

Vehicle Emission Mapping Tool (VEMT) update

Keith Hastings

Transport Knowledge Hub Emission Group Quarterly Meeting
Feb 2021

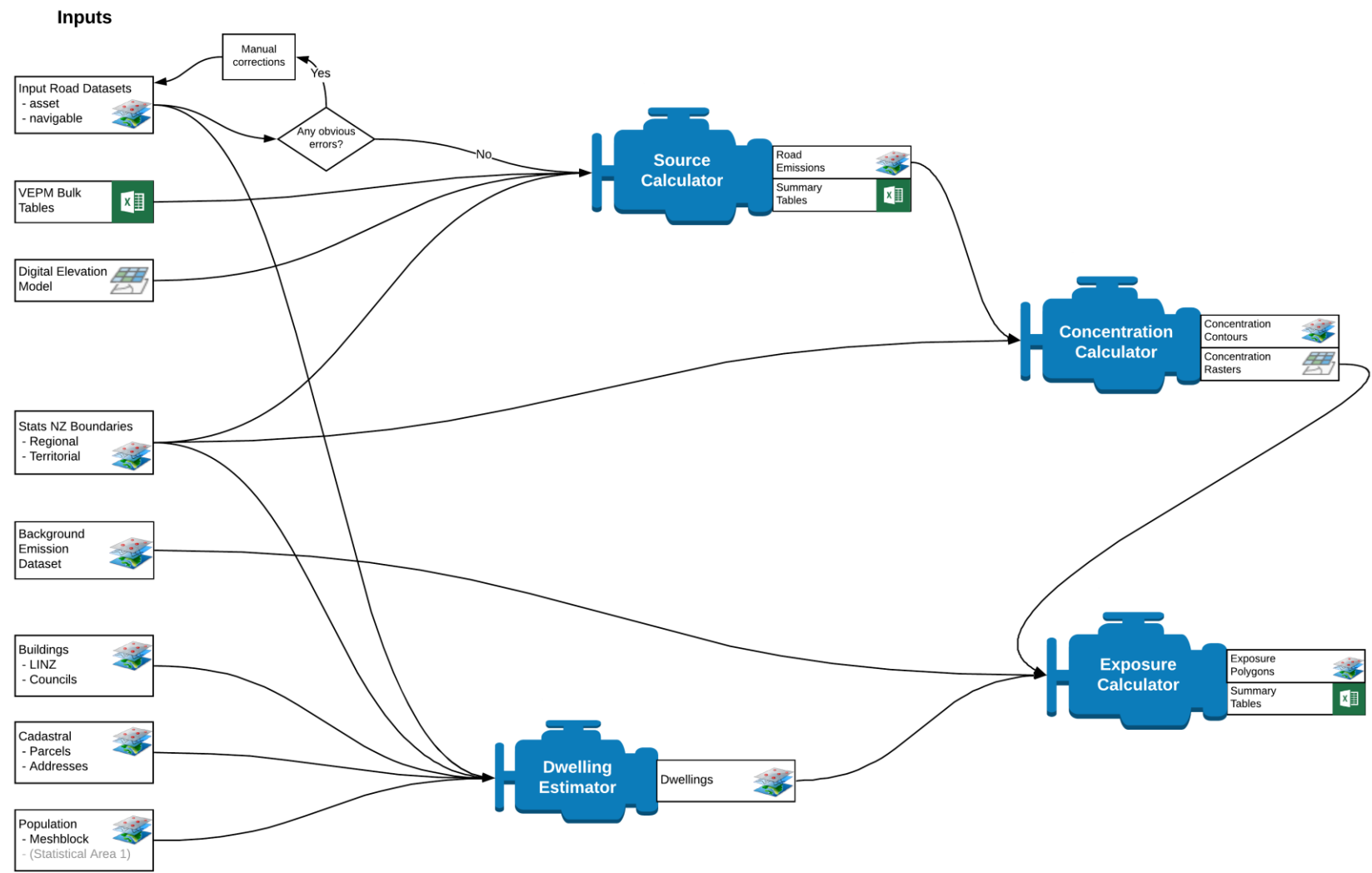
Agenda

1. VEMT review

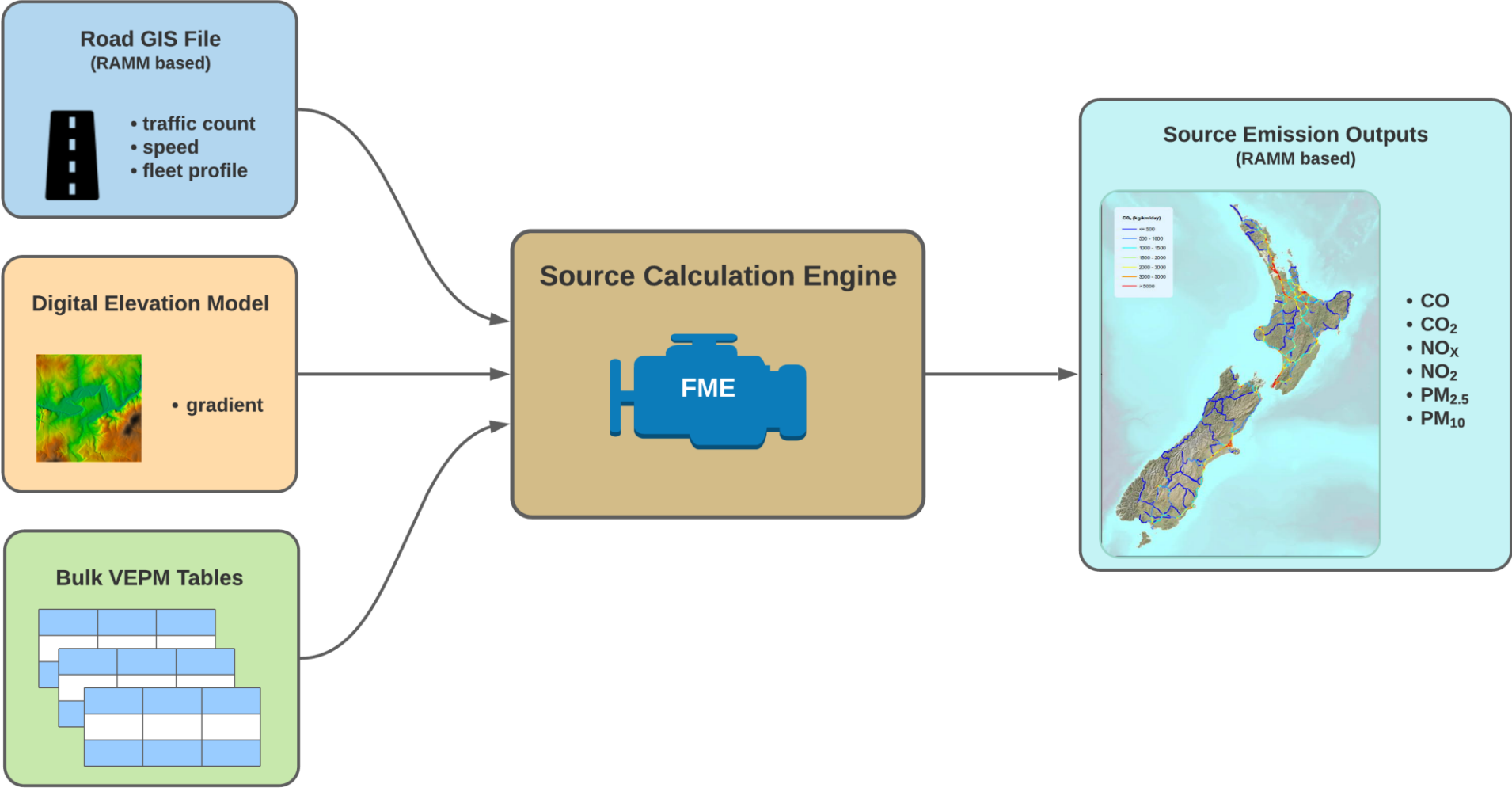
2. Current state

3. New developments

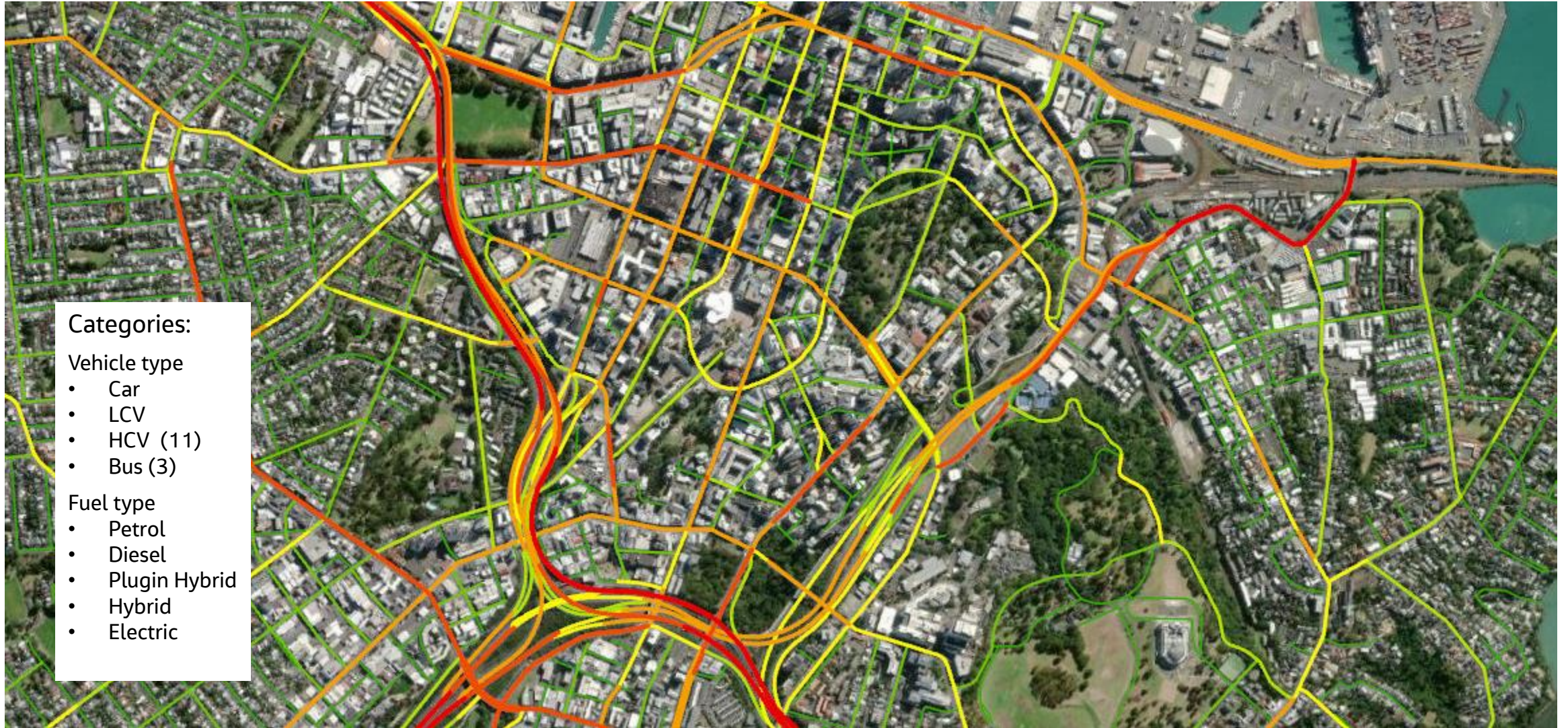
VENT family



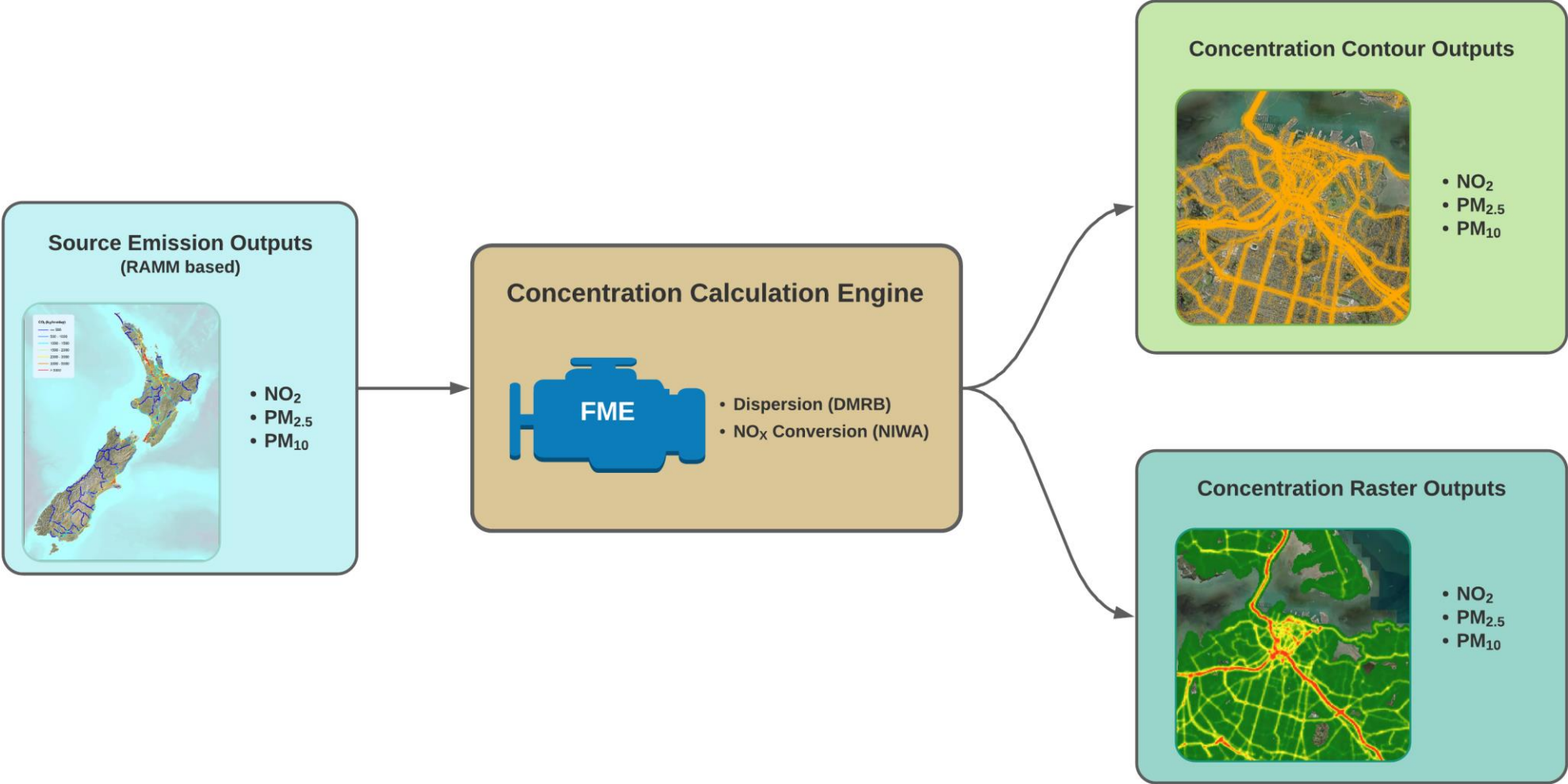
Source Emission Calculator



Source Emission Calculator



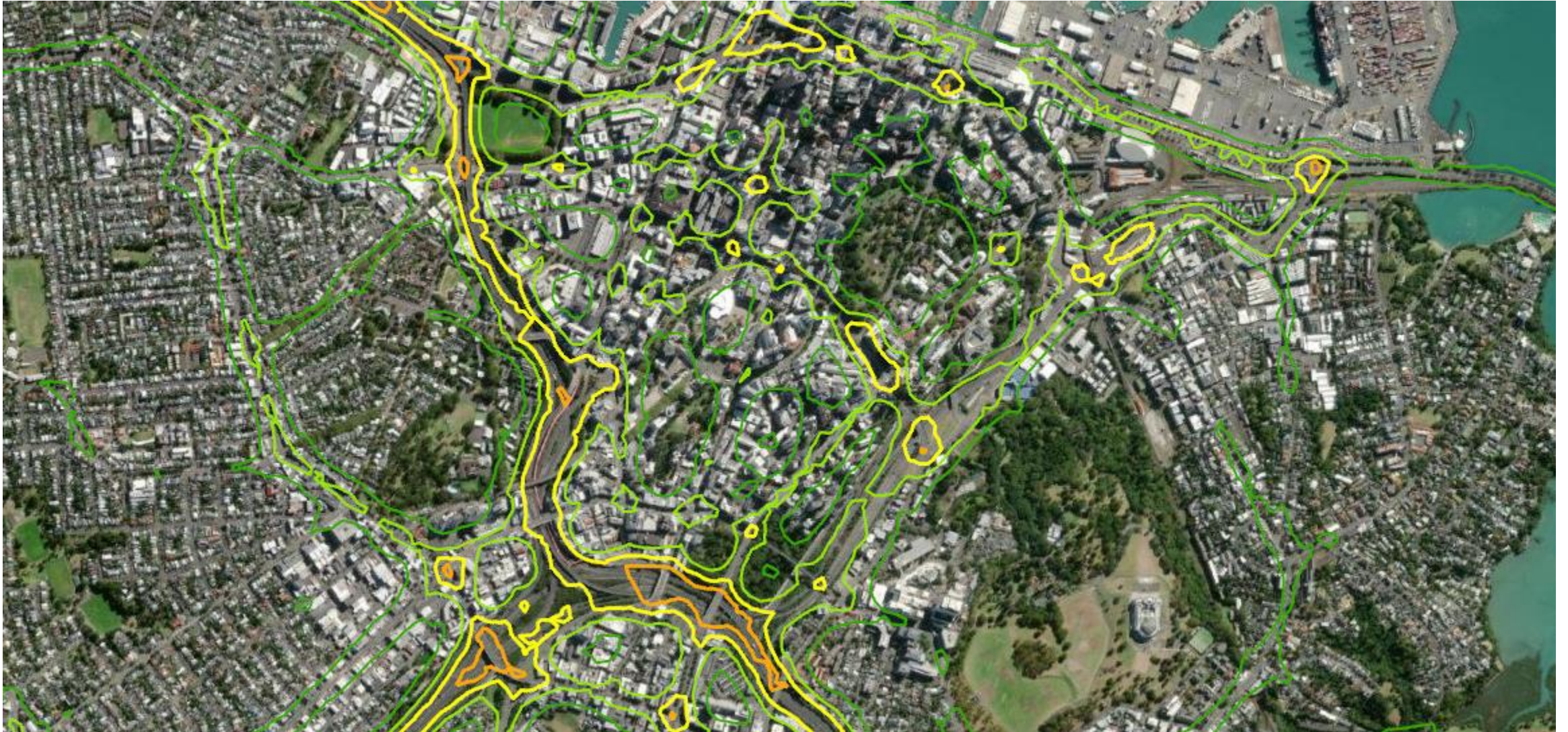
Emission Concentration Calculator



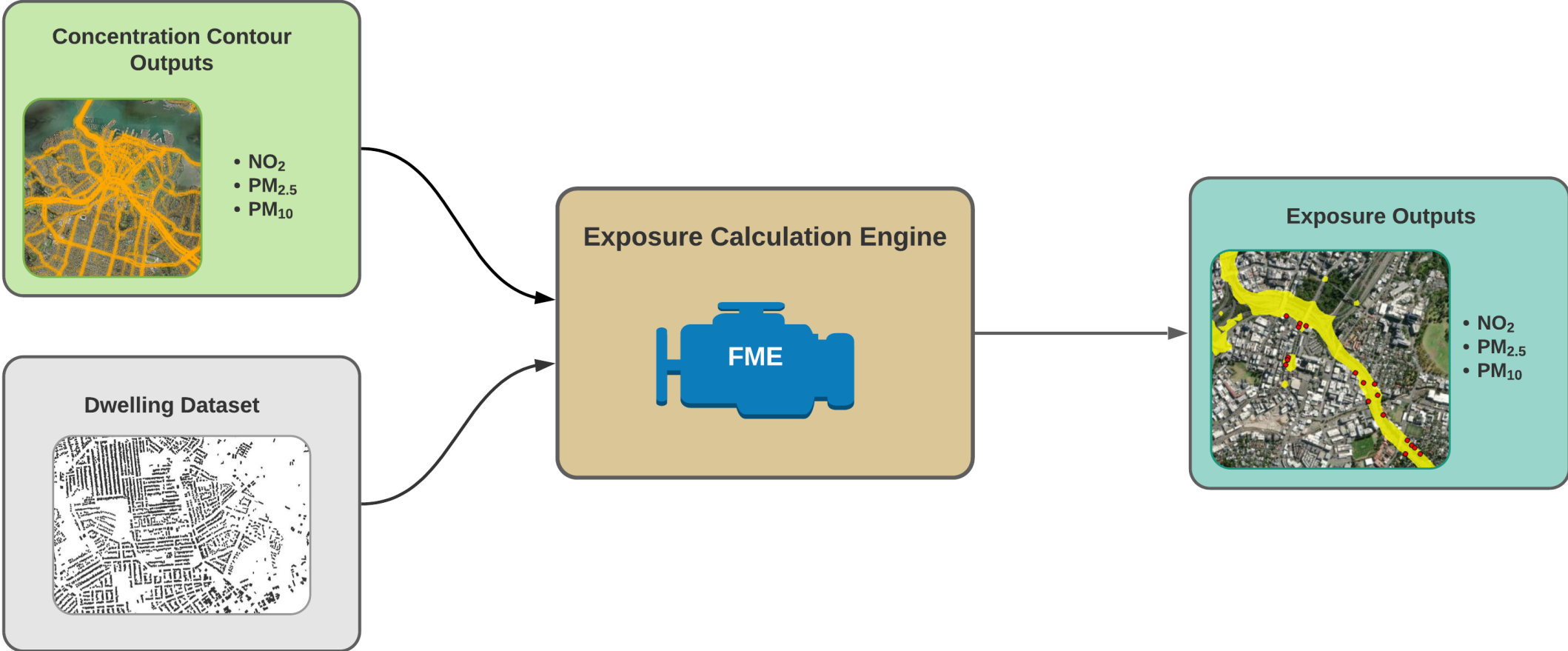
Emission Concentration Calculator



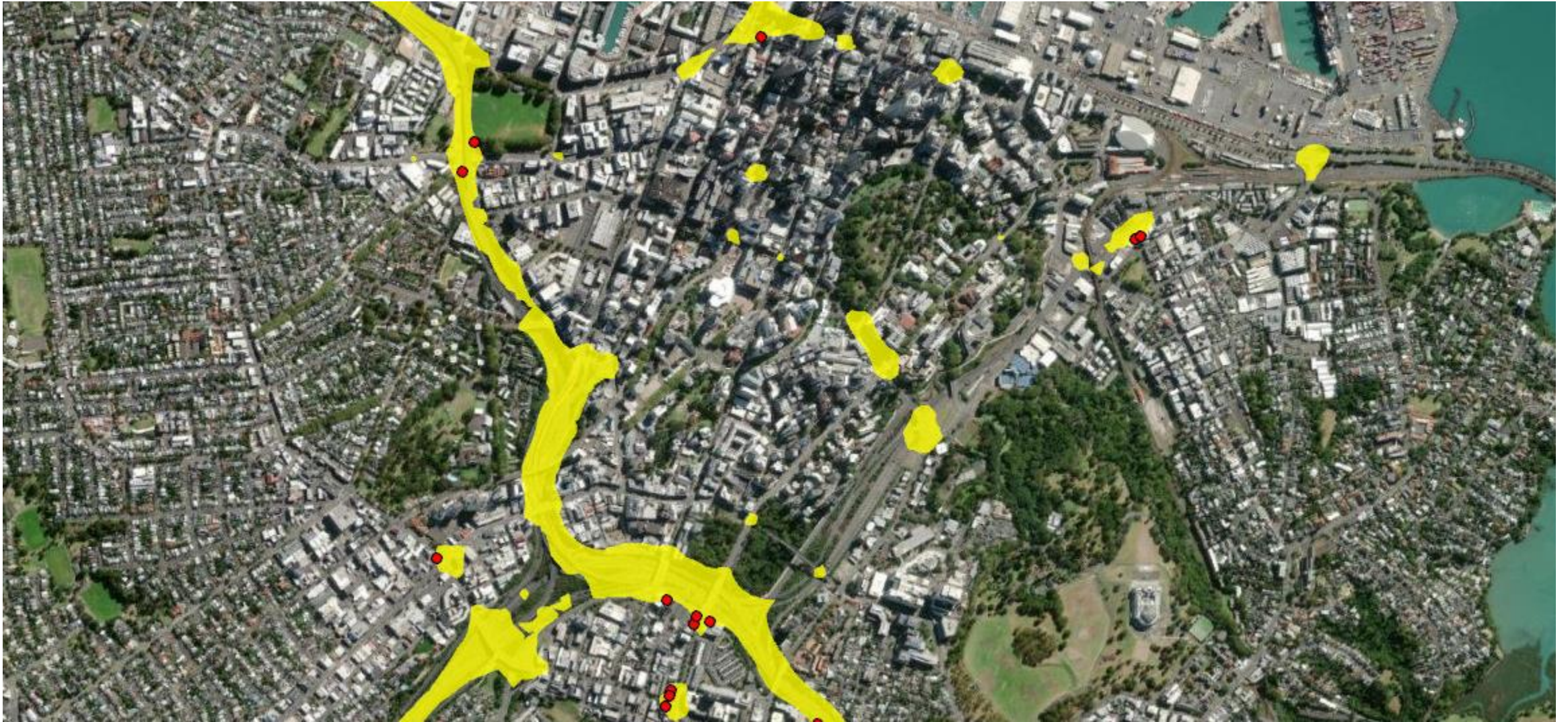
Emission Concentration Calculator



Emission Exposure Calculator



Emission Exposure Calculator



Current state

- Source Emission Calculator
 - existing national datasets available for 2016-2019
- Emission Concentration Calculator
 - review and documentation currently being completed
- Emission Exposure Calculator
 - review and documentation currently being completed
- 2020 national datasets will be available May/June
 - will include Source, Concentration and Exposure

New developments

Dynamic emission factors

- VEPM emission factor calculations brought inside source emission calculator
- Eliminates need for manual VEPM bulk table pre-processing
- Allows variable fleet profile to be used

New developments

Scenario modelling (Tonkin+Taylor & Jacobs)

Tool being expanded to allow the alteration of:

Speed	Traffic count	Fleet profile	Area of interest	Year
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Potential use cases:

Low emission zones	Pricing interventions	Corridor speed changes	Mode shift	Future years
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- Initially still a desktop tool
- Currently in development with delivery of Phase I at the end of March

New developments

Future (?):

- Regional transport model input
- Online

Questions

keith.hastings@jacobs.com

