

By vehicle type & drive type
Stocks
Mileage
Occupancy/load

Model parts:
Transport data system
3 Times = Activity (passenger km) \rightarrow (times efficiency)
 \downarrow
energy

Supply side fuel share: % of total use in all oil use (input).

Vehicle sales share: % of transport type, the % of new activity that is satisfied by new stocks of that vehicle/drive (eg. BEV car) (input).

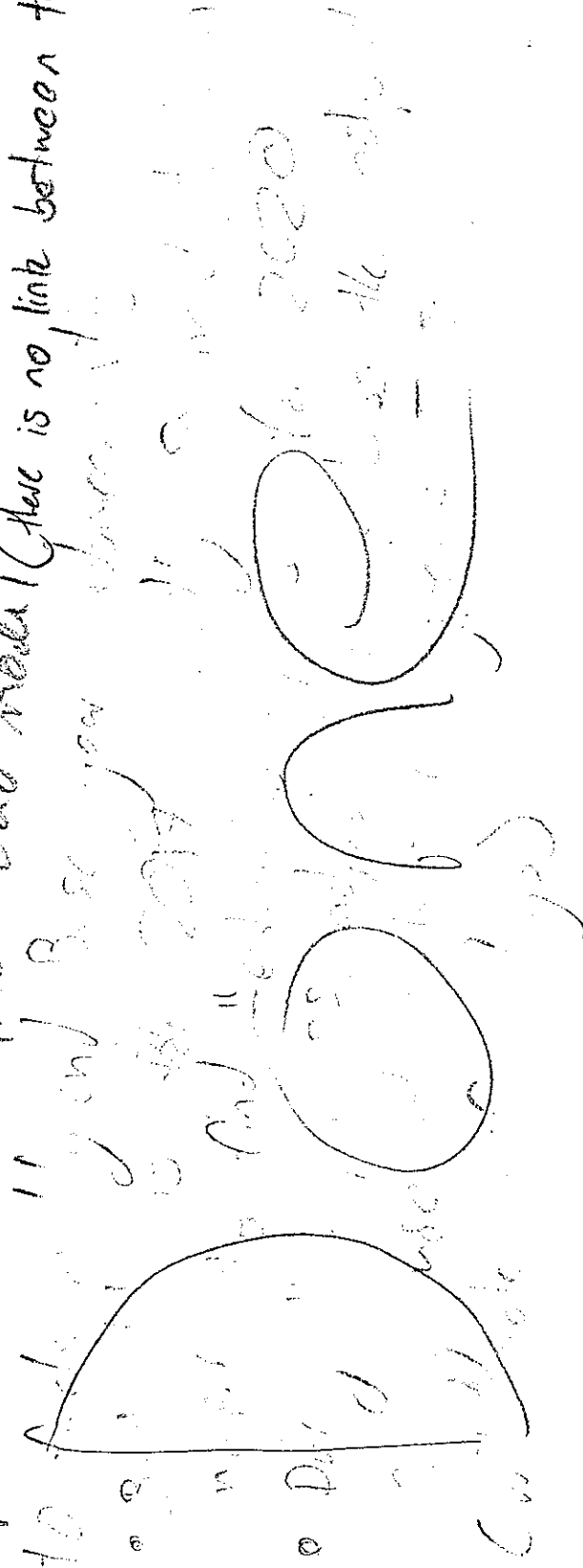
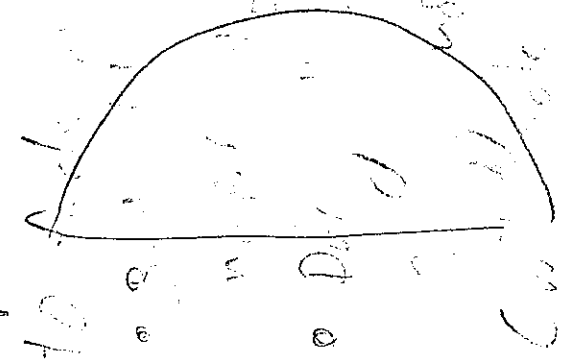
Vehicle turnover rate: using average age of vehicles in Base year estimate turnover rate. Each year vehicles get older, but also new vehicles may be bought. \therefore function is an exponential (curve $\frac{y}{x}$).

Activity growth rates: Passenger growth rate is same as population growth (but affected by vehicle saturation!).
Freight growth is a % of GDP growth, loosely based on manufacturing growth & % to represent deliveries etc.

Logarithmic curves to limit max stocks per capita.

After running road model, if stocks per capita passes threshold, then adjust activity growth so this doesn't happen. Growth should slowly decrease until saturation is reached.

* Incorporate new road into road model (there is no link between their activity)
To do: * Estimate Base year when the road is built



* Clean code up

- * few months rush with making additions without keeping system clean has had an effect.
- * Will help make it more useable and find any potential issues.

* Continue adding better input data.

- * Most economies will need a day to find better ratios for vehicle types.

* Keep improving assumptions.