"Input – Facility Data L1-L30.xlsx"

Candidate Primary Facility (Warehouse) Data

Column	Description
A	User specified vertex id
B, C	x,y coordinates
D-M	Overall inventory capacity of combined products for periods t1 to t10
N-P	Initial open capacity level for products g0 to g2
Q-S	Initial existing capacity level for products g0 to g2
T-V	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t1
W-Y	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t2
Z-AB	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t3
AC-AE	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t4
AF-AH	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t5
AI-AK	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t6
AL-AN	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t7
AO-AQ	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t8
AR-AT	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t9
AU-AW	Unit transport cost from plant to warehouse for products g0, g1, g2 in period t10
AX-AZ	Unit ordering cost for products g0, g1, g2 in period t1
BA-BC	Unit ordering cost for products g0, g1, g2 in period t2
BD-BF	Unit ordering cost for products g0, g1, g2 in period t3
BG-BI	Unit ordering cost for products g0, g1, g2 in period t4
BJ-BL	Unit ordering cost for products g0, g1, g2 in period t5
BM-BO	Unit ordering cost for products g0, g1, g2 in period t6
BP-BR	Unit ordering cost for products g0, g1, g2 in period t7
BS-BU	Unit ordering cost for products g0, g1, g2 in period t8
BV-BX	Unit ordering cost for products g0, g1, g2 in period t9
BY-CA	Unit ordering cost for products g0, g1, g2 in period t10
CB-CD	Unit holding cost for products g0, g1, g2 in period t1
CE-CG	Unit holding cost for products g0, g1, g2 in period t2
CH-CJ	Unit holding cost for products g0, g1, g2 in period t3
CK-CM	Unit holding cost for products g0, g1, g2 in period t4
CN-CP	Unit holding cost for products g0, g1, g2 in period t5
CQ-CS	Unit holding cost for products g0, g1, g2 in period t6
CT-CV	Unit holding cost for products g0, g1, g2 in period t7
CW-CY	Unit holding cost for products g0, g1, g2 in period t8
CZ-DB	Unit holding cost for products g0, g1, g2 in period t9
DC-DE	Unit holding cost for products g0, g1, g2 in period t10
DF-DH	Unit transportation cost for products g0, g1, g2 in period t1
DI-DK	Unit transportation cost for products g0, g1, g2 in period t2
DL-DN	Unit transportation cost for products g0, g1, g2 in period t3
DO-DQ	Unit transportation cost for products g0, g1, g2 in period t4
DR-DT	Unit transportation cost for products g0, g1, g2 in period t5
DU-DW	Unit transportation cost for products g0, g1, g2 in period t6
DX-DZ	Unit transportation cost for products g0, g1, g2 in period t7
EA-EC	Unit transportation cost for products g0, g1, g2 in period t8
ED-EF	Unit transportation cost for products g0, g1, g2 in period t9
EG-EI	Unit transportation cost for products g0, g1, g2 in period t10
EJ-EL	Lead time to fulfill an incoming order for products g0, g1, g2 in period t1
EM-EO	Lead time to fulfill an incoming order for products g0, g1, g2 in period t2
EP-ER	Lead time to fulfill an incoming order for products g0, g1, g2 in period t3
ES-EU	Lead time to fulfill an incoming order for products g0, g1, g2 in period t4

EV-EX	Lead time to fulfill an incoming order for products g0, g1, g2 in period t5
EY-FA	Lead time to fulfill an incoming order for products g0, g1, g2 in period t6
FB-FD	Lead time to fulfill an incoming order for products g0, g1, g2 in period t7
FE-FG	Lead time to fulfill an incoming order for products g0, g1, g2 in period t8
FH-FJ	Lead time to fulfill an incoming order for products g0, g1, g2 in period t9
FK-FM	Lead time to fulfill an incoming order for products g0, g1, g2 in period t10
FN-FR	Maximum order quantity with open capacity levels 1, 2, 3, 4, 5 for products g0
FS-FW	Maximum order quantity with open capacity levels 1, 2, 3, 4, 5 for products g1
FX-GB	Maximum order quantity with open capacity levels 1, 2, 3, 4, 5 for products g2
GC-GG	Inventory capacity with open capacity levels 1, 2, 3, 4, 5 for products g0
GH-GL	Inventory capacity with open capacity levels 1, 2, 3, 4, 5 for products g1
GM-GQ	Inventory capacity with open capacity levels 1, 2, 3, 4, 5 for products g2
GR-HF	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
HG-HU	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
HV-IJ	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
IK-IY	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
IZ-JN	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
JO-KC	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
KD-KR	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
KS-LG	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
LH-LV	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
LW-MK	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
ML-MZ	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
NA-NO	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t2
NP-OD	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t3
OE-OS	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t4
OT-PH	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t5
PI-PW	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t6
PX-QL	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t7
QM-RA	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t8
RB-RP	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t9
RQ-SE	Operating fixed cost with open capacity levels for products 1, 2, 3, 4, 5 g0, g1, g2 in period t10
SF-ST	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
SU-TI	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
TJ-TX	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
TY-UM	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
UN-VB	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
VC-VQ	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
VR-WF	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
WG-WU	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
WV-XJ	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
XK-XY	Non-Operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
XZ-YN	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
YO-ZC	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2

ZD-ZR	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
ZS-AAG	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
AAH-AAV	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
AAW-ABK	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
ABL-ABZ	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
ACA-ACO	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
ACP-ADD	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
ADE-ADS	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
ADT-AEH	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
AEI-AEW	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
AEX-AFL	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
AFM-AGA	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
AGB-AGP	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
AGQ-AHE	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
AHF-AHT	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
AHU-AII	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
AIJ-AIX	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
AIY-AJM	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10

Candidate Secondary Facility (Consolidation Hub) Data

Column	Description
A	User specified vertex id
B, C	x,y coordinates
D-M	Overall max served daily demand of combined products for periods t1 to t10
N-P	Initial open capacity level for products g0 to g2
Q-S	Initial existing capacity level for products g0 to g2
T-X	Max served daily demand with open capacity levels 1, 2, 3, 4, 5 for products g0
Y-AC	Max served daily demand with open capacity levels 1, 2, 3, 4, 5 for products g1
AD-AH	Max served daily demand with open capacity levels 1, 2, 3, 4, 5 for products g2
AI-AK	Unit transportation cost for products g0, g1, g2 in period t1
AL-AN	Unit transportation cost for products g0, g1, g2 in period t2
AO-AQ	Unit transportation cost for products g0, g1, g2 in period t3
AR-AT	Unit transportation cost for products g0, g1, g2 in period t4
AU-AW	Unit transportation cost for products g0, g1, g2 in period t5
AX-AZ	Unit transportation cost for products g0, g1, g2 in period t6
BA-BC	Unit transportation cost for products g0, g1, g2 in period t7
BD-BF	Unit transportation cost for products g0, g1, g2 in period t8
BG-BI	Unit transportation cost for products g0, g1, g2 in period t9
BJ-BL	Unit transportation cost for products g0, g1, g2 in period t10
BM-CA	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
CB-CP	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
CQ-DE	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
DF-DT	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
DU-EI	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
EJ-EX	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
EY-FM	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
FN-GB	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8

GC-GQ	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
GR-HF	Cost for constructing capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
HG-HU	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
HV-IJ	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
IK-IY	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
IZ-JN	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
JO-KC	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
KD-KR	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
KS-LG	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
LH-LV	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
LW-MK	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
ML-MZ	Operating fixed cost with open capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
NA-NO	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
NP-OD	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
OE-OS	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
OT-PH	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
PI-PW	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
PX-QL	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
QM-RA	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
RB-RP	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
RQ-SE	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
SF-ST	Non-operating Fixed cost for maintaining close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
SU-TI	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
TJ-TX	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
TY-UM	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
UN-VB	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
VC-VQ	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
VR-WF	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
WG-WU	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
WV-XJ	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
XK-XY	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
XZ-YN	Cost to reopen capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10
YO-ZC	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t1
ZD-ZR	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t2
ZS-AAG	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t3
AAH-AAV	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t4
AAW-ABK	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t5
ABL-ABZ	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t6
ACA-ACO	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t7
ACP-ADD	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t8
ADE-ADS	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t9
ADT-AEH	Cost to temporarily close capacity levels 1, 2, 3, 4, 5 for products g0, g1, g2 in period t10