Google Maps - Where we've been and the road ahead

Marcelo Quintella
December 04, 2009

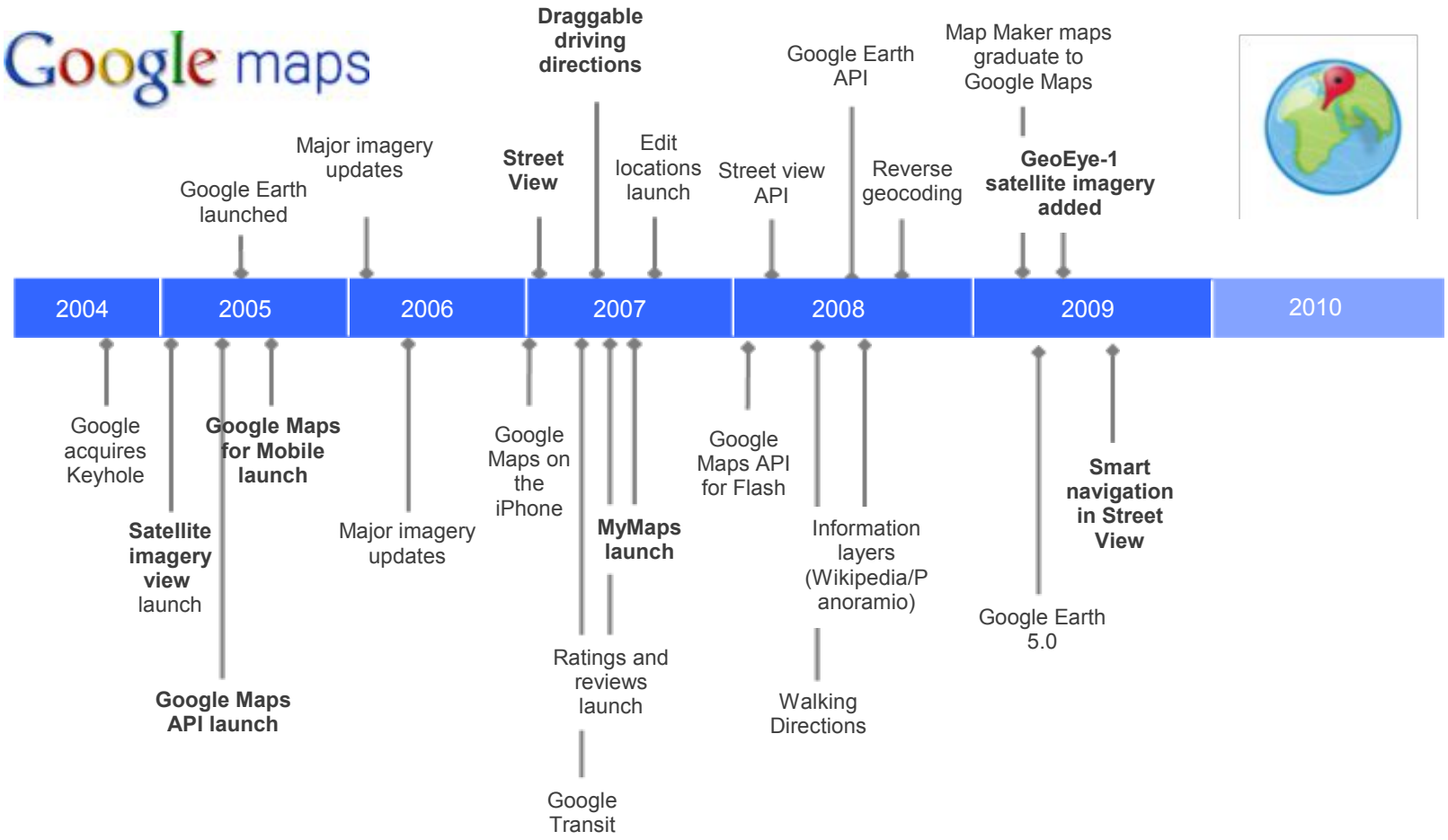
Google's Mission

To organize the world's information
and make it universally accessible and useful.

Geo's Mission

To geographically organize the world's information and make it universally accessible and useful.

A little bit of history



Google Confidential and Proprietary

Largest Fused Earth Database Ever Created

Google Confidential and Proprietary

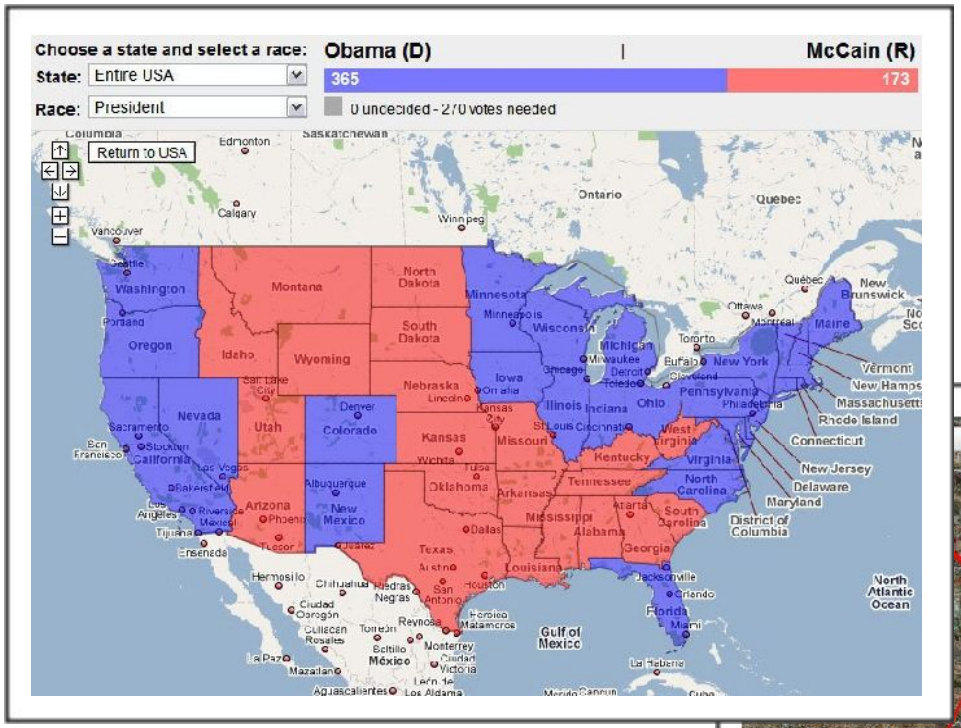
Google: Maps e Earth

- **Every day,** Maps and Earth users spend **over 1 million hours browsing geo content**
  - Most popular mapping site in the world
  - Most popular mapping site in Europe
  - Most popular mapping site in the U.S
  - Most popular mapping site in Brazil
  - **Provides detailed street maps in over 100 countries**
  - **Over 20 million maps have been created by users**
  - **Over 150,000 active sites using the Maps API**
  - **Over 10 million Panoramio photos (photos of places) are viewable in Maps and Earth**
  - Transit routing is available in more than 250 cities worldwide covering tens of thousands of transit stations
  - 500 million unique Earth user activations
  - Detailed Street View imagery is available in 10 countries around the world
  - Earth is available in 41 different languages
  - The satellite imagery in Google Earth covers over 30% of the world's land surface and 50% of the world's population in sub-meter high resolution.
  - 100 Million stars and 200 Million galaxies are visible in Sky, some of them have never been seen by a human eye before

Google Confidential and Proprietary

Maps have taken off in the consumer space

2008 U.S. Presidential Election

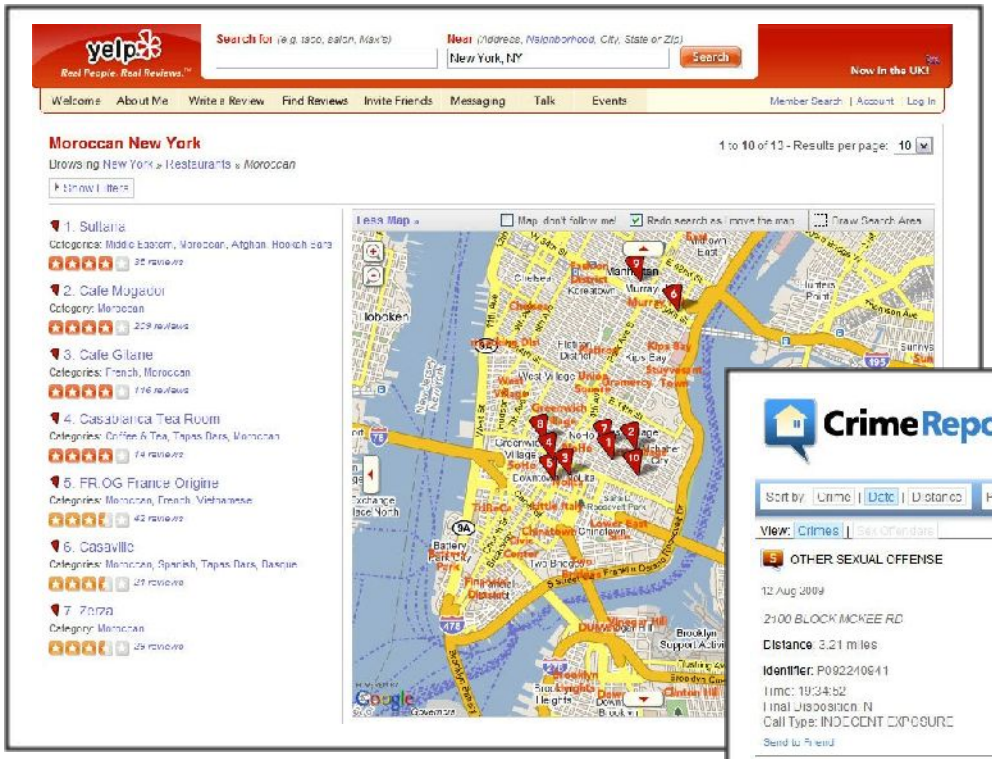


2008 Olympic Torch Relay Path

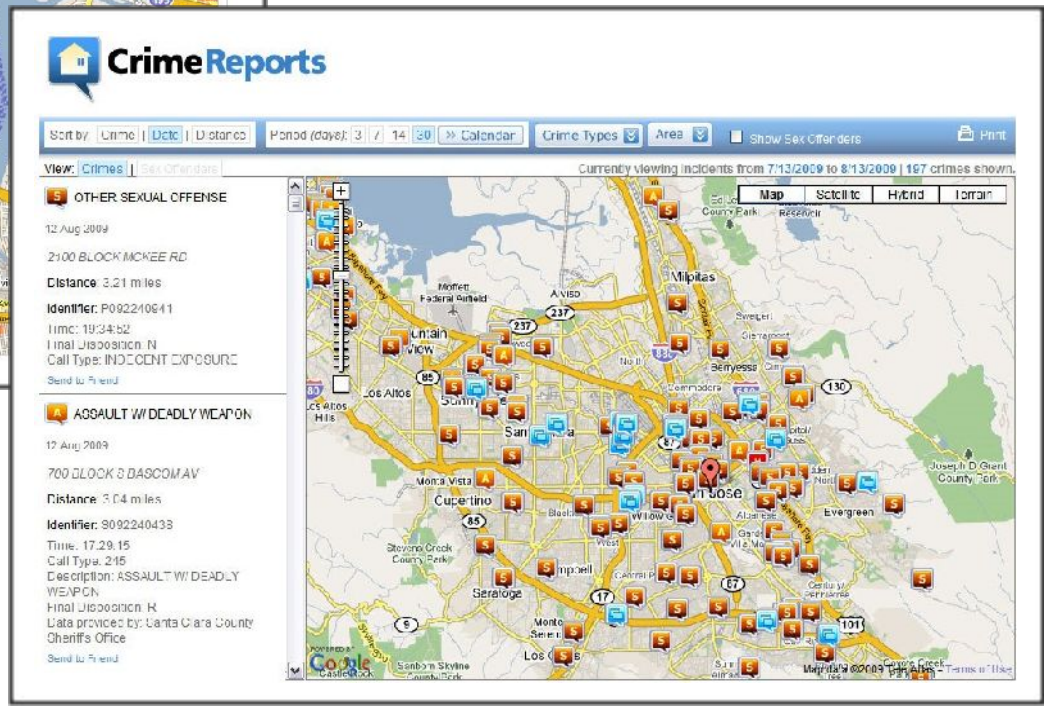
Maps have taken off in the consumer space

Google

Restaurant & business listings

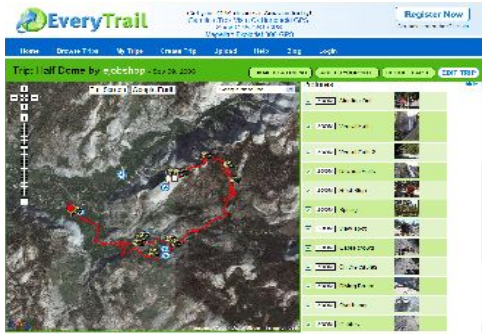


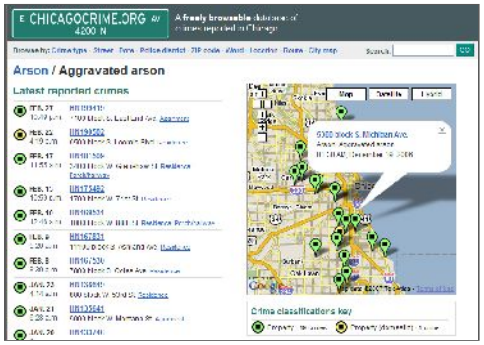
Crime data provided by local agencies

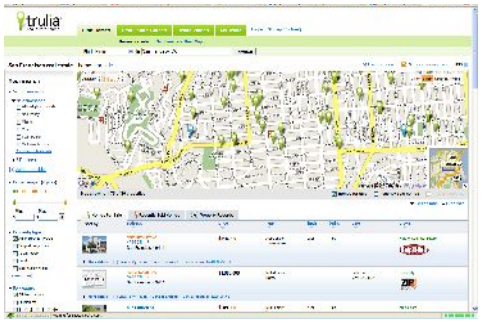


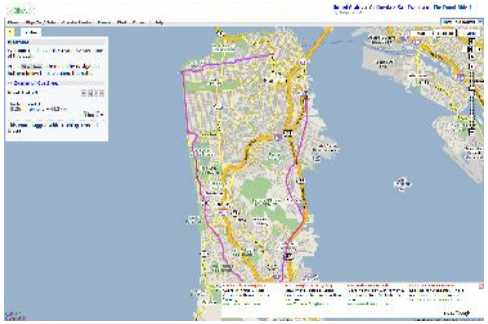
Google Confidential and Proprietary

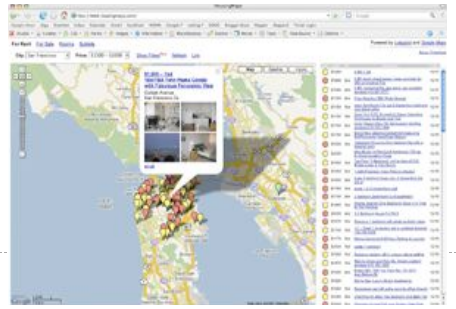
50,000 maps API sites

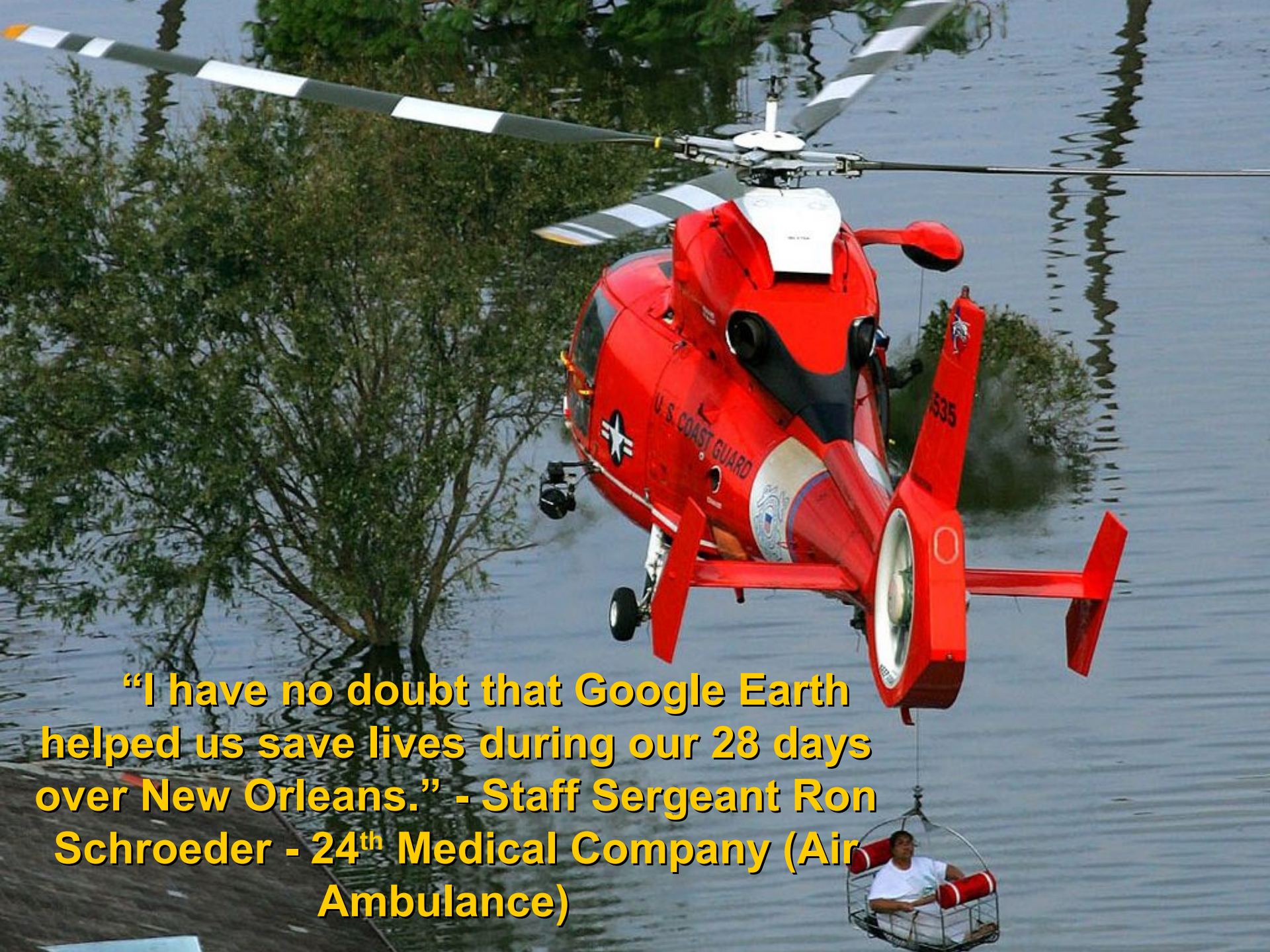




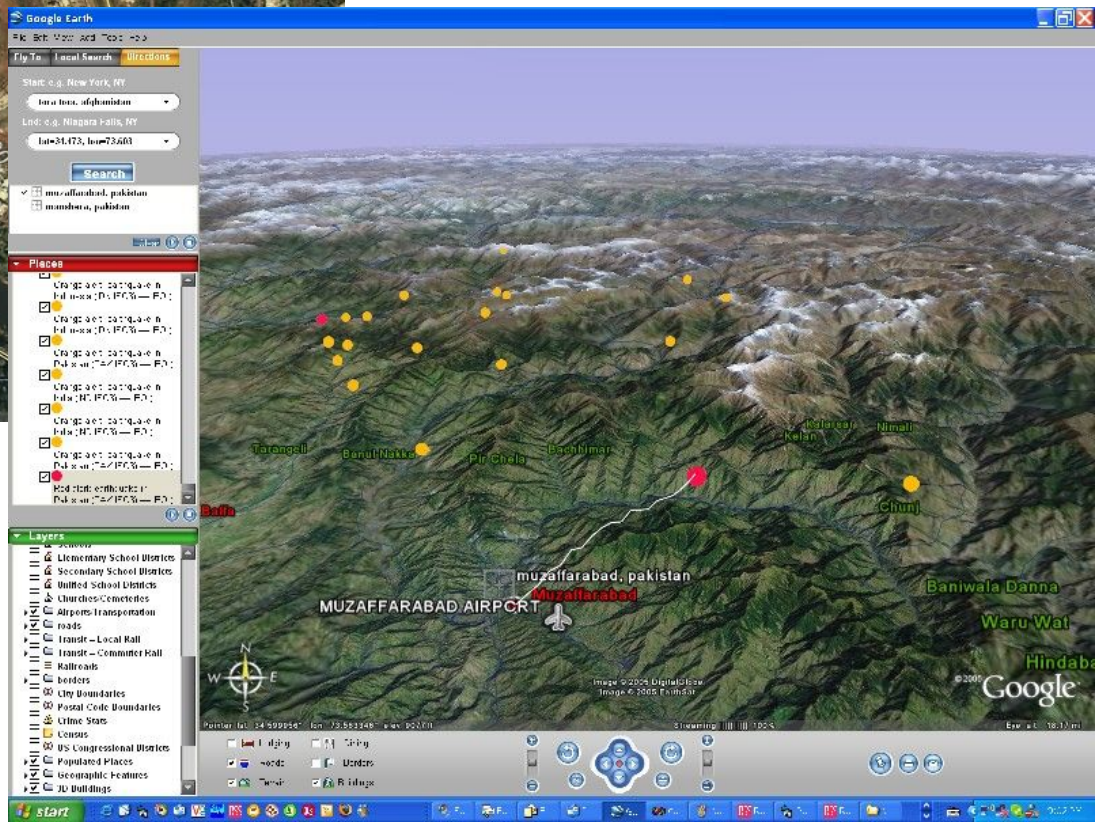








"I have no doubt that Google Earth helped us save lives during our 28 days over New Orleans." - Staff Sergeant Ron Schroeder - 24th Medical Company (Air Ambulance)



Pakistan Earthquake 2005

Google Earth

UNITED STATES HOLOCAUST MEMORIAL MUSEUM
CRISIS IN DARFUR

GIRL WITH BABY SISTER

Girl with traumatized baby sister. The baby has not made a sound since the day their parents were slaughtered and the village burned.

ushmm.org ► Learn More | How Can I Help?

Hide Narration

West Darfur

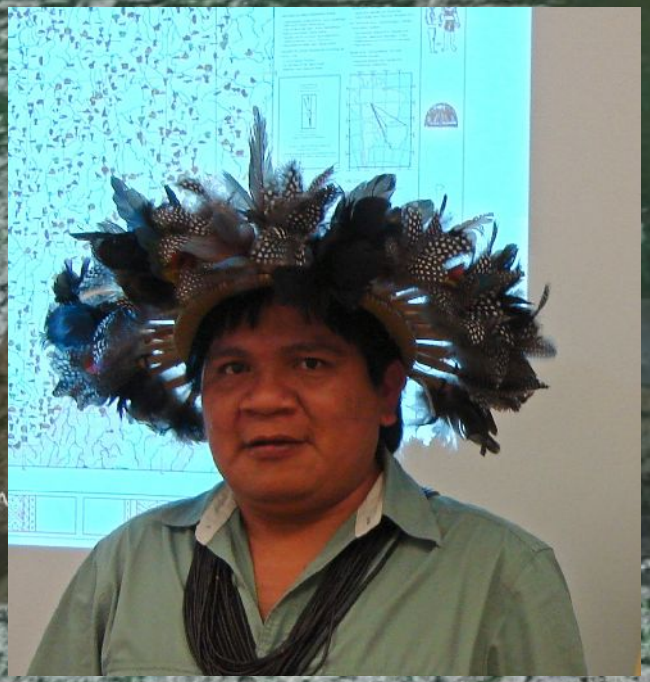
Image © 2008 TerraMetrics

Image © 2008 DigitalGlobe

Google

15°44'37.19" N 22°58'45.15" E

Eye alt 237.02 km



Surui Chief 2007

Amazon - Surui Reservation

Ministro Andreazza

Castanheiras

Novo Horizonte do Oeste

© 2007 Europa Technologies
Image © 2007 TerraMetrics

©2007 Google

Pointer 11°09'39.12" S 61°24'58.34" W elev 877 ft

Streaming 100%

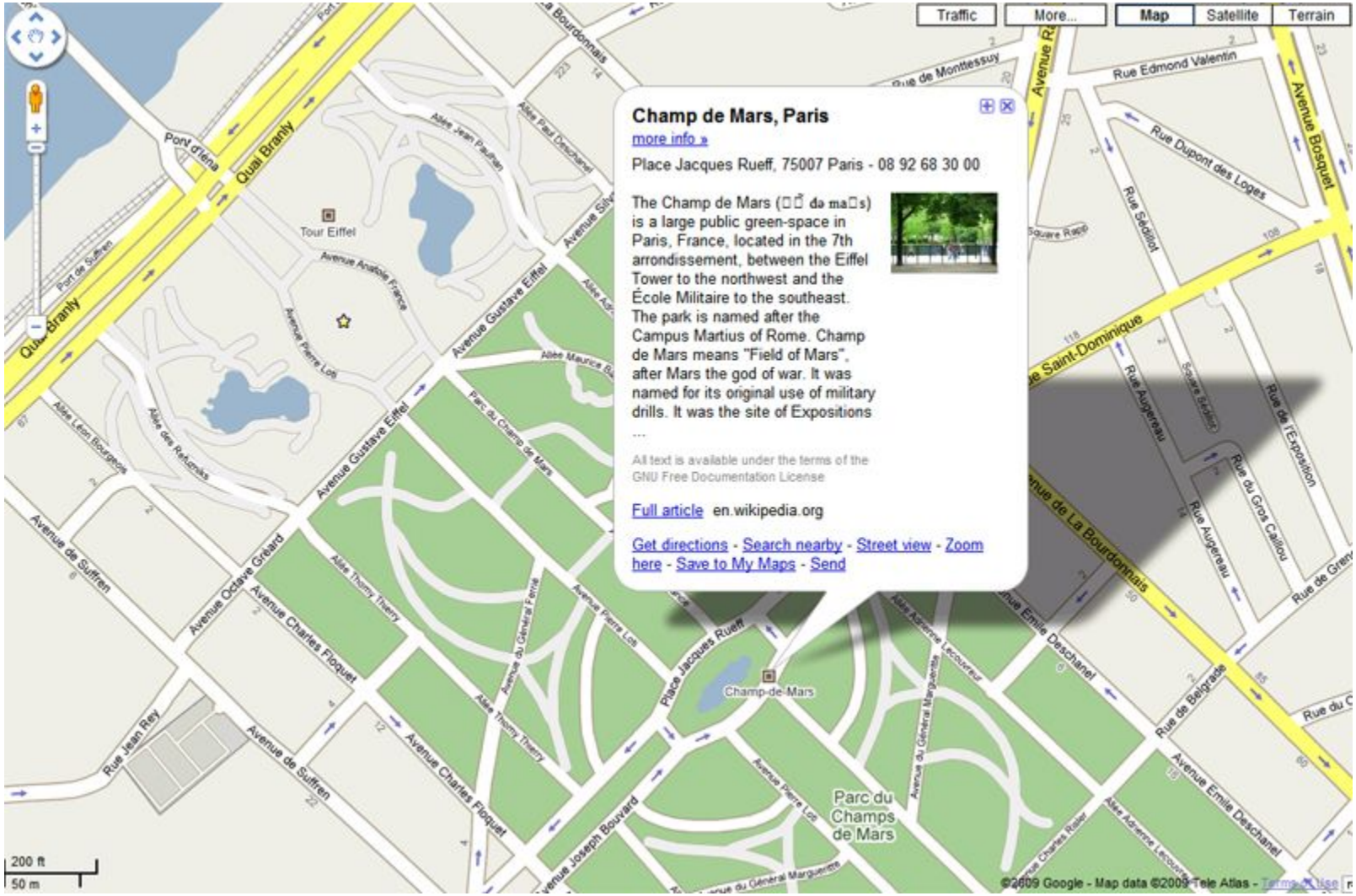
Eye alt 90.61 mi

Geo's Mission

Google

To geographically organize the world's information and make it universally accessible and useful.

SmartMaps


Traffic
More...
Map
Satellite
Terrain
Champ de Mars, Paris
more info »
Place Jacques Rueff, 75007 Paris - 08 92 68 30 00
The Champ de Mars (□□ də ma□s) is a large public green-space in Paris, France, located in the 7th arrondissement, between the Eiffel Tower to the northwest and the École Militaire to the southeast. The park is named after the Campus Martius of Rome. Champ de Mars means "Field of Mars", after Mars the god of war. It was named for its original use of military drills. It was the site of Expositions
...
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Quai Branly
Pont d'Iéna
Pont de Suffren
Tour Eiffel
Avenue Gustave Eiffel
Avenue Anatole France
Avenue Pierre Loti
Allée Jean Paulhan
Allée Paul Deschanel
Allée Maurice Ba
Parc du Champs de Mars
Allée Léon Bourgeois
Allée des Refusniks
Avenue de Suffren
Avenue Octave Gréard
Avenue Charles Floquet
Allée Thierry Thierry
Avenue du Général Ferrié
Rue Jean Rey
Avenue Joseph Bouvard
Place Jacques Rueff
Champ-de-Mars
Parc du Champs de Mars
Avenue du Général Marguerite
Allée Adrienne Lecouvreur
Avenue Emile Deschanel
Rue de Belgrade
Rue de Montessuy
Rue Edmond Valentin
Avenue Bosquet
Rue Dupont des Loges
Rue Sédillot
Square Rapp
Rue Saint-Dominique
Rue Augereau
Square Séché
Rue du Gros Caillou
Rue de l'Exposition
Rue de Grenelle
Avenue de La Bourdonnais
200 ft
50 m
©2009 Google - Map data ©2009 Tele Atlas

Layers

Torre Eiffel by Enrique Fernandez Marcote
Street View
Champ-de-Mars
Panoramio

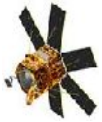
Building the GeoWeb

Building the GeoWeb - Data Sources

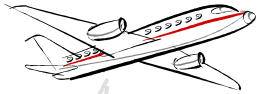
Google

Coordinated effort to map and annotate all features, globally

Medium-resolution satellite



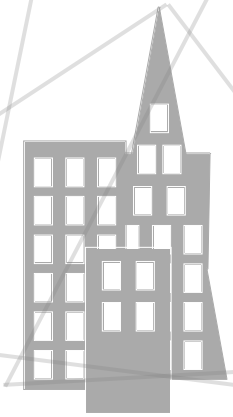
High-resolution satellite



High-resolution aerial

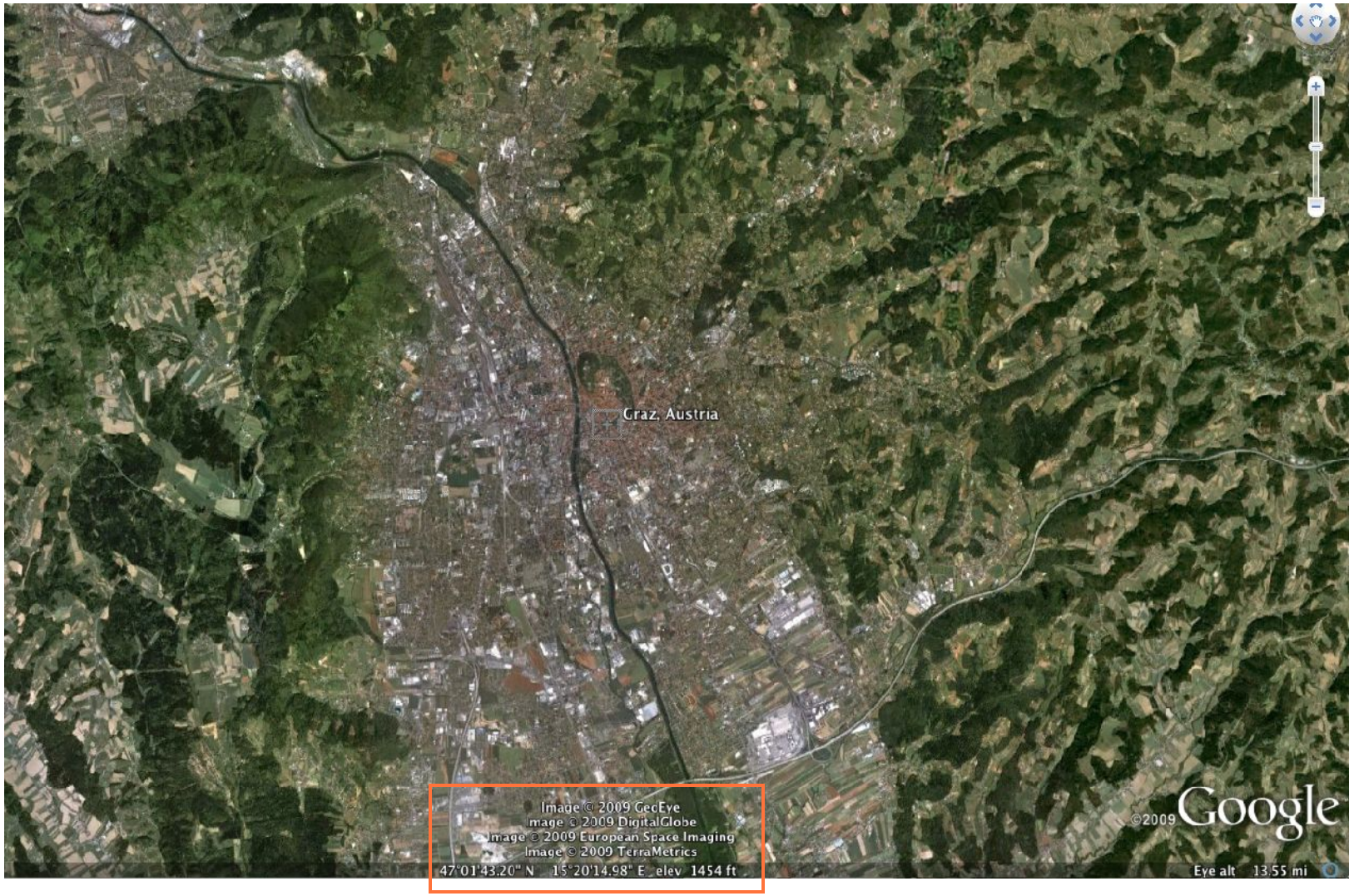
License
- Imagery
- Address, vector data
- Traffic data
- Transit information
- YP, WP listings

+ more

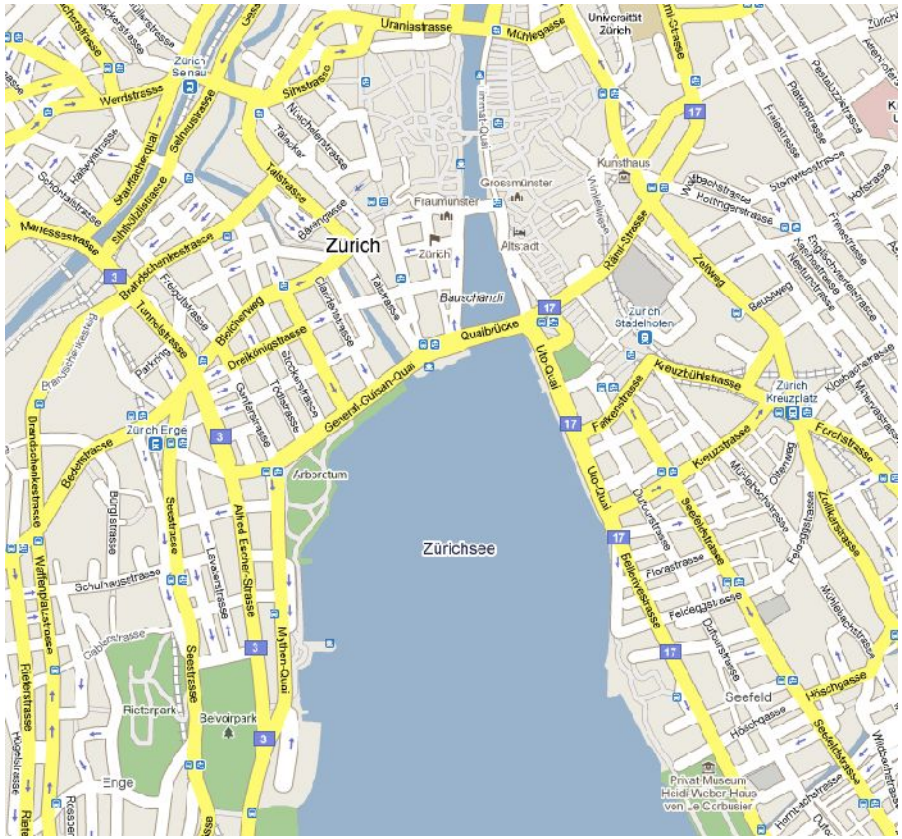


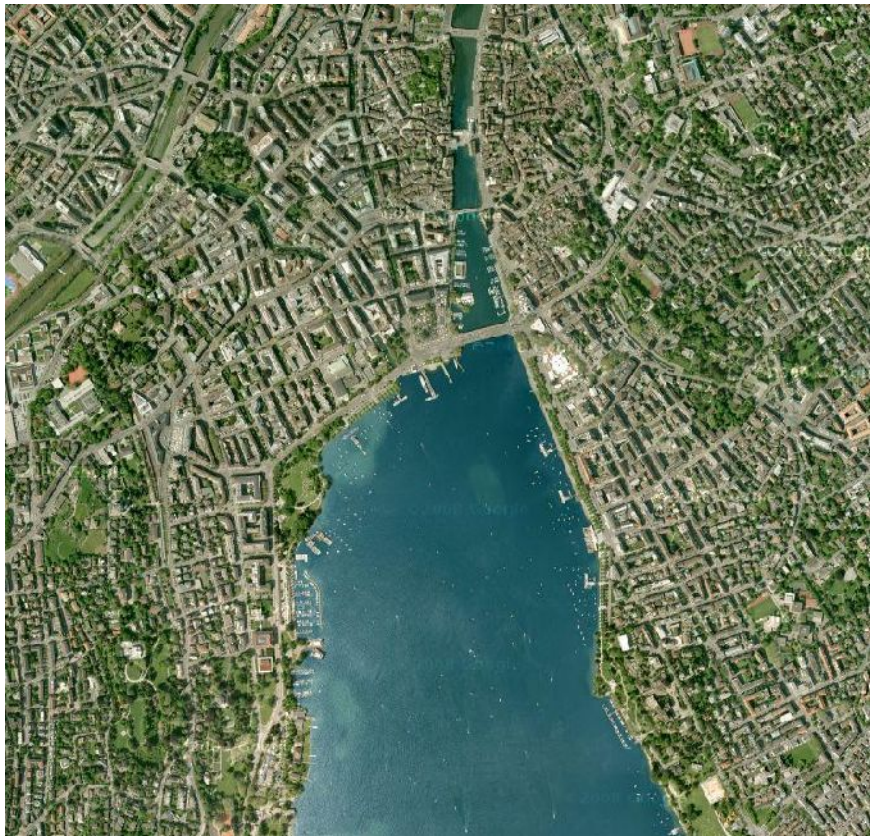
StreetView imagery

Building the GeoWeb - Partners

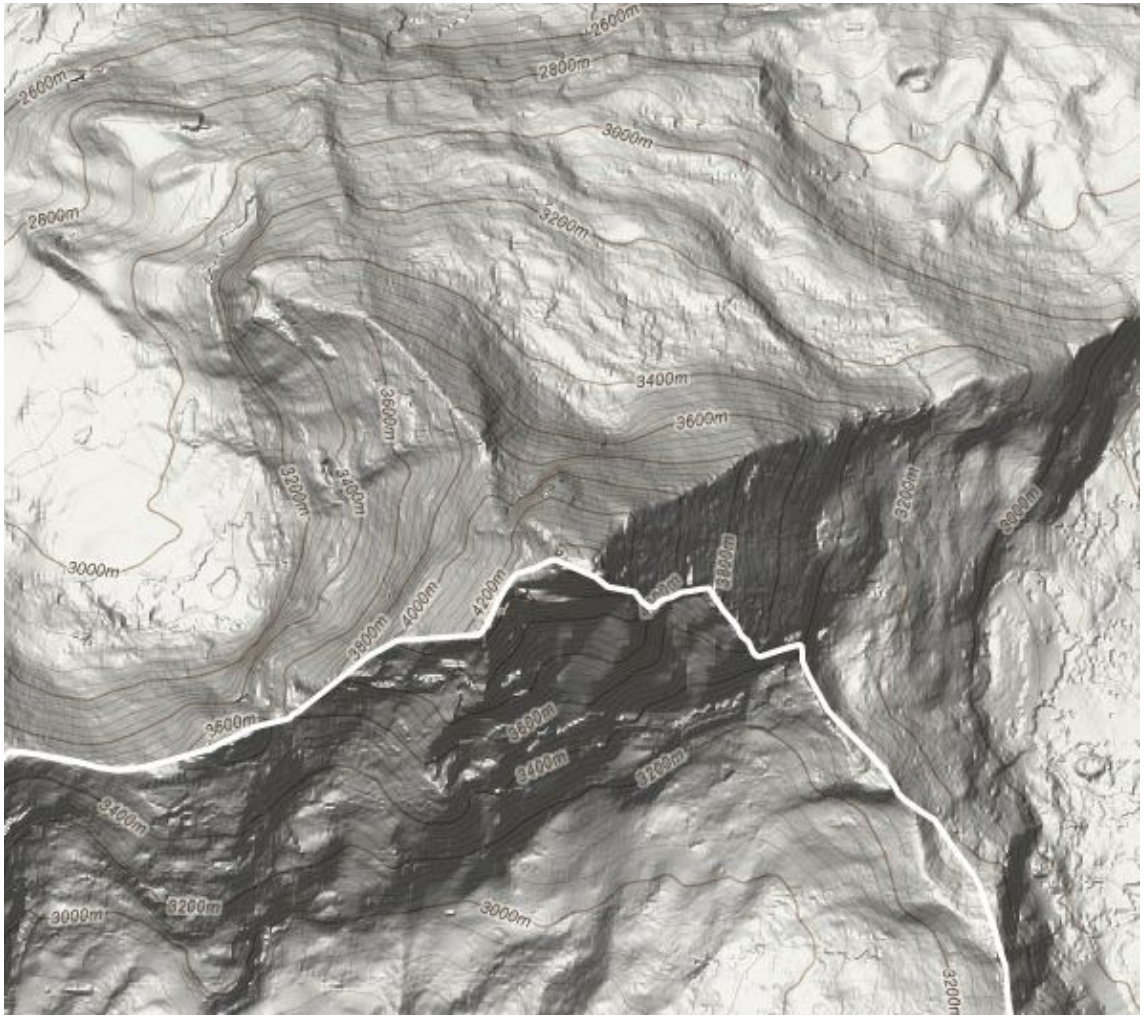


Building the GeoWeb - Blending Data

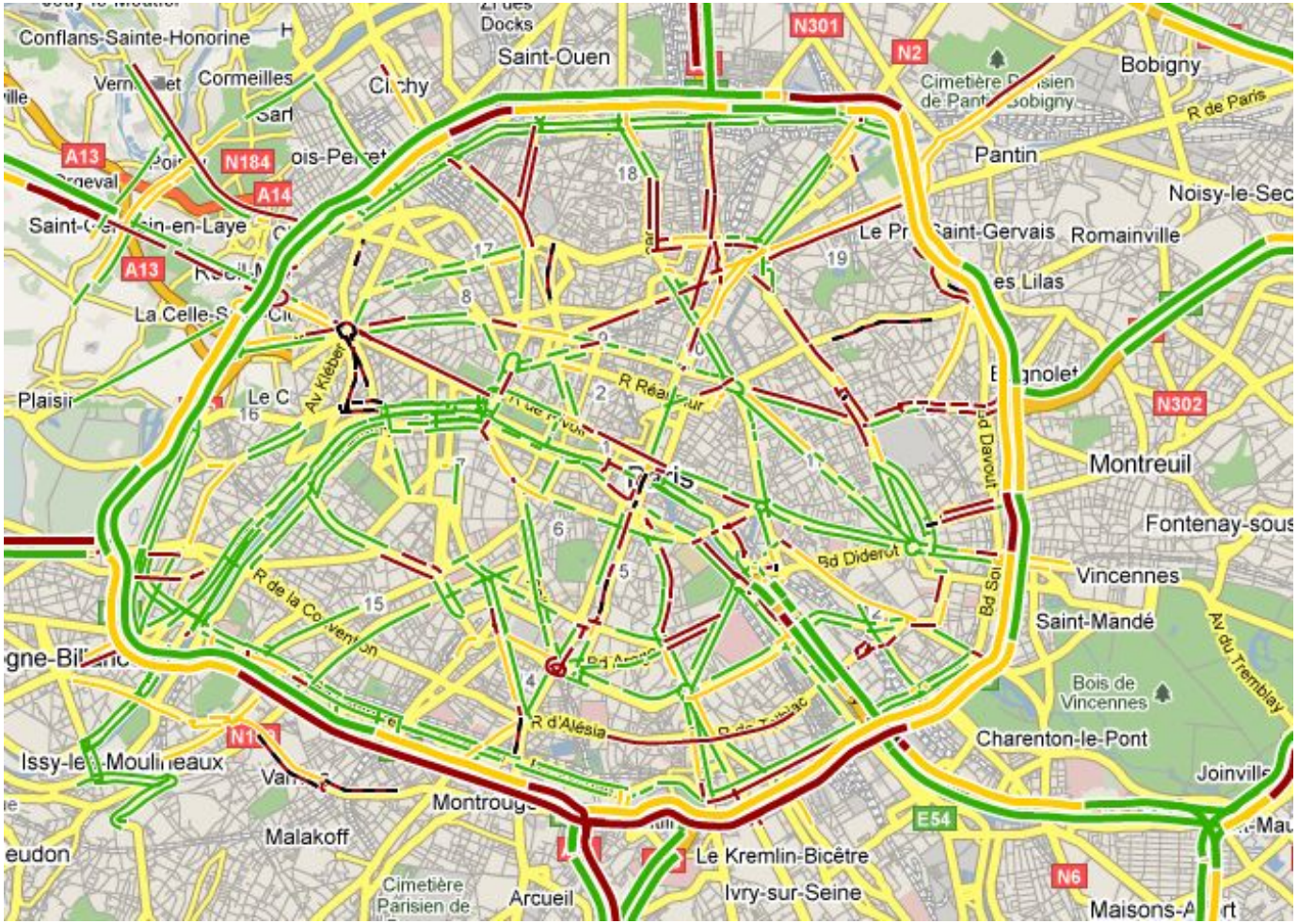




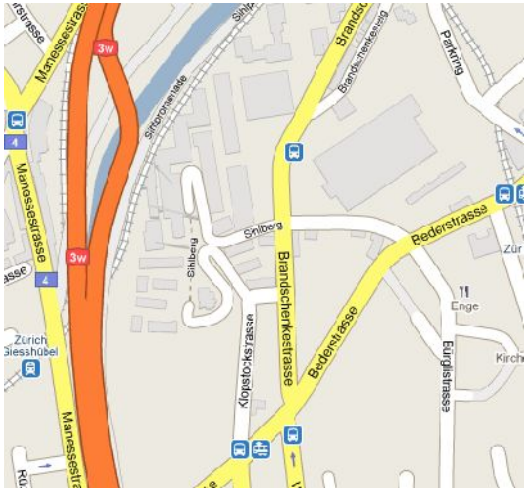
Building the GeoWeb - Elevation



Building the GeoWeb - Live Data



Building the GeoWeb - Look Around You!

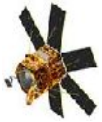


Building the GeoWeb - Data Sources

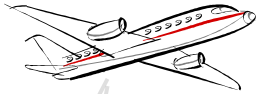
Google

Coordinated effort to map and annotate all features, globally

Medium-resolution satellite



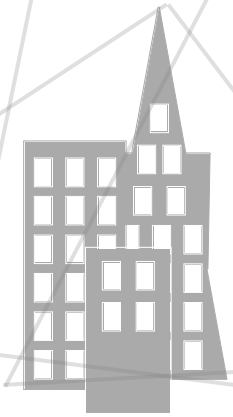
High-resolution satellite



High-resolution aerial

License
- Imagery
- Address, vector data
- Traffic data
- Transit information
- YP, WP listings

+ more



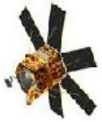
StreetView imagery

Building the GeoWeb - It's more than partners

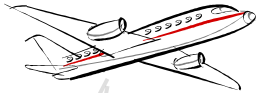
Google

Coordinated effort to map and annotate all features, globally

Medium-resolution satellite



High-resolution satellite



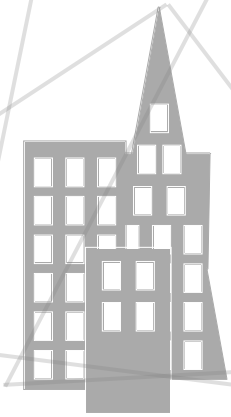
High-resolution aerial

License
- Imagery
- Address, vector data
- Traffic data
- Transit information
- YP, WP listings

+ more

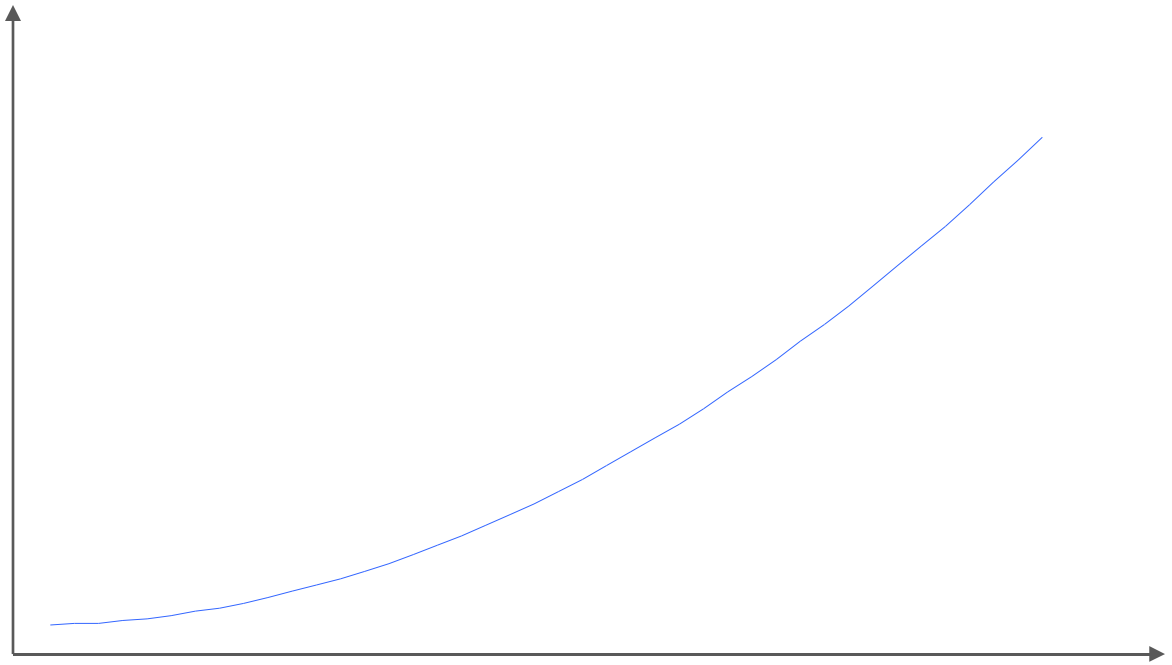
User Contributions UGC

My Maps – annotations, photos & more
Sketchup/3D Warehouse - - 3D models
Panoramio - geo photos
YouTube – geolocated videos



StreetView imagery

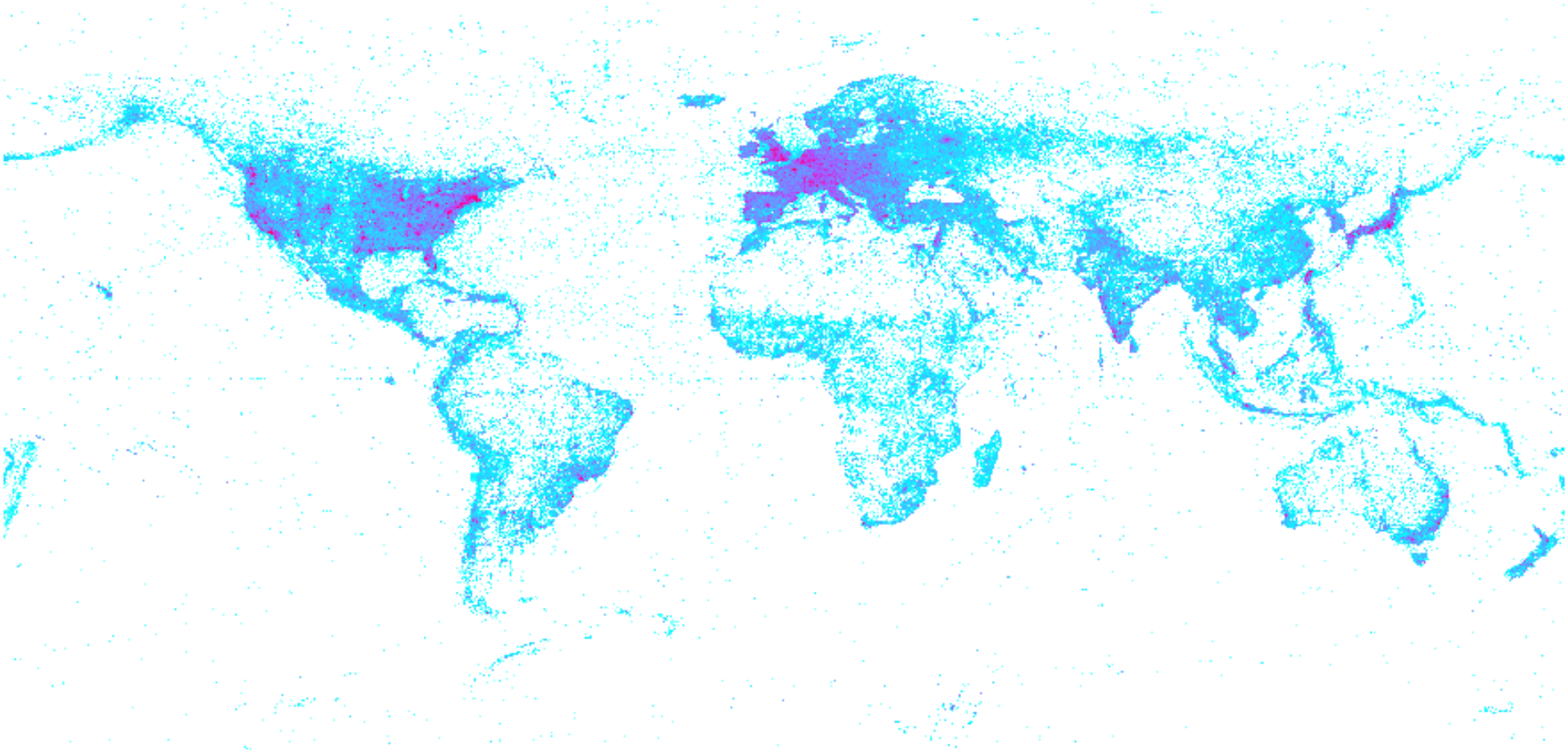
Internet growth: “Up and to the right”



1989	1994	1998	Today
400 servers connected to internet	0.4% population online	150M web users	480M servers 25% pop. online 1.5B web users

Evolution of the GeoWeb

Google



Empowering users to build a collaborative map of the world

Google Earth Community

You are not logged in. [Login]

Entrance · Main Index · Search · Active Topics
New user · Who's Online · FAQ

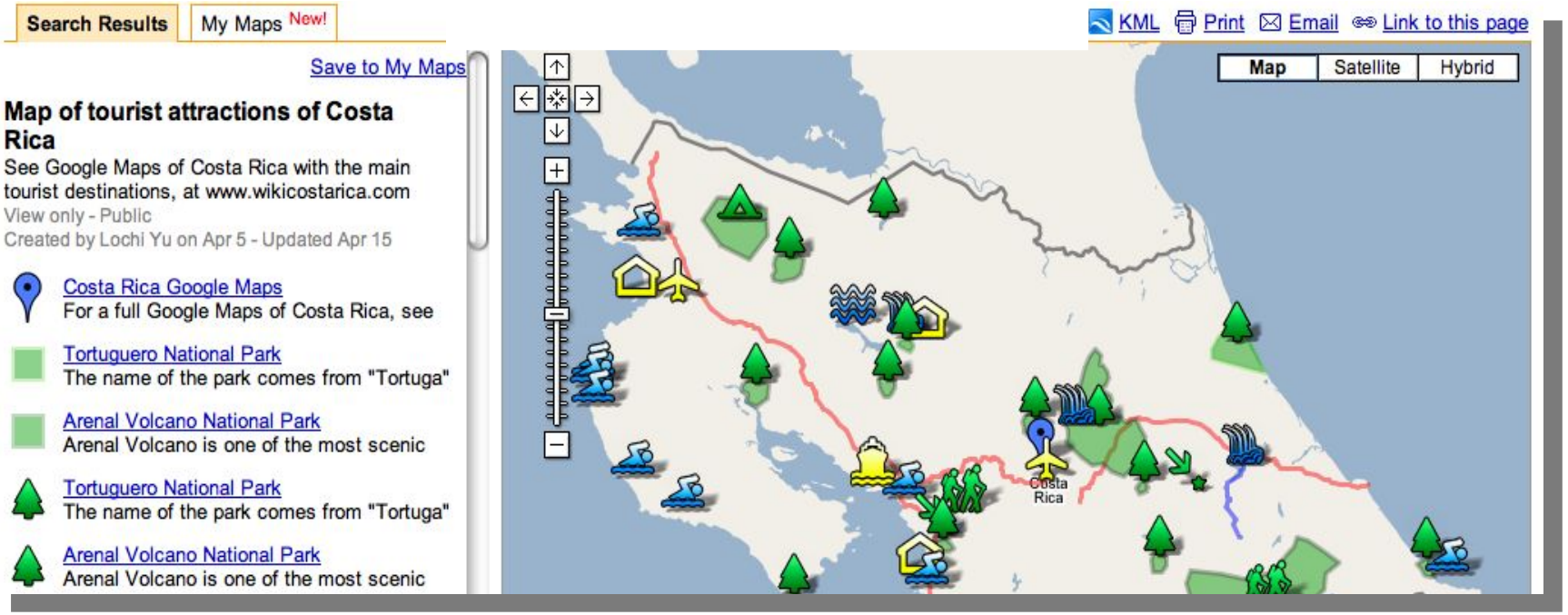
News	Threads	Posts	Last post
Google Earth News (36 viewing) Headlines for the Entrance	40	72	Exciting news for Google E... (seer) - 03/14/06 08:28 AM
Google Earth Sightseer (23 viewing) The Google Earth Sightseer Globe newsletter and the Where in the World contest	18	29	Keyhole GLOBE May 2005 (seer) - 07/18/05 07:42 AM

Earth	Threads	Posts	Last post
National Geographic Content (23 viewing) The place for placemarks and discussions about content in the National Geographic Magazine layers.	127	985	Re: A Jeep on Desert (IanUK) - 03/16/06 02:28 AM
Earth Browsing (172 viewing) The primary forum for sharing and discussing places around the world	61575	84520	Kulta - Tromsdalen Kulturh... (Kulta) - 03/16/06 11:58 AM
Dynamic Data Layers (22 viewing) The home of user-published data layers that Google Earth users can easily install and enable: houses for sale, crime logs, today's weather, shared photographs, and many more.	454	2785	Re: Real-Time Los Angeles ... (BreakDecks) - 03/15/06 09:05 PM
Models and Annotations (16 viewing) Share and Discuss 3D models and geospatial annotations created with Google Earth Plus, Google Earth Pro, or KML.	424	1746	Re: Karamel - 3D version 9... (Knuks) - 03/16/06 06:51 AM
Current Events (18 viewing) Placemarks/Overlays regarding events of the day	1916	6342	crash in culver city, 03/1... (smokeonit) - 03/16/06 11:56 AM
Fun and Games (31 viewing) A fun place to post mystery placemarks, pose riddles, and offer hints	7565	37355	Where are they now No4? (danescombe) - 03/16/06 11:58 AM
Travel Information (59 viewing)			Meikles Hotel

2007 2008 2009

Empowering users to build a collaborative map of the world

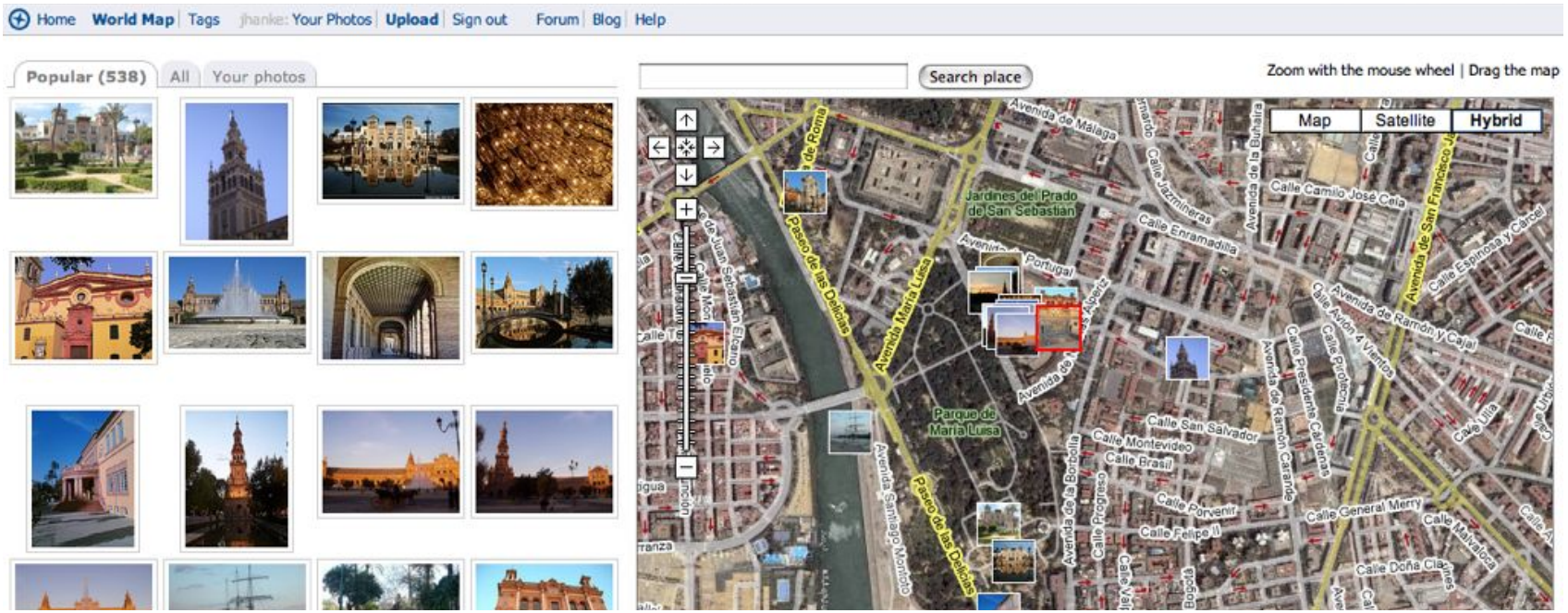
Google



2007 2008 2009

Empowering users to build a collaborative map of the world

Google



Panoramio

2007 2008 2009

Empowering users to build a collaborative map of the world

Google

Empowering users to build a collaborative map of the world

Google

Google Local Business Center

Enter your business information below. Your listing will appear to the right. This is just a first step. After this has been completed, you will be able to upload photos and videos, specify categories, payment options and business hours and much more.

Country: Switzerland

Company/Organization: Acme AG

Street Address: Bahnhofplatz 4

Postal Code: [?] CH- 8134

City/Town: Adliswil

Main phone: 043 993 87 32

Example: 043 123 45 67 Add more phone numbers

Email address: owner@acme.ch

Example: myname@example.com

Website: www.acme.ch

Example: http://www.example.com

Description:

200 characters max, 200 characters left.

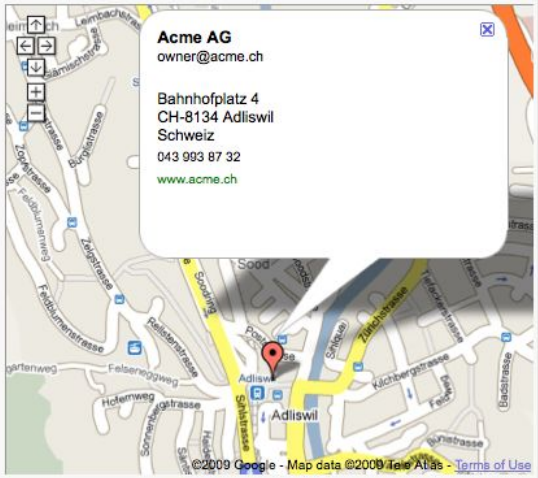
Category: Luggage Repair Service

Which categories (up to 5) best describe your business?
Ex: Dentist, Wedding Photographer, Thai Restaurant

Category:

Add another category

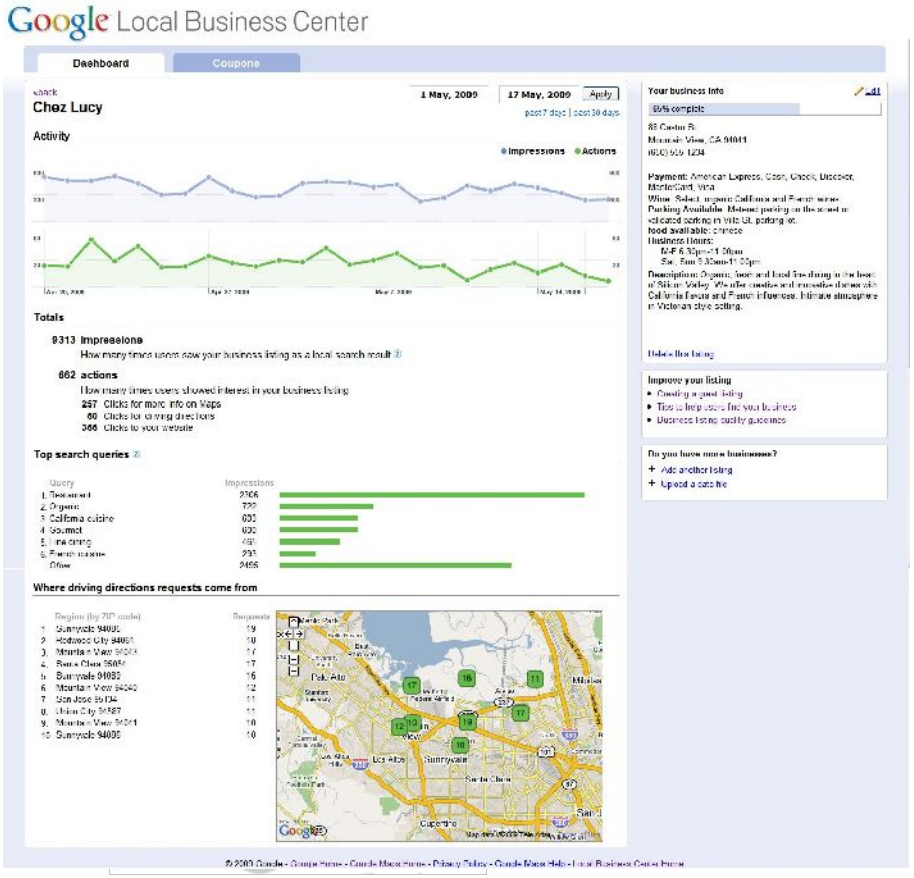
Next



Fix incorrect marker location

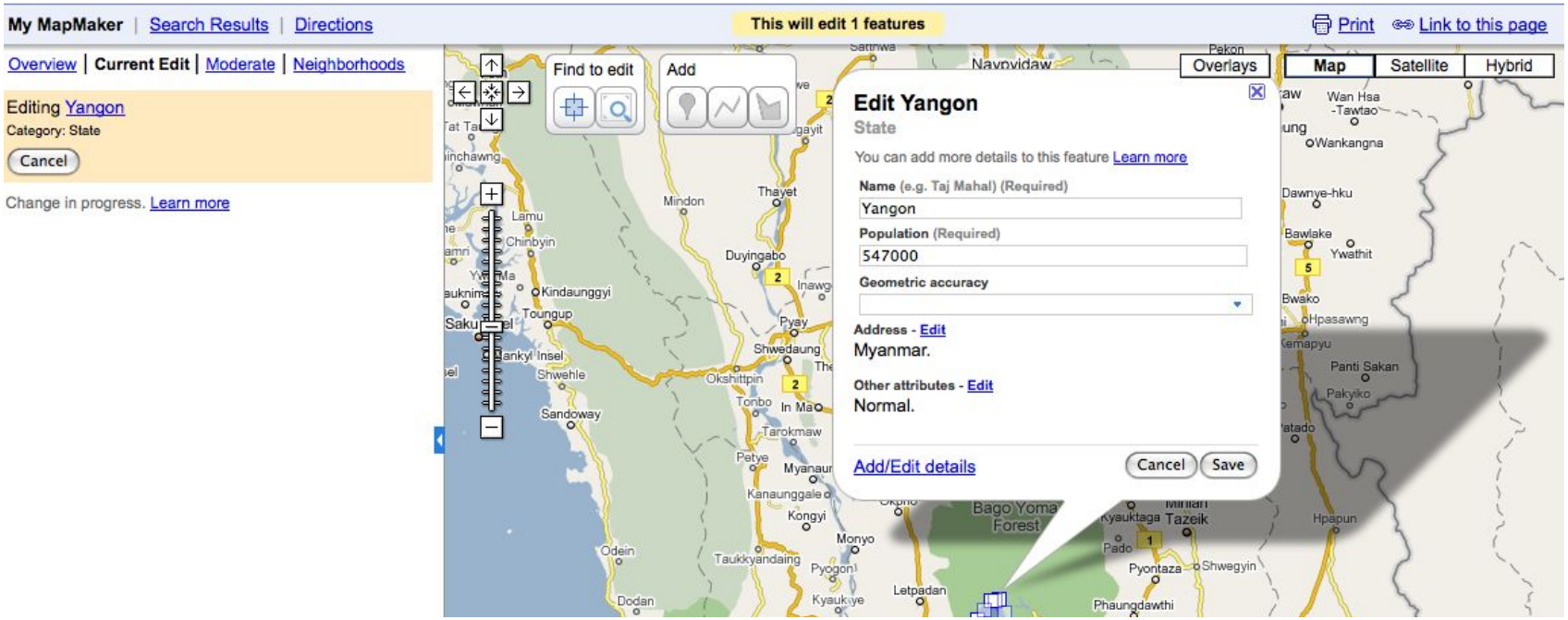
2007 2008 2009

Empowering users to build a collaborative map of the world



2007 2008 2009

Empowering users to build a collaborative map of the world



Panoramio

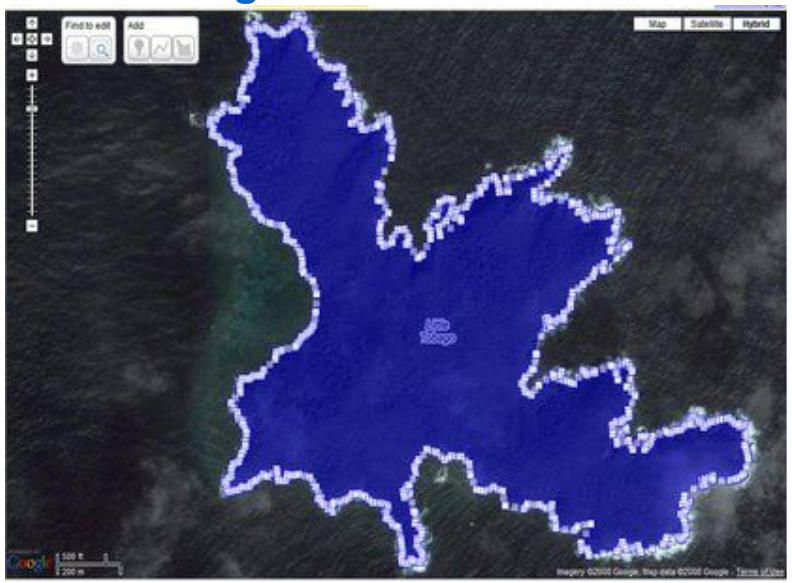
Google Map Maker

2007 2008 2009

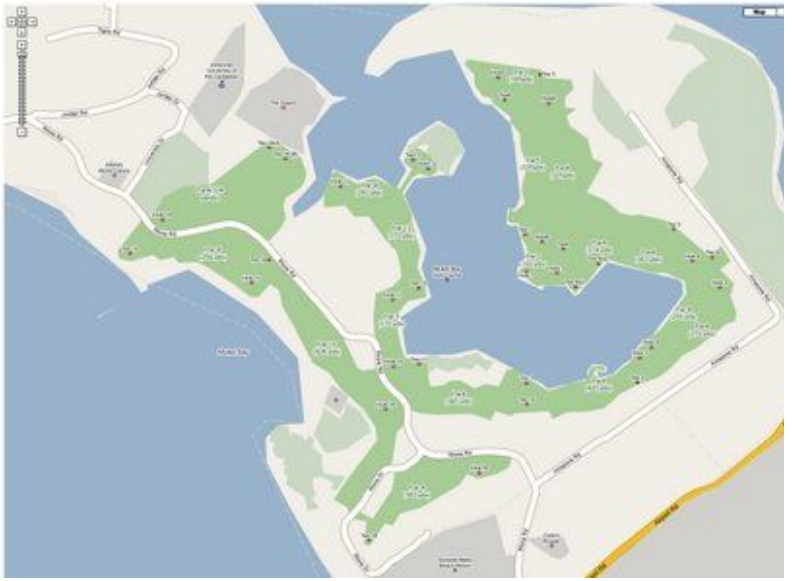
Mapping the world, one Map Maker at a time

Google

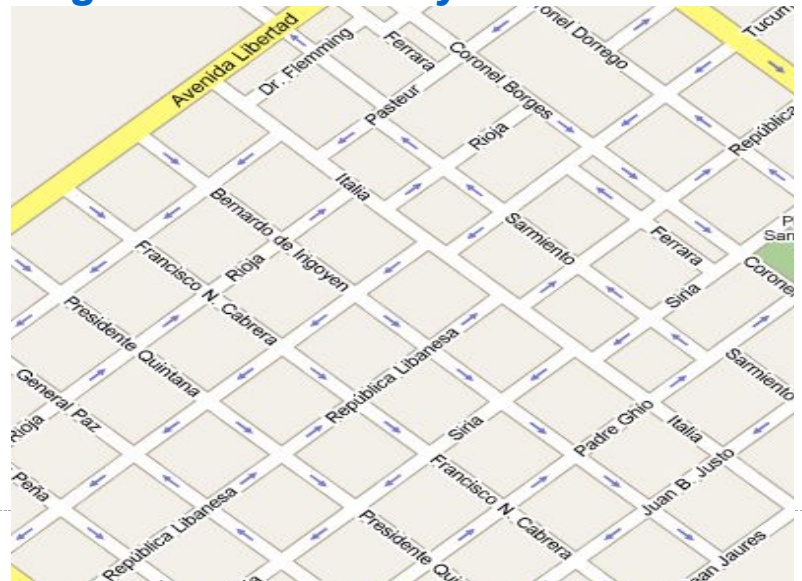
Little Tobago



Caribbean golf course



Argentina – one way streets

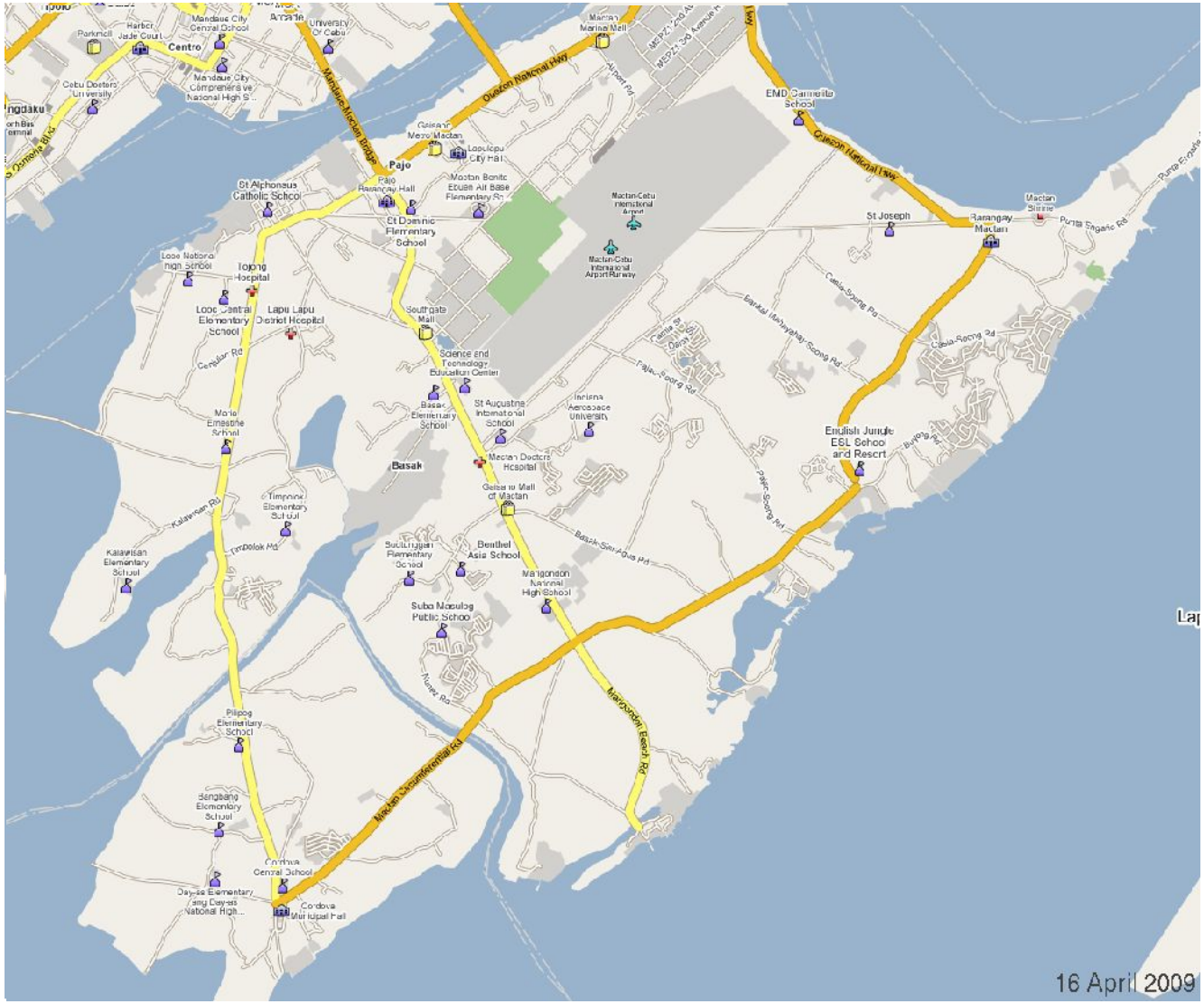


Ivory Coast – mapping through the clouds

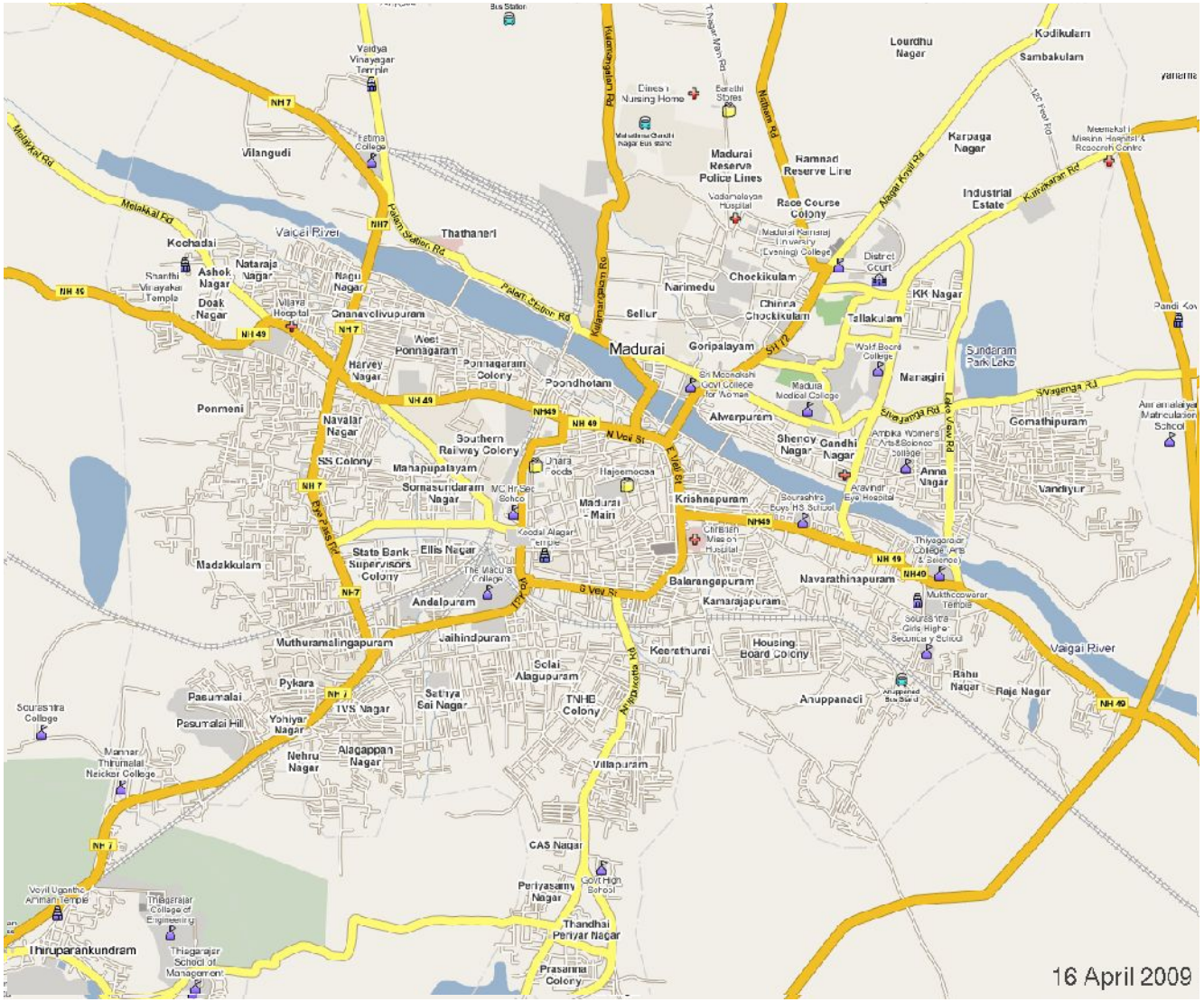
A global, collaborative canvas

Google

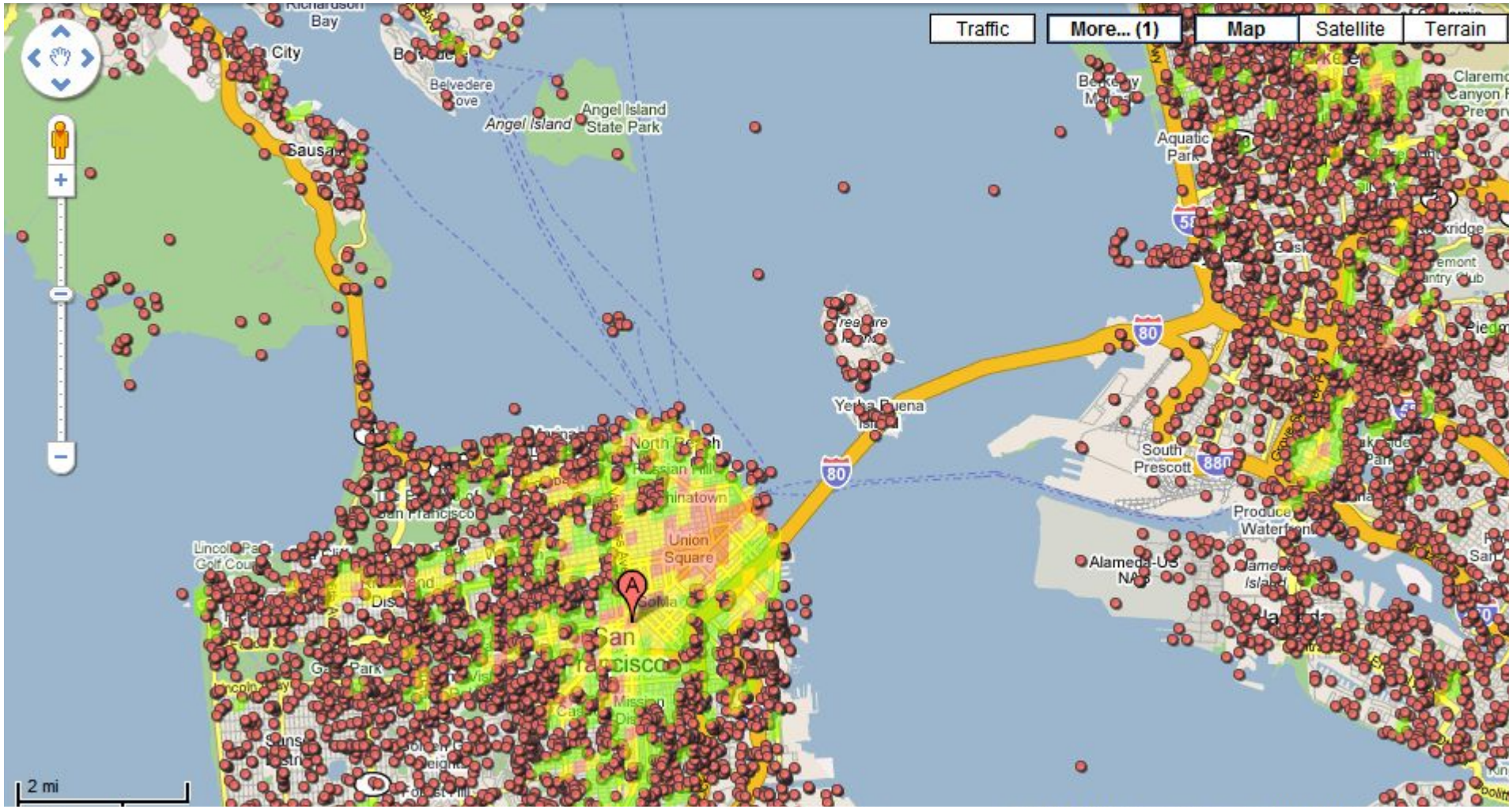
Lapu City, Philippines



Madurai, India



San Francisco, CA



Helping users find information

Helping users find information

Google

- We put a lot of thought into how Maps work for users
- Our goal: make it easy to discover useful and relevant information quickly
- Demos of More button - useful for travel and exploration
  - Panoramio layer
  - Wikipedia layer
  - Youtube layer
- Street View - the next generation of Maps
    - Panoramio integration and ”smart navigation”

Mobile and the Maps API

Google

- Using mobile - find places on the run
  - Search for a restaurant
  - Transit and other directions
  - Click-to-call

- Maps API and our approach to open innovation
  - API is a considerable fraction of the Maps traffic

Place pages for Google Maps

Google

- Place pages
  - re-defining what a "place" is
  - comprehensive information about all types of locations
  - many things have a geographic context
- Wide range of information about a place is out there
  - people want to know more than address / phone
  - photos, reviews, related maps, how to get there
  - presenting the info in a simple, organized way
- Powerful tool for local businesses

Union Square, San Francisco

Google Maps is Google

News

Web

Video

Images

Thank You

Questions?

Google