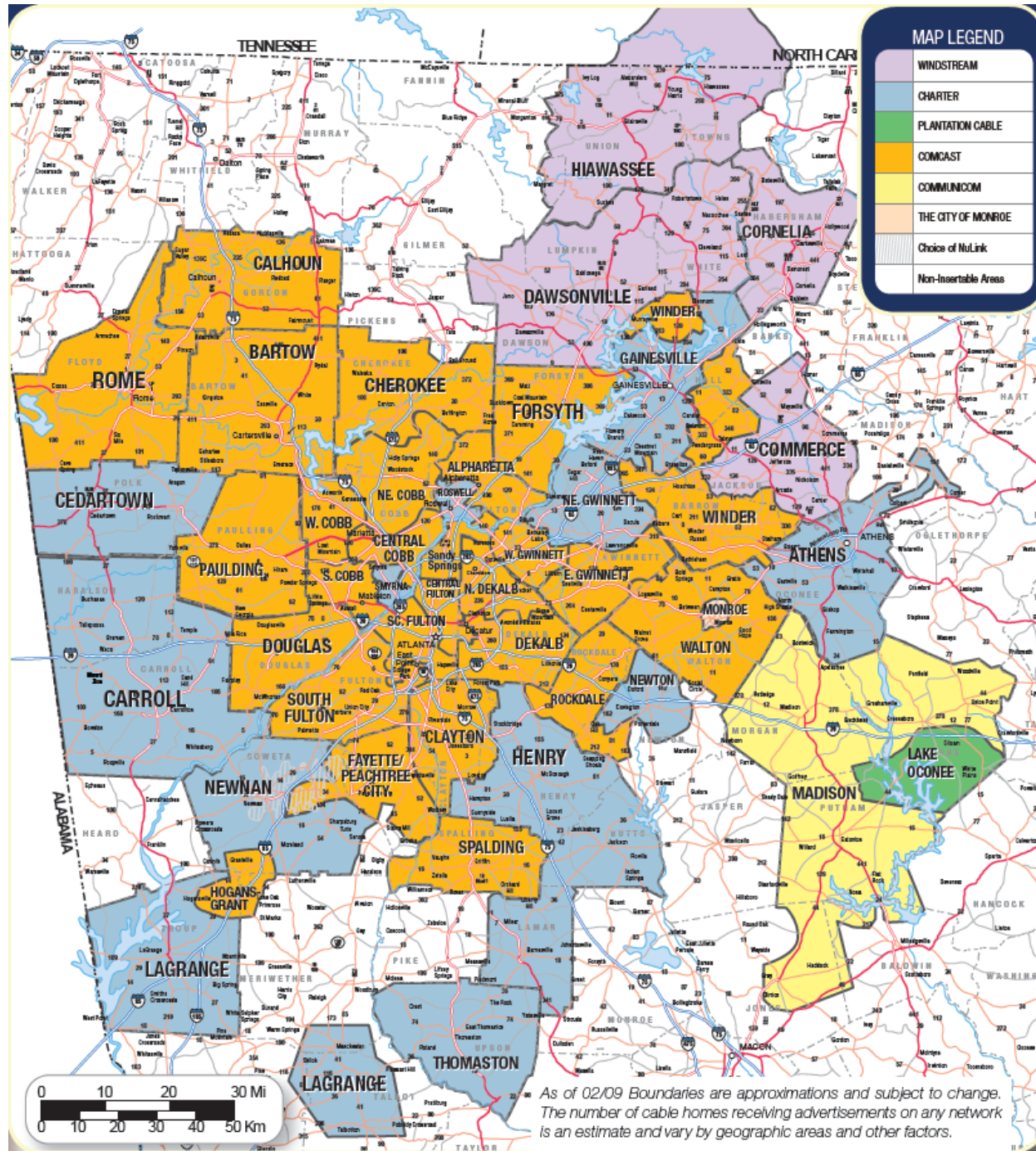


Susan Crawford
Silicon Flatirons
February 2011

- What next?
 - enormous up-front costs
 - crushing economies of scale and scope
 - steeply declining cost curves in the last mile

GOVERNANCE OF THE LOOMING CABLE MONOPOLY



As of 02/09 Boundaries are approximations and subject to change.
 The number of cable homes receiving advertisements on any network
 is an estimate and vary by geographic areas and other factors.

DMA #	DMA Name	DMA MVPD Subscribers (2008)	Major MSO Clusters in DMA
1	New York, NY	7,106,732	Cablevision, Time Warner Cable, Comcast
2	Los Angeles, CA	4,777,850	Time Warner Cable, Cox, Charter
3	Chicago, IL	3,010,837	Comcast
4	Philadelphia, PA	2,767,306	Comcast
5	Dallas-Ft. Worth, TX	1,977,036	Comcast
6	San Francisco-Oakland-San Jose, CA	2,263,475	Comcast
7	Boston, MA (Manchester, NH)	2,281,399	Comcast
8	Atlanta, GA	2,225,223	Comcast, Cox
9	Washington, DC (Hagerstown, MD)	2,142,846	Comcast
10	Houston, TX	1,632,313	Comcast
11	Detroit, MI	1,720,784	Comcast, Bright House
12	Phoenix, AZ	1,570,117	Cox
13	Tampa-St. Petersburg (Sarasota), FL	1,659,988	Comcast, Bright House
14	Seattle-Tacoma, WA	1,632,513	Comcast
15	Minneapolis-St. Paul, MN	1,412,112	Comcast
16	Miami-Fort Lauderdale, FL	1,421,619	Comcast
17	Cleveland-Akron (Canton), OH	1,366,337	Time Warner Cable
18	Denver, CO	1,333,684	Comcast
19	Orlando-Daytona Beach-Melbourne, FL	1,357,905	Comcast, Bright House
20	Sacramento-Stockton-Modesto, CA	1,199,389	Comcast
21	St. Louis, MO	1,038,600	Charter
22	Portland, OR	970,633	Comcast
23	Pittsburgh, PA	1,061,630	Comcast
24	Charlotte, NC	1,012,820	Time Warner Cable
25	Indianapolis, IN	955,529	Comcast, Bright House
26	Baltimore, MD	972,035	Comcast
27	Raleigh-Durham (Fayetteville), NC	947,756	Time Warner Cable

High-speed data reality

Wireless will not be a substitute for wired access

- Shannon's Law
- low efficiency plus exponential growth in high data-rate demand
- advantage of fiber or fiber/coax will continue to grow
- (and wireless itself has natural monopoly characteristics)

Legacy DSL is becoming irrelevant; low-priced DSL won't save the business

Cable Has Won

- Only fiber can compete with DOCSIS 3.0 cable
- Cable's share of net high-speed Internet access additions has exceeded its share of total subscribers for several quarters
- For 60% of the country, cable faces no competition
- Emergence of high data-rate applications reinforces this trend
- A single, high-capacity, IP-based pipe

Now What?

- Many careers built on arguing competition meant no need for regulation (BPL, satellite, wireless, always right around the corner)
- Cable's overwhelming competitive advantage becoming plainer
- “Good enough” wireless has implications for social equity, national competitiveness
 - only really “good enough” where no fiber/coax alt

And Here They Are

- **Recapitulate TA96** with functional separation: introduce local network competition by requiring unbundled local loop (competitor adds electronics), but do a better job with stranded costs
- **Recapitulate ICANN:** the BITAG
- **Recapitulate MSN:** ex post antitrust oversight
- **Recapitulate AT&T divestiture:** structural separation of natural monopoly segments of business, followed by price and entry regulation encouraging expansion
- **Recapitulate water:** public ownership

Imagine a railway station

- Trains are both an economic activity and an essential public good
 - competition won't work for trains, will work for newsstands
 - competition in trains leads to higher costs for state, sharp rise in fares, good profits for train companies
- When villages are avoided, the state has to step in
 - some will claim the subsidy is inefficient – why not just drive?

“A railway station and its service are both a symptom and a symbol of society as a shared aspiration”

-Tony Judt