

# Ghana Infrastructure Report Card 2026

Roads • Electric Power • Potable Water • Railway • Aviation  
• Telecommunications • Health • Education

Overall Score:

**2.83** / 5.00 (57%)

**Grade D3**



# ACKNOWLEDGEMENT

A publication of this kind carries many names behind it, most of them invisible on the cover page. The Ghana Institution of Engineering acknowledges with genuine appreciation the vision and persistence of our current and past Presidents and Council Members who believed this Report Card was worth doing even when the timing was difficult. Our Technical, Advisory, Review, and Public Accountability Committee members contributed their expertise freely and their criticism honestly, both were needed. We are grateful to colleagues in the Ministry of Works, Housing and Water Resources; Ministry of Energy and Green Transition; Ministry of Roads and Highways; Ministry of Transport; Ministry of Health; Ministry of Education; and the Ministry of Communications and Digitalisation, who reviewed our sector fact sheets, corrected errors, and in some cases challenged our conclusions. That conversation made the Report stronger.

We owe a particular debt to the more than 900 Ghanaians across all sixteen regions who completed our survey. They are engineers and nurses, teachers and traders, students and public servants. They gave their time, shared their honest assessments, and in doing so gave this Report Card its legitimacy. Without them, these pages would be just our opinion. With them, they are evidence. The GHIE Secretariat, as always, held everything together in the background. We see you, and we are grateful.

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## FOREWORD

Most discussions about infrastructure sound like they belong in a conference room. Roads, power, water, railways, the language quickly becomes technical, and the moment it does, the conversation stops being about people. So let us be clear from the outset: this report is about people. It is about the trader in Tamale whose lorry breaks an axle every other week on a road that should have been overlaid four years ago. The student in Nkwanta who cannot charge her phone to study because the power goes off at nine every night. The mother in Kumasi who buys sachet water because the tap in her yard has not run in months. These are not edge cases. They are the ordinary experience of millions of Ghanaians, and they are the reason the Ghana Institution of Engineering publishes this Report Card.

In 2016, we published our first Infrastructure Report Card, assessing three sectors against a familiar A-to-F scale. We said at the time that the findings were a warning. This 2026 edition is the follow-up. It is broader in scope, covering eight sectors of the national infrastructure for the first time, and it is more searching in its questions. The picture it presents is uneven, there are areas where Ghana has made genuine, measurable progress, and there are areas where the problems identified a decade ago have deepened rather than been resolved. We leave the details to the pages that follow. What we say here is simply this: the warning we issued in 2016 was not heeded in full, and the cost of that is visible in the data.

We offer this report not as a critique of any single administration, but as a professional assessment that has been building over years of observation. Engineers see infrastructure differently from politicians. We see what has been deferred, what has been over-specified, what has been under-maintained, what has been built once and never touched again. We have a duty to report what we see. Ghana's economy, its environment, its public health, and the safety of its citizens depend on infrastructure that works. This Report Card is our contribution to ensuring that the people who make decisions about that infrastructure have the information they need to make better ones. We are not asking to be agreed with. We are asking to be read, and then acted upon.

**Ing. Ludwig Annang Hesse, F-GhIE**

President, Ghana Institution of Engineering (GhIE)

14th July 2026



## MESSAGE FROM THE PRESIDENT, GHANA INSTITUTE OF ENGINEERING



The Ghana Institution of Engineering exists to serve Ghana through the application of engineering knowledge, professional integrity, and evidence-based advocacy. The 2026 Ghana Infrastructure Report Card is one of the most important expressions of that commitment.

When we published our first Infrastructure Report Card in 2016, we made a promise to Ghanaians: that the engineering profession would provide an honest, independent, and technically rigorous account of the state of the nation's infrastructure, not as a political act, but as a professional duty. Ten years on, this 2026 edition honours that promise with greater depth and broader scope than ever before. For the first time, we assess eight sectors of the national infrastructure, from roads and bridges and railways, to health, education, and telecommunications, engaging over 900 respondents across all sixteen regions of Ghana.

The findings are sobering but not surprising to engineers who work within these systems every day. An aggregate score of 2.83 out of 5.0, Grade D3, tells us that Ghana's infrastructure is broadly in a poor to fair condition. Roads and Bridges have declined from D3 in 2016 to E1 in 2026, a trajectory that demands urgent reversal. Health and Railway both sit at E1. Education infrastructure is chronically underfunded. These are not failures of any single administration; they reflect decades of systemic underinvestment, weak maintenance culture, inadequate data systems, and governance gaps that have persisted across political cycles.

At the same time, the Report Card gives us reason for measured optimism. Aviation has achieved a C3, the only sector to reach the Good threshold, a direct result of sustained, targeted investment. Electric Power has improved from D2 to D1, with Operation and Maintenance reaching C3. Telecommunications demonstrates what is possible when a sector develops competitively with strong regulatory oversight. These are proof points that infrastructure grades can improve when the right conditions are created.

As the 53rd President of the GhIE, I have made the roads sector a focus of particular attention, as reflected in my Presidential Address of 19th February 2026, 'Do It Well, Do It Right: A Focus On Roads In Ghana.' The recommendations in that address, incorporated in full into Section 4.3 of this Report Card, speak directly to the governance, procurement, asset management, and safety reforms that the roads sector urgently requires. I commend them to government, parliament, and the engineering profession as a practical, actionable agenda for reversing the E1 grade.

The Ghana Institution of Engineering is committed to the principle of public accountability in infrastructure. We offer this Report Card not as criticism for its own sake, but as the profession's contribution to informed national decision-making. We stand ready to work with government, development partners, the private sector, and civil society to translate these findings into better roads, cleaner water, more reliable power, and stronger schools and hospitals for every Ghanaian.

**Ing Ludwig Annang Hesse, F-GhIE**

President, Ghana Institution of Engineering (GhIE)

14th July 2026

GHANA INSTITUTION OF ENGINEERING (GhIE)

## MESSAGE FROM THE CHAIR, PUBLIC ACCOUNTABILITY COMMITTEE



The Ghana Infrastructure Report Card 2026 is more than an engineering assessment, it is an instrument of public accountability. This is precisely why the Public Accountability Committee of the Ghana Institution of Engineering has championed its development and publication.

Accountability in infrastructure is not an abstract principle. It is the difference between a road that is built to specification and one that fails within two years of opening. It is the difference between a hospital that is equipped to treat patients and one that exists only on paper. It is the difference between a water system that delivers clean water and one that produces barely half of what the country demands. In each case, the gap between aspiration and reality has a cost, measured in lives, in economic productivity, in the daily hardship of ordinary Ghanaians. This Report Card puts a grade on that gap.

The eight sectors assessed in this 2026 edition reflect a deliberate choice to hold the full breadth of Ghana's infrastructure to public account, not just the roads and bridges and power lines that are most visible, but the schools where our children learn, the hospitals where our families seek care, the railways that should move our goods, and the digital networks that connect our economy. The overall grade of D3 (57%) across these eight sectors is a statement of fact, not a verdict. It tells us where we are, so that we can make clear-eyed decisions about where we must go.

The Public Accountability Committee is acutely conscious that Report Cards achieve nothing if they remain on shelves. The real measure of this document's value is what happens next, whether the grades in Table 4.1 are referenced in budget hearings, whether the recommendations in Section 4 are incorporated into sector development plans, whether the findings on funding trigger legislative action, and whether, at the next edition, we can report meaningful improvement.

To that end, I wish to highlight three accountability imperatives that emerge from this Report Card. First, every sector agency should publicly adopt the relevant GIRC 2026 recommendations and report annually on their implementation. Second, parliament's sector committees should use the sector grades as a standard reference in budget scrutiny, querying, in particular, why Funding scored E1 or E2 in four out of eight sectors. Third, Ghana's citizens, the media, and civil society should demand the transparency and performance data that will make future Report Cards more granular, more regional, and more powerful as tools of accountability.

The GhIE's Public Accountability Committee extends its appreciation to the over 900 respondents across all sixteen regions who gave their time and expertise to this survey, to the sector agencies that reviewed and validated the fact sheets, and to the members of the Technical, Advisory, and Review Committees whose diligence underpins the credibility of these findings. We dedicate this Report Card to the Ghanaian public, in whose service it is offered.

**Ing. Dr. Patrick Amoah Bekoe, F-GhIE**

Vice President and Co-Chair, Public Accountability Committee

Ghana Institution of Engineering (GhIE)

14th July 2026

## EXECUTIVE SUMMARY

The 2026 Ghana Infrastructure Report Card is the second edition of the GhIE's assessment of the country's built and social infrastructure. It assesses eight sectors against eight criteria, Capacity, Condition, Funding, Future Need, Operation and Maintenance, Public Safety, Resilience, and Innovation. All the sectors and criteria were considered as equally important. The survey drew on the judgements of more than 900 respondents across all sixteen regions of Ghana.

### Overall Finding

The aggregate score is 2.83 out of 5.0, Grade D3, or 57%. The same letter grade as 2016. But the aggregate conceals as much as it reveals, and readers are encouraged to look at the sector-by-sector breakdown that follows. Roads has declined from D3 to E1. Health enters the assessment at E1. Railway sits at E1. The table below lays out the full picture.

**Table ES.1: Summary of 2026 Sector Grades vs 2016 Baseline**

| Infrastructure Sector           | 2026 Score  | 2026 %     | 2026 Grade | 2016 Score  | 2016 %     | 2016 Grade | Trend                                                                                           |
|---------------------------------|-------------|------------|------------|-------------|------------|------------|-------------------------------------------------------------------------------------------------|
| <b>Aviation</b>                 | 3.57        | 71%        | <b>C3</b>  | N/A         | N/A        | N/A        | New sector; best performer; AIA Terminal 3 strong; regional airport funding gaps.               |
| <b>Electric Power</b>           | 3.29        | 66%        | <b>D1</b>  | 3.08        | 62%        | <b>D2</b>  | Capacity +45%; O&M improved to C3; ECG finances remain critical constraint.                     |
| <b>Telecommunications</b>       | 3.21        | 64%        | <b>D1</b>  | N/A         | N/A        | N/A        | New sector; mobile penetration 116%; M2M IoT +64% YoY; market concentration concern.            |
| <b>Potable Water</b>            | 2.67        | 53%        | <b>D3</b>  | 2.79        | 56%        | <b>D3</b>  | Coverage 88% but supply meets only 55% of demand; NRW at 50% for a decade.                      |
| <b>Education</b>                | 2.60        | 52%        | <b>D3</b>  | N/A         | N/A        | N/A        | New sector; Free SHS without matching infrastructure; US\$2B financing gap.                     |
| <b>Roads</b>                    | 2.48        | 50%        | <b>E1</b>  | 2.79        | 56%        | <b>D3</b>  | Grade declined D3 to E1; Funding E2; Public Safety E2; critical deterioration.                  |
| <b>Health</b>                   | 2.44        | 49%        | <b>E1</b>  | N/A         | N/A        | N/A        | New sector; 3.1% GDP health spend vs WHO 5% target; Agenda 111 delayed.                         |
| <b>Railway</b>                  | 2.40        | 48%        | <b>E1</b>  | N/A         | N/A        | N/A        | New sector; 149 of 947 km operational; Tema-Mpakadan commissioned Nov 2024 but non-operational. |
| <b>OVERALL CUMULATIVE SCORE</b> | <b>2.83</b> | <b>57%</b> | <b>D3</b>  | <b>2.89</b> | <b>58%</b> | <b>D3</b>  | Broadly stable; scope expanded from 3 to 8 sectors                                              |

## Key Findings by Sector

- Aviation (C3, 3.57 / 71%): The strongest performer. Accra International Airport (AIA) Terminal 3 and Tamale facilities in excellent condition. Funding gaps for medium-term capital projects remain.
- Electric Power (D1, 3.29 / 66%): Capacity +45% since 2016; access has grown to 88%; O&M improved to C3. Fuel supply insecurity and ECG financial fragility remain critical risks.
- Telecommunications (D1, 3.21 / 64%): Mobile voice penetration at 116%; IoT/M2M usage increased by +64% Year on Year. Market concentration and data affordability are key concerns.
- Potable Water (D3, 2.67 / 53%): Coverage has increased to 88% but supply meets only 55% of demand; Non-Revenue Water at approximately 50% for a decade; galamsey intensifying threats to source water.
- Education (D3, 2.60 / 52%): Free SHS drove enrolment without matching infrastructure. One-million desk deficit; education's share of spending fell from 17.9% to 10.9%.
- Roads (E1, 2.48 / 50%): Declined from D3 in 2016, the most alarming trend. Funding E2, Operation and Maintenance E1, Public Safety E2. Combined contractor arrears grew 11.3 times to GH¢17.75 billion.
- Health (E1, 2.44 / 49%): 3.1% GDP health spend vs WHO 5% target. Agenda 111 delayed. Catastrophic health expenditure rose from 1.53% to 11.45% of households.
- Railway (E1, 2.40 / 48%): Only 149 of 947 km operational. Tema-Mpakadan line commissioned November 2024 but remains non-operational as of the end of 2025.

## Cross-Cutting Issues

- Funding: Every sector returned D3 or worse. Roads, Health, Water, and Education reached E1 or E2.
- Maintenance culture is absent across most sectors; asset management systems urgently needed.
- Climate change and galamsey compound deterioration across roads, water, and health sectors.
- Private sector participation is insufficient to bridge public funding gaps in roads, water, health, education, and railway.

# 1.0 INTRODUCTION

## 1.1 The Ghana Institution of Engineering (GhIE)

The Ghana Institution of Engineering was officially founded in 1968 to succeed the Ghana Group of Professional Engineers, as an autonomous professional body with no political affiliation. GhIE is registered under the Professional Bodies Registration Decree 1973 (N.R.C.D 143) and is a licensed body under the Engineering Council Act 2011 (Act 819).

**Vision:** Promoting Engineering Excellence for Society.

**Mission:** To be leaders in the development of Science, Engineering and Technology at all levels of Society; to share knowledge and instil professionalism and ethical practice; and to establish structures that ensure a good corporate image of the Institution.

## 1.2 Ghana: A Global Outlook in 2026

According to the United Nations Department of Economic and Social Affairs (World Population Prospects 2024), Ghana is home to over 35 million people, adding close to 650,000 every year. More than six in ten of us now live in towns and cities, and that shift from rural to urban has happened faster than the infrastructure serving those cities has been able to keep up. In the decade covered by this Report Card, the country also went through a period of significant economic difficulty, a currency that lost much of its value, fiscal deficits that accumulated year after year, a sovereign debt restructuring that shook investor confidence, and an IMF programme that rightly demanded fiscal discipline but left little room for capital investment. These are the conditions in which Ghana's infrastructure has been managed, and they go some way toward explaining, though not excusing, the grades you will find in the pages that follow.

In the last Global Competitiveness Report published by the World Economic Forum (2019), Ghana ranked 111th out of 140 countries overall. On the infrastructure pillar, the country scored 46.6 out of 100, placing it in the bottom third of assessed economies. While the WEF discontinued this annual report after 2019, the underlying infrastructure conditions that drove that ranking have not materially improved, as the grades in this Report Card confirm.

## 1.3 Infrastructure Sectors Assessed in the 2026 Report Card

The decision to expand from three sectors to eight was deliberate. Infrastructure is not only roads and pipes. The classroom where a child learns, the hospital where a patient is treated, the network that carries a business's data, the rail line that could reduce the cost of moving goods from Kumasi to Takoradi, all of these are infrastructure, in the broadest and most important sense of the word. The five new sectors assessed in this edition, Railway, Aviation, Telecommunications, Health, and Education, will be part of every future Report Card. Their inclusion is not experimental. It is overdue.

### 1.3.1 Education

Education infrastructure encompasses all physical facilities that enable the delivery of basic and secondary education: classrooms, desks, laboratories, sanitation facilities, electricity connections, and digital tools. The Ministry of Education, the Ghana Education Service (GES), and the Ghana Education Trust Fund (GETFund) are the primary responsible institutions. The Free SHS policy, introduced in 2017, significantly expanded secondary enrolment. The adequacy, condition, and

equity of school infrastructure directly affect learning outcomes, child safety, and Ghana's ability to develop the human capital its economy requires.

### 1.3.2 Electric Power

The Ministry of Energy and Green Transition is responsible for policy formulation, sector coordination, and performance oversight of Ghana's electricity sector. The main agencies are the Volta River Authority (VRA), Bui Power Authority (BPA), Ghana Grid Company Limited (GRIDCo), Electricity Company of Ghana Limited (ECG), Northern Electricity Distribution Company Limited (NEDCo), Independent Power Producers (IPPs), and the Energy Commission. As of 2024, total installed capacity reached 5,492 MW, with thermal contributing approximately 69.2% and hydro 28.4%. The national electrification rate has grown from approximately 20% at the inception of the National Electrification Scheme in 1990 to 88% as of 2025.

### 1.3.3 Roads and Bridges

The Ministry of Roads and Highways (MRH) has the core mandate to develop, maintain, and manage Ghana's road infrastructure. The implementing agencies are the Ghana Highway Authority (GHA), the Department of Feeder Roads (DFR), and the Department of Urban Roads (DUR). The Ghana Road Fund Secretariat, which has now been transformed into the Road Maintenance Trust Fund (RMTF), has been responsible for the payment of road maintenance by the implementing agencies. Roads are the dominant mode of transport in Ghana, carrying approximately 95% to 98% of the country's passengers and freight combined, according to the Ministry of Roads and Highways sector programme. The network spans three categories: trunk roads (14,948 km), urban roads (28,480 km), and feeder roads (50,775 km), totaling 94,203 km. Only 27% of this network is paved.

### 1.3.4 Railway

The Ministry of Transport is responsible for Ghana's railway infrastructure, implemented through the Ghana Railway Development Authority (GRDA), established under the Railways Act 2008 (Act 779), and the Ghana Railway Company Limited (GRCL). Ghana's historic narrow-gauge railway network spans 947 km connecting Accra, Kumasi, and Takoradi. Of this, only 149 km is currently operational. The 97.7 km Tema-Mpakadan standard-gauge line was formally commissioned on 25th November 2024. However, as of the date of this Report Card, the line remains non-operational pending resolution of vandalism to track infrastructure, the absence of a functioning terminal at Mpakadan, and delays in securing private sector operators. Full commercial operations are projected to begin by the second half of 2026.

### 1.3.5 Telecommunications

The National Communications Authority (NCA) regulates Ghana's telecommunications sector under the Electronic Communications Act 2008 (Act 775). Three Mobile Network Operators (MTN, AT, and Telecel) provide national mobile coverage. As of Q4 2024, mobile voice subscriptions stood at 38.41 million (116% penetration), while mobile data subscriptions had grown from 21.42 million (76% penetration) in Q1 2017 to 26.13 million (79% penetration) by Q4 2024. Telecommunications is assessed in this Report Card for the first time.

### 1.3.6 Potable Water

The Ministry of Works, Housing and Water Resources (MWHWR) oversees the water sector through three primary agencies: the Water Resources Commission (WRC), Ghana Water Limited (GWL), and the Community Water and Sanitation Agency (CWSA). A revised National Water Policy was approved by Cabinet in 2024. Basic national water coverage is estimated at approximately 88%, but daily production by GWL of 572,012 m<sup>3</sup> meets only 55% of daily demand of 1,049,306 m<sup>3</sup>. Non-

revenue water losses average approximately 50%, and an estimated 3.7 million Ghanaians lack access to even basic water services.

### 1.3.7 Health

The Ministry of Health (MoH) has oversight of Ghana's health infrastructure, implemented through the Ghana Health Service (GHS), the National Health Insurance Authority (NHIA), and other agencies. As of 2023, 6,500 CHPS compounds are in operation, covering 46% of the country. The National Health Insurance Scheme (NHIS) covers approximately 55% of the population. The doctor-to-patient ratio stands at approximately 1:8,000, the ambulance-to-population ratio at 1:84,000, and only 5% of primary facilities are fully equipped with basic examination tools.

### 1.3.8 Aviation

The aviation sector operates under the Ministry of Transport. The key agencies are the Ghana Civil Aviation Authority (GCAA) and the Ghana Airports Company Limited (GACL). Ghana has seven public airports: the Accra International Airport (AIA), Kumasi, Tamale, Takoradi, Sunyani, Wa, and Ho, with AIA serving as the main international gateway. AIA handled approximately 3.8 million passengers and 85,000 aircraft movements in 2024. Ghana holds the FAA's International Aviation Safety Assessment (IASA) Category 1 rating.

**Table 1.1: Infrastructure Grades and Their Meaning (Source: GIRC Framework)**

| Grade          | GPA Score                           | % Score                     | Condition   | Description                                                                                                                                                                                                                                                                              |
|----------------|-------------------------------------|-----------------------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1<br>A2<br>A3 | 4.85-5<br>4.65-4.8<br>4.5-4.6       | 97-100%<br>93-96%<br>90-92% | Exceptional | The infrastructure is generally in excellent condition, typically new or recently rehabilitated, and meets capacity needs for the future. Facilities meet modern standards for functionality and are resilient to withstand most disasters and severe weather events.                    |
| B1<br>B2<br>B3 | 4.35-4.45<br>4.15-4.30<br>4.00-4.10 | 87-89%<br>83-86%<br>80-82%  | Very Good   | The infrastructure is in good to excellent condition; some elements show signs of general deterioration that require attention. A few elements exhibit significant deficiencies. Safe and reliable with minimal capacity issues and minimal risk.                                        |
| C1<br>C2<br>C3 | 3.85-3.95<br>3.65-3.80<br>3.50-3.60 | 77-79%<br>73-76%<br>70-72%  | Good        | The infrastructure is in fair to good condition; it shows general signs of deterioration and requires attention. Some elements exhibit significant deficiencies in conditions and functionality, with increasing vulnerability to risk.                                                  |
| D1<br>D2<br>D3 | 3.20-3.45<br>2.90-3.15<br>2.55-2.87 | 64-69%<br>58-63%<br>51-57%  | Fair        | The infrastructure is in generally poor to fair condition; it shows general signs of deterioration and requires attention. Most elements exhibit significant deficiencies in conditions and functionality, with increasing vulnerability to risk.                                        |
| E1<br>E2       | 2.35-2.50<br>1.68-2.34              | 46-50%<br>40-45%            | Poor        | The infrastructure is in poor to fair condition and mostly below standard, with many elements approaching or exceeding the end of their service life. A large portion exhibits significant deterioration. Condition and capacity are of significant concern with strong risk of failure. |
| F              | Below 1.67                          | Below 40%                   | Very Poor   | The infrastructure is in unacceptable condition with widespread advanced signs of deterioration. Many components exhibit signs of imminent failure.                                                                                                                                      |

## 2.0 OBJECTIVE OF THE REPORT CARD

### 2.1 Purpose of the 2026 Report Card

The 2026 Ghana Infrastructure Report Card was prepared specifically for Ghana's citizens and policymakers to ensure everyone knows how Ghana's infrastructure is maintained, its current condition, and the key challenges facing each sector. The Report Card aims to:

- Expand the 2016 assessment scope from three to eight sectors, providing Ghana's first holistic infrastructure audit.
- Provide an authoritative, evidence-based assessment of the state of eight national infrastructure sectors.
- Enable comparison with the 2016 baseline to track whether infrastructure has improved, stagnated, or deteriorated.
- Identify cross-cutting challenges in funding, maintenance, resilience, and innovation, and recommend specific priority actions.
- Stimulate informed public discourse and build public support for infrastructure investment and reform.
- Provide a basis for citizens or non-technical end-user knowledge to be reflected in what would otherwise be a purely technical assessment of infrastructure.

The concept of preparing a Report Card for national infrastructure originated with the American Society of Civil Engineers (ASCE) and has been successfully adopted in Canada, Australia, South Africa, and Nigeria. As engineers, the GhIE sees it as an obligation to share knowledge and provide critical information about Ghana's infrastructure strengths and deficiencies in a way that every citizen understands.

## 3.0 METHODOLOGY AND RESEARCH APPROACH

Grading a nation's infrastructure is not a simple task, and we wanted to be rigorous enough that our conclusions could not be dismissed, but transparent enough that any Ghanaian could understand how we reached them. We built on the method used in the 2016 edition, itself adapted from the approach pioneered by the American Society of Civil Engineers, and expanded it to cover eight sectors.

### 3.1 Project Organisation

A robust governance structure is essential for credibility. The project was therefore organised into the following role players and committees:

- **Steering Committee:** Provided strategic direction, set the project charter, and monitored major milestones.
- **Research Team:** Conducted primary data collection and supplemental desktop research.
- **Sector Experts:** Composed of engineering professionals who interrogated findings and provided expert commentary for each sector.
- **Moderation Team:** Ensured consistency in grading across all eight sectors to maintain comparability.

### 3.2 Data Collection and Research

The assessment employed a multi-method approach to gather information on the eight sectors:

- **Desktop/Office Study:** This involved review of annual reports, asset registers, and financial statements.
- **Primary Survey:** A questionnaire was developed for each sector and administered. The questionnaire began with a fact sheet, followed by a demographics section, criteria rating section, and a suggestion section. Respondents used a rating scale of A to F across the eight criteria.

#### Sector Fact Sheet Development

A detailed fact sheet was developed for each of the eight sectors, drawing from data obtained from the desk study including the most recent strategic government reports, regulatory publications, agency annual reports, and independent studies. Each fact sheet was reviewed and validated by the relevant Ministry and agency representatives prior to survey administration.

#### Eight Grading Criteria

Evaluating infrastructure solely from a single perspective, such as physical condition, is not sufficient. A multi-criteria approach was adopted. Each sector was assessed against the following eight criteria:

- **Capacity:** Evaluate the infrastructure's capacity to meet current and future demands.
- **Condition:** Evaluate the infrastructure's existing or near-future physical condition.
- **Funding:** Evaluate the current level of funding compared to the estimated funding need.
- **Future Need:** Evaluate the cost to improve the infrastructure relative to projected funding availability.
- **Operation and Maintenance:** Evaluate agencies' ability to operate and maintain infrastructure in compliance with regulations.

- **Public Safety:** Evaluate the extent to which public safety is jeopardised by the condition of the infrastructure.
- **Resilience:** Evaluate the system's capability to prevent or recover from multi-hazard threats.
- **Innovation:** Evaluate the implementation and strategic use of innovative techniques and technologies.

## Survey Administration

Questionnaires with fact sheets were administered to over 900 respondents across all sixteen regions of Ghana. Technical respondents including engineers and other infrastructure professionals had at least five years of post-qualification experience. A stratified random sampling strategy was adopted to ensure regional and professional diversity.

## 3.3 Analysis and Reporting

The study analysis followed the procedures used by the American Society of Civil Engineers (ASCE) and the 2016 Ghana Report Card. The qualitative ratings of A through F were converted to a quantitative scale of 0-5, where A = 5 and F = 0.

### Rationale for Unweighted Approach

For the purpose of this project, each of the eight criteria was treated to carry an equal level of importance in the baseline assessment; no weighting was applied to the individual criteria. This approach was chosen to highlight hidden failures. In a weighted system, a Good physical condition score can often mask a critical Funding or Safety deficiency. By treating all criteria equally, the framework exposes vulnerabilities and reduces skewness in the overall results. This approach also ensures consistency with the 2016 Ghana Infrastructure Report Card, creating an opportunity for comparative analysis to identify changes in infrastructure conditions over the decade.

### Data Aggregation Protocols

The data aggregation followed a rigorous step-by-step protocol:

- **Criterion Averaging:** For each infrastructure sector, an average score was first calculated for each of the eight individual criteria, derived from the specific ratings provided by all respondents. Final scores for each criterion were assigned alphabetical grades using the GPA bands in Table 1.1.
- **Sector Averaging:** Once the eight criteria scores were established, they were aggregated to create the Overall Sector Average. The sector average scores were computed and aggregated to produce the overall CGPA of 2.83 (57%), Grade D3.
- **Overall Average Concept:** This final numerical value serves as the Sector Condition Score, providing a high-level summary that allows for quick comparison of infrastructure condition performance between disparate sectors.

## 4.0 INFRASTRUCTURE RATINGS AND ANALYSIS

Table 4.1 presents the master scorecard for all eight infrastructure sectors assessed in the 2026 Ghana Infrastructure Report Card. The aggregate CGPA score is 2.83 out of 5.0 (57%), Grade D3.

**Table 4.1: Ghana Infrastructure Report Card 2026, Master Scorecard**

| Infrastructure Sector           | 2026 Score  | 2026 %     | 2026 Grade | 2016 Score  | 2016 %     | 2016 Grade | Trend                                                                                           |
|---------------------------------|-------------|------------|------------|-------------|------------|------------|-------------------------------------------------------------------------------------------------|
| Aviation                        | 3.57        | 71%        | C3         | N/A         | N/A        | N/A        | New sector; best performer; AIA Terminal 3 strong; regional airport funding gaps.               |
| Electric Power                  | 3.29        | 66%        | D1         | 3.08        | 62%        | D2         | Capacity +45%; O&M improved to C3; ECG finances remain critical constraint.                     |
| Telecommunications              | 3.21        | 64%        | D1         | N/A         | N/A        | N/A        | New sector; mobile penetration 116%; M2M IoT +64% YoY; market concentration concern.            |
| Potable Water                   | 2.67        | 53%        | D3         | 2.79        | 56%        | D3         | Coverage 88% but supply meets only 55% of demand; NRW at 50% for a decade.                      |
| Education                       | 2.60        | 52%        | D3         | N/A         | N/A        | N/A        | New sector; Free SHS without matching infrastructure; US\$2B financing gap.                     |
| Roads                           | 2.48        | 50%        | E1         | 2.79        | 56%        | D3         | Grade declined D3 to E1; Funding E2; Public Safety E2; critical deterioration.                  |
| Health                          | 2.44        | 49%        | E1         | N/A         | N/A        | N/A        | New sector; 3.1% GDP health spend vs WHO 5% target; Agenda 111 delayed.                         |
| Railway                         | 2.40        | 48%        | E1         | N/A         | N/A        | N/A        | New sector; 149 of 947 km operational; Tema-Mpakadan commissioned Nov 2024 but non-operational. |
| <b>OVERALL CUMULATIVE SCORE</b> | <b>2.83</b> | <b>57%</b> | <b>D3</b>  | <b>2.89</b> | <b>58%</b> | <b>D3</b>  | Broadly stable; scope expanded from 3 to 8 sectors                                              |

**Overall Cumulative Score: 2.83 (57%), Grade D3 | Poor to Fair Condition**

## 4.1 EDUCATION

Score: 2.60 | 52% | Grade D3

# D3

52%



Figure 4.1:

### Background and Sector Overview

The Ministry of Education, the Ghana Education Service (GES), and the Ghana Education Trust Fund (GETFund) are the primary institutions responsible for education infrastructure. The Free Senior High School (FSHS) policy, introduced in 2017, drove a significant surge in enrolment at both basic and secondary levels. Between 2017/18 and 2019/20, kindergarten enrolment grew by 7.2%, primary by 6.7%, and JHS by 8.8%. This rapid growth in student numbers has placed enormous pressure on facilities, teachers, and the physical infrastructure of Ghana's public schools.

#### Box 4.1: Education Sector Key Facts

##### KEY FACTS: EDUCATION INFRASTRUCTURE (2017-2024)

|                         |                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Network</b>          | Ghana operates a public basic and secondary school system managed by the Ghana Education Service (GES) and supported by GETFund.                     |
| <b>Enrolment</b>        | Free SHS policy increased JHS enrolment by 8.8% between 2017/18 and 2019/20. Rapid growth exceeded infrastructure provision.                         |
| <b>Desk Deficit</b>     | National desk deficit reached over 1 million by 2021. 40% of pupils in public basic schools sit without a desk (vs 30% in 2016/17).                  |
| <b>School Condition</b> | Only 64% of rural areas have access to primary facilities (vs 90% urban). Only 44% of primary schools are connected to the grid.                     |
| <b>Sanitation</b>       | 6 out of 10 schools lack toilets and water. Only 13% of sampled schools meet the 1:50 toilet-pupil standard.                                         |
| <b>Funding</b>          | Education share of government spending fell from 17.9% (2019) to 10.9% (2023). Only 10% of education expenditure went to infrastructure (2017-2022). |
| <b>Financing Gap</b>    | Ghana faces a US\$2 billion medium-term infrastructure gap to meet SDG4 and Education Sector Plan requirements.                                      |
| <b>ICT</b>              | Only 2% of basic schools in deprived districts have functioning ICT facilities. Digital divide is deeply entrenched.                                 |

Ghana's Free Senior High School policy was one of the most significant education decisions in a generation. The intent was right: secondary education should not be closed off by fees. By 2021, the national deficit of desks in public basic schools had passed one million. Four in ten children in our public schools sit without a desk. That is not a funding gap that crept up on anyone, it is the visible result of years of education spending that prioritised recurrent costs over capital investment.

The education sector's share of total government expenditure has fallen from 17.9% in 2019 to 10.9% in 2023, and within that diminishing envelope, only about one in ten cedis has gone to infrastructure. Six in ten schools have no toilet. Six in ten have no clean water supply. In Ghana's most deprived districts, 2% of basic schools have working ICT. The SDG 4 financing gap stands at roughly US\$2 billion. At present, no credible plan exists to close it.

**Table 4.2: Assessment Grades for Education Infrastructure**

| No.     | Area of Assessment      | 2026 Score | 2026 % | Grade | 2016 | Key Observations                                                                                                            |
|---------|-------------------------|------------|--------|-------|------|-----------------------------------------------------------------------------------------------------------------------------|
| 1       | Capacity                | 2.64       | 53%    | D3    | N/A  | Free SHS drove enrolment gains; 1M+ desk deficit by 2021; 40% pupils lack desks; overcrowding severe.                       |
| 2       | Condition               | 2.68       | 54%    | D3    | N/A  | Many rural schools dilapidated; only 44% of primary schools electrified; 64% rural areas have primary facilities.           |
| 3       | Funding                 | 2.45       | 49%    | E1    | N/A  | Education share of spending fell from 17.9% (2019) to 10.9% (2023); GETFund basic level allocation historically low.        |
| 4       | Future Need             | 2.55       | 51%    | D3    | N/A  | US\$2B infrastructure gap to meet SDG4; donor support projected -57.8% real terms 2023-24; severe financing shortfall.      |
| 5       | Operation & Maintenance | 2.32       | 46%    | E2    | N/A  | Free education policy has not improved infrastructure quality; facilities deteriorating; no dedicated O&M funds.            |
| 6       | Public Safety           | 2.77       | 55%    | D3    | N/A  | 6 in 10 schools lack toilets and water; only 13% meet 1:50 toilet-pupil standard; open defecation risk widespread.          |
| 7       | Resilience              | 2.59       | 52%    | D3    | N/A  | Infrastructure inequality drives district learning gaps; 5.7 of 11.6 schooling years = learning-adjusted; power unreliable. |
| 8       | Innovation              | 2.77       | 55%    | D3    | N/A  | Only 2% of basic schools in deprived districts have functioning ICT; digital divide deeply entrenched nationwide.           |
| Average |                         | 2.60       | 52%    | D3    |      |                                                                                                                             |

### What Needs to Be Done, Education

- Increase infrastructure expenditure to a consistent minimum of 20% of the annual education budget.
- Develop and implement a National School Infrastructure Master Plan with a dedicated, ring-fenced implementation fund.
- Prioritise elimination of the one-million-desk deficit and the sanitation crisis in schools as a 2028 target.
- Provide access to electricity and ICT connectivity to all rural basic schools within a clear, time-bound programme.
- Rebalance GETFund allocations to address historical underinvestment in basic education infrastructure.

# 4.2 ELECTRIC POWER (ENERGY)

Score: 3.29 | 66% | Grade D1

# D1

66%



Figure 4.2:

Background and Sector Overview

The Ministry of Energy and Green Transition oversees Ghana's electricity sector through the Volta River Authority (VRA), Bui Power Authority (BPA), GRIDCo, ECG, NEDCo, IPPs, and the Energy Commission. Ghana's generation mix is predominantly thermal (69.2% of installed capacity), followed by hydro (28.4%) and renewables (2.4%). Total installed capacity reached 5,492 MW as of 2024, with peak demand at 3,952 MW. The national electrification rate has grown to 88%.

Box 4.2: Electric Power Sector Key Facts

| KEY FACTS: ELECTRIC POWER INFRASTRUCTURE (2024-2025) |                                                                                                                     |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Installed Capacity                                   | 5,492 MW total; dependable capacity 5,060 MW. Up 45% from approximately 3,796 MW in 2016.                           |
| Generation Mix                                       | Thermal: 69.2%, Hydro: 28.4%, Renewables: 2.4%. Thermal dominance increases fuel supply risk.                       |
| Energy Generated                                     | 25,269 GWh generated on NITS in 2024, a 7.3% increase over 2023. Exports to neighbours: 2,113 GWh via WAPP.         |
| Peak Demand                                          | 3,952 MW (December 2024). Growing at approximately 9% per year.                                                     |
| Reserve Margin                                       | 15% in 2025, below the required minimum of 18%.                                                                     |
| Access                                               | National electrification rate: 88% (up from approximately 80% in 2016).                                             |
| Hydro Facilities                                     | Akosombo (900 MW), Kpong (140 MW), Bui (400 MW installed, 330 MW operational).                                      |
| Fuel Supply                                          | All thermal plants run on natural gas as primary fuel. Approximately 80% are dual-fired.                            |
| ECG Finance                                          | ECG faces persistent financial difficulties affecting fuel procurement, maintenance, and investment capacity.       |
| O&M Performance                                      | GRIDCo transmission line availability: 99.53%. Transformer availability: 99.67%. Both exceed regulatory benchmarks. |

Electric power is the sector where Ghana has made the most tangible progress since 2016, and it deserves to be acknowledged as such. Those who remember the years of dumsor, when load-shedding schedules were posted on lamp posts and businesses kept generators running as a matter of survival, will understand what has changed. Installed generation capacity has grown from about 3,796 MW in 2016 to 5,492 MW today, a 45% increase. Access to electricity now covers 88% of the population. In 2024, Ghana generated 25,269 GWh and had enough surplus to export over 2,100 GWh to neighbouring countries through the West African Power Pool.

But the objective assessment also requires noting where the vulnerabilities remain. The system's reserve margin sits at 15%, below the 18% that engineers consider the minimum for reliable supply. In 2024, the grid's frequency was within acceptable bounds for only 28.56% of the time. The Electricity Company of Ghana is in persistent financial difficulty, which affects its ability to maintain infrastructure and procure fuel. The shift to nearly 70% thermal has increased exposure to fuel supply disruptions. The structural conditions that produced dumsor have not been permanently resolved. They have been managed, and managing is not the same as fixing.

**Table 4.3: Assessment Grades for Electric Power Infrastructure**

| No. | Area of Assessment      | 2026 Score | 2026 % | Grade | 2016 | Key Observations                                                                                                         |
|-----|-------------------------|------------|--------|-------|------|--------------------------------------------------------------------------------------------------------------------------|
| 1   | Capacity                | 3.45       | 69%    | D1    | D1   | Installed capacity 5,492 MW (up 45% from 2016); dependable 5,060 MW; peak demand 3,952 MW; access 88%.                   |
| 2   | Condition               | 3.35       | 67%    | D1    | D1   | Transmission availability 99.53%; transformer availability 99.67%; ageing thermal assets; frequent plant outages.        |
| 3   | Funding                 | 2.82       | 56%    | D3    | D3   | ECG financial fragility; fuel procurement debts; IMF programme limits non-concessional borrowing; sector illiquidity.    |
| 4   | Future Need             | 2.86       | 57%    | D3    | D3   | Reserve margin 15% vs 18% minimum; 1,200 MW additional capacity needed by 2028; MCC compact partially addressing gap.    |
| 5   | Operation & Maintenance | 3.60       | 72%    | C3    | D2   | GRIDCo transmission availability exceeds regulatory targets; Ameri plant relocation improving Kumasi reliability.        |
| 6   | Public Safety           | 3.55       | 71%    | C3    | D2   | Acceptable frequency achieved only 28.56% of time; voltage drops persist; load shedding risk when fuel supply disrupted. |
| 7   | Resilience              | 3.38       | 68%    | D1    | D2   | Active WAPP power exports (2,113 GWh in 2024); Akosombo managed cautiously; dual-fuel thermal plants add flexibility.    |
| 8   | Innovation              | 3.31       | 66%    | D1    | D2   | Ameri relocation to Kumasi reduces system losses; 330kV Accra-Kumasi line in planning; smart grid efforts nascent.       |
|     | Average                 | 3.29       | 66%    | D1    | D2   |                                                                                                                          |

### What Needs to Be Done, Electric Power

- Urgently address ECG's financial fragility through tariff reform and operational efficiency improvements.
- Secure an additional 1,200 MW of generation capacity by 2028 to achieve the required 18% reserve margin.

- Improve gas supply reliability through diversification of sources, domestic Sankofa/AGPP gas and LNG import.
- Complete the 330 kV Accra-Kumasi transmission line and upgrade the Northern corridor grid.
- Develop a clear renewable energy transition roadmap incorporating solar, wind, and pumped hydro storage.



## 4.3 ROADS AND BRIDGES

Score: 2.48 | 50% | Grade E1

# E1

50%



Figure 4.3:

### Background and Sector Overview

The Ministry of Roads and Highways (MRH) has the core mandate to develop, maintain, and manage Ghana's road infrastructure through the Ghana Highway Authority (GHA), the Department of Feeder Roads (DFR), and the Department of Urban Roads (DUR). The Ghana Road Fund Secretariat, which has now been transformed into the Road Maintenance Trust Fund (RMTF), has been responsible for the payment of road maintenance by the implementing agencies. Roads are the dominant mode of transport in Ghana, carrying approximately 95% to 98% of the country's passengers and freight combined. The network of 94,203 km comprises 14,948 km of trunk roads, 28,480 km of urban roads, and 50,775 km of feeder roads. Only 27% of the total network is paved.

### Box 4.3: Roads and Bridges Sector Key Facts

| KEY FACTS: ROADS AND BRIDGES (2016-2024) |                                                                                                                                                    |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Network Size (2024)</b>               | 94,203 km total: 14,948 km trunk (+2.5%), 28,480 km urban (+84.2%), 50,775 km feeder (+5.0%). Total up 20% from 78,401 km in 2016. Only 27% paved. |
| <b>Road Condition</b>                    | 2016: 41% good / 34% fair / 26% poor. 2023: 44% good / 34% fair / 22% poor. 2024: 47% good / 32% fair / 21% poor.                                  |
| <b>Total Expenditure</b>                 | 2016: GH¢2.55B actual vs GH¢5.59B planned (45.6%). 2024: GH¢9.14B actual vs GH¢5.81B planned (157%, donor-driven surge).                           |
| <b>GoG Budget Delivery</b>               | 2016: GoG consolidated fund delivered only GH¢0.14B of GH¢3.99B planned (3.5%). 2024: GH¢3.33B of GH¢4.01B (83.1%).                                |
| <b>GoG Contractor Arrears</b>            | 2016: GH¢1.06B. 2022: GH¢4.89B. 2023: GH¢4.64B. 2024: GH¢11.99B. An 11-fold increase in eight years.                                               |
| <b>Road Fund Arrears</b>                 | 2016: GH¢0.51B. 2022: GH¢4.53B. 2023: GH¢5.53B. 2024: GH¢5.75B. Growing steadily; fund diverted from maintenance obligations.                      |
| <b>Combined Arrears</b>                  | GoG + Road Fund combined: GH¢1.57B (2016) rising to GH¢17.75B (2024), an 11.3x increase.                                                           |

|                         |                                                                                                                                          |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Overloading</b>      | Average overloading: 2.28% (2016), 2.1% (2022), 2.7% (2023), 5.7% (2024). Overloading has more than doubled since 2016.                  |
| <b>Road Crashes</b>     | 2016 baseline: 8,651 crashes, 2,084 fatalities. Public Safety scored E2 in 2026, the lowest criterion score across all eight sectors.    |
| <b>NRA Act</b>          | The National Roads Authority (NRA) was established under NRA Act 2024 (Act 1118), restructuring legacy agencies GHA, DFR, DUR, and GRFS. |
| <b>Asset Management</b> | Web-based Integrated Road Asset Management System (WIGRAMS) recently developed; full nationwide implementation pending.                  |
| <b>Contractors</b>      | 1,916 registered road contractors in good standing (May 2025). Local contractor capacity remains generally inadequate.                   |

## Assessment

The Roads sector is where this Report Card delivers its hardest verdict. In 2016, roads were graded D3, fair condition, with serious problems. In 2026, the grade is E1, poor condition, with most elements showing significant deficiencies. That is not a subtle shift; it represents a measurable worsening across multiple dimensions simultaneously.

The network has grown from 78,401 km in 2016 to 94,203 km in 2024, a 20% increase. Urban roads alone expanded by 84%, from 15,462 km to 28,480 km, driven by rapid urbanisation that outpaced any corresponding investment in paving, maintenance, or drainage. The road condition figures, while showing modest improvement in percentage terms, apply to a much larger network. The absolute length of road in poor or fair condition remains a substantial and growing maintenance burden. The 2025 target of 60% good roads was not achieved.

In 2016, the GoG consolidated fund had planned to commit GH¢3.99 billion to roads and delivered GH¢141 million, a delivery rate of 3.5%. That extraordinary failure to deploy funding set in motion a chain of contractor non-payment, arrears accumulation, and deferred maintenance that has proved very difficult to reverse. Combined GoG and Road Fund arrears owed to road contractors stood at GH¢1.57 billion in 2016. By 2024, that figure had reached GH¢17.75 billion, an 11.3-fold increase in eight years. These represent contractors who completed work and have not been paid, who may consequently slow down or stop work. Overloading incidence has grown from 2.28% in 2016 to 5.7% in 2024, more than doubling in eight years. The Public Safety score, 2.17 out of 5, an E2 grade, is the single lowest criterion score recorded across all eight sectors in this entire Report Card.

**Table 4.4a: Roads Sector Expenditure vs Plan, 2016-2024 (GH¢ Billion)**

| Source                    | 2016 Plan | 2016 Actual | 2023 Plan | 2023 Actual | 2024 Plan | 2024 Actual | Note                                                 |
|---------------------------|-----------|-------------|-----------|-------------|-----------|-------------|------------------------------------------------------|
| <b>GoG (Consolidated)</b> | 3.99      | 0.14        | 2.72      | 1.35        | 4.01      | 3.33        | 3.5% delivery in 2016; improved to 83% by 2024       |
| <b>Donor Funding</b>      | 1.29      | 0.69        | 2.55      | 3.66        | 0.56      | 4.51        | Donor over-execution drove total above plan in 2024  |
| <b>IGF</b>                | 0.01      | 0.01        | 0.03      | 0.02        | 0.04      | 0.07        | Minor but consistent source                          |
| <b>Road Fund</b>          | 0.31      | 1.71        | 1.08      | 0.76        | 1.19      | 1.23        | Road Fund diverted from maintenance; arrears growing |
| <b>TOTAL</b>              | 5.59      | <b>2.55</b> | 6.38      | 5.80        | 5.81      | 9.14        | 2024 total exceeded plan due to donor surge          |

**Table 4.4b: Contractor Arrears Trend, 2016-2024 (GH¢ Billion)**

| Arrears Category              | 2016            | 2022            | 2023             | 2024             |
|-------------------------------|-----------------|-----------------|------------------|------------------|
| Outstanding GoG Arrears       | GH¢1.06B        | GH¢4.89B        | GH¢4.64B         | GH¢11.99B        |
| Outstanding Road Fund Arrears | GH¢0.51B        | GH¢4.53B        | GH¢5.53B         | GH¢5.75B         |
| <b>COMBINED TOTAL</b>         | <b>GH¢1.57B</b> | <b>GH¢9.42B</b> | <b>GH¢10.17B</b> | <b>GH¢17.75B</b> |

**Table 4.4c: Road Network Size and Condition, 2016-2024**

| Variable             | 2016 Baseline | 2022   | 2023   | 2024   |
|----------------------|---------------|--------|--------|--------|
| Trunk Roads (km)     | 14,583        | 14,948 | 14,948 | 14,948 |
| Urban Roads (km)     | 15,462        | 28,480 | 28,480 | 28,480 |
| Feeder Roads (km)    | 48,357        | 50,775 | 50,775 | 50,775 |
| Total Network (km)   | 78,401        | 94,203 | 94,203 | 94,203 |
| Condition: Good (%)  | 41%           | N/A    | 44%    | 47%    |
| Condition: Fair (%)  | 34%           | N/A    | 34%    | 32%    |
| Condition: Poor (%)  | 26%           | N/A    | 22%    | 21%    |
| Avg. Overloading (%) | 2.28%         | 2.1%   | 2.7%   | 5.7%   |

**Table 4.4d: Assessment Grades for Roads and Bridges Infrastructure**

| No. | Area of Assessment      | 2026 Score  | 2026 %     | Grade     | 2016      | Key Observations                                                                                                        |
|-----|-------------------------|-------------|------------|-----------|-----------|-------------------------------------------------------------------------------------------------------------------------|
| 1   | Capacity                | 2.83        | 57%        | D3        | D2        | Network grew to 94,203 km (up from 78,401 km in 2016); only 27% paved; feeder roads underprovide rural access.          |
| 2   | Condition               | 2.70        | 54%        | D3        | D3        | 47% good, 32% fair, 21% poor (2024); trunk and urban roads overdue for overlaying; bridges mostly RC in fair condition. |
| 3   | Funding                 | 2.25        | 45%        | E2        | D3        | Only 43% of 2022-25 programme funds secured; Road Fund unable to pay contractors within 3 months; persistent arrears.   |
| 4   | Future Need             | 2.39        | 48%        | E1        | D3        | Target of 60% good roads by 2025 unachieved; funding gap worsening; overloading exacerbating asset deterioration.       |
| 5   | Operation & Maintenance | 2.36        | 47%        | E1        | D2        | Maintenance backlogs persist; 1,916 registered contractors with capacity and quality gaps; poor supervision.            |
| 6   | Public Safety           | 2.17        | 43%        | E2        | D3        | High road fatalities continue; flooding of urban roads causes economic disruption; MTED/NRSA campaigns insufficient.    |
| 7   | Resilience              | 2.55        | 51%        | D3        | D3        | ~70% unpaved roads highly vulnerable to weather; periodic floods worsen deterioration; limited network redundancy.      |
| 8   | Innovation              | 2.61        | 52%        | D3        | D3        | Minimal ITS/traffic management technology adoption; performance-based contracts not widely used; limited R&D uptake.    |
|     | <b>Average</b>          | <b>2.48</b> | <b>50%</b> | <b>E1</b> | <b>D3</b> |                                                                                                                         |

## What Needs to Be Done, Roads

The GhIE's 53rd Presidential Address (19th February 2026), themed 'Do It Well, Do It Right, A Focus On Roads In Ghana', sets out the following priority actions:

### Funding and Financial Management

- The Minister of Finance must prioritise the implementation of the Public Investment Management Regulations 2020 (LI 2411) and the Public Investment Plan (PIP) to ensure all road expenditures are evidence-based, sequenced, and fiscally responsible.
- The Ministry of Roads and Highways and Ministry of Finance must take decisive steps to resolve the financial exposure of the roads sub-sector: reduce the project portfolio to levels consistent with available resources; have MoF assume responsibility for outstanding contractor payments and negotiate structured settlements; relieve the RMTF of all non-maintenance obligations; and increase the fuel levy to the equivalent of US\$0.10 per litre.
- Only projects with approved budget lines should be awarded and signed. Independent consultants must be used for supervision as a matter of policy, named as the Engineer.

### Asset Management and Data Systems

- Government should take a clear decision and expedite action on the implementation of the National Roads Authority (NRA) Act. The non-action by MRH is detrimental to the sector's progress.
- The NRA must establish an integrated road inventory and condition database and an integrated system for routine road traffic data collection.
- The NRA must fully implement WIGRAMS for all asset management and maintenance responsibilities.
- The Ministry of Roads and Highways must refrain from interfering in the asset management responsibilities of the NRA and the regulatory responsibilities of the RMTF. Policy, regulation, asset management, and service delivery must be functionally separated.
- MMDA Roads Departments must fully take up urban road asset management, supported by funding from the RMTF and regulations from the NRA.

### Axle Load Control and Road Safety

- The NRA must modernise axle load enforcement using weigh-in-motion bridges with automated central data control. PPP arrangements should be explored; compliance certificates from ports and heavy industries required for all loaded trucks leaving their premises.
- Urgent measures must reduce road deaths, including regular maintenance of road signs and markings and addressing safety risks from okada operations.
- All major road projects must be supported by feasibility studies, engineering design, EIA, and detailed costing prior to procurement, subject to peer and stakeholder review by qualified consultants.
- Laboratory testing must be strengthened nationwide: accredited private laboratories providing certified results directly to supervising engineers and stored in a centralised database.

### Governance, Procurement, and Urban Transport

- The Minister for Roads and Highways must initiate a review of the NRA Act 2024 (Act 1118) to properly separate policy from asset management and achieve full devolution of DFR and DUR.

- At least 90% of all procurement by MDAs and MMDAs for road works should use open competitive tendering. The contractor classification register must be restored to credibility.
- Government must invest in Bus Rapid Transit (BRT) and urban rail as recommended in the 2016 Accra Transport Masterplan; reverse the decision to halt BRT feasibility studies for Kumasi; and prepare long-term land-use and transport plans for Ghana's major urban conurbations.



# 4.4 RAILWAY

Score: 2.40 | 48% | Grade E1

# E1

48%



Figure 4.4:

Background and Sector Overview

The Ministry of Transport is responsible for Ghana's railway infrastructure, implemented through the Ghana Railway Development Authority (GRDA), established under the Railways Act 2008 (Act 779), and the Ghana Railway Company Limited (GRCL). The historic narrow-gauge network of 947 km connects Accra, Kumasi, and Takoradi across three lines: the Western Line (Takoradi to Kumasi), the Eastern Line (Accra to Kumasi), and the Accra-Tema commuter corridor. Of this network, only 149 km is currently operational.

Box 4.4: Railway Sector Key Facts

| KEY FACTS: RAILWAY INFRASTRUCTURE (2018-2025) |                                                                                                                                                                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network                                       | 947 km historic narrow-gauge network (Western, Eastern, Accra-Tema lines). Only 149 km operational.                                                                                                                           |
| Operations                                    | Western Line: manganese freight (Nsuta to Takoradi Port). Sekondi-Takoradi suburban passenger service. Accra-Tema commuter service.                                                                                           |
| Passenger Traffic                             | Actual 2025 passengers: 21,460. Target: 200,000. An 89% delivery gap.                                                                                                                                                         |
| Tema-Mpakadan                                 | 97.7 km standard-gauge line commissioned 25 November 2024 at a cost of US\$447 million (India Exim Bank). Non-operational as of end 2025 due to vandalism, incomplete terminal at Mpakadan, and absence of private operators. |
| Kojokrom-Manso                                | 22 km section: 96% complete.                                                                                                                                                                                                  |
| Takoradi-Huni Valley                          | 78 km section: only 22% complete.                                                                                                                                                                                             |
| Kumasi Adum-Kaase                             | 6 km section: only 2% complete due to non-release of funds.                                                                                                                                                                   |
| Eastern Line                                  | 295 km Achimota-Kumasi line remains non-operational.                                                                                                                                                                          |
| Right of Way                                  | Encroachment on disused railway corridors is widespread and constitutes a significant obstacle to rehabilitation.                                                                                                             |
| Governance                                    | GRDA: asset holding and promotion. GRCL: operations. Ministry of Transport: policy. Funding challenges constrain all three institutions.                                                                                      |

Ghana's railway sector scores the lowest of all eight sectors in this assessment. Of 947 km of historic network, only 149 km is currently in service. In 2025, the railway carried 21,460 passengers against a target of 200,000, an 89% gap between ambition and delivery. The 97.7 km Tema-Mpakadan standard-gauge railway was formally commissioned on 25th November 2024, with eight stations, a functioning Operations Control Centre, and a bridge over the Volta River, the first railway bridge of its kind in West Africa. As of the date of this Report Card, the line remains non-operational due to theft and vandalism of track components, the absence of a functioning terminal at Mpakadan, and delays in securing private sector operators. Significant capital has been spent and real infrastructure has been built, yet the trains are not running.

**Table 4.5: Assessment Grades for Railway Infrastructure**

| No. | Area of Assessment      | 2026 Score  | 2026 %     | Grade     | 2016 | Key Observations                                                                                                           |
|-----|-------------------------|-------------|------------|-----------|------|----------------------------------------------------------------------------------------------------------------------------|
| 1   | Capacity                | 2.57        | 51%        | D3        | N/A  | Only 149 km operational of 947 km historic network; 2025 passenger traffic 21,460 vs 200,000 target.                       |
| 2   | Condition               | 2.43        | 49%        | E1        | N/A  | Most network derelict; signalling obsolete; rolling stock deteriorated; encroachment on disused lines widespread.          |
| 3   | Funding                 | 2.10        | 42%        | E2        | N/A  | Kojokrom-Adum 6 km section only 2% complete due to non-release of funds; heavy dependence on concessional debt.            |
| 4   | Future Need             | 2.27        | 45%        | E2        | N/A  | Tema-Mpakadan commissioned Nov 2024 but non-operational; Takoradi-Huni Valley 22% complete; funding stalled.               |
| 5   | Operation & Maintenance | 2.51        | 50%        | E1        | N/A  | Only manganese freight on Western Line and limited suburban passenger services operational; GRCL severely constrained.     |
| 6   | Public Safety           | 2.39        | 48%        | E1        | N/A  | Encroachment and level crossing risks on operational sections; limited safety oversight capacity at GRDA.                  |
| 7   | Resilience              | 2.43        | 49%        | E1        | N/A  | Rail provides near-zero systemic resilience; complete road dependence with no viable rail alternative nationally.          |
| 8   | Innovation              | 2.51        | 50%        | E1        | N/A  | New standard-gauge construction represents modernisation step; OCC completed at Tema-Mpakadan; digital signalling planned. |
|     | <b>Average</b>          | <b>2.40</b> | <b>48%</b> | <b>E1</b> |      |                                                                                                                            |

### What Needs to Be Done, Railway

- Prioritise the operationalisation of the Tema-Mpakadan standard-gauge line for freight and passenger services as an immediate deliverable, resolving vandalism damage, completing the Mpakadan terminal, and finalising the PPP operator framework.
- Operationalise the Railway Development Fund with ring-fenced, predictable annual allocations independent of political discretion.
- Fast-track right-of-way acquisition and compensation settlement for all stalled line sections.
- Develop a clear PPP framework to attract private investment for rolling stock procurement and service operations.
- Address encroachment on disused railway corridors through legal enforcement and community engagement programmes.

# 4.5 TELECOMMUNICATIONS

Score: 3.21 | 64% | Grade D1

# D1

64%



Figure 4.5:

Background and Sector Overview

The National Communications Authority (NCA) regulates Ghana's telecommunications sector under the Electronic Communications Act 2008 (Act 775). Three Mobile Network Operators (MNOs), namely MTN, AT, and Telecel, provide national mobile coverage. Three fixed network operators and one Broadband Wireless Access (BWA) provider, Telesol, complete the fixed network landscape. A diverse broadcasting ecosystem of 549 FM radio stations and 133 television stations serves the country.

Box 4.5: Telecommunications Sector Key Facts

| KEY FACTS: TELECOMMUNICATIONS INFRASTRUCTURE (Q4 2024) |                                                                                                                                                        |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile Voice                                           | 38.41 million subscriptions. Penetration rate: 116.07%.                                                                                                |
| Mobile Data                                            | Subscriptions grew from 21.42 million (76% penetration) in Q1 2017 to 26.13 million (79% penetration) in Q4 2024. Usage growing at 53.9% year-on-year. |
| Data Traffic                                           | Approximately 763.26 billion MB total mobile data traffic in Q4 2024.                                                                                  |
| IoT/M2M                                                | 2.22 million M2M subscriptions, growing at 63.77% year-on-year.                                                                                        |
| Fixed Broadband                                        | 221,153 fixed broadband subscriptions. Penetration: 0.38%, critically low.                                                                             |
| Broadcasting                                           | 805 authorised FM stations (549 operational); 181 authorised TV stations (133 operational).                                                            |
| Market Share (Voice)                                   | MTN: 73.96%, Telecel: 18.14%, AT: 7.89%.                                                                                                               |
| Market Share (Data Traffic)                            | MTN: 84.99%, Telecel: 14.70%, AT: 0.31%. Extreme concentration.                                                                                        |
| Tariffs                                                | Mobile voice: GHc 0.14/min. Data: GHc 0.14/MB. SMS: GHc 0.06.                                                                                          |
| Smartphones                                            | 57.87% of connected devices are smartphones, growing at 24.35% year-on-year.                                                                           |

Assessment

Telecommunications is the one sector in this Report Card that Ghanaians might find surprising, not because it is struggling, but because it is not. Mobile voice penetration stands at 116%. Mobile data subscriptions have reached 26.13 million, growing at nearly 54% year on year. Machine-to-machine and IoT subscriptions grew by 64% in a single year. This is a sector that has developed largely through competition and private investment, with regulatory oversight from the NCA, and the results show.

There are, however, genuine concerns alongside that positive picture. A single operator, MTN, accounts for nearly 74% of voice subscriptions and 85% of data traffic. The risks of that degree of concentration in a critical national system are real. And on fixed broadband, Ghana's penetration is 0.38%. The mobile layer is strong; the fixed layer barely exists. For an economy that aspires to manufacturing and digital services, that gap matters.

**Table 4.6: Assessment Grades for Telecommunications Infrastructure**

| No.     | Area of Assessment         | 2026 Score | 2026 % | Grade | 2016 | Key Observations                                                                                                             |
|---------|----------------------------|------------|--------|-------|------|------------------------------------------------------------------------------------------------------------------------------|
| 1       | Capacity & Penetration     | 3.80       | 76%    | C2    | N/A  | 38.41M mobile voice subs (116%); 26.13M mobile data subs (79%); 549 FM stations, 133 TV stations.                            |
| 2       | Condition                  | 3.25       | 65%    | D1    | N/A  | Network infrastructure generally adequate; three MNOs provide national coverage; fixed broadband only 0.38%.                 |
| 3       | Funding & Affordability    | 2.95       | 59%    | D2    | N/A  | Call tariffs GHc 0.14/min; data GHc 0.14/MB; affordability strained by cedi depreciation; concentrated market.               |
| 4       | Future Need                | 3.25       | 65%    | D1    | N/A  | Mobile data traffic +53.9% YoY; M2M/IoT subscriptions +63.8% YoY to 2.22M; smartphone adoption 57.87%.                       |
| 5       | Operation & Maintenance    | 2.80       | 56%    | D3    | N/A  | MTN holds 73.96% voice share and 84.99% data traffic, extreme concentration; NCA oversight active.                           |
| 6       | Public Safety & Regulation | 2.95       | 59%    | D2    | N/A  | NCA regulatory framework under Act 775; quarterly statistical publications; oversight effective; consumer redress improving. |
| 7       | Resilience                 | 3.15       | 63%    | D2    | N/A  | Three MNOs, three fixed operators, BWA provider, and diverse broadcasting platforms; redundancy reasonable.                  |
| 8       | Innovation                 | 3.50       | 70%    | C3    | N/A  | Strong IoT/M2M growth (63.8% YoY); 5G planning underway; digital TV service diversity; smartphone ecosystem growing.         |
| Average |                            | 3.21       | 64%    | D1    |      |                                                                                                                              |

### What Needs to Be Done, Telecommunications

- Address extreme market concentration through NCA competition policy; establish structural separation or wholesale access frameworks.
- Aggressively develop fixed broadband (fibre-to-the-home and fixed wireless access) to improve enterprise and household connectivity.
- Accelerate 5G spectrum allocation and rollout planning with clear timelines and coverage obligations.
- Implement data affordability frameworks including social tariff programmes for low-income users.
- Link national digital infrastructure investment to education, health, and e-government service delivery.

4.6 POTABLE WATER

Score: 2.67 | 53% | Grade D3

D3

53%



Figure 4.6:

Background and Sector Overview

The Ministry of Works, Housing and Water Resources (MWHWR) oversees the water sector through three primary agencies: the Water Resources Commission (WRC), Ghana Water Limited (GWL), and the Community Water and Sanitation Agency (CWSA). A revised National Water Policy was approved by Cabinet in 2024. Basic national water coverage is estimated at approximately 88%, but daily production by GWL of 572,012 m<sup>3</sup> meets only 55% of daily demand of 1,049,306 m<sup>3</sup>. Non-revenue water losses average approximately 50%, and an estimated 3.7 million Ghanaians lack access to even basic water services.

Box 4.6: Potable Water Sector Key Facts

| KEY FACTS: POTABLE WATER INFRASTRUCTURE (2024-2025) |                                                                                                                                                          |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Coverage                                            | Basic national water coverage: approximately 88%. An estimated 3.7 million people still lack access to at least basic water services.                    |
| Supply vs Demand                                    | GWL daily output: 572,012 m <sup>3</sup> /day. Daily demand: 1,049,306 m <sup>3</sup> /day. Supply meets only 55% of demand.                             |
| Non-Revenue Water                                   | Approximately 50% of treated water is lost before reaching customers, more than twice the 20% international best practice.                               |
| Rural Functionality                                 | 12-20% of water facilities in rural communities and small towns are either non-functional or below expected standards at any given time.                 |
| Galamsey                                            | Illegal small-scale mining activities are progressively degrading raw water quality in rivers and reservoirs, increasing treatment costs.                |
| Financing Need                                      | Annual investment required: US\$200-265 million. Current expenditure represents only a fraction of this need.                                            |
| GoG Contribution                                    | GoG contributes approximately 80% of sector financing. Rural sector is approximately 90% ODA-dependent.                                                  |
| GWL Bill Collection                                 | GWL bill collection ratio: approximately 95%. But financial constraints limit capital investment and O&M capacity.                                       |
| Policy                                              | National Water Policy revised and approved by Cabinet in 2024.                                                                                           |
| Water Resources                                     | Ghana's total consumptive water demand is approximately 13% of total surface water resources. Supply is a management challenge, not a physical scarcity. |

Potable water is where the gap between what Ghana's infrastructure provides and what its people need is most mathematically stark. GWL produces 572,012 cubic metres of treated water per day against a daily demand of 1,049,306 cubic metres, a supply shortfall of nearly 45%. The gap is filled by private water tankers, sachet water whose source is variably regulated, and boreholes whose quality is inconsistently tested. Compounding the supply problem is a non-revenue water rate of approximately 50%, meaning roughly one in every two litres of treated water is lost before it reaches a paying customer. This rate has not changed in a decade. And illegal small-scale mining, galamsey, is progressively degrading the raw water quality of the rivers and reservoirs that feed Ghana's treatment plants.

**Table 4.7: Assessment Grades for Potable Water Infrastructure**

| No. | Area of Assessment                 | 2026 Score  | 2026 %     | Grade     | 2016      | Key Observations                                                                                                                           |
|-----|------------------------------------|-------------|------------|-----------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | <b>Capacity</b>                    | 2.54        | 51%        | D3        | D2        | Basic water coverage ~88%; GWL daily output 572,012 m <sup>3</sup> /day vs demand of 1,049,306 m <sup>3</sup> /day; 3.7M lack basic water. |
| 2   | <b>Condition</b>                   | 2.65        | 53%        | D3        | D3        | Systems built 30+ years ago; non-revenue water ~50% vs 20% best practice; ageing distribution infrastructure.                              |
| 3   | <b>Funding</b>                     | 2.35        | 47%        | E1        | D3        | Investment far below US\$200-265M/yr need; GoG provides ~80% but rural sector 90% ODA-dependent; CWSA underfunded.                         |
| 4   | <b>Future Need</b>                 | 2.54        | 51%        | D3        | D3        | Rapid urbanisation (63% urban) increasing demand; NWP revised 2024 but implementation severely under-resourced.                            |
| 5   | <b>Operation &amp; Maintenance</b> | 2.85        | 57%        | D3        | D3        | 12-20% rural water points non-functional at any time; bill collection 95%; GWL operations constrained by financing.                        |
| 6   | <b>Public Safety</b>               | 2.73        | 55%        | D3        | D3        | Perennial cholera outbreaks in urban areas; galamsey threatening raw water quality; rationing common in most towns.                        |
| 7   | <b>Resilience</b>                  | 2.62        | 52%        | D3        | D3        | Rainfall variability increasing dry-season shortages; groundwater source dependence growing; illegal mining disrupting supply.             |
| 8   | <b>Innovation</b>                  | 3.08        | 62%        | D2        | D3        | NWP 2024 revision reflects updated policy; CWSA private operator model for spare parts effective; limited smart metering.                  |
|     | <b>Average</b>                     | <b>2.67</b> | <b>53%</b> | <b>D3</b> | <b>D3</b> |                                                                                                                                            |

### What Needs to Be Done, Potable Water

- Expand GWL production and distribution capacity urgently to close the 45% supply-demand gap.
- Implement a National Non-Revenue Water Reduction Programme with a target of less than 25% NRW within five years.
- Protect water resource bodies from galamsey and industrial pollution through coordinated inter-agency enforcement.
- GWL should improve operational efficiency to improve cost recovery while protecting vulnerable and low-income consumers through lifeline tariff structures.
- Establish a comprehensive national water asset register to support evidence-based O&M planning and capital renewal.
- Sector reforms for rural and small towns water supply should be fast-tracked to ensure sustainability of existing water supply systems.

## 4.7 HEALTH

Score: 2.44 | 49% | Grade E1

**E1**  
49%



Figure 4.7:

### Background and Sector Overview

The Ministry of Health (MoH) has oversight of Ghana's health infrastructure, implemented through the Ghana Health Service (GHS) and other agencies. As of 2023, 6,500 CHPS compounds are in operation, covering 46% of the country. The National Health Insurance Scheme (NHIS) covered 55% of the population (17.2 million people) as of June 2023. Health infrastructure is assessed in this Report Card for the first time.

#### Box 4.7: Health Sector Key Facts

| KEY FACTS: HEALTH INFRASTRUCTURE (2017-2024) |                                                                                                                                                     |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NHIS Coverage</b>                         | NHIS covered 55% of the population (17.2 million people) as of June 2023.                                                                           |
| <b>CHPS</b>                                  | 6,500 CHPS compounds in operation, covering 46% of the country.                                                                                     |
| <b>Doctor Ratio</b>                          | Doctor-to-patient ratio: approximately 1:8,000. Far below WHO recommended levels.                                                                   |
| <b>Ambulance Ratio</b>                       | Ambulance-to-population ratio: 1:84,000 (2021).                                                                                                     |
| <b>Facility Condition</b>                    | Only 5% of primary health facilities are equipped with complete basic examination tools.                                                            |
| <b>Health Expenditure</b>                    | Health expenditure as % of GDP: 3.1% (2023), down from 4% (2020). WHO target: at least 5%.                                                          |
| <b>Capital Budget</b>                        | Actual capital expenditure was on average 61% below budgeted levels between 2019 and 2023.                                                          |
| <b>Agenda 111</b>                            | Initiative to construct 101 district hospitals, 7 regional hospitals, and 3 psychiatric hospitals. Significantly behind its 2024 completion target. |
| <b>Catastrophic Expenditure</b>              | Proportion of households facing catastrophic health expenditure rose from 1.53% (2016/17) to 11.45% (2022/23).                                      |
| <b>Innovation</b>                            | Zipline medical drone network delivered 12 million+ products and vaccines by December 2022.                                                         |

Health infrastructure is assessed in this Report Card for the first time, and the findings are among the most sobering in these pages. The doctor-to-patient ratio is approximately 1:8,000; the ambulance-to-population ratio is 1:84,000. Only 5% of primary health facilities have a complete set of basic examination equipment. The capital budget allocated to health infrastructure has consistently been executed at 61% below the approved level on average between 2019 and 2023. Agenda 111, the initiative to construct 101 district hospitals, seven regional hospitals, and three psychiatric hospitals, remains significantly behind its 2024 completion target. The proportion of Ghanaian households facing catastrophic health expenditure rose from 1.53% in 2016/17 to 11.45% in 2022/23. That sevenfold increase over five years is not a statistical artefact. It is people choosing between paying for treatment and paying for food.

**Table 4.8: Assessment Grades for Health Infrastructure**

| No. | Area of Assessment      | 2026 Score  | 2026 %     | Grade     | 2016 | Key Observations                                                                                                              |
|-----|-------------------------|-------------|------------|-----------|------|-------------------------------------------------------------------------------------------------------------------------------|
| 1   | Capacity                | 2.50        | 50%        | E1        | N/A  | Doctor:patient ratio 1:8,000; ambulance ratio 1:84,000; 6,500 CHPS compounds (46% coverage); NHIS covers 55%.                 |
| 2   | Condition               | 2.57        | 51%        | D3        | N/A  | Only 5% of primary facilities fully equipped; many lack clean water/sanitation; rural-urban disparity severe.                 |
| 3   | Funding                 | 2.14        | 43%        | E2        | N/A  | Health expenditure 3.1% GDP (2023) vs WHO 5% target; capital budget execution 61% below budget 2019-2023 average.             |
| 4   | Future Need             | 2.29        | 46%        | E1        | N/A  | Agenda 111 (101 district hospitals) delayed past 2024 target; catastrophic health payments rose from 1.53% to 11.45%.         |
| 5   | Operation & Maintenance | 2.29        | 46%        | E1        | N/A  | MoH underspends capital budget; many CHPS face supply shortages and funding gaps; performance rated 'fairly good' (2022).     |
| 6   | Public Safety           | 2.71        | 54%        | D3        | N/A  | HAI risk from poor facility WASH; critically low doctor ratios increase medical error likelihood; emergency system improving. |
| 7   | Resilience              | 2.57        | 51%        | D3        | N/A  | COVID-19 exposed systemic gaps; UHC Roadmap 2020-2030 in implementation; rural facility resilience remains very low.          |
| 8   | Innovation              | 2.43        | 49%        | E1        | N/A  | Zipline drones delivered 12M+ products by 2022; Agenda 111 incorporates energy-efficient design; EHR/AI diagnostics limited.  |
|     | <b>Average</b>          | <b>2.44</b> | <b>49%</b> | <b>E1</b> |      |                                                                                                                               |

### What Needs to Be Done, Health

- Increase health expenditure toward the WHO's 5% of GDP target through a dedicated, protected budget line with multi-year commitment.
- Prioritise the completion of Agenda 111 facilities as a national emergency, with a revised, realistic implementation schedule and secured financing.
- Implement a healthcare worker retention strategy including rural postings incentives, professional development, and competitive remuneration.
- Expand CHPS compound coverage and equip all primary facilities with basic examination tools by 2030.
- Scale up medical drone delivery networks and integrate Electronic Health Records across the CHPS system.

4.8 AVIATION

Score: 3.57 | 71% | Grade C3

C3  
71%



Figure 4.8:

Background and Sector Overview

The aviation sector operates under the Ministry of Transport. The key agencies are the Ghana Civil Aviation Authority (GCAA), responsible for regulatory oversight and the provision of Air Navigation Services (ANS), and the Ghana Airports Company Limited (GACL), responsible for airport management and development. Ghana has seven public airports: Accra International Airport (AIA), Kumasi, Tamale, Takoradi, Sunyani, Wa, and Ho. AIA handled approximately 3.8 million passengers and 85,000 aircraft movements in 2024.

Box 4.8: Aviation Sector Key Facts

| KEY FACTS: AVIATION INFRASTRUCTURE (as of September 2025) |                                                                                                                                     |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Airports                                                  | 7 public airports: AIA (main international gateway), Kumasi, Tamale, Takoradi, Sunyani, Wa, and Ho.                                 |
| AIA Traffic                                               | Approximately 3.8 million passengers annually (2024). Projection: 5 million by 2030. 85,000 aircraft movements (2024).              |
| Airlines                                                  | Over 25 international airlines plus domestic carriers (Passion Air, Africa World Airlines).                                         |
| Safety Rating                                             | FAA International Aviation Safety Assessment (IASA) Category 1 rating maintained. ICAO safety audit scores above 70% in most areas. |
| AIA Condition                                             | Terminal 3 in excellent condition. Runway renovated. Modern HVAC, baggage handling, and boarding gates.                             |
| Kumasi                                                    | New terminal buildings well-designed but runway too short for full-load large aircraft. Extension works ongoing but limited.        |
| Tamale                                                    | Runway in excellent condition; capable of handling international aircraft.                                                          |
| NAVAIDs                                                   | Critical systems (ILS, VOR, ATC radar) well-maintained to ICAO standards. Some ageing equipment; need for redundant systems.        |
| Funding Gap                                               | Annual allocated budget for infrastructure upgrades: less than 60% of identified need. Projected 40% funding gap for 2024-2027.     |
| Future Investment                                         | USD 1.2 billion required by 2035 for capacity expansion, digital ANS upgrades, and green airport sustainability projects.           |

## Assessment

Aviation is the highest-performing sector in the 2026 Report Card, the only one to achieve a C grade, and it earns that distinction on the merits. Accra International Airport (AIA) Terminal 3 is a functioning, modern, well-managed international gateway. Ghana holds the FAA's International Aviation Safety Assessment Category 1 rating, which is not easily obtained and speaks directly to the quality of our regulatory environment and operational standards. ICAO safety audits have returned scores above 70% across most areas. Five of the eight assessment criteria for aviation came in at the Good level. This is what sustained, professional investment in infrastructure looks like when it works, and it is worth acknowledging clearly and without qualification.

The sector is, however, not without its vulnerabilities. While AIA Terminal 3 and Tamale's runway are in excellent condition, the Kumasi runway remains too short for full-load international operations. GACL's capital expenditure programme is heavily reliant on debt financing, and a 40% funding gap is projected for the 2024-2027 medium term. Retention of highly skilled technical staff, air traffic controllers and engineers who are frequently recruited internationally, remains a sector-wide challenge.

**Table 4.9: Assessment Grades for Aviation Infrastructure**

| No.     | Area of Assessment      | 2026 Score | 2026 % | Grade | 2016 | Key Observations                                                                                                             |
|---------|-------------------------|------------|--------|-------|------|------------------------------------------------------------------------------------------------------------------------------|
| 1       | Capacity                | 3.94       | 79%    | C1    | N/A  | AIA handles 3.8M passengers/year; 85,000 aircraft movements in 2024; Kumasi and Tamale near/beyond designed capacity.        |
| 2       | Condition               | 3.79       | 76%    | C2    | N/A  | AIA Terminal 3 and Tamale runway in excellent condition; Kumasi runway too short for large aircraft; some NAVAID ageing.     |
| 3       | Funding                 | 3.24       | 65%    | D1    | N/A  | Annual allocation <60% of identified need; 40% funding gap for 2024-27; AIA Terminal 3 maintenance alone USD 20M/yr.         |
| 4       | Future Need             | 3.03       | 61%    | D2    | N/A  | USD 1.2B needed by 2035; GACL capital programme debt-reliant; Kumasi/Tamale expansion facing delays in concessional funding. |
| 5       | Operation & Maintenance | 3.65       | 73%    | C2    | N/A  | GCAA holds FAA Category 1 IASA rating; ICAO audit >70%; PPPs for ground handling; staff retention remains a challenge.       |
| 6       | Public Safety           | 3.71       | 74%    | C2    | N/A  | Zero major accidents since 2018; CAT 1 FAA status maintained; wildlife hazards at regional airports an ongoing concern.      |
| 7       | Resilience              | 3.62       | 72%    | C3    | N/A  | AIA demonstrates resilience; backup generators deployed; regional airport flooding vulnerability; BCP plans need testing.    |
| 8       | Innovation              | 3.59       | 72%    | C3    | N/A  | E-gates at AIA; ADS-B implementation; drone cargo pilots underway; sustainable aviation fuel adoption in early planning.     |
| Average |                         | 3.57       | 71%    | C3    |      |                                                                                                                              |



- Complete and operationalise the Kumasi runway extension to enable full international operations and relieve AIA congestion.
- Close the 40% medium-term funding gap (2024-2027) through structured PPP agreements and sovereign-backed financing instruments.
- Implement a lifecycle replacement programme for ageing NAVAIDs at all regional airports with a funded schedule.
- Develop retention strategies and competitive compensation frameworks for highly skilled aviation technical professionals.
- Advance the Green Airport framework and Sustainable Aviation Fuel (SAF) adoption roadmap in partnership with ICAO and IATA.



## 5.0 COMPARATIVE ANALYSIS: 2016 vs 2026

A decade separates the 2016 and 2026 Report Cards. For the three sectors assessed in both editions, Electric Power, Potable Water, and Roads and Bridges, this section asks the straightforward question: have things improved? The answer varies by sector, and one sector has moved substantially in the wrong direction.

### 5.1 Overall Score Comparison

| Key Metric          | 2016            | 2026              |
|---------------------|-----------------|-------------------|
| Electric Power      | 3.08 (D2) / 62% | 3.29 (D1) / 66% ▲ |
| Potable Water       | 2.79 (D3) / 56% | 2.67 (D3) / 53% ▼ |
| Roads               | 2.79 (D3) / 56% | 2.48 (E1) / 50% ▼ |
| Overall (3 sectors) | 2.89 / 58%      | 2.81 / 56% ▼      |

### 5.2 Electric Power: Grade Improved D2 to D1

Electric Power is the one sector among the original three where the grade has improved, from D2 in 2016 to D1 in 2026. The main drivers are real: a 45% increase in installed generation capacity, a rise in national electrification from about 80% to 88%, and a significant improvement in the Operation and Maintenance criterion, which moved from D2 to C3, the highest individual criterion score in the entire Report Card. The grade did not improve further because the structural financial challenges in the sector, ECG's weak balance sheet, fuel procurement difficulties, and the reserve margin sitting below the minimum threshold, have not been resolved. The improvement is genuine but incomplete.

| Key Metric             | 2016           | 2026                  |
|------------------------|----------------|-----------------------|
| Overall Score / Grade  | 3.08 (62%), D2 | 3.29 (66%), D1        |
| Installed Capacity     | ~3,796 MW      | 5,492 MW (+45%)       |
| Dependable Capacity    | ~2,715 MW      | 5,060 MW              |
| Electrification Access | ~80%           | 88%                   |
| Hydro / Thermal Split  | 42% / 58%      | 28.4% / 69.2%         |
| O&M Grade              | D2 (3.16)      | C3 (3.60), Improved ▲ |
| Funding Grade          | D3 (2.86)      | D3 (2.82), Unchanged  |

### 5.3 Potable Water: Grade Unchanged D3, Score Declined

The Potable Water sector carries the same D3 grade as in 2016, but the underlying score has declined from 2.79 to 2.67. National basic water coverage has improved from the mid-seventies to approximately 88%, which is a real achievement in reach. But GWL now produces only 55% of daily national demand. The non-revenue water rate remains at approximately 50%, unchanged from 2016. A decade has passed without meaningful progress on one of the sector's most fundamental efficiency problems. The Funding criterion has deteriorated from D3 to E1. And the galamsey problem, identified as a concern in 2016, has intensified to the point where it now constitutes a systemic risk to raw water quality.

| Key Metric             | 2016                   | 2026                                  |
|------------------------|------------------------|---------------------------------------|
| Overall Score / Grade  | 2.79 (56%), D3         | 2.67 (53%), D3                        |
| Basic Water Coverage   | Urban ~77%, Rural ~64% | National ~88% (basic access)          |
| Daily Supply vs Demand | N/A                    | 572,012 vs 1,049,306 m³/day (55%)     |
| Non-Revenue Water      | ~50%                   | ~50%, No improvement ▼                |
| Galamsey Impact        | Emerging threat        | Severe; NWP revised and approved 2024 |
| Funding Grade          | D3 (2.60)              | E1 (2.35), Deteriorated ▼             |
| Innovation Grade       | D3 (2.71)              | D2 (3.08), Improved ▲                 |

## 5.4 Roads and Bridges: Grade Declined D3 to E1, Most Alarming Trend

The Road sector's decline is the finding that should keep policymakers awake at night. In 2016, roads scored D3, Fair. In 2026, the grade is E1, Poor. We have crossed a line. The network is bigger, 94,203 km compared to 78,401 km in 2016, but we have grown the network faster than we can maintain it, pave it, or make it safe.

In 2016, the GoG consolidated fund planned to spend GH¢3.99 billion on roads and delivered GH¢141 million, a budget execution rate of 3.5%. By 2024, GoG execution had improved to 83%, but combined contractor arrears had grown from GH¢1.57 billion in 2016 to GH¢17.75 billion in 2024, an 11.3-fold increase in eight years. The Funding criterion has fallen from D3 to E2. The Public Safety score has fallen to E2, the lowest criterion score of any sector in this entire Report Card. Meanwhile, overloading incidence has grown from 2.28% in 2016 to 5.7% in 2024.

| Key Metric                  | 2016                                | 2026                                       |
|-----------------------------|-------------------------------------|--------------------------------------------|
| Overall Score / Grade       | 2.79 (56%), D3                      | 2.48 (50%), E1 ▼                           |
| Network Length              | 78,401 km                           | 94,203 km (+20%)                           |
| Urban Roads Length          | 15,462 km                           | 28,480 km (+84%, fastest growing category) |
| Paved Network %             | ~30%                                | 27% (proportionally lower)                 |
| Condition: Good             | 41%                                 | 47%                                        |
| Condition: Poor             | 26%                                 | 21%                                        |
| GoG Budget Delivery         | 3.5% of plan (GH¢0.14B of GH¢3.99B) | 83.1% of plan (GH¢3.33B of GH¢4.01B) ▲     |
| Combined Contractor Arrears | GH¢1.57 billion                     | GH¢17.75 billion (11.3x increase) ▼        |
| Overloading Incidence       | 2.28% average                       | 5.7% (2024), more than doubled ▼           |
| Funding Criterion           | D3 (2.52)                           | E2 (2.25), Deteriorated ▼                  |
| O&M Criterion               | D2 (2.93)                           | E1 (2.36), Deteriorated ▼                  |
| Public Safety Criterion     | D3 (2.76)                           | E2 (2.17), Deteriorated ▼                  |

| Key Metric                            | 2016                             | 2026                                                     |
|---------------------------------------|----------------------------------|----------------------------------------------------------|
| <b>2016 Road Crashes / Fatalities</b> | 8,651 crashes / 2,084 fatalities | Systemic conditions unchanged; no meaningful improvement |

## 5.5 New Sectors: 2026 Baselines

Five sectors are assessed for the first time in 2026, establishing baselines for future Report Card editions. Aviation (C3, 3.57) sets a strong baseline, reflecting real investment in Ghana's primary international gateway. Telecommunications (D1, 3.21) reflects Ghana's mobile-first digital growth and competitive market. Education (D3, 2.60) and Health (E1, 2.44) reveal deep structural underfunding in Ghana's social infrastructure. Railway (E1, 2.40) presents the lowest baseline of all sectors, reflecting decades of neglect.



## 6.0 CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

The aggregate grade for Ghana's infrastructure in 2026 is D3, 2.83 out of 5.0, or 57%. That is the same letter as 2016. It would be easy to read that as stagnation, but the more accurate reading is that a sector mix has shifted: power and aviation improving, roads and the new social sectors dragging the average down. The overall D3 conceals both genuine progress and genuine deterioration, and it would be a mistake for any administration to cite the stable headline without engaging with what lies beneath it. Roads are in a worse condition than they were a decade ago. Health infrastructure has entered the assessment at E1. A million children sit without desks. These are not acceptable baseline conditions for a country with Ghana's ambitions.

The most consistent finding across all eight sectors is the inadequacy of infrastructure funding, and, critically, the poor governance of the funding that does exist. No sector scored better than D1 on the Funding criterion. In four sectors it scored E1 or E2. This is not simply a matter of Ghana spending too little, though that is part of it. It is also about how money is allocated and managed: projects awarded before funding is secured, Road Fund revenues diverted to non-maintenance uses, capital budgets approved but not released, contractor arrears that stretch to six months and beyond. The infrastructure problem in Ghana has a significant fiscal governance dimension, and technical solutions, however well-designed, will not take root in a system where the financial management of infrastructure expenditure is as broken as the infrastructure itself.

### 6.2 Priority Recommendations

#### National Level

- Establish a National Infrastructure Council to coordinate cross-sector infrastructure planning, investment, and performance monitoring.
- Enact a National Infrastructure Asset Management Policy mandating condition-based maintenance and asset registers across all public agencies.
- Integrate the findings of the 2026 GIRC into all Sector Medium Term Development Plans (SMTDPs) 2026-2029 and ensure implementation tracking.
- Protect infrastructure maintenance budget lines from discretionary cuts; establish multi-year funding commitments for the Road Maintenance Trust Fund, Railway Development Fund, and education and health capital budgets.

#### Sector-Specific Priority Actions

- Roads (E1): Implement LI 2411; resolve contractor payment arrears through MoF structured settlements; increase fuel levy to US\$0.10/litre equivalent; fully deploy WIGRAMS; modernise axle load enforcement with weigh-in-motion technology; separate policy, regulation, asset management, and service delivery under the NRA Act; mandate 90% open competitive tendering; invest in BRT and urban rail for Accra and Kumasi; ensure all major road projects are preceded by feasibility studies, engineering design, and EIA.
- Electric Power: Address ECG financial crisis; secure 1,200 MW additional capacity by 2028; complete 330 kV Accra-Kumasi line; develop renewable energy transition roadmap.
- Potable Water: Close the supply-demand gap; implement NRW reduction programme targeting below 25%; protect water bodies from galamsey; improve GWL operational efficiency; fast-track rural sector reforms.

- **Railway:** Operationalise Tema-Mpakadan line immediately; establish a Railway Development Fund; fast-track right-of-way acquisition; attract PPP for rolling stock.
- **Aviation:** Complete Kumasi runway extension; close the 40% medium-term funding gap; replace ageing NAVAIDs; advance SAF adoption.
- **Telecommunications:** Address MTN's market dominance; invest in fixed broadband; accelerate 5G spectrum allocation; promote data affordability.
- **Health:** Increase spending toward 5% of GDP; complete Agenda 111 as a national emergency; expand CHPS with adequate staffing and equipment.
- **Education:** Increase infrastructure expenditure to 20% of education budget; eliminate desk deficit by 2028; electrify and connect all rural schools.

### For Private Sector and Development Partners

- Expand PPP frameworks across roads, water, railways, health, and education with clear risk allocation, performance standards, and investor protection.
- Support the GhIE and government in the next Report Card cycle to build granular, regional-level infrastructure data.
- Increase concessional financing for the railway and health sectors, where social and economic returns are high but public budget constraints are severe.

### Looking Ahead

The GhIE will publish the next edition of this Report Card on a regular cycle. The next edition will disaggregate scores to the regional level, track the implementation of these recommendations, and extend the assessment to additional sectors including sanitation, ports, and digital government. We want each edition to be more useful than the last, more specific about where the problems are, more precise about what has changed, and more honest about what progress, or its absence, looks like. The recommendations in this Report Card are addressed to government, to parliament, to the private sector, and to development partners. That is what we have tried to do in this Report Card. We hope it is read, debated, challenged, and, most importantly, acted upon.

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