Expensive to build a network that covers everything.

Why?

- Wires cost money
- Need land
- Civil Engineering for laying down wires
- People have different requirements
1960s

- Stanord
- UCLA
- USC
- UTAH

How to connect?
- Physical connectivity
- Everyone agrees on a common protocol

Fast Forward Many Years

- Sonic
- AT&T
- Spectrum
- Comcast

Why agree to interconnect?
What sorts of paths are ideal?
Are shortest paths enough?

Problems?

How to route?

- Flexibility?

- Loop freedom
Are routes stable?
Sufficient conditions for route stability