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FEDERAL COMMUNICATIONS COMMISSION
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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Notice of Ex Parte Presentation; CC Docket No. 96-98; CS Docket 95-184; CCBPol 97-9; CC Docket 98-146; IB Docket No: 97-95

Dear Ms. Salas:

On November 16, 1998, Bill Rouhana, Tim Graham, David Ackerman, Leo George, Peter Soltesz, Joe Haggler, Barry Ohlson and the undersigned, on behalf of *WinStar Communications, Inc.* ("WinStar"), met with Chairman William Kennard, Dan Pythyon, Chief of the Wireless Telecommunications Bureau, and Ari Fitzgerald, Legal Advisor to Chairman Kennard. During the meeting, WinStar discussed its positions on record in the above-captioned proceedings that state certificated, facilities-based Competitive Local Exchange Carriers (CLECs) should be allotted non-discriminatory access to buildings and rights-of-way and negotiations on the terms of reasonable compensation can occur post-entry. WinStar also addressed the need for clear protection of licensed fixed service operations from proposed commercial fixed satellite service operations in the 38.6-40.0 GHz. Attached is the material that was distributed during the meeting. Pursuant to Section 1.1206(a) of the FCC's rules, 47 C.F.R. § 1.1206(a), we are filing with the Secretary an original and 10 copies of this notice of *ex parte* presentation.

Should there be any questions regarding the above, please do not hesitate to contact the undersigned at 202-833-5678.

Very truly yours,

Joseph M. Sandri, Jr.
VP & Regulatory Counsel

Attachments

cc: Chairman William Kennard
Ari Fitzgerald
Dan Phythyon

Winstar Communications, Inc.

1146 19th Street, N.W. • Suite 200 • Washington, D.C. 20036 • TEL 202 833 5678 • FAX 202 659 1931

November 16, 1998
WinStar Communications, Inc./Federal Communications Commission

1. Introduction to WinStar Communications, Inc.

- 38 GHz licenses-277 area licenses, each covering up to 10,000 square miles (almost 200 million people)-licenses in the top 50 U.S. cities
- 28 GHz licenses: third highest bidder at recent auctions
- Hub Networks attached to Lucent Class 5 Switches
- Deploy in 30 top cities by December 31, 1998 and in the top 40 cities by the year 2000
- Over 30 Interconnection Agreements Completed- 44 of top 50 markets
  -RBOCs, GTE, Sprint, major independent LECs
- CLEC Authority - 30 jurisdictions; CAP Authority - 38 jurisdictions
- IXC Authority - 47 jurisdictions
- WinStar for Education: http://www.win4edu.com
  -LATTICE
  -Virtual Vietnam Wall: http://www.thevirtualwall.org

2. The Telecommunications Act of 1996 was crafted to promote competition by companies like WinStar

3. Non-Discriminatory Access by facilities-based CLECs to Customers via Building Rooftops, Inside Wire and Rights-of-Way is essential to the success of local competition.

- Facilities-based CLECs Are Stopped at the last "100 feet";
- Building owners hold virtual monopoly control over tenant access to CLECs;
- Incumbent LECs often pay nothing for building/customer access;
- Federal solution needed to ensure non-discriminatory building access.
- Section 207. Consumer access to wireless CLEC signals which include video cannot be blocked by "any restriction" placed by a building owner, covenant, etc. 47 C.F.R. 1.400.
- Section 224. Rule on WinStar Petition in CC Dkt. 96-98 seeking clarification that rooftops, risers (vertical and horizontal), inside wiring, utility closets are rights-of-way.
- Section 706. Broadband facilities-based providers like WinStar clearly offer advanced services. The FCC holds broad authority to improve building access conditions for advanced services providers.

4. Engineering studies clearly prove that ubiquitous satellite systems cannot economically or feasibly share the same spectrum with high density fixed services

- FCC conclusions at 28 GHz and 38 GHz clearly recognize this fact by concluding that band segmentation is necessary to protect FS licensees.
- Need FCC support in ITU process. U.S. policy should be to firmly declare "hands off" of 38.6-40.0 GHz fixed service licenses by prohibiting incessant U.S. sponsored satellite "studies" which foment uncertainty about status of FS licenses.
- Like at LMDS, domestic FSS downlinks at 38.6-40.0 GHz should be given the designator "secondary."

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The WinStar Mission

Operate Alternative Local Networks Which Are Broadband and Enable Our Customers to Be More Productive

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The WinStar Opportunities

- The Local Network Is the Bottleneck for Competition and Bandwidth
- The Growing Demand for Broadband Communication Services Cannot Be Met by Today's Network
- Global Corporations are Increasingly Looking for Customized End-to-End Broadband Solutions

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The WinStar Advantages

- Fixed Wireless Broadband Networks Can Be Deployed at the Lowest Cost and with Unmatched Speed and Flexibility
- The Only Independent CLEC with Sufficient Spectrum, Geographic Coverage and Critical Mass to Reach All of the Nation's Top 50 Markets
- A Veteran Management Team Which Has Done This Before
- $2 Billion Global Strategic Relationship with Lucent

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WinStar Today

- Sales, Service and Network Organizations Established in 27 Major Markets – and Growing
- Customers and Revenues Growing Rapidly – Project Millennium
- Increasing Percentage of Traffic Fully on Rapidly Expanding Network
- Systems and Network Are Best of Breed and at the Leading Edge of Technology – Lucent Agreement
- Network Operating at 99.999% Reliability

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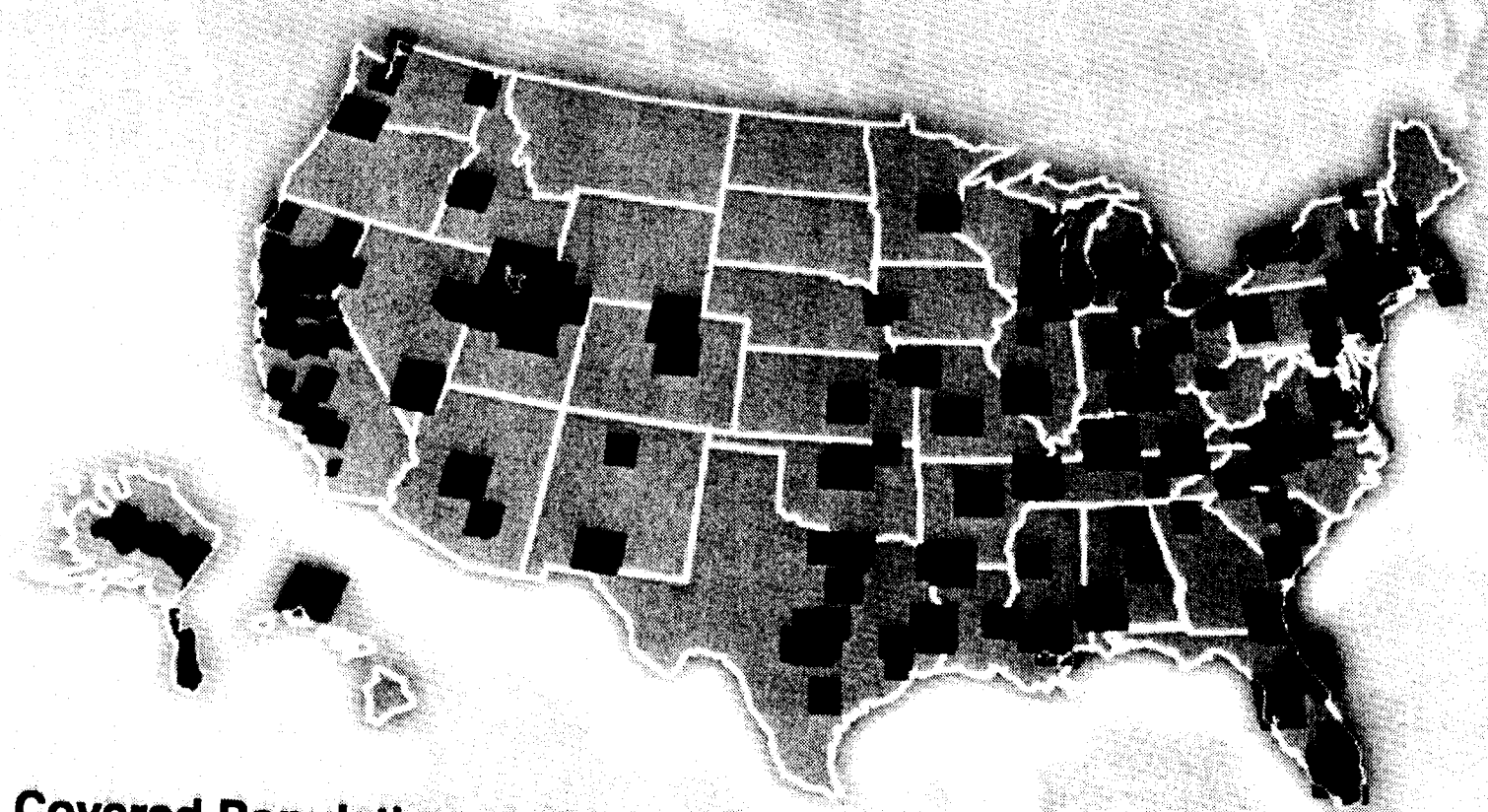
WinStar's Spectrum Holdings Cover the Nation's Business Market



- Covered Population of Almost 200 Million
- Largest Holder of Bandwidth
- Over 80% of Nation's Business Market Covered

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Extensive Bandwidth in All Major Markets

Channel capacity by market

More than 1,000 MHz	10 channels (1,000 MHz)	9 channels (900 MHz)	8 channels (800 MHz)	7 channels (700 MHz)	6 channels (600 MHz)	5 channels (500 MHz)
New York	Miami	Houston	Dallas	Chicago	Los Angeles	Washington, DC
San Francisco	Tampa	Atlanta	Seattle	Denver	Philadelphia	Las Vegas
San Jose	Ft Lauderdale	St Louis	Buffalo	Phoenix	Boston	Riverside
Oakland		Cincinnati		Minneapolis	Kansas City	Indianapolis
Salt Lake City		Fort Worth			Newark	Cleveland
New Orleans		Spokane			Orange County	Louisville
Provo					Detroit	Tacoma
Fresno					Baltimore	
Greensboro					Memphis	
Modesto					Pittsburgh	
Norfolk					Milwaukee	
Orlando					San Juan, PR	
					Bergen-Passaic	
					Trenton	

- **Bandwidth averages more than 750 MHz in top 50 markets**

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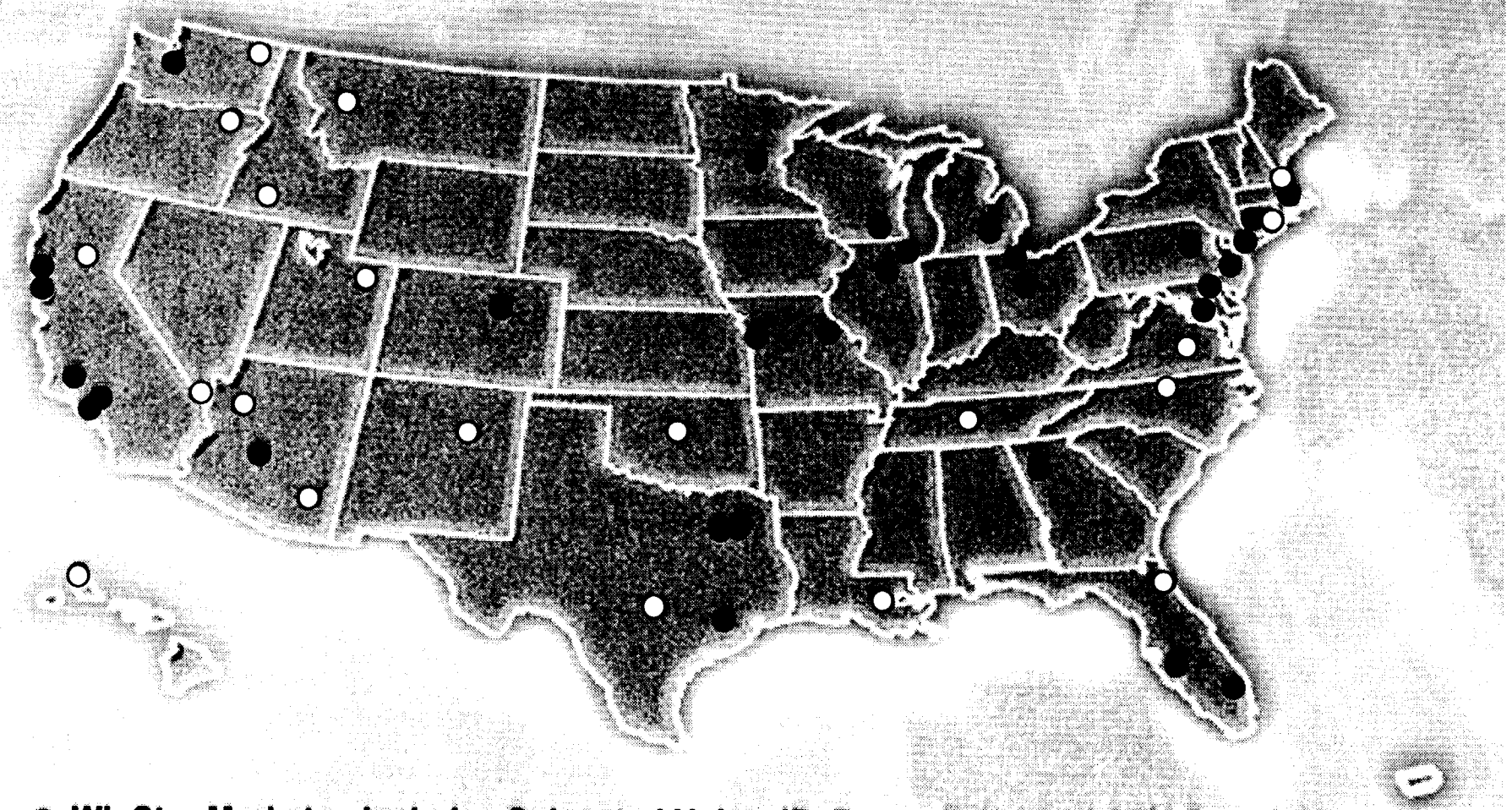
The WinStar Network - 1998 - 30 Markets +



● WinStar Markets - Includes Colocated Voice, IP, Frame Relay and ATM Switches

○ Data Switches

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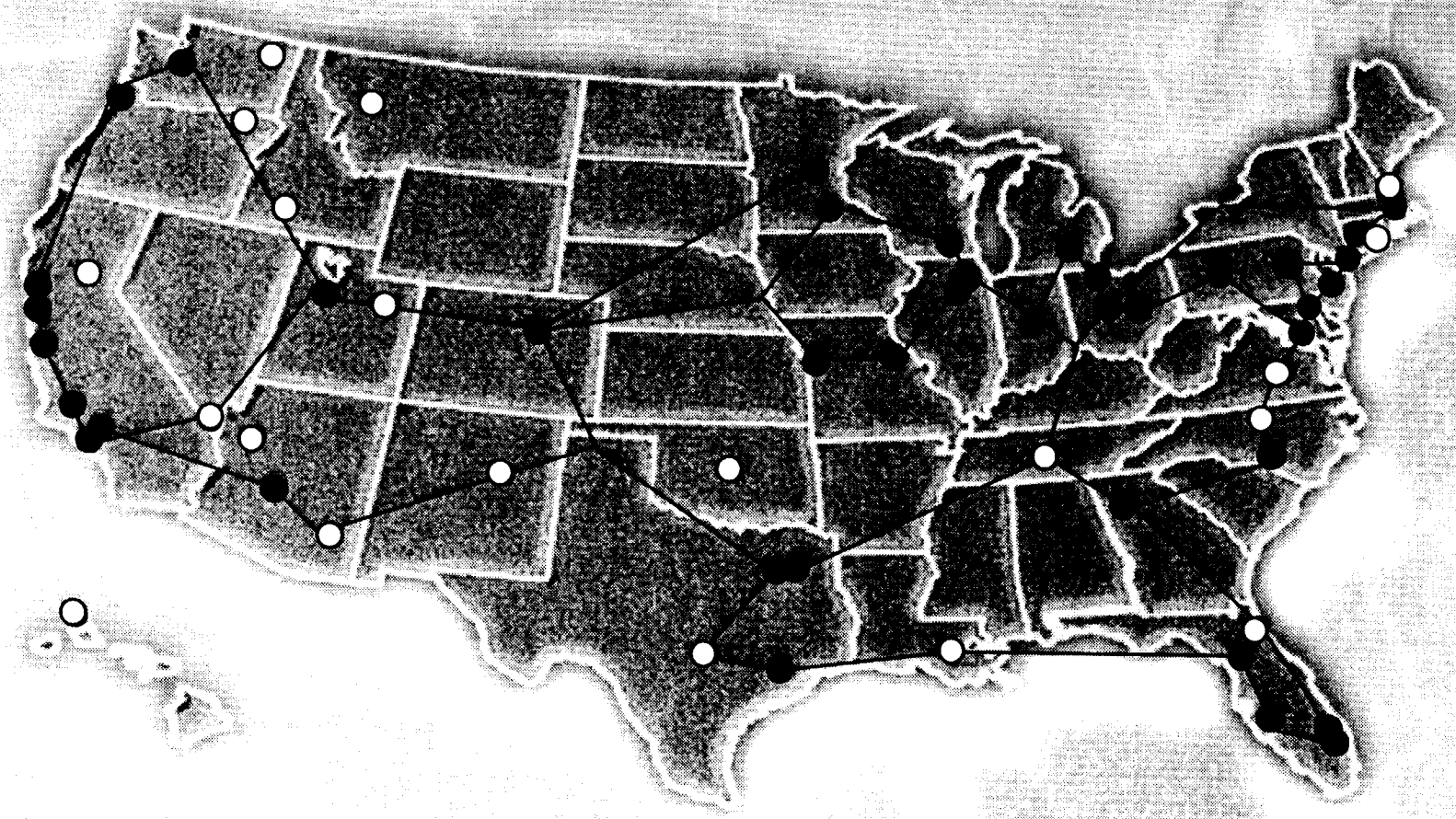
The WinStar Network - 1999 - 40 Markets +



● WinStar Markets - Includes Colocated Voice, IP, Frame Relay and ATM Switches

○ Data Switches

— Backbone Fiber Capacity

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A National Presence

	Jan. 1, 1997	Sep. 30, 1998	Dec. 31, 1999
Major Markets with Sales Offices	*1*	*27*	*40*
Field Sales Personnel	*11*	*450+*	*600+*
Buildings	*800*	*3,500+*	*8,000*
Customers	*25*	*12,000+*	*20,000+*
% of Business Market	*10%*	*45%*	*70%+*

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$2 Billion Global Strategic Relationship with Lucent

- Best of Breed Technology
- Network Integration
- Worldwide Scope
- $2 Billion in Financing – $500 Million Immediately Available

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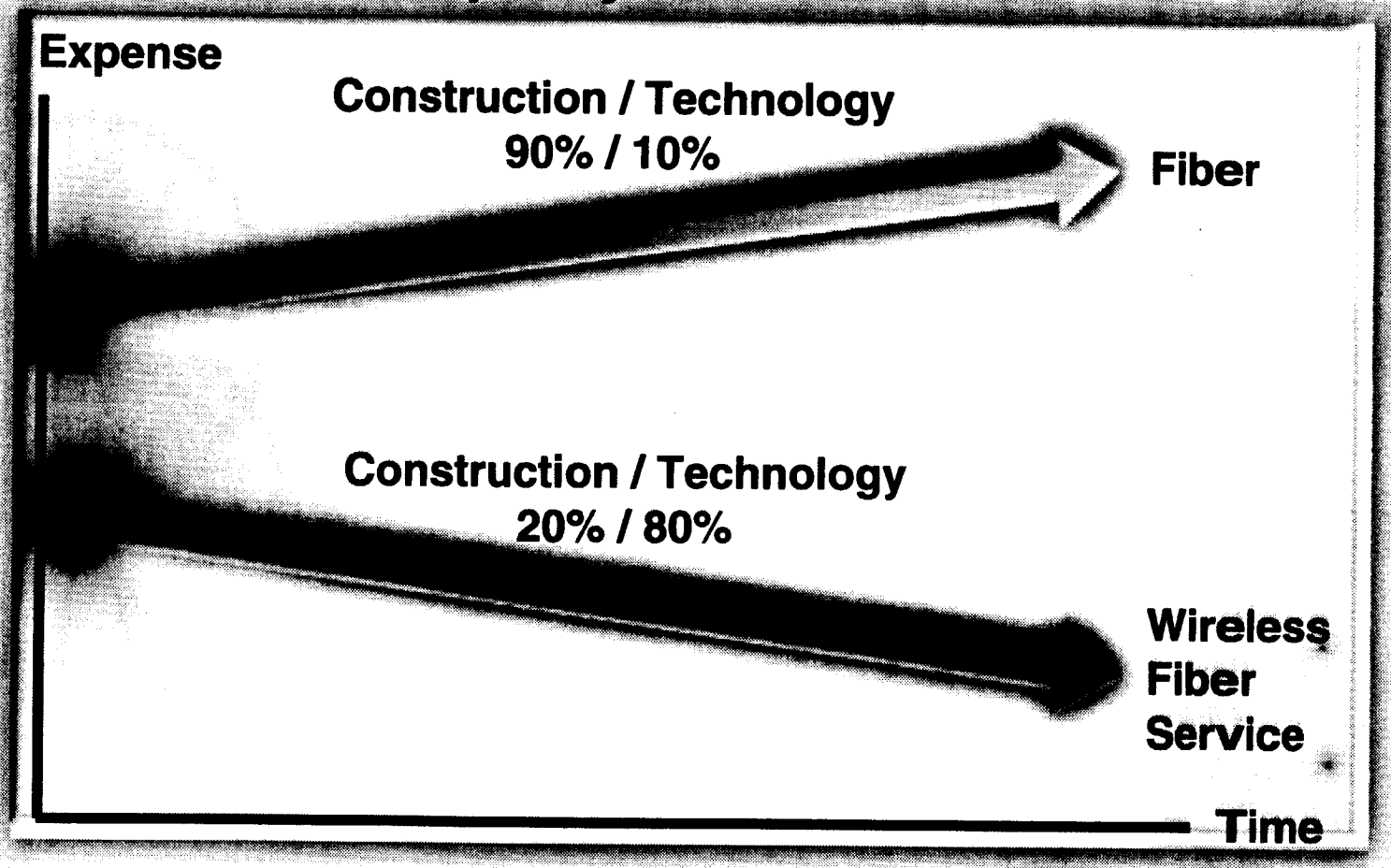
WinStar's Enduring Cost Advantage

Cost to Build New Capacity: Fiber vs. Wireless Fiber Service



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Impact of Increasing Cost Advantage

- WinStar's "Sweet Spot" Expands
  - The Fiber / Copper Gap
- Near Ubiquity Becomes Achievable
  - True Facilities Based Voice Competition
  - First Widely Available Broadband Network

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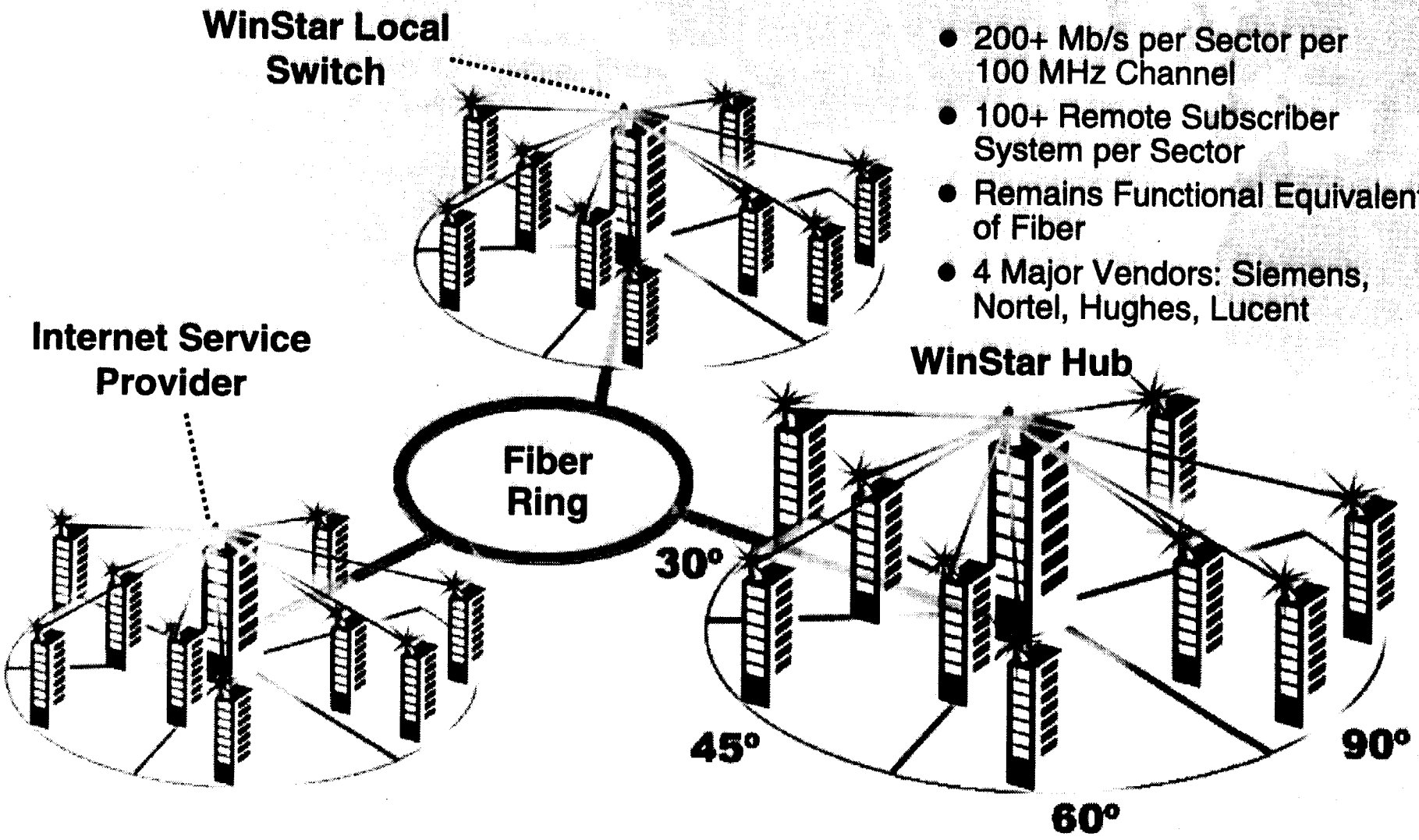
WinStar Point to Multipoint Metropolitan Area Network



- 200+ Mb/s per Sector per 100 MHz Channel
- 100+ Remote Subscriber System per Sector
- Remains Functional Equivalent of Fiber
- 4 Major Vendors: Siemens, Nortel, Hughes, Lucent

Benefits to Multipoint Network Architecture

- Significantly Lowers Network Build-Out and Operating Costs
- Greatly Expands Addressable Market
- Integrates Voice / Video / Data Network
- Introduces Bandwidth on Demand - New Services and Billing Options

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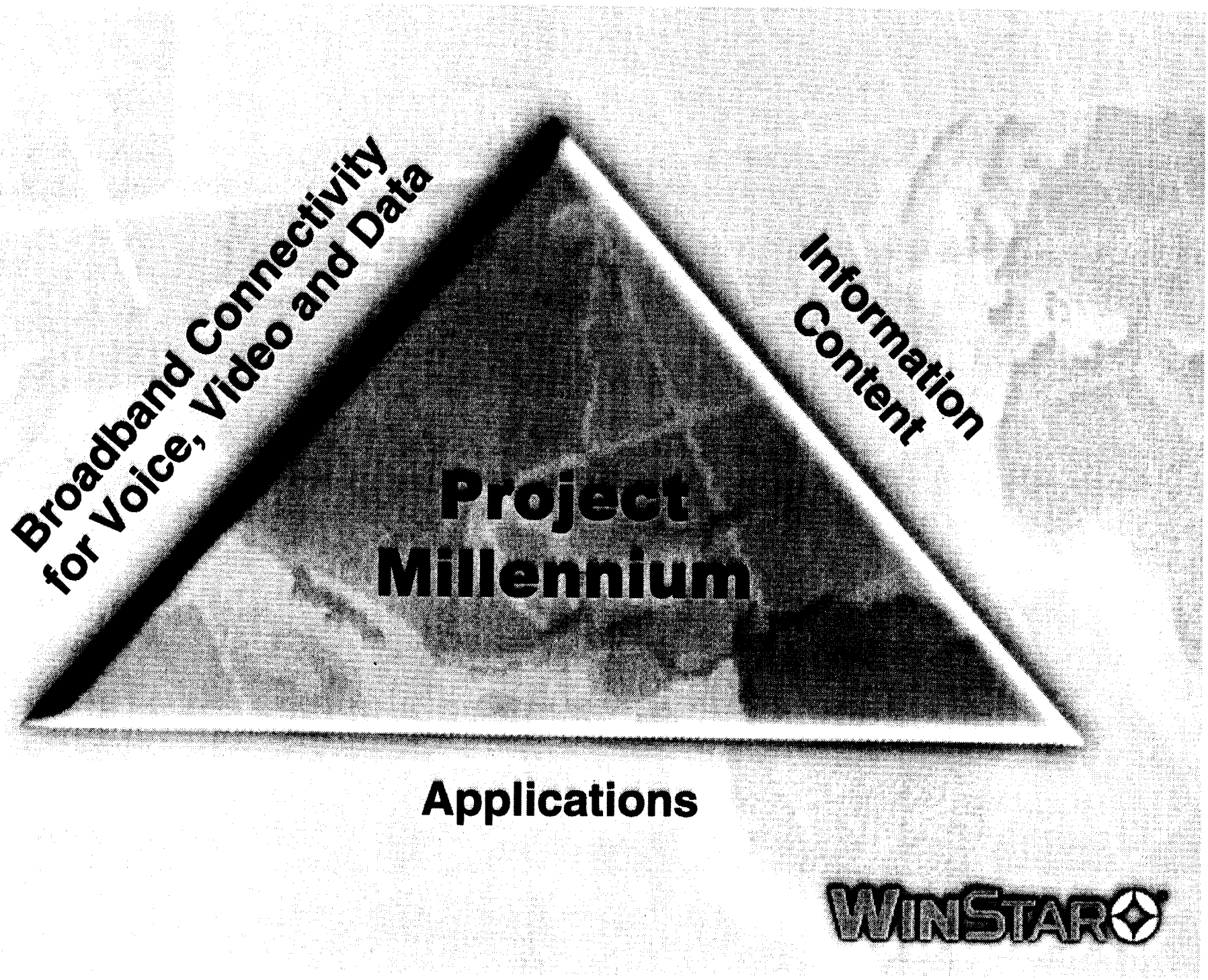
Broadband Connectivity
for Voice, Video and Data
Information
Content
Project
Millennium
Applications
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Sales and Marketing Focus

- Building Customer Base
- Selling Multiple Services
- Special Effort to Sell into Targeted and Networked Buildings
  - Focus on Underserved / Fiberless Buildings
  - Spend Marketing $ in Those Buildings
- Goal
  - 90% On-Switch
  - 66% On-Net

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What We Sell

- **Basic and Enhanced Services**
  - **Local and Long Distance Phone Service**
  - **High Speed Data and Internet Access**
  - **Voice Mail, Web Hosting and Information Services**
  - **Customized Solutions**
- **3 Goals**
  - **Drive Network Usage**
  - **Differentiate Our Services**
  - **Create Customer Loyalty**

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How We Sell

- 2 Direct Sales Forces
  - Small and Medium-Sized Businesses
  - Large Businesses
- Broadband Data Overlay Sales Force
- Agents
- Superior Customer Experience

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Project Millennium

- Shares the Overwhelming Speed to Market and Cost Advantages of Fixed Wireless with Our Customers
- Sold Only to 1,000 Newly Connected Buildings in 13 of 27 Markets
- Free Local Service Until Year 2000 with 3 Year Commitment and Acceptance of Intralata Toll Service
- High Margin Business – 100% on Our Network

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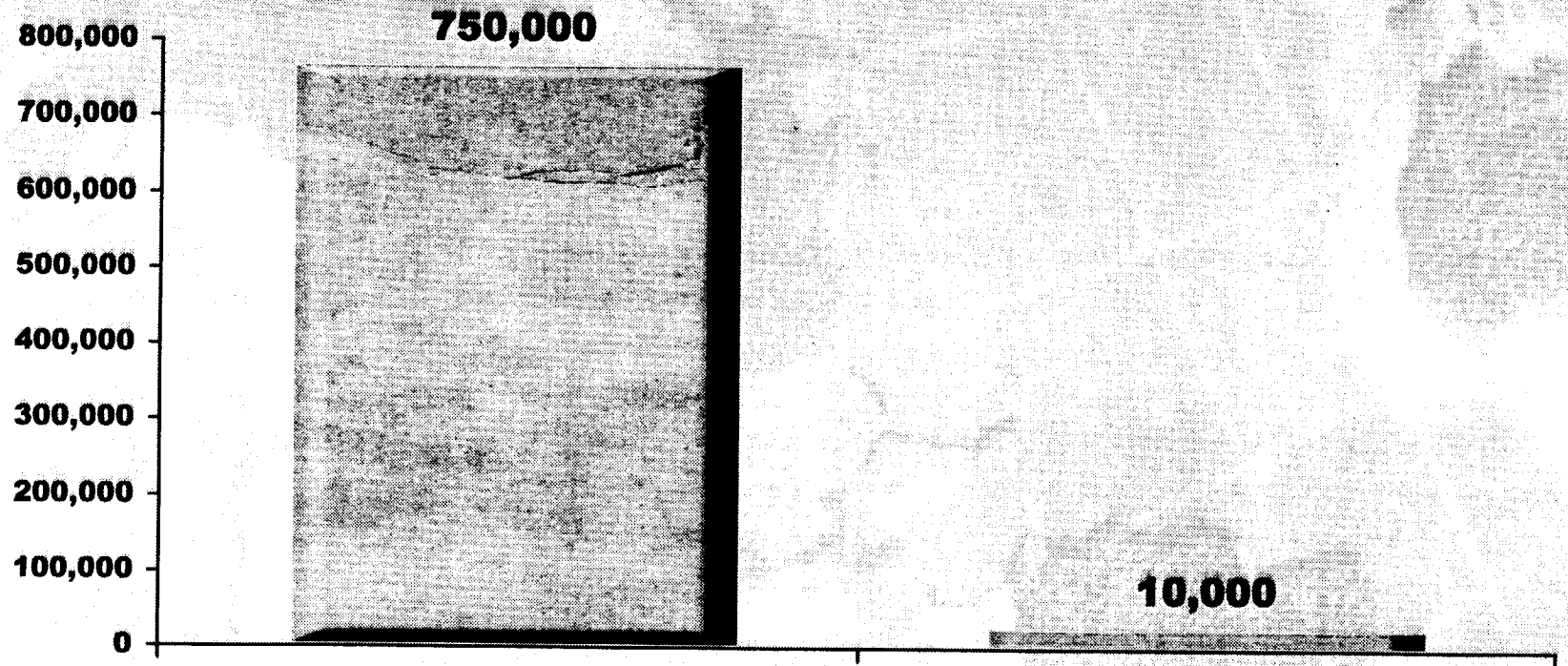
Identifying Target Buildings



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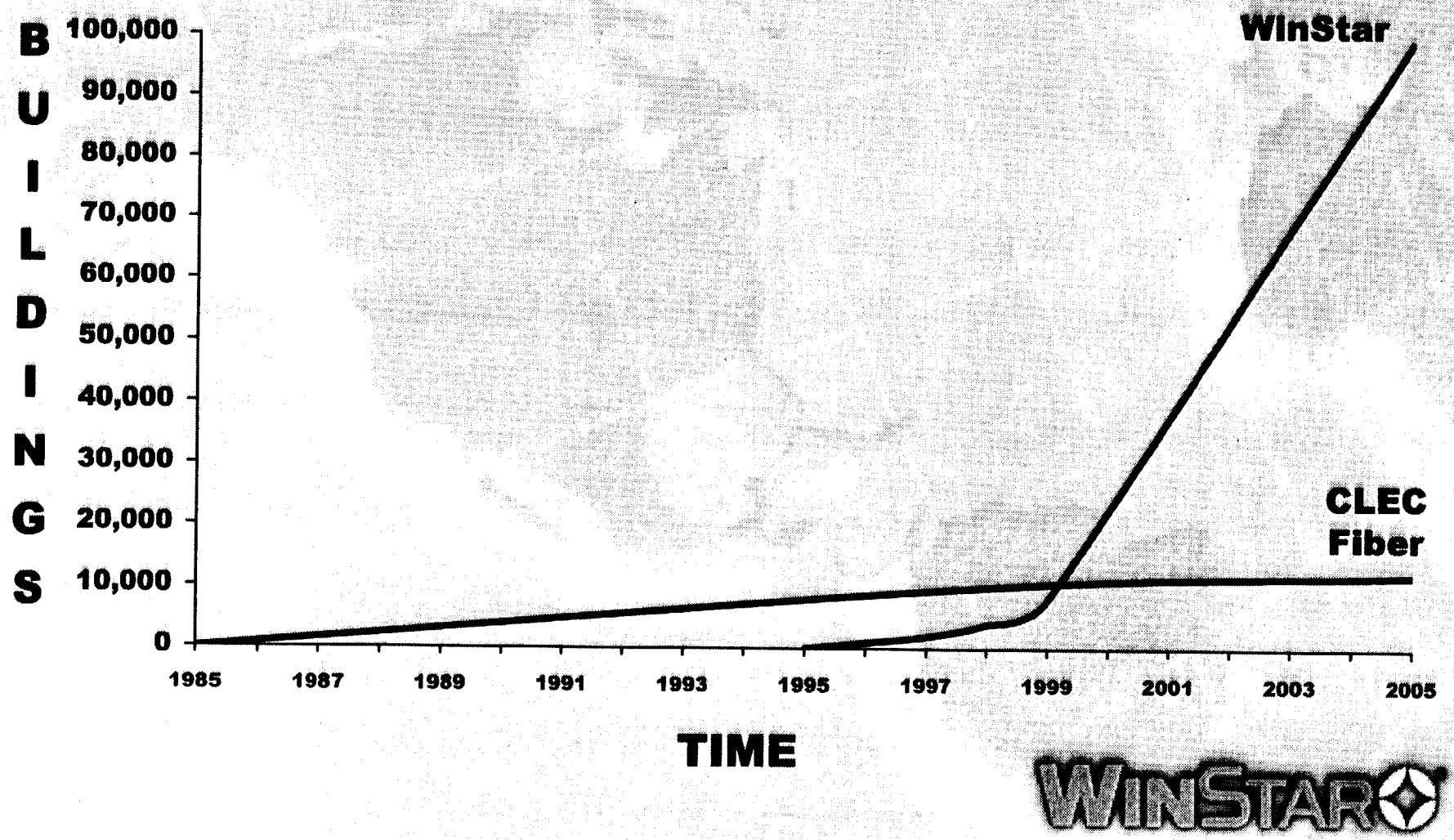
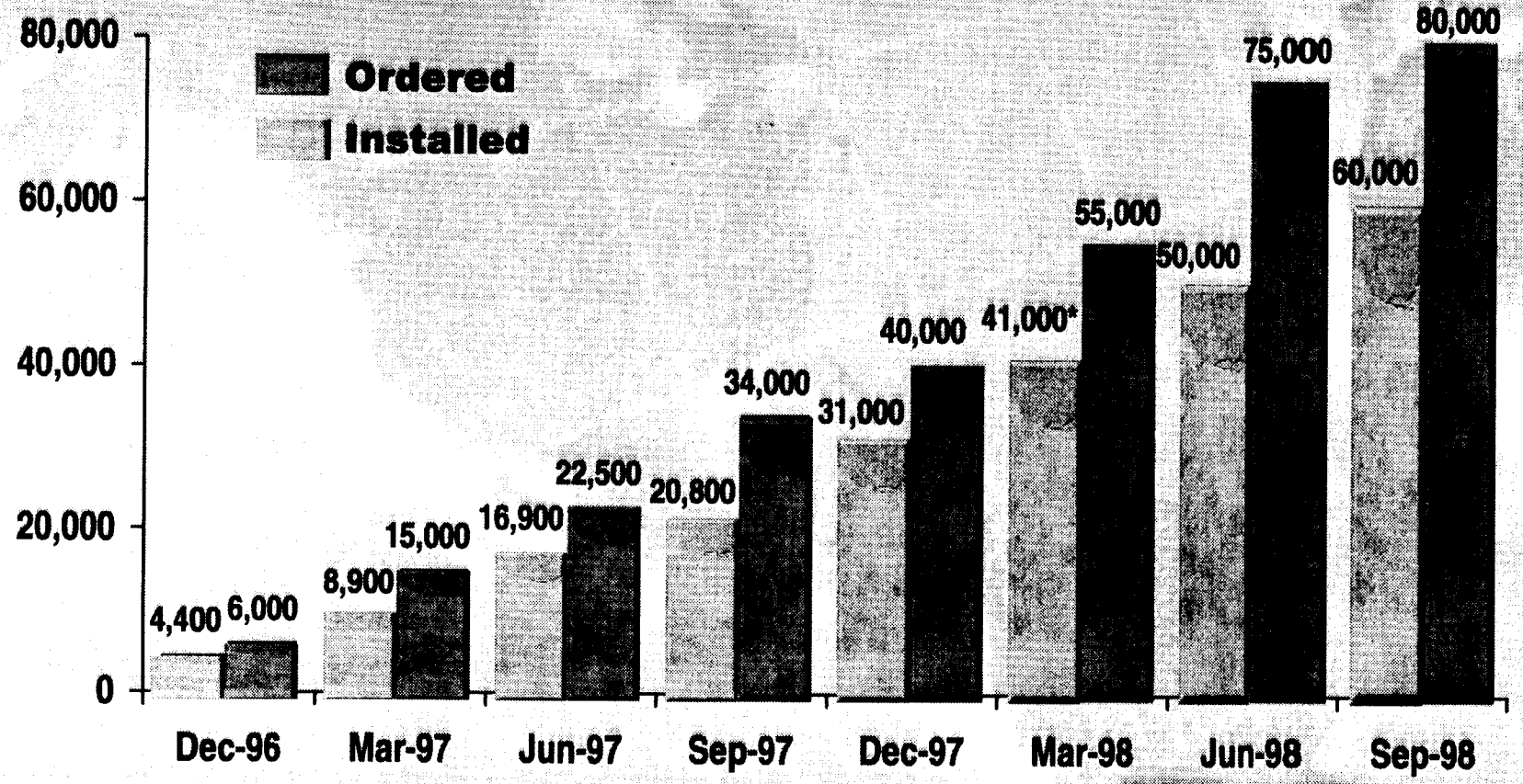
Buildings Reached



Important Measurements of Progress

Quarterly Lines Ordered/Installed



** Exclusive of Acquisitions*

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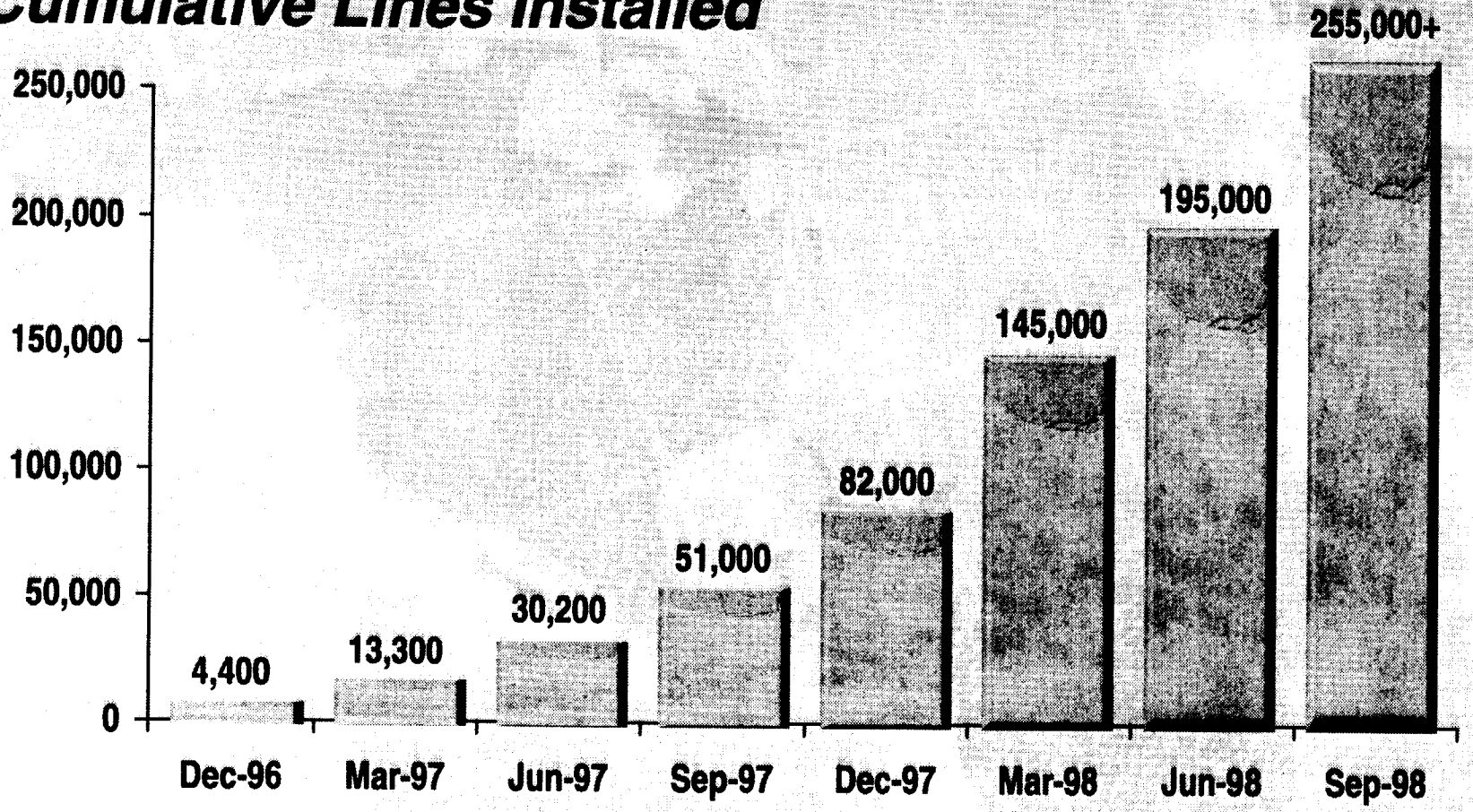
Important Measurements of Progress

Cumulative Lines Installed



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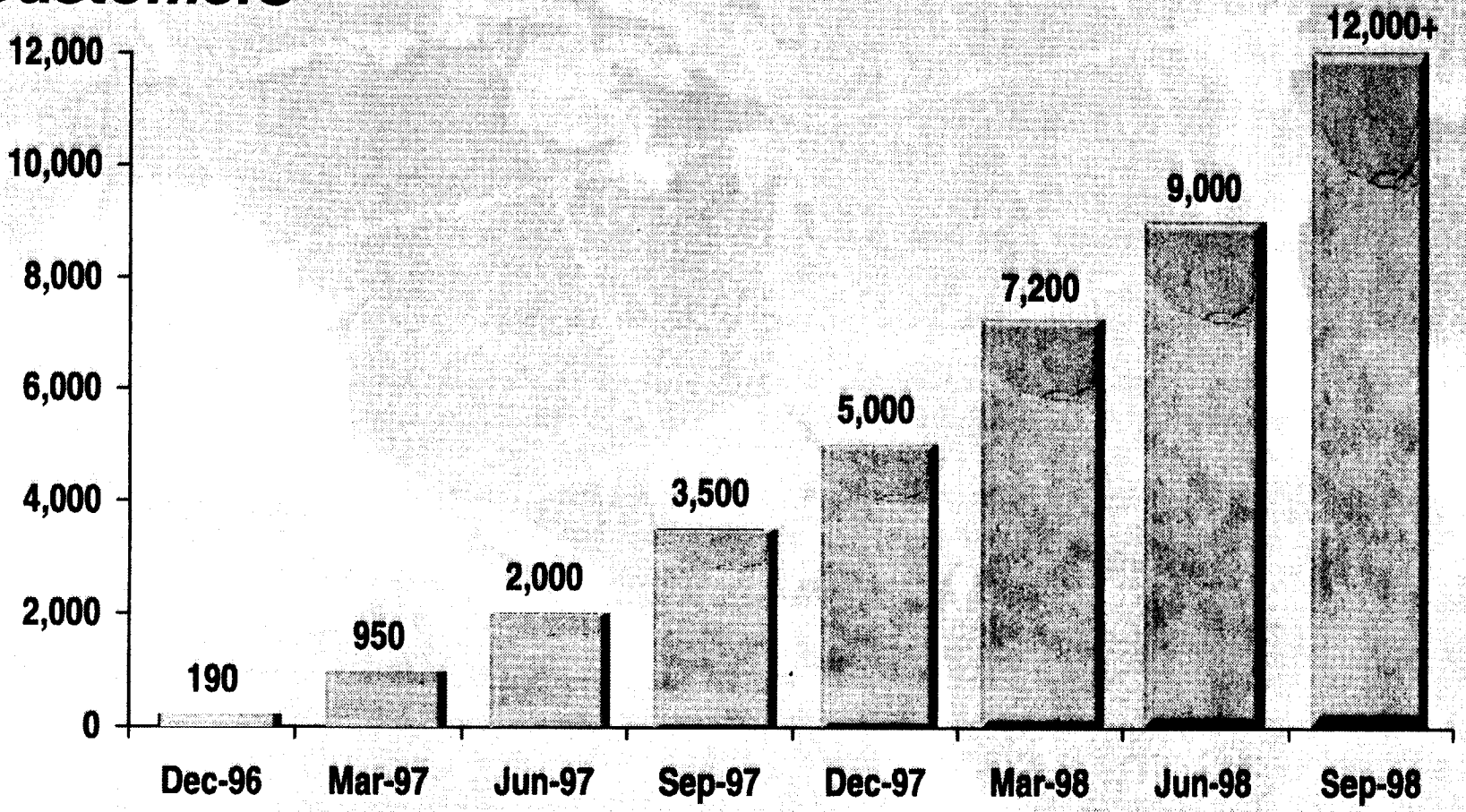
Important Measurements of Progress

Customers



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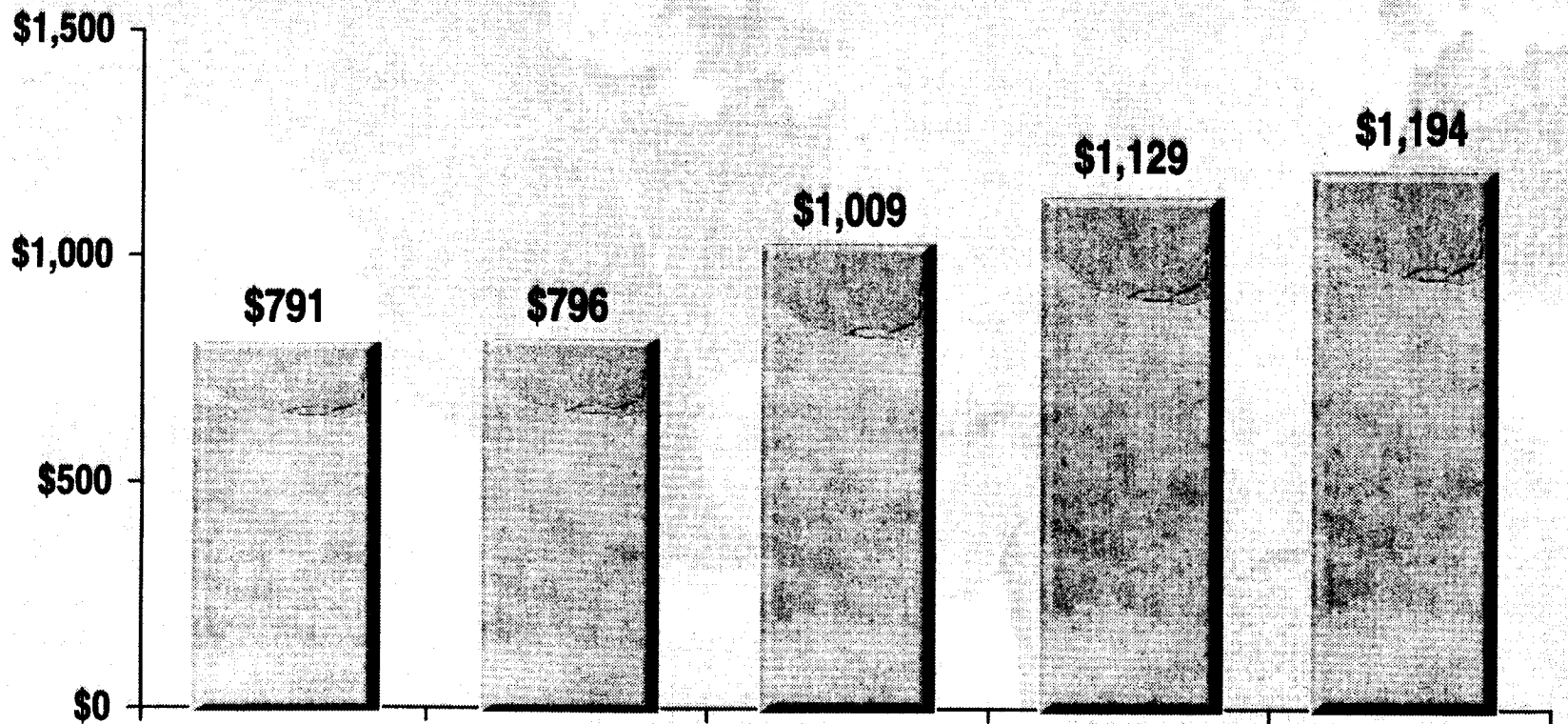
Important Measurements of Progress

Monthly Revenues Per Customer



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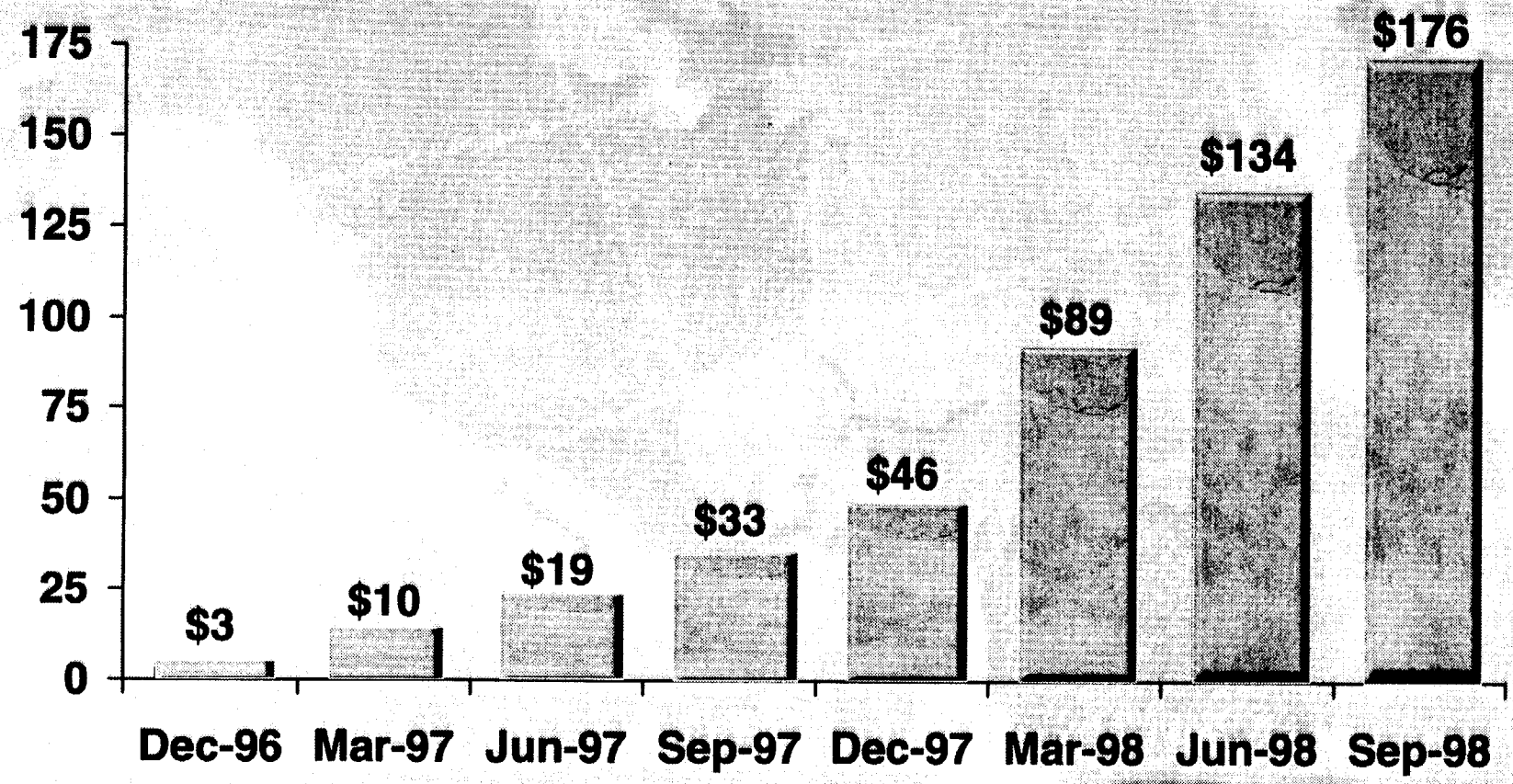
Important Measurements of Progress

Annualized Revenues (in millions)



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Economics of On-Net Strategy

Highest Profitability
Margins Possible

=

Gross Margin
60-70%

Nationwide Infrastructure

+

Gross Margin
25-30%

Spectrum Covering
Almost 200 Million POPs

Gross Margin
15-20%

- Private and Switched Local Services
- Long Distance
- Internet Service
- Broadband Data Services
- Other Info Services

- Local Switched Services
- Resale of Long Distance

- Resale of Local, Long Distance and Internet Services

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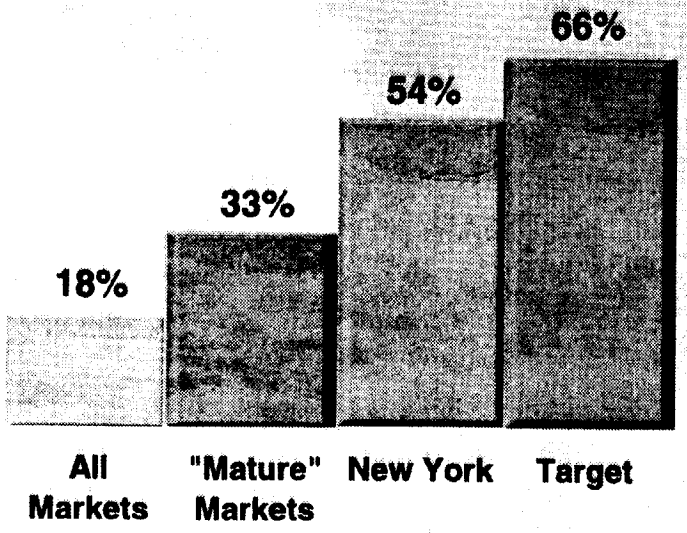
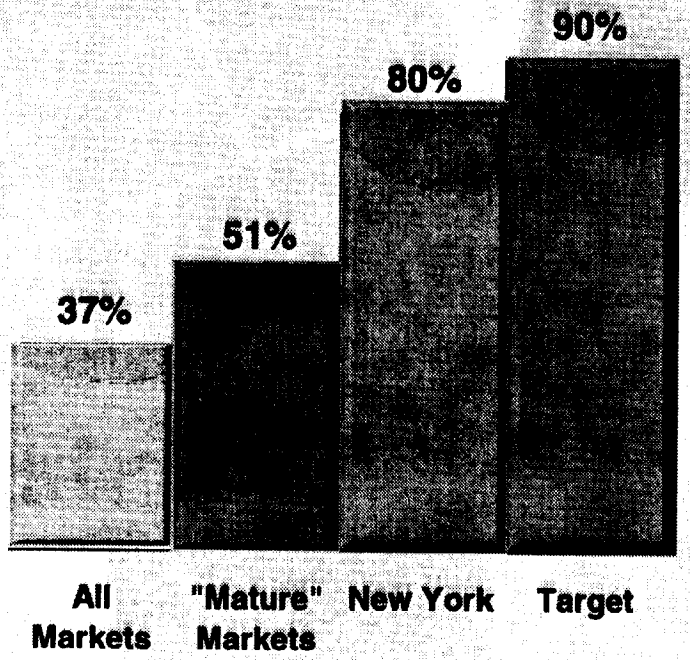
On-Net Conversion Progress

Composition of Lines as of September 30, 1998

On-Net



On-Switch



- 65% of Current Sales are in Target Buildings
- Over 1,000 Newly Added Networked Buildings

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New York - Model Market

- Operating for Approximately 21 Months as of September 30, 1998
- For the Quarter Ended September 30:
  - Revenue Exceeded $4 Million
  - Gross Margin of 46%
  - Achieved EBITDA Breakeven During the Quarter

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Outlook

- Increasing Network Coverage
- Further Strong Gains in Revenues, Lines and Customers
- Increasing Margins
- Gradually Declining EBITDA Losses

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Strategic Focus

- Expand Our Network Coverage
- Exploit Global Opportunities
- Develop Additional Strategic Relationships
- Make Acquisitions Which Enhance Revenues and EBITDA

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PMP DEMO CENTER

APPLICATIONS DIAGRAMS

WinStar Confidential and Proprietary

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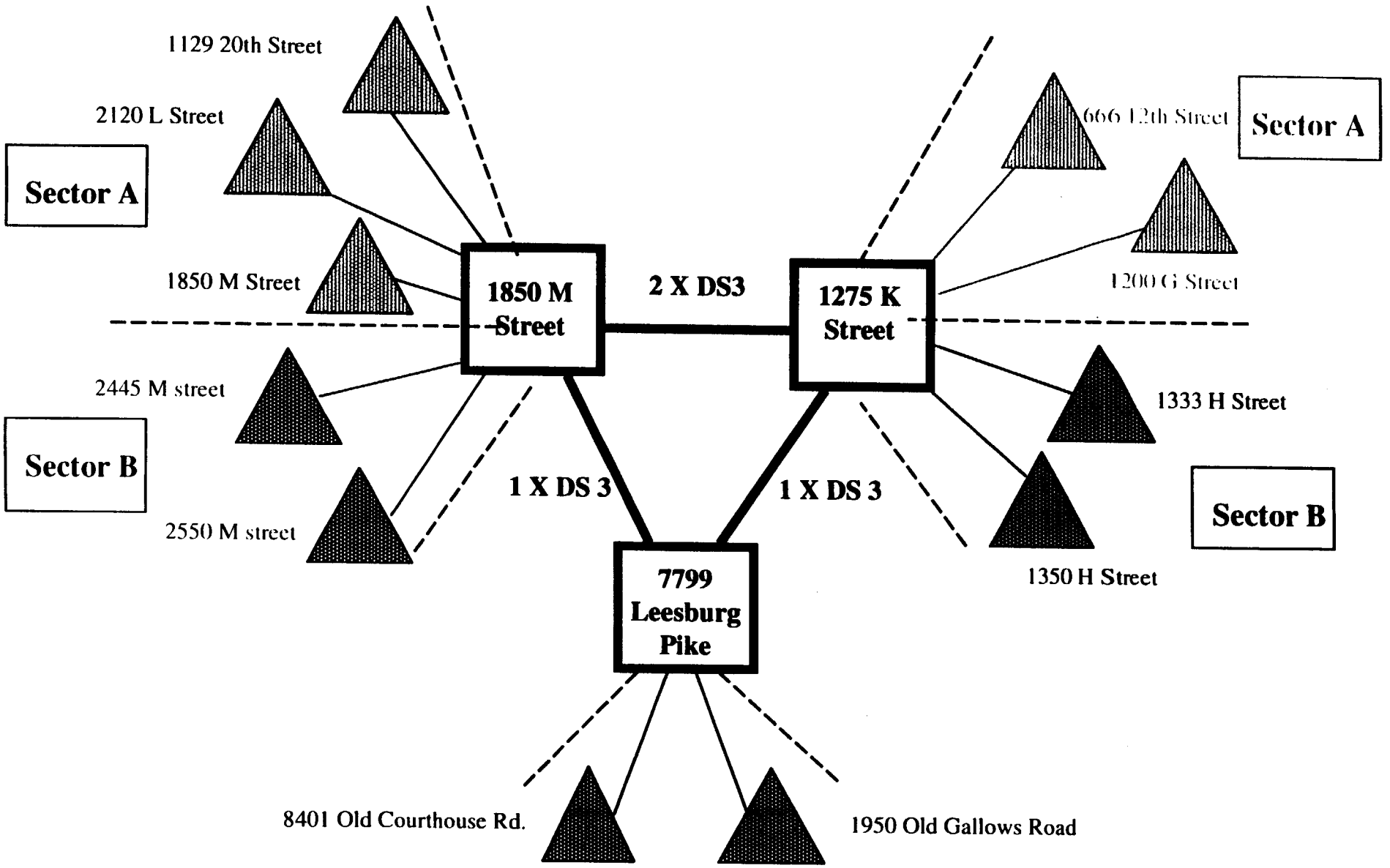
TRIAL NETWORK CONFIGURATION DIAGRAM



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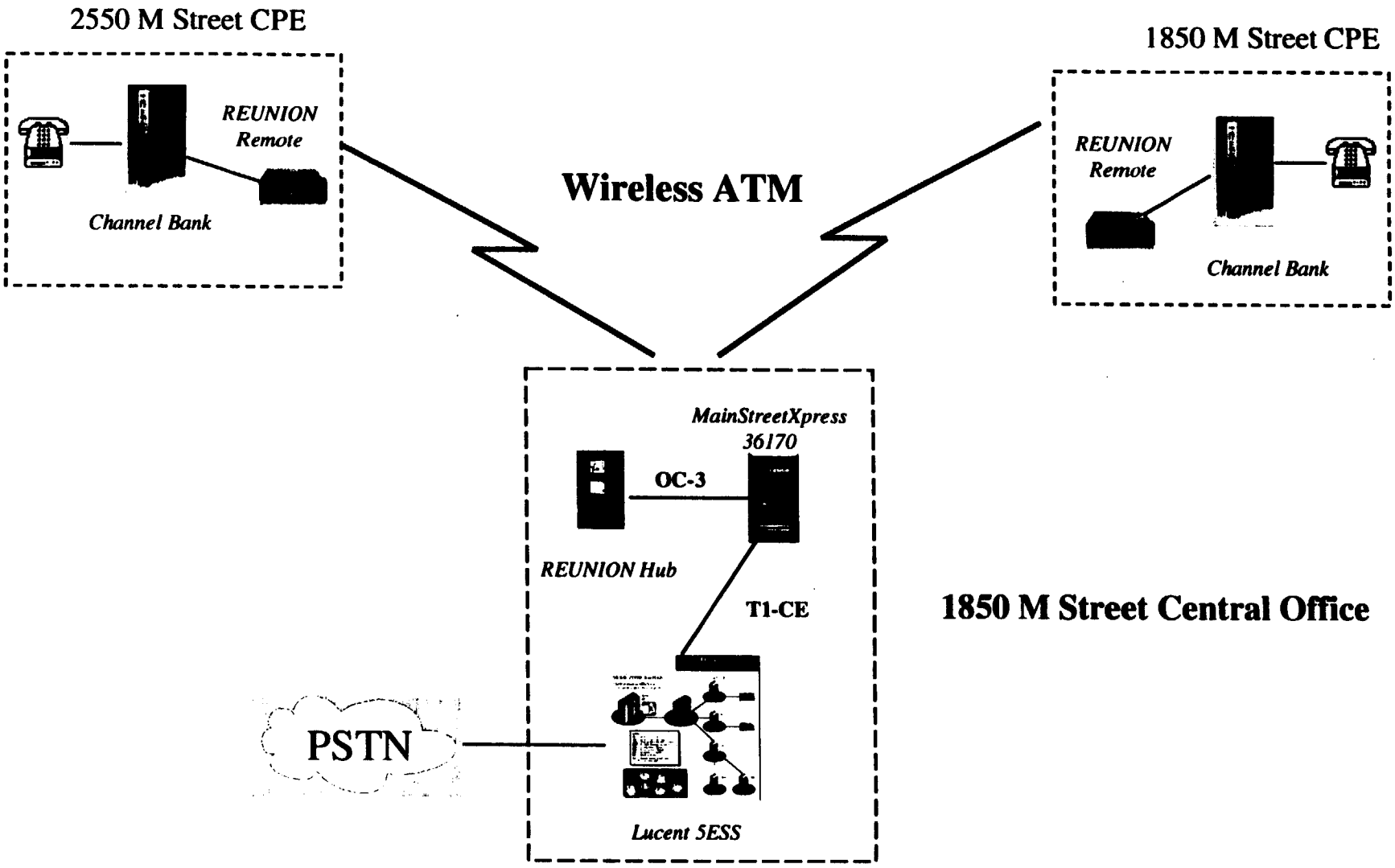
Point-to-Multipoint Voice Call
Wireless ATM Access



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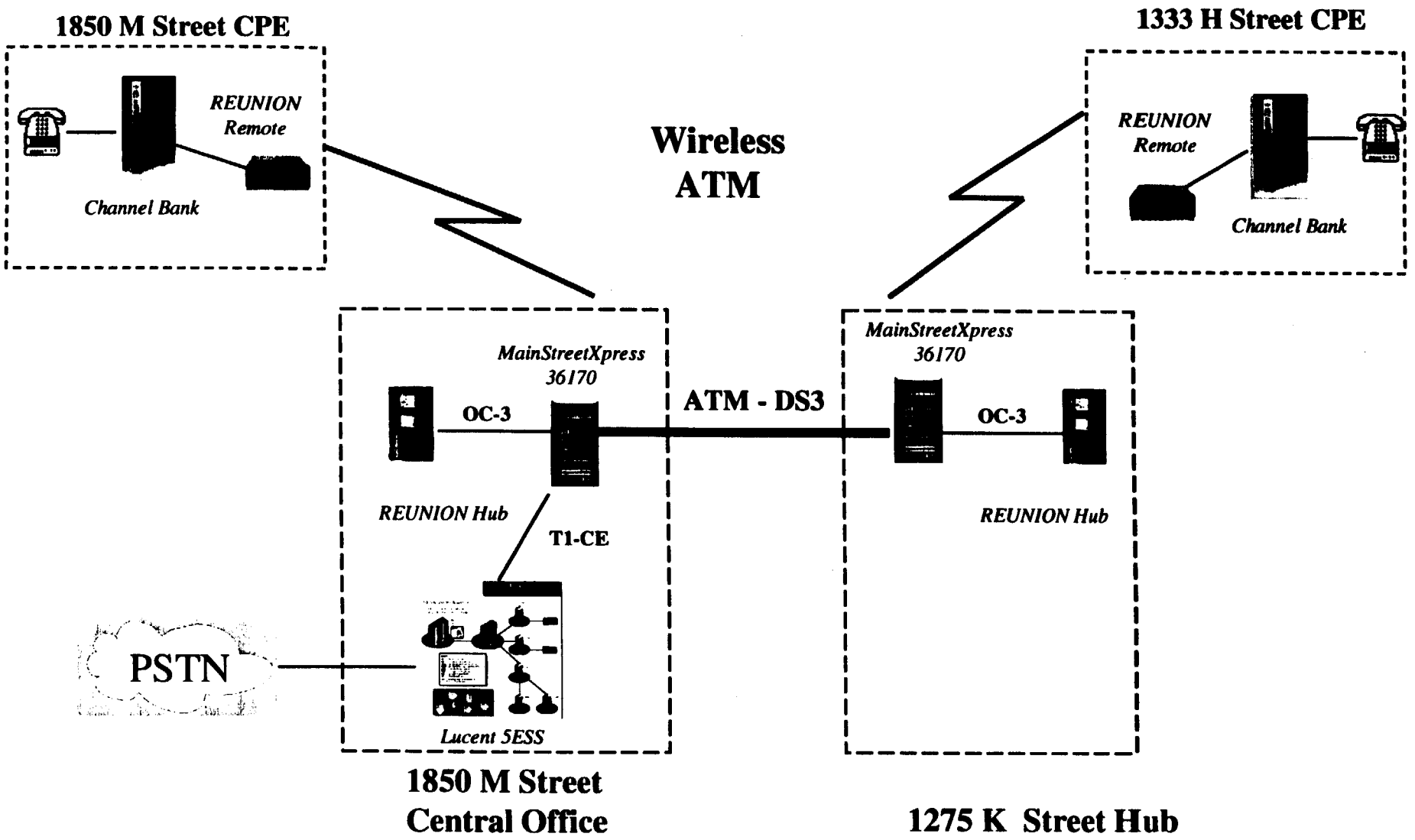
Point-to-Multipoint Voice Call
Wireless ATM Access and ATM Backbone



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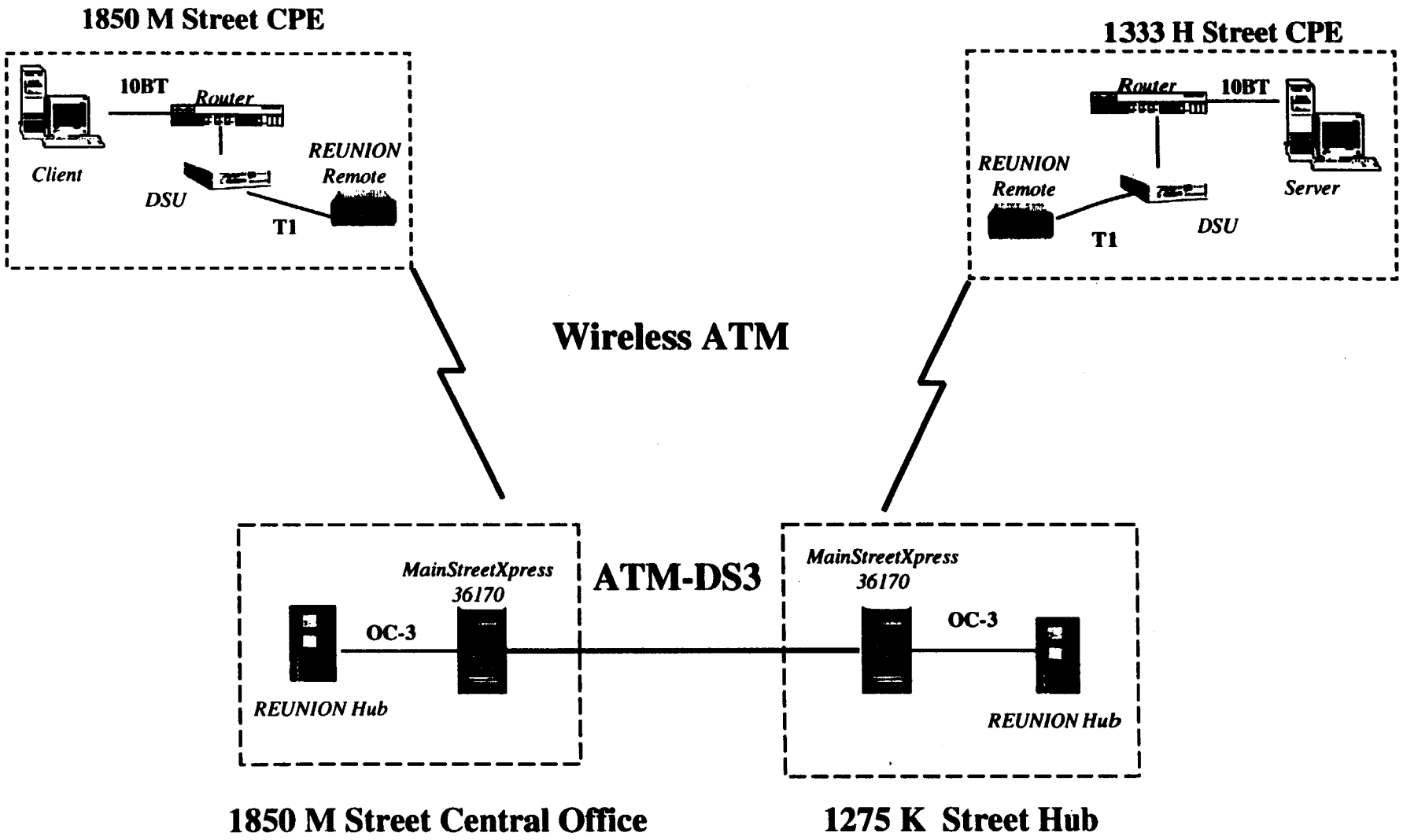
Point-to-Multipoint Data Call



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RF System Comparison

	Point to Point	Point to Multipoint
Hub/Remote	One to One	One to Many
Beam	2 Degree Pencil Beam	15 - 90 Degree Sector Coverage
Capacity (50 MHz)	DS-3/E-3 --> OC-3	200 - 250 Mb/s
Modulation	FSK. QPSK	QPSK, 16 QAM, 32 QAM, 64 QAM
B/W Assignment	Fixed	Variable
Connection	Full Period	On Demand
Air Interface	TDM	ATM
Network Interface	TDS-1 or DS-3	ATM (OC-3c) and DS-3
RF Power Control	None	Uplink, Bi-Directional
Spectral Eff.	1 Bit/Hz/Sec	4+ Bits/Hz/Sec
Provisioning	Physical Only	Remote Configuration and Control
Intelligence	None	Hub Controller Software Driven
CPE Interfaces	T-1/E-1, DS-3/E-3, Ethernet	Add Frame Relay, MPEG, ATM-25
Link Distance	1 - 5 Km	1 - 5 Km
Link Availability	99.999%	99.999%

Proprietary and Confidential Information of WinStar Communications, Inc.

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Point to Multipoint System Capacities

- Four Fold Improvement in Spectrum Efficiency Over Point to Point
- 112 DS-1's Per FCC Channel
- 4 DS-3 's Per FCC Channel
- FCC Channels Can be "Stacked" In A Sector
- Up to 16 Sectors Per Hub
- 3 Gb/s of End-User Capacity Per Hub Per FCC Channel
- 300 Remote Sites Per Sector
- 5000 Remote Sites Per Hub
- Sector Capacity Delivered to Single Remote or Distributed Between Many Remotes

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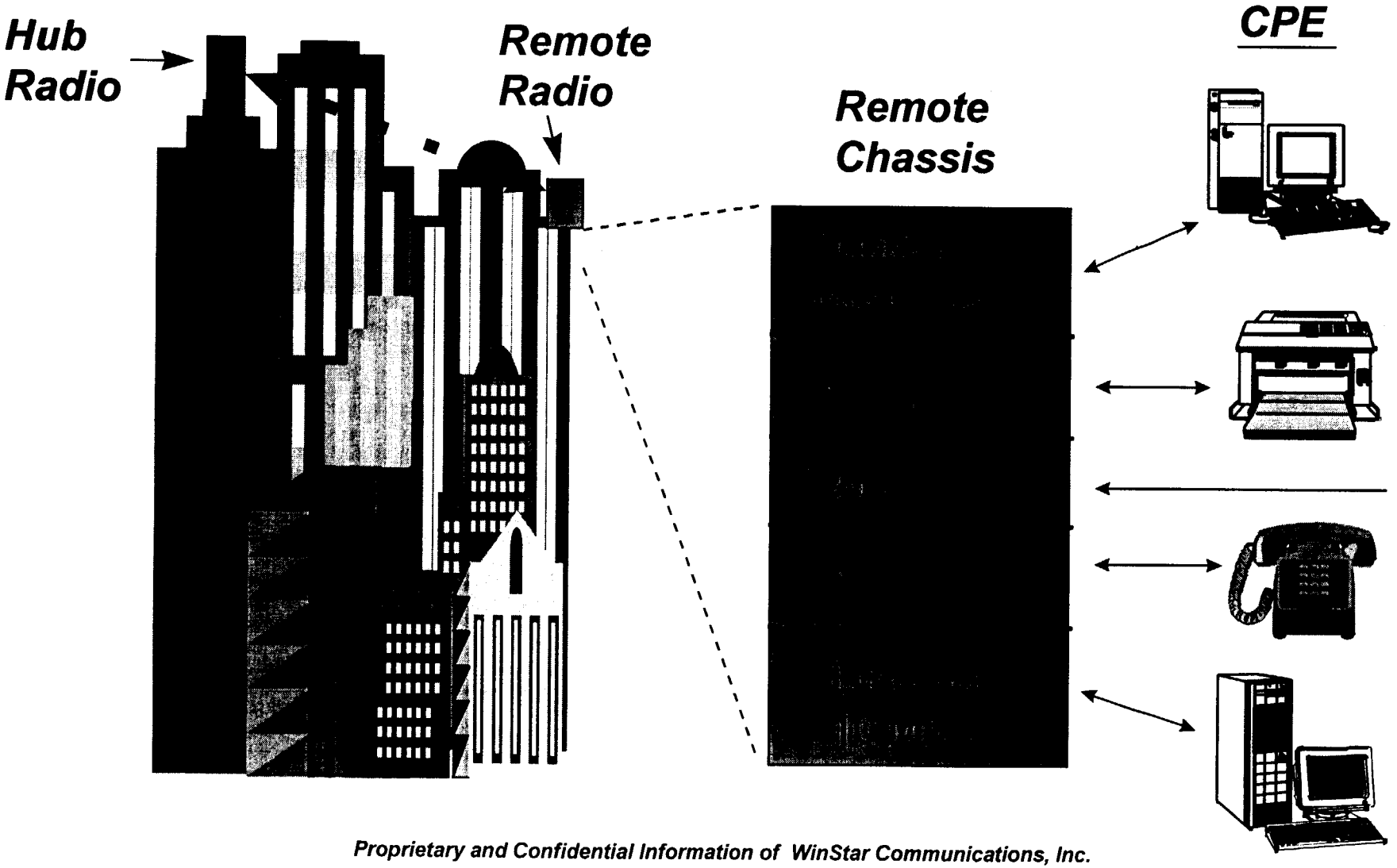
Customer Interface Cards



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Modulation

- QPSK ~ 1.2 bits/Hz
  - 60 Mb/s per 50 MHz Channel (~1 DS-3)
- 16-QAM ~ 3.5 bits/Hz
  - 175 Mb/s per 50 MHz Channel (~3 DS-3 or 1 OC-3)
- 64-QAM ~ 5 bits/Hz
  - 250 Mb/s per 50 MHz Channel (~1 OC-3 + 2 DS-3)

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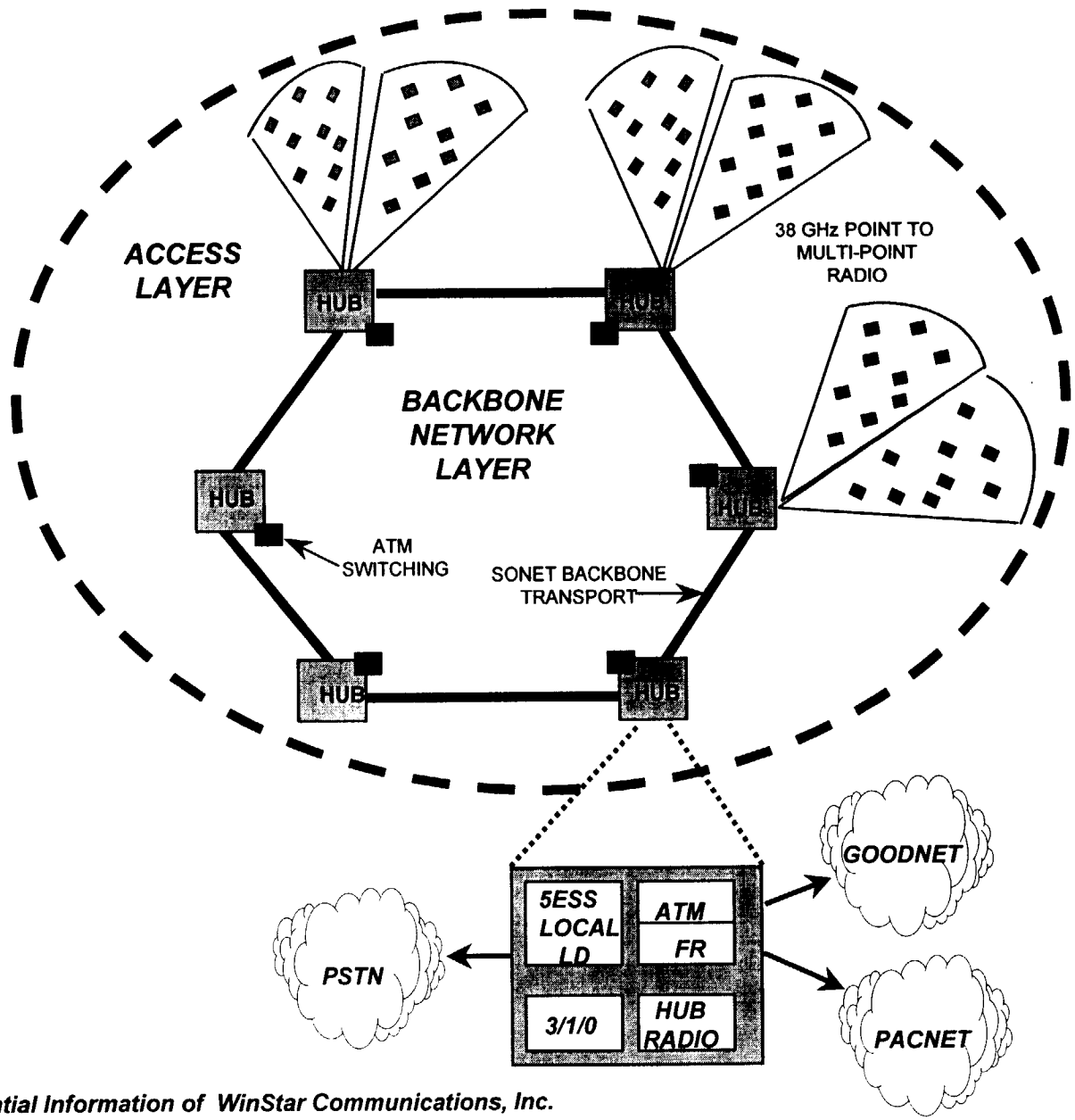
WinStar Network Architecture



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