```
Aeq(7, 5) = 1;
Aeq(7, 9) = 1;
Aeq(7, 15) = 1;
Aeq(7, 24) = -1;
% NY Conservation Constraints
Aeq(8, 13) = 1;
Aeq(8, 16) = 1;
Aeq(8, 19) = 1;
Aeq(8, 23) = -1;
% Call linprog
options=optimset ('display', 'off');
x = linprog(cost, [], [], Aeq, beq, lower, upper, [], options);
min_cost = dot(cost, x)
```