



FM 1431 in Lago Vista, TX

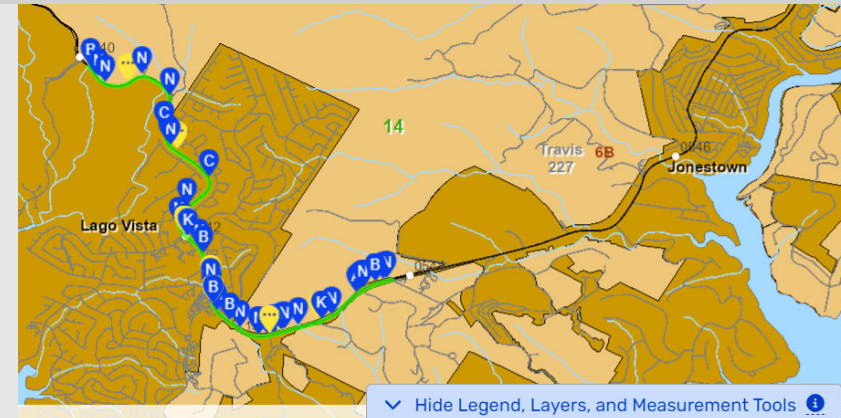
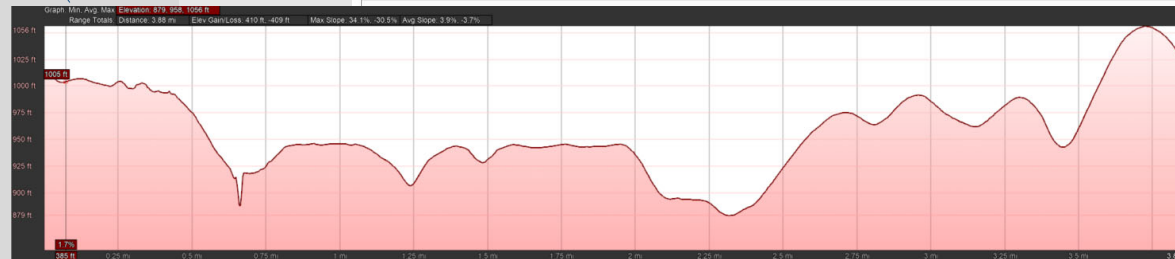
Safety Analysis

AUS DISTRICT

Info

- Roadway – FM1431
- Limit – within the city limit of City of Lago Vista
- A total of around 4.5 miles of FM1431 within the city limit was studied
- Max. Speed limit - 55 mph, speed limits were established in 2003 by city ordinance
- Corridor with vertical profile and horizontal curve
- **Crash data** from **2018- current** was used

Longitudinal Profile



Filters Applied to Query

Crash Year Is In 2018 or 2019 or 2020 or 2021 or 2022 or 2023

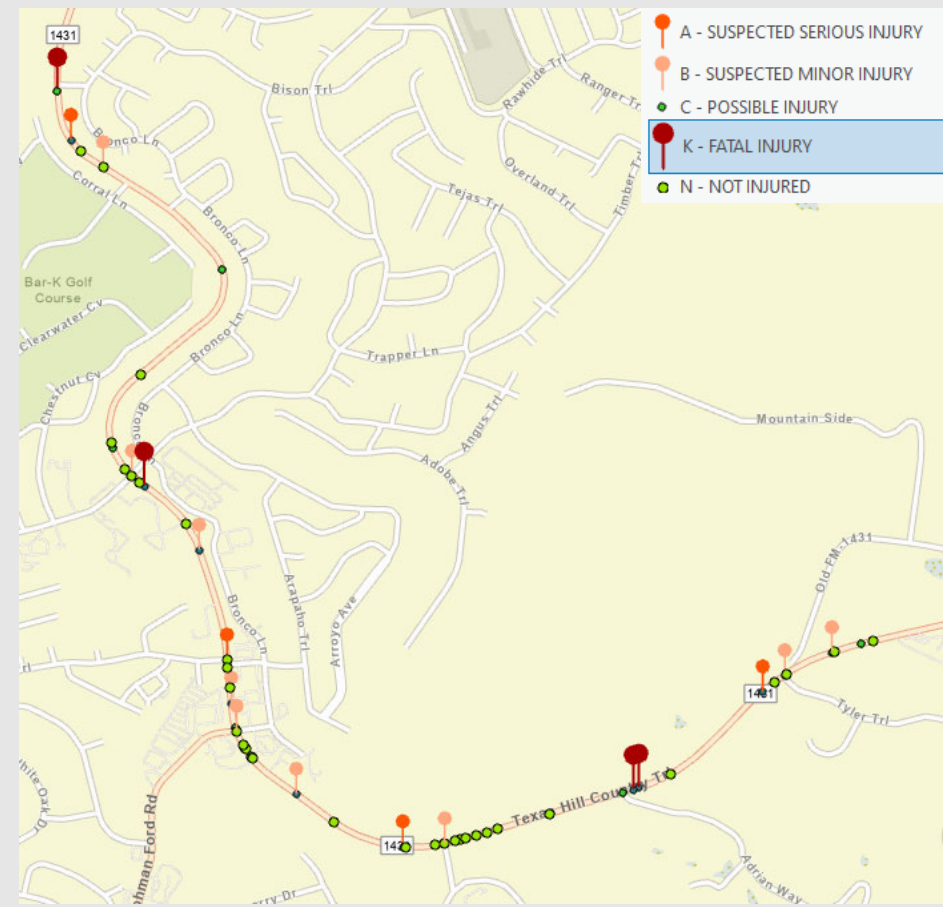
City Is Equal To LAGO VISTA

Highway Name Is Equal To RM1431

TxDOT Reportable Flag Is True

Summary of Crash History

- A total of **114** crashes were recorded.
- Crash severity - **4 crashes were fatal**. Others, A – 7, B – 14, C – 14, N – 75)
- All 4 fatal crashes are non-intersection – 3 roadway departure crashes with fixed object and 1 roadway departure crossing the center stripe and resulting head-on collision.
- 2 fatal crashes involved MOTORCYCLES.
- No PEDESTRIAN crashes were reported
- Manner of collision- ROR crashes – 27% (31/114) and rear-end crashes – 19%(22/114), Head-on collision – 6%(7/114)



Crash Summary – 114 Crashes

Crash Severity	Count	%
K - FATAL INJURY	4	3.51%
A - SUSPECTED SERIOUS INJURY	7	6.14%
B - SUSPECTED MINOR INJURY	14	12.28%
C - POSSIBLE INJURY	14	12.28%
N - NOT INJURED	75	65.79%
Total	114	100.00%

Crash Year	Count
2018	17
2019	17
2020	14
2021	26
2022	24
2023	16
Total	114

Intersection Related	Count
DRIVEWAY ACCESS	5
INTERSECTION RELATED	15
INTERSECTION	42
NON INTERSECTION	52
Total	114

Light Condition	Count of Light Condition
1 - DAYLIGHT	88
2 - DARK, NOT LIGHTED	16
3 - DARK, LIGHTED	8
5 - DAWN	1
6 - DUSK	1
Total	114

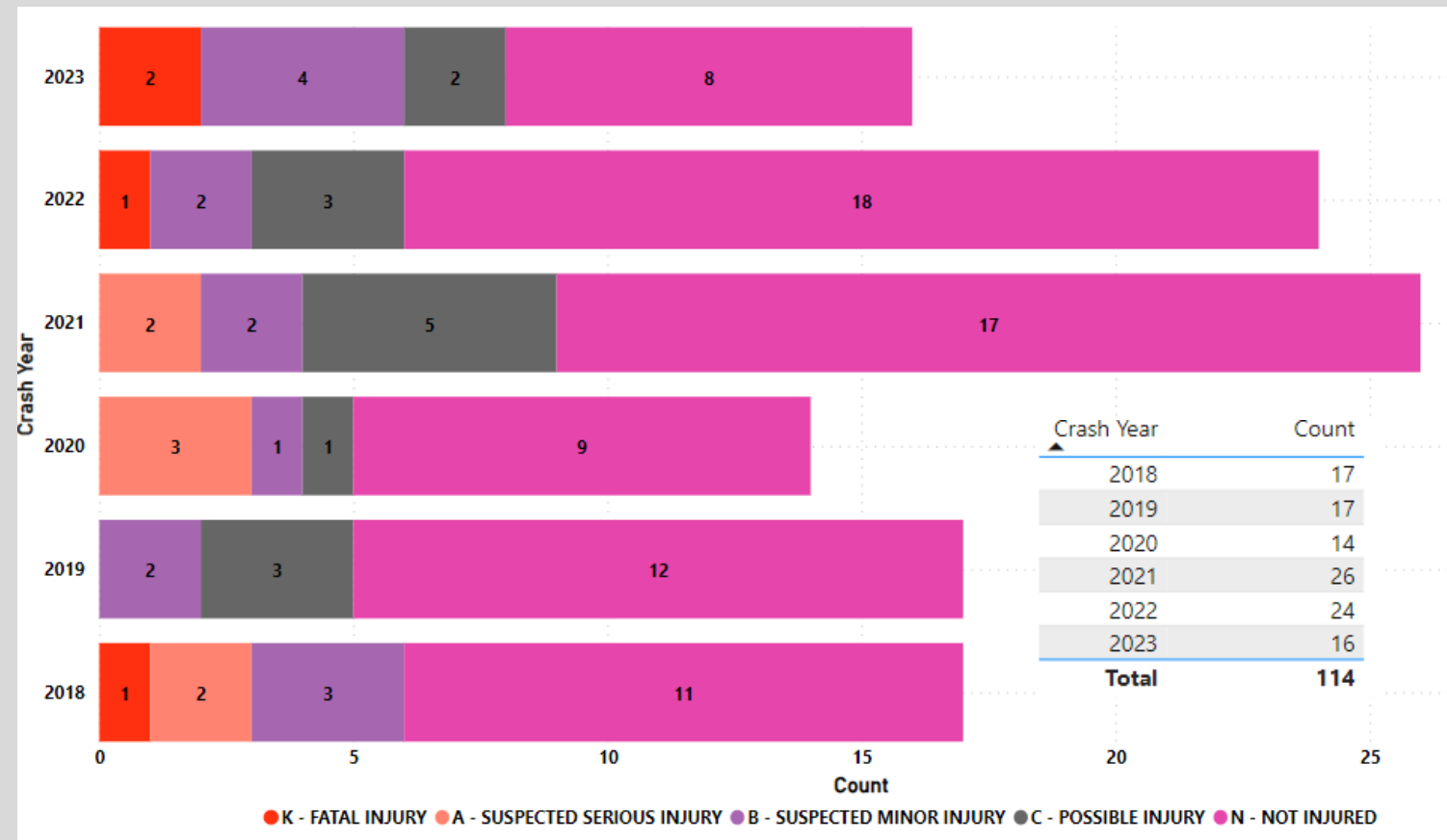
- Most of the crashes were in DAYLIGHT.
- Almost 50/50 intersection and non-intersection crashes.
- No PEDESTRIAN crashes were reported

Hour of Day	Count of Hour of Day
00:00 - 00:59	2
03:00 - 03:59	1
05:00 - 05:59	1
06:00 - 06:59	4
07:00 - 07:59	9
08:00 - 08:59	4
09:00 - 09:59	6
10:00 - 10:59	3
11:00 - 11:59	11
12:00 - 12:59	8
13:00 - 13:59	6
14:00 - 14:59	8
15:00 - 15:59	11
16:00 - 16:59	8
17:00 - 17:59	6
18:00 - 18:59	7
19:00 - 19:59	9
20:00 - 20:59	4
21:00 - 21:59	2
22:00 - 22:59	2
23:00 - 23:59	2
Total	114

Crash Distribution by Year



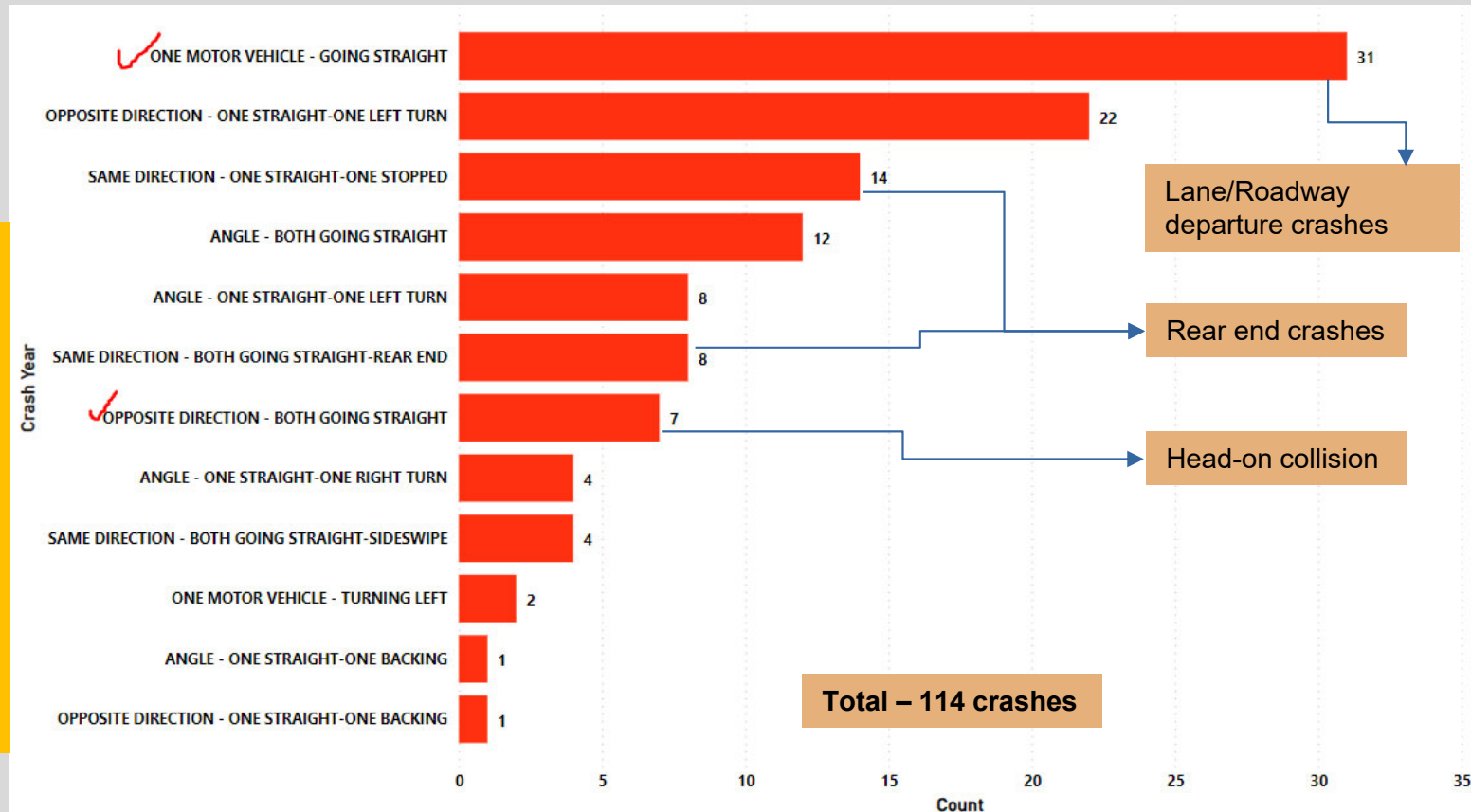
- 2 fatal crashes reported in 2023 with 16 crashes along the corridor
- Crashes increased after 2020
- No fatal crashes reported from 2019-2021



Manner of Collision



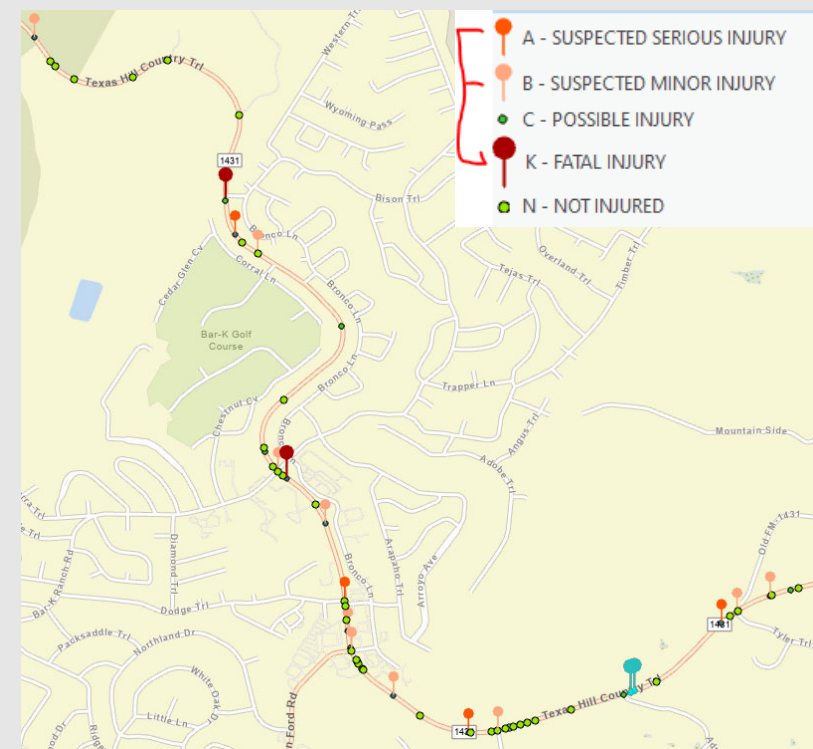
- Roadway Departure crash is the dominant one – 31(27%) crashes
- Rear end crashes – 22 (19%)
- Head-on collision – 7 (6%)
- With more roadway departure and rear end crashes, SPEEDING and DISTRACTED DRIVING may be behavioral issues on the corridor



Contributing Factors on KAB crashes

Contributing Factor	Count of Contributing Factors
INTERSECTION	10
DISREGARD STOP SIGN OR LIGHT	1
DRIVER INATTENTION; FAILED TO STOP AT PROPER PLACE	1
DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	2
DRIVER INATTENTION; FAILED TO YIELD RIGHT OF WAY - TURNING LEFT; OTHER (EXPLAIN IN NARRATIVE)	1
FAILED TO YIELD RIGHT OF WAY - STOP SIGN	1
FAILED TO YIELD RIGHT OF WAY - STOP SIGN; FAULTY EVASIVE ACTION	1
FAILED TO YIELD RIGHT OF WAY - TURNING LEFT	2
FAILED TO YIELD RIGHT OF WAY - TURNING LEFT; TURNED WHEN UNSAFE	1
NON INTERSECTION	15
ANIMAL ON ROAD - WILD	1
DISTRACTION IN VEHICLE; DRIVER INATTENTION; <u>UNSAFE SPEED</u>	1
DRIVER INATTENTION	1
DRIVER INATTENTION; FAILED TO <u>CONTROL SPEED</u>	2
DRIVER INATTENTION; FAILED TO <u>CONTROL SPEED</u> ; <u>SPEEDING - (OVERLIMIT)</u>	1
DRIVER INATTENTION; FATIGUED OR ASLEEP	1
DRIVER INATTENTION; <u>UNSAFE SPEED</u>	1
DROVE WITHOUT HEADLIGHTS; WRONG SIDE - NOT PASSING	1
FAILED TO <u>CONTROL SPEED</u>	2
FAULTY EVASIVE ACTION; <u>UNSAFE SPEED</u>	1
LOAD NOT SECURED	1
OTHER (EXPLAIN IN NARRATIVE)	1
<u>SPEEDING - (OVERLIMIT)</u>	1
Total	25

- For Non - Intersection crashes, most of the crashes were associated to **unsafe speed**.

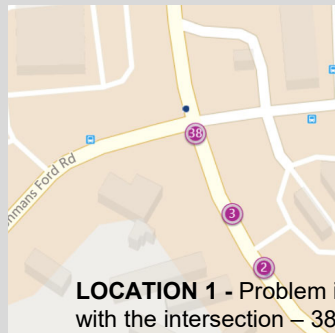


Heat Map – All 114 crashes

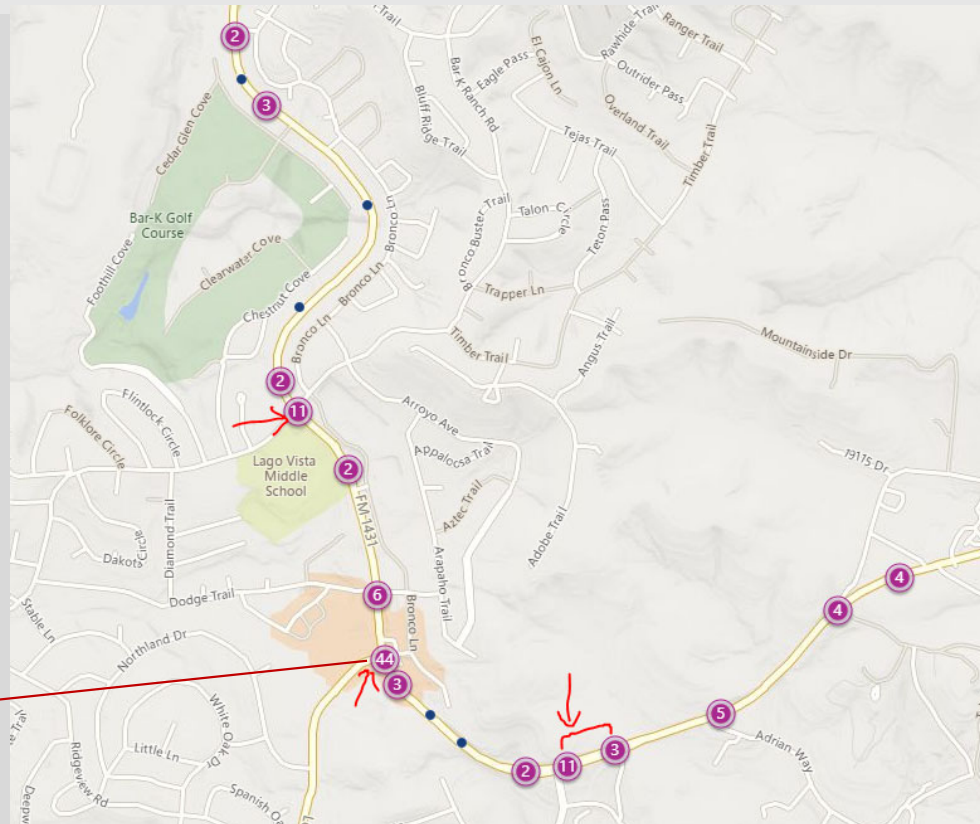


Locations with more frequent crashes

- Location 1 –almost all intersection crashes. No fatal crash (853<96952>3<998: .



LOCATION 1 - Problem is with the intersection – 38 intersection crashes



Location 1 with too many crashes



■ Location 1

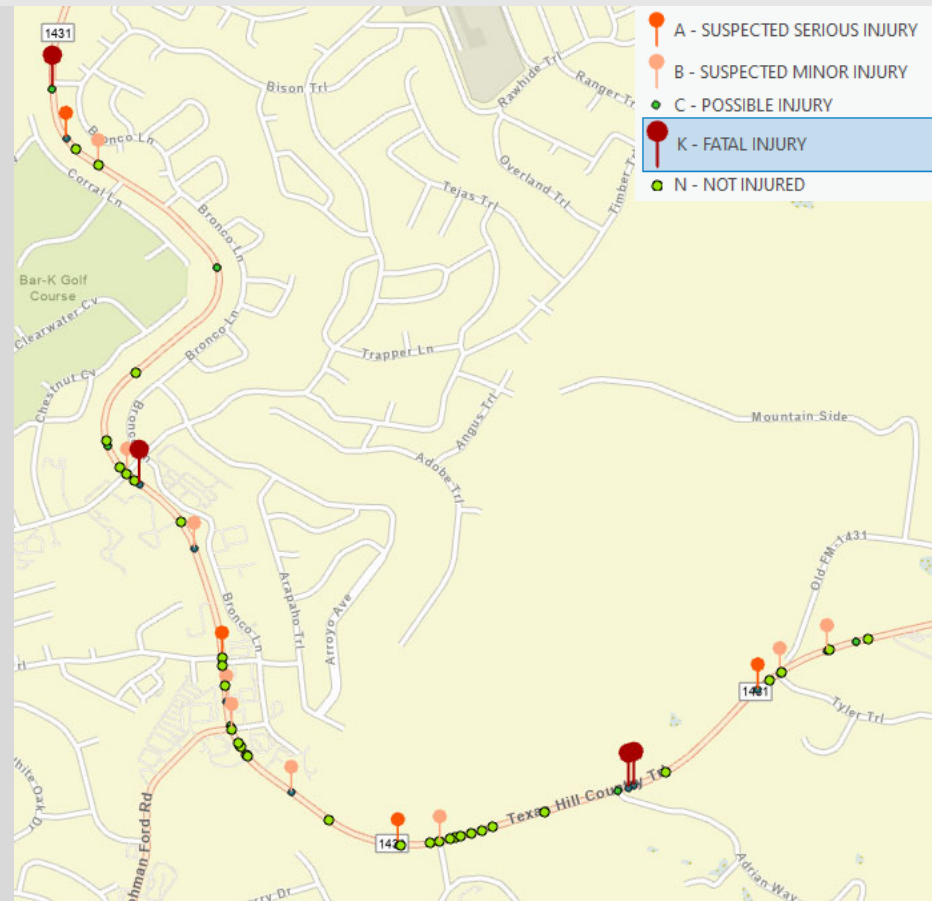
- RM1431 and Lohman Ford Rd- [Map](#)
- No Fatal Crashes, but 38 intersection only crashes
- Most of the crashes were due left turning vehicles and rear end collision
- Recommendation –make left turning phase protected only



Exploring 4 fatal crash locations



- Of 4 fatalities – 3 roadway departure crashes with fixed object and 1 roadway departure crossing center striping and resulting a head-on collision
- 2 fatal crashes involving MOTORCYCLE
- All 4 fatal crashes are non intersection





FM1431 - Lago Vista - Safety Analysis

Crash Year (2018-Present)	K - FATAL INJURY	A - SUSPECTED SERIOUS INJURY	B - SUSPECTED MINOR INJURY	C - POSSIBLE INJURY	N - NOT INJURED	Total
2018	1	2	3		11	17
2019			2	3	12	17
2020		3	1	1	9	14
2021		2	2	5	17	26
2022	1		2	3	18	24
2023	2		4	2	8	16
Total	4	7	14	14	75	114

TOTAL - 114 crashes,
Roadway departure crashes - 27% rear-end crashes - 19%, head-on collision - 8%..
No PEDESTRIAN crashes
Almost 50/50 intersection and non-intersection crashes
44% of KAB crashes are ROR - Non-intersection
24% of KAB crashes are intersection related
Speeding is the main issue

Fatal Crash Locations

Recommendations

MAJOR RECOMMENDATIONS

Install portable speed feedback signs at fatal crash locations
Relocate some confusing signs
Add curve advisory, intersection ahead signs at few locations
Make left turn phase PO @ Lohman Rd ints.
Add flashing beacon @ Destination way ints.



Add intersection ahead warning sign
Relocate posted speed limit sign after the curve advisory sign



4. Speed limit sign at curve.
May be replace curve sign with advisory speed



6. Motorcycle Fatal crash in 2023
Traveling westbound
Went straight to guardrail
Add curve advance warning sign



Two signs portray the same info
Relocate one sign or combine
Install flashing beacon at FM1431 @Destination Way
(It may address all crash causes - speeding, distracted..)

1. FM1431@Lohmans Ford RD

38 crashes - left turning and rear end collision
Recommendation - improve sight distance,
make left turning phase protected only



3. Relocate speed limit sign

2. FM1431corridor - [Destination Way to Adrian Way]

4 left turn crashes at FM1431 @Destination Way
Crash causes - Speeding, distracted, sleeping, wrong lane change

Location with 2 fatal crashes in 2018 & 2023
Both ROR crashes & moving westbound

- A - SUSPECTED SERIOUS INJURY
- B - SUSPECTED MINOR INJURY
- C - POSSIBLE INJURY
- K - FATAL INJURY
- N - NOT INJURED



SHORT TERM RECOMMENDATIONS

- Install portable speed feedback signs
- Speed study
- Look for opportunities for additional signage
- Make left turn phase PO @ Lohman Ford Rd intersection
- Add flashing beacon @ Destination way intersection and update signage if needed