T1145 model overview

An **economic model** to act as a decision support tool for **rail organisations and policymakers**, including a consideration of both economic and commercial factors to ensure that the industry can make actions based on the **costs and benefits** associated with both the economic and commercial viability of the traction decarbonisation options, for **passenger** and **freight** services.

This will be a **simple, configurable tool**, which is in line with **Web-TAG**.
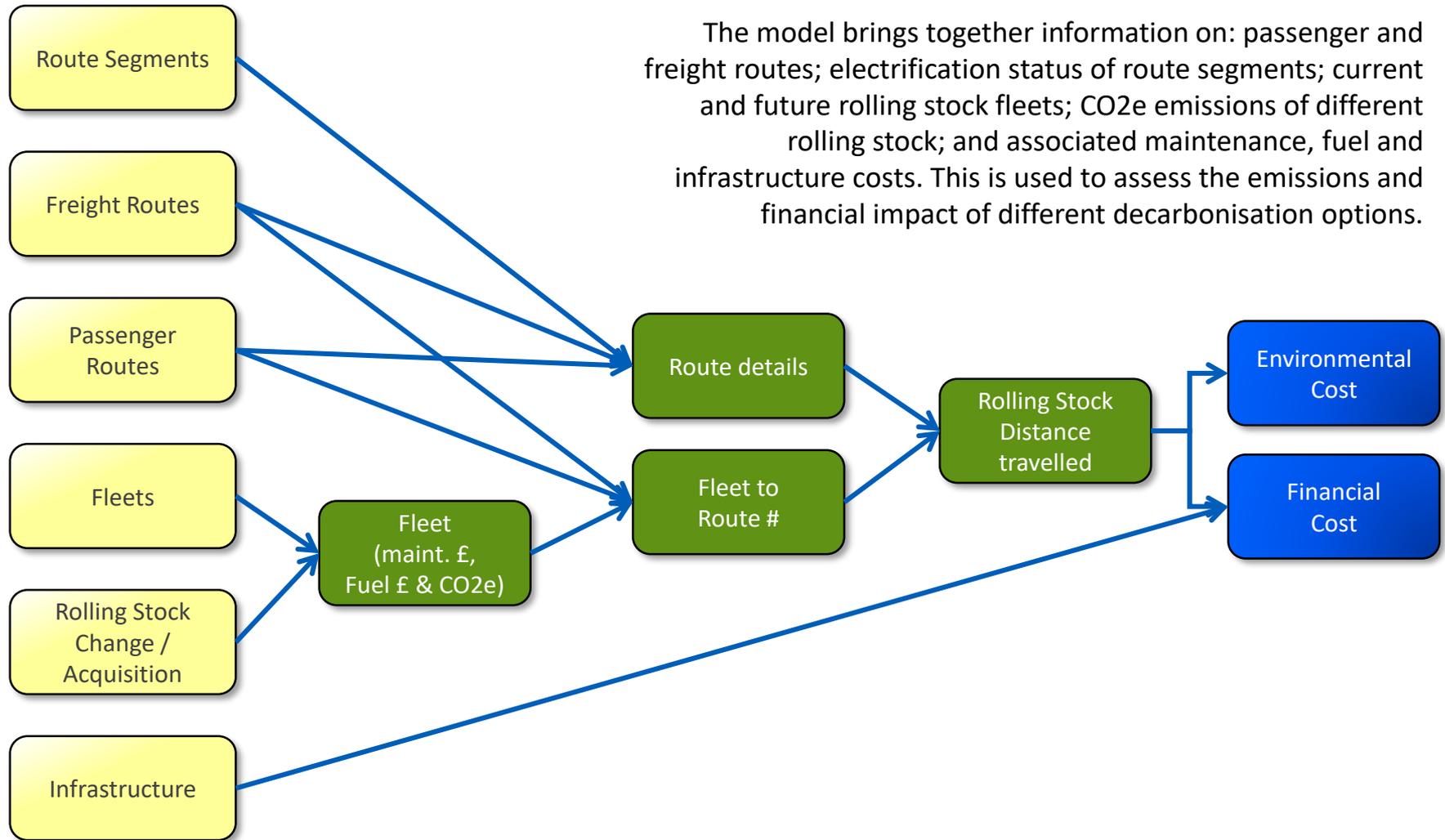
T1145 model overview

What it is:

- A tool for **high-level** economic analysis of the different potential decarbonisation schemes generated by WP2.1 of T1145

- A model to assess the financial and emissions impact of each scheme over a suitably lengthy appraisal period

- A model with the ability to explore different pathways by changing input parameters

- A representation of a large number of GB passenger and freight services

- An user-friendly model supported by guidance documentation

What it isn't:

- A detailed model of the entire rail network

- A tool to enable optimisation of decarbonisation options against target CO_2e goals

T1145 model overview

The model brings together information on: passenger and freight routes; electrification status of route segments; current and future rolling stock fleets; CO_2e emissions of different rolling stock; and associated maintenance, fuel and infrastructure costs. This is used to assess the emissions and financial impact of different decarbonisation options.

Route Segments

Freight Routes

Passenger Routes

Fleets

Rolling Stock Change / Acquisition

Infrastructure

Route details

Fleet to Route #

Fleet (maint. £, Fuel £ & CO_2e)

Rolling Stock Distance travelled

Environmental Cost

Financial Cost