



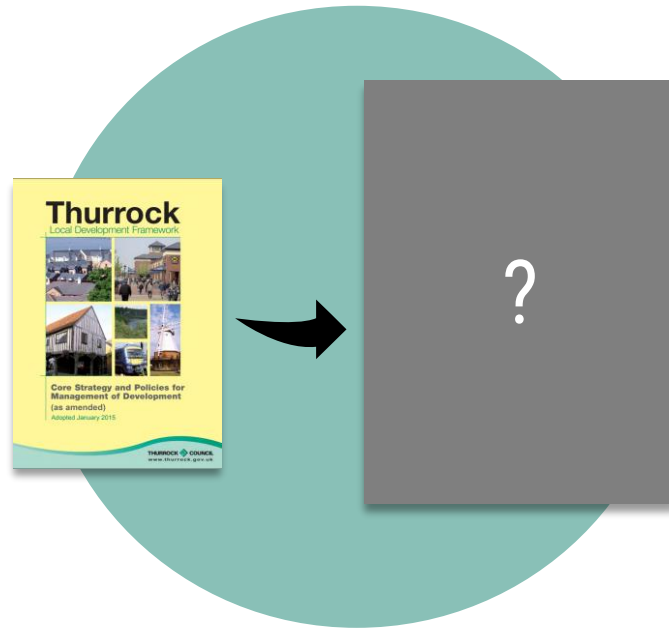
THURROCK STRATEGIC TRANSPORT MODEL

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

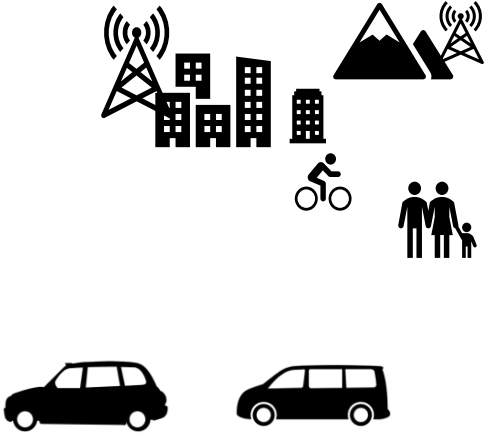
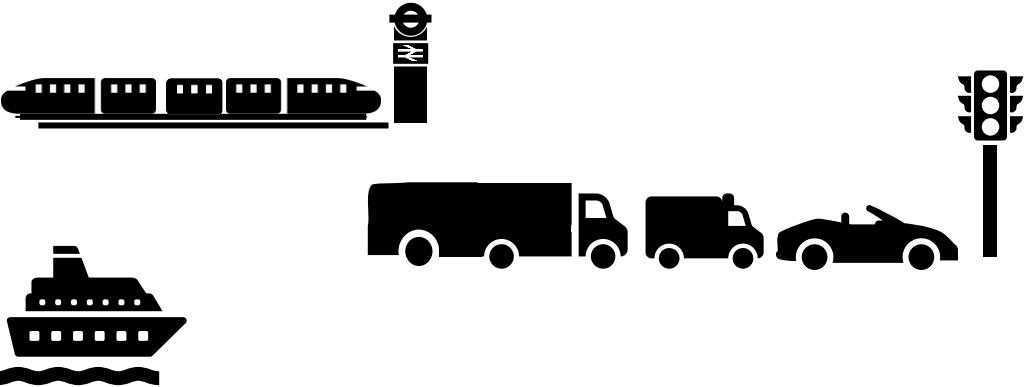
What data informs the Transport Model?

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

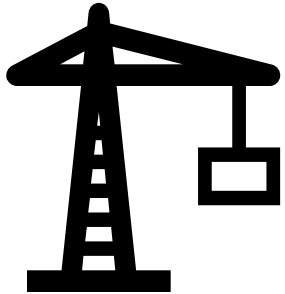
- Traffic counts
- Public transport counts
- DfT journey time surveys
- Timetables



Confidential

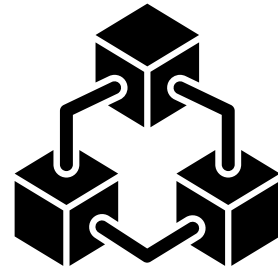


How does the model reflect travel decisions?



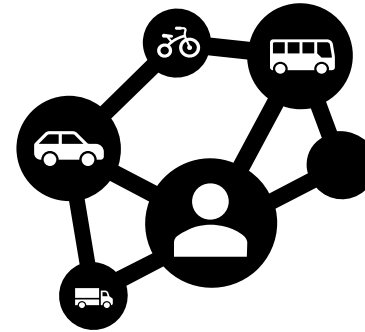
Trip generation

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



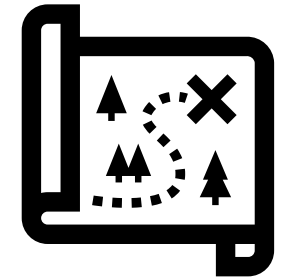
Trip distribution

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

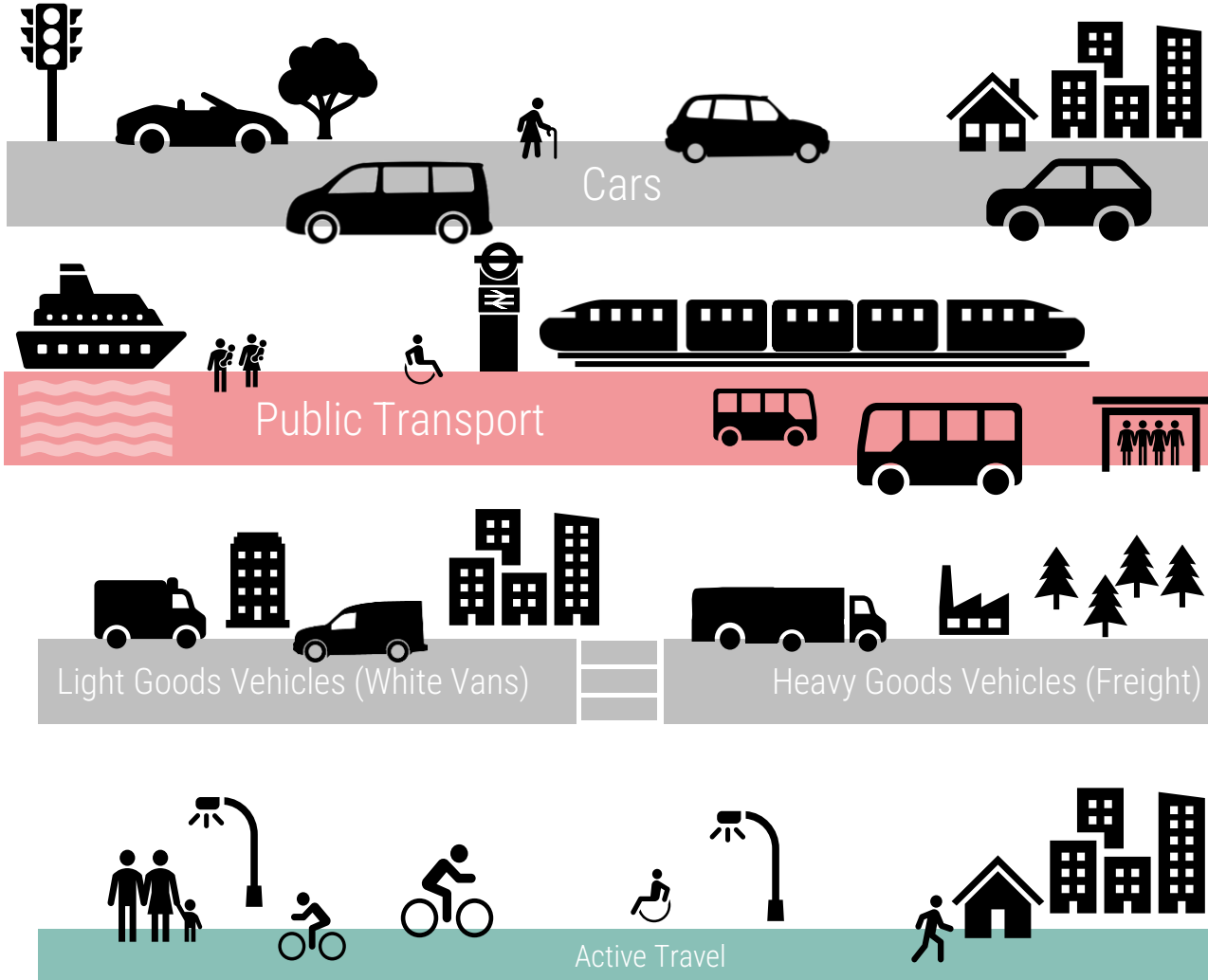
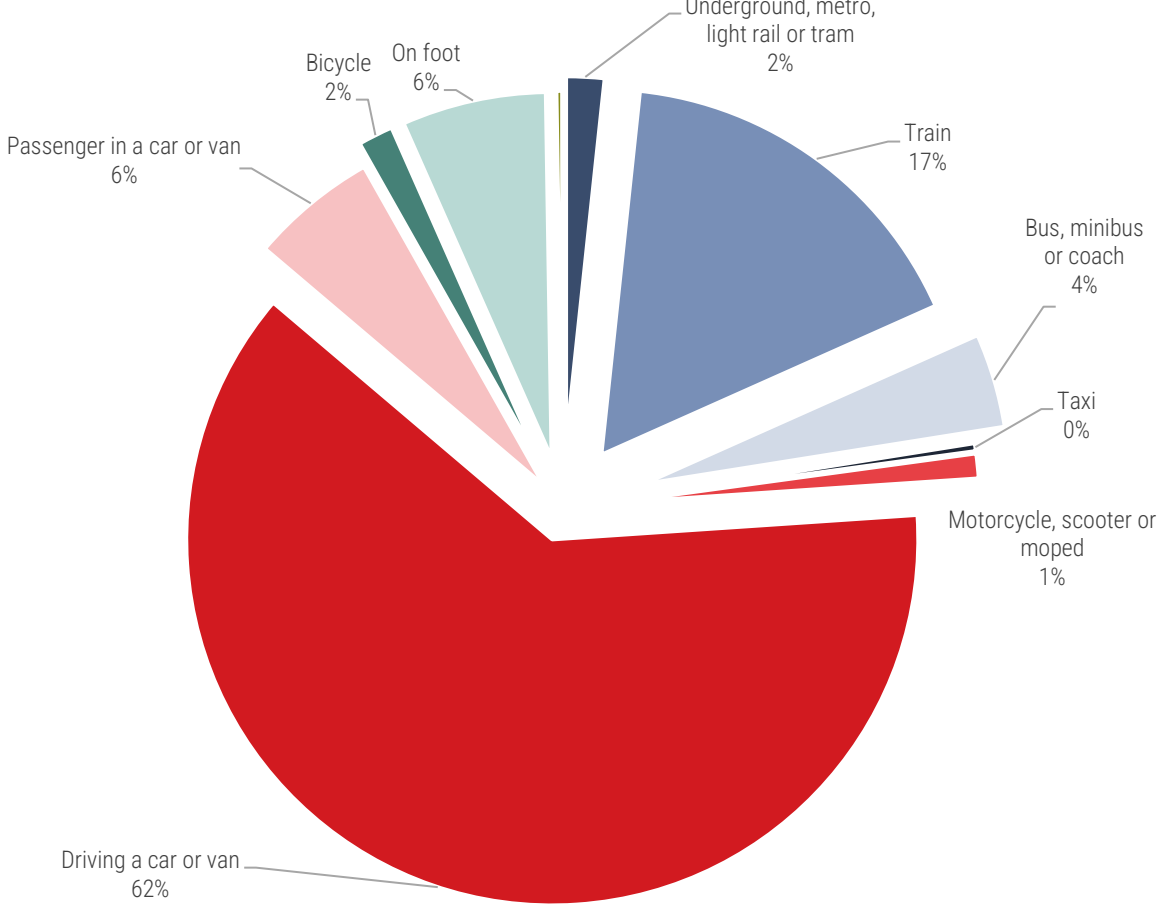


Routing

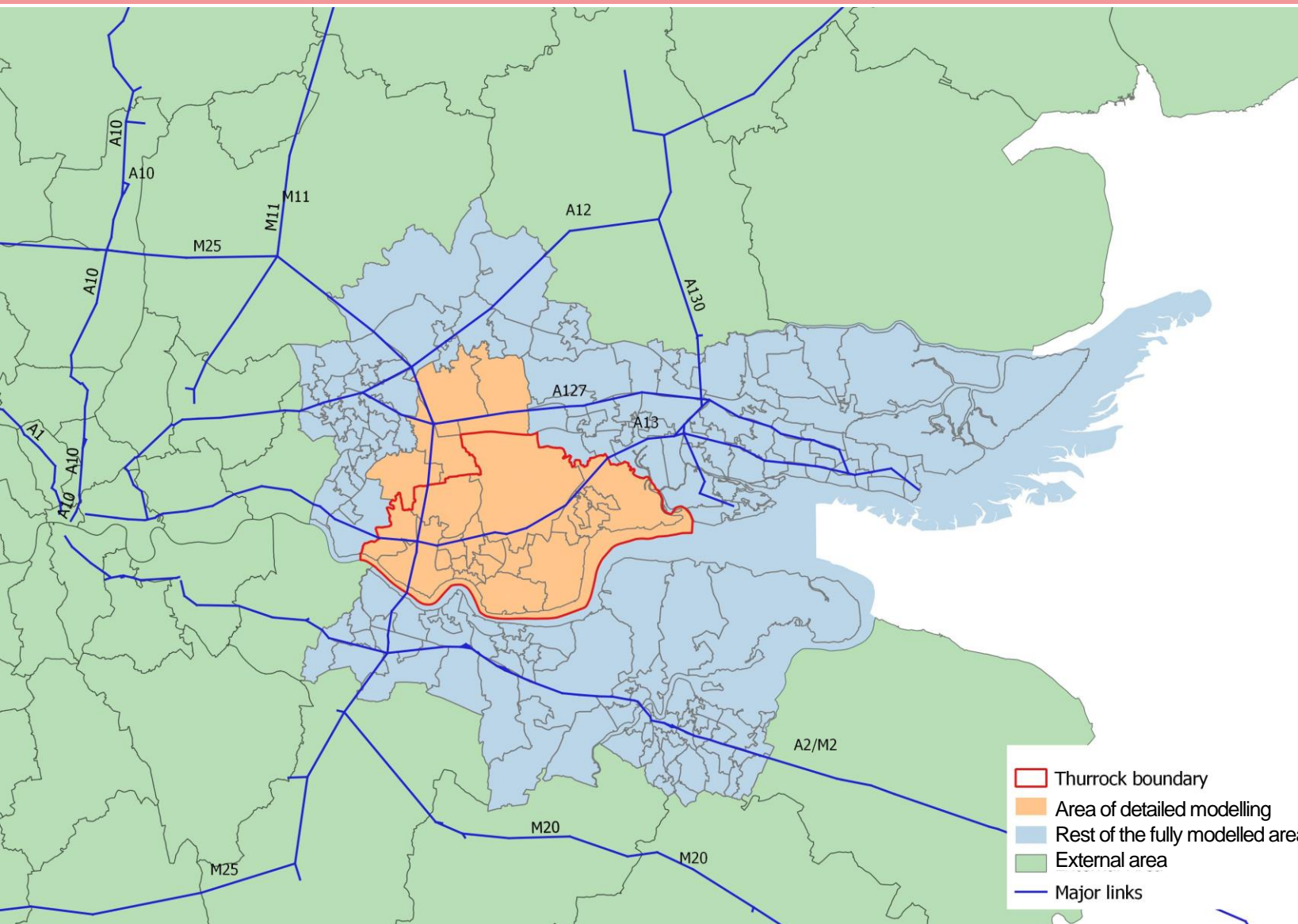
To calculate the impact on congestion of new or improved roads, but also new or improved public transport routes

What travel modes are included?

Modal Share (2011 Census)



What area is covered?



What time periods are covered?

Base Year | Forecast Years

2019

2025

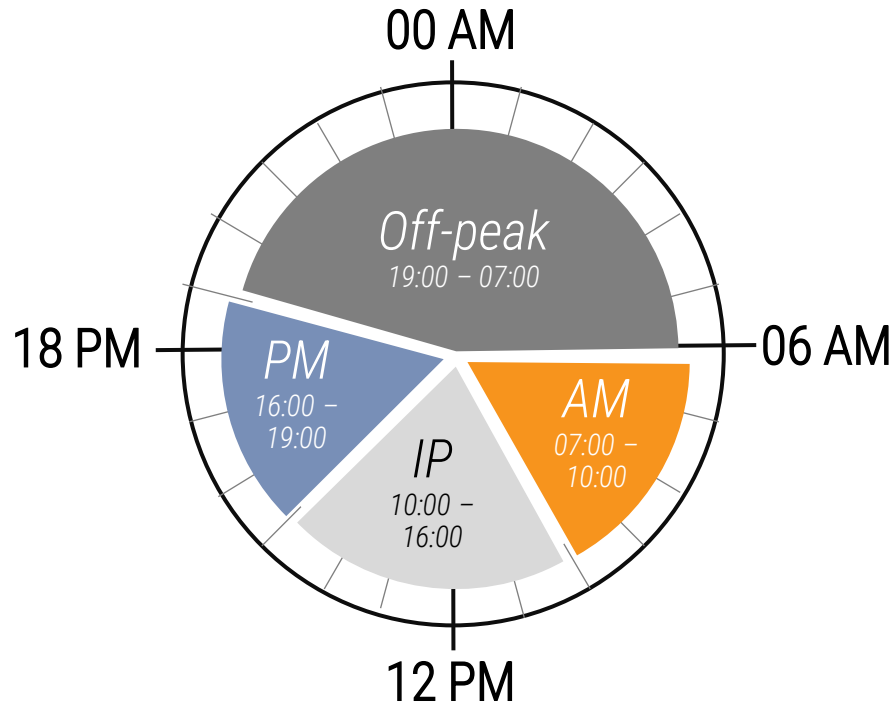
2030

2035

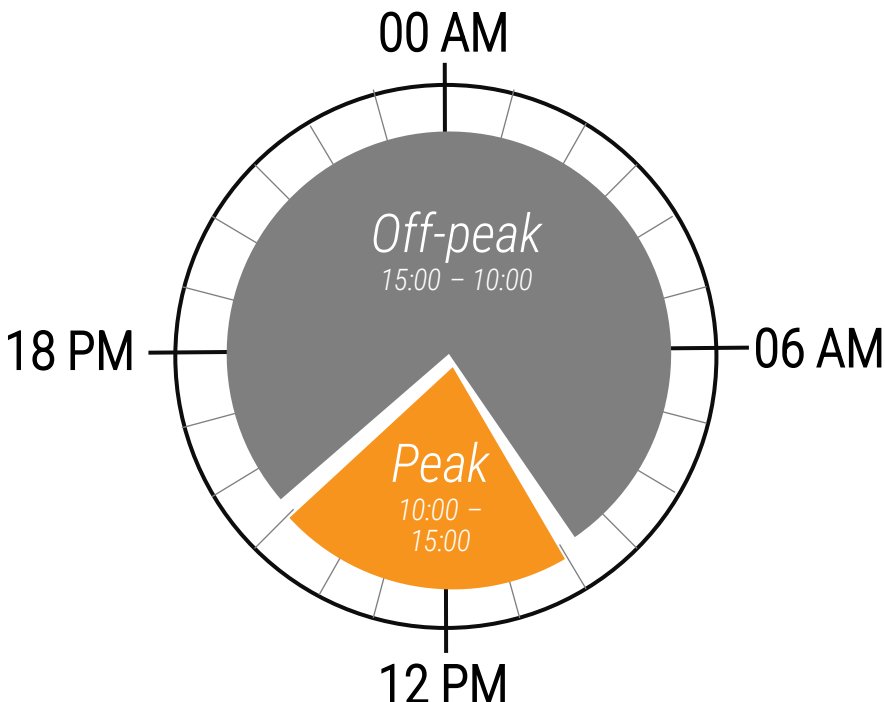
2040

2050

Weekday



Saturday



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												█	█										
Local Plan Scenario Testing														█										
Forecasting & Scenario Testing Report																█								
Outputs	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