

PPD 631 Project Report

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Analysis of Opportunity Zones Location Selection in LA County

Introduction

Opportunity Zones are a new tool for community development, which provide tax incentives for investment in designated census tracts. California Opportunity Zones will support new investments in environmental justice, sustainability, climate change, and affordable housing. Various zoning codes have different impacts on different living environments for the maximization of development through the set and permitted policies. Some of the determinants behind the development of specific zoning codes like those in LA County include supply constraints, accessibility, and amenities, interest groups, zoning, neighborhood change, and gentrification around the locations (Gabbe 294). The focus on Los Angeles County and developing specific Opportunity Zones in the region comes from factors like metropolitan fragmentation, growth rate, and the size of the state.

After a comprehensive analysis of the economic development of LA county, this project compared the economic status of the entire LA county and opportunity zones communities, which acts as the research basis for the entire project. The project utilizes Geographic Information Systems (GIS) as an effective tool to analyze whether the locations of Opportunity Zones in Los Angeles County are set up reasonably. In addition to the existing opportunity zones, many economically depressed regions are also qualified for establishing opportunity zones. With using GIS as an appropriate method, this project also analyzes appropriate locations for new opportunity zones.

Data Source

Base map: Light grey canvas base map is downloaded from the ArcGIS official website.

California OZs shapefile: The shapefile of California opportunity zones is downloaded from the State of California Department of Finance website.

The data of five indicators are collected from Simply Analytics website:

1. % Employment, White Collar, 2019
2. % Employment, Blue Collar, 2019
3. % Population not in poverty, Total, 2019
4. # Financial Services, Investment, 2019
5. Housing, Median Value Owner Household, 2019

Methodology

Selection of indicators

To estimate the general economic development of Opportunity Zones in LA county, I first choose five indicators from different sectors, including employment rate, poverty rate, financial services, and housing value.

Of all the indicators selected, the most important is the employment rate indicator. One major factor promoting the potential of developing opportunity zones in different sectors is the workforce of the county. The development of many resident businesses and the growing workforce acts as a contributing factor in the development of increased OZ focused on providing amenities like housing, accessibility, and effective supply of products and services. Therefore, I gave relatively high weights to the two employment indicators.

Financial investment is also an important factor to assess economic development in OZs. Opportunity zones provide many incentives such as tax deferral and tax exemption to

attract business investors. The government and private companies cooperate to make investments in Opportunity Fund.

Housing demand is one of the greatest factors behind the direction of the implementation of opportunity zones in LA county. Man-made factors like security or ample living conditions like perfect weather drive increased demand for housing and opportunity zones in Los Angeles. (Gabbe 295)

The demand may arise from increased relocation of even more Americans to the region or from increased populations living in impoverished environments looking for affordable housing and living conditions. The diverse growth in LA County presents a combination of well-established and impoverished neighborhoods in demand from concepts like supply constraints while promoting relevance through the accessibility and amenities found in the county.

Calculate and join each indicator score

I score every factor from 1 to 5 points in the attribute tables based on data collected from Simply Analytics. Taking the employment rate as an example, I first divided the existing employment rate data into five levels from small to large, and then assigned a value of 1 to the lowest level in the attribute table. By analogy, the highest employment rate is assigned a value of 5. Same operations for the other four indicators are repeated four times. Finally, I join all five indicators to the LA county shapefile's attribute table. The data in the joint attribute table is sorted to remove useless data, leaving key geographic information and the scores of various indicators.

Calculate the total score of five indicators

Afterwards, I combine all the 5 factors by a weighted proportion to create a total economic index score for each census tract in LA county. Table 1 shows the weight of each

element among total score. The total score is calculated by multiplying the score and weight of each factor. Part of calculated total scores and detailed data are shown in table 2.

	E score	E score2	P score	F score	H score
	% Employment, White Collar	% Employment, Blue Collar	% Population not in poverty	# Financial Services, Investment	Housing, Median Value Owner Household
Weight	1	2	1	0.5	1

Table 1: Weighted proportion of each indicator

Economic Index Scores in LA County OZs						
Census Tracts	Escore	Escore2	Pscore	Fscore	Hscore	Total Score
CT242100, Los Angeles County, CA	3	1	1	1	1	8
CT980014, Los Angeles County, CA	1	1	3	1	1	8
CT402304, Los Angeles County, CA	4	1	1	1	1	9
CT190201, Los Angeles County, CA	1	2	2	1	1	9
CT134305, Los Angeles County, CA	4	1	1	1	1	9
CT541603, Los Angeles County, CA	4	1	1	1	1	9
CT212303, Los Angeles County, CA	3	1	2	1	1	9
CT206300, Los Angeles County, CA	3	2	1	1	0	9
CT576401, Los Angeles County, CA	4	1	1	1	1	9
CT570603, Los Angeles County, CA	2	2	1	1	1	9
CT120103, Los Angeles County, CA	4	1	1	1	1	9
CT205120, Los Angeles County, CA	5	1	1	1	1	10
CT104203, Los Angeles County, CA	4	1	1	1	2	10
CT122410, Los Angeles County, CA	4	1	2	1	1	10
CT910501, Los Angeles County, CA	3	2	1	1	1	10
CT910601, Los Angeles County, CA	4	1	2	1	1	10
CT242600, Los Angeles County, CA	4	1	1	1	2	10
CT294830, Los Angeles County, CA	4	1	1	1	2	10
CT541400, Los Angeles County, CA	5	1	1	1	1	10
CT533104, Los Angeles County, CA	5	1	1	1	1	10
CT900606, Los Angeles County, CA	3	2	1	1	1	10
CT208902, Los Angeles County, CA	5	1	1	1	1	10
CT212203, Los Angeles County, CA	3	1	2	1	2	10
CT600100, Los Angeles County, CA	3	2	1	1	1	10

Table 2: Total economic index scores in LA County Opportunity Zones by census tract

Analysis

Economic Index scores of entire LA county

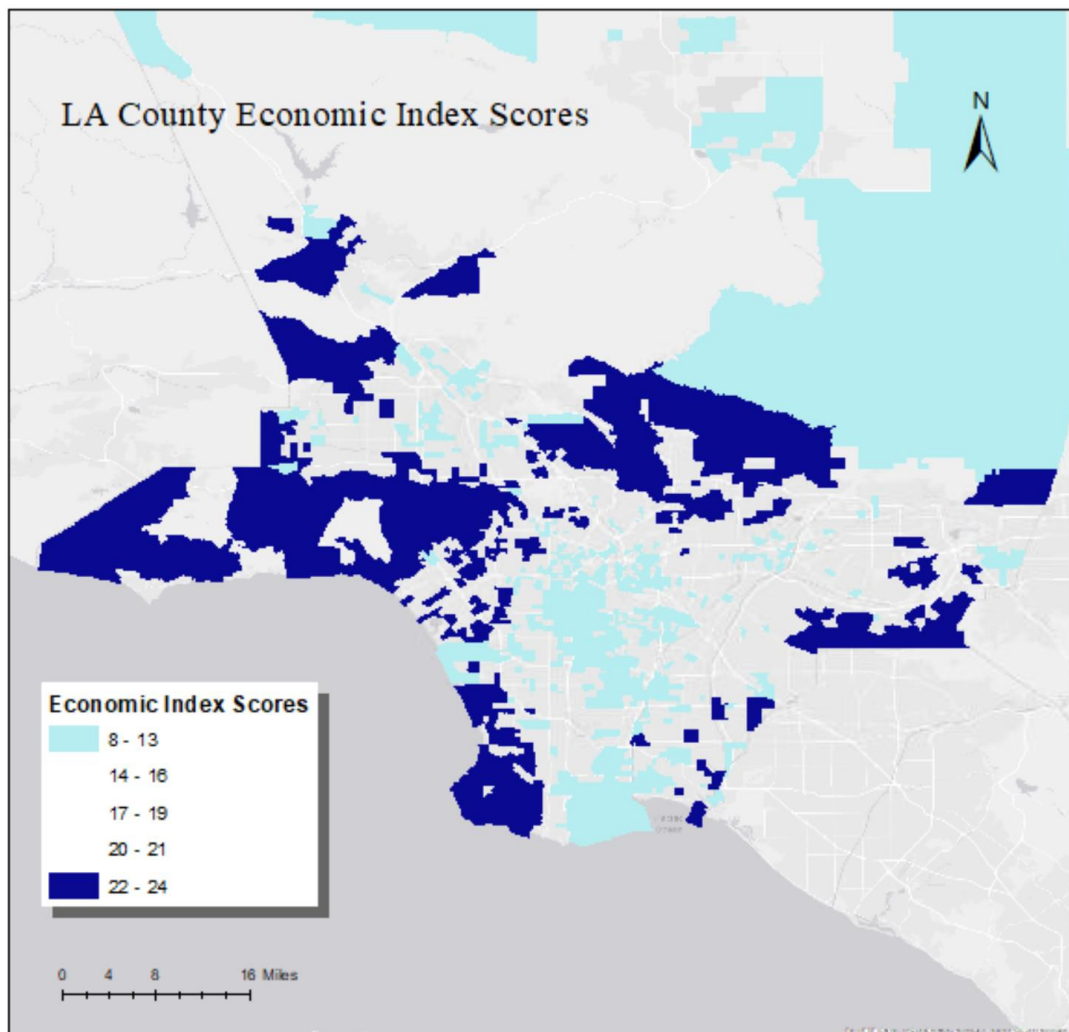


Figure 1: LA County Economic Index Scores

To test the indicators of the opportunity zones, I first study the economic situation of the entire LA county. To measure and compare the current state of economic development between regions, I use the total scores obtained above to see the economic development of different areas of LA county on the map (Figure 1). I find that the differences between regions are very large. On one hand, the scores are generally higher in coastal areas, such as the northern, western, and southern coastal areas. Northeast area of LA such as Arcadia also have high scores. On the other hand, most of the cities in central areas and northwest areas have low scores.

Rationality Analysis of Existing Opportunity Zones Locations

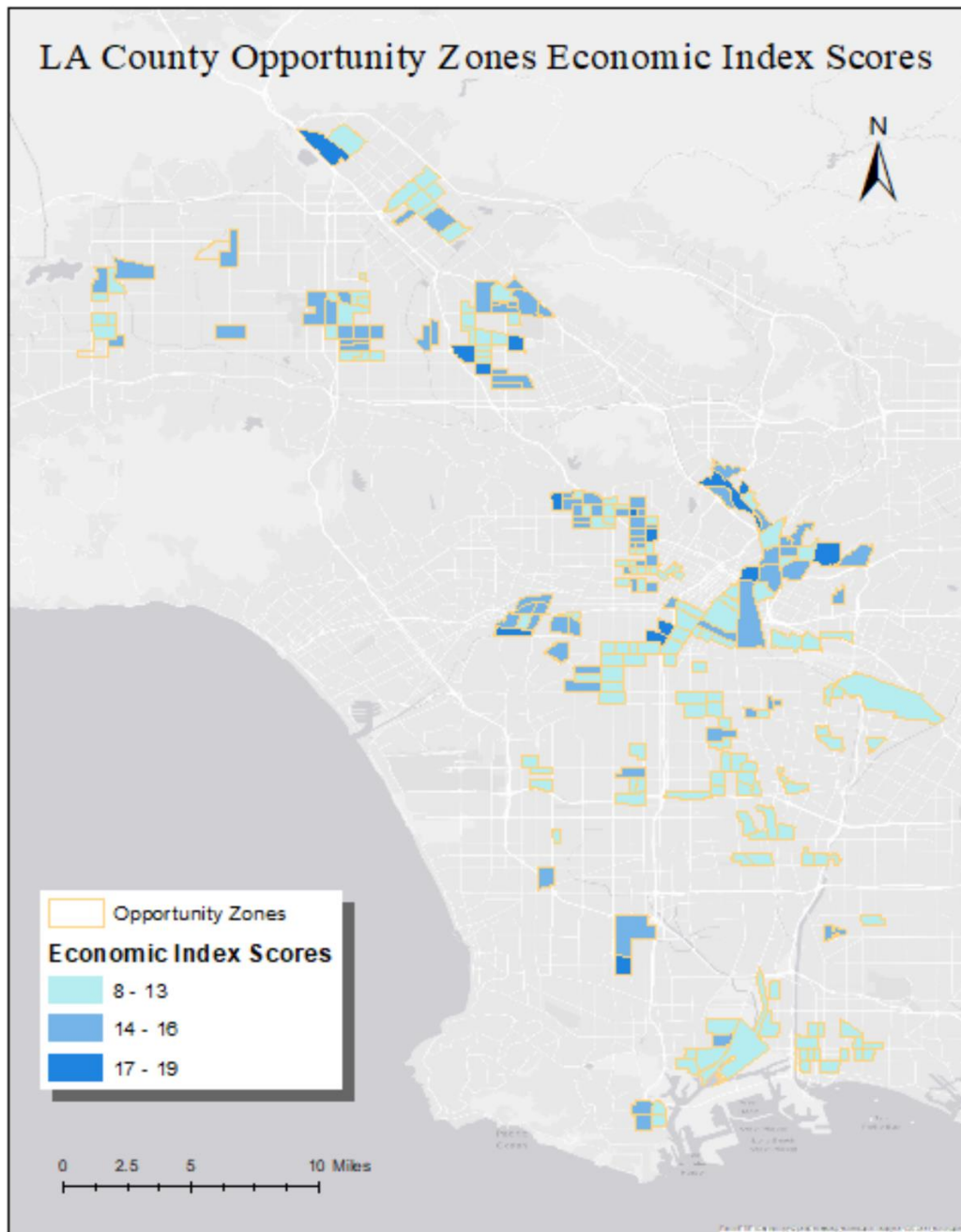


Figure 2: LA County Opportunity Zones Economic Index Scores

Opportunity Zones were created to promote economic development in relatively poor communities. The higher the overall economic index, the better the economic development of the region. Similarly, the lower the overall economic index, it means that the economy of these areas needs to be improved, so these areas are the target areas that Opportunity Zones should plan.

Figure 2 shows how Economic Index is distributed within the opportunity zones. The map vividly reveals that most of the scores in the Opportunity Zones area are relatively low. More than half of these areas only have scores between 8 to 13. Areas around San Fernando Valley, Los Angeles, East Los Angeles, Wilmington and Long Beach have the lowest scores among them. The areas with the highest scores are all far away from Opportunity Zones. All the analysis conducted above demonstrates that the establishment of existing opportunity zones is generally rational and effective.

Close analysis of the most effective positions for OZs in LA showed that a lot of regions needing opportunity zones still have little to no investments. Factors like economic instability and insecurity in the southern regions of the county, for instance, promoted reduced OZs investments. The analysis shows that LA has a lot of challenges in realizing the significance of OZs in the state. Developing new OZs in the county close to pre-existing ones is also a benefit and a challenge for LA. The expansion of incubator regions is useful in the promotion of economic and social growth (Sharkey 174).

Proposed locations to set up new OZs based on low scores

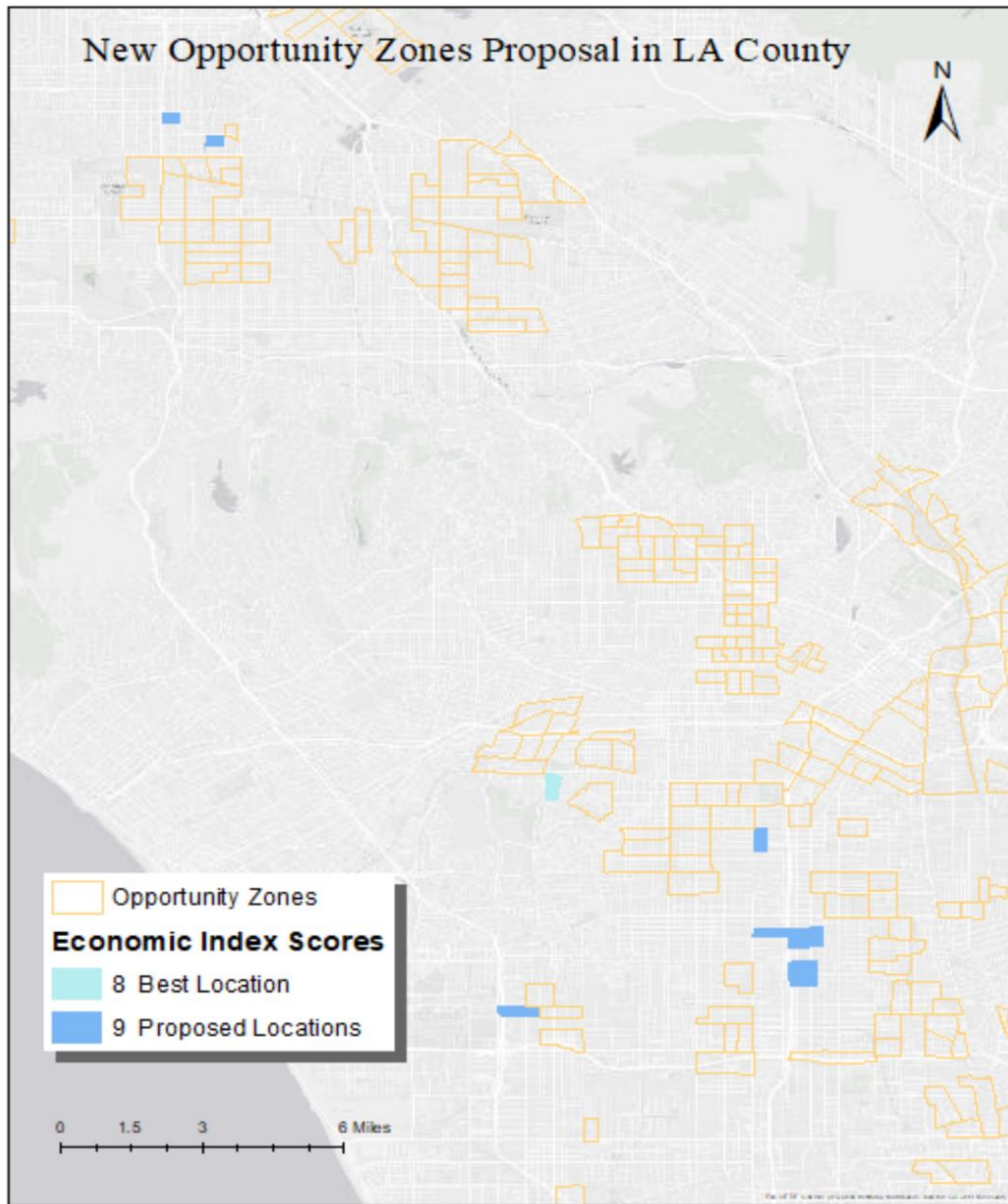


Figure 3: New Opportunity Zones Proposal in LA County

Census Tract of proposed new OZs	
CT117405	CT 239602
CT 120107	CT 239701
CT 232110	CT 240200
CT 236202	CT 601501
CT 237720	CT 900602

Table 3: Census Tract of proposed new OZs

According to the analysis and results of the map (Figure 1), there are still some census tracts in LA county with relatively lagging economic development that are very appropriate for establishing new opportunity zones. According to the economic index scores of entire LA county, I select the areas with relative lower score from 8 to 9 and then intersect these locations with areas that are not existing opportunity zones. The new suitable establishment sites are shown with highlighted blue color (Figure 3). Table 3 states the detailed census tracts number of these new proposed OZs. Because CT236202 area is qualified for lower score than any other areas in LA county except OZs, it is recommended as the best location and marked with lighter blue color in Figure 3. On the map we can clearly see that these areas are relatively close to the existing opportunity zones, which are located in the central area of LA county and the northwestern area. It shows that the scope of the impact of opportunity zones is relatively wide, which is appropriate for large-scale centralized governance.

Conclusion

One goal for opportunity zones is to directly target impoverished regions while promoting investors to invest in such sectors through incentives and tax write-offs. After systematic analysis of the project, we found that the economic gap between different areas of LA county is very large. As a consequence, in order to promote the development of relatively backward communities, it is necessary and reasonable to set up opportunity zones. This project examines the rationality of the location of opportunity zones, which indicates that the existence of established opportunity zones is rational and is consistent with the goal of supporting poor areas in LA county.

In addition to the current opportunity zones, there are still some locations in LA county with low economic index scores. The scores of these areas are even lower than that of some existing opportunity zones. Therefore, these areas are also ideal for setting up new opportunity

zones. However, the lack of some form of guarantee from investors on investing in OZs also promotes a lack of investment in opportunity zones. Therefore, even though LA continues to welcome and establish OZs, especially among impoverished regions, investors have nothing holding them accountable to accomplishing the task that sometimes leads to OZs uninvested tax breaks.

Limitation

Due to limited time and resources, there are still many deficiencies in the selection of data in this project. In addition to the five indicators mentioned in the article, there are many indicators such as accessibility, neighborhood change, gentrification, and interest groups that also promote increased OZ in LA. Even though it might seem positive, gentrification can also increase rental prices leading to increased living standards that might have negative effects on people with low index scores.

LA County has different index score regions. The notable trend in the county showed that the majority of minorities and other indigenous groups recorded low index scores. Some of the most developed regions in the state had a predominantly white male population. More analysis on OZ useful in the low index score regions, therefore, is needed to develop an all-round analysis and map showing the exact points requiring opportunity zones in LA. More analysis on OZ in LA is also useful to develop not only the role of such approaches but the impact and measurement of the effects of OZ in the region. More information on the legal aspect of OZ, the benefactors, and the future contributions of the OZ is also efficient, especially for Los Angeles. Also, using the elaborate formula for measuring different index scores is useful in analyzing regions that need OZ in Los Angeles.

Reference

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