Below is a formulation of the internal depot transportation problem. This is a robust formulation, and as such, this formulation will provide a feasible solution even in the worst-case scenario. We assume that we can garner some data about the maximum weight and volume of each item

Sets

I	set of Items

Parameters

w_i^{max}	$i \in I$	max weight of item i
v_i^{max}	$i \in I$	max volume of item i
p_i	$i \in I$	profit gained from item i
V		volume capacity of vehicle
W		weight capacity of vehicle
L		item capacity of vehicle

Variables

$x_i \geq 0$	$i \in I$	quantity of good i allotted to the vehicle

Objective

$$\max \quad \sum_{i \in I} p_i x_i \tag{1}$$

Constraints

$$\sum_{i \in I} w_i^{max} x_i \leq W \tag{2}$$

$$\sum_{i \in I} v_i^{max} x_i \leq V \tag{3}$$

$$\sum_{i \in I} x_i \leq L \tag{4}$$

Since there are no constraints enforcing a minimum number of items on a vehicle, this formulation is always feasible, and hence robust.