1.224 Recitation #5

Transit crew scheduling
Agenda

• HASTUS
• Set partitioning
• Column generation
• Athena @#$@$
HASTUS

• Decomposition
  – HASTUS-BUS
  – HASTUS-MACRO
  – HASTUS-MICRO
HASTUS-Macro

Input: blocks

Relaxations:
Fractional drivers,
30 minute partitioning
Neglect travel time (to and from relief points)

List of pieces that provide Cheap way of covering blocks
HASTUS-Micro

Input: output from HASTUS-Macro

3 steps:
1) Partition vehicle blocks close to macro solution
2) Hook the pieces together (as seen in class)
3) Marginal improvement phase

Good workable crew schedule
Micro, step 2
Pieces are nodes…
Adding tripper runs
Compare HASTUS to HW

Where does column generation fit in?
What is column generation???
ATHENA @#:#@#:%*

- Source .path file
- Cutting and pasting into emacs
- Use loqo if it takes too long
- IF and AND finally get to be used in EXCEL!