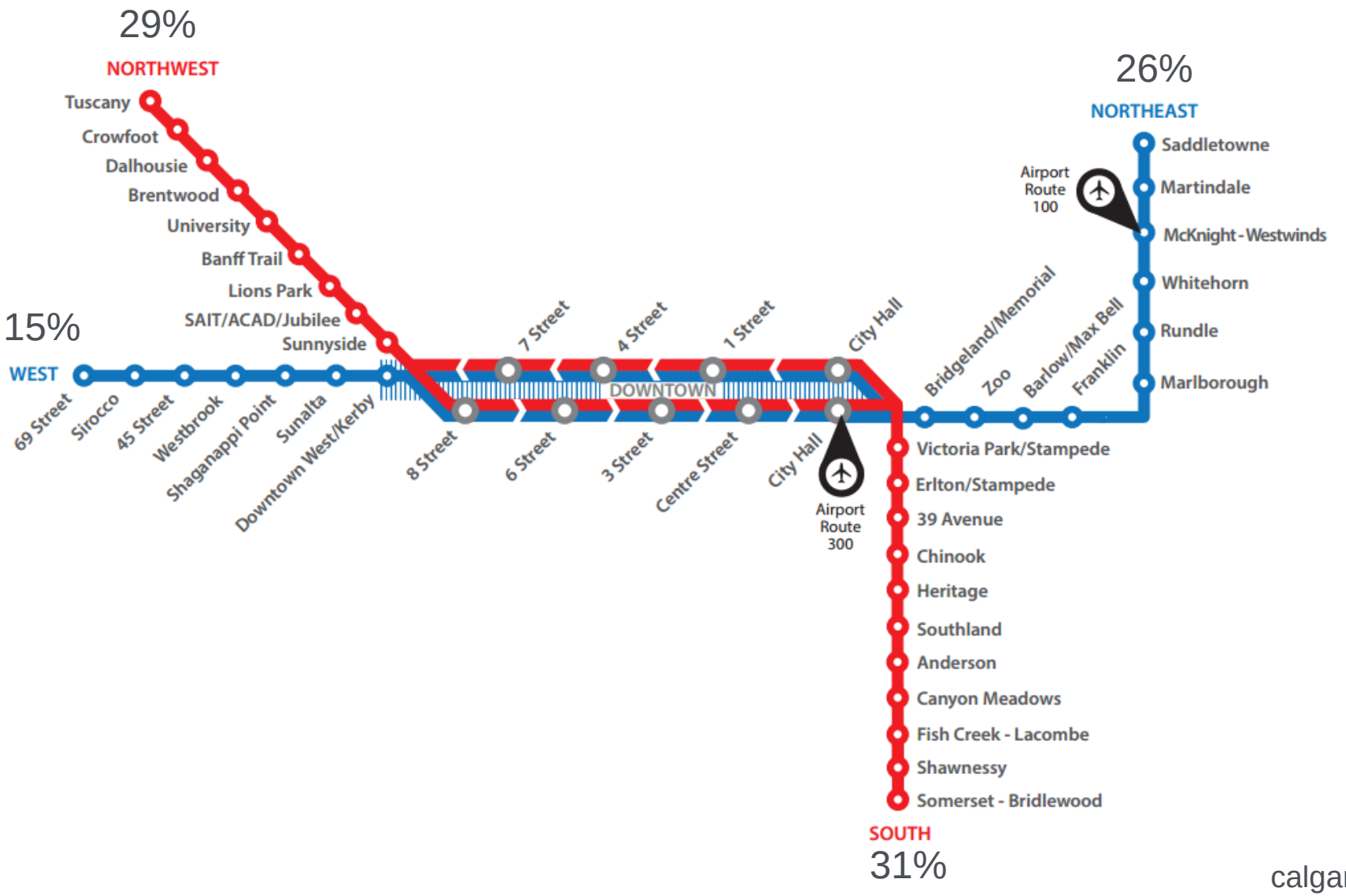
Impact of a Light Rail Crossing on Vehicle Travel Times

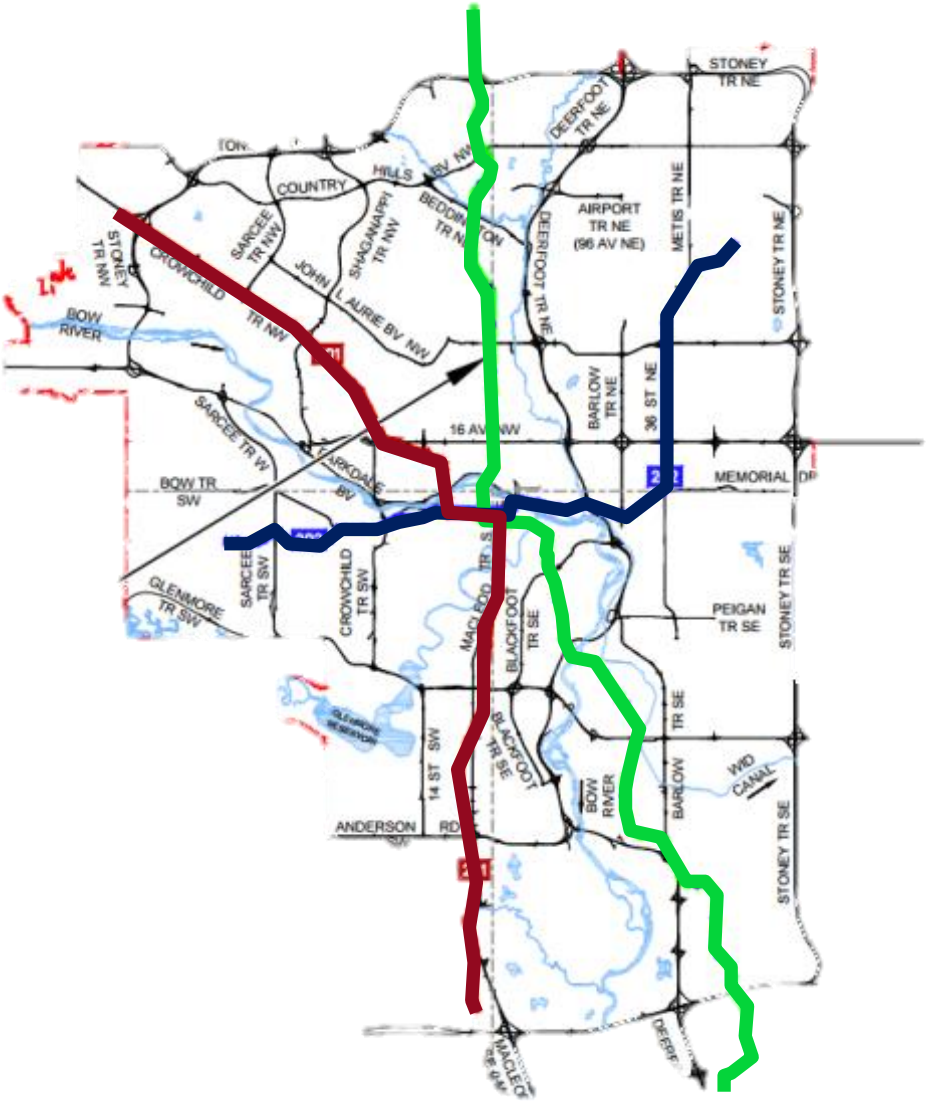
Brian Gaas
Senior Data Analyst
Data and Forecasting Division

City of Calgary's C-Train System



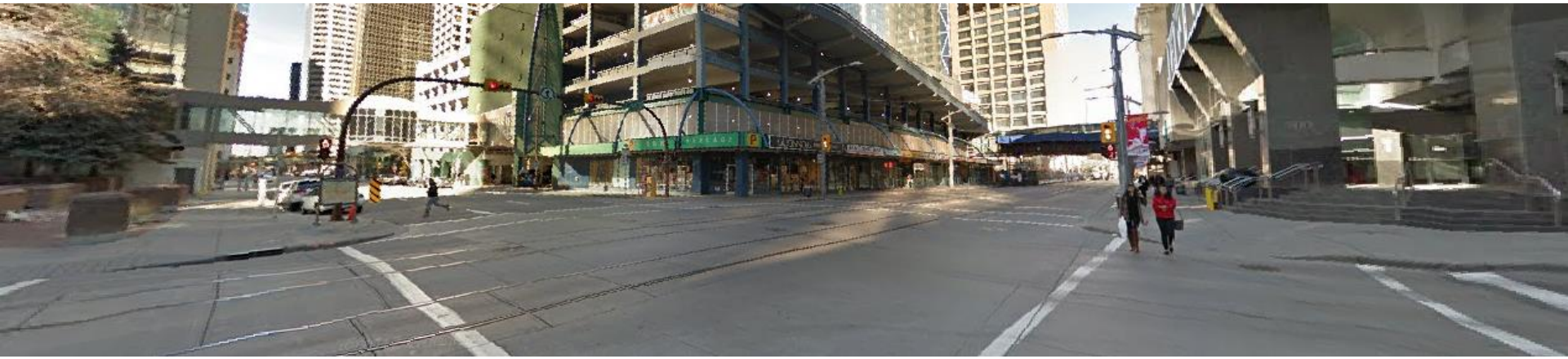
calgary.ca

Green Line Expansion



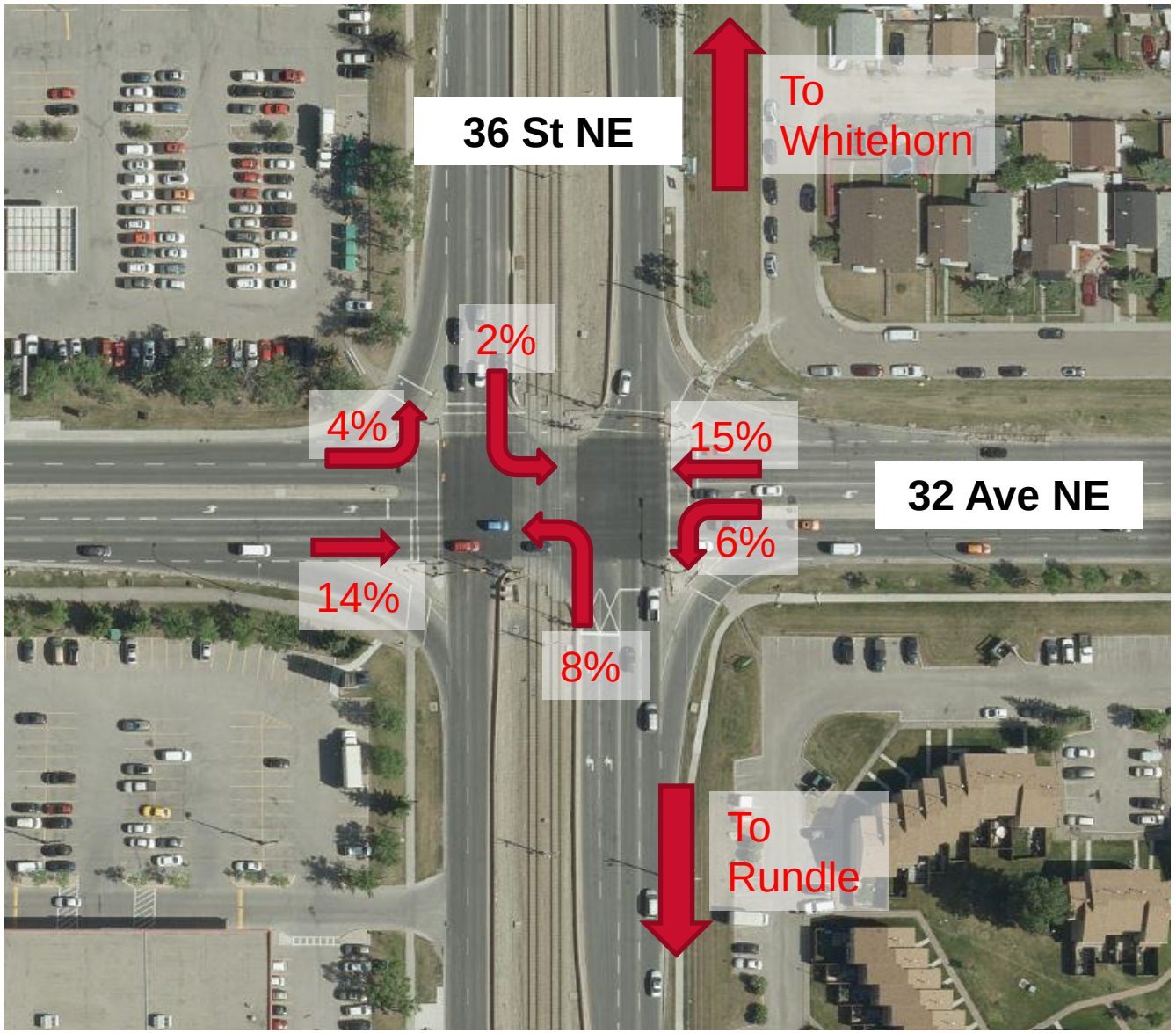
cbc.ca

Multimodal Cohabitation



Multimodal Cohabitation

36 St and 32 Ave NE

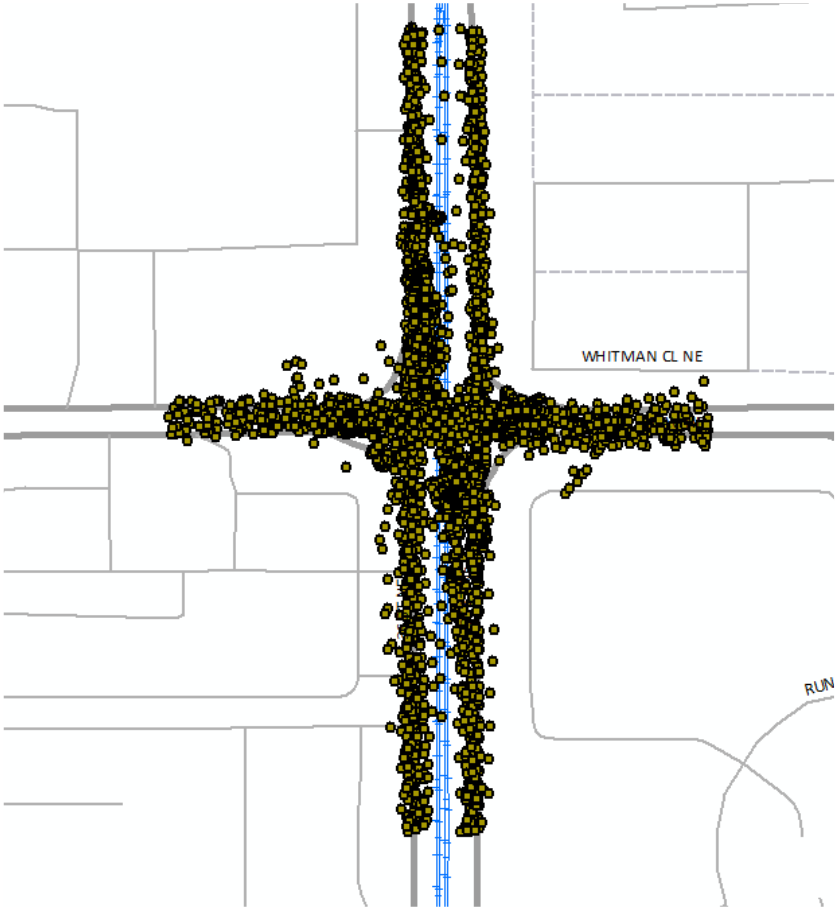


Train Operations

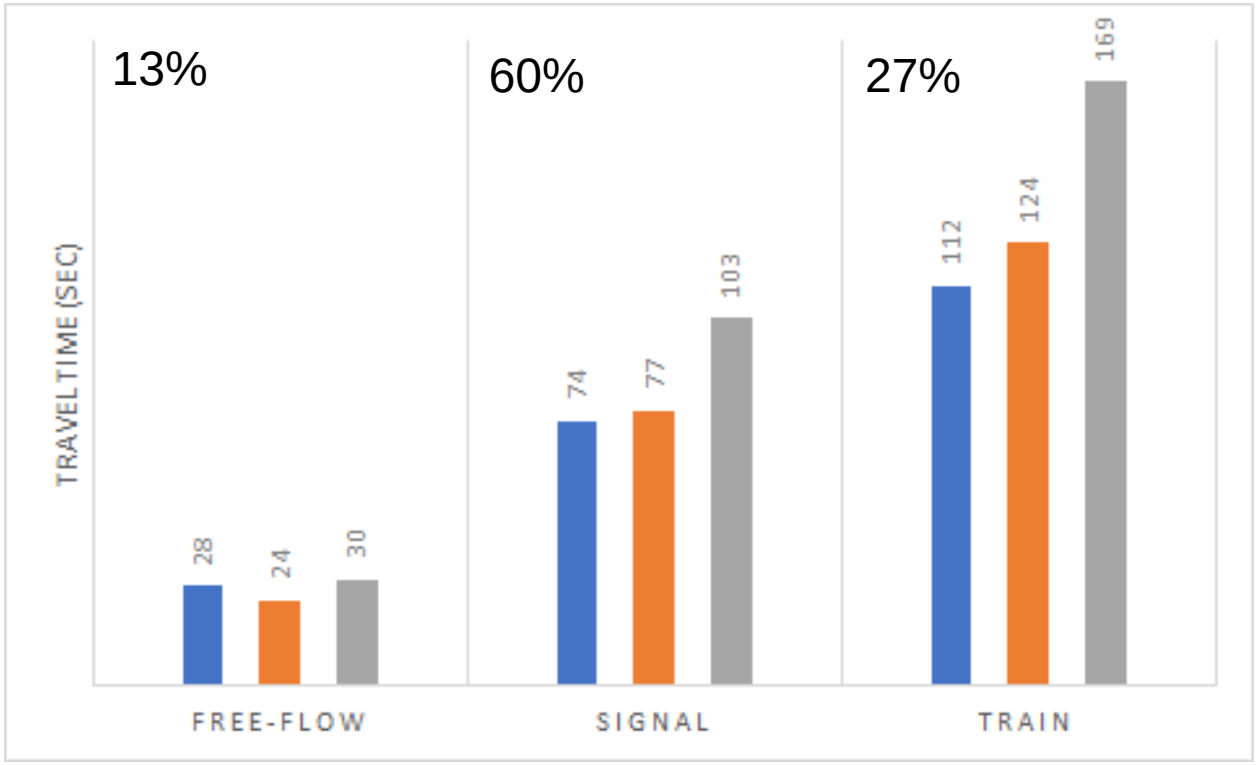
Peak Hour	Time on Single Track	Simultaneous Transit	Time Segment in Use	Track Occupancy
07:00-09:00	28 min	28%	49 min	41%
11:00-13:00	15 min	0%	30 min	25%
16:00-18:00	27 min	55%	39 min	33%

Trains block traffic 30-40% of the peak hours

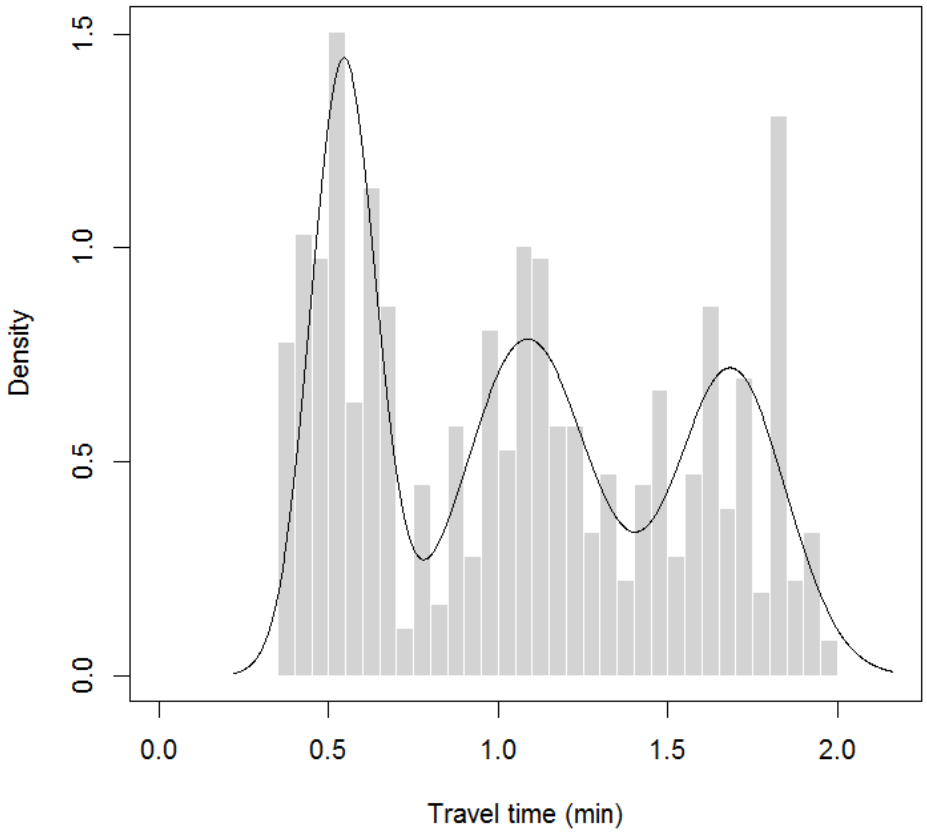
Pace Car Methods



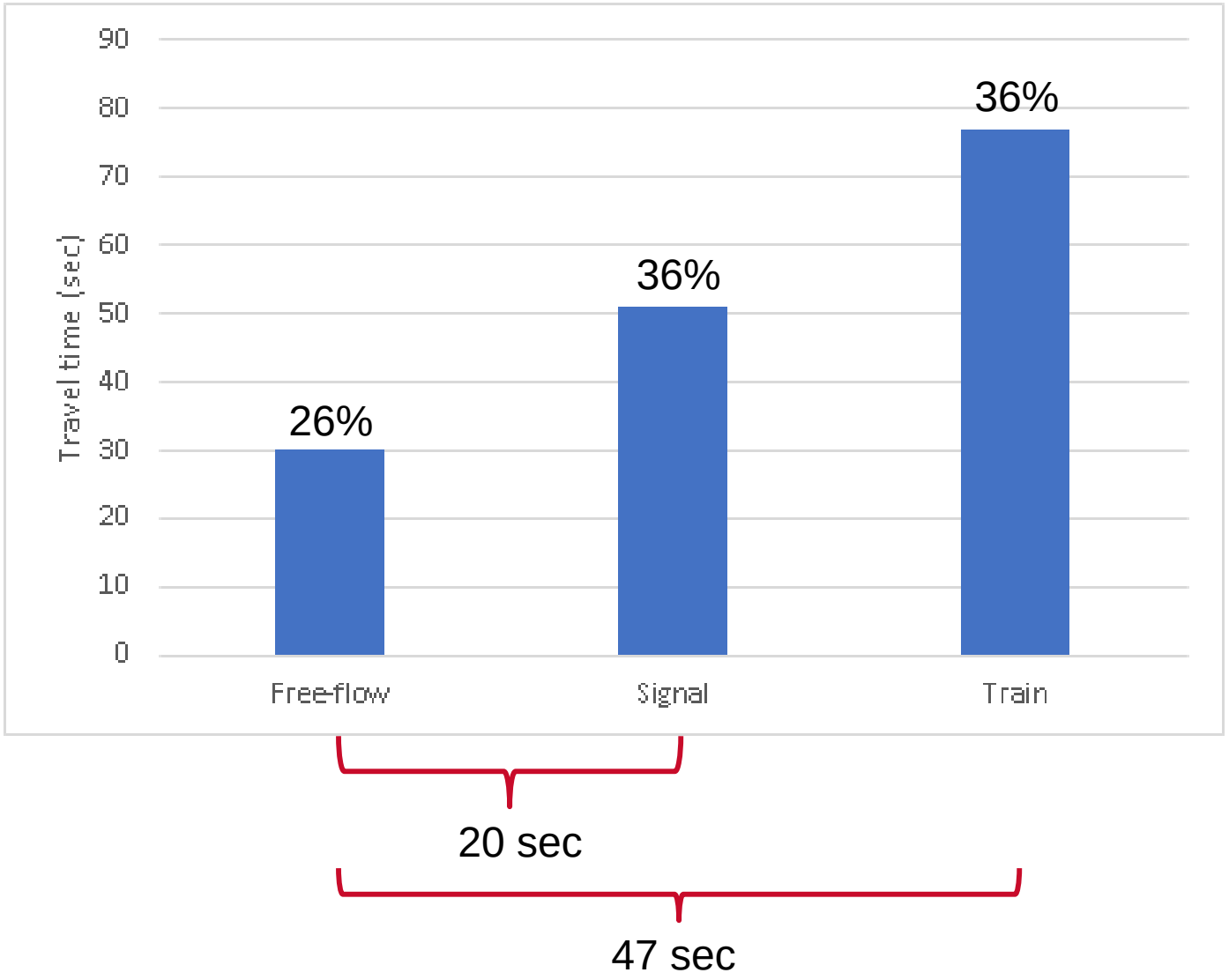
Pace Car Results



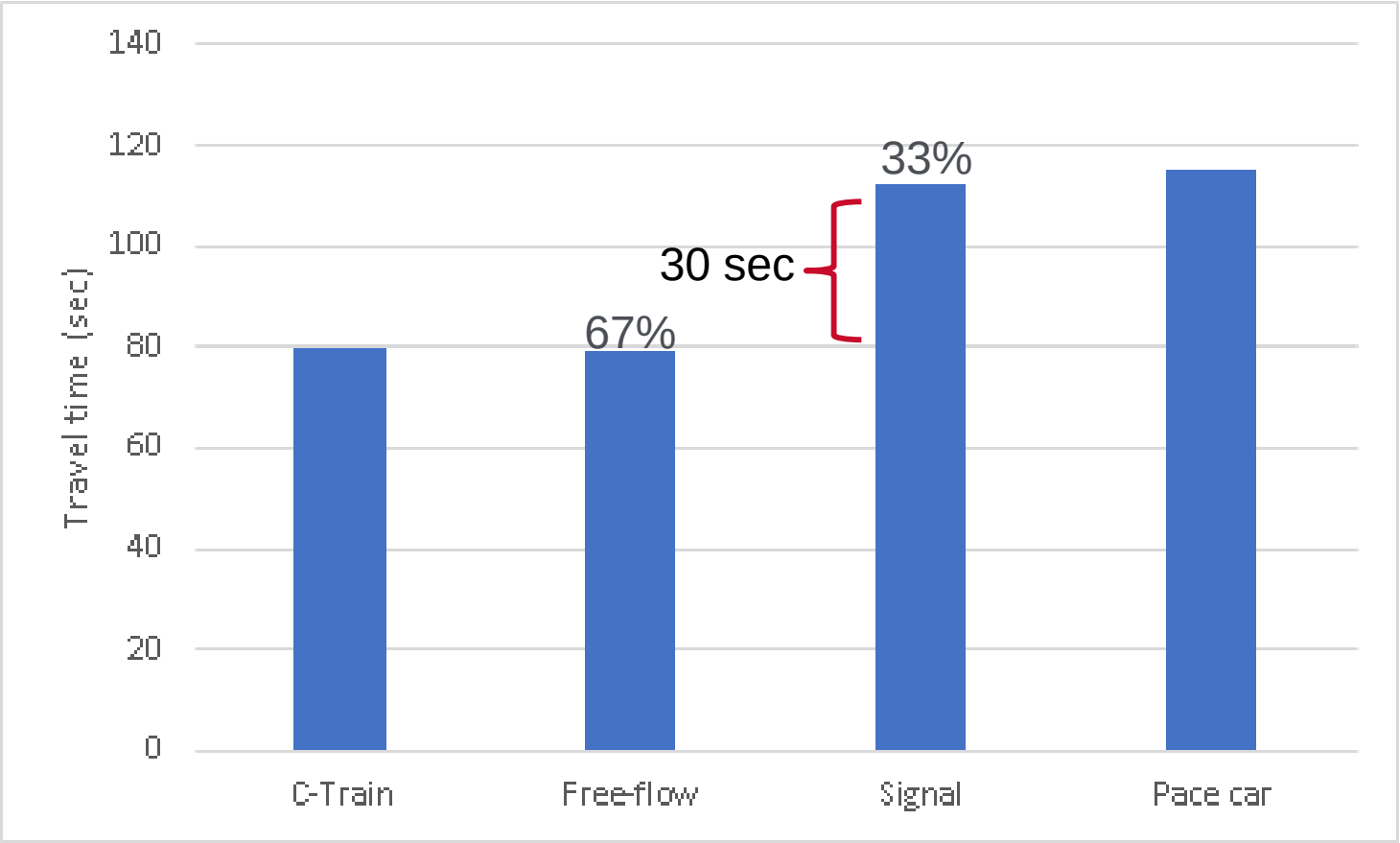
Bluetooth Methods



Bluetooth Results



Travel time between stations



C-Train 10 seconds faster than vehicle travel times

Conclusions

I. It matters where you orient your light rail line

II. Delays from the C-Train ≈ delays from traffic signal

III. Relative importance of delays from C-Train depends on encounter frequency

Calgary

Please direct all questions to the people who assisted with this project:

City of Calgary data collectors

Austin Norrie
C-Train data processor

Jenn Malzer
Project ideator