

San Valero Traffic Fatalities

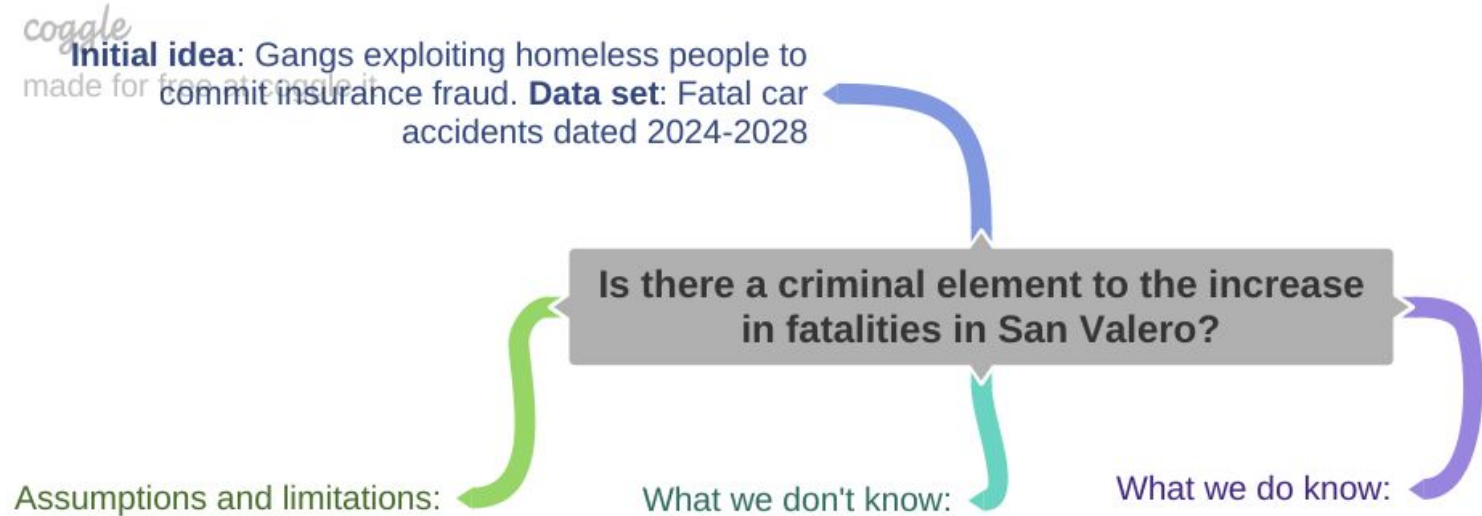
“D” INT Update
August 14, 2020

Key Intelligence Question and What We Know

Is there a criminal element to the increase in traffic fatalities in San Valero?

- City leaders think there is an unusually large and concentrated number of fatalities in San Valero. They want the task force to examine potential causes for this activity.
- There is some information that:
 - San Valero has an incursion of violent gangs that has pushed across the Texas/Mexico border in 2028 (2018 data date).
 - a string of vehicle accident deaths are the result of insurance fraud and the exploitation of homeless and poor residents.
 - indicates increased gang presence.

Brainstorming



Analysis of Competing Hypotheses

H1: International terrorism - Gangs are crossing the TX/MX border and increasing fatalities.

H2: Insurance Fraud - Homeless/low-income folks are being exploited for insurance payouts.

H3: Non-Criminal Causes - Drunk driving, economic segregation, construction, and other geographic factors are causing the fatalities.

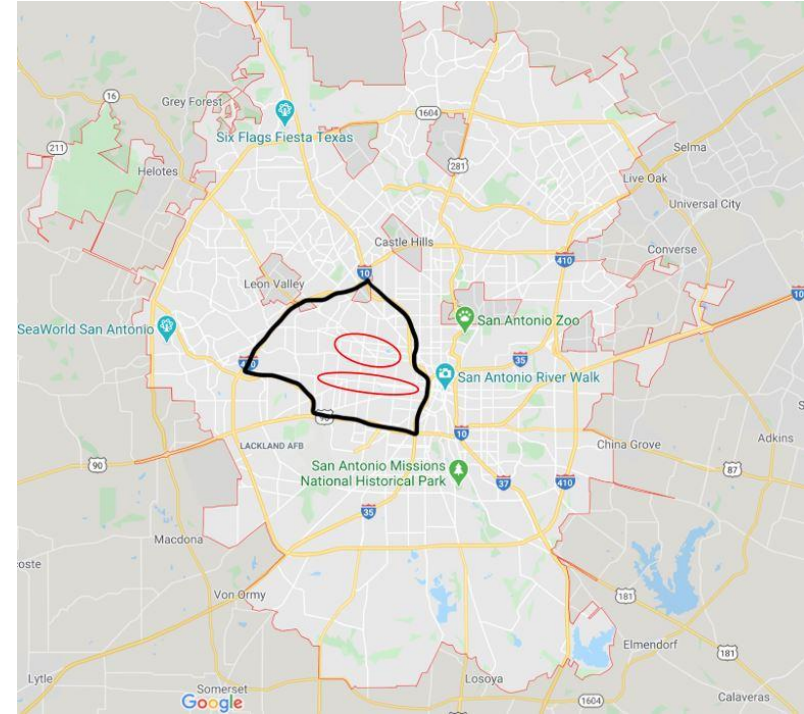
Analysis of Competing Hypotheses (con't.)

- E1** Accidents clustered around Haven for Hope
- E2** Stable fatality numbers (2024-2028)
- E3** Gang from out of town is active/coercing people
- E4** Zetas, JJJ, and Khans in SV.
- E5** Most gang activity is outside area of interest
- E6** Report is gangs use Vietnamese restaurants as BoO.
- E7** Only one Workzone in that area
- E8** Vehicle/pedestrian collision graphic
- E9** Graffiti Location Map
- E10** Gang graffiti in area of interest
- E11** Report no cases of gangs contacting homeless
- E12** Insurance fraud would not likely involve fatalities
- E13** Area of Interest has one of highest insurance costs in SV
- E14** High poverty areas experience more traffic fatalities

	Credibility	Consistency
H1: International Terrorism	-2.50	-4.00
H2: Insurance Fraud	-4.50	-5.00
H3: Non-Criminal Causes	-2.25	-4.00

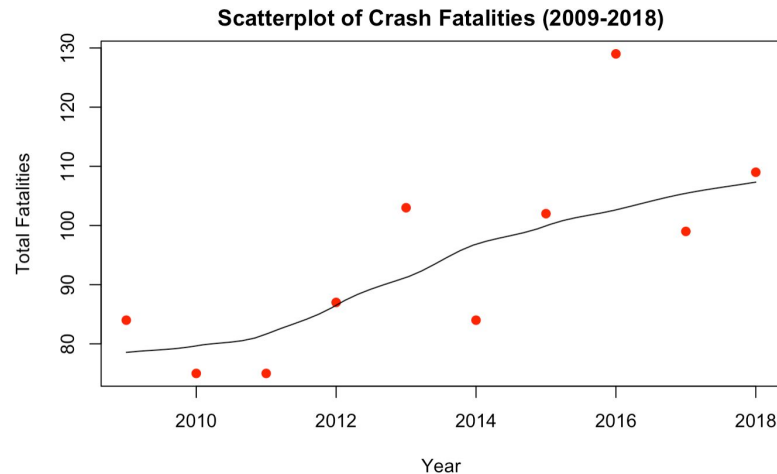
Area of Interest

The Area of Interest we examined had concentrated amounts of car crashes and was in the downtown area above Highway 90 and around Culebra Road. Within this area, the Bandera and Culebra intersection and West Commerce Street were of special interest since there were a lot of accidents surrounding these two areas.



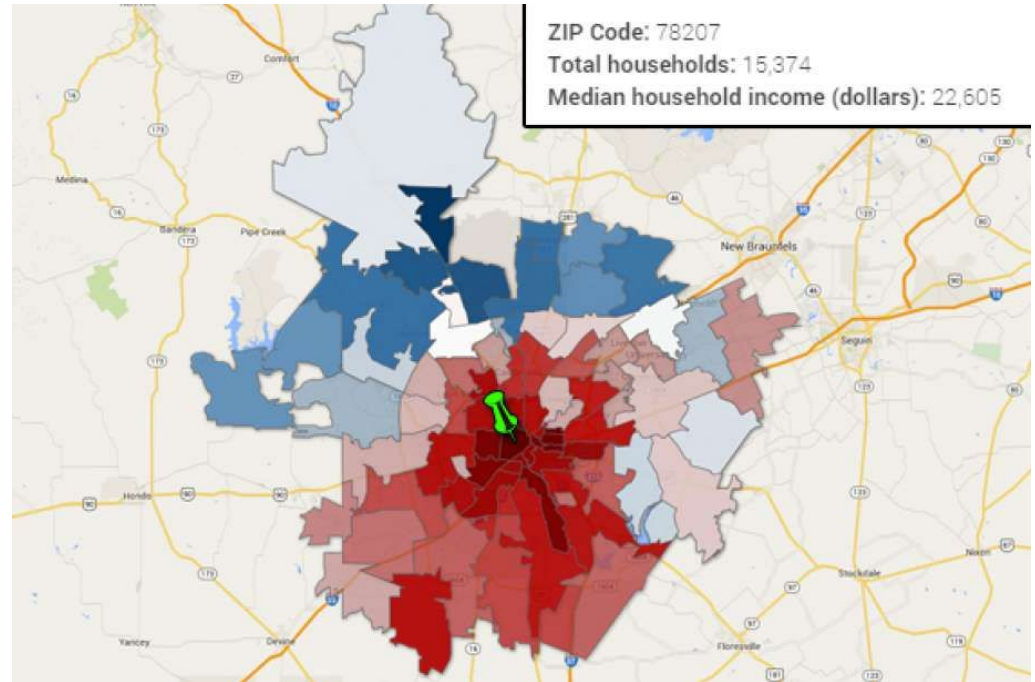
Analysis Methods (Data Sets and Visualizations)

- Data were pulled from City of San Antonio (income distribution), FARS (fatal vehicle crashes), and NHTSA (metadata on crashes for Texas)
- We created visuals mapping several variables over the Area of Interest to examine correlations and test the evidence we were given.



Additional Context for the Area of Interest

- Dark red = lower income
- Blue = higher income
- Lower income area experience higher crash fatalities

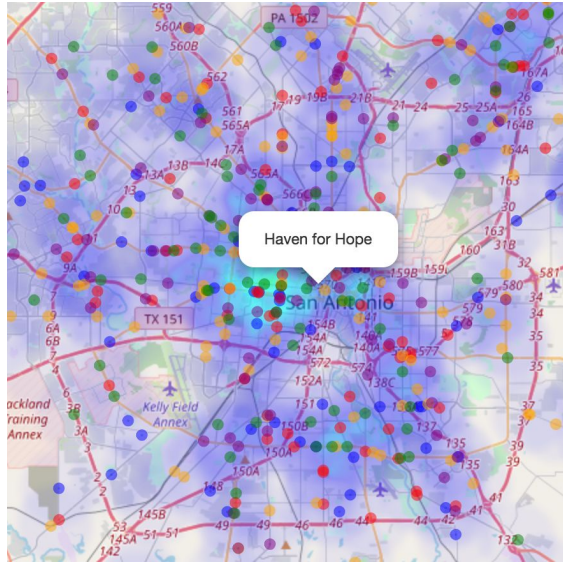


Context for Crash Fraud Cases

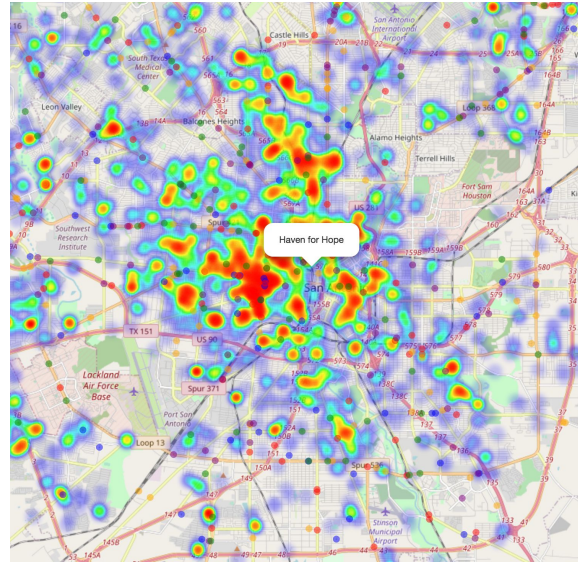
- Minor injuries or faked injuries
- Turning lane accidents, failure to yield, ignoring stop signs
- Many people involved (to increase payouts)
- Person shows up on-scene and pushes certain services (medical, legal, etc.)

Mapping of Incidents

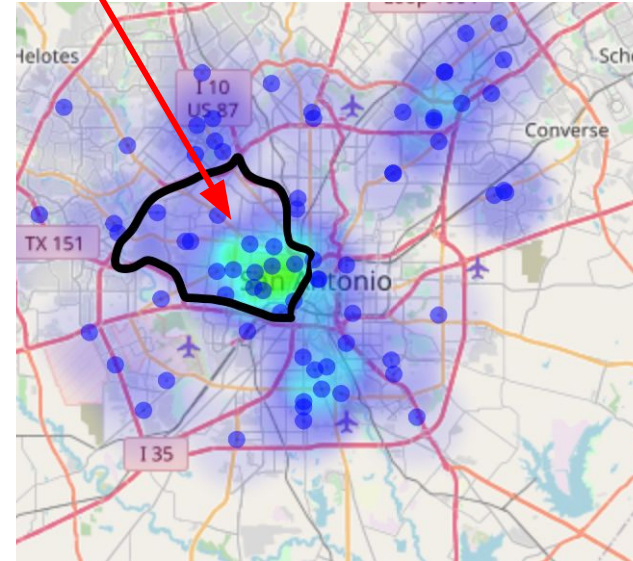
Area of Interest



Fatal Car Crashes



Graffiti locations

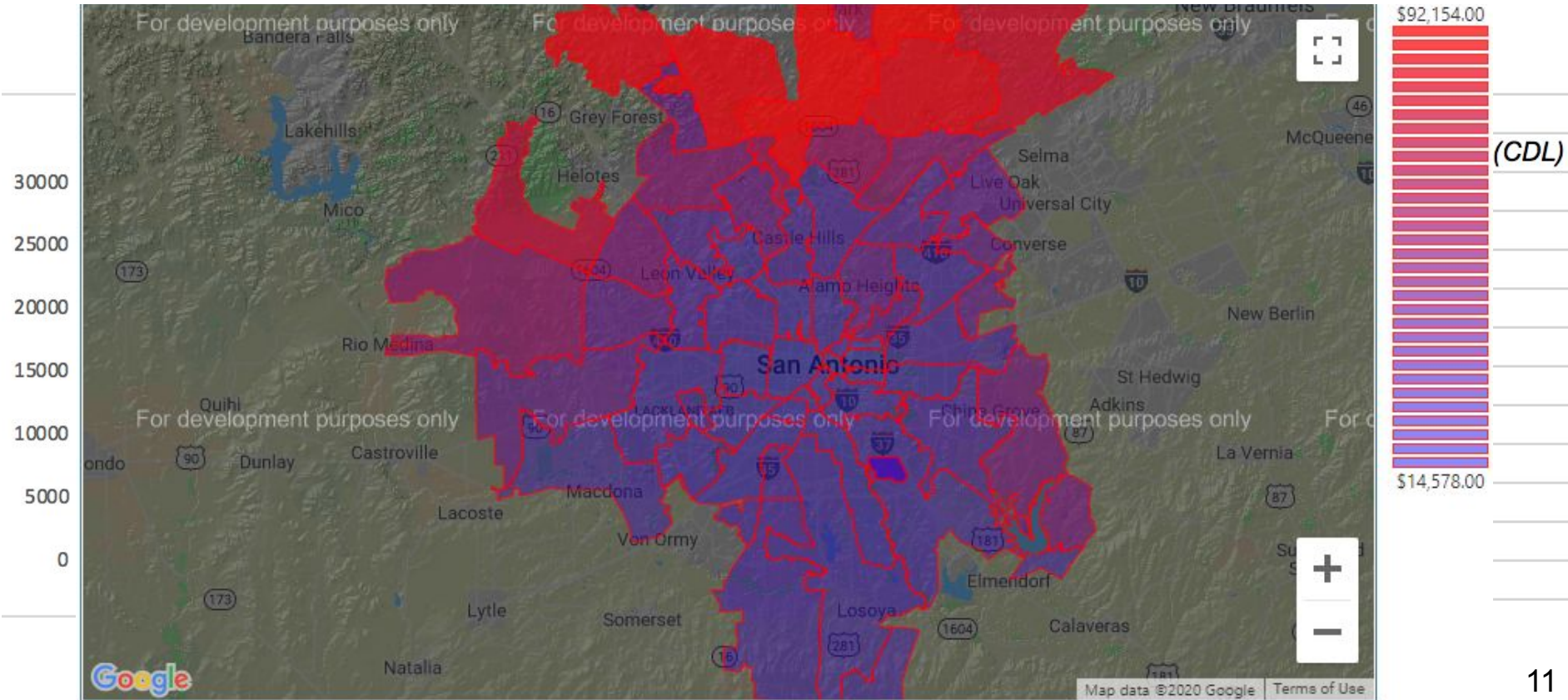


Pedestrian fatalities

Similar clustering is seen regardless of variable plotted

Visual Work and Graphics

Accidents (H1), Deaths (H2), Injuries (H3), Property Damage (H4), and Other (H5)



Tentative Conclusions/Limitations and Next Steps

- **Conclusions**

- Most likely explanation is that non-criminal factors are contributing to the fatality levels
- Fraud cannot be dismissed as an explanation but does require more evidence

- **Limitations**

- Access to more specific and helpful information (Insurance Reports)
- Time frame

- **Next Steps**

- Future work could use an semi-supervised machine learning model (such as a sequential RNN) to detect underlying patterns between fraudulent and non-fraudulent crash cases
- Examine crash violations where drivers didn't obey traffic signs (characteristic with typical fraud cases)

Questions and Comments

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Brainstorming Session

1 Information (White) (What do we know?)

Considering purely what information is available, without making assumptions

Red Team Handbook
usacac.army.mil

Data about fatalities involving Alcohol is available

New regulations, different traffic patterns, and road development can influence car crashes

All demographic geographic aspects SA apply to

2 Requests for information

Intuitive or instinctive gut reactions or statements of what we need to know

HUMINT RFIs

- Are there indications or evidence to substantiate...

Do the crash reports from both sides match?

- who is targeted in these accidents - how relevant...
- Do the crash reports from both sides match...
- Stolen vehicle reports
- How much money is involved
- Gang members relationships with homele...

Evidence RFIs

- Do we have any additional sources to verify...
- Have any restaurant owners in the area been...
- Are any gang symbols graffitied in the area...
- Do we know the areas each SV gang frequen...
- Have we talked to any homeless people a...

3 Discernment (Black) (What can we infer or assume?)

(Hypotheses go here) Logic applied to identifying reasons to be cautious and conservative

Area of accidents

I would assume it would be in places most concentrated to not have crashes appear where they normally aren't

There must be some increase in number of traffic accidents in order for this to be an issue

By process of elimination, we can see which accidents are natural and which are nefarious. Underlying patterns for night-time crashes, when ruled out, can also contribute to the discernment of foul play.

Increased gang presence in the city of San Valero

Road construction impacts traffic fatalities.

Known gangs in the area

Analysis of Competing Hypotheses

After brainstorming ideas and before we created visuals to support those, we came up with several hypotheses to hone in what we were going to be looking at and decide which hypotheses could be supported or disproved. Information we had to support the hypotheses were accidents clustered around Haven for Hope shown later with other visualizations, Stable fatality numbers (2024-2028), a report saying gangs use Vietnamese restaurants as BoO, another report stating no cases of gangs contacting the homeless, and the fact there are more traffic fatalities in high poverty areas. What we came up with based on the information is that there were Gangs from out of town actively coercing people, such as the Zetas, JJJ, and Khans. Our areas of interest had a lot of gang graffiti and they mostly operated outside of it since it is a low economic area with high insurance rates. We had a last thought that it is very likely insurance fraud would not involve fatalities since there would be no way to collect the money.