



PRESENTS

**NETWORLD INTEROP**

an INTEROP event

# Future Watch: The Need for Speed

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Robert Gemmell  
CEO and Chairman of the Board  
Cirronet Inc.

September 12, 2001



# Company-at-a-Glance

**Business:**

Cirronet develops and markets fixed broadband wireless equipment designed to break the residential and small business market's Internet access deployment barriers worldwide

**Deployments:**

60+ ISP global networks

**Founded:**

1987

**Employees:**

40

**Headquarters:**

Atlanta, GA

# The Opportunity

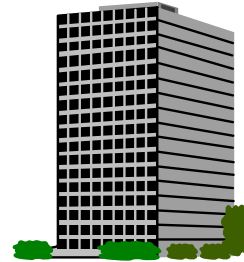
Approximate  
Building Size  
(Sq. Ft.)



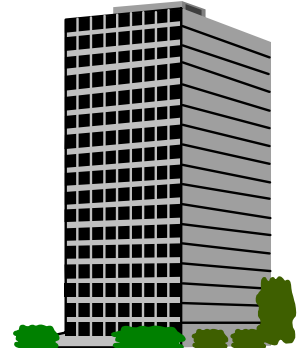
**Residential Dwellings**



**25k – 50k**



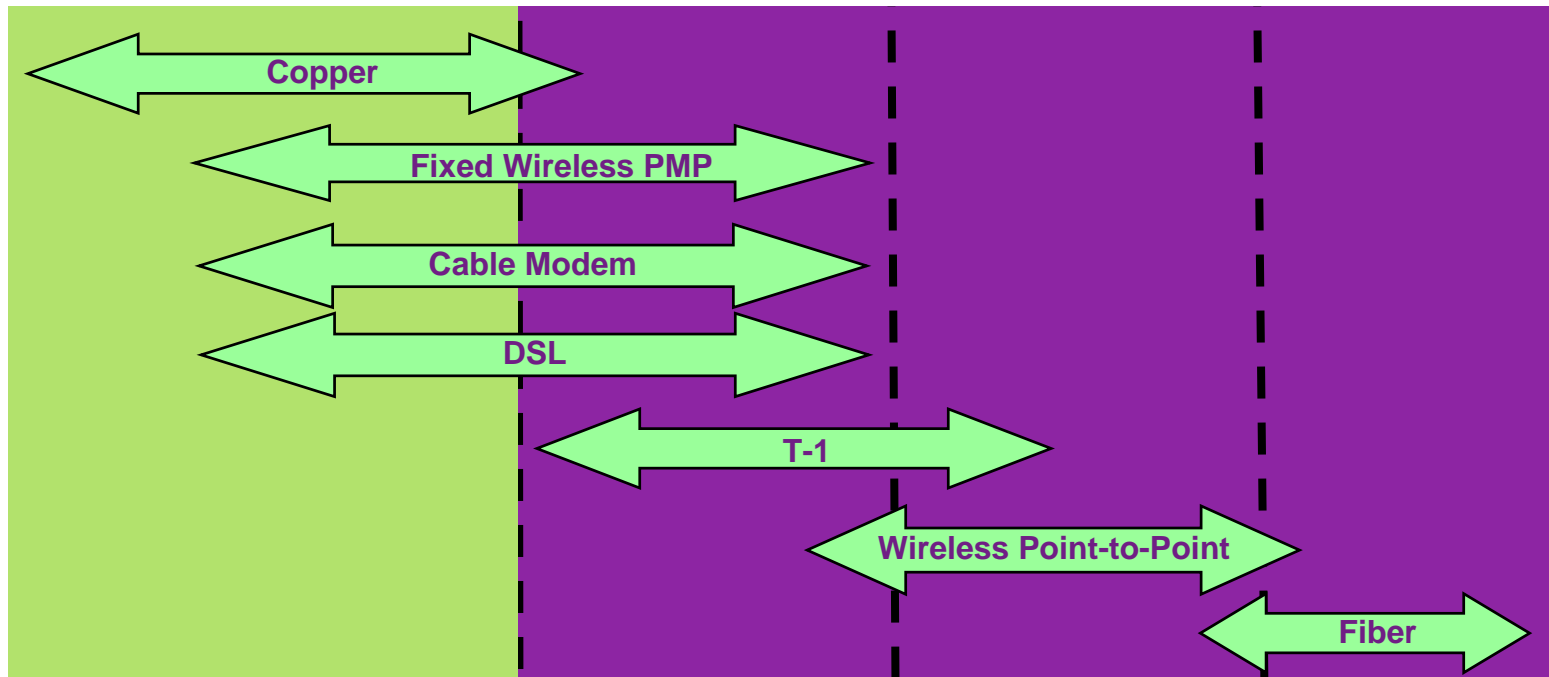
**50k – 180k**



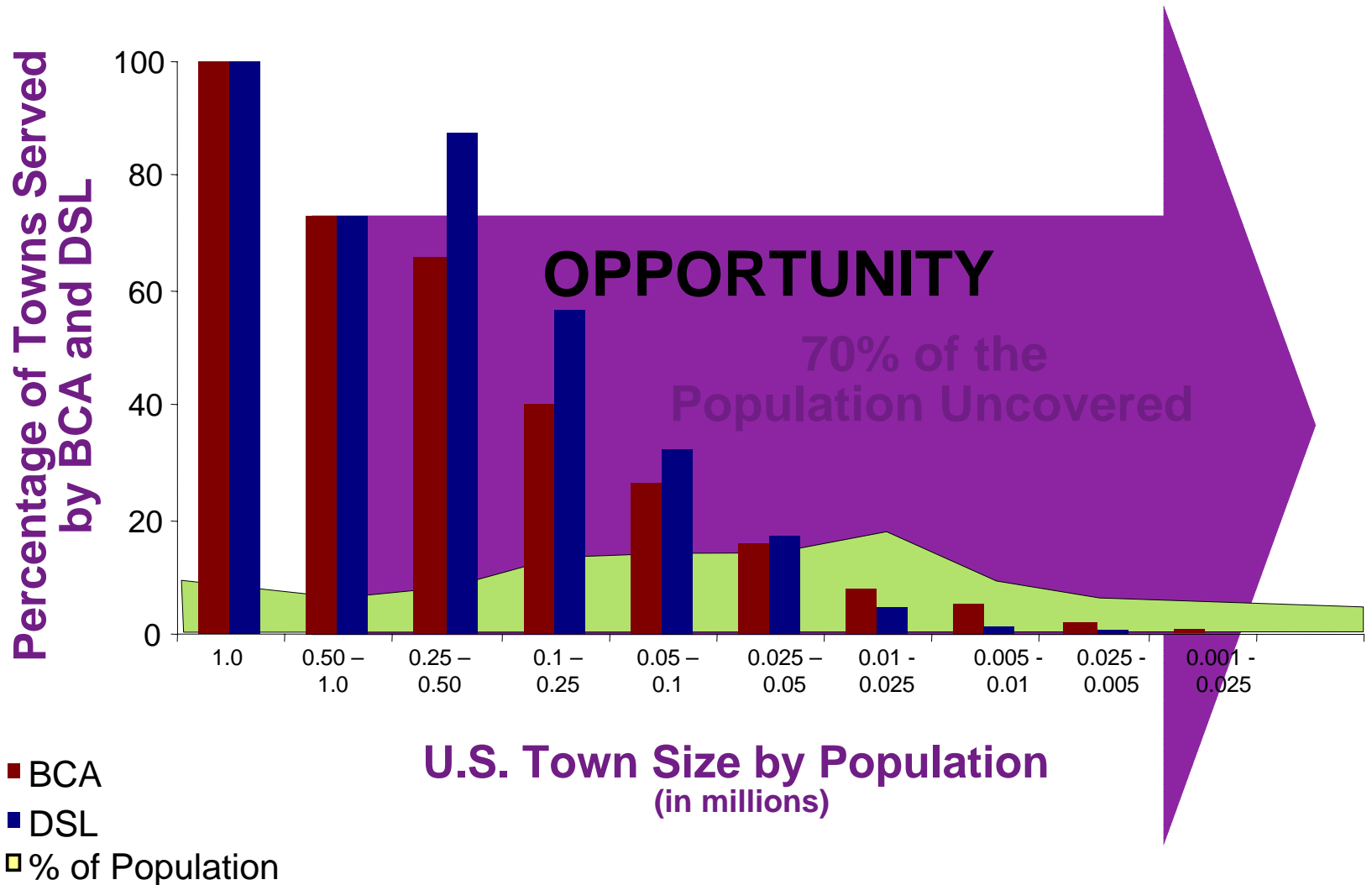
**180k**

**Broadband**  
(128k – 10Mbps)

**High  
Capacity**  
(>100Mbps)

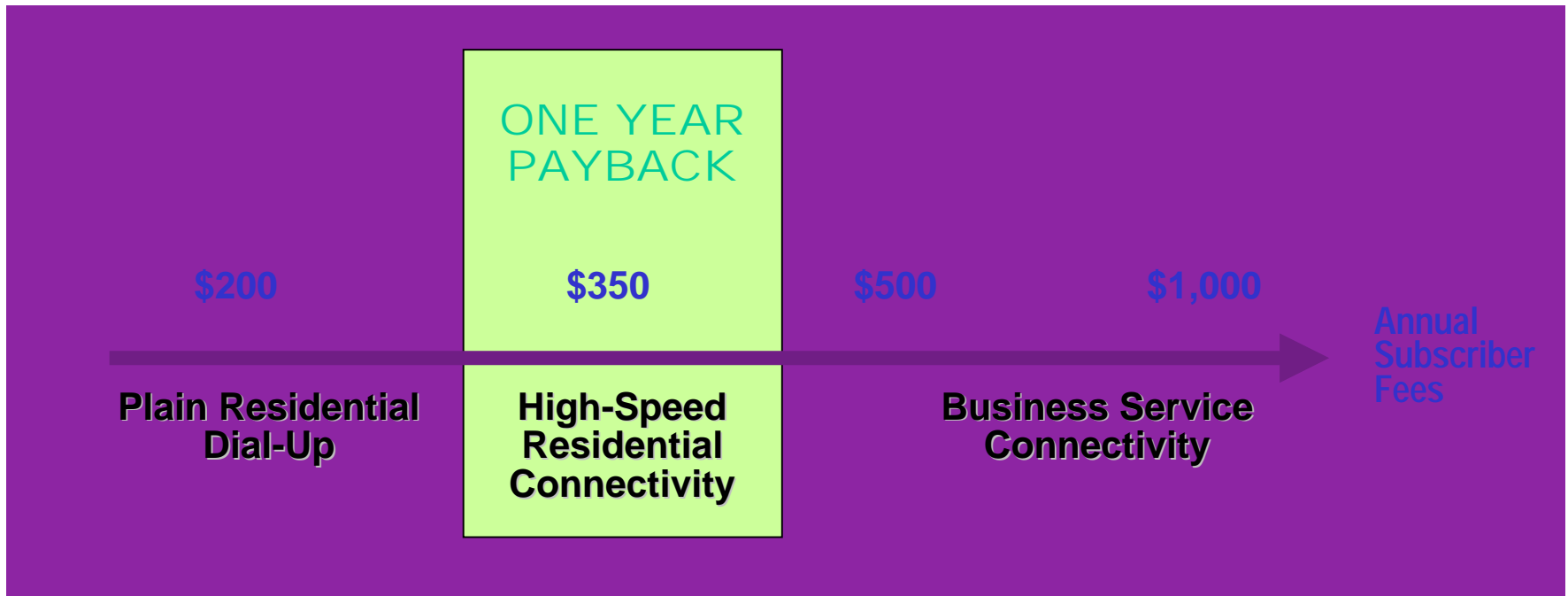


# Technology Coverage



# What is Essential Today

- Ease of deployment
- Reasonable equipment cost



There is a limit on what the mass market will pay for higher speeds.

# Speed vs. Coverage

- Cellular voice paradigm for broadband data
  - Difficult to execute
  - Data is more challenging than voice
    - Link budget considerations
    - Multi-path problems
- Obvious solutions are expensive
  - More base stations
  - Antenna diversity
  - Mesh networks

Higher speeds mean:

- Higher costs
- More difficult implementation
- Less coverage

# Conclusion

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- Business case
  - Affordability
  - Ease of deployment
    - User installation
    - High link margin for Near/Non-line-of-sight
    - Ability to handle multi-path fade
- Comparable speed