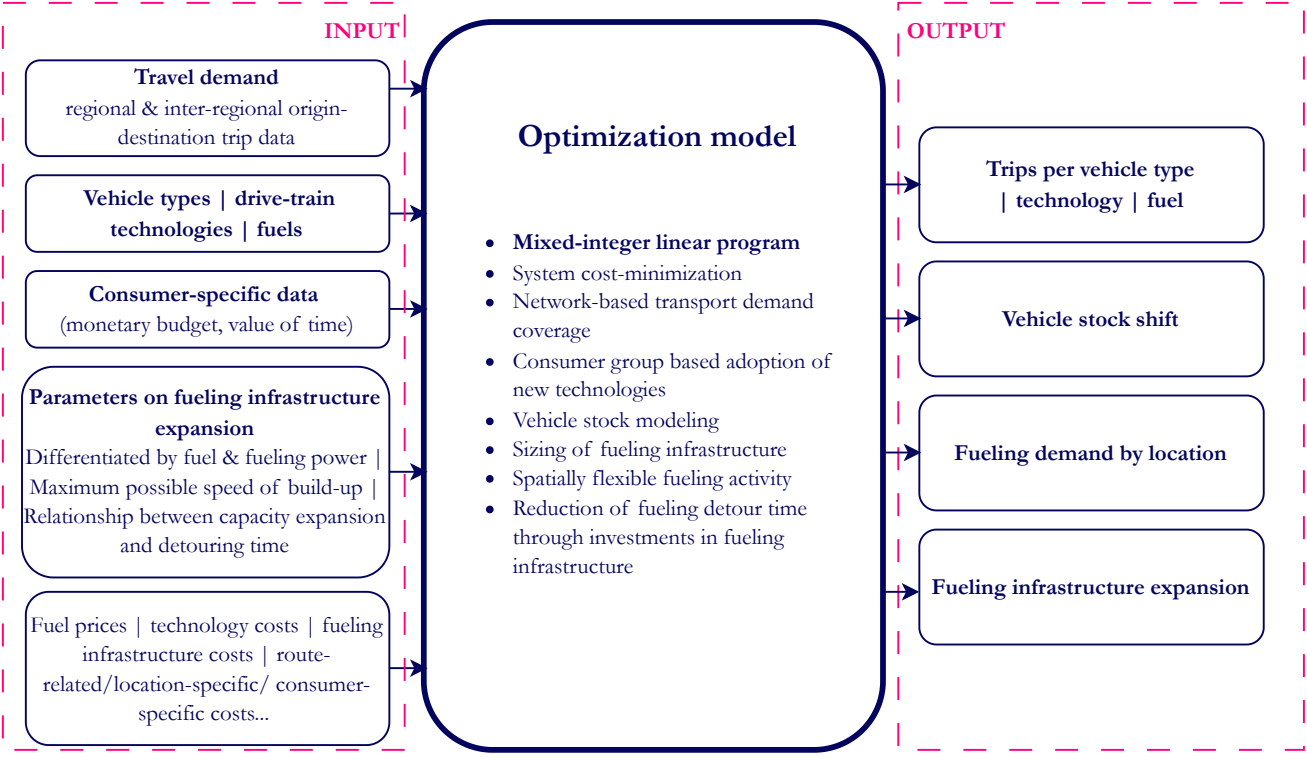
INPUT
Travel demand
regional & inter-regional origin-destination trip data
Vehicle types | drive-train technologies | fuels
Consumer-specific data
(monetary budget, value of time)
Parameters on fueling infrastructure expansion
Differentiated by fuel & fueling power | Maximum possible speed of build-up | Relationship between capacity expansion and detouring time
Fuel prices | technology costs | fueling infrastructure costs | route-related/location-specific/ consumer-specific costs...
Optimization model
Mixed-integer linear program
System cost-minimization
Network-based transport demand coverage
Consumer group based adoption of new technologies
Vehicle stock modeling
Sizing of fueling infrastructure
Spatially flexible fueling activity
Reduction of fueling detour time through investments in fueling infrastructure
OUTPUT
Trips per vehicle type | technology | fuel
Vehicle stock shift
Fueling demand by location
Fueling infrastructure expansion