

# Sector Trends at a Glance



Liberia's telecommunications sector is undergoing a clear and measurable transformation. Interpreted data trends indicate favorable sector growth — subscriptions are rising, broadband adoption is expanding, and mobile data traffic continues to surge year over year. These indicators reflect strong consumer demand and demonstrate that connectivity infrastructure is increasingly reaching citizens across the country. A positive relationship is evident between mobile coverage expansion and broadband uptake: as network coverage grows, more citizens gain the opportunity to access internet and mobile services.

However, while infrastructure availability remains an important driver of broadband uptake, the data also reveals that affordability continues to constrain meaningful participation in the digital economy. Liberia must develop a clear strategy beyond the telecom sector to achieve affordable broadband connectivity — one that ensures expanding infrastructure translates into inclusive digital participation. Without such a strategy, coverage will continue to grow while affordability limits actual broadband adoption among ordinary citizens.

Indicator	Status	2023	2024	2025
Mobile cellular subscriptions %	Growing	88%	93.3%	99.6%
Population covered by mobile network	Expanding	90%	98%	98%
Population covered by 4G	Expanding	67%	87%	93%
Mobile broadband subscriptions %	Growing	50%	53%	63%
Mobile data traffic (MB)	Surging	91.1B	132.2B	182.9B
Mobile data revenue (USD)	Growing	\$78.7M	\$81.5M	\$92.6M
OnNet voice revenue (USD)	Growing	\$54.5M	\$72.9M	\$76.4M
5GB data basket as % of GNI per capita	Improving	13.6%	12.7%	12.1%

Source: LTA-Licensees Data Report, ITU, Macrotrends & World Bank Country GNI

# Sector Data Snapshot



Sector data reveals a story of meaningful progress tempered by a persistent 2% affordability challenge. Infrastructure is expanding, subscriptions are growing, and data demand is surging — yet the critical 2% affordability benchmark remains out of reach for the average citizen. Affordability may be the primary unresolved barrier standing between expanded networks and true digital inclusion.

## Data is Dominant

Mobile data has surpassed OnNet voice (traditional voice) as the leading revenue stream and usage driver. Mobile data traffic and revenue now lead

## Favorable Sector Growth

Subscriptions and broadband adoption are expanding, signaling strong consumer demand for connectivity.

## Coverage Improving

4G and mobile network coverage have reached significant portions of the population nationwide.

## Affordability Remains the Hurdle

The 2% affordability target is the primary unresolved barrier to universal digital inclusion.

The sustained growth in mobile data traffic confirms a decisive structural shift : from a voice-based communication model to a data-driven digital ecosystem. Between 2023 and 2025, mobile data traffic more than doubled, climbing from 91.1 billion MB to 182.9 billion MB — a trajectory that reflects deepening digital engagement among citizens.

# 17.7%

## Data Revenue Growth

Mobile data revenue grew from \$78.7M (2023) to \$92.6M (2025) — outpacing OnNet voice every year.

# 55%

## Data Revenue Share

Mobile data accounts for approximately 55% of combined data and OnNet voice revenues in 2025.

# 93%

## 4G Coverage (2025)

A major infrastructure milestone — up from just 67% in 2023 — fueling broadband adoption growth.

# 63%

## Broadband Subscriptions

Mobile broadband subscriptions reached 63% in 2025, rising steadily from 50% in 2023.

## 2% Affordability Target: The Income-Price Equation

To meet the 2% target at \$8/month

- Required monthly income: \$400
- Current average monthly income: \$66
- Income gap to close: \$334/month
- OR : Data price must fall to \$1.32

Both levers- Income growth and data price reduction - must be pulled simultaneously through deliberate policy intervention.

# The Digital Shift: Voice to Data

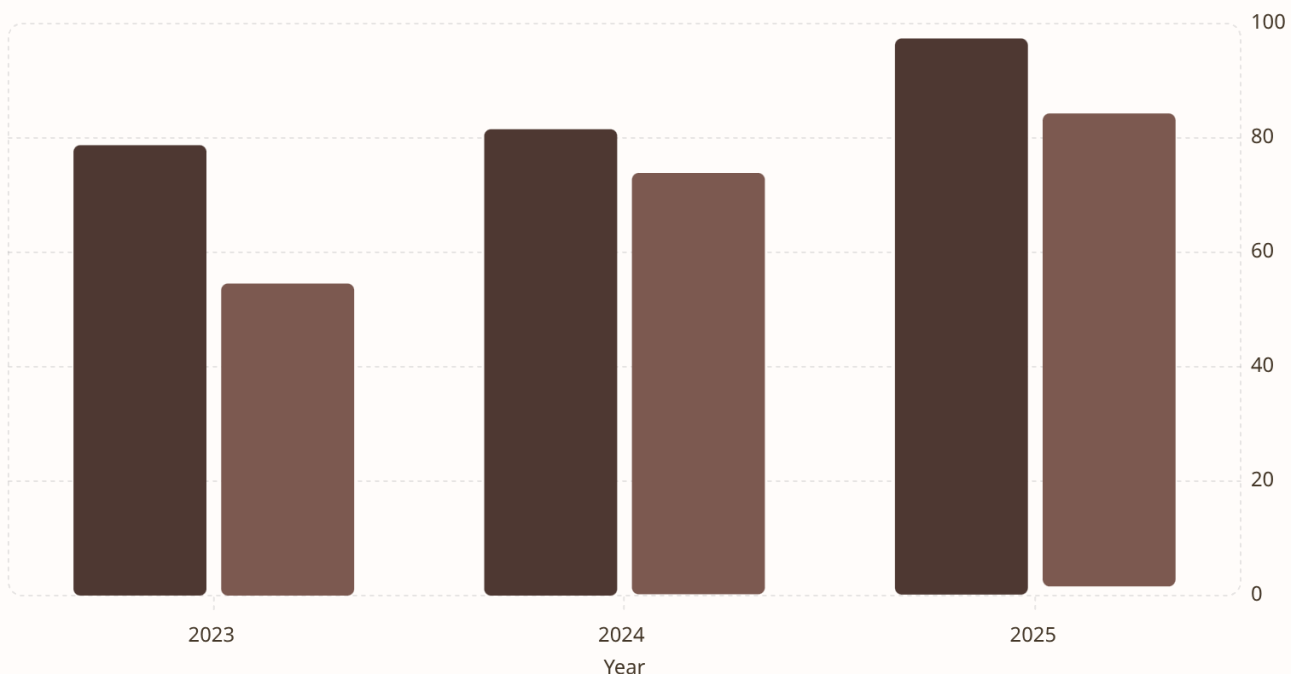
Infrastructure progress — particularly the expansion of 4G network coverage to 93% of the population — is a key driver of the mobile data explosion and the broader digital transformation underway. The sustained growth in mobile data traffic is the clearest signal of this structural shift : the sector has transitioned decisively from a voice-based communication model to a data-driven digital ecosystem. Between 2023 and 2025, mobile data traffic more than doubled, climbing from 91.1 billion MB to 182.9 billion MB — a trajectory that reflects not only wider coverage but deepening digital engagement among citizens.

The revenue dimension of this shift is equally telling. Mobile data has consistently outearned OnNet voice revenue across every year in the review period. Between 2023 and 2025, mobile data revenue grew from \$78.7 million to \$92.6 million — a 17.7% increase over two years. By 2025, mobile data accounts for approximately 55% of combined data and OnNet voice revenues, cementing its position as the dominant and growing revenue stream for the sector. This trend underscores the commercial and strategic importance of prioritizing data infrastructure investment and affordability policies to sustain and deepen this digital transformation. (Note : OnNet voice is the most dominant amongst other traditional voice traffic- Offnet and International voice traffic ).

## Mobile Data Revenue Growth

From \$78.7M in 2023 to \$92.6M in 2025 — a 17.7% increase, driven by rising data demand.

■ Mobile Data Revenue (\$M)  
■ OnNet Voice Revenue (\$M)



# Broadband Affordability: The Persistent Hurdle

Among all findings, broadband affordability stands out as the most persistent and consequential barrier to digital inclusion. Even where mobile networks now reach a large share of the population (mobile network coverage at 98%) — citizens may still limit their communication and internet usage when the cost of data services represents a substantial share of monthly income. This reality reveals a critical disconnect: infrastructure availability does not automatically translate into meaningful connectivity.

Coverage expansion alone may not fully close the digital inclusion gap if affordability constraints persist. In Liberia, **Is connectivity becoming affordable enough for the average citizen?** Based on available data and the international benchmark, the answer is: **not yet**. The affordability gap remains firmly in place, and the distance between current pricing and the internationally recognized 2% benchmark is substantial.

## Coverage Is Not Enough

93% 4G mobile network coverage exists, yet a large segment of citizens cannot afford to actively use broadband services due to high data costs relative to income. Including also the speculative “high” cost of smart devices.

## The International Benchmark

The ITU benchmark stipulates that entry-level broadband should cost no more than 2% of average monthly income to be considered affordable for universal access.

## The Gap Persists

Liberia's affordability ratio stood at 12.1% in 2025 — more than six times the 2% target — indicating a structural challenge that requires coordinated policy action beyond the telecom sector.

The affordability ratio pace of decline is far too slow. At this slow rate of improvement, meaningful affordability for the average Liberian remains a distant aspiration rather than a near-term outcome.

# Affordability Indicator: The 2% Benchmark

The 2% affordability benchmark provides an internationally recognized reference for assessing whether broadband services are financially accessible to the average citizen. It is calculated as the ratio of the price of an entry-level mobile data package (in this case, a 5GB monthly data basket) — to average monthly income.

A country is considered to have achieved affordable broadband when this ratio falls at or below 2%.

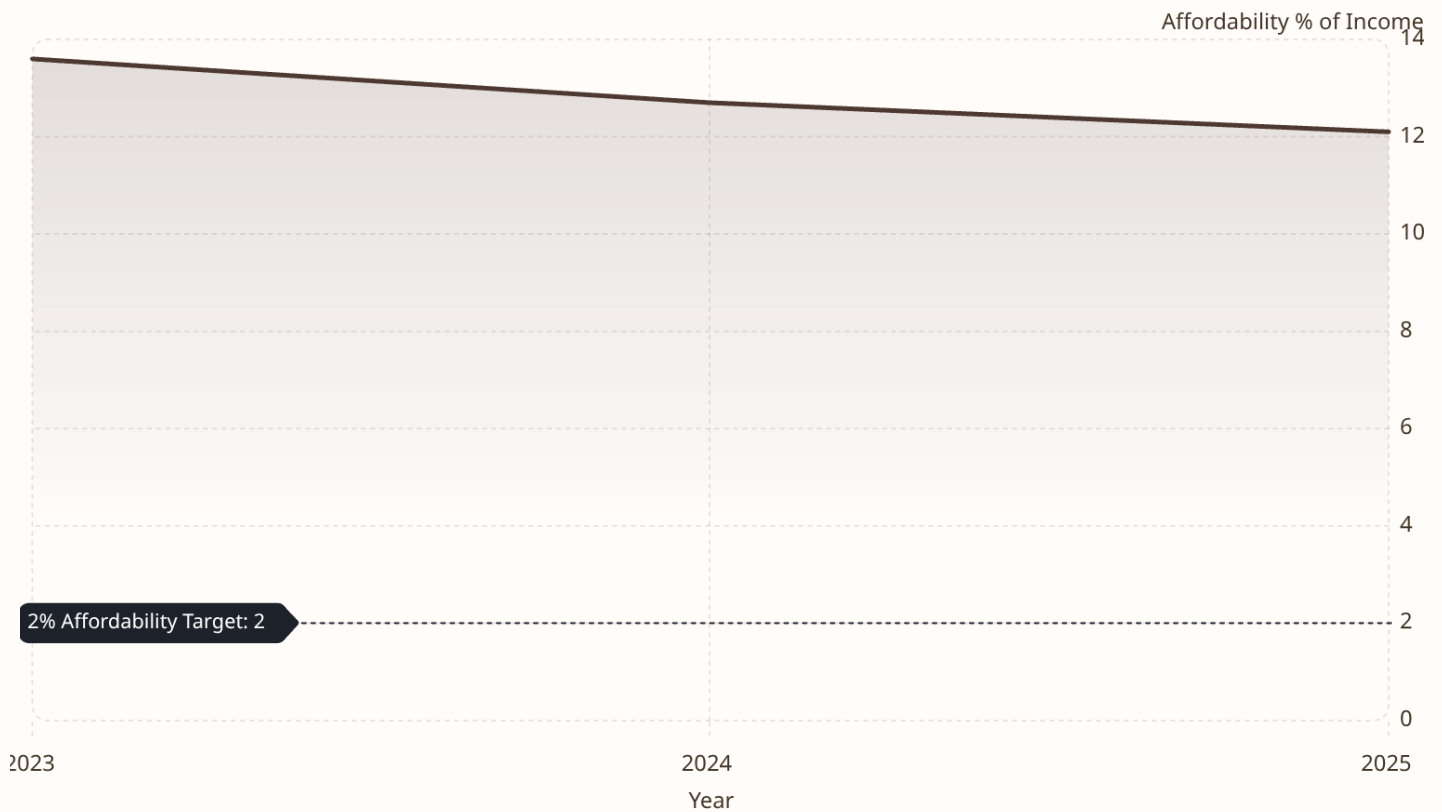
In Liberia's case, the cost of a 5GB data package is \$8 per month, while average monthly income has risen only modestly, from approximately \$59 in 2023 to \$66 in 2025. The result is an affordability ratio that, while declining, remains dramatically above the benchmark.

Indicator	2023	2024	2025	2% Target (USD)
Price of 5GB mobile data (USD/month)	\$8.00	\$8.00	\$8.00	—
Average monthly income (USD)	\$59	\$63	\$66	—
Affordability % (as % of income)	13.6%	12.7%	12.1%	2.0%
2% target cost threshold (USD)	\$1.18	\$1.26	\$1.32	~\$1.32

Source: Orange Liberia (\$2 weekly data pack — cheapest option for 5GB); World Bank & Macrotrends Country GNI

**Crucially, the cost of the data pack has remained flat at \$8 throughout the period, meaning improvements in the ratio have been driven entirely by marginal income growth rather than reductions in data pricing.** For the 2% target to be met at the current \$8 monthly package price, a citizen would need to earn a minimum of \$400 per month — a threshold far beyond present income levels for the majority of Liberians. (note: Analysis is based on the cheapest available data pack from the operator with the largest market share)

## Affordability & Inclusion: **Affordability Indicator: The 2% Benchmark**



The line chart above shows that the cost of mobile data (\$8/month as at 2025) exceeds the affordability target by a wide margin. The 12.1% ratio in 2025 indicates that the cost of entry-level broadband consumed more than 12% of the average citizen's monthly income. The chart illustrates the slow decline of the affordability ratio against the 2% international benchmark. Moving from 13.6% in 2023 to 12.1% in 2025 represents a reduction of just 1.5 percentage points over two years. At this slow rate of improvement, reaching the 2% benchmark through organic income growth and market competition alone would take several decades. **The gap between the current trajectory and the target underscores the urgency of developing a Broadband Affordability Roadmap.**

# Closing the Gap: Why the Pace Must Accelerate

Despite modest year-on-year improvement, the current trajectory would require decades to reach the target without deliberate policy intervention to either reduce data prices or accelerate income growth — or both simultaneously. **This gap is not merely a telecom issue; it reflects structural economic constraints that require coordinated policy intervention across multiple sectors. The structural dynamics at play make it clear that the affordability gap will not close on its own: data prices have remained static at \$8 per month, while income growth has been marginal and insufficient to meaningfully shift the ratio.**

**For the 2% affordability target to be reached at the current entry-level data cost of \$8 per month, the average citizen's monthly income must be a minimum of \$400 — equivalent to 2% of \$400 equaling \$8. Given that current average monthly income is approximately \$66, this income threshold represents a gap of more than six times the present level.**

## 12.1%

### Current Affordability Affordability Ratio Ratio

Cost of 5GB as a share of monthly income in 2025 — far above the 2% target.

## \$400

### Income Required

Minimum monthly income needed for \$8 data pack to meet the 2% affordability benchmark.

## \$66

### Current Avg. Income

Average monthly income in 2025 — roughly one-sixth of the income required to meet the benchmark.

## 6x

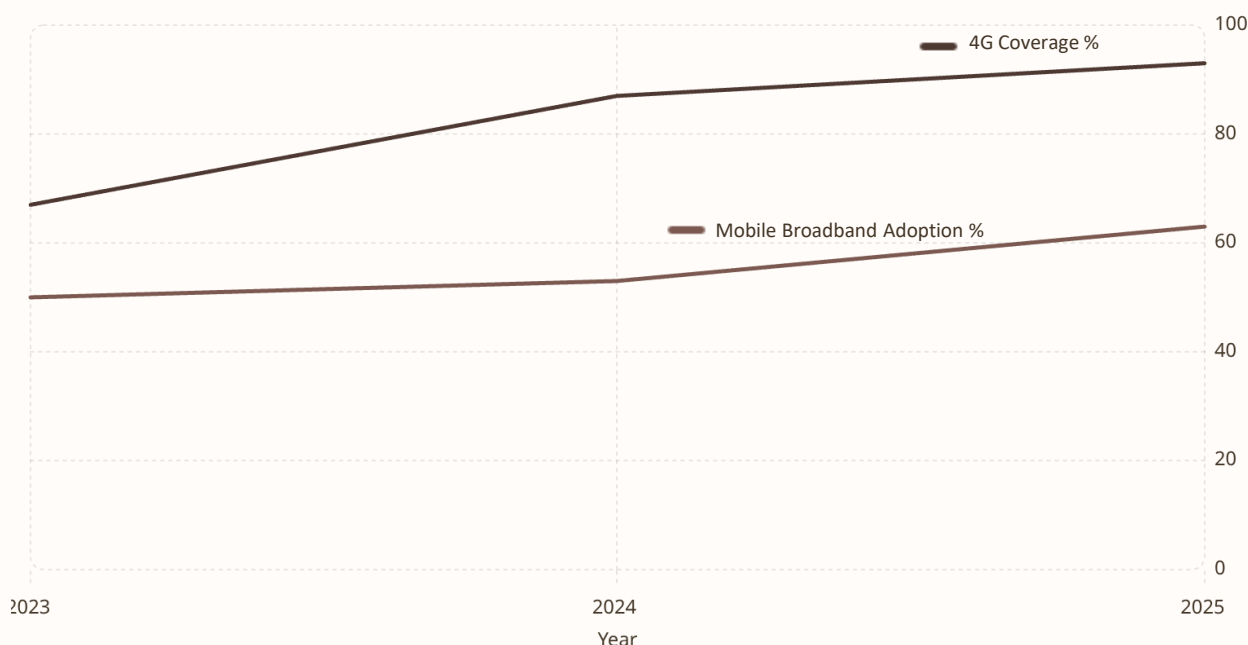
### The Affordability Gap

Current affordability ratio is more than six times the internationally recognized 2% benchmark.

**Key Policy Implication:** Even where coverage exists, adoption depends on affordability. While network expansion improves connectivity availability, the ability of citizens to afford internet services ultimately determines whether digital infrastructure translates into meaningful access. Closing the broadband affordability gap requires coordinated efforts across government, the private sector, and development partners — particularly through infrastructure cost reduction, infrastructure sharing initiatives, pricing reforms including data pricing, income support programs, income growth strategies and income-oriented development policies.

## Affordability & Inclusion: Coverage vs. Adoption vs. Affordability

Broadband adoption remains meaningfully lower. The chart highlights the coverage-adoption gap (the gap between mobile broadband coverage and actual adoption). Broadband adoption (measured by mobile broadband subscriptions as a percentage of the population) remains significantly lower at 63% in 2025 while 4G coverage has surged to 93% of the population. Confirming that network availability alone does not guarantee meaningful connectivity. This widening divergence in pace is the clearest empirical signal that affordability, not availability, is a binding constraint on digital inclusion in Liberia. Affordability is the key variable constraining uptake.



[The chart seeks to examine gaps in digital inclusion and digital access and shows the difference between Availability vs Adoption (coverage vs usage relationship)].

- ❑ **Policy Recommendation:** Closing this gap requires not just addressing the structural cost factors associated with infrastructure investment but also having a coordinated strategy that addresses the economic realities of the citizens that infrastructure is meant to serve.

### → Promote Infrastructure Sharing

Reduce structural costs through active and passive infrastructure sharing among operators and service providers, as part of efforts to lower barriers to affordable data pricing. **The LTA planned initiative to promote infrastructure sharing represents one concrete structural approach to reducing infrastructure costs.**

### → Targeted Investment

Continue investment in infrastructure to reach remaining unserved and underserved populations, particularly in rural and remote districts.

# Mobile Coverage Expansion: Closing the Gap in Priority Counties & Districts

While mobile coverage has improved substantially at the national level, significant disparities remain — particularly in rural, remote, sparsely populated, and non-economically viable districts. Available data identifies **73 priority districts spanning 11 counties** where coverage gaps are most severe and where populations continue to live beyond the reach of cellular networks. These coverage gaps represent not only barriers to digital inclusion but also gaps in national resilience, emergency communications, and access to essential services.

## Counties Requiring Urgent Attention

Rivercess, Gbarpolu, River Gee, Lofa, Grand Kru, Grand Bassa, Sinoe, Grand Gedeh, Grand Cape Mount, Bong, and Maryland. In these 11 counties, many districts still have populations living entirely beyond the reach of cellular networks.

## Why These Gaps Persist

Rural, remote, and sparsely populated districts are often commercially unviable for private operators. The substantial network deployment and operational costs in these areas create market failures that require coordinated public investment and policy intervention to address.

## Policy Recommendation

Infrastructure investment in non-economically viable districts must be treated as a public good requiring direct government and development partner financing - NOT left solely to market-driven operator deployment decisions.

## 73 Priority Districts Critically Needing Coverage

County	Key Districts Requiring Coverage
Rivercess	Jo River, Central Rivercess, Sam Gbalor, Doedain, Norwein, Beawor
Gbarpolu	Belleh, Kongba, Bopolu, Gounwolaila, Gbarma
River Gee	Karforh, Nanee, Tuobo, Glaro, Nyenebo, Sarbo, Potupo, Chedepo
Lofa	Zorzor, Kolahun, Foya, Vahun, Voinjama, Salayea
Grand Kru	Wlogba, Forpoh, Lower & Upper Jloh, Dorbor, Buah, Dweh
Grand Bassa	Districts 1–4, St. John River City
Sinoe	Sanquin #2–3, Bodae, Jeadopo, Bokon, Kulu Shaw Boe, Pynes Town
Grand Gedeh	Glio-Twarbo, Gboe-Ploe, Putu, Konobo, Cavala
Grand Cape Mount	Golakonneh, Commonwealth, Porkpa
Bong	Sanoyeah, Kokoyah, Salala, Fuamah, Yeallequelleh, Zota, Suakoko
Maryland	Karluway #1, Whojah, Gwelekpoken

Above are the districts most affected by inadequate coverage and where offline populations face the greatest exclusion from digital life. Despite the substantial network deployment and operational costs associated with serving low-density and geographically challenging terrain, infrastructure investment should be prioritized in these rural, remote and sparsely populated districts.