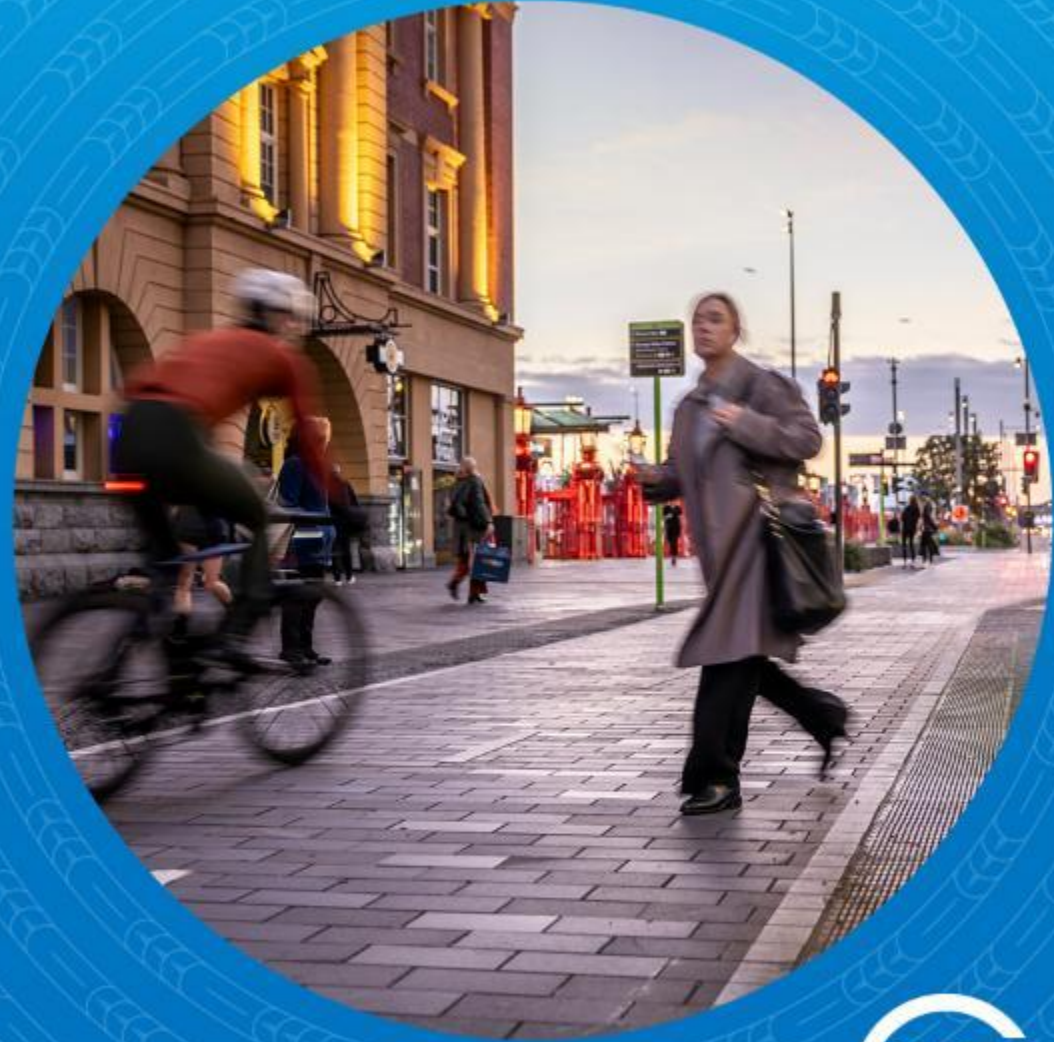




Representing Urban Auckland's Kerbsides

Working with what we have



Presented by:

Claire Covacich - Transport Planning Team Leader

Shelale Mazari - Senior Transport Planner



TRAGEDY OF THE COMMONS

Overuse of shared resource by individuals results in degradation of that resource



Common resource,
shared by many



Not managed,
used for individual gain



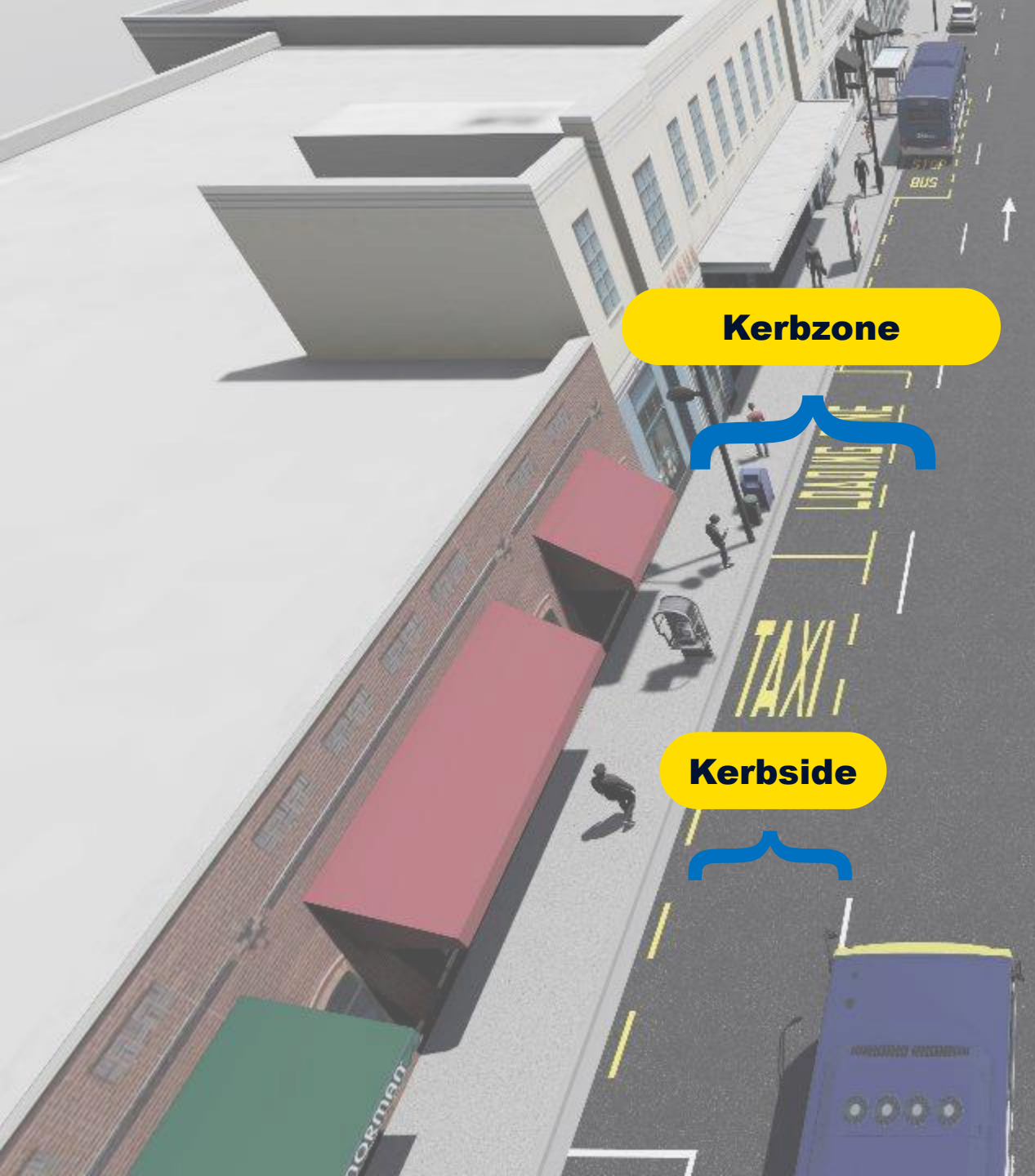
Resource depleted
**UNSUSTAINABLE
OUTCOME**

Background

The need for this work

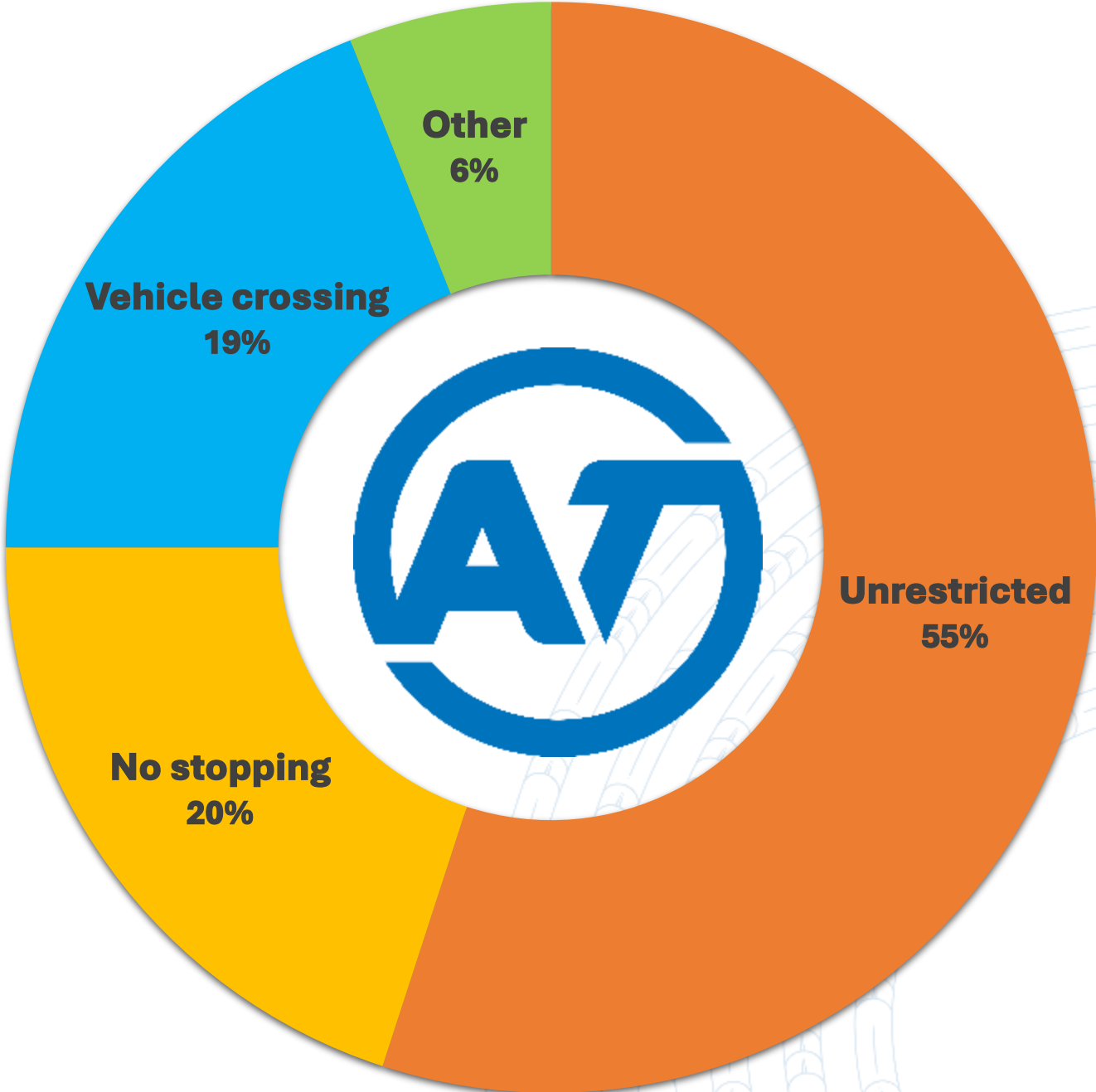
- Local government kaitiaki role
- Road space is a valuable public asset
- Parking management aims to optimise kerbside space
- In order to manage it, we need to understand what we have





Kerbsides

Urban Auckland has around 8,800kms of kerbside



How do we know this?



**How can we
manage our
resources if we
don't know
what's out there?**



Data Collection

Beginning from zero, and ending up with a dataset that was reasonably accurate at the time of collection

- Consultants collected imagery from across the urban region (using a camera-equipped car, supplemented with aerial imagery) before processing it through an AI programme
- Kerbside use was allocated based on lines and signs along the kerb and channel

But this wasn't the most straightforward task...

Kerbside Use

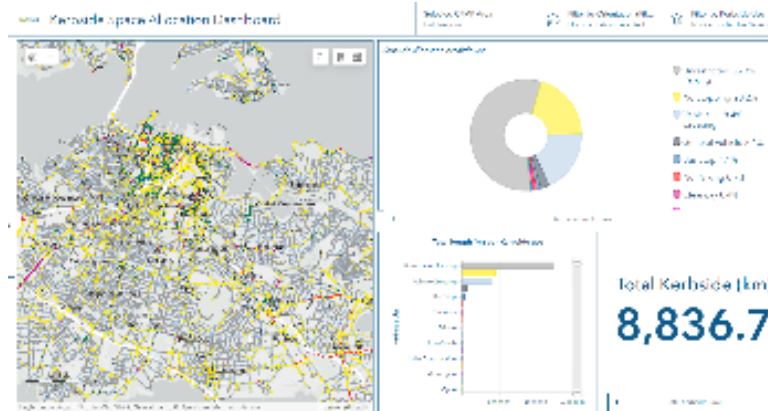
- Authorised Vehicles
- Bus/Coach
- - Bus Stop
- Cycle
- Clearway
- General Vehicle
- Loading Zone
- Mobility
- Motorcycle
- - No Parking
- - No Stopping
- Private
- Shared Vehicle
- Taxi/Ride Share
- - Under Construction
- Unrestricted Parking
- Vehicle Crossing



Viewing and using the data



We developed three apps to view and use the dataset



Viewing

A quick overview of kerbside allocation in an area
Being updated area-by-area as comprehensive parking management plans are rolled out

Analysing

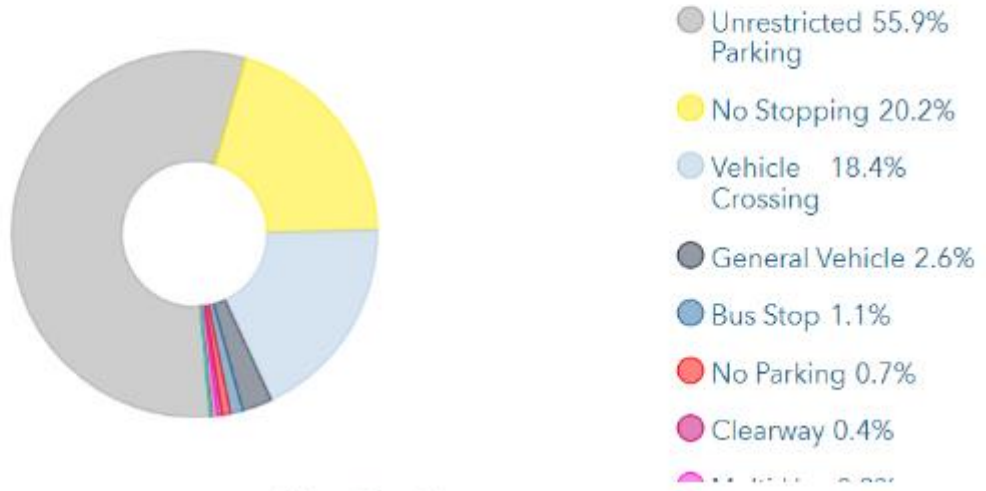
A more detailed breakdown of an area (or the region)
The most common types of analysis have been pre-programmed in

Updating

Initially set up as an easy to use tool to update the data
Slowly transitioning towards using ArcGIS Pro software

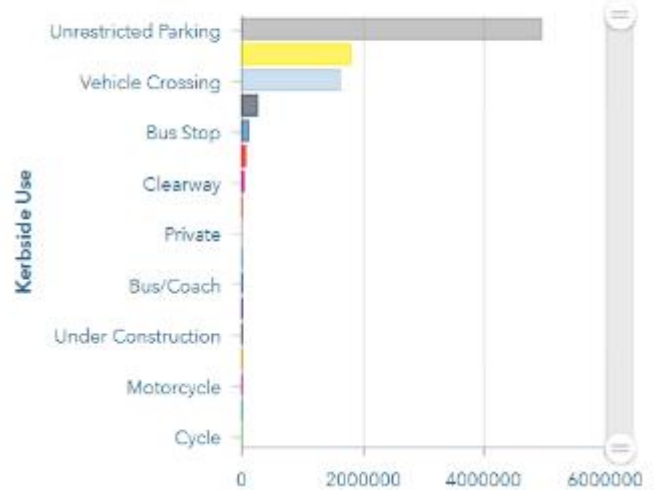


Kerbside allocation breakdown:



Kerbside Breakdown

Total length (m) per Kerbside use

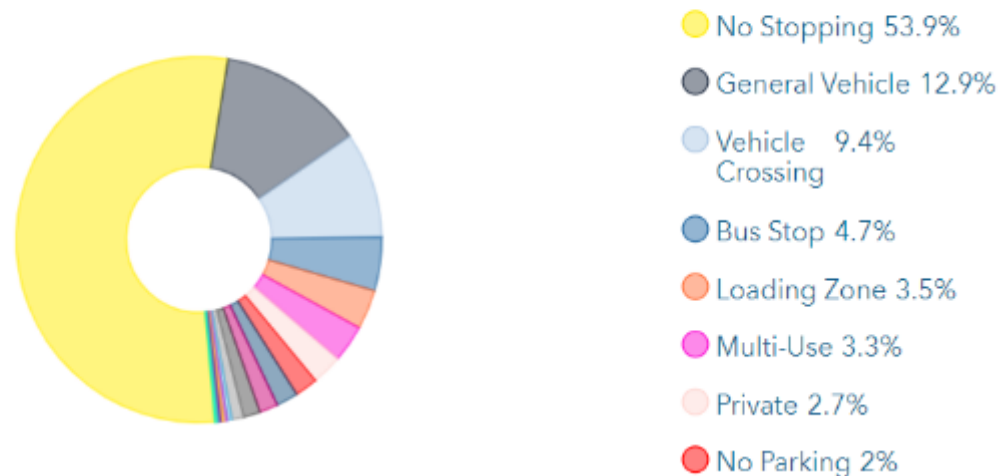


Total Kerbside (km)
8,836.7

Total Kerbside (km)

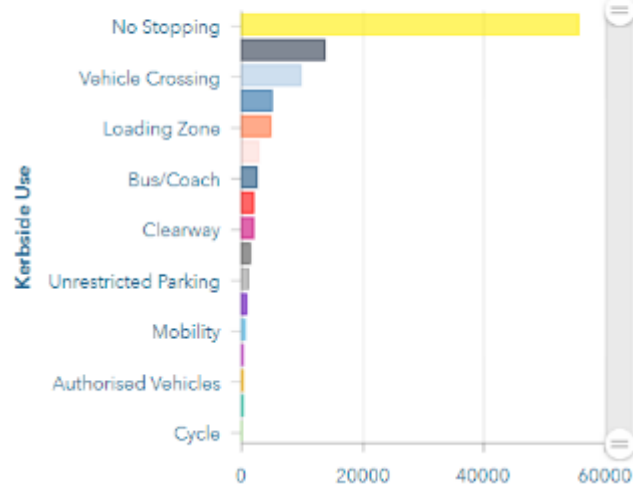


Kerbside allocation breakdown:



Kerbside Breakdown

Total length (m) per Kerbside use



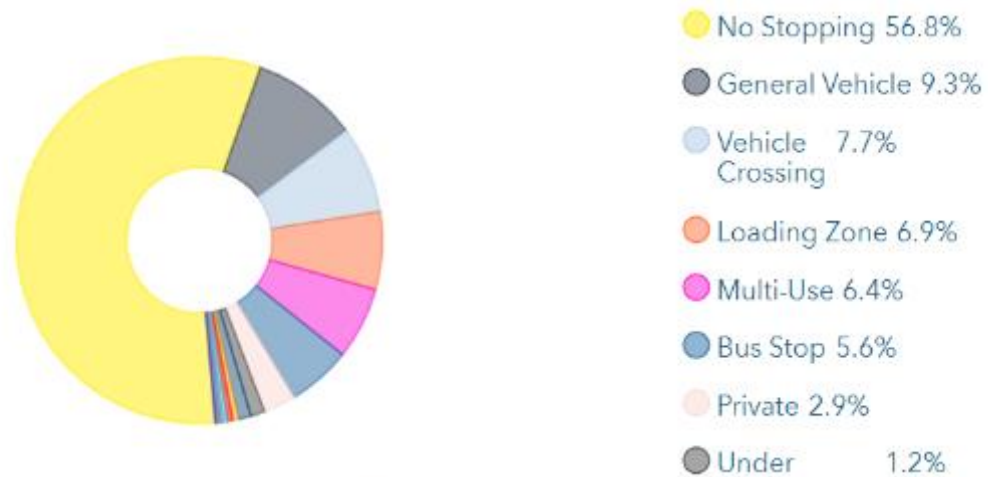
Total Kerbside (km)

103

Total Kerbside (km)



Kerbside allocation breakdown:



Kerbside Breakdown

Total length (m) per Kerbside use



Total Kerbside (km)

17.3

Total Kerbside (km)

The Dataset in Practice



How are we using this data?

Parking management:

- Comprehensive parking management plans – now delivering changes in our City Centre, with 8 more areas underway
- Update important customer information on mobility parking and loading zones
- To understand kerbside resources, scale and opportunities

Other uses:

- Network optimisation
- Asset management
- Monitoring



What next?

Working with what we have

- Continued development of our platform and datasets
- Working on sharing the kerbside data more widely

The opportunity

- Developing a tool for wider road system management?
- Nationwide tool?



Local roads ~ \$288b-\$333b

State highways ~ \$28b

(Ministry of Transport, May 2025)





Careful and intention management of our common space





Thank you

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