

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG)

2013 Safety Program Performance Measures

NCTCOG 16-County Crash and Fatality Data 2011-2013

NCTCOG staff receives regional crash data from TxDOT's Crash Records Information System (CRIS) annually. The collected data will help identify crash hotspots and assist in the development of improvement strategies for the locations. The performance measures below highlight reportable crashes and fatalities that occurred in the North Texas region in 2011, 2012 and 2013. The data below indicates that in 2013 the NCTCOG region experienced one crash every five minutes and one fatality every 15 hours.

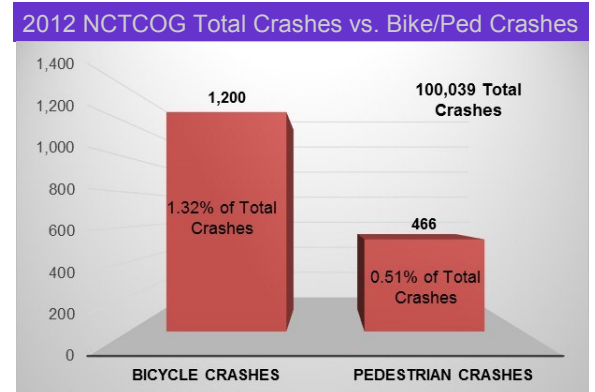
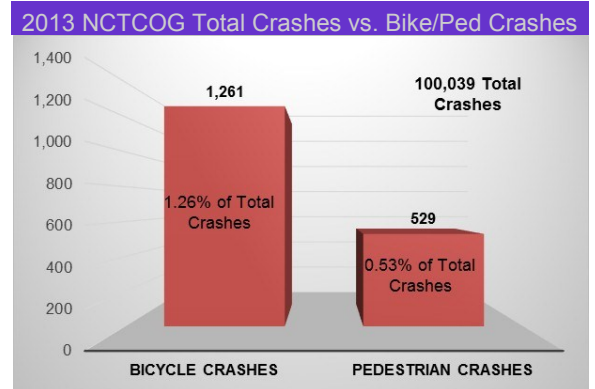
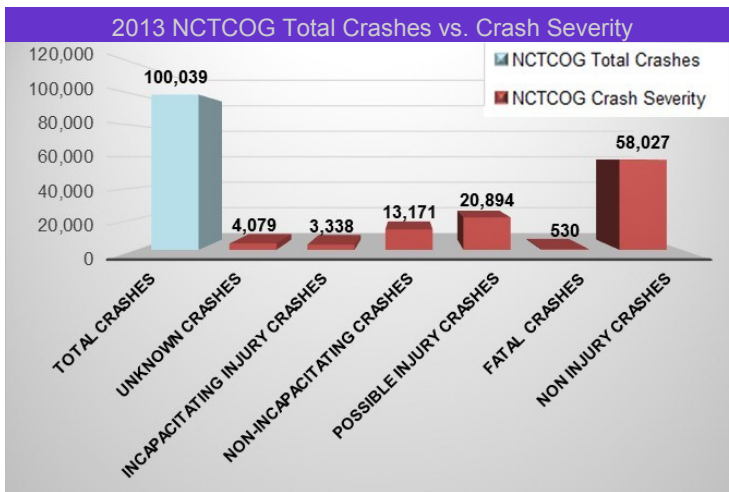
2011-2013 Crashes				
County	2011	2012	2013	% Change 2012 to 2013
Collin	9,024	9,406	10,419	10.77%
Dallas	34,955	36,082	40,330	11.77%
Denton	6,979	7,634	8,975	17.57%
Ellis	1,841	1,801	1,858	3.16%
Erath	550	558	500	-10.39%
Hood	698	633	638	0.79%
Hunt	1,060	1,037	949	-8.49%
Johnson	2,039	1,947	2,010	3.24%
Kaufman	1,322	1,335	1,388	3.97%
Navarro	983	930	968	4.09%
Palo Pinto	435	495	535	8.08%
Parker	1,626	1,613	1,804	11.84%
Rockwall	901	982	1,026	4.48%
Somervell	131	135	141	4.44%
Tarrant	24,006	25,419	27,595	8.56%
Wise	801	837	903	7.89%
Total	87,351	90,844	100,039	10.12%

2011-2013 Fatalities				
County	2011	2012	2013	% Change 2012 to 2013
Collin	34	47	41	-12.77%
Dallas	168	173	218	26.01%
Denton	27	34	40	17.65%
Ellis	16	12	19	58.33%
Erath	6	7	10	42.86%
Hood	5	8	5	-37.50%
Hunt	19	22	15	-31.82%
Johnson	16	20	18	-10.00%
Kaufman	15	27	12	-55.56%
Navarro	1	8	13	62.50%
Palo Pinto	8	7	11	57.14%
Parker	18	20	18	-10.00%
Rockwall	4	12	8	-33.33%
Somervell	3	5	6	20.00%
Tarrant	134	107	139	29.91%
Wise	13	19	10	-47.37%
Total	487	528	583	10.42%

Source (Crashes and Fatalities): TxDOT's Crash Records Information System (CRIS) current as of 1/31/2014- 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."

North Central Texas Council of Governments - Traffic Safety Crash and Fatality Statistics



NCTCOG Crash and Fatality Data 2013

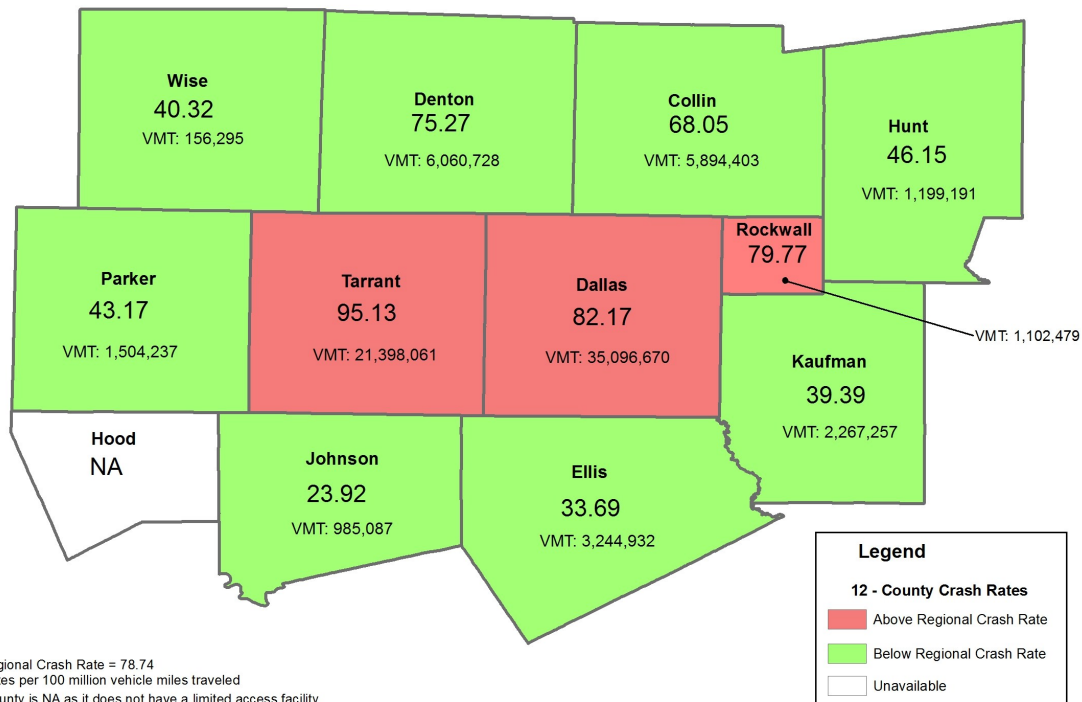
2013 Contributing Factors for Serious Injury and Fatality Crashes

	Top Ten Contributing Factors	Percentage
1	Speeding - (Overlimit / Unsafe Speed / Failed to Control Speed)	27.99%
2	Driver Related (Distraction in Vehicle / Driver Inattention / Drove Without Headlights / Road Rage)	10.65%
3	Faulty Evasive Action	7.99%
4	Changed Lane When Unsafe	7.28%
5	Followed Too Closely	7.16%
6	Failed to Drive in Single Lane	6.15%
7	Under Influence - (Had Been Drinking / Alcohol / Drug)	5.96%
8	Disregard Traffic Control (Stop and Go Signal / Stop Sign or Light)	5.75%
9	Failed to Yield ROW - (Turn on Red / Open Intersection / Private Drive / To Pedestrian / Stop Sign / Yield Sign / Turning Left)	4.34%
10	Fatigued or Asleep	1.65%

Note: The Contributing Factor Analysis above includes Primary, Secondary and Tertiary Contributing Crash Factors on limited access facilities in the NCTCOG 12-County MPA.

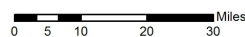
2013 Crash Rates by County

In 2009, NCTCOG began calculating crash rates on limited access facilities for the NCTCOG 12-County MPA. The first phase was focused on developing a limited access facility crash rate for the individual counties and developing a limited access facility crash rate for the region as a whole. The map below displays crash rates by county in comparison to the 2013 regional crash rate of 78.74 crashes per 100 million vehicle miles traveled. 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.



Note:
 2013 Regional Crash Rate = 78.74
 Crash rates per 100 million vehicle miles traveled
 Hood County is NA as it does not have a limited access facility

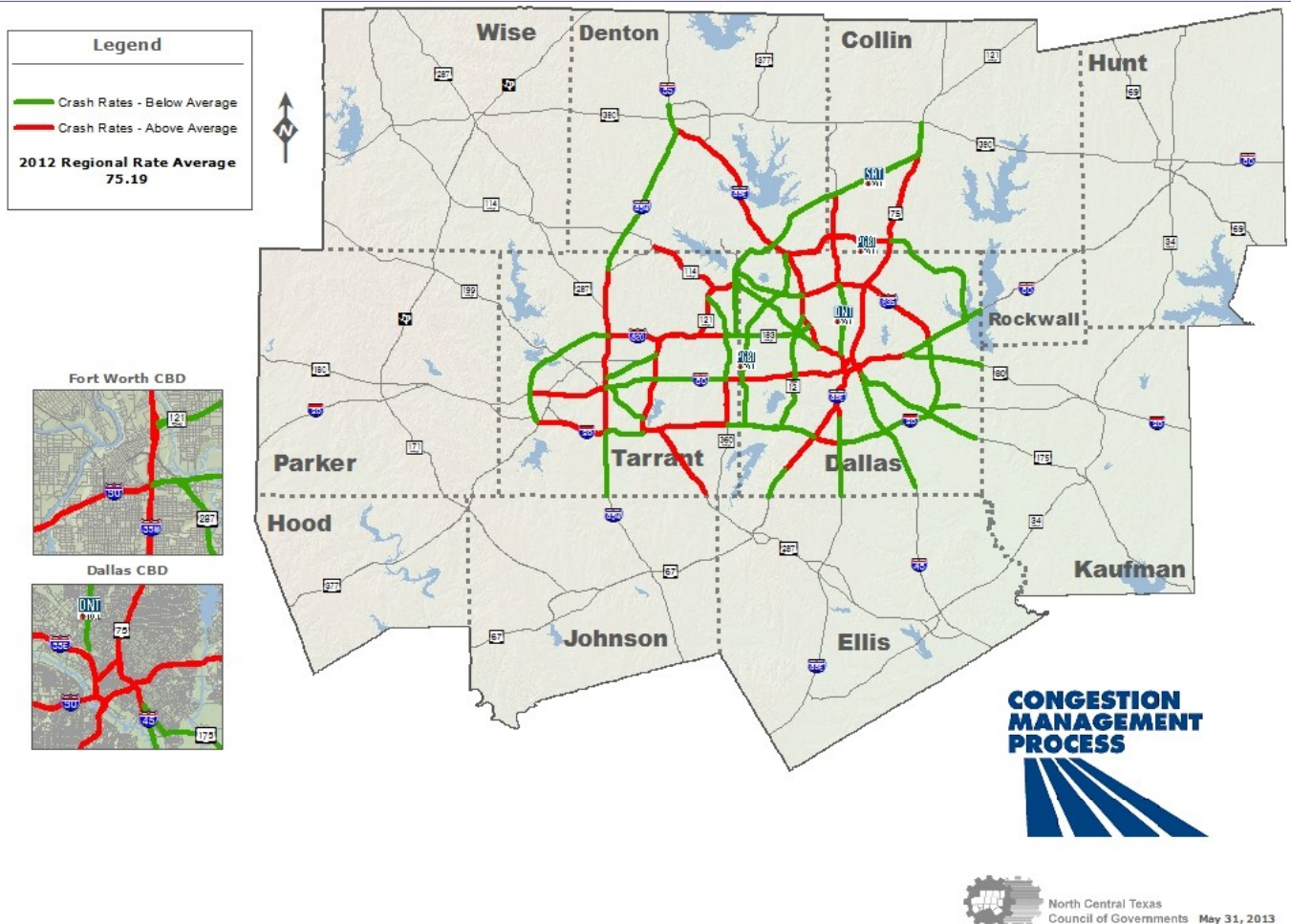
Source:
 Crash data - TxDOT Crash Records Information System (CRIS)
 VMT data - NCTCOG trans model performance reports



2012 Crash Rates by CMP Corridor Segment

Crash Rates by Corridor

To assist with the 2013 Congestion Management Process (CMP) update, crash rates were calculated for 93 limited access facility corridor segments using 2012 crash data. The average corridor segment crash rate was 75.19 indicating there's an of average 75.19 crashes per 100 million vehicle miles traveled. The map below displays corridor segments that are above (red) or below (green) the average crash rate of all corridor segments.



The table below highlights the top 10 crash rates by corridor segment as included in the CMP – 2013 Update. More information on each individual corridor analysis is included in Appendix C of the CMP – 2013 Update. <http://www.nctcog.org/trans/cmp/index.asp>

2012 Crash Rates / Corridor

Rank	Highway	From	To	VMT	Crashes	Crash Rate
1	IH-635	DNT	US-75	848,431	629	203.11
2	IH-30	I-35E	US-80	1,693,845	1133	183.26
3	IH-35E	N. Garden Ridge	SH-121	940,871	616	179.37
4	IH-635	I-35E	DNT	1,058,378	686	177.58
5	IH-20	S Hulen St	I-35W	587,390	349	162.78
6	IH-35E	I-30	Ledbetter Rd	1,152,159	684	162.65
7	IH-820	I-30	US-287	410,051	240	160.35
8	DNT	PGBT	I-635	1,062,054	618	159.42
9	SH-360	I-30	I-20	975,571	537	150.81
10	IH-35W	I-820	I-30	758,999	405	146.19

NCTCOG Freeway Incident Management (FIM) Program

Regional Incident Management Performance Measure Definitions

In May 2013, NCTCOG staff held a workshop with regional partner agencies and first responders to build consensus on regional incident management performance measures. During the workshop, the following regional definitions were agreed upon:

Incident Clearance Time – The time between the first recordable awareness of an incident and the time at which the last responder has left the scene.

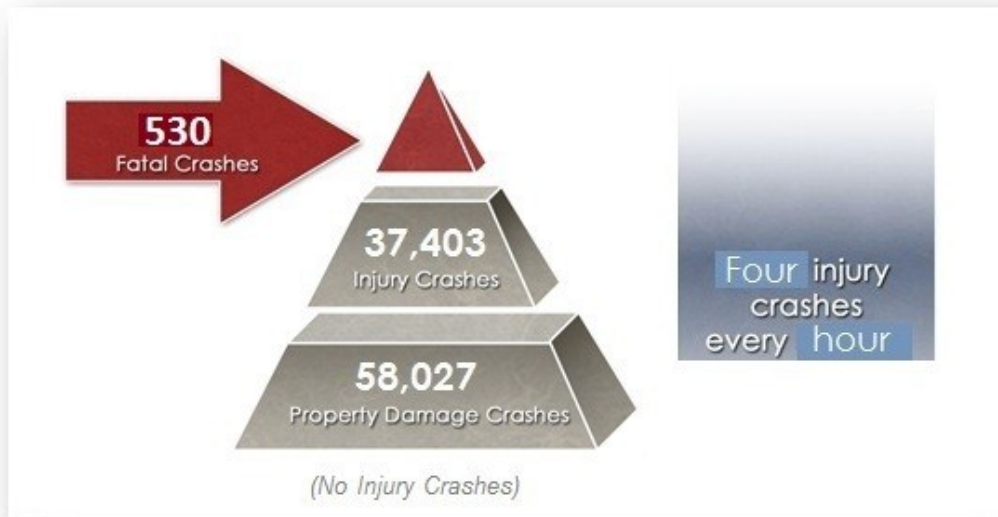
Roadway Clearance Time – The time between the first recordable awareness of an incident by the responding agency and the time at which all lanes are available for traffic flow.

Secondary Crash – Incidents beginning with the time of detection of the primary incident where a collision occurs either a) within the incident scene or b) within the queue, including the opposite direction, resulting from the original incident.

Recovery Time – The time between the first recordable awareness of an incident and the restoration of impacted roadway/roadways to “normal” operations.

2013 Regional Crash Pyramid

The statistics below show the importance of training for agencies responsible for managing and clearing traffic incidents is extremely important, as well as consistency among agencies, and has demonstrated the ability to improve responder and motorist safety and to significantly reduce the length and size of roadway closures.



On average, each injury crash requires

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

Potentially 36 responders “working in or near moving traffic” every hour 24/7/365

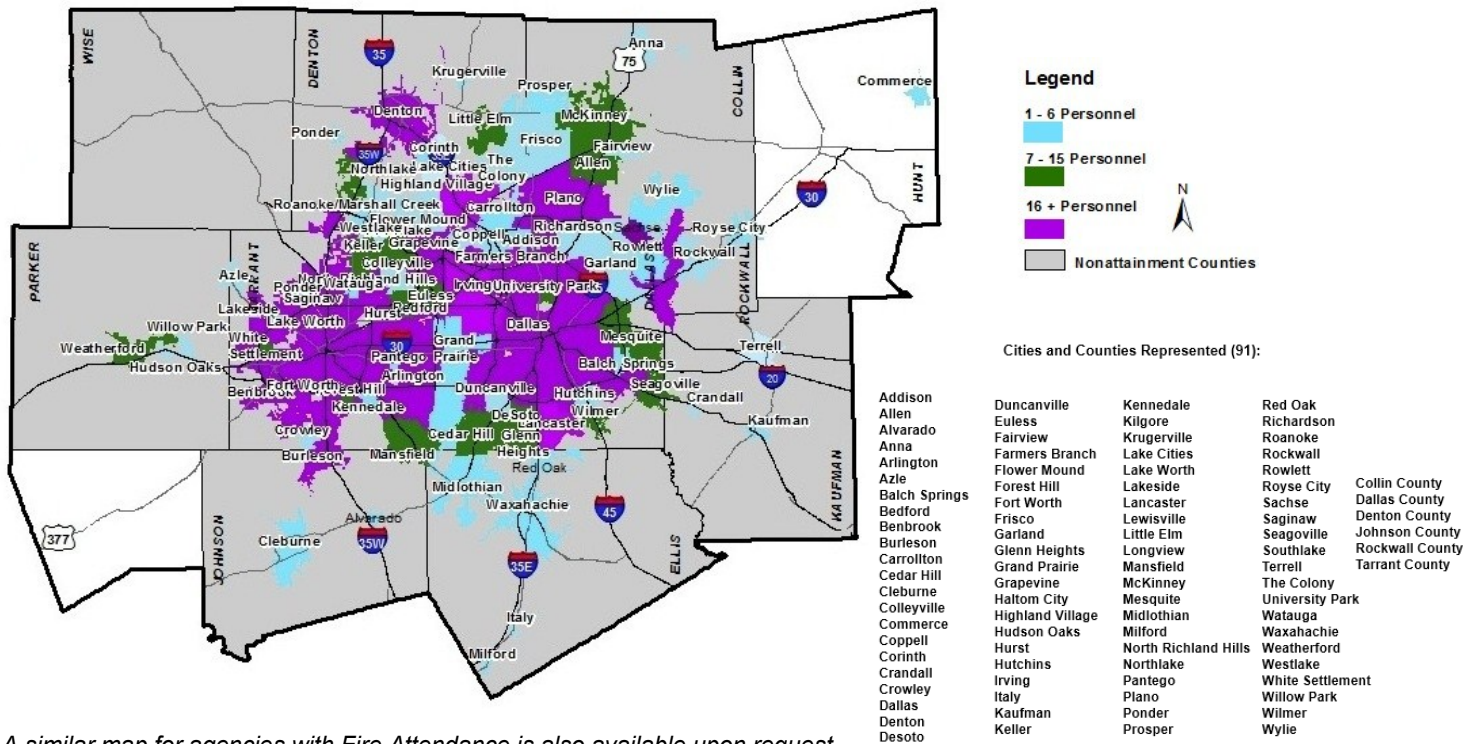
NCTCOG Freeway Incident Management (FIM) Program

First Responder and Manager's Course/Executive Level Course Training

The Freeway Incident Management (FIM) training series was developed in February of 2003 and first offered in December of 2003. The goal of the FIM 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** is specifically designed for those with daily involvement in responding to traffic incidents on the region's freeways. This course is offered at least six times per year. NCTCOG recently updated the course material in partnership with FHWA to ensure the NCTCOG FIM Course is equivalent with the Strategic Highway Research Project 2 (SHRP2) National Traffic Incident Management (TIM) Program Course .

First Responder and Manager's Course Attendance			
2003 - 2012	2013	January and March 2014	Total
2,131	183	49	2,363

First Responder and Manager's Course Attendance - Police



A similar map for agencies with Fire Attendance is also available upon request.

The **Executive Level Course** was introduced in 2005 and is geared towards agency decision makers 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.

Executive Level Course Attendance

Police	Fire	City Staff	Elected Officials	Public Works/ Strategic Services Transportation	Medical Staff	Other	Total (February 2005 - November 2013)
212	82	17	13	13	3	71	411

Photogrammetry Training 2007-2013

Photogrammetry Training is offered as a complement to the region's FIM Training series. The Photogrammetry System, used for crash reconstruction and forensic measurements, 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 Crash Zone workshop)
- Advanced Training - two-days (offered to students who completed Basic Training)

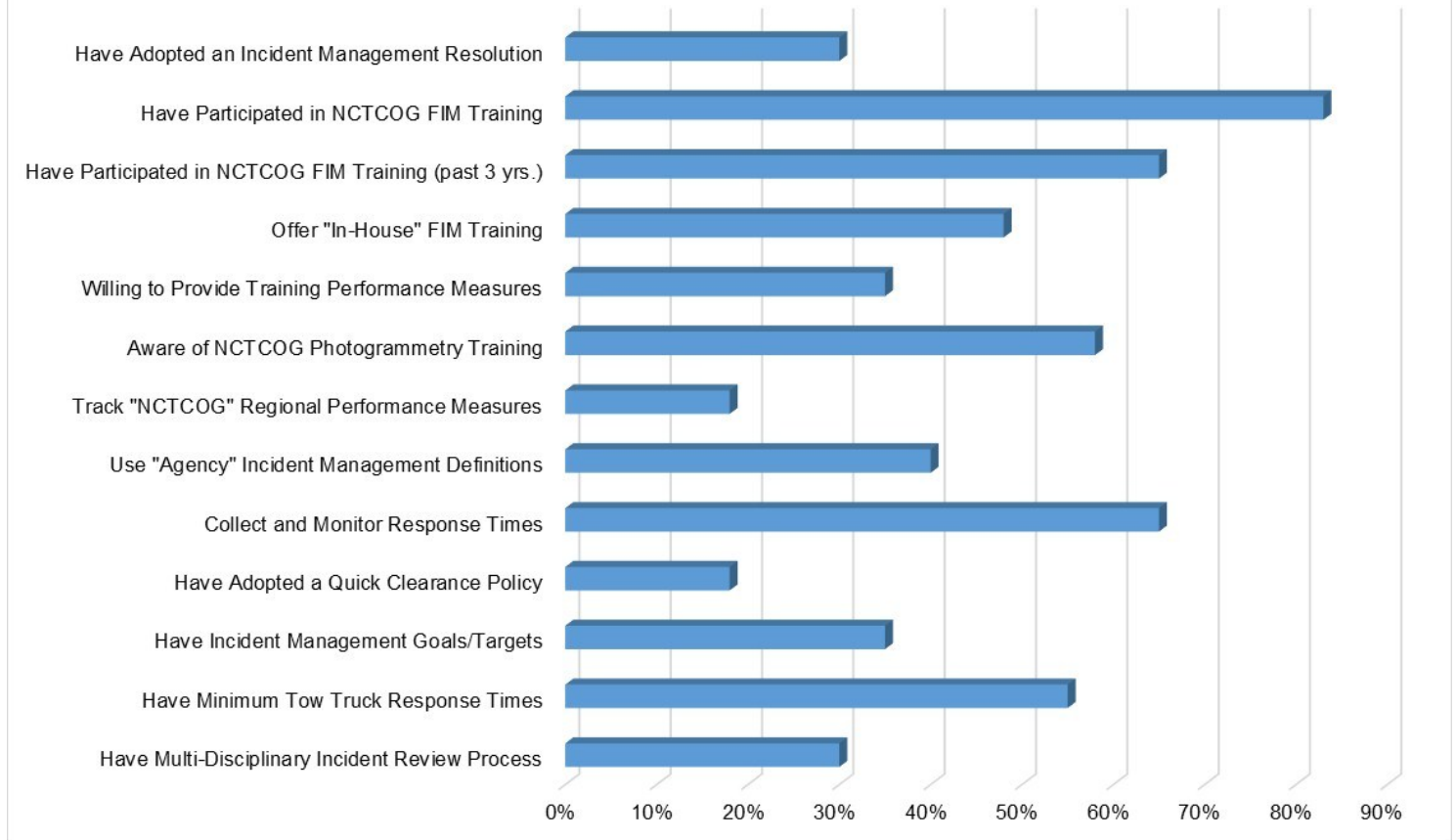
Course	Total
Basic Training	135
Advanced Training	78

NCTCOG Freeway Incident Management (FIM) Program

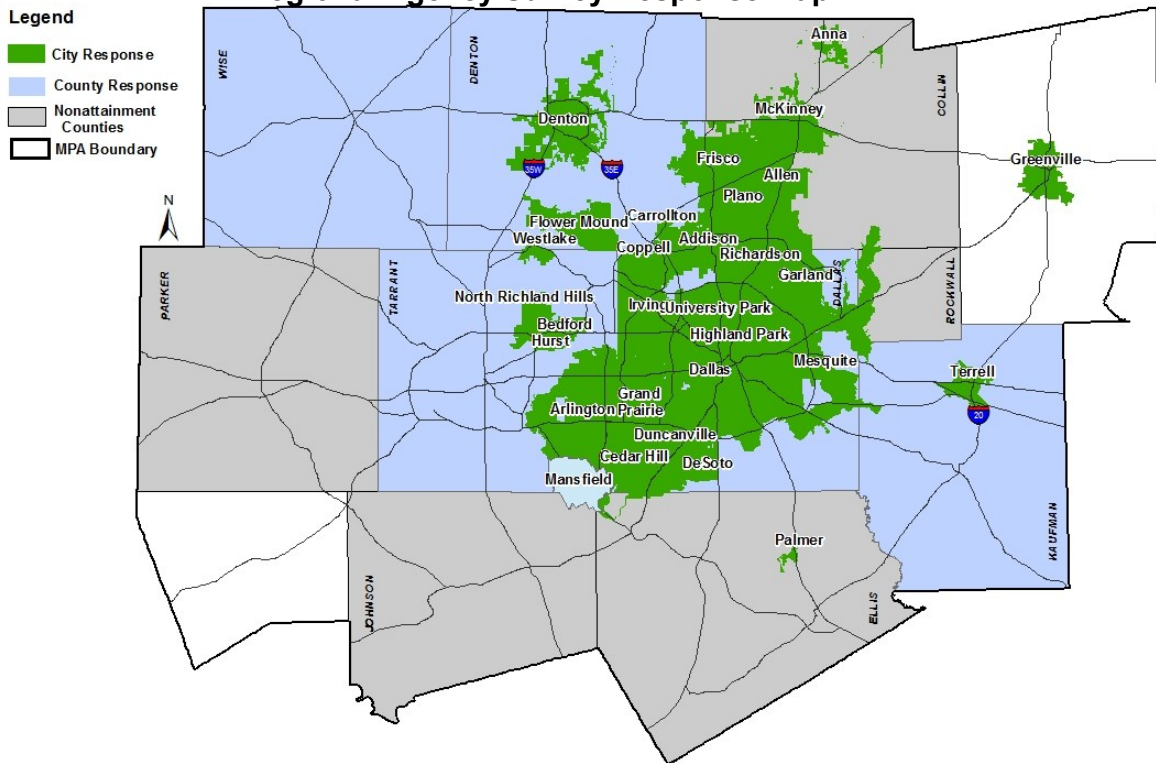
Incident Management Commitment Level Survey

NCTCOG recently released an Incident Management Commitment Level Tracking Survey to regional partners. The purpose of the survey is to gather information on our partner agencies' commitment to incident management. The release of this survey is a part of our continued efforts to emphasize the importance of effective incident management goals and objectives throughout the region. The submital of this survey will be a scoring factor in the upcoming 2014 Incident Management Equipment Purchase Call for Projects, which will be released later this year. The results of the survey are as follows:

Regional Incident Management Survey Response Results



Regional Agency Survey Response Map



Mobility Assistance Patrol Program (MAPP)

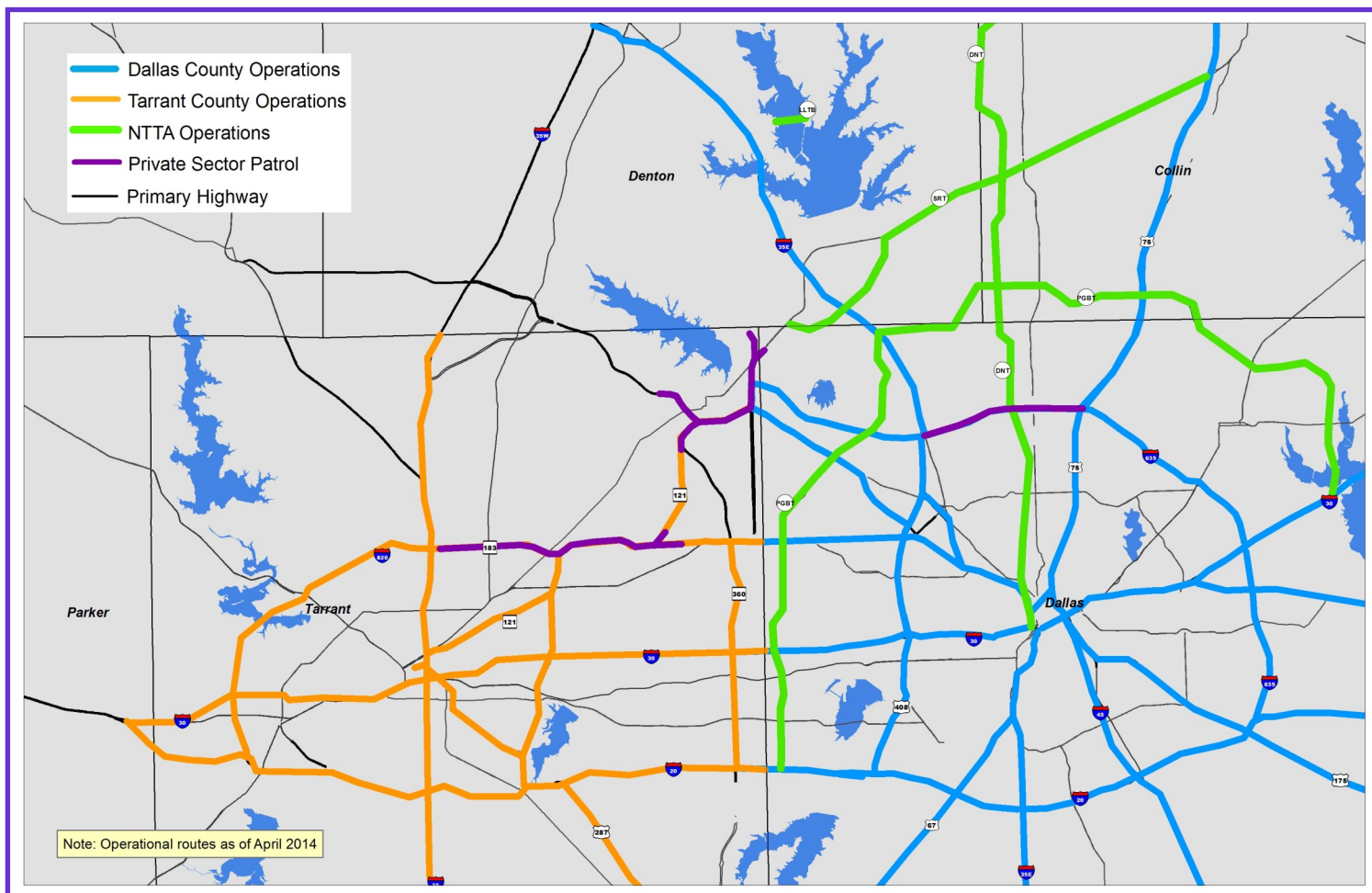
The Mobility Assistance Patrol Program (MAPP) is an essential element to the region's Freeway Incident Management operations. The MAPP coverage area is focused on congested roadway systems in Dallas and Tarrant Counties and portions of Collin and Denton Counties. The goal of the Regional MAPP is to assist in the alleviation of congestion on area highways/freeways and toll roads. The MAPP provides free assistance to stalled and stranded motorists by helping them to move disabled vehicles from the main lanes of regional highway/freeway facilities, assisting with flat tires, stalled vehicles, and minor accidents and ultimately getting the vehicles operating or off the facility completely. Assistance is also provided to law enforcement with traffic control when deemed necessary or when requested by law enforcement.

MAPP is currently being operated by the Dallas County Sheriff's Office, Tarrant County Sheriff's Office and the North Texas Tollway Authority (NTTA). Portions of Dallas and Tarrant County Operations are currently being patrolled by private sector partner agencies on particular corridors while they are under construction. This may reflect a decrease in assist numbers. We are currently not receiving performance stats from the private sector partner agencies.

Mobility Assistance Patrol Program Performance Measures

Agency	2012 Assists	2013 Assists
Dallas County	68,303	62,356
Tarrant County	23,729	20,164
NTTA	32,531	37,998

Patrol Routes

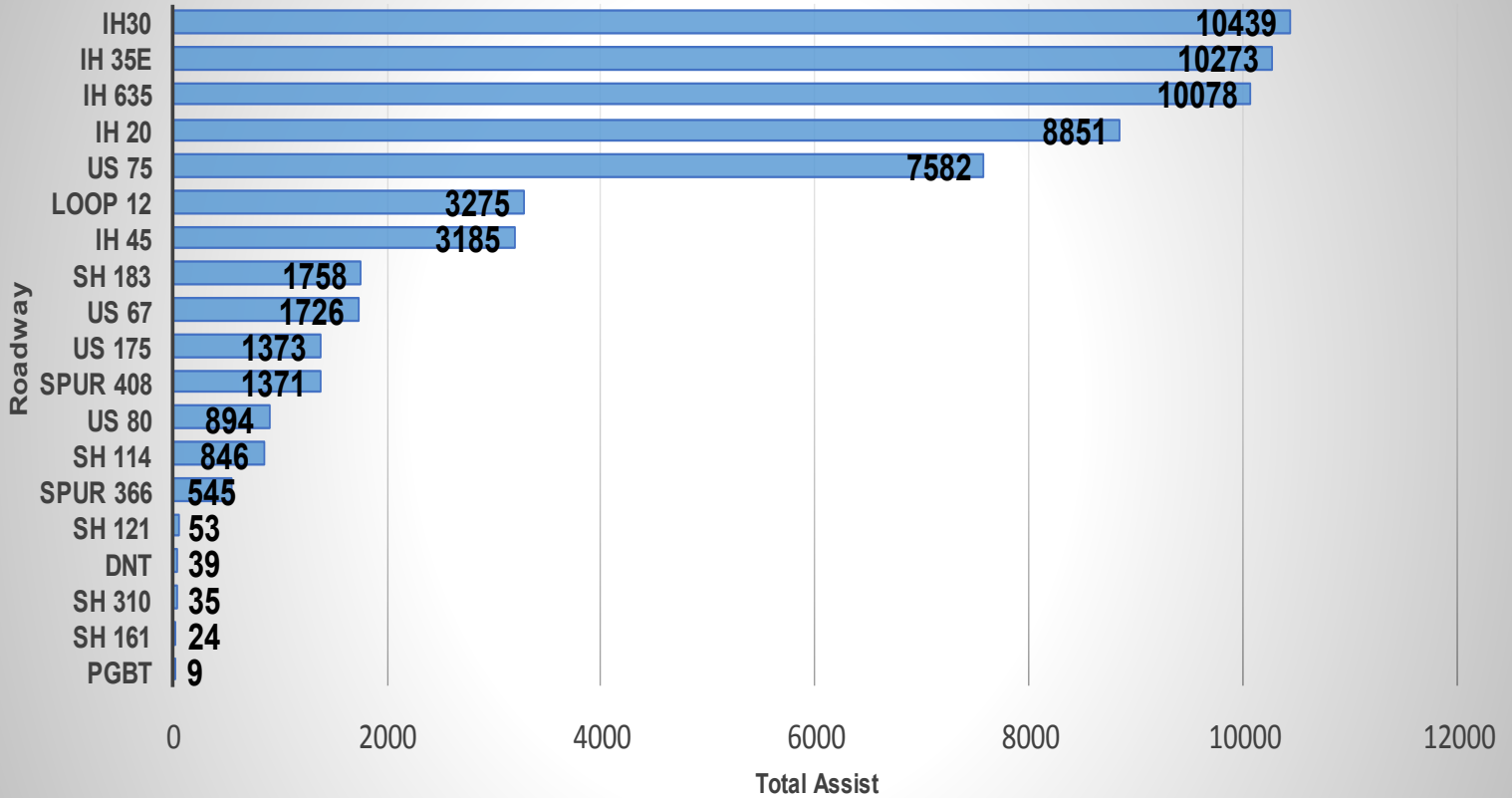


Hours of Operation

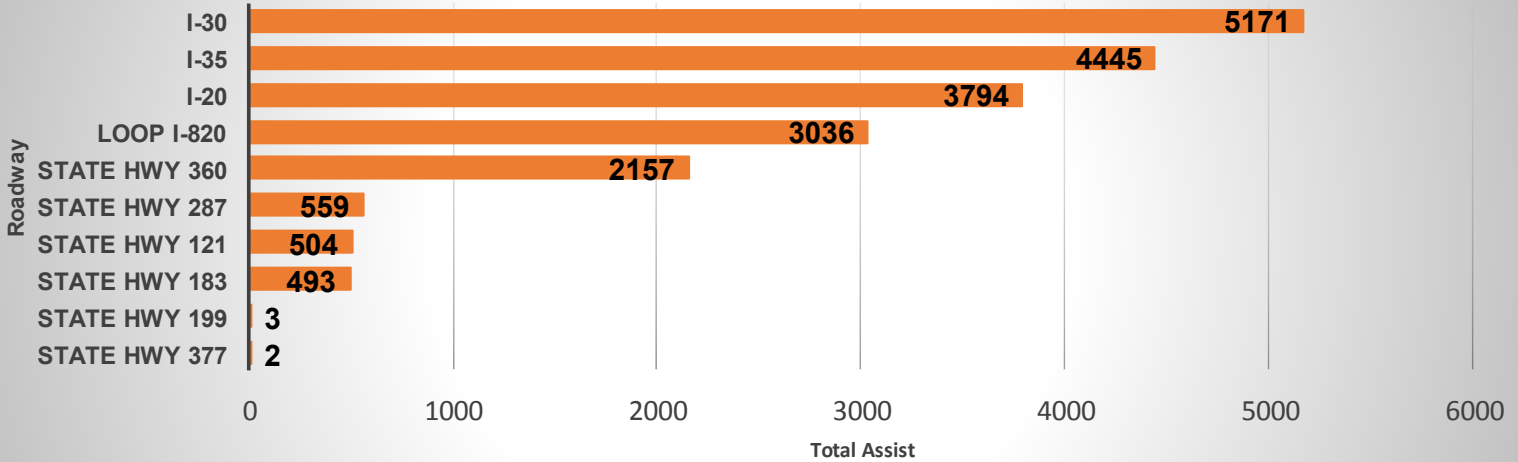
Dallas County	Tarrant County	NTTA	CDA (NTE)	CDA (LBJ)	CDA (DFW)
Mon - Fri 5 am - 9:30 pm	Mon - Sun	Mon - Sun	Mon - Sun	Mon - Sun	Mon - Fri 5:30 am - 8:30 am
Sat - Sun 11 am - 7:30 pm	6 am - 10 pm	24 hours/day	24 hours/day	24 hours/day	Mon - Fri 3:30 pm - 7 pm

Mobility Assistance Patrol Program (MAPP)

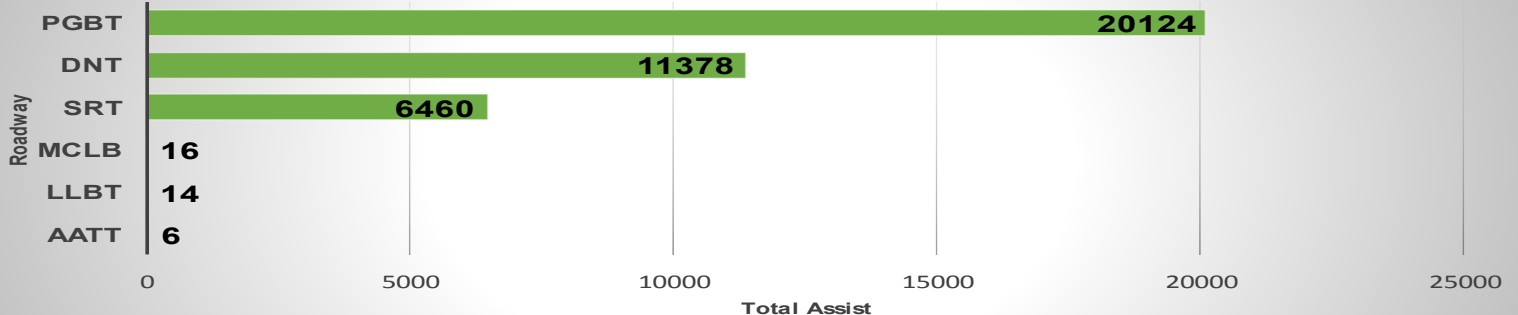
2013 Dallas County Assist Totals by Roadway



2013 Tarrant County Assist Totals by Roadway



2013 NTTA Assist Totals by Roadway



Wrong Way Driving Pilot Project - Dallas County

In 2012, NCTCOG began working with TxDOT and local jurisdictions to implement a Wrong Way Driving (WWD) Pilot Project in Dallas County. The goal was to implement a project that focuses on preventing wrong way driving along regional corridors through the implementation of intersection improvements, signage and/or other available countermeasures. The project will focus on Diamond Interchanges throughout Dallas County. In 2013, intersection inventories were completed to identify signage, striping and signal locations for each intersection. Project design plans were then developed for the individual intersections.

2014 Update:

The project let in January, 2014. Work authorizations are being developed for individual intersections. The first group of cities are expected to receive their work authorizations within the next few months.

City/Agency	Total # of Intersections Identified
Carrollton	12
Dallas	199
Farmers Branch	2
Garland	15
Grand Prairie	25
Irving	38
Mesquite	16
Richardson	7
Rowlett	4
TxDOT	37
Total	355

Highway Safety Improvement Project (HSIP)

NCTCOG hosted a workshop in June, 2013 on the Highway Safety Improvement Project (HSIP) Call For Projects (CFP). During the workshop TxDOT district engineers from both the Dallas and Fort Worth Districts, provided information to local agencies on the process for submitting project applications as well as types of projects that would be accepted. The CFP resulted in the following projects for our region:

- The Dallas District received approval on 39 projects for a total of \$22,511,138.
- The Fort Worth District received approval on 11 projects for a total of \$22,645,751.

2014 Update:

NCTCOG held a workshop in March for the 2014 HSIP call for projects. The deadline to submit projects was April 9, 2014.

Strategic Highway Research Program 2 L34 Pilot Project

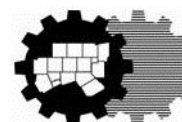
In October 2013, NCTCOG hosted a Strategic Highway Research Program (SHRP) 2 L34 Pilot Workshop that focused on improving business processes in the area of incident response. The workshop was a component of the SHRP 2 L34 Project which has a primary objective of developing and pilot testing an e-tool for evaluating existing and proposed business processes to improve travel time reliability. The pilot case study is limited to the existing City of Dallas/Dallas County partnership. Representatives from TxDOT Dallas District, Dallas County Sheriff's Office, City of Dallas PD, City of Dallas Fire/EMS and NCTCOG participated in the workshop. Information gathered during the workshop will support a 7-step process that is used to identify business processes that affect travel time reliability outlined in SHRP L34 and SHRP L01. The results of the SHRP 2 research program are expected to help local, state, and national agencies reduce travel time variability for commuters. These efforts are expected to continue in 2014.

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