

LUMEN®

Built for What's Next

How Lumen's Network
Investments Are Powering the
AI and Cloud Revolution



The digital world moves fast. Lumen moves faster.

Innovation doesn't wait. From generative AI to real-time analytics, autonomous systems to distributed cloud platforms, the digital world is accelerating at breakneck speed.

But transformation doesn't happen in isolation, it demands infrastructure that's fast, smart, and deeply connected.

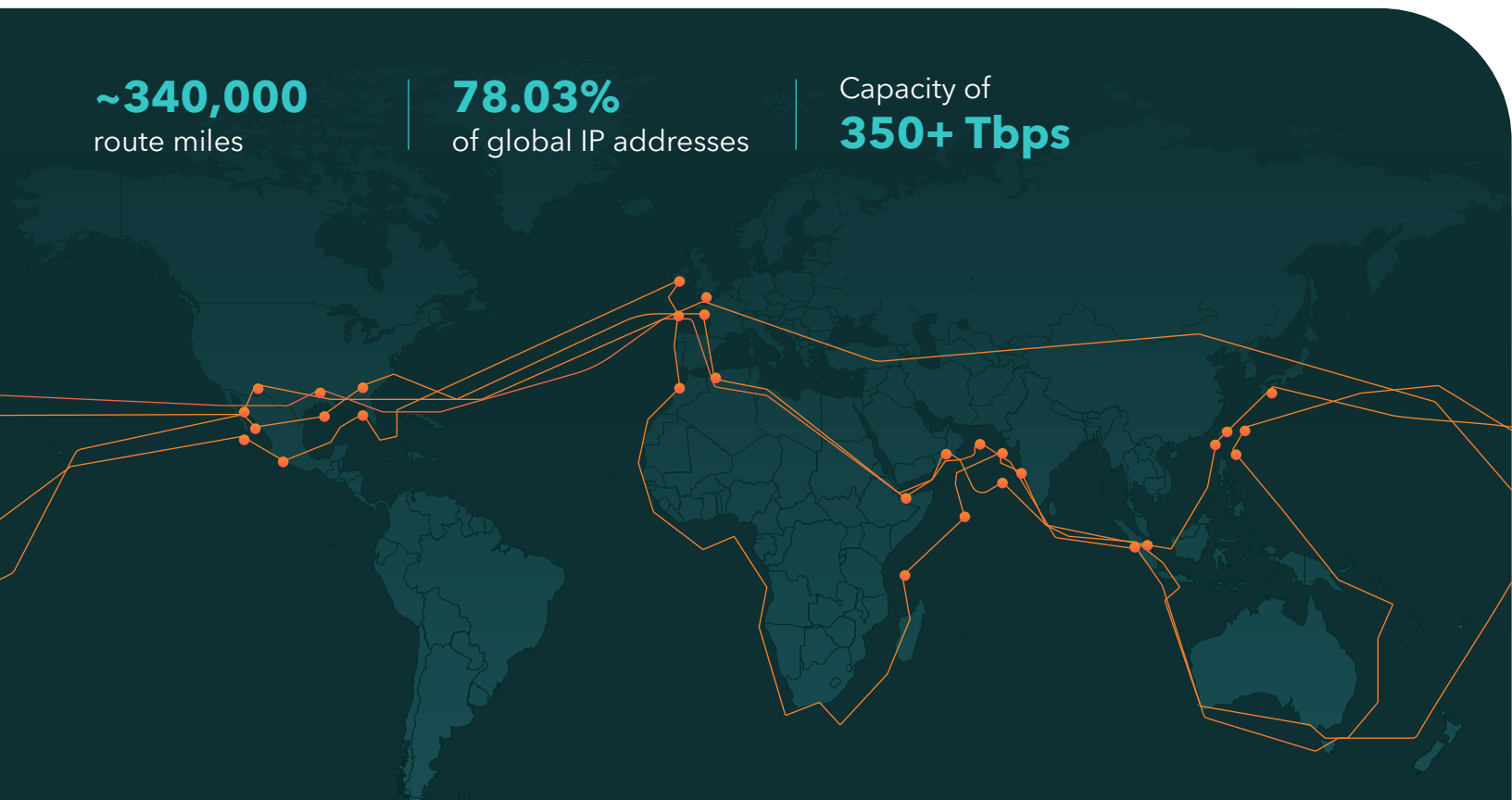
That's where Lumen leads

With **~340,000 route miles**, **78.03% of global IP addresses** touching the network*, and a **global backbone capacity of +350 Tbps**, Lumen operates one of the most deeply connected digital platforms on Earth. Our infrastructure isn't just keeping pace with innovation—it's enabling it.

~340,000
route miles

78.03%
of global IP addresses

Capacity of
350+ Tbps

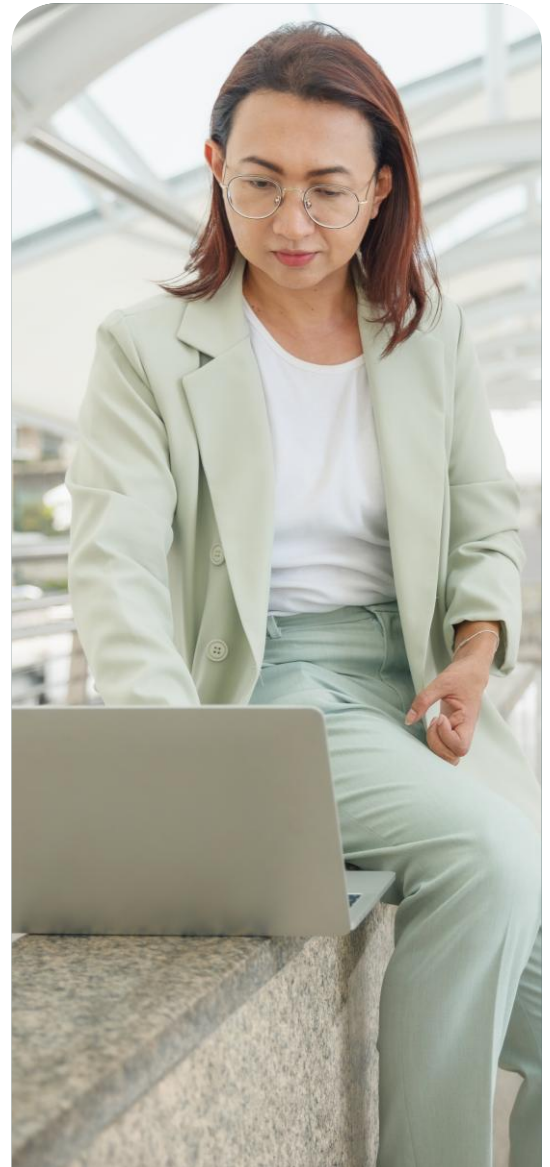


The AI and cloud infrastructure gap

AI and cloud technologies are evolving rapidly, but the networks that support them haven't always kept up. As businesses adopt AI at scale, they face a growing challenge: How to move massive volumes of data quickly, securely, and reliably across platforms, regions, and devices.

Training large models, deploying real-time applications, and syncing global cloud environments require more than compute power—they demand a network built for speed, scale, and intelligence.

According to IDC, machine learning, AI, and big data analytics are now the top three applications driving bandwidth demand. In fact, **47% of North American enterprises reported that Generative AI significantly affected their connectivity strategy in 2024—nearly double the rate from mid-2023.**¹



The message is clear:

AI is reshaping how businesses think about infrastructure. And Lumen is closing the gap.

Strategic investments to close the gap

Lumen is investing in the infrastructure that modern innovation demands. Our upgrades are designed to bridge the divide between where data is processed and where it's needed—creating seamless, high-performance pipelines for AI and cloud workloads.

We're focused on three key areas

01

Metro Ethernet Upgrades

02

Data Center Enablement

03

Wavelength Expansion



Metro ethernet upgrades

Bringing speed and intelligence to the edge:

The edge is where decisions happen. Whether it's autonomous vehicles, smart manufacturing, or real-time analytics, low-latency performance is critical.

Lumen is deploying 100G Ethernet across 16 major metro areas, creating fast, reliable connectivity hubs in cities driving the future.

What this unlocks:

- Faster access to nearby cloud and edge computing
- Real-time AI processing at the edge
- Consistent performance for latency-sensitive technologies
- Seamless hybrid deployments across cloud, colocation, and edge environments

With direct fiber access to ~163,000+ buildings and 2,200+ third-party data centers, Lumen delivers the flexibility and reach businesses need to scale smarter



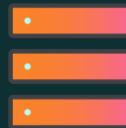
100G Ethernet

being deployed across
16 major markets



~163,000+ buildings

with direct fiber access



2,200+ third-party data centers

integrated into global network

Data center enablement

Scaling smarter in a hybrid and multi-cloud world:

Modern workloads span clouds, data centers, and edge environments. Flexibility and reach are no longer optional—they're essential.

Lumen is enhancing 70+ third-party data centers with ultra-fast IP connectivity and 100G Ethernet, expanding our interconnection ecosystem and enabling smarter deployments.

What this unlocks:

- Effortless connections to cloud providers, partners, and platforms
- Seamless hybrid and multi-cloud integration
- Reliable replication and failover across regions
- Accelerated AI model training and deployment

Today, **92% of organizations have adopted a multi-cloud approach, while 83% are implementing hybrid cloud strategies.**¹ Lumen's infrastructure is built to support this complexity with speed and resilience.



**70+ third-party
data centers**

enhanced with **100G Ethernet &
IP connectivity**



**2,200+ third-party
data centers**

connected to
Lumen's global network

Wavelength expansion

Moving massive data at speed:

AI workloads are data-hungry. Whether syncing global environments or training large models, businesses need networks that move petabytes in milliseconds.

Lumen is dramatically expanding its wavelength capacity by lighting up new high-speed optical routes across key corridors. This effort **adds 1.26 petabytes** of throughput across high-demand metro areas.

This expansion is critical as nearly half of North American enterprises now say Generative AI is significantly impacting their connectivity strategy and roadmap decisions. Another 32% expect Gen AI to influence future investment and transformation plans.¹

What this unlocks:

- Accelerated AI model training and deployment
- Seamless cloud replication with minimal latency
- High-speed data movement across regions

Backed by one of the most deeply connected networks in the world, Lumen's backbone moves up to **350 terabits per second, with speeds reaching up to 400 Gbps.**



1.26 petabytes

of additional throughput being added across high-demand metro corridors



350+ Tbps

global backbone capacity



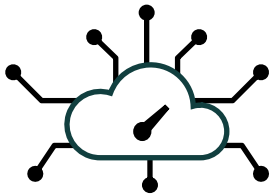
Speeds up to 400 Gbps

across backbone routes

What customers gain

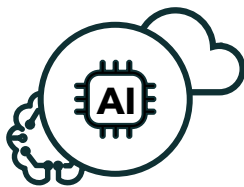
Lumen's network upgrades aren't just technical—they're transformational. These investments are designed to solve real business challenges and unlock new capabilities across industries.

Here's what customers gain:



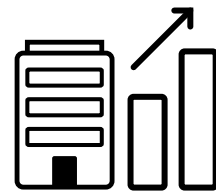
Performance where it matters

- **Quick access to cloud and AI services** through expanded Metro Ethernet in 16 major cities and enhanced connectivity at 70+ third-party data centers
- **Real-time decision-making at the edge** enabled by low latency architecture and proximity to compute resources
- **Rapid movement of massive datasets** powered by new high-throughput optical routes and expanded wavelength capacity



Smart cloud and AI deployments

- **Seamless hybrid and multi-cloud integration** supported by direct fiber access to 2,200+ third-party data centers and ~163,000 buildings
- **Accelerated AI model training and deployment** through high-speed, low-latency data pipelines optimized for large workloads
- **Reliable replication and failover across regions** made possible by deep interconnection and resilient backbone infrastructure



Infrastructure that scales with you

- **Support for emerging workloads and applications** through future-ready architecture and ultra-high-count fiber deployments
- **Effortless interconnection to cloud providers and partners** via new interconnection locations and expanded peering
- **Room to grow without compromise** thanks to increased capacity, reach, and performance across key corridors

Why Lumen: Already a leader. Actively investing. Built for what's beyond.

The future is intelligent, distributed, and data-driven. Lumen is building the network to power it.

Lumen already operates the #1 peered global network*, recognized as one of the largest and most deeply interconnected infrastructures in the world. Trusted by leading enterprises and innovators, Lumen delivers the speed, scale, and reliability that digital transformation demands.

Our network already supports:

- **350+ Tbps of global backbone capacity**, built to move massive volumes of data at lightning speed
- The **largest ultra-low-loss intercity fiber network in North America**, with diverse routes to **50+ major cities**
- Approximately **163,000 on-net fiber buildings globally**, enabling direct access to cloud, edge, and enterprise environments
- Connectivity up to **400 Gbps** with a **99.9993% data delivery rate****
- More than **16.5 billion voice minutes** and **33 million+ toll-free numbers** supported monthly***

But we're not standing still. **We're investing \$100+ million** in strategic upgrades in 2025 into 2026, deploying ultra-high-count fiber. With **125+ cloud on-ramps** already in place as part of our broader footprint, and pre-engineered routes

Why Lumen?

Because we already operate one of the most peered networks in the world—and we're making it even better. Lumen is the infrastructure partner for what's now, what's next, and what's beyond.

With strategic investments in high-speed Ethernet, expanded wavelength capacity, and ultra-connected data centers, we're building the digital foundation for AI, cloud, and edge innovation at scale.

*The AS3356 network. CAIDA, AS Rank, September 2025

**AS 3356 network performance measurement, August 2025

***August 2025



Lumen is building the backbone for the AI economy



The Lumen network is one of the largest, most deeply connected networks with bandwidth up to 400 Gbps



Lumen operates the #1 peered global network per CAIDA's AS Rank*



Lumen has the largest ultra-low-loss intercity fiber network in North America with diverse routes to more than 50 major cities across the country.



LUMEN®

Ready to accelerate your transformation?

Explore how Lumen's infrastructure is powering the future of intelligent, distributed, data-driven business.

[Click here](#)

**to grow your business on the
expanding Lumen network today**
and discover deployment-ready
solutions, regional upgrades, and
connectivity options built for
what's next.

Let's build the future together.