CCI Broadband Webinar

Practical Infrastructure-Based Approaches to Solving Broadband Problems

Erik J. Cecil, Esq.

Nov. 18, 2014

OVERVIEW

- MARKET CONDITIONS
- FCC, STATE LAW
- PRACTICAL SOLUTIONS

MARKET CONDITIONS

VOICE

444 million total U.S. retail local telephone service connections

- **48 million - VoIP/broadband**
- **85 million - switched landline**
- **311 million - mobile wireless**

CARRIERS - WIRELESS

AT&T + Verizon = 64% U.S. subs; 78% U.S. revenue

- AT&T - $134b
- Verizon - $124b
- Sprint - $36b
- T-Mobile USA – $24.42b

CARRIERS - WIRELINE

<u>Verizon + AT&T + CenturyLink</u> = approx. 83% of voice lines.

(FCC "Broadband Availability Gap" OBI Tech, Paper 1, April 2010 at 84; see also FCC Local Tel. Comp. Reports).

CABLE

COMCAST + TWC = 40% U.S. broadband market

SATELLITE

AT&T + DirectTV - AT&T $50 billion acquisition of DirectTV (2nd largest paid TV provider)

- DirectTV has 19.9 million subs
- DirectTV also has valuable NFL and other content

INDUSTRY TRENDS

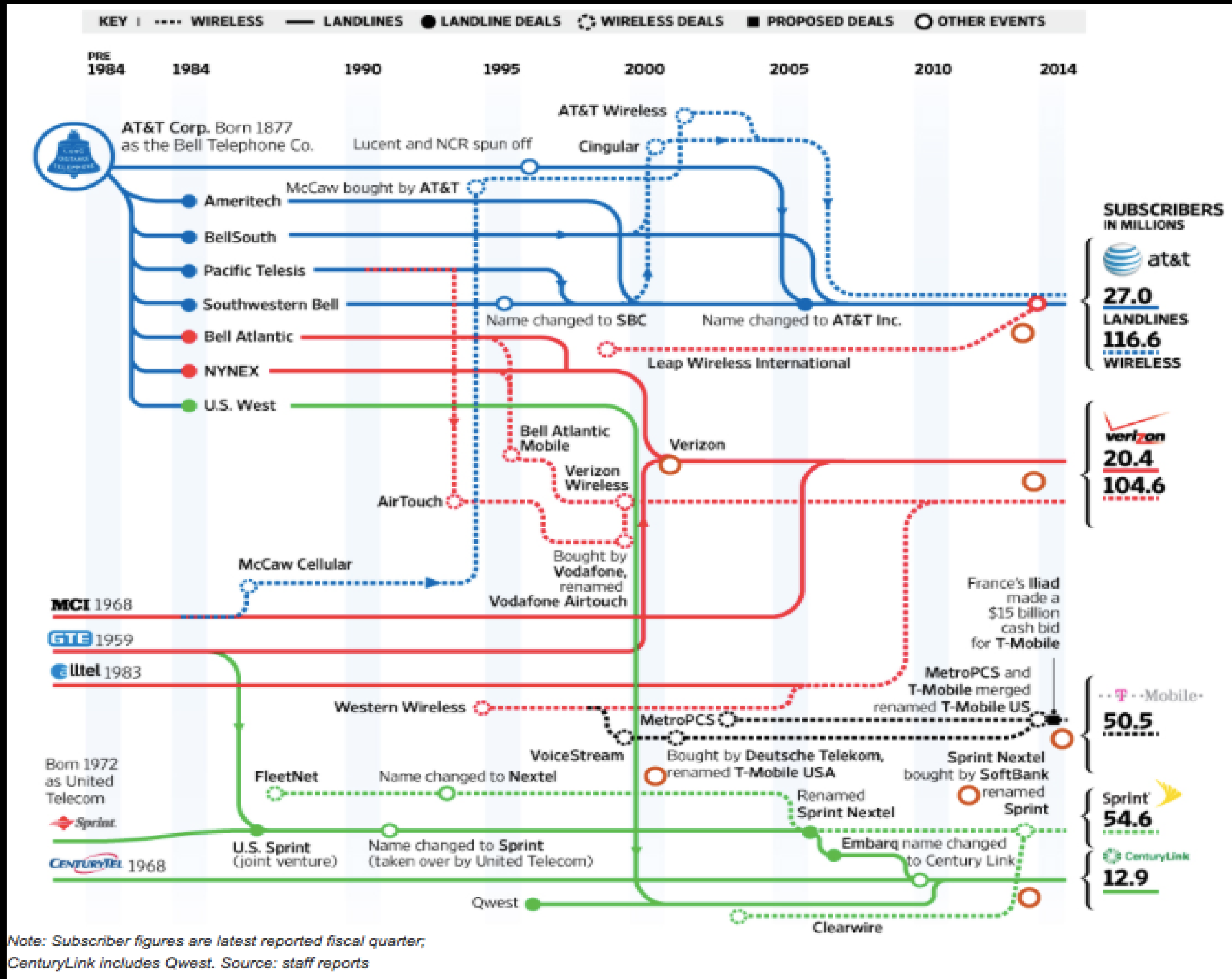
Wireless - market has matured.

Telephone - 2 super giants + CenturyLink.

Cable - Comcast/TW + the rest of the market

Over the Top - Cable cutting, cord cutting. Broadband is a commodity - customers want choice. Netflix. Google ($350b). Apple ($400b).

Overall, it looks like this …



Source: “A Changing Telecom Landscape”

WSJ Online

http://online.wsj.com/articles/SB10001424127887324326504578466872381479586

STATUS - LAW & REGULATION

<u>Federal</u>

- FCC questioning state barriers to local gov’t involvement in broadband
- IP Transition Proceedings - moving away from telephone regulation to quasi-regulation of Internet-based services.
- Net Neutrality - “A lawyers dream.” Already a decade old; several trips to the federal appellate courts; Major carriers threaten further court action if Title II imposed.

States - Nationally:

- 20+ states deregulated telecom; incl. removal of carrier of last resort obligations.
- 19+ states restrict municipal broadband.
- Uneasiness about jurisdiction / accountability of mega-ISPs/carriers.

State - Colorado:

- Last year's updates to CRS helpful (joint trenching; movement toward statewide collaborative for broadband funding).
- This year, 8 communities affirm local desire for self-determination.
- SB 05-152 - open to interpretation; Market & Regulation of 2014 much different than 2005.
- Greater cooperation between community and carrier than in most states.

PRACTICAL SOLUTIONS

START WITH THE BASICS ….

REDUCE COST

PHYSICAL LAYER =
up to 90% of total cost

92+% of rural providers say initial deployment cost is the single largest barrier to deployment.

NTCA 2013 BROADBAND/INTERNET AVAILABILITY SURVEY REPORT May 2014

Examples of Local Gov’t Solutions

Dig Once - San Francisco; drop conduit anytime street open; 140 miles in place

Dark Fiber - fiber leases are simple.

Lit Fiber - harder than it looks; carriers do fail. Let history be your guide …

State - share state highway rights of way / conduit (details matter, but … e.g. AZ, CT, MA, MS, NM, NJ, OK, TX, etc.)

BASICS … LIKE … FLEXIBILITY

Local & Regional Economics will drive approaches

- Routes
- Locations
- Money
- Creativity

<u>State & Federal Funding / Support</u>:

- Market / technology defy simple legal solutions; even the FCC struggling to keep up; law is very outdated.
- Greater interest in infrastructure-based solutions.

BASICS … LIKE … CREATIVITY

Creativity, New Tech, New Approaches

Microtrenching - can lower costs up to 65%

Joint trenching - lowers costs

Open conduit / dark fiber - aggregates and lowers costs

Data Center - revitalize vacant buildings by converting them to data centers

Erik J. Cecil, Esq.

erik@sourcelawpc.com

720-886-6887