

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS 2018 Safety Program Performance Measures



North Central Texas Council of Governments - Roadway Safety Program Area

Establishing NCTCOG's Safety Performance Targets

- NCTCOG Aspirational Safety Goal: Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.
- On February 14, 2019, the Regional Transportation Council adopted a resolution supporting Highway Safety Improvement Program Performance Targets (i.e. PM1) as established by the Texas Department of Transportation (TxDOT) in collaboration with statewide stakeholders.
- Targets were developed using a data-driven, multi-year, collaborative process.
- Two percent reduction from original trend line by Target Year 2022 — achieved by reducing each intermediate year by 0.4 percent in 2018, 0.8 percent in 2019, 1.2 percent in 2020, 1.6 percent in 2021, and 2.0 percent in 2022.
- Targets are based on a five-year rolling average (2014 - 2018) for 2019 targets.

Safety Performance Targets	2018 TxDOT Targets	2018 NCTCOG Targets	2019 TxDOT Targets	2019 NCTCOG Targets
	0.4% Reduction		0.8% Reduction	
No. of Fatalities	3,703.08	665.2	3,791.0	599.2
Fatality Rate	1.432	0.960	1.414	0.838
No. of Serious Injuries	17,565.4	3,647.8	17,751.0	3999.6
Serious Injury Rate	6.740	5.180	6.550	5.568
No. of Non-motorized Fatalities & Serious Injuries	2,150.6	560.0	2,237.6	582.4

NCTCOG 12-County MPA Crash and Fatality Data 2014-2018

NCTCOG receives regional crash data from TxDOT's Crash Records Information System annually. The performance measures below highlight reportable crashes and fatalities that occurred in the NCTCOG 12-county Metropolitan Planning Area (MPA) from 2014 to 2018. The data below indicates that in 2018 the NCTCOG region experienced **one crash every four minutes** and **one fatality every 12 hours**.

2014-2018 Crashes							2014-2018 Fatalities					
County	2014	2015	2016	2017	2018	% Change 2017-2018	2014	2015	2016	2017	2018	% Change 2017-2018
Collin	11,861	13,222	13,898	13,100	13,201	0.77%	46	38	50	68	45	-33.82%
Dallas	42,879	48,905	55,684	50,565	49,745	-1.62%	222	260	316	281	294	4.63%
Denton	9,952	11,693	12,236	11,970	11,768	-1.69%	34	35	49	49	51	4.08%
Ellis	2,181	2,407	2,596	2,725	2,810	3.12%	24	25	28	33	16	-51.52%
Hood	752	751	795	819	725	-11.48%	8	3	15	11	5	-54.55%
Hunt	1,111	1,332	1,418	1,346	1,471	9.29%	18	22	28	27	17	-37.04%
Johnson	1,998	2,020	2,287	2,354	2,358	0.17%	21	23	23	21	23	9.52%
Kaufman	1,482	1,802	2,026	1,913	2,128	11.24%	22	18	28	31	25	-19.35%
Parker	2,003	2,014	2,176	2,306	2,219	-3.77%	14	18	21	20	29	45.00%
Rockwall	1,109	1,308	1,369	1,346	1,407	4.53%	2	4	12	13	8	-38.46%
Tarrant	28,274	30,831	34,722	34,295	32,809	-4.33%	138	151	166	182	168	-7.69%
Wise	911	811	968	954	971	1.78%	10	21	19	22	16	-27.27%
Total	104,513	117,096	130,175	123,693	121,612	-1.68%	559	626	755	758	697	-8.05%

Data Source: TxDOT Crash Records Information System (CRIS) current as of 4/30/2019 - All TxDOT disclaimers apply to this information.

Note: A reportable motor vehicle 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 property of any one person to the apparent extent of \$1,000."

2018 Contributing Factors for Serious Injury and Fatality Crashes

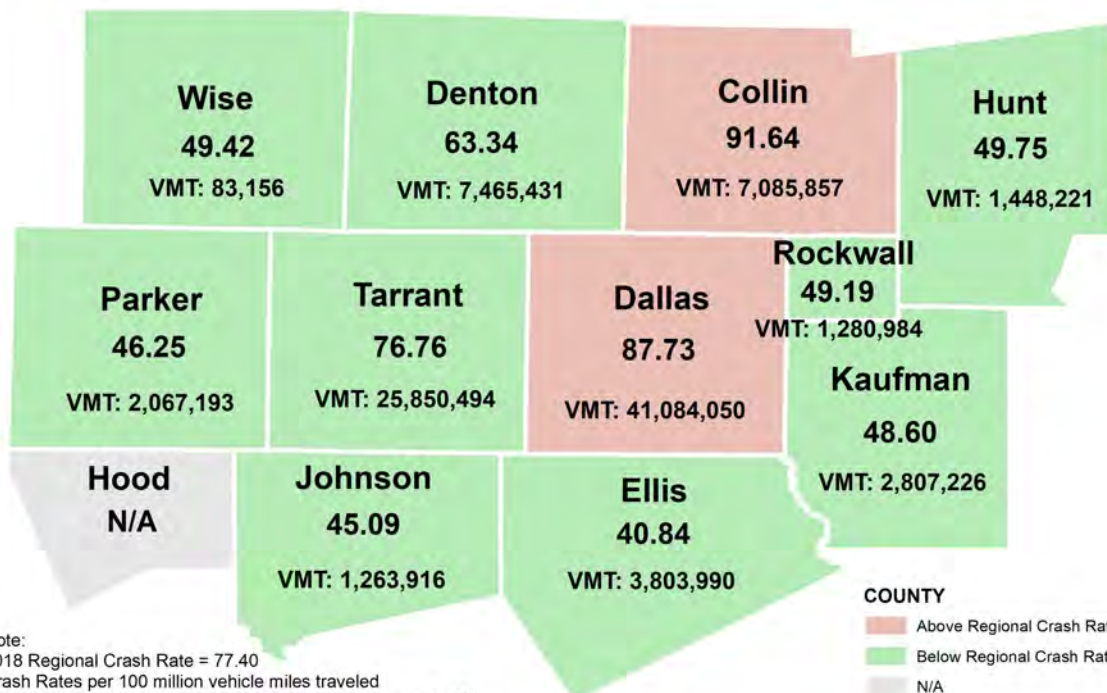
Top Ten Contributing Factors — Limited Access Facilities Only		2018	2017
1	Speeding - (Overlimit / Unsafe Speed / Failed to Control Speed)	34.23%	33.15%
2	Driver Related (Distraction in Vehicle / Driver Inattention / Road Rage / Drove Without Headlights / Cell/Mobile Device Use - (Texting / Other / Unknown - [0.53%]))	11.41%	10.24%
3	Changed Lane When Unsafe	11.31%	6.81%
4	Faulty Evasive Action	9.49%	7.88%
5	Followed Too Closely	8.72%	3.98%
6	Failed to Drive in Single Lane	8.26%	10.44%
7	Under Influence - (Had Been Drinking / Alcohol / Drug)	5.61%	9.10%
8	Fatigued or Asleep	2.16%	2.09%
9	Disabled in Traffic Lane	1.79%	2.36%
10	Pedestrian Failed to Yield Right of Way to Vehicle	1.26%	3.71%

Note: The Contributing Factor Analysis above includes Primary, Secondary, and Tertiary Contributing Crash Factors on limited access facilities in the NCTCOG 12-County MPA only. Speeding has been the number one contributing factor for all analysis done from 2016-2018. For more information on contributing factor trends for previous years, please visit the [NCTCOG Safety Program](#) webpage.

2018 Crash Rates by County

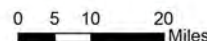
Each year, NCTCOG calculates crash rates on limited access facilities for each county within the NCTCOG 12-County MPA. The map below displays crash rates by county in comparison to the 2018 regional crash rate of 77.40 crashes per 100 million vehicle miles traveled (VMT). Counties that have a higher crash rate than the regional rate are shown in red, while counties with a rate below the regional crash rate are shown in green.

2018 Limited Access Roadway Crash Rates by County: NCTCOG 12 - County MPA



Note:
 2018 Regional Crash Rate = 77.40
 Crash Rates per 100 million vehicle miles traveled
 Hood County is N/A as it does not have a limited access facility

Source:
 Crash Data - TxDOT Crash Records Information System (CRIS)
 VMT Data - NCTCOG Trans Model Performance Reports



Crash Rates calculated for limited access facilities: IH, SH, and US mainlanes

NCTCOG Bicycle and Pedestrian Safety

Look Out Texans Campaign and Planning Efforts

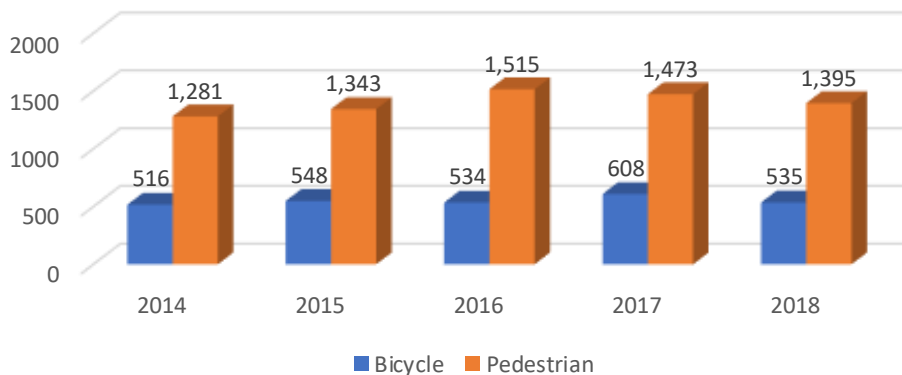
Launched in October 2015, the Look Out Texans Campaign encourages North Texans to watch out for one another and offers specific tips to bike, walk and drive safely together. The campaign was developed by the North Central Texas Council of Governments and funded by the Texas Department of Transportation. Between 2014 and 2018, there were more than 9,700 reported bicycle and pedestrian crashes involving a motor vehicle and over 785 fatalities in North Texas, according to TxDOT. The campaign features North Texans helping bring a greater sense of community and respect to our roads. Understanding how people bicycling, walking, and driving should interact together is important to improving safety on area roads and protecting our friends, families, and neighbors.

For example, people **bicycling** should follow the same traffic rules as motor vehicles, ride in the same direction as traffic, always stop at traffic signals and stop signs, and use hand signals to notify motorists of their intent. People **walking** must be alert and visible. Pedestrians should only cross streets at crosswalks and intersections where they can gauge traffic and be visible. Before crossing, eye contact with drivers ensures they were seen. Finally, people **driving** should allow at least three feet when passing someone on a bicycle. State law allows bicyclists to ride on roadways and use the middle of a lane. Drivers must also look out for people walking, always yielding to crossing pedestrians. To view safety education videos and see all 21 safety tips of the Look Out Texans campaign, visit LookOutTexans.org.

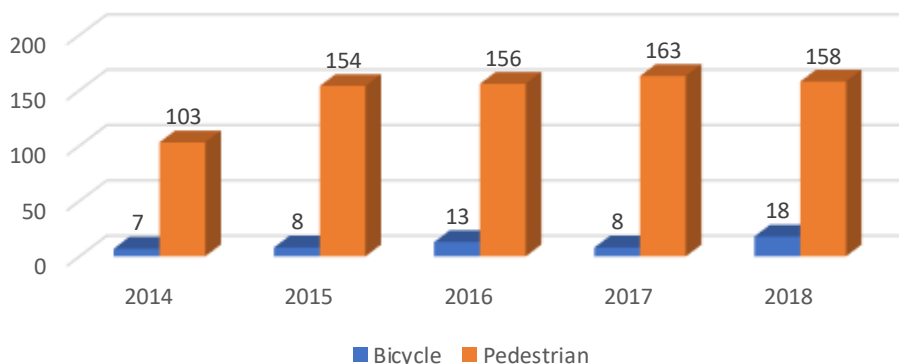
In a focused effort to reduce the number of pedestrian crashes and fatalities, NCTCOG in partnership with TxDOT, is creating a Pedestrian Safety Action Plan. The plan will identify goals and action items in the areas of engineering, education, and enforcement and brings together key stakeholders from various agencies across the metropolitan area to ensure the plan is a success. A survey was conducted to gather user input on the pedestrian experience to direct the goals and action items, which could result in projects and programs across the region. For more information about the plan, please visit the project web page nctcog.org/pedsafetyplan.

NCTCOG 12-County MPA Bicycle and Pedestrian Crash Data 2014—2018

2014-2018 Bicycle & Pedestrian Crashes 12-County MPA



2014-2018 Bicycle & Pedestrian Fatalities 12-County MPA



NCTCOG Traffic Incident Management Program

2018 Regional Crash Pyramid — NCTCOG 12-County MPA

The crash pyramid represents the high volume of crashes in the region, equating to five injury crashes every hour. There is an obvious need for highly effective training for those agencies responsible for managing and clearing traffic incidents. Traffic incident management training promotes consistency among agency responders, significantly improves responder and motorist safety, and reduces the duration of traffic incidents.



On average, each injury crash requires

- 2 Law Enforcement
- 4 Fire/Rescue
- 2 Emergency Medical Services
- 1 Towing and Recovery
- 9 Responders

Potentially 45 responders "working in or near moving traffic" every hour 24/7/365.

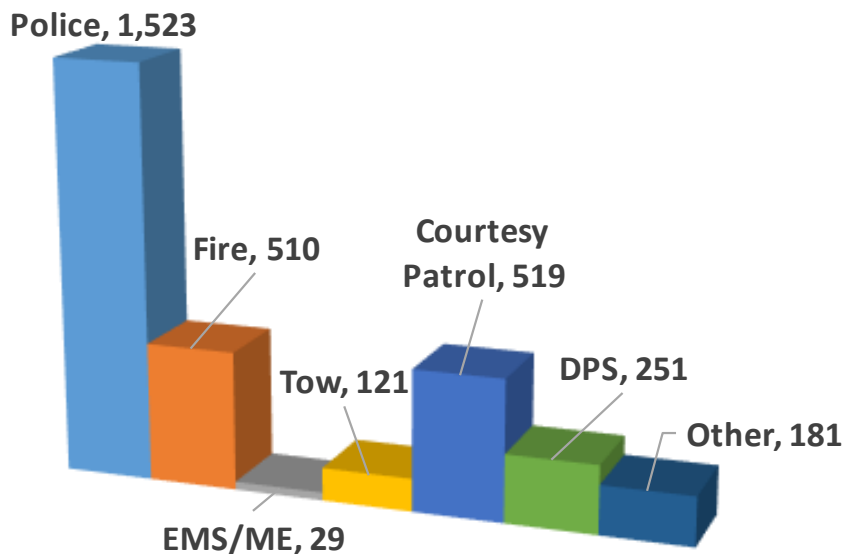
**Crash pyramid does not include "Unknown Injury Crashes"*

NCTCOG TIM First Responder and Manager's Course

The Traffic Incident Management (TIM) training series was developed in February of 2003 and first offered in December of 2003. The goal of the TIM training course is to initiate a common, coordinated response to traffic incidents that will build partnerships, enhance safety for emergency personnel, reduce upstream traffic accidents, improve the efficiency of the transportation system, and improve the air quality in the Dallas-Fort Worth region. The **First Responder and Manager's Course**, geared towards those with daily involvement in responding to traffic incidents, is offered six times per year. The training is eligible for TCOLE Credits, Fire Commission Credits, and Emergency Medical Services Continuing Education Units.

NCTCOG First Responder and Manager's Course Attendance		
2003 - 2018	January - July 2019	Total
3,012	122	3,134

NCTCOG First Responder and Manager's Course Attendance - Breakdown By Area



NCTCOG Traffic Incident Management Program

NCTCOG First Responder and Manager's Course Attendance — Breakdown By Agency

Cities and Counties Represented (70): August 2013 - July 2019

Allen Argyle Arlington Aubrey Azle Balch Springs Bedford Benbrook Burleson Caddo Mills Carrollton Cedar Hill Cleburne Colleyville Corinth Cresson	Dallas Decatur DeSoto Duncanville Euless Farmers Branch Flower Mound Forest Hill Fort Worth Frisco Garland Glenn Heights Granbury Grand Prairie Grapevine Greenville	Hickory Creek Hurst Irving Joshua Keller Kennedale Krum Lake Cities Lake Worth Lewisville Mansfield McKinney Melissa Mesquite N. Richland Hills Northlake	Plano Ponder Prosper Richardson Richland Hills Roanoke Rockwall Sachse Seagoville Springtown Terrell University Park Venus Waxahachie Willow Park Wilmer
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Counties: **Collin, Dallas**, Erath, Hunt, Tarrant, and Wise

Notes:

1. Agencies shown in bold text have attended both the First Responder and Manager's Course and the Executive Level Course.
2. The last major course update was done in August 2013.
3. A complete list of Agency Attendance from 2003 is available upon request.

NCTCOG TIM Executive Level Course Attendance

The **Executive Level Course** was introduced in 2005 and is geared towards agency decision and policy makers and provides a high-level overview of the topics discussed in the First Responder and Manager's Course. The Executive Level Course is offered twice a year.

Police	Fire	City Staff	Elected Officials	Public Works/ Strategic Services Transportation	Medical Staff	Other	Total (February 2005 - May 2019)
366	159	32	15	57	17	187	833

NCTCOG Photogrammetry Training Attendance: 2007— April 2019

Photogrammetry Training is offered as a complement to the region's TIM Training series. The Photogrammetry System, used for crash reconstruction, is an image-based 3D system that calculates measurements from photographs and digital images. The System helps reduce the time needed to investigate a crash scene. The following training is offered twice a year:

- Basic Training - five days (includes a three-day iWitness™ workshop and a two-day CAD workshop)
- Advanced Training - two days (offered to students who completed Basic Training)

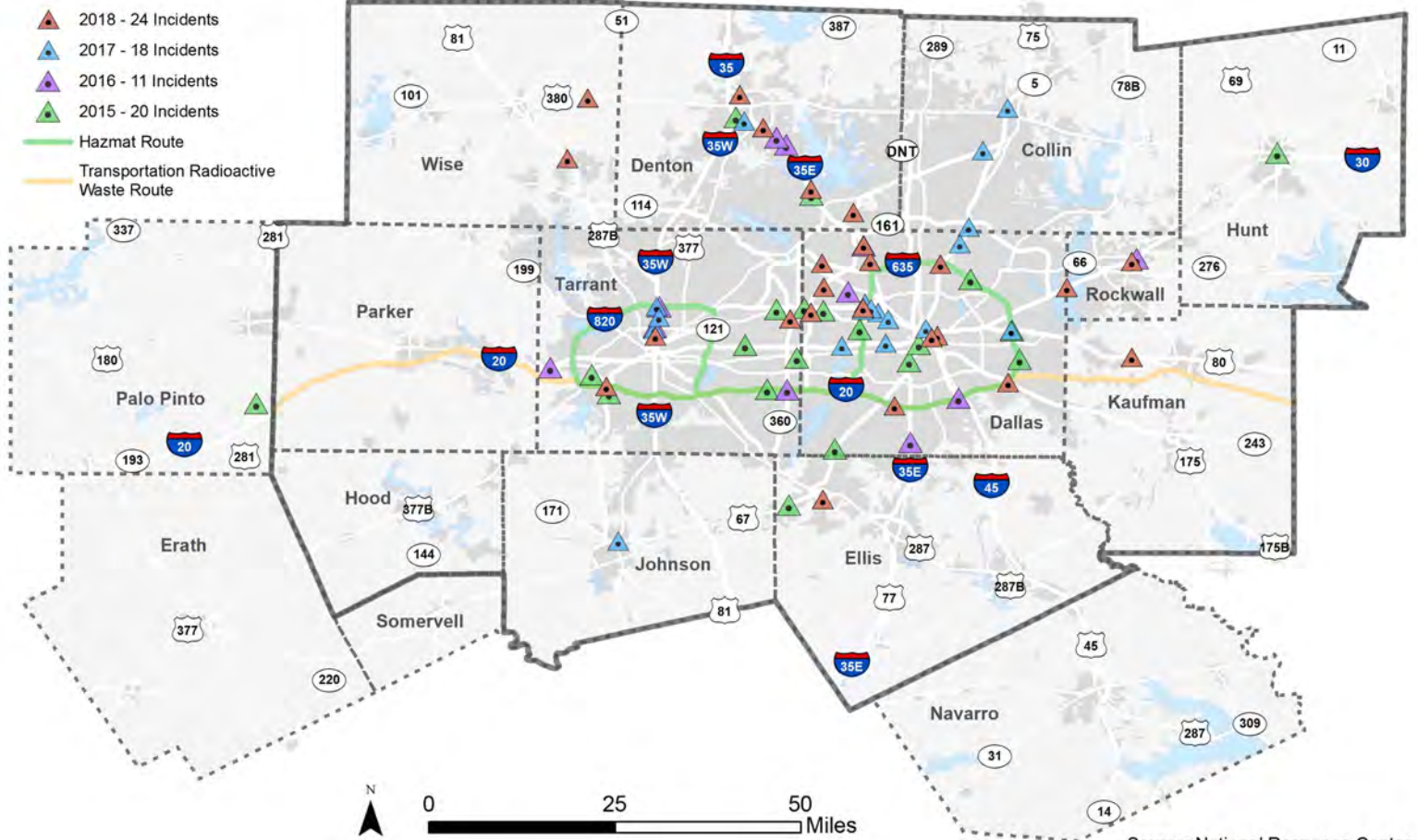
Course	Total
Basic Training	230
Advanced Training	133

Cities and Counties Represented (72) - As of April 2019

Addison Allen Alvarado Anna Argyle Arlington Azle Balch Springs Bedford Benbrook Carrollton Cedar Hill Cleburne	Coppell Colleyville Dallas Decatur Denton DeSoto Duncanville Ennis Euless Fairview Farmers Branch Ferris	Flower Mound Forest Hill Forney Fort Worth Frisco Glenn Heights Granbury Grand Prairie Grapevine Greenville Highland Park	Hurst Irving Lake Dallas Lancaster Lewisville Mansfield McKinney Melissa Mesquite Midlothian North Richland Hills	Northlake Red Oak Richardson Roanoke Rockwall Royse City Sachse Saginaw Seagoville Springtown Terrell Venus	Watauga Waxahachie Weatherford Wilmer Collin County Dallas County Denton County Tarrant County Wise County DART DFW Airport FWTA TxDPS
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2018 NCTCOG 16-County HazMat Incidents

NCTCOG continues to monitor major hazardous material spills on regional limited access facilities using data obtained from the National Response Center. This analysis helps identify areas which have been or may be impacted by hazardous materials carriers. Currently, the IH 20 corridor and the regional loops IH 820 and IH 635 are designated as radioactive waste routes. In 2018, there were 24 significant HazMat spills within the 16-county region.



Source: National Response Center
Data current as of March 7, 2019

County	2015	2016	2017	2018	Total
Collin	0	0	3	0	3
Dallas	9	4	10	11	34
Denton	2	2	1	4	9
Ellis	1	0	0	1	2
Erath	0	0	0	0	0
Hood	0	0	0	0	0
Hunt	1	0	0	0	1
Johnson	0	0	1	0	1
Kaufman	0	0	0	1	1
Navarro	0	0	0	0	0
Parker	0	0	0	0	0
Palo Pinto	1	0	0	0	1
Rockwall	0	1	0	2	3
Somervell	0	0	0	0	0
Tarrant	6	4	3	3	16
Wise	0	0	0	2	2
Total	20	11	18	24	73

Commercial Motor Vehicle Violations Training

NCTCOG, in partnership with the National Traffic Law Center at the National District Attorney's Association held two half-day Commercial Motor Vehicle Violations training opportunities on March 18-19, 2019. This interactive course was designed to provide prosecutors, judges, and law enforcement officers with a better understanding of commercial vehicle regulations and commercial drivers' licensing laws. The training is based on the Commercial Drivers' Licenses: A Prosecutor's Guide to the Basics of Commercial Motor Vehicle Licensing and Violations created by the National District Attorney's Association. It serves as a basic introduction for those who handle court cases related to commercial drivers' licenses and commercial motor vehicles. Training materials can be requested from Kevin Kroll at kkroll@nctcog.org and cover commercial drivers licenses (CDLs), convictions, driver disqualifications, and ethics. Additional CMV Violations training dates are expected to be scheduled in 2020.

Roadside Assistance Program

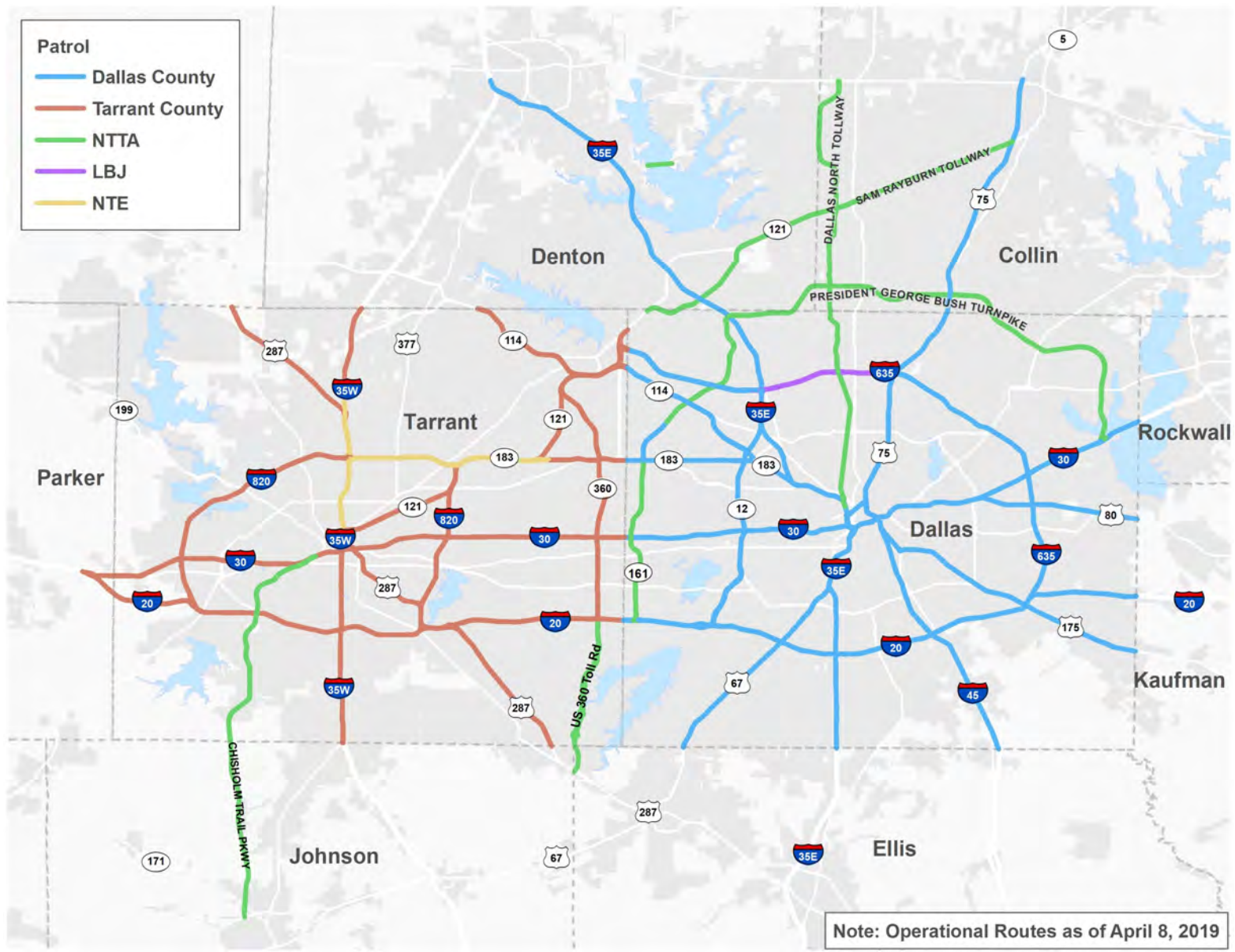
The Roadside Assistance Program (RAP) is an essential part of the region's Traffic Incident Management efforts. RAP coverage is focused on congested roadway systems in Dallas and Tarrant Counties but extends into portions of Collin, Denton, and Johnson Counties. The regional RAP helps alleviate congestion on area highways/freeways and toll roads by providing free assistance to stalled and stranded motorists by assisting with flat tires, stalled vehicles, and minor crashes and ultimately getting the vehicles operating or off the facility completely. Traffic control assistance and protection are also provided to law enforcement.

The RAP is currently operated by the Dallas County Sheriff's Office, Tarrant County Sheriff's Office, and the North Texas Tollway Authority (NTTA). Managed lane facilities along the LBJ Express and North Tarrant Express (NTE) corridors in Dallas and Tarrant Counties are patrolled by private sector partner agencies. Each agency's coverage area is shown in the map below.

Roadside Assistance Program Performance Measures

Agency	2017 Assists	2018 Assists
Dallas County Operations	66,166	66,048
Tarrant County Operations	26,687	27,129
NTTA	44,295	44,684
NTE Express	4,436	5,829
LBJ Express	7,055	6,176

Patrol Routes



In 2018, Dallas/Fort Worth Area Roadside Assistance Patrols

provided:



72,340

**Driver Assistance /
Stalled Vehicle**



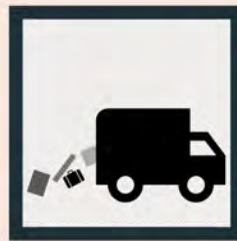
32,053

**Courtesy Check /
Directions**



5,445

**Crash
Assistance**



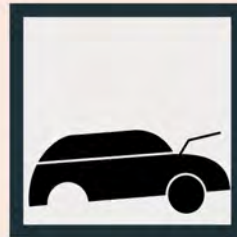
16,024

**Debris
Removal**



8,860

**Protection to
First Responders**



10,576

**Abandoned
Vehicle Check**

Total Combined Assists: 149,866

Notes:

Data includes Dallas County, Tarrant County, LBJ and NTE Texpress, and NTTA motorist assists combined.

4,568 assists were either not found, cancelled before a patrol vehicle arrived, or did not specify the service provided.

		Hours of Operation		Phone Number
Dallas County		Mon - Fri 5 AM - 9:30 PM Sat - Sun 11 AM - 7:30 PM		(214) 320-4444
Tarrant County		Mon - Sun 6 AM - 10 PM		(817) 884-1213
NTTA		Mon - Sun 24 Hours a Day		(214) 224-2203 or #999
NTE and LBJ TEXpress		Mon - Sun 24 Hours a Day		(972) 661-8693 or #777



Wrong-Way Driving Mitigation Pilot Programs - Dallas and Fort Worth Districts

The NCTCOG Wrong-Way Driving (WWD) Mitigation Pilot Program focuses on reducing the number of these high-speed head-on collisions on regional limited access facilities by installing WWD countermeasures and roadway improvements. Phase 1 of the WWD Mitigation Pilot program began in Dallas County in 2014 and incorporated strategies to replace conflicting lane and arrow markings, signal enhancements, and other intersection-related improvements. This project has since expanded to several additional counties shown in the table below. To date, 256 intersections have been completed, 229 of which are in Dallas County. Work on 27 of the remaining intersections in Dallas County was contracted out in July 2019. Countermeasure installation for Phase II of the WWD Mitigation Pilot Program began in Tarrant County in 2015 and focused on three corridors: IH 30, SH 360, and IH 35W. This included 14 intersections along IH 30 where radar, high definition cameras, and flashing LED Wrong Way signs were installed alongside more traditional WWD countermeasures. Using this technology, researchers documented an initial decrease in the number of wrong way drivers entering IH 30 compared to the average annual crash rate of the previous six years, but will wait for additional data collected over the next few years before drawing any final conclusions.

The North Texas Tollway Authority (NTTA) has started using thermal cameras to detect wrong way drivers on the mainlanes of tolled facilities. They also use sensors embedded in the pavement of tolled ramps to determine if a vehicle has entered the ramp traveling in the wrong direction. When this happens, automatic alerts are sent to NTTA staff who notify law enforcement. NTTA also continues to add prevention measures like flashing signs to correct a wrong way driver's travel before they enter the highway.

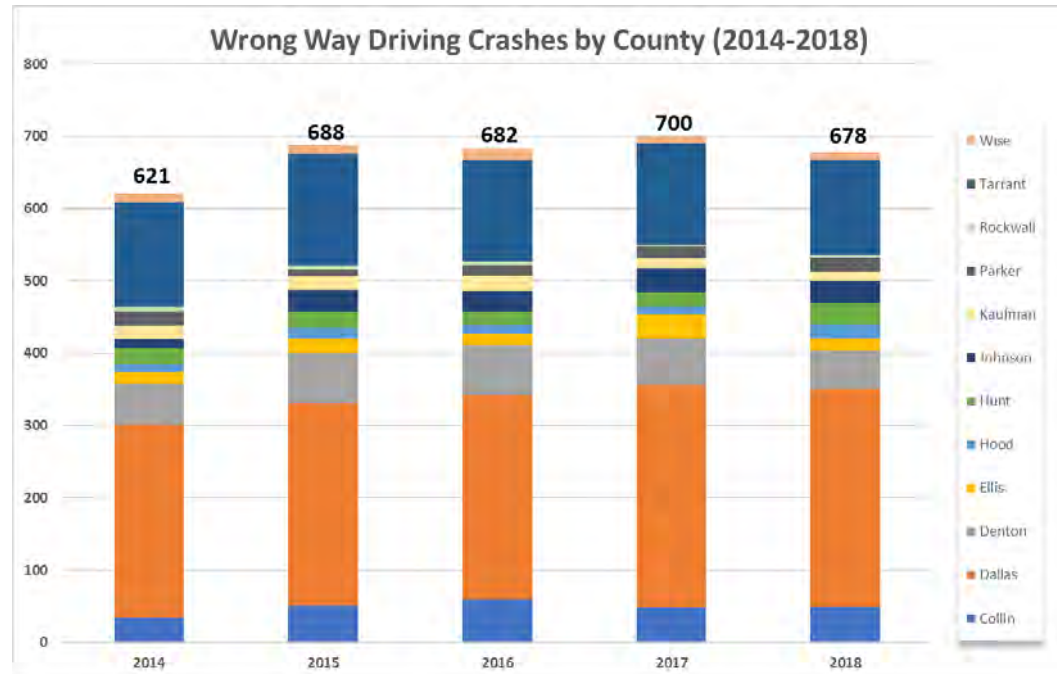
In addition to the items above, NCTCOG in partnership with TxDOT and NTTA released a Request for Information for wrong-way driver detection, verification and notification through mobile and/or in-vehicle technology in August 2019. The agencies are currently reviewing responses received and determining if these responses have proven technology to release a Request for Proposals to pursue this technology within the region.

Phase I Signalized and Non-signalized Intersections: TxDOT Dallas District

Dallas County Intersections			Additional Counties		
	Proposed Intersections	Remaining Intersections		Proposed Intersections	Remaining Intersections
Carrollton	11	3	Collin County	39	27
Dallas	174	59	Denton County	20	18
Farmers Branch	2	2	Ellis County	6	6
Garland	17	0	Rockwall County	4	4
Grand Prairie	25	6	Navarro County	3	3
Irving	38	7	Kaufman County	3	3
Mesquite	17	6	Dallas (DNT)*	13	0
Richardson	6	0			
Rowlett	5	2			
TxDOT	34	15			
Totals	329	100		88	61

12-County MPA - Wrong Way Driving Crashes: 2014-2018

From 2014 to 2018, the number of crashes on all roadways caused by a wrong way driver increased 9.2 percent within the 12-county MPA. However, there was a 3 percent decrease in WWD crashes from 2017 to 2018, including decreases in Dallas, Tarrant, and Denton Counties.



Note: WWD crashes include those where wrong way driving was identified as either a primary, secondary, or tertiary contributing factor to the crash.

Highway Safety Improvement Program

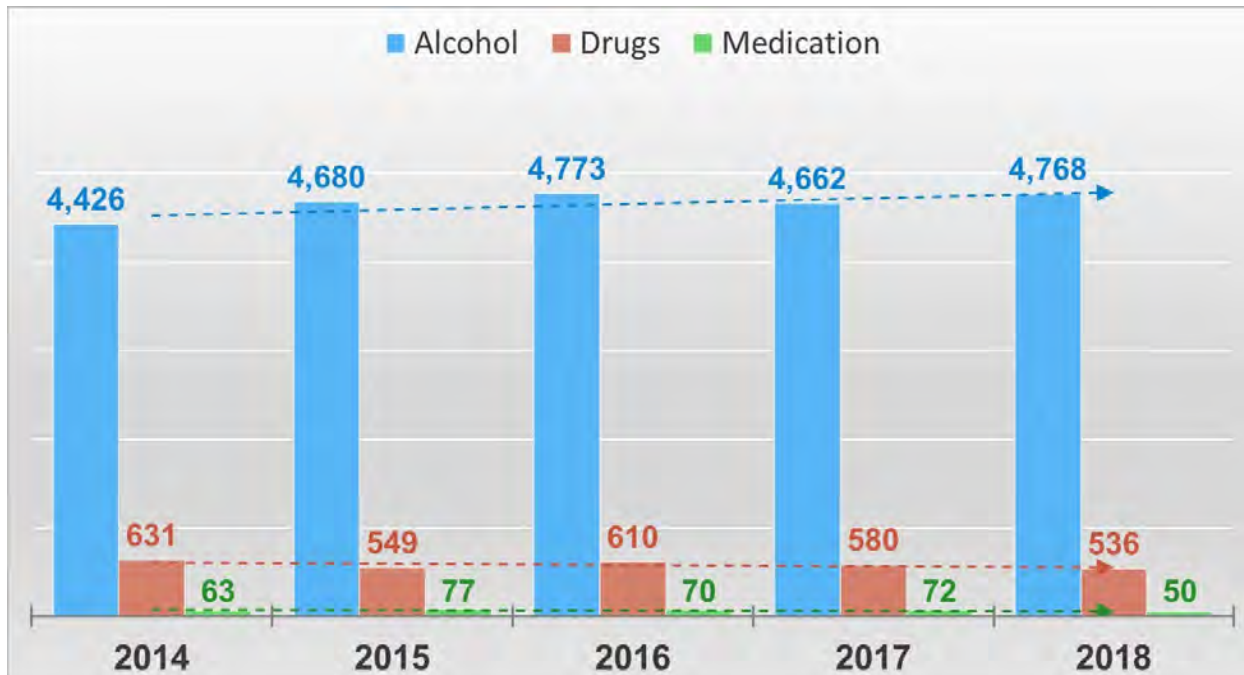
The TxDOT Highway Safety Improvement Program (HSIP) Call for Projects (CFP) is a funding opportunity for highway safety projects that decrease the number of fatalities and serious injuries on all public roadways. Funds are provided for construction and operational improvements that address crash types outlined in the Texas Strategic Highway Safety Program. The 2018 TxDOT HSIP CFP resulted in the following projects for our region:

- The Dallas District received approval on 46 projects for a total of \$16,536,377.
- The Fort Worth District received approval on 21 projects for a total of \$15,656,856.

Note: The TxDOT HSIP CFP format is being restructured, so there will not be a TxDOT HSIP CFP for 2019.

Crashes Involving Impaired Drivers: 2014-2018

According to TxDOT, in 2018, there were 26,580 crashes in the State of Texas where at least one driver was determined to be under the influence of alcohol, drugs, or medication. The graph below highlights crashes with these same contributing factors between 2014 and 2018 in the North Central Texas region. During this time period, the number of crashes involving an impaired driver has increased almost 5 percent overall, including a 7 percent rise in crashes involving alcohol, but also including an 18 percent drop in crashes involving illegal drugs.

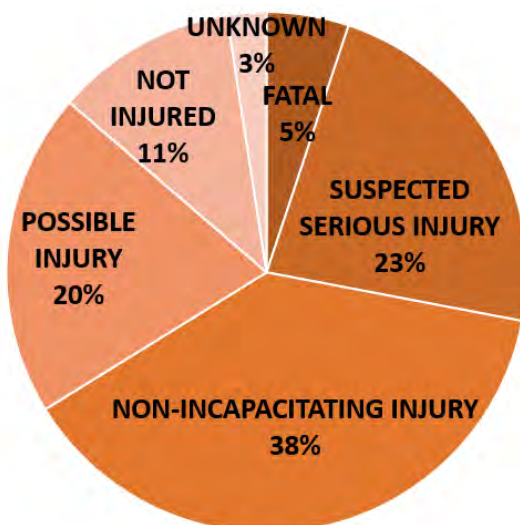


Note: The Impaired Driving Analysis includes TxDOT crash records where the primary, secondary, or tertiary contributing factors were cited as "Had been drinking", "Taking medication", "Under influence—alcohol", or "Under influence—drugs". Motor vehicle crash within the NCTCOG 16-County area are included.

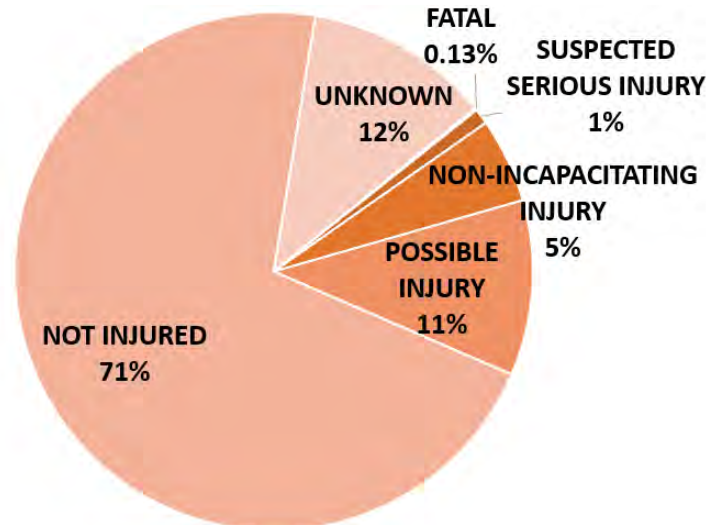
Motorcycle Injuries: 2014-2018

There were 10,996 injuries sustained by those riding a motorcycle within the 12-county MPA in the past five years. While motorcyclist injuries represent less than one percent of all motorist injuries, they account for 25 percent of all motorist fatalities and 20 percent of serious injuries. When analyzing motorcyclist injuries alone, 5 percent of injuries were fatal and 23 percent were serious. Compare that with 0.13 percent of all motor vehicle injuries being fatal and 1 percent being serious injuries, shown in the charts below. Motorcyclists are also much less likely to be involved in a crash without receiving any injury. Approximately 36 percent of motorcyclists were not wearing a helmet when involved in a crash. Of these, over 7 percent of injuries were fatal and 27 percent were serious injuries. When a helmet was worn, the percentage of fatalities and serious injuries among motorcyclists dropped to 4 percent and 22 percent respectively.

Motorcyclist Injuries by Injury Severity (2014-2018)



Motor Vehicle Injuries by Injury Severity (2014-2018)



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North Central Texas
Council of Governments
Transportation Department