

! Keywords: Distribution / Network / Shipping / Transportation / Geographic;

MIN 20 AB2 + 50 AB3 + 70 AB4 + 52 AC2 + 55 AC3 + 57 AC4 + 12 BC2
+ 15 BC3 + 17 BC4 + 52 BD2 + 55 BD3 + 57 BD4 + 20 CD2 + 50 CD3
+ 70 CD4 ! Minimize total congestion

SUBJECT TO

2) - AB2 - AB3 - AB4 + AB = 0 !Definition of AB
3) - AC2 - AC3 - AC4 + AC = 0 ! and AC,
4) - BC2 - BC3 - BC4 + BC = 0 ! BC
5) - BD2 - BD3 - BD4 + BD = 0 ! BD
6) - CD2 - CD3 - CD4 + CD = 0 ! and CD
7) AB + AC = 6 ! Flow out of A
8) AB - BC - BD = 0 ! Flow through B
9) AC + BC - CD = 0 ! Flow through C
10) BD + CD = 6 ! Flow into D
11) AB2 <= 2 ! Steps in supply schedule
12) AB3 <= 1
13) AB4 <= 1
14) AC2 <= 2
15) AC3 <= 1
16) AC4 <= 1
17) BC2 <= 2
18) BC3 <= 1
19) BC4 <= 1
20) BD2 <= 2
21) BD3 <= 1
22) BD4 <= 1
23) CD2 <= 2
24) CD3 <= 1
25) CD4 <= 1

END