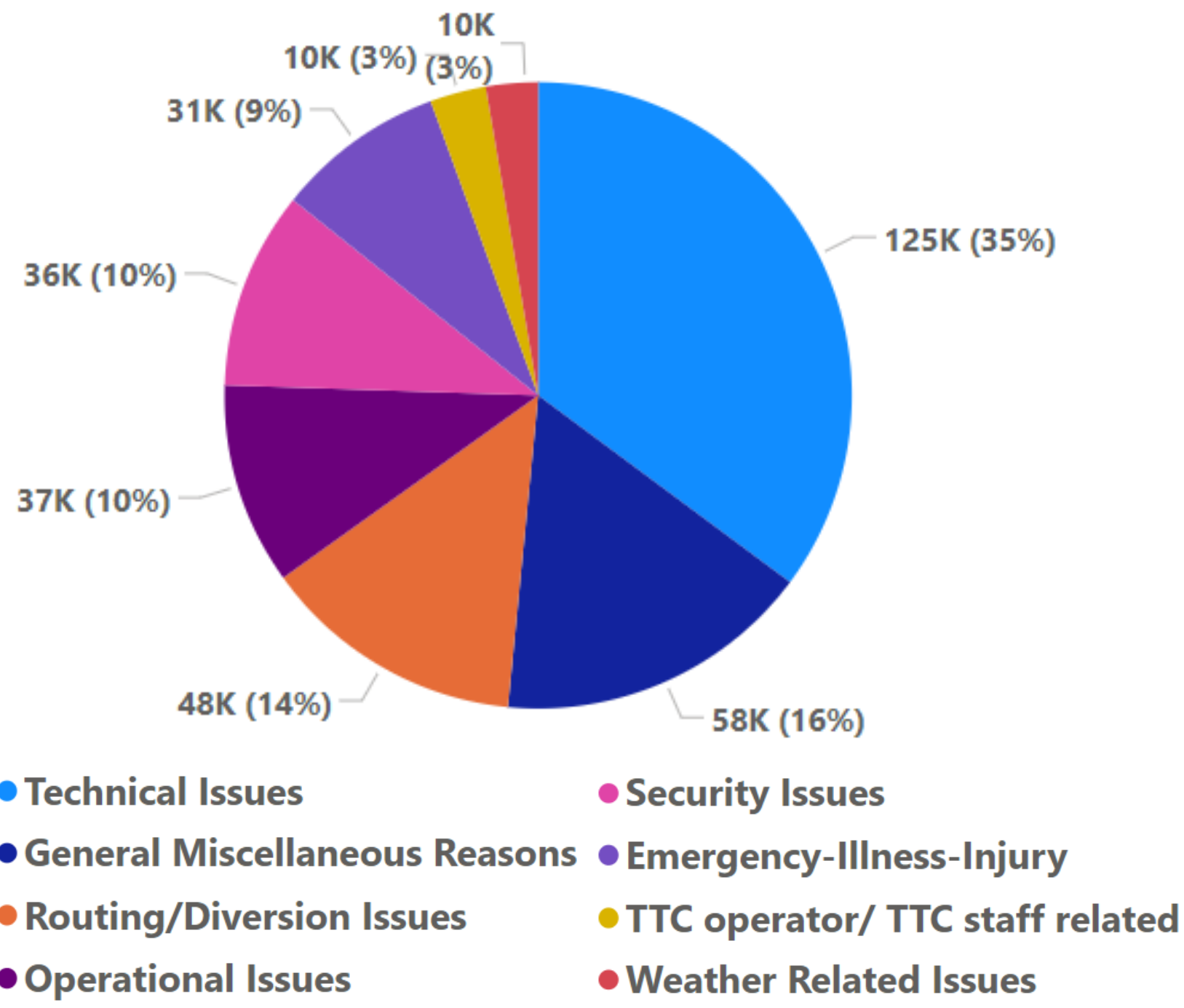


Toronto Transit Commission - TTC

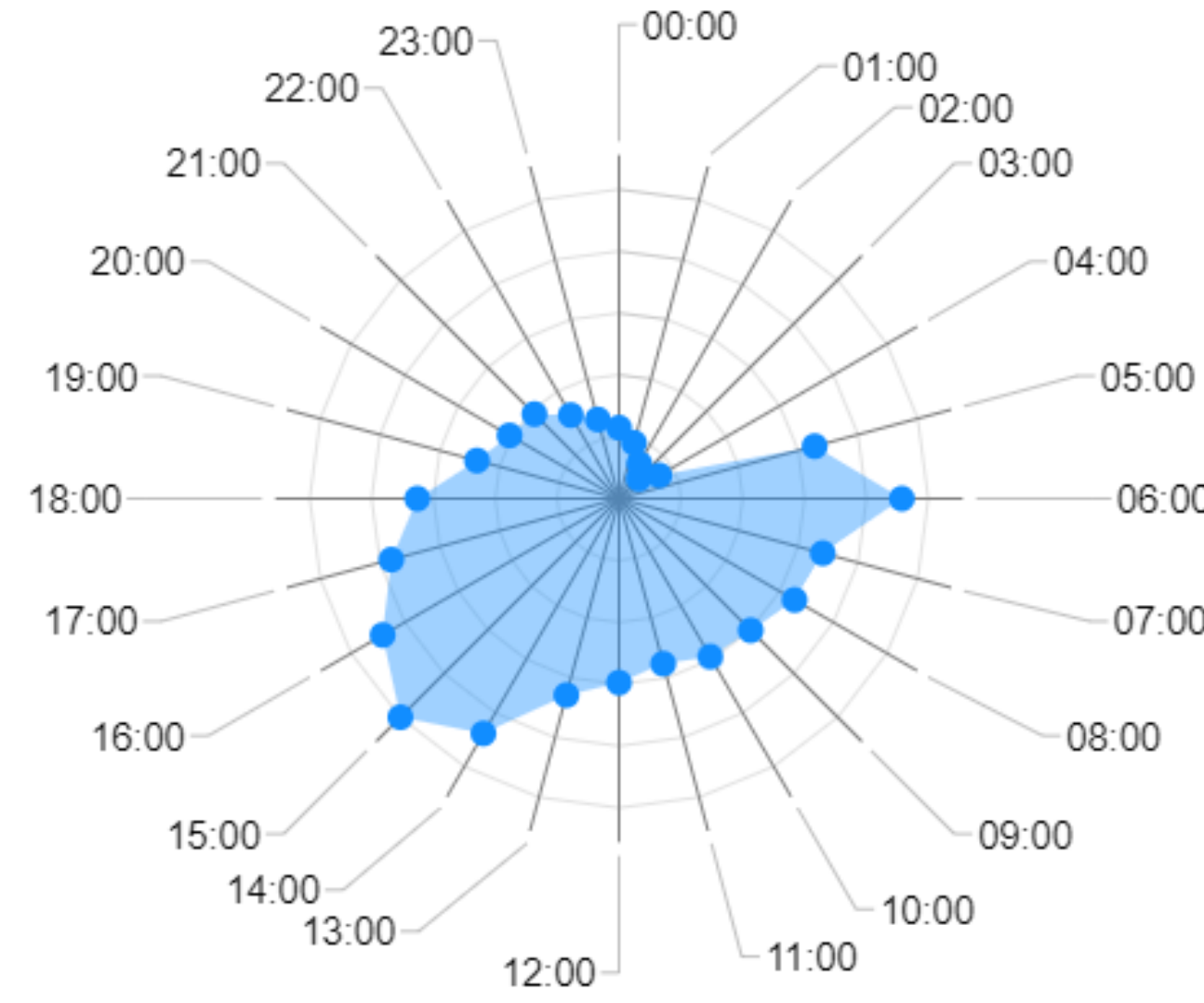
Analyzing Delays and Improving Efficiency for Commuters

The Toronto subway began in 1954 with 12 stations and is now the second busiest rapid transit system in Canada, with 75 stations. It runs a total distance of 77km and comprises of 4 lines namely, [Yonge–University](#), [Bloor–Danforth](#), [Scarborough](#), and [Sheppard](#). A system that employs thousands and serves 889,300 passengers everyday will face several challenges which cause delays.

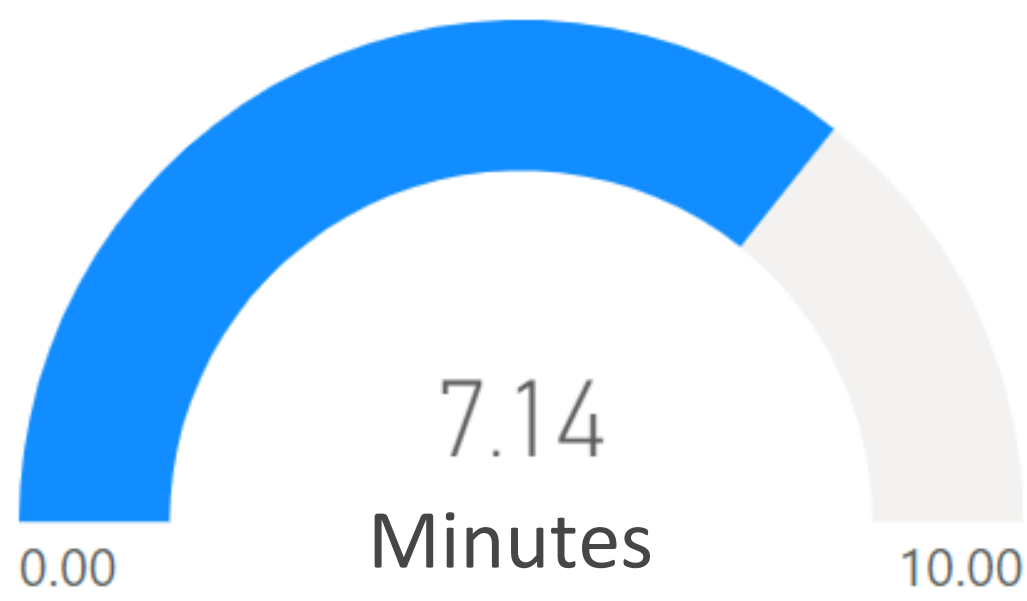
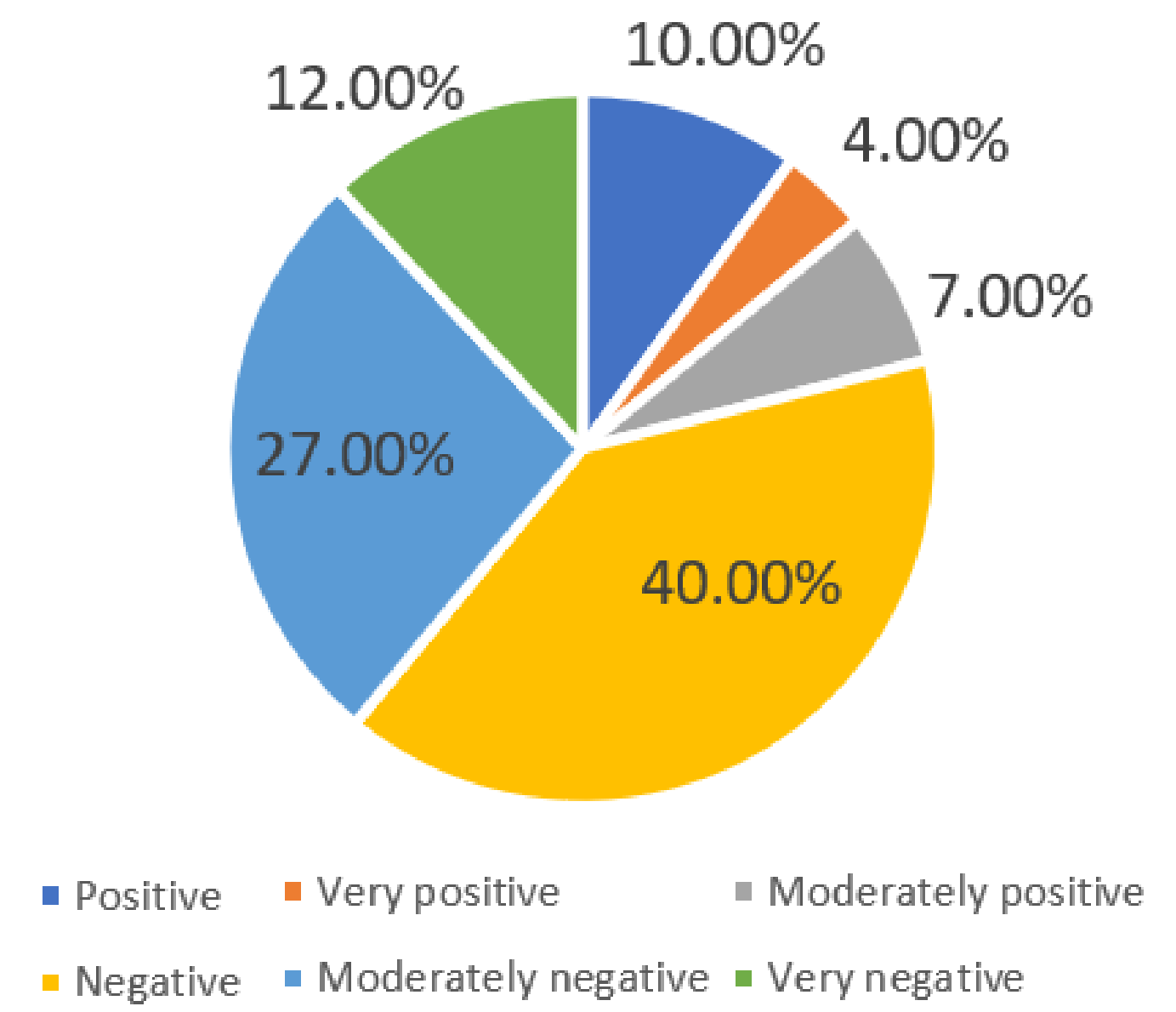
Why the delay ?



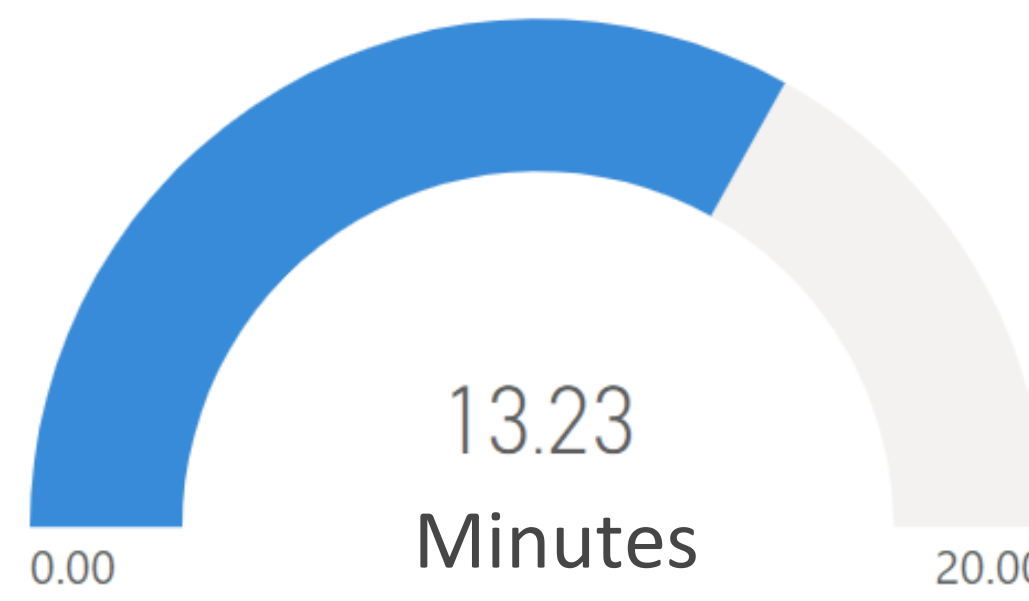
At what time can we expect delays ?



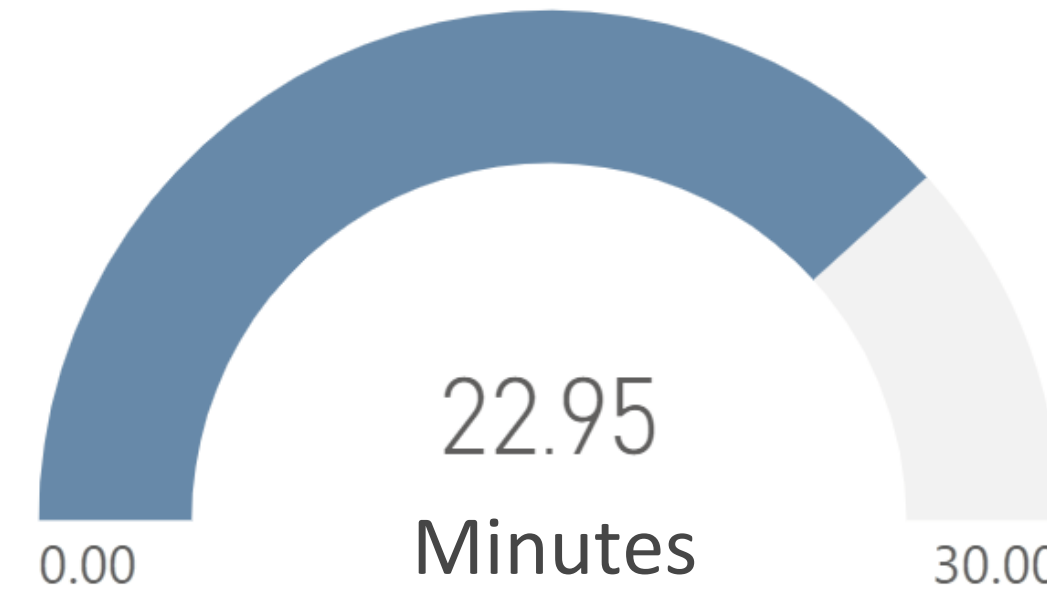
What does users on twitter say about the service?



Subway



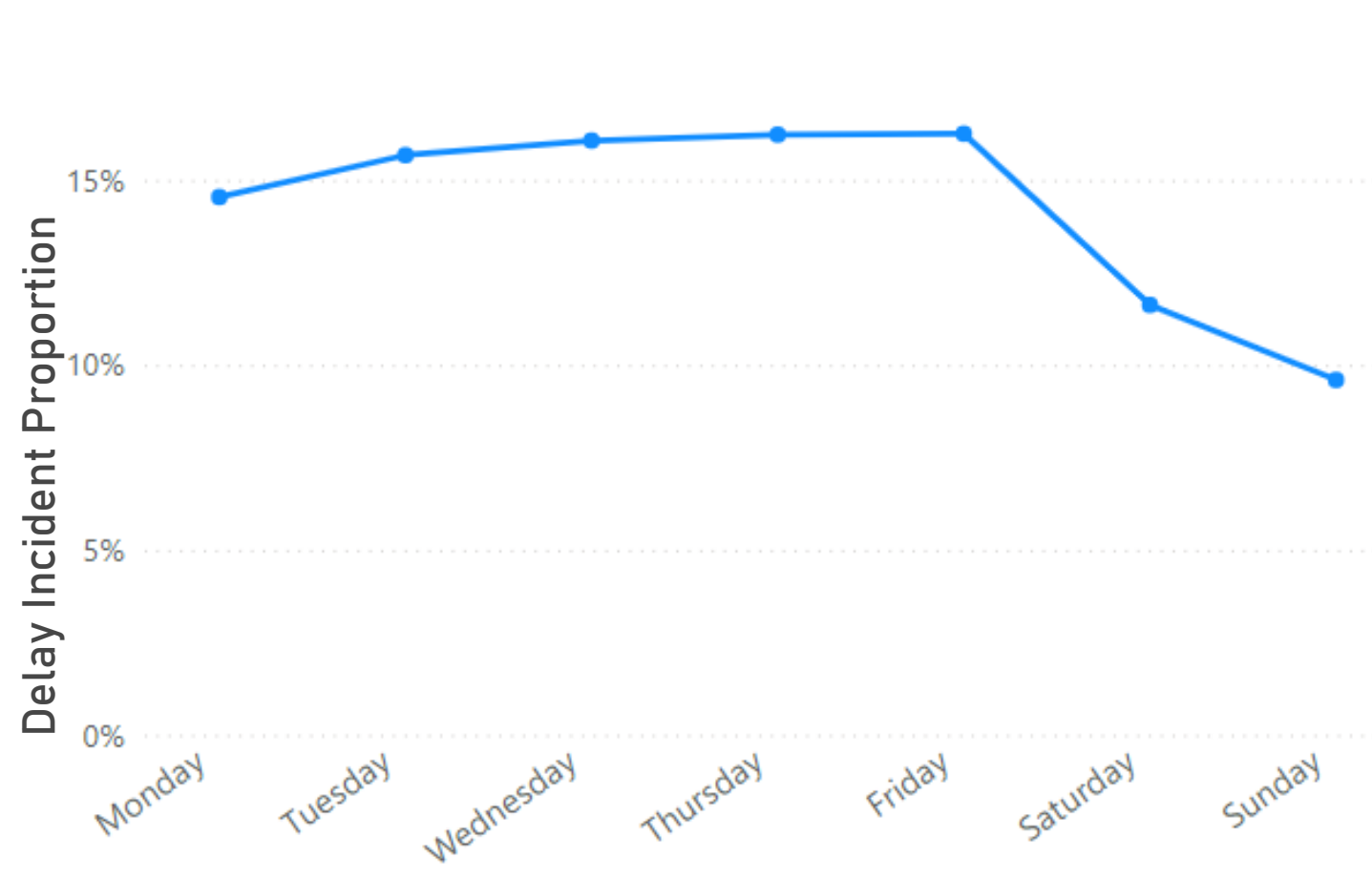
Streetcar



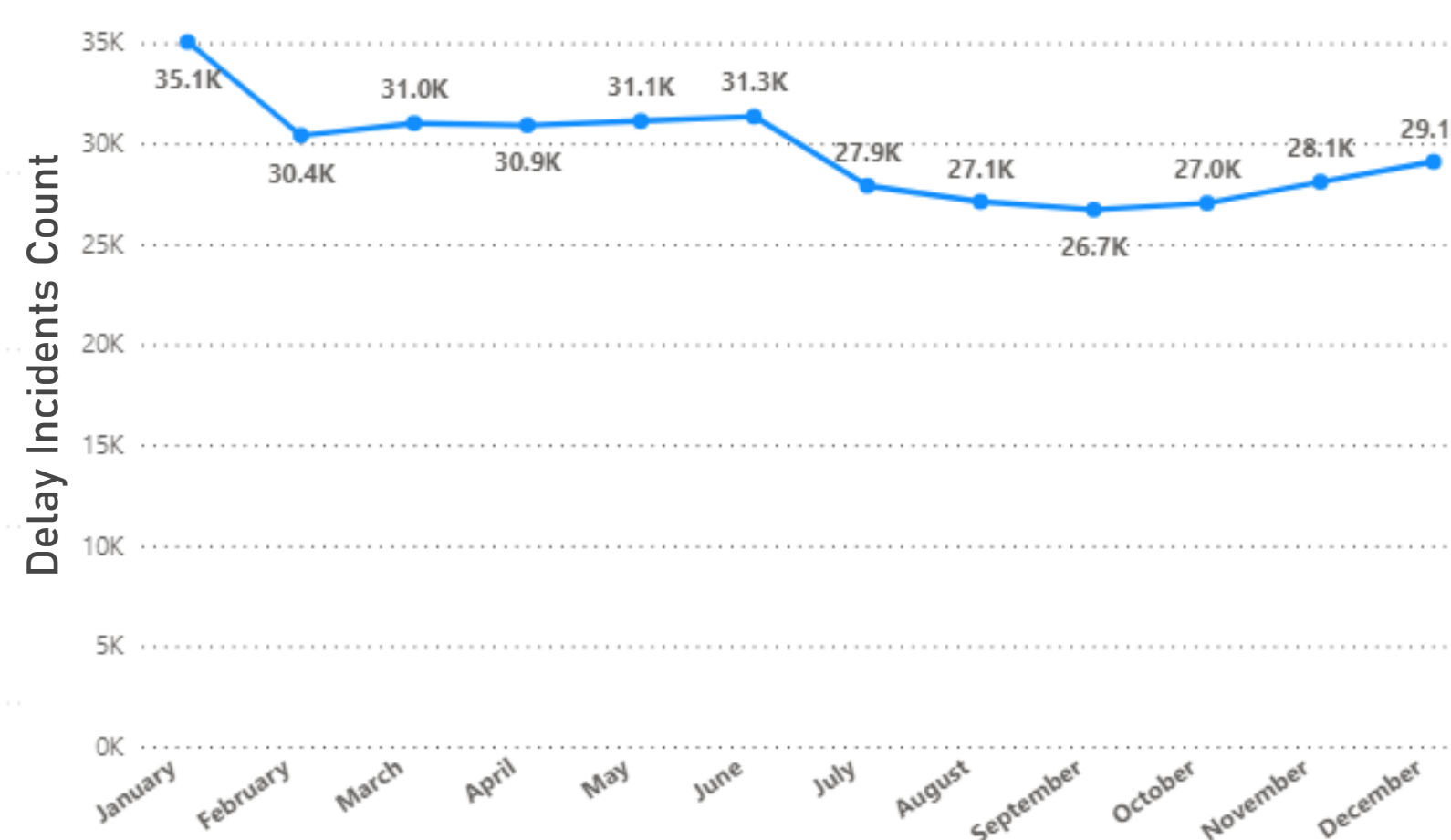
Bus

How long will it take to resume ?

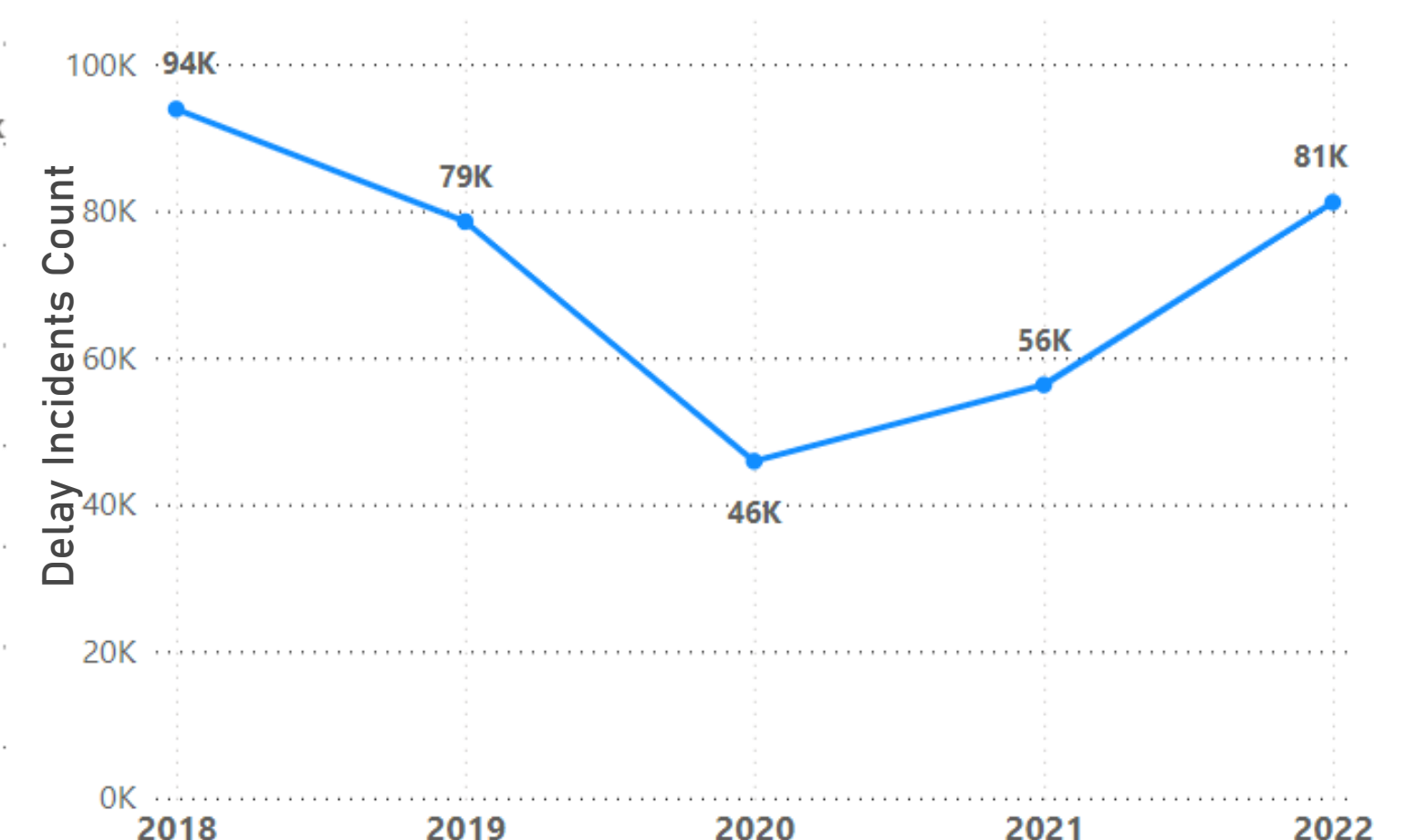
Is it the same every day?



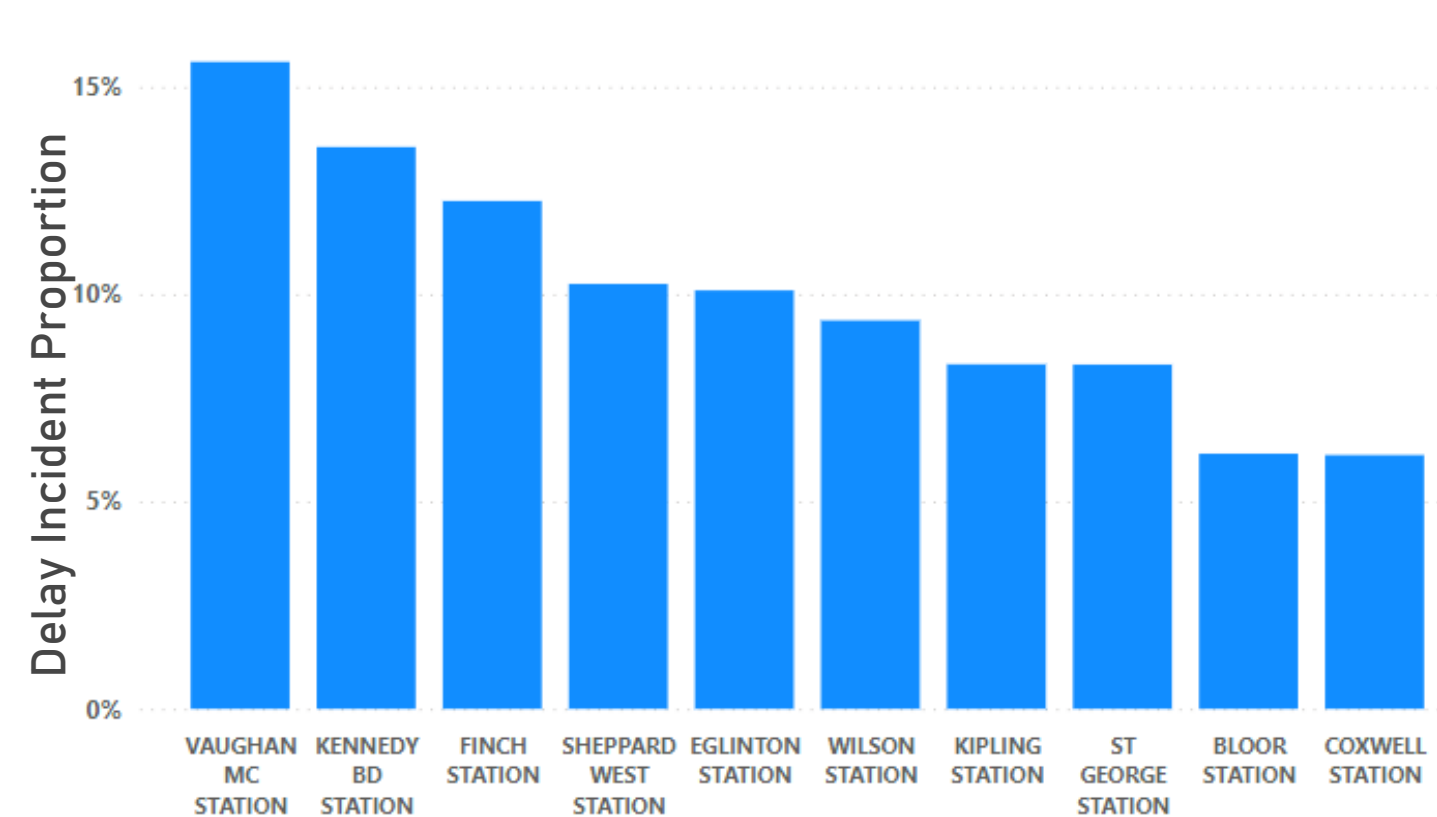
Do the winters have more delays?



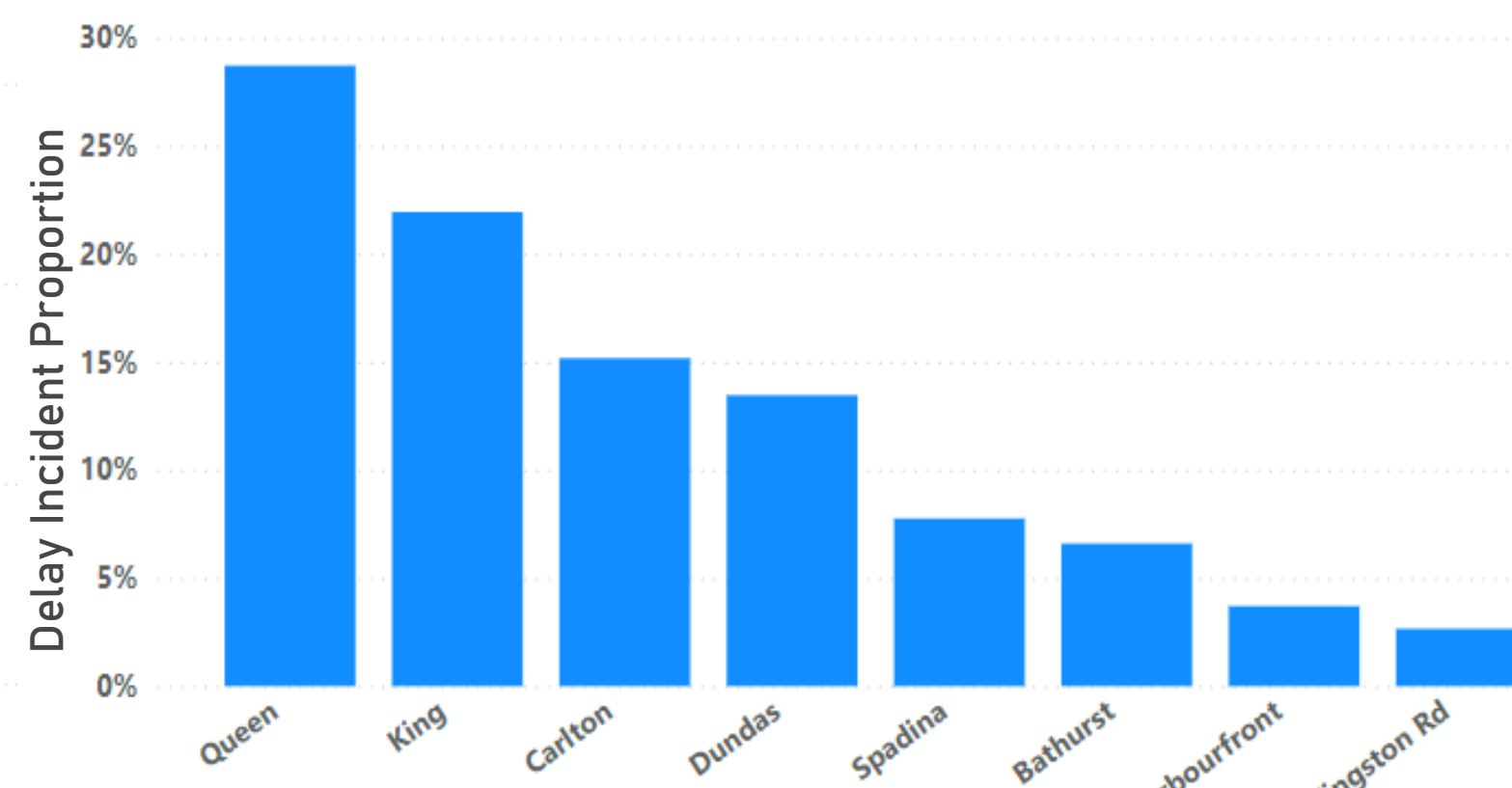
Has it changed over the years?



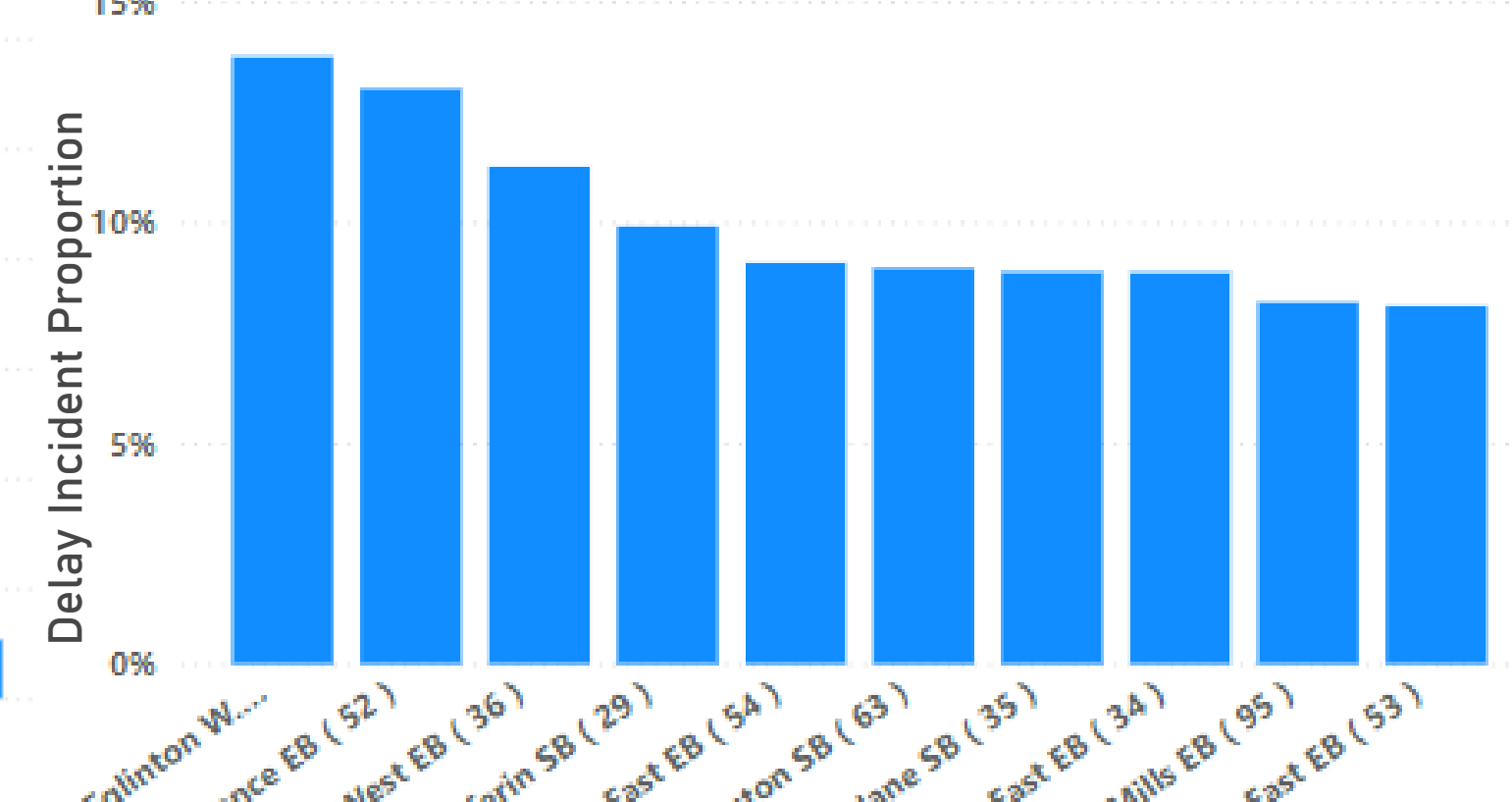
Which areas need the most attention?



Subway



Streetcar



Bus

Takeaways

- By controlling technical issues and route diversion issues, 50% of delays can be controlled.
- Most delays take place at 6 am and 3 pm during the day.
- Only 28% of the tweets are positive and the rest are negative.
- It takes 7 minutes for a bus delay to be resolved, 13 minutes for a streetcar delay and 22 minutes for a bus delay on average.
- The delays are generally higher on the weekdays and lower on the weekends. They are also generally higher on the winter months.
- Delays were lower around 2020 due to the pandemic and have steadily risen as general activities returned to normal.
- A the majority of the delays occur at few stations on each service and the overall efficiency can be increased by increased attention to the key problematic areas.