Federal Universal Service

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Overview

- It's all about the network
- Universal Service Trends
  - Contributions
  - Distributions
- High Cost Fund – *"One (high cost) fund, three programs"?*
  - Rural Small Company
  - Rural Large Company
  - CETC/Wireless
- The Joint Board's tough questions.
  - *"Four funerals and a wedding?"*

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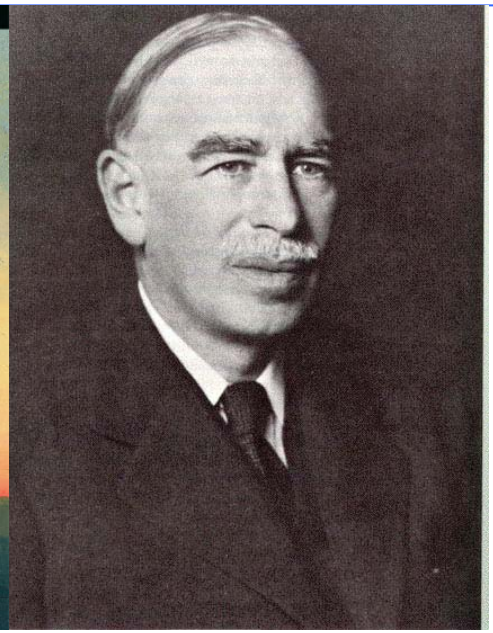
"It's all about the network"

Identifying and supporting the conditions that enable investment in high quality network to serve customers

The Economist versus the economist



"How the Internet killed the phone business"
The Economist, headline
September 19 2005

"In the long run, we're all dead."
John Maynard Keynes

- Ultimately, applications depend on robust networks
- Network operators want successful applications to help drive revenue and support investment

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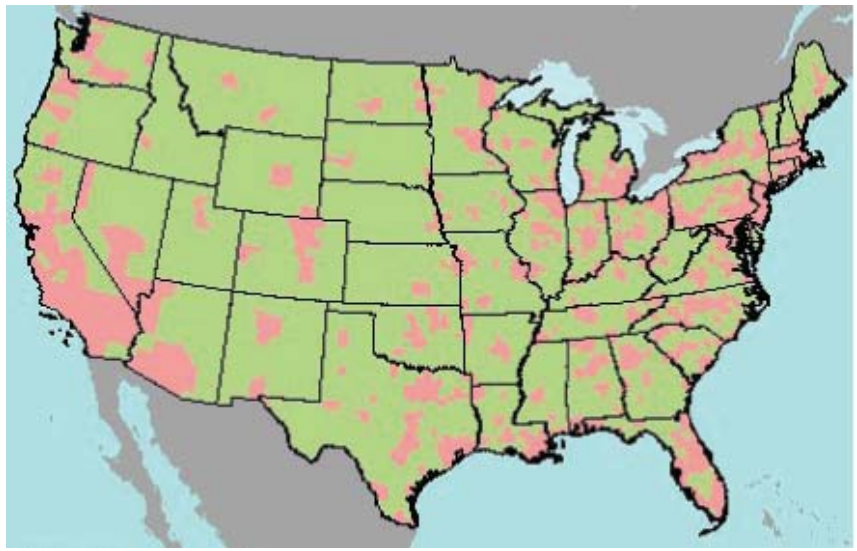
Rural overview

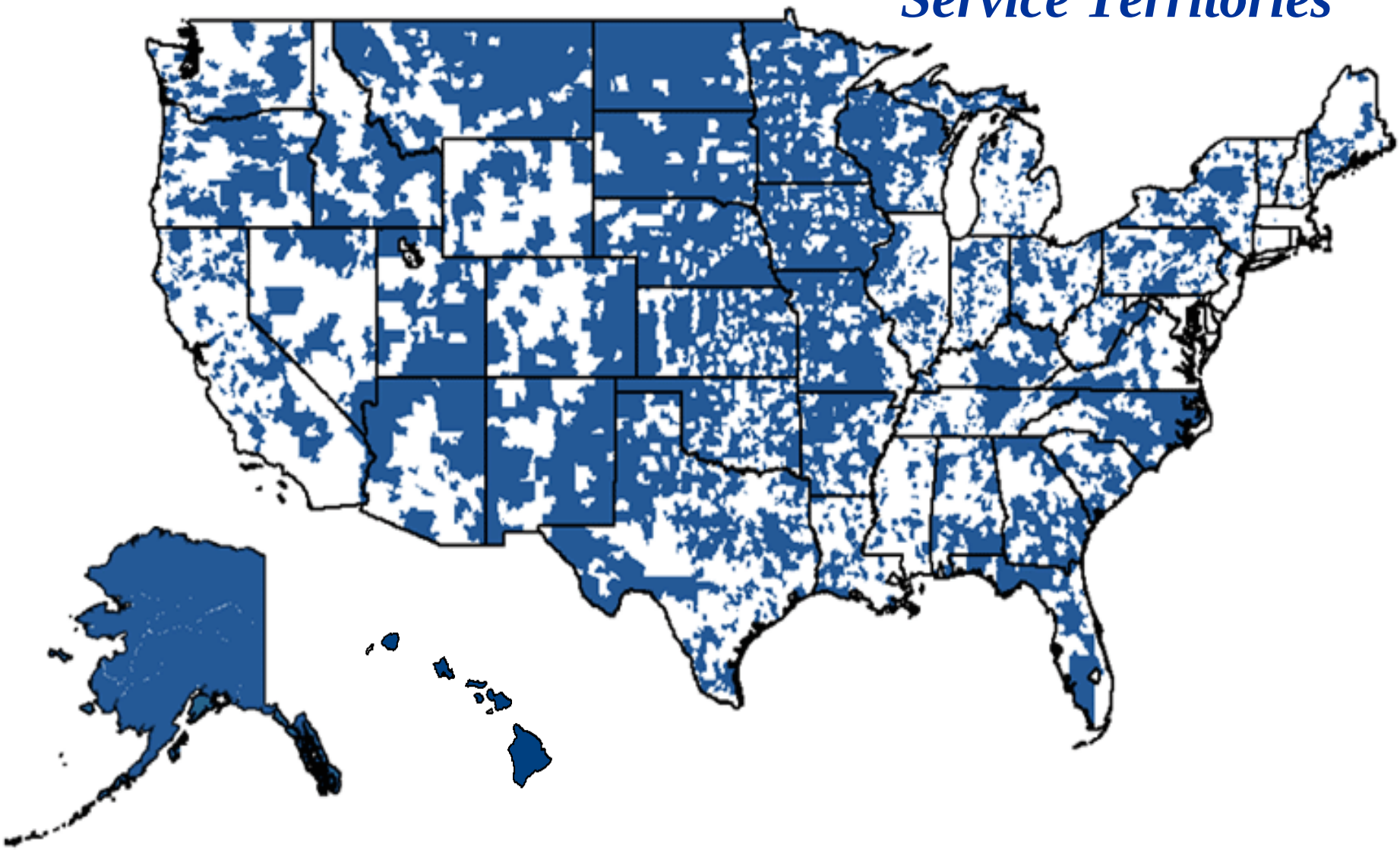
- Approximately 1,300 incumbent local telephone companies in U.S.
  - RBOCs serve almost 85% of total copper lines
  - "Rural" carriers serve nearly 10%
- Competition
  - Competitors in urban business markets control 30% of market
  - Intramodal in residential areas
    - Wireless is growing 10%+ annually
    - VoIP growth rapid (off small base)
- Rural regions (green on map)
  - Less than 15 lines per square mile
  - RBOCs serve 25+ million rural lines
  - RLECs serve 10+ million rural lines
- Broadband services
  - Approximately 70% coverage in rural independent service areas
  - Less than 30% in RBOC rural areas
    - "*Actual deployments may vary*"



Source: US Department of Agriculture

Independent Telephone Company

Service Territories



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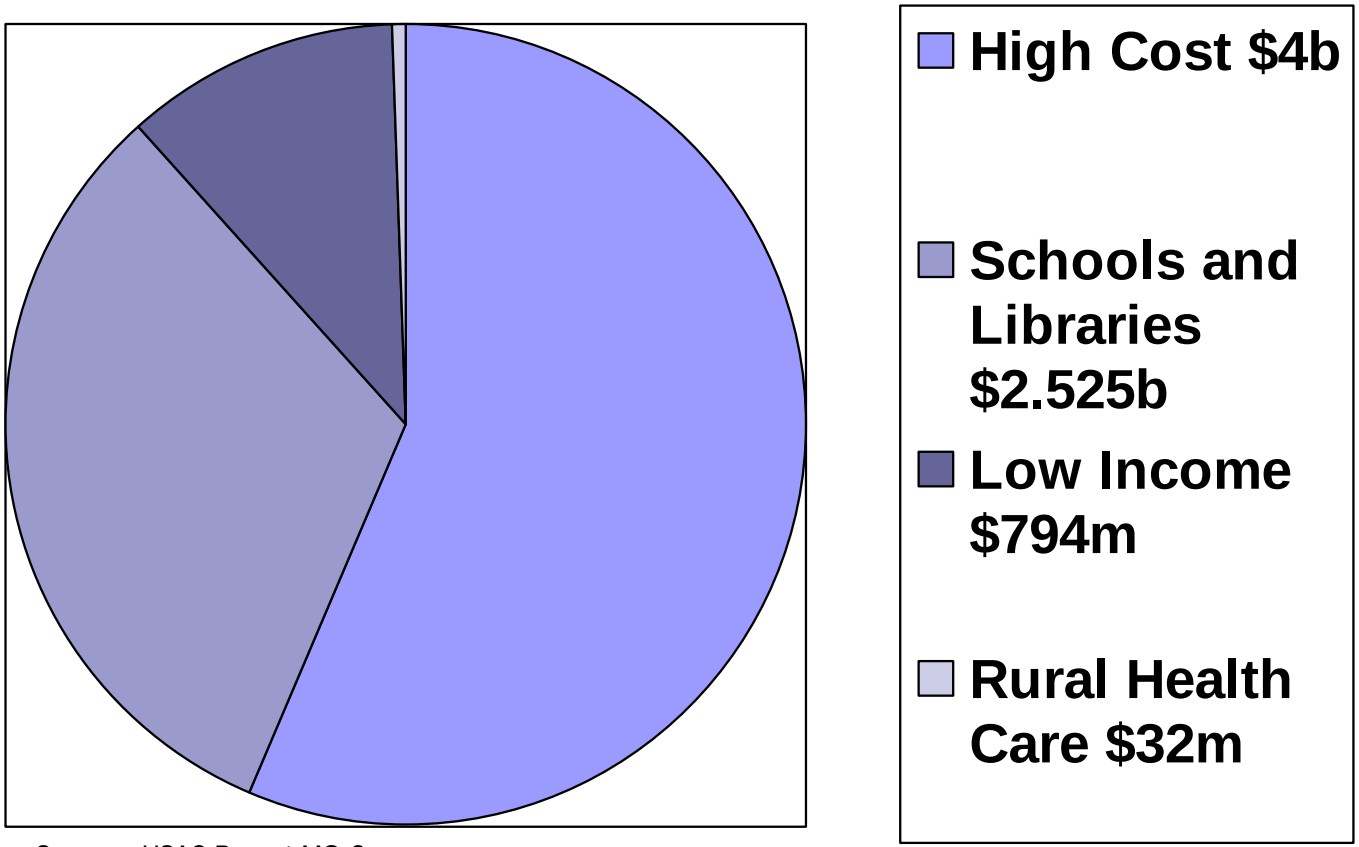
Universal service trends

Contributions

Distributions

"One Fund, Four Programs"



Source: USAC Report MO-2

Under '96 Act, universal service includes social, civic, and educational goals, as well as traditional support for networks

Subsequently, network support expanded to replace access (from implicit to explicit support) and include CETCs

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Florida Universal Service Receipts

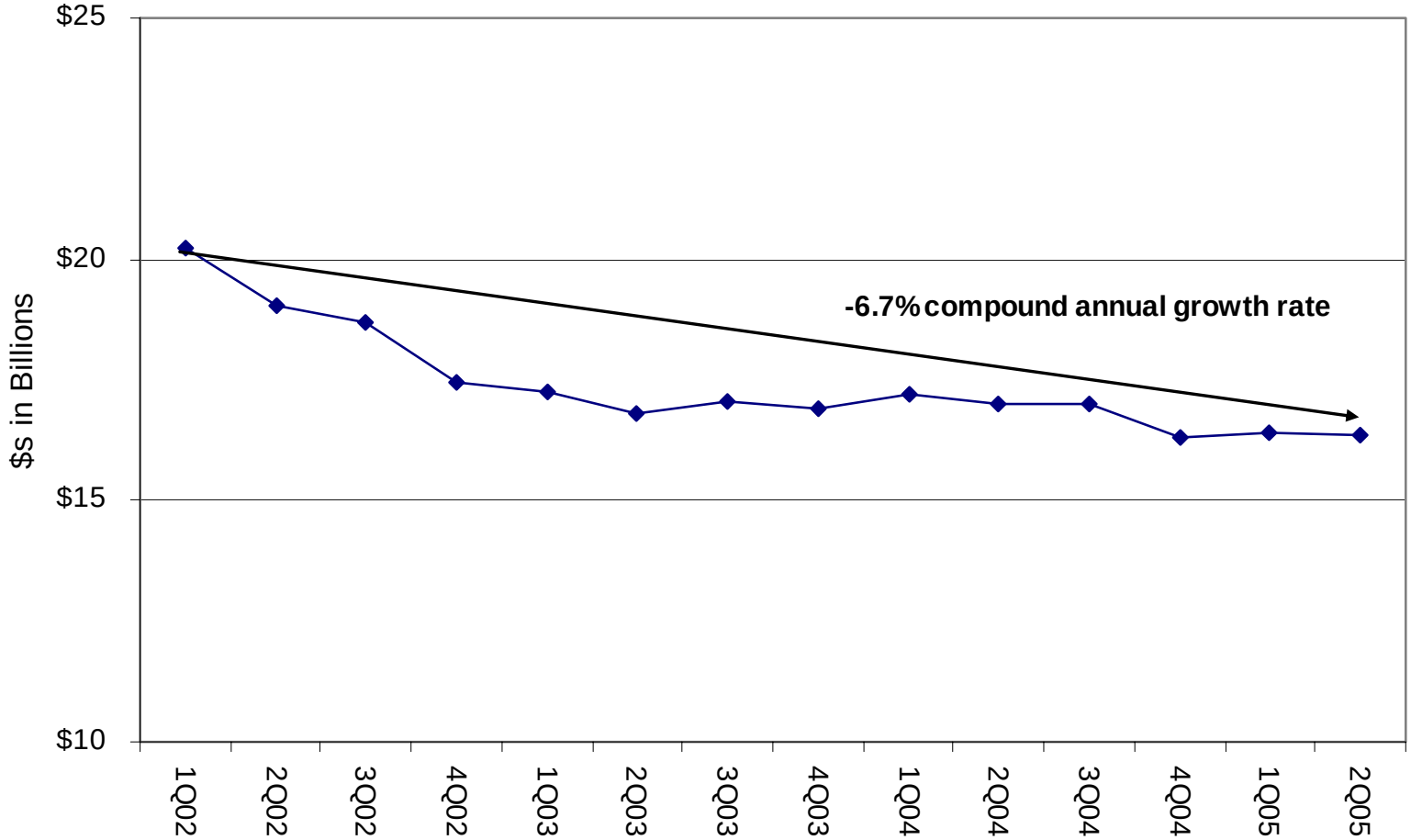
	2004	1998-2004
High Cost Fund	84,700,000	427,392,000
Low Income	18,384,000	98,124,000
Rural Health Care	0	689,000
Schools and Libraries	43,408,000	398,131,000

Source: USAC 2004 Annual Report

USF Contribution Methodology

- Problem
  - Need for a funding mechanism that provides larger, more stable USF funding base, w/ equitable contribution requirements
  - When DSL is eventually removed from base, assessment factor could raise 13%, from 10.2% to 11.5%, making prompt action important
  - Uncertainty around future funding sources is clouding investment decisions

Contribution base shrinking



Source: FCC

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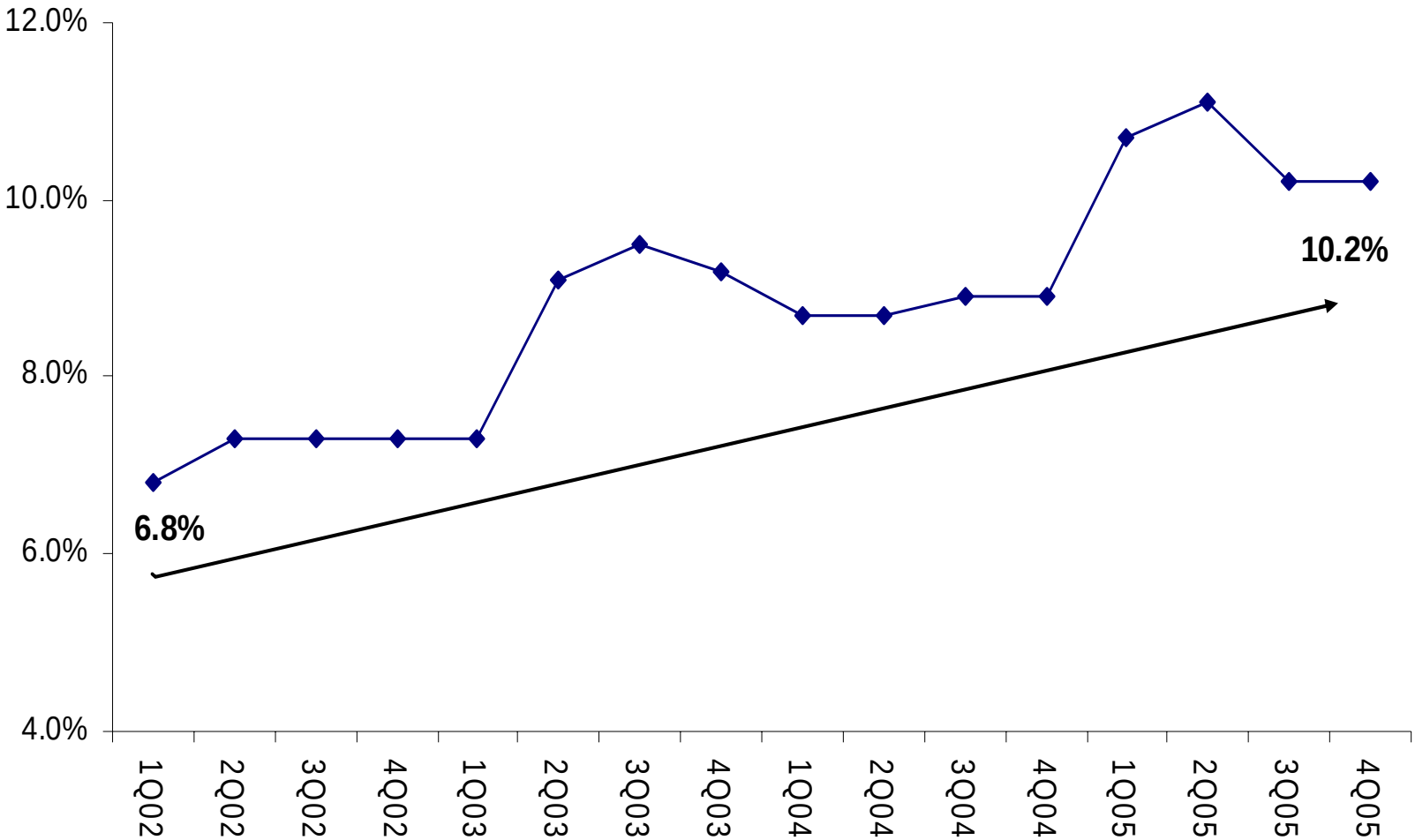
Assessment Increasing



Source: FCC

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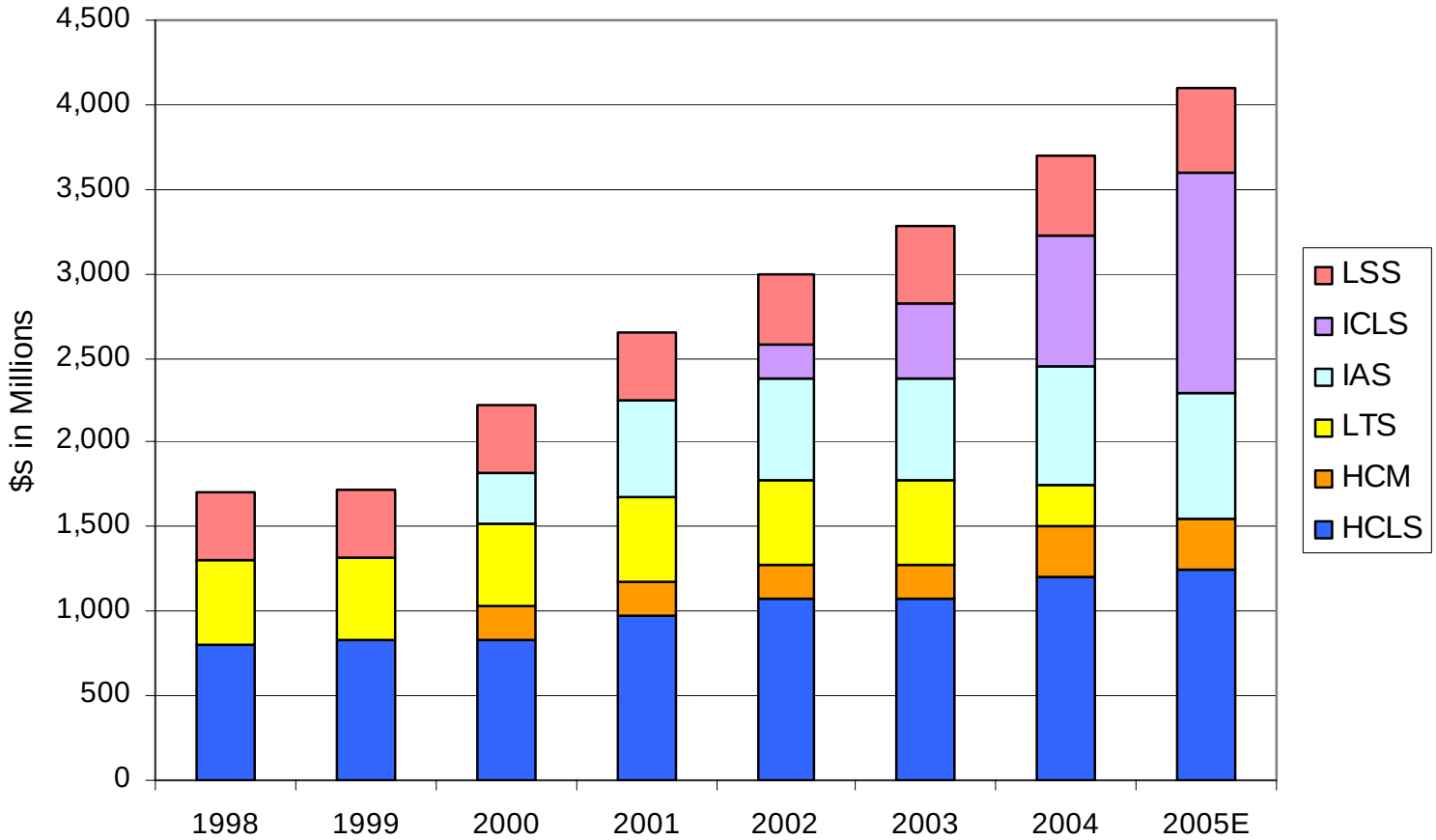
Attributes of Contribution Reform

- Broadest possible funding base to achieve relatively low assessment rate on each consumer
  - Minimize incentives for bypass or noncompliance
  - Unequal obligation among similar services using different technologies could affect consumer choice
- Sufficiency, stability, and predictability over time
  - Minimize carrier and customer confusion
  - Better environment for network investment decisions
- Relatively technology and market resilient
- Providers that benefit from use of the network should be obligated to contribute to the support of the network

High Cost Fund Elements



HCLS = loop; HCM = Model (large co); LTS = long term; ICLS = interstate common line; LSS = local switching; SNS = safety net; SVS = safety valve. Source: USAC

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HCF growth from ILEC access replacement and CETCs

	Funding in $millions			% of USF		Growth in funding			
	CETC	ILEC	Total	CETC	ILEC	CETC	ILEC	ILEC w/o (2)	Incremental ILEC funding (2)
1998	.	1,696.6	1,696.6	0%	100%	-	-		
1999	.5	1,723.1	1,723.7	0%	100%	-	1.6%	**1.6%**	
2000	1.5	2,515.3	2,516.8	0%	100%	179.1%	46.0%	**17.0%**	$500M from reg. chngs., including IAS
2001	20.2	2,583.2	2,603.4	1%	99%	1251.1%	2.7%	**2.7%**	
2002	47.5	2,934.5	2,982.	2%	98%	135.3%	13.6%	**5.5%**	$210M from reg. chngs., including ICLS
2003	131.5	3,141.8	3,273.2	4%	96%	176.8%	7.1%	**2.6%**	$130M from reg. chngs., including ICLS/IAS
2004	333.1	3,154.5	3,487.7	10%	90%	153.4%	0.4%	**0.4%**	
2005E	719.4	3,174.2	3,893.5	18%	82%	115.9%	0.6%	**0.6%**	

Source: USAC; projections by Balhoff & Rowe and are based on USAC's 2Q05 estimates for full year

- Step-function changes in ILEC funding, mainly due to access replacement, shift from implicit to explicit support, not “new money”
- Under identical support rule, CETCs receive “new money” from access replacement
  - 97 percent of CETC carriers were wireless. Did not receive access payments, but did receive access replacement.
  - Also benefited from reduced access levels.
- Identical support also provides CETCs “safety valve” support, intended to help rehabilitate acquired ILEC exchanges

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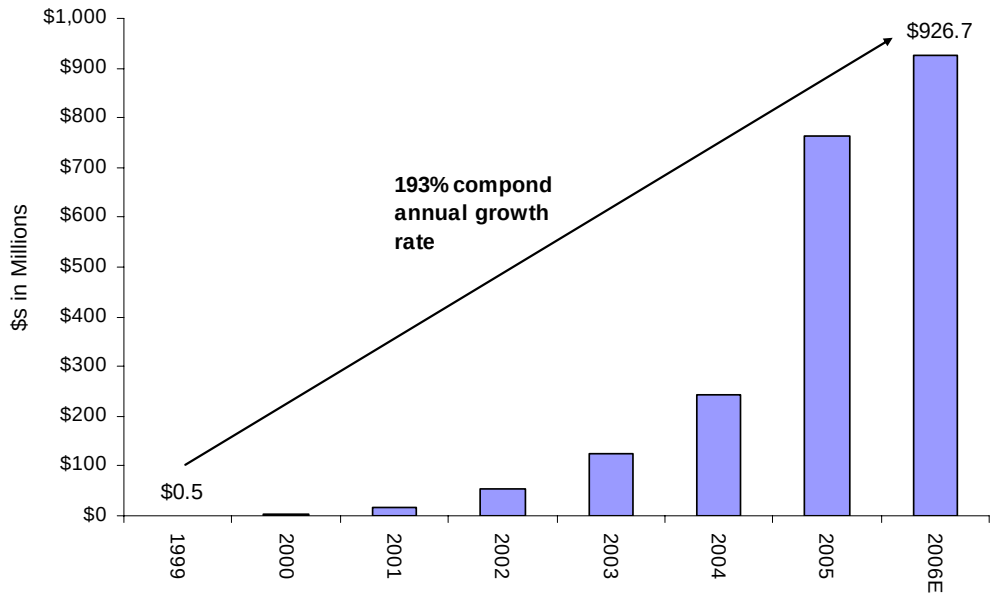
CETC Growth



Source: USAC 4Q05. Note: 2006E reflects 1Q06 annualized

	1Q03	1Q06	CAGR
Rural CETCs	26	161	83.6%
Rural ILEC Study Areas w/ CETCS	221	747	51.7%
% of Total Rural High Cost Support	3.0%	17.8%	89.1%

Source: USAC 1Q06

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Key Implications of Current Approach to Designating & Funding CETCs

- *Current* fund growth associated with the rapid increase in wireless CETC funding
  - So far, the largest CMRS carriers (e.g. Verizon, Cingular) have largely refrained from seeking CETC status
  - Wireless different from other CETCs, as customers tend to keep landline as well, different economics, different attributes
- Number of Competitive (mainly mobile wireless) ETCs increasing, with presence in more study areas
  - Under "identical support rule" they also receive access-replacement support, although they didn't receive access
- Confusion over universal service purposes – promote rural service, promote competition, or both?

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Quarterly HCF Growth Comparison

(in 000s)			Growth	
Non-Rural	ILEC	CETC	ILEC	CETC
ILEC-Price	$ 159,235		-3.5%	
ILEC-ROR	$ 19,455		-3.0%	
CETC		$ 53,902		149.2%
CETC-Pending		$ 16,132		236.5%
Total	**$ 178,690**	**$ 70,033**	**-3.5%**	**165.0%**
Rural	ILEC	CETC		
ILEC-Price	$ 70,814		-15.1%	
ILEC-ROR	$ 554,826		1.0%	
CETC		$ 111,929		63.0%
CETC-Pending		$ 22,076		-40.2%
Total	**$ 625,640**	**$ 134,005**	**-1.1%**	**26.9%**
Non-Rural + Rural	**$ 804,330**	**$ 204,039**	**-1.6%**	**54.5%**

High Cost Support 4Q2004

Non-Rural	ILEC	CETC
ILEC-Price	$ 165,038	
ILEC-ROR	$ 20,067	
CETC		$ 21,629
CETC-Pending		$ 4,794
Total	**$ 185,105**	**$ 26,423**
Rural	ILEC	CETC
ILEC-Price	$ 83,441	
ILEC-ROR	$ 549,133	
CETC		$ 68,671
CETC-Pending		$ 36,935
Total	**$ 632,573**	**$ 105,607**
Non-Rural + Rural	**$ 817,678**	**$ 132,030**

- *ILEC support flat or declining*
- *CETC support growing rapidly*
- *Number of supported ILEC study areas also declining*

Source: USAC 4Q05

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Greater CETC Discipline is Required

- Problem
  - CETCs are driving current fund growth
  - Unfocused policy goals in CETC regime
  - Absence of discipline and accountability
- Solutions
  - Clearly stated policy goals & targeted mechanisms
  - Adopt mandatory minimum national criteria for CETCs
    - CETC COLR requirements to receive USF
    - USF for ETCs based on their own costs
    - Address deficiencies in the guidelines, including not requiring compliance at the time the funds are received
    - Pursue appropriate tests/analyses, for national application, providing a “bright-line” for designating ETCs

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High Cost Fund

"One (high cost) fund, three programs?"

Rural small company

Rural large company

CETC/Wireless

Three high cost fund programs

- RLEC rural program
  - Embedded cost basis, requires investment before receiving support
  - Little “new” money, support for many carriers declining due to caps and formula
  - ILEC support overall grew 0.4% overall in ’04, estimated to grow 0.6% in ’05, but many RLECs losing significant amounts year-over-year
  - Producing good results for customers
  - Modify to fix specific problems, ensure support is adequate

Three high cost fund programs

"Non rural" program

- Better: *Large companies serving rural areas*
- Forward looking costs
  - Model flawed and not maintained
- Program twice rejected by 10th Circuit
- Clarify relationship to Act's purposes
  - Reasonable comparability
  - Sufficiency
- Reform consistent with court's direction
  - While not adding to policy instability

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Qwest v. FCC
(10th Circuit, Qwest II, 2-23-05)

- FCC's 9th order, concerning large company HCF (11-99) remanded by Court (2001).
  - FCC failed to "provide sufficient reasoning or record evidence" to support its decision.
  - Insufficient explanation for using 135% of national average (rather than urban) cost as benchmark.
  - No "inducement" to state action.
- On Qwest I remand, FCC referred matter to Joint Board; largely adopted the Board's recommendation (Martin, Rowe dissenting) FCC order issued March '03.
- For second time, court remands FCC's decision concerning the large company HCF.
- FCC relied on **erroneous or incomplete construction of Sec. 254** in defining statutory terms and crafting the mechanism.
- FCC's definition of **"sufficient" fails to take into account full range** of Sec. 254 principles.
- No deference due FCC's definition of "reasonable comparability." On remand, FCC must define term "in a manner that comports with its **concurrent duties to preserve and advance universal service**."
- FCC must return with "**empirical findings** supporting its conclusion," and utilize its expertise to craft a support mechanism "taking into account all the factors that Congress identified."
- Court declined to retain jurisdiction or set deadline for FCC action.

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Three high cost fund programs

De facto separate CETC program

- 97% wireless
- Support based on another party's costs
  - Allows business plans based on "regulatory revenue," contrast regimes based on actual investment or cost
  - Rapidly growing, even with largest carriers staying out – so far
- Confused purposes, little discipline
- Producing good results for shareholders in certain companies
  - Reform to clarify purposes, increase accountability and discipline, produce results for customers
- Can states use certification to link with results, preserving program for customers and recipients alike?

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The Joint Board's tough questions

"Four funerals and a wedding?"

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High Cost Referral Order

- June 28, 2004, FCC referral to Federal-State Joint Board
  - FCC seeks a long-term universal service plan that
    - Ensures specific, predictable, and sufficient funding
    - Effectively targets rural telcos serving the highest cost areas but protect against excessive fund growth
    - Takes into consideration distinctions among rural carriers (currently defined for universal service purposes using the Act's definition for "rural telephone company") and between rural and non-rural carriers
  - Should **separate mechanism** be maintained **for rural vs. non-rural carriers**?
  - Should the HCF mechanism for rural carriers be based **on embedded or forward-looking** costs?
  - Should the **definition of "rural telephone company"** be modified so that an embedded model is used for only a **subset of carriers** (e.g. FCC suggests 50K lines in a state as a possible cut off) and a forward-looking model is used for the larger LECs?
- August 17, 2005, Joint Board issues notice requesting comment on four proposals developed by state members and staff

Problems	Implicit Principles	Illustrative Recommendations
• Growth in the size of the fund	• Fund growth must be arrested or “stabilized”	• SAM block grants; consolidate study areas; freeze per-line on competitive entry; review rate comparability
• States may not assume enough of USF load	• States can/should evaluate their USF duties	• States may supplement federal USF if there is need; state-specific benchmarks using cost-of-living/income
• Contribution base that is too narrow	• Contributor base should include all network users	• Contributions required of all those that use the PSTN network
• Problematic CETC discipline	• CETCs overseen by the states	• Segregate fund of CETCs from ILECs, capped at $1B, funding based on cost-studies
• Difficulty in maintaining non-rural/rural distinction	• Eliminate distinction—so USF is omni-jurisdictional	• Change the discipline so there is no artificial distinction between rurals and non-rurals
• Parent trap—limited USF for acquired properties	• Acquired exchanges eligible for USF	• Repeal the section 54.305 rule that prevents an acquirer of a rural property from USF eligibility
• All-distance prods blur jurisdictional separations	• Intrastate and interstate distinction erased	• Abrogate the distinctions between intrastate and interstate so separations process is unnecessary
•Insufficient recovery mechanisms for transport	• Entire network, including transport eligible for USF	• Ensure all network elements are eligible for recovery including high transport costs (impt. for broadband)
•Intercarrier comp. reform pressures USF	• USF reform supports intercarrier reform	• Provide flexibility so that USF can provide support in the reform of intercarrier discipline
•Uncertainty hurting rural investments	• Provide time frame for predictability in investment	• Generally set three-to-five year review processes to create predictable investment timeframe

Fundamental analyses

Derivative proposals

Source: Balhoff & Rowe 9-30-05 Joint Board Comments

Realistically achievable reforms

From Balhoff & Rowe Comments

- Focus on reforms that are:
  - Adoptable
    - Politically feasible
  - Achievable
    - Reasonably likely to achieve the desired goals
  - Sustainable
    - Workable as conditions change
  - Take into account the point at which reforms are commencing
    - Recognize policy path dependency

  - See, Barbara Cherry, "T*he Telecommunications Economy and Regulation as Coevolving Complex Adaptive Systems: Implications for Federalism"* (delivered to TRP); Barbara Cherry and Johannes Bauer, "Adaptive Regulation: Contours of a Policy Model for the Internet Economy" (September 2004), presented at the *International Telecommunications Society 15th Biennial Conference*, Berlin Germany.

Realistically achievable reforms

- Network focus
  - Supporting robust network platforms, capable of providing rural areas with “reasonably comparable” services as well as rates to those in urban areas
    - “No barriers to deployment” of advanced services, from Rural Task Force
  - Purchasers of rural price cap properties should be allowed to propose company-specific approaches consistent with their circumstances
  - Reform or abandonment of the parent trap rules to allow meaningful investment in acquired rural property
  - Support for all non-average schedule companies should be based on their own costs (whether embedded or FLEC)
  - Reform should be based in a correct identification of cost drivers, and should seek to reconcile support with costs

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Realistically achievable reforms

- CETC program
  - Clarify the purposes for CETC support, rather than delaying these decisions or deferring them to the states
  - Additional steps to ensure program discipline, accountability and customer value in the CETC program similar to that already present in the rural rate of return program
  - Meaningful CETC certifications and review
  - Support for CETCs specifically should be based on their own costs and network characteristics, either embedded or forward looking
- Small company program
  - Support for rural rate of return carriers should generally continue to be based on embedded costs, with specific modifications as described below
  - Consider modifications to the formulae to ensure that support better follows costs
  - The high cost fund should not be capped or frozen, as variously suggested
  - Study areas should not be consolidated

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Realistically achievable reforms

- Large company program
  - The HCPM should be subject to ongoing review concerning inputs to the model, modeling assumptions and formulae
  - The "non-rural" large company fund should ensure that support is sufficient to facilitate reasonable comparability of rates and services for rural areas served by large companies
- State role
  - Support should continue to be based on national rules and formulae
  - Key issues should be resolved by the Commission, not punted
  - States continue to have an important role in ETC and CETC certifications, through the Joint Board process, and through direct participation in FCC proceedings
- Contribution base
  - Broaden and stabilize the contribution base for universal service

Yogi Berra on universal service policy

"You got to be careful if you don't know where you're going, because you might not get there."

(We are living the Law of Unintended Consequences)

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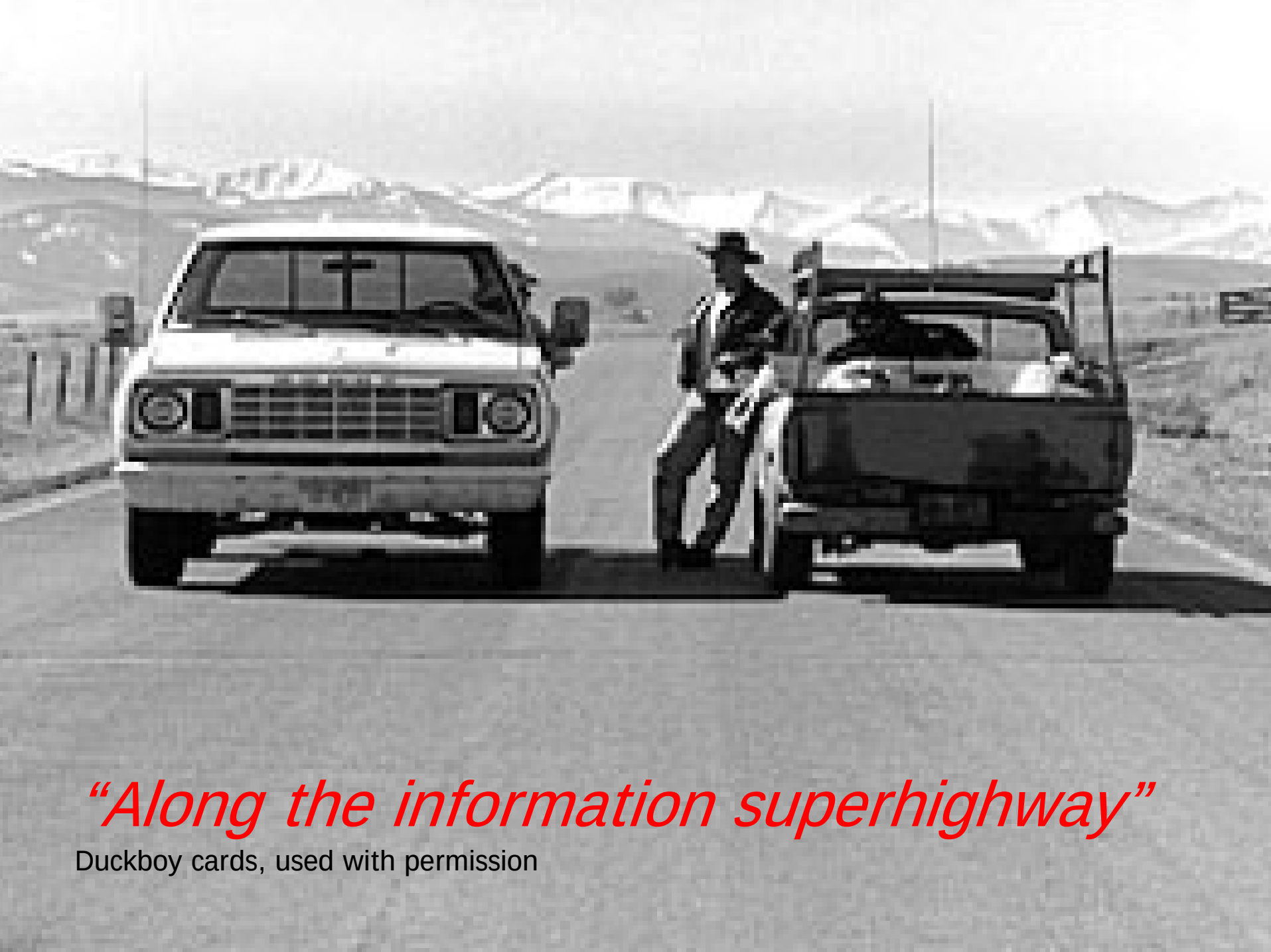
About Balhoff & Rowe

Balhoff & Rowe, LLC, is a specialized professional services firm focused on providing financial-regulatory advice. The principals have more than 40 years of experience in advising investors and regulators on complex investment issues. They have provided services to a wide range of communications companies, including incumbents, competitive carriers, wireless operators and cable operators. Additionally, the firms has expertise in energy and other utility services. The services of Balhoff & Rowe include research, think-tank projects, professional facilitation, advocacy efforts, financial and restructuring advice for various companies, carriers and policymakers. The company offers an unparalleled combination of experience, credibility, strategic insight and access in a rapidly changing environment.

Michael J. Balhoff, CFA, ***Managing Partner***
Michael J. Balhoff, CFA, is managing partner at Balhoff & Rowe, LLC. Previously, Mr. Balhoff headed for 16 years the Telecommunications Equity Research Group at Legg Mason, which advised investors about equities in media, cable, wireless, telephony, communications equipment and regulation. Prior to joining Legg Mason in 1989, Mr. Balhoff taught at both the graduate and undergraduate levels. He has a doctorate in Canon Law and four master's degrees, including an M.B.A., concentration in finance, from the University of Maryland. A Chartered Financial Analyst and a member of the Baltimore Security Analysts Society, Mr. Balhoff has been named on six occasions as a *Wall Street Journal* All-Star Analyst for his telecommunications recommendations. His coverage of telecom was named by *Institutional Investor* as the top telecommunications boutique in the country in 2003. He has also testified multiple times before congressional committees, is regularly a featured speaker at conferences for investors and policymakers, and is widely quoted in the media, including television, newspapers as well as communications and business journals.

Robert C. Rowe, Esq., ***Senior Partner***
Robert C. Rowe, Esq., is a senior partner at Balhoff & Rowe, LLC. Previously, Mr. Rowe served as the Chairman of the Montana Public Service Commission which was responsible for regulating telecommunications, electricity, natural gas, water, and some transportation services. Mr. Rowe also served as President of the National Association of Regulatory Utility Commissioners, Chairman of the NARUC Telecommunications Committee, member and state chair of the Federal-State Joint Board on Universal Service, member of the Federal-State Joint Conference on Advanced Services, chairman of the thirteen state Operations Support Systems Collaborative working with Qwest and its competitors to achieve compliance with Section 271 of the 1996 Federal Telecommunications Act, and member of various advisory boards for university-affiliated programs.

Bradley P. Williams, Esq., *Principal*
Bradley P. Williams joined Balhoff & Rowe as a principal in 2005. Previously, Mr. Williams was a member of the Strategic Planning & Business Development group at Lowe's Companies Inc., the Fortune 50 home improvement retailer. Prior to joining Lowe's, Brad worked with Mr. Balhoff in the award-winning Telecommunications Equity Research Group at Legg Mason, focusing on incumbent and rural local exchange carriers. Prior to joining Legg Mason, Brad was a co-founder of eSprocket / Beachfire, a venture-backed company that evolved into one of the pioneers in mediation technology solutions for the financial services sector. Previously, he served as a financial executive for Iron Road Railways Incorporated, a Washington, D.C.-based holding company that integrated, through acquisitions, a significant regional freight rail network serving northern New England and eastern Canada. Brad began his career as an investment banker in First Union's Capital Markets Group. He has a BA in Economics from the University of North Carolina and a JD from the University of North Carolina School of Law.



“Along the information superhighway”

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