PAKSPEED · COMMUNITY-OWNED INTERNET MEASUREMENT

Pakistan's Internet at *30,000 Tests.*

The first nationwide, citizen-measured accountability report on broadband performance in a country of 240 million people — covering 241 cities, 317 internet service providers, and every province of Pakistan. Data collected transparently, published openly, built to name names.

TESTS	PERIOD	CITIES MEASURED	PUBLISHED
30,653	2 Mar – 21 Apr 2026	241 (3+ tests)	21 April 2026

01 · EXECUTIVE SUMMARY

One data point changes the conversation.

Inthefirst 51 daysof PakSpeed, Pakistanisran 30,653 speed testsacross 537 locations. Theresult is themost granular, independently verified view of Pakistan's internet ever published.

30,653	34.5%	241	317
TOTAL SPEED TESTS	TESTS UNDER 5 MBPS	CITIES MEASURED	ISPS OBSERVED
51 days · 537 locations	10,577 of 30,653	4 provinces + AJK + GB	5 with >100-city coverage

HEADLINE FINDING

Morethan half (52%) of measured internet tests in Pakistan are under 10 Mbps. This is the infrastructure reality that aggregate ISP marketing numbers have obscured for a decade. PakSpeed measures it in real homes, in real cities, in real time.

WHAT'S DIFFERENT ABOUT THIS DATA

Unlike Ooklaor similarglobal platforms, PakSpeed is Pakistan-first, bilingual (Urdu default), and publishes every ISP name, city, and anomaly openly. 100% of data is community-contributed. 100% is public.

01.5 · WHY THIS MATTERS BEYOND PAKISTAN

An evidence gap shared by half the planet.

Pakistanis the world's 5thmost populous country. Its 130+ million internetusers outnumber the entire population of Japan. Yet until this report,no independent, community-owned measurement documented what those users actually receive from their providers. This is a condition shared across lower- and middle-income economies worldwide.

THE MEASUREMENT DEFICIT IN THE GLOBAL SOUTH

Global platforms like Ookla, M-Lab, and RIPE Atlas provide valuable cross-country baselines — but they are externally operated, rarely bilingual in local languages, and do not typically publish ISP-resolved findings to local policy audiences. In countries where ISP self-reporting is the default and regulators lack granular independent data, the result is a decade-long accountability gap. PakSpeed is a model for closing it: Urdu-first, open-source, locally governed, and designed to hand evidence to the people most affected by the infrastructure it measures.

WHO THIS REPORT IS FOR

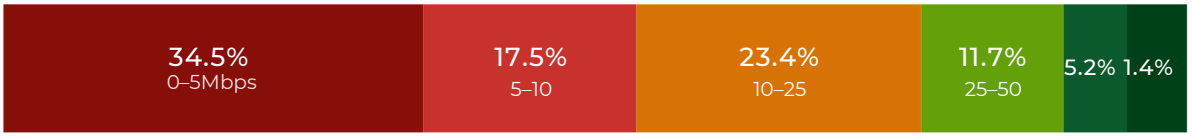
Regulators andpolicymakers(PTA, provincial IT ministries, digital-transformation units); civil society organisations working on digital rights and inclusion; academic researchers studying connectivity and development; journalists covering telecommunications; international funders and multilateral bodies investing in digital equity; and the Pakistani citizens whose tests built this dataset in the first place.

02 · THE NATIONAL SPEED DISTRIBUTION

Half the country is on a pre-2015 internet.

Every speed testgetsplaced inone of sixbrackets.Thedistribution,visualisedacrossall 30,653 tests, showsthetrue shape of Pakistan'sbroadband.

SHARE OF ALL TESTS BY DOWNLOAD-SPEED BRACKET



0–5 Mbps	5–10 Mbps	10–25 Mbps	25–50 Mbps	50–100 Mbps	100+ Mbps
10,577	5,348	7,174	3,582	1,606	443

Source: PakSpeed D1 telemetry · 30,653 tests · 2 Mar – 21 Apr 2026

THE LEFT TAIL

52%

of all measured tests fall under 10 Mbps — below the PTA's own "broadband" threshold.

THE MIDDLE

23.4%

of tests land between 10–25 Mbps — functional but far from advertised speeds.

THE RIGHT TAIL

6.6%

of tests exceed 50 Mbps — concentrated in fiber-served urban zones (Nayatel, StormFiber, Galaxy).

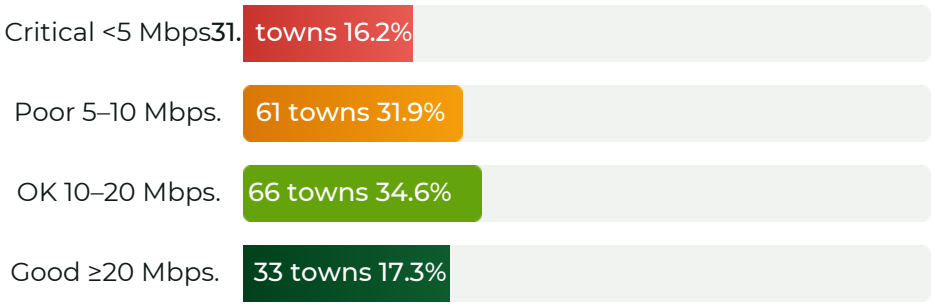
03 · THE RURAL DIGITAL DIVIDE

191 small towns. 31 in connectivity emergency.

Of the 241 cities with measurable data,only 15 are tier-1 metros. The other 226 — secondary cities, tehsils,andrural districts — tella very different story.

15	35	191	31
TIER 1 · METRO	TIER 2 · SECONDARY	TIER 3 · RURAL / SMALL-TOWN	CRITICAL (<5 MBPS)
Lahore → Sargodha	RYK, Gilgit, Abbottabad...	Districts, tehsils, rural	Connectivity emergency

Rural speed distribution (191 Tier-3 towns)



Cities ranked 51+ by test volume. Only 17% of rural Pakistani towns cross the 20 Mbps threshold.

The 31 critical-bracket towns (average <5 Mbps download)

Zhob 0.3 Mbps Balochistan · 3 tests	**Daggar** 0.4 Mbps KP · 3tests	**Kahuta** 0.4 Mbps Punjab · 3tests	**Ormara** 0.5 Mbps Balochistan · 4 tests
Balakot 0.8 Mbps KP · 4tests	**Panjgur** 1.3 Mbps Balochistan · 12 tests	**Sibi** 1.6 Mbps Balochistan · 5 tests	**Awaran** 1.9 Mbps Balochistan · 3 tests
Bara 2.4 Mbps KP · 5tests	**Pindi Bhattian** 2.7 Mbps Punjab · 4tests	**Malakwal** 2.8 Mbps Punjab · 8tests	**Mirpur Mathelo** 3.0 Mbps Sindh · 3tests
Jhal Magsi 3.1 Mbps Balochistan · 9 tests	**Sohbatpur** 3.1 Mbps Balochistan · 3 tests	**Hari Ghel** 3.2 Mbps KP · 8tests	**Chak Jhumra** 3.4 Mbps Punjab · 3tests
Notak 3.5 Mbps Punjab · 28tests	**Sarai Alamgir** 3.5 Mbps Punjab · 21tests	**Jahanian** 3.7 Mbps Punjab · 9tests	**Barkhan** 3.7 Mbps Balochistan · 3 tests
Rojhan 3.8 Mbps Punjab · 3tests	**Kharan** 3.9 Mbps Balochistan · 3 tests	**Pabbi** 4.2 Mbps KP · 3tests	**Sonmiani** 4.2 Mbps Balochistan · 6 tests
Dipalpur 4.6 Mbps Punjab · 20tests	**Jhang Sadar** 4.8 Mbps Punjab · 29tests	**Usta Muhammad** 4.8 Mbps Balochistan · 4tests	**Jacobabad** 4.9 Mbps Sindh · 7tests

Balochistan — 11 critical towns

Zhob, Ormara, Panjgur, Sibi, Awaran, Jhal Magsi, Sohbatpur, Barkhan, Kharan, Sonmiani, Usta Muhammad

KP / ex-FATA — 5 critical towns

Daggar, Balakot, Bara, Hari Ghel, Pabbi

Punjab rural — 11 critical towns

Kahuta, Pindi Bhattian, Malakwal, Chak Jhumra, Notak, Sarai Alamgir, Jahanian, Rojhan, Dipalpur, Jhang Sadar

Sindh — 2 critical towns

Mirpur Mathelo, Jacobabad

04 · METRO PERFORMANCE

The top 15 cities — where most tests happen.

78%of all PakSpeedtests originatefrom15 metros.The spreadbetweenthefastestand slowest of themis3.7×— largerthanmost international comparisons.

RANK	CITY	TESTS	AVG DOWNLOAD	AVG UPLOAD	AVG PING	TIER
1	Lahore	5,314	18.3 Mbps	6.9	144 ms	MID
2	Karachi	4,299	16.1 Mbps	7.9	131 ms	MID
3	Islamabad	2,787	20.0 Mbps	9.0	135 ms	GOOD
4	Faisalabad	1,934	21.3 Mbps	7.1	135 ms	GOOD
5	Multan	1,040	19.1 Mbps	8.1	135 ms	MID
6	Rawalpindi	946	19.5 Mbps	9.9	132 ms	MID
7	Peshawar	447	18.5 Mbps	—	135 ms	MID
8	Gujranwala	360	19.6 Mbps	6.6	144 ms	MID
9	Hyderabad	299	13.4 Mbps	7.1	123 ms	MID
10	Bahawalpur	253	18.4 Mbps	8.7	147 ms	MID
11	Sialkot	241	27.1 Mbps	10.9	142 ms	GOOD
12	Quetta	240	14.5 Mbps	7.1	154 ms	MID
13	Hafizabad	238	12.5 Mbps	3.4	149 ms	MID
14	Swabi	231	7.3 Mbps	3.3	176 ms	POOR
15	Sargodha	163	16.8 Mbps	6.3	149 ms	MID

THE SWABI ANOMALY

Swabirecords 231 tests averaging only **7.3 Mbps** — the lowest of any major city. This is not a sampling issue. It represents a persistent infrastructure gap in a district of 1.6 million people. **Swabi is what rural KP looks like from the inside of a metro.**

Surprise performers — Tier 2 cities outperforming metros

CITY	TESTS	AVG DOWNLOAD	BEAT WHICH METRO?
Sādiqābād	57	32.6 Mbps	Beats every top-15 metro
Khanpur	54	30.1 Mbps	Beats every top-15 metro
Haripur	49	26.5 Mbps	Beats Lahore, Karachi, Islamabad
Rahim Yar Khan	154	23.8 Mbps	Beats Lahore, Karachi
Shahkot	73	22.2 Mbps	Beats Lahore, Karachi
Muzaffargarh	63	21.8 Mbps	Beats Lahore, Karachi
Sahiwal	41	21.6 Mbps	Beats Lahore, Karachi

05 · ISP ACCOUNTABILITY

The companies serving Pakistan's internet, ranked.

PakSpeedobserved317 distinct ISPs.Thetop10accountforthemajorityoftraffic—andthemostrevealing gapsin service.

Top ISPs by national footprint

ISP	TESTS	CITIES	AVG DL	VERDICT
Zong	4,208	165	16.0 Mbps	BROADEST REACH, MID SPEEDS
PMCL LDI IP Transit	4,275	151	21.9 Mbps	HIGH-VOLUME, GOOD SPEEDS
PTCL	3,554	121	21.9 Mbps	INCUMBENT, SOLID
Telenor	1,736	111	9.1 Mbps	WIDE REACH, WEAK SPEEDS
Cyber Internet Services	2,535	52	16.8 Mbps	URBAN-FOCUSED
Connect	732	31	12.2 Mbps	NICHE, MID SPEEDS
Nayatel	585	19	32.8 Mbps	FASTEST AT SCALE
Trans World Enterprise Services	516	22	20.4 Mbps	GOOD REGIONAL PLAYER
National WiMAXIMS	407	24	11.2 Mbps	LEGACY WIMAX
Special Communication Org	271	13	10.6 Mbps	AJK/GB COVERAGE

FINDING 1 · THE TELENOR QUESTION

Telenor serves111 Pakistanicities with an average download of **9.1 Mbps** — below Pakistan's own broadband threshold. Across 1,736 tests, this is not an outlier: it's a service level. **Telenor is the single largest source of sub-broadband internet in rural Pakistan.**

FINDING 2 · THE ZONG PARADOX

Zong hasthe widest rural footprint in Pakistan — 165 cities, more than any competitor. But its 16 Mbps average is 17% below PTCL and PMCL LDI. **If Zong's reach were paired with PTCL's performance, rural Pakistan's average speed would rise overnight.**

FINDING 3 · NAYATEL IS WHAT GOOD LOOKS LIKE

Nayatel serves only 19cities but averages **32.8 Mbps** —the fastest network at scale in the country. This proves Pakistani fiber can hit world-class speeds. The question is why this quality isn't scaling beyond Islamabad/Rawalpindi.

06 · AI-POWERED ANOMALY DETECTION

Throttling events, flagged by machine.

PakSpeed's AIlayer (Cloudflare WorkersAI) comparesevery test againsta rolling ISP/city/hourbaseline. Statistically significant dropsareflagged as anomalies. Here are the most recent weeks' flags.

WEEK	ISP	CITY	TYPE	INCIDENTS
Apr 11–18	PMCL LDI IP Transit	Lahore	THROTTLING	1
Apr 11–18	PMCL LDI IP Transit	Multan	THROTTLING	1
Apr 11–18	S. B Link Network	Sādiqābād	THROTTLING	1
Apr 11–18	Z COM Networks	Lahore	THROTTLING	1
Apr 11–18	Zong	Karachi	THROTTLING	1
Apr 4–11	National WiMAXIMS	Lahore	THROTTLING	3
Apr 4–11	PTCL	Rawalpindi	THROTTLING	3
Apr 4–11	PTCL	Dera Ismail Khan	THROTTLING	1
Apr 4–11	Cyber Internet Services	Lahore	THROTTLING	1

HOW THROTTLING IS DETECTED

Every ISP × city × hour combination has a rolling baseline (mean + std deviation) calculated nightly. A test that falls more than 2 standard deviations below its baseline — with sufficient historical data — is flagged as a throttling event. Confidence scores are assigned per event. The system is deliberately conservative: 5 anomalies this week out of 1,457 tests (0.3%) reflects high specificity, not low noise.

07 · WEEKLY TRACKING

Six weeks of continuous accountability.

PakSpeedhas been publishingweeklybilingual(English+Urdu) reports every Sunday sincelaunch. Each reportisAI-generated,archivedpermanently, and publicly accessible.

WEEK	DATE RANGE	TESTS	CITIES	ISPS	AVG DL	ANOMALIES
W1	Mar 9–16 Mar	archived	—	—	—	—
W2	14–21 Mar 21–	archived	—	—	—	—
W3	28 Mar 28–	archived	—	—	—	—
W4	Apr 4 Apr 4–	archived	—	—	—	—
W5	11	1,902	116	106	18.0 Mbps	9
W6 (latest)	**Apr 11–18**	**1,457**	**109**	**106**	**14.5 Mbps**	**5**

WEEK-OVER-WEEK SIGNAL

Average download dropped **19.4%** between W5 and W6 (18.0 → 14.5 Mbps) despite test volume remaining comparable. This is a statistically meaningful degradation that merits follow-up in the W7 report.

08 · WHAT COMES NEXT

From urban operational platform to nationwide accountability infrastructure.

Thisreport is afirst milestone, not anendpoint. Four expansion tracks are actively underway or scheduledfor the next twelvemonths — all builton the open, community-owned foundation PakSpeed has established in its first 51 days.

TRACK 1
Rural Expansion
Deploy community measurement partners across the 191 under-sampled rural districts — prioritising the 31 critical-bracket towns this report names. Closes the single largest sampling gap in the current dataset.

TRACK 2
IPv6 Accountability
IPv6 family detectionis now live on every speed test (deployed 21 April 2026). Forthcoming: the first independent, ISP-disaggregated IPv6 adoption dataset for Pakistan, updated continuously.

TRACK 3
Quarterly Research Reports
Peer-reviewable longitudinal reports designed for regulatory, policy, and academic use — tracking ISP performance, throttling patterns, and digital-divide trendlines over time.

TRACK 4
Open Data Portal & API
PublicAPI andinteractive dashboard at pakspeed.com/data. Full dataset available to researchers, journalists, and civil society under CC-BY-4.0.

TRACK 5
Research Capability Cohort
A trainingcohortof20–30 Pakistani journalists, civil society researchers, and university analysts — building independent capability to interrogate the open dataset without PakSpeed as an intermediary.

TRACK 6
Regional Replication
Open-source architecture designed for replication. Interest welcomed from civil society technologists across South and Southeast Asia who want to stand up equivalent platforms in their own economies.

09 · METHODOLOGY & TRANSPARENCY

How we collect, what we publish.

DATA COLLECTION

Every test is run through LibreSpeed on a PakSpeed-operated Oracle VPS. Tests are voluntary, anonymous, and stored in a single Cloudflare D1 database with no PII beyond ISP name (from ASN lookup), city (from IP geolocation), and bandwidth measurements. Raw IPs are never stored. Users can toggle between Urdu and English; both locales share the same backend.

AI LAYER

Three AI-powered systems operate on top of the raw data: (1) a throttling detector that compares each test to a rolling ISP/city/hour baseline, (2) an Urdu/English review NLP pipeline that categorizes citizen feedback, and (3) a weekly report generator that produces bilingual accountability summaries every Sunday. All AI runs on Cloudflare Workers AI. All outputs are stored and auditable.

LIMITATIONS

1. Sampling is opt-in. PakSpeed data over-represents users motivated to measure their own speeds (often: people facing problems). Absolute averages should be read as ceilings on typical performance, not population means.

2. ISP names come from ASN lookup. Corporate naming is inconsistent (e.g. PMCL LDI IP Transit = Jazz). We normalize known aliases but some fragmentation remains.

3. Test volume is uneven. Cities with fewer than 3 tests are excluded from rankings. Rural sample sizes are growing but small — a second milestone at 100K will resolve most remaining uncertainty.

REPRODUCIBILITY

Every chart, table, and number in this report is derived from SQL queries against a single Cloudflare D1 database (`pakspeed-db`). Raw aggregate exports are available to researchers on request. The full worker source code is open-source at **github.com/urduaiorg/pakspeed**.

PARTNERS WE'RE LOOKING FOR

Funders investing in digital equityand internet-governance infrastructure. Universities and research institutions interested in longitudinal connectivity analysis. Journalists and policy organisations who can use the open dataset to hold providers accountable. Civil society technologists in neighbouring economies who want to replicate the model. Contact: **talk@walipak.com**

ABOUT PAKSPEED

PakSpeed is Pakistan's first community-owned internet speed testing and accountability platform. Bilingual (Urdu-first), fully open-source, citizen-funded. A project of **WALI — Wang Lab of Innovation** in partnership with **Urdu AI**.

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