Giga Country Tour

Guatemala

Welcome!

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giga


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Introduction

Giga Country Tour – Guatemala



Antonio Ibacache Reyes
Giga Country Engagement Specialist
Americas and Caribbean Region
ITU
Master of Ceremonies

Run of show

Giga Country Tour – Guatemala

10 September 2026

09:30 - 09:40	Welcome and Opening Remarks
09:40 - 09:55	Country Spotlight: Guatemala
09:55 - 10:05	The Supporting Ecosystem – Voices from the field
10:05 - 10:20	Open Discussion – Q&A
10:25 - 10:30	Closing Remarks and Introducing Next Stop

Giga Country Tour

Guatemala

Part 1
Opening

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Opening Remarks

Giga 2026 Overview: “Progress, Lessons and Next Steps"



Irene Kaggwa
Giga Programme Manager
ITU



Alejandra Trossero
Representative
UNICEF Guatemala



Herbert Armando Rubio
Superintendent
Superintendency of Telecommunications (SIT)



Francisco Cabrera
Vice Minister of Technical Education
Ministry of Education of Guatemala

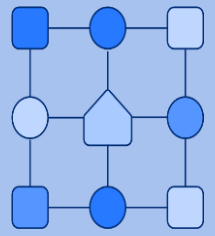
Giga Overview

Giga's core areas of work



Map

Map the location of schools and monitor school connectivity status in real-time



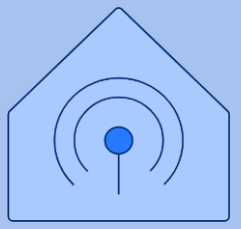
Model

Model the infrastructure and investments needed to deliver school connectivity



Finance

Support governments to build the right-layered financing to pay for connectivity



Contract

Help governments contract connectivity for schools

Underpinned by **capacity development,** strengthening knowledge and skills of countries across Giga's four main pillars

Giga Country Tour

Guatemala

Part 2
Country Spotlight



José Luis Antúnez
Consultant
Superintendency of
Telecommunications (SIT)



Edsson González
Advisor
Educational Innovation
Sub-directorate
Ministry of Education

1 | Guatemala at a glance

2 | Why Giga?

3 | The Giga Effect

4 | Looking Ahead... 2030 Vision

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1 | Guatemala at a glance

Population
18.4M

24.8 Average age
50.4% Female population
43.6% Indigenous population

GDP (2024)
121.4 MUSD

The largest economy in Central America

Remittances (2024)
$24,000 MUSD

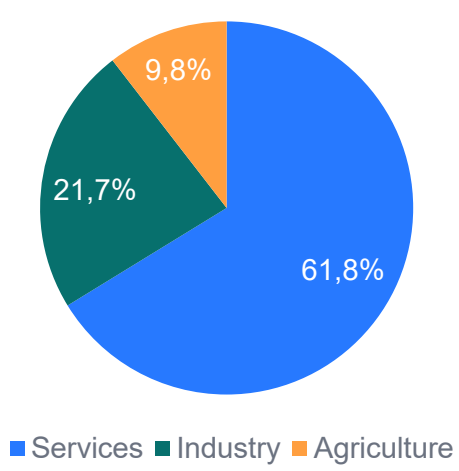
19.1% of GDP

GDP growth
3.65%

It recovered from the -1.8% in 2020

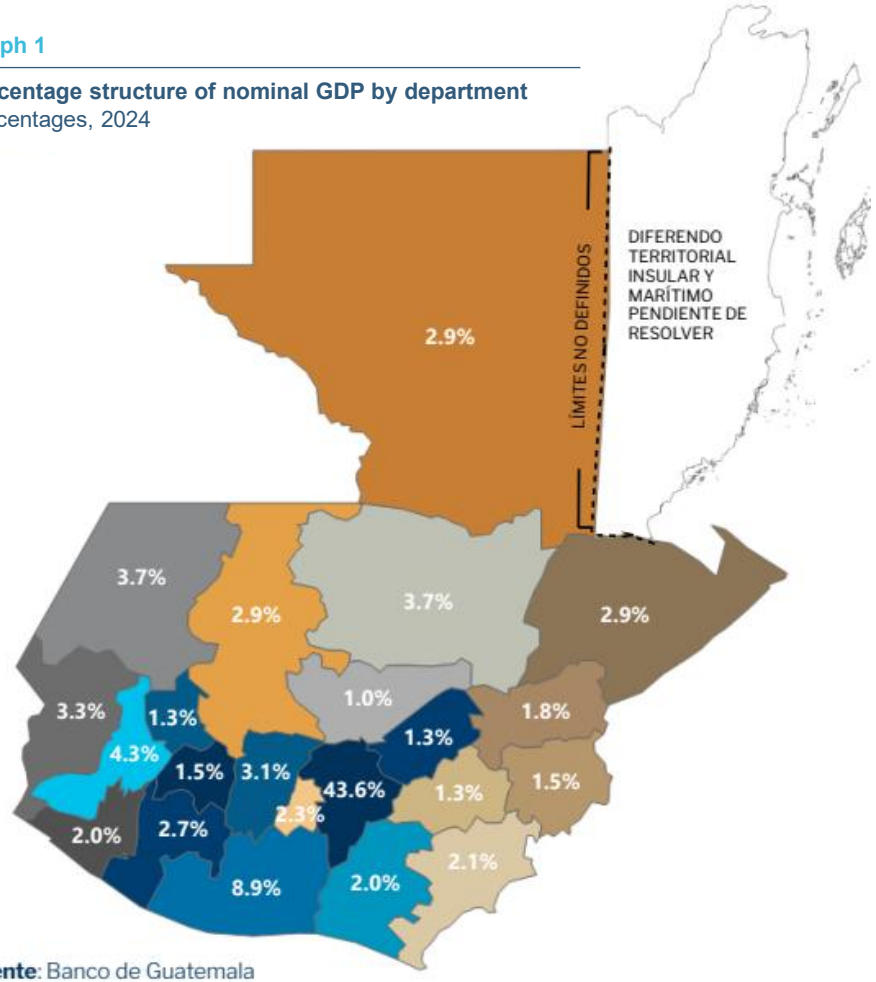
GDP per capita
$6,150

It increased from the $3,894 in 2015



Graph 1

Percentage structure of nominal GDP by department
Percentages, 2024



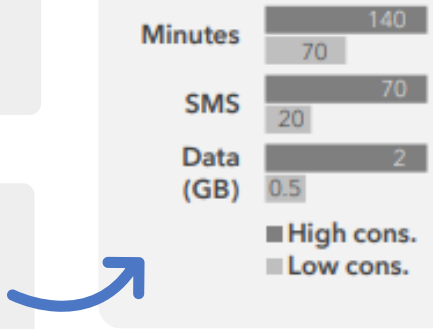
Fuente: Banco de Guatemala
Nota: Cifras preliminares

Sources: Banco de Guatemala

1 | Guatemala at a glance

57.9 ICT Development Index (0–100)*

2.9% Mobile
6.7% Fixed
Price of the ICT basket as a percentage of GDP per capita.



$2.79B Telecommunications market size in 2025: among the largest in Central America.

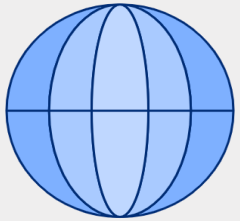
40% 5G population coverage, 2023 — compared to 23% in 2022

20M+ Mobile connections: 99.3% on 3G/4G/5G networks (GSMA, 2025)

$176 MUSD Proceeds from the 2023 spectrum auction (700 MHz and 2.5 GHz bands; Tigo and Claro)

(*) Source: ICT Development Index 2025 and Affordability of ICT services 2024, ITU.

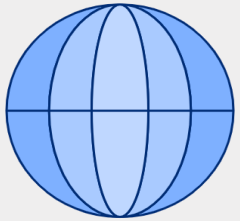
1 | Guatemala at a glance



Internet Usage

60%

60% of the population (2024)

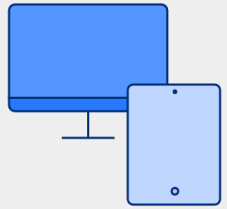


Internet Access

34%

8.7%

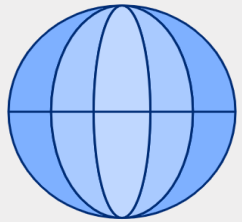
34% Urban Areas
8,7% Rural Areas



Mobile Network Coverage

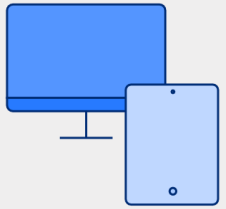
95%

95% of the population covered by 3G.
92% LTE/WiMAX



Household Broadband Penetration

50.8%



Mobile Telephony

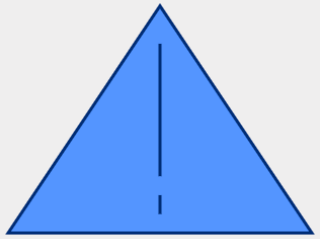
90%

Teledensity >100%More than 20 million subscribers

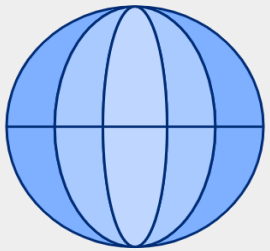
1 | Guatemala at a glance



Children and adolescents
6.6 M



Children living in poverty
64%



With internet Access
23%



With internet Access
3.5 M

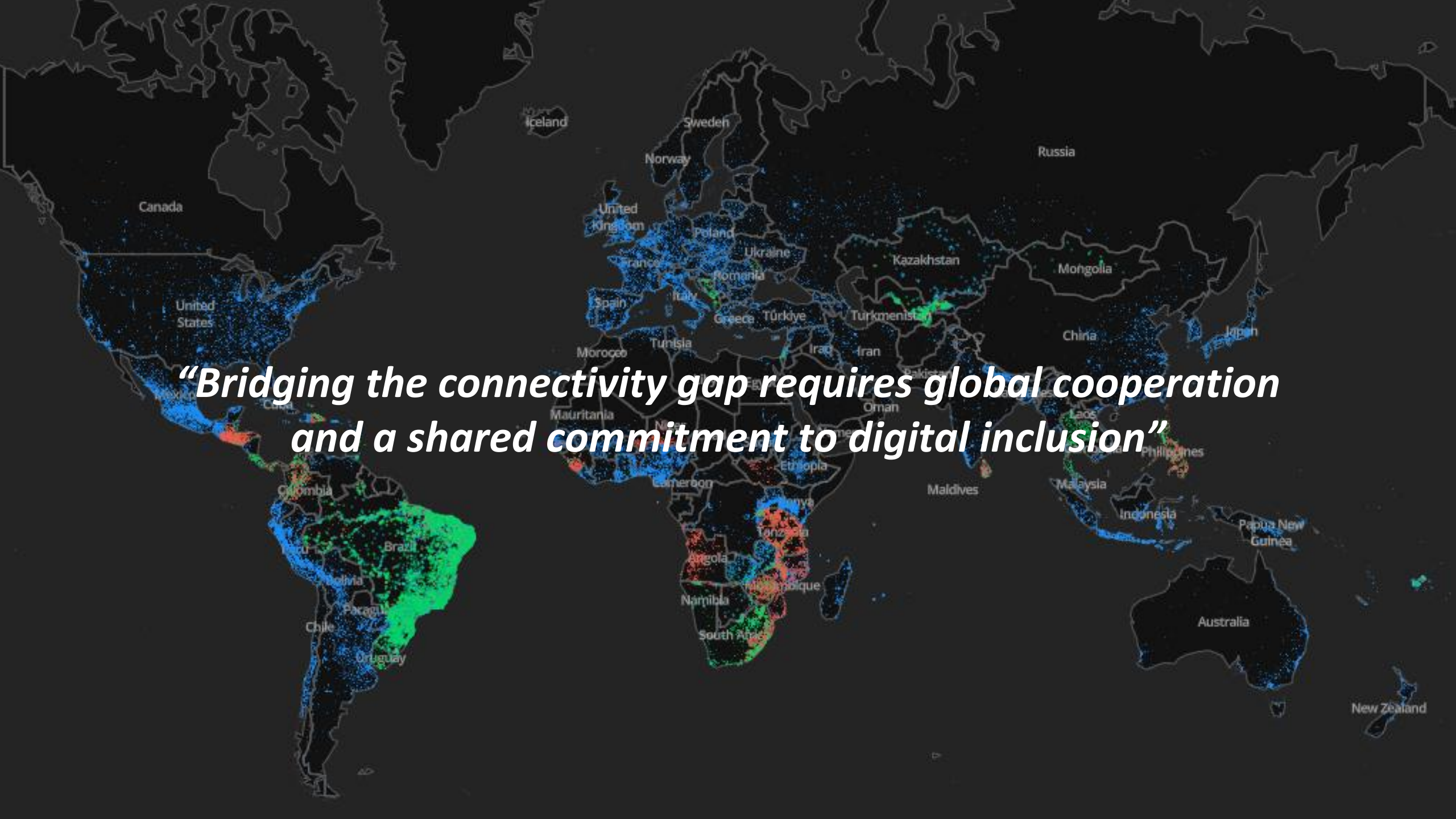
Connectivity for All

Connectivity is the first pillar of the Ministry of Education's (MINEDUC) Digital Transformation Policy, reflecting its central role in the institutional agenda.

40,000
Students

10,000
Teachers

With access to educational resources, digital libraries, and certified courses.



“Bridging the connectivity gap requires global cooperation and a shared commitment to digital inclusion”

2 | Why Giga?

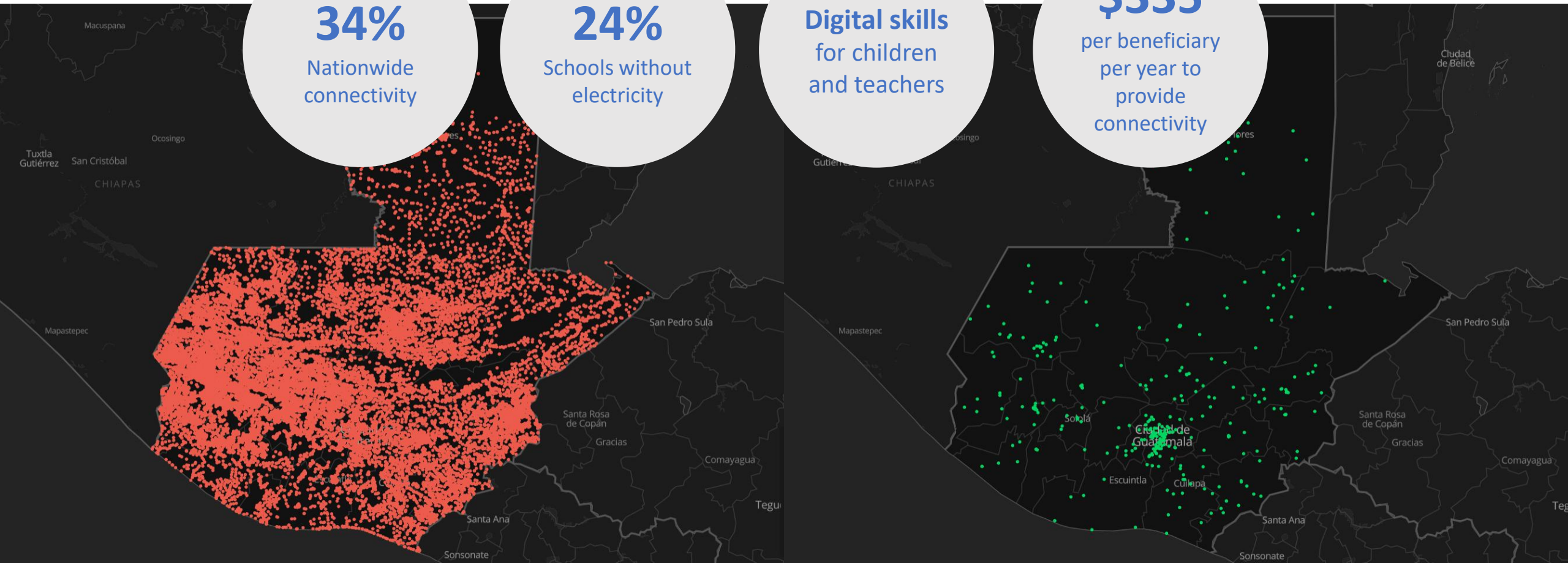
What is missing? What is the gap?

34%
Nationwide connectivity

24%
Schools without electricity

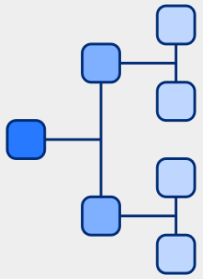
Digital skills
for children and teachers

$335
per beneficiary per year to provide connectivity

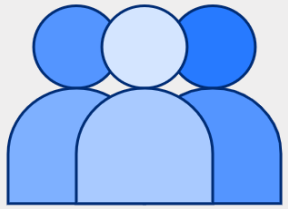


2 | Why Giga?

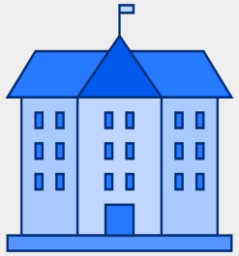
Progress in School Connectivity in Guatemala



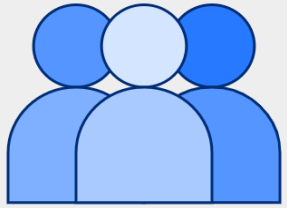
2
Government Institutions



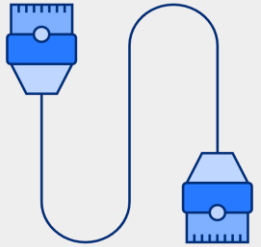
1
Policy to Reach Everyone



36.000
Schools



46.324
Students Connected



100%
Connectivity Target

“Access to technology can transform people’s perspectives and reshape the future”



© UNICEF/UNI604703/Diaz

3 | The Giga Effect

Lessons Learned / Good Practices

- ✓ Strategic coordination between telecommunications authorities and the education sector is key to accelerating technology infrastructure coverage in schools.
- ✓ Giga's technical training for the team helps manage connectivity plans with a long-term vision, optimizing resources and maximizing the impact of each intervention.
- ✓ Use crowdsourced data to estimate tower locations, fiber-optic node locations, and mobile coverage.
- ✓ Identify Internet service requirements tailored to the needs of each institution (schools, health centers, etc.).

3 | The Giga Effect

Institutional Learning



Evidence-based decision-making: integrating real-time mapping and data visualization strengthened processes and government capacity to plan, prioritize, and allocate resources with greater precision.



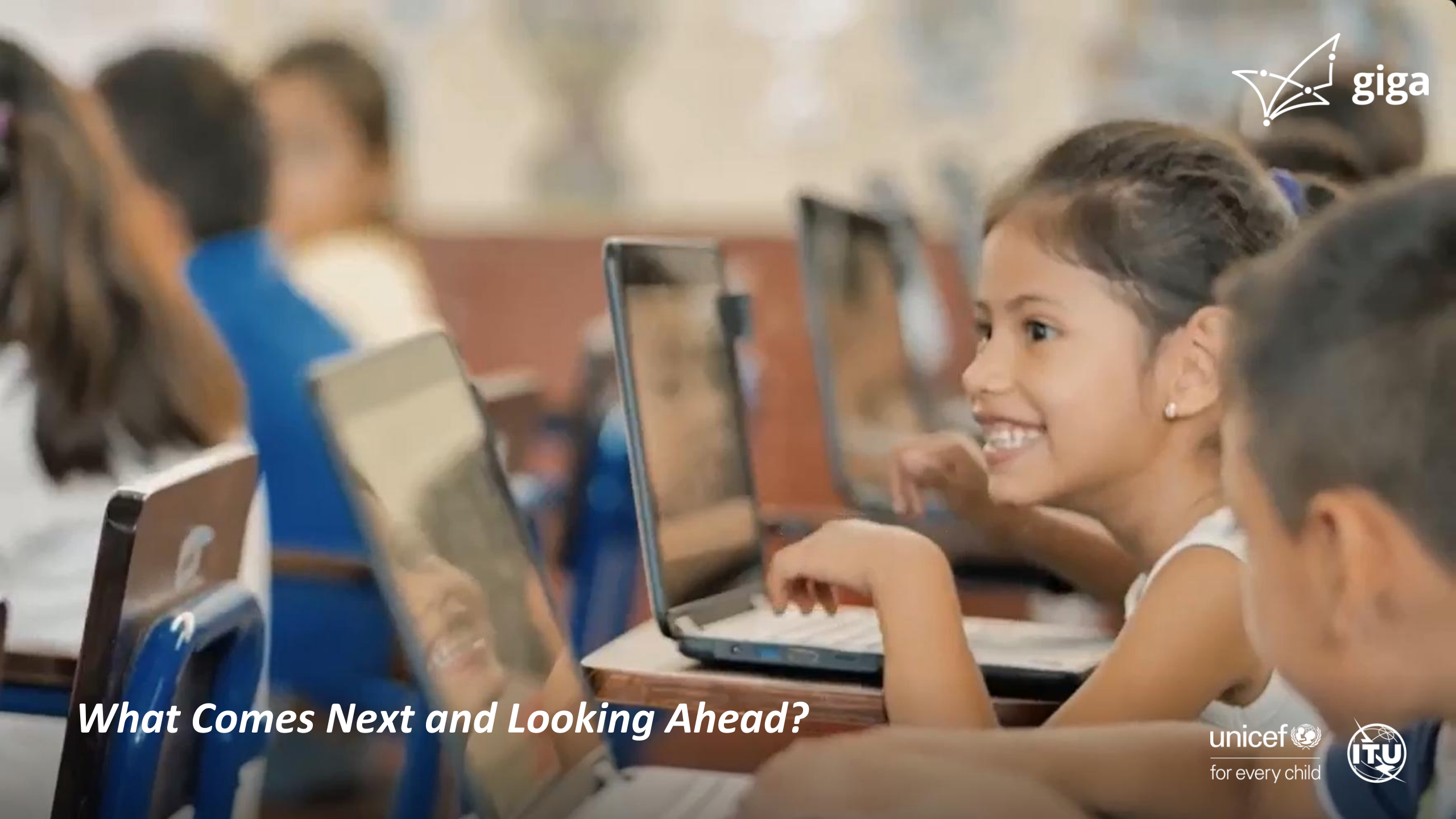
Having shared digital tools, data, and methodologies **can transform a one-off intervention into sustainable institutional capacity.**



Understanding the State's legal procurement framework helps streamline decision-making and public procurement processes.



Monitoring and supervision are essential to ensure the proper functioning of Internet services.



What Comes Next and Looking Ahead?

4| Looking ahead... 2030 Vision

- Connecting schools is a multisectoral commitment.
- Provide the population with access to data on service quality, coverage, and telecommunications infrastructure.
- Ensure that legislation recognizes Internet access as a basic service.



Giga Country Tour

Guatemala

Part 3
Voices from the Field

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Voices From The Field

Giga Country Tour – Guatemala: The Supporting Ecosystem



Enrique Iglesias Rodríguez
Telecom Sector Specialist, Inter-American Development Bank



Sergio X. Plaza
CEO, Wayfree
Partner2Connect Pledger



Aldo Natalizia Nasser
Director, Regulatory and Sustainability Affairs, Millicom.
Partner2Connect Pledger



Marisabel Ruiz
CEO, Sheva Asociation Guatemala
Inclusión y Educación Digital de Niñas y Mujeres







A strategic partnership between ITU and IDB to strengthen digital infrastructure in Latin America and the Caribbean, implemented in three pilot countries, including Guatemala.

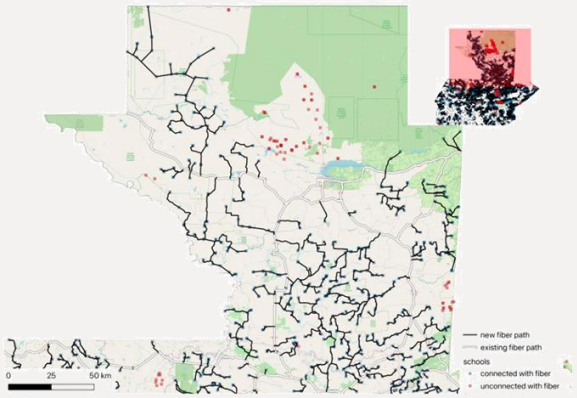
An advanced ICT infrastructure mapping methodology to identify unconnected schools, leveraging Ookla's 3G/4G tower location data through the Development Data Partnership.

Guatemala has 86% mobile broadband coverage. However, significant connectivity gaps remain in remote areas, particularly in schools serving rural and Indigenous communities.

Data-Driven Connectivity Needs Assessment

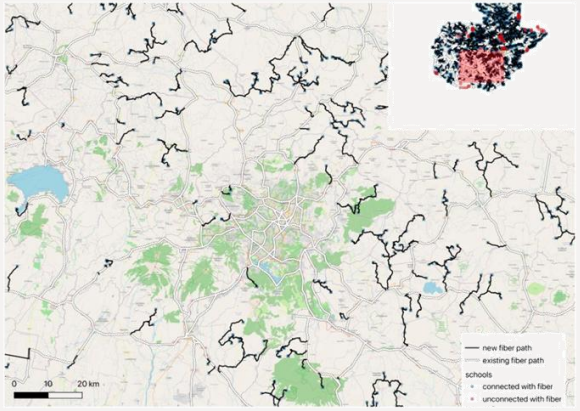
Fiber path modelling

El Petén



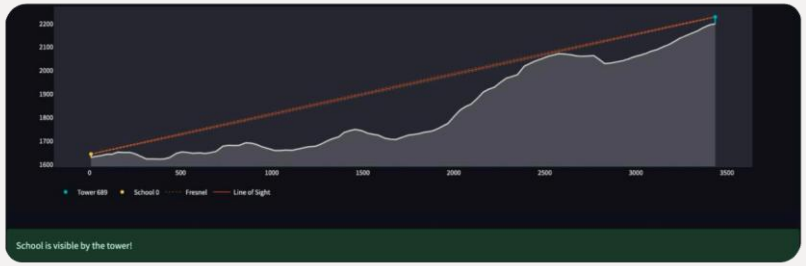
New Fiber (Km) = 4,480
Schools = 1,108

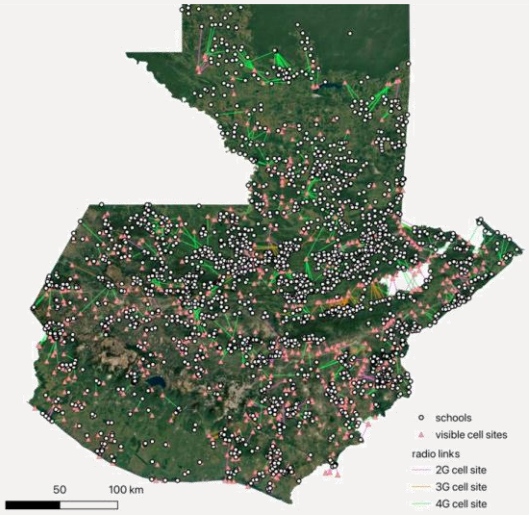
Guatemala City



New Fiber (Km) = 2,000
Schools = 507

P2P visibility modelling





Feasible new point-to-point microwave links.

Opportunities to Improve Digital Connectivity for Regional Integration

1

IMPROVING DIGITAL CONNECTIVITY AT THE NATIONAL LEVEL

- National Broadband Plans
- Expansion of backbone networks
- Next-generation access networks

2

DEVELOPING DIGITAL HUBS

- Deployment of regional data centers and Internet Exchange Points (IXPs)
- Promotion and development of regional and local content
- Improved interconnection among countries in the region (fiber rings)

3

IMPROVING DIGITAL CONNECTIVITY AT THE INTERNATIONAL LEVEL

- Promotion of submarine cable deployment
- Harmonization of regulations and public policies related to Universal Service Funds (USFs), spectrum management, and the analog switch-off
- Improved access conditions to the global Internet

Investing to Integrate the Region into the Global Economy



UIT PARTNER2CONNECT · DIGITAL COALITION

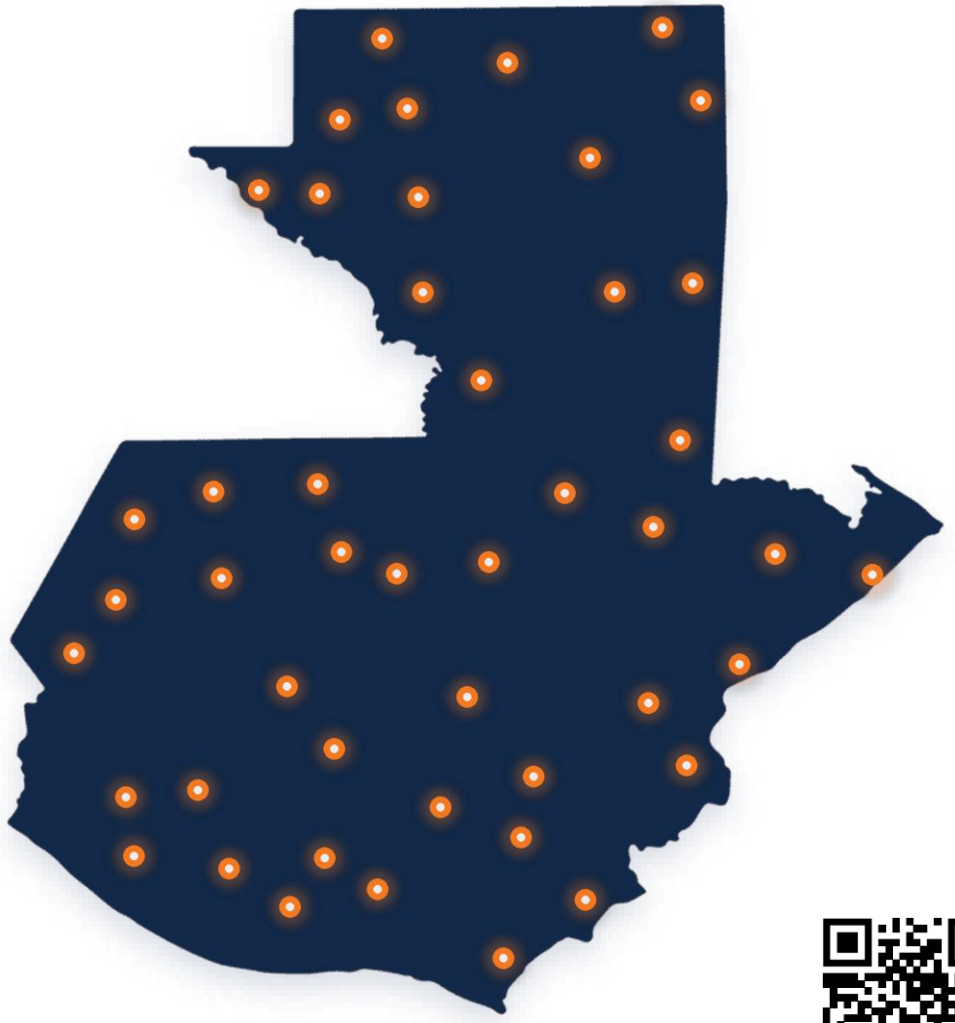
wayfree®

FROM COMMITMENT TO IMPACT

Free public Wi-Fi is becoming a cornerstone of Guatemala's national digital inclusion infrastructure.

22 / 22
DEPARTMENTS

270 / 340
MUNICIPALITIES



+5,5M
PEOPLE REACHED

1,1M
USUUSERS · Last 90 days

6,1M
SESSIONS · per month

Partner2Connect Pledge — **USD 6,7M** · Funded by EU, implemented by IDB Lab · 2025–2026

wayfree®

Connectivity as an Educational Opportunity

Uninterrupted connectivity to help students learn in the public spaces they already use.

Free Public Wi-Fi

In public squares, markets, and transport terminals frequented by students.

Donated Wayfree+ Code

15 days of premium, ad-free, uninterrupted access.

Time to Learn

Studying, homework, and online services — at no cost to families.

7,140

Wayfree+ codes donated

7,140

Students who could benefit

107,100

Days of premium access

Q100,000 donated in connectivity · With Fundación Azteca · MINEDUC (Ministry of Education)Aligned with SDGs 4, 9 and 10

wayfree®

Connectivity as Public Health Infrastructure

The same network that connects citizens can also help protect them.

Free Public Wi-Fi

Users connect in public squares, markets, and transport terminals.

Citizen Health Input

A brief three-minute survey through the captive portal.

Early Epidemiological Signals

Live indicators by age, sex, and municipality.

Public Health Dashboard

A live dashboard for the Ministry of Health.

ACTIVE PILOT

Measles surveillance

urrently operational · wayfree-almadatos.com

CAPACITY

Near-real-time monitoring

across all 22 departments

NEXT PHASE

11+ vaccine-preventable diseases

measles, influenza, HPV, rotavirus

Connect → Understand → Serve

With FUNDEGUA · Ministry of Public Health (MSPAS) · ALMA

wayfree®

From Free Wi-Fi to Digital Government

Bringing government services directly to citizens' mobile phones.

Free Public Wi-Fi

Open and free public access.

Gateway to Digital Government

A dedicated government channel on the same network.

Public Services

Delivered directly to citizens' mobile phones

WHAT CITIZENS CAN ACCESS THROUGH THIS GATEWAY

- **Government Services**
- **Education**
- **Health**
- **Economic Opportunities**

NATIONAL DIGITAL CONNECTIVITY PLAN TARGET

340 / 340 municipalities · 100% coverage

>90% mobile signal coverage **<65%** consistent access

The signal is there. Meaningful access is not.

GUATEMALA:
Connecting people,
Transforming opportunities.

Tigo has promoted initiatives aimed at closing the digital divide and strengthening skills for personal, educational, and social development across Latin America.



+ 107 K
Connected Women

Women empowered with digital tools to start businesses, learn, and grow

+ 56 K
Connected Teachers

Teachers equipped with new digital skills to transform education

+ 20 K
Stay Safe Online

Children, teachers, and parents promoting safe and responsible Internet use

+ 183 K
Direct Beneficiaries

Partnerships that amplify our impact

We work in partnership with governments, organizations, and strategic allies to generate sustainable impact at greater scale.

Connected Teachers

Education that transforms

Guatemala now has more than 56,000 teachers trained through Maestr@s Conectad@s, a Tigo programme that brings digital skills to the heart of Guatemalan education.



+ 56,000

Certified Teachers

01 – DIGITAL TOOLS

Teachers strengthened their digital skills and learned to use new tools to create more dynamic content and learning experiences.

02 – EDUCATIONAL INNOVATION

Teachers adopted innovative methodologies to transform their teaching practices and promote more active, participatory learning.

03 – TECHNOLOGY INTEGRATION IN THE CLASSROOM

Teachers developed skills to integrate technological resources into their classes, facilitating student interaction, participation, and understanding.

04 – NEUROEDUCATION

Teachers gained knowledge of learning processes and strategies to improve students' attention, motivation, and development.

05 – LEARN, PRACTICE, GET CERTIFIED

1. 25 training courses
2. Courses lasting 2 or 4 hours
3. Practical activities
4. Final assessments
5. Certification for each course

* Partnership with the Ministry of Education to formalize teacher training.

From building skills
to shaping Guatemala's future

Jóvenes Conectados **is a Tigo programme focused on strengthening young people's digital skills and preparing them for opportunities in today's world, particularly in education, employability, and personal development.**





Purpose-Driven Digital Learning

Learning pathways combining technical content and soft skills to improve participants' employability

Mandatory Educational Integration

The programme is part of a high school subject, with three weekly instructional hours. Students must complete the courses to pass the subject

Tour of the Future

An immersive experience featuring visits and engagement with leading companies in the country, bringing participants closer to the world of work.

Academic Offering and Content

- **10,300** available courses
- **8** Learning pathways

Academic Integration

- Integrated into classroom instruction
- Completion of one Learning pathway

Assessment and Recognition

- Certificates
- Student recognition

Guidance and Support

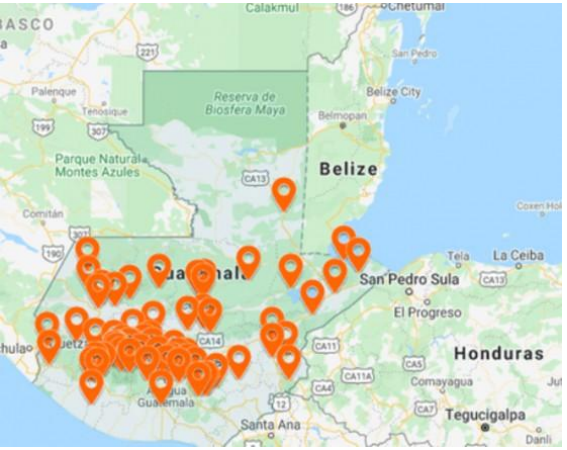
- Guidance and follow-up

EMPOWERING THROUGH DIGITAL TRANSFORMATION

At SHEVA, we empower people through **impactful projects that use digital tools** to support their development and improve their well-being.



WE DESIGN AND IMPLEMENT IMPACT PROGRAMMES IN GUATEMALA



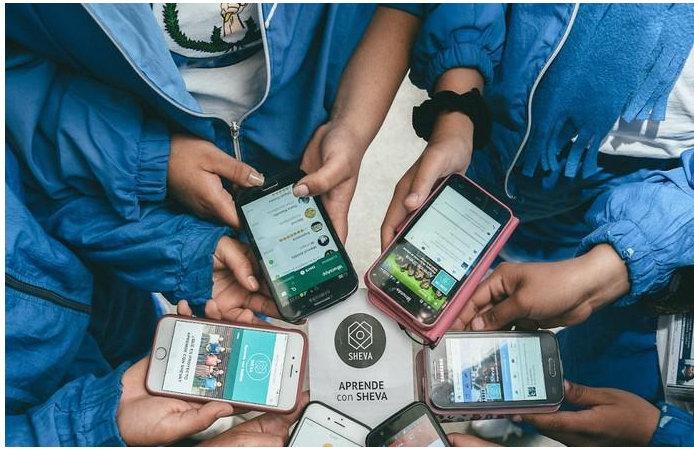
Analysis
Opportunity identification, reporting, monitoring, and evaluation.



Programme Design
Tailored projects and methodologies



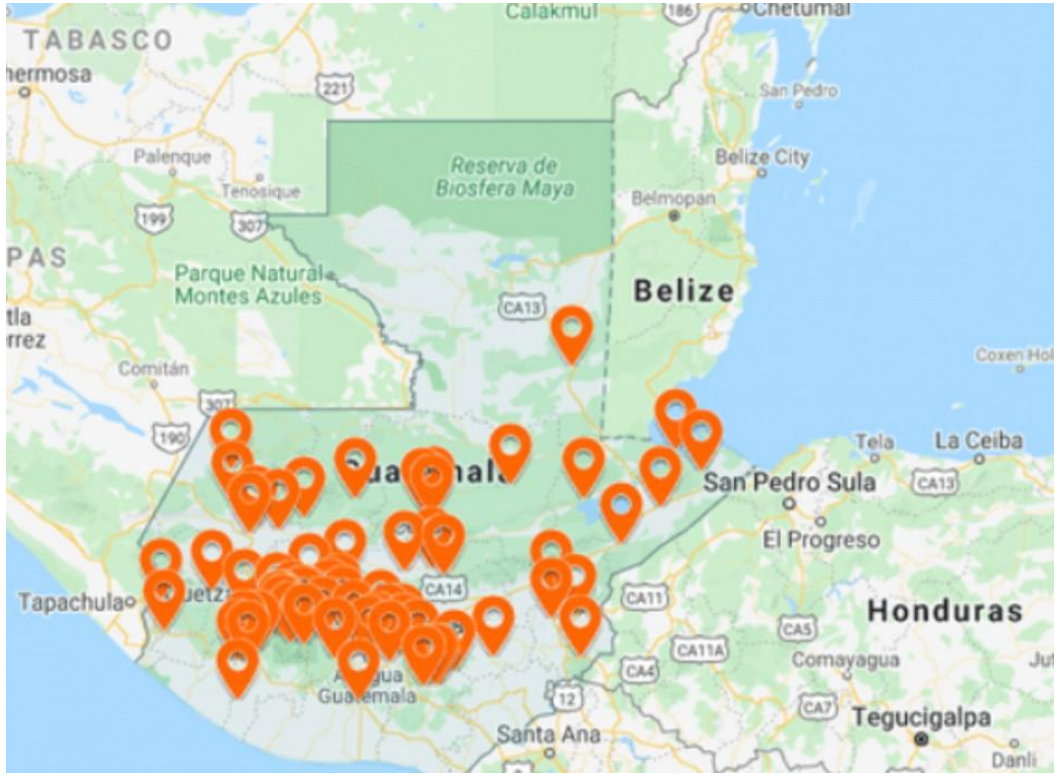
Programme Implementation
Training, reporting, monitoring, and evaluation



Technology
We consistently integrate technology to expand reach and impact

IMPACT

We work across all departments of Guatemala, implementing both virtual and in-person projects. We have provided support and developed small-, medium-, and large-scale projects throughout the country.



SHEVA

Giga Country Tour

Guatemala

Part 4
Open Discussion

Open Discussion

Live Exchange

Moderated Q&A with participants and MoC



Antonio Ibacache Reyes
Giga Country Engagement Specialist
Americas and Caribbean Region, ITU

Giga Country Tour

Guatemala

Part 5
Closing

Giga Country Tour

Do you want your country to be featured in the Giga Country Tour?
Email us at:

giga@itu.int

unicef
for every child

ITU

Next Stop
Giga Country Tour

Cambodia





Photo by Roth Chanvirak on Unsplash

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