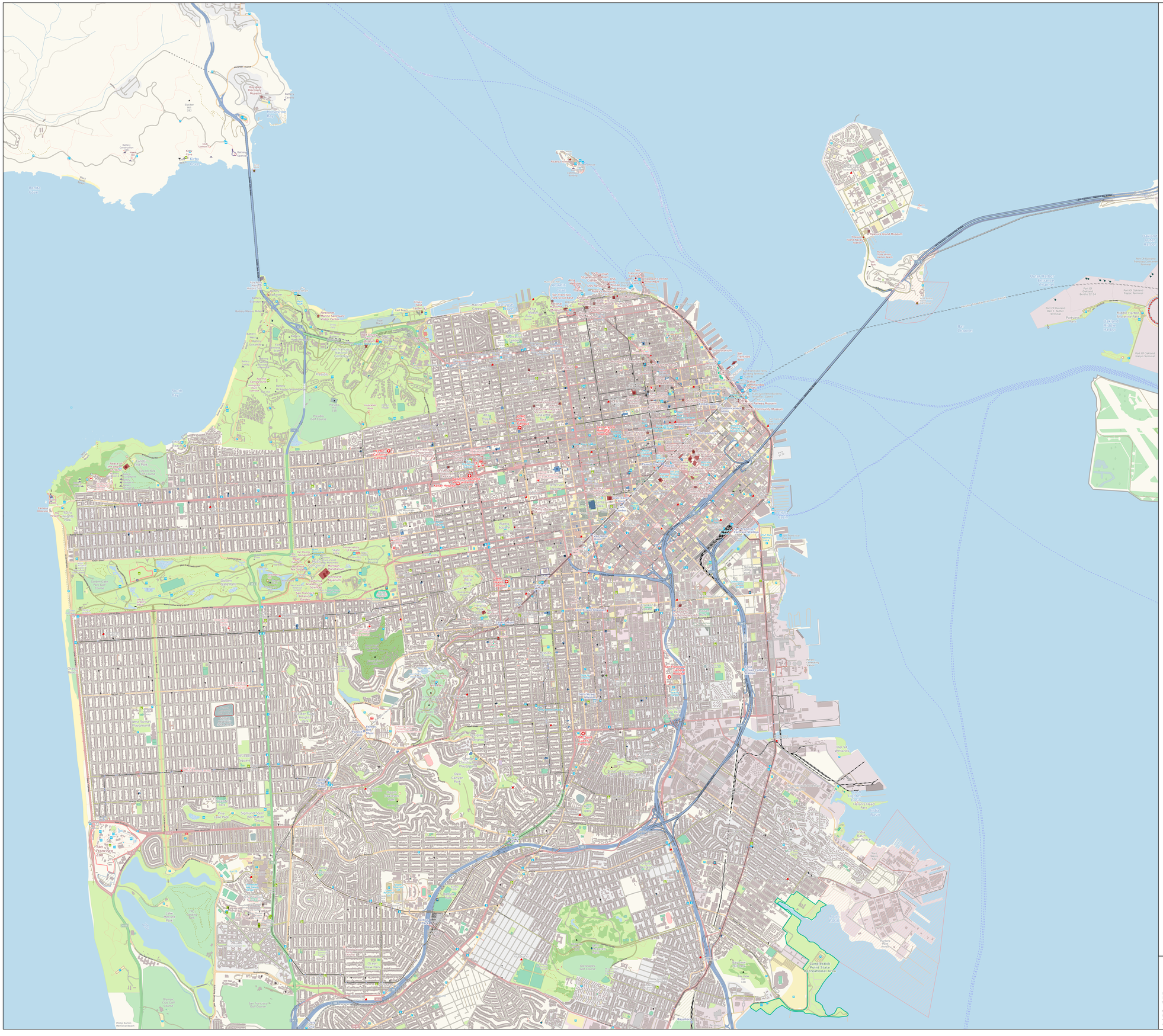

# "San Francisco"

## OpenStreetMap Renderer for ArcGIS

**Railway (Lines) - Tunnel**
- <all other values>
- rail
- light_rail
- subway
- tram
- monorail
- funicular
- narrow_gauge
- preserved
- miniature
- abandoned
- disused
- proposed
- construction
- platform

**Tourism (Points) - Viewpoint**
- viewpoint, other
- viewpoint,
- viewpoint, tower

**Tourism (Points) - Information Office**
- office

**Tourism (Points) - Information Guidepost**
- guidepost

**Tourism (Points) - Information Map**
- map

**Tourism (Points) - Information Board**
- board, <Null>
- board, district
- board, geology
- board, history
- board, nature
- board, plants
- board, wildlife

**Tourism (Points)**
- wilderness_hut
- alpine_hut
- attraction
- camp_site
- caravan_site
- motel
- museum
- picnic_site
- theme_park
- zoo

**Tourism (Points) - Zoo Enclosure**
- zoo enclosure

**Historic (Points)**
- archaeological_site
- battlefield
- boundary_stone
- castle
- fort
- manor
- memorial
- milestone
- monument
- palace
- ruins

**Place of worship (Points)**
- buddhist
- christian
- hindu
- jewish
- muslim
- shinto
- sikh
- taoist

**Leisure (Points)**
- bird_hide
- dog_park
- fishing
- ice_rink
- miniature_golf
- swimming_pool
- wildlife_hide

**Aerialway (Points)**
- station

**Natural (Points)**
- bay
- beach
- cape
- cave_entrance
- geyser
- peak
- reef
- spring
- volcano

**Power (Points) - Wind turbine**
- wind turbine

**Power (Points) - Cable_distribution_cabinet**
- cable_distribution_cabinet

**Power (Points) - Compensator**
- compensator

**Power (Points) - Converter**
- converter

**Power (Points) - Transformer**
- transformer

**Power (Points) - Switch**
- switch

**Power (Points) - Pole_Tower**
- pole
- tower

**Aeroway (Points)**
- gate (number)
- helipad

**Man made (Points) - Telescope**
- radio_telescope
- telescope

**Man made (Points) - Communications Tower**
- communications_tower

**Man made (Points) - Tower**
- mast, communication
- mast, lighting
- tower, communication
- tower, defensive
- tower, lighting
- tower, observation

**Man made (Points)**
- beacon
- crane
- lighthouse
- mineshaft
- water_tower
- water_well
- watermill
- windmill

**Railway (Points)**
- buffer_stop
- halt
- level_crossing
- subway_entrance
- station
- tram_stop
- turntable

**Amenity (Points) - Shelter Public Transport**
- shelter, public_transport

**Amenity (Points) - Shelter**
- shelter, <Null>
- shelter, basic_hut
- shelter, lean_to
- shelter, picnic_shelter
- shelter, rock_shelter
- shelter, weather_shelter

**Amenity (Points) - Hospital**
- hospital, emergency=yes
- hospital, emergency=no
- hospital, unknown
- clinic, emergency=yes
- clinic, emergency=no
- clinic, unknown

**Amenity (Points) - Public Parking**
- public parking

**Amenity (Points) - Destination Parking**
- customers or destination parking

**Amenity (Points)**
- bus_station
- cinema
- ferry_terminal
- fire_station
- fountain
- fuel
- hunting_stand
- library
- police
- post_office
- theatre
- toilets
- townhall

**Power (Lines) - Line**
- line
- minor_line

**Power (Lines) - Busbar_Bay**
- bay
- busbar

**Power (Lines) - Cable**
- cable

**Aerialway (Lines)**
- cable_car
- gondola
- chair_lift
- mixed_lift
- t-bar
- j-bar
- platter
- rope_tow
- magic_carpet
- goods

**Route (Lines) - Piste**
- downhill, novice
- downhill, easy
- downhill, intermediate
- downhill, advanced
- downhill, expert
- downhill, freeride
- downhill, <Null>
- nordic, novice
- nordic, easy
- nordic, intermediate
- nordic, advanced
- nordic, expert
- nordic, unknown
- skitour, unknown
- sled, unknown
- sleigh, unknown

**Historic (Lines) - Aqueduct**
- aqueduct bridge
- aqueduct

**Man made (Lines) - Pipeline Overground**
- pipeline

**Man made (Lines) - Pipeline Bridge**
- pipeline bridge

**Aerroway (Lines)**
- runway
- taxiway

**Natural (Lines)**
- arete
- cliff
- ridge
- strait

**Natural (Lines) - Tree_row**
- tree_row

**Barrier (Lines)**
- city_wall

**Barrier (Lines) - Hedge**
- hedge

**Boundary (Polygons)**
- national_park
- protected_area

**Man made (Polygons) - Boundary**
- wastewater_plant
- water_works

**Tourism (Polygons) - Zoo Enclosure**
- zoo enclosure

**Tourism (Polygons) - Boundary**
- attraction
- camp_site
- caravan_site
- museum
- picnic_site
- theme_park
- viewpoint
- zoo

**Historic (Polygons) - Boundary**
- Historic (Polygons) - Boundary

**Land use (Polygons) - Observatory**
- observatory

**Land use (Polygons) - Boundary**
- brownfield
- greenfield
- military

**Waterway (Polygons) - Boundary**
- wadi
- boatyard

**Barrier (Polygons) - Hedge Boundary**
- hedge

**Leisure (Polygons) - Boundary**
- fishing
- marina
- miniature_golf
- nature_reserve
- water_park

**Amenity (Polygons) - Hospital Boundary**
- clinic or hospital

**Amenity (Polygons) - Boundary**
- college
- police
- prison
- school
- university

**Tourism (Polygons) - Building**
- alpine_hut
- attraction
- gallery
- information
- motel
- museum
- viewpoint
- wilderness_hut

**Historic (Polygons) - Building**
- <all other values>
- aqueduct
- castle
- city_gate
- citywalls
- fort
- manor
- memorial
- monument
- palace
- ruins

**Amenity (Polygons) - Hospital Building**
- hospital, emergency=yes
- hospital, emergency=no
- hospital, unknown
- clinic, emergency=yes
- clinic, emergency=no
- clinic, unknown

**Building (Polygons) - Hospital**
- hospital, emergency=yes
- hospital, emergency=no
- hospital, unknown
- clinic, emergency=yes
- clinic, emergency=no
- clinic, unknown

**Amenity (Polygons) - Building**
- cinema
- ferry_terminal
- fire_station
- library
- police
- post_office
- prison
- theatre
- toilets
- townhall

**Place of worship (Polygons) - Building**
- generic place of worship
- cathedral
- chapel
- church
- convent
- monastery
- mosque
- synagogue
- temple

**Aerroway (Polygons) - Facility**
- hangar
- helipad
- terminal

**Aerialway (Polygons) - Building**
- aerialway station building

**Railway (Polygons)**
- station
- platform
- turntable

**Leisure (Polygons) - Building**
- bird_hide
- ice_rink building or covered
- sports_centre
- stadium
- swimming_pool building or covered
- track building or covered
- wildlife_hide

**Military (Polygons) - Building**
- barracks
- bunker

**Building (Polygons) - Bunker**
- bunker

**Amenity (Polygons) - Parking Building Public**
- public parking

**Amenity (Polygons) - Parking Building Destination**
- customers or destination parking

**Building (Polygons)**
- generic building
- barn
- castle (avoid, use historic=castle)
- city_hall
- construction
- factory
- garage
- garages
- glasshouse
- greenhouse
- hangar
- houseboat
- hut
- industrial
- office
- palace (avoid, use historic=castle)
- retail
- school
- shed
- static_caravan
- train_station
- transportation
- university
- warehouse

**Power (Polygons) - Solar Photovoltaic Panel**
- solar_photovoltaic_panel

**Power (Polygons) - Solar Thermal Collector**
- solar_thermal_collector

**Power (Polygons) - Heliostat**
- heliostat

**Power (Polygons) - Compensator**
- compensator

**Power (Polygons) - Converter**
- converter

**Power (Polygons) - Substation**
- substation
- sub_station (avoid, use power=substation)

**Power (Polygons) - Generator**
- generator

**Power (Polygons) - Plant**
- plant

**Man made (Polygons) - Telescope**
- telescope
- radio_telescope

**Man made (Polygons) - Communications Tower**
- communications_tower

**Man made (Polygons) - Tower**
- communication
- cooling
- defensive
- observation

**Railway (Lines) - Layer 0**
- <all other values>
- rail
- light_rail
- subway
- tram
- monorail
- funicular
- narrow_gauge
- preserved
- miniature
- abandoned
- disused
- crane
- construction
- proposed
- platform

**Railway (Lines) - Layer 0 - Siding, spur, yard**
- <all other values>
- rail: yard
- rail: siding
- rail: spur
- light_rail: yard
- light_rail: siding
- light_rail: spur
- subway: yard
- subway: siding
- subway: spur
- tram: yard
- tram: siding
- tram: spur
- monorail: yard
- monorail: siding
- monorail: spur
- funicular: yard
- funicular: siding
- funicular: spur
- preserved: yard
- preserved: siding
- preserved: spur
- miniature: yard
- miniature: spur
- miniature: siding
- narrow_gauge: yard
- narrow_gauge: siding
- narrow_gauge: spur
- abandoned: yard
- abandoned: siding
- abandoned: spur
- disused: yard
- disused: siding
- disused: spur
- construction: yard
- construction: siding
- construction: spur
- proposed: yard
- proposed: siding
- proposed: spur
- platform: yard
- platform: siding
- platform: spur

**Highway (Line) - Layer 0**
- <all other values>
- motorway
- motorway_link
- trunk
- trunk_link
- primary
- primary_link
- secondary
- secondary_link
- tertiary
- tertiary_link
- unclassified
- road
- residential
- living_street
- raceway
- service
- track
- path
- pedestrian
- footway
- steps
- cycleway
- bridleway
- bus_guideway
- platform
- ford
- proposed
- construction

**Highway (Line) - Layer 0 - Bridge**
- <all other values>
- motorway bridge
- motorway_link bridge
- trunk bridge
- trunk_link bridge
- primary bridge
- primary_link bridge
- secondary bridge
- secondary_link bridge
- tertiary bridge
- tertiary_link bridge
- unclassified bridge
- road bridge
- residential bridge
- living_street bridge
- raceway bridge
- service bridge
- track bridge
- path bridge
- pedestrian bridge
- footway bridge
- steps bridge
- cycleway bridge
- bridleway bridge
- bus_guideway bridge
- platform bridge
- ford bridge
- proposed bridge
- construction bridge

**Man made (Polygons)**
- breakwater
- bridge
- chimney
- crane
- gasometer
- groyne
- lighthouse
- mineshaft
- monitoring_station
- pier
- pumping_station
- reinforced_slope
- reservoir
- reservoir_covered
- silo
- storage_tank
- storm_surge_barrier
- water_tower
- water_well
- watermill
- windmill
- works

**Man made (Lines)**
- pier
- groyne
- breakwater

**Man made (Lines) - Dyke_Levee**
- dyke
- levee

**Aerroway (Polygons) - Apron**
- apron

**Building (Polygons) - Underground**
- Building (Polygons) - Underground

**Barrier (Polygons)**
- city_wall
- hedge
- retaining_wall

**Route (Lines) - Ferry**
- ferry

**Highway (Lines) - Tunnel**
- <all other values>
- motorway tunnel
- motorway_link tunnel
- trunk tunnel
- trunk_link tunnel
- primary tunnel
- primary_link tunnel
- secondary tunnel
- secondary_link tunnel
- tertiary tunnel
- tertiary_link tunnel
- unclassified tunnel
- road tunnel
- residential tunnel
- living_street tunnel
- raceway tunnel
- service tunnel
- track tunnel
- path tunnel
- pedestrian tunnel
- footway tunnel
- steps tunnel
- cycleway tunnel
- bridleway tunnel
- bus_guideway tunnel
- platform tunnel
- ford tunnel
- proposed tunnel
- construction tunnel

**Waterway (Lines) - Dam_Weir**
- dam
- weir

**Waterway (Polygons)**
- <all other values>
- canal
- dam
- ditch
- dock
- drain
- lake
- lock
- riverbank
- stream

**Natural (Polygons) - Water**
- bay
- reef
- spring
- water
- waterfall

**Land use (Polygons) - Water**
- basin
- reservoir
- salt_pond

**Waterway (Lines)**
- canal
- ditch
- drain
- river
- stream
- wadi

**Woodland (Polygons)**
- Other woodland type
- Unknown
- Coniferous
- Deciduous
- Mixed

**Leisure (Polygons) - Feature**
- bird_hide
- dog_park
- ice_rink
- pitch
- playground
- sports_centre
- stadium
- swimming_pool
- track
- wildlife_hide

**Highway (Polygons)**
- pedestrian
- rest_area
- services

**Geological (Polygons)**
- moraine

**Natural (Polygons)**
- <all other values>
- bare_rock
- beach
- cape
- fell
- glacier
- grassland
- heath
- land
- moor
- mud
- rock
- sand
- scree
- scrub
- tundra
- wetland

**Amenity (Polygons) - Parking Area Public**
- public parking

**Amenity (Polygons) - Parking Area Destination**
- customers or destination parking

**Amenity (Polygons) - Area**
- bus_station
- grave_yard
- marketplace

**Leisure (Polygons) - Area**
- <all other values>
- common
- garden
- park
- golf_course
- miniature_golf

**Land use (Polygons)**
- <all other values>
- allotments
- cemetery
- commercial
- construction
- farm
- farmyard
- forest
- garages
- grass
- greenhouse_horticulture
- industrial
- landfill
- meadow
- orchard
- quarry
- railway
- recreation_ground
- residential
- retail
- village_green
- vineyard

**Aerroway (Polygons) - Aerodrome**
- aerodrome

**Place (Polygons) - Island**
- island

**Waterway (Polygons) - Backdrop**
- <all other values>
- canal
- dam
- ditch
- dock
- drain
- lake
- lock
- riverbank
- stream

## "San Francisco"

as rendered by the OSM Renderer for ArcGIS

**Application development by MSc Marco Boeringa**

***Note:*** Contours may contain artefacts due to uncorrected source

Kilometers

0 0,25 0,5 1

Projection: ArcGIS: **1:25.000**

WGS 1984 Web Mercator (auxiliary sphere)

Data Credits: **© OpenStreetMap contributors, 2014**, contours based on ASTER GDEM: **ASTER GDEM is a product of METI and NASA**.

**Disclaimer:** OpenStreetMap is a community project. Data provided "AS IS". Map author does not take any responsibility for possible in-accuracies or errors in the map, or damages caused by the use of this map.

Cartography and application development of the OSM Renderer for ArcGIS by MSc Marco Boeringa (marco@boeringa.demon.nl). The OSM Renderer is a combined ModelBuilder / Python toolbox that depends on ESRI's "OpenStreetMap Editor for ArcGIS" for preliminary data preparation and extraction of attributes, but enhances this with OSM rendering rules and automated data processing to build a topographic style map. It makes extensive use of SQL Definition Queries, Symbol Level Drawing and (Maplex) labeling options. The OSM Renderer for ArcGIS cartographic styling is loosely based on CartoCSS/Mapnik rendering, with adjustments.