



NEW PARADIGM RESOURCES

CLEC Strategies In a Web 2.0 World

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CLEC Strategies in a Web 2.0 World

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Looking Ahead to 2009 and Beyond

Section 1: The Big Picture: Putting the CLEC Sector in Context

Sorting out the Confusion Over CLECs

Questions we hear...

“What are “CLECs?”

“I’ve heard that CLECs are extinct. Are they?”

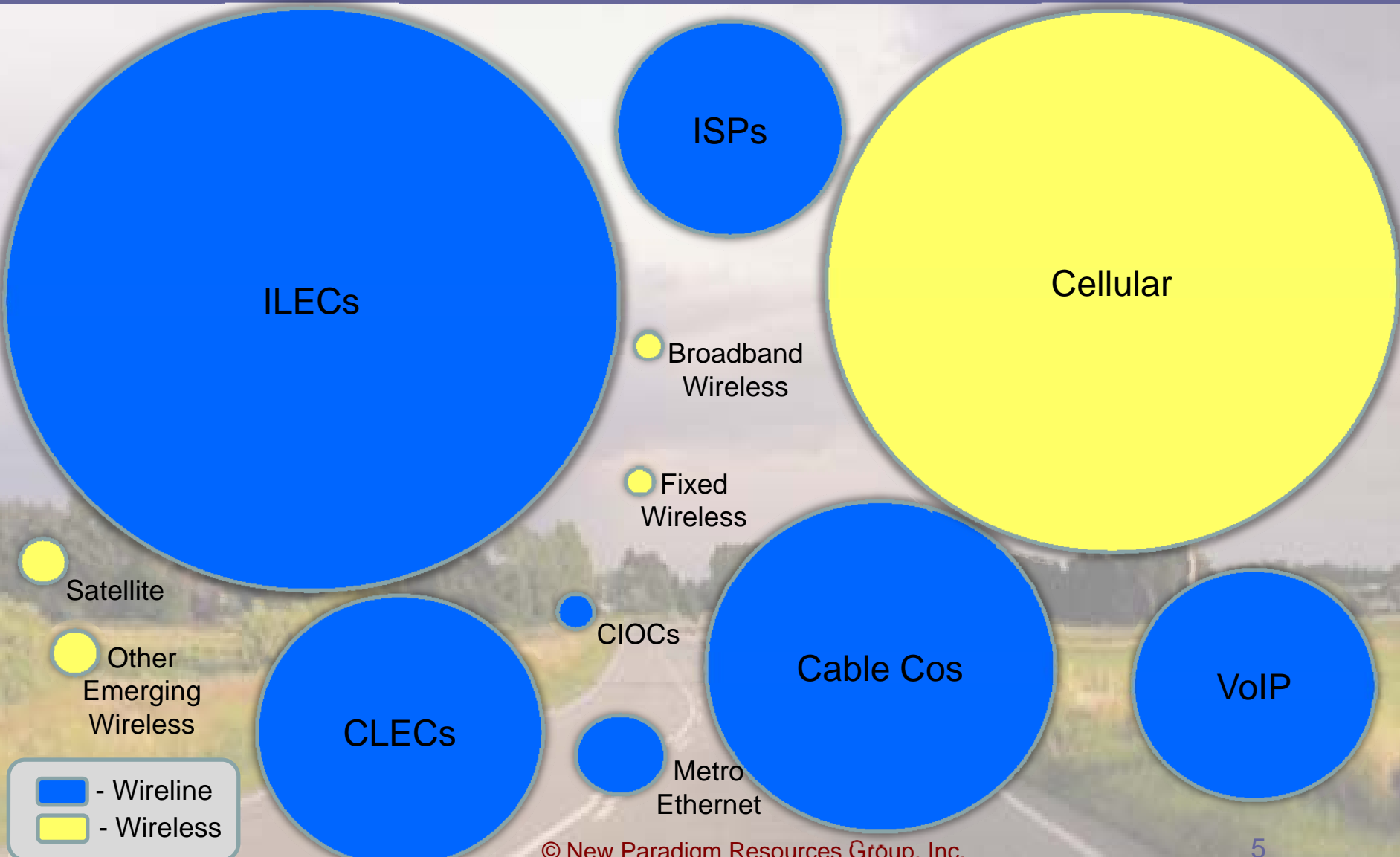
“What does “CLEC” stand for? (and can you also tell me how to pronounce ‘C-L-E-C’?)”

“The guy in the office next to me says there are about 2,000 CLECs out there! But then my neighbor says there are only five. Can you tell me who’s right?”

“How will I know a CLEC if I see one?”

“Will there be any CLECs for my grandkids?”

The Competitive Communications Universe



CLEC Identification 101: Distinguishing Features

Carrier Characteristic:	CLEC Features:
Networks: <ul style="list-style-type: none">• Access & Transport• Network Intelligence	Primarily fiber-based networks TDM-based Class 5 switches in place; Migrating to IP
Services	Full range of voice services Full range of data offerings Some offer advanced services
Historical Aspects	No 100 year history
Markets Served	No legacy “franchise” markets
Customer Base	Almost exclusively business users

CLEC or Not a CLEC?

CLEC

Not a CLEC

Logos of CLECs (Competitive Local Exchange Carriers):

- NUVOX™
- Birch communications
- Level (3)™ COMMUNICATIONS
- COX COMMUNICATIONS
- integra TELECOM
- XO
- tw telecom

Logos of non-CLECs:

- Granite TELECOMMUNICATIONS
- Comcast
- MasterAgent.org™
- Google talk BETA
- TELEPHONY PARTNERS
- CDW™
- Vonage™

CLEC Universe: 2000



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@Link Networks	Crystal Communications, Inc.	Lightship Telecom	RCN Corp.
21st Century Telecom Group	CTC Communications Corp.	Log On America	Reach Communications
2nd Century Communications	CTC Exchange Services, Inc.	LOGIX Communications	Rhythms NetConnections, Inc.
Actel Integrated Communications	CTS Telecom (dba Climax Telephone)	MCI Worldcom	RIO Communications, Inc.
Adelphia Business Solutions	CTSI, Inc.	McLeodUSA, Inc.	RNK Telecom
Advanced Communications Group, Inc.	Digital Teleport, Inc.	MediaOne Telecommunications, Inc.	SBC Telecom
Advanced Radio Telecom Corp.	DSL.net Communications, Inc.	Metromedia Fiber Networks, Inc.	Sharon Telephone Company
Advanced Telcom Group, Inc.	Dyntel (Dynamic Telco Services, Inc.)	MGC Communications, Inc.	Sunwest Communications, Inc.
Advanced Telecommunications, Inc. (ATI)	e.spire Communications, Inc.	MH Lightnet/Comcast Network Services	Supra Telecommunications & Information Systems, Inc.
Allegiance Telecom, Inc.	Eagle Communications, Inc.	Millennium Optical Networks, Inc.	TDS Metrocom
ALLTEL Communications, Inc.	Electric Lightwave, Inc.	Minnesota Power Telecom	Telepacific
AMC Communications	ExOp of Missouri, Inc.	Mpower	Telephone Plus
American MetroComm Corp.	FairPoint Communications	Net2000 Communications, Inc.	Telergy, Inc.
AT&T Corp.	FiberNet Telecom Group, Inc.	NETtel Corporation	Teligent, Inc.
ATS Telecommunications, Inc.	First Regional TeleCom, L.L.C.	Network Access Solutions, Inc.	TelNet Worldwide
Avana Communications	FirstWorld Communications, Inc.	Network Plus, Inc.	Thrifty Call
Avista Communications	Florida Digital Network	Network Telephone, Inc.	Time Warner Telecom
Birch Telecom, Inc.	Focal Communications Corp.	NewSouth Communications L.L.C.	TriVergent Communications
Black Hills FiberCom, L.L.C.	Forest City Telecom, Inc.	NEXTLINK Communications, Inc.	UBNetworks
BlueStar Communications, Inc.	Futureway Communications, Inc.	Norigen Communications, Inc.	UniversalCom, Inc.
Bresnan Communications, Inc.	Gabriel Communications, Inc.	North American Telecommunications, Inc.	US LEC Corp.
Bridgeband Communications, Inc.	Gateway Telephone	NorthEast Optic Network Services, Inc. (NEON)	US MidTel Corporation
Broadview Networks, Inc.	General Communications, Inc.	Northland Communications Group	US Online Communications, Inc.
BTI Telecom Corp.	Global Crossing, Ltd.	NorthPoint Communications	US Unwired
Buckeye TeleSystem	Global NAPs	Novus Telecom, Inc.	US Xchange, L.L.C.
C1 Communications	Globalcom, Inc.	NTS Communications, Inc.	Village Telephone
Cablevision Lightpath, Inc.	Goldfield Telephone Company	OCI Communications, Inc. (Optel)	Vitts Corporation
Cambridge TelCom Services, Inc.	GST Telecommunications, Inc.	One Point Communications Corp.	WinStar Communications, Inc.
CapRock Communications Corp.	GT Group Telecom Services Corp.	Onvoy	XIT Communications
Cavalier Telephone	GTE Communications Corp.	Optel Communications Corporation	
CFW Communications	HarvardNet	OpTel Telecom, Inc.	
Choice One Communications	ICG Communications, Inc.	Orlando Telephone Company	
CNS Lightnet, Inc.	Indigital Telecom	Otter Tail, Inc.	
Coast to Coast Telecommunications, Inc.	Integra Telecom	P.V. Telecommunications, L.L.C.	
Columbia Telecommunications (dba Axessa)	InterAccess Co.	Pac-West Telecomm, Inc.	
Comav Telco, Inc.	Intermedia Communications, Inc.	PaeTec Communications, Inc.	
Communications Options, Inc.	Ionex Telecommunications, Inc.	PICUS Communications	
Conectiv Communications, Inc.	ITC DeltaCom, Inc.	Pointe Communications	
ConnectSouth, Inc.	Jato Communications Corp.	Pontio Communications	
Convergent Communications, Inc.	Jones Communications Corp.	Primary Network Communications, Inc.	
Conversent Communications, Inc.	KMC Telecom, Inc.	Prism Communication Services, Inc.	
CoreComm, Ltd.	Knology Holdings, Inc.	Prosper.net	
Cox Communications, Inc.	Level 3 Communications	R&B Network, Inc.	

- Acquired
- Merged
- Bankrupt
- Ceased Operations
- Ceased NPRG-defined CLEC activities
- New Addition

CLEC Universe: 2008



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AT&T, Inc.	Global NAPs	Pac-West Telecom, Inc.
BayRing Communications	Globalcom, Inc.	PAETEC Communications, Inc.
Birch Telecom, Inc.	Grande Communications Networks, Inc.	RCN Corp.
Broadview Networks, Inc.	GVCwinstar	RIO Communications, Inc.
Buckeye TeleSystem	Integra Telecom	RNK Telecom
Cablevision Lightpath, Inc.	Jaguar Communications, Inc.	StratusWave Communications
Cavalier Telephone	Knology Holdings, Inc.	TDS Metrocom
Cbeyond, Inc.	Level 3 Communications	TelePacific
CenturyTel, Inc.	LOGIX Communications	TelNet Worldwide
Cox Communications, Inc.	NTS Communications, Inc.	tw telecom
DeltaCom, Inc.	NuVox Communications	Verizon Enhanced Communities
General Communications, Inc.	One Communications Corp.	XO Communications
Global Crossing, Ltd.	Orlando Telephone Company	

Source: New Paradigm Resources Group, Inc.

*Informed Direction Within a
Changing Landscape*

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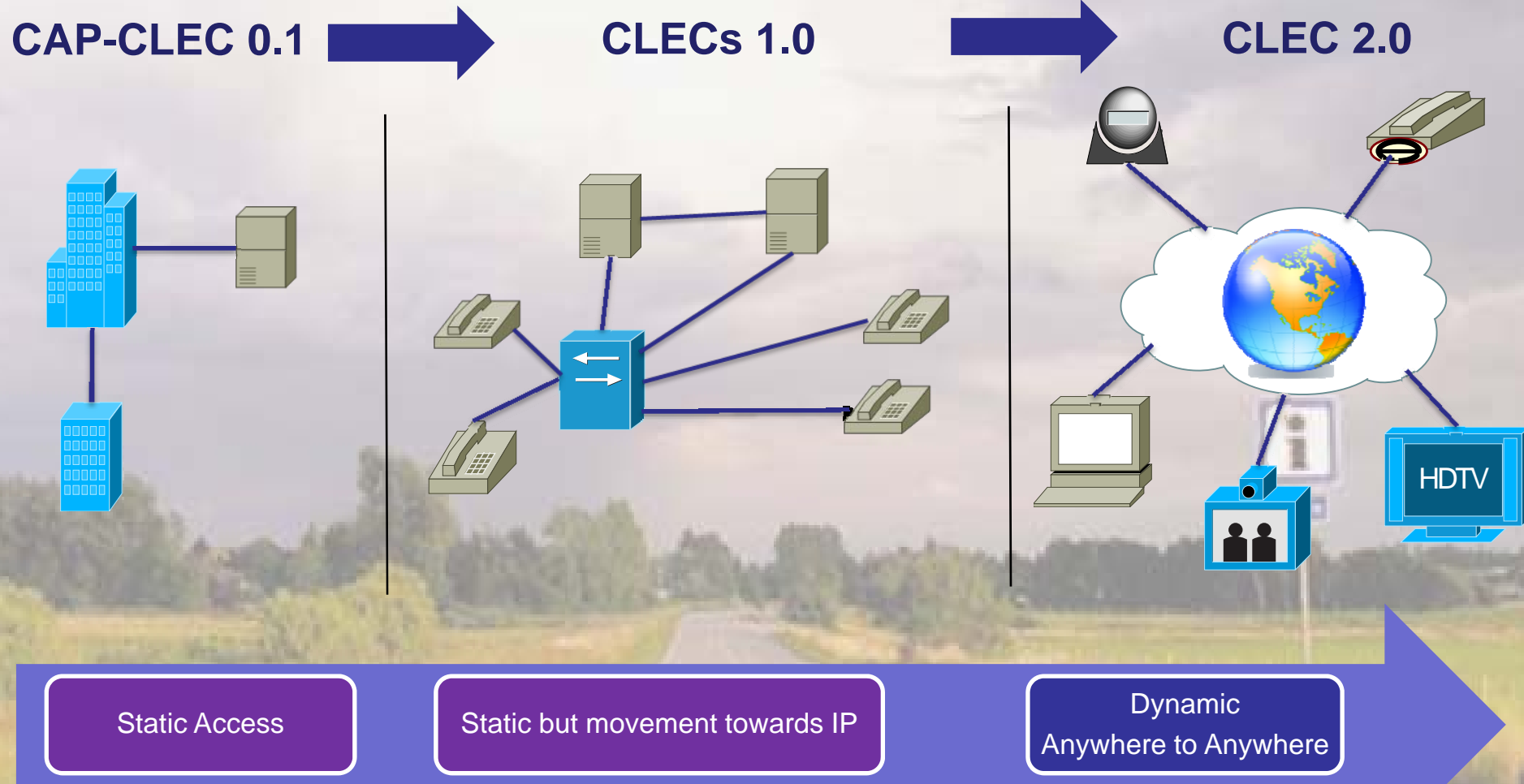
Sector Score Card

	CLEC	RBOC	Cable MSO	Emerging Wireless
Network Reach	∅	++	-	?
Infrastructure	∅	++	+	∅
Financial Resources	-	+++	++	-
Service Quality	+	+	-	∅
Customer Care	+	∅	-	+
Portfolio Breadth	∅	+	-	-
Advanced Service Offerings	+	+	∅	+
Nimbleness	+	-	-	+
Web 2.0 Potential	+	+	+	∅

Source: New Paradigm Resources Group, Inc.

Section 2: CLECs' Evolutionary Path: The Road to Web 2.0

CLECs' Evolutionary Path



Informed Direction Within a Changing Landscape

CLEC 0.1 Strategies Evolution

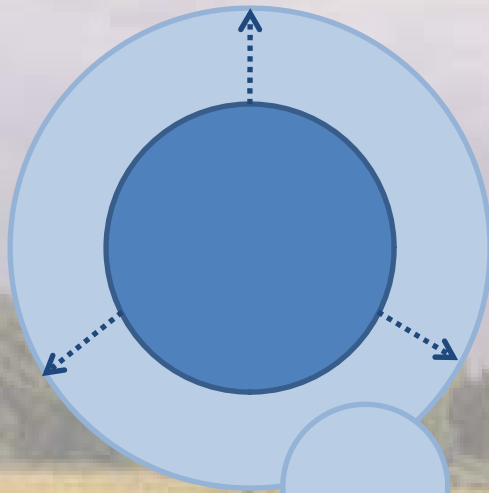
Strategies Evolution: The CAP-CLEC 0.1 Era

	CAP-CLEC 0.1	CLEC 1.0	CLEC 2.0
Network Design & Deployment	Bright Shiny Building Class 5 Switch Fiber Deployment		
Sales Strategies & Market Research	“Crumb Catchers” Low-hanging fruit Hinged on redundancy & bypass Building Marques		
Target Customers	Enterprise Users Data Intensive LD carriers		
Services	Point-to-Point Migrated to “LEC” services		
Pricing	Simple – Benchmarked off of ILECs tariff rates		

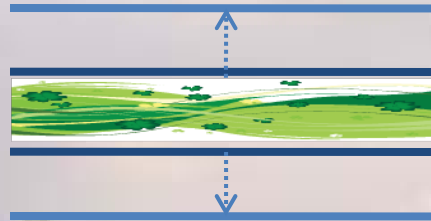
Source: New Paradigm Resources Group, Inc.

Incremental, Rational Network Expansion

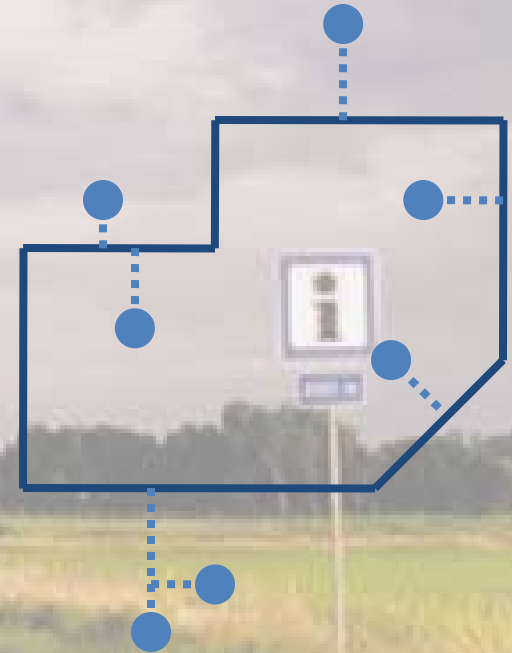
**Expanding
Footprints**



**Larger
Capacities**



**Organic
Buildouts**

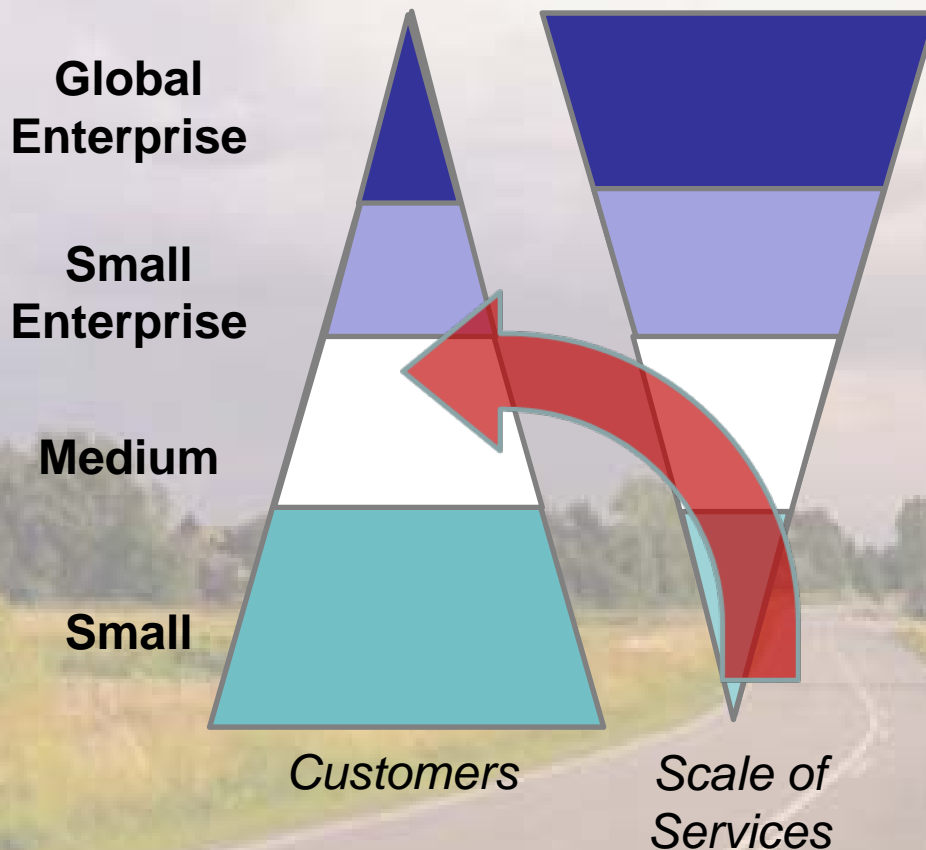


**Complementary
Markets**

*Informed Direction Within a
Changing Landscape*

Section 3: CLEC 1.0: How Things Stand Today

Network assets + Experience = Upmarket Opportunities



Target Verticals:

- Financial Services
- Medical & Healthcare
- Engineering & Architecture
- Media
- Government & Education
- Retail
- Content: Web 2.0

Expanding Competencies Offer Higher-Margin Services

Relative Service Complexity

		Pipe Only	Value Added
Relative Customer Size	Larger	SNET Services Dedicated Voice Access Distributed VoIP / SIP Trunking Fiber-Based Metro Ethernet Dark Fiber	Fully Managed Services & BPO Network Design & Traffic Management Distributed Storage & Disaster Recovery Bandwidth on Demand Real-Time Back-Up VPLS
	Smaller	POTS PBX services Hosted VoIP DIA/ T-1 / IAS Mid-Band Metro Ethernet	Basic Storage Network Monitoring Network Security Telecom Consulting IP VPN

Shorter Intervals
Tight Service Levels

Source: New Paradigm Resources Group, Inc.

Customers just aren't the same...

- **Average retail customer size** ↑
- **Increasing sophistication of buyers**
- **Externalizing functions = Managed Services**
- **Communications services = Mission-Critical**
- **Customer locations don't want to hear about service territories – or national borders**
- **Bandwidth thirst** ↑

CLEC 1.0 Strategies Evolution

Strategies Evolution: The CLEC 1.0 Era

	CAP-CLEC 0.1	CLEC 1.0	CLEC 2.0
Network Design & Deployment	Bright Shiny Building Class 5 Switch Fiber Deployment	Organic Build Out Multi-Service Platforms M&A Market Depth	
Sales Strategies & Market Research	“Crumb Catchers” Low-hanging fruit Hinged on redundancy & bypass Building Marques	“Smart Builds” Solutions Selling Selective & Deliberate Expand Toeholds General Demographics	
Target Customers	Enterprise Users Data Intensive LD carriers	Cost-conscious SMBs Distributed Enterprises	
Services	Point-to-Point Migrated to “LEC” services	Full Service Voice, Data Service differentiation	
Pricing	Simple: “X% off” ILEC tariff	IRR driven	

Source: New Paradigm Resources Group, Inc.

*Informed Direction Within a
Changing Landscape*

Section 3: CLEC Sector Analysis: By The Numbers

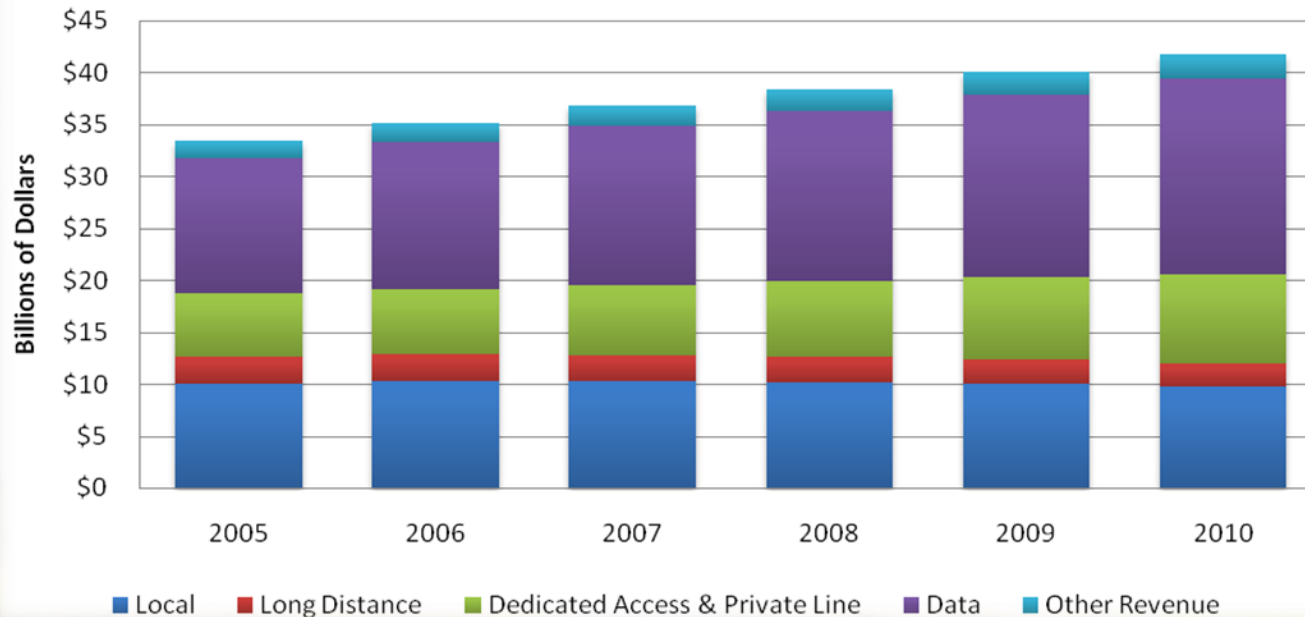
CLEC Sector Sizing (2008)

Total Revenue	~\$36 billion
Network Route-Miles	~400,000
Voice Switches	~1,700
Data Switches	~1,600
Access Lines	~41 million

Source: New Paradigm Resources Group, Inc.

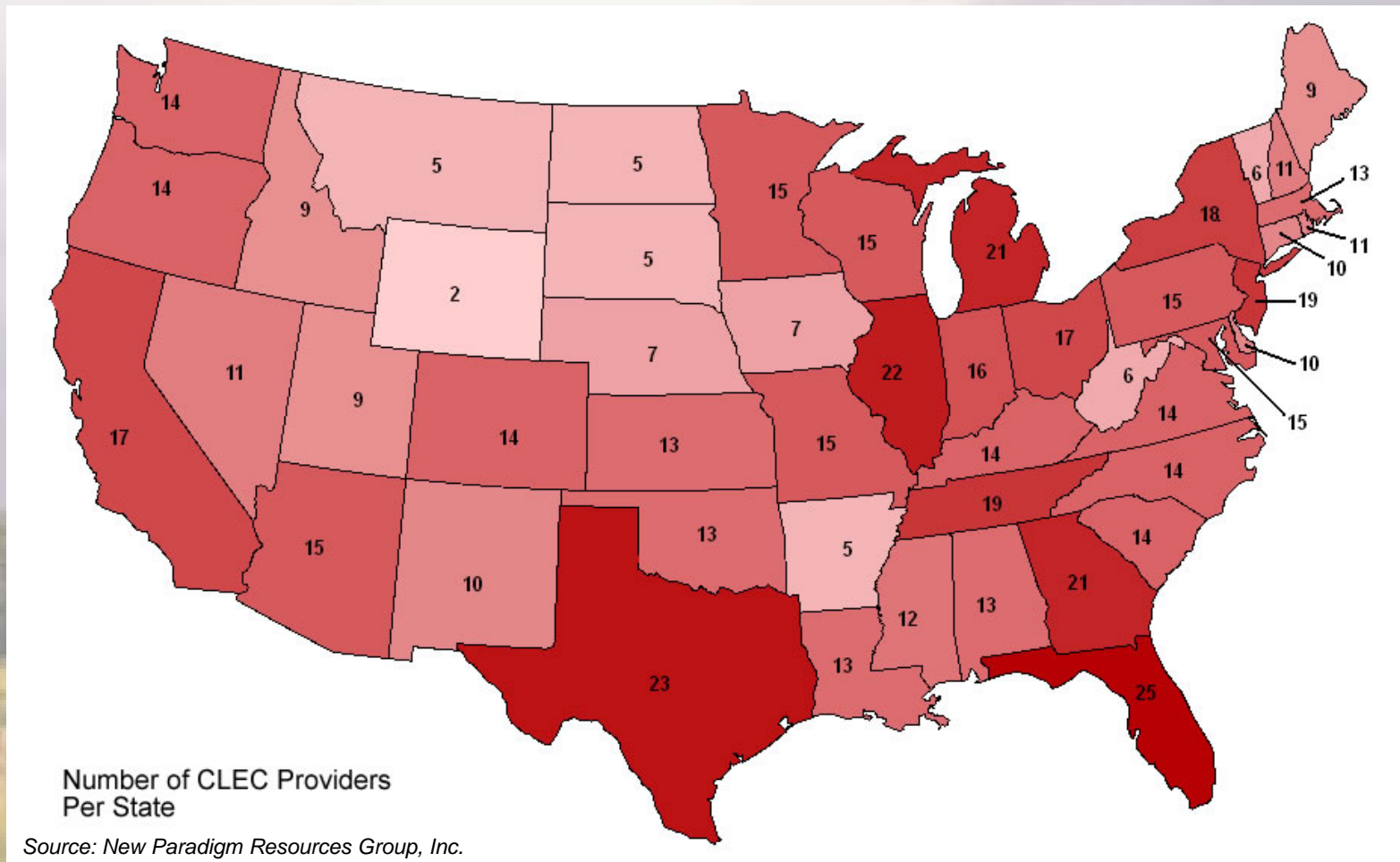
CLEC Revenue Breakdown

CLEC Revenue Segmentation



Source: New Paradigm Resources Group, Inc.

CLEC Presence Across the U.S.



Section 4: CLECs in a Web 2.0 World

Emerging 2.0 customer requirements include:

- **“Content is King”**
- **Big transport pipes + Scalable access + CoS**
- **Bandwidth & services in the right places**
- **No one carrier goes everywhere, but anyone may need to connect anywhere – including globally**
- **Open platforms, not closed systems**
- **Redundancy & recovery rise again**
- **Fortune 500 needs at Mom & Pop locations**

CLEC 2.0 Opportunities:

- **Market shifts**  **Market opportunities**
- **Address application-specific needs**
- **High-cap availability for bandwidth kings; but also an array of options for niche needs**
- **Careful selection of interconnects & market presence to align with customer needs**
- **Collaborate to capture larger opportunities**
- **Next Opportunity – Small today, but tomorrow?**

Strategies Evolution: The CLEC 2.0 Era

	CAP-CLEC 0.1	CLEC 1.0	CLEC 2.0
Network Design & Deployment	Bright Shiny Building Class 5 Switch Fiber Deployment	Organic Build Out Multi-Service Platforms M&A Market Depth	IP + Ethernet Access Anywhere Integrated Optical Gear
Sales Strategies & Market Research	“Crumb Catchers” Low-hanging fruit Hinged on redundancy & bypass Building Marques	“Smart Builds” Solutions Selling Selective & Deliberate Expand Toeholds General Demographics	Targeted Selling Connectivity + Apps Toolkit Approach Integrate with Customer Market Segmentation & Analysis
Target Customers	Enterprise Users Data Intensive LD carriers	Cost-conscious SMBs Distributed Enterprises	SMBs, esp. Mid-Sized Regional Network Needs Content-Oriented
Services	Point-to-Point Migrated to “LEC” services	Full Service Voice, Data Service Differentiation	Managed Services Application-Specific
Pricing	Simple: “X% off” ILEC tariff	IRR Driven	Pay for Application Level Premium Pricing

Source: New Paradigm Resources Group, Inc.

CLEC 2.0 Scorecard

	Level 3	Twtc	PAETEC	XO	Integra	Deltacom
Network & Infrastructure	✓ ✓ ✓	✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓
Provision/ Integration	✓	✓ ✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓ ✓
Customer Care	✓	✓ ✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓
Portfolio Breadth	✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓
Advanced Services	✓ ✓ ✓	✓ ✓	✓	✓ ✓	✓	✓
Financial Stability	✓	✓ ✓	✓ ✓ ✓	✓	✓ ✓	✓ ✓
Overall Web 2.0 Potential	✓ ✓ ✓	✓ ✓	✓ ✓	✓	✓ ✓	✓ ✓

Source: New Paradigm Resources Group, Inc.

Section 5: CLEC 2.0: The Road Ahead

CLECs 2.0 Is Coming...

- **Consolidation has forged more robust competitors**
- **CLECs have certain competitive advantages versus others**
- **“CLEC 2.0” offers a fuller range of services**
- **Pricing is still important, but is no longer *the* factor**
- **Organic network growth**
- **CLECs have great flexibility to adapt solutions to the market, and nimble ones can often react best**

Insights for '09

- **Economic downturn tempers overall outlook... but also presents opportunities**
- **↑ Continued Innovation & Adaptation**
- **↑ Niche opportunities**
- **↑ M&A activity as capital frees up**

Related Reports & Information You May Want to Purchase

- ***Competitive Carrier Track – NPRG’s Continuous Information & Advisory Service***
- ***CLEC Sector Analysis Report***
- ***The Communications Marketplace: Analyzing the Competitive Tactics Used to Win Market Share (NPRG Tactical Analysis Series)***
- ***To order these or other reports: (312) 980-7848***



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Informed direction

...within a changing landscape

Thank You!

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