SCAG LAND USE FIELD CALCULATOR SCRIPT:

if(Find('CROPS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Agriculture'

}

if(Find('GRAZING',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Agriculture'

}

if(Find('PASTURE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Agriculture'

}

if(Find('DWP LAND AGRICULTURE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Agriculture'

}

if(Find('MISC AGRICULTURE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Agriculture'

}

if(Find('SFR (SINGLE FAMILY RESIDENCE)',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Single Family Residential'

}

if(Find('VACANT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Vacant'

}

if(Find('UNUSED BLDG',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Vacant'

}

if(Find('VAC OPEN SPACE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('SFR OPEN SPACE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('2 UNIT RESIDENCE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('134 4 UNIT RES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('APTS 6 UNITS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('APTS 5 UNITS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('TRIPLEX',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('SFR AND SFR',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('SFR AND APTS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('APTS 34 UNITS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('3 UNIT RESIDENCE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Multi-Family Residential'

}

if(Find('RESERVOIR',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('AIRPORT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('CANAL & AQUEDUCT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('MINING',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('OPEN SPACE/STORAGE YARD',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('HEAVY INDUSTRIAL & MANUFACTURING',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('FOOD PROCESSING',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('MH OPEN SPACE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Rural Residential'

}

if(Find('SFR OPEN SPACE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Rural Residential'

}

if(Find('COMMERCIAL COACH',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('AUTOMOTIVE SALES REPAIR',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('WAREHOUSE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('LIGHT INDUSTRIAL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('DWP LAND',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('DWP LAND INDUSTRIAL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Industrial'

}

if(Find('FIRE STATION', $feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('CHURCH',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('CHURCH & PARSONAGE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('FEDERAL FACILITIES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('COUNTY FACILITIES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('STATE FACILITIES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('MULTI COMMERCIAL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MULTI COMMERCIAL & RESIDENTIAL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('COMMERCIAL SERVICES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MULTICOMMERCIAL & OFFICES',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('RETAIL STORE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('FOOD STORE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MH PARK',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('USFS OR BLM REC SITE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('MH ON FEE LAND',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('UNPAT MINING CLAIMS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('GAS & MINI MKT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('211 RETAIL STORE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('RESTAURANT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('PRIVATE RECREATION',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('CEMETERY',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('PUBLIC CAMPGROUND',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('WELL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('RAILROAD R/W',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('PUBLIC SCHOOL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Education'

}

if(Find('RESORT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MOTEL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MOTEL 17 UNITS & MGR',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MOTEL 6 UNITS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('ENTERTAINMENT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('HOTEL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MOTEL 9 UNITS',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('MOTEL 28 UNITS & MGR',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('BANK',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('FOOD STORE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Commercial and Services'

}

if(Find('SEPTIC',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('GAS STATION',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('WATER PRODUCTION',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(Find('RAILROAD R/W',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Transportation, Communications, and Utilities'

}

if(find('MULTI COMMERCIAL',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Mixed Commercial and Industrial'

}

if(Find('DRY LAKE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Water'

}

if(Find('CREEK',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Water'

}

if(Find('INDIAN RESERVATION',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Undevelopable or Protected Land'

}

if(Find('MUSEUM',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('STATE ASSD',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Open Space and Recreation'

}

if(Find('PARKING LOT',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Facilities'

}

if(Find('OFFICE BLDG',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'General Office'

}

if(Find('STORE & RESIDENCE',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Mixed Residential'

}

if(Find('SFR AND DUPLEX',$feature['COI\_parcels\_20230119.PropClass'],0)>-1){

return 'Mixed Residential'

}

else {return "Other"}

**From:** Mohammad Abdul Muneer Mogni Shaik (he/him) [<mohammad-abdul-muneer-mogni.shaik@cgu.edu](mailto:<mohammad-abdul-muneer-mogni.shaik@cgu.edu)>  
Sent: Monday, May 1, 2023 7:15 PM  
To: Jasmin Dominguez (she/her) [<jasmin.dominguez@cgu.edu](mailto:<jasmin.dominguez@cgu.edu)>  
Subject: code

!pip install requests

import csv

import requests

import os

#Set the input file name here. You can also use fully qualified path.

inputfilename = '/arcgis/home/AQI/Madera\_County.csv'

#Do not change URL below

apiurl = "<https://geocode-api.arcgis.com/arcgis/rest/services/World/GeocodeServer/reverseGeocode>"

#Update your API Key here.

token = "AAPK2d239bc33b994d45a57e02f3f05adc71dkCbsQRh-zpHCsQE6e1BSan5KtKjtdLedH63lmprkF9KUcu5VVDs\_4ER4O6Sth7Y"

#Set the output file name here. You can also use fully qualified path.

outputfilename = "/arcgis/home/AQI/Madera\_County\_output.csv"

#Code below delete the output file if already exists, else continoue.

try:

os.remove(outputfilename)

except OSError:

pass

try:

with open(outputfilename, mode='w',newline='') as output\_file:

output\_writer = csv.writer(output\_file, delimiter=',', quotechar='"', quoting=csv.QUOTE\_MINIMAL)

with open(inputfilename) as csv\_file:

csv\_reader = csv.reader(csv\_file, delimiter=',')

line\_count = 0

for row in csv\_reader:

try:

if line\_count == 0:

output\_writer.writerow(['id','x','y','Match\_addr','LongLabel','ShortLabel','Addr\_type','Type','PlaceName','AddNum','Address','Block','Sector','Neighborhood','District','City','MetroArea','Subregion','Region','RegionAbbr','Territory','Postal','PostalExt','CntryName','CountryCode'])

line\_count += 1

else:

location = ''

jsonresponse = ''

location = row[1] + ',' + row[2]

response = requests.get(f'{apiurl}?f=pjson&token={token}&location={location}')

jsonresponse = response.json()

id = row[0]

x=jsonresponse['location']['x']

y=jsonresponse['location']['y']

Match\_addr=jsonresponse['address']['Match\_addr']

LongLabel=jsonresponse['address']['LongLabel']

ShortLabel=jsonresponse['address']['ShortLabel']

Addr\_type=jsonresponse['address']['Addr\_type']

Type=jsonresponse['address']['Type']

PlaceName=jsonresponse['address']['PlaceName']

AddNum=jsonresponse['address']['AddNum']

Address=jsonresponse['address']['Address']

Block=jsonresponse['address']['Block']

Sector=jsonresponse['address']['Sector']

Neighborhood=jsonresponse['address']['Neighborhood']

District=jsonresponse['address']['District']

City=jsonresponse['address']['City']

MetroArea=jsonresponse['address']['MetroArea']

Subregion=jsonresponse['address']['Subregion']

Region=jsonresponse['address']['Region']

RegionAbbr=jsonresponse['address']['RegionAbbr']

Territory=jsonresponse['address']['Territory']

Postal=jsonresponse['address']['Postal']

PostalExt=jsonresponse['address']['PostalExt']

CntryName=jsonresponse['address']['CntryName']

CountryCode=jsonresponse['address']['CountryCode']

output\_writer.writerow([id,x,y,Match\_addr,LongLabel,ShortLabel,Addr\_type,Type,PlaceName,AddNum,Address,Block,Sector,Neighborhood,District,City,MetroArea,Subregion,Region,RegionAbbr,Territory,Postal,PostalExt,CntryName,CountryCode])

line\_count += 1

except Exception as e:

print(e)

print(f"Error ocurred while processing record {line\_count}")

print(f'Processed {line\_count} records.')

except Exception as ex:

print(ex)