

**REGIONAL SAFETY ADVISORY COMMITTEE**  
**North Central Texas Council of Governments**  
**Friday, October 23, 2020**  
**10:00 am – 12:00 pm**

[Join Microsoft Teams Meeting](#)  
[+1 903-508-4574](#) (Toll); Conference ID: 946 380 623#

**The phone number above is available for anyone who cannot join the meeting through Teams software. Please note it is a Toll number. Please MUTE your telephone during the meeting unless you are asking a question.**

**AGENDA**

1. Approval of July 24, 2020 Meeting Summary – Alonzo Liñán, RSAC Chair
2. TxDOT's Safety Plan and Performance Targets – Larbi Hanni, TxDOT Austin
3. COVID-19/Dallas District Overview – Minh Le, Jason Wu, TTI
4. NTTA Wrong Way Driving Program Overview – Eric Hemphill, NTTA
5. Public Transportation Agency Safety Plan – Joe Acosta, Trinity Metro
6. Developing Low-Cost Safety Countermeasures – Dhurva Lahon, Kimley-Horn
7. Update Items
  - a) 2021 Federal Safety Targets Development Activities – Kevin Kroll, NCTCOG
  - b) Mobility Assistance Patrol Peer Review – Kevin Kroll, NCTCOG
  - c) CVE Equipment and Training Program Update – Kevin Kroll, NCTCOG
  - d) Commercial Motor Vehicle Violations: Enforcement, Prosecution, and Reporting Training Update – Michael Misantonis, NCTCOG
  - e) Traffic Incident Management Training During COVID-19 – Camille Fountain, NCTCOG
  - f) Traffic Incident Regional Police Academy Outreach – Camille Fountain, NCTCOG
  - g) Traffic Incident Management 2020 Self-Assessment Survey Activities – Camille Fountain, NCTCOG
  - h) Traffic Incident Management Call for Projects Status Update – Camille Fountain, NCTCOG
  - i) National Traffic Incident Response Awareness Week – Sonya Landrum, NCTCOG
  - j) Transportation Related Regional Conferences/Trainings – Ricardo Serrano, NCTCOG
8. [Safety-Related Reference Items, Topics or Training Courses Website](#)
9. Upcoming Safety-Related Events and Training Announcements
  - a) Fall 2020 "Virtual: Traffic Incident Management Executive Level Course"
    - o November 5, 2020
  - b) [National Traffic Incident Response Awareness Week](#)
    - o November 9 - 16, 2020
  - c) National Traffic Incident Management Train-the-Trainer Workshop (Virtual)
    - o November 12 – 13, 2020; (8:00AM-4:00PM; 8:00AM-12:00PM)
10. Other Business (Old or New): This item provides an opportunity for members to bring items of interest before the group
11. Next RSAC Meeting: January 22, 2021 at 10 am



# TxDOT's Performance Targets and Request for Proposals

**Larbi Hanni**  
**Crash Data Analysis Branch Manager**

**Heather L. Lott, P.E.**  
**Traffic Engineering Section Director**

**Letty von Rossum, Behavioral Traffic Safety Program Planner**

**#EndTheStreakTX**

End the streak of daily deaths on Texas Roadways.





## Strategic Highway Safety Plan

- Statewide-Coordinated Safety Plan
- Reduce Fatalities and Serious Injuries on All Public Roads
- Data-Driven
- Updated Every 5 Years
- FAST Act Compliance by August 1, 2017
- 4 E's - Engineering, Education, Enforcement and EMS
- Emphasis Areas
- Strategies and Countermeasures
- [www.texasshsp.com](http://www.texasshsp.com)





## 2017 Strategic Highway Safety Plan Emphasis Areas

- Distracted Driving
- Impaired Driving
- Roadway and Lane Departures
- Speeding
- Pedestrian Safety
- Intersection Safety
- Older Users
- [www.texasshsp.com](http://www.texasshsp.com)

TEXAS STRATEGIC HIGHWAY SAFETY PLAN

ABOUT EMPHASIS AREAS RESOURCES CALENDAR CONTACT

Never believe that a few caring people can't change the world. For, indeed, that's all who ever have. – Margaret Mead

At least one person dies on Texas roadways every day and the numbers are increasing at an alarming rate. Motor vehicle fatalities are the number one cause of death for children under the age of 14 – a human and economic tragedy for our state. The [Texas Department of Transportation](#), [Department of Public Safety](#), and a host of other agencies seek your help in developing a strategic highway safety plan (SHSP) to drive down the numbers.

The Texas SHSP will focus on selected issues with the greatest promise of success in the least amount of time. Please join one of the [emphasis area teams](#) and help us identify the most effective and efficient strategies and actions to reduce fatalities and injuries on Texas roads.





## Highway Safety Plan

- National Highway Traffic Safety Administration (NHTSA)
- Education and Enforcement
- Submitted/Approved Every Year
- Statewide Safety Campaigns
  - Be Safe. Drive Smart.
  - Click It or Ticket
  - Share the Road - Look Twice for Motorcycles
  - Talk, Text, Crash.



Llano County - Highway 29

## TEXAS FY 2021 Highway Safety Plan

# Texas Safety Plans - HSP



- Alcohol and Other Drug Countermeasures
- Driver Education & Behavior
- Emergency Medical Services
- Motorcycle Safety
- Occupant Protection
- Pedestrian and Bicycle Safety
- Planning /Stakeholder Outreach
- Police Traffic Services
- Railroad/Highway Crossing
- Roadway Safety
- Safe Communities
- School Bus Safety
- Speed Control
- Traffic Records

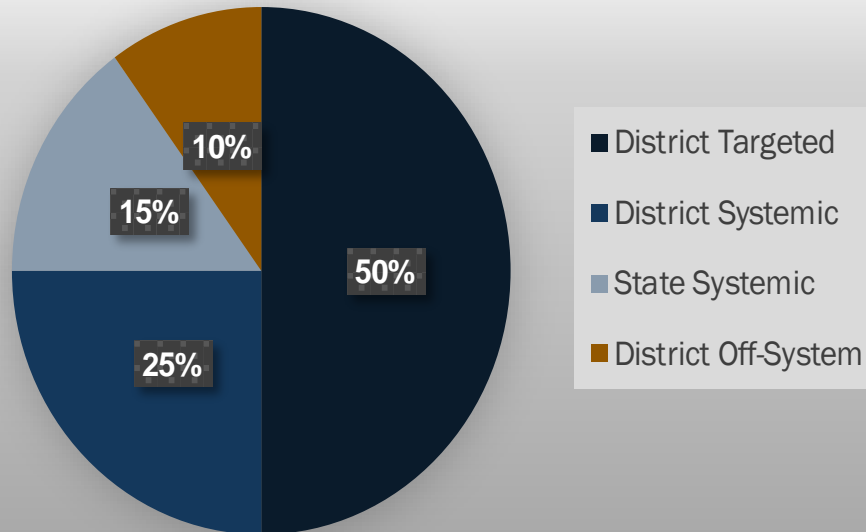


# 2020 HSIP Program – Funding



\$300

## Breakdown of Funding Million



### FY 2022

- Not fully funded
- Remainder split across District Targeted, District Systemic, and District Off-System

### FY 2023 and beyond

- Split based on ratios of fatalities and progress toward reducing KA crashes
- Specific program levels for off-system and systemic work

# Timeline for FY22-24 Project Selection



Agenda Item	FY 2021												
	2020									2021			
	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
2020 HSIP Program Announced (week of) 6/8/20		▲											
District FY 22-24 Submittals Due 10/30/20 *		■								▲			
Project selections confirmed by 03/01/21						■						▲	
CSJ's due to TRF & TxDOT Connect Inputs Due 3/29/21											■		▲

\*District Submittals Include

- Confirm FY 22 projects already approved for scope, schedule, & estimate for both on and off system
- Submit FY 22 – FY 24 proposed projects for both on and off system

**Future HSIP program calls will follow the same general timeline.**





## Five Common Performance Measures

- Fatalities
  - Fatality Analysis Reporting System (FARS)
  - FARS Annual Report File (ARF)
- Fatality Rate
  - FARS
  - State Vehicle Miles Traveled (VMT) data derived from the Highway Performance Monitoring System (HPMS)
- Serious Injuries
  - Crash Record Information System (CRIS)
  - Suspected Serious Injury (A)
- Serious Injury Rate
  - CRIS
  - State VMT
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries
  - FARS
  - CRIS



## Establishing Safety Targets

- 5-year linear trend
  - FARS (2014-2018)
  - CRIS (2015-2019)
- Reduction of 2% by 2022 for trends with a positive slope
  - Serious Injuries and Serious Injury Rate
  - Non-motorized fatalities and serious injuries
- Equal to 2022 projection for trends with a negative slope
  - Serious Injury Rate

# Texas Safety Targets



## Serious Injuries:

Year	Target or Actual Data	Source
2017	17,538	CRIS
2018	14,937	CRIS
2019	15,843	CRIS
2020	18,602	Target
2021	18,835	Target
<b>2021 Target expressed as 5-year average</b>		17,151

## Serious Injury Rate:

Year	Target or Actual Data	Source
2017	6.42	CRIS
2018	5.30	CRIS
2019	5.53	CRIS
2020	6.56	Target
2021	6.51	Target
<b>2021 Target expressed as 5-year average</b>		6.06

## Non-Motorized Fatalities and Serious Injuries:

Year	Target or Actual Data	Source
2017	2,146	FARS-CRIS
2018	2,099	ARF-CRIS
2019	2,300	CRIS
2020	2,477	Target
2021	2,560	Target
<b>2021 Target expressed as 5-year average</b>		2,316



## Road to Zero

- In May 2019 the Texas Transportation Commission (TTC) directed TxDOT to work toward the goal of reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050.

# Texas Safety Targets - New Targets



## Traffic Fatalities:

Year	Target or Actual Data	Source
2017	3,732	FARS
2018	3,642	ARF
2019	3,610	CRIS
2020	4,068	Target
2021	3,384	Target
2021 Target expressed as 5-year average		3,687

## Fatality Rate:

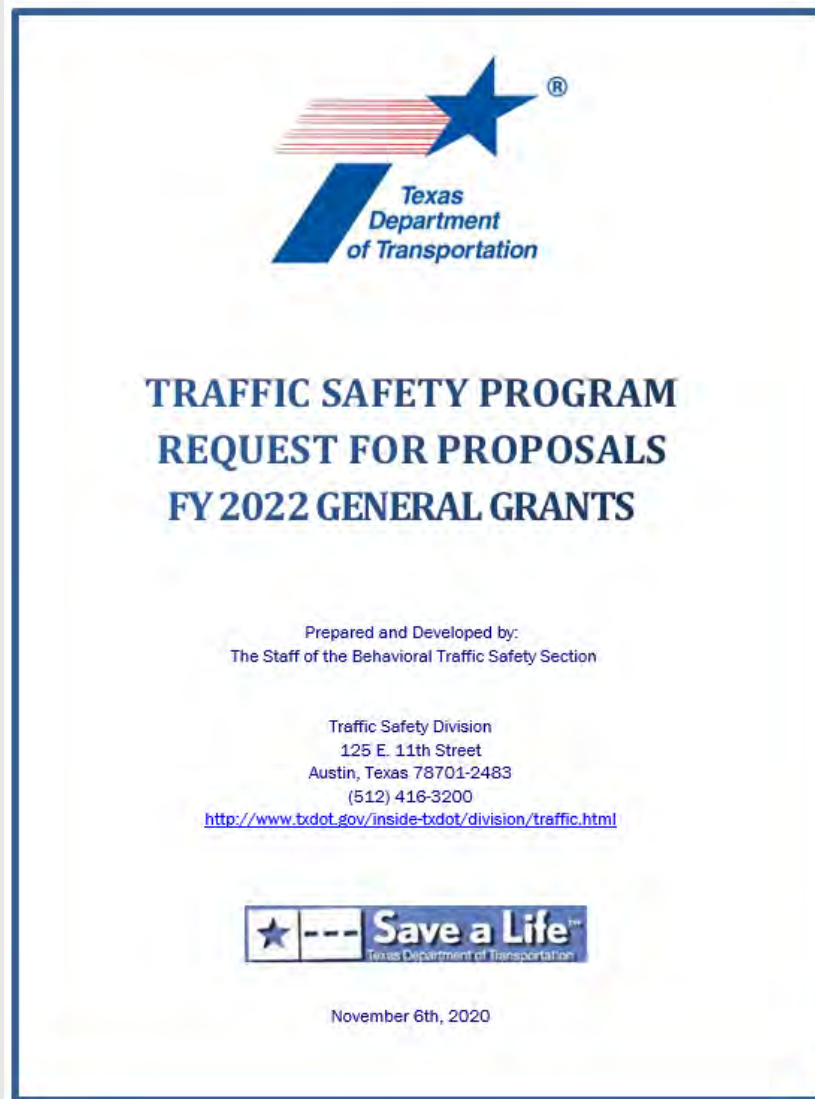
Year	Target or Actual Data	Source
2017	1.37	FARS
2018	1.31	ARF
2019	1.26	CRIS
2020	1.48	Target
2021	1.25	Target
2021 Target expressed as 5-year average		1.33

# Texas Traffic Safety Program - FY2022 Planning Schedule



Activity / Milestone	Target Due Date
<b>Submission</b>	
Request for Proposals (RFP) Posted	11/06/2020
Proposal Submission Training for General/STEP Grants	11/18/2020
Deadline for Proposal Questions	11/30/2020 @ Noon
Proposal Q&A Posted	12/04/2020
Deadline for Proposal Submission	01/06/2021
<b>Scoring and Negotiations</b>	
Proposals Scored	02/19/2021
Proposal Negotiations Completed	04/16/2021
<b>Funding Approval</b>	
Funding List and Minute Order Developed	05/03/2021
Funding Approved by Transportation Commission	05/27/2021
<b>HSP Development</b>	
HSP Drafted and Reviewed	06/15/2021
HSP Submitted to NHTSA	07/01/2021
HSP Approved and Published	08/16/2021
<b>Award Grants</b>	
Grants Awarded, Executed and Activated in eGrants	10/01/2021

# Texas Traffic Safety Program - FY2022 Request For Proposals



- Budget – Funding
- Source/Limits
- High Priority Needs
- eGrants
- Reminders –
  - Eligibility
  - Match (20% Minimum)
  - Timeframe



# Questions?

**Larbi Hanni, Crash Data  
Analysis Branch Manager  
Larbi.Hanni@txdot.gov  
(512) 416-3260**

**Heather L. Lott, P.E.  
Traffic Engineering Section Director  
Heather.Lott@txdot.gov  
(512) 416-3344**

**Letty von Rossum, Behavioral  
Traffic Safety Program Planner  
Letty.vonRossum@txdot.gov  
(512) 416-3309**



**Save a Life™**  
Texas Department of Transportation





# COVID-19 Impacts TxDOT Dallas District

Regional Safety Advisory Committee  
October 23, 2020

Texas A&M Transportation Institute

# Table of contents

<b>1</b>	TMC Incidents	3
<b>2</b>	CRIS crashes	4
<b>3</b>	Fatal & Truck Tractor Crashes	5-10
<b>4</b>	Traffic Volumes	11-13
<b>5</b>	Travel Times	14-15
<b>6</b>	Ped & Bike Volumes	16-18
<b>7</b>	Transit Ridership	19-20

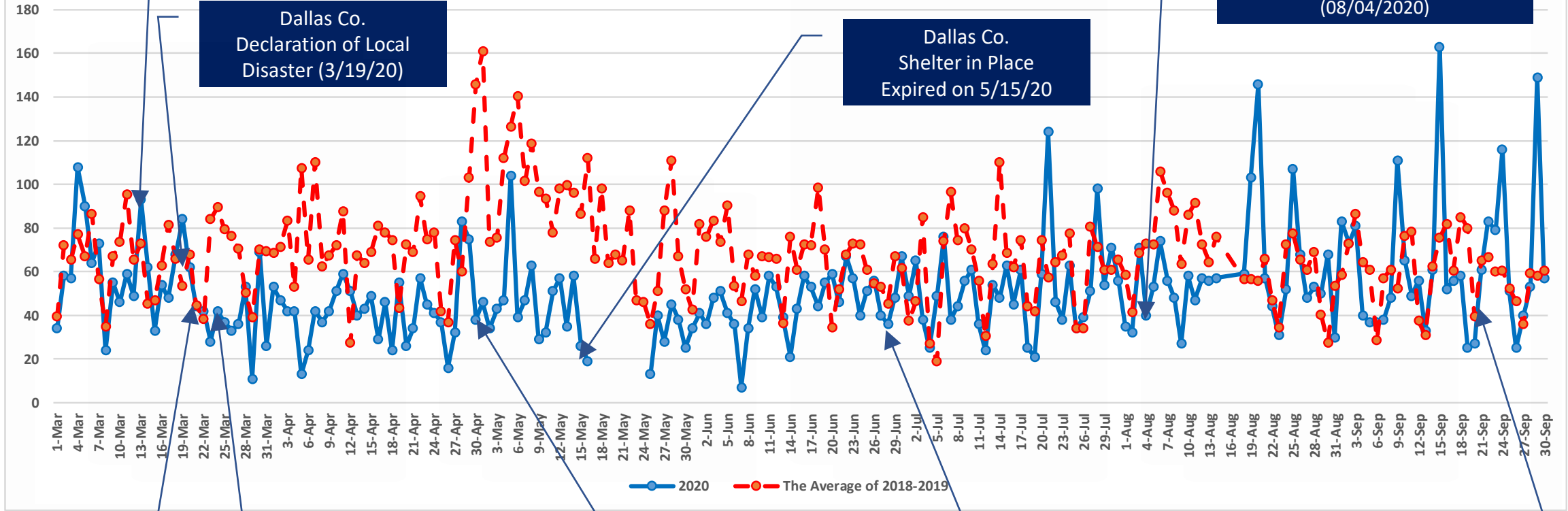
Texas  
Disaster Proclamation  
(3/13/20)

### Dallas District Covid-19 Impact Analysis TMC Incidents: March to September Data

Dallas Co.  
Supplemental order after  
expiration of stay home, stay safe  
(08/04/2020)

Dallas Co.  
Declaration of Local  
Disaster (3/19/20)

Dallas Co.  
Shelter in Place  
Expired on 5/15/20



Texas  
Mitigate Spread  
(03/20/20)

Dallas Co.  
Shelter in Place  
(3/23/20)

Texas  
Mitigate Spread  
Expired on 4/30/20

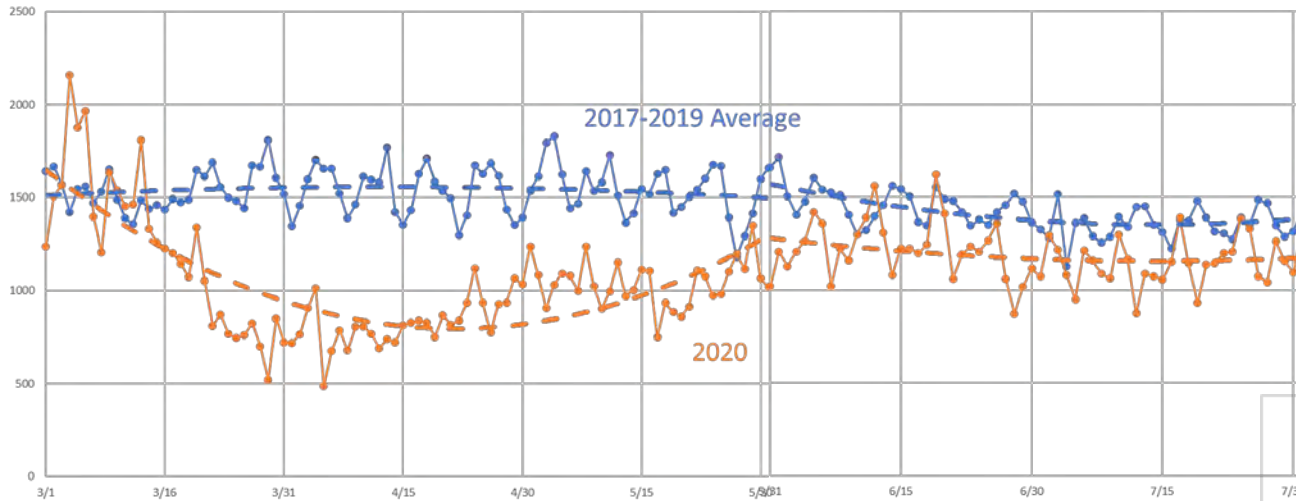
Texas Coronavirus EOs  
28&29: Business (50%  
Capacity) & Face Covering  
(06/26/20)

Texas Coronavirus EO 30:  
Business (50% Capacity)  
(09/17/20)

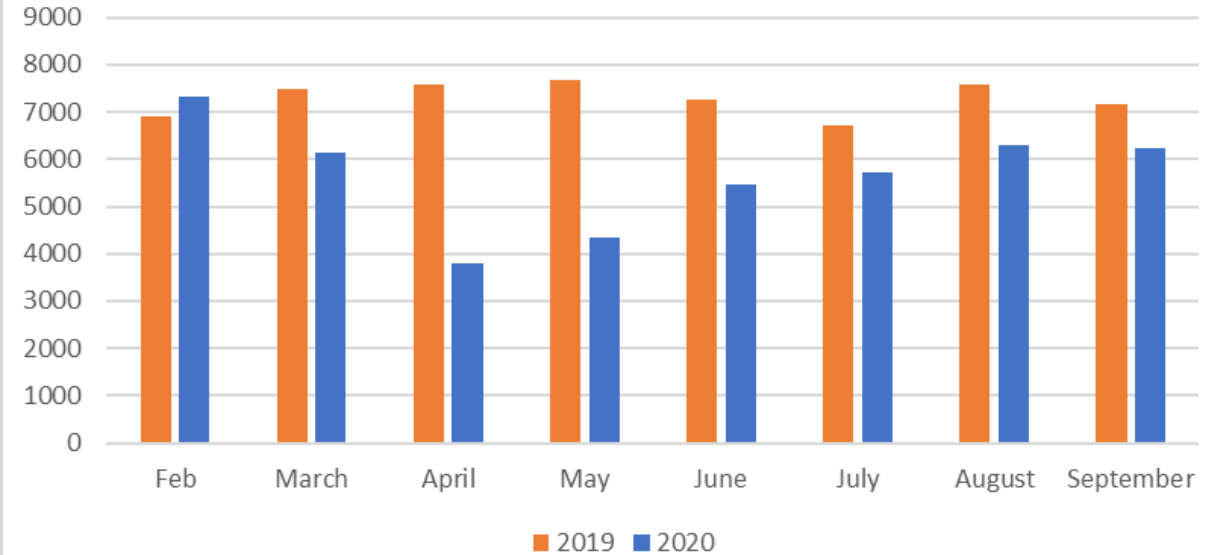
Note: Data Not Available 5/17-5/24, 2020

# COVID-19 Impacts: Crashes (CRIS)

Texas Statewide Crashes  
March 1 thru July 31

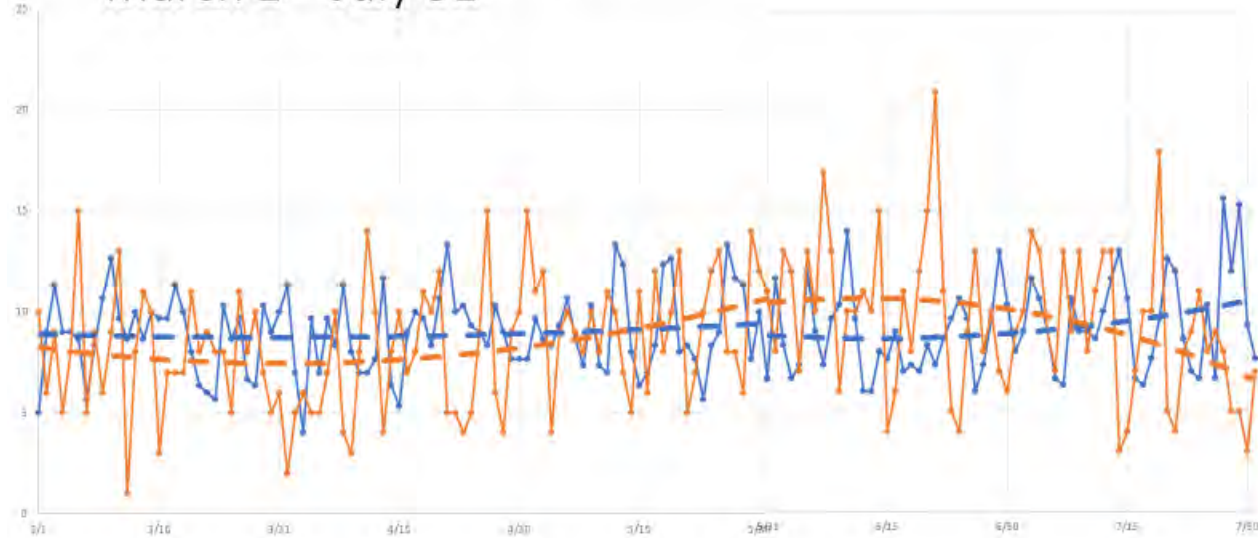


## Total Crashes for Dallas District

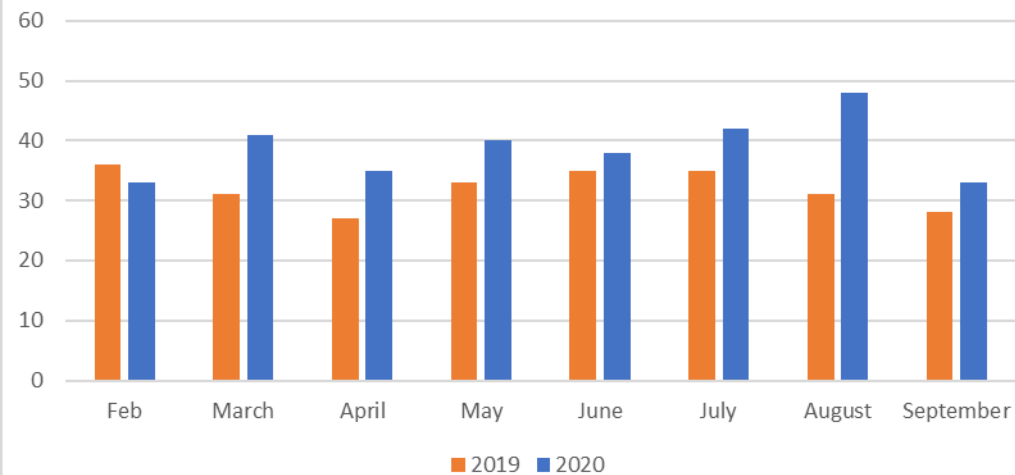


# COVID-19 Impacts: Crashes (CRIS)

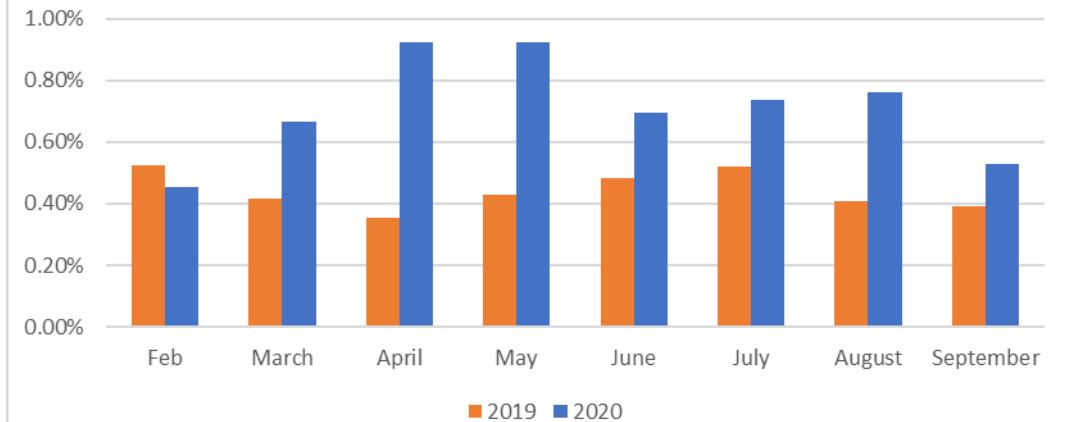
Texas Statewide Fatal Crashes  
March 1 – July 31



Fatal Crashes for Dallas District



Fatal Crash Percentage for Dallas District



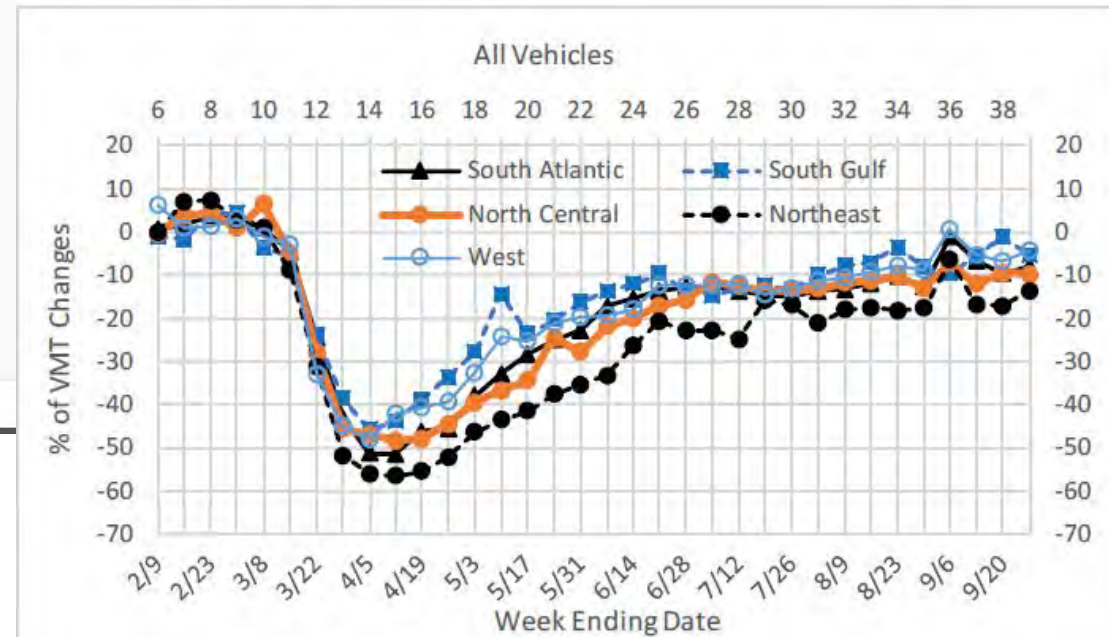
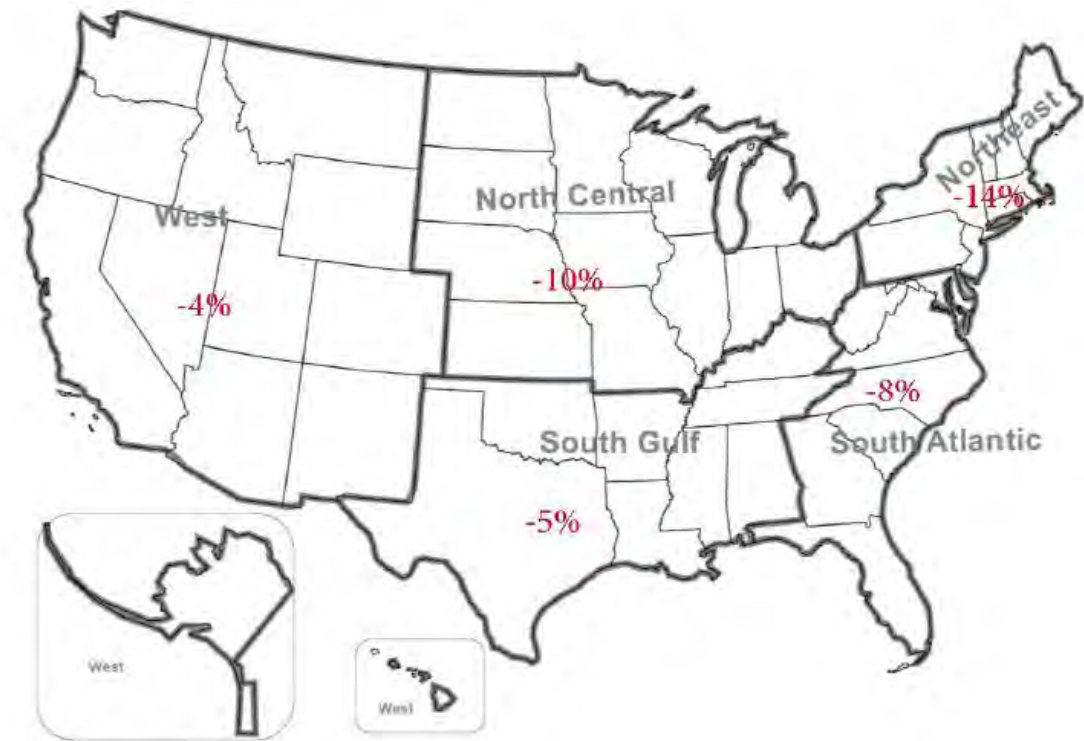
# Back to work: Dallas leads the country in employees returning to the office

This article has comments enabled

The Dallas area is one of the spots where the most workers are headed back to the office



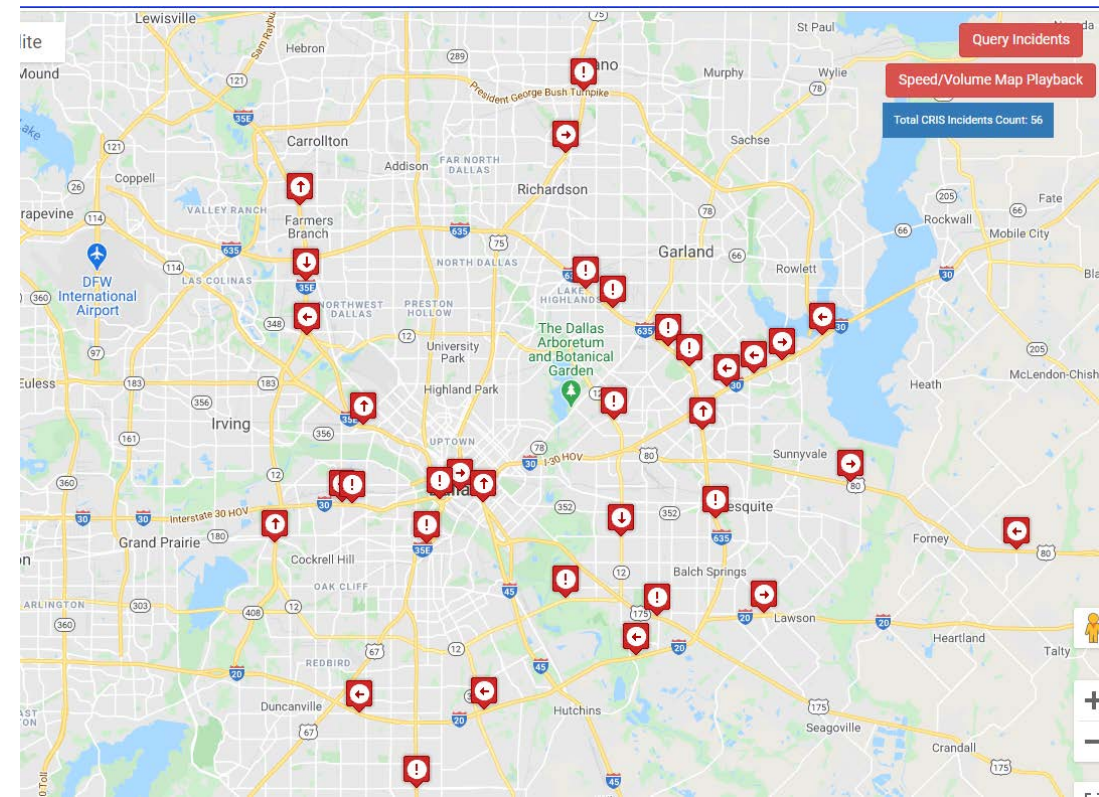
More than a third of Dallas-area workers have gone back to the office, a new study finds. (G.J. McCARTHY/Staff Photographer)

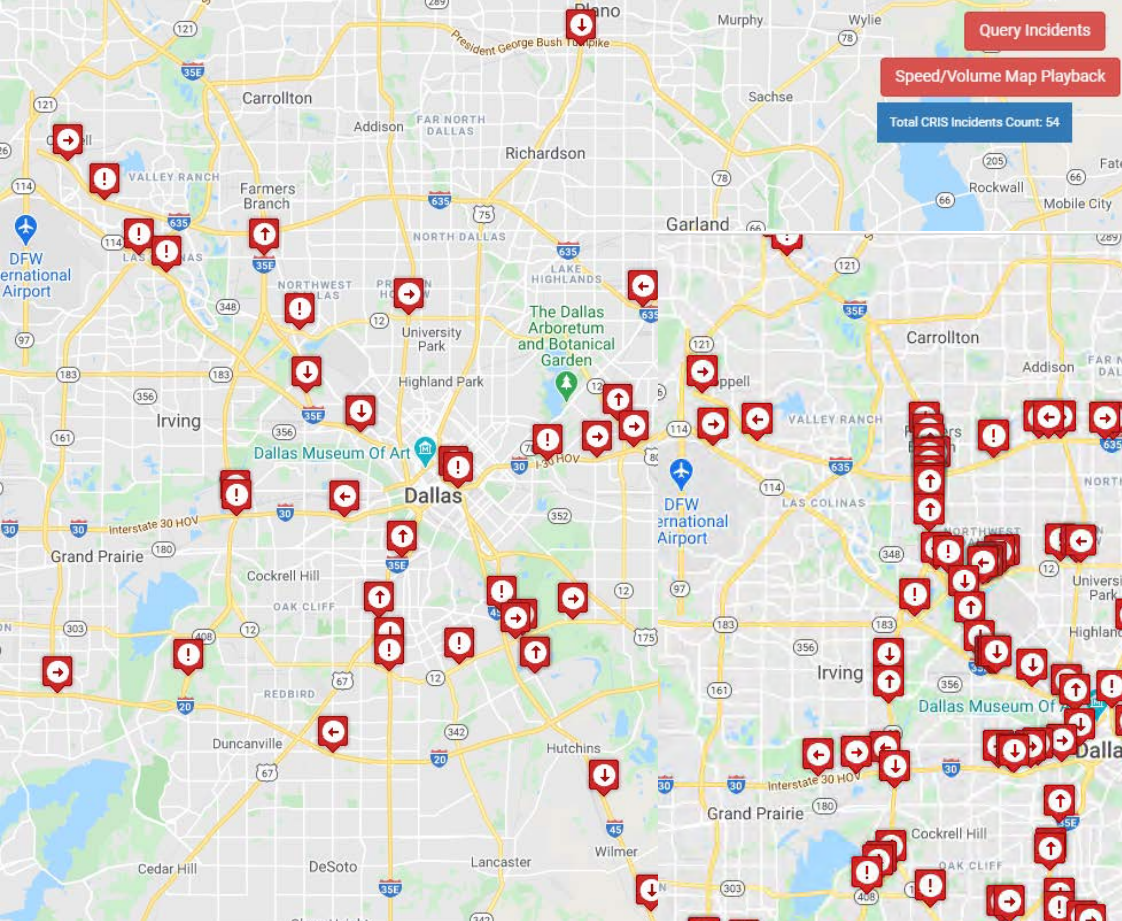


# Are more freeway fatal crashes occurring because of higher speeds?

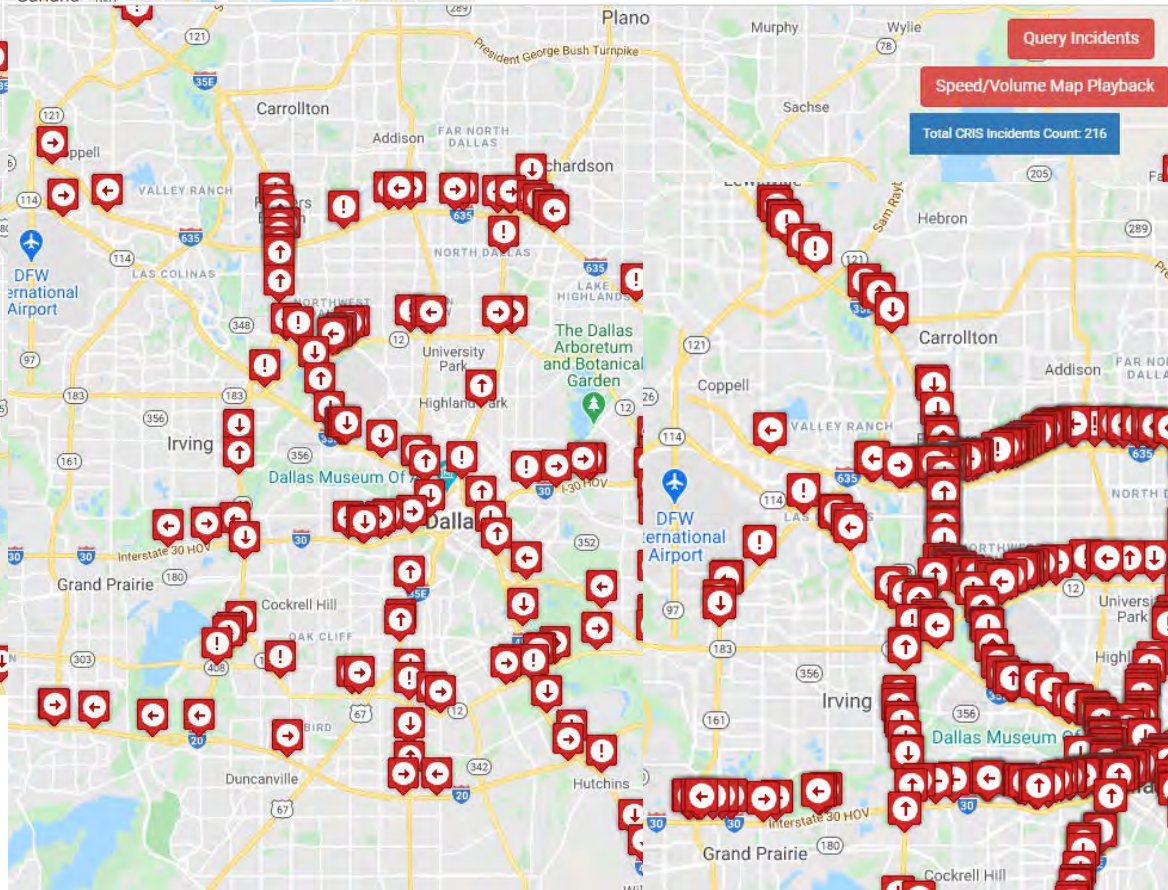
- Determine average speeds during fatal crash (2020)
- Compare to historical 'normal' speeds for same time & location
  - Temporal Instability – how operating speed changes as a crash factor year-to-year
  - 'Sliding Window' - KAB crash within 0.25-1 mile (1-2 segments) downstream and 3 hrs.
- NPMRDS Data – TMC segment speeds
- RHINO – geometrics
- ITS Detector Data – Link speeds & volumes

56 Fatal(K) Apr.-Aug. 2020

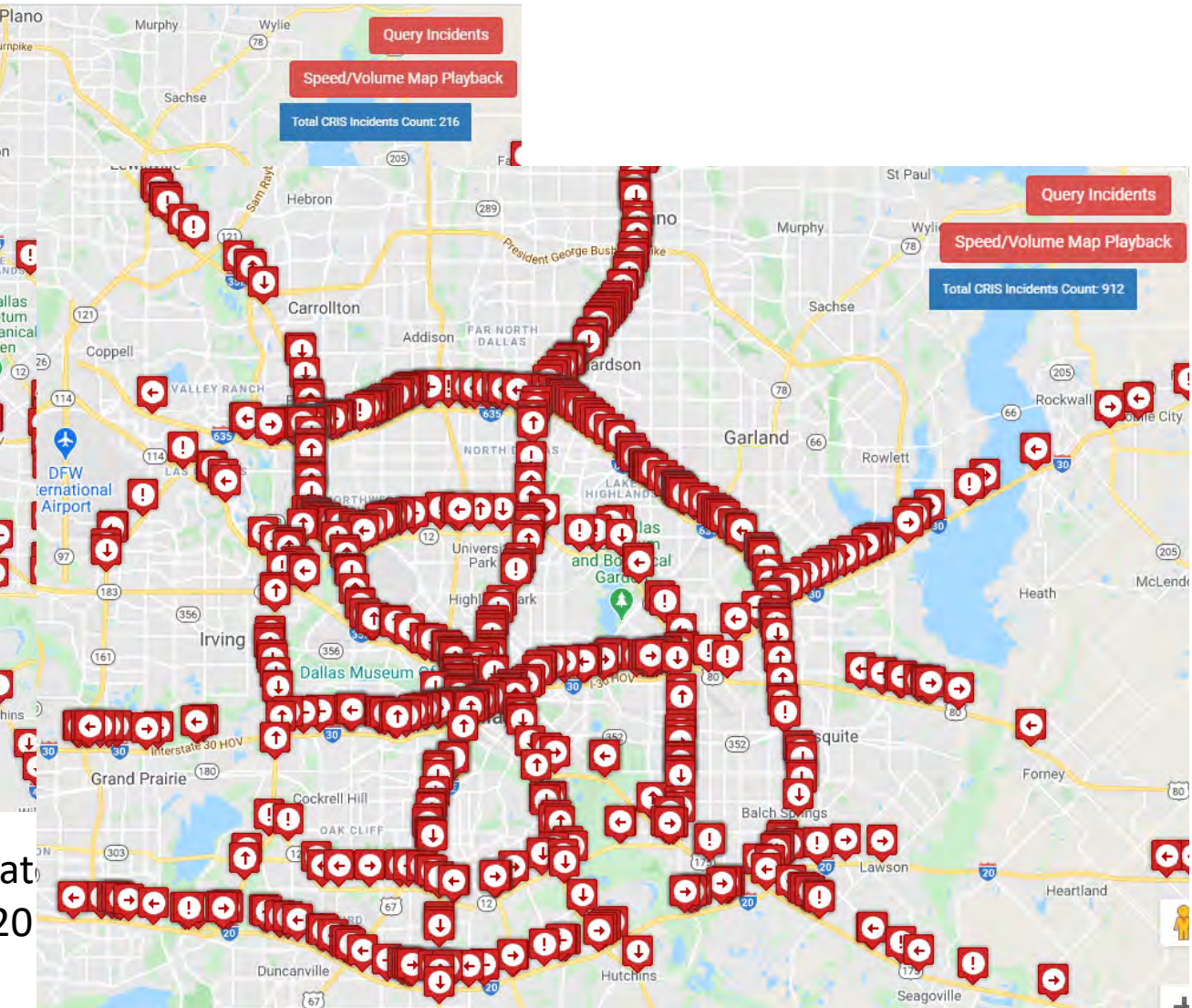




54 Fatal (K)  
Apr.-Aug. 2019



216 Incapacitated (B)  
Apr.-Aug. 2019

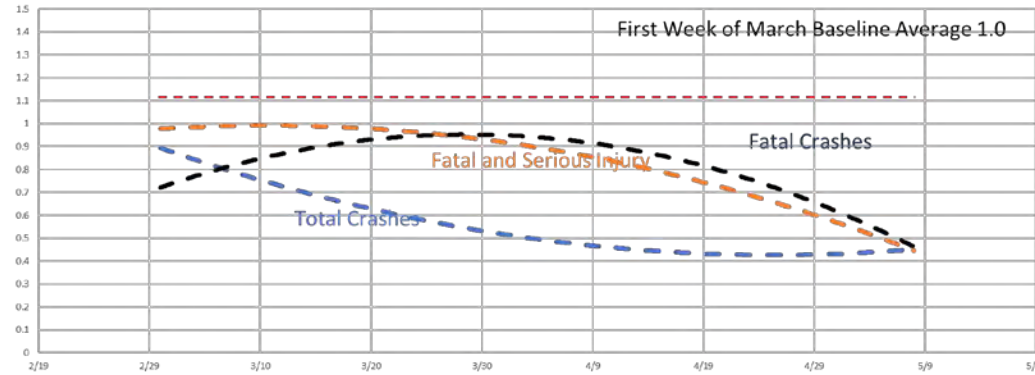


912 Non-incapacitated (B)  
Apr.-Aug. 2019

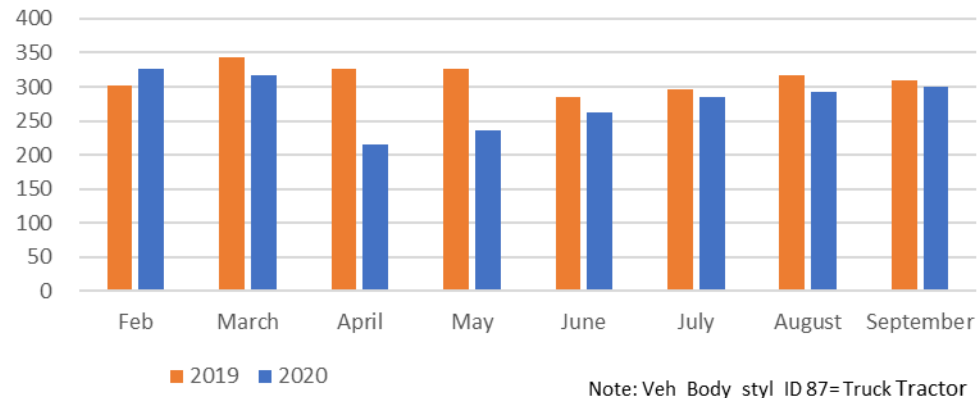


# COVID-19 Impacts: Crashes (CRIS)

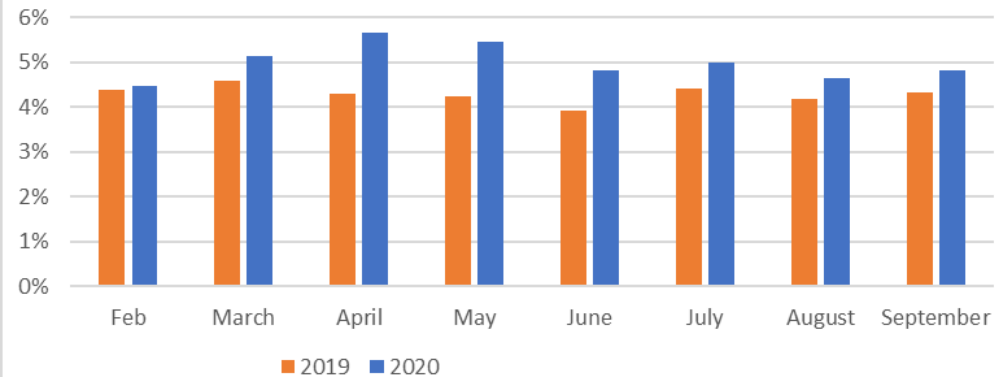
Texas  
Tractor Trailer Total, Fatal, and Fatal and Serious Injury Crash  
Trendlines  
Indexed to the Level of the First Week of March 2020

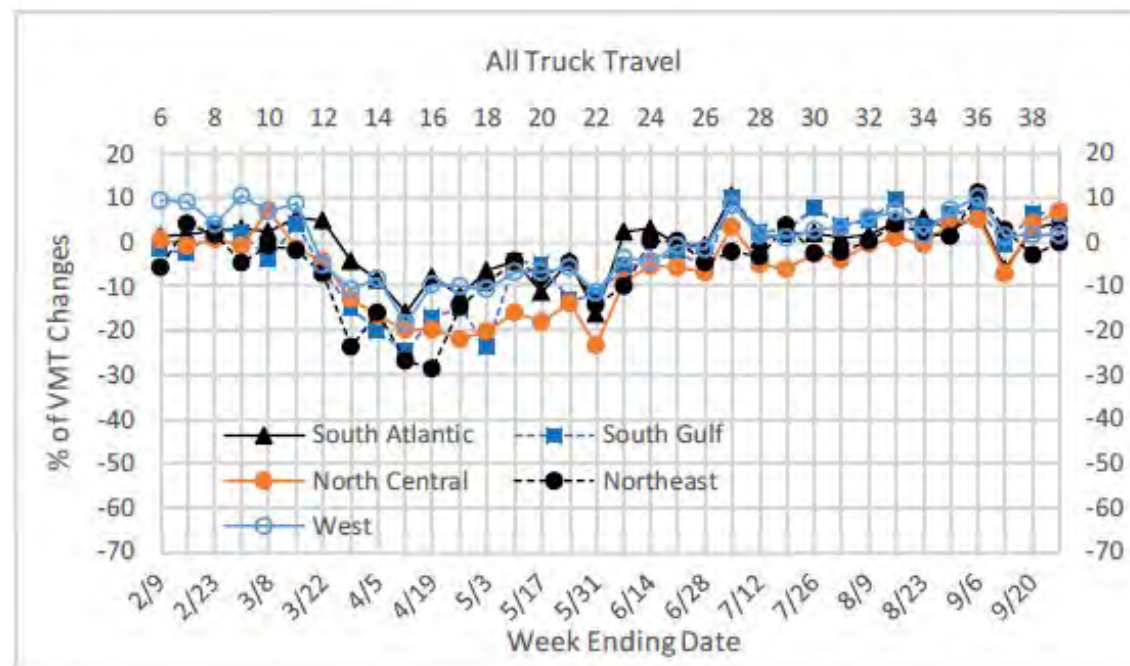
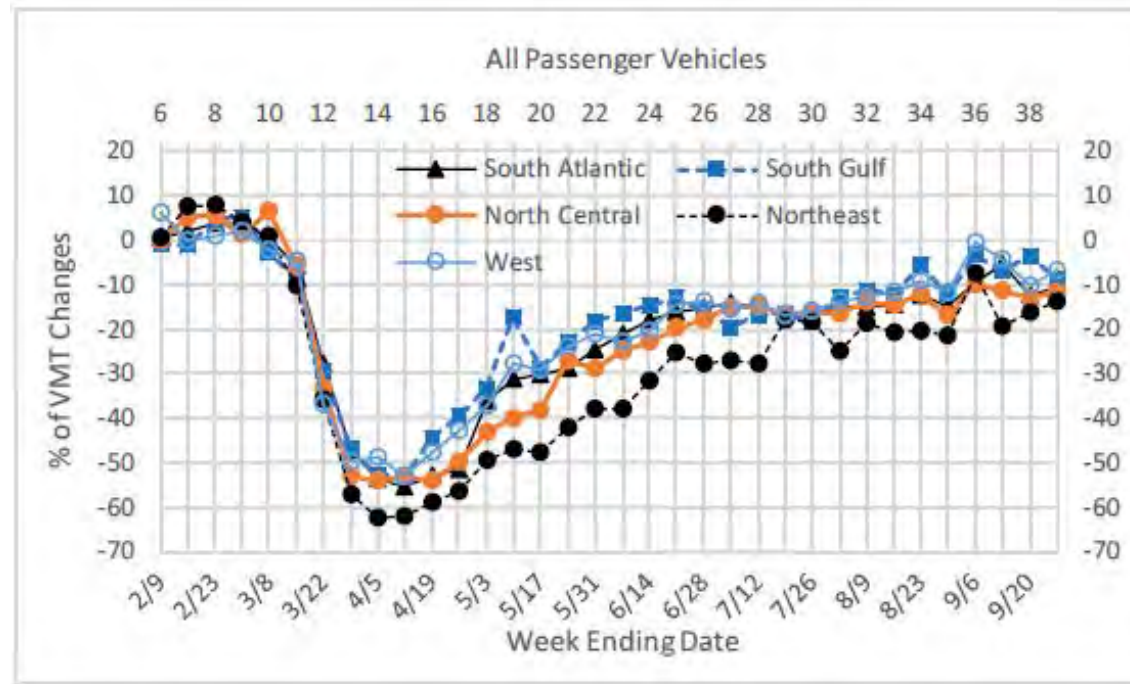


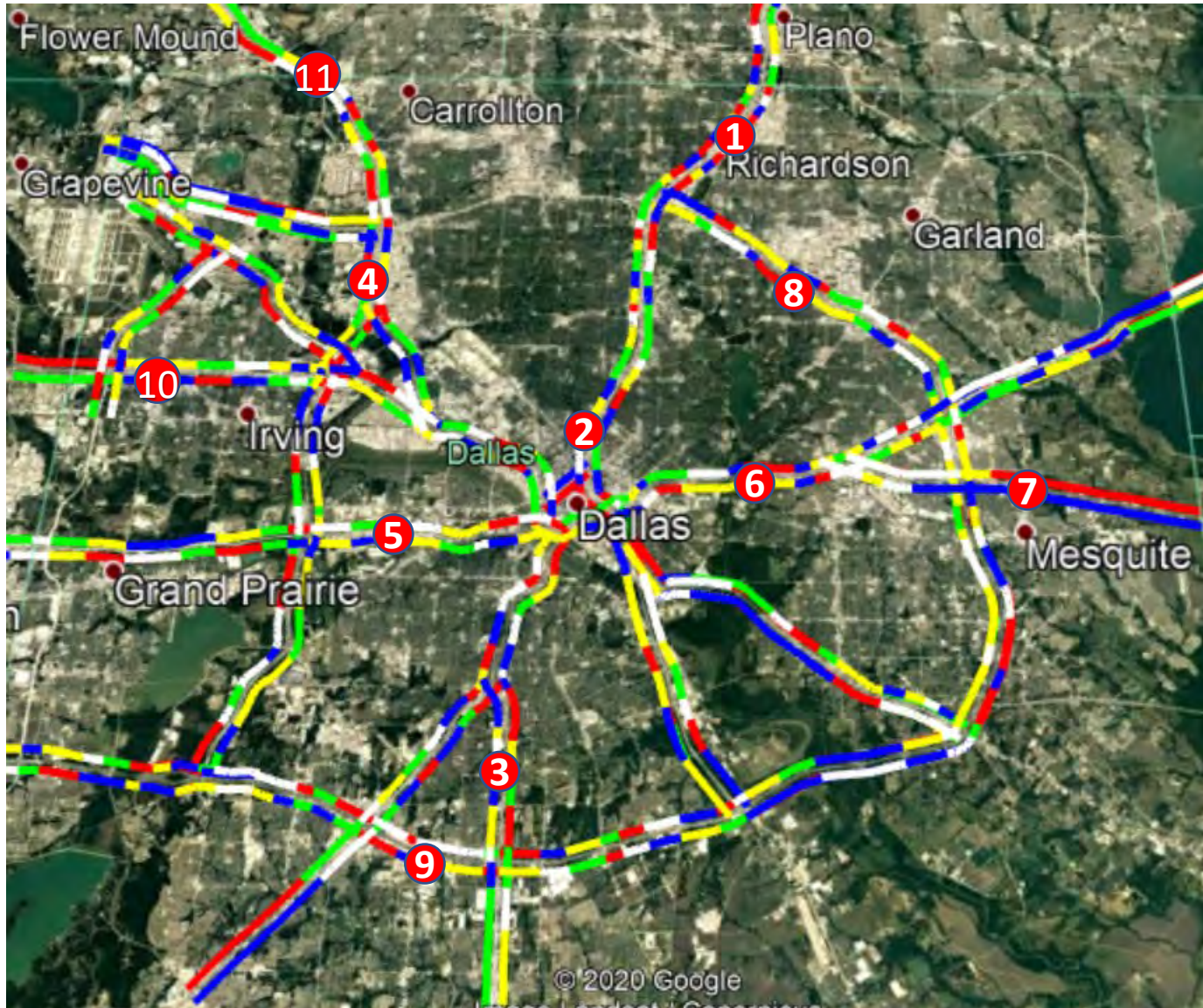
Total Truck Tractor crashes for Dallas District



Percent of Truck Tractor Crashes for Dallas District



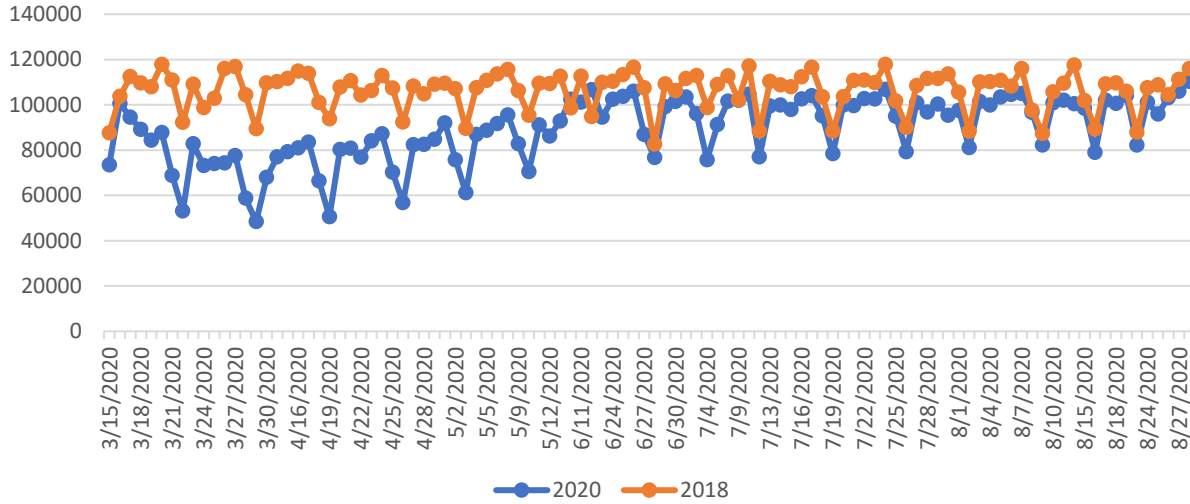




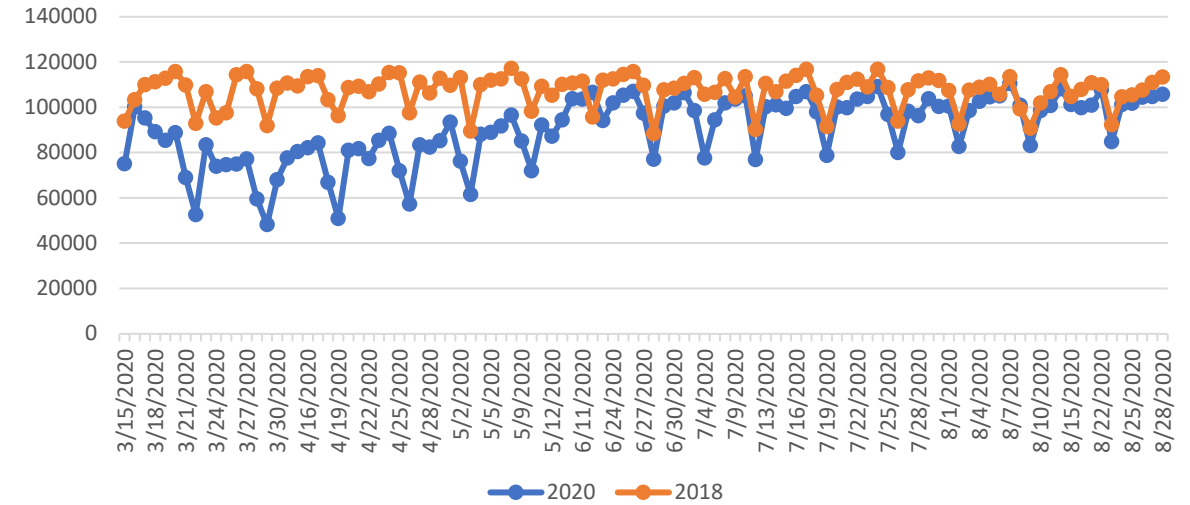
Site	Highway	Link
1	US 75	NB US75 - Arapaho to Collins
		SB US75 - Arapaho to Belt Line
2	US 75	SB US75 - Lemmon to Woodall Rodgers
		NB US75 - Woodall Rodgers to Haskell
3	IH 35E	SB IH35E - Loop 12 to Laureland
		NB IH35E - Laureland to Loop 12
4	IH 35E	SB IH35E – Royal to Walnut
		NB IH35E – Walnut to Royal
5	IH 30	WB IH30 - Hampton to Westmoreland
		EB IH30 - Westmoreland to Hampton
6	IH 30	WB IH30 - Jim Miller to Ferguson
		EB IH30 - Ferguson to Jim Miller
7	US 80	WB US80 - Lawson Rd to IH635
		EB US80 - IH635 to Lawson Rd
8	IH 635	WB IH635 - Miller to Skillman
		EB IH635 - Miller to Plano Rd
9	IH 20	WB IH20 - Willoughby to Hampton
		EB IH20 - Hampton to Willoughby
10	SH 183	WB SH183 - MacArthur to Story Rd
		EB SH183 - Story Rd to MacArthur
11	IH35E	SB IH35E - SH121 Bypass to PGBT North
		NB IH35E – PGBT North to SH 121 Bypass

# Daily Volume Changes: US 75

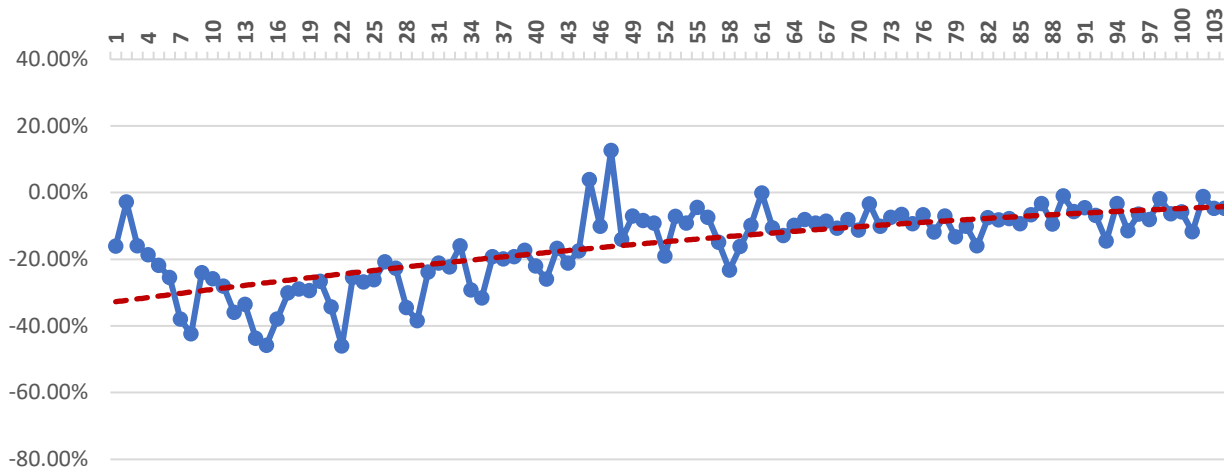
**US75 Southbound - Arapaho to Belt Line (LinkID: 376)**  
Same Day 24-hour Volume Change



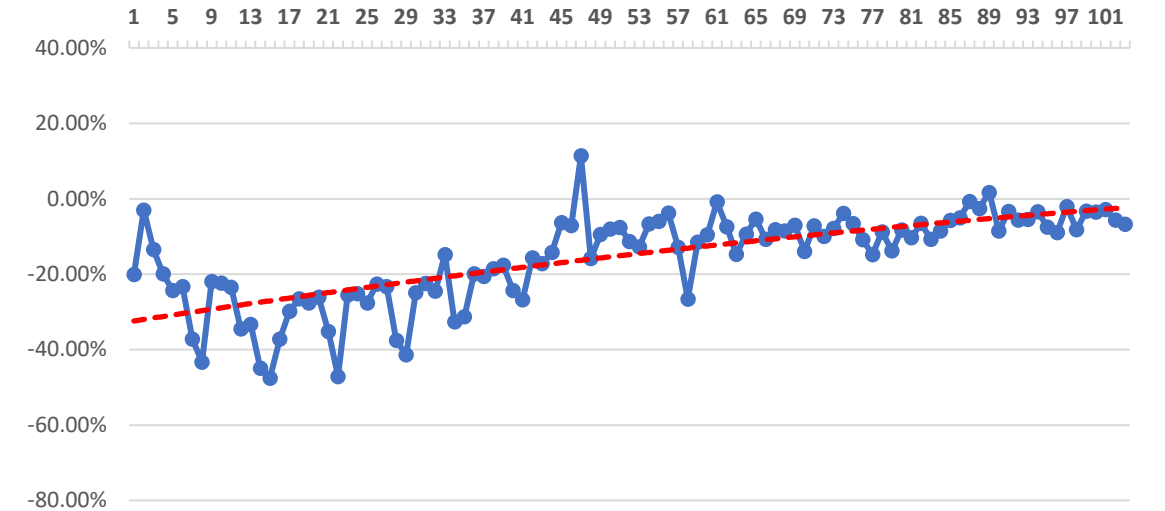
**US75 Northbound - Arapaho to Collins (LinkID: 377)**  
Same Day 24-hour Volume Change



**US75 Southbound - Arapaho to Belt Line (LinkID: 376)**  
Same Day 24-hour Volume Change(%)

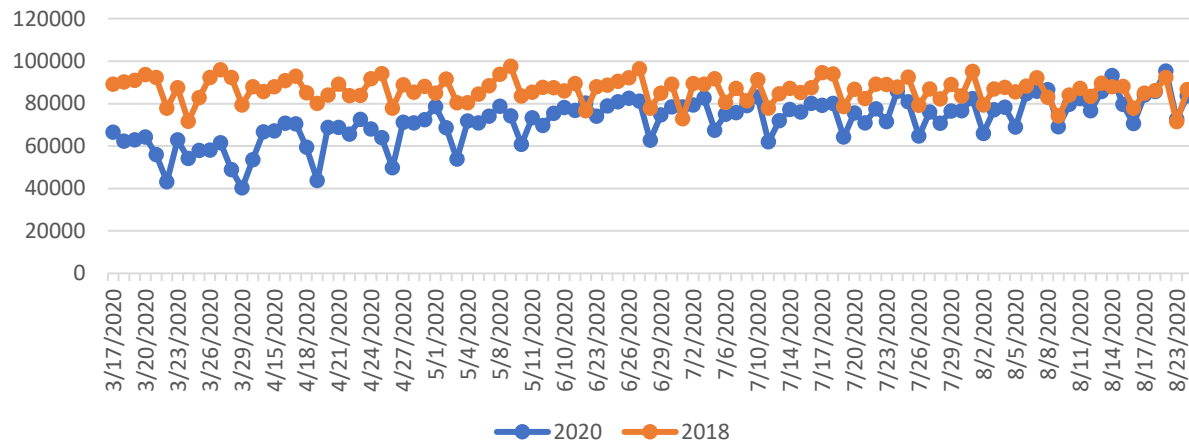


**US75 Southbound - Arapaho to Belt Line (LinkID: 377)**  
Same Day 24-hour Volume Change(%)

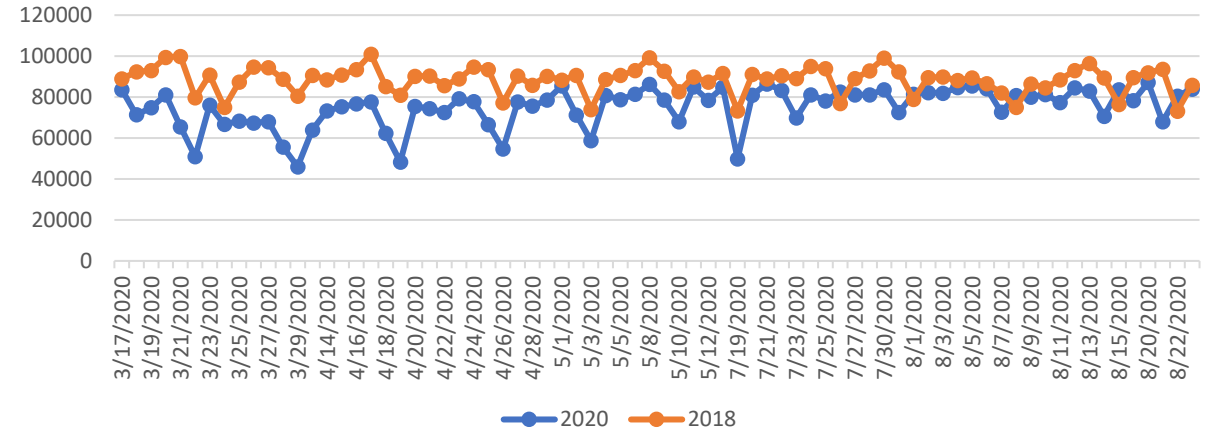


# Daily Volume Changes: IH 635

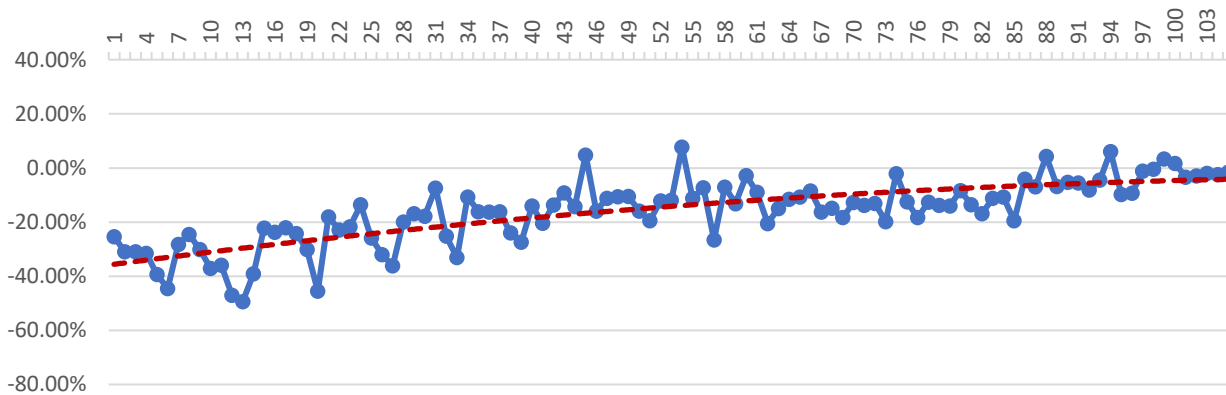
**IH635 Eastbound - Miller to Plano Rd (LinkID: 767)**  
Same Day 24-hour Volumes



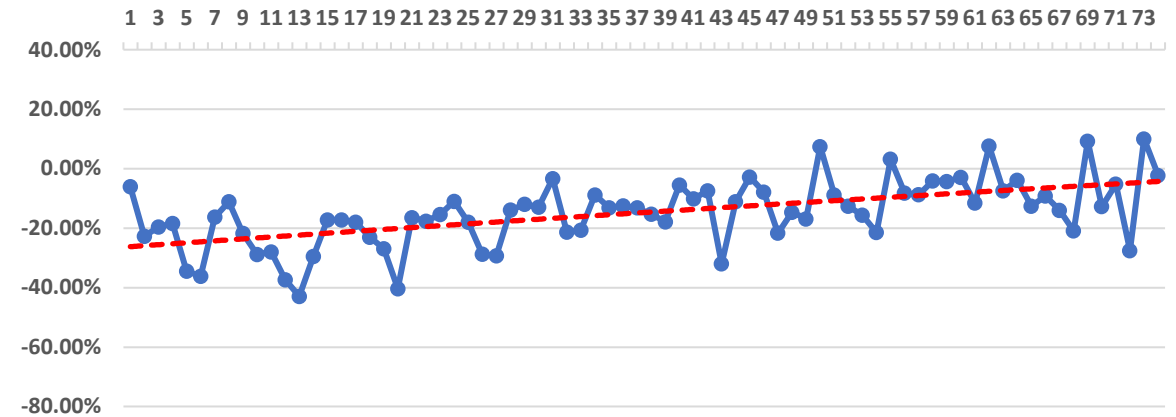
**IH635 Westbound - Miller to Skillman (LinkID: 768)**  
Same Day 24-hour Volumes



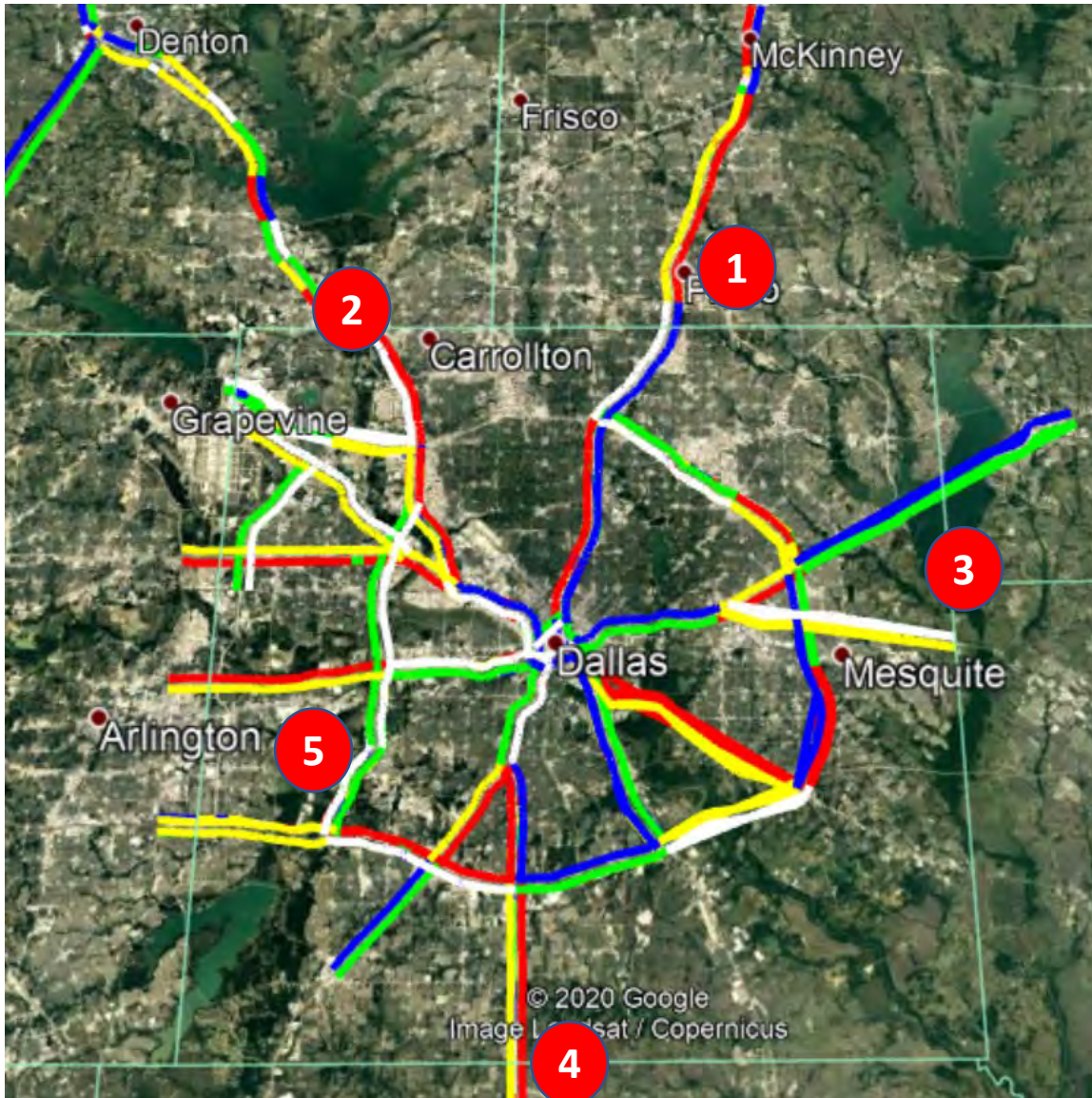
**IH635 Eastbound - Miller to Plano Rd (LinkID: 767)**  
Same Day 24-hour Volume Change (%)



**IH635 Westbound - Miller to Skillman (LinkID: 768)**  
Same Day 24-hour Volume Change (%)



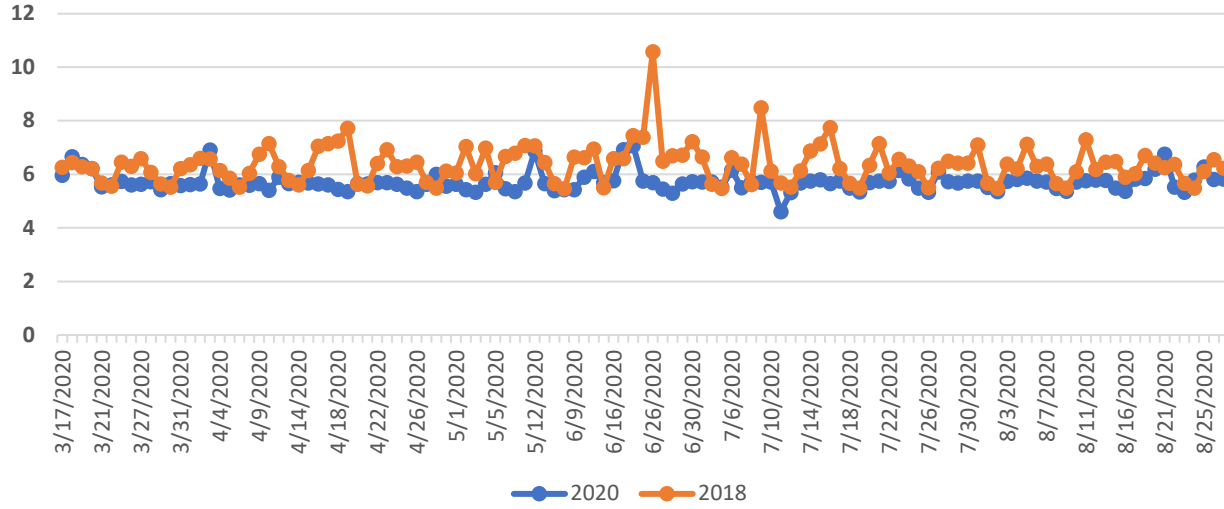
### Selected Sections (Peak Dir. 6-9am and 4-7pm)



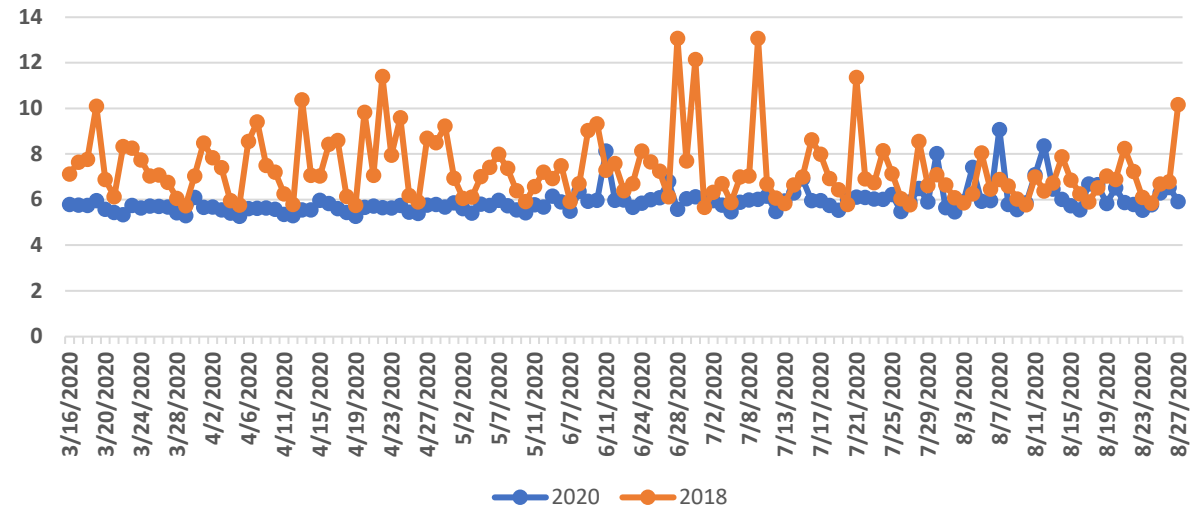
Commuting Route	Highway	From	To
Route 1	US 75	McKinney	Dallas Downtown
		Dallas Downtown	McKinney
Route 2	IH 35E	Denton	Dallas Downtown
	IH 35E	Dallas Downtown	Denton
Route 3	IH 30	Rockwall	Dallas Downtown
	IH 30	Dallas Downtown	Rockwall
Route 4	IH 35E	Red Oak	Dallas Downtown
		Dallas Downtown	Red Oak
Route 5	IH 30	Arlington	Dallas Downtown
		Dallas Downtown	Arlington

# Daily Travel Time Changes: US 75

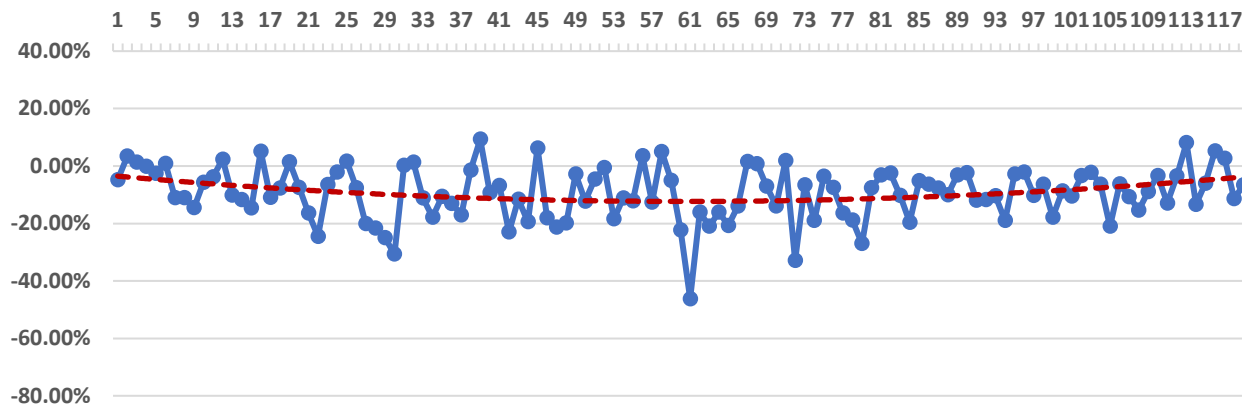
### US75 Northbound: IH 635 - PGBT (SectionID: 51) Daily Average Travel Time (Minutes)



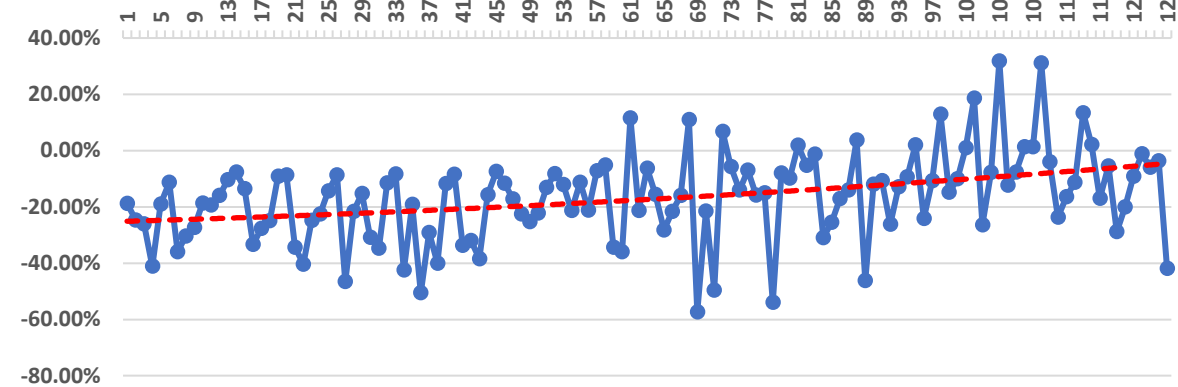
### US75 Southbound: PGBT - IH 635 (SectionID: 54) Daily Average Travel Time (Minutes)



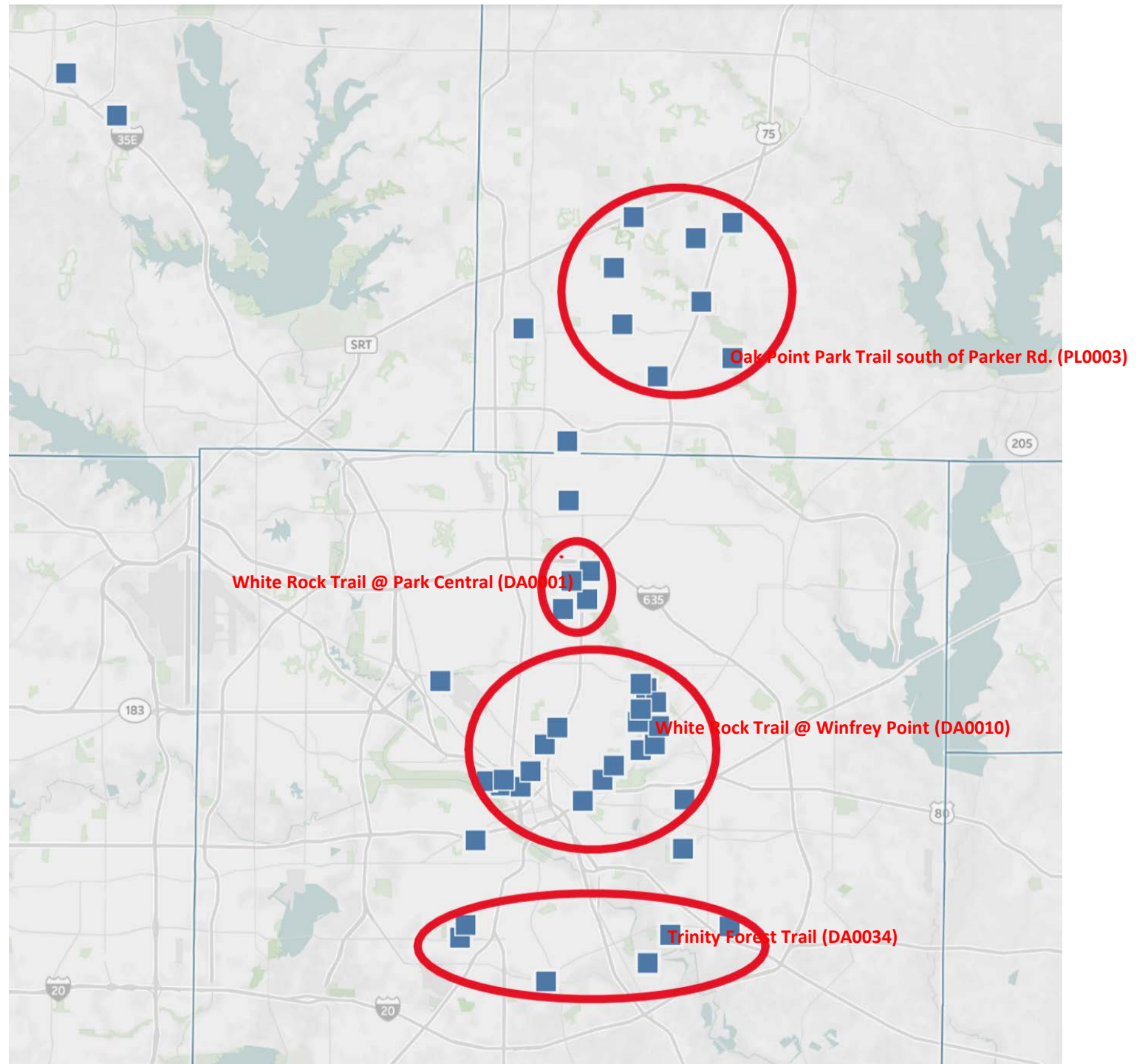
### US75 Northbound: IH 635 - PGBT (SectionID: 51) Daily Average Travel Time Change (%)



### US75 Southbound: PGBT - IH 635 (SectionID: 54) Daily Average Travel Time Change (%)

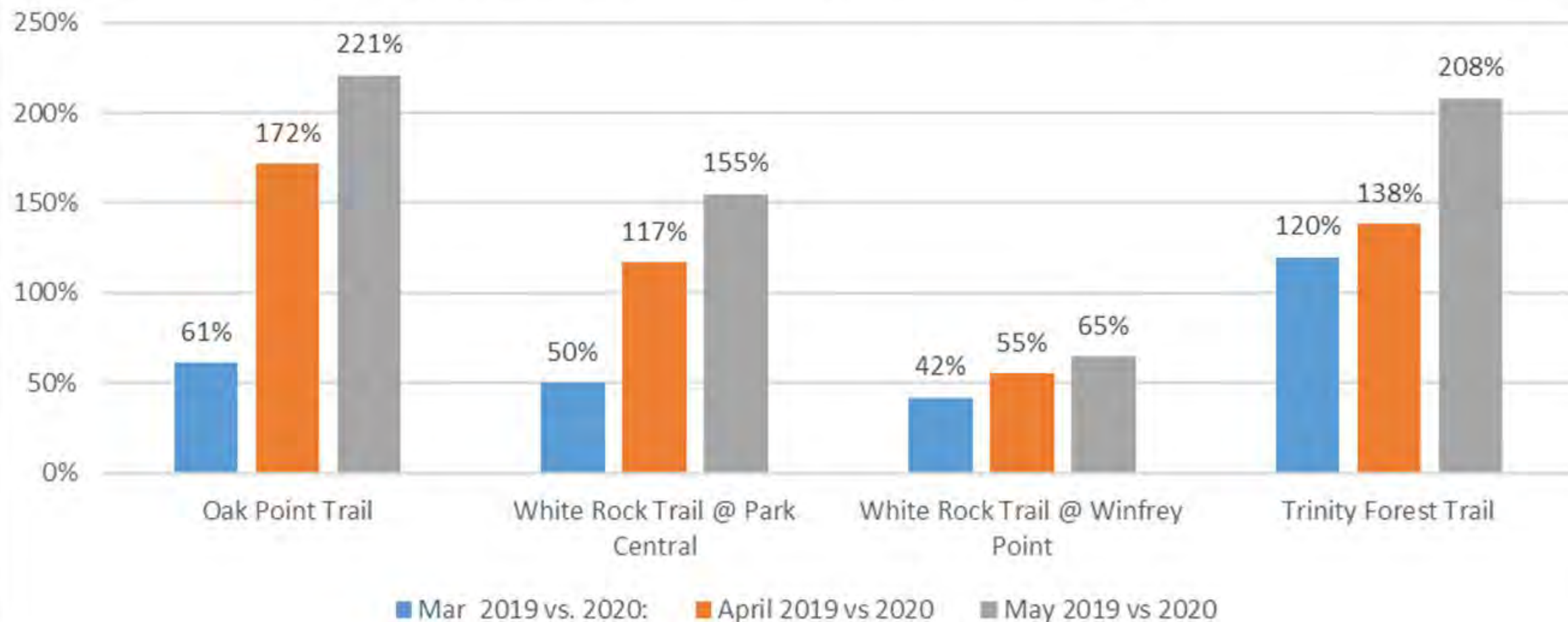


# Ped. and Bike Counter Locations:

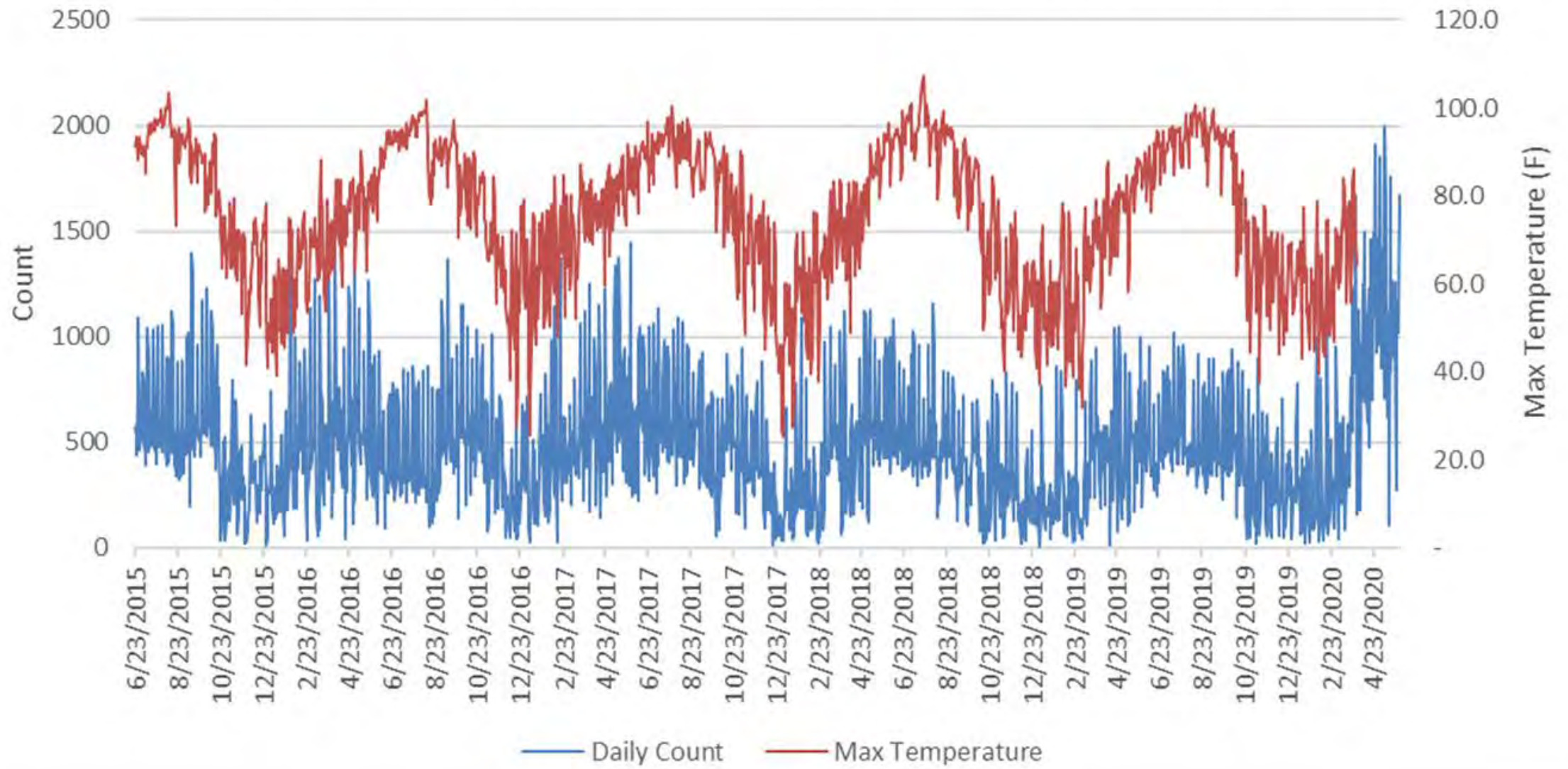




## 2019 vs. 2020 Ped and Bike Count Changes



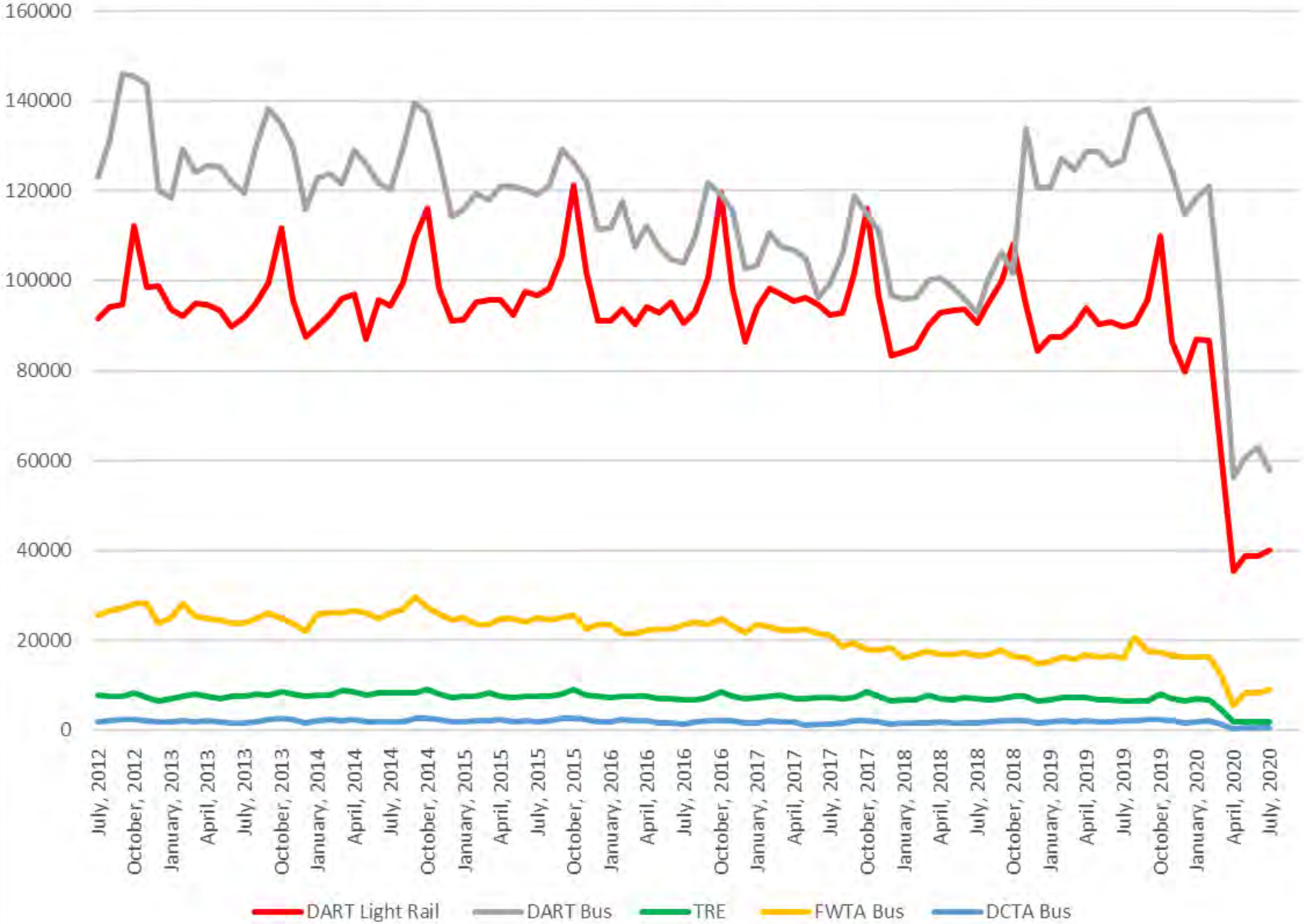
# Daily Ped & Bike Counts at White Rock Trail @ Park Central (DA0001)



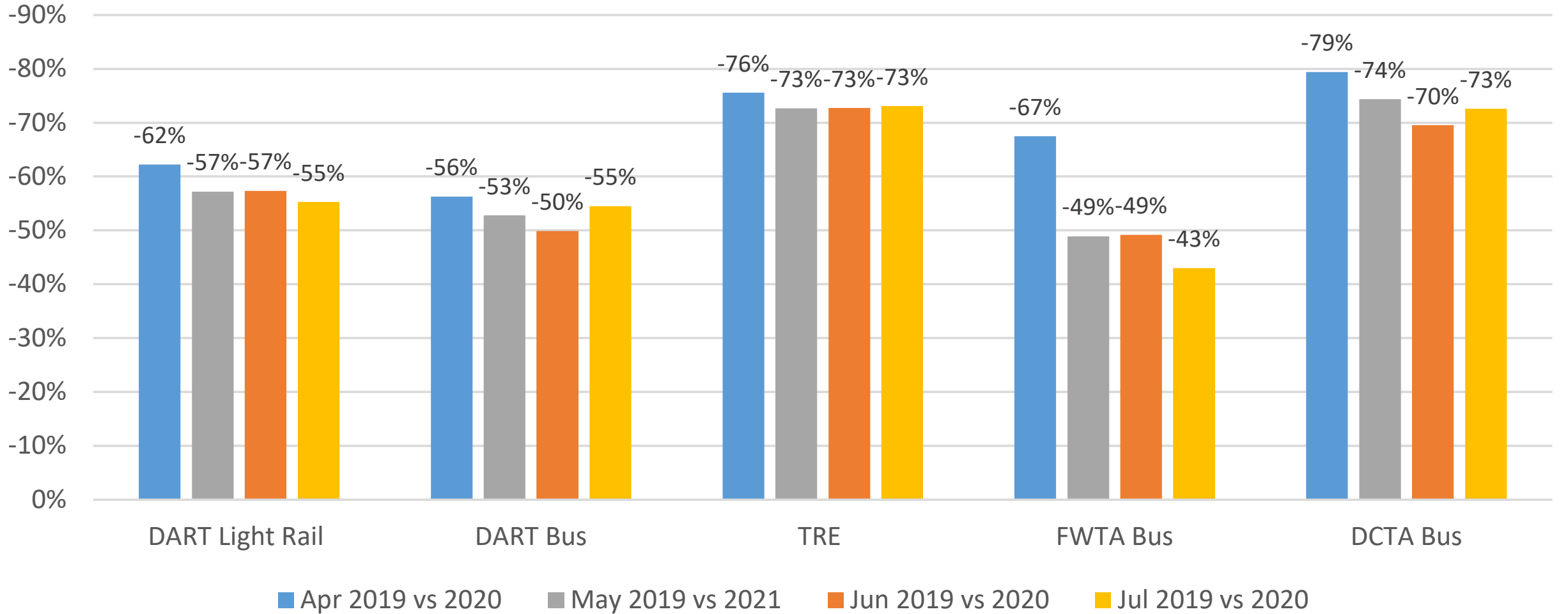
**April 2019 vs. 2020: 117%**

**May 2019 vs. 2020: 155%**

Average Weekday Transit Ridership by Month



# 2019 vs. 2020 Month-to-Month Decrease in Transit Ridership



# Questions?

Texas A&M Transportation Institute Team  
Research and Implementation Division

Minh Le

[M-le@tti.tamu.edu](mailto:M-le@tti.tamu.edu)

Jason (Dayong) Wu

[J-Wu@tti.tamu.edu](mailto:J-Wu@tti.tamu.edu)

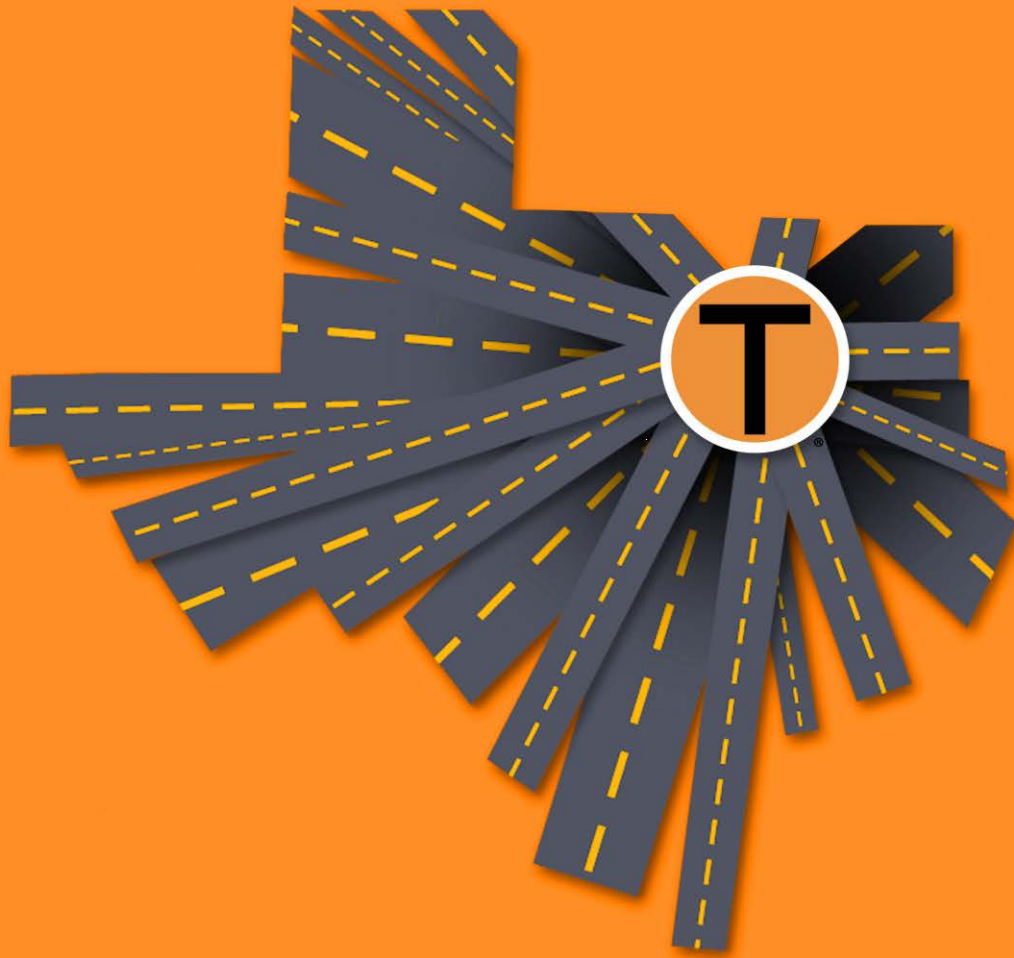
Manya Umamahesh

[M-Umamahesh@tti.tamu.edu](mailto:M-Umamahesh@tti.tamu.edu)

Roberto Macias

[R-Macias@tti.tamu.edu](mailto:R-Macias@tti.tamu.edu)





North Texas Tollway Authority

## Wrong Way Driving Prevention Efforts

Presented To:  
Regional Safety Advisory Committee

Presented By:  
Eric Hemphill, P.E.  
Director of Traffic Incident Management

October 23, 2020

# Safety Operations Center



**SAFETY  
OPERATIONS  
CENTER**

# Signs and RPMs





# Layout and Lane Markings

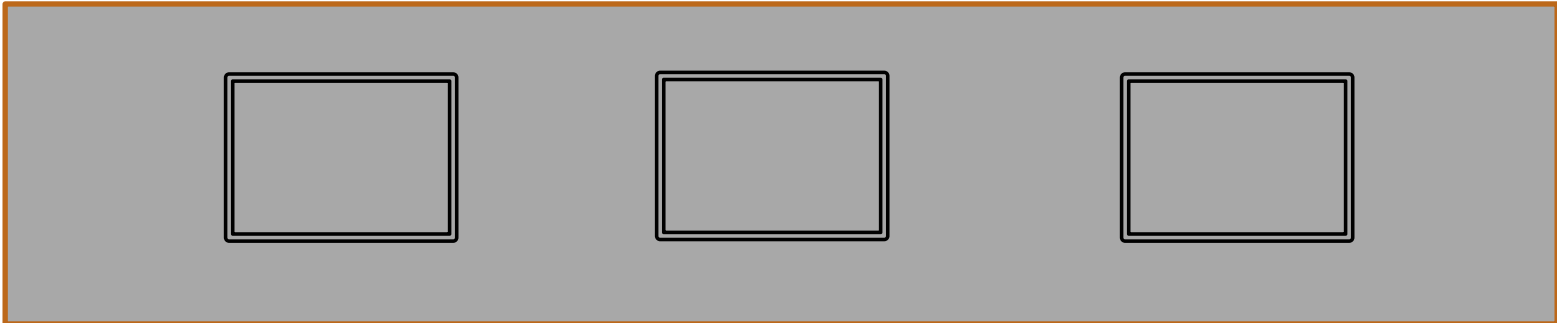


# WWD Loop Detection

A

B

C



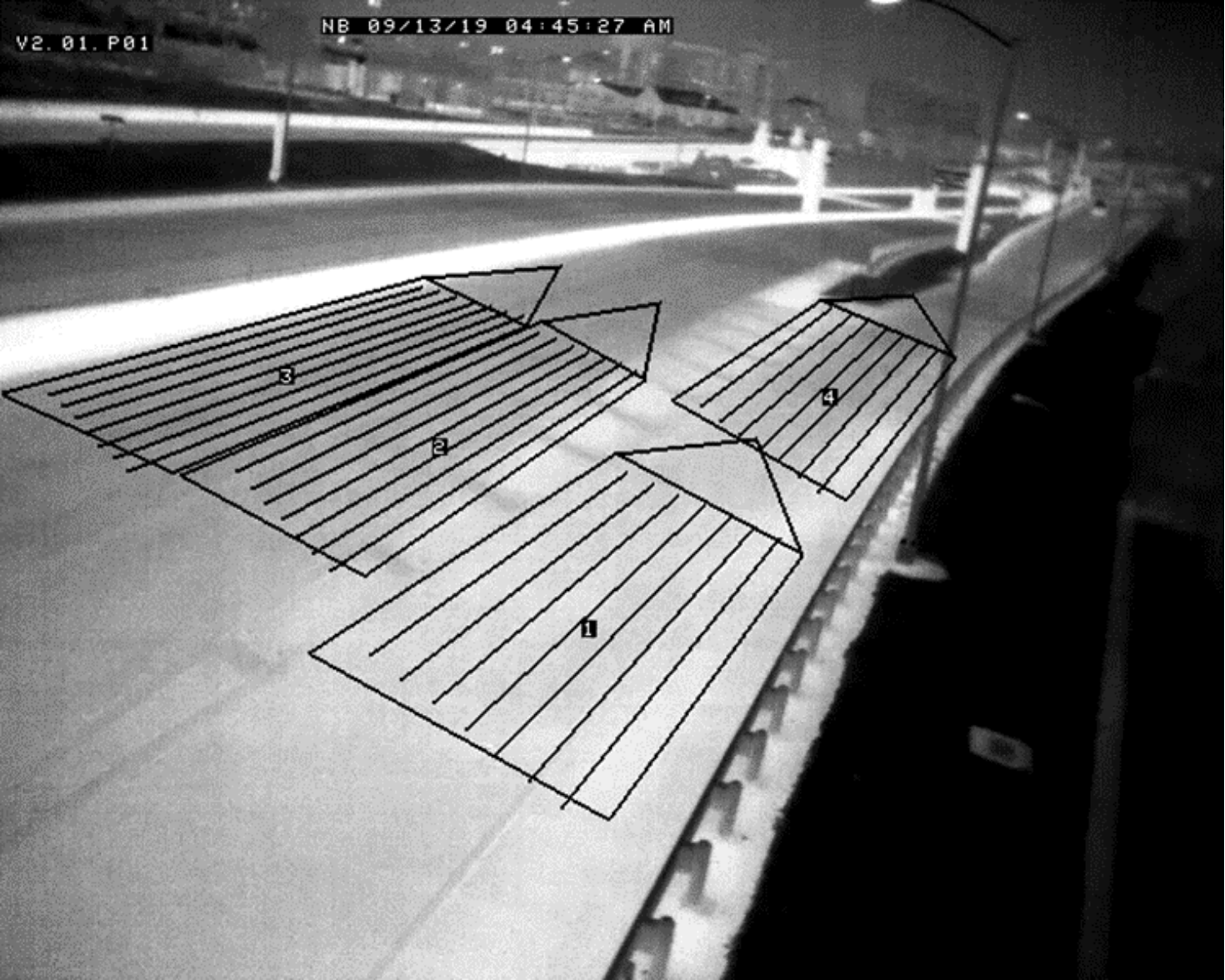
# Loop Activated Signs



# Thermal Camera



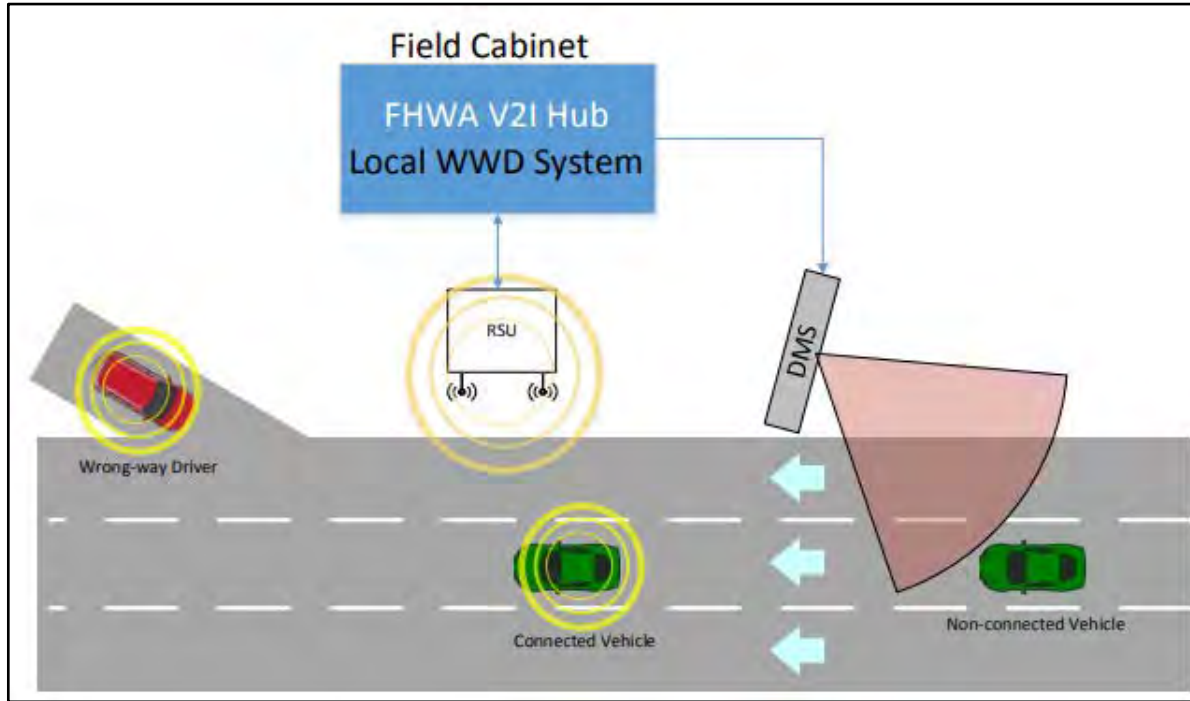
# Thermal Cameras



# Connected Signs



# Future – Connected Vehicles



Images from Texas A&M Transportation Institute Report found at <https://static.tti.tamu.edu/tti.tamu.edu/documents/0-6867-01-1.pdf>

# North Texas Tollway Authority

---

## Our Mission

❖ **Provide** a safe and reliable toll road system for customers  
❖ **Increase** value and mobility options  
❖ **Operate** the Authority in a businesslike manner  
❖ **Protect** our bondholders  
❖ **Partner** to meet our region's growing need for transportation infrastructure





# Developing Low-Cost Safety Countermeasures

Dhruva Lahon, P.E., PTOE  
NCTCOG Regional Safety Advisory Committee Meeting  
October 23, 2020

# Outline

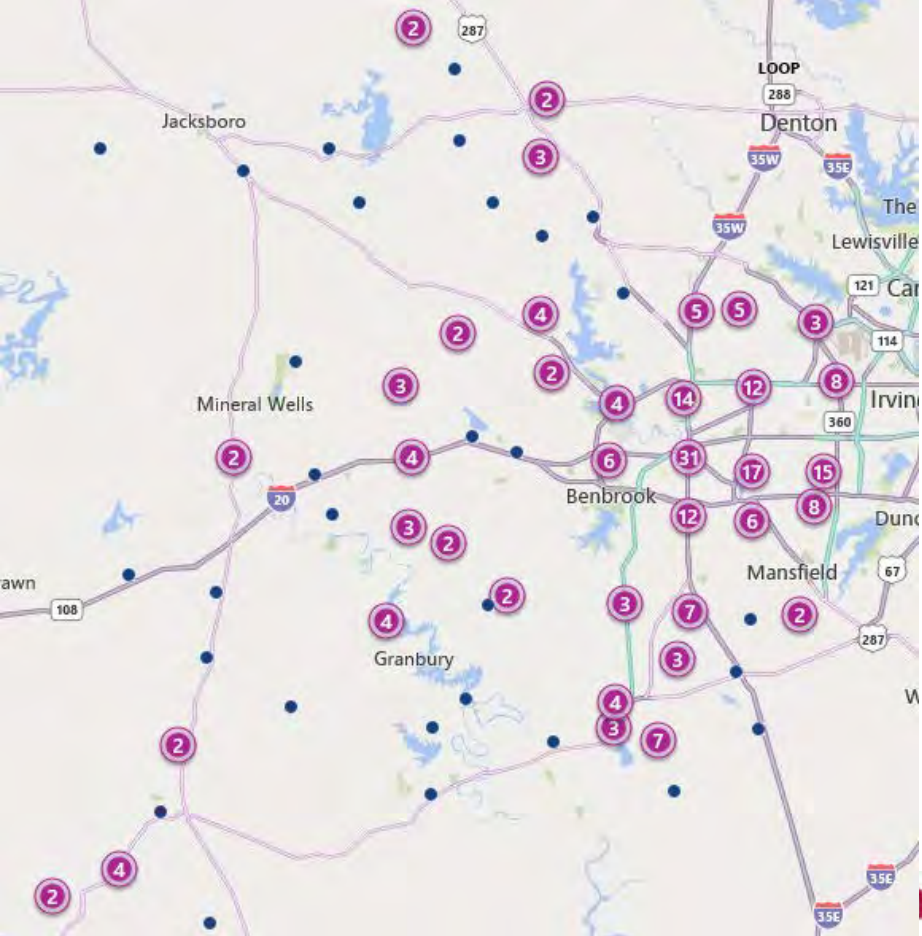
- Safe System
- Countermeasures
  - Traffic Signals
  - Pavement Markings
  - Curves
  - Pedestrians
  - Technology

# Introduction

- 3 Es of safety
  - Education
  - Enforcement
  - Engineering

# Crash Heat Map Analysis

- Identify target facilities



# Crash Countermeasures

- Identify crash contributing factors
- Evaluate predominant crash trends and types
- Determine countermeasures for treatment

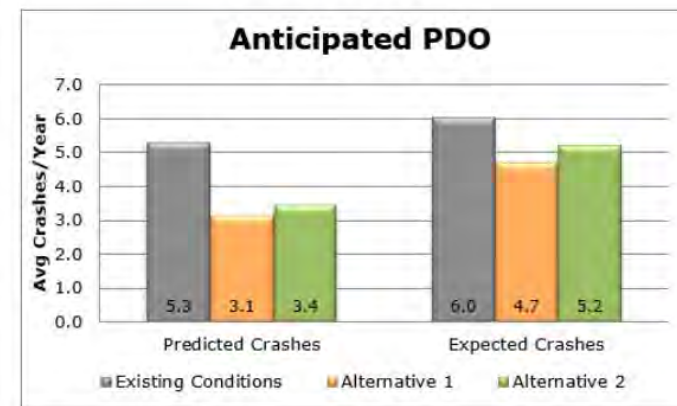
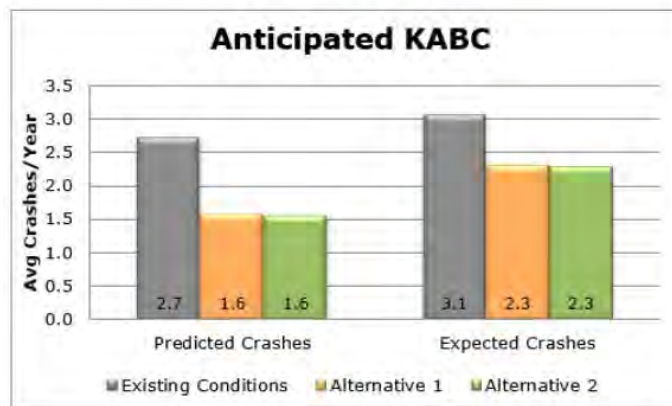
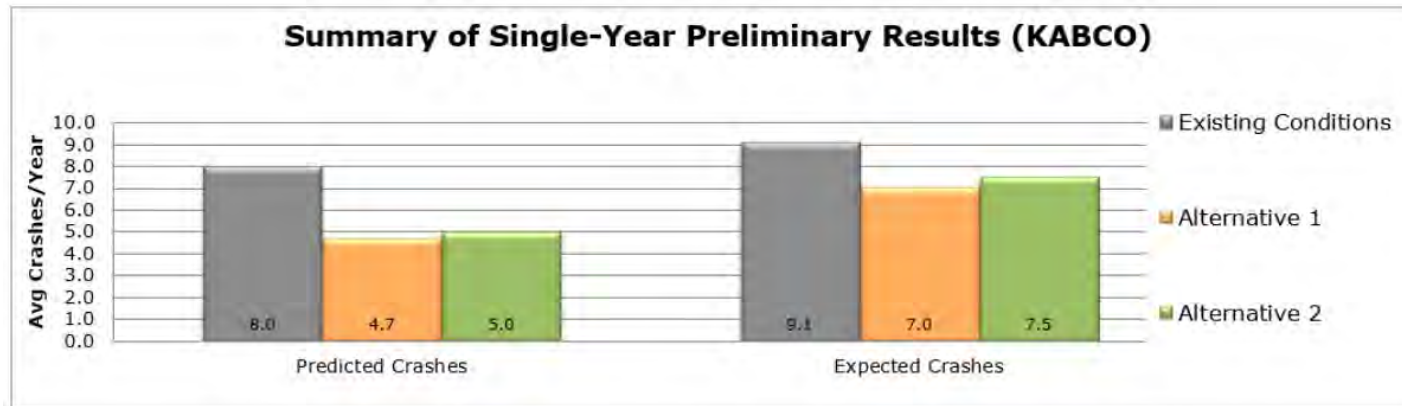


# Safe System Approach

- Manage interactions of roadway, vehicles, multi-modes, and travel speeds
- Promote system-wide safety strategy
- Accommodate human error
- Design forgiving roadways

# Systemic Safety

- Identify high risk roadway features
- Use data-driven process to proactively reduce fatal and serious injury crashes



# TRAFFIC SIGNALS



# Traffic Signals

- Left turn phase – Flashing Yellow Arrow
- Backplates with retroreflective border



Source: FHWA

# Traffic Signals

- Diamond intersections



# PAVEMENT MARKINGS

# Stop Bars



# Centerline Rumble Strips



Source: FHWA

# Curve Warning Markings



Source: FHWA

# Pavement Marking Shields



Source: Google

# CURVES





# Chevrons



Source: FHWA

# High Friction Surface Treatment



Countermeasure	Crash Reduction Factor	Typical Urban Crash Threshold	Typical Rural Crash Threshold	Additional Intersection Concern	Implementation Cost Range per Intersection
Skid resistance surface	50% (wet pavement crashes only)	8 wet pavement crashes in 5 years, a wet/total crash ratio above the statewide average wet/total crashes for intersections	8 wet pavement crashes in 5 years, a wet/total crash ratio above the statewide average wet/total crashes for intersections	High-speed approaches (45mph or greater) and a ribbed tire skid number of about 30 or less.	\$20,000 to \$50,000

Sources: FHWA

# Ramp Curves



Source: Google

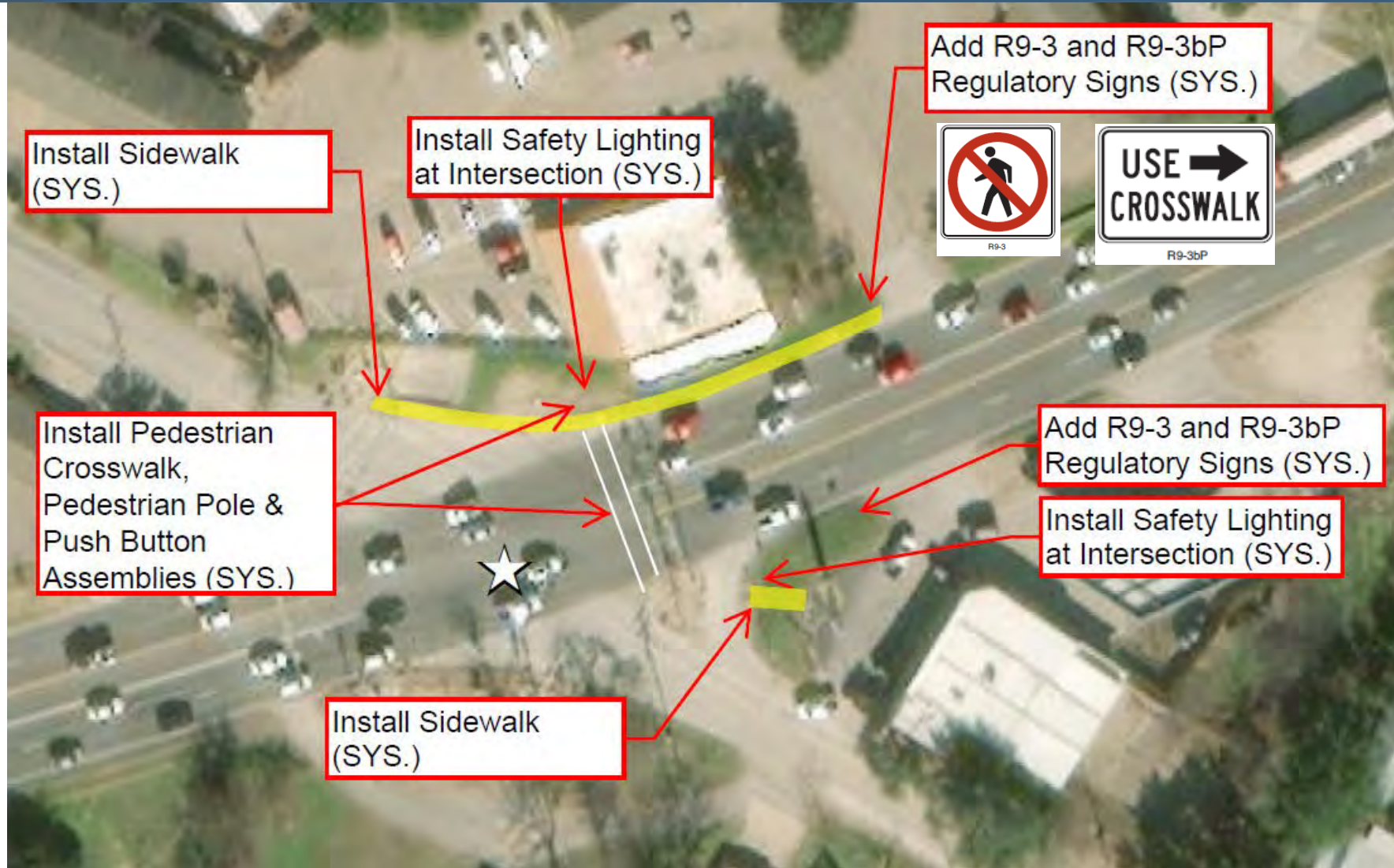
# PEDESTRIANS

# Pedestrian Crossing



Source: Nearmap

# Pedestrian Crossing



Map Source: Nearmap

# Pedestrian Signal



Source: Google



# Leading Pedestrian Interval



Source: FHWA

# Pedestrian Crossing Barrier



Source: TxDOT

# TECHNOLOGY

# Dynamic Curve Warning Systems



Source: FHWA

# Intersection Warning Systems



Source: FHWA

# Smart Street Lighting



Countermeasure	Crash Reduction Factor	Typical Urban Crash Threshold	Typical Rural Crash Threshold	Additional Intersection Concern	Implementation Cost Range per Intersection
New or upgraded Lighting	50% (NEW), 25% (UPGRADED) of night crashes	10 night crashes in 5 years and a night /total crash ratio above the statewide average for urban unlit intersections	5 night crashes in 5 years and a night/total crash ratio above the statewide average for rural unlit intersections	None	\$5,000 to \$15,000

Source: FHWA

# Median Cable Barrier



Source: FHWA

# FHWA Proven Countermeasures

- Road safety assessments
- Rumble strips and rumble stripes
- Median barriers
- Safety edges
- Roundabouts
- Left and right turn lanes
- Yellow change intervals
- Medians and pedestrian refuge areas
- Walkways





# TxDOT Countermeasures

Table 3-1 Low-Cost Countermeasures on Rural Highways.

Category	Countermeasure	Definition	CMF	Service Life (yr)	Cost (\$)
Signing and Signals	Install Warning/Guide Signs	Provide advance signing for unusual or unexpected roadway features	0.80; 0.75 <sup>1</sup>	6	Initial: \$300 <sup>2</sup>
	Overheight Warning System	Install electronic devices to detect overheight loads.	0.35	10	
	Install Delineators	Install post-mounted delineators to provide guidance.	0.70	2	
	Install Chevrons (Curve)	Install post-mounted chevron signs to provide guidance	0.70 0.89 <sup>3</sup>	2	Initial: \$3,000 <sup>4</sup>
	Convert Two-Way Stop Signs to Four-Way Stop Signs	Provide four-way stop signs where two-way stop signs existed previously	0.85 0.50 <sup>1</sup>	6	
	Install Advance Warning Signals and Signs (Intersection)	Provide flasher units and signs in advance of an intersection where none previously existed	0.85	10	
	Install Advance Warning Signals and Signs (Curve)	Provide flasher units and signs in advance of a curve where none previously existed	0.85	10	
	Install LED Flashing Chevrons (Curve)	Install LED flashing chevrons on curve to provide guidance	0.65	10	
	Install Flashing Yellow Arrow	Modernize existing intersection signals by adding a flashing yellow arrow indication	0.85	10	

Source: TxDOT HSIP

# TxDOT Countermeasures – Contd.

Category	Countermeasure	Definition	CMF	Service Life (yr)	Cost (\$)
Resurfacing and Roadway Lighting	Install Safety Lighting	Provide roadway lighting, either partial or continuous, where either none existed previously or major improvements are being made	0.60	15	Initial: \$5,000 <sup>4</sup> (per lighting pole) Maintenance: \$100 per luminaire
	Install Safety Lighting at Intersection	Install lighting at an intersection where either none existed previously or major improvements are proposed	0.55 0.60 <sup>1</sup>	15	Initial: \$5,000 <sup>4</sup> (per lighting pole) Maintenance: \$100 per luminaire
Pavement Markings	Install Edge Marking	Place edge lines where none existed previously	0.75: 0.70 <sup>3</sup> : 0.37 <sup>2</sup> (Injury)	2	Initial: \$650 <sup>4</sup>
Roadway Work	Milled Edgeline Rumble Strips	Install continuous milled depressions (rumble strips or rumble strips) along the edgeline	0.5	10	
	Profile Edgeline Markings	Install profile edgeline markings	0.4	5	
	Raised Edgeline Rumble Strips	Install non-reflective raised traffic buttons (yellow or white) along the edgeline	0.4	2	
	Milled Centerline Rumble Strips	Install milled centerline rumble strips along the centerline	0.65	10	
	Profile Centerline Markings	Install profile centerline markings and preformed thermoplastic strips along the centerline	0.65	5	
	Raised Centerline Rumble Strips	Install non-reflective raised traffic buttons (yellow or black) and preformed thermoplastic strips along the centerline	0.65	2	
	Transverse Rumble Strips	Install transverse or in-lane rumble strips in advance of a high incident and special geometric location	0.85	5	

# THANK YOU

Dhruva Lahon, P.E., PTOE

Phone: 972 770 1305

Email: [dhruva.lahon@kimley-horn.com](mailto:dhruva.lahon@kimley-horn.com)



# ROADWAY SAFETY PERFORMANCE MEASURES TARGET SETTING 2021 AND BEYOND

Regional Safety Advisory Committee | October 23, 2020

Kevin Kroll



North Central Texas  
Council of Governments

# NCTCOG Safety Actual Performance 2018

## Final

Safety Performance Measures	2018 Target	PY2018 Actual Performance	PY2012-2016 Baseline Performance	Met Target ?	Better than the Baseline ?	Met or Made Significant Progress?
<b>Number of Fatalities</b>	665	542	496	Yes	No	Yes
<b>Rate of Fatalities</b>	0.96	0.784	0.768	Yes	No	
<b>Number of Serious Injuries</b>	3,612	3,741	3,754	No	Yes	
<b>Rate of Serious Injuries</b>	5.18	5.431	5.807	No	Yes	
<b>Number of Non-Motorized Fatalities and Serious Injuries</b>	560	546.7	497	Yes	No	

PY2018 Actual Performance calculated as PY2014-2018 five-year averages.

# TxDOT Target Setting

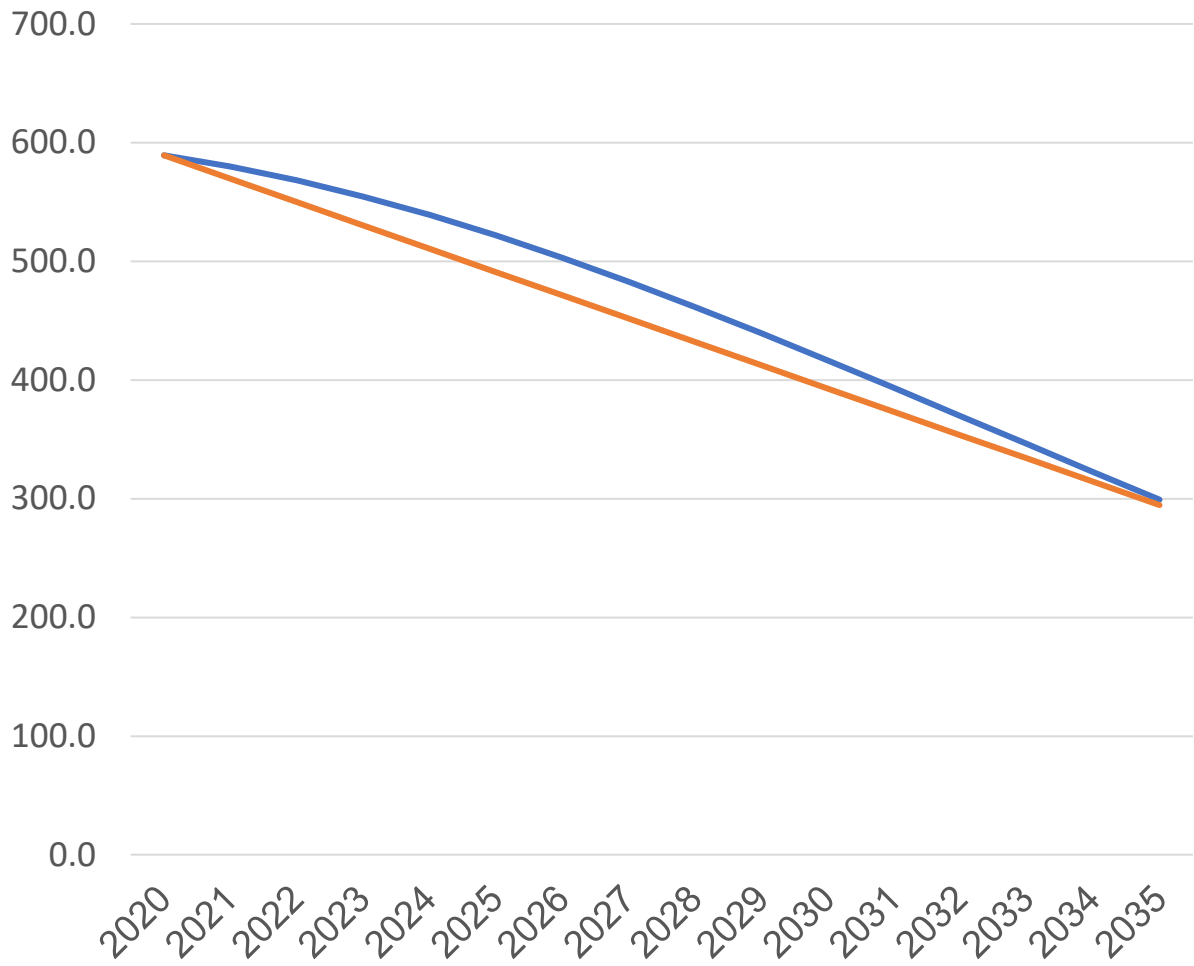
Previous State Safety Performance Target: Two percent reduction in each of the five performance measures by the target year of 2022

New State Safety Performance Target: 50 percent reduction in each of the five performance measures by the target year of 2035 (Beginning with the 2021 Target Year)

	<b>Original Target Reduction</b> 2% Reduction Across each Performance Measure by 2022	<b>Updated Target Reduction</b> 50% Reduction Across each Performance Measure by 2035
2018	0.40%	
2019	0.80%	
2020	1.20%	
2021	1.60%	3.33%*
2022	2.00%	3.45%*

\*Calculated using linear interpolation between our 2020 regional targets and a 50% reduction in those targets in 2035. 106

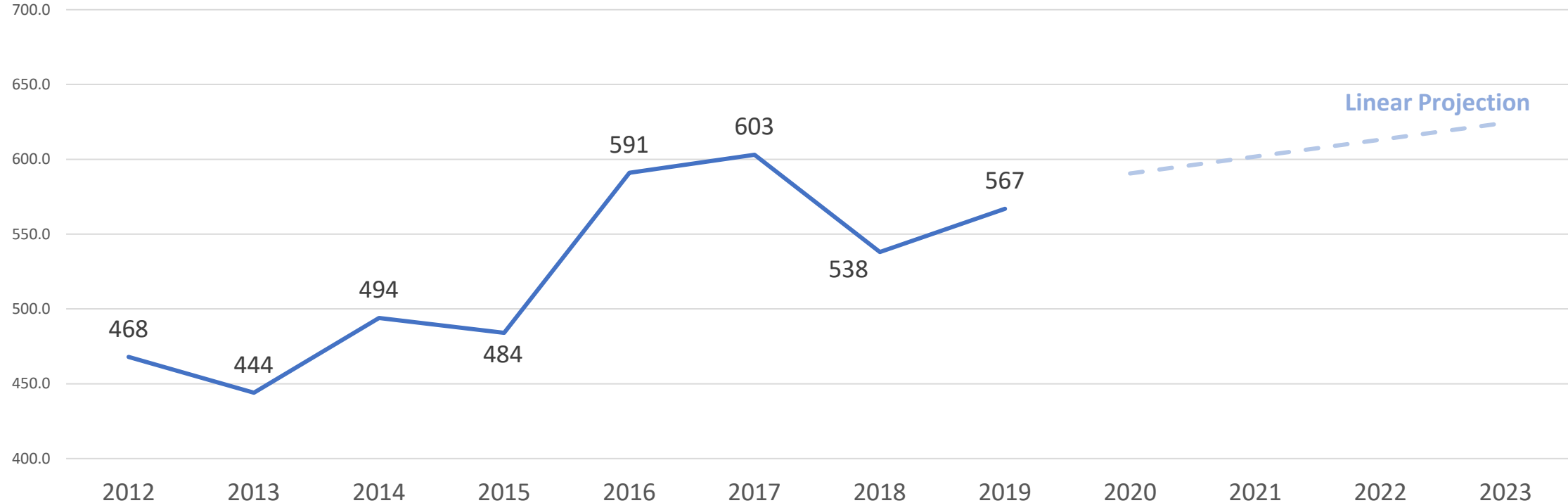
# NCTCOG Region Target Projections 2020-2035



	Projected Fatalities 2% Reduction by 2022 Target	Projected Fatalities 50% Reduction by 2035 Target	Target Percentage decrease - 2% by 2022	Target Percentage decrease - 50% by 2035
2020	589.3	589.3		
2021	579.9	569.7	1.6%	3.3%
2022	568.3	550.0	2.0%	3.4%
2023	554.6	530.4	2.4%	3.6%
2024	539.1	510.7	2.8%	3.7%
2025	521.9	491.1	3.2%	3.8%
2026	503.1	471.4	3.6%	4.0%
2027	482.9	451.8	4.0%	4.2%
2028	461.7	432.2	4.4%	4.3%
2029	439.5	412.5	4.8%	4.5%
2030	416.7	392.9	5.2%	4.8%
2031	393.3	373.2	5.6%	5.0%
2032	369.7	353.6	6.0%	5.3%
2033	346.1	333.9	6.4%	5.6%
2034	322.5	314.3	6.8%	5.9%
2035	299.3	294.7	7.2%	6.3%

# NCTCOG Safety Performance Measures

## Fatalities – Preliminary Projections



	Base Projection	Projected Fatalities with 2% Reduction by 2022	Projected Fatalities with 50% Reduction by 2035	Difference Between Targets
2017-2021 5-year average	580.1	570.9	561.5	9.4
2018-2022 5-year average	582.1	570.7	562.7	8.0
2019-2023 5-year average	599.4	585.3	578.7	6.6



# Contacts

Kevin Kroll  
Senior Transportation Planner  
817-695-9258  
[kkroll@nctcog.org](mailto:kkroll@nctcog.org)

Camille Fountain  
Transportation Planner  
817-704-2521  
[cfountain@nctcog.org](mailto:cfountain@nctcog.org)

Sonya J. Landrum  
Program Manager  
817-695-9273  
[slandrum@nctcog.org](mailto:slandrum@nctcog.org)

Michael Misantonis  
Transportation Planner  
[MMisantonis@nctcog.org](mailto:MMisantonis@nctcog.org)

Ricardo Serrano  
Safety Intern  
[RSerrano@nctcog.org](mailto:RSerrano@nctcog.org)

## AGENDA

1. Approval of July 24, 2020 Meeting Summary – Alonzo Liñán, RSAC Chair
2. TxDOT's Methods of Crash Data Dissemination, and Texas Safety Plan and Performance Targets – Larbi Hanni and Letty Von Rossum, TxDOT Austin
3. Public Transportation Agency Safety Plan – Joe Acosta, Trinity Metro
4. COVID-19/Dallas District Overview – Minh Le and Jason Wu, TTI
5. NTTA Wrong Way Driving Program Overview – Eric Hemphill, NTTA
6. Developing Low-Cost Safety Countermeasures – Dhruva Lahon, Kimley-Horn
7. Update Items
  - a) 2021 Federal Safety Targets Development Activities – Kevin Kroll, NCTCOG
  - b) Mobility Assistance Patrol Peer Review – Kevin Kroll, NCTCOG
  - c) CVE Equipment and Training Program RFP Update – Kevin Kroll, NCTCOG
  - d) Commercial Motor Vehicle Violations: Enforcement, Prosecution, and Reporting Training Update – Michael Misantonis, NCTCOG
  - e) Traffic Incident Management Training During COVID-19 – Camille Fountain, NCTCOG
  - f) Traffic Incident Regional Police Academy Outreach – Camille Fountain, NCTCOG
  - g) Traffic Incident Management 2020 Self-Assessment Survey Activities – Camille Fountain, NCTCOG
  - h) Traffic Incident Management Call for Projects Status Update – Camille Fountain, NCTCOG
  - i) National Traffic Incident Response Awareness Week – Sonya Landrum, NCTCOG
  - j) Transportation Related Regional Conferences/Trainings – Ricardo Serrano, NCTCOG
8. [Safety-Related Reference Items, Topics or Training Courses Website](#)
9. Upcoming Safety-Related Events and Training Announcements
  - a) Fall 2020 "Virtual: Traffic Incident Management Executive Level Course"
    - o November 5, 2020
  - b) [National Traffic Incident Response Awareness Week](#)
    - o November 9 – 16, 2020
  - c) National Traffic Incident Management Train-the-Trainer Workshop (Virtual)
    - o November 12 – 13, 2020; (8:00 AM - 4:00 PM; 8:00 AM - 12:00 PM)
10. Other Business (Old or New): This item provides an opportunity for members to bring items of interest before the group.
11. Next RSAC Meeting: January 22, 2021 at 10 am