Discrete Optimisation Project Documentation

# Info

For complex constraints a line explaining what the constraint is controlling should be placed above. *[An additional detailed note about how exactly if works can be placed above the constraint in square brackets and italics if needed, keep this to a minimum]*

# Notes

* Currently the time to travel down an arc doesn’t consider the mode of transportation. This will need to be integrated into the model later
* The commodities that a person must track are:
  + Time, money, number of times changed public transportation, spending costs, current mode of transportation

# Assumptions

# Indexes

# Independent Variables

# Semi-Dependant Variables

***These are the variables that are technically dependant variables but are modelled as constrained independent variables***

# Dependent Variables

***This section is saved for any variable which are fully dependant on other variables, this is generally used if various variables need to be consolidated into a single figure i.e. the sum of costs. Please note that when using these variables the developer needs to be careful not to make any illegal calculations this new variable***

# Constants

# Constraints

Flow is directional, multi-medium, multi-flow (person)

*[the entries/exits from a node j, needs to be larger one if there is a task at the node or if it is the home node of the person (h) (Boolean values)]*

This controls the time (w) which the task at I starts

This controls that tasks happen within their designated time windows