is jointly owned by DART and Trinity Metro to provide a commuter rail service between downtown Dallas and downtown Fort Worth. The TRE has 10 stations along the route, provides daily service and had over two million annual rides in 2018.

5.0 Project Readiness

5.1 Technical Feasibility

The technical feasibility of all project components is high. All components are in preliminary design and engineering stages and cost estimates are parametric estimates based on the anticipated scope of the project components. Design costs are included in the cost estimate at 10% for most components. The cost estimate also includes approximately 10% contingency for all project components, with slight deviations, for projects that are expected to be more complex based on known conditions, such as location or scope of work. The statement of work for each component follows.



- **Double Track Medical Market Center to Stemmons Freeway** – Double Track Medical Market Center to Stemmons Freeway (milepost 639.5) to the beginning of the existing double-tracked section west of Medical Market Center Station (approximately milepost 640.7), a distance of about 1.2 miles. Rehab the existing bridge over Inwood Road (milepost 640.41) and add adjacent bridge for new second track. Add new bridge at Knights Branch (milepost 640.32) for a new second track. Replace current Noble Branch Bridge and add adjacent bridge for second track (milepost 639.62).
- **Double Track Handley Ederville Road to Precinct Line Road** – Replace bridges at Walkers Creek (milepost 620.60) and Mesquite Creek (milepost 621.06) and construct 2.4 miles of new second track from east of Handley Ederville Road to east of Precinct Line Road (milepost 618.7 to milepost 621.1).
- **Implement Clear Path Technology (Not Shown on Map)** – Design, develop concept of operations, and implement hardware and software structure that will enable all agencies and users of the DFW regional rail system to exchange timely, accurate, and actionable information on train movements in the terminal complex. This system will increase capacity of the DFW rail network by facilitating inter-carrier operations and enhancing the flow of passenger and freight trains through the complex.

5.2 Project Schedule

Upon notification that the NT MOVES projects have been funded under the BUILD program, project components will be added to the region’s Transportation Improvement Program at the next quarterly modification (anticipated February 2021 State and federal approval of that modification). In addition, any necessary project partnership and implementation agreements with implementing agencies (Dallas Area Rapid Transit/Trinity Railway Express and Trinity Metro) will be completed on the same timeline as Transportation Improvement Program modifications, following standard partnership approaches used in the region. Project work will therefore be able to begin expeditiously.

All project components will receive environmental clearance in a timely manner and funds will be obligated no later than September 30, 2022. All of the project components will be completed in the existing right-of-way or do not have a right-of-way component. Additionally, all project components, including construction and delivery of technology components, will be completed by the first quarter of 2024. Please see **Attachment 4** for environmental, design, procurement, and construction scheduling activities for each project component.

5.3 Required Approvals

5.3.1 Environmental Permits and Reviews



The required Environmental Permits and Reviews for the project’s components are summarized in **Exhibit 14**, followed by additional information related to environmental clearance and other required approvals.

Exhibit 12: Project Component Environmental Clearance Status

Component Name	Environmental Clearance Status
Bridge Replacement and Double tracking for Obsession, Inwood, and Knights Branch Bridges Double track from Medical Market Center to Stemmons Freeway Bridge	Anticipated Fall 2020
Double Track Handley Ederville Road to Precinct Line Road	Anticipated Fall 2020
Clear Path™ Technology	Not Applicable

The proposed projects would follow the NEPA process due to the use of federal funds. The FRA would be the designated authority for the NEPA process for all projects within this grant and would be the final reviewer and approver of any NEPA documentation. This grant includes multiple projects in multiple locations and each location would be subject to FRA’s NEPA process, independently. Following FRA’s process, each individual project would be covered as a Categorical Exclusion since the projects do not individually or cumulatively have significant impact on the human environment. To facilitate NEPA categorical exclusions, FRA has developed a worksheet for these types of low impact projects. Most of these projects would fall under the “minor rail additions” category for NEPA action and all the listed projects would be categorically excluded in NEPA under FRA. No new right-of-way is anticipated for any project in this grant submittal. These worksheets would be completed as part of the project process and submitted to FRA for approval and NEPA clearance. It is expected these sheets will be completed prior to the grant submittal and approval would occur within a few months after the submittal to FRA. Please see **Attachment 7**, FRA worksheets for these projects. All the proposed projects would follow any mitigation requirements for potential impacts that may occur including waters of the US, threatened or endangered species and cultural resources.

5.3.2 State and Local Approvals and Federal Transportation Requirements

After the Request for Qualification documents, issue solicitation, evaluation, and award recommendations are completed, the individual projects will be brought to the DART/Trinity Metro Boards.

A revision to the State Transportation Improvement Program/Transportation Improvement Program (STIP/TIP) will be necessary to add the BUILD Grant funding to the project. The modification will be coordinated between NCTCOG and TxDOT during a quarterly STIP/TIP modification cycle. It is anticipated that the revision would occur in February 2021 (assuming grant award by fall 2020).



Several project components are already included in the region's Transportation Improvement Program (TIP). A letter from the Chairman of the Regional Transportation Council (RTC), included in **Attachment 6 - Letters of Support**, indicates that this project is consistent with the programs and policies in Mobility 2045: The Metropolitan Transportation Plan for North Central Texas (Mobility 2045). All federally-funded surface transportation projects must also be included in the TIP. If the project is successful in receiving funds, the RTC will support its inclusion in the 2019-2022 TIP for North Central Texas.

Mobility 2045 includes rail strategies that are to be implemented, to expand both freight and passenger rail services and programs and projects that support NT MOVES Projects. Specific references include:

- Freight System/Network Planning (FP2-120) – This includes implementing recommendations of the Regional Rail Study, which will be completed later this year and contain the projects in the NT MOVES Program.
- Regional Connections: Next Generation Transit Program (TR2-003) – This includes recommendations for improving services through public and private agencies, and implementing service as needed in communities throughout the region through 2045.

5.4 Assessment of Project Risk and Mitigation Strategies

All the projects are integral parts of longer-term plans to double track the entire TRE corridor and improve commuter rail. These plans have been vetted through community involvement. These projects will connect with other projects that have already been constructed in similar environs, will not require the acquisition of right-of-way, and will not require extensive environmental documentation or permitting.

As the Applicant, NCTCOG will coordinate with DART and Trinity Metro on the implementation of the project components and, as needed, provide technical support to our project partners to ensure timely delivery of the projects. However, it is expected that DART and Trinity Metro would implement the projects and be the recipient of the grant funds. Please see **Exhibit 15** for identified risks and opportunities.



Exhibit 13: Identified Risks and Opportunities

Risk/Opportunity	Chance or Occurrence	Likely Impact to Costs	Likely Impact to Schedule	Potential Mitigation Strategy
Unplanned Work (changed orders)	100%	\$2 million	Unknown	As design moves from 30% to final design this will be mitigated with a contingency
Increased Right-of-Way Costs	5%	\$2 million	None	DART/TRE owns the right-of-way where the work is to be done
Third Party Impacts (permits, utilities, etc.)	25%	\$5 million	6 months	Early coordination with all third parties
Bridge Rehabilitation	50%	\$10 million	None	As design moves from 30% to final design this will be mitigated with a contingency

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 2A – Benefit-Cost Analysis Methodology



North Central Texas Council of Governments



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I. METHODOLOGY – BENEFIT COST ANALYSIS

The following description provides the methodology for the detailed calculations of benefits and costs of the proposed *The North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (NT MOVES)* projects. Benefits are assumed after project completion from 2024 to 2045; a 21-year time span of benefits.

TABLE 1: EXECUTIVE SUMMARY PROJECT MATRIX

Current Status/Baseline and Problem to be Addressed	Change to Baseline or Alternatives	Types of Impacts
Commuter rail and freight rail service is limited by sharing sections of single track and outdated bridges on the TRE corridor. Underperforming stations and outdated engines idle in yards.	Double track current single-track sections of TRE corridor and rehab plus construct additional parallel bridges at old crossings and implement Clear Path™ System Technology. Improve TRE headways in 2025 and 2035.	Improve transit and freight travel time, reduce automobile congestion and travel cost for new riders, improve air quality, reduce automobile crashes, save on maintenance cost, and improve residual value.

Transit ridership, traffic volumes (vehicle miles traveled), and congestion forecasts for current conditions (2018) and for build and no-build conditions in 2045, were based on the North Central Texas Council of Governments (NCTCOG) DFX Regional Travel Demand Model. This version of the travel demand model was used for Mobility 2045: The Metropolitan Transportation Plan for North Central Texas and is based on demographic forecasts at the Traffic Survey Zone (TSZ) level. The no-build alternative scenario in this benefit cost analysis (BCA) excludes the improvements to headway and increases in transit-oriented development, attributable to this NT MOVES project. The build alternative includes the assumptions outlined in the narrative and this BCA document.

The Trinity Railway Express (TRE) service schedule of Monday through Saturday, with no Sunday service, is assumed to improve headways over the analysis period from 30 minutes peak/60 minutes off-peak at present, to 20 minutes peak/40 minutes off-peak in 2045. Headway improvements are made in two steps. In 2025, the headways improve to 20 minutes peak/60 minutes off-peak. In 2035, the headways improve to 20 minutes peak/40 minutes off-peak. The travel model only captures weekday travel. This analysis uses 52 weeks of service with five days per week, resulting in 260 weekdays per year used in benefit calculation. Saturday is calculated at 1 day per week resulting in 52 Saturdays. The Dallas Area Rapid Transit (DART) Reference Book published in March 2018 (www.dart.org/about/dartreferencebookmar18.pdf) contains Commuter Rail ridership information that allows the comparison of average Saturday ridership to average weekday ridership. Using the most recent data (Fiscal Year 2017) provided in the Reference Book, average Saturday ridership is 44% of average weekday ridership. Weekday ridership provided by the model is used to approximate Saturday ridership on the TRE by reducing the model-predicted weekday ridership by 44%.



II. BENEFITS

A. Mobility

Passenger Travel Time Savings

Once improvements are implemented, TRE passengers will benefit from a shorter total trip time traveling from Texas & Pacific Station in Fort Worth to Dallas Union Station. This was calculated based on the transit trip time savings provided by the travel model across all origin and destination pairs, represented here by the three project segments. Existing Riders are counted at the Personal travel time value of \$15.20 per hour while forecasted New Riders, attracted by reduced headways, are valued at \$7.60 per hour as described in USDOT BCA 2020 Guidance. Weekday and Saturday riders are initially separate, based on separate annual counts.

$$TRE \text{ Passenger Travel Time Savings} = (T * (R1+R3) * S) + (T * (R2+R4) * (S/2))$$

- T = Transit Trip Travel Time Savings (hours)
- R1 = Weekday Riders Base (no-build)
- R2 = New Weekday Riders (build)
- R3 = Saturday Riders Base (no-build)
- R4 = New Saturday Riders (build)
- S = Value of Travel time savings

Freight Travel Time Savings

Improved speed and capacity in the TRE corridor will translate to a reduction in delay for freight moved throughout the corridor resulting in a travel time savings of 6.5 minutes. The estimate was based on the replacement of the Inwood and Obsession Bridges, with current speed restrictions for freight trains. The travel time savings is converted to hours and multiplied by the number of freight trains in the corridor and their associated number of engineers. NCTCOG staff estimates 2 to 3 engineers on board each train for an average of 2.5 per train with per hour travel time value of \$45.70, as provided in 2020 BCA Guidance. Rail traffic on the TRE is bidirectional with an average daily train count of 63, of which approximately 60 are passenger trains and 3 are freight, as counted per DART staff.

For this analysis, only an incremental 1 Aggregate Train was used as the basis for the Freight Travel Time Savings. Freight train trips were held constant over time due to insufficient data on freight modal diversion and/or freight traffic growth. The benefit of this added train was only calculated for the portion of the trip on the TRE right-of-way, **not** the full journey of the train.



$$\text{Freight travel time savings} = T * N * X * D * S$$

- T = Freight Travel Time Savings (hours)
- N = Number of freight trips in corridor
- X = Number of engineers per train
- D = Days per Year
- S = Value of Travel time savings

Freight Travel Time Savings - Truck

The estimate was prepared based on the estimated reduced number of trucks on the road with the availability of increased rail capacity. No change in the current speed for trucks was assumed. The travel time savings of .33 hours per truck trip is multiplied by the number of freight trucks taken off the corridor and the associated number of truck drivers. This benefit was only calculated for the portion of freight movement on the TRE right-of-way. USDOT estimates 1 truck driver in each truck with per hour travel time value of \$28.60 as provided in 2020 BCA Guidance.

$$\text{Freight travel time savings - Truck} = T * N * X * S$$

- T = Freight Travel Time Savings- Truck (hours)
- N = Number of freight truck trips saved in corridor
- X = Number of drivers per truck
- S = Value of Travel time savings per truck driver

Congestion Delay Savings

Reduced vehicle hours of congestion delay per year, for all regional roadway users as a result of the NT MOVES improvements, was calculated by the DFX Travel Demand Model. The reduced hours of congestion delay were multiplied by the per hour value of general travel time (\$15.20) and the average vehicle occupancy of 1.41, provided by the 2020 BCA guidance to produce an annual benefit value.

$$\text{Congestion Delay Savings} = (((V1 - V2) * D) * P) * S$$

- V1 = Vehicle Hours/day of Congestion Delay no-build
- V2 = Vehicle Hours/day of Congestion Delay build
- D = Days per year
- P = Persons per vehicle
- S = Value of Travel time savings

Driver Cost Savings

A reduced personal auto use cost is calculated using the reduction in vehicle miles traveled by each transit passenger who uses the TRE instead of driving. New transit commuters are calculated based on modeled ridership increase. Drivers save \$0.41 for every mile not driven based on BCA Guidance. NCTCOG regional travel model assumes an average trip length of 13.28 miles and a constant commuter rail fare of \$2.10. This calculation is seen below.



$$\text{Vehicle Operating Cost Savings} = NT * [(L * S) - F]$$

- R = Annual New Transit Riders
- L = Length of average trip in miles
- S = Savings per mile
- F = Fare for commuter rail

Operating Cost Savings

Operating Cost Savings are calculated based on the savings achieved from converting truck miles to rail miles to transport Aggregate Products from Union Station in Dallas to Irving, TX. The Operating Costs of Build Truck miles plus Build Rail miles are subtracted from No-Build Operating Costs.

$$\text{Operating Cost Savings} = (TVMT1 * T\$) - [(RVMT * R\$) + (TVMT2 * T\$)]$$

- TVMT1 = No-Build Truck Miles
- RVMT = Build Rail Miles
- TVMT2 = Build Truck Miles
- T\$ = Operating cost per mile for Trucks
- R\$ = Operating cost per mile for Rail

B. Air Quality

Regional Roadway Emissions Reductions

Air quality benefits for this project are derived from increased ridership on the TRE and modal diversion to transit trips, as indicated by our travel model over the 20-year analysis period. These result in less delay for roadway users and a reduction in vehicle emissions. Reduction estimates were developed by taking the difference between the No-Build and the Build scenarios total emissions.

The methodology used to calculate the total emissions for each scenario is consistent with our 2018 Transportation Conformity document, Chapter 7, which discusses the methodology used to develop regional emissions (www.nctcog.org/nctcg/media/Transportation/DocsMaps/Quality/Air/Chapter-7_Emission-Factors_MOVES-Model.pdf). Annual estimates were calculated for Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOCs).



$$\text{Air Quality Benefit} = [(R * D) / 2000] * V$$

- R = Reduction in pounds per day
- D = Days per year
- V = Value of reduction per short ton

C. Safety

Reduction in Automobile Crashes

The reduction in vehicle miles traveled (VMT), as a result of increased transit ridership, will reduce the likelihood of automobile crashes. The number of crashes for a parallel Highway corridor to the TRE (Hwy 121/Hwy 183/ IH-35) between the two end line stations, divided by the 2018 annual VMT in the corridor, was used to determine the existing annual crash rate per VMT. The daily VMT was multiplied by 365 days to establish an annual value.

The number of crashes was obtained from the Texas Department of Transportation's (TxDOT) Crash Records Information System (CRIS) by KABCO Accident Classification System categories. This data is only composed of TxDOT "Reportable Crashes." A "Reportable Motor Vehicle Traffic Crash" is defined by TxDOT as any crash involving a motor vehicle in transport that occurs or originates on a traffic way, results in injury to or death of any person, or damage to the property of any one person to the apparent extent of \$1,000. A traffic way is defined as any land way open to the public as a matter of right or custom for moving persons or property from one place to another.

$$\text{Annual Crash Reduction} = C1 - ((C1 / VMT1) * VMT2)$$

- C1 = Crash Incidents no-build highway corridor
- VMT1 = Truck Vehicle Miles Traveled in no-build scenario
- VMT2 = Truck Vehicle Miles Traveled in build scenario

D. Maintenance Savings

Bridge Maintenance Cost Savings

The estimated maintenance cost for new bridges on the TRE alignment is lower than the existing annual maintenance cost for older structures. Maintenance costs included in this calculation are not included in the cost section as this provides the net benefit. Other maintenance costs, such as rail and train maintenance costs, are included in the cost section. While the regional mobility plan assumes maintenance costs, in this BCA they are held constant to keep values in 2018 dollars.



$$\text{Annual Bridge Maintenance Cost Savings} = (M1 - M2)$$

M1 = Annual cost of bridge maintenance, no-build (dollars)

M2 = Annual cost of bridge maintenance, build (dollars)

E. Residual Value

Remaining Service Life of New Bridges

New bridges in this project will have a remaining service life beyond the 20-year benefit calculation in this BCA. The current value of each new bridge will be divided by the years of its life span and then discounted annually. Value remaining after the end of the 20-year calculation will be added to the benefit calculation. All project elements with life spans beyond the project are included in the attached excel tables. All project components not included are expected to last as long as the project analysis period.

$$\text{Residual Value} = [(U - Y) / U] * C$$

U = Useful Service Life of Project

Y = Years of Analysis Period

C = Cost of Project Component

III. COSTS

A. Capital Construction

Proposed construction costs were obtained in coordination with the Trinity Railway Express, Dallas Area Rapid Transit, and Trinity Metro. Construction costs were estimated based on the proposed construction schedule and activities for each quarter. Detail for future capital construction cost estimates per project component are located in the “Cost-Lifecycle” tab of the Budget Excel file. The total construction cost estimates used in this BCA are given in 2018 real dollars. The following table summarizes each component’s capital construction cost in 2018 dollars, including costs incurred prior to the grant application up through 2045. Additional information on the annual costs from 2018-2045, in 2018 dollars, are found on the “Costs Lifecycle” tab of the BCA Tables Excel file. Costs incurred prior to the grant application include design and engineering costs for the improvements. Please see **Table 2** for the construction cost per project component.



TABLE 2: CONSTRUCTION COST PER PROJECT COMPONENT

Component ID	Component Name	Construction Cost (2018 dollars)
1	Double track from Medical Market Center to Stemmons Freeway Bridge and Bridge Replacement and Double tracking for Obsession, Inwood, and Knights Branch Bridges	\$23,500,000
2	Bridge replacement at Walkers Creek and Mesquite Creek Double tracking from east of Handley Ederville Road to east of Precinct Line Road	\$29,000,000
3	Clear Path™ Technology	\$2,500,000
Total	All Projects	\$55,000,000

B. Operations and Maintenance

The Operations and Maintenance cost estimate excludes the maintenance savings attributable to bridge replacements. The methodology for the bridge maintenance cost savings is described above in section II.D. Maintenance Savings.

The remaining operating and maintenance (O&M) costs for this project used in the BCA include the costs as described below. Following the BCA guidance, the O&M costs include only the incremental cost of the “build” scenario, which are the costs required to provide the service levels used in the BCA benefits calculations. Overall O&M costs will increase in real dollars, accounting for the increased headways in the corridor and the increased cost to maintain additional double-track funded by this grant. Double track will be completed by 2024 and headways will be improved in two steps. The incremental cost of increased O&M is estimated at 2% of baseline capital improvements (\$2018) for O&M costs per year from 2020 - 2045. Clear Path’s Life-cycle costs are estimated at \$800,000 per year plus a major upgrade at years 10, 15 and 20. This estimate is based on a detailed O&M schedule by asset type. Details for the O&M cost estimate are located in in the **Cost_Lifecycle** tab of the BCA Tables Excel file.

IV. SUMMARY OF BENEFITS AND COST

A. Result Ratio

Results of the benefit cost comparison are summarized in Table 3. The benefits are assumed to incur after project completion from 2025 for a 20-year life span of the projects to 2045. Costs are calculated from 2018 to 2045. All monetized estimates were discounted at a 7% rate to 2018. The Excel table includes a details tab noting the calculations of each benefit and the model outputs of ridership, VMT, vehicle hours of congestion delay, and the cost summary table.



TABLE 3: NT MOVES PROJECTS PROJECT BENEFIT/COST SUMMARY

Costs and Benefits	Nominal Total Value	Discounted to 2018 (7%)
Costs		
Construction Cost	\$55,000,000	\$43,418,689
Operation and Maintenance Cost	\$42,060,000	\$15,268,956
Total Cost	\$97,060,000	\$58,687,645
Benefits		
Passenger Travel Time Savings	\$49,840,416	\$17,151,495
Freight Travel Time Savings - Rail + Truck	\$21,443,637	\$7,687,068
Congestion Delay Savings	\$303,261,988	\$91,601,661
Operating Cost Savings	\$150,068,944	\$50,928,387
Driver Cost Savings	\$52,605,550	\$13,788,869
Emissions Reductions Benefit	\$934,477	\$157,025
Crash Reduction Benefit	\$119,135,339	\$34,014,210
Maint/Preservation Savings	\$2,748,607	\$985,314
Less Operation Cost and Maintenance Savings	-\$42,060,000	-\$15,268,956
Value of Remaining Service Life	\$22,050,000	\$3,548,515
Total Benefit	\$680,028,957	\$204,593,589
Net Present Value (NPV)		\$145,905,944
Benefit-Cost Ratio (BCR)	7.01	3.49

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 3 – Budget



North Central Texas Council of Governments

**North Texas MOVES Projects
BUILD Grant Budget Summary**

Component ID	Component Name	Component Description	Total Cost	BUILD Federal	Other Federal	Federal Comments	Non-Federal	Non-Federal Source
1	Bridge Replacement and Double tracking for Noble Branch, Inwood, and Knights Branch Bridges. Double track from Medical Market Center to Stemmons Freeway Bridge	Double Track Medical Market Center to Stemmons Freeway (milepost 639.5) to the beginning of the existing double-tracked section west of Medical Market Center Station (approximately milepost 640.7), a distance of about 1.2 miles. Rehab the existing bridge over Inwood Road (milepost 640.41) and add adjacent bridge for new second track. Add new bridge at Knights Branch (milepost 640.32) for a new second track. Replace current Noble Branch Bridge and add adjacent bridge for second track (milepost 639.62).	\$23,500,000	\$7,500,000	\$2,000,000	STBG/CMAQ programmed by NCTCOG	\$14,000,000	Private sector source or DART
2	Double Track Handley Ederville Road to Precinct Line Road	Replace bridges at Walkers Creek (milepost 620.60) and Mesquite Creek (milepost 621.06); and construct 2.4 miles of new second track from east of Handley Ederville Road to east of Precinct Line Road (milepost 618.7 to milepost 621.1).	\$29,000,000	\$15,000,000	\$0		\$14,000,000	Trinity Metro
3	ClearPath Technology Implementation	This project will deliver a browser-based suite of applications that provides networked visibility to gateway operations including inbound train lineup, train and locomotive consist, crew status, train location and infrastructure status across all gateway railroads. Railroad-provided data will be collected in standard formats, including some in near real-time, to facilitate gateway status visualization on a consolidated and accurate geospatially enabled map. Functionality will also include train route forecasting, performance metrics and historical trend analysis.	\$2,500,000	\$2,500,000	\$0		\$0	

Total Cost	BUILD Federal	Other Federal	Non-Federal
\$55,000,000	\$25,000,000	\$2,000,000	\$28,000,000

BUILD Request	\$25,000,000	47%
Non BUILD Match	\$28,000,000	53%

**North Texas MOVES Projects
BUILD Grant Cost Summary (Future Costs Only)**

Component ID	Component Name	Component Description	Total Cost	BUILD Federal	Other Federal	Federal Comments	Non-Federal	Non-Federal Source
1	Bridge Replacement and Double tracking for Obsession, Inwood, and Knights Branch Bridges. Double track from Medical Market Center to Stemmons Freeway Bridge	Double Track Medical Market Center to Stemmons Freeway (milepost 639.5) to the beginning of the existing double-tracked section west of Medical Market Center Station (approximately milepost 640.7), a distance of about 1.2 miles. Rehab the existing bridge over Inwood Road (milepost 640.41) and add adjacent bridge for new second track. Add new bridge at Knights Branch (milepost 640.32) for a new second track. Replace current Noble Branch Bridge and add adjacent bridge for second track (milepost 639.62).	\$23,500,000	\$7,500,000	\$2,000,000	STBG/CMAQ programmed by NCTCOG	\$14,000,000	Private sector source or DART
2	Double track TRE near new Trinity Lakes Station and New Station at Trinity Lakes	Replace bridges at Walkers Creek (milepost 620.60) and Mesquite Creek (milepost 621.06); and construct 2.4 miles of new second track from east of Handley Ederville Road to east of Precinct Line Road (milepost 618.7 to milepost 621.1).	\$29,000,000	\$15,000,000	\$0		\$14,000,000	Trinity Metro
3	ClearPath Technology Implementation	This project will deliver a browser-based suite of applications that provides networked visibility to gateway operations including inbound train lineup, train and locomotive consist, crew status, train location and infrastructure status across all gateway railroads. Railroad-provided data will be collected in standard formats, including some in near real-time, to facilitate gateway status visualization on a consolidated and accurate geospatially enabled map. Functionality will also include train route forecasting, performance metrics and historical trend	\$2,500,000	\$2,500,000	\$0		\$0	

Total Cost	BUILD Federal	Other Federal	Non-Federal
\$55,000,000	\$25,000,000	\$2,000,000	\$28,000,000

Total Federal	\$27,000,000	49%
Total Local - Excluding Previously Expended Funds	\$28,000,000	51%

North Texas MOVES Projects
 BUILD Grant Detailed Costs (Future Costs Only)

	BUILD Request	Other Federal	Non-Federal	Total
All	Total for All Projects in Year of Expenditure Dollars			
Administrative and legal expenses	\$200,000	\$45,500	\$264,500	\$510,000
Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0
Relocation expenses and payments	\$0	\$0	\$0	\$0
Architectural and engineering fees	\$1,946,500	\$704,500	\$2,724,000	\$5,375,000
Other architectural and engineering fees	\$100,000	\$0	\$425,000	\$525,000
Project inspection fees	\$900,000	\$500,000	\$1,075,000	\$2,475,000
Site work	\$905,000	\$500,000	\$2,145,000	\$3,550,000
Demolition and removal	\$641,000	\$0	\$564,000	\$1,205,000
Construction	\$15,500,000	\$0	\$15,310,000	\$30,810,000
Equipment	\$1,425,000	\$0	\$300,000	\$1,725,000
Miscellaneous	\$677,500	\$250,000	\$1,322,500	\$2,250,000
Contingencies	\$2,705,000	\$0	\$3,870,000	\$6,575,000
Total in Dollars	\$25,000,000	\$2,000,000	\$28,000,000	\$55,000,000

Costs in 2018 Real Dollars (reduced based on 3% inflation assumption)	
\$470,509	
\$0	
\$0	
\$4,945,908	
\$487,656	
\$2,134,957	
\$3,062,261	
\$608,139	
\$26,576,977	
\$1,519,701	
\$1,913,289	
\$5,612,610	
\$47,332,006	

Year	Years from 2017	Inflation Adjustment
2019	2	1.0609
2020	3	1.092727
2021	4	1.12550881
2022	5	1.15927407
2023	6	1.1940523
2024	7	1.22987387

	BUILD Request	Other Federal	Local	Total	Anticipated Year of Expenditure per Line Item
Double track from Medical Market Center to Stemmons Freeway bridge in Year of Expenditure Dollars					
Administrative and legal expenses	\$25,000	\$45,500	\$164,500	\$235,000	2020
Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0	
Relocation expenses and payments	\$0	\$0	\$0	\$0	
Architectural and engineering fees	\$121,500	\$704,500	\$1,524,000	\$2,350,000	2020/2021
Other architectural and engineering fees	\$0	\$0	\$0	\$0	
Project inspection fees	\$200,000	\$500,000	\$475,000	\$1,175,000	2022
Site work	\$205,000	\$500,000	\$1,645,000	\$2,350,000	2022
Demolition and removal	\$141,000	\$584,000	\$705,000	\$1,430,000	
Construction	\$6,000,000	\$7,160,000	\$13,160,000	\$26,320,000	2022/2023
Equipment	\$0	\$0	\$0	\$0	
Miscellaneous	\$102,500	\$250,000	\$822,500	\$1,175,000	2023
Contingencies	\$705,000	\$1,645,000	\$2,350,000	\$4,700,000	2023
Total in Dollars	\$7,500,000	\$2,000,000	\$14,000,000	\$23,500,000	

Costs in 2018 Real Dollars	
\$221,510.04	
\$0	
\$0	
\$2,151,522	
\$0	
\$1,013,565.32	
\$2,027,130.64	
\$608,139.19	
\$11,351,931.60	
\$0	
\$984,044.00	
\$1,968,088.00	
\$20,325,931	

Year	Cost
2019	\$1,107,550
2020	
2021	\$1,043,972.28
2022	\$1,235,075
2023	\$16,939,333
2024	
	\$20,325,931

Double Track Handley Ederville Road to Precinct Line Road in Year of Expenditure Dollars					Anticipated Year of Expenditure per Line Item
	BUILD Request	Other Federal	Local	Total	
Administrative and legal expenses	\$100,000	\$0	\$0	\$100,000	2021
Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0	
Relocation expenses and payments	\$0	\$0	\$0	\$0	
Architectural and engineering fees	\$700,000	\$0	\$1,200,000	\$1,900,000	2020/2021
Other architectural and engineering fees	\$100,000	\$0	\$425,000	\$525,000	2020/2021
Project inspection fees	\$700,000	\$0	\$600,000	\$1,300,000	2022
Site work	\$700,000	\$0	\$500,000	\$1,200,000	2022
Demolition and removal	\$500,000	\$0	\$0	\$500,000	
Construction	\$9,500,000	\$0	\$8,150,000	\$17,650,000	2022/2023
Equipment	\$200,000	\$0	\$300,000	\$500,000	2022/2023
Miscellaneous	\$500,000	\$0	\$500,000	\$1,000,000	2022/2023
Contingencies	\$2,000,000	\$0	\$2,225,000	\$4,225,000	2022/2023
Total in Dollars	\$15,000,000	\$0	\$14,000,000	\$29,000,000	

Costs in 2018 Real Dollars
\$180,363
\$1,764,851
\$487,656
\$1,121,391
\$1,035,131
\$15,225,045
\$431,304
\$862,609
\$3,644,522
\$24,752,872

Year	Cost
2019	\$1,142,898
2020	\$1,201,123
2021	\$88,849
2022	\$22,320,002
2023	
2024	
	\$24,752,872

ClearPath Technology					Anticipated Year of Expenditure per Line Item
	BUILD Request	Other Federal	Local	Total	
Administrative and legal expenses	\$75,000	\$0	\$0	\$75,000	2021
Land, structures, rights-of-way, appraisals, etc.	\$0	\$0	\$0	\$0	
Relocation expenses and payments	\$0	\$0	\$0	\$0	
Architectural and engineering fees	\$1,125,000	\$0	\$0	\$1,125,000	2021
Other architectural and engineering fees	\$0	\$0	\$0	\$0	
Project inspection fees	\$0	\$0	\$0	\$0	
Site work	\$0	\$0	\$0	\$0	
Demolition and removal	\$0	\$0	\$0	\$0	
Construction	\$0	\$0	\$0	\$0	
Equipment	\$1,225,000	\$0	\$0	\$1,225,000	2022
Miscellaneous	\$75,000	\$0	\$0	\$75,000	2022
Contingencies	\$0	\$0	\$0	\$0	
Total in Dollars	\$2,500,000	\$0	\$0	\$2,500,000	

Costs in 2018 Real Dollars
\$68,635.62
\$0
\$0
\$1,029,534.37
\$0
\$0
\$0
\$0
\$0
\$1,088,396.63
\$66,636.53
\$0
\$2,253,203

Year	Cost
2019	\$2,253,203
2020	
2021	
2022	
2023	
2024	
	\$2,253,203

North Texas MOVES Projects

BUILD Grant Detailed Costs (Future Costs Only) By Percent Share in Major Construction Activity

All	Total for All Projects in Year of Expenditure Dollars	BUILD Request	Other Federal	Non-Federal	Total
	Administrative and legal expenses	39%	9%	52%	100%
	Land, structures, rights-of-way, appraisals, etc.	0%	0%	0%	0%
	Relocation expenses and payments	0%	0%	0%	0%
	Architectural and engineering fees	36%	13%	51%	100%
	Other architectural and engineering fees	19%	0%	81%	100%
	Project inspection fees	36%	20%	43%	100%
	Site work	25%	14%	60%	100%
	Demolition and removal	53%	0%	47%	100%
	Construction	50%	0%	50%	100%
	Equipment	83%	0%	17%	100%
	Miscellaneous	30%	11%	59%	100%
	Contingencies	41%	0%	59%	100%
	Total in Dollars	45%	4%	51%	100%

Double track from Medical Market Center to Stemmons Freeway bridge in Year of Expenditure Dollars					
	BUILD Request	Other Federal	Local	Total	
	Administrative and legal expenses	11%	19%	70%	100%
	Land, structures, rights-of-way, appraisals, etc.	0%	0%	0%	0%
	Relocation expenses and payments	0%	0%	0%	0%
	Architectural and engineering fees	5%	30%	65%	100%
	Other architectural and engineering fees	0%	0%	0%	0%
	Project inspection fees	17%	43%	40%	100%
	Site work	9%	21%	70%	100%
	Demolition and removal	0%	0%	0%	0%
	Construction	46%	0%	54%	100%
	Equipment	0%	0%	0%	0%
	Miscellaneous	9%	21%	70%	100%
	Contingencies	30%	0%	70%	100%
	Total in Dollars	32%	9%	60%	100%

Double track and New Station at Trinity Lakes in Year of Expenditure

Dollars	BUILD Request	Other Federal	Local	Total
Administrative and legal expenses	50%	0%	50%	100%
Land, structures, rights-of-way, appraisals, etc.	0%	0%	0%	0%
Relocation expenses and payments	0%	0%	0%	0%
Architectural and engineering fees	37%	0%	63%	100%
Other architectural and engineering fees	19%	0%	81%	100%
Project inspection fees	54%	0%	46%	100%
Site work	58%	0%	42%	100%
Demolition and removal	0%	0%	0%	0%
Construction	54%	0%	46%	100%
Equipment	40%	0%	60%	100%
Miscellaneous	50%	0%	50%	100%
Contingencies	47%	0%	53%	100%
Total in Dollars	52%	0%	48%	100%

ClearPath Technology

	BUILD Request	Other Federal	Local	Total
Administrative and legal expenses	100%	0%	0%	100%
Land, structures, rights-of-way, appraisals, etc.	0%	0%	0%	0%
Relocation expenses and payments	0%	0%	0%	0%
Architectural and engineering fees	100%	0%	0%	100%
Other architectural and engineering fees	0%	0%	0%	0%
Project inspection fees	0%	0%	0%	0%
Site work	0%	0%	0%	0%
Demolition and removal	0%	0%	0%	0%
Construction	0%	0%	0%	0%
Equipment	100%	0%	0%	100%
Miscellaneous	100%	0%	0%	100%
Contingencies	0%	0%	0%	0%
Total in Dollars	100%	0%	0%	100%

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 4 – Schedule



North Central Texas Council of Governments

NT MOVES Project Schedule

		2020				2021				2022				2023			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Project 1	Double Track Medical Market Center to Stemmons Freeway			E	E												
						D	D	D	D								
										P	P	P					
												C	C	C	C	C	
Project 2	Double Track Handley-Ederville Rd. to Precinct Line Rd.			E	E												
						D	D	D									
										P	P	P					
												C	C	C	C	C	
Project 3	Implement Clear Path Technology																
			D	D	D												
						P	P										
												C	C				

Legend	E Environmental	P Procurement
	D Design	C Construction

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 5 – DART FY2020 Business Plan



North Central Texas Council of Governments

FY 2020 BUSINESS PLAN

DALLAS AREA RAPID TRANSIT

Go



Including FY 2020 Annual Budget and
Twenty-Year Financial Plan





Commuter Rail & Railroad Management Department

The purpose of this section is to highlight the Commuter Rail (Trinity Railway Express or more simply, TRE) business plan, including key indicators and strategic initiatives. TRE passenger service is provided jointly with Trinity Metro pursuant to an Interlocal Agreement as restated by the two transit authorities in September 2003. The Vice President of Commuter Rail & Railroad Management directs the overall activities of the department.

Commuter Rail – TRE Scorecard – Key Performance Indicators

Exhibit 79 highlights Commuter Rail – TRE’s Key Performance Indicators (KPIs) presented in scorecard format. The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Second Quarter represents the period ending March 31, 2019. The numbers in the columns for fiscal years 2019 and 2020 are the target values for those years.

To more accurately depict the true operating costs of TRE, the data shown includes combined revenues and expenses for both DART and Trinity Metro. By including all revenues and expenses, the information presented will provide the reader with data comparable to all other modes. Ridership is collected and reported for the TRE system; therefore, KPIs associated with ridership are calculated as TRE totals.

Exhibit 79
Commuter Rail – TRE Scorecard (System wide)
Key Performance Indicators

Indicators	FY17A	FY18A	FY19A YTD Q2	FY19B YTD Q2	FY20B
Customer Quality					
Ridership (M)	2.1	2.0	1.1	1.0	2.0
Revenue Car Miles (M)	1.6	1.6	1.9	1.7	1.7
Passengers Per Revenue Car Mile	1.29	1.25	0.55	0.60	1.21
Revenue Train Hours (000)	25.6	25.6	26.1	25.5	25.5
Farebox Recovery Ratio	21.4%	14.9%	23.2%	28.0%	17.7%
On Time Performance	98.5%	97.4%	94.5%	97.0%	97.0%
Complaints per 100K Passengers	4.4	3.7	5.6	5.5	5.1
Accidents Per 100K Train Miles - TRE ^[1]	0.66	0.09	0.44	1.00	0.24

[1] The measure has been restated from Accidents/Car Mile to Accidents/Train Mile and therefore will not tie to previous reports

Indicators	FY17A	FY18A	FY19A YTD Q2	FY19B YTD Q2	FY20B
Financial Efficiency					
Expenses - Fully Allocated (M) ^[2]	\$30.11	\$31.31	\$16.19	\$18.09	\$34.10
Revenues (M)	\$7.81	\$7.39	\$6.51	\$7.98	\$13.18
Net Subsidy (M)	\$22.31	\$23.92	\$9.69	\$10.12	\$20.92
Subsidy Per Passenger	\$10.63	\$11.73	\$9.19	\$9.90	\$10.21
Cost Per Revenue Car Mile	\$18.47	\$19.20	\$8.41	\$10.58	\$20.06

[2] Fully allocated expenses and revenues for FY17B and FY18B include overhead from Trinity Metro.

TRE Fuel Hedge – A fuel hedge was put in place starting in May 2015 and will run through the end of FY 2020. Exhibit 80 shows the fuel hedge costs in place from FY 2015 – FY 2020. With the completion of the transition to CNG-fueled buses, DART’s exposure to diesel price fluctuations are limited to TRE and a few non-revenue vehicles.

Exhibit 80
Fuel Hedge Costs by Fiscal Year

Fiscal Year	Fuel Hedge Cost per Gallon
2015	\$1.7625
2016	\$2.0650
2017	\$2.1590
2018	\$1.6590
2019	\$1.7645
2020	\$1.8465

Exhibit 81 is an overview of the uses of the funds and allocated operating positions for the Commuter Rail mode of service. For allocation purposes, each department identifies the percentage of time and money spent on each mode of service to determine the expenses and positions allocated to the mode of service.

Exhibit 81
Commuter Rail Overview

Overview	FY17A	FY18A	FY19B	FY20B
Allocated Operating Expenses (M)	\$30.1	\$31.3	\$31.6	\$34.1
Capital Expenditures (M)*	\$15.3	\$44.9	\$141.9	\$317.3

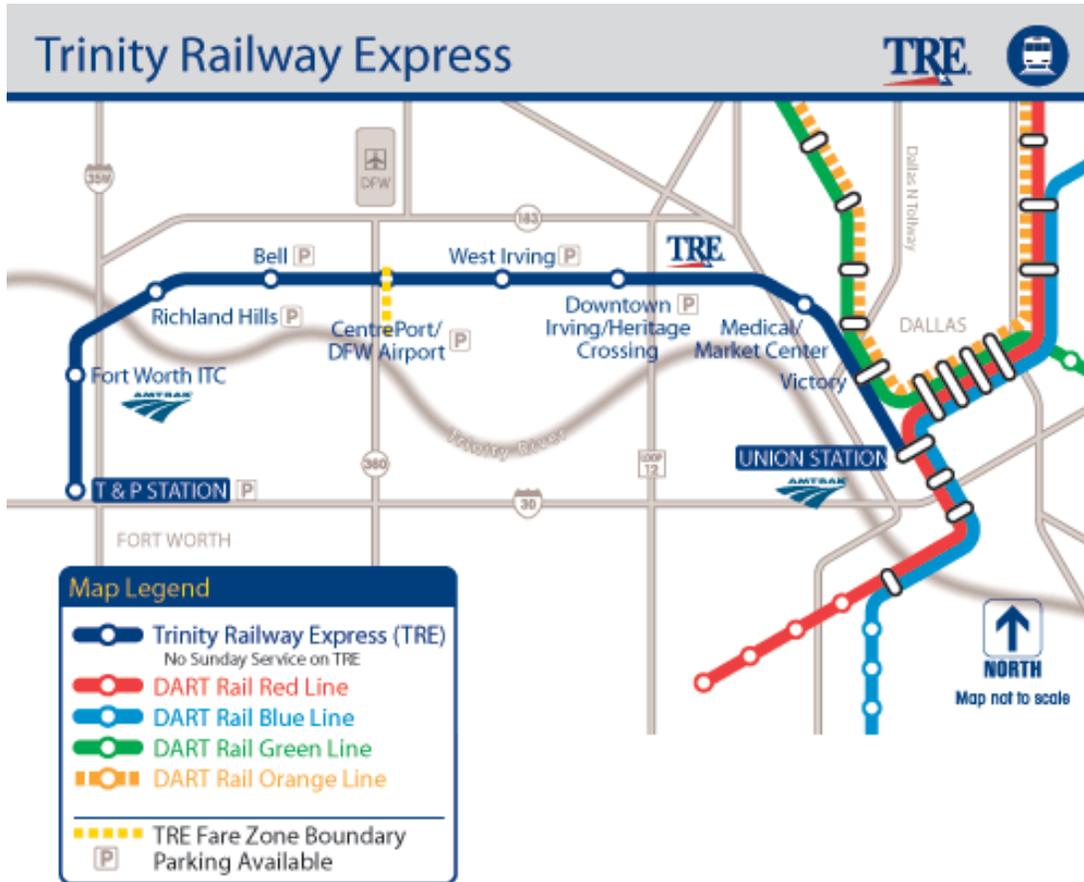
* These amounts are the actual or budgeted capital for this mode only and do NOT include an allocation of Agency-wide capital.

** Allocated positions are based on budgeted position counts.



Exhibit 82 is a map that includes the TRE Corridor.

Exhibit 82
Trinity Railway Express Corridor



TRE Ridership and Subsidy Per Passenger

Exhibit 84 graphically depicts actual and budgeted TRE ridership and Exhibit 84 depicts TRE subsidy per passenger. In both exhibits, The numbers in the columns for fiscal years 2017 and 2018 indicate actual values. Fiscal Year 2019 Second Quarter represents the period ending March 31, 2019. The numbers in the columns for fiscal years 2019 and 2020 are the budget values for those years.

Exhibit 83
TRE Ridership
(in Millions)

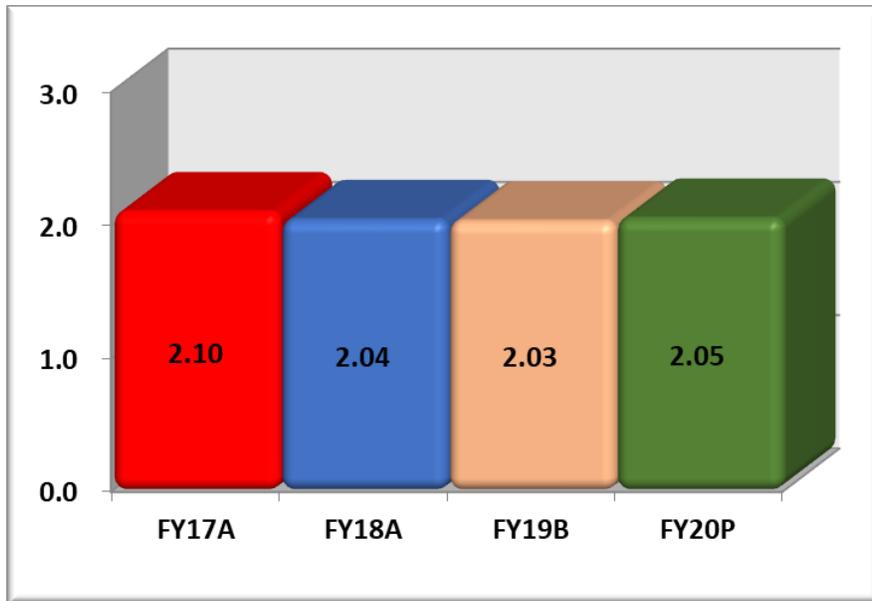
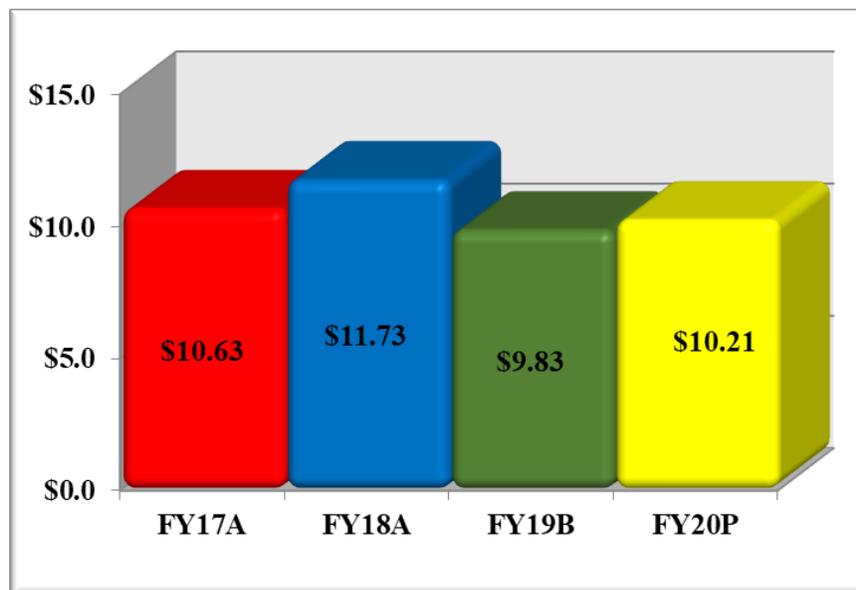


Exhibit 84
TRE Subsidy Per Passenger



Subsidy Per Passenger – This metric increased starting in FY 2016 because of higher first-year contract costs. While those first year costs do not apply in FY 2017 or FY 2018, the majority of those savings have been reinvested into a revised schedule. While these costs will go down in the subsequent fiscal years, the overall subsidy per passenger will continue to increase in FY 2018 and beyond due to additional operating costs associated with operating contract escalation as well as



with the federal mandate for Positive Train Control (PTC). Please see page 225 for more information on this program.

Revenue Contributions from the Mid-Cities – In FY 2002, the cities of Arlington, Bedford, Colleyville, Euless, Grand Prairie, Grapevine, Haltom City, Hurst, and North Richland Hills (the Mid-Cities) agreed through an Interlocal Agreement (ILA) with the North Central Texas Council of Governments (NCTCOG) to contribute to DART and Trinity Metro for TRE services that their citizens utilize. None of the Mid-Cities currently belong to either DART or Trinity Metro. Several additional ILAs have been negotiated over the past few years. NCTCOG, DART, and Trinity Metro secured amendments to extend the 2007 Mid-Cities ILA to the period of October 2011 through September 2016 at the same 2007 funding level. This funding was not allocated by the Mid-Cities / NCTCOG in FY 2017, however NCTCOG has proposed to reinstate the program in FY 2019.

Weekday and Weekend Service Expansion – Beginning in October 2016, weekday and Saturday service was expanded to include earlier morning and late-night service with standardized 60-minute headways. Sunday service is not currently offered because maintenance and construction activities within the right-of-way are performed on Sundays. The majority of the double-tracking projects remaining to be done are in Tarrant County, and the project cost is not included in DART's Twenty-Year Financial Plan, as they will be incurred by Trinity Metro.

Ensure Service Quality – There are a number of railroads using the TRE (Amtrak, BNSF, DGNO, FW&W, and UP) which presents a challenge to maintaining on-time passenger service. The TRE has consistently maintained this metric between 97% and 98%. Weekday service improvements implemented in October 2016 added an additional 130 trains per week. Enhancements included 30-minute peak and 60-minute off peak headways, and a longer service day. There is a commitment to our freight customers utilizing the corridor to move as much freight traffic as can be done in a safe manner without disrupting TRE service. There are currently 2025 freight train movements per day along the corridor despite this being a predominantly single-track railroad. This is accomplished through careful coordination with the freight railroads and the TRE Operations and Maintenance contractor. On-time performance was targeted at 97% for FY 2019. Amtrak's intercity passenger rail service was moved from the Union Pacific corridor to the TRE corridor in December of 2016. Amtrak also utilizes two TRE stations; The Intermodal Transportation Center (ITC) in Fort Worth and Union Station in Dallas.

Constant monitoring of the track and signal systems is essential to ensure safe and continued operation of the railroad; but eventually, more sidings, double tracking, and bridge refurbishments and replacements will be required to support both current service levels and future service expansion. One such project is the Valley View double tracking project, which includes adding an additional 1.4 miles of track and the replacement of the Bear Creek Bridge. This project construction began in the fourth quarter of FY 2017 and was completed in the fourth quarter of FY 2018. This project will be partially funded from a grant provided to TxDOT via the Federal Railroad Administration, and grants from the CMAQ and STIP programs.

The major capital projects proposed over the next few years to maintain and improve service quality and safety of the TRE are listed under Departmental Emphasis on FY 2018 Strategic

Priorities section below. TRE has developed a 20-year capital program that identify both right-of-way and vehicle maintenance projects required to maintain a state of good repair for the service. Reserves are planned within DART's Twenty-Year Financial Plan to provide for both types of expenditures. These reserves will ensure the timely replacement and overhaul of assets, as well as allow for a certain amount of unanticipated future capital requirements.

Departmental Overview

The Commuter Rail Division is responsible for the operations and management of the TRE commuter rail service between Dallas and Fort Worth, the Madill Subdivision, and future commuter rail service on the Silver Line corridor.

- Contract operation – DART, on behalf of DART and Trinity Metro, has contracted with Herzog Transit Services, Inc. (Herzog) to maintain the commuter rail rolling stock and railroad right-of-way, provide dispatching services for the corridor, and operate the commuter rail service on the corridor. During 2014, the operation and maintenance contract was resolicited. Herzog was chosen to be awarded a ten-year contract commencing at the beginning of FY 2016. The contract expires on September 30, 2025.
- Service – TRE service operates Monday through Saturday between downtown Dallas and downtown Fort Worth. This line covers a distance of 34.5 miles and includes a total of 10 stations, 5 of which are maintained by DART and 5 by Trinity Metro.
- Operating Fleet – The operating fleet consists of 9 locomotives, 17 bi-level coaches, and 8 bi-level cab cars (all jointly owned by DART and FW Trinity Metro). In FY 2017, DART negotiated the sale of 12 of the 13 rail diesel cars (RDCs). The remaining RDC will be held by the Agency with its future to be determined.
- Sharing of Costs – The DART/ Trinity Metro ILA specifies that revenues generated on or by the TRE Corridor are joint revenues and are to be applied against TRE operating costs. After the application of these revenues, the remaining net costs are allocated to DART and Trinity Metro based on revenue seat miles operated in each county. DART's share for FY 2015 was 46.25% , FY 2016 was 46.11%, and FY 2017 was 43.22%, as a result of the new train schedule and is projected to remain at this level in FY 2019. Except for employees that are 100% dedicated to TRE, DART, and Trinity Metro separately absorb their own staff, administrative, and station maintenance costs.
- Madill Subdivision – The department is also responsible for the maintenance and operation of the Madill Subdivision, which is achieved through the contract with Herzog. This is currently a freight-only corridor. The City of Dallas deeded the northern section of the Madill Subdivision to DART in exchange for easements related to Hike and Bike Trails. The Madill Subdivision located between Irving and Carrollton is now owned in its entirety by DART.

Departmental Emphasis on Strategic Priorities – Strategic Priorities that will be the subject of special emphasis during the year are:

- Strategic Priority 1: Continually improve service and safety experiences and perceptions
- Strategic Priority 2: Optimize and preserve (state of good repair) the existing transit system

- Strategic Priority 3: Optimize DART's influence in regional transportation planning.

Major initiatives that are underway or proposed that are targeted at achieving the Board's Goals and at improving the overall safety, efficiency, and effectiveness of the Commuter Rail & Railroad Management services and operations are as follows:

- Operations and Maintenance Contract – The current Operations and Maintenance (O&M) contract expires on September 30, 2025. The contract provides for a ten-year base contract with an additional ten-year option for providing long-term commuter rail services to the region, including but not limited, to:
 - General management
 - Train operations, including crews
 - Maintenance services for all TRE-owned rolling stock and equipment
 - Train dispatching services
 - Timely and accurate communications to customers, to DART and Trinity Metro, and to tenant railroads
 - Provision of 5 Star Customer Service to all commuter rail customers
 - Maintenance of rights-of-way
 - Maintenance of infrastructure, centralized traffic control (CTC), and voice radio system
 - Maintenance and operations of PTC, including configuration management
 - Provision of Federal Railroad Administration (FRA) required Roadway Worker Protection services for the maintenance of the corridors, capital projects, and other contractors on the corridors

The TRE operations and maintenance (O&M) contract provides O&M services for the TRE DFW Subdivision and the right-of-way maintenance of the Madill Subdivision. The Trinity Metro has separately procured an O&M contract with Herzog to provide O&M services on the TEXRail Corridor estimated to be in revenue service in December 2018. The agencies are exploring opportunities of cost for contractor positions that may be shared by the two services.

- Positive Train Control (PTC) – The Rail Safety Improvement Act of 2008 defines PTC and mandated its implementation by December 2015. PTC is defined as a system designed to prevent train-to-train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position. PTC is required for intercity passenger rail or commuter rail passenger main lines and will further enhance safety on the TRE. An implementation plan for TRE was submitted and approved by the FRA. PTC implementation is planned as a regional project with several components of the PTC system to be shared by the TRE and the TEXRail service when it begins revenue operation. Federal legislation was passed in December 2015 that extended the implementation deadline to December 2018 with an available two-year extension

available to agencies showing positive progress in the proposed PTC implementation. See page 54 for additional information.

- *State of Good Repair and Capital Investment Plan* – In 2016, The TRE performed a State of Good Repair (SGR) review that included the infrastructure, facilities and rolling stock that addressed the capital maintenance and capital improvement needs over the next twenty years through FY 2036. The Condition Assessment and Capital Investment Plan (CIP) are maintained by the Commuter Rail & Railroad Management Department and serve as the basis for budget planning each fiscal year and help to ensure that all operational and business assets are in working order and fulfill their intended use. The SGR analysis serves as the basis for a long-range capital asset replacement program and a 20-year financial forecast for both the TRE and Madill Subdivision. This enables DART and Trinity Metro to plan for adequate funding to maintain TRE service quality.
 - *Rail and Tie Replacement Program* – As a result of continued operations along the TRE and Madill lines, the rail and track ties have experienced wear and will need to be replaced over time in order to maintain a state of good repair and the desired operating speeds and track class. The TRE is replacing 115-pound rail with new 136-pound rail and also replacing wood ties with longer-lasting, concrete ties to extend the life of the assets. This helps reduce capital and operating costs in the long term.
 - *Bridge Management Plan and Bridge Replacement Program* – In FY 2012, an FRA-mandated Bridge Management Plan and Capacity Rating Study was completed. As a result of the Capacity Rating Study, the department is performing preliminary engineering for bridge enhancements and replacements in accordance with the SGR for the TRE and Madill. On the TRE, two bridges in Dallas County (Noble Branch and Inwood) have been designed and will undergo construction beginning FY 2020; the I35/Stemmons freeway has been repaired; the Medical Market Street bridge will be replaced in partnership with Dallas County, TxDOT, and the City of Dallas; and construction on the Trinity River Bridge in Tarrant County began in December 2018.
- *Next Train Customer Communication System* – To improve customer communications, the effort to expand the Next Train system to the TRE vehicles and train stations was completed in August 2016. This project included automatic voice announcements of stops, variable message signs on-board vehicles, and the platforms at TRE stations. An added operational benefit will come from the installation of automatic passenger counters onboard the TRE vehicles.
- In FY 2013, Variable Message Boards (VMB) were installed at the ten TRE stations allowing for ad hoc messages to be sent to inform passengers of delays and other TRE-related information.



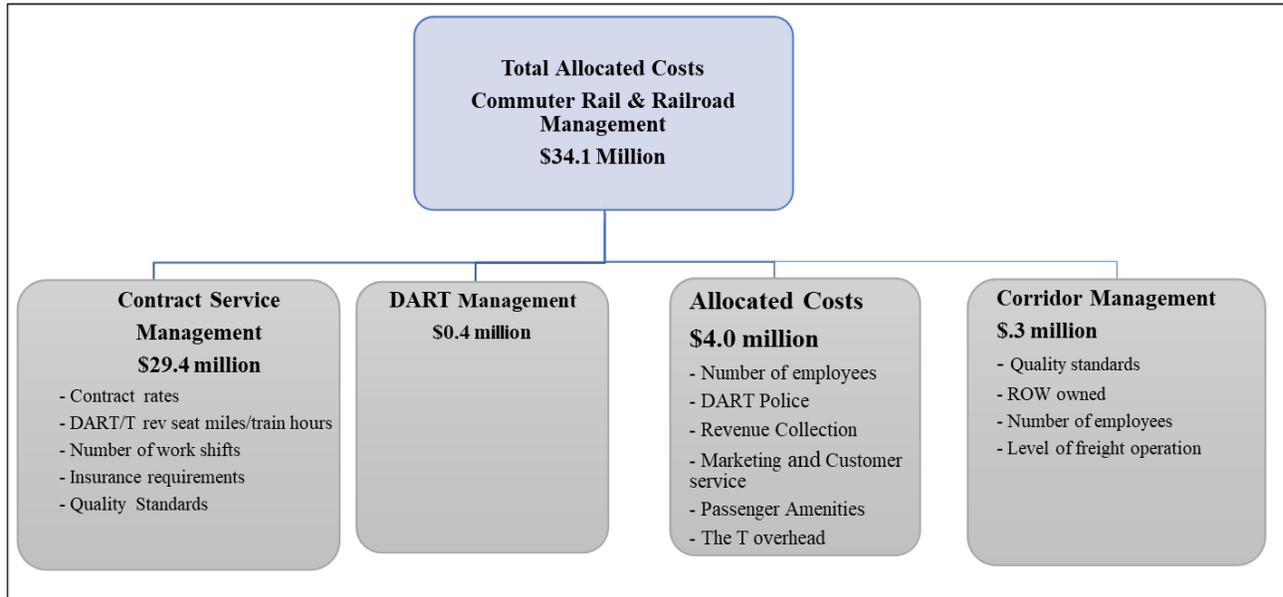


- Valley View Double-Tracking – This project upgraded the existing TRE line by double-tracking 1.5 miles between the Dallas/Tarrant County Line and the existing siding west of West Irving Station. A new bridge will also be constructed over Bear Creek. This project was tied to the TEXRail and Amtrak agreements with DART that were executed in December 2015. The funding and construction agreements between the FRA, TxDOT, and DART were executed in June 2016 to allow for the project activities to commence once the FRA issues Notice to Proceed which occurred on September 8, 2017. This project was complete in the FY 2018.
- Vehicle Maintenance – TRE has issued a solicitation for an overhaul program that will extend over the next three years and will include up to six coaches, two cab cars, and two locomotives. The solicitation for the locomotive overhauls was awarded in May 2018 with the Notice to Proceed given in July 2018.
- Vehicle Expansion – In FY 2014, TRE performed a study to determine spare fleet ratio requirements. The results of the study indicated the TRE fleet should consist of two additional locomotives and an additional cab car to protect service levels and allow for maintenance, inspection, overhaul activities, and a ready set. In line with the study and in anticipation of removing the RDCs from active status from the fleet, TRE began the process of developing specifications to solicit and purchase a rebuilt locomotive for fleet expansion. In FY 2015, the TRE received a grant to purchase a locomotive using CMAQ funds. The department has developed a statement of work and an estimate for the use of these funds to procure an additional locomotive in FY 2018. The purchase of two locomotives was approved by both the DART and Trinity Metro Boards in FY 2019.

Silver Line Corridor – DART owns 54 miles of the Silver Line rail corridor from north Fort Worth to downtown Wylie. In 2016, Trinity Metro negotiated and signed a Full Funding Grant Agreement with FTA for the TEXRail project, which uses the segment of the Silver Line west of DFW Airport, and continue south into downtown Fort Worth to the existing TRE Fort Worth Central Station and the Fort Worth T&P Station. Service began in January 2019. Plans include a future extension into southwest Fort Worth.

Exhibit 85 is the Commuter Rail and Railroad Management Cost Model. Costs are divided between Commuter Rail and Railroad Management divisions of the Department.

**Exhibit 85
Commuter Rail Cost Model**



North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 6 – Letters of Support



North Central Texas Council of Governments



Paul B. Duncan
Vice President, Service Design
& Performance

BNSF Railway Company
P. O. Box 961502
Fort Worth, TX 76161-0052

2650 Lou Menk Drive
Fort Worth, Texas 76131-2830
(817) 352-3464

paul.duncan@bnsf.com

May 18, 2020

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

Dear Secretary Chao,

BNSF Railway supports the effort by the North Central Texas Council of Governments (NCTCOG), Dallas Area Rapid Transit (DART), and Trinity Metro to obtain funding for Trinity Railway Express (TRE) infrastructure improvements from the 2020 Better Utilizing Investments to Leverage Development (BUILD) discretionary grant program. This project will replace bridges and install double track at two locations on the corridor.

BNSF would be willing to provide a matching contribution of up to \$2M to the portion of this project that includes doubletracking and bridge replacement between Medical Market Center and Stemmons Freeway Bridge. This contribution is subject to satisfactory review of funding requirements, final engineering, and finalizing definitive agreements with applicable agencies and it will only be applied to a single award of this scope of work. We expect that, in recognition of such a pledge of private capital support, the performance measures for the project would include validation of additional BNSF freight movement over the TRE in accordance with the terms of our existing agreement.

We look forward to collaborating with the NCTCOG and the other project stakeholders for the implementation of this project.

Sincerely,

A handwritten signature in blue ink that reads "Paul B. Duncan". The signature is written in a cursive, flowing style.

Paul B Duncan
Vice President, Service Design and Performance



BYRON S. COMATI

Vice President

CORPORATE PLANNING

May 11, 2020

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

RE: North Central Texas Council of Governments' FY 2020 BUILD Grant Application

Dear Secretary Chao:

On behalf of the National Railroad Passenger Corporation (Amtrak), I am writing to express our support for the for the North Central Texas Council of Governments (NCTCOG) grant application submitted in response to the Notice of Funding Opportunity (NOFO) for the FY20 United States Department of Transportation (USDOT) Better Utilizing Investments to Leverage Development (BUILD) transportation discretionary grant program. The BUILD competitive grant program funds surface transportation infrastructure investments that will have a significant local or regional impact.

Amtrak's support relates to the following project:

North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)

North Texas MOVES is a long-range plan for increasing freight and passenger mobility in the Dallas-Fort Worth corridor through strategic investment in rail capacity to improve multimodal transportation. The proposed project will allow for the replacement or rehabilitation of the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Nobel Branch bridges in Dallas and Tarrant Counties that are past their useful life or in poor condition, as well as double tracking of the rail alignment where these bridges are located. These improvements will enhance freight rail service performance as well as intercity passenger rail (Amtrak's *Texas Eagle* Service) and commuter passenger rail in the Dallas-Fort Worth rail corridor by improving rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional Trinity Railway Express (TRE) service frequencies.

In addition, *North Texas MOVES* would fund the design, development, and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate, and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

*The Honorable Elaine Chao
Secretary of Transportation
U.S. Department of Transportation
May 11, 2020
Page 2 of 2*

It is Amtrak's expectation that, prior to the obligation of grant funds, NCTCOG, TRE, right-of-way owners and Amtrak will discuss resource requirements and subsequently enter into agreements setting forth our roles and responsibilities with terms acceptable to Amtrak.

The advancement of a safety and operations-based infrastructure projects like this will not only significantly improve our nation's rail infrastructure, but will also contribute to the economic competitiveness of the region.

Sincerely,

A handwritten signature in black ink, appearing to read 'Byron S. Comati', with a stylized, wavy flourish extending to the right.

Byron S. Comati
Vice President, Corporate Planning

United States Senate

WASHINGTON, DC 20510-4305

May 1, 2020

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

Dear Secretary Chao:

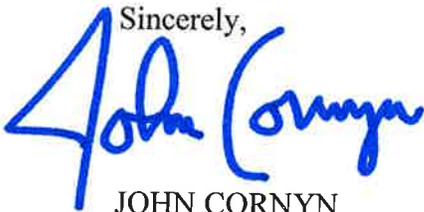
I am writing to express my support for North Central Texas Council of Governments' (NCTCOG) application submitted to the Department of Transportation for the BUILD grant for the North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES) project.

As you and your staff review the proposal, I trust you will give full consideration to the many strengths of this application. If funded, NCTCOG will begin critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

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

Thank you for your assistance and consideration.

Sincerely,



JOHN CORNYN
United States Senator



DALLAS COUNTY JUDGE CLAY LEWIS JENKINS

May 13, 2020

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

Dear Secretary Chao:

Dallas County is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

In closing, Dallas County fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact Clay.Jenkins@dallascounty.org.

Sincerely,

A handwritten signature in blue ink that reads "Clay Lewis Jenkins". The signature is written in a cursive, flowing style.

Clay Lewis Jenkins
Dallas County Judge

ERIC JOHNSON
Mayor of Dallas



May 8, 2020

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

Dear Secretary Chao:

The City of Dallas is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. This program, which is the result of data-driven computer modeling, leverages investment by multiple public agencies. The BUILD Discretionary Grant would enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region.

Projects for the BUILD 2020 submission include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch, and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements would enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency.

In addition, North Texas MOVES would fund the design, development, and implementation of the innovative Clear Path technology platform. This technology would facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate, and actionable information about train movements in terminal complexes. This would result in increased capacity of the North Texas rail network, which would be a significant asset to this fast-growing metro area, which is now the fourth largest in the country.

Thank you for your time and consideration. If you have any questions, please contact Dina Colarossi, dina.colarossi@dallascityhall.com, 214.671.9062.

Sincerely,

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

Eric Johnson



COMMISSIONER DR. THERESA M. DANIEL
ROAD & BRIDGE DISTRICT 1

April 28, 2020

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

Dear Secretary Chao:

Dallas County, Commissioner District 1 is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, Dallas County, Commissioner District 1 fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Dr. Theresa M. Daniel".

Dr. Theresa M. Daniel
Dallas County Commissioner



Dallas Area Rapid Transit
P.O. Box 660163
Dallas, TX 75266-0163
214-749-3278

May 8, 2020

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

Dear Secretary Chao:

Dallas Area Rapid Transit (DART) is pleased to support the North Central Texas Council of Governments' (NCTCOG) 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly-owned commuter rail network. It will also encourage passenger and freight rail to operate more efficiently and effectively throughout the Dallas-Fort Worth region. North Texas MOVES will accommodate the continued on-time performance of the Trinity Railway Express (TRE) commuter rail service, jointly owned by DART and Trinity Metro; the planned expansion of commuter service on DART's Cotton Belt regional rail project (anticipated to be operational in 2022); and expected freight rail growth on private networks.

The grant proposal also includes design and engineering elements for improvements that will be included in later phases of the North Texas MOVES program. Finally, the innovative ClearPath technology platform will facilitate communication between public and private operators of the regional rail network to maximize the utility of shared-use assets.

Again, DART fully supports this grant application submitted by the NCTCOG for the North Texas MOVES program and appreciates your consideration of this project. If you have any questions, please contact me at 214-749-2544 or gthomas@dart.org.

Sincerely,

/s/ Gary C. Thomas
Reviewed and approved, but not signed due to
COVID-19 Coronavirus Pandemic

Gary C. Thomas
President/Executive Director

c: DART Board
Edie Diaz, Vice President, Government and Community Relations



May 8, 2020

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

Dear Secretary Chao:

The City of Fort Worth is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, the City of Fort Worth fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact Chelsea Adler at 817-392-6118.

Sincerely,

Mayor Betsy Price
City of Fort Worth

BETSY PRICE, MAYOR

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



CITY OF HALTOM CITY

Office Of The Mayor

May 5, 2020

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

Dear Secretary Chao:

Haltom City is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, Haltom City fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact me at mayor@haltomcitytx.com.

Sincerely,

An M. Truong
Mayor



May 12, 2020

Office of the Mayor

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 Hurst is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, the City of Hurst fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact our City Manager Clay Caruthers at 817.788.7000.

Sincerely,

Henry Wilson, Mayor
City of Hurst

1505 Precinct Line Road, Hurst, Texas 76054
Phone 817.788.7000 • Fax 817.788.7054
www.hursttx.gov

May 4, 2020

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

Dear Secretary Chao:

The City of Irving is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, the City of Irving fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration.

Sincerely,



Richard H. Stopfer
Mayor
City of Irving



REPRESENTATIVE MATT KRAUSE

— District 93 • Tarrant County —

May 8, 2020

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

Dear Secretary Chao:

I, Representative Matt Krause, am pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

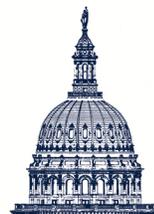
In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, my office fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact my office at 512-463-0562 or email my Chief of Staff, Shane Birdwell at shane.birdwell@house.texas.gov

Sincerely,

A handwritten signature in black ink that reads "Matt Krause".

Representative Matt Krause
House District 93





Congress of the United States
House of Representatives

Congressman
Kenny Marchant

24th District
Texas

May 14, 2020

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

Dear Secretary Chao,

I am writing you today in support of the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)

This vital transportation corridor for the 24th District and for the State of Texas 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 represents the initial projects of NCTCOG's rail capacity improvement program which will enable critical rail capacity improvements, supporting both passenger and freight movement through the heart of the Dallas-Fort Worth region.

Projects included in the BUILD 2020 submittal include the replacement or rehabilitation for five bridges either past their useful life or in poor condition. This project will also double rail track along these bridges, enhancing passenger rail (AMTRAK), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor. These improvements which improve safety and reliability are essential to the continued growth and success of this region's families. Furthermore, these improvements will enhance accessibility and promote development to compliment the region's economic growth. By funding the design, development and implementation of the innovative Clear Path technology platform, we will ensure communication between public and private operators to maximize the use and efficiency of these shared-use assets.

Thank you for your time and consideration of the North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES) submitted by NCTCOG. 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



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

Committees:

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

May 6, 2020

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

Dear Secretary Chao:

I am writing in support of the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES).

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform to facilitate communication between public and private operators of the regional rail network. Thank you for your time and consideration of this important regional priority.

Very truly yours,

A handwritten signature in black ink that reads "Jane Nelson". The signature is fluid and cursive, with the first name "Jane" being more prominent than the last name "Nelson".

Senator Jane Nelson



TARRANT COUNTY

May 12, 2020

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

Dear Secretary Chao:

Tarrant County is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

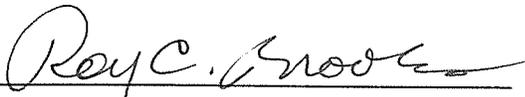
In addition, North Texas MOVES will fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Tarrant County fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration.

Sincerely,



County Judge B. Glen Whitley



Roy Charles Brooks
Commissioner, Precinct 1

Present via Virtual Meeting

Gary Fickes
Commissioner, Precinct 3



Devan Allen
Commissioner, Precinct 2

Present via Virtual Meeting

J.D. Johnson
Commissioner, Precinct 4



Dallas Area Rapid Transit
P.O. Box 660163
Dallas, TX 75266-0163
214-749-3278

May 11, 2020

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

Dear Secretary Chao:

Dallas Area Rapid Transit is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, Dallas Area Rapid Transit fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact me at 214-749-3566 or BMurphy@dart.org.

Sincerely,

A handwritten signature in blue ink that reads "Bonnie Murphy".

Bonnie Murphy
Vice President Commuter Rail and Railroad Management/
Director TRE

May 12, 2020

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

Dear Secretary Chao:

Trinity Metro is pleased to support the United States Department of Transportation 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, Trinity Metro fully supports the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration. If you have any questions, please contact Bob Baulsir, 817-215-8704 or bob.baulsir@ridetm.org

Sincerely,



Bob Baulsir
President & Chief Executive Officer





The Senate of The State of Texas

SENATE COMMITTEES:

VICE CHAIR
Higher Education

MEMBER
Education
Finance
Transportation

Senator Royce West
District 23

President Pro Tempore
2006

DISTRICT OFFICE:
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Fax: 214/467-0050

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Austin, Texas 78711
512/463-0123
Fax: 512/463-0299
Dial 711 for Relay Calls

May 14, 2020

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

Dear Secretary Chao:

Please accept this letter as an expression of my support for rail projects here in North Texas that are made possible by the United States Department of Transportation. I heartily support the 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Projects (North Texas MOVES)**.

The North Texas MOVES project will replace or rehabilitate bridges at Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Nobel Branch that are either past their useful life or have now degraded to poor condition. In addition, the project will double track the rail line that runs from Medical Market Center to Stemmons Freeway and also build a second track from Handley Ederville Road to near Precinct Line Road, thus increasing capacity. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the TRE corridor by maintaining existing rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development, and implementation of the innovative Clear Path technology platform. This technology will

May 14, 2020
Letter to Secretary Chao
page 2

facilitate enhanced communications between public and private operators of the regional rail network and maximize utility of shared-use assets through timely, accurate, and actionable information about train movements in terminal complexes. Once completed, these innovations will result in increased efficiency and capacity for the North Texas rail network.

I remain confident of the numerous initiatives brought forward by the NCTCOG to address the current and future transportation needs of the fourth largest metropolitan area in the United States and again, lend my full support for the 2020 BUILD grant application submitted for the North Texas MOVES Projects. If you have any questions, please contact my Texas Senate District office at 214-467-0123. Thank you for your time and consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Royce West". The signature is stylized with a large, looped "R" and a long horizontal stroke extending to the right.

Royce West
Texas Senate
District 23



May 7, 2020

SENATOR PAT FALLON
NORTH TEXAS ★ DISTRICT 30

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 2020 Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant application submitted by the North Central Texas Council of Governments (NCTCOG) for the **North Texas Multimodal Operations, Velocity, Efficiency, and Safety Program (North Texas MOVES)**.

North Texas MOVES represents the initial projects in NCTCOG's rail capacity improvement program. The result of data-driven computer modeling, this program leverages investment by multiple public agencies. The requested funding will enable critical rail capacity improvements that support passenger and freight growth on the publicly owned commuter network and encourage passenger and freight rail fluidity through the Dallas-Fort Worth region. Projects for the BUILD 2020 submittal include replacement or rehabilitation for the Walker's Creek, Mesquite Creek, Inwood, Knights Branch and Noble Branch bridges that are past their useful life or in poor condition, as well as double tracking for the railways where these bridges are located. These improvements will enhance intercity passenger rail (Amtrak), commuter passenger rail, and freight rail service performance in the Trinity Railway Express (TRE) corridor by maintaining rail assets, removing speed restrictions, improving safety and reliability, and allowing for additional service frequency along the TRE facilities.

In addition, North Texas MOVES would fund the design, development and implementation of the innovative Clear Path technology platform. This technology will facilitate communication between public and private operators of the regional rail network to maximize utility of shared-use assets through timely, accurate and actionable information about train movements in terminal complexes, resulting in increased capacity of the North Texas rail network.

Again, I am pleased to support the 2020 BUILD grant application submitted by NCTCOG for the North Texas MOVES program. Thank you for your time and consideration.

For Texas and Liberty,

A large, stylized handwritten signature in black ink, appearing to read "Pat Fallon".

Pat Fallon, Member
Texas Senate - District 30

CAPITOL OFFICE:
ROOM GE.7
P.O. BOX 12068
AUSTIN, TEXAS 78711
(512) 463-0130



Pat.Fallon@Senate.Texas.Gov

DISTRICT OFFICE:
3305 SOUTH MAYHILL RD.
SUITE 125
DENTON, TEXAS 76208
(940) 320-6782

ARCHER ★ CLAY ★ COLLIN ★ COOKE ★ DENTON ★ ERATH ★ GRAYSON

JACK ★ MONTAGUE ★ PALO PINO ★ PARKER ★ WICHITA ★ WISE ★ YOUNG

North Texas Multimodal Operations, Velocity, Efficiency, and Safety (MOVES) Program

FY2020

Attachment 7 – FRA Category Exemption Worksheets



North Central Texas Council of Governments

Public reporting burden for this information collection is estimated to average 176 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 2130-0548. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave., N.W., Washington D.C. 20590.

**Federal Railroad Administration (FRA)
CATEGORICAL EXCLUSION WORKSHEET**

The purpose of this worksheet is to assist Project sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for projects that may qualify as Categorical Exclusions. Categorical Exclusions are categories of actions (i.e. types of projects) that the FRA has determined, based on its experience, typically do not individually or cumulatively have a significant effect on the human environment and which generally do not require the preparation of either an environmental impact statement (EIS) or an environmental assessment (EA). Decisions to prepare EAs and EISs are made by FRA.

Submission of the worksheet by itself does not meet NEPA requirements. FRA must concur in writing with the Categorical Exclusion recommendation for NEPA requirements to be met.

The Project sponsor is responsible for providing FRA with a sufficient level of documentation and analysis to help inform FRA's determination that a Categorical Exclusion is the appropriate NEPA class of action. Documentation and analysis may include background research, results of record searches, field investigations, field surveys, and any past planning or studies.

Instructions for completing this worksheet are available on the FRA website at: <http://www.fra.dot.gov/eLib/Details/L02708>. Please complete this worksheet using compatible word processing software and submit and transmit the completed form in MS Word electronic format.

The following documents must be submitted along with this worksheet:

1. Include maps or diagram of the Project area that identifies locations of critical resource areas, wetlands, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences.
2. Include maps or diagrams of the proposed modifications to existing railways, roadways, and parking facilities.
3. Copies of all agency correspondence particularly with permitting agencies.
4. Representative photographs of the Project area.

I. PROJECT DESCRIPTION

Project Sponsor Federal Railroad Administration	Date Submitted to FRA	FRA Funding (TIGER, HSIPR, Rail Line Relocation, RRIF, etc.) or other FRA Action
Contact Person	Phone	E-mail address
Proposed Project Title The North Texas Multimodal Operations, Velocity, Efficiency and Safety Program (NT MOVES)		
Location (Include Street Address, City or Township, County, and State)		
Elm Fork Bridge Replacement with doubletrack bridge		
Replace existing Inwood Bridge with new doubletrack structure		
Replace existing Knight's Branch Bridge with new doubletrack structure		
Doubletrack from Medical Market Center Blvd to Stemmons Freeway Bridge		
Doubletrack from Irving to Dallas		
Centralized Traffic Control (CTC) between Irving and Carrollton		
NEPA Contact Steve Salin	Phone 214-749-2828	E-mail Address SSalin@dart.org
Description of Proposed Action (Project): Fully describe the Project including specifics that may be of environmental concern such as: <i>widening an embankment to stabilize roadbed; repairing or replacing bridge pier foundations, extending culverts, including adding rip-rap in a waterway; earthwork and altering natural (existing) drainage patterns and creating a new water discharge; contaminated water needing treatment; building a new or adding on to a shop building; fueling or collection of fuel or oil and contaminated water; building or extending a siding; and building or adding on to a yard. Where applicable fully describe the operational characteristics of the facility to be improved by the proposed action and any anticipated operational changes that may result.</i>		
Centralized Traffic Control (CTC) and Track Expansion on the Madill Subdivision to facilitate the commuter equipment moves between Irving and Carrollton in support of DART's future Cotton Belt service includes:		
<ol style="list-style-type: none"> 1. Trinity Railway Express (TRE) doubletracking from Irving to Dallas 2. Doubletracking, from Medical Market Center to Stemmons Freeway. 3. Doubletracking the Inwood, Knight's Branch and Elm Fork bridges 		
Purpose and Need of Proposed Action (Project).		
The implementation of this project will improve flexibility and safety in the Burlington Northern Santa Fe (BNSF) freight and the TRE commuter rail operations in this shared use assets corridor		

II. NEPA CLASS OF ACTION

Please check the category or categories that the Project best fits. If no category applies, contact FRA as an EA or EIS may need to be prepared.

- Changes in plans for a Project for which an environmental document has been prepared, where the changes would not alter the environmental impacts of the action. *(Describe the full consequences of the changes only in part III)*
- Maintenance of: existing railroad equipment; track and bridge structures; electrification, communication, signaling, or security facilities; stations; maintenance-of-way and maintenance-of-equipment bases; and other existing railroad-related facilities. *("Maintenance" means work, normally provided on a periodic basis, which does not change the existing character of the facility, and may include work characterized by other terms under specific FRA programs)*
- Temporary replacement of an essential rail facility if repairs are commenced immediately after the occurrence of a natural disaster or catastrophic failure.
- Operating assistance to a railroad to continue existing service or to increase service to meet demand, where the assistance will not result in a change in the effect on the environment.
- Financial assistance for the construction of minor loading and unloading facilities, provided that proposals are consistent with local zoning, do not involve the acquisition of a significant amount of land, and do not significantly alter the traffic density characteristics of existing rail or highway facilities.
- Minor rail line additions *including construction of side tracks, passing tracks, crossovers, short connections between existing rail lines, and new tracks within existing rail yards*, provided that such additions are consistent with existing zoning, do not involve acquisition of a significant amount of right of way, and do not substantially alter the traffic density characteristics of the existing rail lines or rail facilities.
- Acquisition of existing railroad equipment, track and bridge structures, electrification, communication, signaling or security facilities, stations, maintenance of way and maintenance of equipment bases, and other existing railroad facilities or the right to use such facilities, for the purpose of conducting operations of a nature and at a level of use similar to those presently or previously existing on the subject properties.
- Research, development and/or demonstration of advances in signal, communication and/or train control systems on existing rail lines provided that such research, development and/or demonstrations do not require the acquisition of substantial amounts of right-of-way, and do not substantially alter the traffic density characteristics of the existing rail line.
- Improvements to existing facilities to service, inspect, or maintain rail passenger equipment, *including expansion of existing buildings, the construction of new buildings and outdoor facilities, and the reconfiguration of yard tracks.*
- Alterations to existing facilities, locomotives, stations and rail cars in order to make them accessible for the elderly and persons with disabilities, *such as modifying doorways, adding or modifying lifts, constructing access ramps and railings, modifying restrooms, and constructing accessible platforms.*
- Bridge rehabilitation, reconstruction or replacement, the rehabilitation or maintenance of the rail elements of docks or piers for the purposes of intermodal transfers, and the construction of bridges, culverts, or grade separation projects, predominantly within existing right-of-way, that do not involve extensive in-water construction activities, *such as projects replacing bridge components including stringers, caps, piles, or decks, the construction of roadway overpasses to replace at-grade crossings, construction or reconstruction of approaches and/or embankments to bridges, or construction or replacement of short span bridges.*
- Acquisition (including purchase or lease), rehabilitation, or maintenance of vehicles or equipment that does not cause a substantial increase in the use of infrastructure within the existing right-of-

way or other previously disturbed locations, *including locomotives, passenger coaches, freight cars, trainsets, and construction, maintenance or inspection equipment.*

- Installation, repair and replacement of equipment and small structures designed to promote transportation safety, security, accessibility, communication or operational efficiency that take place predominantly within the existing right-of-way and do not result in a major change in traffic density on the existing rail line or facility, *such as the installation, repair or replacement of surface treatments or pavement markings, small passenger shelters, passenger amenities, benches, signage, sidewalks or trails, equipment enclosures, and fencing, railroad warning devices, train control systems, signalization, electric traction equipment and structures, electronics, photonics, and communications systems and equipment, equipment mounts, towers and structures, information processing equipment, and security equipment, including surveillance and detection cameras.*
- Environmental restoration, remediation and pollution prevention activities in or proximate to existing and former railroad track, infrastructure, stations and facilities conducted in conformance with applicable laws, regulations and permit requirements, *including activities such as noise mitigation, landscaping, natural resource management activities, replacement or improvement to storm water oil/water separators, installation of pollution containment systems, slope stabilization, and contaminated soil removal or remediation activities.*
- Assembly or construction of facilities or stations that are consistent with existing land use and zoning requirements, do not result in a major change in traffic density on existing rail or highway facilities and result in approximately less than ten acres of surface disturbance, *such as storage and maintenance facilities, freight or passenger loading and unloading facilities or stations, parking facilities, passenger platforms, canopies, shelters, pedestrian overpasses or underpasses, paving, or landscaping.*
- Track and track structure maintenance and improvements when carried out predominantly within the existing right-of-way that do not cause a substantial increase in rail traffic beyond existing or historic levels, *such as stabilizing embankments, installing or reinstalling track, re-grading, replacing rail, ties, slabs and ballast, installing, maintaining, or restoring drainage ditches, cleaning ballast, constructing minor curve realignments, improving or replacing interlockings, and the installation or maintenance of ancillary equipment.*

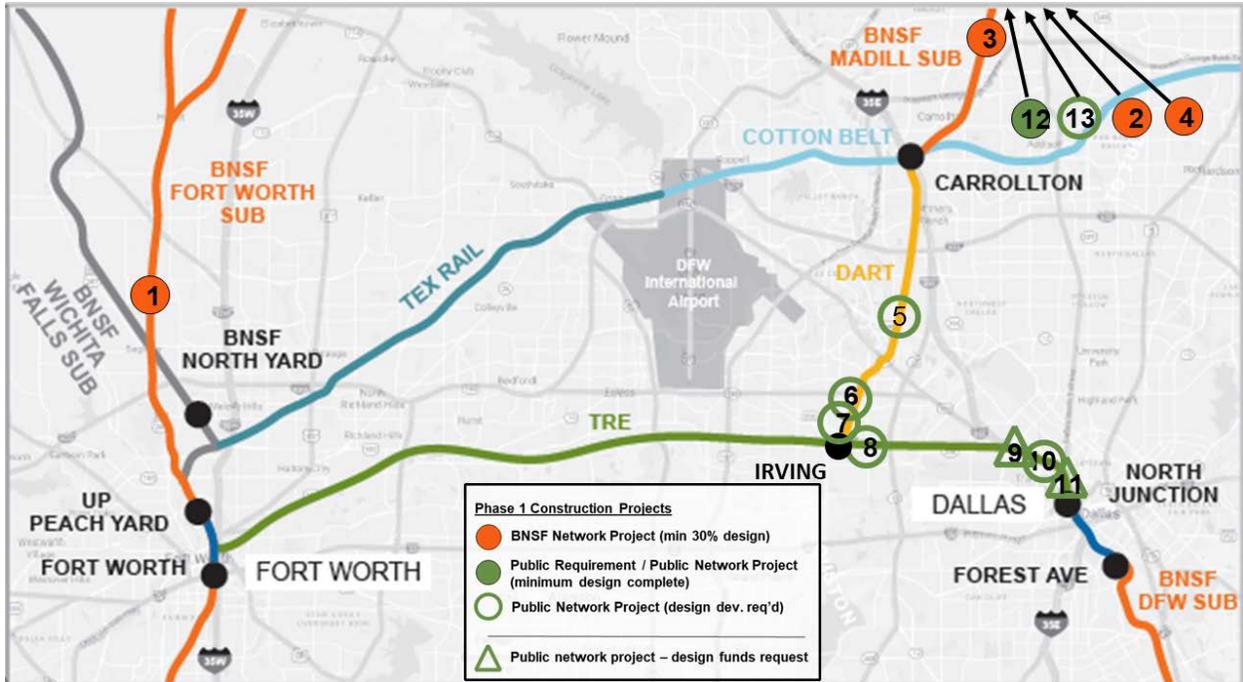
III. PROJECT INFORMATION

Potential impacts from both construction and changes to operations (where applicable) should be analyzed and identified for each resource type below. Where appropriate, the Project sponsor may commit to mitigation measures to avoid, reduce, or minimize impacts, including the use of Best Management Practices (BMP). Mitigation measures necessary to comply with other laws or regulations (e.g. Clean Water Act Section 404) should also be identified and the impacts from mitigation considered.

A. Affected Environment: *Briefly describe the ecosystems and environmental conditions in the area affected by the Project (defined as broadly as necessary to evaluate potential impacts and address Project area habitats).*

The Project area is located within the cities of Dallas, Irving and Carrollton along the TRE Right-Of-Way. The project area is surrounded by commercial and light industrial land uses. Unimproved areas adjacent to the proposed project areas are considered to be maintained grassland vegetation.

FRA Categorical Exclusion Worksheet



B. Location & Land Use: Briefly describe the existing land use of the Project site and surrounding properties and resources and identify and discuss any potential inconsistencies the Project might have with local land use plans and policies.

The Project area is located within the cities of Dallas, Irving and Carrollton along the TRE Right-Of-Way. The project area is surrounded by commercial and light industrial land uses. Unimproved areas adjacent to the proposed project areas are considered to be maintained grassland vegetation.

As the project area is dominated by commercial, retail, and light industrial land use this track upgrade would not significantly alter the project area, and therefore would have no impacts on land use of the adjacent areas.

C. Cultural Resources: Is the Project of the type where there is no potential to affect historic properties? Check yes or no depending on whether resources have been identified in the immediate vicinity of the Project (Area of Potential Effect)

Yes, explain how Project has no potential to affect historic properties. (Continue to D)

A review of appropriate local state and federal resources listing concludes that the proposed project will have no significant impacts to cultural and natural resources, ecologically sensitive area, historic properties, and/or archeological sites within the area of potential effect of the TRE Track improvement. On the basis of this information, it is believed that no impacts to significant cultural properties would occur. If in the course of construction, unforeseen discoveries of cultural remains are made, work would cease immediately and the Texas Historic Commission (THC) will be consulted for instructions on how to proceed.

No, there is potential to affect historic properties. Describe identification procedures to determine the existence of cultural resources in the Project area.

Describe any resource(s) identified in the project area and then describe any potential effect of the Project on the resource(s).

Has consultation with the State Historic Preservation Office occurred?

No, contact FRA

Yes, describe and attach relevant correspondence

What resources of interest to Federally-recognized Native American Tribes are known to be present in the Project area?

D. Parks and Recreational Facilities: Are there any publicly owned park, wildlife and waterfowl refuge, or recreational area of national, state, or local significance within or directly adjacent to the Project area?

- No, include a short statement describe efforts to identify parks and recreational facilities in the Project area.

No use of public parkland or recreation areas in the proposed project areas are required. No mitigation is necessary.

There are no significant impact to wetlands on or near the project areas anticipated; therefore there would be no mitigation treatments required.

- Yes, include a detailed description of the property, including map or drawing, describe the recreational uses of the property, any unique characteristics of the property, any consultations with the entity with legal jurisdiction over the property, and the potential impact on the property.

E. Transportation: *Would the Project have any effect (beneficial or adverse) on transportation including but not limited to other railway operations, road traffic, or increase the demand for parking?*

- No, explain why the Project would have no effect (beneficial or adverse) on transportation

The addition of these improvements is not anticipated to have any significant changes in the traffic level of service (LOS) around the project area. The proposed project is expected to cause no increase in the daily traffic on surrounding road networks. The increase in train speed due to the proposed project would minimize the amount of time for the intersection gates closing this improving traffic flow. The minimal increase in vehicular traffic due to this action requires no mitigation treatments

- Yes, describe potential transportation, traffic, and parking impacts, and address capacity constraints and potential impacts to existing railroad and highway operations. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this Project will impact.

F. Noise and Vibration: *Are there any sensitive receptors in the Project area?*

No, describe why there are no sensitive receptors (residences, parks, schools, hospitals, public gathering spaces) in or near the Project area. (Continue to G)

There are no noise sensitive receptors located within the proximity of the proposed TRE track improvement areas. The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor containing existing commercial, retail, and light industrial uses. The proposed project would have no significant impact and no mitigation would be required.

The proposed track upgrades do not alter the dominate vibration sources (railroad traffic) in this project area. It would have no significant impacts and no mitigation will be required.

Yes, will the Project change the noise and/or vibration exposure of the sensitive receptors when applying the screening distances for noise and vibration assessment found in FRA and Federal Transit Administration's noise impacts assessment guidance manuals? Such changes in exposure might include changes in noise emissions and/or events, or changes in vibration emissions and/or events.

If the Project is anticipated to change the noise or vibration exposure of sensitive receptors, complete and attach a General Noise and/or Vibration Assessment. Describe the results of the Assessment and any mitigation that will address potential impacts.

G. Air Quality: *Is the Project located in a Non-Attainment or Maintenance area?*

No, identify any air emissions increases or benefits that the project will create.
(Continue to H)

The proposed project would produce a temporary increase in fugitive dust (including PM10) and unquantifiable amounts of hydrocarbons, NOX, CO, and CO2 during the construction phase.

Regular equipment maintenance, including emissions checks, would reduce impacts to air quality. No open burning of construction debris, trash, or refuse would be allowed in construction areas

Yes, for which of the following pollutants:

- Carbon Monoxide (CO) Ozone (O₃), volatile organic compounds or Nitrous Oxides (NO_x)
 Particulate Matter (PM₁₀ and PM_{2.5})

Will the Project, both during construction and operation, result in new emissions of criteria pollutants including Carbon Monoxide (CO), Ozone (O₃), volatile organic compounds, or Nitrous Oxides NO_x, Particulate Matter (PM₁₀ and PM_{2.5})?

No Yes, Attach an emissions analysis for General Conformity regarding CO, O₃, PM₁₀, and NO_x.

Based on the emissions analysis, will the Project increase concentrations of ambient criteria pollutants to levels that exceed the NAAQS, lead to the establishment of a new non-attainment area, or delay achievement of attainment?

No Yes, Describe any substantial impacts from the Project.

H. Hazardous Materials: *Does the Project involve the use or handling of hazardous materials?*

No (continue to I)

Yes, describe the use and measures that will mitigate any potential for release and contamination.

I. Hazardous Waste: *Is the Project site in a developed area or was previously developed or used for industrial or agricultural production,*

No, describe the steps taken to determine that hazardous materials are not present on the Project site. (Continue to J)

The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Yes. *If yes, is it likely that hazardous materials will be encountered by undertaking the Project? (Prior to acquiring land or a facility with FRA funds, FRA must be consulted regarding the potential presence of hazardous materials)*

Yes, complete a Phase I site assessment and attach.

No, explain why it is unlikely that hazardous materials will be encountered.

If a Phase I survey was completed, is a Phase II site assessment recommended?

No, explain why a Phase II site assessment is not recommended.

Yes, describe the mitigation and clean-up measures that will be taken to remediate any hazardous materials present and what steps will be taken to ensure that the local community is protected from contamination during construction and operation of the Project.

J. Property Acquisition: *Is property acquisition needed for the Project?*

No (continue to K)

Yes, indicate how much property and whether the acquisition will result in relocation of businesses or individuals. **Note:** *acquiring property prior to completing the NEPA process and receiving written FRA concurrence in the NEPA recommendation may jeopardize Federal financial participation in the Project.*

K. Community Impacts and Environmental Justice: *Is the Project likely to result in impacts to adjacent communities? Impacts might be both beneficial (e.g. economic benefits) or adverse (e.g. reduction in community cohesion).*

No, describe the steps taken to determine whether the Project might result in impacts to adjacent communities. (Continue to L)

The proposed project will have no impacts on neighborhood cohesion and social interaction and will not disturb existing neighborhoods. The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor, no displacement will be required. Thus no mitigation is recommended.

Yes, characterize the socio-economic profile of the affected community, including the presence of minority or low-income populations.

Describe any potential adverse effects to communities, including noise, visual and barrier effects. Indicate whether the Project will have a disproportionately high and adverse effect on minority or low-income populations. Describe outreach efforts targeted specifically at minority or low-income populations.

L. Impacts On Wetlands: *Does the Project temporarily or permanently impact wetlands or require alterations to streams or waterways?*

No, describe the steps taken to determine that the Project is not likely to temporarily or permanently impact wetlands or require alterations to streams or waterways.

There is no significant impact to wetlands on or near the project area anticipated; therefore there would be no mitigation treatments required. The US Army Corp of Engineers has been consulted and has provided a clearing house letter stating no individual 404 permit

will be required.

Yes, show wetlands and waters on the site map and classification. Describe the Project's potential impact to on-site and adjacent wetlands and waters and attach any correspondence with the US Army Corps of Engineers.

Is a Section 404 Permit necessary?

Yes, attach all permit related documentation

404 Permit is being coordinated with US Army Corps of Engineers.

No

M. Floodplain Impacts: *Is the Project located within the 100-year floodplain or are regulated floodways affected?*

No (continue to N)

Yes, describe the potential for impacts due to changes in floodplain capacity or water flow, if any and how the Project will comply with Executive Order 11988. If impacts are likely, attach scale maps describing potential impacts and describe any coordination with regulatory entities.

N. Water Quality: *Are protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site?*

No, describe the steps taken to identify *protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site.*

Yes, describe water resource and the potential for impact from the Project, and any coordination with regulatory entities.

O. Navigable Waterways: *Does the Project cross or have effect on a navigable waterway?*

No (continue to P)

Yes, describe potential for impact and any coordination with US Coast Guard.

P. Coastal Zones: *Is the Project in a designated coastal zone?*

No (continue to Q)

Yes, describe coordination with the State regarding consistency with the coastal zone management plan and attach the State finding if available.

Q. Prime and Unique Farmlands: *Does the Project impact any prime or unique farmlands?*

No, describe the steps taken to identify *impacts to prime or unique farmlands*.

The proposed project will have no impacts on prime or unique farmlands. The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Yes, describe potential for impact and any coordination with the Soil Conservation Service of the US Department of Agriculture.

R. Critical Habitat and Endangered Species: *Are there any designated critical habitat areas (woodlands, prairies, wetlands, rivers, lakes, streams, and geological formations determined to be essential for the survival of a threatened or endangered species) within or directly adjacent to the Project site?*

No, describe the steps taken to identify critical habitat within or directly adjacent to the Project site.

The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Geology

The proposed project will have minimal impact on geological resources at the Inwood bridge and Knight's Branch bridge areas; thus no mitigation treatments would be necessary

Soils

Direct impacts to soils include removal of vegetation during construction, which will cause exposure of the soil, short term increased susceptibility to wind and water erosion may occur, Storm Water Pollution Prevention Plans (SWPPP) and Best Management Practices (BMP) will be developed as a mitigation measure during construction. The SWPPP and BMP will be installed for controlling runoff, erosion, and sedimentation during construction. Long term impacts would be insignificant.

Yes, describe them and the potential for impact.

Are any Threatened or endangered species located in or adjacent to the site?

No, describe the steps taken to identify the presence of endangered species directly adjacent to the Project site.

Threatened or Endangered species that are known to occur in Dallas County include the interior least tern and the black-capped vireo and whooping crane (USFWS 1995b). Since maintained grassland vegetation is not considered suitable habitat for either of the endangered species found in Dallas County, it is not likely that impacts to the Threatened or Endangered species would result from this proposed project. Thus no mitigation treatments would be necessary.

Yes, describe them and the potential for impact. Describe any consultation with the State and the US Fish and Wildlife Service about the impacts to these natural areas and on threatened

and endangered fauna and flora that may be affected. If required prepare a biological assessment and attach it and any applicable agency correspondence.

S. Public Safety: *Will the Project result in any public safety impacts?*

No, describe method used to determine whether the Project results in any safety or security impacts

The Dallas Area Rapid Transit (DART) has developed several policies, including DART Safety System Program Plan, that will be actively implemented to ensure that safety and security at the proposed project site is maximized. The proposed project would have no significant adverse impact related to safety and security and thus no mitigation treatments would be required.

Yes, describe the safety or security concerns and the measures that would need to be taken to provide for the safe and secure operation of the Project during and after its construction.

T. Cumulative Impacts: A "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts may include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or resulting from smaller actions that individually have no significant impact. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern.

Are cumulative impacts likely? No Yes, describe the impacts:

U. Indirect Impacts: "Indirect impacts" are those that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Are Indirect impacts likely? No Yes, describe the impacts:

V. Commitments: List all measures, procedures and practices that have been incorporated into the Project avoid and minimize impacts, if any, as identified in the above sections of this worksheet.

W. Public Notification: *Briefly describe any public outreach efforts undertaken on behalf of the Project, if any. Indicate opportunities the public has had to comment on the Project (e.g., Board meetings, open houses, special hearings).*

Has the Project generated any public discussion or concern, even though it may be limited to a relatively small subset of the community? Indicate any concerns expressed by agencies or the public regarding the Project.

X. Related Federal, State, or Local Actions: *Does the Project require any additional actions (e.g., permits) by other Agencies? Attach copies of relevant correspondence. It is not necessary to attach voluminous permit applications if a single cover Agency transmittal will indicate that a permit has been granted. Permitting issues should be described in the relevant resource discussion above.*

- Section 106** *Historic Properties*
- Section 401/404 of the Clean Water Act;** *Wetlands and Water Quality*
- Section 402 of the Clean Water Act**
- USCG 404** *Navigable Waterways*
- Migratory Bird Treaty Act**
- Endangered Species Act** *Threatened and Endangered Biological Resources*
- Magnuson-Stevens Fishery Conservation and Management Act** *Essential Fish Habitat*
- Safe Drinking Water Act**
- Section 6(f) Land and Conservation Act**
- Other State or Local Requirements** (Describe)

Expiration 08/31/2018

OMB No. 2130-0548

Public reporting burden for this information collection is estimated to average 176 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for this information collection is 2130-0548. All responses to this collection of information are mandatory. Send comments regarding this burden estimate or any other aspect of this collection, including suggestions for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave., N.W., Washington D.C. 20590.

Federal Railroad Administration (FRA)
CATEGORICAL EXCLUSION WORKSHEET

The purpose of this worksheet is to assist Project sponsors in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for projects that may qualify as Categorical Exclusions. Categorical Exclusions are categories of actions (i.e. types of projects) that the FRA has determined, based on its experience, typically do not individually or cumulatively have a significant effect on the human environment and which generally do not require the preparation of either an environmental impact statement (EIS) or an environmental assessment (EA). Decisions to prepare EAs and EISs are made by FRA.

Submission of the worksheet by itself does not meet NEPA requirements. FRA must concur in writing with the Categorical Exclusion recommendation for NEPA requirements to be met.

The Project sponsor is responsible for providing FRA with a sufficient level of documentation and analysis to help inform FRA's determination that a Categorical Exclusion is the appropriate NEPA class of action. Documentation and analysis may include background research, results of record searches, field investigations, field surveys, and any past planning or studies.

Instructions for completing this worksheet are available on the FRA website at: <http://www.fra.dot.gov/eLib/Details/L02708>. Please complete this worksheet using compatible word processing software and submit and transmit the completed form in MS Word electronic format.

The following documents must be submitted along with this worksheet:

1. Include maps or diagram of the Project area that identifies locations of critical resource areas, wetlands, potential historic sites, or sensitive noise receptors such as schools, hospitals, and residences.
 2. Include maps or diagrams of the proposed modifications to existing railways, roadways, and parking facilities.
 3. Copies of all agency correspondence particularly with permitting agencies.
 4. Representative photographs of the Project area.
-

I. PROJECT DESCRIPTION

Project Sponsor Federal Railroad Administration	Date Submitted to FRA	FRA Funding (TIGER, HSIPR, Rail Line Relocation, RRIF, etc.) or other FRA Action
Contact Person Bo V. Cung, P.E.	Phone 817-215-8782	E-mail address Bo.Cung@rideTM.org
Proposed Project Title Trinity Railway Express Corridor (TRE) State of Good Repair Improvements		
Location (Include Street Address, City or Township, County, and State)		
Replace TRE bridges at Walkers Creek and Mesquite Creek; and construct 2.4 miles of a new second track from east of Handley Ederville Road to east of Precinct Line Road. Project component A is located in Fort Worth, TX.		
NEPA Contact Bo V. Cung, P.E.	Phone 817-215-8782	E-mail Address B0.Cung@rideTM.org
Description of Proposed Action (Project): Fully describe the Project including specifics that may be of environmental concern such as: <i>widening an embankment to stabilize roadbed; repairing or replacing bridge pier foundations, extending culverts, including adding rip-rap in a waterway; earthwork and altering natural (existing) drainage patterns and creating a new water discharge; contaminated water needing treatment; building a new or adding on to a shop building; fueling or collection of fuel or oil and contaminated water; building or extending a siding; and building or adding on to a yard. Where applicable fully describe the operational characteristics of the facility to be improved by the proposed action and any anticipated operational changes that may result.</i>		
An existing section of the TRE from Milepost 618.7 (Handley Ederville Road) to Milepost 621.1 (Precinct Line Road) in the City of Fort Worth, TX is single-track and crosses three tributaries named Rock Creek, Walkers Creek and Mesquite Creek. Due to their conditions, TRE desires to replace the existing Walkers Creek Bridge and Mesquite Creek Bridge with new concrete bridges. In order to accomplish this, TRE would need to construct a second railroad track parallel to the existing track between the aforementioned mile posts, divert trains on to the new track, close the existing track, and replace the two bridges. The new track would cross the three tributaries on three new bridges.		

Purpose and Need of Proposed Action (Project).

The project aims to address the state of good repair backlog, performance restrictions, safety concerns, and capacity constraints caused by deteriorated railroad assets in the TRE corridor. These improvements will effectively enhance passenger rail and freight rail service performance operating in the corridor by maintaining state of good repair, improving safety and reliability, and allowing additional service frequency.

II. NEPA CLASS OF ACTION

Please check the category or categories that the Project best fits. If no category applies, contact FRA as an EA or EIS may need to be prepared.

- Changes in plans for a Project for which an environmental document has been prepared, where the changes would not alter the environmental impacts of the action. *(Describe the full consequences of the changes only in part III)*
- Maintenance of: existing railroad equipment; track and bridge structures; electrification, communication, signaling, or security facilities; stations; maintenance-of-way and maintenance-of-equipment bases; and other existing railroad-related facilities. *("Maintenance" means work, normally provided on a periodic basis, which does not change the existing character of the facility, and may include work characterized by other terms under specific FRA programs)*
- Temporary replacement of an essential rail facility if repairs are commenced immediately after the occurrence of a natural disaster or catastrophic failure.
- Operating assistance to a railroad to continue existing service or to increase service to meet demand, where the assistance will not result in a change in the effect on the environment.
- Financial assistance for the construction of minor loading and unloading facilities, provided that proposals are consistent with local zoning, do not involve the acquisition of a significant amount of land, and do not significantly alter the traffic density characteristics of existing rail or highway facilities.
- Minor rail line additions *including construction of side tracks, passing tracks, crossovers, short connections between existing rail lines, and new tracks within existing rail yards*, provided that such additions are consistent with existing zoning, do not involve acquisition of a significant amount of right of way, and do not substantially alter the traffic density characteristics of the existing rail lines or rail facilities.
- Acquisition of existing railroad equipment, track and bridge structures, electrification, communication, signaling or security facilities, stations, maintenance of way and maintenance of equipment bases, and other existing railroad facilities or the right to use such facilities, for the purpose of conducting operations of a nature and at a level of use similar to those presently or previously existing on the subject properties.
- Research, development and/or demonstration of advances in signal, communication and/or train control systems on existing rail lines provided that such research, development and/or demonstrations do not require the acquisition of substantial amounts of right-of-way, and do not substantially alter the traffic density characteristics of the existing rail line.
- Improvements to existing facilities to service, inspect, or maintain rail passenger equipment, *including expansion of existing buildings, the construction of new buildings and outdoor facilities, and the reconfiguration of yard tracks.*
- Alterations to existing facilities, locomotives, stations and rail cars in order to make them accessible for the elderly and persons with disabilities, *such as modifying doorways, adding or modifying lifts, constructing access ramps and railings, modifying restrooms, and constructing accessible platforms.*

- Bridge rehabilitation, reconstruction or replacement, the rehabilitation or maintenance of the rail elements of docks or piers for the purposes of intermodal transfers, and the construction of bridges, culverts, or grade separation projects, predominantly within existing right-of-way, that do not involve extensive in-water construction activities, *such as projects replacing bridge components including stringers, caps, piles, or decks, the construction of roadway overpasses to replace at-grade crossings, construction or reconstruction of approaches and/or embankments to bridges, or construction or replacement of short span bridges.*
- Acquisition (including purchase or lease), rehabilitation, or maintenance of vehicles or equipment that does not cause a substantial increase in the use of infrastructure within the existing right-of-way or other previously disturbed locations, *including locomotives, passenger coaches, freight cars, trainsets, and construction, maintenance or inspection equipment.*
- Installation, repair and replacement of equipment and small structures designed to promote transportation safety, security, accessibility, communication or operational efficiency that take place predominantly within the existing right-of-way and do not result in a major change in traffic density on the existing rail line or facility, *such as the installation, repair or replacement of surface treatments or pavement markings, small passenger shelters, passenger amenities, benches, signage, sidewalks or trails, equipment enclosures, and fencing, railroad warning devices, train control systems, signalization, electric traction equipment and structures, electronics, photonics, and communications systems and equipment, equipment mounts, towers and structures, information processing equipment, and security equipment, including surveillance and detection cameras.*
- Environmental restoration, remediation and pollution prevention activities in or proximate to existing and former railroad track, infrastructure, stations and facilities conducted in conformance with applicable laws, regulations and permit requirements, *including activities such as noise mitigation, landscaping, natural resource management activities, replacement or improvement to storm water oil/water separators, installation of pollution containment systems, slope stabilization, and contaminated soil removal or remediation activities.*
- Assembly or construction of facilities or stations that are consistent with existing land use and zoning requirements, do not result in a major change in traffic density on existing rail or highway facilities and result in approximately less than ten acres of surface disturbance, *such as storage and maintenance facilities, freight or passenger loading and unloading facilities or stations, parking facilities, passenger platforms, canopies, shelters, pedestrian overpasses or underpasses, paving, or landscaping.*
- Track and track structure maintenance and improvements when carried out predominantly within the existing right-of-way that do not cause a substantial increase in rail traffic beyond existing or historic levels, *such as stabilizing embankments, installing or reinstalling track, re-grading, replacing rail, ties, slabs and ballast, installing, maintaining, or restoring drainage ditches, cleaning ballast, constructing minor curve realignments, improving or replacing interlockings, and the installation or maintenance of ancillary equipment.*

III. PROJECT INFORMATION

Potential impacts from both construction and changes to operations (where applicable) should be analyzed and identified for each resource type below. Where appropriate, the Project sponsor may commit to mitigation measures to avoid, reduce, or minimize impacts, including the use of Best Management Practices (BMP). Mitigation measures necessary to comply with other laws or regulations (e.g. Clean Water Act Section 404) should also be identified and the impacts from mitigation considered.

- A. Affected Environment:** *Briefly describe the ecosystems and environmental conditions in the area affected by the Project (defined as broadly as necessary to evaluate potential impacts and address Project area habitats).*

The Project area is located within the city of Fort Worth along the TRE Right-Of-Way. The project area is surrounded by commercial and light

industrial, and residential land uses. Unimproved areas adjacent to the proposed project areas are considered to be maintained grassland vegetation.

B. *Location & Land Use:* Briefly describe the existing land use of the Project site and surrounding properties and resources and identify and discuss any potential inconsistencies the Project might have with local land use plans and policies.

The project area is surrounded by commercial, light industrial, and residential land use. Construction will be contained within the existing TRE's right-of-way. There is no land or easement is needed for the project, and therefore would have no impacts on land use of the adjacent areas.

C. *Cultural Resources:* Is the Project of the type where there is no potential to affect historic properties? Check yes or no depending on whether resources have been identified in the immediate vicinity of the Project (Area of Potential Effect)

Yes, explain how Project has no potential to affect historic properties. (Continue to D)

A review of appropriate local state and federal resources listing concludes that the proposed project will have no significant impacts to cultural and natural resources, ecologically sensitive area, historic properties, and/or archeological sites within the area of potential effect of the TRE Track improvement. On the basis of this information, it is believed that no impacts to significant cultural properties would occur. If in the course of construction, unforeseen discoveries of cultural remains are made, work would cease immediately and the Texas Historic commission (THC) will be consulted for instructions on how to proceed.

No, there is potential to affect historic properties. Describe identification procedures to determine the existence of cultural resources in the Project area.

Describe any resource(s) identified in the project area and then describe any potential effect of the Project on the resource(s).

Has consultation with the State Historic Preservation Office occurred?

No, contact FRA

Yes, describe and attach relevant correspondence

What resources of interest to Federally-recognized Native American Tribes are known to be present in the Project area?

D. *Parks and Recreational Facilities:* Are there any publicly owned park, wildlife and waterfowl refuge, or recreational area of national, state, or local significance within or directly adjacent to the Project area?

- No, include a short statement describe efforts to identify parks and recreational facilities in the Project area.

No use of public parkland or recreation areas in the proposed project areas are required. No mitigation is necessary.

There is no significant impact to wetlands on or near the project areas anticipated; therefore, there would be no mitigation treatments required.

- Yes, include a detailed description of the property, including map or drawing, describe the recreational uses of the property, any unique characteristics of the property, any consultations with the entity with legal jurisdiction over the property, and the potential impact on the property.

E. Transportation: *Would the Project have any effect (beneficial or adverse) on transportation including but not limited to other railway operations, road traffic, or increase the demand for parking?*

- No, explain why the Project would have no effect (beneficial or adverse) on transportation

The addition of these improvements is not anticipated to have any significant changes in the traffic level of service (LOS) around the project area. The proposed project is expected to cause no increase in the daily traffic on surrounding road networks. The increase in train speed due to the proposed project would minimize the amount of time for the intersection gates closing this improving traffic flow. The minimal increase in vehicular traffic due to this action requires no mitigation treatments.

- Yes, describe potential transportation, traffic, and parking impacts, and address capacity constraints and potential impacts to existing railroad and highway operations. Also, summarize any consultation that has occurred with other railroads or highway authorities whose operations this Project will impact.

F. Noise and Vibration: *Are there any sensitive receptors in the Project area?*

No, describe why there are no sensitive receptors (residences, parks, schools, hospitals, public gathering spaces) in or near the Project area. (Continue to G)

The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor containing existing commercial, light industrial, and residential land uses. There is no change in train operation and therefore, the project would have no impacts and no mitigation would be required.

The proposed track upgrades do not alter the dominate vibration sources (railroad traffic) in this project area. It would have no significant impacts and no mitigation will be required.

Yes, will the Project change the noise and/or vibration exposure of the sensitive receptors when applying the screening distances for noise and vibration assessment found in FRA and Federal Transit Administration's noise impacts assessment guidance manuals? Such changes in exposure might include changes in noise emissions and/or events, or changes in vibration emissions and/or events.

If the Project is anticipated to change the noise or vibration exposure of sensitive receptors, complete and attach a General Noise and/or Vibration Assessment. Describe the results of the Assessment and any mitigation that will address potential impacts.

G. Air Quality: *Is the Project located in a Non-Attainment or Maintenance area?*

No, identify any air emissions increases or benefits that the project will create.
(Continue to H)

The proposed project would produce a temporary increase in fugitive dust (including PM10) and unquantifiable amounts of hydrocarbons, NOX, CO, and CO2 during the construction phase.

Regular equipment maintenance, including emissions checks, would reduce impacts to air quality. No open burning of construction debris, trash, or refuse would be allowed in construction areas.

Yes, for which of the following pollutants:

- Carbon Monoxide (CO) Ozone (O₃), volatile organic compounds or Nitrous Oxides (NO_x)
 Particulate Matter (PM₁₀ and PM_{2.5})

Will the Project, both during construction and operation, result in new emissions of criteria pollutants including Carbon Monoxide (CO), Ozone (O₃), volatile organic compounds, or Nitrous Oxides NO_x, Particulate Matter (PM₁₀ and PM_{2.5})?

No Yes, Attach an emissions analysis for General Conformity regarding CO, O₃, PM₁₀, and NO_x.

Based on the emissions analysis, will the Project increase concentrations of ambient criteria pollutants to levels that exceed the NAAQS, lead to the establishment of a new non-attainment area, or delay achievement of attainment?

No Yes, Describe any substantial impacts from the Project.

H. Hazardous Materials: *Does the Project involve the use or handling of hazardous materials?*

No (continue to I)

Yes, describe the use and measures that will mitigate any potential for release and contamination.

I. Hazardous Waste: *Is the Project site in a developed area or was previously developed or used for industrial or agricultural production,*

No, describe the steps taken to determine that hazardous materials are not present on the Project site. (Continue to J)

The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Yes. *If yes, is it likely that hazardous materials will be encountered by undertaking the Project? (Prior to acquiring land or a facility with FRA funds, FRA must be consulted regarding the potential presence of hazardous materials)*

Yes, complete a Phase I site assessment and attach.

No, explain why it is unlikely that hazardous materials will be encountered.

If a Phase I survey was completed, is a Phase II site assessment recommended?

No, explain why a Phase II site assessment is not recommended.

Yes, describe the mitigation and clean-up measures that will be taken to remediate any hazardous materials present and what steps will be taken to ensure that the local community is protected from contamination during construction and operation of the Project.

J. Property Acquisition: *Is property acquisition needed for the Project?*

No (continue to K)

Yes, indicate how much property and whether the acquisition will result in relocation of businesses or individuals. **Note:** *acquiring property prior to completing the NEPA process and receiving written FRA concurrence in the NEPA recommendation may jeopardize Federal financial participation in the Project.*

K. Community Impacts and Environmental Justice: *Is the Project likely to result in impacts to adjacent communities? Impacts might be both beneficial (e.g. economic benefits) or adverse (e.g. reduction in community cohesion).*

No, describe the steps taken to determine whether the Project might result in impacts to adjacent communities. (Continue to L)

The proposed project will have no impacts on neighborhood cohesion and social interaction and will not disturb existing neighborhoods. The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor, no displacement will be required. Thus no mitigation is recommended.

Yes, characterize the socio-economic profile of the affected community, including the presence of minority or low-income populations.

Describe any potential adverse effects to communities, including noise, visual and barrier effects. Indicate whether the Project will have a disproportionately high and adverse effect on minority or low-income populations. Describe outreach efforts targeted specifically at minority or low-income populations.

L. Impacts On Wetlands: *Does the Project temporarily or permanently impact wetlands or require alterations to streams or waterways?*

No, describe the steps taken to determine that the Project is not likely to temporarily or permanently impact wetlands or require alterations to streams or waterways.

Crossings over three small creeks will be constructed but no significant impact to wetlands on or near the project area is anticipated; and therefore there would be no mitigation treatments required. Trinity Metro will consult with the US Army Corp of

Engineers during the final design of the project.

Yes, show wetlands and waters on the site map and classification. Describe the Project's potential impact to on-site and adjacent wetlands and waters and attach any correspondence with the US Army Corps of Engineers.

Is a Section 404 Permit necessary?

Yes, attach all permit related documentation

404 Permit will be coordinated with US Army Corps of Engineers.

No

M. Floodplain Impacts: *Is the Project located within the 100-year floodplain or are regulated floodways affected?*

No (continue to N)

Yes, describe the potential for impacts due to changes in floodplain capacity or water flow, if any and how the Project will comply with Executive Order 11988. If impacts are likely, attach scale maps describing potential impacts and describe any coordination with regulatory entities.

N. Water Quality: *Are protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site?*

No, describe the steps taken to identify *protected waters of special quality or concern, or protected drinking water resources present at or directly adjacent to the Project site.*

Yes, describe water resource and the potential for impact from the Project, and any coordination with regulatory entities.

O. Navigable Waterways: *Does the Project cross or have effect on a navigable waterway?*

No (continue to P)

Yes, describe potential for impact and any coordination with US Coast Guard.

P. Coastal Zones: *Is the Project in a designated coastal zone?*

No (continue to Q)

Yes, describe coordination with the State regarding consistency with the coastal zone management plan and attach the State finding if available.

Q. Prime and Unique Farmlands: *Does the Project impact any prime or unique farmlands?*

No, describe the steps taken to identify *impacts to prime or unique farmlands*.

The proposed project will have no impacts on prime or unique farmlands. The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Yes, describe potential for impact and any coordination with the Soil Conservation Service of the US Department of Agriculture.

R. Critical Habitat and Endangered Species: *Are there any designated critical habitat areas (woodlands, prairies, wetlands, rivers, lakes, streams, and geological formations determined to be essential for the survival of a threatened or endangered species) within or directly adjacent to the Project site?*

No, describe the steps taken to identify critical habitat within or directly adjacent to the Project site.

The proposed project will be located within existing TRE Right-Of-Way in an established transportation corridor.

Geology

The proposed project will have minimal impact on geological resources since an existing track has been constructed and; thus no mitigation treatments would be necessary.

Soils

Direct impacts to soils include removal of vegetation during construction, which will cause exposure of the soil, short term increased susceptibility to wind and water erosion may occur, Storm Water Pollution Prevention Plans (SWPPP) and Best Management Practices (BMP) will be developed as a mitigation measure during construction. The SWPPP and BMP will be installed for controlling runoff, erosion, and sedimentation during construction. Long term impacts would be insignificant.

Yes, describe them and the potential for impact.

Are any Threatened or endangered species located in or adjacent to the site?

No, describe the steps taken to identify the presence of endangered species directly adjacent to the Project site.

Threatened or Endangered species that are known to occur in Tarrant County include the interior least tern and the black-capped vireo and whooping crane (USFWS 1995b). Since maintained grassland vegetation is not considered suitable habitat for either of the endangered species found in Tarrant County, it is not likely that impacts to the Threatened or Endangered species would result from this proposed project. Thus no mitigation treatments would be necessary.

Yes, describe them and the potential for impact. Describe any consultation with the State and the US Fish and Wildlife Service about the impacts to these natural areas and on threatened

and endangered fauna and flora that may be affected. If required prepare a biological assessment and attach it and any applicable agency correspondence.

S. Public Safety: *Will the Project result in any public safety impacts?*

No, describe method used to determine whether the Project results in any safety or security impacts

The proposed project would have no significant adverse impact related to safety and security and thus no mitigation treatments would be required.

Yes, describe the safety or security concerns and the measures that would need to be taken to provide for the safe and secure operation of the Project during and after its construction.

T. Cumulative Impacts: A "cumulative impact" is the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts may include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or resulting from smaller actions that individually have no significant impact. Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern.

Are cumulative impacts likely? No Yes, describe the impacts:

U. Indirect Impacts: "Indirect impacts" are those that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

Are Indirect impacts likely? No Yes, describe the impacts:

V. Commitments: List all measures, procedures and practices that have been incorporated into the Project avoid and minimize impacts, if any, as identified in the above sections of this worksheet.

W. Public Notification: *Briefly describe any public outreach efforts undertaken on behalf of the Project, if any. Indicate opportunities the public has had to comment on the Project (e.g., Board meetings, open houses, special hearings).*

Public notification process has not started.

Has the Project generated any public discussion or concern, even though it may be limited to a relatively small subset of the community? Indicate any concerns expressed by agencies or the public regarding the Project.

No.

X. Related Federal, State, or Local Actions: *Does the Project require any additional actions*

(e.g., permits) by other Agencies? Attach copies of relevant correspondence. It is not necessary to attach voluminous permit applications if a single cover Agency transmittal will indicate that a permit has been granted. Permitting issues should be described in the relevant resource discussion above.

- Section 106** *Historic Properties*
- Section 401/404 of the Clean Water Act;** *Wetlands and Water Quality*
- Section 402 of the Clean Water Act**
- USCG 404** *Navigable Waterways*
- Migratory Bird Treaty Act**
- Endangered Species Act** *Threatened and Endangered Biological Resources*
- Magnuson-Stevens Fishery Conservation and Management Act** *Essential Fish Habitat*
- Safe Drinking Water Act**
- Section 6(f) Land and Conservation Act**
- Other State or Local Requirements** (Describe)

