

Project 5 Test Graphs

Adam Vigneaux | CPS 222 Data Structures

Data Set 1: Provided Data

5 6

SALEM

BEVERLY

DANVERS

LYNN

WENHAM

BEVERLY DANVERS N 2.9

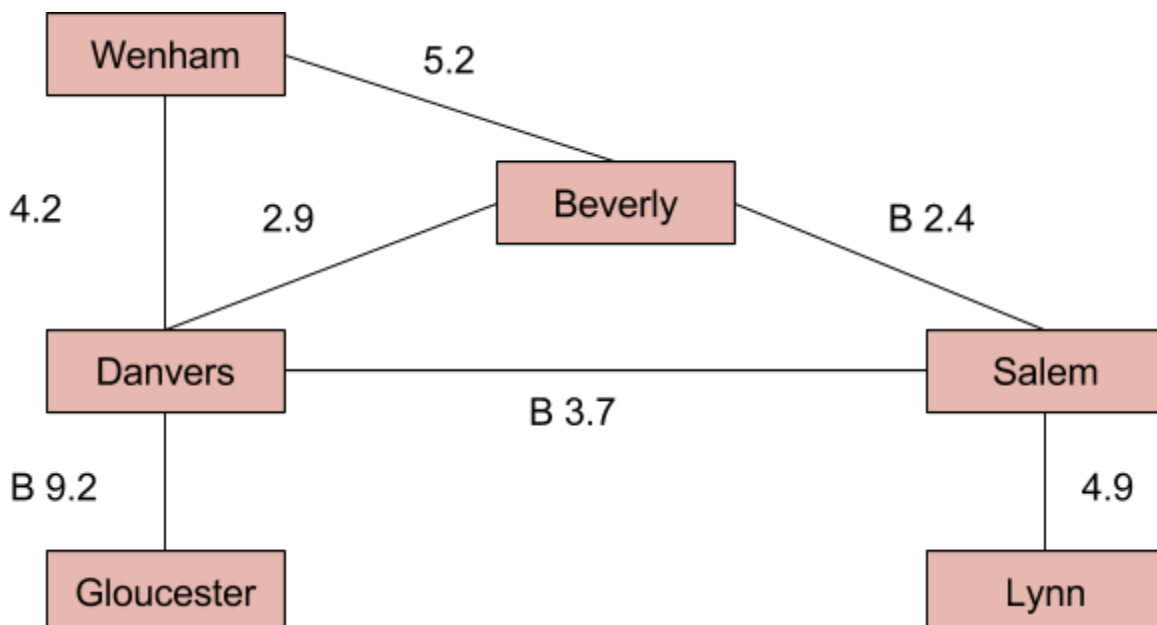
BEVERLY SALEM B 2.4

BEVERLY WENHAM N 5.2

DANVERS WENHAM N 4.2

DANVERS SALEM B 3.7

LYNN SALEM N 4.9



Shortest Routes from Capital

- Salem to Beverly: 2.4mi via Salem, Beverly
- Salem to Danvers: 3.7mi via Salem, Danvers

- Salem to Lynn: 4.9mi via Salem, Lynn
- Salem to Wenham: 7.6mi via Salem, Beverly, Wenham
- Salem to Gloucester: 12.9mi via Salem, Danvers, Gloucester

Cheapest Road Upgrades

- Salem to Beverly
- Beverly to Danvers
- Danvers to Wenham
- Salem to Lynn
- Danvers to Gloucester

Connected Components

- Salem, Lynn
- Gloucester
- Beverly, Wenham, Danvers

Data Set 2: No Bridges, Biconnected

4 6

BOLTON

STOW

HUDSON

HARVARD

BOLTON HARVARD N 1.5

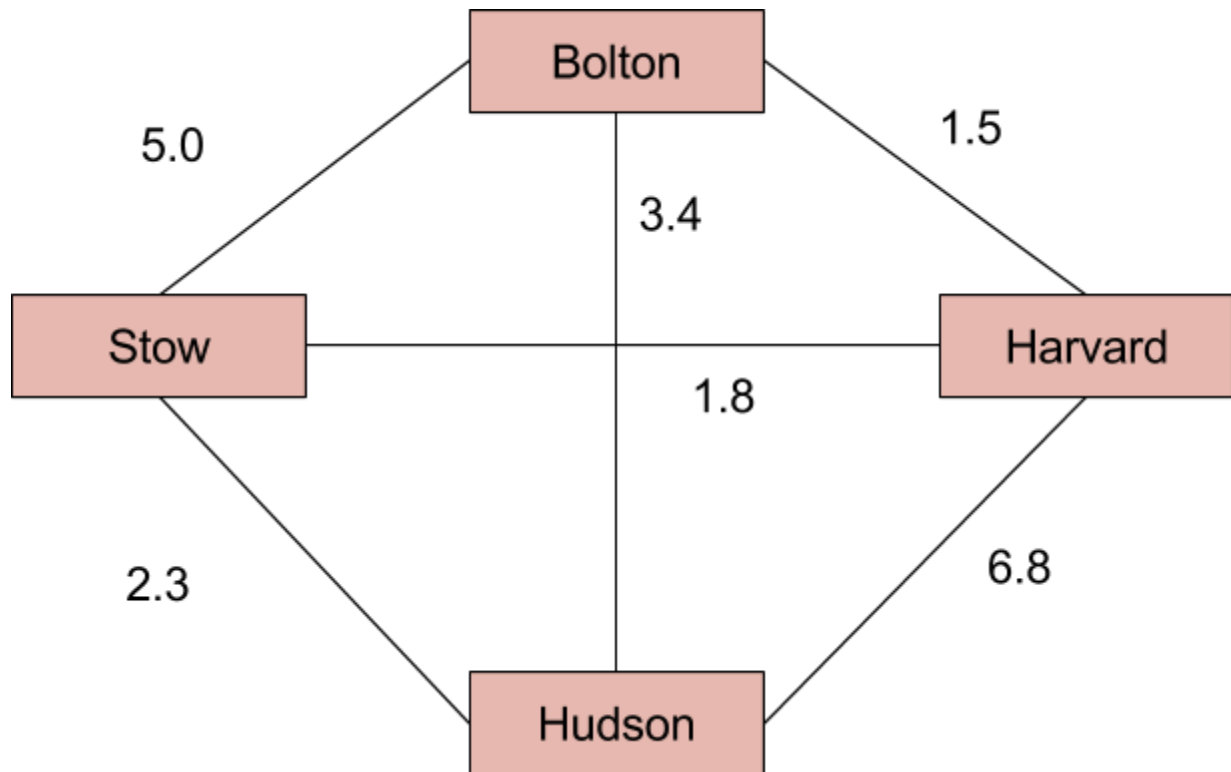
HARVARD HUDSON N 6.8

STOW HUDSON N 2.3

BOLTON HUDSON N 3.4

HARVARD STOW N 1.8

STOW BOLTON N 5.0



Shortest Routes from Capital

- Bolton to Stow: 3.3mi via Bolton, Harvard, Stow
- Bolton to Harvard: 1.5mi via Bolton, Harvard
- Bolton to Hudson: 3.4mi via Bolton, Hudson

Cheapest Road Upgrades

- Harvard to Bolton
- Stow to Harvard
- Hudson to Stow

Connected Components

- Harvard, Bolton, Hudson, Stow

Data Set 3: All Bridges

3 2

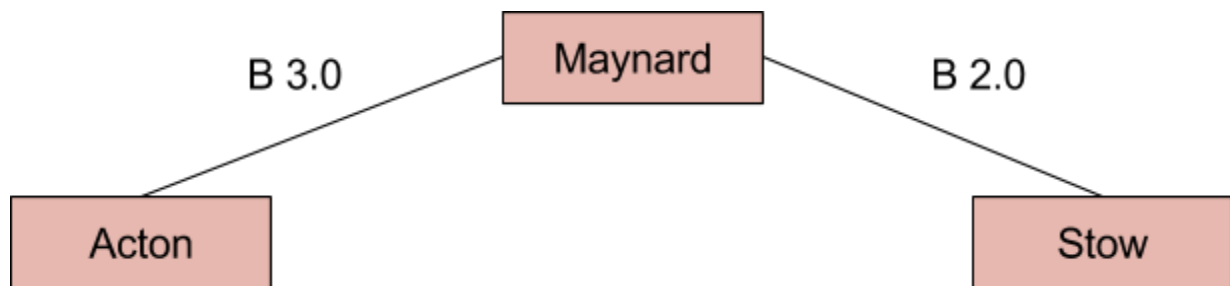
MAYNARD

ACTON

STOW

MAYNARD ACTON B 3.0

MAYNARD STOW B 2.0



Shortest Routes from Capital

- Stow to Maynard: 2.0mi via Stow, Maynard
- Acton to Maynard: 3.0mi via Acton, Maynard

Cheapest Road Upgrades

- Maynard to Stow
- Maynard to Acton

Connected Components

- Acton
- Maynard
- Stow

Data Set 4: One Town, No Roads

1 0

BOLTON



Shortest Routes from Capital

- none

Cheapest Road Upgrades

- none

Connected Components

- Bolton