

The background features a large, faded seal of the Federal Communications Commission. The seal is circular with a gold rope-like border. Inside, the words "FEDERAL COMMUNICATIONS COMMISSION" are written in a circular path. The center of the seal contains a shield with a scale of justice, a sword, and a radio tower, surrounded by stars.

John Muleta

Chief,
Wireless Telecommunications Bureau
Federal Communications Commission



Why We Are Here!

To help with the Digital Migration

- To educate our federal partners regarding resources available at the FCC to help in the Digital Migration of rural America
- To “prime the pump” regarding new FCC rural initiatives and the development of new and innovative services for rural communities

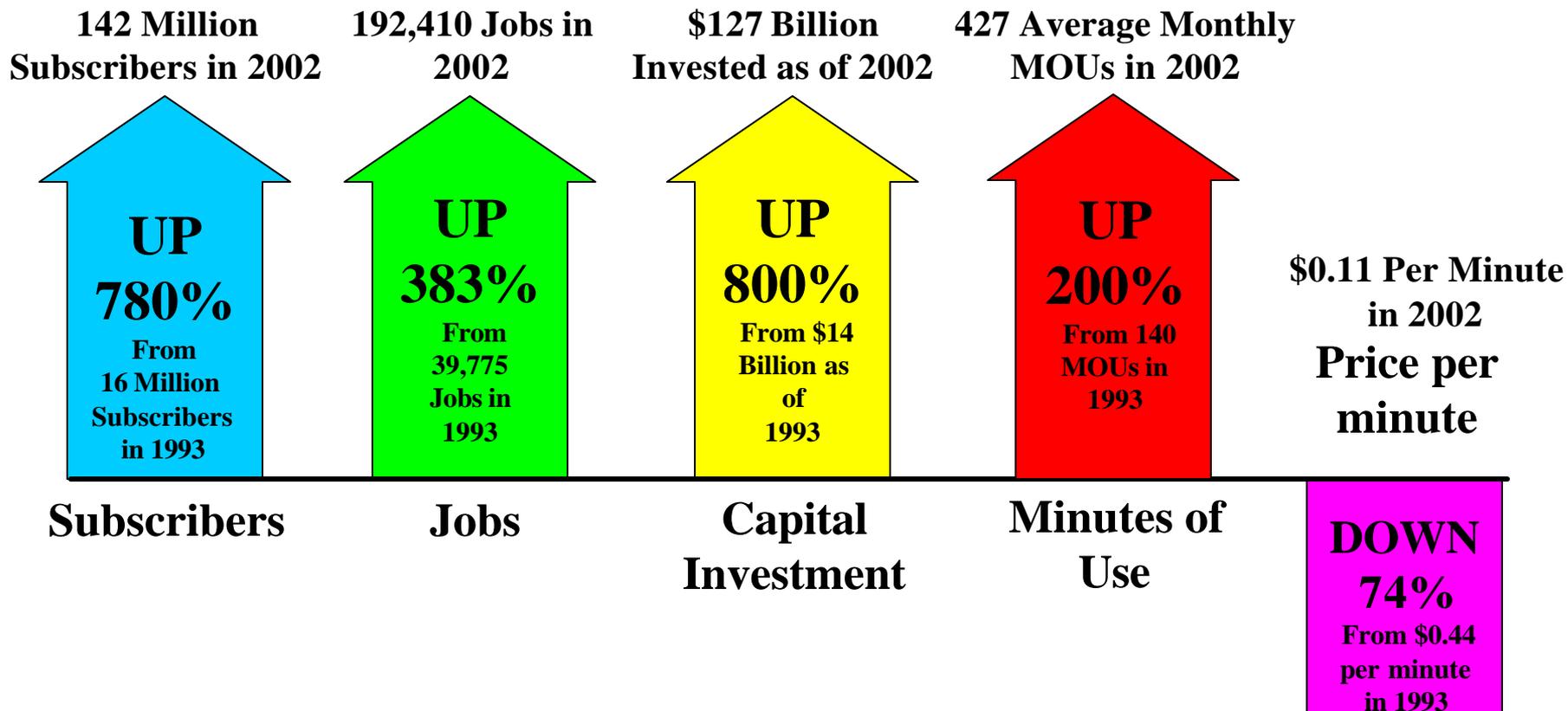


Today's Focus

- **Overview of Wireless Market**
 - FCC Authority
 - Unparalleled Success in Bringing Wireless to all Americans
- **Ways of Accessing Spectrum in Rural Markets**
 - Auctions for New Licenses
 - Small Business Bidding Credits
 - Tribal Land Bidding Credits
 - Secondary Markets (*i.e.*, leasing spectrum from existing licensees)
- **Public Safety in Rural Markets**
 - Spectrum Designated for Public Safety Use (Police, Fire, EMT, etc.)
 - Availability of Wireless E-911 Services
- **Recent and Upcoming FCC Rural Initiatives**
 - Rural NOI
 - Flexibility for Rural Markets and Licensees



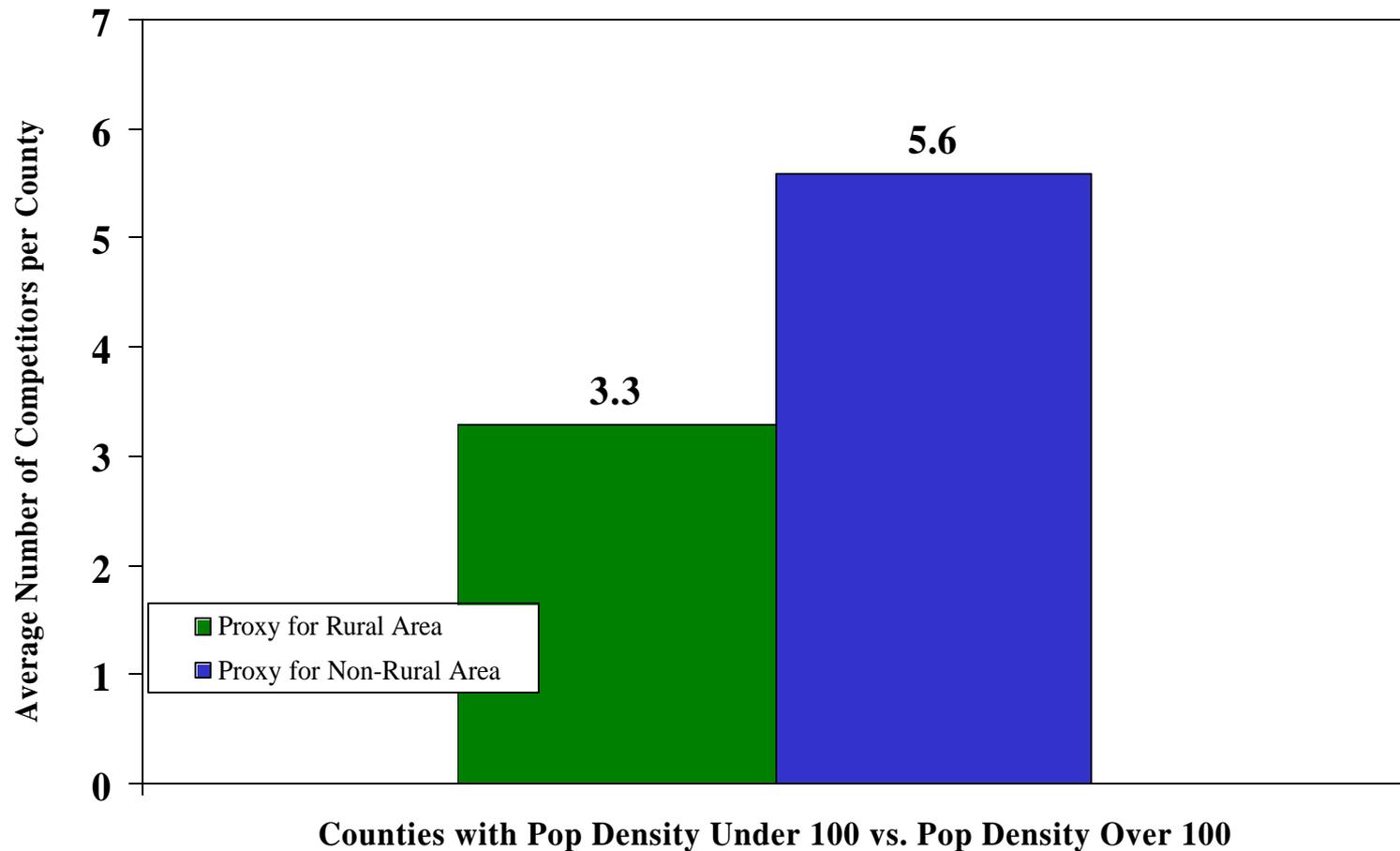
10 Years of Deregulation and Competition: Growth in the Mobile Telephone Industry



Source: Cellular Telecommunications & Internet Association; FCC.



Urban vs. Rural Comparisons: Coverage





Spectrum Policy Task Force

Key Findings & Recommendations Related to Rural Issues

- Generally, spectrum access more significant problem than physical scarcity
 - Due in large part to legacy command-and-control regulations that limit the ability of potential spectrum users to obtain access.
- Commission should explore ways to promote spectrum access and flexibility in rural areas by increasing incentives and reducing transaction costs on parties seeking access to rural spectrum.
 - Flexible regulation of power levels.
 - Secondary markets mechanisms to encourage leasing of spectrum usage rights in rural areas.
 - Consider rural issues in defining geographic licensing areas.
 - In some instances, appropriate to use licensing areas that distinguish between rural and urban areas to allow focused bidding in rural areas.
 - In other instances, larger spectrum areas beneficial to rural interests due to advantages of economies of scale or scope based from regional or nationwide footprints.
 - Consider expanding “easements” on licensed spectrum in low-congestion areas to allow access, on a non-interference basis, by other spectrum users.
 - Designate additional bands for unlicensed spectrum use and allow wireless ISPs (WISPs) to increase their power limits in rural areas.



FCC Wireless Strategic Plan

- Email
- Location Based Services
- Voice communications
- Internet
- Telemetry/Telematics

**New
Wireless
Applications
(broadband)**

- Corporate Communications
- Instant Messaging
- Video streaming
- Digital Cameras

**Innovative
Policies**

**Innovative
Technologies**

- Cell phones
- Wi-Fi
- PDAs
- Pagers
- Microwave
- Computers
- Smart Appliances

**Spectrum
Access**

**Innovative
Rules and
Regulations**

**Customer
Service**

- E-911
- LNP
- Interference Mgmt.
- Auction Technology
- Licensing Database



Rural Wireless Capabilities

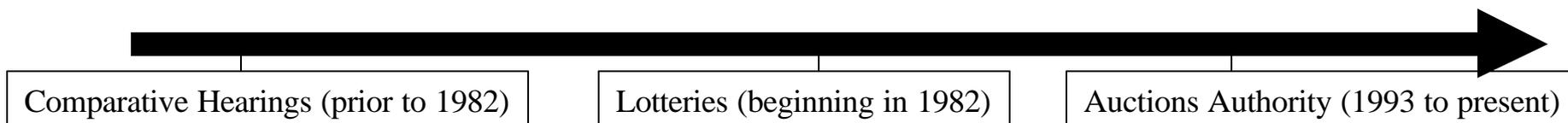
Wireless Services	Capabilities					
	Public Safety	Basic Access	Long Distance	Internet Access	Tele-medicine	Distance Learning
Mobile Telephone	X	X	X	X	X	X
Fixed Wireless	X	X	X	X	X	X
Paging	X		X	X	X	
Public Safety Spectrum	X	X	X	X	X	X





Auctions Overview

- Since the first spectrum auction was held in July 1994, the FCC has
 - Completed 45 auctions
 - Auctioned over 50,000 licenses
 - Deposited over \$14.4 billion in the US Treasury
 - Qualified 2,600 bidders to participate



As of 6/26/03



Auctions – Statutory Intent

- Development and rapid deployment of new technologies, products, and services for the benefit of the public
- Access for those living in rural areas
- Fairly and efficiently awarding Mutually Exclusive Licenses. There are statutory exemptions for:
 - Public Safety Radio Services
 - Digital television licenses to replace analog licenses
 - Non-commercial educational and public broadcast stations
 - International or global satellite communications services



Auctions Results

- Since auctions began in 1994
 - 1,635 bidders won 25,427 licenses in 45 auctions
 - 1,276 (78%) bidders who claimed to be either small, very small or entrepreneur businesses won 13,780 (54%) licenses
 - 173 (11%) minority bidders won 978 (4%) licenses
 - 172 (11%) women bidders won 1,063 (4%) licenses
 - 184 (11%) rural telco bidders won 981 (4%) licenses

As of 6/26/03



Small Business Bidding Credits

- Bidding credits are available in most auctions. A bidding credit represents the amount by which a bidder's winning bids at an auction are discounted.
- Example of Bidding Credits (in Auction 44)

Average Annual Gross Revenues For Previous 3 Years	Bidding Credit
Under \$3 million	35%
\$ 3 million - \$20 million	25%
\$20 million - \$40 million	15%



Tribal Land Bidding Credits

- **Rules and Timing:** Enhanced auction rules to provide greater incentives for wireless carriers to serve tribal lands – effective October 1, 2000 and Applicable beginning with Auction #36 – which began on November 1, 2000
- **Credit Amount:** \$300,000 for first 200 square miles of qualifying tribal land an applicant commits to serve; \$1500 for each additional square mile
- **Buildout Requirement:** Applicants awarded a tribal lands bidding credit must construct and operate a system capable of serving 75% of the population of each qualifying tribal land for which the credit is awarded within the 3 year buildout requirement
- **Applications:** 7 out of the 12 wireless spectrum auctions have resulted in 31 bidders expressing intent to seek a Tribal Land Bidding Credit
 - Broadband PCS C & F Block
 - Narrowband PCS
 - Lower 700 MHz Band
 - Paging (2 auctions)
 - 1670-1675 MHz Band Nationwide License
 - Public Coast & LMS



Tribal Land Bidding Credits (cont'd)

Recent Changes to Tribal Land Bidding Credits

- March 14, 2003
 - Issued Second Report & Order and Second Notice of Proposed Rulemaking
 - Seeks comment on a number of issues including whether to extend the credits to adjacent non-tribal areas that have telephone penetration rates of less than 70 percent



Secondary Markets Rulemaking

- Authorizes spectrum leasing from current licensees in a broad array of wireless radio services
- Adopts streamlined processing for certain categories of license transfer and assignment applications
- Examples of the benefits in rural context
 - Build only what you can afford and lease the rest
 - Allows for better capital allocation between licensees
 - Removes the tie between facilities and licenses thereby permitting greater flexibility in structuring projects



Public Safety

- Currently 47 megahertz designated primarily for voice communications for public safety
 - 24 megahertz in upper 700 MHz band (TV channels 63, 64, 68, and 69) must be cleared of incumbent broadcasters no later than the end of 2006, but this date may be extended in some markets
 - In 2002, allocated 50 megahertz in 4.9 GHz to be used in support of emerging broadband technologies for public safety



E911

- Enhanced 911 provides crucial information to the emergency responder who gets a call for help from a person using a wireless phone.
- Deployment of the two phases of E911 are well underway –
 - All national carriers have deployed Phase I in a number of their service areas, as have many smaller carriers.
 - Phase II deployment is a reality in a number of localities, with further roll-outs scheduled for the near future.



Performance Requirements/Technical Flexibility for Rural Areas

- Rural Notice of Inquiry (December 2002)
 - Definition of “Rural Areas”
 - Effectiveness of current programs
- Investigating ways to create incentives for achieving greater buildout and market entry in rural markets
 - Possible reform of current performance requirements
 - Possible reform and modification of technical/operational rules for rural service providers



Wireless Rural Initiative Joint Website

- Currently designing a joint website between USDA/RUS and the FCC's Wireless Bureau with links to other affiliates (e.g., FCC Wireline Bureau, FCC Consumer And Governmental Affairs Bureau, etc.)
- Plan to include information such as:
 - Upcoming events
 - FCC and USDA releases
 - Links to related sites



WTB Proposal: Joint Action Plan

- Harmonize Outreach
 - Affected Communities
 - Affected Service Providers
- Harmonize Rules and Regulations
 - Work to construct a consistent federal paradigm for rural America
- Develop a joint “Model Wireless Broadband Community Project”