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Towards meaningful connectivity in South African townships: evidence from Motherwell

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Executive Summary

South Africa has a relatively high degree of internet network access. Nationally, 86% of households have some form of internet access, predominantly through mobile devices, while 21% have fixed internet at home. However, blanket network coverage rates don't show whether households can use the internet regularly and affordably.

Research ICT Africa found that almost half of internet users would use the internet more if data were cheaper (Partridge et al. 2024). Measures of **meaningful connectivity** need to capture whether people can use the internet regularly, safely, productively and affordably.

This study examines affordability and patterns of use among households that are already online. It compares a sample of a thousand connected households across neighbouring parts of Motherwell, an urban township outside Gqeberha in the Eastern Cape. At the time of the survey, one area had widespread access to low-cost, uncapped fibre, while rollout in the other was limited. Fibre-area respondents report a different mix of connectivity spending, lower reliance on large mobile-data bundles and more use at home and at night on weekdays. Mobile data remains important in both areas.

The comparison follows fibertime's staged network rollout in Motherwell. R5 buys one day of uncapped internet for a device, and fibertime installs routers in all electrified homes within its coverage area. In our study, households in the *fibre area* had widespread access to the service at the time of being surveyed. In the *non-fibre area*, rollout was planned for later or has only just begun. The label does not mean that no households in this area have fibre or Wi-Fi. Because anyone can connect to the fibertime network through a nearby router, households are grouped by area-level availability rather than whether their own dwelling has a router.

Trained interviewers surveyed households from July to August 2025. Sampled respondents used the internet at home and had a say in the household's connectivity budget. Our estimates use calibration weights and, where appropriate, comparisons account for observed social and economic differences between the areas.

Four findings emerge.

Households in the fibre area allocate their connectivity spending differently, but continue to buy mobile data. They report less spending on mobile data and more on fibre or Wi-Fi. Median total connectivity spend in the fibre area is in the R201 to R300 bracket, compared to the R151 to R200 bracket in the non-fibre area.

Reliance on large mobile-data bundles is lower in the fibre area. Close to 30% of households in the non-fibre area report spending R201 or more a month on mobile data, compared with only 11% in the fibre area. Correspondingly, monthly mobile data volumes of 2 to 5 GB are reported by 41% in the non-fibre area, compared with 24.8% in the fibre area.

Respondents report different places and times of use. Home is a usual place of internet access for 99.2% of fibre-area respondents, compared to 94.5% of non-fibre-area respondents. Weekday night-time use is also more common in the fibre area, at 64.5% compared with 52.8%. Non-fibre-area respondents more often report using workplaces, malls and other locations outside the home.

Online activities, perceived benefits and concerns also differ between the areas. Communication is the most common internet use in both areas. After accounting for observed differences, fibre-area respondents more often report online shopping, streaming radio, sports betting and running a business. Non-fibre-area respondents more often report personal email, transport services and several communication activities. Fibre-area respondents also more often mention not having to travel and avoiding trips to the bank as advantages of the internet. Cost is reported as the dominant disadvantage of the internet in the non-fibre area, while respondents in the fibre area are more concerned about its impact on productivity, school results, cybercrime and online gambling.

The survey compares two places at one point in time. Unobserved differences may remain, so the findings cannot be attributed to fibre alone. The study excludes households that do not use the internet at home and cannot show whether fibre brings households online for the first time.

For policymakers, coverage and household-access measures need to be complemented by evidence on affordability, regularity, devices, places of access and online activities (van der Spuy, Gillwald, and Fourie 2026). Our next note will test whether these differences causally affected labour market outcomes in Motherwell.

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Introduction

South Africa's connectivity statistics show where networks are available and whether households can access the internet. They reveal less about the regularity and affordability of use. A user who must ration data faces a different set of opportunities from one with affordable, uncapped access at home, even when both are recorded as connected.

The 2025 General Household Survey reports that 86% of households had some form of internet access, predominantly through mobile devices, and 21% had fixed internet at home (Statistics South Africa 2026). However, Research ICT Africa's 2022 After Access survey found that about two-thirds of internet users faced constraints on their use; 47% said they would use the internet more if data were cheaper (Partridge et al. 2024).

What we mean by meaningful connectivity

The ITU defines meaningful connectivity as a level of connectivity that allows users to have a safe, satisfying, enriching and productive online experience at an affordable cost (International Telecommunication Union 2022). It rests on several conditions:

- **Affordability:** can the household afford intensive internet use?
- **Quality and availability:** how regularly can people connect, and from where?
- **Suitable devices:** does the household have equipment capable of more than basic messaging?
- **Digital skills and security:** can people use the internet safely and effectively?

This note reports on affordability, regularity, devices, places and times of use, activities and perceived benefits and disadvantages. It does not measure connection quality, digital skills or online security directly.

Having access to a network does not mean a household can afford to use it regularly.¹

Our research on digital inclusion, published in September 2026, argues that connectivity statistics need to be supplemented with evidence on how people

¹The digital-inequality literature distinguishes three related divides: access; skills and patterns of use among people who are online; and the benefits or outcomes derived from internet use (Scheerder, van Deursen, and van Dijk 2017). This note examines how affordability is associated with patterns and intensity of use among households that are already online. It does not measure digital skills or establish downstream outcomes.

use the internet, the constraints they face and what they gain from it (van der Spuy, Gillwald, and Fourie 2026). In Motherwell, we examine differences in use among connected households with different access to affordable, uncapped internet. All four of South Africa's largest mobile networks cover the study area (GSMA 2026), and more than 90% of surveyed respondents have access to a smartphone. However, at the time of the study, cheap, uncapped connectivity was widely available in some parts of the area and not yet in neighbouring areas.

This note asks how access to cheap, uncapped connectivity is associated with where and when connected households go online, how they allocate connectivity spending and what they do online. It draws on a household survey conducted in 2025. The comparisons are descriptive and prepare the ground for later work on well-being and employment outcomes.

Studying meaningful connectivity in Motherwell

THE RESEARCH SETTING

The study covers the Motherwell area, an urban township setting in the Eastern Cape's Nelson Mandela Bay Metropolitan Municipality, roughly 20 km north of Gqeberha, formerly Port Elizabeth.

The sampled neighbourhoods are densely residential and lie alongside formal employers, industrial sites and transport corridors. Coega Port and the Coega Special Economic Zone are to the east, and a major motor-vehicle distribution facility sits on the edge of the study area. Administrative tax data for the wider area show that public administration and defence, consisting mostly of general government, accounts for 45% of reported formal employment. The remaining employment base spans manufacturing, education, personal services, warehousing and transport.²

²Figures are drawn from the National Treasury Spatial Tax Panel for the 2024 tax year, the last full tax year before fibertime's Motherwell rollout began (Nell and Visagie 2025). They describe the wider economy around the sample rather than where individual respondents work, and they exclude informal employment and business activity.

THE FIBRE ROLLOUT AND THE COMPARISON

The comparison follows the staged rollout of fibertime, the fibre network provider in the study. With fibertime, R5 buys one day of uncapped internet for one device, and the company installs routers in electrified homes without an upfront charge. Users buy time online rather than data bundles, so additional use during the paid period carries no per-megabyte charge.³

The rollout began in September 2024, and network nodes were activated in stages through the first half of 2025. The *fibre area* refers to the parts of the study area with established, widespread access to fibertime by the survey. The *non-fibre area* refers to neighbouring parts that fibertime had earmarked for later coverage, or where rollout was only beginning when households were interviewed. The label does not imply that no household in this area had fibre or Wi-Fi access, but (as we show later) fibre access in the area was marginal. Annexure Figure 4 summarises nearby network availability at the time of interview.

fibertime's prior selection of the non-fibre area makes it a more relevant comparator than an area the provider did not plan to enter. This improves the comparison, although rollout timing was not random, and differences between the areas remain.

Both areas have full mobile coverage (GSMA 2026). The relevant contrast is the effective cost of intensive internet use: the fibre area had widespread access to low-cost, uncapped connectivity, while households in the non-fibre area generally depended on mobile data or other paid connections.

Anyone can join fibertime's shared network via a nearby router, even if their own household does not have a router installed. We therefore classify sampled connected households by area-level network availability and report home connection as a characteristic of each area rather than using it to define the groups.

³Service and pricing information is from fibertime.com (accessed 12 August 2026).

THE SURVEY AND THE SAMPLE

Trained interviewers visited sampled dwellings from 4 July to 27 August 2025. We sampled 500 households in the fibre area and 500 in the non-fibre area, with area recorded at the point of sampling.⁴ The sample was stratified by dwelling type, and calibration weights align the realised sample with an external benchmark for Motherwell's dwelling composition (see Annexure).

The survey recorded how households connect to the internet, what they spend, what they do online and their demographic characteristics. Questions on emotional wellbeing, employment and job search are reserved for later research notes.

Respondents had to live in the sampled dwelling, use the internet at home, have access to an internet-capable device and decide, alone or jointly, how the household spends on data and connectivity. The results therefore describe connected households in the two study areas, based on interviews with the people who make or share decisions about connectivity spending.

Households without home internet use were screened out. The comparisons show how connected households go online. They cannot estimate the gap between coverage and use, explain why some households remain offline or show whether fibre brings households online for the first time.

The two areas also differ in their social and economic composition. Employment is more common in the fibre area, at 54% of respondents against 48% in the non-fibre area, and business ownership is somewhat more common at 9% against 6%. The unemployment difference is larger: 20% of respondents in the non-fibre area are unemployed job seekers, against 11% in the fibre area. The non-fibre area has a larger share of low-income households and more recipients of the Social Relief of Distress grant, while the fibre area has a larger share of households with monthly income above R5 000. Annexure Tables 1 and 2 report the full comparisons. We report

⁴Two records for the same household contained conflicting information. Because the correct record could not be identified, both were excluded, leaving an analysis sample of 998 households.

composition-adjusted differences alongside the headline shares to account for these observed differences between the areas.

How to read this note

- **Every comparison places the two areas side by side.** Unless stated otherwise, shares and averages use the calibration weights described in the Annexure. Selected results also account for observed differences in age, sex, education, dwelling type, household income, work status, business ownership and household composition.
- **The comparisons are descriptive.** The two areas may differ for reasons beyond fibre availability. Subsequent work in this series will examine causal effects.
- **The figures are self-reported and cross-sectional.** They show how households described their use and spending at one point in time.
- **The activity and perceived-value comparisons are exploratory.** Row-level p-values are not adjusted for the number of comparisons made. Some apparently significant differences may therefore arise by chance.
- **The base varies by question.** Questions about mobile data went to those who use mobile data, questions about fibre and Wi-Fi to those who use it, and questions about other household members only to households with more than one person. The base is stated in each Annexure table.

How, where and when do households connect?

More than 90% of respondents in each area have access to a smartphone, but households combine connection types differently.⁵ Access to laptops, desktop computers and smart TVs is similar across the areas (Annexure Table 4).

Most households in the fibre area report using fibertime, with about one in ten using another provider. Most dwellings in the non-fibre area reported no fibre at home at the time of interview, while roughly a fifth reported a home

⁵The survey asked which devices the respondent has access to rather than which devices they personally own, so these shares should be read as device access rather than ownership. A *feature phone* is a non-smartphone that includes additional functions such as a camera, media player, basic apps or limited internet access, but does not run a full smartphone operating system.

fibre or Wi-Fi connection. Free-text responses indicate that these are mainly plug-and-play fixed-wireless products, such as Rain or MTN home routers (see Annexure Table 3).

The survey also asked how often households use mobile data and fibre or Wi-Fi. Fibre-area households report more regular fibre or Wi-Fi use, while frequent mobile-data use remains common in both areas. In the non-fibre area, the most common pattern is to use mobile data all the time and to rarely use fibre or Wi-Fi.

The areas also differ in where respondents go online. Almost all include their own home among their usual places of access, but the share is larger in the fibre area. Respondents in the non-fibre area more often report using the internet at work, malls or shopping centres. Annexure Table 5 gives the full results.

Internet use during working hours is common in both areas. The clearest timing difference occurs at night on weekdays, when internet use is more common among fibre-area respondents (Annexure Table 6). The survey does not record what respondents do online at different times, but this pattern is consistent with more regular home access outside working hours.

Do households with fibre use less mobile data?

The questionnaire recorded monthly data volumes and spending in brackets. We therefore compare distributions and do not treat responses as exact amounts. Households can report spending on both mobile data and fibre or Wi-Fi.

In the fibre area, 86% of respondents report spending on both mobile data and fibre or Wi-Fi (Figure 1). Mobile-only spending is most common in the non-fibre area, although 39% still report both. This reflects the fixed-wireless products already present outside the primary coverage area.

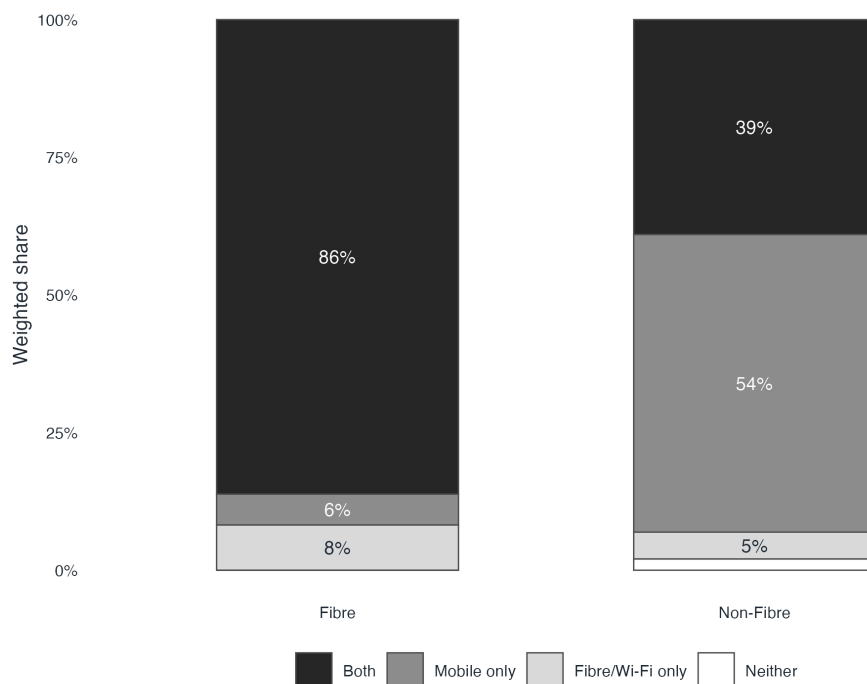


Figure 1: Joint mobile and fibre/Wi-Fi spending profile.

Respondents in the non-fibre area report larger mobile-data bundles. Some 41% report monthly volumes of 2 to 5 GB, compared with 24.8% in the fibre area. At the upper end of the distribution, 9.8% report more than 15 GB a month, compared with 2.6% in the fibre area. Fibre-area respondents more often report volumes up to 500 MB, uncapped data or an unknown volume.⁶ The distribution is consistent with lower reliance on large mobile-data bundles in the fibre area. Annexure Table 7 reports the full distribution.

The largest spending difference occurs at the top of the distribution. Close to 30% of respondents in the non-fibre area report spending R201 or more a month on mobile data, compared with 11% in the fibre area. More than half of non-fibre respondents report no fibre or Wi-Fi spend, compared with only about 6% in the fibre area, where spending is concentrated in the R101

⁶Some respondents may have understood *uncapped* mobile volume as referring to fibre or Wi-Fi use. We therefore treat the volume figures as evidence on the direction of mobile-data reliance rather than as a precise measure of quantity.

to R200 bracket. Annexure Table 8 reports both distributions, including the composition-adjusted comparisons.

Median spending brackets are lower for mobile data and higher for fibre or Wi-Fi in the fibre area. We assign each spending bracket its midpoint to combine mobile and fibre spending. The median total falls in the R201 to R300 bracket in the fibre area and the R151 to R200 bracket in the non-fibre area (Annexure Table 9). The continued mobile-data purchases are consistent with a need for connectivity away from home.

What people do online and what they gain

We also compare what respondents do online and the benefits and disadvantages they report. These differences may reflect both connectivity and household characteristics, so we report adjusted differences alongside the weighted shares.

Figure 2 combines the prevalence of each activity with the composition-adjusted difference between the areas. The dots show the share of respondents in each area who report using the internet for a specific activity; the right-hand labels show the fibre-area difference in percentage points after adjustment for observed characteristics.

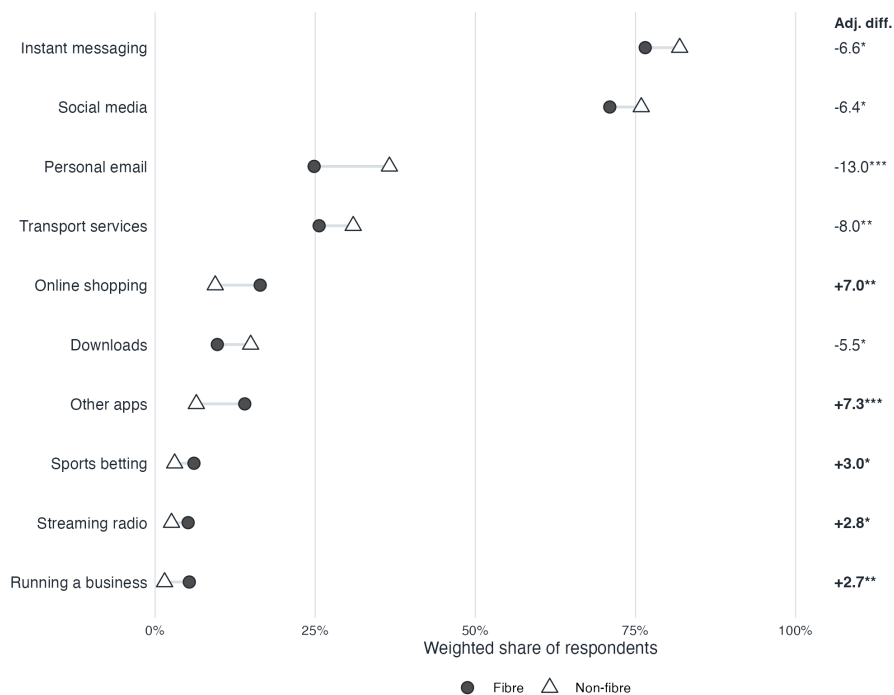


Figure 2: Common online activities and adjusted area differences.

Note: Filled circles show the fibre area and open triangles show the non-fibre area. Lines connect the unadjusted weighted shares; right-hand labels show composition-adjusted fibre-area differences in percentage points. Stars mark conventional significance levels. The figure shows reported activities with composition-adjusted area differences that are statistically significant at the 5% level. It should not be read as a complete ranking of all internet uses.

Communication is the most common use in both areas. Instant messaging and social media are among the activities reported most often.

The mix of other activities differs. After adjusting for observed differences between the areas, online shopping, other apps, streaming radio, sports betting and running a business are more common in the fibre area. Personal email, transport services, social media, instant messaging and downloads are more common in the non-fibre area.

Respondents also differ in the benefits and disadvantages they associate with internet access (Figure 3).

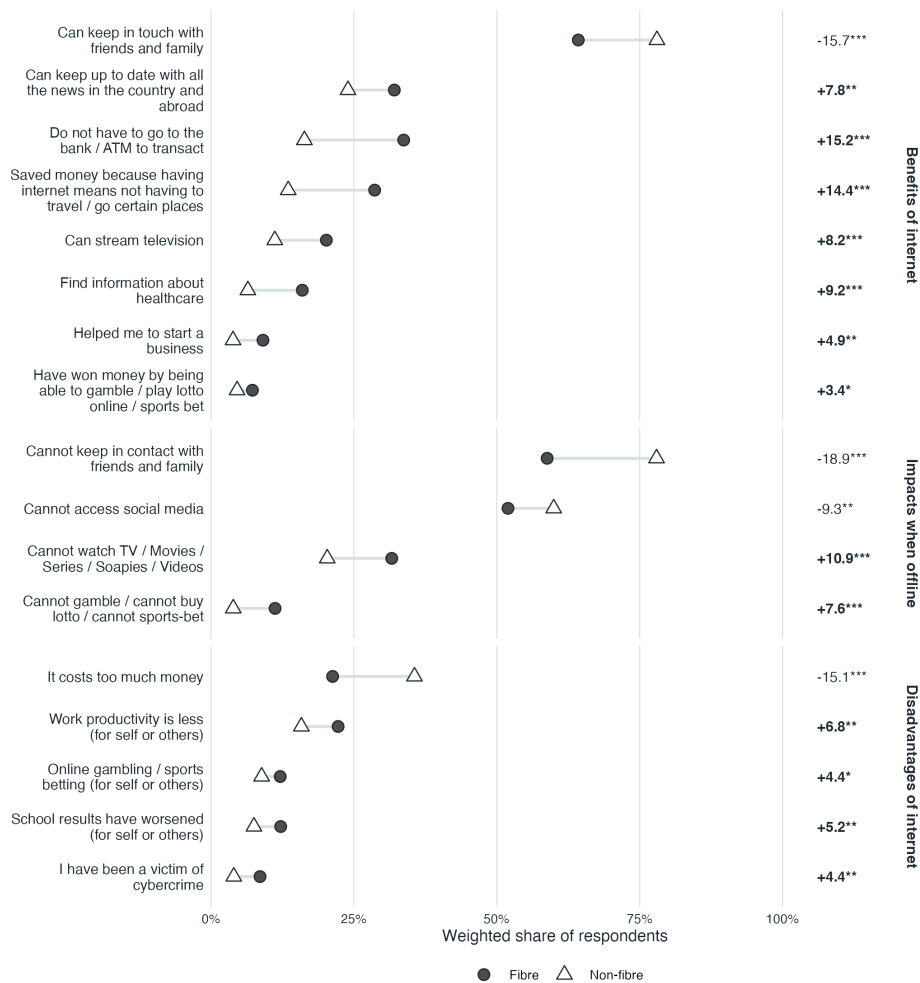


Figure 3: Perceived benefits, impacts and disadvantages, with adjusted area differences.

Note: Filled circles show the fibre area and open triangles show the non-fibre area. Lines connect the unadjusted weighted shares; right-hand labels show composition-adjusted fibre-area differences in percentage points. Stars mark conventional significance levels. The figure shows items whose composition-adjusted area differences are statistically significant at the 5% level and at least 2.5 percentage points in magnitude; generic “Other” responses are omitted. It should not be read as a complete ranking of perceived benefits, impacts or disadvantages.

Fibre-area respondents more often report benefits that reduce the cost or effort of transactions, especially avoiding trips to a bank or ATM. They also more often mention healthcare information, streaming television, news, starting a business and gambling or betting.

Non-fibre-area respondents more often describe social benefits, such as keeping in touch with friends and family. They also more often report that being offline prevents them from maintaining these connections or accessing social media.

The largest differences concern reported disadvantages. Cost dominates in the non-fibre area. Fibre-area respondents more often mention lower productivity, worse school results, cybercrime and online gambling. These patterns suggest that online safety and digital wellbeing deserve policy attention alongside the price of data.

Implications for providers and for policy

Mobile data remains important when cheap fixed access is available.

Fibre-area respondents continue to buy mobile data, but fewer report large bundles. Mobile connectivity remains useful away from home.

Respondents' concerns also widen the policy agenda. Cost is reported more often in the non-fibre area, while exposure to potential harms of being online is reported more often in the fibre area. These descriptive differences highlight that digital wellbeing should be prioritised alongside other conditions for meaningful connectivity.

The Motherwell comparison shows why connectivity should be measured by more than network coverage or household access. Households recorded as connected can face different costs, rely on different connection types and use the internet in different places, at different times and for different purposes (van der Spuy, Gillwald, and Fourie 2026). Affordable, uncapped home access may allow a given connectivity budget to support more intensive use, even when households continue to buy mobile data. Demand-side evidence is therefore essential for understanding whether digital infrastructure provides meaningful connectivity in practice.

References

- Fourie, Helanya, and Debra Shepherd. 2025a. "The Impact of Fibre Broadband on Online Behaviour in a South African Township." BER Research Note. Stellenbosch, South Africa: Bureau for Economic Research (BER), Stellenbosch University.
- . 2025b. "Fibre Connectivity and Economic Participation in a South African Township." BER Research Note. Stellenbosch, South Africa: Bureau for Economic Research (BER), Stellenbosch University.
- GSMA. 2026. "Mobile Network Coverage Maps: South Africa." <https://www.gsma.com/coverage/#551>.
- International Telecommunication Union. 2022. "Achieving Universal and Meaningful Digital Connectivity: Setting a Baseline and Targets for 2030." Geneva: International Telecommunication Union. https://www.itu.int/itu-d/meetings/statistics/wp-content/uploads/sites/8/2022/04/UniversalMeaningfulDigitalConnectivityTargets2030_BackgroundPaper.pdf.
- Nell, Andrew, and Justin Visagie. 2025. "Spatial Tax Panel 2014–2025 [Dataset], Version 6." National Treasury – Cities Support Programme and Human Sciences Research Council [producer and distributor].
- Partridge, Andrew, Sandra Makumbirofa, Mpho Moyo, Nawal Omar, and Abdiaziz Ahmed. 2024. "After Access 2022–2023, Digital Africa Post the Pandemic: South Africa Report." Cape Town: Research ICT Africa. https://researchictafrica.net/wp-content/uploads/2024/05/AfterAccess_South-Africa-Policy-Paper_AP.pdf.
- Scheerder, Anique, Alexander van Deursen, and Jan van Dijk. 2017. "Determinants of Internet Skills, Uses and Outcomes: A Systematic Review of the Second- and Third-Level Digital Divide." *Telematics and Informatics* 34 (8): 1607–24. <https://doi.org/10.1016/j.tele.2017.07.007>.
- Statistics South Africa. 2026. "General Household Survey 2025." PO318. Pretoria: Statistics South Africa. <https://www.statssa.gov.za/publications/PO318/PO3182025.pdf>.
- van der Spuy, Anri, Alison Gillwald, and Helanya Fourie. 2026. "Measuring what matters: Digital inclusion and South Africa's growth and development agenda." BER Research Note. September. Bureau for Economic Research.

Annexure

WEIGHTING STRATEGY

The main descriptive results use calibration weights because the samples differ in composition. The weights improve comparability on selected observed characteristics but do not create causal estimates.

Weighting proceeds in two steps. First, both areas are standardised to an external benchmark for Motherwell's dwelling composition: 49% formal dwellings, 26% informal dwellings and 25% backyard dwellings (GeoTerra Imaging). Second, the non-fibre area is reweighted to match the fibre area's distribution of respondent age, sex and education. The final weights are normalised within each area. Household income and device access are excluded from the calibration because they may be related to connectivity and internet use.

There are no missing or non-positive final weights. The effective sample size is about 459 out of 500 households in the fibre area and 421 out of 498 in the non-fibre area. The weights balance the selected margins rather than every possible combination of characteristics.

COMPOSITION-ADJUSTED COMPARISONS

Several results show differences between the areas after adjustment for observed characteristics. We use linear probability models for yes-or-no outcomes, such as online shopping or a reported disadvantage. The fibre-area coefficient is reported as an adjusted percentage-point difference.

The models adjust for respondent age, sex, education, dwelling type, household income, current work status, business ownership, household size and the household employment-share category. They use the calibration weights described above. The variance estimates incorporate these weights and treat sampled respondents as independent observations; the survey design used for these estimates does not include explicit stratification or spatial clustering variables.

The adjusted results remain descriptive. They show whether the areas differ after accounting for selected observed characteristics, but unobserved differences may remain. The row-level p-values are not adjusted for the number of comparisons, so the activity and perceived-value results should be read as exploratory. Overall distributional tests are Rao-Scott F-adjusted chi-squared tests; row-specific tests are design-weighted Wald tests.

THE TWO AREAS COMPARED

Table 1: Selected socio-demographic characteristics, by survey area.

Characteristic	Fibre (%)	Non-fibre (%)	Diff. (pp)
<i>Labour-market status</i>			
Employed	54.0	48.1	+5.9
Business owner	8.9	6.2	+2.7
Unemployed job seeker	11.0	20.2	-9.2
Not economically active	26.1	25.5	+0.6
<i>Monthly household income</i>			
No or very low household income	26.4	32.7	-6.3
R3 001-R5 000	18.9	22.7	-3.7
R5 001-R10 000	40.0	32.2	+7.8
More than R10 000	14.7	12.5	+2.2
<i>Grant receipt</i>			
Any household grant recipient	37.3	40.3	-3.1

Note: Entries are weighted shares of sampled respondents in each area. Employed includes wage earners, respondents with recent paid activity, and respondents with a new job that has not yet started. Business owner includes business-owner-only respondents and those who are both wage earners and business owners. Unemployed job seekers are not working and looking for work; not economically active respondents are not working and not looking for work. Grant receipt means that the respondent or at least one other household member receives any social grant. Single-person households are treated as having no other household grant recipient. The primary weights align the areas on dwelling type, age, sex and education, but not on income or labour-market status. Rao-Scott tests reject equality of the labour-market-status distribution (0.001) and income distribution (0.035) across the two

areas. A row-specific design-weighted Wald test does not reject equality of the household grant-receipt share (0.349).

Table 2: Respondent or household-member social grant receipt, by survey area.

Grant type	Fibre (%)	Non-fibre (%)	Diff. (pp)	p-value
Child support grant	25.5	28.5	-3.0	0.304
Disability grant	3.1	1.2	+1.9	0.065
Old age grant	6.9	5.4	+1.6	0.310
Foster child grant	1.3	0.4	+0.9	0.138
Care dependency grant	0.2	0.0	+0.2	0.317
Social Relief of Distress grant	9.1	13.6	-4.5	0.034
Other grant	0.3	0.0	+0.3	0.317

Note: Entries are weighted shares of sampled respondents in each area. A grant type is counted when either the respondent receives that grant or at least one other household member is reported to receive it. Single-person households are treated as having no other household grant recipient. The care-dependency row is based on other household members only, because the cleaned respondent-level grant fields do not contain a care-dependency indicator. P-values are from row-specific design-weighted Wald tests.

HOW HOUSEHOLDS CONNECT

Table 3: Home fibre/Wi-Fi provider, by survey area (weighted)

Home fibre/Wi-Fi provider	Fibre share (%)	Non-fibre share (%)	Difference (pp)
fibertime	78.2	1.7	+76.5
Other operator	10.1	17.2	-7.2
No fibre in home	11.8	81.1	-69.3

Note: Entries are weighted shares of all sampled respondents in each area. Respondents who report never using fibre/Wi-Fi at home were not asked whether fibre is installed and are classified as “No fibre in home”; in the fibre area, some of these homes may have an installed but unused router, while some homes on the periphery of the coverage area may not have received one. “Other operator” includes reported non-fibre home connections, mostly plug-and-play fixed-wireless products.

Table 4: Device access, by survey area.

Device	Fibre (%)	Non-fibre (%)	Difference (pp)	p-value
Basic phone	6.6	5.8	+0.8	0.654
Feature phone	15.5	8.2	+7.3	0.001
Smartphone	90.9	92.7	-1.9	0.323
Tablet	9.1	4.5	+4.6	0.007
Laptop	16.4	16.2	+0.2	0.926
Desktop computer	1.0	1.5	-0.4	0.526
Smart TV	27.0	27.3	-0.3	0.929

Note: Entries are weighted shares of sampled respondents in each area. P-values are from row-specific design-weighted Wald tests.

Table 5: Usual places of internet access, by survey area (weighted)

Usual access location	Fibre share (%)	Non-fibre share (%)	Difference (pp)	p-value
Own home	99.2	94.5	+4.7	<0.001
Someone else's home	22.7	23.6	-0.9	0.756
Work	16.0	26.2	-10.1	<0.001
Mall or shopping centre	18.0	25.9	-7.9	0.005
Other usual location	6.0	7.3	-1.3	0.422

Note: Entries are weighted shares of all sampled respondents in each area; shares can sum to more than 100% because respondents could select more than one location. Other usual location combines school, college or university; local community centre; church; and other locations. P-values are from row-specific design-weighted Wald tests.

Table 6: Usual times of internet access, by survey area (weighted)

Usual time category	Fibre share (%)	Non-fibre share (%)	Difference (pp)	p-value
<i>Weekday</i>				
At night	64.5	52.8	+11.7	<0.001
Work hours	78.1	79.5	-1.3	0.638
Before/after work	75.0	75.0	-0.0	0.994
<i>Weekend</i>				
At night	51.1	46.4	+4.7	0.166
Work hours	86.3	83.1	+3.2	0.185
Before/after work	68.4	70.1	-1.7	0.574

Note: Entries are weighted shares of all sampled respondents in each area. At night covers 21:00 to 05:00; work hours covers 09:00 to 17:00; before/after work covers 05:00 to 09:00 and 17:00 to 21:00. P-values are from row-specific design-weighted Wald tests.

DATA VOLUMES AND SPENDING

Table 7: Monthly mobile-data volume distribution among all respondents.

Volume bracket	Fibre share (%)	Non-fibre share (%)	Diff. (pp)	Adj. diff. (pp)	Adj. p-value
No reported volume	8.2	6.9	+1.3	+0.8	0.630
Up to 500 MB	16.9	9.7	+7.2	+7.8	< 0.001
501 MB-1 GB	13.6	12.6	+1.0	+1.5	0.477
2-5 GB	24.8	41.0	-16.2	-17.0	< 0.001
6-15 GB	7.7	10.4	-2.7	-2.7	0.170
More than 15 GB	2.6	9.8	-7.2	-7.2	< 0.001
Uncapped	13.2	5.5	+7.7	+7.7	< 0.001
Don't know	12.9	4.0	+8.9	+9.1	< 0.001

Note: Rows are weighted shares of sampled respondents in each area. No reported volume means that the respondent has no non-missing mobile-volume bracket; in the cleaned data this corresponds to respondents who report never using mobile data. Adjusted differences use the like-for-like comparison described above. The unadjusted Rao-Scott test of the full collapsed distribution is statistically significant.

Table 8: Collapsed spending distributions among all respondents.

Spend bracket	Fibre share (%)	Non-fibre share (%)	Diff. (pp)	Adj. diff. (pp)	Adj. p-value
<i>Mobile data</i>					
No reported spend	8.2	6.9	+1.3	+0.8	0.630
R0-R20	5.9	4.9	+1.0	+1.6	0.289
R21-R50	16.9	9.8	+7.1	+7.7	< 0.001
R51-R100	24.3	20.0	+4.3	+5.0	0.073
R101-R200	33.6	28.6	+5.0	+3.7	0.238
R201+	11.0	29.7	-18.7	-18.8	< 0.001
<i>Fibre/Wi-Fi</i>					
No reported spend	5.6	56.1	-50.5	-50.2	< 0.001
R0-R20	11.0	11.9	-0.9	-2.3	0.285
R21-R50	8.0	3.3	+4.7	+5.2	< 0.001
R51-R100	12.1	5.5	+6.5	+7.3	< 0.001
R101-R200	40.3	5.2	+35.1	+36.0	< 0.001
R201+	23.0	17.9	+5.0	+4.0	0.141

Note: Rows are weighted shares of sampled respondents in each area. No reported spend means that the respondent has no non-missing spend bracket for that connection type. Adjusted differences use the like-for-like comparison described above. The unadjusted Rao-Scott tests of the full collapsed distributions are statistically significant for both mobile spend and fibre/Wi-Fi spend.

Table 9: Median midpoint-implied monthly connectivity spend bracket.

Component	Fibre median bracket	Non-fibre median bracket
Mobile data	R81-R100	R101-R150
Fibre/Wi-Fi	R101-R150	R0 (no reported spend)
Total connectivity	R201-R300	R151-R200

Note: Missing spend for a connection type is assigned zero. A median shown as “R0 (no reported spend)” means that at least half of respondents in that area report no spend on that connection type.

NETWORK AVAILABILITY AT DATE OF INTERVIEW

Households were interviewed at different stages of the rollout. We approximate local availability as the number of days between the activation of the nearest network node and the interview, set to zero if that node was not yet active. Figure 4 shows that the fibre area is mostly in the longer-duration categories, while most non-fibre-area dwellings are in the “nearest node not active” category.

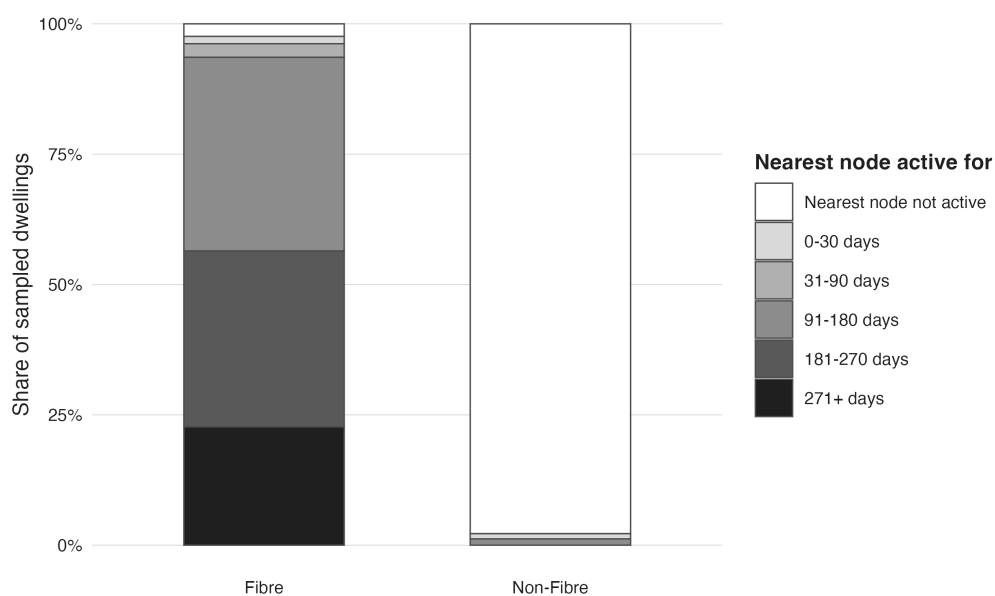


Figure 4: fibertime access duration, by survey area.

Note: Access duration is approximated from the activation date of the nearest network node. It measures local availability, not the date on which a household connected to the network.