



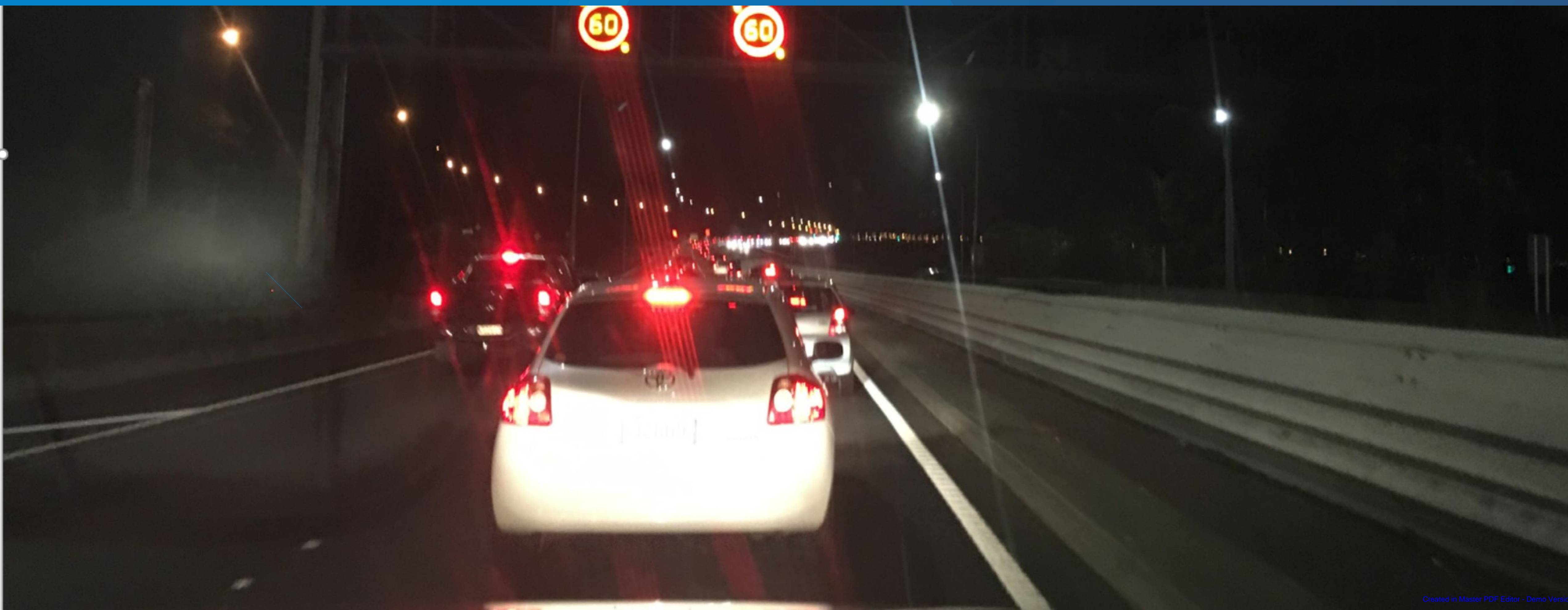
A journey into Smart City Transformation

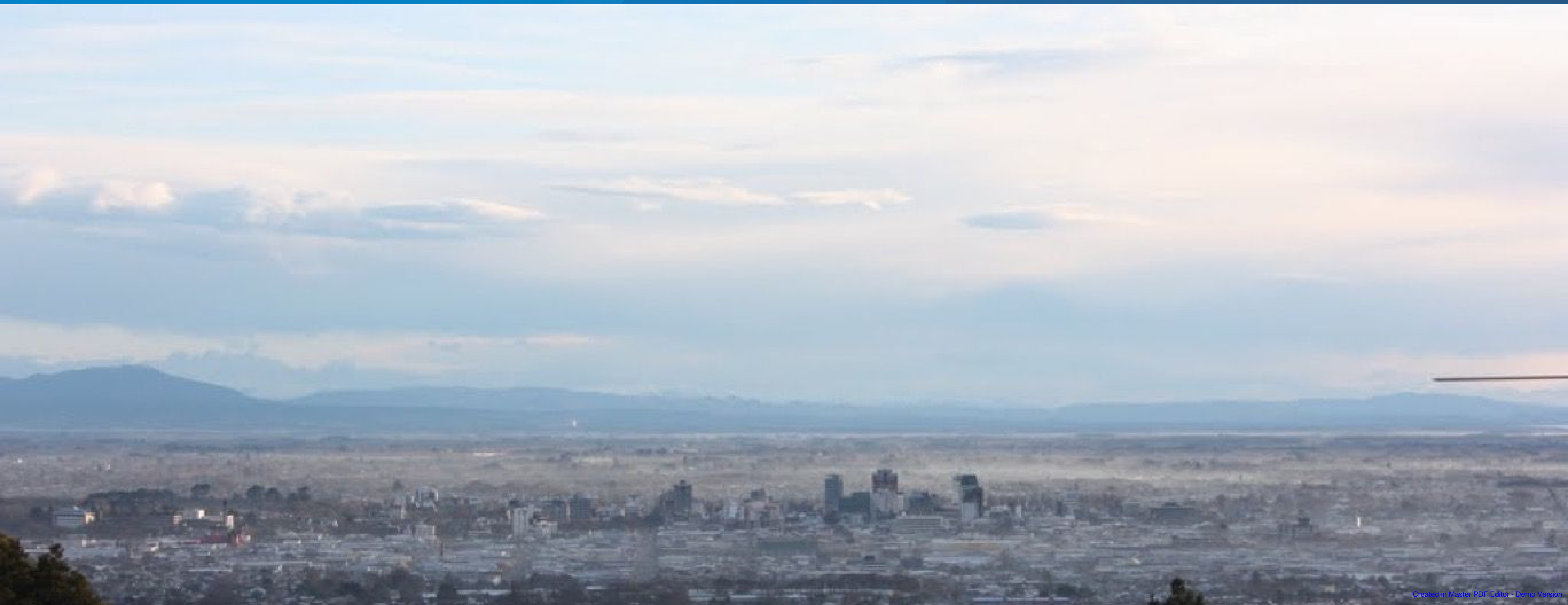
The Self Aware City













Long-term water quality alerts

Nga mataaratanga roa

We recommend you don't swim at these spots

Cox's Bay	Meola Reef
Weymouth Beach	Little Oneroa Lagoon
Wairau Outlet	Piha Lagoon
North Piha Lagoon	Te Henga (Bethells) Lagoons
Laingholm Beach	Wood Bay
Taumanu East	Green Bay
Clarks Beach	Titirangi Beach
Fosters Bay	Armour Bay

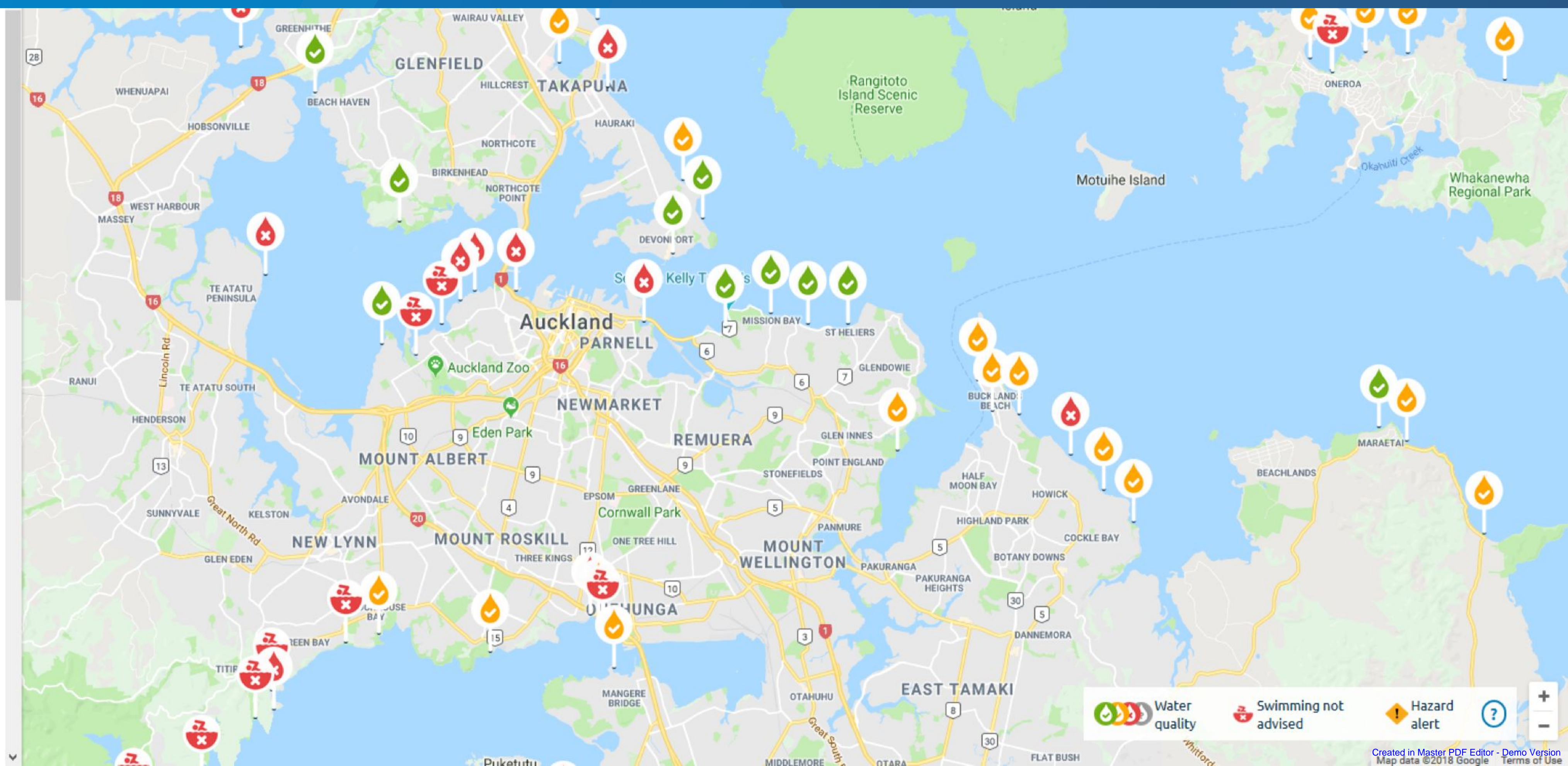
Staying safe at the beach

- Find a beach that is patrolled (be prepared)
- Listen to the advice of lifeguards
- Always keep an eye on children in the water
- Get a friend to swim or surf with you- never swim alone
- Stay between the flags

Shellfish gathering

Mahingā kai

We advise against any consumption of shellfish





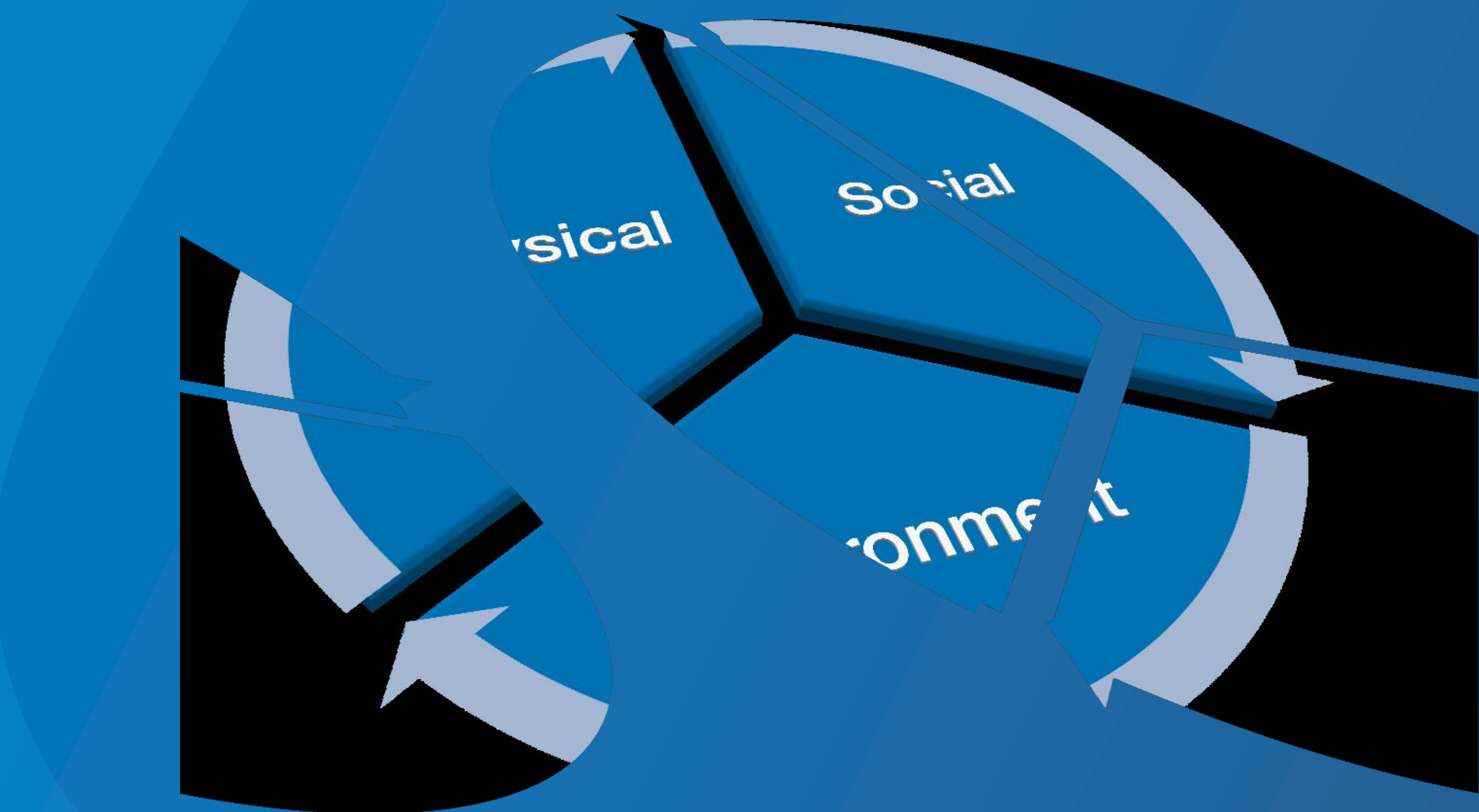


**Every growing city has these
issues...**



How do we approach these issues?

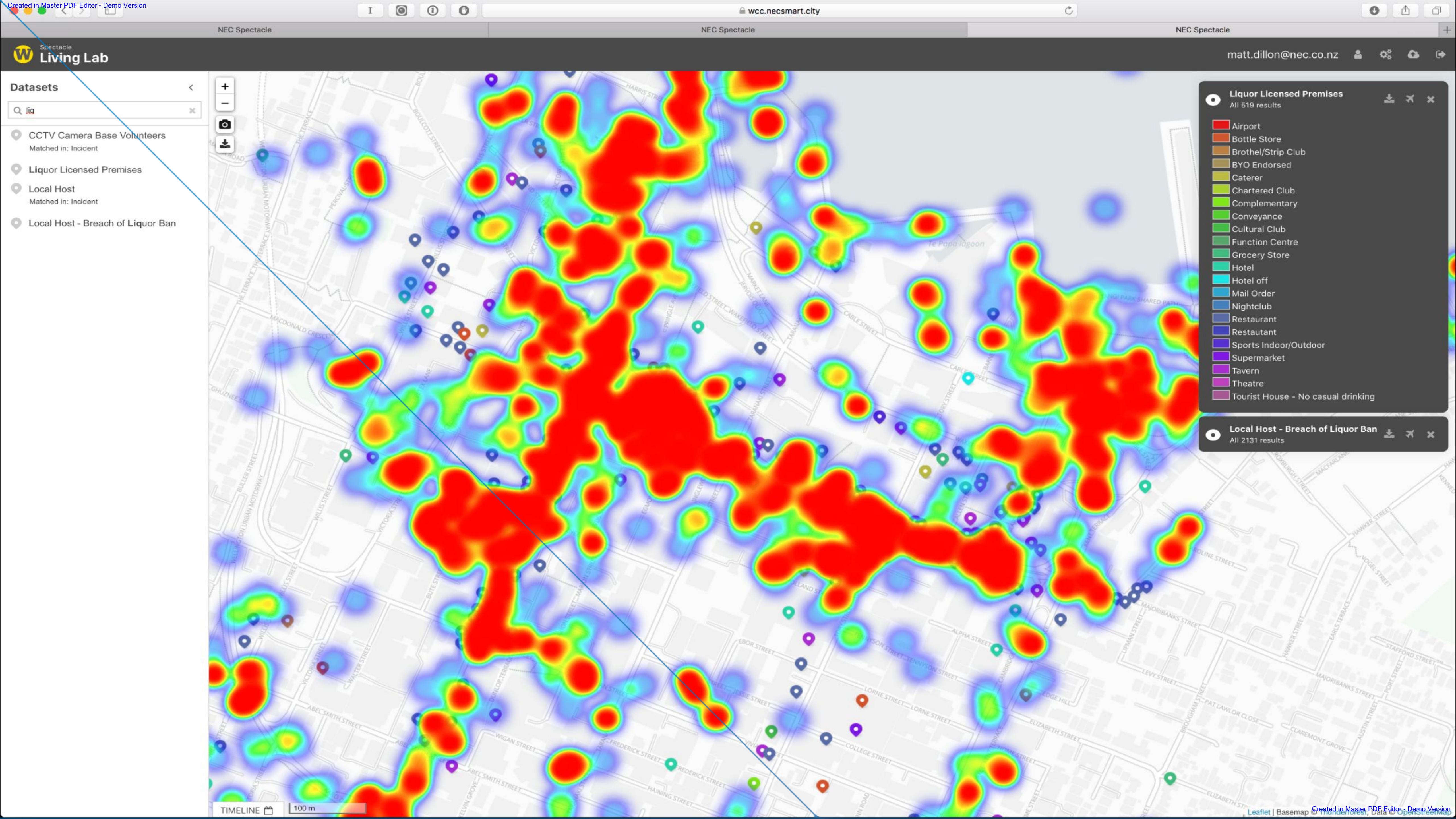
- *We have lots of data out there already that will help us to better understand these issues but...*
- *We operate in silos and struggle to collaborate*
- *We are all drowning in our own data lakes*

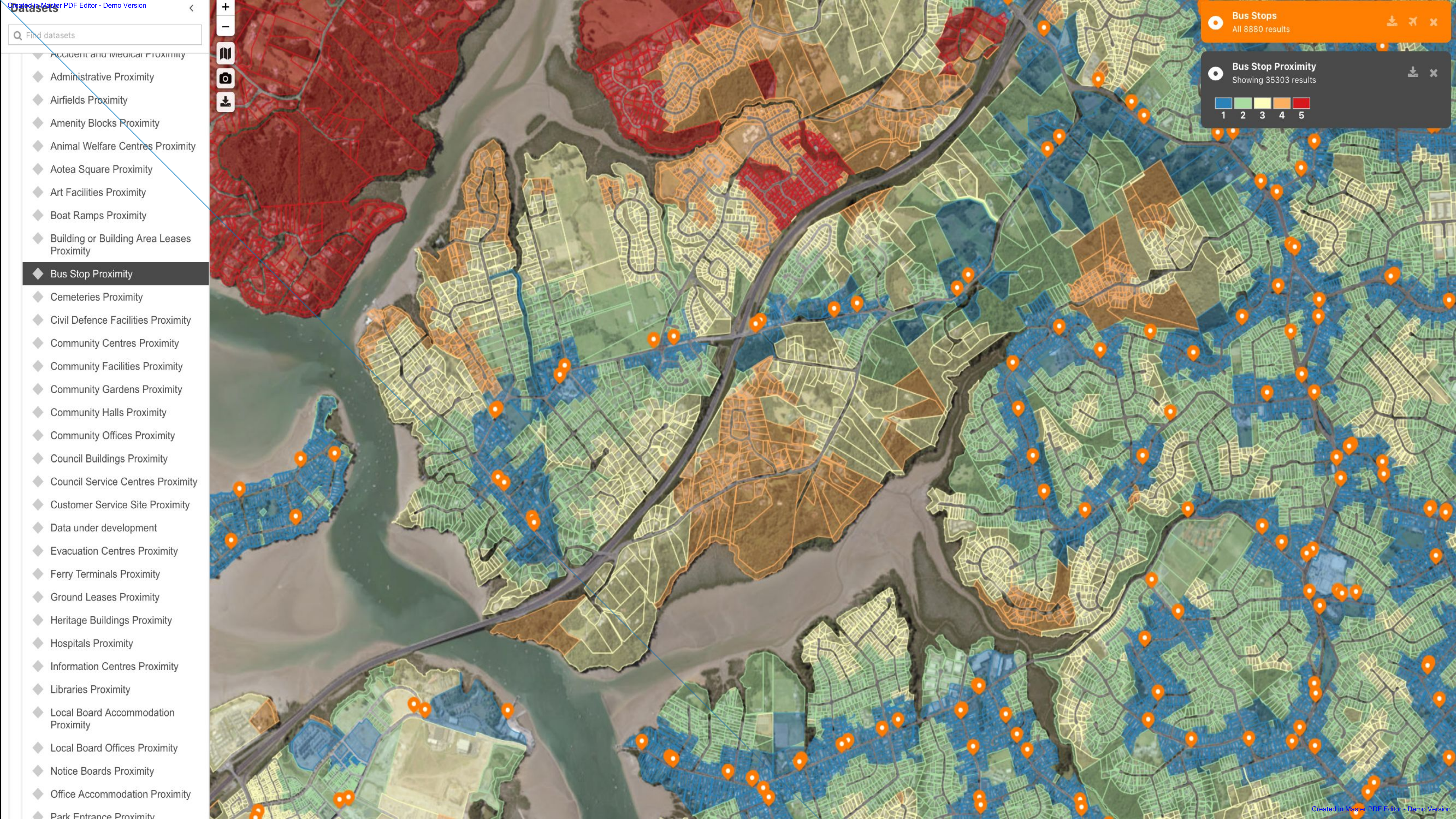




Cloud

The Digital Commons

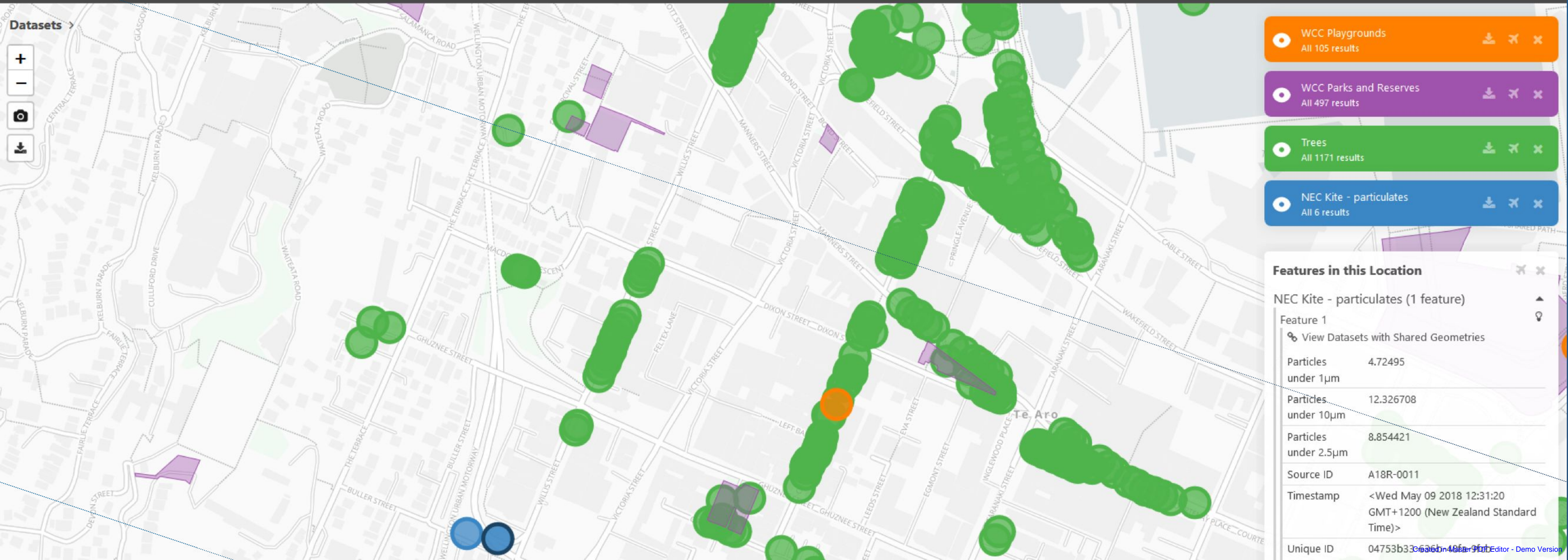






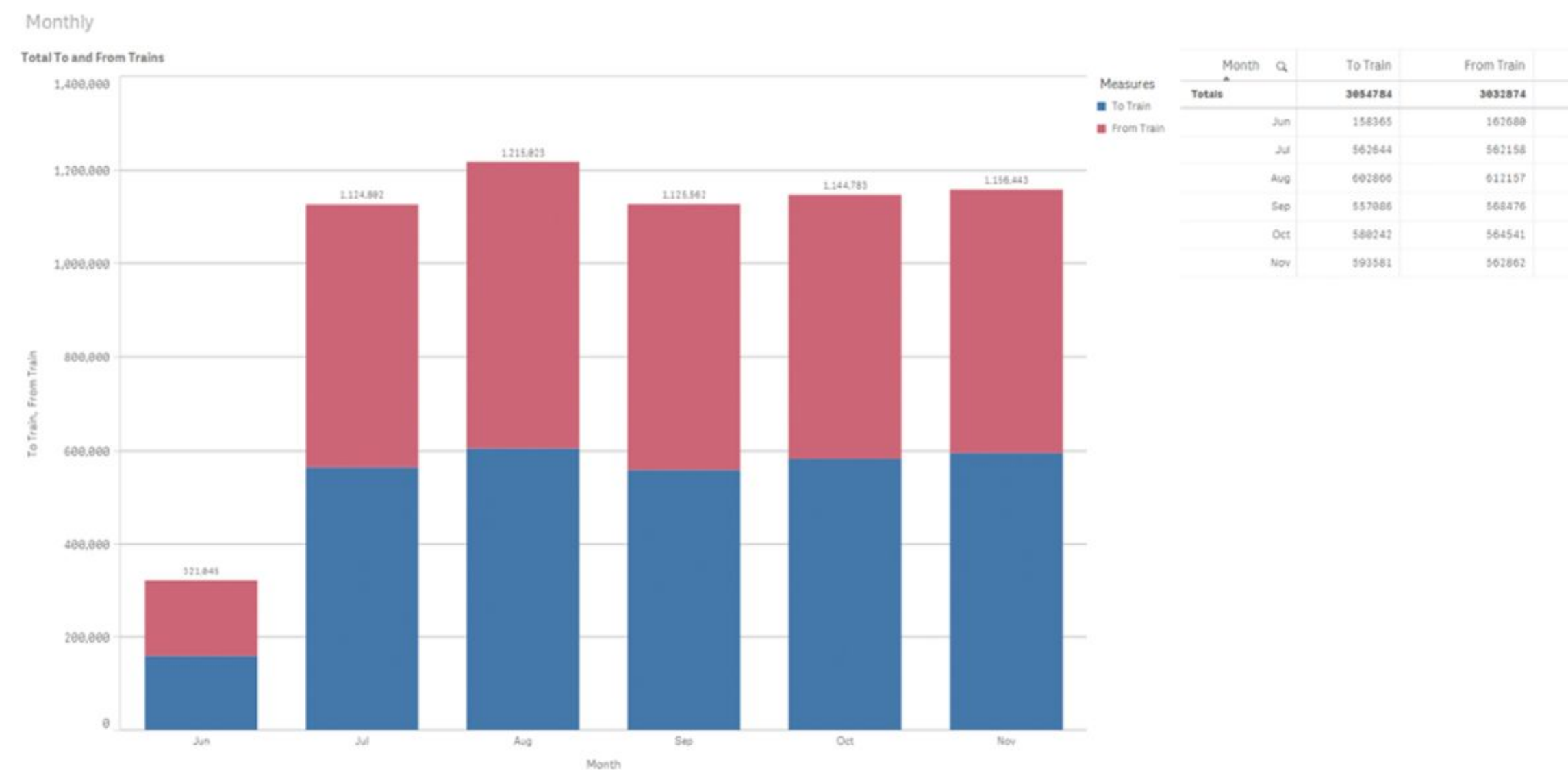
Sensors and IOT

Joining the dots

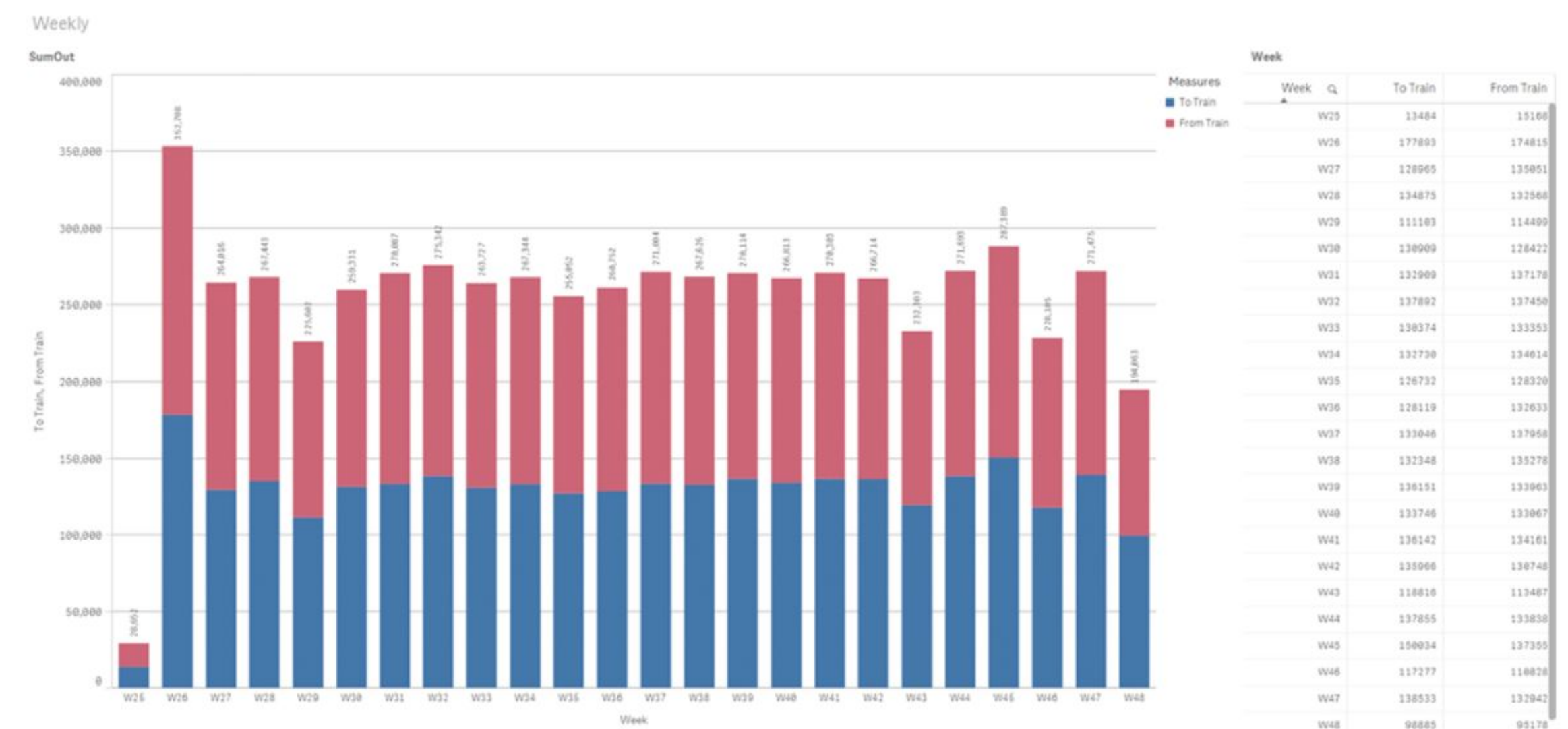




Total Commuters By Month



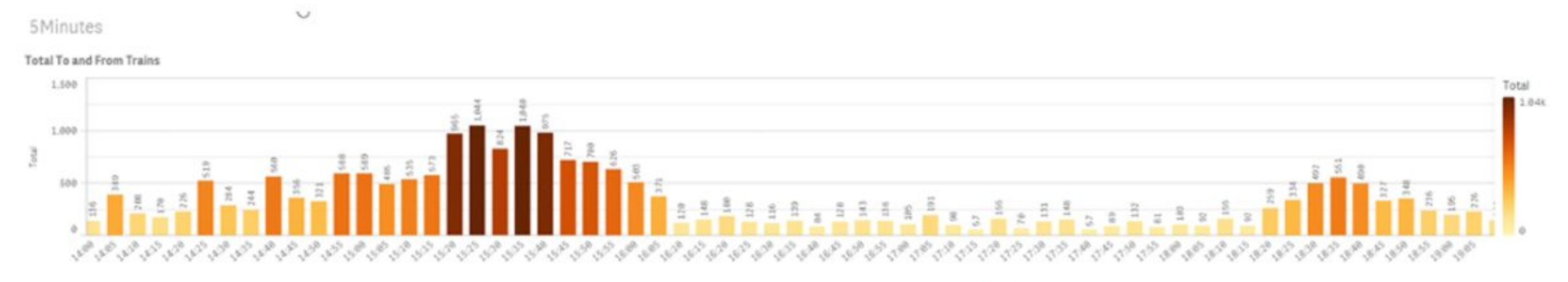
Total Commuters By Week



Total Commuters By Day – November



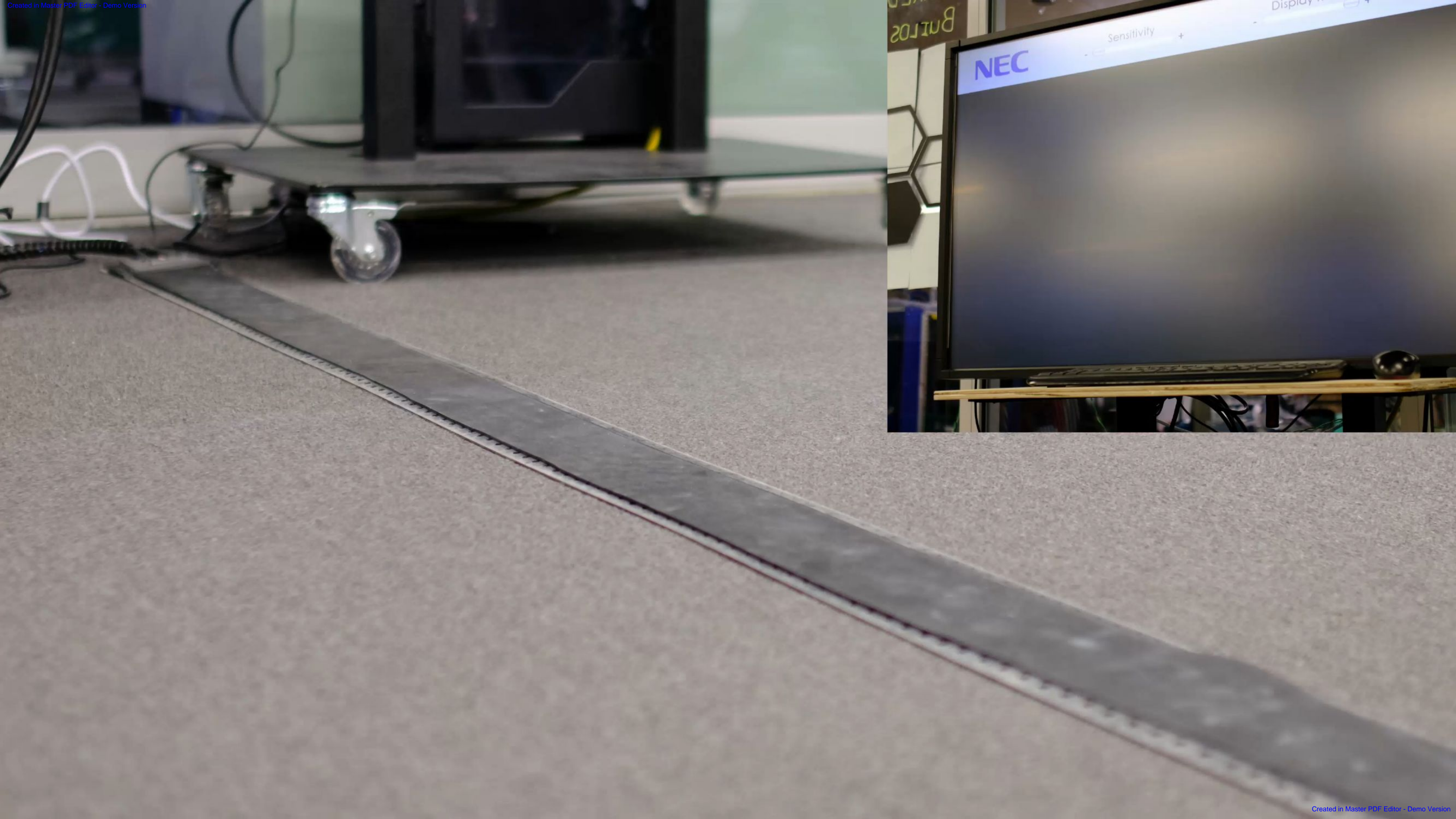
Total Commuters By 5 minute Intervals – All White vs Peru was on at the Stadium





Materials & Machine Learning

Improving Insights

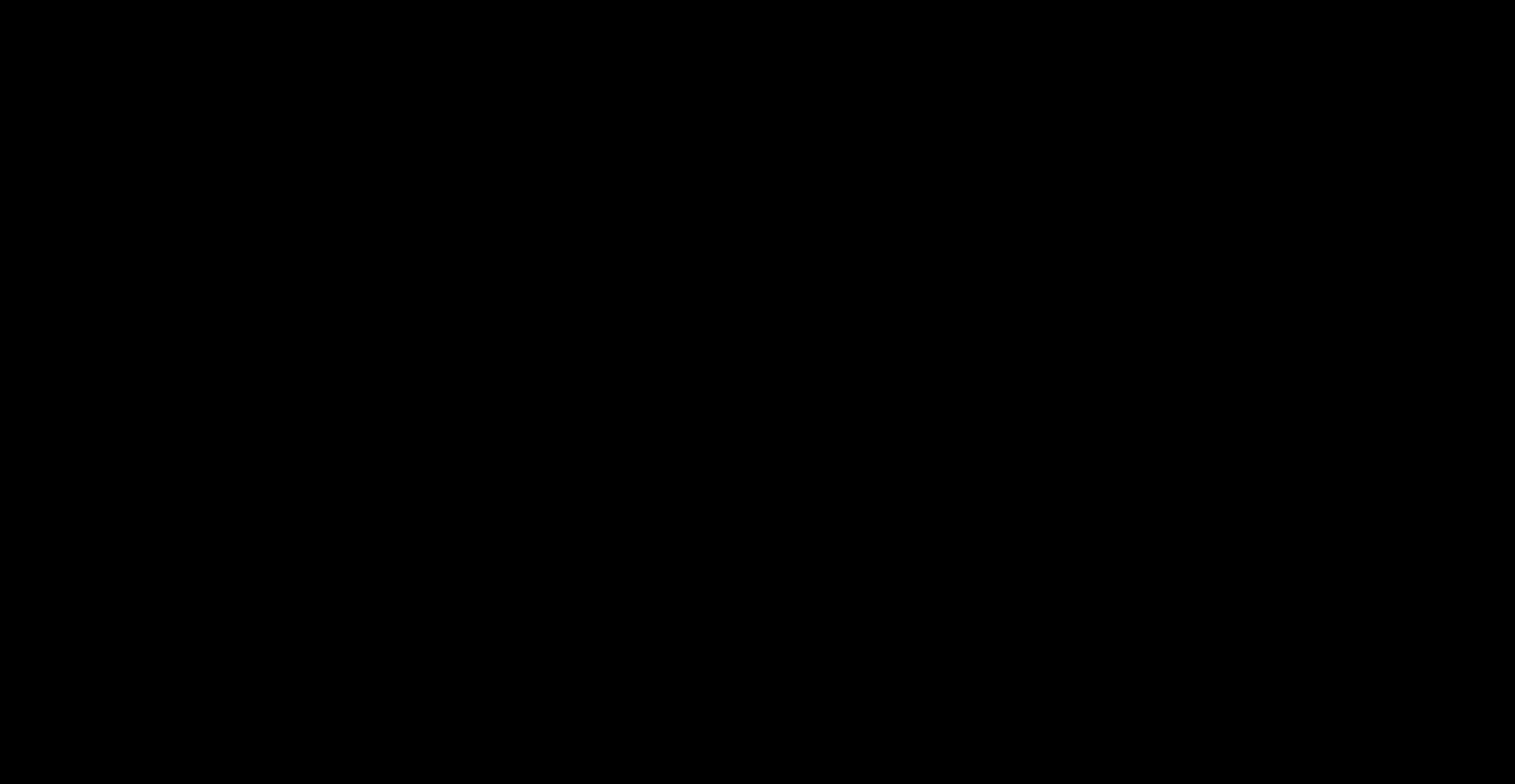




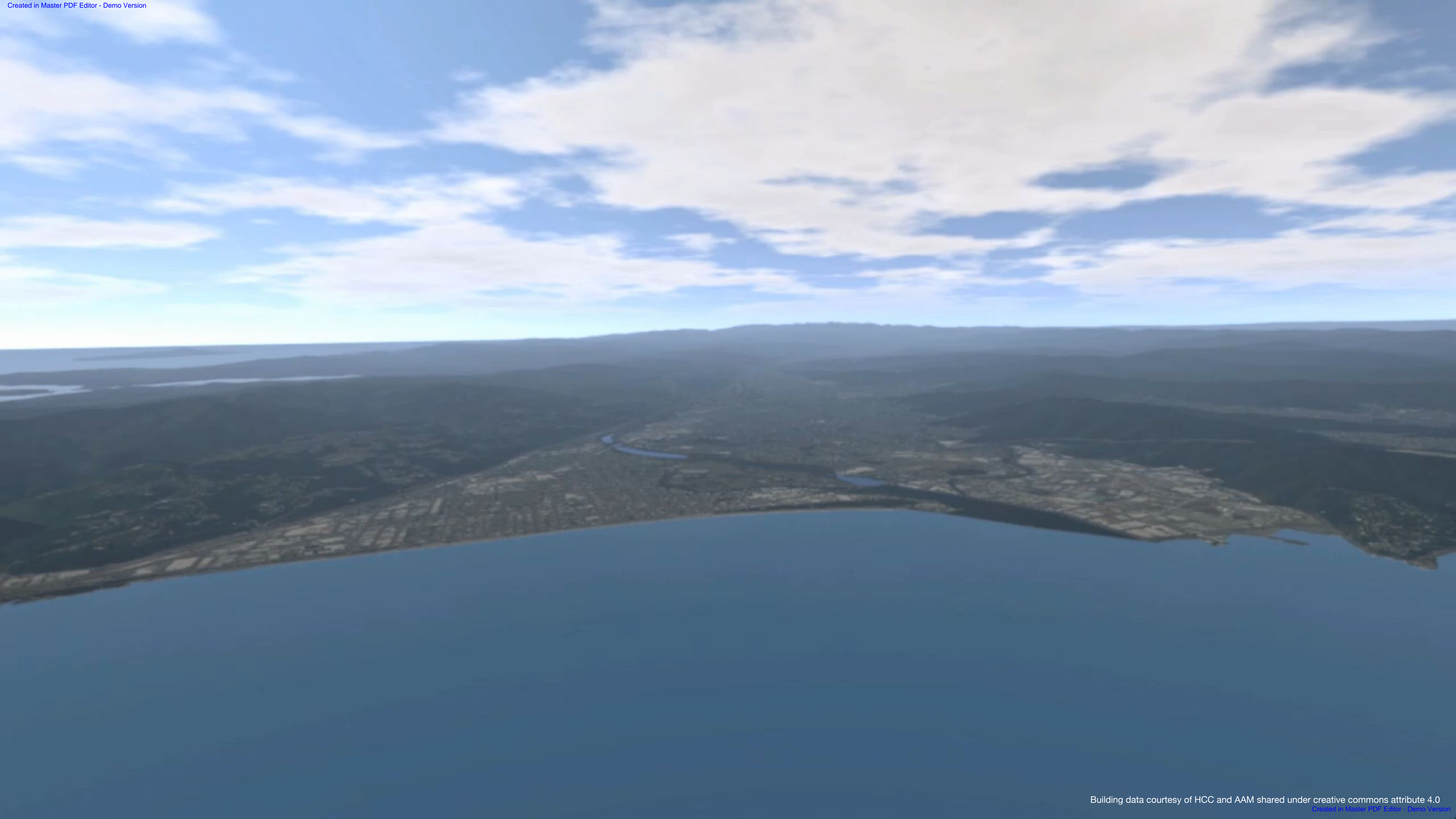


Gaming Tech

Story Telling









Revisiting our Issues

- *Digital Commons will break down our silos of operation*
- *A more holistic ecosystem view will provide improved insights*
- *New sensors and IOT will fill the gaps in data so we don't use assumptions*
- *The same IOT networks can be used to react faster to stresses and shocks*
- *ML will provide new insights from the vast amounts of data we are collecting*
- *Story telling will lead to more informed and more democratic decision making*
- *This I believe will be a more self-aware city...*



So...

- *Let's find ways to walk before we run, the self aware city is within our reach*
- *There is an emerging tech toolkit that will lead us along the way*
- *Agile Co-creative ways of working work well for nascent tech*
- *Collaborative Partnering models are possible between Public and Private enterprise - Barriers are largely human not technical*
- *Lets not forget about the humans!*



***Success is moving from one failure to another with
no loss of enthusiasm – Winston Churchill***

