With COVID-19 threatening the nation, certain populations are more vulnerable to its health, economic, and education impacts.

This pattern of disparate impacts has been seen in recent data for California (where the sample sizes are large enough for some degree of reliability).
THE CORONAVIRUS CRISIS

Even before pattern began to be clear, community partners (particularly from South LA) asked USC’s Program for Environmental & Regional Equity (PERE) to look at certain vulnerable populations in Los Angeles: the elderly, the undocumented, renters, and children on the other side of the digital divide.
To do this and more for this project, we analyzed six data sets:

- the 2014-2018 American Community Survey (ACS) micro-data (so that we could devise customized disaggregations),
- the 2014-2018 ACS summary files which are best for mapping and other sorts of geographic analysis,
- a special version of the 2013-2017 ACS in which we previously estimated legal status,
- a customized self-pooled version of the 2016, 2017, 2018 ACS micro data to better estimate digital divide,
- 2017 ESRI Business Analyst data, &
- the 2014-2018 California Health Interview Survey.

So here’s (part of!) what we found:

Because Los Angeles is a high-cost area, economists tend to look at those living below 150% of the poverty level. The share of seniors living below that is much higher in South LA than in the City or the County.

![Graph showing percent of seniors living below 150% of the poverty level in L.A. County, L.A. City, and South LA, 2018.](image)

Note: Data reflect a 2014 through 2018 average.
The share of **seniors living below 150% of the poverty level** in the County varies dramatically by race & nativity.

The share of **seniors living without family members** (& not in assisted living) is higher for African Americans and whites, lower for Latinos and Asians.
But the poverty rates for all seniors of color living alone is much higher than for whites.

More generally, there are significant racial disparities in terms of not just health insurance but access to care.
Undocumented workers are a significant share of employed workers, especially in the City and South LA. They are often in industries that will be hard-hit & lack access to needed support.

While undocumented workers are 12 percent of overall employment up to one-third of those in occupations that are hard-hit by the COVID-19 crisis, such as janitorial and food services. They also are a large share of workers in occupations that are essential for all of us to keep going, such as farming, production and transportation.
Among food service occupations in the County, there are about 67,000 cooks and nearly 27,000 of them are undocumented. Among janitorial service occupations, there are over 18,000 undocumented janitors and 27,000 undocumented housekeepers.

![Graph showing workers by immigration status and occupation]

Workers (Age 25-64) by Immigration Status, Selected Food and Janitorial Services Occupations in L.A. County, 2017

- Immigrant, undocumented
- Immigrant, documented
- U.S. born

Note: Data reflect a 2013 through 2017 average. Figures are rounded to the nearest 100.

Nearly 19 percent of L.A. County residents are either undocumented or living with a family member who is undocumented. This is partly because of the long-settled nature of the population: 69% of undocumented Angelenos have been in the U.S. for a decade or longer.

![Graph showing immigration status and family ripple effects]

Immigration Status and Family Ripple Effects, Los Angeles County, 2017

- Undocumented: 834,600
- US Citizen Family Members: 804,500
- LPR Family Members: 264,300

Note: Data reflect a 2013 through 2017 average. Figures are rounded to the nearest 100.
L.A. County has a large share of the state’s undocumented Californians and children of undocumented, many of whom will not be eligible for federal relief programs as they are currently designed; local and state programs will be key.

Individual, Household, and Family Statistics for California, Los Angeles County, & Los Angeles City, 2017

<table>
<thead>
<tr>
<th>Numbers by Geography</th>
<th>Share in Geography</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>LA County</td>
</tr>
<tr>
<td>Number of Residents</td>
<td>39,368,000</td>
</tr>
<tr>
<td>Number of Undocumented Californians</td>
<td>2,504,000</td>
</tr>
<tr>
<td>Of which, Number of DACA Recipients</td>
<td>200,000</td>
</tr>
<tr>
<td>Number of Households</td>
<td>12,888,000</td>
</tr>
<tr>
<td>Households with at least one undocumented adult</td>
<td>1,234,000</td>
</tr>
<tr>
<td>Number of Families</td>
<td>14,777,000</td>
</tr>
<tr>
<td>Families with at least one undocumented adult</td>
<td>1,488,000</td>
</tr>
<tr>
<td>How many minor children by geography?</td>
<td>9,130,000</td>
</tr>
<tr>
<td>How many minor children with at least one parent who is undocumented?</td>
<td>1,649,000</td>
</tr>
<tr>
<td>How many married adult couples?</td>
<td>6,956,000</td>
</tr>
<tr>
<td>How many married adult couples are mixed status, where one spouse is undocumented and the other spouse is a LPR or US Citizen?</td>
<td>470,000</td>
</tr>
<tr>
<td>How many children in mixed status families (one parent undocumented, the other not)?</td>
<td>712,000</td>
</tr>
</tbody>
</table>

Source: USC CSU analysis of 2017 5-year American Community Survey microdata from IPUMS USA. Data represents 2013 through 2017 average. Overall population numbers may be slightly higher than in usually reported statistics because of adjusted weights used to account for undercount of undocumented Californians.

Children are heading to home-based instruction, but the digital divide by race persists.
And high housing costs mean finding enough space in the house for learning is more challenging for some than others.

Many of L.A. County's residents work in small business establishments.

Source: USC PERE analysis of 2017 ESRI Business Analyst Data. Note: Universe includes businesses with one or more employees. Employee data reported by establishment location. Individual businesses may have multiple establishments.
There is significant racial segregation of the elderly in Los Angeles County.
There are significant disparities in where the elderly poor live in Los Angeles County.
This map shows the pattern when we adjust up the poverty line to 150% of the poverty level, more appropriate for L.A. County.
“Linguistically isolated” households are households where no one age 14+ speaks English “very well.” Such households may need special language-appropriate outreach.
Carless households are likely to need to rely on public transit to go to work or shop. This is especially concentrated in mid-city and South LA.
Rent-burdened households are households paying more than 30 percent of their income on rent. That’s a large number of renters in high-cost Los Angeles County.
Severely rent-burdened households are paying more than 50 percent of their income on rental housing. That is an especially acute problem in mid-city, South LA, part of Northeast LA, and Long Beach.
Those living below the federal poverty level are at acute risk in the crisis. When we look the racial composition we find large populations of all groups, with a presence of Asian Americans in the San Gabriel Valley, west L.A. county, the South Bay, and elsewhere.
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All this is occurring against a backdrop of elevated health risk due to air pollution (with data here from our Environmental Justice Screening Method).

And the pattern is even more striking when we consider cumulative impacts in which we take into account health risk, hazard proximity, and social vulnerability (from our Environmental Justice Screening Method).
The share of Angelenos who are undocumented varies across the county, with high concentration in the Southeast cities, mid-City, and in the eastern San Fernando Valley.

For details on estimates of the undocumented population visit: https://dornsife.usc.edu/assets/sites/731/doc/Methodology_Final_updated_ETH_2017.pdf
The share of Angeleno children who have at least one undocumented parent follows a generally similar pattern, but with a specific concentration in Historic South Central.

For details on estimates of the undocumented population visit: https://dornsife.usc.edu/assets/sites/731/docs/Methodology_Final_updated_ENY_2017.pdf
The digital divide has a distinct geographic pattern, with the highest levels of disconnection in South Los Angeles and Long Beach.
The pattern of overcrowded households has a similar geographic pattern, with the highest levels in South Los Angeles and Long Beach but also in the San Fernando Valley.
A key public health principle – evident in this crisis – is to protect ourselves, we must protect everyone. For too long, in L.A. and the U.S., we have instead left the most vulnerable behind.

This is a time to make sure that our short-run measures to address the COVID-19 crisis take into account the situations of all Angelenos and set the long-term platform for a more inclusive and sustainable economy and society.