

Fresno Economy and the Environment

Place-Based Data Brief

What's the Issue?

Fresno County's local economy is fundamentally intertwined with environmental and housing issues that impact its residents. Historically, the health of South Fresno residents has been placed at risk due to zoning laws and the construction of affordable housing units near polluted industrial sectors with no respite from the heavy pollution (Zuk, 2013)¹. The City of Fresno has incentivized the private warehouse industry, specifically with subsidized development and tax rebates for Amazon and Ulta warehouses (Sheehan, 2018)². Fresno's General Plan designated thousands of acres, primarily in South Fresno, for industrial development. Areas with the highest pollution burden of the state, have been prioritized for industrial development (Bonta, 2022)³. Such decisions impact the vulnerable communities of South Fresno.

Objective

The objective was to compare Southwest Fresno census tracts 15 (Amazon) and 18 (Ulta) to other census tracts within Fresno City by key environmental, health, and economic indicators. Furthermore, we conducted a comparative analysis (2015 vs 2021) of the change in employment within the selected area.

Key Findings

- Table 1 reveals that for both Census tracts (15 and 18) from 2015 to 2021, the number of those living and employed within those regions decreased.
- Figure 1 illustrates that census tracts near recent warehouse development in South Fresno have higher levels of diesel PM emissions compared to census tracts in North Fresno
- Figure 2 shows that census tract 15 is at the 87th percentile in low life expectancy indicating that life expectancy is equal to, or worse than, 87 percent of census tracts in the state of California.
- Figure 3 shows that residents living in close proximity to the Amazon and Ulta factories tend to have greater travel barriers than residents in other parts of the city.

Figure 1: Diesel PM Percentile Rank

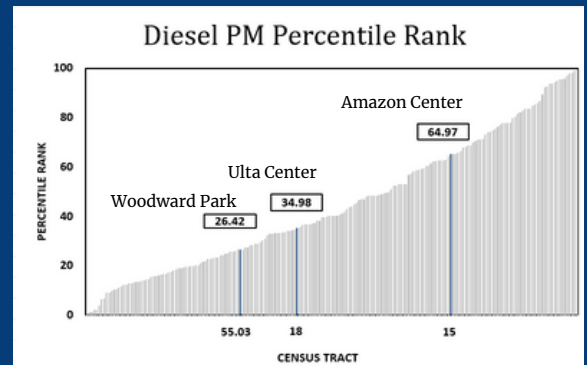


Figure 1 highlights the levels diesel particulate matter (PM) within census tracts 15 and 18 (65% and 35% respectively) compared to census tract 55.03 near Woodward park (26%). The Amazon fulfillment center falls within Census Tract 15 and the Ulta Distribution center is located within Census Tract 18. Diesel PM is the mixture of particles in diesel exhaust in the air, measured as micrograms per cubic meter.

Figure 2: Low Life Expectancy Percentile

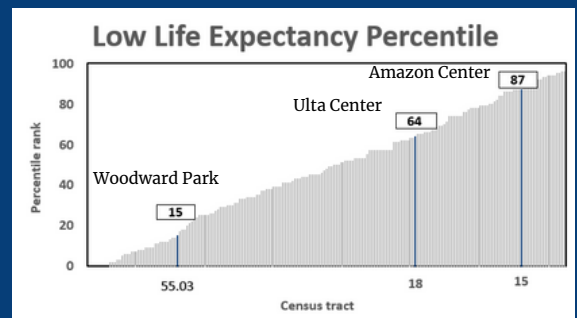
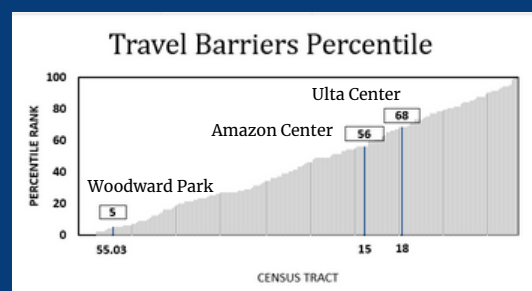


Figure 2 illustrates how populations within Census Tract 18 and 15 have drastically lowered life expectancies and are in the 64th and 87th percentiles. In contrast affluent areas such as Census tract 55.03 have low percentages, with that population experiencing relatively high life expectancies. Low life expectancy is computed as the average number of years people have left in their lives.

Figure 3: Travel Barriers Percentile



Transportation barriers is computed as the average relative cost and time spent on transportation relative to all other tracts. As depicted by Figure 3, populations within Census tract 15 and 18 experience high percentages of travel barriers, emphasizing the need for accessible employment opportunities within these regions.

Employment Breakdown

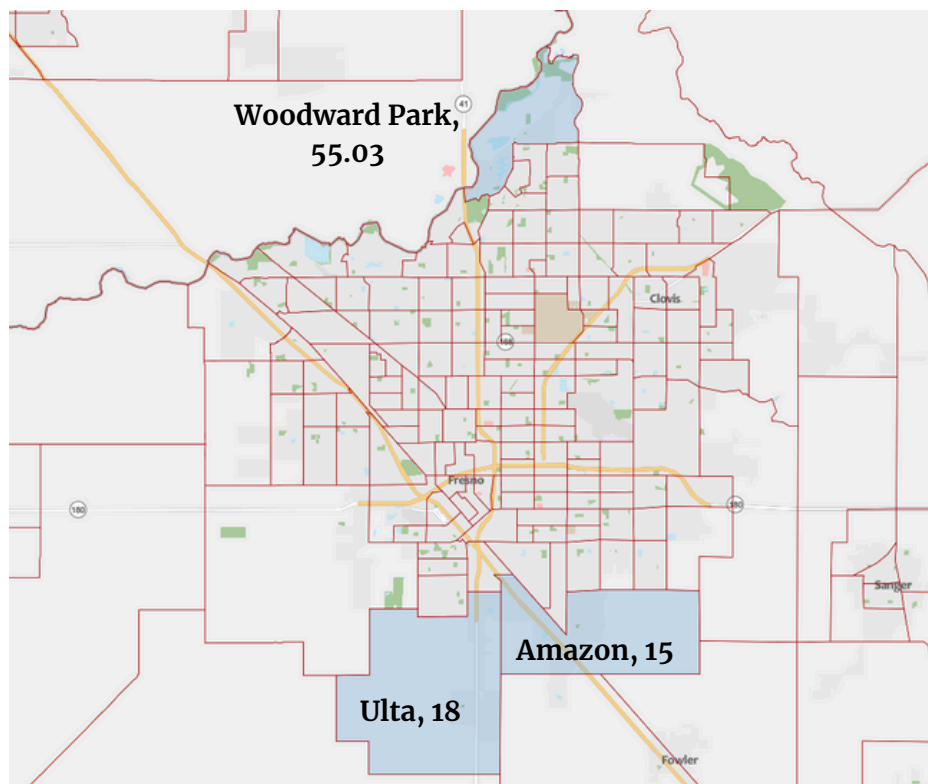
Table 1. Inflow and Outflow of All Private Jobs

Inflow/Outflow of All Private Job Counts			% Increase or	Increase or
Census Tract 18 Ulta Distribution Center	2015	2021	Decrease	Decrease
Employed in the Selection Area	5046	5910	17.1	▲
Employed in the Selection Area but Living Outside	4881	5754	17.9	▲
Employed and Living in the Selection Area	165	156	-5.5	▼
Living in the Selection Area	1484	1415	-4.6	▼
Living in the Selection Area but Employed Outside	1319	1259	-4.5	▼
Living and Employed in the Selection Area	165	156	-5.5	▼

Inflow/Outflow of All Private Job Counts			% Increase or	Increase or
Census Tract 15 Amazon Fullfillment Center	2015	2021	Decrease	Decrease
Employed in the Selection Area	8778	12,571	43.2	▲
Employed in the Selection Area but Living Outside	8663	12,475	44	▲
Employed and Living in the Selection Area	115	96	-16.5	▼
Living in the Selection Area	697	686	-1.6	▼
Living in the Selection Area but Employed Outside	582	590	1.4	▲
Living and Employed in the Selection Area	115	96	-16.5	▼

Table 1 shows the inflow and outflow of employment in census tracts 15 and 18 from 2015 to 2021.⁴

- In census tract 15 where the Amazon distribution center was built, employment for those living outside of the area increased by 44% and decreased for those living within the selection area by 16.5%.
- In census tract 18 where the Ulta distribution center was built, there has been a decrease in employment across many indicators listed in Table 1. Most notably, there was a 5.5% decrease in the number of people employed who live within the census tract.



Policy Recommendations

City, County, and State leadership can improve the health of communities. Despite efforts to bring more jobs to local communities, bringing the logistics industry into these neighborhoods has not had that effect on those residents. The following are policy recommendations for the improvement of health in these communities:

Reducing Diesel Particulate Matter Emissions

- Update land use zoning policies in the General Plan to prevent further concentration of industrial facilities in overburdened communities.
- Adopt and enforce restrictions for the proximity of truck routes near residential areas to the maximum extent feasible.
- Require polluting facilities near environmentally burdened communities to reduce toxic air emissions and air emissions exposure of vulnerable residents.
- Require state agencies to maximize collaboration with government agencies to ensure constant review of land use planning and siting decisions to protect disadvantaged communities and to verify compliance with applicable state laws.

Meaningful Community Engagement

- Require city and county leadership to consult and engage with community members prior to finalizing decisions to site or expand polluting land uses near overburdened communities.
- To overcome patterns of segregation and disparities in living conditions, counties and cities must provide meaningful engagement by
 - Translate notices or applications for proposed developments into locally spoken languages,
 - Hold community convenings and public hearings that provide community members with the space to raise concerns and have their input taken into account.

Sustainability

- Require city and county leadership to develop and adopt specific plans that identify goals, policies, and commitments that prioritize the needs of the community residents to minimize the impacts of polluting land uses.
- Invest in public infrastructure (bus stops, sidewalks, etc.) that enable local residents to commute safely to and from work sites
- Prohibit new industrial development in disadvantaged communities based on findings in an Environmental Impact Report (EIR) required by CEQA that identify significant and unavoidable impacts on the health and environment of a community

Economic Development

- Promote the development and attainment of skilled, higher education jobs by preparing, mentoring, and training South Fresno residents, including youth, to become better qualified for existing and future employment within South Fresno by providing appropriate services, programs, and facilities.
- Establish programs that enforce local and state environmental and land use laws by cities, counties, and community-based organizations.

Errata:

1. Data from the On the Map Census website for the year 2021 became available; therefore, data for 2020 was replaced by 2021.
2. Data representing census tract 18 was originally published as data from the census block group and has since been corrected to represent census tract data.

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Citations

- 1 Zuk, M. Z. (2013, September 20). Health equity in a new urbanist environment: Land use planning and community capacity building in Fresno, CA. eScholarship, University of California. <https://escholarship.org/uc/item/4pq5p68j>
- 2 Sheehan, T. (2018, March 18). Study questions value of Amazon tax breaks. Fresno Bee, The (CA), 1A. America's News – Historical and Current.
- 3 Bonta, Rob. (2022, March 29). [RE: Fresno County Draft General Plan]. Retrieved from <https://oag.ca.gov/system/files/attachments/press-docs/Final%20Fresno%20County%20GP%20Letter.pdf>
- 4 US Census. (n.d.). OnTheMap. <https://onthemap.ces.census.gov/>

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