



# Enterprise Geospatial in the Cloud

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# 2006

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**Maps**

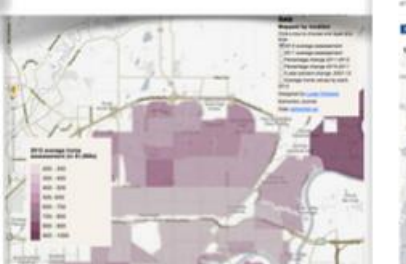
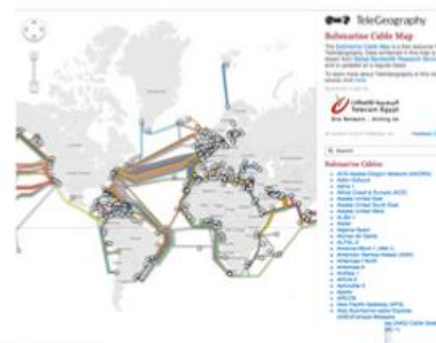


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- A** [200 Boylston St Assocs](#)  
(617) 244-1975 - 6.3 mi SW
- B** [West Boylston St Beach Tanning Salon](#)  
(508) 856-0535 - 38 mi W
- C** [West Boylston St Citgo Station](#)  
(508) 852-6296 - 38 mi W
- D** [J.Jill](#)  
(617) 236-8668 - 1.3 mi SW
- E** [Hillcrest Learning Institute](#)  
(617) 357-5485 - 0.5 mi SW
- F** [Talbots the Inc](#)  
(617) 262-2981 - 0.9 mi SW
- G** [St John Boutique](#)  
(617) 338-6130 - 0.7 mi SW
- H** [Spaulding & Slye Security Desk](#)  
(617) 424-6165 - 0.8 mi SW
- I** [Shapiro Carl and Ruth Family Foundation](#)  
(617) 778-7999 - 0.8 mi SW
- J** [Demsky Kenneth PHD](#)

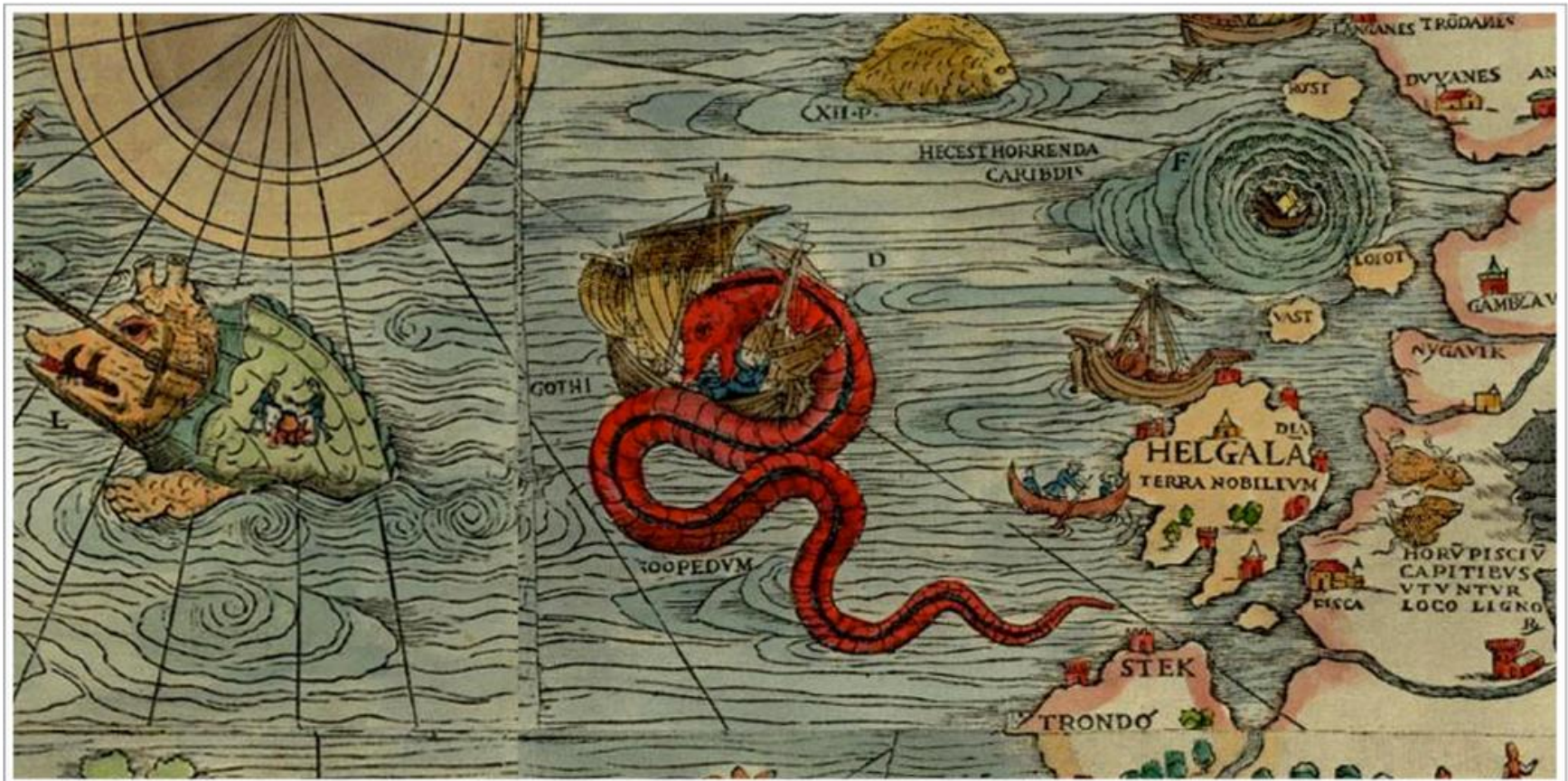
©2005 Google Map data ©2005 NAVTEQ TeleAtlas

# 800 thousand sites





2011



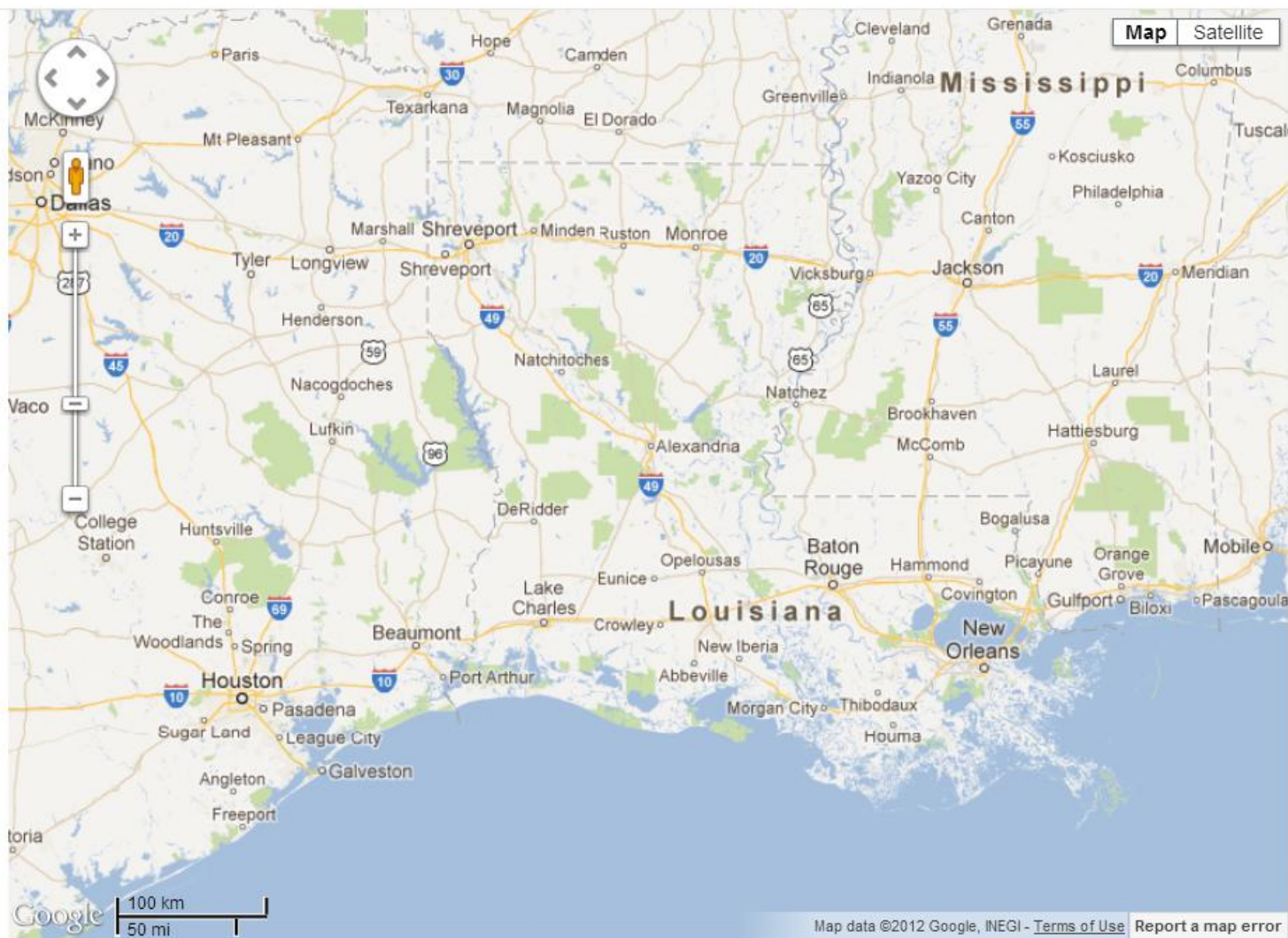
Build your maps in our  
cloud

Reach users on every  
platform

Integrate with your  
applications

## Louisiana Oil & Gas

- ☐ Haynesville Shale Wells
- ☐ Oil & Gas Fields
- ☐ Oil & Gas Wells
- ☐ Permit Points
- ☐ Permit Polygons
- ☐ Levees
- ☐ USGS Chart
- ☐ Ortho







# Google's Cloud



Google Maps is used more than  
1 million hours every day



Over one billion monthly active users of  
Google Maps services



Santa Tracker handled 1.6 million queries per second





Worlds Largest Imagery Database  
over 20 PBs of data

Constantly updating base data



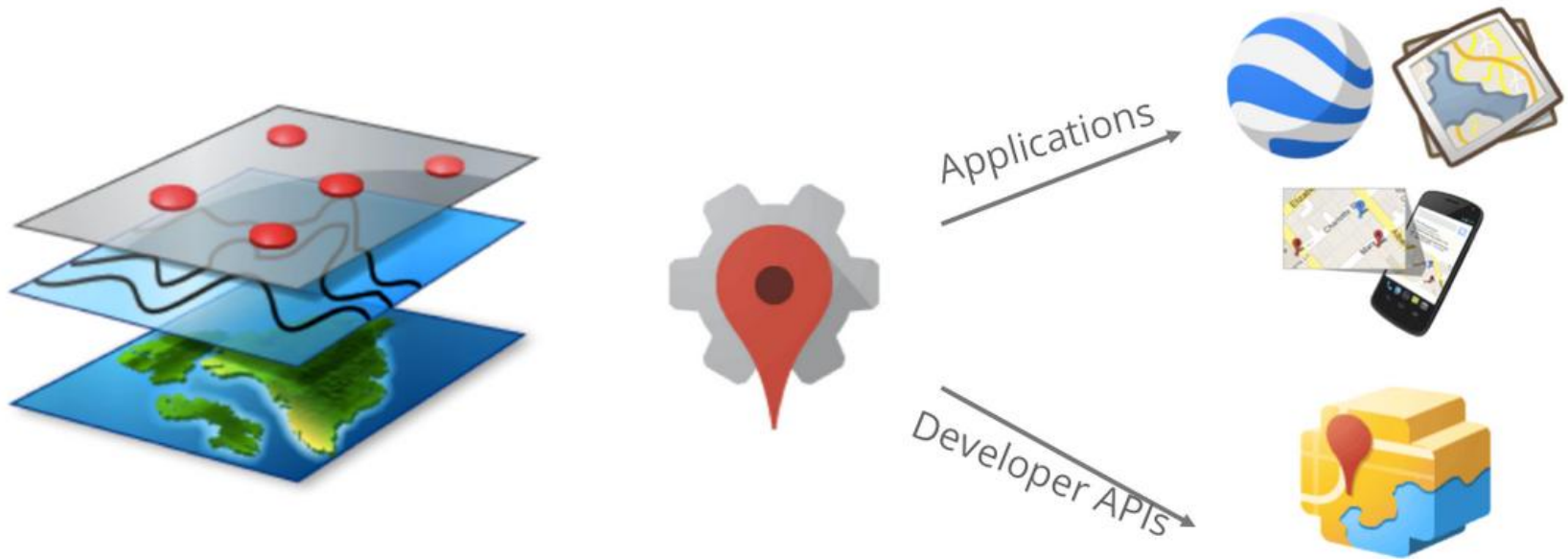
# Access Control

# API Integration



# Google Maps Engine

# What is Google Maps Engine?



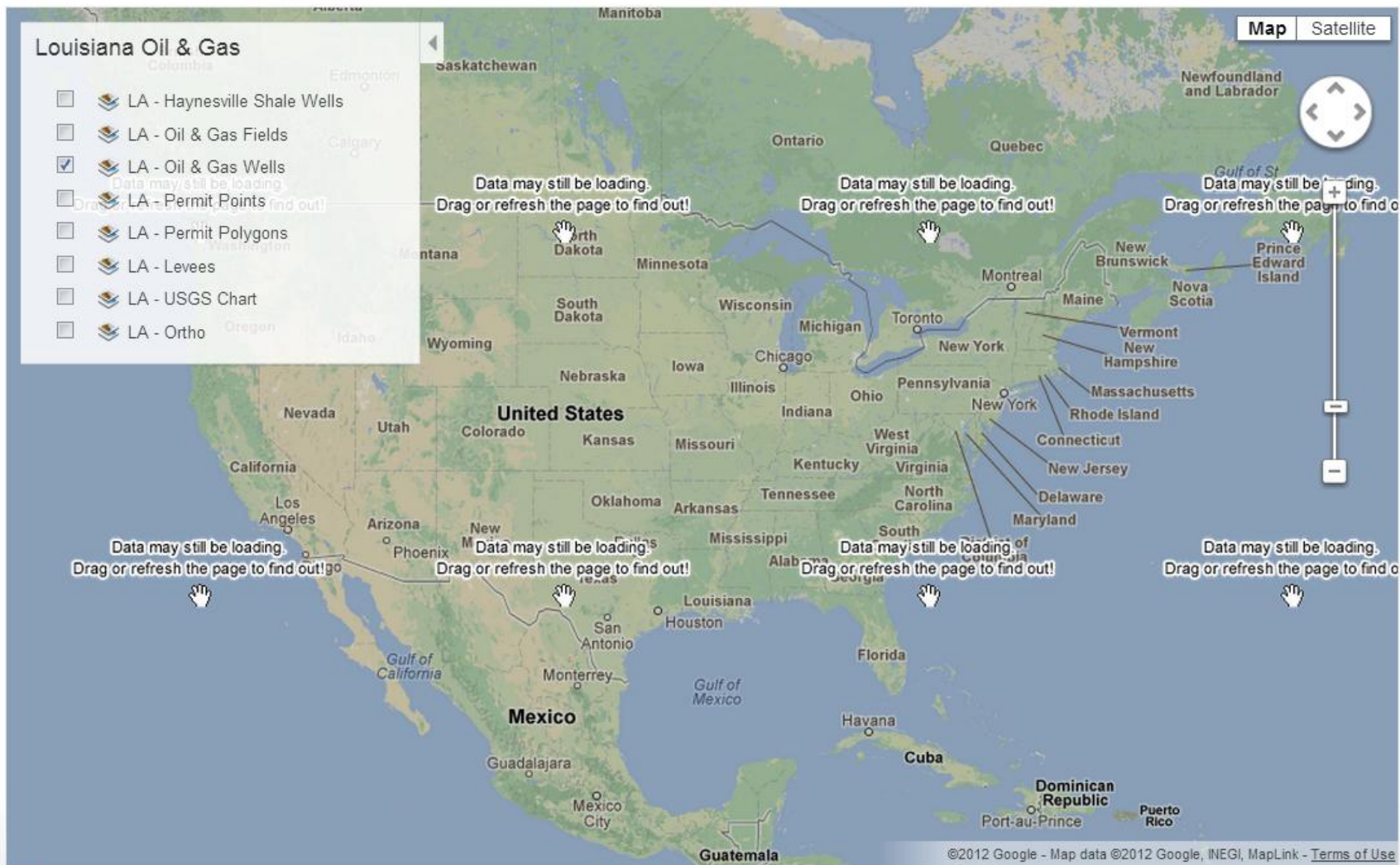


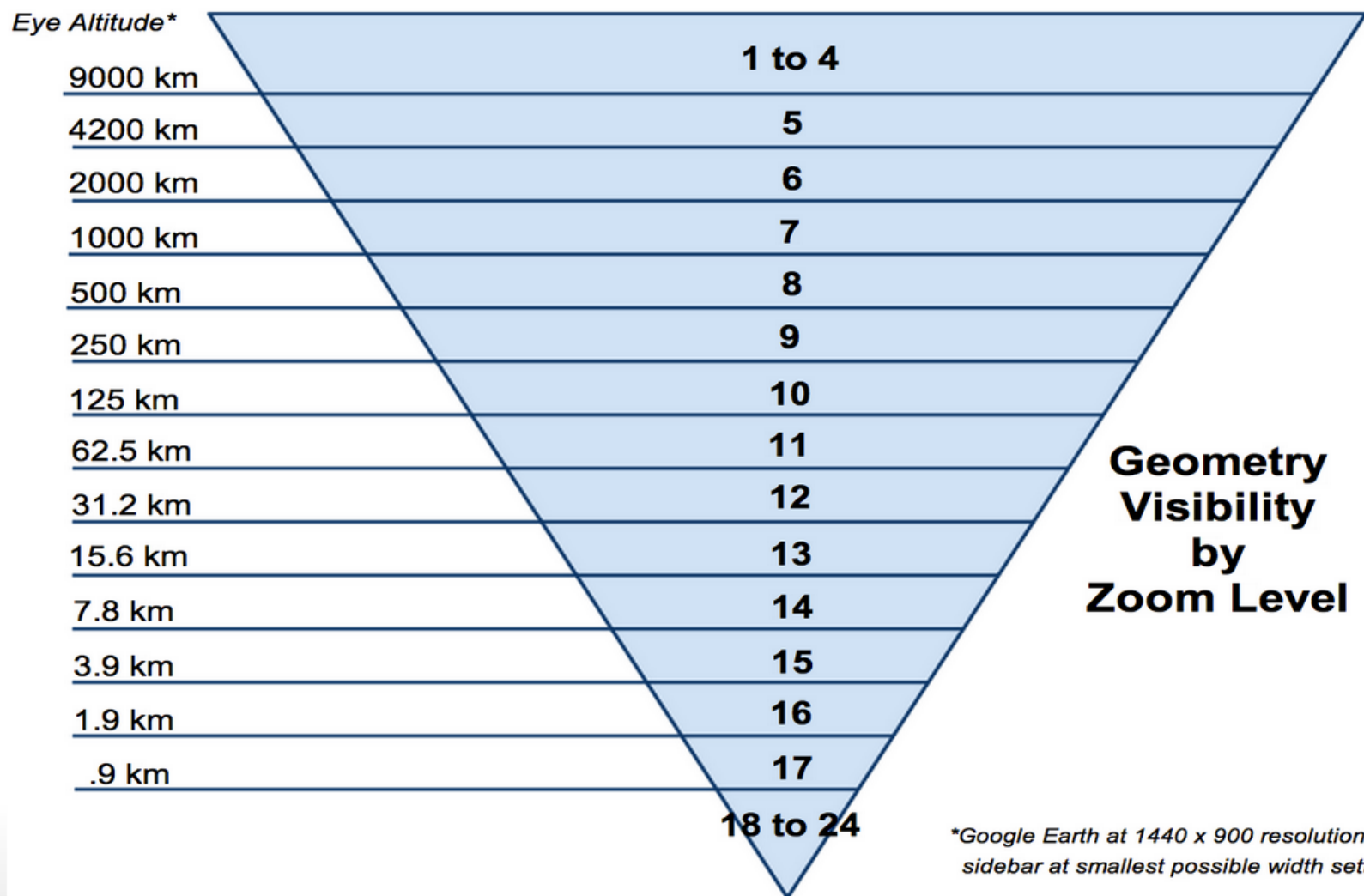
## Google Maps Engine Usage

- 165 TB of imagery
- 2.5 billion vector features
- More than one thousand published maps

## Key Tasks

- Upload data
- Create layer
- Style layers
- Publish map









# Google Maps Engine Interface



# Google Maps Engine for Developers

**Developer Access**

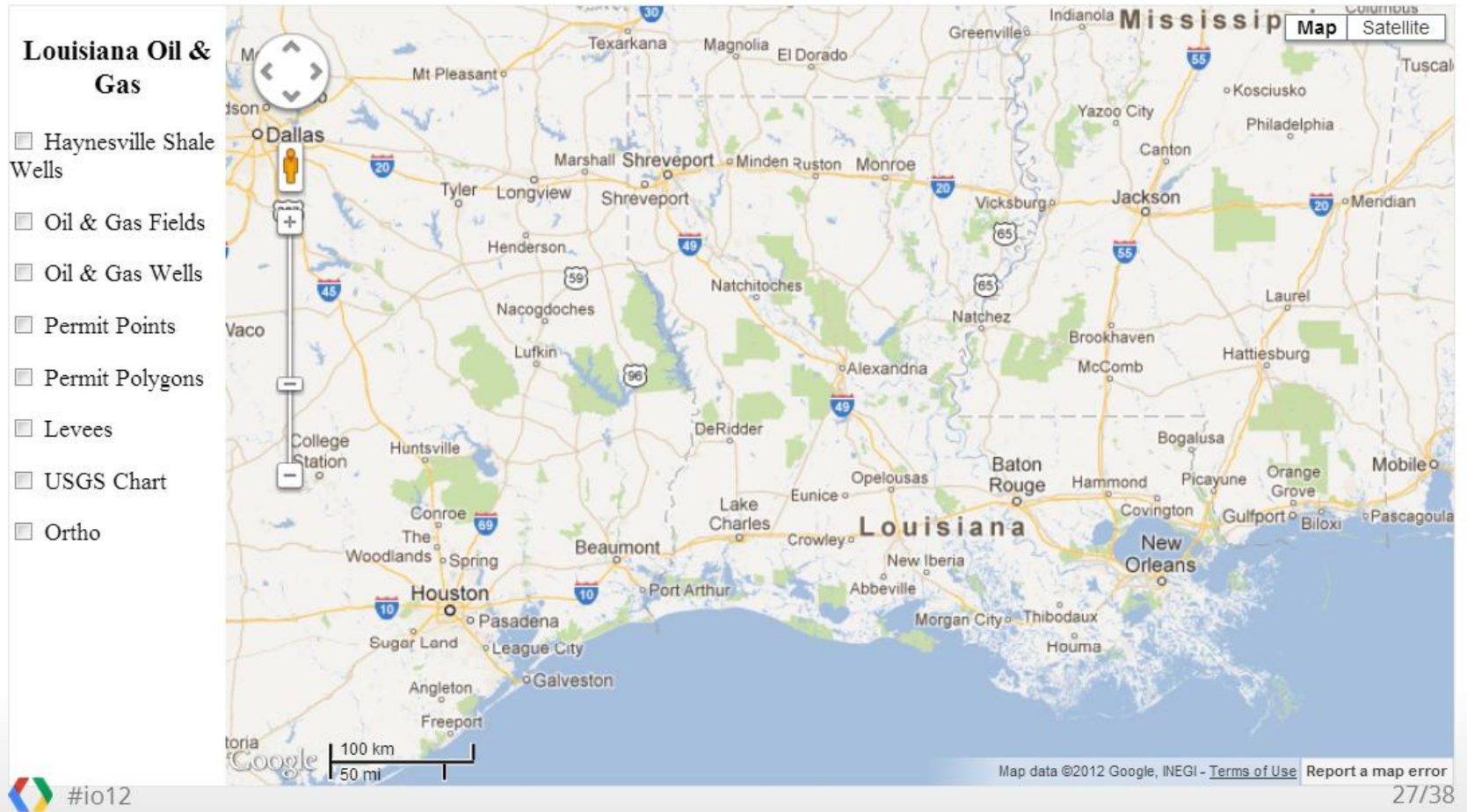
MapsDataLayer

JSON Feed

Earth API

OAuth for authentication

# Back to the Demo





# Show us the code!

JAVASCRIPT

```
<script type="text/javascript"
  src="http://maps.googleapis.com/maps/api/js?libraries=visualization
    &client=gme-yourclientid&sensor=true_or_false">
  ...
  var mapDataLayer = new google.maps.visualization.MapDataLayer({
    mapId: mapId,
    layerId: layerId,
    map: map
  });
```

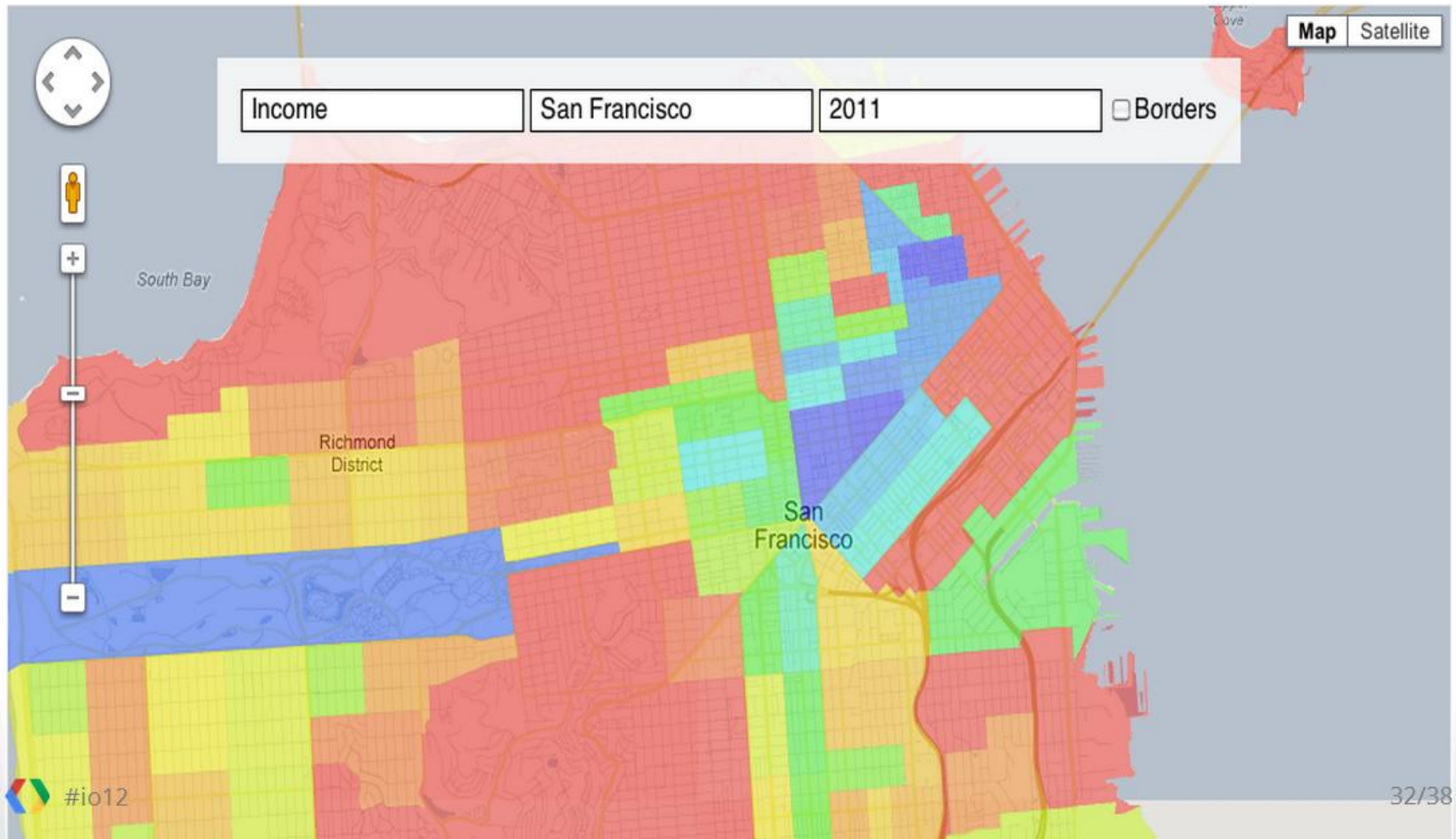
```
{
  "assetId": "04996796288385000359-10761208349087452998-4",
  "name": "Louisiana Oil \u0026 Gas",
  "description": "",
  "bounds": {...}
},
"layers": [
  {
    "layerName": "LA - Haynesville Shale Wells",
    "layerType": "VECTOR",
    "assetId": "04996796288385000359-10761208349087452998-4/2",
    "key": "layer_00001",
    "defaultOn": true,
    "bounds": {
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        "lat": 31.59825539109528,
        "lng": -94.04001747858447
      },
      "northEast": {
        "lat": 33.00609170899404,
        "lng": -93.09197778079105
      }
    }...
  }
]
```

# Later this Year: Read-Write API



## Other new features of the Geospatial Cloud

# US Demographics Layer





# Google Maps Gallery



# Bringing it Together

## Demographics Layers

☒ Income By Census Tract

## Louisiana Oil & Gas

☐ Haynesville Shale Wells

☐ Oil & Gas Fields

☐ Oil & Gas Wells

☒ Permit Points

☒ Permit Polygons

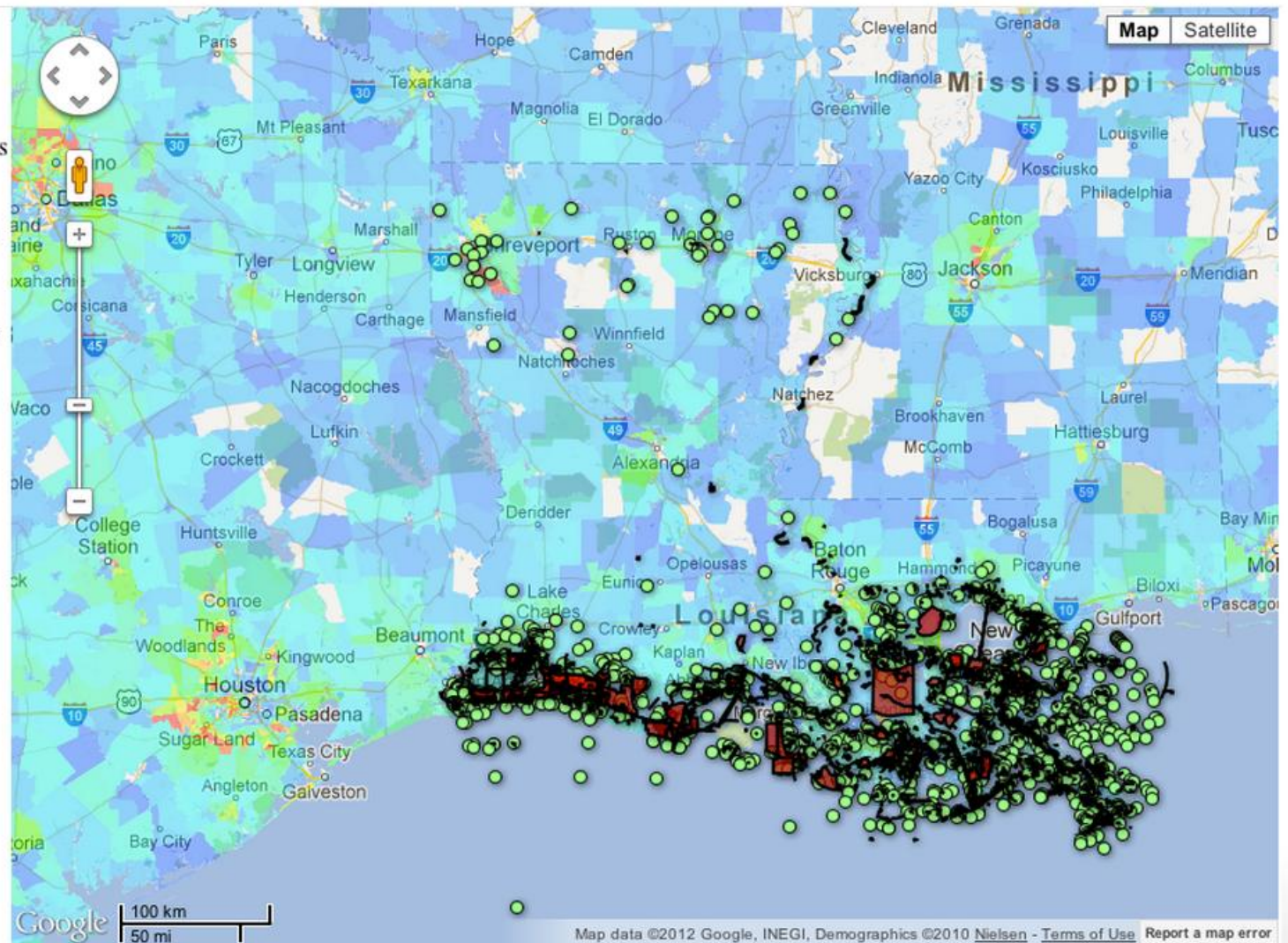
☐ Levees

☐ USGS Chart

☐ Ortho

## Historical Topographic Maps

☐ Bounding Boxes



Don't miss tomorrow's codelab

## Build Maps with Google Maps Engine

Sean Wohltman



Mike Evanoff



# <Thank You!>

Google Maps Engine: <http://goo.gl/kpQTT>

MapDataLayer: <http://goo.gl/QnEVR>

Sean Maday - Enterprise Geo Engineer, Google  
Mano Marks - Staff Developer Advocate, Google

