Thurrock Strategic Transport Model

Tom van Vuren
Regional Director, UK and Europe

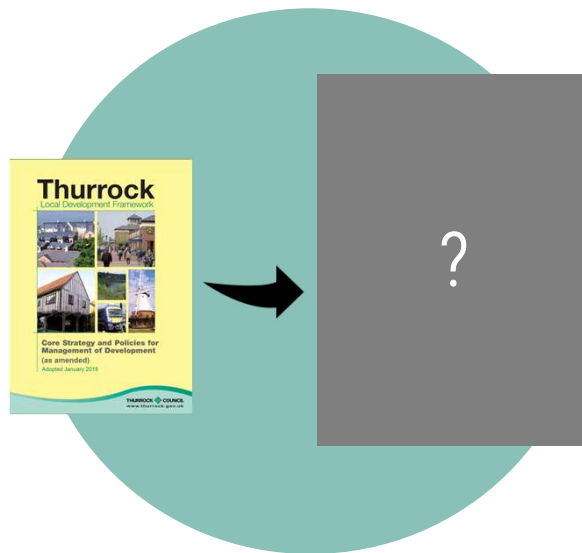Veitch Lister Consulting

thurrock.gov.uk

THURROCK STRATEGIC TRANSPORT MODEL

Local Development Plan Task Force Meeting | 26 September 2022

Tom van Vuren, Technical Director | Grace Solsby, Project Manager

Page 3

To produce **transport evidence** to inform the preparation of the Thurrock Local Plan

To support potential **business case development** for transport interventions related to the Local Plan

What is a Transport Model?

Sydney 2016 Base - Traffic
Level of Service AM Peak

	A
	B
	C
	D
	E
	F
	F*
	N/A

To estimate the **impact of future development** proposals and the **need for and effectiveness of alternative network** configurations
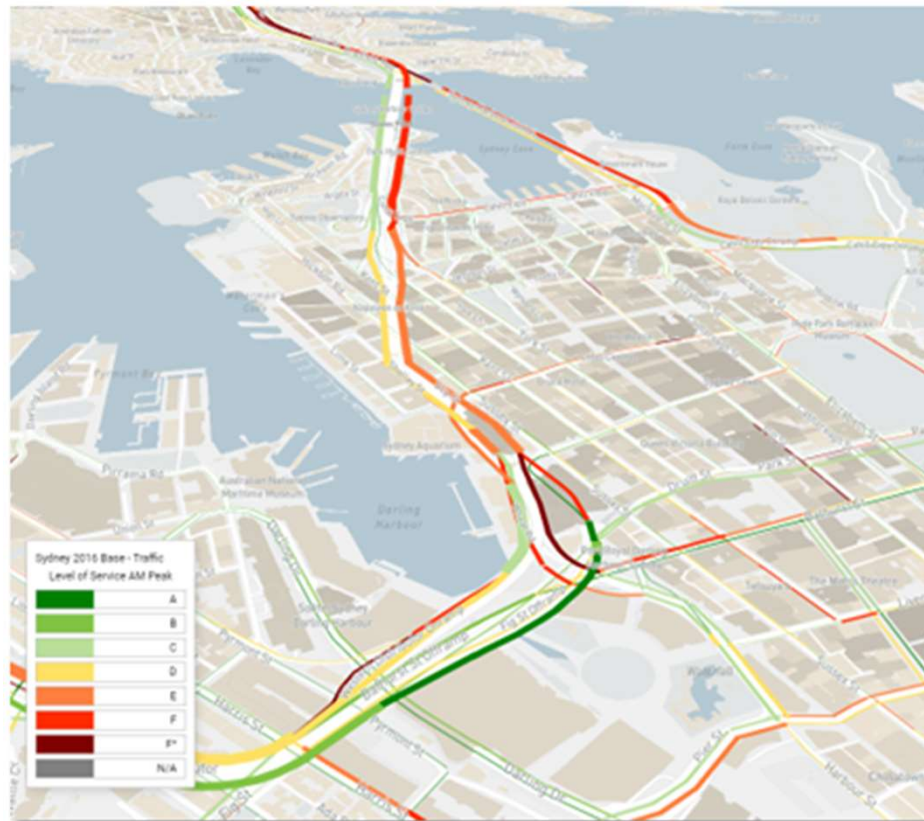
- Develop a simulation of the current travel patterns, traffic and public transport flows in Thurrock

- Estimate how future travel patterns, traffic and public transport flows will change

- Predict how new developments and new transport projects will affect these travel patterns, traffic and public transport flows

Page 5

Travel patterns within, to and from Thurrock

- Mobile phone-derived data on how people travel in Thurrock
- Census data on where people live and work
- National Travel Survey
- Travel demand data from other models in the area

Traffic and public transport flows and travel times

- Traffic counts
- Public transport counts
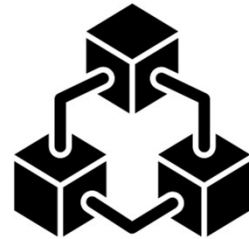- DfT journey time surveys
- Timetables

Confidential

CITY SCIENCE
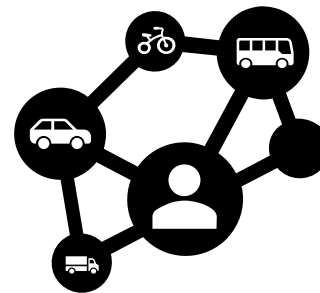delivering decarbonisation

vlc

Page 6
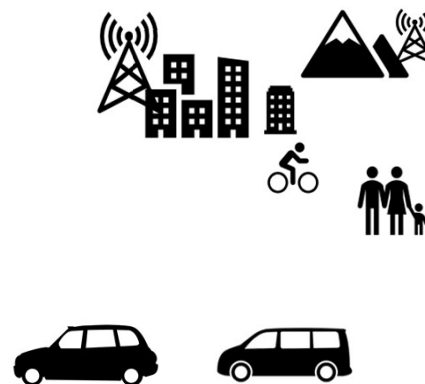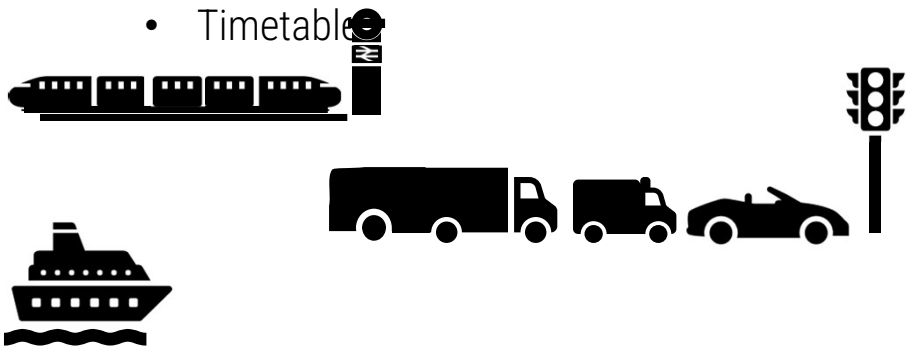
Trip generation

How many trips do people make? To reflect the impact of new housing and employment locations

Trip distribution

Where do people travel to? Allowing people to travel to new destinations, for example cross-Thames using LTC, but also to new employment opportunities

Mode choice

Which mode do they use. To reflect future shifting to or from car, dependent on congestion but also transport plans, such as better cycling facilities or more frequent buses
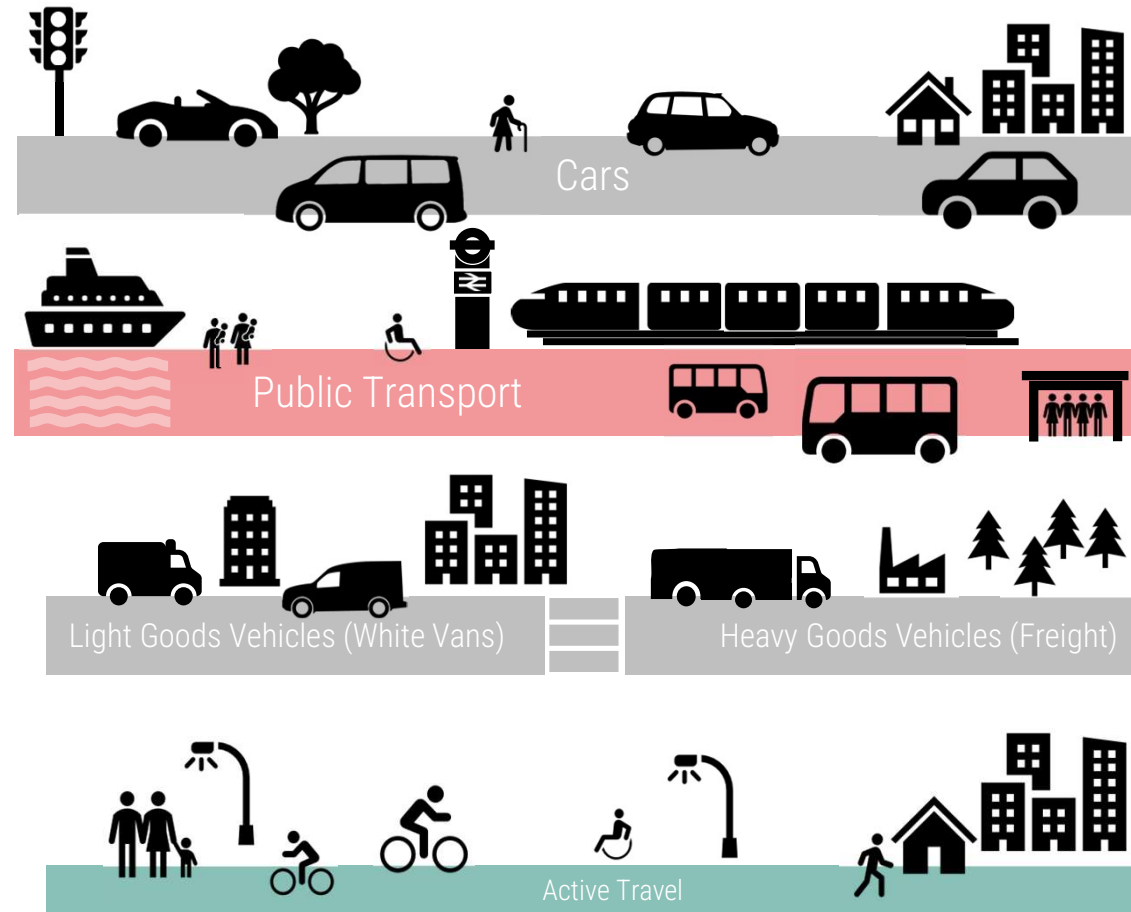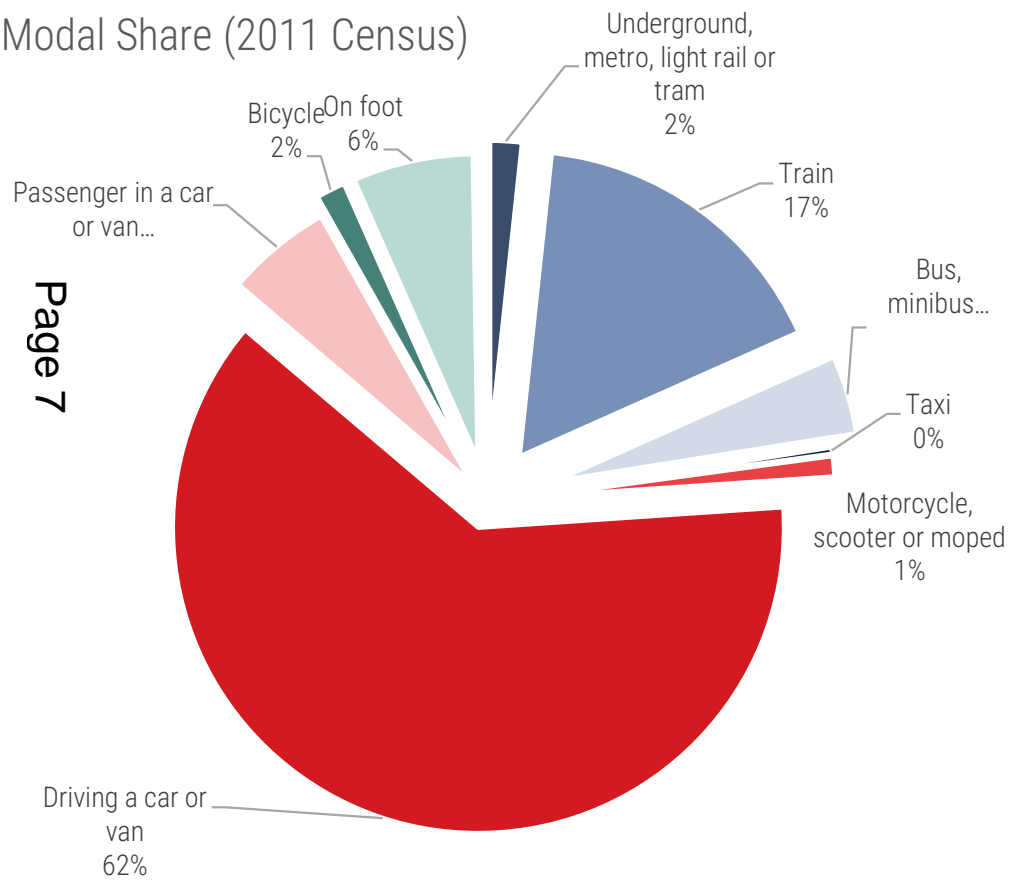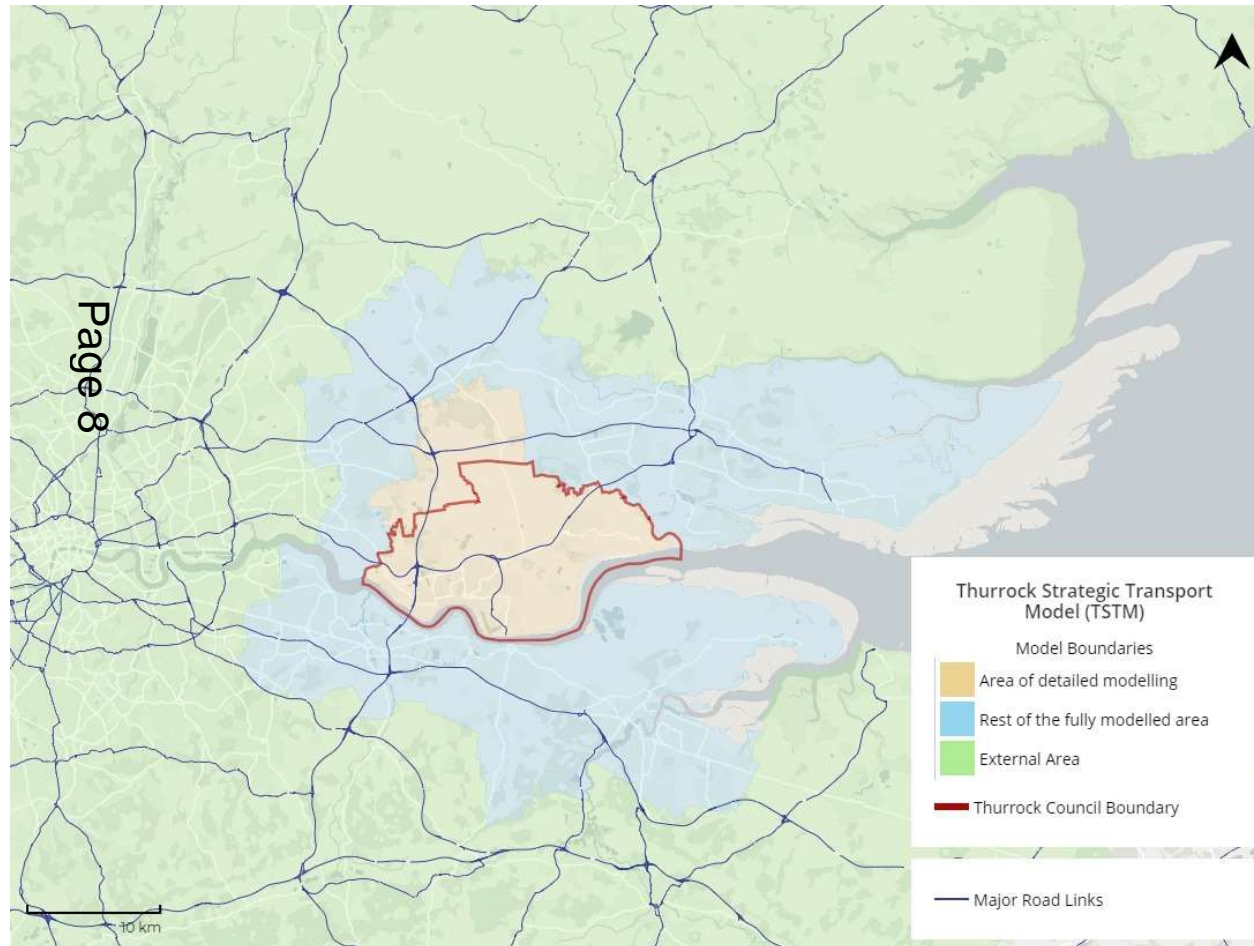
Routing

To calculate the impact on congestion of new or improved roads, but also new or improved public transport routes

Modal Share (2011 Census)

- Underground, metro, light rail or tram 2%
- Train 17%
- Bus, minibus...
- Taxi 0%
- Motorcycle, scooter or moped 1%
- Driving a car or van 62%
- Passenger in a car or van...
- Bicycle 2%
- On foot 6%

Page 7

Cars

Public Transport

Light Goods Vehicles (White Vans)

Heavy Goods Vehicles (Freight)

Active Travel

Thurrock Strategic Transport
Model (TSTM)

Model Boundaries

- Area of detailed modelling
- Rest of the fully modelled area
- External Area
- Thurrock Council Boundary

— Major Road Links

What time periods are covered?

Base Year	Forecast Years				
2019	2025	2030	2035	2040	2050

Weekday

00 AM

Off-peak
19:00 – 07:00

18 PM

06 AM

PM
16:00 – 19:00

AM
07:00 – 10:00

IP
10:00 – 16:00

12 PM

Saturday

00 AM

Off-peak
15:00 – 10:00

18 PM

06 AM

Peak
10:00 – 15:00

12 PM
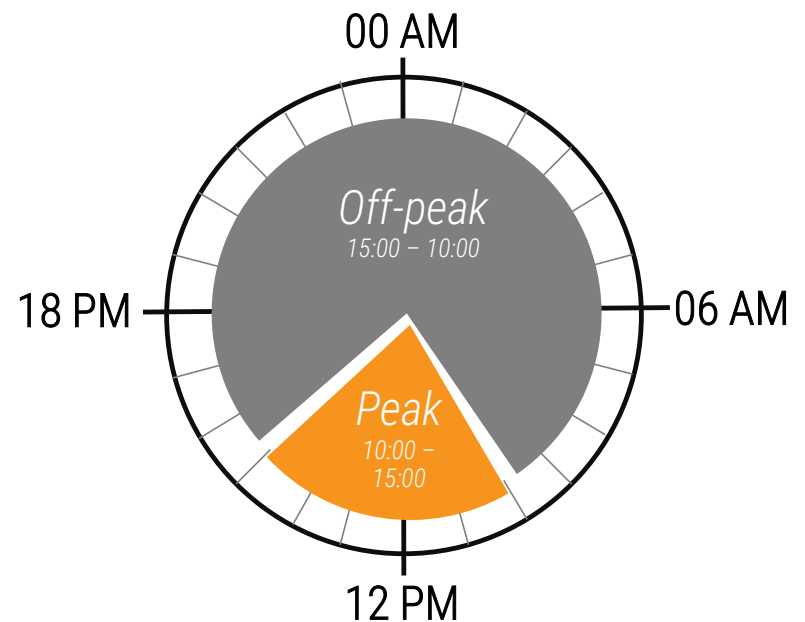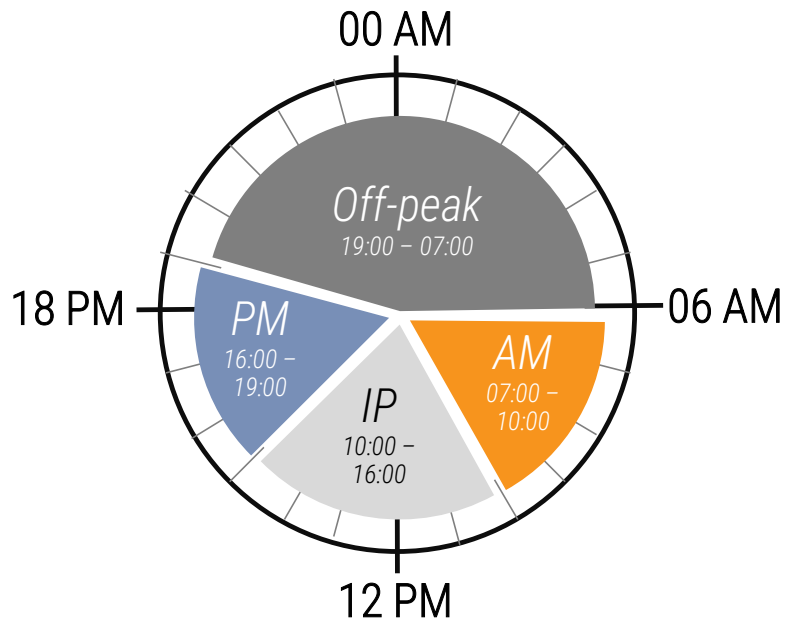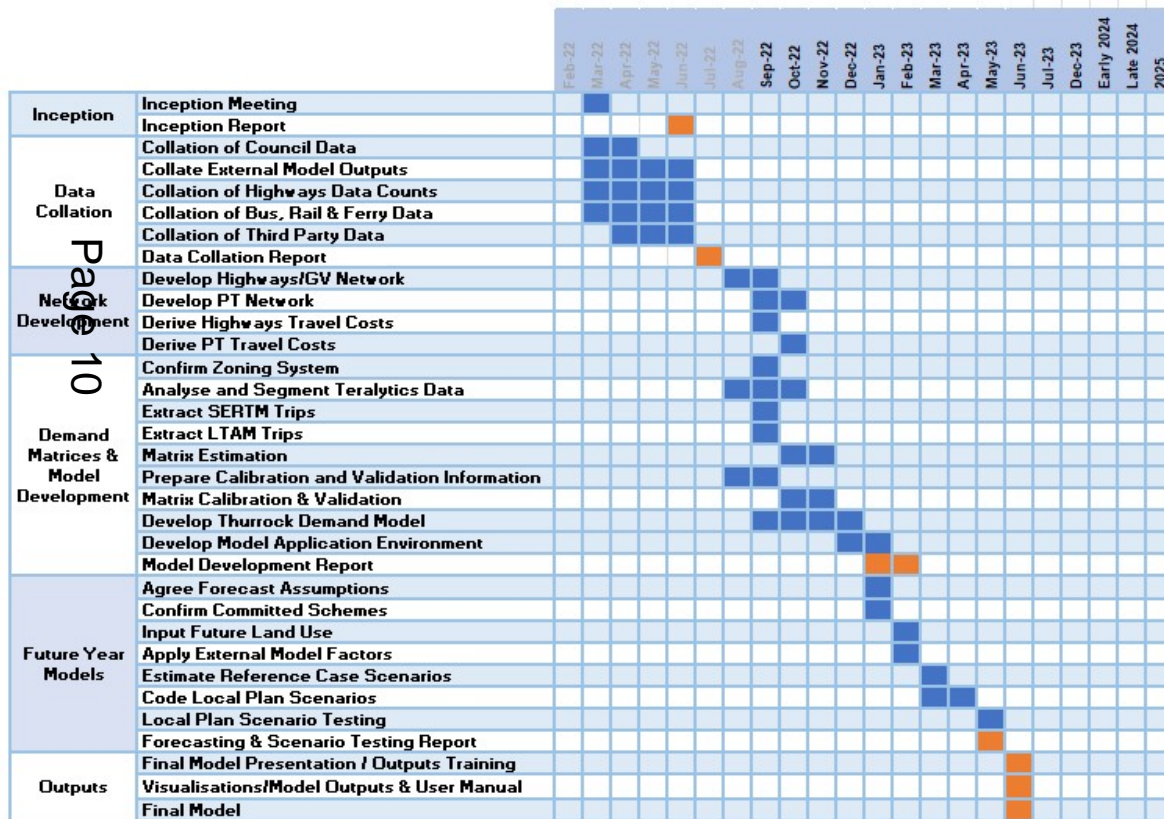
Transport Model Timeline
- Inception (Feb – Jun 2022)
- Data Collation (Feb – Jul 2022)
- Model Development (Jul 2022 – Jan 2023)
- Finalised Base Year Model (Jan 2023)
- Future Year Model Development (Jan 2023– May 2023)
- Delivery of Outputs and Visualisation Tool (Jun 2023)