

UTOPIA Feasibility Assessment

– Eleven City Build –

May 13, 2004

DEAN & COMPANY
STRATEGY CONSULTANTS

WASHINGTON, D.C.

Agenda



- **Overview**
- **Demand Benchmarks**
- **Cost Benchmarks**
- **Sensitivities & Scenarios**

Summary

- **Dean & Company have evaluated the feasibility of UTOPIA's Eleven City Build with an emphasis on the Phase 1 plan. We have evaluated Phase 1 on a standalone basis. It is our understanding that the future phases will follow, based on Phase 1.**
- **While it represents a smaller footprint, the Phase 1 plan remains feasible, given the fundamentals:**
 - Conservative and Expected take rates are within the achievable range given the experience of other broadband overbuilders and competitive service providers.
 - Planned build out rates are conservative, particularly since the scope of construction is lower than the 18 city plan
 - The Open Access, IP-based business model remains consistent with the evolution of competition and technology in the telephone, internet, and video services markets
 - Wholesale price levels are sufficiently low for service providers to become profitable on UTOPIA, and are comparable to or more attractive than wholesale access over the incumbent telephone and cable networks. This holds even considering the price pressure on local and long distance telephone services placed by voice-over-IP services.
 - Active/Ethernet technology choice is well-suited over the long term for UTOPIA's model, leverages a broad supplier base, and has minimal risk of obsolescence by other technologies, including wireless
 - Projected capital and operating costs are within the range of comparable projects, and take into account the important costs drivers for FTTH/B networks (e.g. aerial vs. buried mix, replacement lifecycles). The Phase 1 plan is large enough that fixed costs (e.g. NOC) are lower on a per-subscriber basis than the costs that are driven by homes passed (terminal costs) and by subscriber density (distribution, maintenance) - i.e. Phase 1 is large enough to achieve required economies of scale in construction and operation.

Summary - continued

- **The primary areas of risk relate to the competitive environment:**

- The competitive response from Comcast and Qwest may be escalated relative to the plan assumptions, potentially driving down market price levels, increasing churn, and/or putting pressure on recovery of installation fees. While the service providers on UTOPIA's network bear the initial impact of these pressures, they could ultimately flow through to UTOPIA in order to maintain service provider profit margins as an incentive to continue their marketing efforts.
- The smaller footprint means that UTOPIA is more dependent on the success of fewer retail service provider tenants in the first 2-3 years, vs. the larger build where the diversity of service providers could expand more quickly. On the positive side, the smaller footprint will facilitate tighter operational coordination in signing up and provisioning subscribers between UTOPIA and its initial retail service providers, one of the concerns in the larger build plan.
- The usage-tiered wholesale pricing model for data services is well-structured to capture the value of increasing data traffic over the long term. This traffic can be expected to grow dramatically with increased internet use and migration of voice and video service to internet protocols. However, customer acceptance of usage-based pricing is uncertain given historical experience and counter-marketing by incumbent service providers.

- **The Phase 1 plan has a high degree of robustness to these risks**

- Downside sensitivity analysis and scenarios show sufficient cash flow to meet the projected debt obligations across the full range of cases we examined.
- In cases that combine multiple downsides: take rates lower than the conservative view, price war lasting 3 years or more that flows through to UTOPIA, and construction and operating cost overruns of 10% and 20% respectively, additional funding of \$1MM to \$12MM would be required over the 3rd to 5th year of operation. Past that point, UTOPIA would generate positive cash surplus even in outcomes with combined downsides.
- While UTOPIA has no control over the competitive environment, UTOPIA is in a position to proactively manage project costs and retail tenant performance. Success in managing these two areas of risk would keep the potential for additional funding to a level under \$1-2 MM.

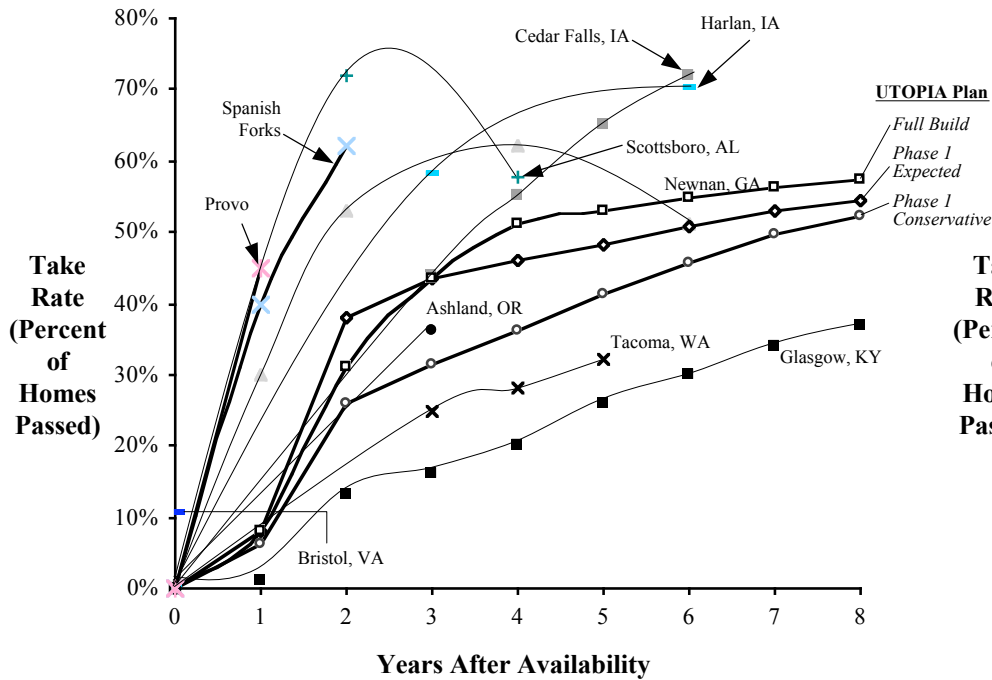
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- • **Demand Benchmarks**
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Given the experiences of other municipalities and over-builders, UTOPIA's predicted take-rates over time are feasible

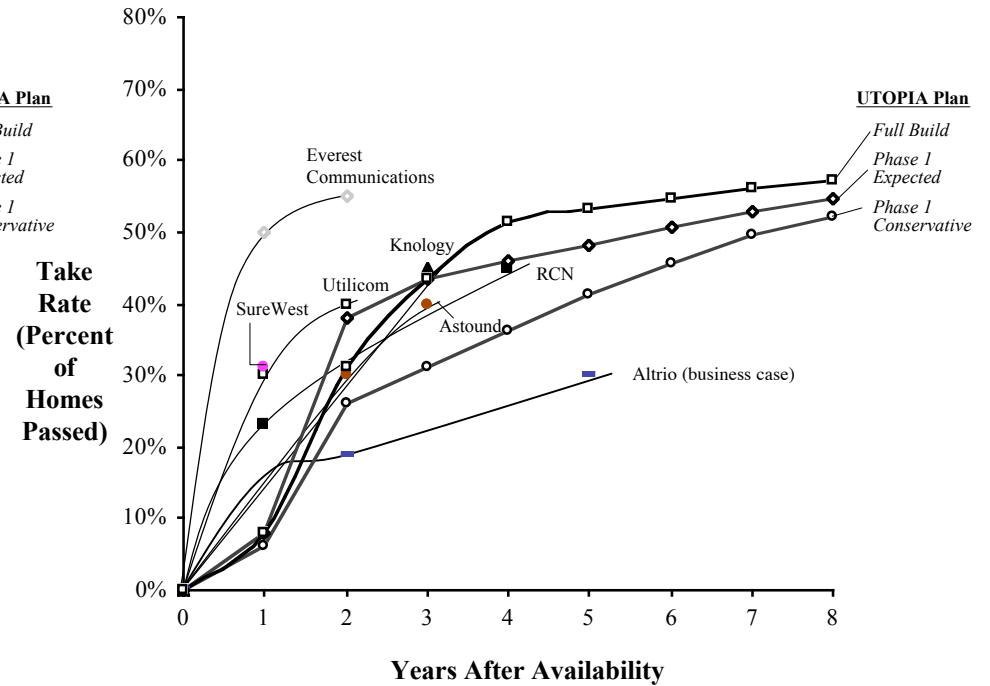
Take-Rates Over Time – One or More Services –

Municipal Networks



Average Take Rates	16%	46%	36%	45%	41%	56%

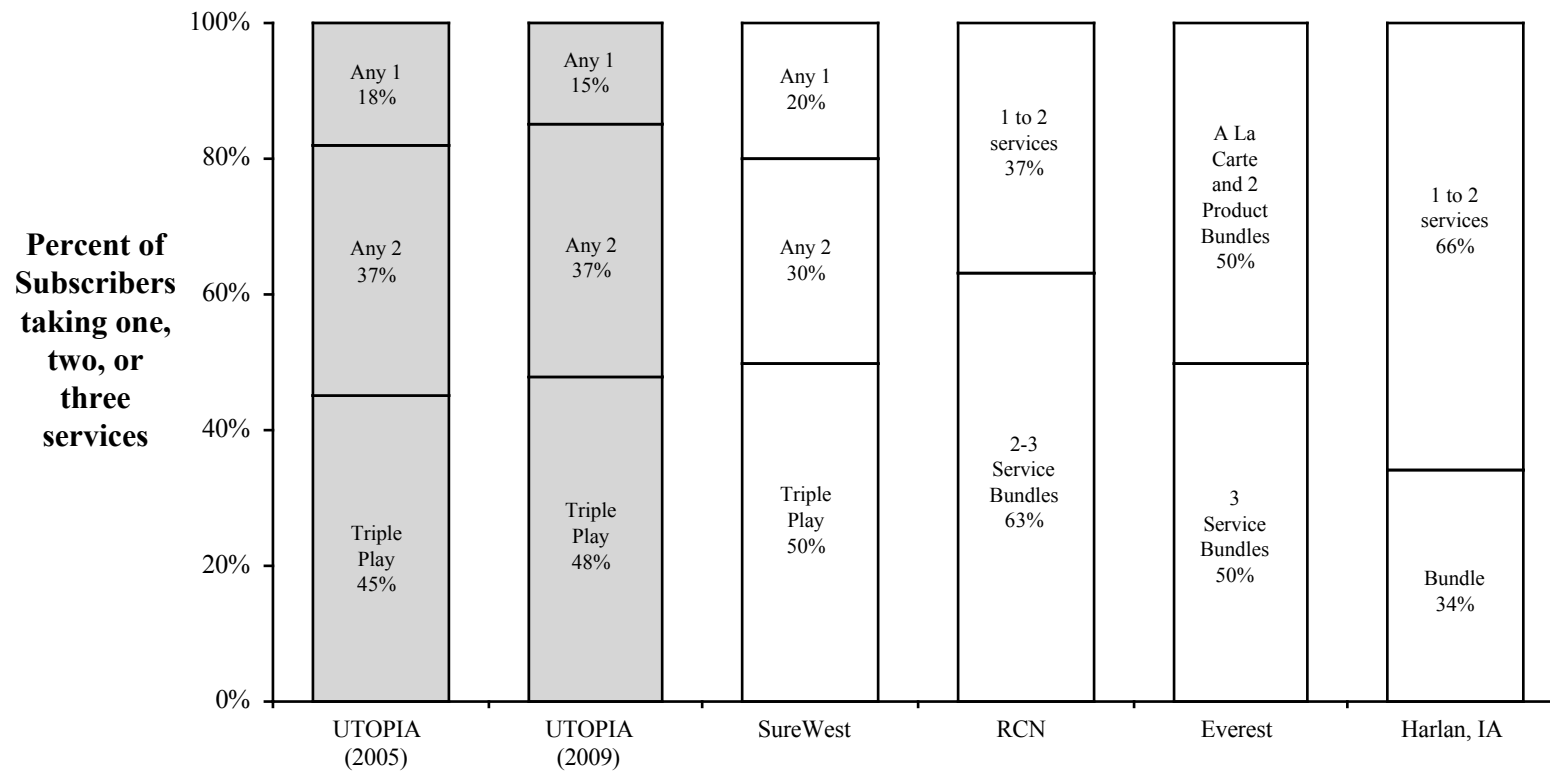
Overbuilder Networks



Average Take Rates	29%	42%	43%	45%

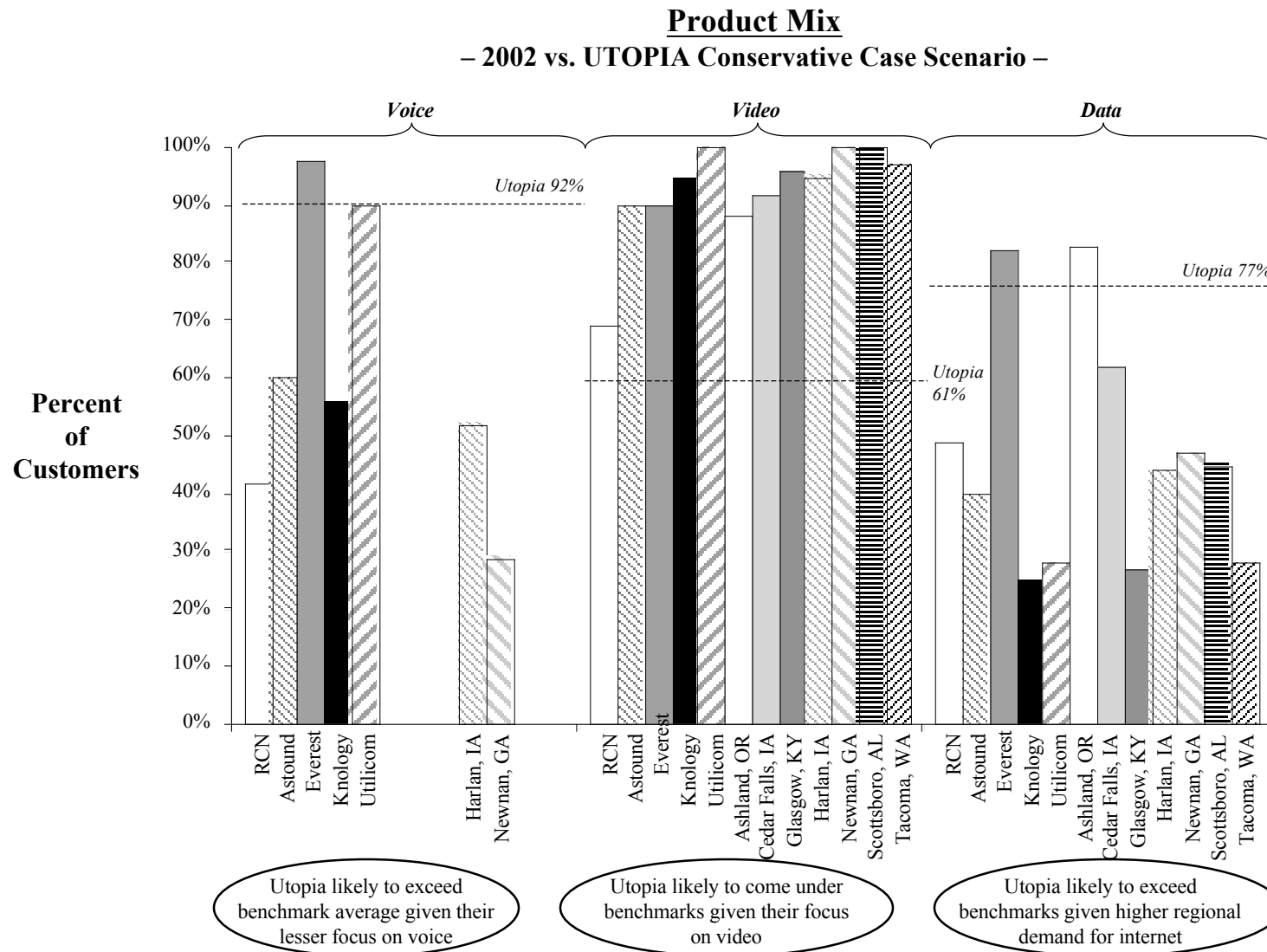
Expectations of selling service bundles are in line with other “triple play” networks

Overbuilder Customer Demand for Bundles
– By Product Mix –



Source: Company statements, Dean & Company research

The variation between the expected UTOPIA product mix and benchmarks are directionally consistent with differences in UTOPIA's market demographics and business model

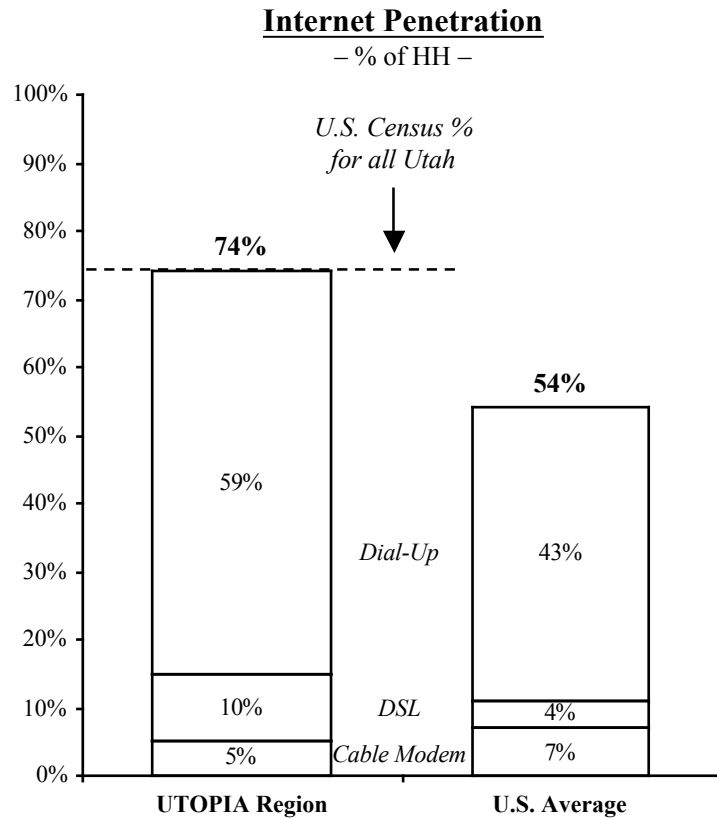


Note: Take rates decline over time.

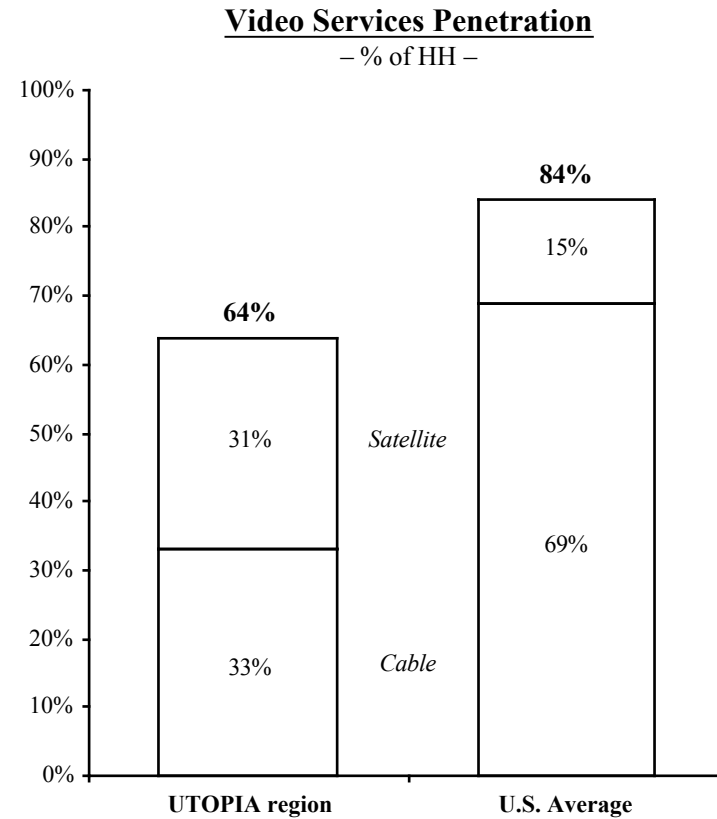
Ashland, OR; Glasgow, KY, and Tacoma, WA assume 12% of Internet customers do not have cable TV. Harlan, IA assumes 1% of Voice customers do not have cable TV.

UTOPIA has attractive residential market environment

Residential Service Intensity Comparisons – UTOPIA vs. the National Average –



➔ **Internet services are the cornerstone for FTTH success**

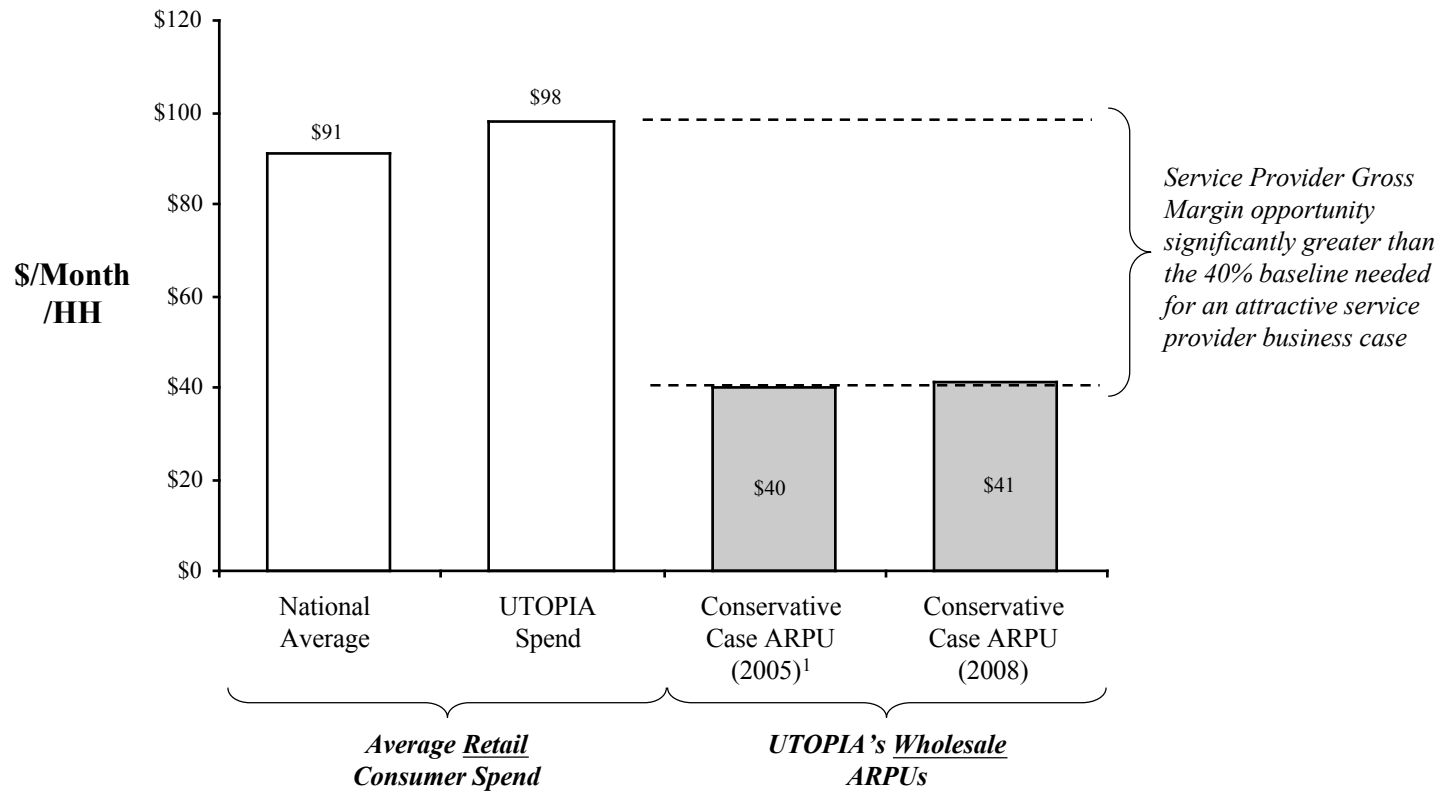


➔ **Typical of older TCI cable systems - implies upside for higher quality network**

Source: UTOPIA Survey; U.S. Department of Commerce (2002), MediaWeek

UTOPIA's wholesale service charges are in a range where service providers have sufficient margin to be profitable

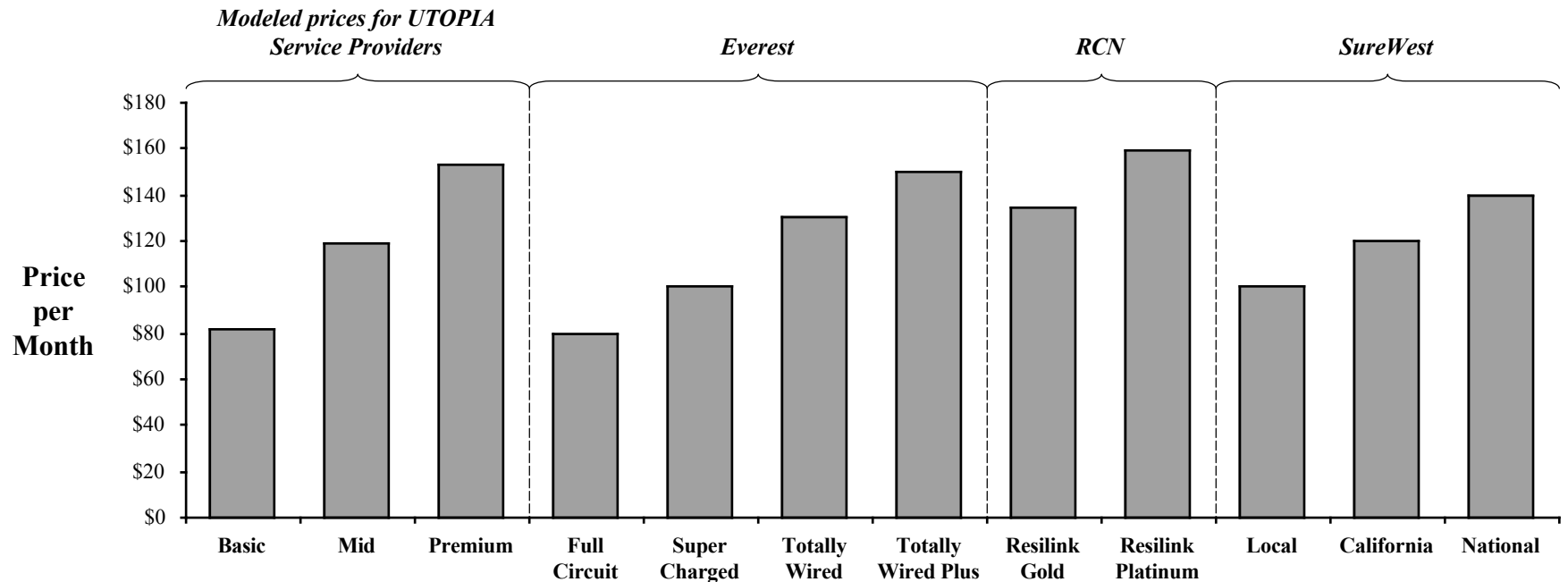
UTOPIA Revenue per Subscriber Benchmarks
 – Voice, Video, and Data Triple Play Example –



¹ Includes Access Charge

To evaluate service providers' business cases, we assumed bundled offers similar to other triple play providers

Price Comparisons – Triple Play Packages –



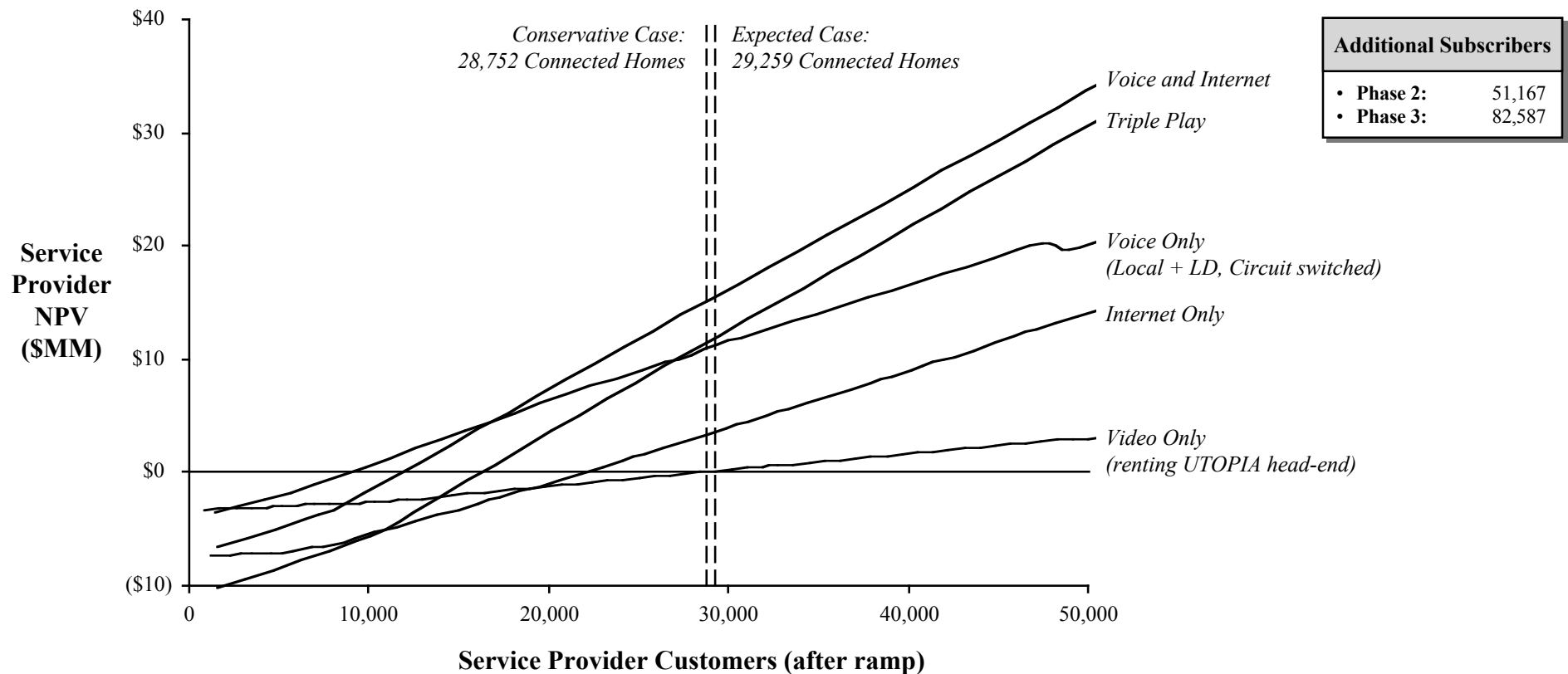
Price	\$82.05	\$119.45	\$153.48	\$84.95	\$109.95	\$139.95	\$149.95	\$135.00	\$159.00	\$109.95	\$119.95	\$142.90
Local Phone	1 line	1 line	2 lines	1 line	1 line	1 line	1 line	1 line	2 lines	1 line	1 line	1 line
Features	3	3	6	0	6	11	11	3	4	4 including voicemail	4 including voicemail	4 including voicemail
LD - Free Minutes		100	150				120			0	0	Unlimited
Basic Cable Channels				70+	70+	70+	70+	81, 1 box	81, 2 boxes			
Digital Cable Channels	100	150	150	40+	40+	40+	40+	35	35	150	180	230 +
Internet	1M	10 M/Sec, 10G/Mo.	10 M/Sec, 20G/Mo.	256K	1.5M	3M	3M	3M	3M	10M	10M	10M

Source: UTOPIA Model, company websites and representatives

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The first phase plan is large enough to support two to three service providers

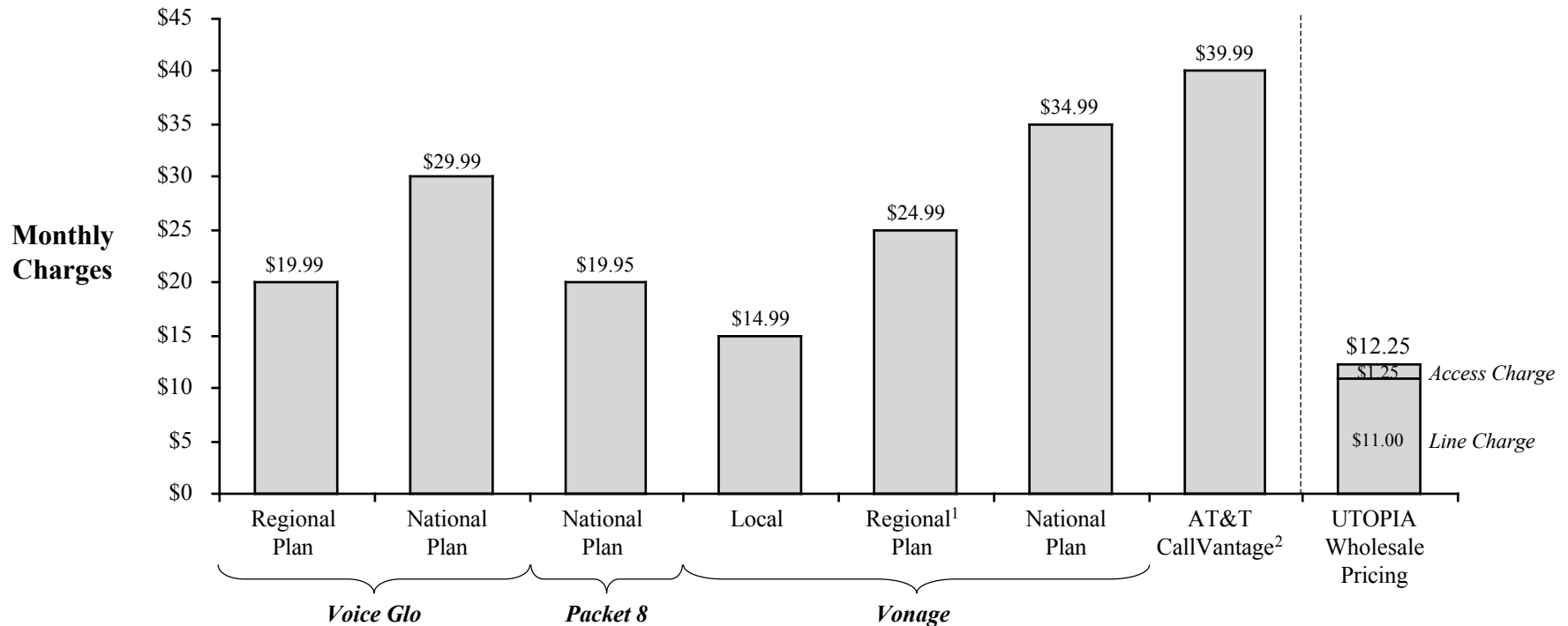
Service Provider Business Case – Combination of Residential and Business Customers –



Note: Based on proposed UTOPIA service charges as of April 2004 plan, assumes that service provider offer 20% discount to standard retail price

VoIP offers will continue to provide service providers with sufficient margin for profitability

VoIP Pricing – Residential Calling Plans –



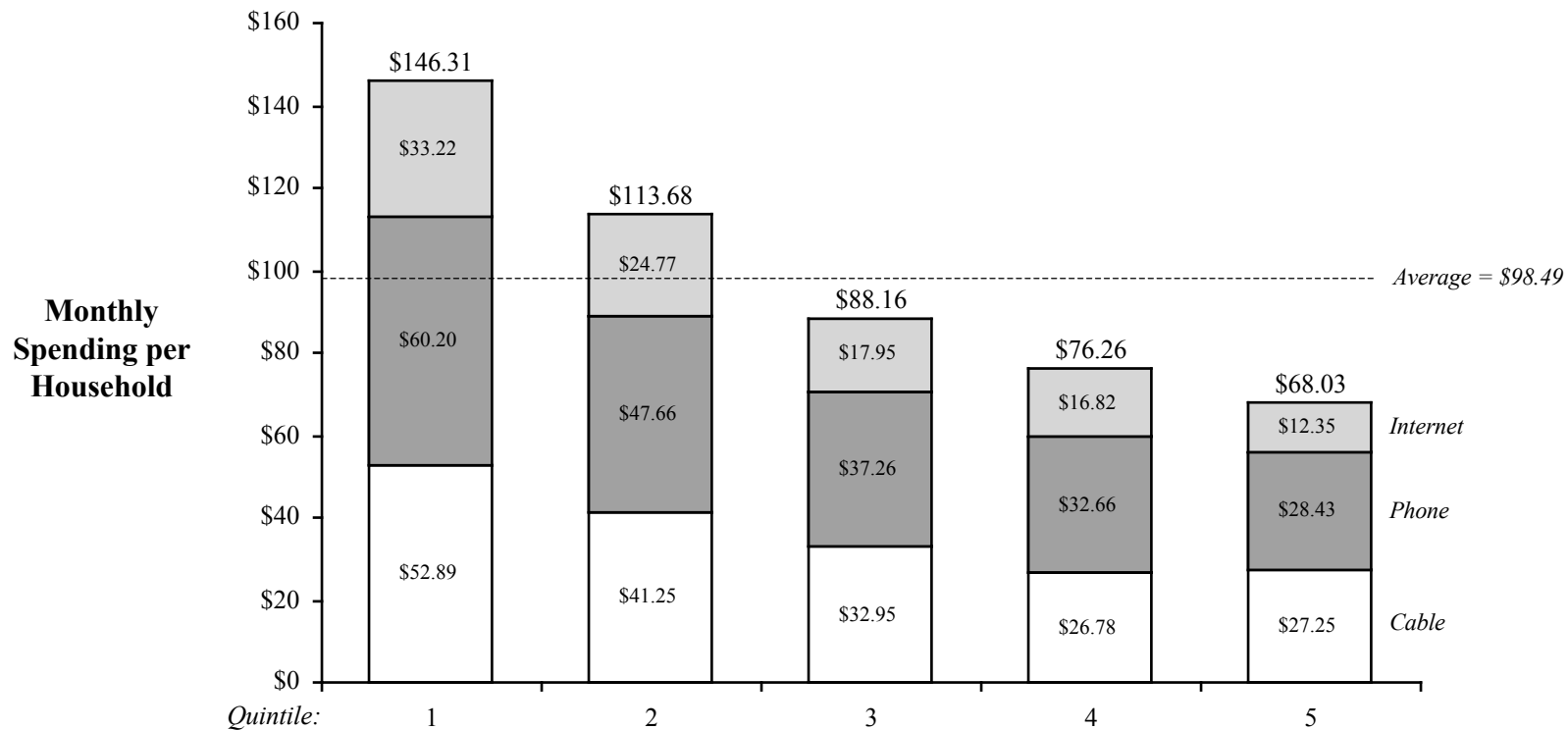
Local Minutes	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
LD Minutes	0	Unlimited	Unlimited	500	500	Unlimited	Unlimited
LD Rate	3.9¢/minute	–	–	3.9¢	3.9¢	Unlimited	–

¹ Includes a larger local area

² 6 months into offer at \$19.99/month

Households in the highest spending quintile spend 2x more on telecom services than those in the fifth quintile, with data and voice spending driving the majority of variation. This allows UTOPIA service providers to target heavy-spending customers offering high margins.

Relative Bill Size by Quintile — UTOPIA Region
 – For Those Who Buy Service –



Percentage of People Who Take Service	• Internet	• Phone	• Cable
1	94%	100%	67%
2	76%	99%	76%
3	77%	98%	71%
4	61%	97%	49%
5	40%	74%	7%

Source: UTOPIA survey

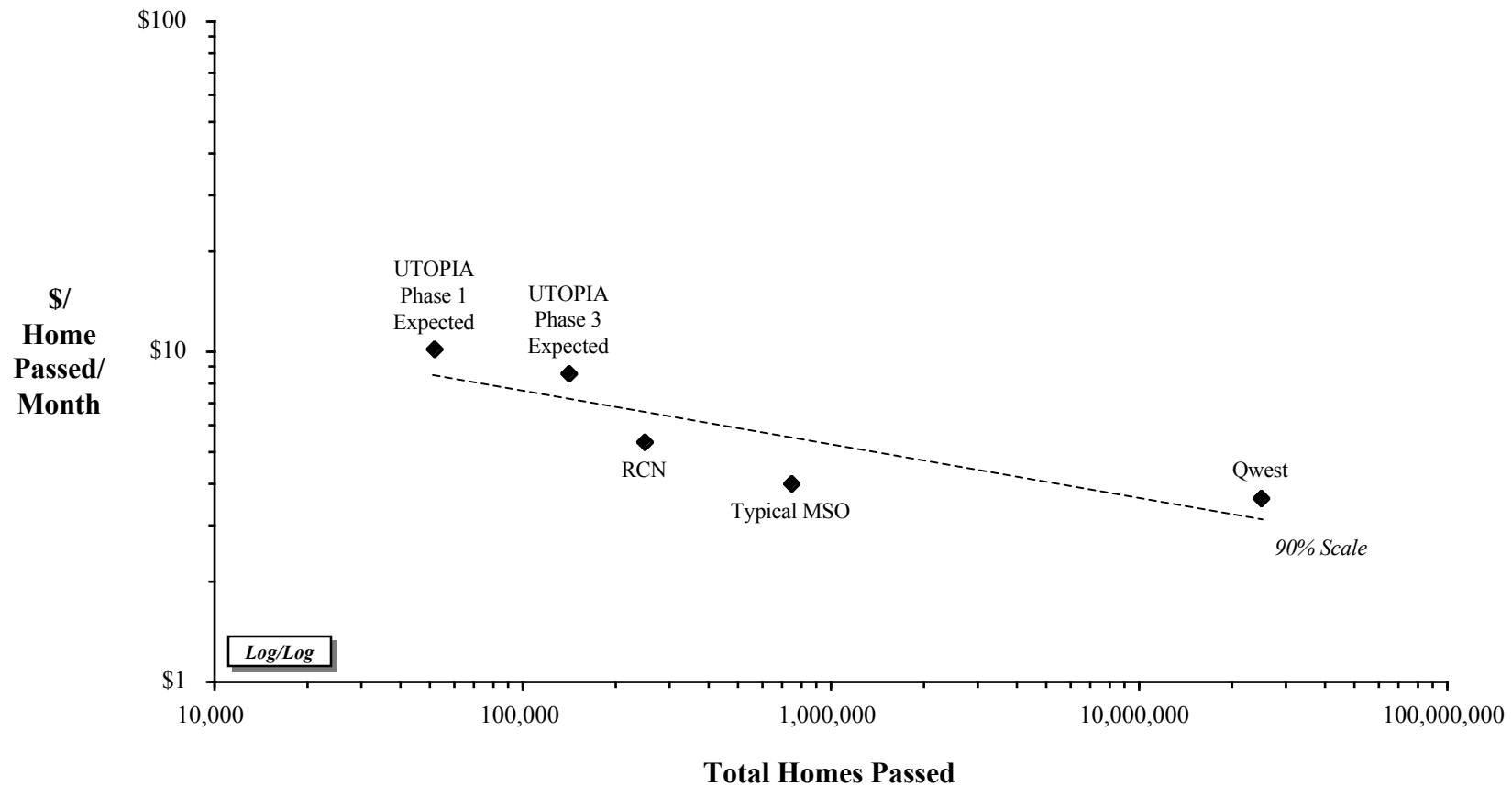
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UTOPIA's scale-adjusted projected network operations cost is comparable to other operators

Network Operating Expense Comparison — NOC and Field
 — \$ per Home Passed —



Note: NOC costs include asset management, headend, co-location, and interconnect expense. Field expenses include field maintenance and electronics maintenance.

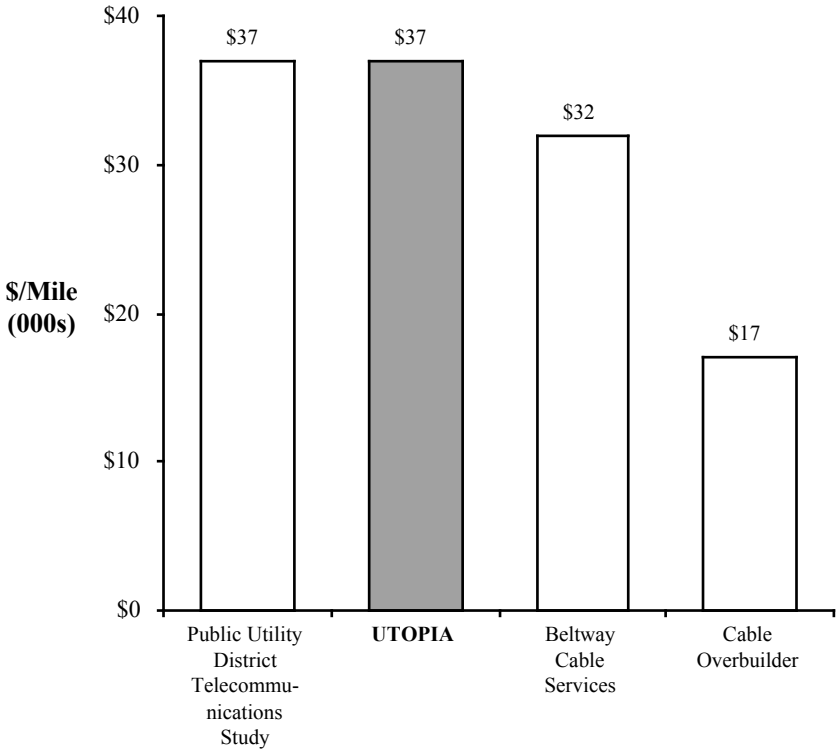
Source: UTOPIA cost and revenue model, April 2004; company statements; Dean & Company research

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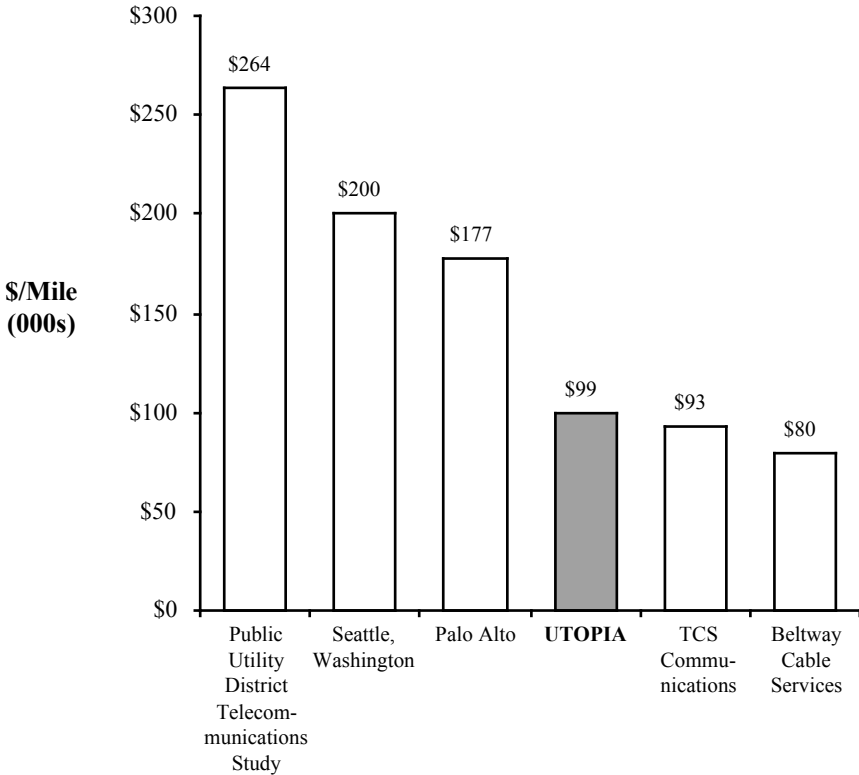
UTOPIA’s planned fiber construction costs are consistent with our experience

Fiber Construction Costs – Benchmarks –

Aerial Fiber



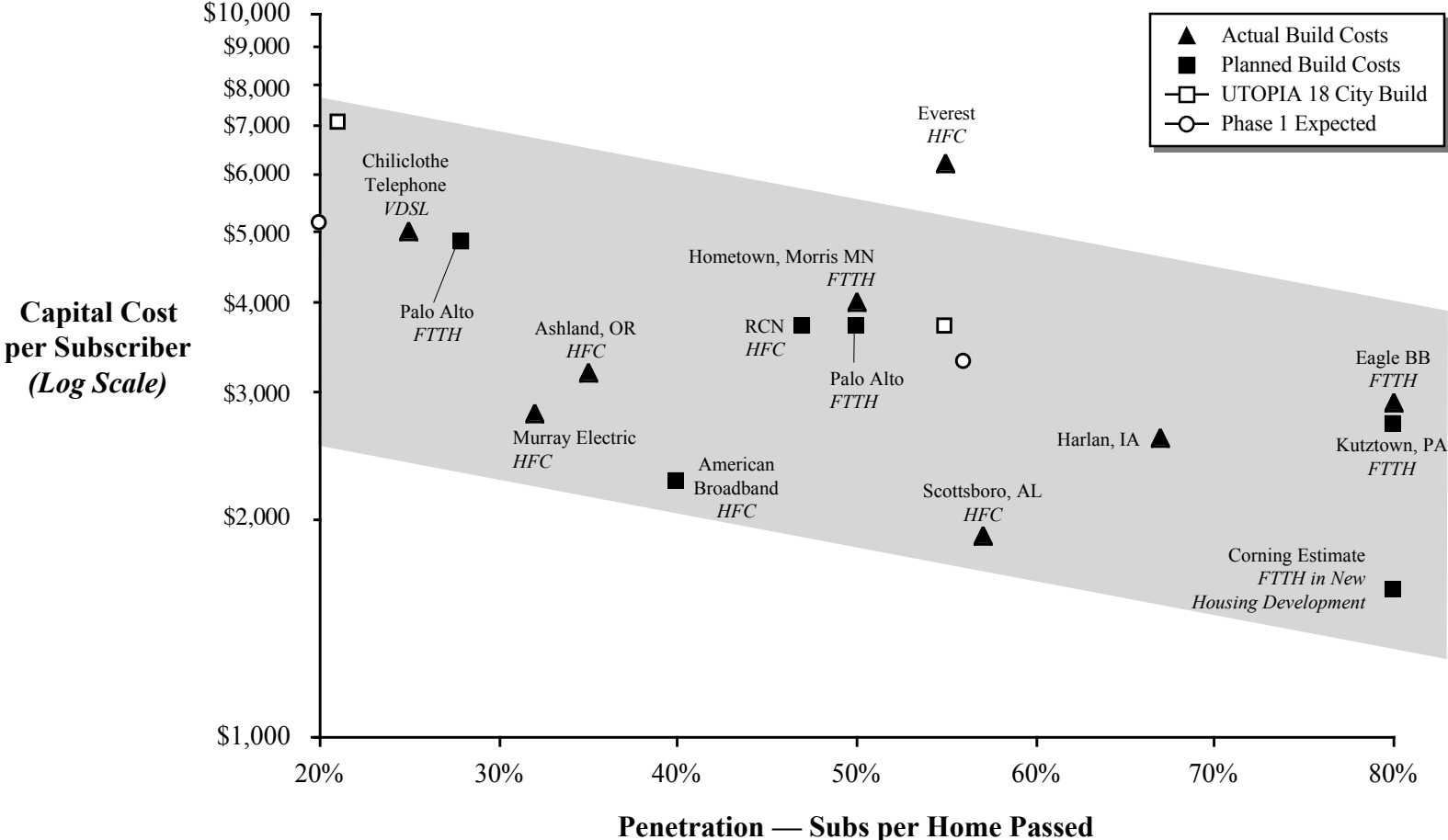
Underground Fiber



Note: Contingency has been excluded

UTOPIA's projections for total capital cost per subscriber are in the range of other broadband and fiber network overbuilds

Capital Cost Comparison
 – Distribution, Core, NOC, NIU –

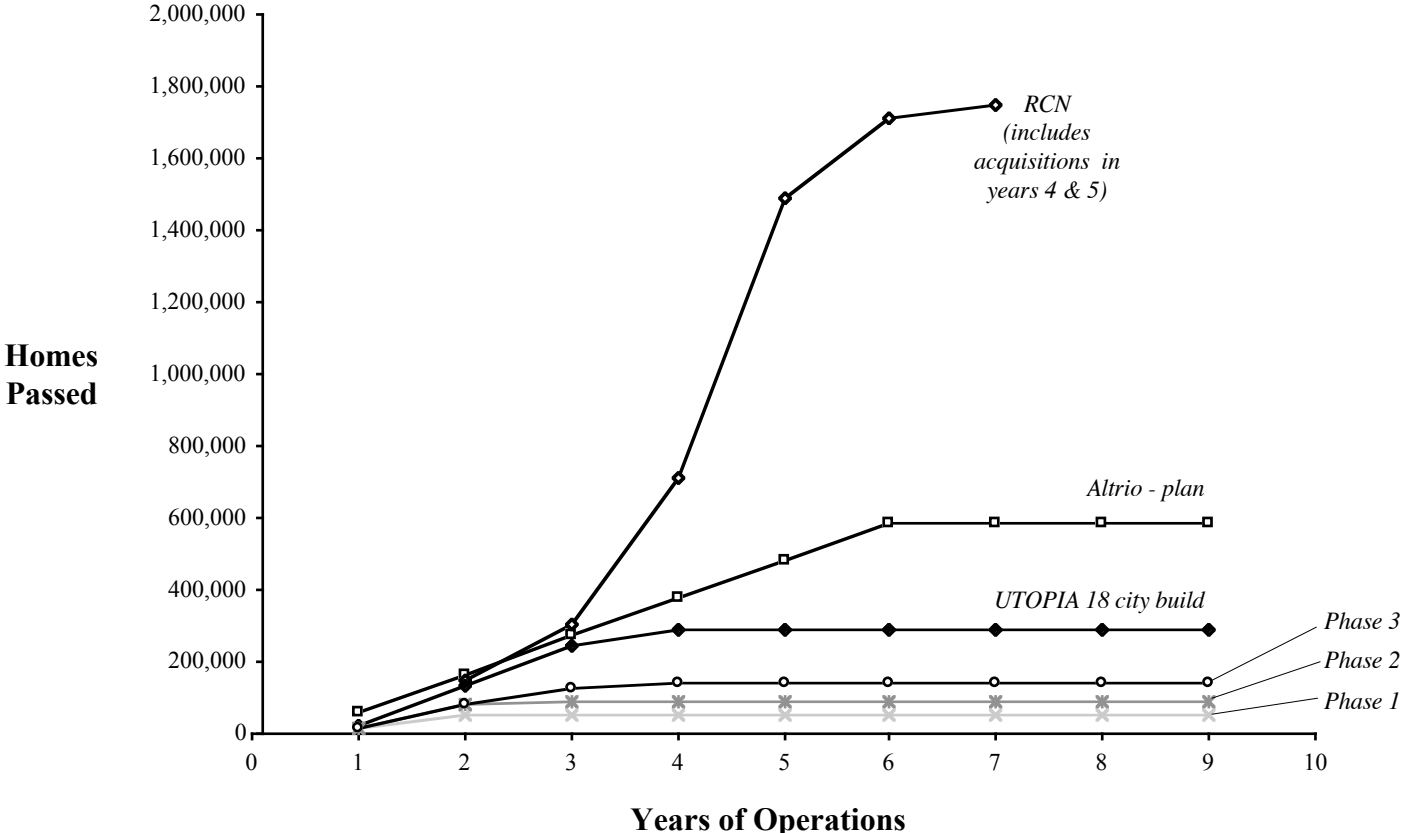


Note: Palo Alto costs include core network and subscriber drops but not headend
 Capital cost per subscriber defined as cumulative capital expenditures over installed subscriber base

Source: UTOPIA Business Model, Palo Alto business case, company websites

UTOPIA's build-out rate appears to be achievable

Build-Out Rate Benchmarks



FTTH deployments appear to be roughly split between Active/Ethernet vs Passive/ATM

FTTH Deployments

– 2002 –

	Active	Passive/PON
Ethernet/ IP	<p>80-100K</p> <ul style="list-style-type: none"> • Grant County - WA (ZIPP) • WIN - Sacramento WA (include HFC drops) • Lyse Tele - Norway • Fastweb - Italy • B2 - Sweden • Competisys - American Canyon/CA 	<p>10-20K</p> <ul style="list-style-type: none"> • Palo Alto Utility - Palo Alto, CA
ATM	<p><10K</p> <ul style="list-style-type: none"> • Few 	<p>40-60K</p> <ul style="list-style-type: none"> • Bell South - Dunwoody, GA (trial) • Blair Tel. - NE • Rye Tel - Colorado City, CO • NexTech - KA • Itex Communications - TX • Baldwin Telecom - WI • Bristol Utilities - VA • Hometown Solutions - Morris, MN • Kutztown, PA • SBC - Mission Bay, CA

Source: Dean & Company Analysis, KMI estimates

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Active fiber Ethernet solutions have the advantage of support by established suppliers, and Cisco in particular

FTTH Technology Suppliers
 – Partial List –

	APON	EPON	A-Active	E-Active
New				
AllOptic		+		
One Path		+		
Optical Solutions	+			
Paceon	+			
Quantum Bridge	+			
Salira		+		
Terawave	+			+
WWP				+
Riverstone				+
Optical Access				
Extreme Networks				
	<i>Resolution into a stable market likely to wait until RBOCs begin large scale deployment</i>			<i>Leverages existing metro-optical equipment markets</i>
Established				
NEC Illuminant	+			
Nortel	+			+
Cisco				+
Pirelli		+		
Lucent	+			+
Alcatel	+			+
Marconi				+

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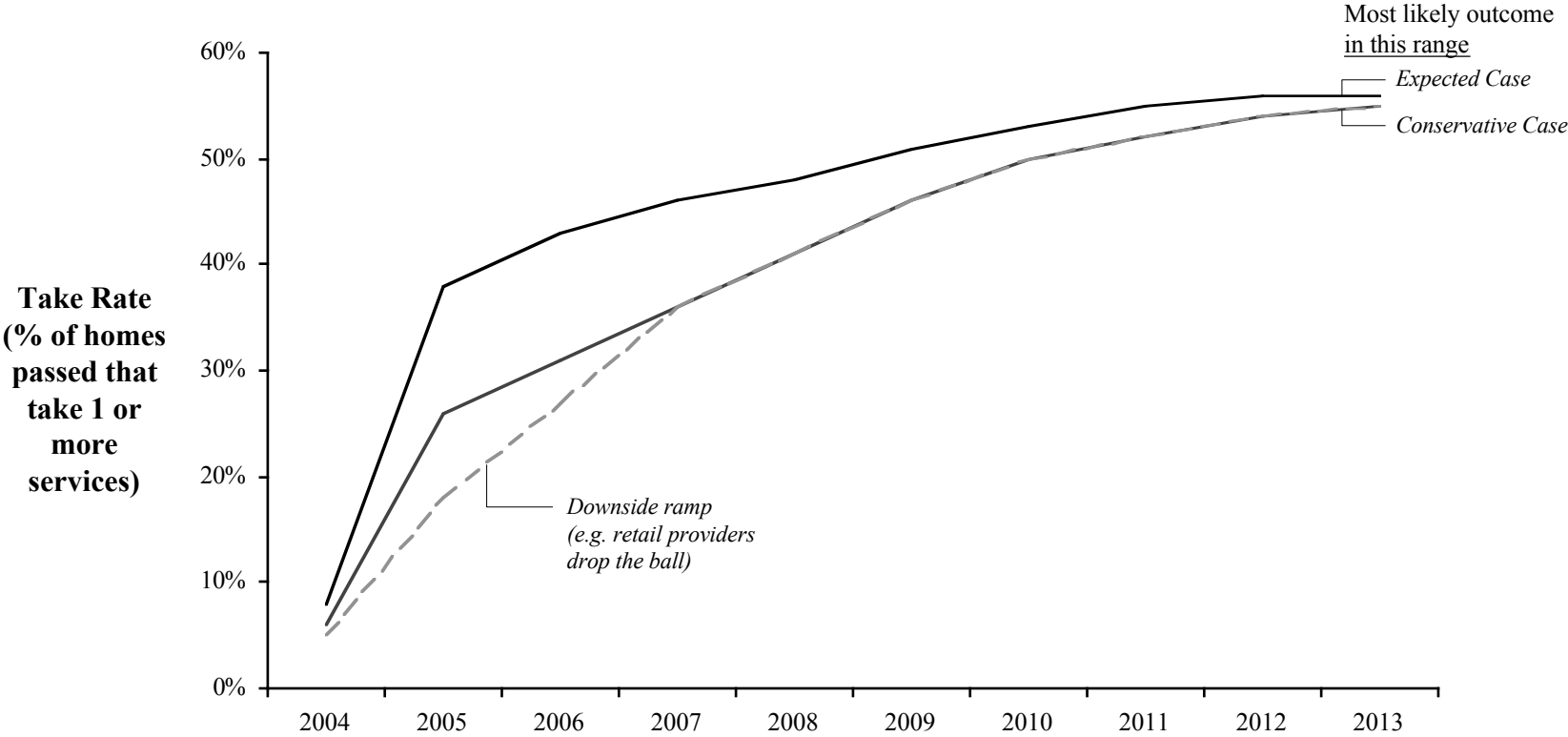
The various cases test the Phase 1 plan's ability to withstand competitive pressures, demand declines, and cost overruns

Phase 1 Downside Scenarios – Details –

	Plan	Escalated Competitive Response	Assumptions Downside
<i>Demand Assumptions</i>	<ul style="list-style-type: none"> • 100% recovery of premise wiring • Residential Churn: 16% • Business Churn: 9% • No price war 	<ul style="list-style-type: none"> • Marketing War <ul style="list-style-type: none"> — 50% recovery of premise wiring — Residential Churn: 25% — Business Churn: 20% • All-out: Marketing War + Price War <ul style="list-style-type: none"> — Additional 20% price discount for 3 years (on top of 20% discount already assumed) passed through to UTOPIA 	<ul style="list-style-type: none"> • 100% recovery of premise wiring • Residential Churn: 16% • Business Churn: 9% • No price war
<i>Cost Assumptions</i>	<ul style="list-style-type: none"> • Expected operating cost level • Expected product mix • Expected CapEx costs 	<ul style="list-style-type: none"> • Expected operating cost level • Expected product mix • Expected CapEx costs 	<ul style="list-style-type: none"> • 20% higher operating costs • 10% Higher CapEx costs • Cap on growth in revenue per subscriber for data (Data mix frozen in Year 5)

The business case has been tested at three different take rate scenarios

Take Rate Scenarios



The UTOPIA business model looks robust in all but the most negative cases

Scenario Overview – Key Financials –

Take Rate	Plan	Escalated Competitive Response		Assumptions Downside	Combined Downside and Competitive Response ²
		Marketing War	All-Out		
<ul style="list-style-type: none"> • Expected — Minimum Debt Coverage¹ — Construction Loan — Bond — Largest Annual Cash Deficit — Largest Cumulative Cash Deficit 	1.75 (2008) \$80.65MM \$85MM — —	1.69 (2008) \$83.5MM \$86MM — —	1.65 (2008) \$86.0MM \$88MM — —	1.48 (2008) \$85.1MM \$88MM — —	1.39 (2008) \$91.2MM \$91MM \$4.3MM (2007) \$4.7MM (2008)
<ul style="list-style-type: none"> • Conservative Case — Minimum Debt Coverage¹ — Construction Loan — Bond — Largest Annual Cash Deficit — Largest Cumulative Cash Deficit 	1.44 (2008) \$77.25MM \$85MM — —	1.31 (2008) \$81.0MM \$90MM — —	1.29 (2008) \$82.4MM \$91MM \$3.0MM (2008) \$0.2MM (2008)	1.17 (2008) \$82.35MM \$91MM \$3.8MM (2008) \$2.9MM (2009)	1.11 (2008) \$87.95MM \$91MM \$4.9MM (2007) \$11.3MM (2010)
<ul style="list-style-type: none"> • Downside — Minimum Debt Coverage¹ — Construction Loan — Bond — Largest Annual Cash Deficit — Largest Cumulative Cash Deficit 	1.39 (2008) \$79.00MM \$87.0MM — —	1.30 (2008) \$82.6MM \$91.0MM \$3.0MM (2008) \$0.1MM (2009)	1.30 (2008) \$83.6MM \$91.0MM \$3.0MM (2008) \$1.5MM (2009)	1.18 (2008) \$84.3MM \$91.0MM \$3.7MM (2008) \$4.8MM (2009)	1.12 (2008) \$89.0MM \$91.0MM \$5.9MM (2007) \$12.4MM (2010)

Note: Minimum cash balances \$500K

¹ After Dynamic Cities Deferral

² Includes Price War

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Incumbents frequently respond to overbuilders by cutting price and escalating marketing efforts

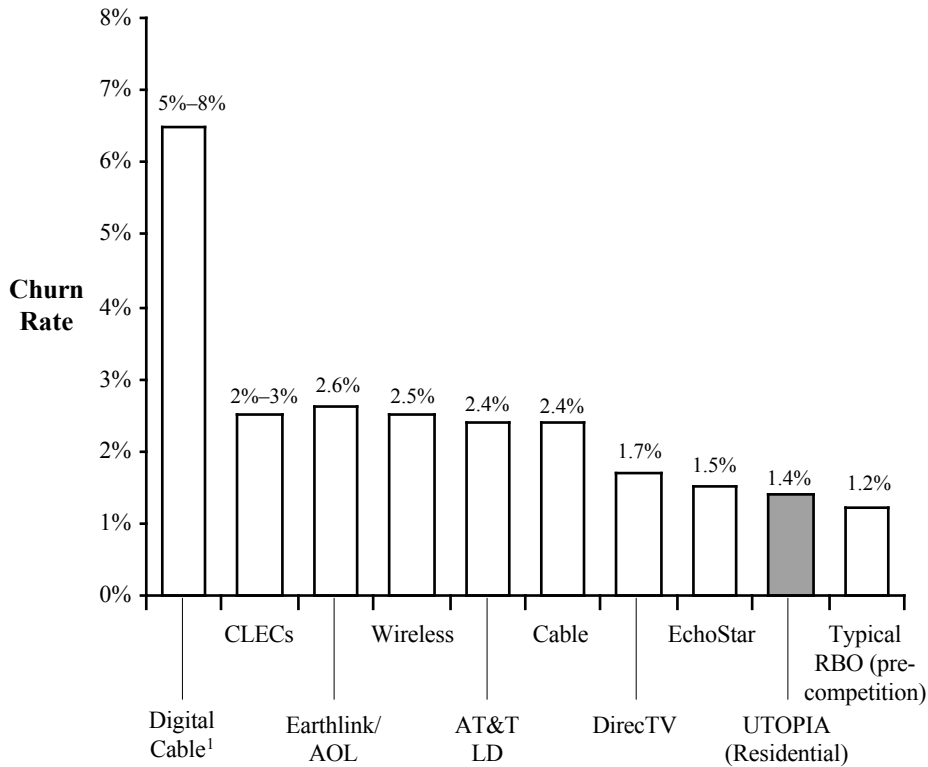
Competitive Response

Municipality/ Overbuilder	Competitor(s)	Lowered Rates	Marketing	Political Lobbying	Upgraded Network	No Action
<i>Altrio</i>	Adelphia Charter SBC Verizon	50% discounts (limited time)	- \$200 incentives - Loyalty bonus of every third month free	x		
<i>Ashland, OR</i>	Charter Communications	25% lower	- Went door-to-door right before AFN came through - Instant installs			
<i>Astound</i>	AT&T Broadband Pacific Bell Qwest Charter Communications		- Special customer service centers to dissuade customers from cancelling service			
<i>Bristol, VA</i>	Charter Communications			x		
<i>Cedar Falls, IA</i>	Charter Communications TCI Communications	Lowered rates (14% lower than national average)	- Expanded services			
<i>Coldwater, MI</i>		Lowered rates to \$5/month	- Eliminated monthly fees for additional outlets - Eliminated franchise fee pass through - Added additional channels	x		
<i>Everest Communications</i>	Time Warner SBC	20% lower	- \$200 incentive to return (more if write a testimonial) - 50% discount for signing up for 1 year - Invested in marketing efforts - Incumbent monopolizes terrestrially delivered programming & won't sell - local regional sports network		x	
<i>Glasgow, KY</i>	Comcast Cable				x	Purchased by Glasgow Plant Board
<i>Grande Communications</i>	AT&T Time Warner	Lowered rates by \$16-\$28/month				
<i>Harlan, IA</i>	TCI Communications	17% lower (\$20 lower than surrounding areas)	- Expanded basic package - Expanded offerings (compressed digital service)		x	
<i>Knology</i>	Comcast BellSouth Charter Communications	Predatory Pricing	- Selling blocks of long distance	x	x	
<i>LaGrange, GA</i>	Charter Communications Bell South					Joint Venture
<i>Newnan, GA</i>	Charter Communications		- \$300 to switch	x	x	
<i>RCN</i>	CableVision Verizon	10-15% lower	- Threatened contractors working with RCN, leading contractors to charge higher prices			
<i>Scottsboro, AL</i>	Charter Communications	50%-66% lower (limited time predatory pricing)	- Offered \$200 to SEPB customers who switch CATV - "Amnesty Program": forgave SEPB customers' old debts to Falcon or Charter			
<i>SureWest</i>	Pacific Bell AT&T Broadband		- SBC is bundling 4 services (DBS, LD/Local, DSL/Dial-up, wireless)			
<i>Tacoma, WA</i>	AT&T Broadband	20% lower	- Funded reports about Click's lack of success		x	
<i>WOW</i>	Comcast	50% discount (limited time)	- Free PPV - Free digital upgrade			

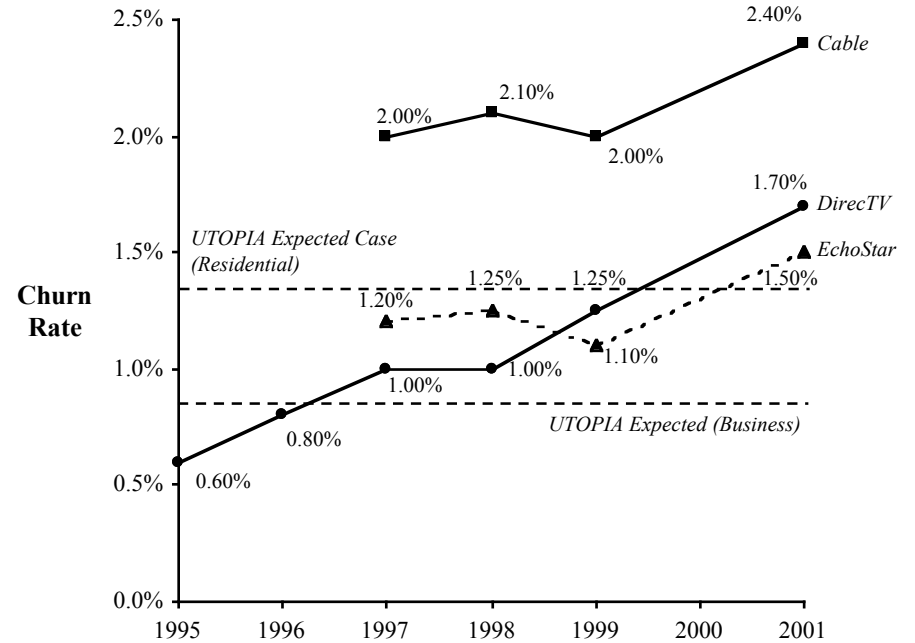
Highly competitive markets can see churn levels over 2% per month

Churn Benchmarks - Residential -

Monthly Average Churn

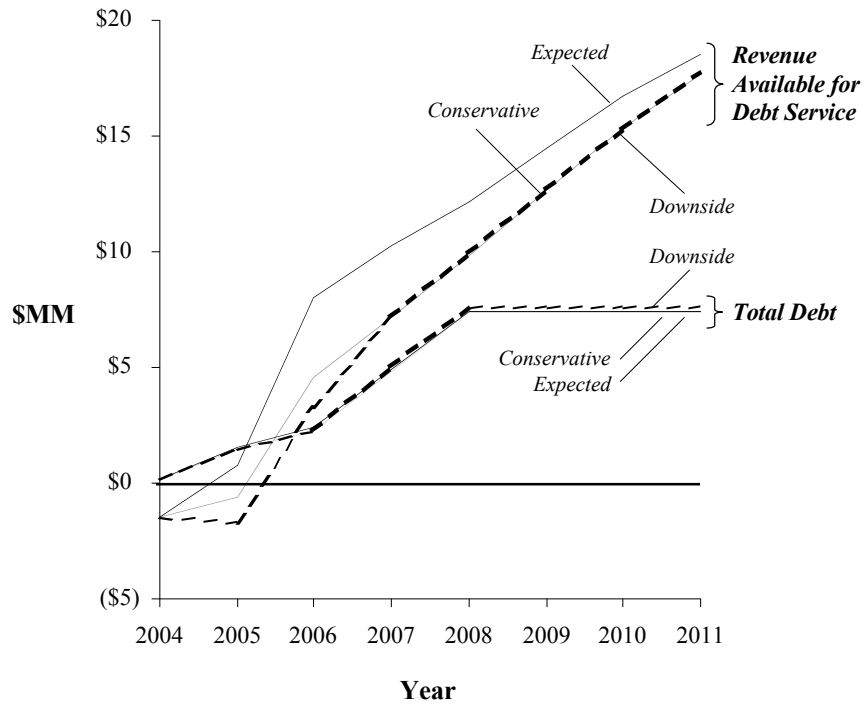


Monthly Churn Over Time

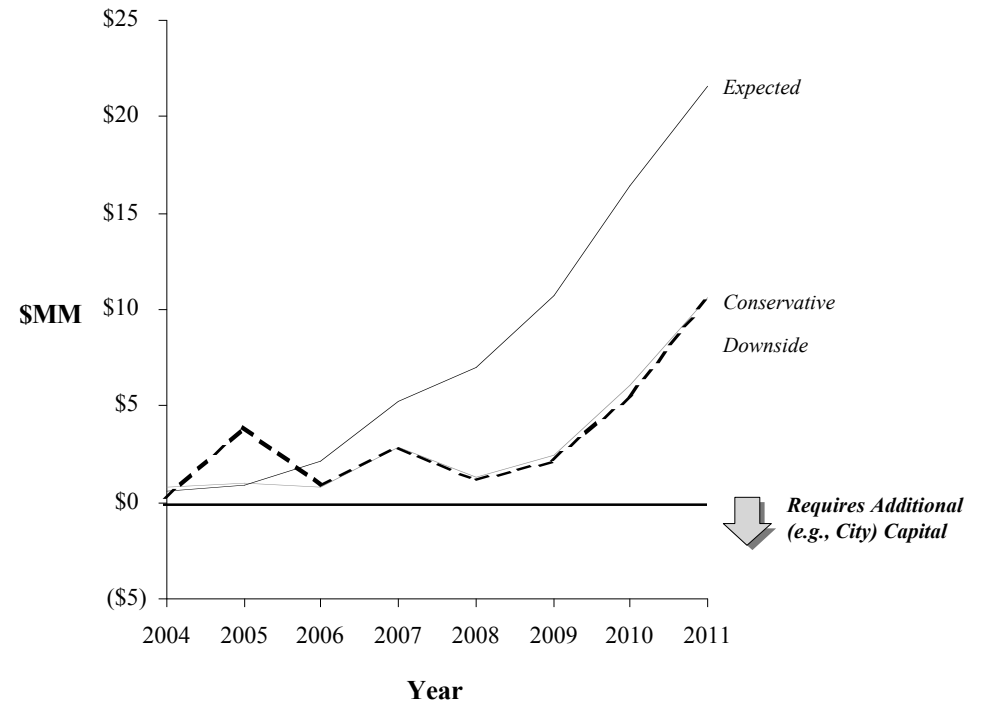


Scenario Comparison: Business Plan
 – Expected vs. Conservative vs. Downside –
 – First 8 Years –

Debt Coverage

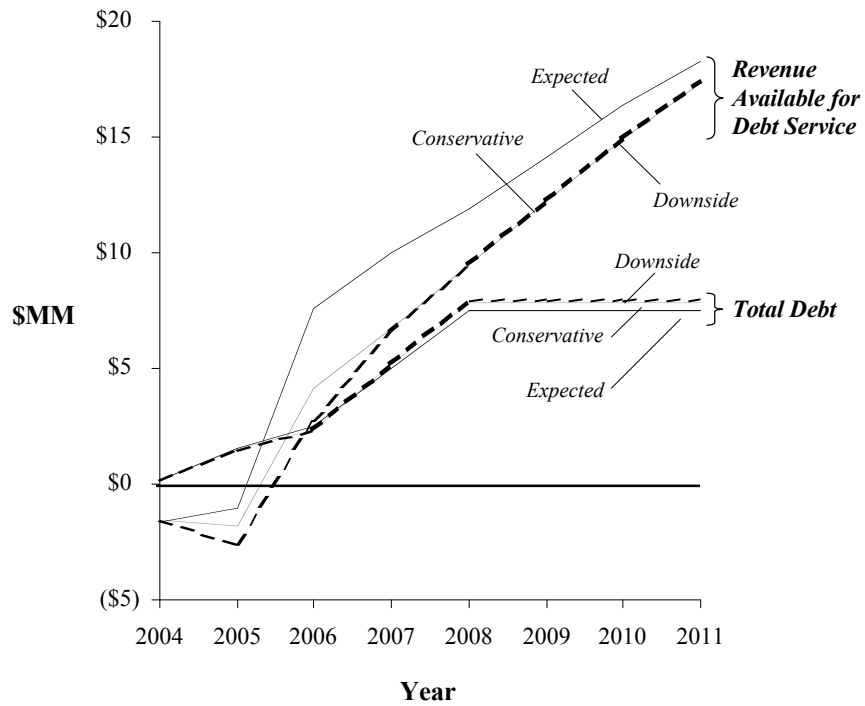


End-of-Year Cash Position

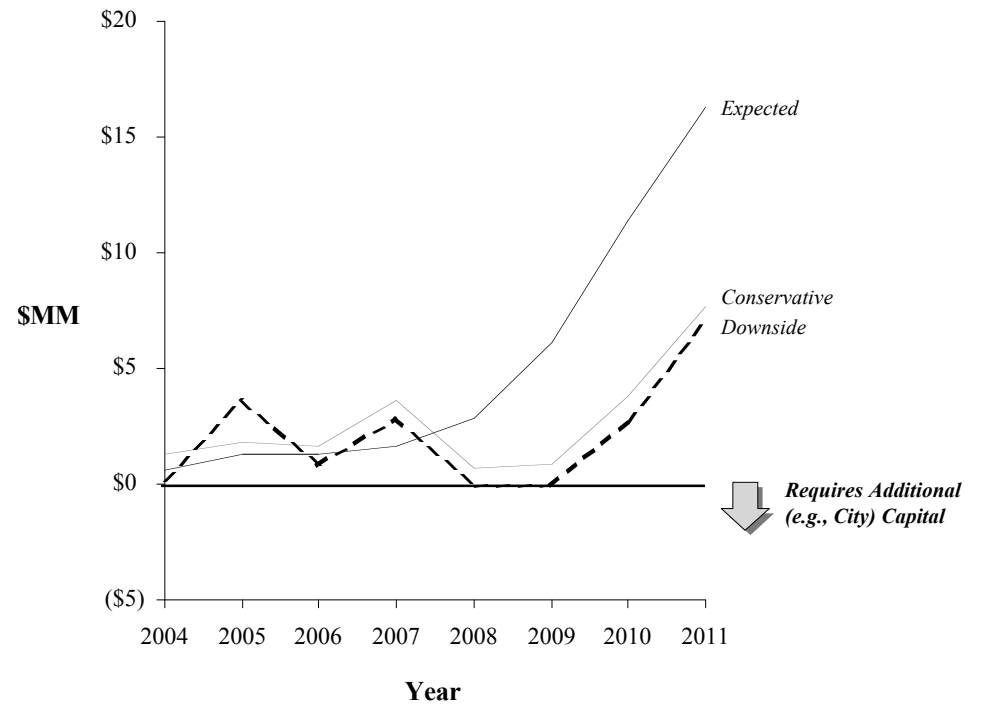


Scenario Comparison: Marketing War
 – Expected vs. Conservative vs. Downside –
 – First 8 Years –

Debt Coverage



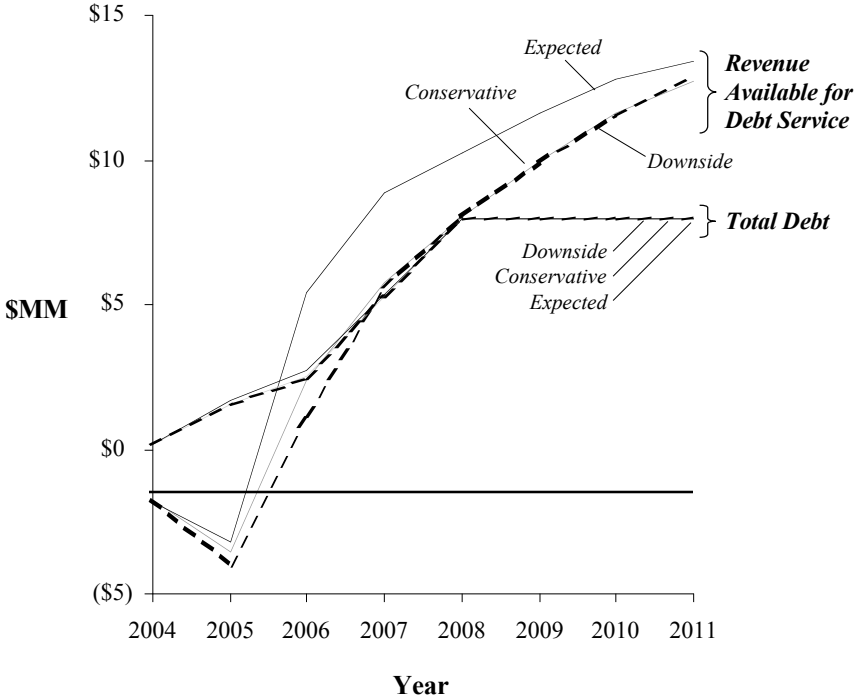
End-of-Year Cash Position



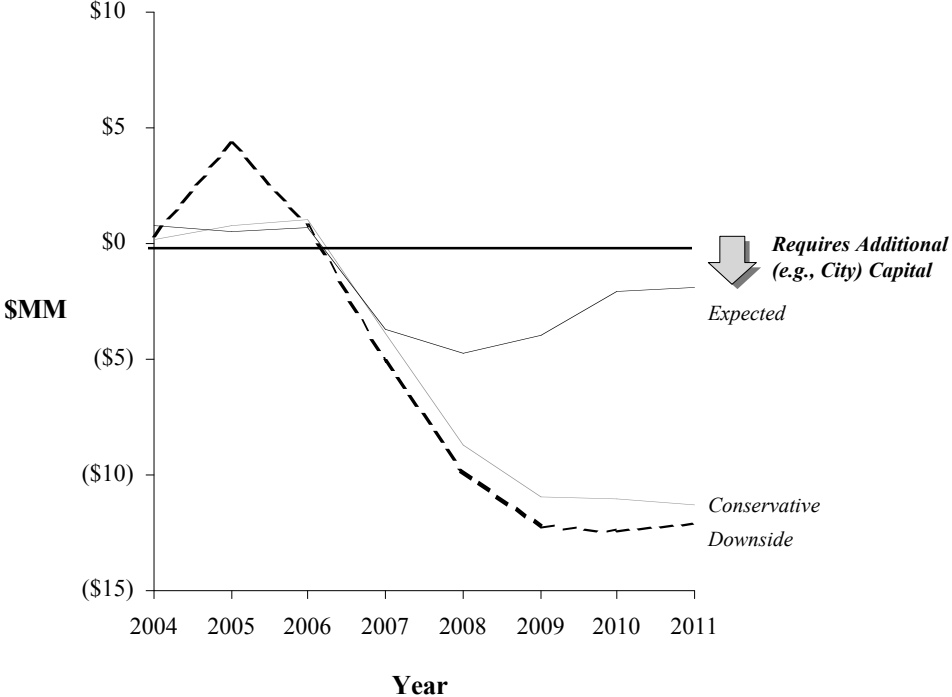
Scenario Comparison: Combined Downside

– Expected vs. Conservative vs. Downside –
– First 8 Years –

Debt Coverage



End-of-Year Cash Position



Real value creation relies on proactive management of complementors and economic development

Jumpstarting Value – Broadband Economic Development –

