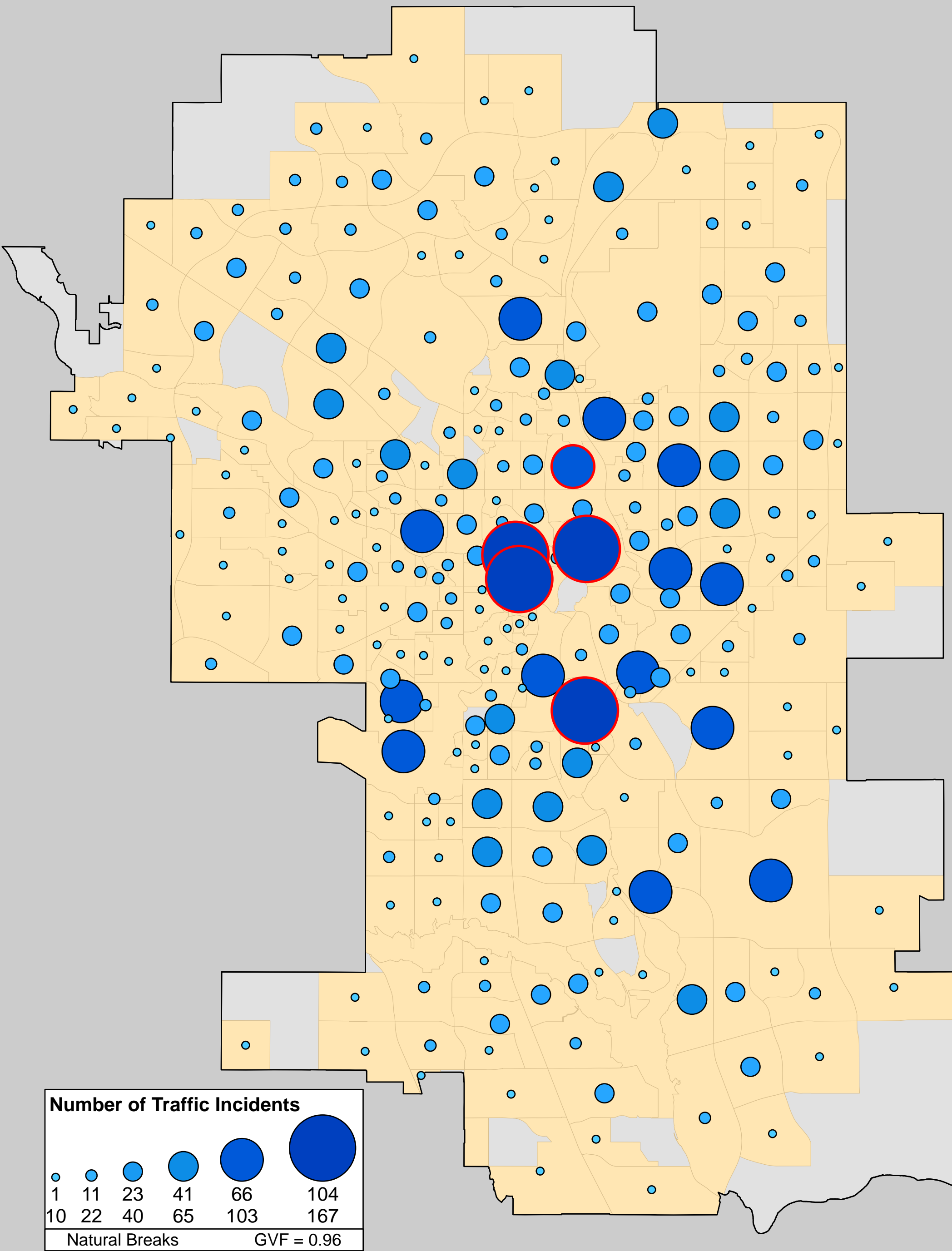


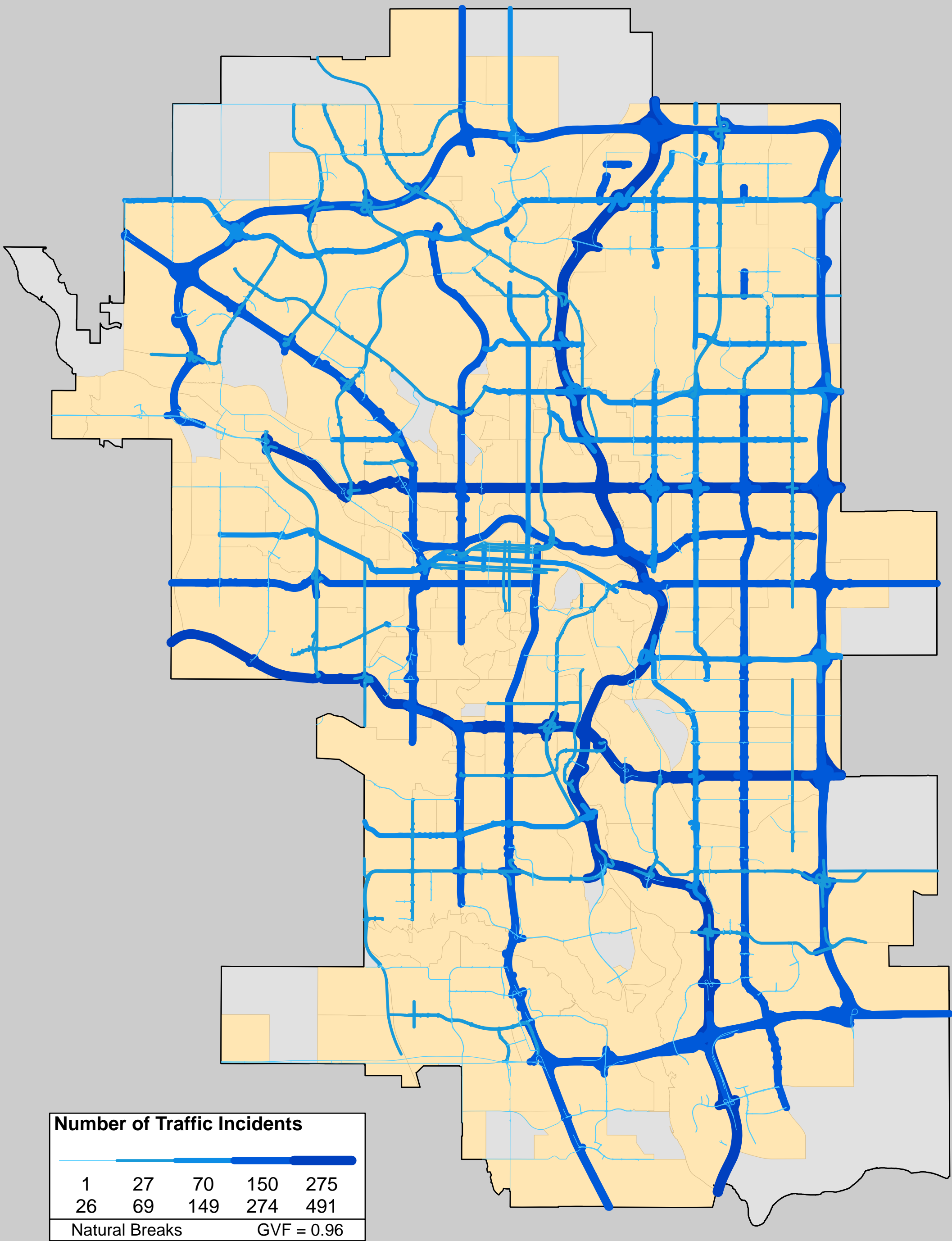
Traffic Incidents in Calgary

February 2017 to January 2018

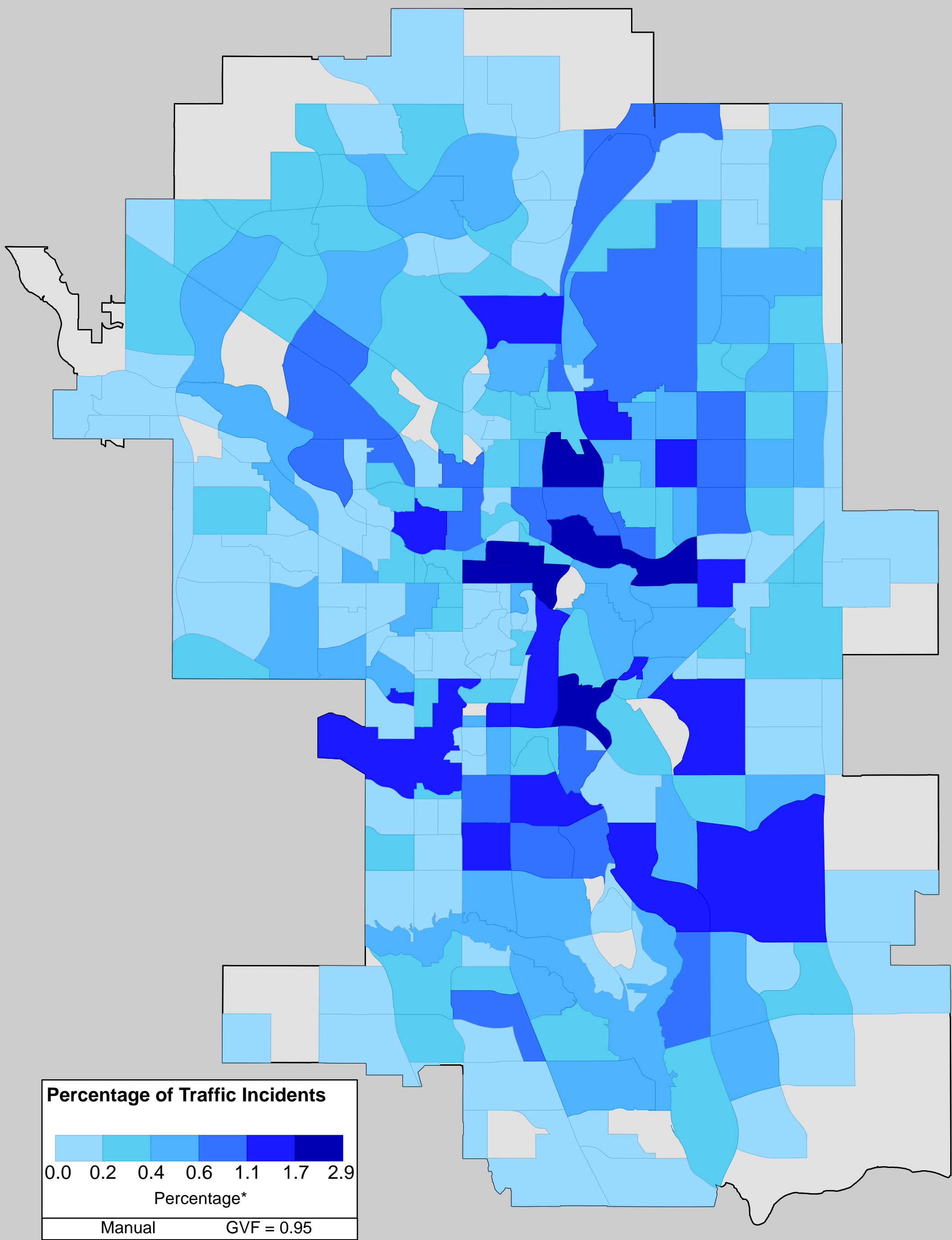
Traffic Incidents by Community District



Traffic Incidents by Road



Community District Percentage



In 2017 the arithmetic mean for the number traffic incidents that occurred in each of the community districts in the city of Calgary was calculated to be **22.2 incidents**.

When comparing the 5 community districts with the most traffic incidents in 2017 to the average for the city the following statistics were calculated:

Downtown Commercial Core had **7.6 times** more incidents
Beltline had **7.5 times** more incidents
Burns Industrial had **6.6 times** more incidents
Bridgeland/ Riverside had **6.5 times** more incidents
Winstone Heights/ Mountview had **4.7 times** more incidents

On average if you were in one of these five community districts your chance of being involved in a traffic incident was **6.6 times** higher than the city's average.

A logical assumption is that longer roads would have more accidents, due to the simple fact that there is more road for accidents to occur, we determined this to be true by calculating a **correlation coefficient of 0.74** existing between the road's length and the number of accidents that occurred.

On the **3 roads** that had the most traffic incidents in 2017 we wanted to determine the **length along each of the roads that an incident occurred** the numbers were calculated as the following:

In 2017 an traffic incident occurred every **0.27 km** along **Deerfoot**, total length* = 131.9km
In 2017 an traffic incident occurred every **0.13 km** along **Glenmore** total length* = 65.6km
In 2017 an traffic incident occurred every **0.15 km** along **Deerfoot** total length* = 53.9km

Note* Total length is both ways along the road and all arterial portions of the road i.e. exits.

The number of accidents increased greatly during rush hour periods of the day with the **most incidents (578) occurring at 5PM**.

The number of incidents that occurred at 5PM was **2.4 times** higher than the average number of incidents that occurred at an hour with the day

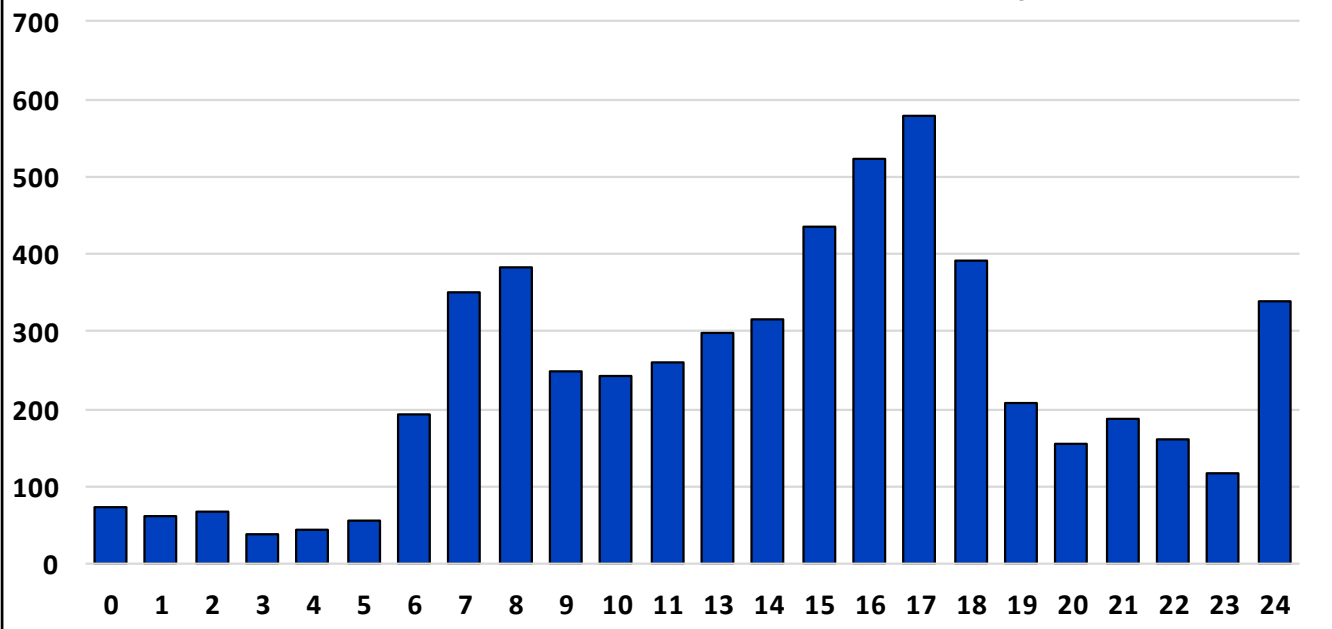
The average time that an accident occurred was calculated for the time span that the data was measured and the results returned a time of **2:02PM**.

The average time shows us that the majority of the accidents occurred in the later part of the day since the calculated mean was **later** than 12PM.

The number of incidents that occurred in the PM was **3708** whereas the number of that occurred in the AM was **2017**.

This means that drivers were **29.6%** more likely to be involved in a traffic incident if they were driving in the PM times of the day

Number of Incidents based on Time of Day (24 hours)



Top 5 Communities with the most Traffic Incidents in 2017:

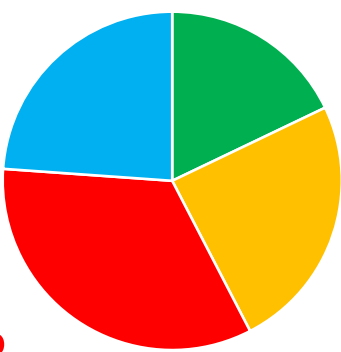
(Outlined in red)

Downtown Commercial Core	167 incidents (1.86km)
Beltline	165 incidents (1.26km)
Burns Industrial	144 incidents (3.99km)
Bridgeland/Riverside	142 incidents (2.08km)
Winston Heights/Mountview	103 incidents (4.39km)

Each of these community districts are within **5 km** of the city's center (with their distance from the city center in brackets)

Traffic Collisions by Quadrant:

NW	1024 incidents - 18%
SW	1366 incidents - 24%
NE	1403 incidents - 25%
SE	1931 incidents - 34%



In 2017 there was a total of **5725** traffic incidents that occurred in the city of Calgary.

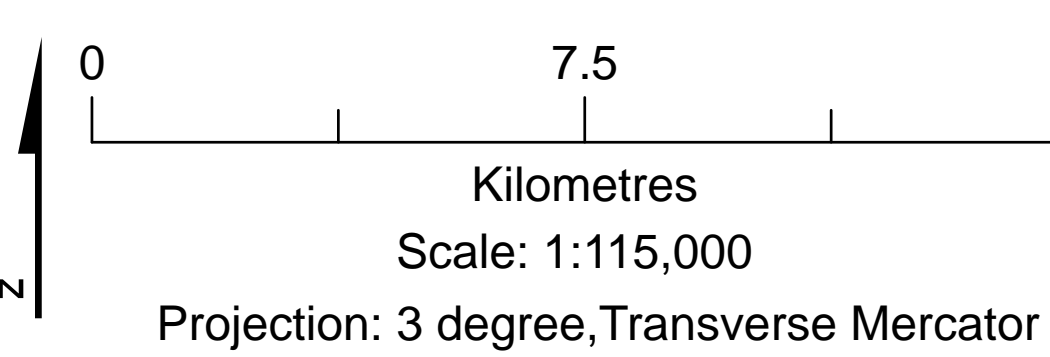
Traffic incidents are the conglomeration of numerous types of incidents, the types of incidents are:

- Multi-vehicle incidents
- Road closure(s)
- Two-vehicle incidents
- Traffic light Malfunctions
- Single-vehicle incidents
- Incidents with pedestrian(s)
- Stalled vehicle(s)

The most common type of incident was two-vehicle incidents with **3255** occurrences in 2017.
Next was single vehicle incidents with **962** occurrences in 2017 followed by multi-vehicle incidents which accounted for **740** incidents in 2017

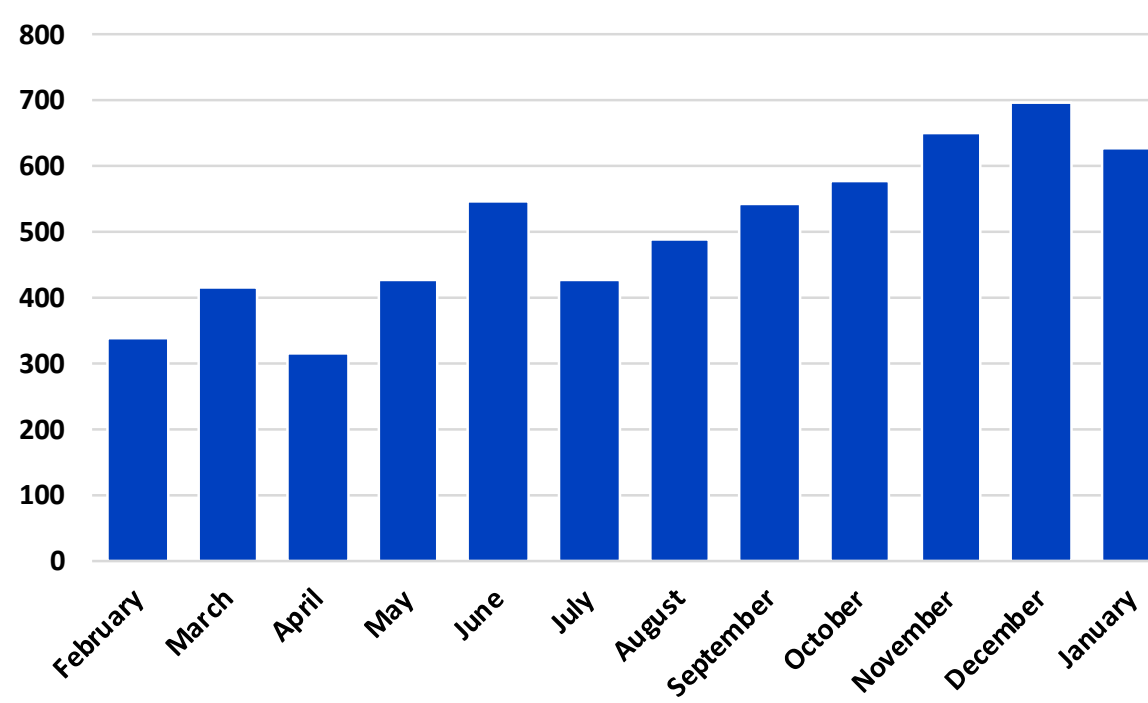
The 3 roads in the city of Calgary with the highest number of traffic incidents in 2017 are:

1. **Deerfoot** - 491 incidents
2. **Glenmore** - 473 incidents
3. **16th Ave.** - 351 incidents



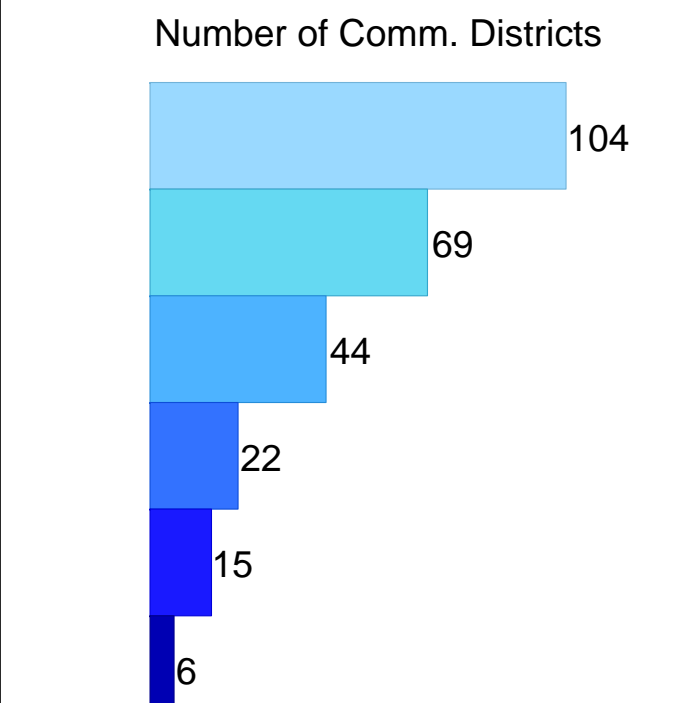
Data: City of Calgary
Date: February 2018
Cartographers: Matthew Kemper, Kelly Mooney

The graph below shows the number of traffic incidents in each month for 2017. **November, December, and January** accounted for **32.5%** of all incidents.



*Note: Percentage of traffic incidents in a community district of the total number of traffic incidents in the city of Calgary

The histogram below shows the count of comm. districts in each of the classes.



Traffic Incidents based on the time of day:

