FCC Presentation

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Allegiance Telecom

The New Way for Business to Connect®

Allegiance Telecom is a true facilities based local service provider.

- Operations in 36 Tier 1 cities.
- Each of the 36 markets is autonomous.
- 31 Class 5 central office switches (Lucent 5ESS).
- 835+ collocations within ILEC wire centers provide access to the last mile (e.g. Unbundled Local Loop).
- Leveraged existing infrastructure for network deployment (i.e. “Smart Build Strategy”).
- Major investment to electronically bond with ILEC Operational Support Systems (OSS).

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Allegiance Telecom's Markets

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Smart Build

- **Stage 1 - Lease Capacity**
  - Purchase and Install Switches
  - Collocate within ILEC COs
  - Lease Interoffice Transport (UNE IOF)
  - Utilize other UNEs (incl. OS/DA, Local Loop, SS7, OSS)
- **Stage 2 - Purchase Dark Fiber**
  - Buy from Available Providers
  - Purchase and Install Electronics
  - Continue to Utilize UNEs

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Smart Build

- **Utilize Unbundled Network Elements (UNEs)**
  - UNE-Loop
  - UNE-IOF (Interoffice Transport Facility)
  - UNE-SS7 and Related Databases
  - UNE-Operator Service/Directory Assistance (removed as UNE in 1999)
  - UNE-Operation Support Systems
  - Two-stage approach

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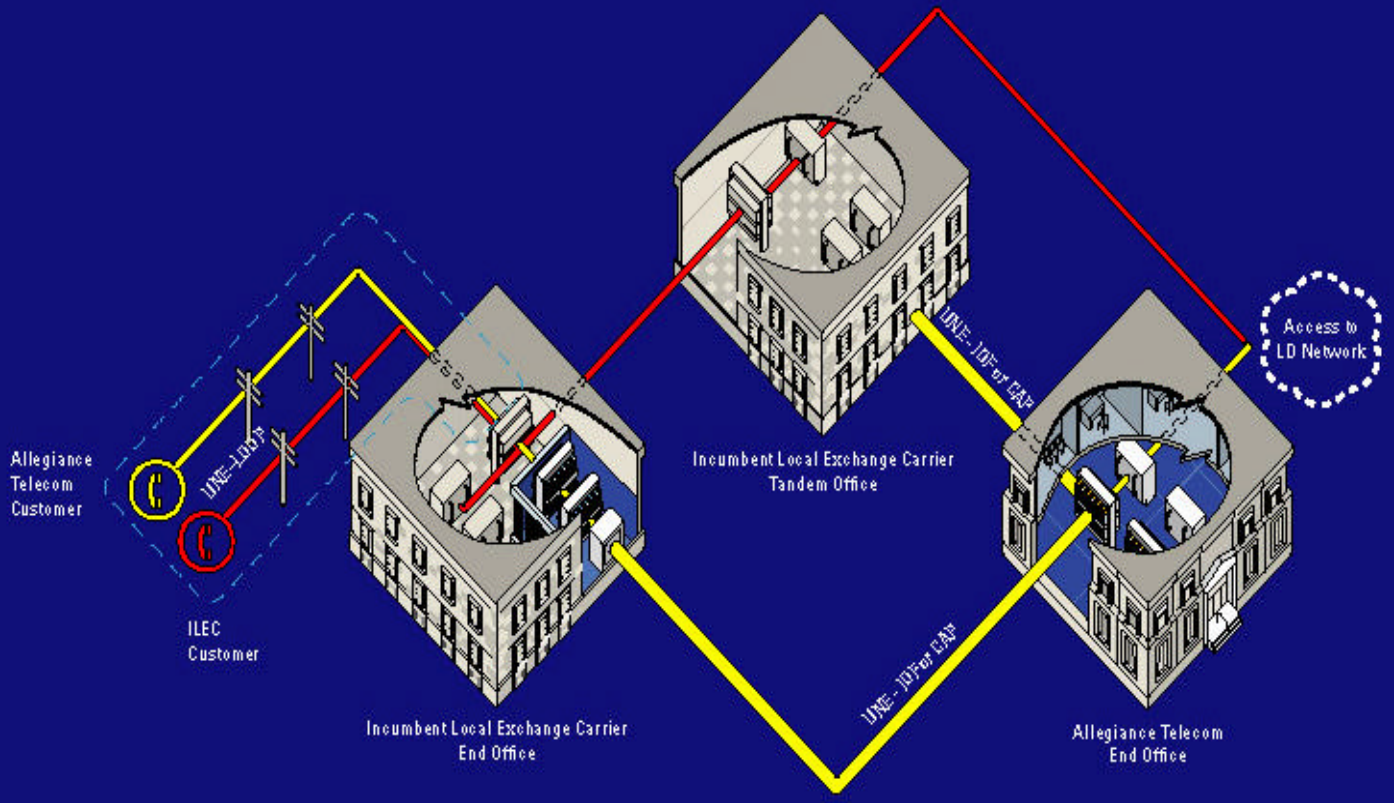
Allegiance Infrastructure



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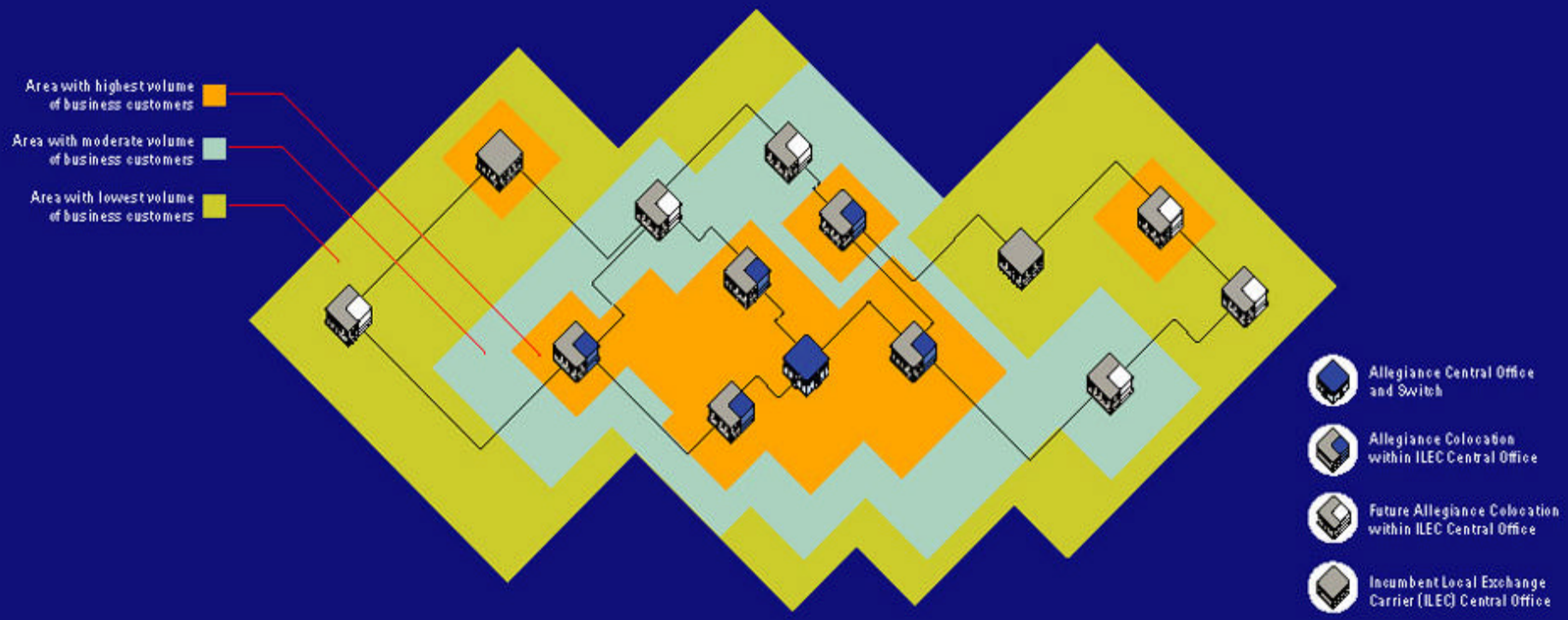
Allegiance Market Deployment Strategy



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Allegiance Metropolitan Network

- Allegiance dark fiber systems installed in 24 markets today (12,894 fiber miles)
- Serving 167 Allegiance Collocations
- Third Party (non-ILEC) competitive access providers (CAPs)
  - MCI/WorldCom
  - Time Warner Telecom
  - Florida Power and Light (FP&L)
  - XO Communications
  - Looking Glass Networks
  - Level3
  - California Edison
  - ICG
  - AT&T
- Typical IOF Environment - Washington DC, So. Maryland, N. Virginia (LATA 236)

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UNE Necessity

- Critical to Allegiance continued growth and expansion plans.
  - Local Loops (last mile)
  - Interoffice Facilities (IOF)
  - SS7 and associated databases
  - Operational Support Systems

UNE-Local Loop

The "last mile"

- In almost all instances, there are no alternatives to the ILEC local distribution plant.

- Controlling the local loop, controls access to the end user customer.

- New broadband distribution technologies and outside plant have the potential to limit access to the end user and therefore limit the possibility of competition at the service level.

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UNE-IOF

Interoffice Facilities

- Provides the umbilical that connects the Allegiance central office switching system(s) to the ILEC wire centers.
- Non-ILEC IOF generally exists in the concentrated central business district (CBD).
- Example - Washington DC (LATA 236)
  - 33 collocations currently established
  - 189 IOF DS3s currently in service (127,008 DS0 equivalents)
  - 53% on Allegiance dark fiber systems
  - 33% on Verizon IOF
  - 9% MCI/WorldCom

  - 64% of In-service collocations could be served by MCI/Worldcom
  - 36% of all In-service collocations can only be served by Verizon

- As Allegiance's geographic footprint expands beyond the CBD, dependence on ILEC IOF increases.

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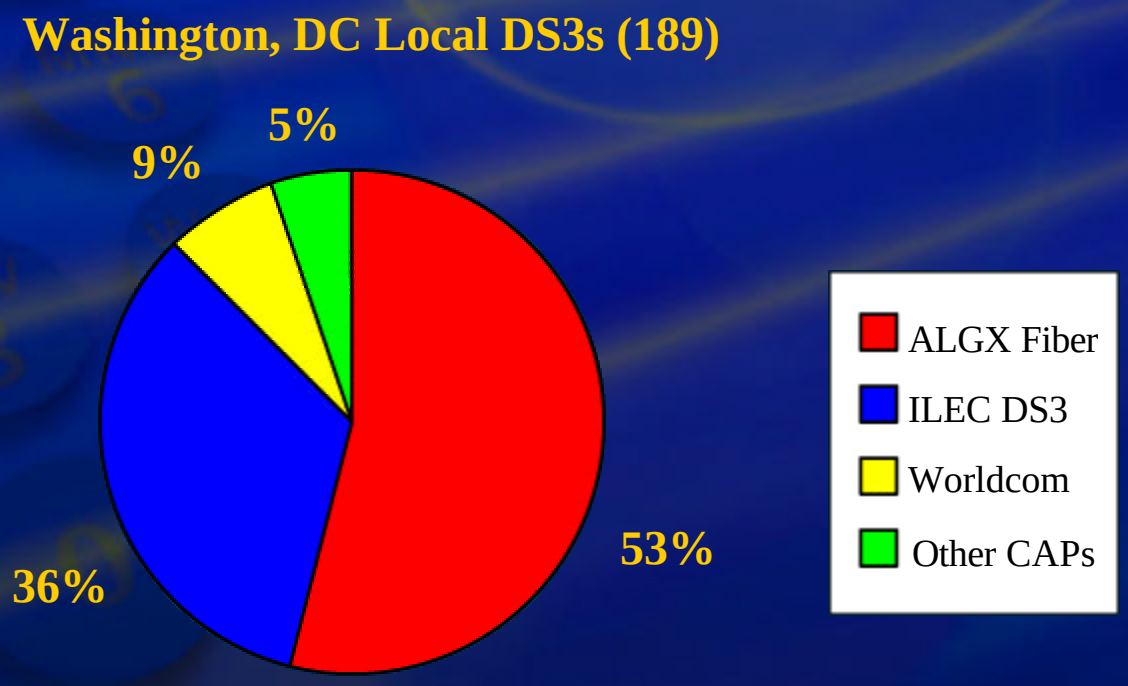
ALGX Single Market Local DS-3 Breakdown

Washington DC, So. Maryland, N. Virginia
LATA 236



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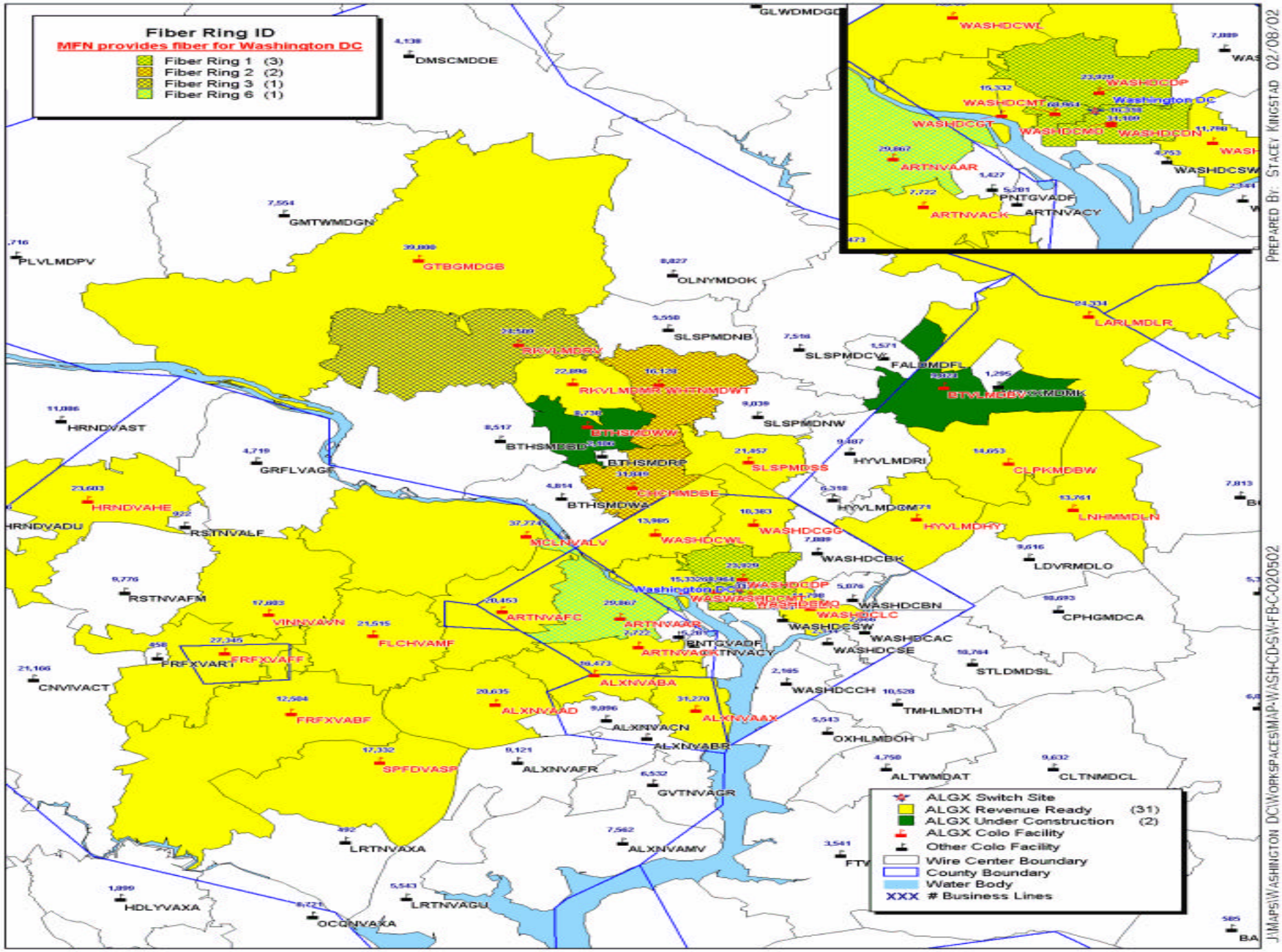
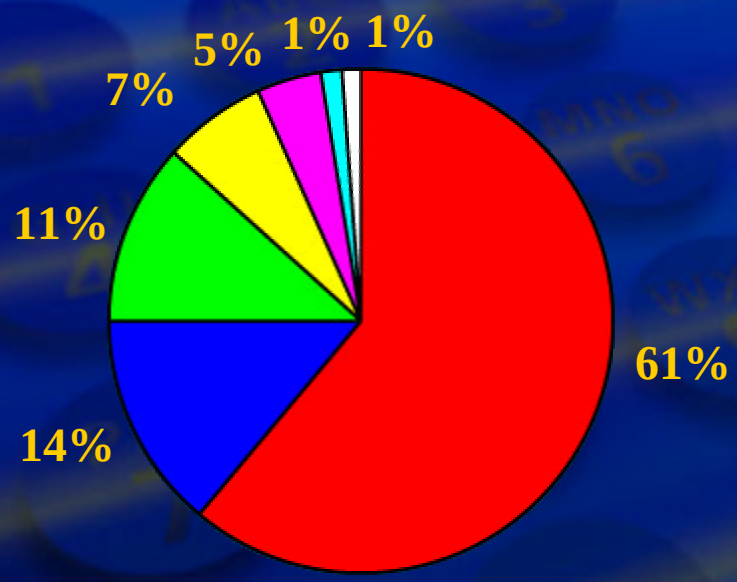


WASHINGTON D.C. MARKET W/FIBER RING ID

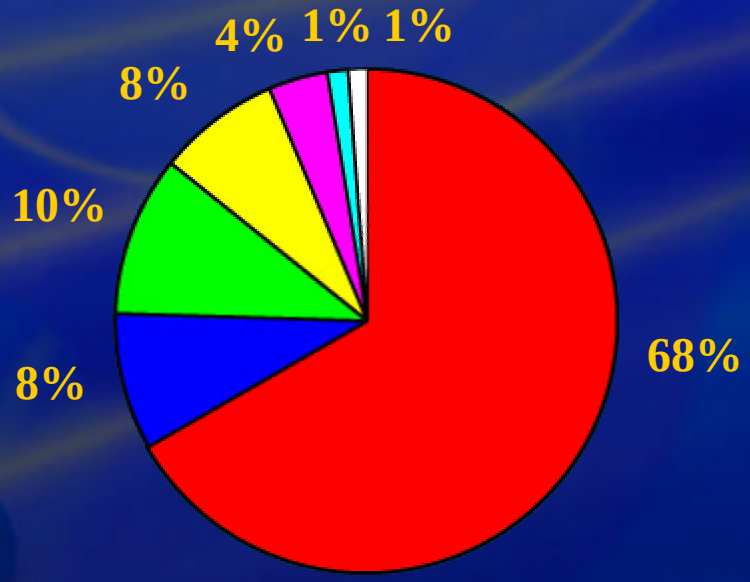
All Allegiance Markets Leased DS-3's

All Markets

Total Leased DS3 Allocation/Circuit



Total Leased DS3 Allocation/Dollars



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A Substitute Must Serve the Same Point-to-Point Route Served By ILEC UNE Interoffice Transport.

Scenario One

- Non-ILEC Source Of Supply Serves Only One End Point On A Route And Its Network Does Not Come Close To Serving The Other End Point.
  - Such An Alternative Supplier Should **Not** Qualify As A Substitute. Given The Relevant Entry Barriers, There Is No Basis For Concluding That Deployment Of Transport Over One Point-To-Point Route Means That Deployment Over A Different Point-To-Point Route Would Be Efficient.
  - Costs vary significantly between actual physical locations.
  - Traffic demand differs radically between routes.

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Scenario One – Cont.

- Cost variables that differ from route to route include:
  - Lateral construction
    - Access to conduit
    - Permitting and Zoning (Municipality Issues)
    - City Moratorium
  - Building Issues (real estate)
    - Real Estate Lease
    - Riser rights / building conduit accessibility
  - Unexpected costs over budget
  - Time to implement

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Scenario One – Real World Example

- Location: 451 D Street, Boston, MA
- Issue: Diverse fiber lateral to MFN metro network to interconnect ALGX CO with ALGX metro fiber rings.
- Timeline: Project began on 3/13/2001 date w/ initial projected completion on 6/30/2001
- Current Status: Still not complete. Current 1/20/2003 date.
- Delay Issues: City Permitting (joint build), MFN Chapter 11, and unexpected construction cost burdens.
- Impact: Additional costs incurred for leased DS3's to Verizon and various Caps.

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Scenario 1 – Cont
Boston ALGX / MFN Fiber Network

- See attached PDF

Scenario 1 – Traffic Demand

- Examples
  - Central Offices in less populated business districts demand less bandwidth.
  - Central Offices with a tandem switch or other points of interconnection drive fiber / bandwidth utilization.

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Scenario Two: Non-ILEC Source Of Supply Runs Close To Both End Points Or Serves One End Point And Runs Close To The Second End Point. Such An Alternative Supplier Should **Not** Qualify As A Substitute.

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Scenario Two - Cont

- The large sunk costs and significant delays associated with even a relatively short lateral facility make it impossible to assume that lateral construction, including diversity, would be efficient or even possible.
- There is also no way to establish a general standard for the circumstances in which a lateral can be constructed efficiently because (as explained) the costs and demand factors for each transmission facility are likely to vary significantly. Even where a non-ILEC transport provider serves the collocation hotel or similar facility in which a CLEC switch it located, there is no basis for presuming that the transport provider's network can be efficiently extended to connect to the CLEC switch.
- Some non-ILEC providers of transport may not even be legally eligible to physically collocate in an ILEC CO if they are deemed neither to be seeking access to UNEs nor interconnection with the ILEC.

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Scenario Two - Example

- See Boston Again

Scenario Three: Non-ILEC Source Of Supply Is In Bankruptcy. This Fact, By Itself, Should Mean That An Alternative Supplier Does **Not** Qualify As A Substitute.

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The Commission Should Establish A Presumption That A Substitute Offering Cannot Consist of Multiple Vendors Supplying A Single Point-to-Point Route; It Should Be Presumed A Single Non-ILEC Source Must Provide The Entire Facility.

Multiple Vendor Scenario

- Multiple Vendor Solutions For A Single Point-To-Point Route Result In Serious Service Quality Degradation.
  - Mean Time To Repair increases with each additional vendor providing part of the circuit
    - Every network service provider has primarily a myopic view of network planning, engineering, implementation, optimization and operations. Each of these activities can contribute to service outages when not properly coordinated.
    - Service Level Agreements from the supplying vendor are generally exempt or dramatically reduced in terms of performance for a circuit that is dependent on a third party transport provider as part of the circuit.
  - Use of multiple vendors sources of lit transport increases the number of potential points of network failure.

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Multiple Vendor Scenario – Cont.

- Use of multiple vendors sources of lit transport increases the number of potential points of network failure.
  - A non optimal route between end points occurs due to the necessity of the fiber route going to a point of interconnection between the vendors.
  - Incremental network elements are introduced that could fail
    - Electronics supporting the interconnection
      - Optical Transport Equipment
      - Digital Cross Connect Systems
      - Fiber Distribution Panel

Multiple Vendor Scenario – Cont.

- Multiple Vendor Solutions Result In Inefficient Pricing Structures That Would Fail To Put Competitive Pressure On ILEC Transport Offerings
  - Use of "as the crow flies" industry pricing in multiple vendor context results in inefficient pricing.
  - Use of multiple vendors results in increased transaction costs due to the need for intercarrier interconnection.

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