Thurrock Strategic Transport Model

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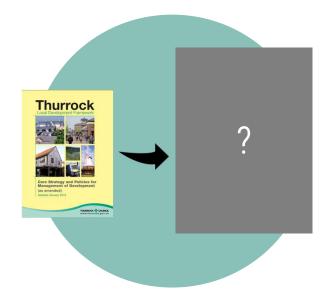


THURROCK STRATEGIC TRANSPORT MODEL

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

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

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

What data informs the Transport Model?

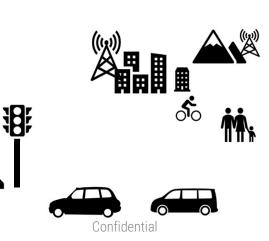


Travel patterns within, to and from Thurrock

- 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
- Timetabl









How does the model reflect travel decisions?



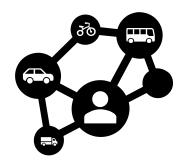


Trip generation

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

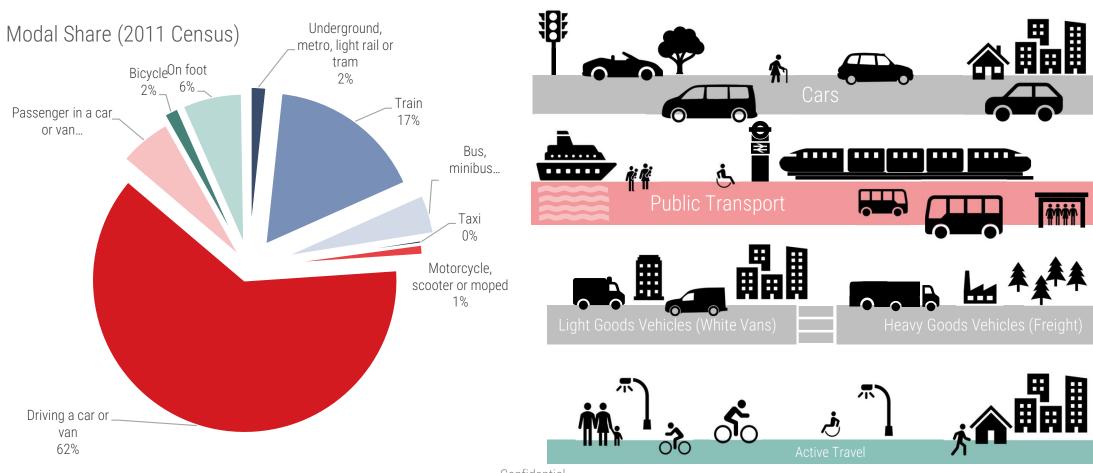


Routing

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

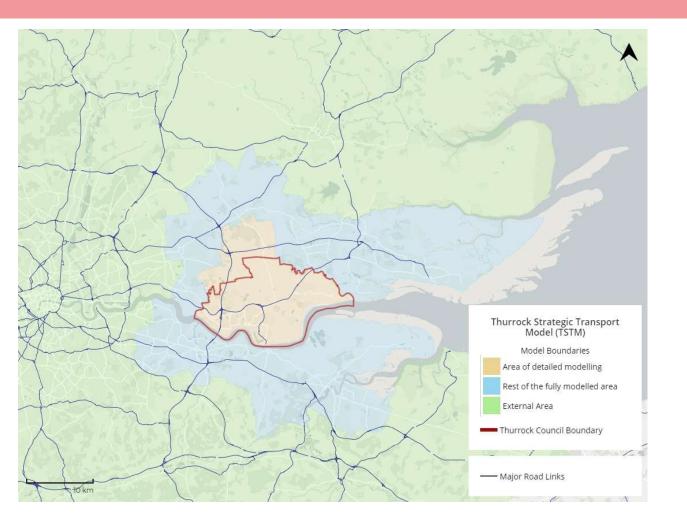
CITY SCIENCE delivering decarbonisation

What travel modes are included?



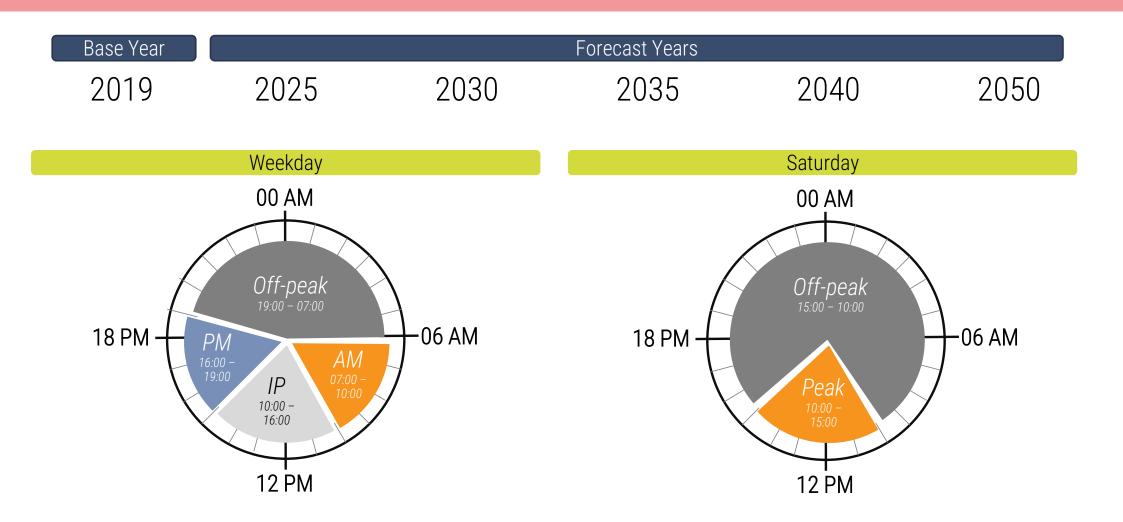
What area is covered?





What time periods are covered?





Current Timetable



						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 Meeting																			
Inception	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	1.																		
	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			1											1			1	1	
	Estimate Reference Case Scenarios																			
	Code Local Plan Scenarios																			
	Local Plan Scenario Testing																			
	Forecasting & Scenario Testing Report																			
-	Final Model Presentation / Outputs Training					1								1						
Outputs	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)