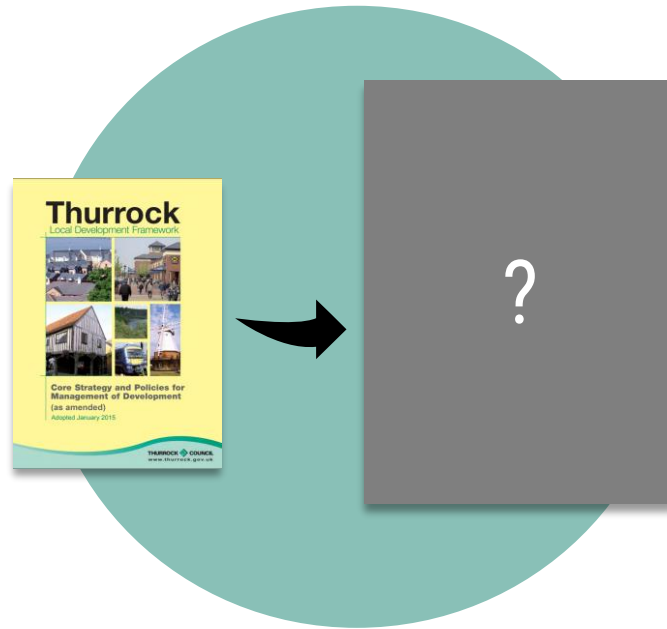


THURROCK STRATEGIC TRANSPORT MODEL

Local Development Plan Task Force Meeting | 26 July 2022
Tom van Vuren, Technical Director | Grace Solsby, Project Manager

RECORDING NOTICE: By participating in this meeting, you agree the meeting can be recorded for training and monitoring purposes for the development of the model.

Why build a Thurrock Transport Model?



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?



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

What data informs the Transport Model?

Travel patterns within, to and from Thurrock

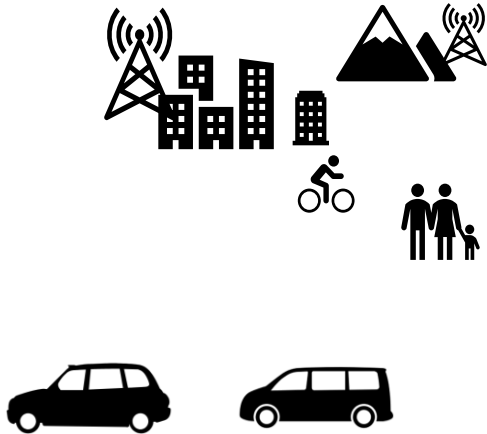
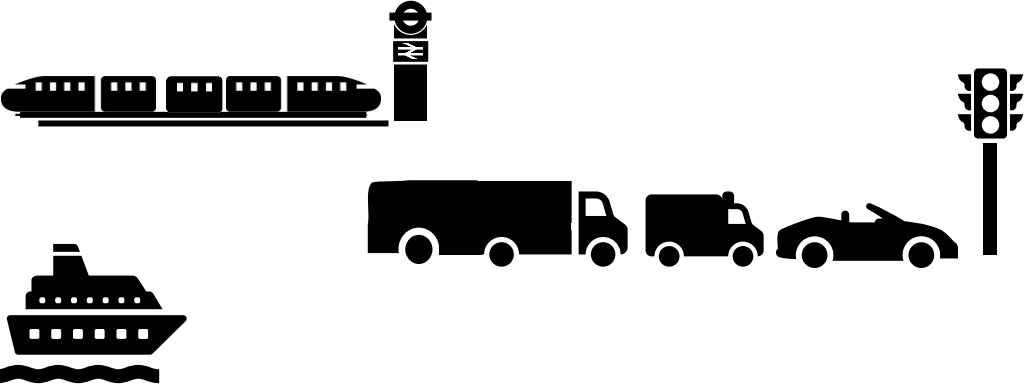
- Mobile phone-derived data on how people travel in Thurrock
- Census data on where people live and work
- National Travel Survey
- Travel demand data from other models in the area



Traffic and public transport flows and travel times

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

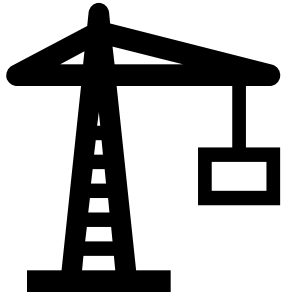
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Confidential

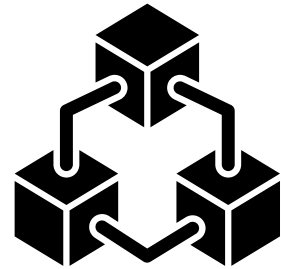


How does the model reflect travel decisions?



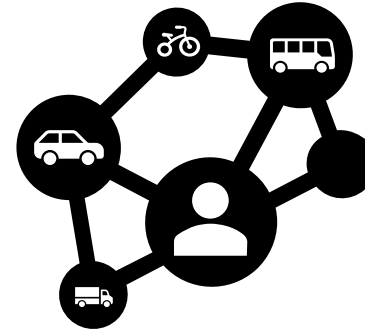
Trip generation

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



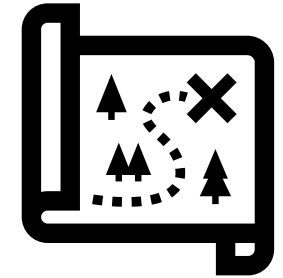
Trip distribution

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

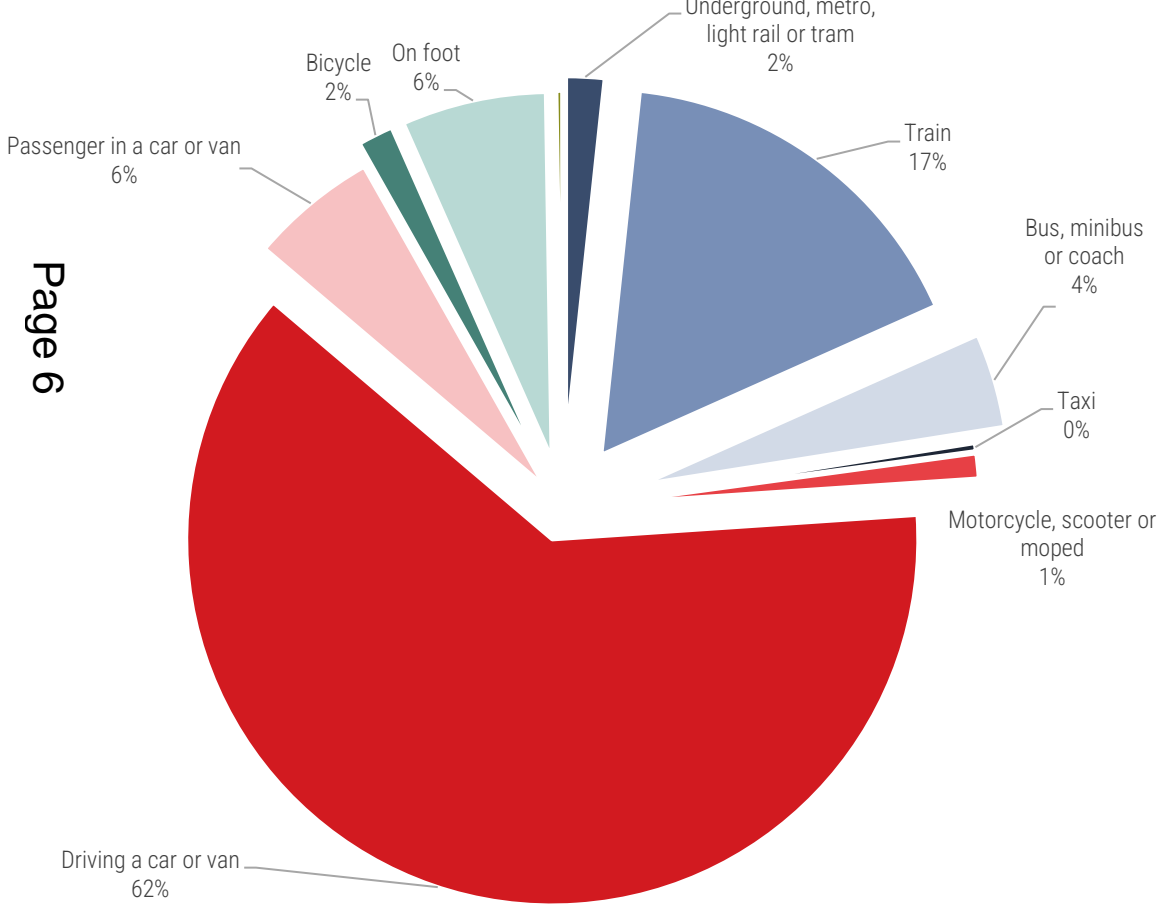


Routing

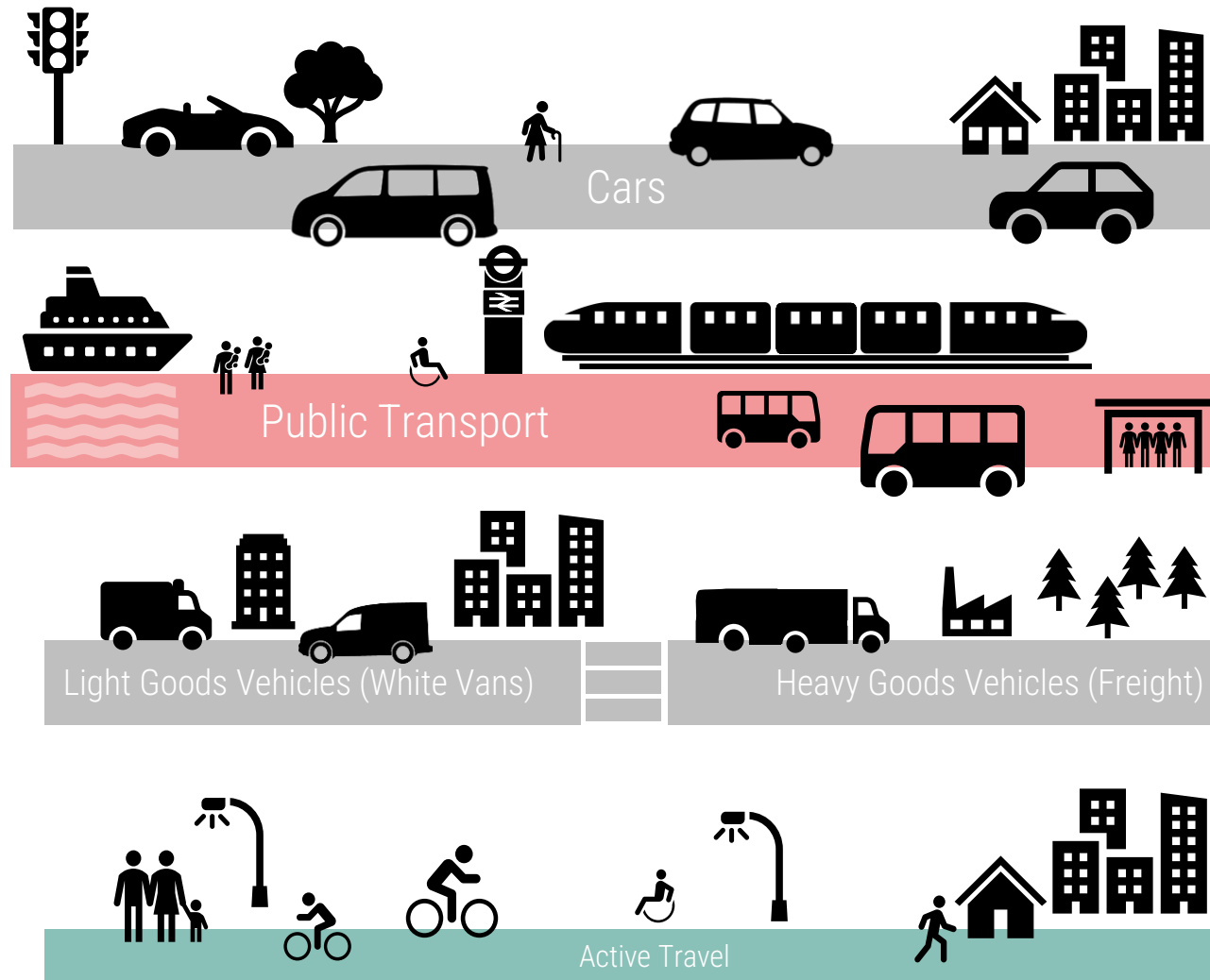
To calculate the impact on congestion of new or improved roads, but also new or improved public transport routes

What travel modes are included?

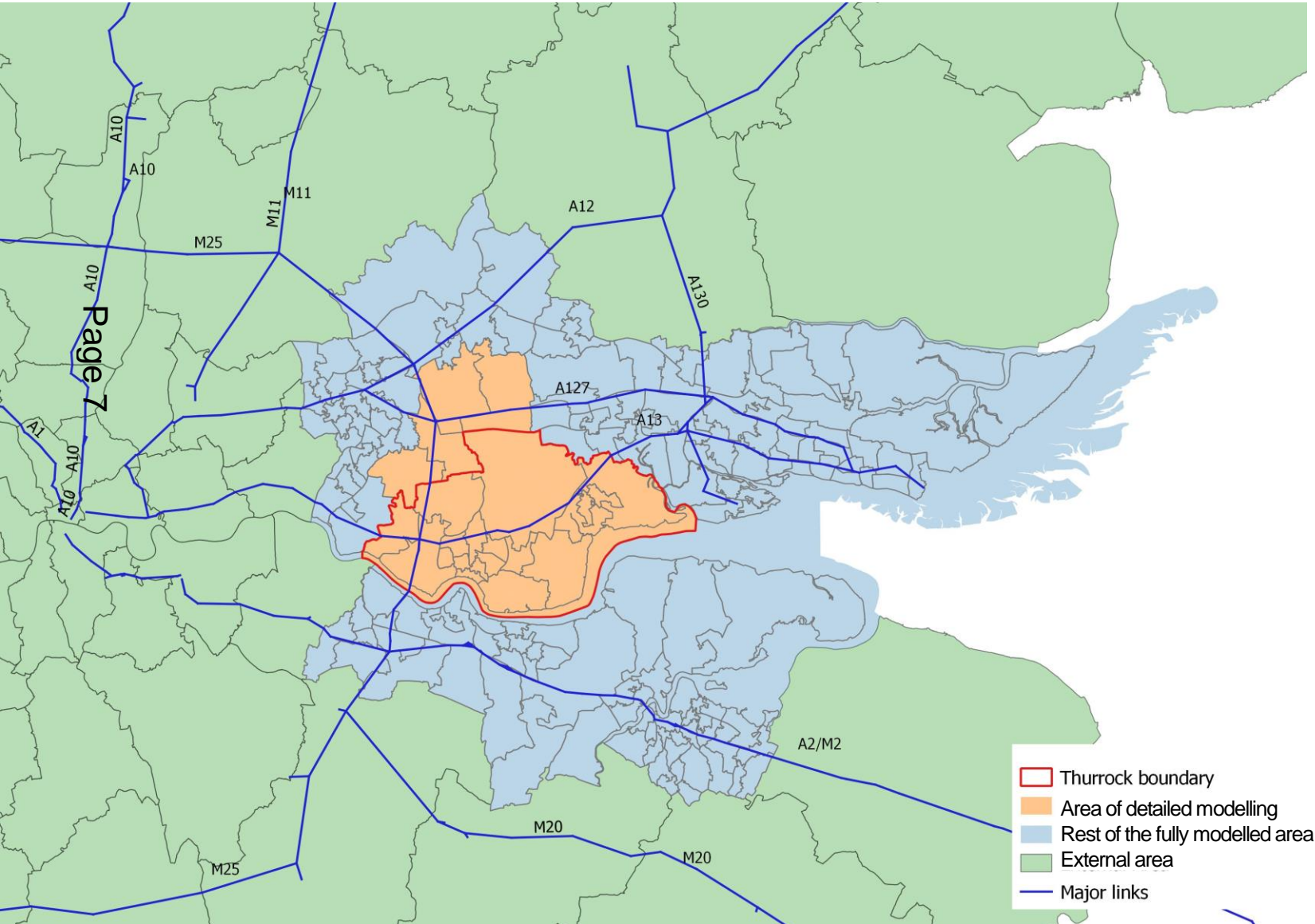
Modal Share (2011 Census)



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What area is covered?



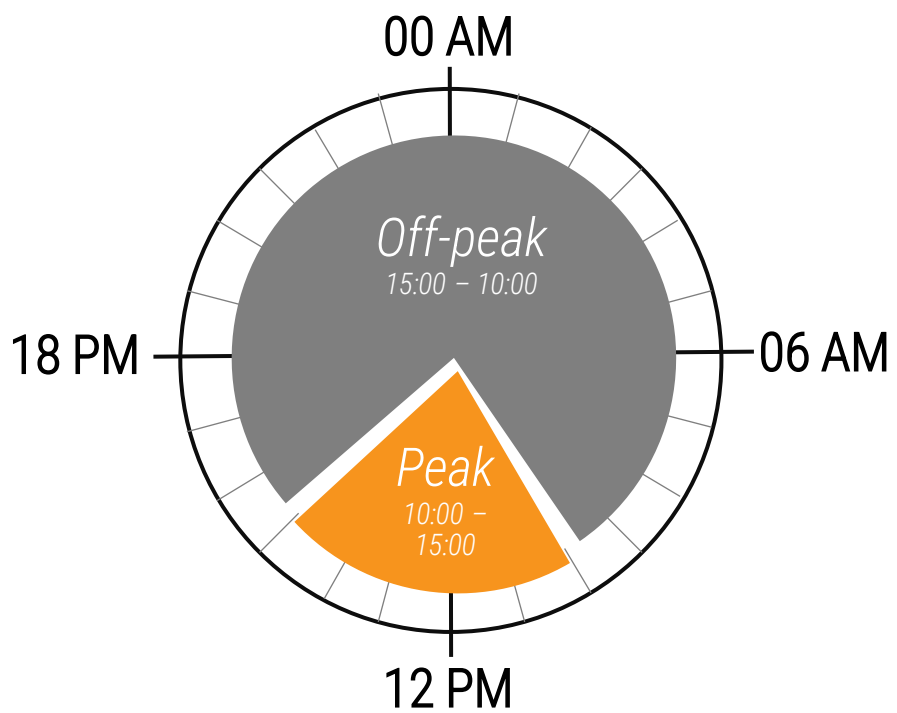
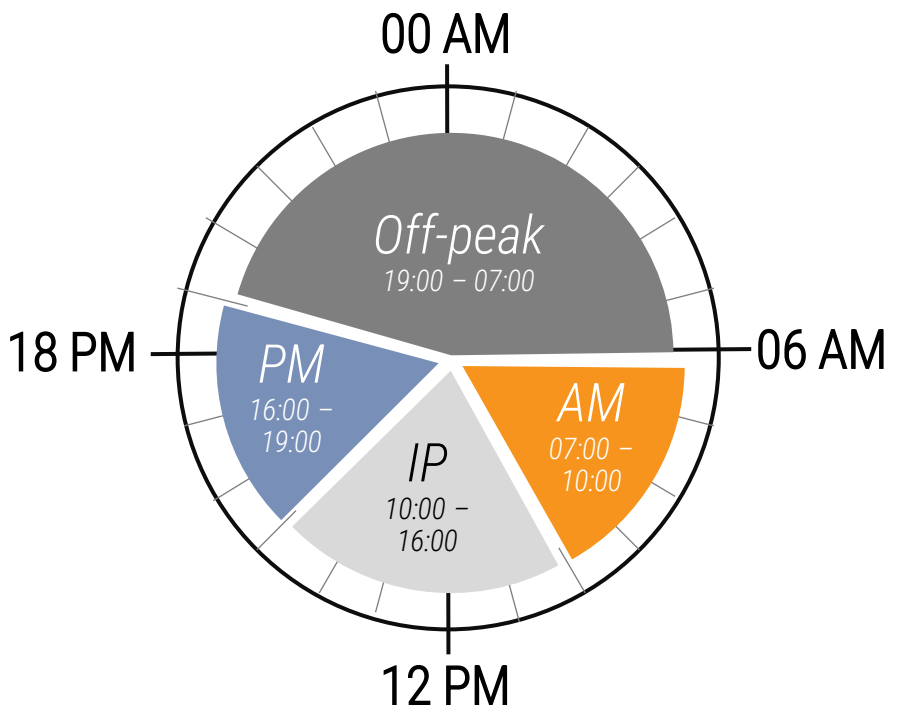
What time periods are covered?



Weekday

Saturday

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Current Timetable

		Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Dec-23	Early 2024	Late 2024	2025	
Inception	Inception Meeting																							
	Inception Report																							
Data Collation	Collation of Council Data																							
	Collate External Model Outputs																							
	Collation of Highways Data Counts																							
	Collation of Bus, Rail & Ferry Data																							
	Collation of Third Party Data																							
	Data Collation Report																							
Network Development	Develop Highways/GV Network																							
	Develop PT Network																							
	Derive Highways Travel Costs																							
	Derive PT Travel Costs																							
Demand Matrices & Model Development	Confirm Zoning System																							
	Analyse and Segment Teralytics Data																							
	Extract SERTM Trips																							
	Extract LTAM Trips																							
	Matrix Estimation																							
	Prepare Calibration and Validation Information																							
	Matrix Calibration & Validation																							
	Develop Thurrock Demand Model																							
Develop Model Application Environment																								
Model Development Report																								
Future Year Models	Agree Forecast Assumptions																							
	Confirm Committed Schemes																							
	Input Future Land Use																							
	Apply External Model Factors																							
	Estimate Reference Case Scenarios																							
	Code Local Plan Scenarios																							
Outputs	Local Plan Scenario Testing																							
	Forecasting & Scenario Testing Report																							
	Final Model Presentation / Outputs Training																							
	Visualisations/Model Outputs & User Manual																							
	Final Model																							

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)



Thank You