



North Central Texas Council
of Governments

Dallas Rail Crossing Analysis

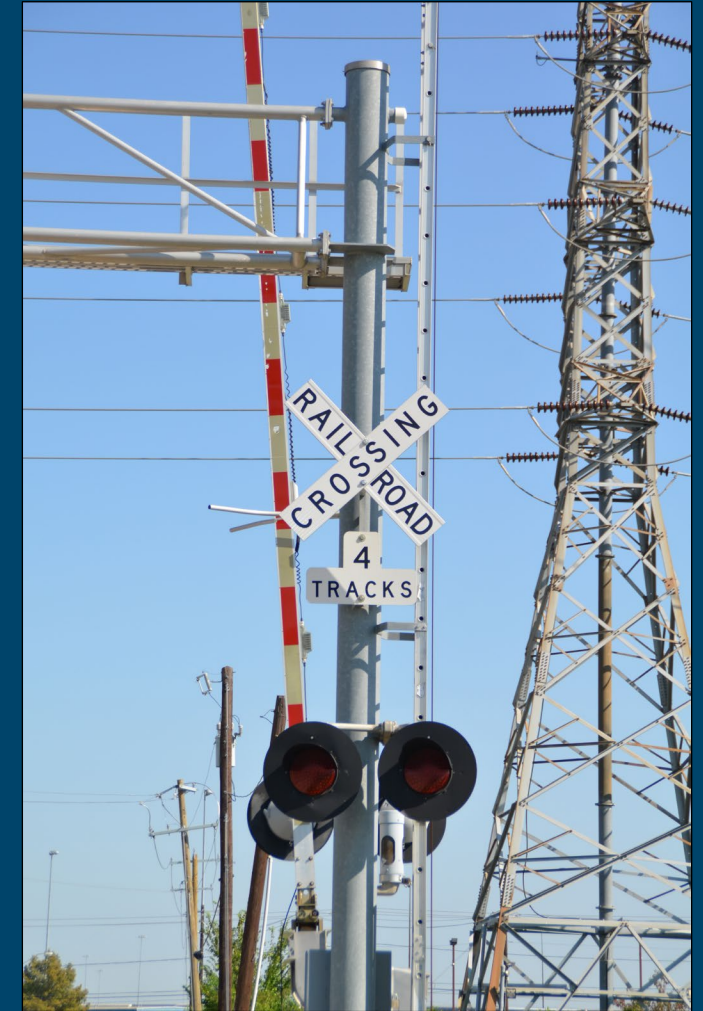
Regional Freight Advisory Committee

Elijah Cook

November 11, 2025

Railroad Crossing Analysis Background

- At-grade rail crossings are a major concern across the region and NCTCOG continues to recognize rail safety as a crucial issue needing to be addressed within our region.
- The first analysis focused on the city of Fort Worth and was completed in 2023.
- Each analysis will be developed to help understand and prioritize rail crossings for potential improvements.
- The Dallas analysis evaluated 224 public at-grade railroad crossings.
- The goal of all current and future analysis is to improve safety and reduce congestion at railroad crossings across our region.



Courtesy of NCTCOG



Rail Crossing Analysis

The Process

- 1) Identified all public at-grade crossings in the city of Dallas
- 2) Built a database with both quantitative and qualitative information about each crossing
- 3) Conducted site visits from November 2024 through August 2025
- 4) Completed database with field verification
- 5) Developed formulas to prioritize crossings
- 6) Identified priority rail crossings for recommended improvements

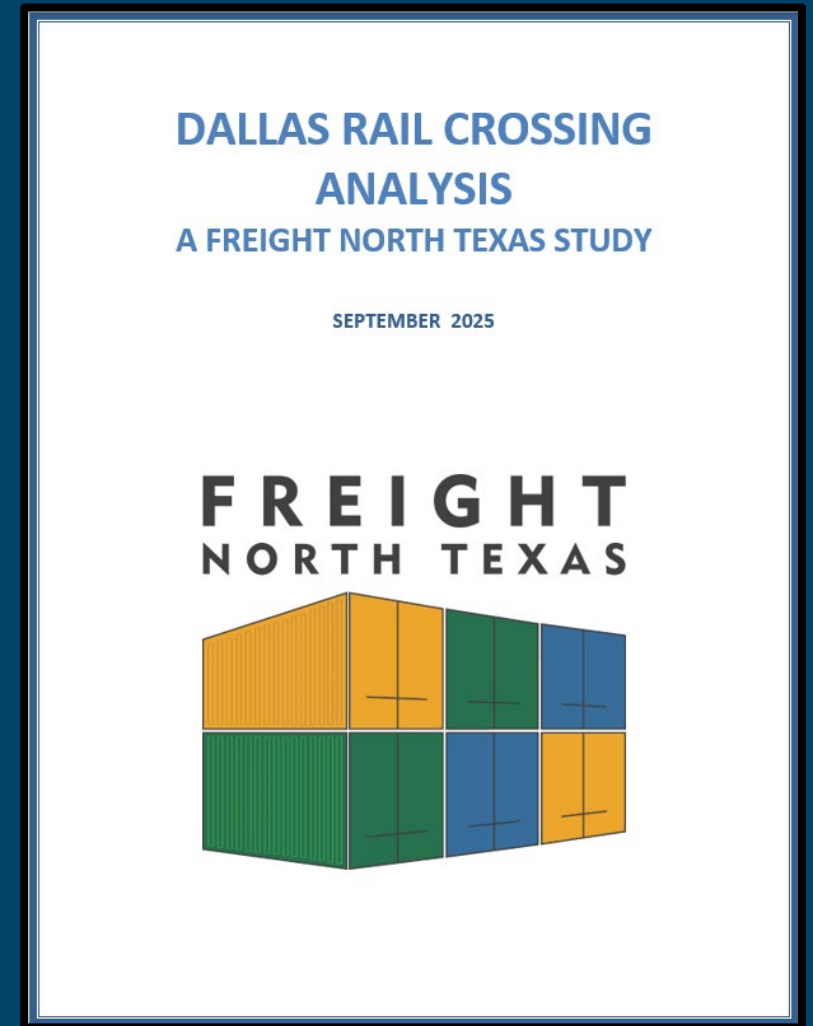


Courtesy of NCTCOG



Dallas Rail Crossing Analysis Report

- 1) Introduction
- 2) Data Collection
- 3) Analysis
 - a) Quantitative
 - b) Qualitative
 - c) Crossing Gaps
- 4) Recommendations
 - a) Crossings that would benefit from grade separation
 - b) Crossing that would benefit from safety improvements



Courtesy of NCTCOG



Building the Database

Quantitative information included in the review (from FRA)

- Number of vehicles a day: Average Annual Daily Traffic (AADT).
- Trains per day: Number of trains that pass through the crossing each day.
- Train speed: Speed of the train when it passes through the crossing.
- Crossing incidents: Number of accidents at the crossing from 2014-2024 (10 years).



Courtesy of NCTCOG



Building the Database

Qualitative information included in the review (from site visits)

- Active Warning Devices: Includes gates and lights that activate when a train approaches the crossing.
- Static Warning Devices: Includes pavement marking and standard signage such as crossbucks.
- Supplemental Safety Measures: Includes medians, supplemental signage, etc.
- Observed Conditions: Includes geometry issues and number of roadway lanes, etc.

Rail Crossing Evaluation Form		
Date	Railroad	
Crossing DOT #	Road	
Crossing Information		
Quiet Zone	Pavement Markings	Signals
Advanced Warnings	Crossbucks	Active Warning Devices
Near By Signals		
Number of Lanes	Number of Tracks	
Median and Other SSMS	Geometry Issues	
Nearby Driveways	Clearance (Grade Seeps only)	
Other Observed Issues	Additional Notes	

Courtesy of NCTCOG



Analysis Methodology

How Crossings were Prioritized

- Formulas scored each crossing on quantitative factors and qualitative factors
- Combined scores classified crossings into priority levels
- **High Priority:** High traffic volumes and incidents with inadequate safety measures
- **Medium Priority:** Mixed conditions
- **Low Priority:** Lower traffic volumes and incidents with adequate safety measures

Heavy Rail vs. Light Rail Separation

Analysis separated heavy rail and DART light rail due to operational differences

U. S. DOT CROSSING INVENTORY FORM
DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For private pathway grade crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Items 20 and Part II Items 7-8, are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 10 / 14 / 2022		B. Reporting Agency ☐ Railroad ☒ Transit ☒ State ☐ Other		C. Reason for Update (Select only one) ☒ Change in Data ☐ New Crossing ☐ Closed ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR		D. DOT Crossing Inventory Number 9711915	
Part I: Location and Classification Information							
1. Primary Operating Railroad Dallas Area Rapid Transit (DART)		2. State TEXAS		3. County DALLAS		4. City / Municipality Near DALLAS	
5. Street/Road Name & Block Number SCOTT LAMAR STREET		6. Crossing Type & No. ST 0000		7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR		8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR	
9. Railroad Division or Region None TEXAS		10. Railroad Subdivision or District None DART		11. Branch or Line Name None RED-BLUE		12. RR Milepost 0136.00	
13. Line Segment OC 1		14. Nearest RR Timetable Station N/A		15. Parent RR (if applicable) N/A DART		16. Crossing Owner (if applicable) N/A DART	
17. Crossing Type ☒ Public ☐ Private		18. Crossing Purpose ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.		19. Crossing Position ☒ At Grade ☐ RR Under ☐ RR Over		20. Public Access (if Private Crossing) ☐ Yes ☒ No	
21. Type of Land Use ☐ Open Space ☐ Farm ☐ Residential ☒ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard		22. Average Passenger Train Count Per Day Less Than One Per Day ☒ Number Per Day 150		23. Type of Train ☒ Freight ☐ Inter-city Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other		24. Is there an Adjacent Crossing with a Separate Number? ☐ Yes ☒ No	
25. Quiet Zone (FRA provided) ☐ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused		26. HSR Corridor ID N/A		27. Latitude in decimal degrees (WGS84 std: -nn.nnnnnn) 32.772656		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnn) -96.802352	
29. Lat/Long Source ☒ Actual ☐ Estimated		30.A. Railroad Use *		30.B. Railroad Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.A. State Use *		31.B. State Use *		31.C. State Use *	
31.D. State Use *		32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *		33. Emergency Notification Telephone No. (posted) 214-928-6000	
34. Railroad Contact (Telephone No.) 214-928-6000		35. State Contact (Telephone No.) 512-416-2684		36. State Phone# updated - date updated 2024-12-06		37. State Contact (Telephone No.)	
Part II: Railroad Information							
1. Estimated Number of Daily Train Movements 1.A. Total Day Thru Trains (6 AM to 6 PM) 80		1.B. Total Night Thru Trains (6 PM to 6 AM) 70		1.C. Total Switching Trains 0		1.D. Total Transit Trains 150	
1.E. Check if Less Than One Movement Per Day How many trains per week? ☐		2. Year of Train Count Data (YYYY) 2016		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 25 3.B. Typical Speed Range Over Crossing (mph) From 10 to 25		4. Type and Count of Tracks Main 2 Siding 0 Yard 0 Transit 0 Industry 0	
5. Train Detection (Main Track only) ☐ Constant Warning Time ☐ Motion Detection ☐ AFO ☒ PTC ☐ DC ☐ Other ☐ None		6. Is Track Signaled? ☒ Yes ☐ No		7.A. Event Recorder ☒ Yes ☐ No		7.B. Remote Health Monitoring ☐ Yes ☒ No	

FORM FRA F 6180.71 (Rev. 3/15) OMB approval expires 01/31/2026 Page 1 OF 2

Courtesy of FRA



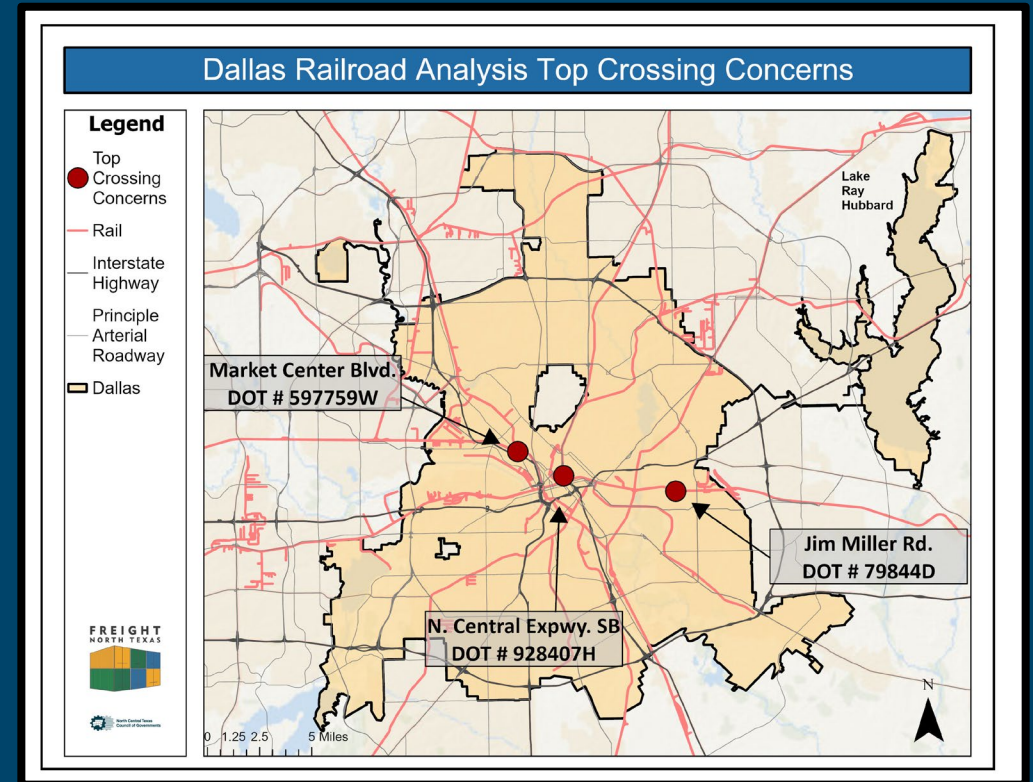
Analysis Results – Key Findings

Priority Classifications:

- **High Priority:** 2 heavy rail and 17 light rail crossings
- **Medium Priority:** 50 heavy rail and 35 light rail crossings
- **Low Priority:** 46 heavy rail and 33 light rail crossings

Top Concerns Identified:

- **Market Center Boulevard:** 5 incidents since 2015
- **Jim Miller Road:** 3 incidents, geometry issues, high AADT
- **North Central Expressway SB (DART):** Extremely high quantitative score

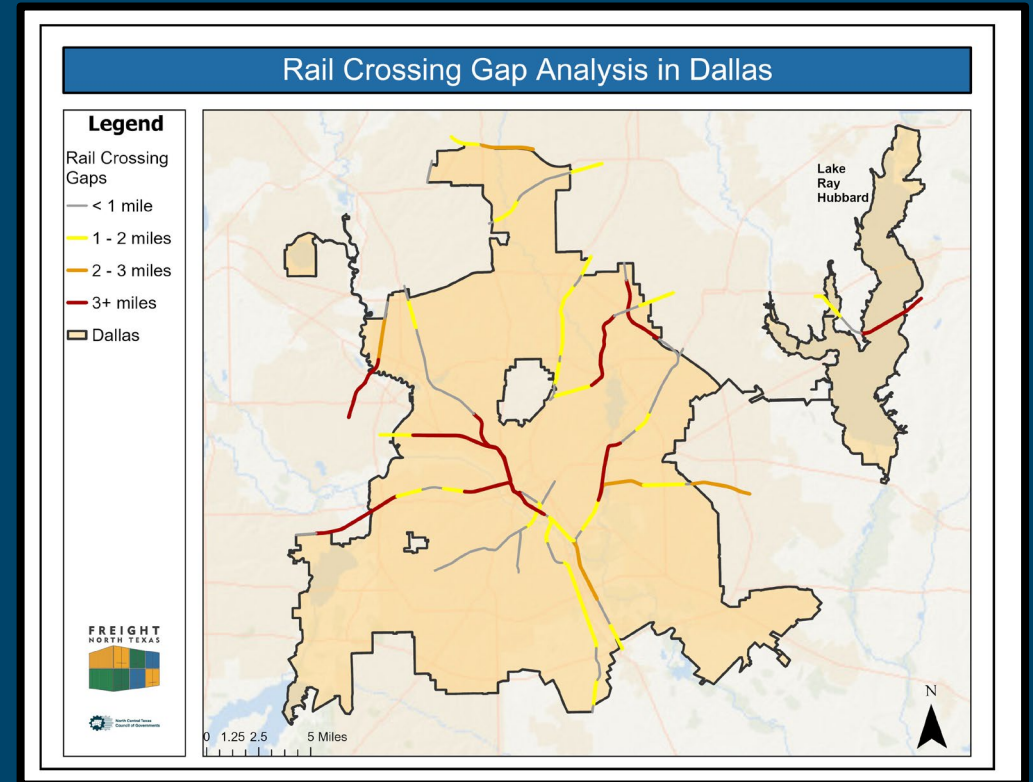


Courtesy of NCTCOG



Crossing Gap Analysis

- An analysis was completed to identify where there is enough space to hold a 1-mile, 2-mile, or 3-mile-long train without occupying a crossing.
- Results will inform future decisions about grade separations to reduce blocked crossings.
- NCTCOG understands there are many factors that determine where a train is held; this analysis will be used to identify potential locations only.



Courtesy of NCTCOG



Crossing Gap Analysis Results

40 gap segments identified for potential train staging:

- **One-to-two-mile gaps: 26 segments (65%)**

18 heavy rail corridors and 8 light rail corridors

- **Two-to-three-mile gaps: 5 segments (13%)**

All heavy rail corridors

- **Three + mile gaps: 9 segments (22%)**

- 7 heavy rail corridors and 2 light rail corridors
- Longest gap: 4.78 miles (South Lamar Street to Manor Way)

Distance Between Crossings (Miles)	Beginning Crossing ID	Beginning Railroad Subdivision	Beginning Street Name	Railroad Crossing Operator	Terminating Crossing ID	Terminating Railroad Subdivision	Terminating Street Name
1.00	794844D	Mineola Sub	N. Jim Miller Rd.	UP	795418Y	Mineola Sub	Loop 12 N. Frontage Rd.
1.01	795418Y	Mineola Sub	Loop 12 N. Frontage Rd.	UP	794833R	Mineola Sub	N. Prairie Creek Rd.
1.02	794925D	Dallas Sub	Manila	UP	794921B	Dallas Sub	Vilbig
1.05	022050P	Dallas Sub	Lakeland Dr.	CPKC	022052D	Dallas Sub	Mariposa Dr.
1.23	912106P	Ennis Sub	Youngblood Dr.	UP	763644J	Ennis Sub	Langdon Rd.
1.24	415311A	DFW	Simpson Stuart Rd.	BNSF	415312G	DFW	JJ Lemon Rd.
1.25	415315C	DFW	Cleveland Rd.	BNSF	415317R	DFW	Witt Rd.
1.26	794929F	Dallas Sub	Chalk Hill Rd.	UP	794927S	Dallas Sub	Norwich Ln.
1.29	675302S	DFW	Lenway St.	BNSF	415305W	DFW	Sargent Rd.
1.38	021770E	Alliance	Horizon North Dr.	CPKC	021767W	Alliance	Marsh Ln.
1.49	790180D	Carrollton	Knoll Trail Dr.	DGNO	789622J	Carrollton	Davenport Rd.
1.52	415221B	Dallas	Miller Rd.	DGNO	415224W	Dallas	George Bush Tpke.
1.59	597754M	DFW	Norwood Rd.	TRE	597751S	DFW	Wildwood Dr.
1.60	789627T	Fort Worth	Waterview Pkwy.	DGNO	789628A	Alliance	Custer Pkwy.
1.60	765864L	Mineola Sub	Bethrum St.	UP	765858H	Mineola Sub	Tx. Scyene
1.64	763660T	Dallas Sub	Lenway St.	UP	763657K	Dallas Sub	S. Lamar St.
1.69	415309Y	DFW	E. Ledbetter Rd.	BNSF	415307K	DFW	E. Overton Rd.

Courtesy of NCTCOG



Recommendations

Grade Separation Candidates:

- Market Center Boulevard – grade separation should be reviewed for feasibility
- Jim Miller Road – possible grade separation should be reviewed if incidents continue

Safety Improvements:

Recommendations for safety improvements at crossings (ex. update pavement markings, working signals, etc.) where necessary

Available Funding:

- Federal: RCEP, CRISI, INFRA, BUILD,
- State: Rail Relocation and Improvement Fund



Courtesy of NCTCOG



Next Steps and Regional Expansion

Future Regional Studies:

- Continue analysis for other cities within the NCTCOG region
- Coordinate with cities, counties, TxDOT, and railroads on improvements
- Monitor implementation of recommended safety measures

Ongoing Priorities:

- Support targeted crossing improvements based on priority rankings
- Assist in discussions to reduce blocked crossings using gap analysis
- Maintain focus on safety, efficiency, and reliability improvements



Courtesy of NCTCOG



Questions?



CONTACT US



Jeff Hathcock

Program Manager

jhathcock@nctcog.org | 817-608-2354



Savannah Briscoe

Transportation Planner

sbriscoe@nctcog.org | 817- 608-2347



Mike Johnson

Principal Transportation Planner

mjohnson@nctcog.org | 817-695-9160



Valerie Alvarado

Transportation Planner

valvarado@nctcog.org | 817-640-4428



Bryce McMeans

Transportation Planner

bmcmeans@nctcog.org | 817-695-9128



Elijah Cook

Transportation Intern

epcook@nctcog.org | 817-704-5669

