

Leveraging Geospatial Data to Empower Communities



AfricaGIS 2025

Holli Howard
Google Maps
November 19, 2025



UN-GGIM: AFRICA
UNITED NATIONS
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT

AfricaGIS 2025 and UN-GGIM: Africa XI Joint Conference

17-21 November 2025, Alisa Hotel, Accra, Ghana



International Federation of Surveyors
Fédération Internationale des Géomètres
Internationale Vereinigung der Vermessungsingenieure

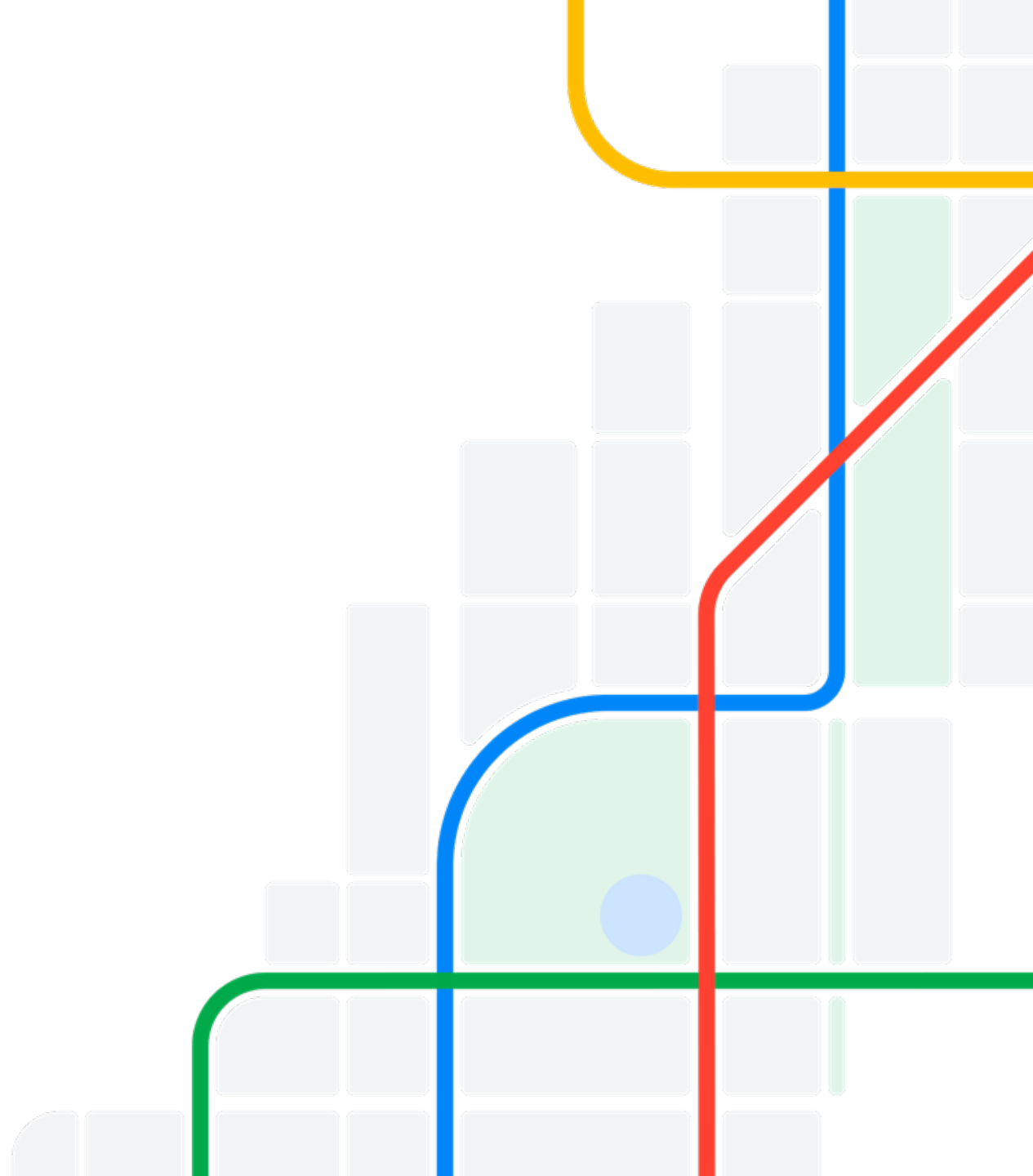


**UNIVERSITY
OF GHANA**

Agenda

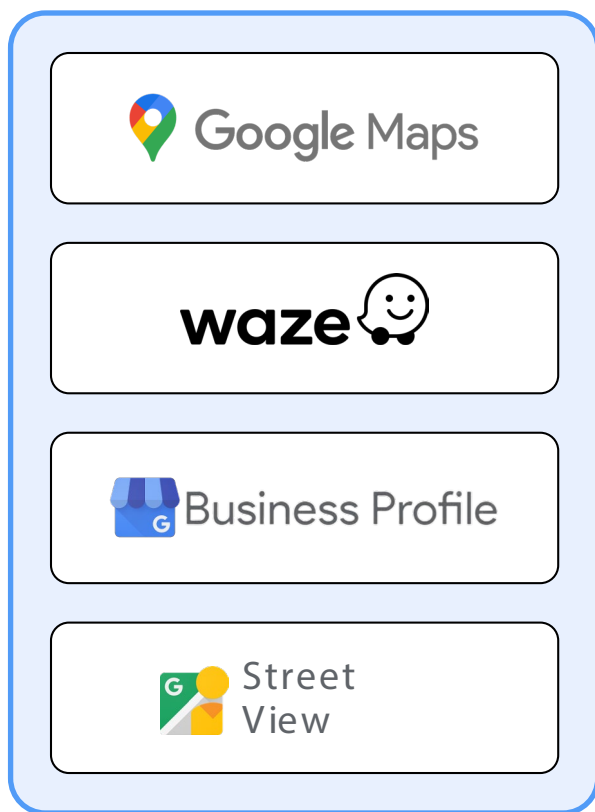
- Leveraging Geospatial Data to work for your community
- Geo for Cities
 - Google Maps
 - Content Partners
 - Transit
 - Waze for Cities
- Google commitment to Africa's Digital AI transformation



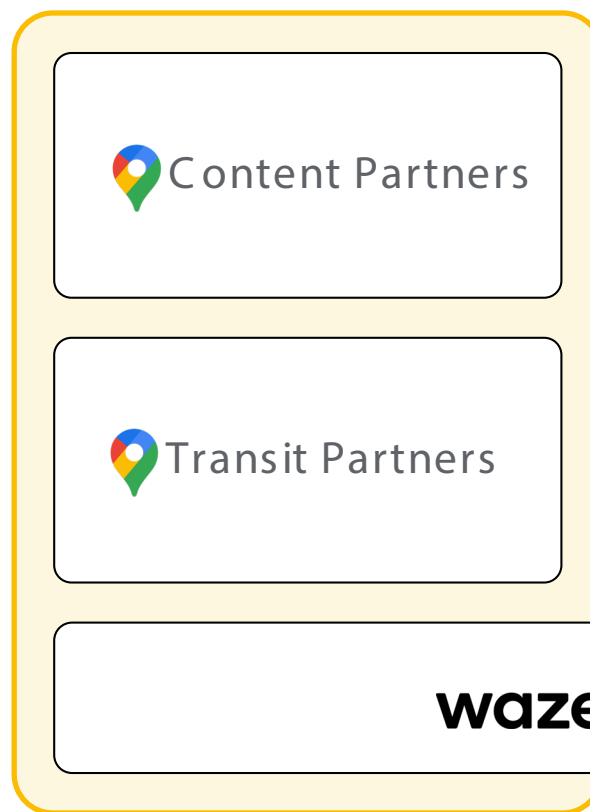


Many ways to put geospatial data to work

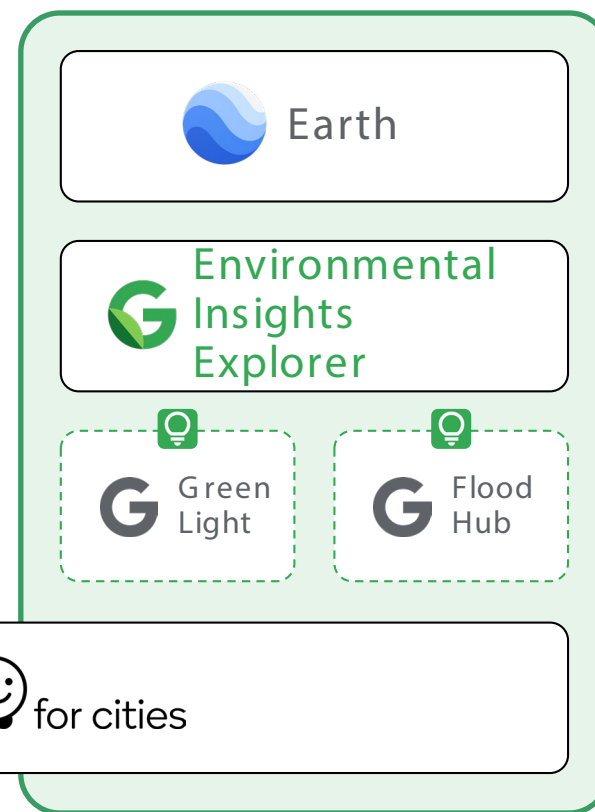
User-facing products



Partner contribution platforms



Data insights products



The world never stops changing.
We never stop mapping it.



What goes into map creation at a global scale?

Global and Local



Precision and Diversity

At the same time, data must be diverse, covering a wide range of applications, and authentic to the local level.



Continual Freshness

And along the way, the world never stops changing.
Neither can its maps.



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What goes into map creation at a global scale?

Global Scale

The world is a big place, and it takes a big platform to map it.



Overhead Imagery



Street View Imagery



Precision and Diversity

At the same time, data must be diverse, covering a wide range of applications, and authentic to the local level.



Anonymized Traffic Data



Crowdsourced Edits

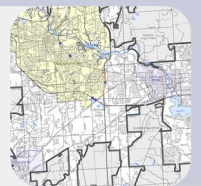


Continual Freshness

And along the way, the world never stops changing. Neither can its maps.



Authorities



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What goes into map creation at a global scale?

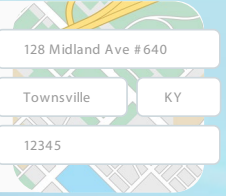
Global Scale

The world is a big place, and it takes a big platform to map it.



Address updates

Improvements help us keep data fresh and reduce failed queries.



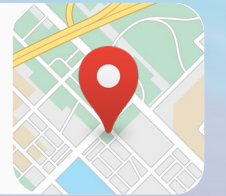
Precision and Diversity

At the same time, data must be diverse, covering a wide range of applications, and authentic to the local level.



Places of Interest updates

Business information, ratings, reviews and more about over 250 million businesses and places globally.



Hyperlocal Data updates

Coverage and latency improvements drive performance.



Continual Freshness

And along the way, the world never stops changing. Neither can its maps.



Road updates

From the changing layouts of roads themselves to their condition (weather, traffic, and more).



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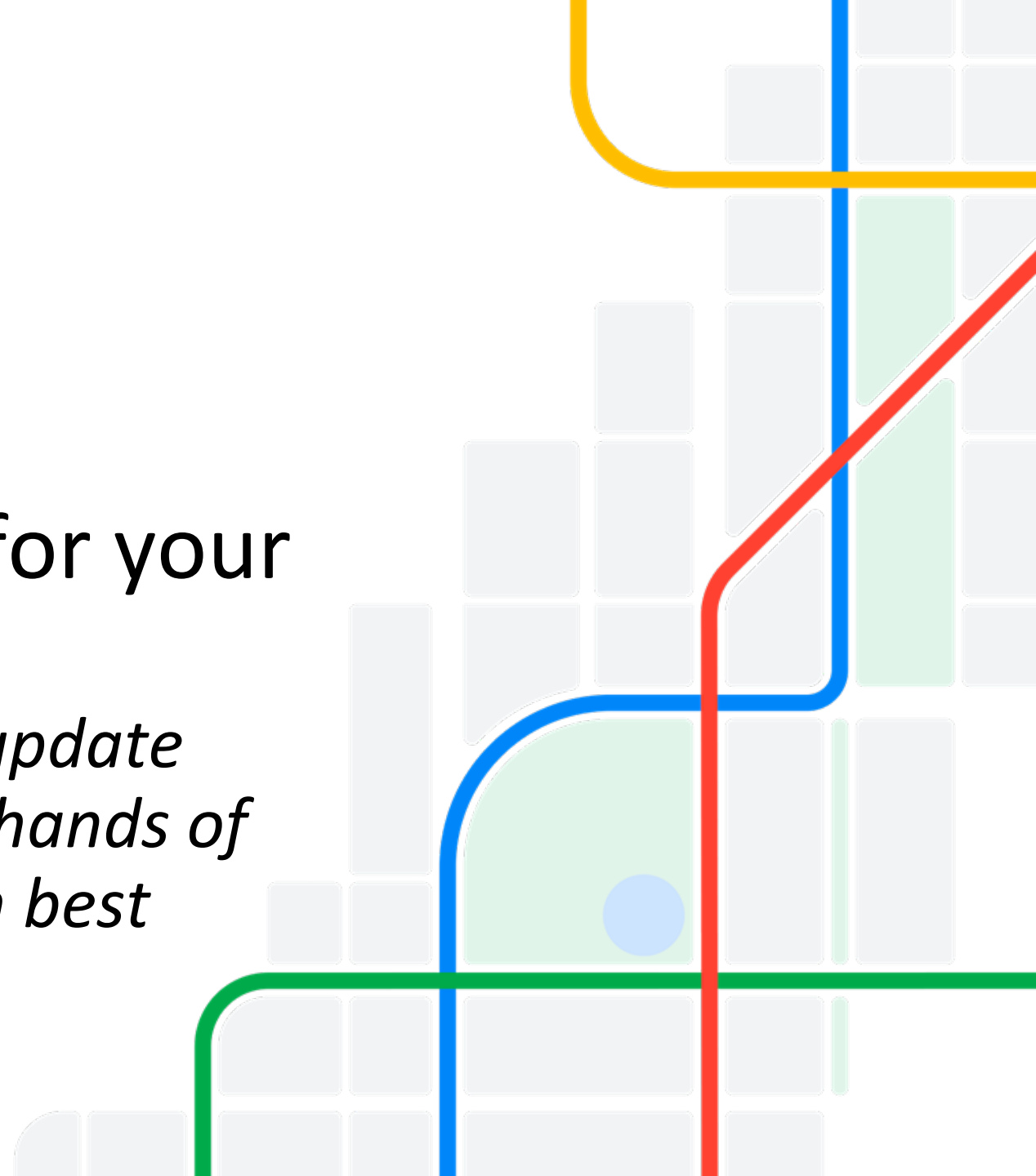
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Google Maps

Putting Maps to work for your community:

- *Thousands of requests to update*
- *Best to put the map in the hands of those who know the region best*



Google Geo for Cities



Complex
Mobility Challenges



Accessible
Civic Services



Driving
Economic
Growth



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To help communities accomplish their goals and drive positive change for citizens to...



Promote tourism

Reduce emissions

Encourage transit usage

Ensure accessibility



Crisis response & disaster preparedness

Reduce congestion

Encourage active mobility

Manage traffic flow



Make city navigation more efficient

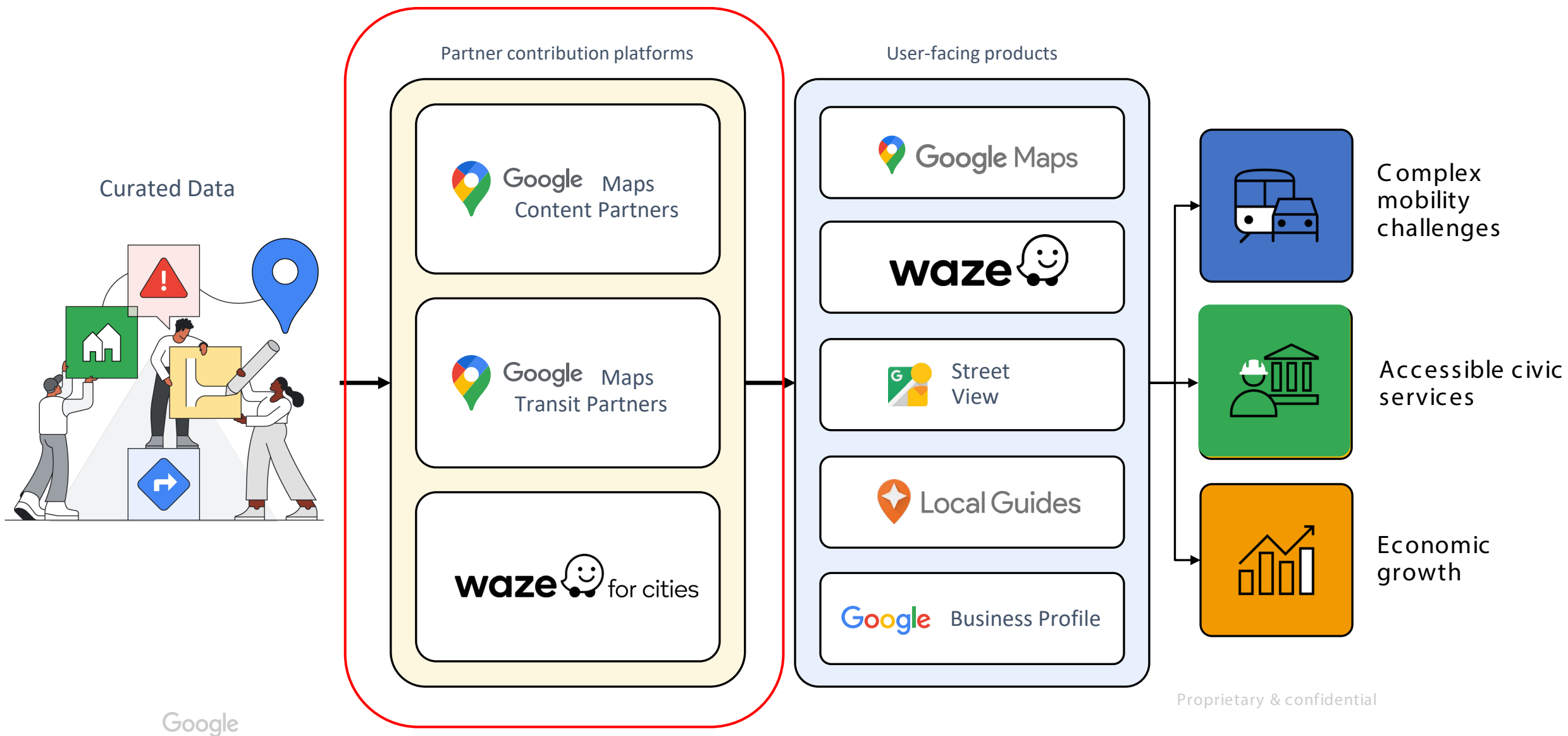
Ensure Equity



Improve Road safety

Support Local businesses

Authorities and governments keeping the map up to date





Partner contribution platforms

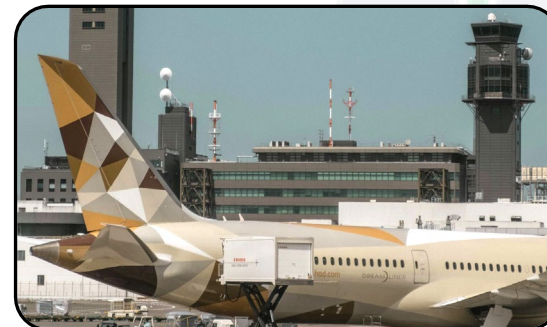
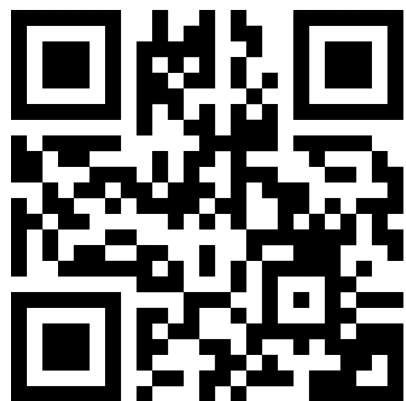
Flagship programs for cities and authorities to efficiently manage their data on the maps





Google Maps

Content Partners





Make your geospatial data accessible and useful to everyone

Help keep Google Maps up to date so the world can be accurately searched, explored, and navigated

Get Started

g.co/maps/contentpartners



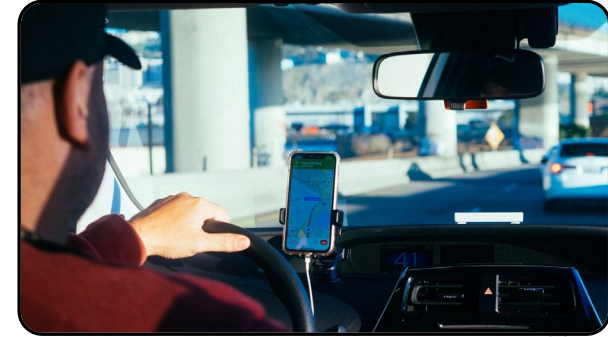
Maps Content Partners can be:



Local, regional,
and national authorities



Housing developers



Organizations using
Google Maps and APIs



Healthcare providers,
agencies, and NGOs



Airports



Other trusted public, private,
or non-profit organizations
(e.g., universities)

Most of the requests to submit corrections are from government agencies



Content Partners

Share up-to-date geospatial data for your city to be efficiently integrated and accessible for all constituents using Google Maps and Waze.

Static data



Geocoded addresses, administrative boundaries and points of interest



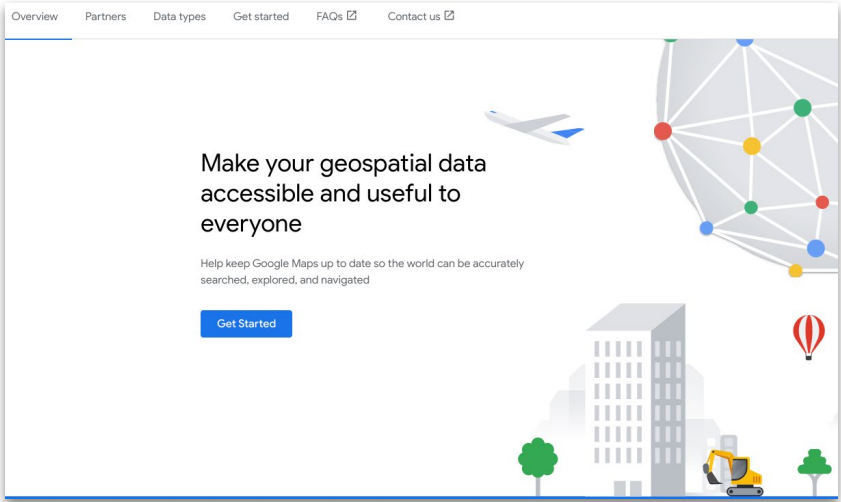
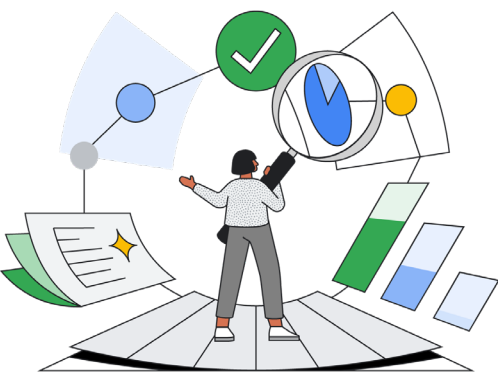
Recurrent updates

to static data, such as speed limits



Content Requirements

This site provides preferred formats and schema to ease the processing and avoid delays due to data transformation.



<https://g.co/maps/contentpartners>

Maps Content Partners Accepted Data Layers and Formats

How to Format and Structure Your Data

Sending data using the file types, schema, format and templates we provide in this section will ease the processing. Submitting data outside of these requirements will cause delays.

[Preferred File Types for GMCP](#) ▼

[Acceptable Data Types](#) ▼

Data Type Detailed Properties

[Political Boundaries](#) ▼

[Points of Interest \(POIs\)](#) ▼

[Address Points\(Geocodes\)](#) ▼

[New Roads and Bicycle and Pedestrian Paths](#) ▼

[Travel Restrictions for Checkpoints, Road Closures, Border and Road Restrictions](#) ▼

[Transit](#) ▼

[New Housing Development](#) ▼

[Building Footprints, Property Boundaries and Parcels](#) ▼

[Parks and Protected Areas](#) ▼

[Overhead Imagery](#) ▼

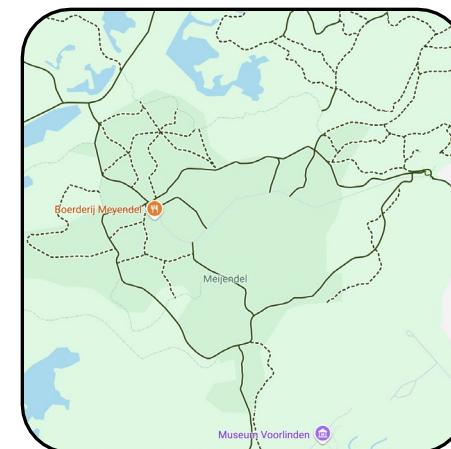
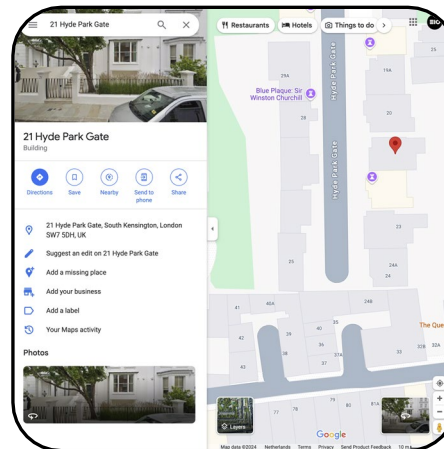
[Drone Imagery](#) ▼

[Water Boundaries](#) ▼

[EV Charging Stations](#) ▼

Core Data Types:

- Address points
- Political boundaries
- Postal Codes
- Points of Interest (POIs)



Address points

Geocodes are a single spatial coordinate (latitude/longitude) that is placed directly on the center of a building or structure.

They include all necessary components for a valid postal address (house number, street name, city, state/province, postal code, etc).

Address points are the key to precise navigation and delivery, but global addressing is complex!

Important to Note:

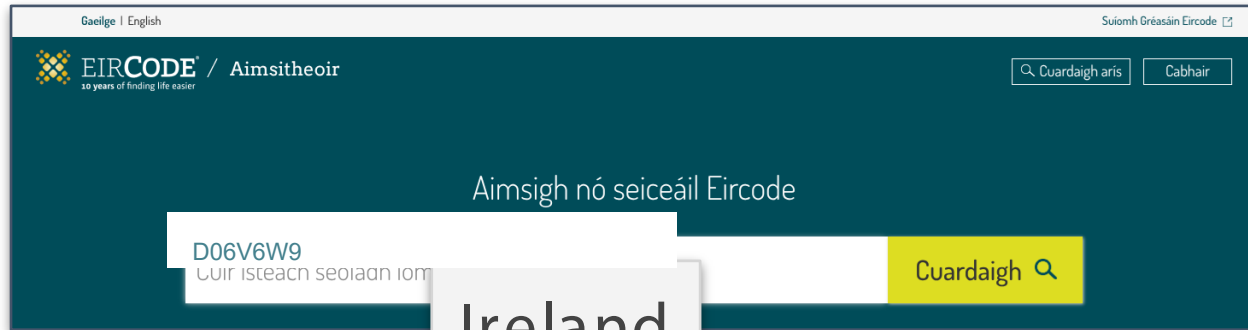
If the address updates you are providing reflect associated postal code or city boundary changes, please also submit the updated postal or city polygon as a political upload.

Address fields/attributes

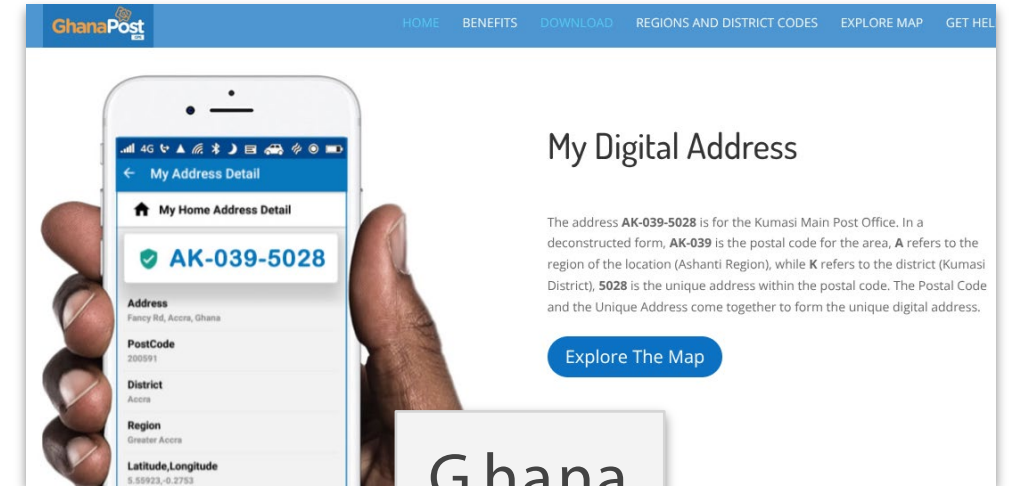
The following fields are listed as either Required, Preferred, or Optional for address points (geocode) datasets. Failure to include the required information could result in processing delays or rejection.

FIELD	REQUIRED	DESCRIPTION	EXAMPLE
ST_NUM	Required	Street Number (i.e. house number, address number, etc)	125
APT_NUM	Optional	Apartment Number	#101
BLDGNAME	Optional	Building Name	BLDG D
ST_NAME	Required	Street Name and Type (Street, Avenue, etc., can be abbreviated but expansion of abbreviations is preferred)	Powell St
NEIGHBH	Optional	Neighborhood Name	Union Square

Understanding Global Addressing



Ireland



Ghana

From traditional detailed address to: Short Address

A short address that is easy to memorize, consists of 4 letters and 4 numbers that will make your life simpler.



Saudi Arabia



Points of Interest (POIs)

Commercial/Business

Examples: Restaurants, retail stores, banks, hotels, shopping centers.

Attributes: Brand name, operating hours, phone number, website, customer reviews, price level.

Civic/Public

Examples: Police stations, fire departments, hospitals, libraries, schools, post offices.

Attributes: Type of service, governmental jurisdiction, emergency contact info.

Cultural/Natural

Examples: Parks, museums, monuments, historical landmarks, tourist attractions.

Attributes: Establishment year, historical significance, ticket prices, amenities.

Political boundaries and Postal Codes

Political boundaries data (often called Administrative Boundaries or Admin Areas in GIS) are a type of geospatial data that define the formal, legal limits of governmental or jurisdictional control.



Google Maps




Transit Partners



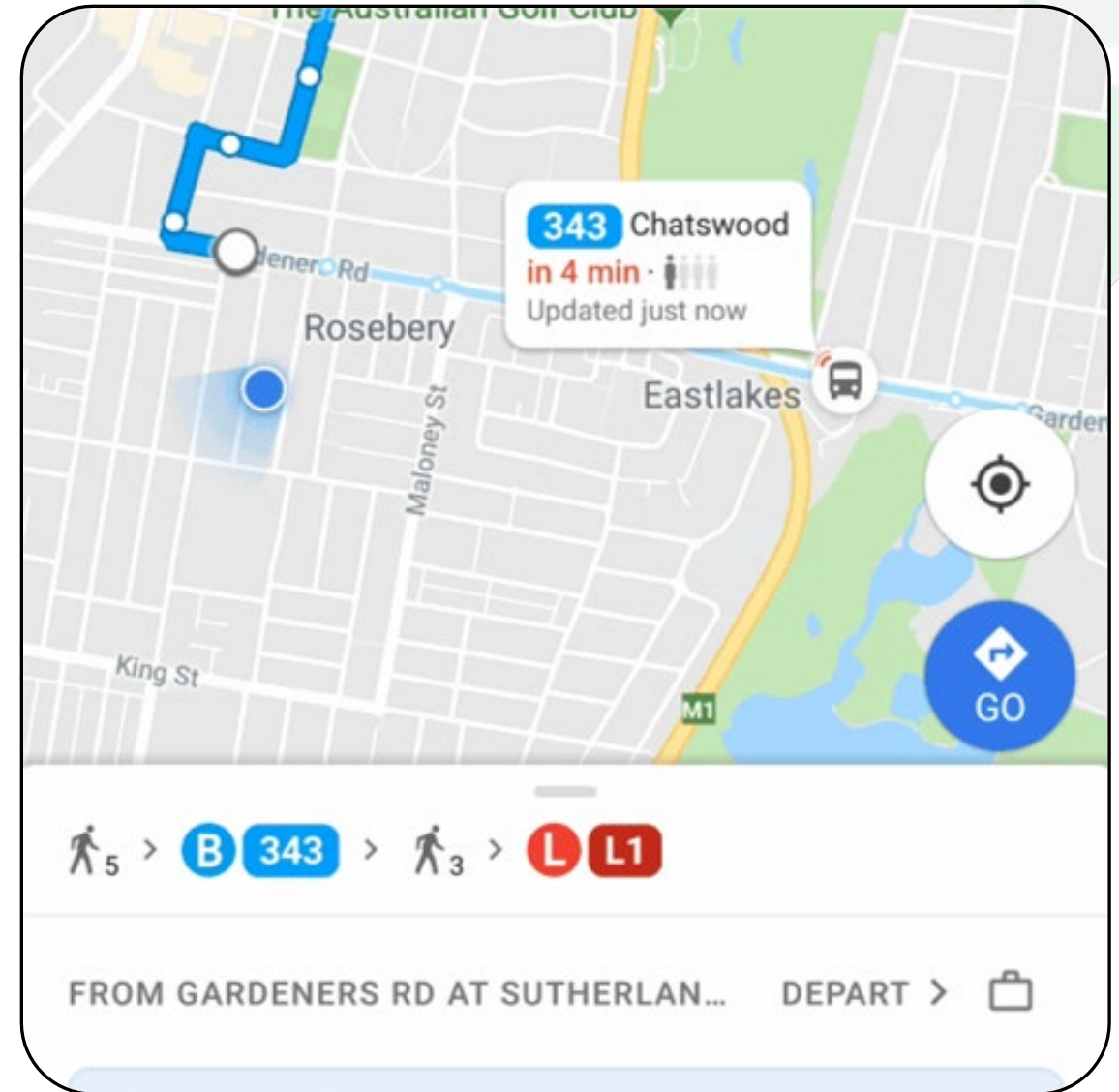
Partnering to encourage transit usage

Transit agencies can share their transit data with Google Maps to be integrated and accessible to all users.

Data types partners can share:

-  Static schedules
-  Real-time data
The latest departure and arrival times, service alerts and vehicle positions
-  Accessibility information
such as wheelchair accessibility

Must have GTFS feed





waze for cities

This partner program gives authorities the opportunity to share critical, real-time information with Waze & Google Maps drivers for safer and more efficient journeys

Data types partners can share:

Construction Zones



Locations of road construction projects to help drivers anticipate delays and find alternative routes



Alerts and Closures

Real-time information about accidents, road closures, and other incidents impacting traffic flow



Live Data Feeds

Dynamic data feeds on traffic conditions with the most current view of the city's roads



Crisis Response

Send alerts and offer critical evacuation support with the Crisis Program



This is a community site so the more participation the better the app

Waze Contributor

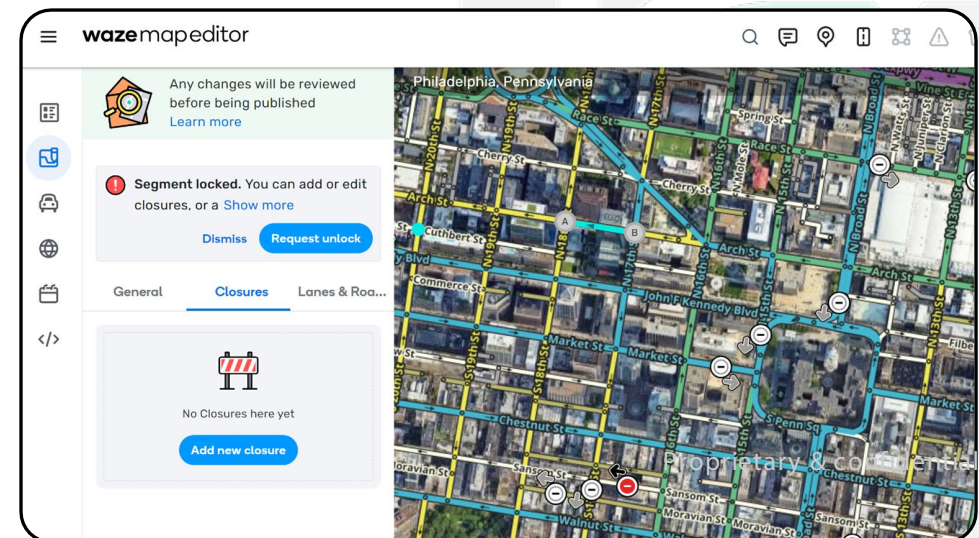
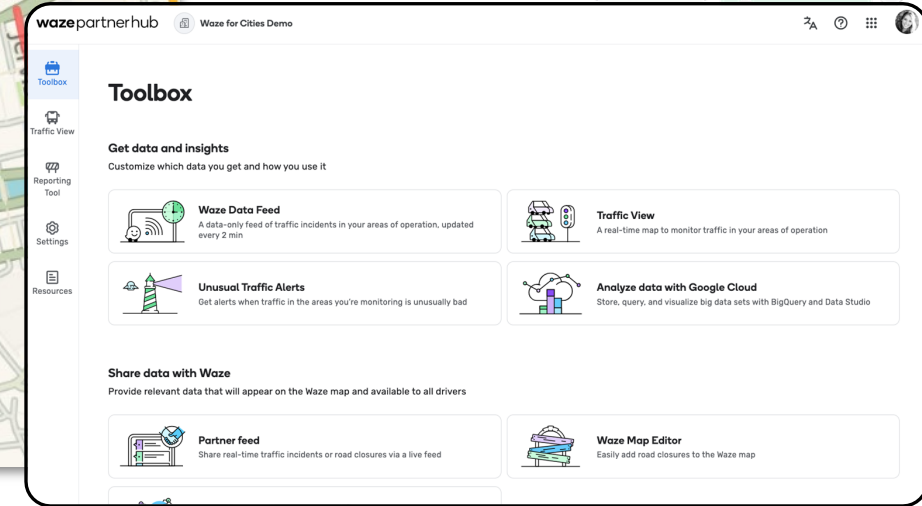
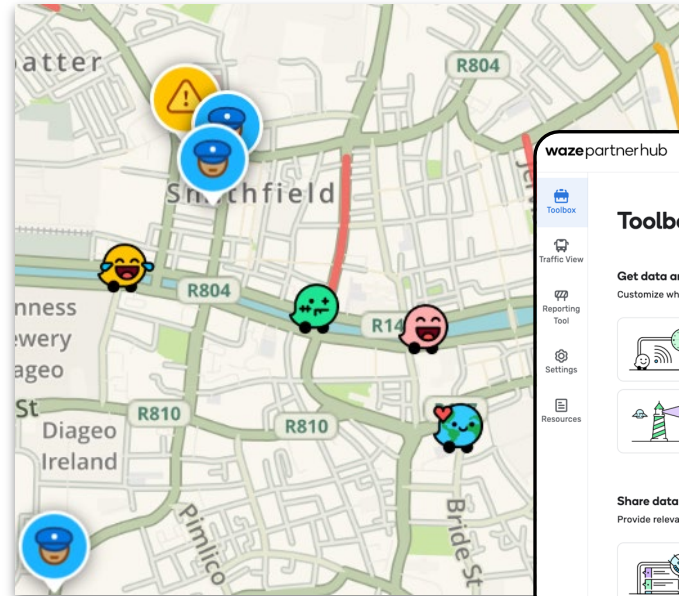
Free platform to contribute for all Waze users

Data Partner

Free, unified data platform for public sector

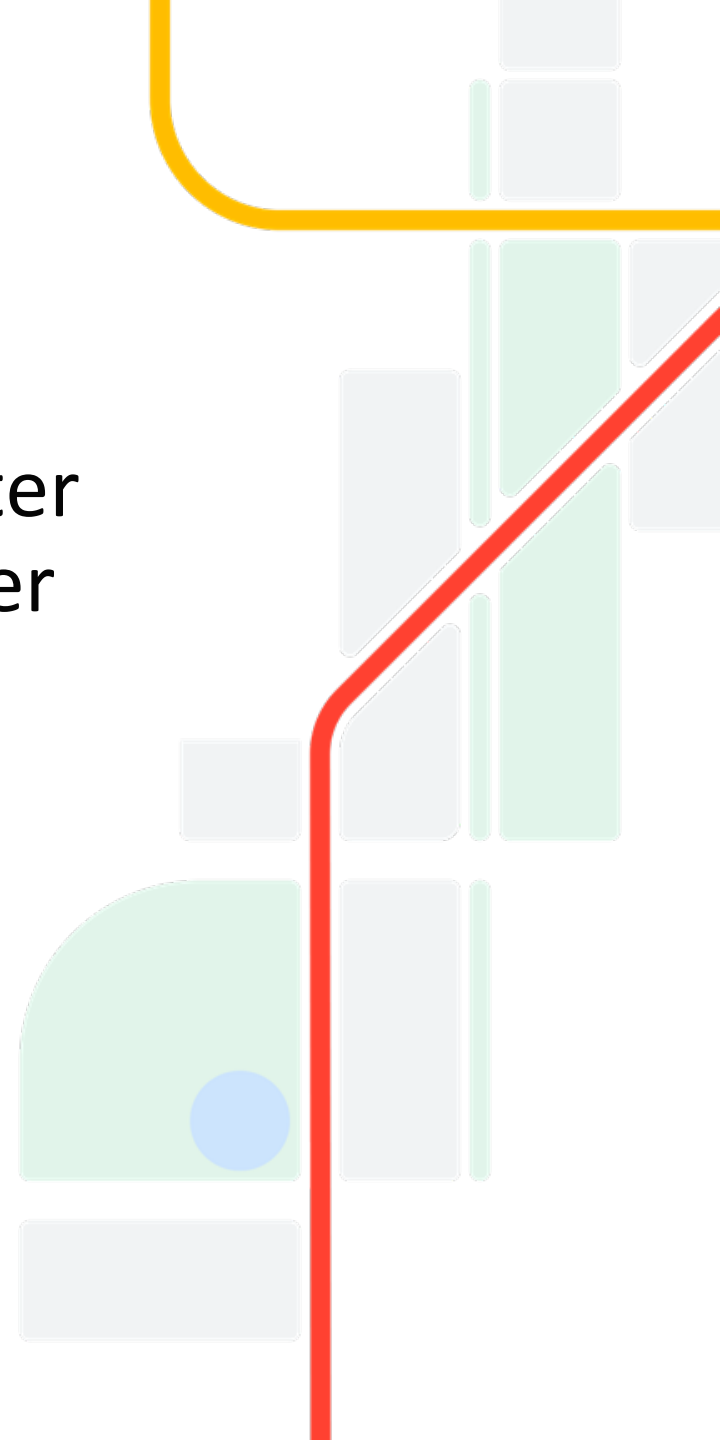
Map Editor

Waze Map Editors create road closures and distribute essential information to drivers.





Geo for cities for increased **mobility**, greater environmental **sustainability** and a stronger **economy** in your city.



Google \$1B commitment partnering to advance Africa's Digital and AI future

Building a Robust Foundation for Connectivity & Skills



Enabled 100 million Africans to [access the internet](#) since our initial investment in the Seacom cable (2006).

Offered [100,000 Career Certificate scholarships](#) and committing over \$26M to African universities and research institutions.

AI Solutions



[AI research](#) teams in Accra are focused on unique challenges to drive local impact.

[Flood Forecasting models covering 40 countries in Africa](#), helping 700 million people prepare 7 days in advance for riverine floods.

We leverage AI-driven Nowcasting for highly accurate, short-term [weather forecasts](#), filling a critical gap in a continent heavily reliant on agriculture.

Foundational Geospatial Data



The [Open Buildings](#) project mapped over 500 million building outlines across 50 African countries, a critical geospatial layer for public services.

[Data Commons for Africa](#) at datacommons.org





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Thank you

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