

The Telecommunications Industry

NITIURAND THEMPROPERTY SERVICES AND STRATES

Minority Business Development: Economic Value And Benefits

MED Week 2001



This Report Was Written And Produced For:

U.S. Department of Commerce

Minority Business Development Agency

Ronald N. Langston

National Director

By:

The Asaba Group, Inc.
Lakeview Office Park
214 North Main Street, Suite 207
Natick, MA 01760

www.asabagroup.com

Tel. 508.655.8100 Fax. 508.655.1955

This analysis on the economic value and benefits of the telecom industry was prepared by The Asaba Group and is the Group's interpretation of the economic trends of the telecom industry. The study is not a Commerce Department report, but was developed for the sole purpose of discussion amongst industry experts. The conclusion and analysis of the report do not necessarily reflect the views of the U.S. government.

Express Gratitude And Acknowledgement For Contributions To The Project:

Minority Business Development Agency

Ronald N. Langston

AT&T

Winston Smith Vicky Liston

Tellabs

Steve McCarty Kimberly Johnson

Lucent Technologies
Heather Herndon-Wright

SBC

Joan Kerr

Fujitsu

Javier Fernandez

Verizon Communications

Jeannie Diefenderfer Julian Birdsong

ADC

Kathleen Riopelle

HCI Tchnologies

R. Martin

Harvard Technologies

Manny Chavez

Motorola

Bud Bowen Nannette Kelley

Advanced Fibre Communications

Irene Fay

Cisco Systems
Denise Coley

Graybar

Karen Buckhart

Cornet Technologies

Sant Gupta

Communications Production, Inc.

Keith Doucette

MCI Communications

Vern Davis Lisa Smith

Ericsson, Inc.

Vicky Bunch

Lexicom Telecommunications

Alexis Scott

Alcatel

Tony Shumaker

Content

Project Overview/Introduction	3-6	
Industry Trends	7-18	
Demographic Realities	19-27	
Minority Energy Markets	28-38	
Minority Business Value Proposition	39-44	
State of Minority Sourcing	45-53	





Develop A Report That Shows The Economic Value To Corporations From Doing Business With Minority-Owned Companies

Business case should place emphasis on the following:

- Focus on business imperatives and free market forces
- Leverage minority demographic shifts and emerging purchase power
- Ensure alignment with current industry trends and strategies of key players
- Drive increased participation in minority business development

The Asaba Group Retained To Assist Building Business Case

MINORITY BUSINESS DEVELOPMENT AGENCY

Project Approach

Industry Trends/ **Dynamics Minority Market Assessment Minority Business Value Proposition Minority Sourcing** and Partnerships

- Market trends
- Industry dynamics
- Major player's reactions
- Market and customer opportunities
- Revenue expansion and growth
- Brand differentiation
- Supply chain flexibility
- Channel and market access
- Current state
- Issues and challenges
- Future perspectives

į



Executive Summary

Telecommunications services have grown 8% annually over last 5 years

Broadband, wireless and data services expected to accelerate growth in the future

Economy slowdown and industry slowdown has increased focus on developing strong consumer value propositions

Service providers will use new innovative products to increase consumption and build brand loyalty to ensure profitability

Minority consumers estimated to spend \$56 Billion on telecommunications services

One of the fastest growing consumer segments and expected to account for significant share of future revenues

Service providers view minority segment as essential to long term success

Industry committed to minority business development – spending \$7.8 billion with MWDVBE suppliers

Minority suppliers spend estimated at \$4 Billion

Future efforts should focus on high growth areas of the industry

6

Content

	STRATEGY AND BUSINESS IMPROVEMENT CONSULTING
Project Overview/Introduction	3-6
Industry Trends	7-18
Demographic Realities	19-27
Minority Energy Markets	28-38
Minority Business Value Proposition	39-44
State of Minority Sourcing	45-53





Key Trends In The Telecommunications Industry

Telecommunications services revenues in 2000 approximately \$283 Billion and growing at 8% annually

Industry undergoing rapid change as a result of deregulation

- Started with Telecommunications Act of 1996
- New industry forces and business models emerging
 - From constrained bandwidth (narrowband) to unconstrained bandwidth (broadband)

Recent industry declines in sales and market values has sharpened focus on building customer-focused value proposition

- A function of reduced levels on capital expenditures by service providers
- Consumer adoption of new services is essential to future success

Long-term industry fundamentals remain quite strong

- Data traffic has grown significantly surpassing voice
 - But voice still accounts for significant share of total revenues
- Wireless and internet traffic continues to grow

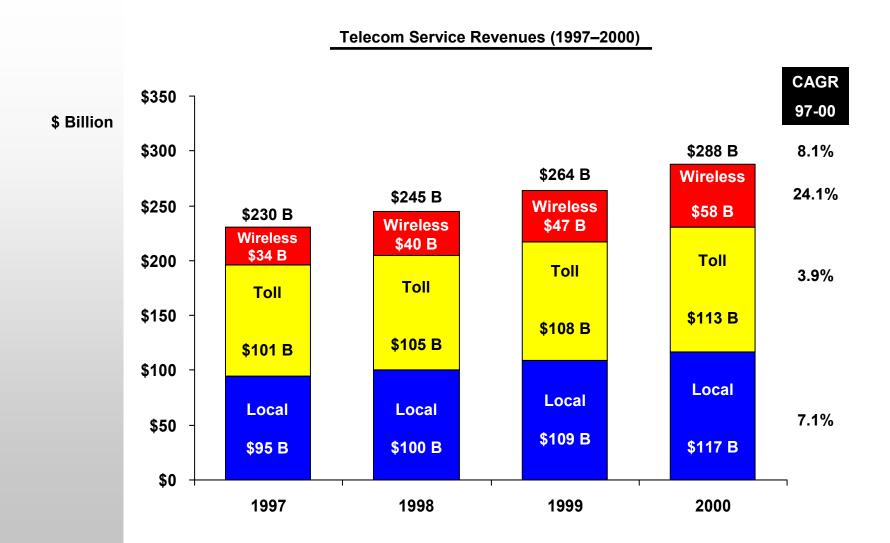
Fragility of revenues a continuing trend with service providers

- Traditional voice revenues approach commoditization and pricing pressures
- Bundling new services (e.g., data and voice) essential to hold on to customers
- Service providers seek new avenues for brand differentiation and customer loyalty

Telecommunications Services Industry Seen Modest Growth During Last 5 Years



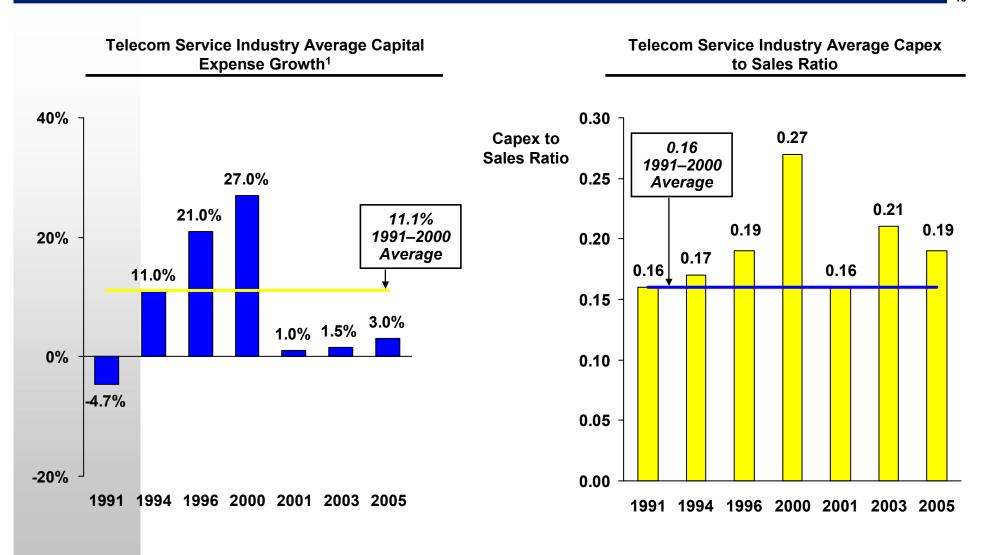
Wireless Services Has Been Fastest Growing Segment



SOURCE: Multimedia Telecommunications Association, Cellular Telecommunications & Internet Association

Industry Slowdown Is A Function Of Reduced Levels Of Capital Expenditures By Service Providers

Spending Levels And Future Growth Expected To Trend Downward

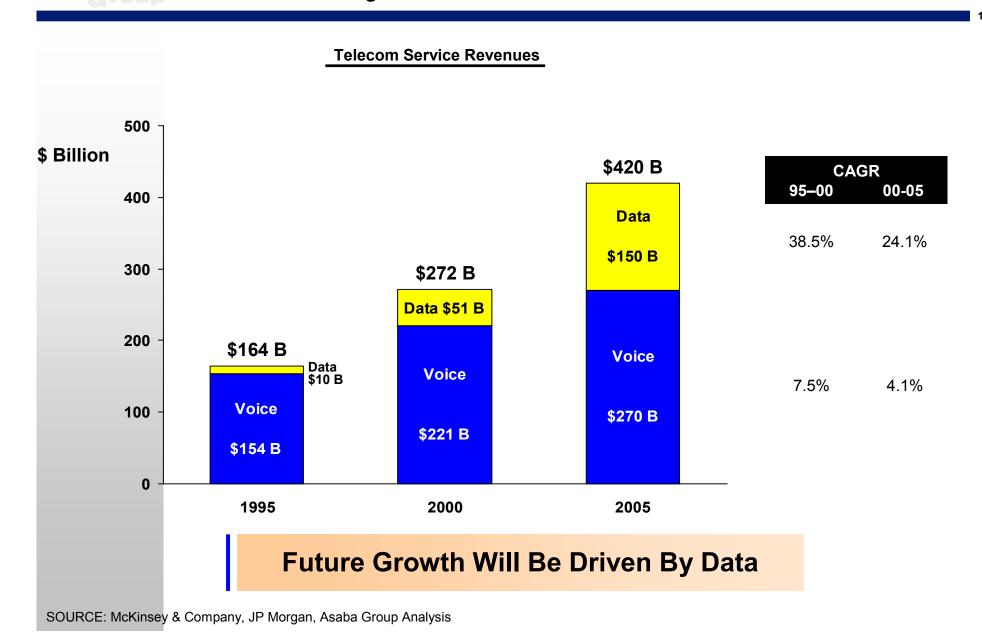


1. Includes AT&T, BellSouth, Quest, SBC, Verizon, Worldcom, CenturyTel SOURCE: Morgan Stanley Dean Witter, Financial Times



However Demand Drivers Are Still Strong

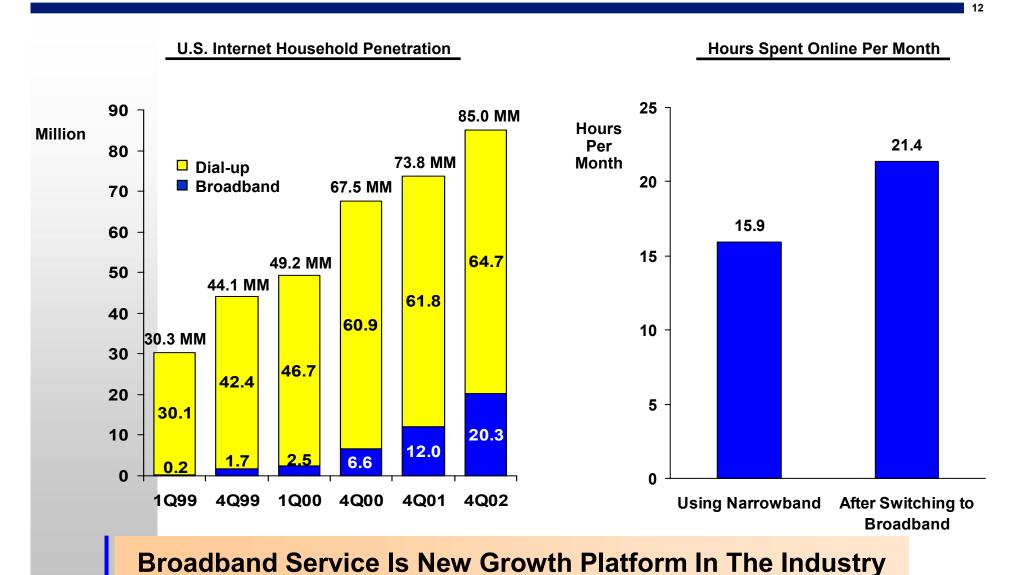
Data-Based Products Growing Faster Than Voice Products



Internet Access And Usage Are Strong Drivers For Data Services



Expect Higher Penetration And Usage With Broadband Access



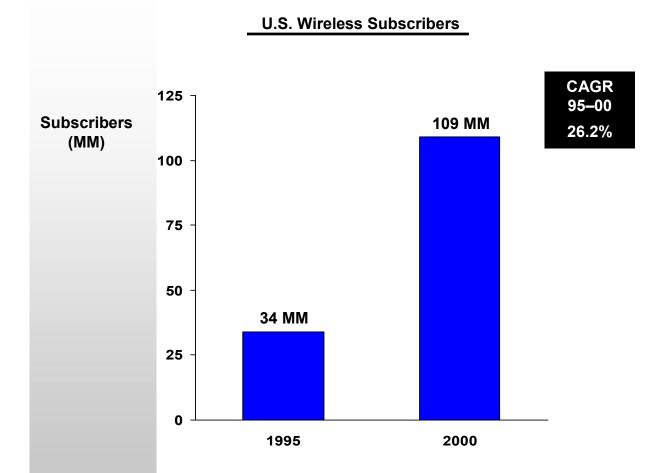
SOURCE: Telecommunications Reports International, Industry Standard, McKinsey & Company, Merrill Lynch, Asaba Group analysis

MINORITY BUSINESS DEVELOPMENT AGENCY

Wireless Subscriber Growth Has Been Significant In Last Five Years

Largely Driven by Small Business and Residential Customers

13



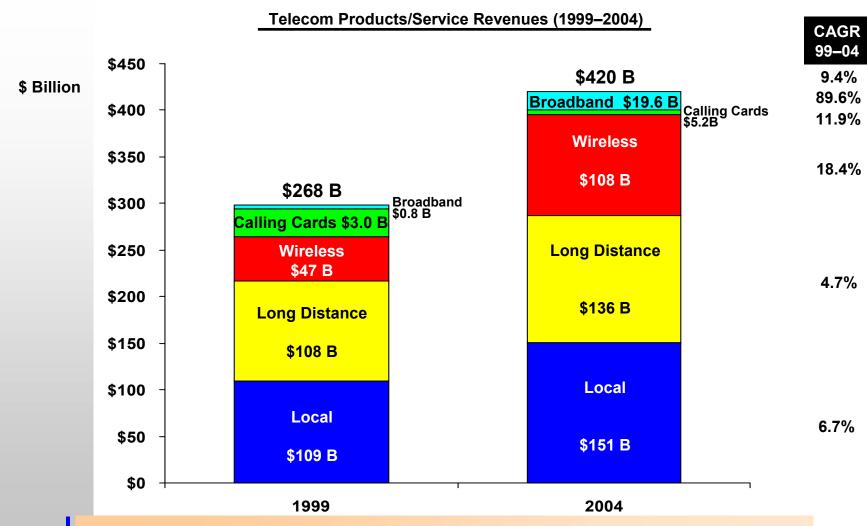
Key Trends

- Largely voice-based service
- Huge potential for data-based services
- Full-service mobility for competing and interactive entertainment applications

Demand Drivers For Wireless Service Expected To Be Strong



Broadband, Wireless, And Calling Cards Fastest-Growing Product Segments



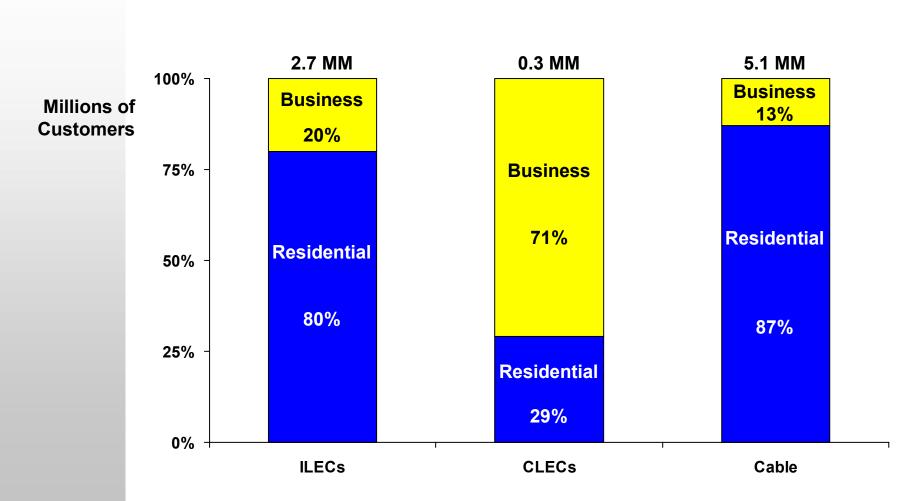
Residential And Small Business Customers Expected To Account For Significant Share Of Future Revenue

SOURCE: MultiMedia Telecommunications Association (MMTA), Federal Communications Commission

1.

Residential Customers Account For Significant Share Of Broadband Customers For ILEC's And Cable Operations

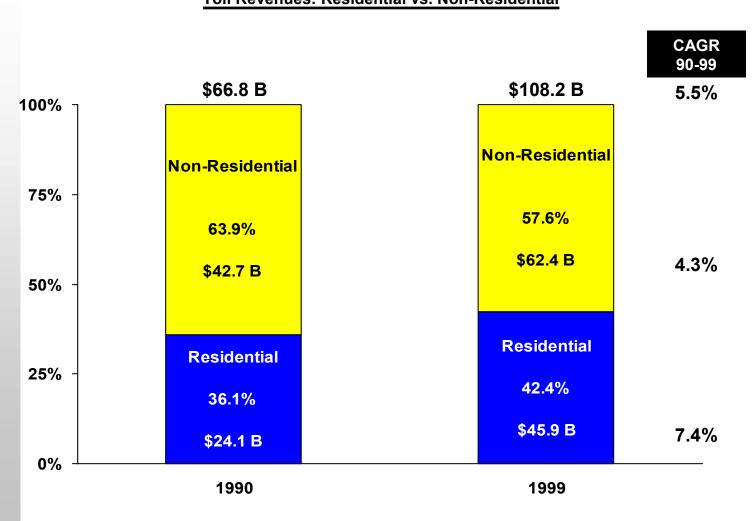




SOURCE: TeleChoice, MultiMedia Telecommunications Association, Merrill Lynch, Asaba Group analysis

Residential Customers Account For Most Growth In Long Distance

Toll Revenues: Residential vs. Non-Residential



SOURCE: Federal Communications Commission

47

Consumer Telecommunications Expenditures Have Risen Over Last 4 Years

A Significant Monthly Expenditure For Consumers To Seek Competitive Providers

Estimated Residential Communications Spending/Month

Services	1996	2000	Trend	% Change
Local	25.50	34.50	^	35.3%
Long Distance	28.00	25.10	lack lack	(10.4%)
Cable	26.20	39.30	^	50.0%
Wireless	44.30	44.00	lack	(0.7%)
Internet Access	19.95	24.50	^	22.8%
Broadband ¹	NA	42.00	NA	NA
TOTAL	143.95	209.40	^	45.5%

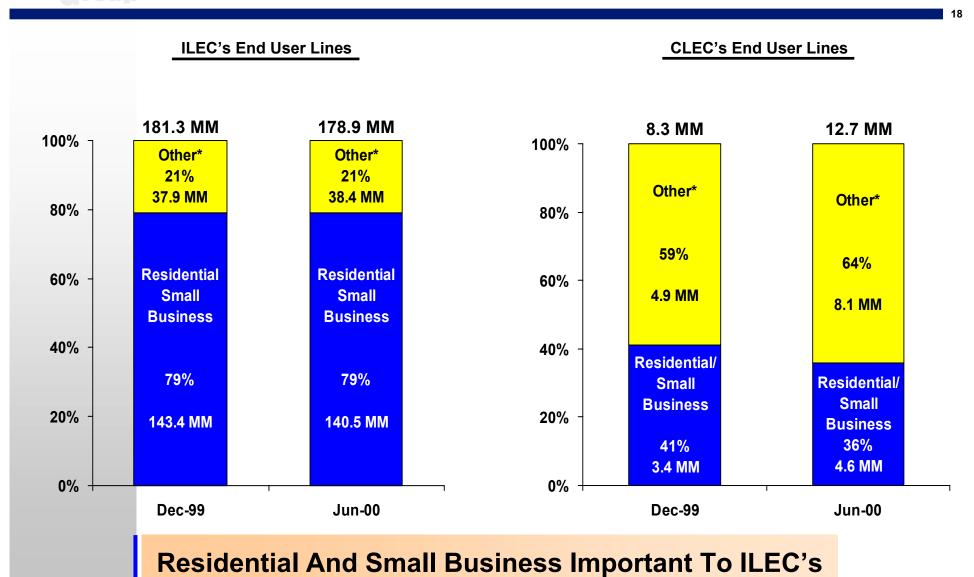
Building End-Consumer Loyalty Essential In Achieving Sustainable Long-term Growth

SOURCE: Wall Street Journal, The Yankee Group, Asaba Group analysis.

^{1.} Includes internet access



Competition With Local Services By CLEC's Focused On Large Commercial Customers



* Other = Medium and Large Businesses, Institutional & Government SOURCE: Federal Communications Commission, June 2000

Content

	STRATEGY AND BUSINESS IMPROVEMENT CONSULTING
Project Overview/Introduction	3-6
Industry Trends	7-18
Demographic Realities	19-27
Minority Energy Markets	28-38
Minority Business Value Proposition	39-44
State of Minority Sourcing	45-53









- Minority population fastest growing segment of the U.S. population
- Workplace demographics reflecting the growth of minorities
- Minority population much younger than non-minority population - Minority median age 28.2, Non-Minority median age 36.6

Speed of Change

- California now a majority minority state
- Not acknowledging demographic changes has led to social tensions with communities and advocacy groups

Political Factors

- Minority Groups becoming a significant force in politics
 - Influencing outcome of elections and public policy
- Minorities occupying more political offices and contesting elections

BUT...

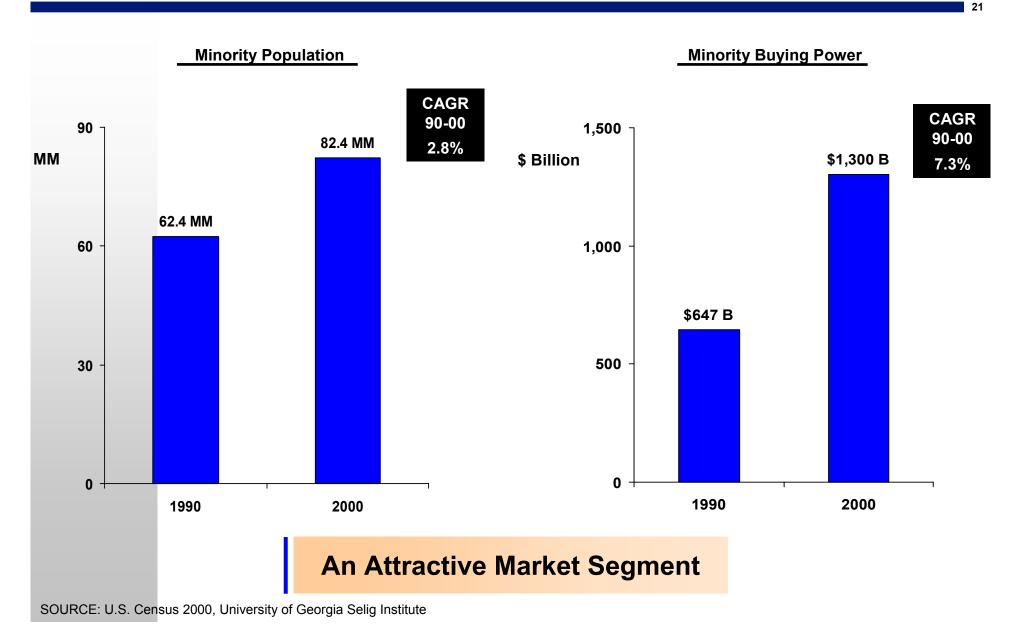
Socio-**Economic**

- Even though Minorities have experienced significant growth in purchasing power, they still lag in economic producer power
- Minorities still experience significant barriers to economic opportunities

Telecom Service Providers Must Anticipate And Reflect These Realities In Their Business Models



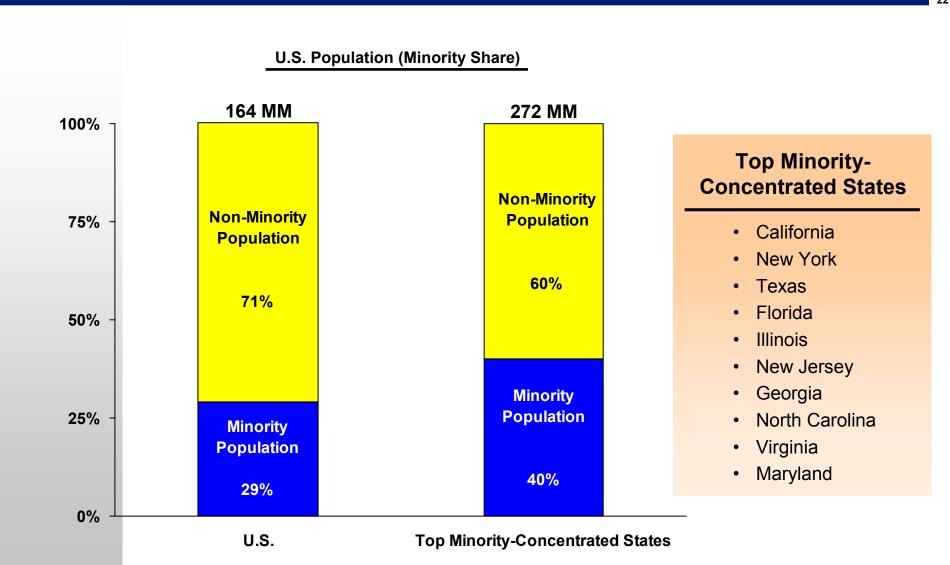
In the Last Decade, Minorities Experienced Growth In Population And Buying Power







Minorities Are 29% Of U.S. Population, But Are 40% Share In Top Ten Minority States



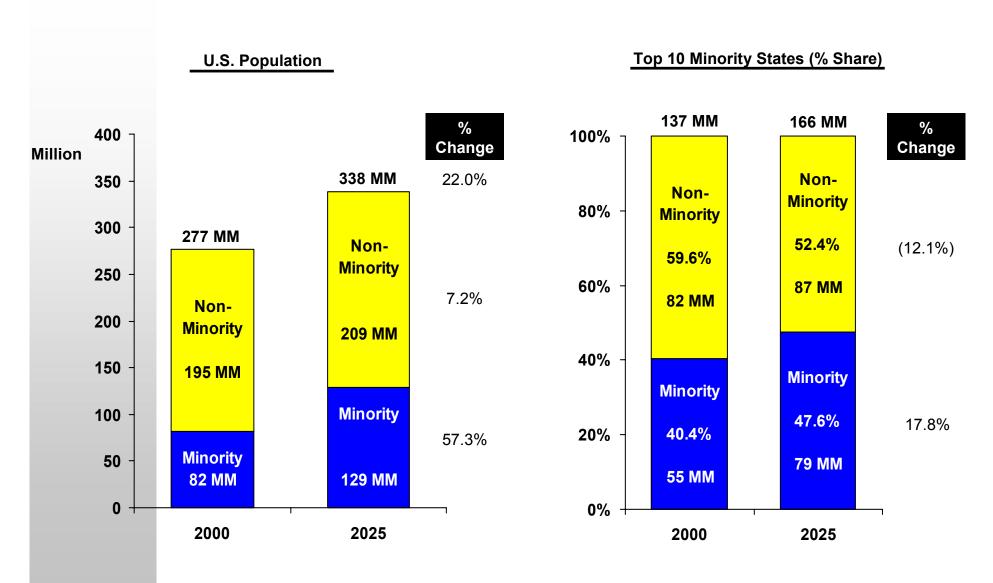
SOURCE: U.S. Census

23

Minority Population Expected To Account For Significant Share Of Future Consumer Growth

MINORITY BUSINESS DEVELOPMENT AGENCY

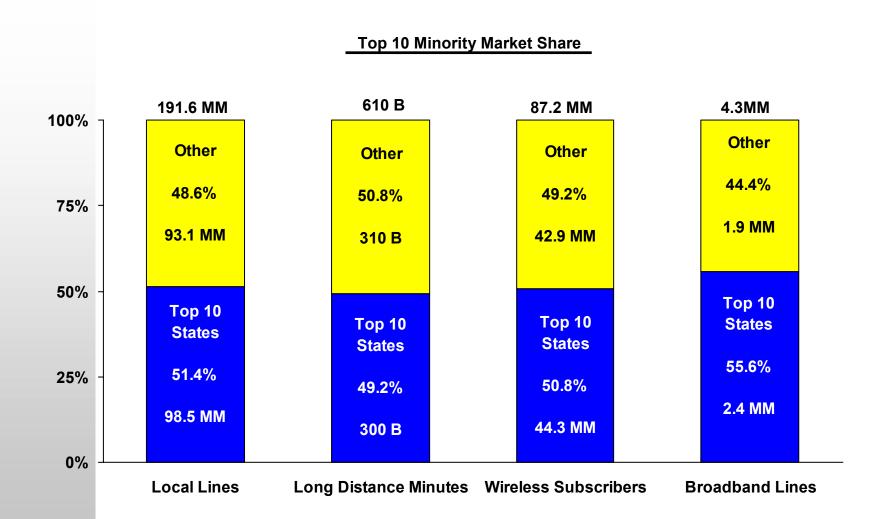
Particularly Significant In Top 10 Minority-Concentrated States



SOURCE: U.S. Census, Asaba Group analysis

Minority Dominant States Account For Significant Share Of Telecom Services





Minorities Are Significant Consumers In These States

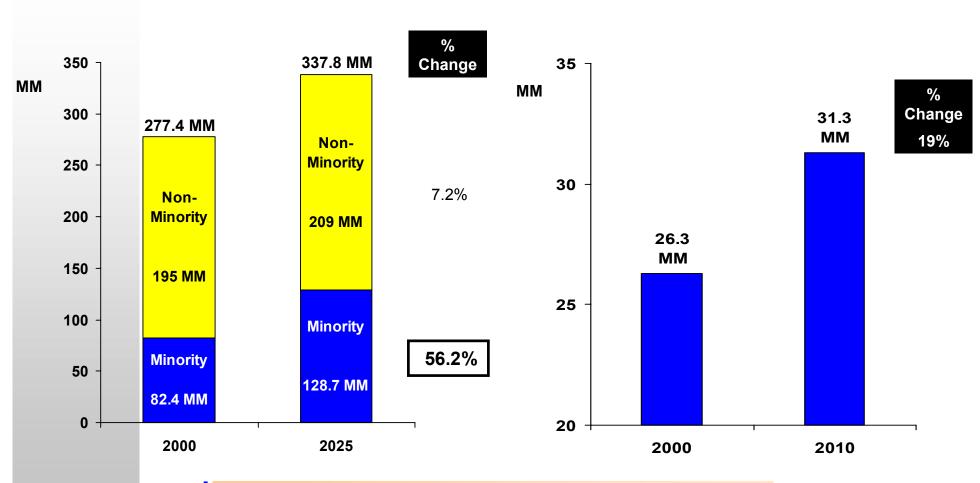
SOURCE: Federal Communications Commission



Growth Trend Expected To Continue For The Next Two Decades

Population Projection (2000-2025)





Greater Political And Economic Leverage

SOURCE: U.S. Census, Asaba Group Analysis



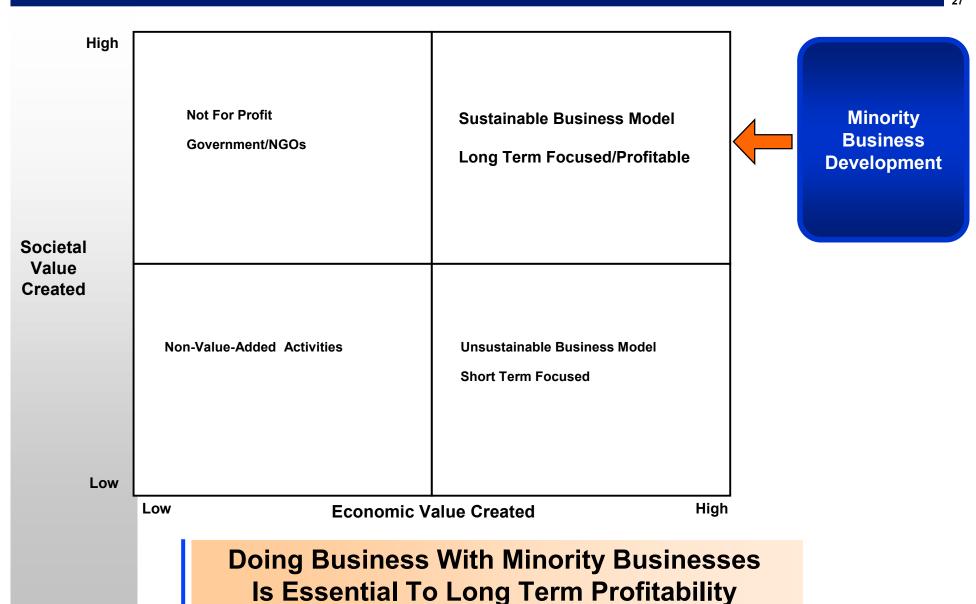
Creating Long-Term Shareholder Value Requires Addressing All Stakeholders

Telecommunications Stakeholders Community **Business** Shareand Partners/ **Suppliers Environment** Regulators **Customers Employees** holders **Advocacy Alliances Groups Economic Value Add** Societal Value Add

Striking An Optimal Balance Between Economic And Societal Value Add Is Essential For Long Term Success

27

Minority Business Development Is A Key Initiative Which Optimizes Both Economic And Societal Value Add



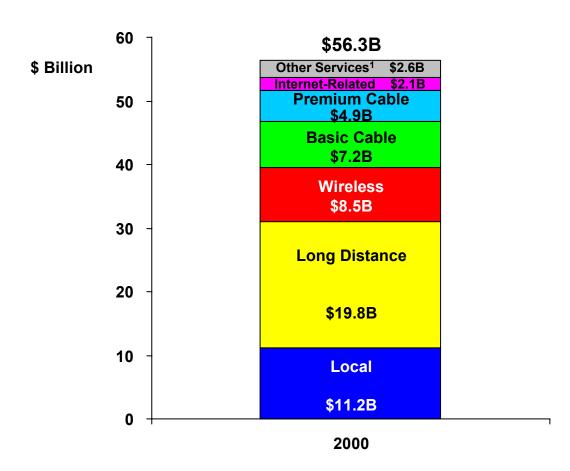
Content

	STRAILERY AND BUSINESS IMPROVEMENT CONSULTIN
Project Overview/Introduction	3-6
Industry Trends	7-18
Demographic Realities	19-27
Minority Telecommunications Markets	28-38
Minority Business Value Proposition	39-44
State of Minority Sourcing	45-53





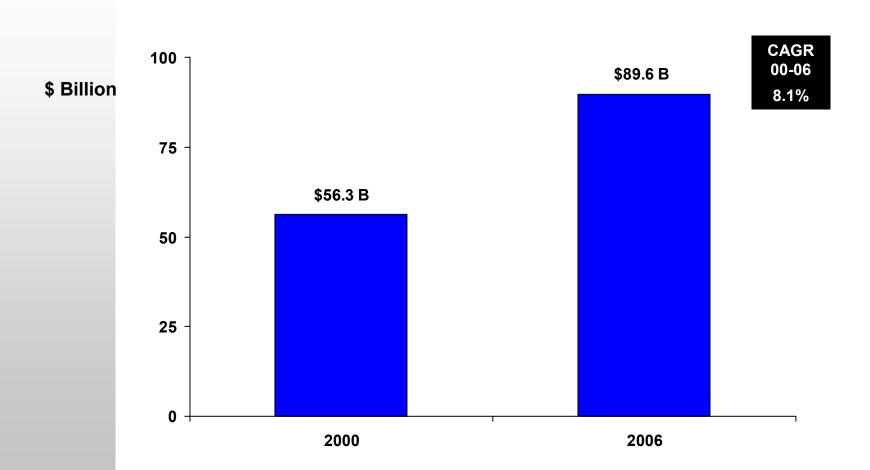
Minority Telecommunications Spending (2000)



1. Includes Calling Cards, Ancillary Services, Paging SOURCE: Bureau of Labor Statistics, Federal Communications Commission, **National Telecommunications and Information Administration**, Asaba Group analysis

Minority Expenditures Will Grow To \$90 Billion In Five Years

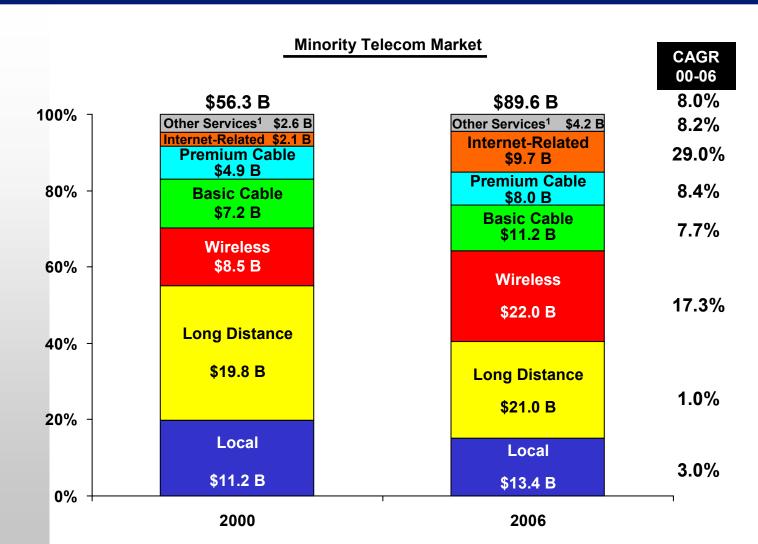
Minority Telecommunications Expenditures (2000–2006)



SOURCE: Bureau of Labor Statistics, Federal Communications Commission, **National Telecommunications and Information Administration**, U.S. Census, Asaba Group analysis



Internet And Wireless Services Account For Significant Share Of Future Growth



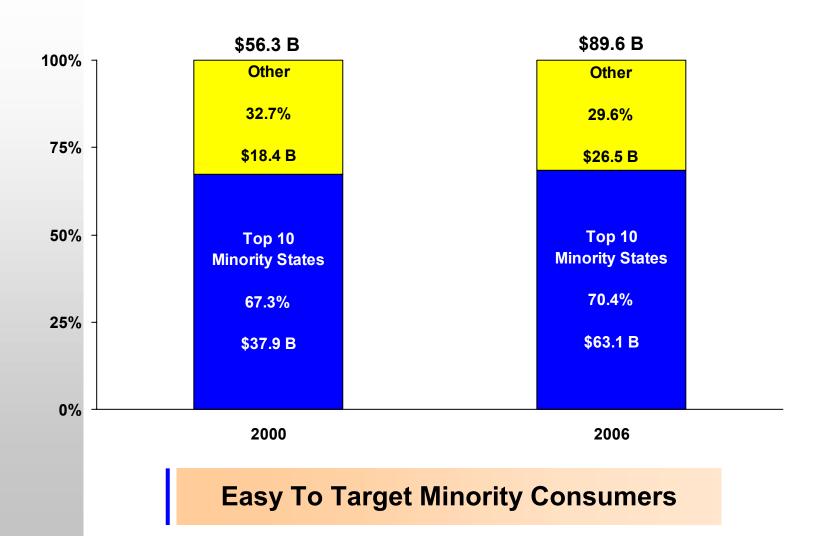
^{1.} Calling Cards, Paging and Ancillary Services

SOURCE: MultiMedia Telecommunications Association, Gartner, Bureau of Labor Statistics, U.S. Census, Asaba Group Analysis

^{2.} Includes Broadband



Sixty-Seven Percent Of Minority Telecommunications Spending In Top 10 Minority States

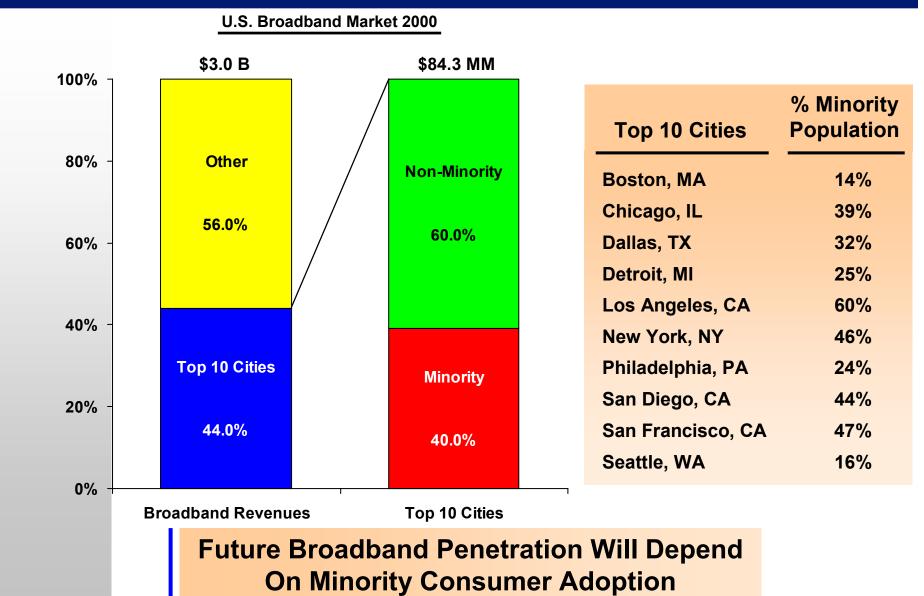


SOURCE: U.S. Census, U.S. Department of Commerce, Telecommunications Industry Association, Asaba Group analysis

22

Top Ten Broadband Cities Account For 44% Of Total Revenues

Minority Consumers Are 40% Population Share In These Cities

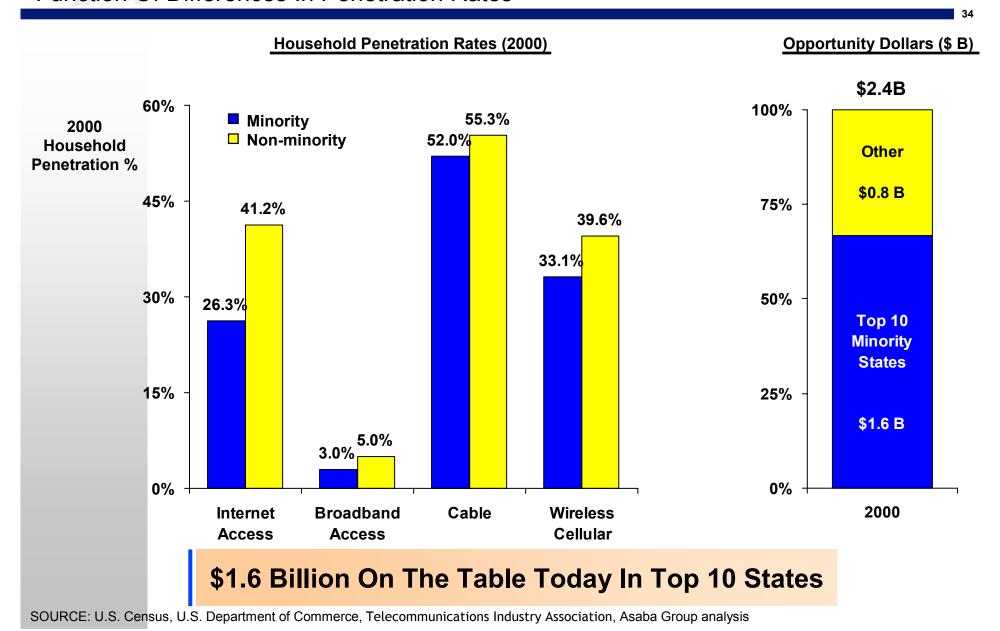


SOURCE: AC Nielsen/Net Ratings, Merrill Lynch

\$2.4 Billion Exist In Near-Term Minority Telecommunications Opportunity



Function Of Differences In Penetration Rates

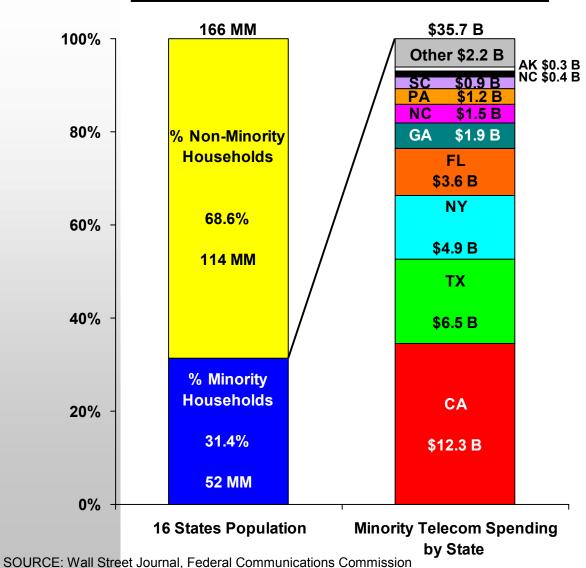


35

Capturing Minority Customers Is Pivotal To Service Providers' Long Term Success

In States With Local Retail Competition, Minorities Account For 31% Of The Market





States With Local Service Competition

Approved

- Texas
- Oklahoma
- Kansas
- New York
- Massachusetts

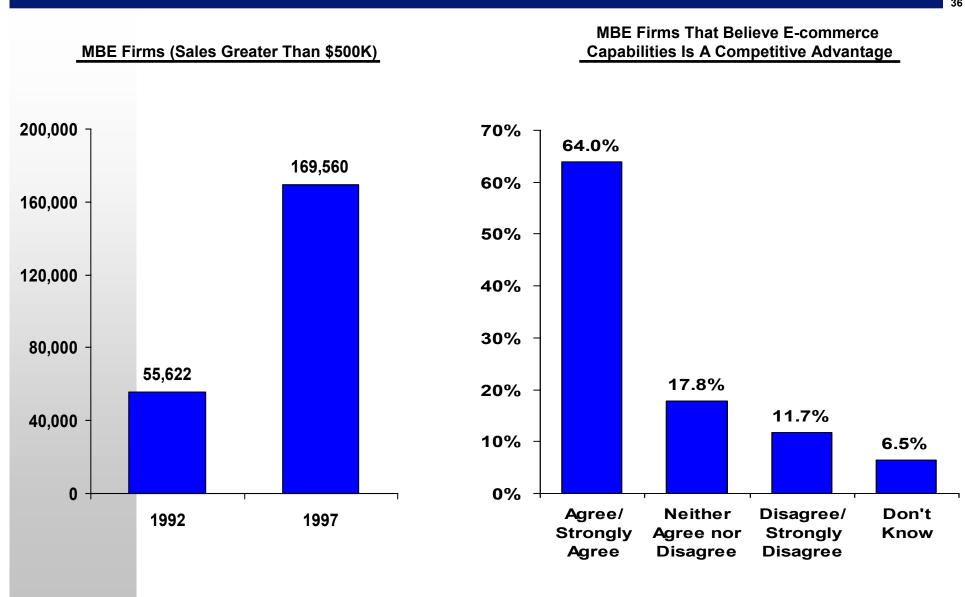
Filed/Pending

- California
- Nevada
- Arkansas
- Florida
- Georgia
- South Carolina
- North Carolina
- Pennsylvania
- Connecticut
- Rhode Island

Minority-Owned Firms Provide Incremental Opportunities



Growing Fast; Most Believe E-Commerce Is A Competitive Advantage

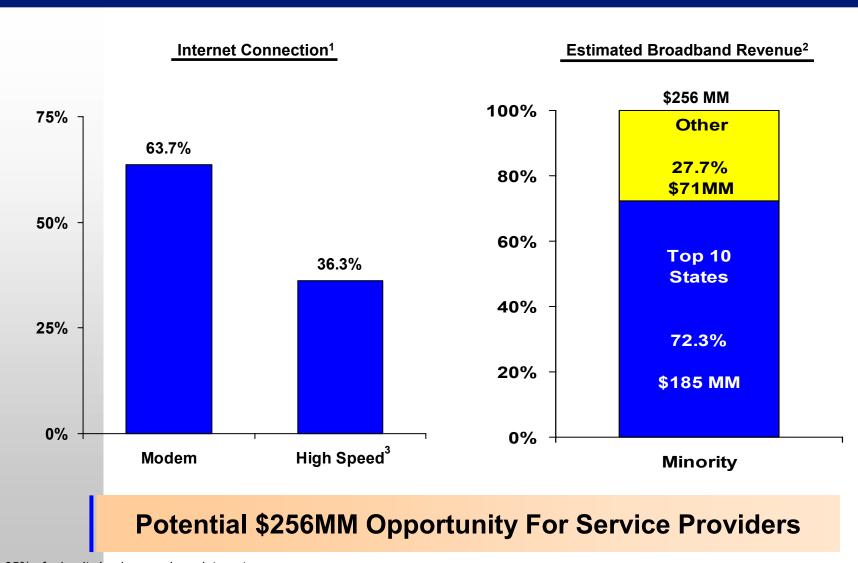


SOURCE: Thomas Rivera Policy Institute, U.S. Census Survey of Minority-Owned Business Enterprises

27

Commercial Broadband Opportunities Exist With Minority Businesses

MBE Firms Have Low Broadband Penetration Rates



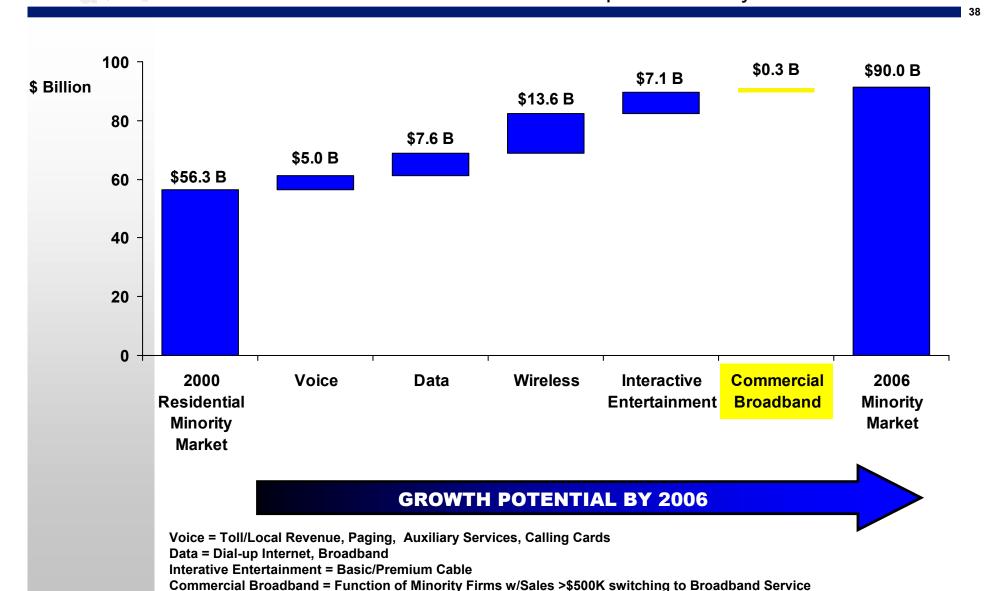
- 1. 85% of minority businesses have internet access
- 2. Based on 1997 total for minority-owned firms
- 3. DSL, Cable, T1/Other

SOURCE: U.S. Census Survey of Minority-Owned Business Enterprises, Tomas Rivera Policy Institute, Asaba Group Analysis

Minority Markets Provide Significant Revenue And Growth Opportunities To Service Providers



Over \$35 Billion Incremental Telecommunications Expenditures By 2006



SOURCE: Federal Communications Commission, MultiMedia Telecommunications Association, Bureau of Labor Statistics, University of Georgia Selig Institute, U.S. Census Survey of Minority-Owned Business Enterprises, Asaba Group Analysis

Content



	STRATEGY AND BUSINESS IMPROVEMENT CONSULTING
Project Overview/Introduction	3-6
Industry Trends	7-18
Demographic Realities	19-27
Minority Telecommunications Markets	28-38
Minority Business Value Proposition	39-44
State of Minority Sourcing	45-53



Benefits of Minority Business Development

Minority businesses are vital links in connecting with the minority consumer base

- These consumers in certain markets account for greater share of future Telecom consumption
 - Typically one of the highest growing consumer market

Minority business development enhances community development efforts

- Potentially a circular process with significant multiplier effect on wealth creation
 - Drives increased Telecom expenditures and consumption
 - Increases the tax base and levels of discretionary income (essential for Broadband adoption)

Provides effective representation of interests with government and political constituencies

Minority population are a significant political force and are swing votes on critical issues

Minority Business Development Can Impact
Customers And Government

40



Value Propositions For Doing Business With Minority-Owned Businesses

41

Market Access

Provides access to new growth and strategically important market segment or consumers. e.g. Access to national commercial accounts, industrial and residential customers Supplier diversity rapidly becoming a key criteria with vendor selection

Increase Customer Loyalty Enhances ability to build differentiation and build customer loyalty Enables increased and sustained profitability from existing customer base

Essential in reducing customer churn

Provides opportunities for new revenue sources – Increase Share of Wallet (SOW) e.g. Loyalty drives down cost associated with customer retention and acquisition.

Supply Chain Flexibility Provides second sourcing alternative in supply chain

Reduces supplier concentration risk

Take on supply chain roles which are essential to service providers (e.g., rapid deliveries, installation, and turn ups)

Lower cost alternatives to certain suppliers and business processes

• Customization of equipment for specific customer needs

Stakeholder Satisfaction

Satisfy needs of key Stakeholders, employees, advocacy groups, and community

Develop and Enhance Corporate Image

Regulatory Value

Contributes to ability to meet government mandate/compliance without sacrificing profits or increasing cost

e.g. Public Utility Commission Requirements (e.g., California CPUC General Order 156)

Minority Businesses Provide Value To Industry Players



Provide Added Value As Companies Increase Focus And Develop Core Competencies

Broadband Impact (Emerging Dynamics)

Impact on

Industry Players

Industry Focus

Minority Business Value Contribution

- Power shift from providers to customers
- Value creation in leveraging intangible assets

- Basis of competition
 - Moore's Law and demand elasticity

· Higher degree of

collaboration

- · Focus, define and leverage core competence
 - Brand equity
 - Knowledge base
- Access partners to rapidly growing customer segment
 - Generate brand differentiation
- Partner in developing new revenue-making applications

- Accelerated innovation
 - New price/ performance characteristics

deployment to

Increased pressure

from Capital

maturity

markets

Virtual integration

Extended enterprise

- New interactions with supply chain partners
 - Supplier collaboration
 - Shared risks
 - Cross-industry collaborations

- Low-cost supply chain flexibility
- Wide pool of technological partners

- **Shorter revenue** Cost-effective sourcing cycles from
 - Maximize ROCE

- Increased focus on economics of scale
- Rapid deployment
 - 3rd party logistics
 - Low-cost sourcing
- · Partners in rapid installation and turn up (EF&I)
- Lower-cost structures
- Flexibility operating models

12

Minority Business Partnerships And Development Provides Customer Differentiation

Especially In Minority-Dominant Markets

Customers increasingly choose among various providers of telecommunications products

- Product and service attributes are becoming "Table Stakes"
- Relationship attributes increasingly important differentiator
- Minority sourcing programs can become a tool in building brand differentiation

Price and Corporate Image become the most important criteria for making a purchasing decision

- Small business and residential customers say price, value, and corporate image are important considerations
- Price is largely market-based; corporate image is the lever controlled by the service providers

Ability to defend and increase market share with minority consumers will depend on building differentiation

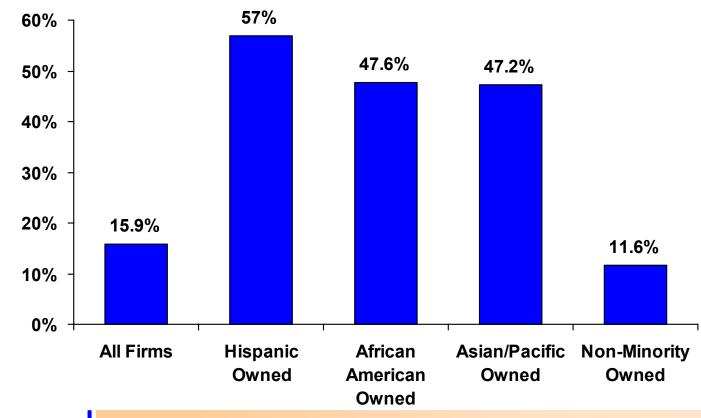
Minority Consumers Will Ask
"What Are You Doing In My Community?"

Minority Business Development Is A Prime Way Connect with Minority Consumers

Minority Businesses Hire More Minority Employees Compared To Non-Minority Firms

Penetration % of U.S. Firms With 50% Or More Minority Employees

% Penetration With 50% Or More Minority Employees



Minority Business Development Is A Lever To Connect With Minority Consumers

SOURCE: U.S. Census 1997 Survey of Minority-Owned Business Enterprises, 1992 Characteristics of Business Owners, Asaba Group Analysis

Content

he
Asaba
Group

	-10 00
State of Minority Sourcing	45-53
Minority Business Value Proposition	39-44
Minority Telecommunications Markets	28-38
Demographic Realities	19-27
Industry Trends	7-18
Project Overview/Introduction	3-6
	STRATEGY AND BUSINESS IMPROVEMENT CONSULTIN



Key Observations From Industry Sourcing Efforts

High concentration of minority sourcing dollars in traditional "minority" categories

- Value-Added Resellers (VAR), Maintenance Repair and Operations (MRO) account for greater than 50% of total expenditures
- May be indicative of early efforts to achieve "quick wins" and build program momentum

Industry participants committed to minority business development

- MWDVBE spending has grown from \$4.2B in 1994 to \$7.8 in 2000
- SuperComm diversity challenge signatories increased from 14 in 1995 to 72 in 2001

Current minority business development efforts focused on product sourcing or supply chain processes

- Need to evolve process and metrics to include roles associated with market/channel access
- Business process outsourcing, asset sales and divestitures

Currently used metrics and measurements of minority "sourcing effort" focused on quality of dollars purchased from MBE's

- Need to increase emphasis on "quality of spending" commodity margin and growth
- Increase representation along the value chain: how best to leverage Telecommunications Industry Group
- Inclusion in high-value (growth and margin) categories Contract manufacturing, optical networking, software development, etc.
- Define value from reduction in operating risk to top-line growth



Senior-Level Commitment For Diversity Sourcing Efforts

"Diversity is not a game of quotas or headcount—It's a way of seeing, broadening of the corporate vision to encompass a wider and more-varied employee, [supplier] and customer base."

— Ivan Seidenberg, CEO

Verizon Communications

"Supply chain diversity will remain a priority for Lucent as we move into the 21st century."

Henry Schacht, Chairman and CEOLucent Technologies

"SBC Communications is committed to supporting minority- and women-owned businesses."

Edward Whitacare,
 Chairman and CEO
 SBC Communications

"As we focus on building the strengths of our businesses, supplier diversity will continue to be valued."

— C. Michael Armstrong,Chairman and CEOAT&T

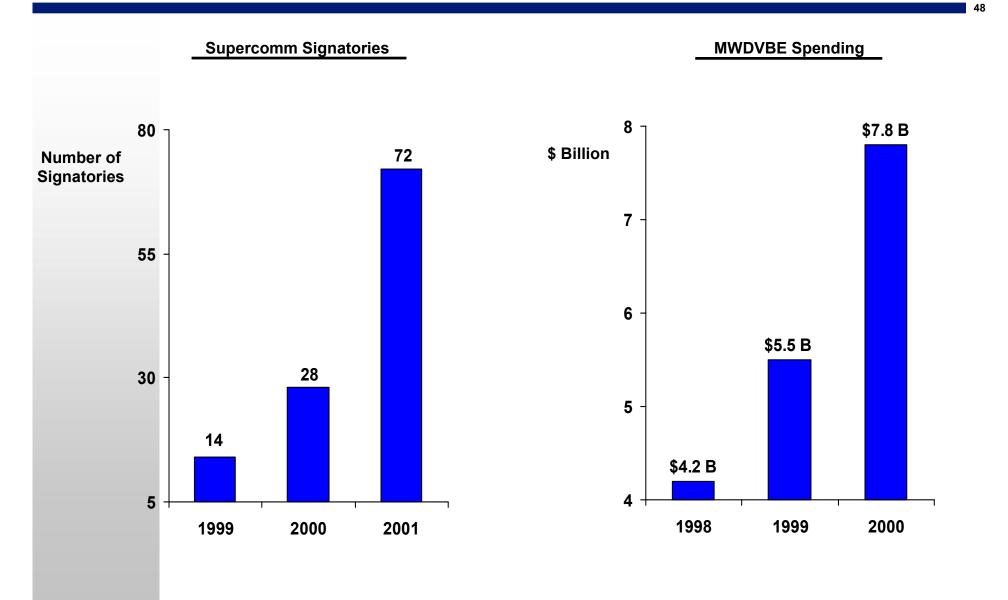
SOURCE: Company Reports

Supercomm Signatories: Telecom Industry Committed To Minority Sourcing



Have Achieved \$7.8 Billion In MWDVBE Spending

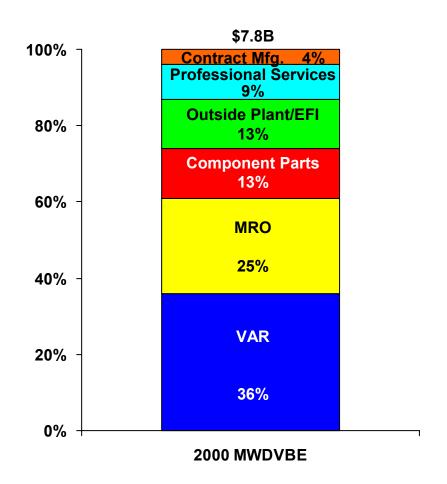
SOURCE: Telecommunications Industry Association





Value Added Resellers And MRO Expenditures Account For 61% Of Total Spending

Telecommunications Minority Sourcing by Category

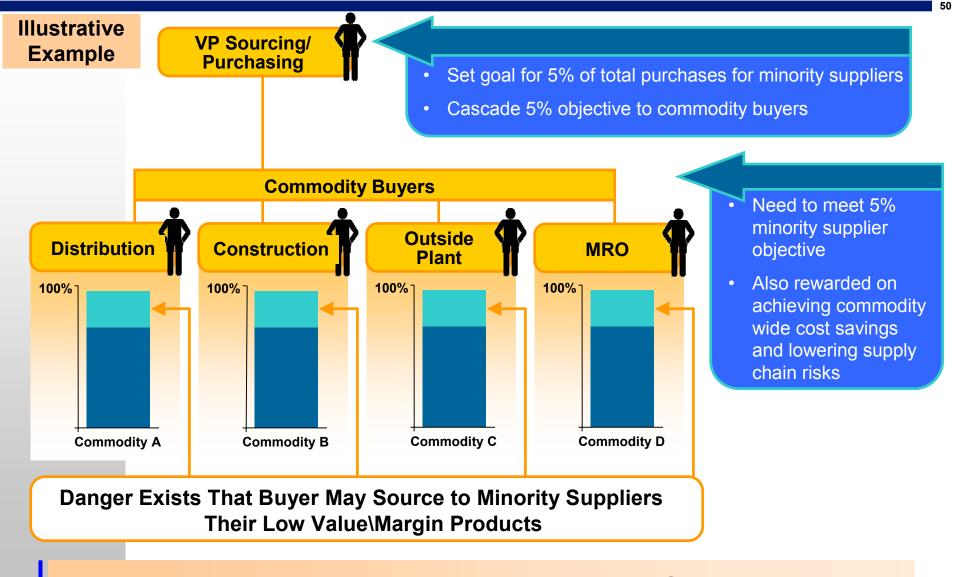


SOURCE: Telecommunications Industry Association, Company Reports, Asaba Group analysis

Cascading Minority Sourcing Objectives Present Unforeseen Dilemmas



Intensifies The "Quantity Of Spend" Versus "Quality Of Spend" Conflict



Leads to High Fragmentation Within The Supply Base



Ongoing industry consolidation and divestitures increases level of uncertainty with minority business initiatives

- How to include minority business development in the Post-Merger Integration (PMI) Process
- Most PMI processes view sourcing consolidation as source of cost savings and "synergy" dollars

Capital intensity associated with some high-value opportunities requires that MBE's have access to substantial capital (e.g., Contracting Manufacturing, etc.)

- Current minority business definition based on ownership structure
 - Constrains ability to raise equity capital
- Debt financing of growth increases the MBE's operating risks during industry slowdown

Size and scale also identified as an inhibiting factor

- Most sourcing opportunities require national or global coverage
- Corporations increasingly hesitant to maintain fragmented regional suppliers
- Seen as a determinant of ability to manage risks associated with demand slowdowns

Some concerns expressed with the practice of VARs and customer revenue concentration

- Current slowdown increasing the scrutiny of "middleman roles" to ensure its truly a valueadded proposition
- High customer sales concentration increasingly seen as a problem when sourcing new business



MBE programs must understand the impact of industry dynamics (e.g., convergence) and sourcing initiatives

- Convergence in the network: Optical, Sonet, and Ethernet
- Convergence in industry boundaries: Communications, Computing, Storage and Entertainment
- Convergence in application: Voice, Data, and Environment

Convergence will define new relationship along the supply chain (rapid deployment, obsolescence and product development)

Migration to a highly integrated supply chain—virtual integration

Redefining metrics of success that make sense to business practioners and corporate senior managers

- Current metrics more focused on external reporting and advocacy constituencies
- Need to evolve from "% spending" to include economic value created by initiatives
 - "% spending led to 3% cost savings"
 - "% spending grew sales by ___%"

Minority business inclusion must exist throughout the industry value chain

- Opportunity for first tier sourcing from service provider will become increasingly difficult
- Need a credible second and third tier program
 - Equipment manufacturers, technology providers, electronic manufacturing services, etc.
- Potentially Leverage Telecommunications Industry Group (TIG) to drive this initiative



Future Challenges And Trends That Must Be Incorporated Into Diversity Supplier (Cont'd)

Several high technology minority-owned firms exist today, most providing services to government agencies (e.g., Jackson and Tull, Cornet Technologies, etc.)

Need to develop outreach initiatives to attract these companies into the industry

Achieving size and scale through alliances and joint ventures is a viable option for MBE's

- Can leverage best practices from Automotive Manufacturers success with minority suppliers and large-tier one suppliers
- MBE-to-MBE alliances in most instances will be suboptimal
 - Similar to two smaller players merging

53



Proposed New Methods/Framework To Measure MBE Spending

Places new emphasis on measuring "Quality of Spending"

Asaba Group Quality Index (AGQI™)

Functions of the following

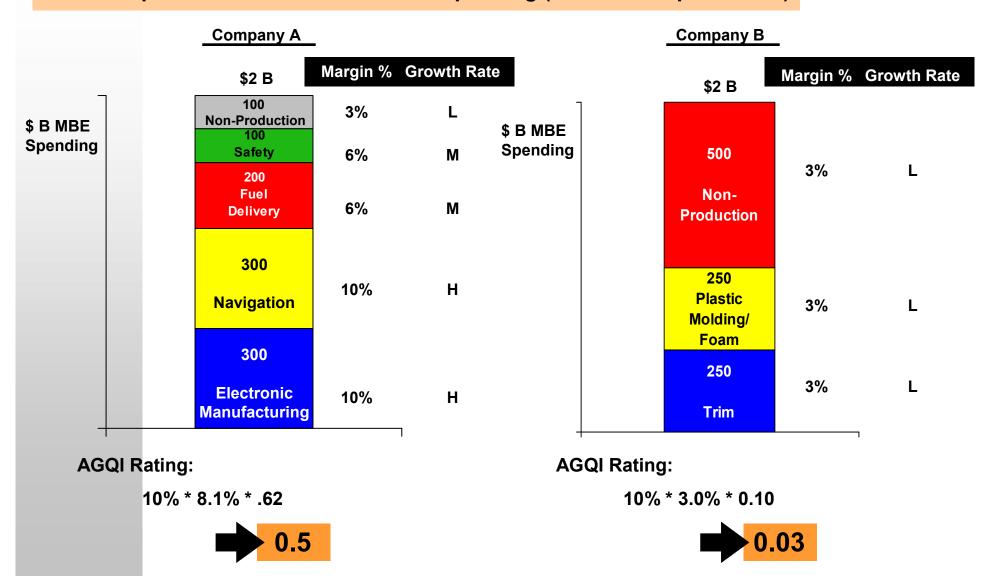
- Total Minority Spending (% of Total Purchases)
- Weighted average commodity category margin
- Weighted average category growth factor (0.1 = Low, 0.5 = Mid, 1 = High)
- AGQI solves the issues of MBE Concentration in weak value chain positions → Forces Commodity Buyers to provide higher quality opportunities
- AGQI enables better recognition of Lower Tier minority efforts

Reflects Industry Supply Chain Realities Without Compromising Inclusion



Asaba Group Quality Index (AGQI™) – Illustrative Example

Two companies with \$2 Billion in MBE spending (10% of total purchases)



ne Asaba Group

www.asabagroup.com