l3) Internet layer: deliver from address to address
l4) TCP : which person (process) will receive the packet.
l2) Data link: neighbor send/receive. SF-Seattle-Chicago...

Depending on phys (L1), L2 will be different.
↑ ↑
ethernet wifi
Most ethernet device does not have LLC control.

* each protocal:
– header size: IP v4 (20 bytes), TCP (20), IP V6 (40), UDP (8)

IPV6 : * "flow label" is new
* Next header : similar to "protocal" in v4
* no 2nd level (fragmentation) : frag is done by the source, not by the router (post office)

IP - connectionless : the packets donot go in order or in the same route.
– does not spend time to setup the conn. (less reliable, faster)

IPv4 only does independent routing by default., Source routing or route recording are optional.
" does not do flow control.

Network Info Source : the map. (routing info) That the router maintain.

- Distance-vector routing: based on the info from neighbor to find out the best way to go.
- Link state routing: got a map (instead of asking the neighbor)

ARP: convert L3 (MAC addr) to L4 (IP addr)

TCP flag: used for setup conn or tearing down conn.

QoS:
- Resource reservation: reserve res but use, very expersive

MPLS: another class

Quiz on every class, open book
Midterm / final: same as quiz but different no, closed

slides: ~sandy/class/cs540.