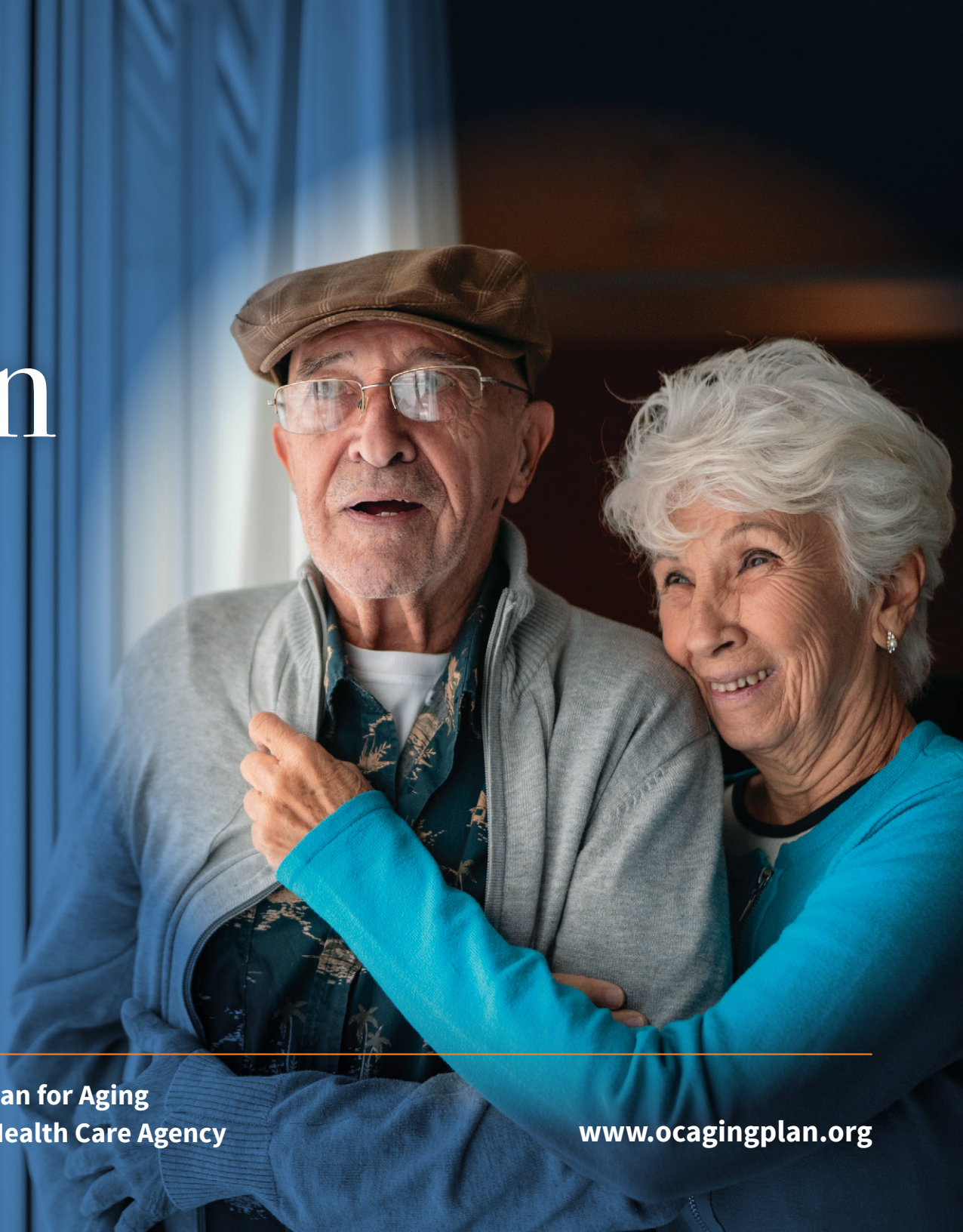
ORANGE COUNTY STRATEGIC PLAN FOR AGING

Orange County Aging Services COLLABORATIVE

Report on Aging in Orange County

2023



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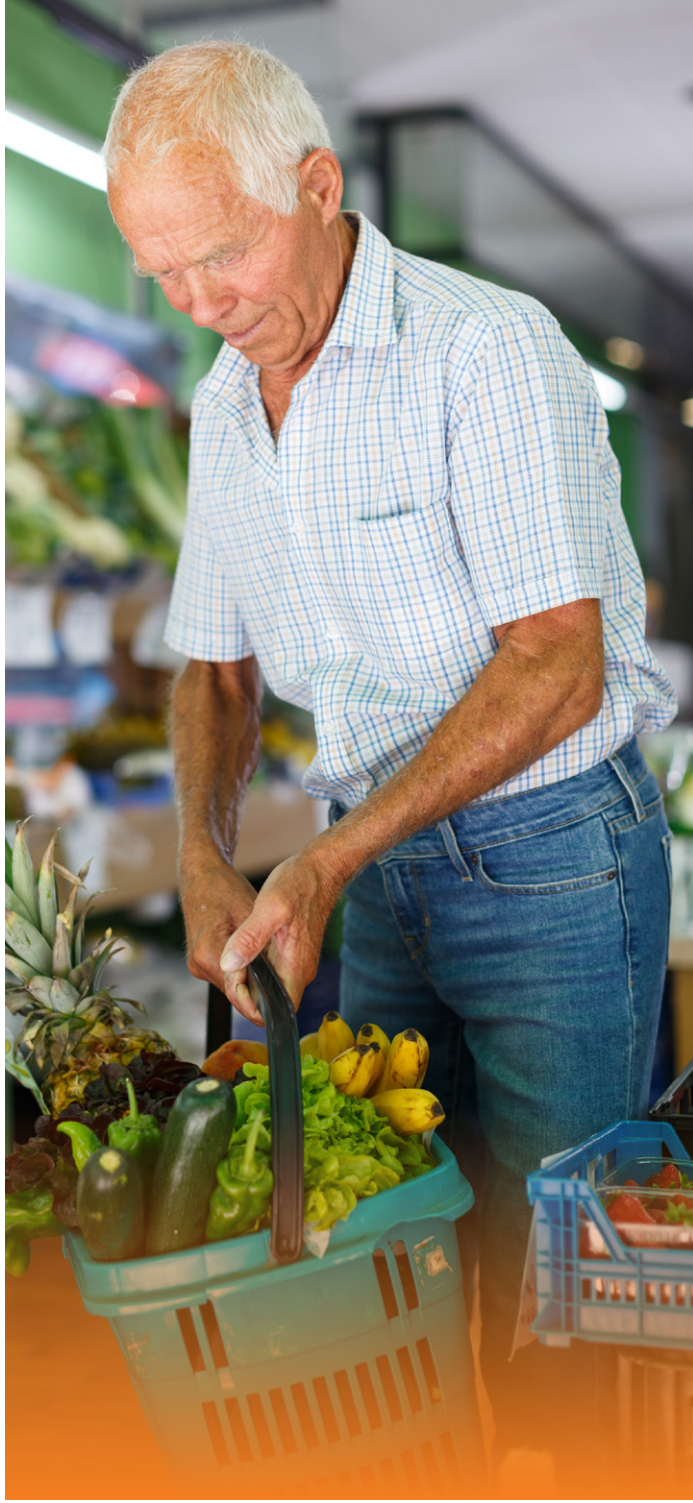

INTRODUCTION

As the sixth-largest county in the nation by population, Orange County is home to over 3 million people. With 8% of California's total population residing within fewer than 800 square miles, Orange County has the second highest population density in California, second only to San Francisco County. It also has a comparatively high cost of living; the median gross rent is 21% higher than the state's median, which is in turn higher than the national median. Although the poverty rate hovers just under 10%, according to Justice in Aging, 28% of adults over 65 do not have enough money to cover their basic needs. Orange County is incredibly racially diverse, too, with no singular majority group. Non-Hispanic whites constitute the largest racial/ethnic group (38.5%), followed by Hispanics/Latinos (34.1%), and Asians (22.8%). Although the Black population in Orange County is 3%, this equates to over 68,000 residents.

In 2022, 15.7% of Orange County residents were aged 65+, which equates to just under 500,000 older adults. In just a few decades' time, Orange County residents aged 65 years and older are expected to represent nearly 25% of the county's population. In fact, according to the 2022 Orange County Community Indicators Report, older adults are the only portion of the Orange County population expected to see expanded growth between now and the year 2060. Further, Orange County, the state of California, and the nation as a whole are witnessing an increase in the proportion of racial/ethnic minorities. As such, projections suggest an increasing number of older minorities in Orange County and beyond. Given that minority status is highly correlated with income, education, and health status, we can infer that Orange County will need to be prepared to serve a massive population of older adults greatly in need of resources.

Given the exponential growth rate of persons 65 years and older, and the rapidly changing composition of the aging population, a comprehensive and accurate needs profile of older adults who live in Orange County is crucial. Such a profile of Orange County's aging adults is necessary to improve the County's ability to enhance not only service provision but also individual quality of life. This report presents an evaluation of the most recent service records from Orange County's aging service providers in an effort to aggregate existing knowledge on provided services and service recipients, as well as identify gaps and risk areas that require further attention.

In just a few decades' time, Orange County residents aged 65 years and older are expected to represent nearly 25% of the county's population.

CURRENT REPORT

In 2022, the *Report on Aging in Orange County* was submitted as part of the Orange County Aging Services Collaborative (OCASC). In that report, multiple years of data were aggregated and presented across four key areas: Digital Divide, Disabilities, Food Insecurity, and Social Isolation/Loneliness. This year, the goal of OCASC was to compile and evaluate data generated since the last report, both within these areas, as well as in two additional areas: Transportation and Housing Insecurity. In this report, we also include data on two pervading factors, Disabilities and Alzheimer's Disease, that overlay the areas identified above. Collecting and aggregating data from multiple service providers creates an overall portrait of the well-being of older adults in Orange County, including trends and patterns of services, as well as program delivery processes. Such data can then be used to identify critical gaps and limitations in service provision to Orange County seniors, ultimately informing policy, strategic planning, and communication efforts between agencies.

PARTICIPATING AGENCIES AND ORGANIZATIONS

The following community partners committed their time and energy to support this report. Highlighted throughout are success stories from some of these agencies.

- Abrazar
- AgeWell Senior Services
- Aging and Disability Resource Center
- Alzheimer's Association, Orange County Chapter
- Alzheimer's Orange County
- CalAIM Community Supports
- California Caregiver Resource Center
- CalOptima Health
- The Cambodian Family Community Center
- Council on Aging–Southern California
- Dayle McIntosh Center
- EasterSeals Southern California
- HMIS
- Jamboree Housing Corporation
- LGBTQ Center Orange County
- Meals on Wheels Orange County
- OC Senior Citizens Advisory Council

- OMID Multicultural Institute for Development
- Orange County Community Foundation
- Orange County Office on Aging
- Second Baptist Church of Santa Ana
- South County Outreach
- UCI Livable Cities Lab
- UC Irvine Health School of Medicine Division of Geriatric Medicine and Gerontology

NATURE AND LIMITATIONS OF PROVIDED DATA

Eighteen Orange County based agencies and organizations provided, in total, 53 files. These included raw data files, summary reports, pictographs, survey findings, and white paper reports, a few of which pertain to California as a whole and not specifically to Orange County. The majority of the data are from the past 12 months, though a few agencies submitted data for just a month or two or included data from the past 2-3 years. Data represent 44 Orange County zip codes, though some participating organizations did occasionally extend services beyond Orange County.

Participating agencies ranged from county-wide providers to more niche organizations with singular missions, some serving only older adults, others serving residents of all ages. Some agencies did not record information on the ages of their clients at all, while other datasets included persons of all ages. When disaggregation was possible, data from children and younger adults were excluded. To best capture the experiences of aging adults, analyses aimed to include only those aged 55 years and older, thereby constituting our definition of "aging adults." In the case of services provided to persons who are disabled, all ages were included.

Submitted records ran the gamut from basic ID numbers and gender to more complete profiles of service recipients, such as monthly earnings, ethnic/racial status, veteran status, and head of household, etc. Unfortunately, a variety of issues prevented any real data aggregation across agencies. To begin with, inconsistencies in terminology prohibited seamless integration of datasets. For example, organizations defined "older adults" in a variety of ways. Some characterized "older" as persons over 65, whereas others used 60 or even 55. As noted above, we used 55 years and older, when possible, to capture as many older adults as possible.

Additionally, few standardized measurements existed; whereas one organization asked for monthly income in dollars, another asked for financial status on a 4-point Likert-type scale. The likely overlap of service recipients among the various organizations further precluded the generation of precise descriptive statistics. Confidentiality considerations prevented any investigation into the degree of duplicated participants. Likewise, some organizations provide wraparound services, though no systematic reporting of each and every service was provided, especially if a client was referred to a partner organization. In contrast, sometimes both organizations recorded the service and the client was double-counted despite receiving a single service. Finally, the representations of various time periods by different agencies limited intra-agency comparisons.

DEMOGRAPHIC PROFILE OF PARTICIPANTS

Of the 18 participating agencies, six provided information on gender. In four data files, it was reported that females were the majority of service recipients (ranging from 57.3%-75.8%) whereas, as documented in the other two files, males were more prevalent (56.5% and 61.7%). Two of these agencies also asked about sexual orientation, sex at birth, transgender status, and/or a gender other than singular (binary/fluid/agender/culturally specific gender status), reporting that 335 respondents identified as non-singular and 1082 respondents chose not to respond. Given that at least 5% of California elders identify as LGBTQ+, the majority of existing datasets may have oversimplified their assessment of gender identity and sexual orientation.

Tracking ethnicity/race also proved challenging. Only half the agencies recorded data for these variables, but different coding schemes were used each time. Some followed census classifications, while many others created their own categories, precluding aggregation of data across datasets. Overall, Caucasian/White represented the majority of respondents (ranging from 32.1% to 74.2%); in one data set, Hispanic respondents were the majority (28.7%), and in others, Asian respondents were the majority (57.2% to 100%). Other ethnic groups (Black/African American, Middle

Eastern, Native Hawaiian, American Indian, etc.) always represented fewer than 10% of the respondents, when indicated. Note, in each data set there were many who declined to answer, reported they did not know, or defined themselves as other/multiracial (ranging from less than 1% to nearly 20%). Two agencies submitted data reflecting services provided to specific ethnic/racial subgroups. The Cambodian Family provided data on service linkages for 38 clients and post health education data from 65 clients. The Second Baptist Church of Santa Ana presented data from the Black Community Health Survey, 2022-2023, taken from 636 participants.

Though few organizations tracked the primary language spoken by their clients, when data were available, there was no clear majority. The top three languages consistently reported were English, Spanish, and Vietnamese, mirroring the county's diversity.

In terms of socioeconomic status, a few agencies tracked education, employment status and/or income (amount and sources). Some, but not all, have income restrictions. Despite a wide range in annual and household incomes, the majority of participants reporting income fell below $30,000/year. When income was measured on an ordinal scale, the majority of respondents reported "very low" or "extremely low" incomes. For most older adults, the main source of income was Social Security, though some were still employed. Insurance status was difficult to glean, as few agencies recorded it and the ones that did were plagued by missing data.

Several agencies recorded the residential city and/or zip code of their participants. Larger agencies that served the entire county showed service provision in each of Orange County's cities, but service was expectedly concentrated in areas of lower socioeconomic status. Unfortunately, there were few instances with associated outcome data, so geographic mapping by area was not possible.

Overall, there was a dearth of consistent and complete demographic data. As such, no inferential analyses were possible; outcomes could not be linked to demographic factors.

FINDINGS

Digital Divide

The digital divide refers to the gap between those who have access to technology (e.g., computers, smart phones, internet) and those who do not. Previous research shows that older adults use technology significantly less than do younger adults. The COVID-19 pandemic only exacerbated the divide; however, data do not exist at the county level to accurately quantify its impact. At the national level, recent surveys report that 61% of older adults own a smartphone, 45% report using social media, and the majority report having the internet (96% of those 50-64 years old, and 75% of those 65 years and older).

County level data from 2021 indicate that 94% of older adults in Orange County have internet access; more recent data, as provided from one agency for this report, shows that nearly 100% of their respondents have the internet and can access WIFI at home and via their cell phones. Such data, however, do not allow for a full composite of technology usage, ignoring more specific technological devices (e.g., smartphone use) and purposes (e.g., telehealth).

Additionally, **no county level data exist regarding the digital divide as stratified by race/ethnicity, income, and disability status, despite the fact that such factors are critical in explaining major inequities** in technology usage and its associations with poor physical and psychological health outcomes. At a national level, adoption has been found to be less likely among the oldest-old (those over age 85), those with low income, and the less educated.

Sara, an 87-year-old Hispanic grandmother, wanted to connect with her adult children and grandkids who lived several hours away. Her children gave her a smartphone to stay in touch, but despite her repeated efforts she struggled to use it. She found a local senior center that offered technology classes in Spanish and attended them to learn how to use her phone. Thanks to what she learned, Sara can now make calls and video chat with her family and feels more connected and more confident in her ability to use her phone in her daily life.

Given that nearly 45% of Orange County residents aged 60 years and older are minorities, with projected increases in the prevalence of older persons of color (2023 Census data), **examining demographic correlates of technology usage at the county level is becoming essential**.

Orange County partners are encouraged to investigate barriers to technology, including confidence using technology, the need for help to set up technology, and disability status. Such findings are necessary to ensure available technology matches older adults' needs, including readily accessible training and support.

Food Insecurity

National data indicate that 5.2 million seniors in the U.S. (6.8%, or 1 in 15) were food insecure in 2020. Food insecurity is defined as a person or household's occasional or consistent lack of enough healthy or nutritious food to enable the person or household members to live an active, healthy life. According to the United States Department of Agriculture (USDA), food insecurity is classified as low (reduced quality, variety, or desirability of diet; little or no indication of reduced food intake) and very low (multiple indications of disrupted eating patterns and reduced food intake).

Vast disparities in food security exist. **Black and Latino older adults are, respectively, 4.7 and 3.1 times more likely to experience food insecurity** compared to white older adults. Not surprisingly, the unemployed and those living below the poverty rate are at high risk for food insecurity. Other factors contribute to the enduring and pervasive pattern of food insecurity, such as mobility limitations, veteran status, and mental health conditions. Food insecurity is also compounded by competing financial obligations. For example, a lack of affordable housing in the community puts people at greater risk for food insecurity, as more of their finances must go to housing. Similarly, medical expenses can compete with nutrition needs and those with high medical bills and low income may need to choose between treatments and medications or food.

As food prices started climbing, Linh and Mark found themselves stretching their food budget. With a monthly Social Security check as their only source of income, they asked their local church for resources. This led to a connection with a local nonprofit that provides ethnic tailored meals such as Vietnamese and Latino dishes. To express their gratitude in return, Linh and Mark now volunteer at their local nonprofit and help deliver meals to homebound older adults.

This year, two Orange County agencies provided data related to food issues. The first agency reported providing food-related services to 3,763 residents, 2,610 (69%) of whom were adults aged 60 or older. These recipients were primarily Vietnamese (56.5%) from two or three geographic areas, with relatively low education and income levels. While both the record keeping and the numbers served by this agency are impressive, they are limited to older adults within a designated service area or population subgroup. The second agency shared data from their community health survey that gathered data on health food access, food choices, and utilization of food-related provisions. Of those who responded, 83.5% reported having enough of the kinds of foods they wanted to eat, 14.3% indicated that they received CalFresh/Food Stamps/WIC, and 13.6% utilized a food pantry. It is unclear, however, how this reflects older adults specifically, as the data (from children as young as 13) could not be disaggregated.

Previous county level data from the California Health Interview Survey estimated that the rate of food insecurity among older adults in Orange County was about 29% in 2016-2018. Aside from being outdated, this finding does not accurately capture older adults with incomes above the 200% federal poverty level (FPL), despite the fact that 200% FPL equates to less than $30,000. Post-pandemic data need to reflect current poverty guidelines, which have increased by 20% in the last five years. Feeding America now estimates that 33% of the now 51,000 food insecure individuals in Orange County reside above the 200% FPL threshold.

Predictably, older adults with food insecurity are more likely to participate in government funded or subsidized SNAP (CalFresh) programs. Current Orange County data from the CalFresh dashboard indicates that their older adult enrollment grew in the last 2 years by nearly 42% from June 2021 (54,404 older adults) to January 2023 (77,367 older adults). Unfortunately, the future of CalFresh and other subsidized nutrition programs are currently facing government spending cuts and the extent to which this will affect Orange County older adults is unknown. Furthermore, Feeding America estimated the annual food budget shortfall in Orange County was $180 Million in 2020, before the pandemic. That number has likely increased drastically, but without detailed information on the residents at greatest risk, targeted service provision will not reach peak efficiency.

Food insecure older adults have higher rates of multiple comorbidities, depression, frailty, living alone, being homebound, community disability, and social isolation. Given the projected growth in the aging population and the accompanying challenges therein, Orange County must heighten its efforts in preparation

for significant increases in food insecurity rates. Barring detailed documentation by Orange County service providers, little can be gleaned regarding which groups currently are receiving assistance and which at-risk groups remain un(der)served. We need to ensure we have a systematic approach to track these numbers over time.

Current Orange County data from the CalFresh dashboard indicates that their older adult enrollment grew in the last 2 years by nearly 42% from June 2021 (54,404 older adults) to January 2023 (77,367 older adults).

Social Isolation and Loneliness

According to the Centers for Disease Control and Prevention (CDC), loneliness is the feeling of being alone, regardless of the amount of social contact, whereas social isolation is a more objective lack of social connections. Both are prevalent concerns for those who work with older adults in Orange County. Social isolation, despite being one of the greatest risk factors for poor health and early mortality, has been an incredibly difficult construct to study. Those most at risk are the very people most difficult to recruit into studies. Still, researchers have established several links between sociodemographic factors and social isolation.

One of the greatest risk factors for social isolation is advanced age. Those aged 80 and older are at greater risk than their younger counterparts. Not surprisingly, those who live alone, especially those who are unmarried and/or childless, are more likely to be socially isolated. Men also appear to be at a higher risk than women, and Whites tend to be at greater risk than Blacks or Hispanics. Income and education also are predictive factors. Those with lower incomes are at greater risk, as are those with fewer years of education. Similarly, those receiving state pensions or benefits are worse off than the currently employed.

Spotlight on Service Success

HK, 75 stated "I am so happy to be a part of The Cambodian Family Community Center. They understand me and my needs. I am able to get the help I need and in the language that I understand. This is very important because I don't speak English and I'm learning English, but it is hard for me." The Cambodian Family organization was able to help HK apply for Medi-cal, Social Security Income, and a senior socialization program to help him achieve his goals and connect him to other seniors.

Poor physical or mental health increases the risk for social isolation. Chronic conditions, physical limitations, or limited mobility also increase risk, as do impaired senses, especially hearing loss. Those with depression are at greater risk than those without. Cognitive impairment increases risk as well. Inversely, social isolation has been associated with an increased risk of developing dementia. **It can not be emphasized enough how critical it is to develop appropriate interventions that reduce loneliness and social isolation among older adults**.

Finally, a variety of sociocultural factors predict social isolation. Social networks, a critical component for support and belongingness, are impacted by relationship losses, such as the death of family and friends. Geographic isolation and/or a lack of transportation can also put people at greater risk. Those less acculturated to their local community are at greater risk, especially those without proficiency in the dominant language. Only one agency partner provided data on language spoken; a high proportion reported speaking Spanish or Vietnamese, consistent with county demographics.

Social networks, a critical component for support and belongingness, are impacted by relationship losses, such as the death of family and friends.

Previously documented findings on social isolation and loneliness among older adults in Orange County are not especially helpful. This is in part due to inconsistencies in how "older adult" is defined, as well as inappropriately generalized conclusions drawn from small area estimates that limit our comprehension of the nature and prevalence of these issues among our older residents.

High-quality measurement from the National Social Life, Health, and Aging Project Survey, 2015-2016, found that nearly **21% of adults aged 50 years and over in Orange County are at risk for loneliness**. Unfortunately, this report is now outdated.

For the present report, no agency provided direct data on social isolation on loneliness. Two agencies did however report on household status (i.e., "live alone," "live with family members" "non-family households," "without children," "single adult") which is often inaccurately used as measures for isolation or loneliness; one can live alone and not be isolated just as one can experience loneliness in a room full of people. Data from one of these agencies also asked respondents about their perceptions of *services needing the most improvement in your neighborhoods*. Among the answers was "socialization for more opportunity to connect with the community". While this finding is not conclusive, it does reinforce the need to collect data that capture the full experiences of older adults. A variety of validated measures are available to more accurately assess the numerous risk factors for loneliness and social isolation. Given the significant role of social isolation and loneliness in the lives of aging adults, as well as the fact that the COVID-19 pandemic will have a long-term and profound impact on older adults' health and well-being (cite), accurately tracking these data is imperative.

Transportation

In the context of public health, transportation refers to the movement of people from one place to another. This can include both personal, public, and private modalities. The United States Department of Transportation defines transportation equity as "the way in which the needs of all transportation system users, in particular the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, older adults, and individuals with disabilities, are reflected in the transportation planning and decision-making processes and its services and products.

Nationally, 1 in 5 Americans older than 65 are not driving, and over 80% of young adults with disabilities report transportation challenges.

Reliable transportation is a social determinant of health especially among older adults. Research shows that it can cause loneliness and social isolation due to impaired opportunities to participate in religious, recreational and social events (Health Affairs). Lack of transportation among older adults also leads to and/or exacerbates current health problems. Interestingly, 3.6 million Americans fail to receive medical care as a direct result of a lack of transportation. Older adults, as well as adults with disabilities, require reliable, affordable, and accessible transportation alternatives. Unfortunately, many do not have adequate transportation options.

As the population continues to age, and the rate of people with disabilities also increases, both driving capacity and car ownership will decline. Nationally, 1 in 5 Americans older than 65 are not driving, and over 80% of young adults with disabilities report transportation challenges. Not surprisingly, the demand for transportation is steadily increasing and efforts to ensure the health of these groups, both now and in the future, must be prioritized.

The Martinez family was struggling to transport their father, Miguel, to the adult day health center he attended three times a week. Miguel's fixed low income meant that purchasing a vehicle or hiring private transportation was not an option. Moreover, Miguel's wheelchair required special transportation accommodations. The family was left with few options and was worried about Miguel's well-being. Fortunately, they learned about a senior transportation program managed by a local nonprofit that serviced their area that provided transportation services for individuals with disabilities. Thanks to this program, Miguel was able to continue attending the adult day care center and the Martinez family had peace of mind knowing that he was getting the care he needed.

Unfortunately, many alternative non-driving transportation options, such as **buses and walking, often do not meet ethical or equitable standards of availability, accessibility, adaptability, affordability, and cultural appropriateness**. For example, the National Aging and Disability Transportation Center reports that ethnically and culturally diverse older adults have unique transportation barriers, often due to income inequality and related historical racism. For example, Black households, as compared to their White counterparts, are more than 3 times less likely to have access to a vehicle. In California, almost 4.3 million

older adults have driver's licenses; given that the number of non-White residents over the age of 65 is only going to increase, it is easy to anticipate the need to develop **Orange County programs designed to reduce racial/ethnic transportation barriers. Orange County faces major obstacles unless complete and detailed tracking of transportation needs among seniors commences**.

For the present report, very limited transportation-related data were provided. One agency that serves both the general community (n=9317) and the adult day health care population (n=3245), reports that nearly 41% of their transportation clients earn less than $16,000/year, with many of their clients identifying as Hispanic/Latino, and many using a walker or wheelchair. It is unfortunate that no data are available on vehicle ownership, health and functional status, or other established risk factors, such as neighborhood safety, household size, population density, and proximity to public transportation. Another agency submitted hard data on nearly 12,000 clients who participated in the Senior Non-emergency Medical Transportation (SNEMT) program, and indicated that their average client was 85 years old, Caucasian (62%), Ambulatory (46%) and lived in high-income neighborhoods. No other data were submitted on clients who utilize other Orange County Senior Transit Programs, including Fare Stabilization and the Senior Mobility Program (SMP). Interestingly, in 2021-2022, 32 cities and three non-profits were SMP partners. Expanded efforts to track usage of referrals and resources across Orange County, and among multiple services, is not only possible, but essential. Finally, one agency with survey data on perceptions of health shared that "lack of transportation" is among the factors that impact one's health. Obtaining both objective and subjective data on factors that relate to transportation, across the county, is necessary.

Barriers to Independent Living In Orange County

ADRC partners report that the most significant barriers to independent living for older adults and people with disabilities in Orange County continue to be in-home care and affordable, accessible housing. The severity of these issues cannot be overstated. Additionally, individuals must regularly check their plans for coverage because offered benefits may be limited and vary greatly. Some of the specific and currently insurmountable challenges in each area include:

HOUSING:

- Section 8 waitlist, closed for nearly 10 years
- Voucher amounts have not increased, despite drastic increase in rents
- Ground-level, ADA-compliant apartments are extremely limited in number and out of voucher price range
- Non-Elderly Disabled (NED) vouchers exclude older adults from housing opportunities, forcing them to remain institutionalized

IN-HOME CARE:

- Severe lack of IHSS providers, likely due to pay below living wage
- Few agencies accept Medi-Cal/WPCS, and those that do have few available providers
- Medicare does not cover long-term supports and services, including in-home care
- Medicare Advantage Plans that cover in-home care offer extremely limited hours (~130 per year) and are not available in Orange County
- Many individuals whose income is too high for Medi-Cal cannot afford in-home care, leading to injury and institutionalization

Housing Insecurity

Housing insecurity can be defined as "limited or uncertain availability, access, or inability to acquire stable, safe, adequate, and affordable housing and neighborhoods in socially acceptable ways." NYU Researcher Giselle Routhier similarly advocates for "measuring housing insecurity as an index of multiple variables within four identified dimensions: unaffordability, poor conditions, overcrowding, and forced moves." In general, substandard housing is linked with numerous negative physical outcomes, including infectious diseases, chronic health conditions, injuries, and mental health conditions (e.g., depression, and isolation). These outcomes are exacerbated among older adults who are frail, disabled, and cognitively impaired who then require more assistive services. Racially and ethnically minoritized populations

are also particularly affected by housing insecurity. Nationwide in 2020, Black and Hispanic homeowners experienced significantly more housing insecurity (27% and 28%, respectively) as compared to White and Other homeowners (11% and 20%, respectively).

> …housing insecurity is more than homelessness; it includes numerous factors associated with home ownership and aging in place.

Sadly, mortgage debt among seniors has skyrocketed. In one study, it is reported that by 2035, 6.4 million renters and 11 million homeowners will be cost-burdened, with 8.6 million characterized as severely cost burdened, spending more than 50% of their household income on housing. Many older adults also carry significant debt into retirement, making necessary home modifications and repairs nearly impossible. The COVID-19 pandemic further compounded these existing housing-related vulnerabilities, especially among low-income, segregated, and minority populations. One agency provided residential data on their Black participants; of their 451 respondents, more than half live in a single-family residence (53%) and about 35% live in condos, townhomes, or apartment complexes. No data exist, however, regarding financial challenges related to aging-in-place.

In California, the unhoused population is increasingly composed of older male adults. **In fiscal year 2021-2022, 40% of unhoused, single adults 50 years and older were referred to the homeless response system**. In 2022, nearly 11,000 veterans were homeless.

John and Mary rent a one bedroom apartment. With the rising cost of living and their fixed income, they could not afford their current living situation. Due to their immigration status and misconceptions about eligibility for public assistance, they were afraid to seek help. A neighbor suggested that they should contact their local Senior Center. After learning what the Senior Center offers and speaking with a trusted Case Manager, they were able to apply for affordable housing.

Between 2019 and 2022, Orange County saw a decrease of 17% in overall homelessness, though the number of unsheltered adults with physical disabilities, mental health challenges, or substance abuse issues increased during that time period. One participating agency that tracks homelessness reported that between 2021- 2022, of their 41,534 clients, the majority were male (62%), not Veterans (83%), and Caucasian/White (74%), with 41% categorized as chronically homeless and 33% as homeless for the first time. Another agency reported that their clients believe "more affordable housing" and "housing insecurity/ homelessness" are key areas in need of improvement in their community. This is important because housing insecurity is more than homelessness; it includes numerous factors associated with home ownership and aging in place. **An older individual whose home becomes unsafe because they cannot afford home repairs or modify the home to adapt to functional decline could also be experiencing housing insecurity**. No provided data addressed any of these aspects of housing insecurity, underscoring the critical need for large-scale, systematic data collection in Orange County.

Overall, limited housing data were provided. This report therefore cannot provide robust conclusions on rates of homelessness broken down by any number of critical factors, not the least of which is race. We can potentially extrapolate from national data; according to the Alliance's State of Homelessness 2020 report, we can expect rates of homelessness, as compared to whites, to be three times higher for Blacks, four times higher for Native Americans, and nine times higher for Pacific Islanders. Of course, Orange County is not the rest of the country. It is different, even, from the rest of California. Additional research is needed to address disparities specific to Orange County.

PERVADING FACTORS

Disabilities

According to Justice in Aging, over 25,000 older adults and persons with disabilities receive in-home supportive services. As defined by the Americans with Disabilities Act a person has a disability if they have a "physical or mental impairment that substantially limits a major life activity." Disability rates are correlated with age, with rates of at least 30% and 50% for those over 65 and those over 75, respectively. Disabilities include issues with senses (e.g., vision, hearing), mobility, and cognition.

The *2022 Report on Aging in Orange County* reported that 148,233 or 4.65% of older adults (defined as 65+) in Orange County have a disability: 12% with hearing loss, 5% with vision difficulty, 8.5% with self-care difficulty, and 14.4% with independent living difficulties. Orange

County cities with the highest incomes report the lowest age-based (65+) disabilities (e.g., Coto de Caza, 15.2%), as compared to lower-income cities (e.g., Midway City, 46.7%). Not surprisingly, as noted in the 2022 report, the American Community Survey (ACS) reported that residents in higher income cities also have more education, as well as access to better health care and internet connectivity, as compared to cities with a higher prevalence of older adults with disabilities.

The Black Health Study, for example, reported that 5% of their participants were unable to work due to disability (n=458) and 7% (n=147) did not exercise due to being physically disabled.

One agency indicated that 22% of their clients (in a diverse sample of residents: 29% Caucasian, 26% Hispanic/Latino, over half native English speakers) have a disability. Another agency reported a disability rate of 24% among their fairly diverse service recipients. Unfortunately, the above data are insufficient due to small sample sizes and, because the data could not be disaggregated, we could not draw any conclusions regarding the types of services these individuals were receiving. However, in both cases, the **rates were approximately 5 times the estimated county-wide rate (4.65%), underscoring the notion that older adults with disabilities are more likely to need and seek support services**.

Disability status was included in a few other datasets across a variety of service areas, reinforcing the classification of disability as a pervasive factor. The Black Health Study, for example, reported that 5% of their participants were unable to work due to disability (n=458) and 7% (n=147) did not exercise due to being physically disabled.

Again, the **disability rates were higher than the county-wide estimates for all agencies that assessed the status, especially for housing, food insecurity, and transportation**. Although inferential statistical analyses were not possible with the submitted data, disability rates appeared to be associated with minority status, lower income, poorer mental health and greater substance abuse.

Though no current county data were submitted to confirm this, disability status has been linked to the digital divide in the literature. For example, 55% with a disability go online compared to 72% without a disability. More specifically, those with vision impairments were found to be less likely to use the internet and health information technology. Conversely, a study looking specifically at older technology adopters found that older adults with a body function impairment (i.e., mobility, vision, hearing) and those with a fall or accident history were more likely to adopt smart home technology.

Spotlight on Service Success

A 37-year-old with hearing loss and learning disabilities requested support with accessing resources for independent living. The Community Living Advocate provided referrals to Goodwill and One Stop for employment, a housing voucher, housing advocacy options, SSI/SSDI Benefits Workshops, DMV practice tests, adaptive driving resources, and a referral to DMC's Independent Living Skills Program. He now has housing, a driver's permit, part-time employment and has just started school…he is well on his way to achieving his independent living goals.

National data indicate that there is a strong association between functional deterioration, disability and death among older adults, with clear disparities between racial/ethnic groups. Further, as one loses the ability to perform necessary activities of daily living, the likelihood of placement in a long-term care facility grows, increasing the financial burden on both family members and society.

To improve the health status of the elderly and reduce disparities, service delivery targeting the needs of specific population groups should be considered. As the proportion of older adults from non-white groups grows more rapidly than whites, it will be crucial to understand health outcomes in diverse populations.

Alzheimer's Disease

Trends across the United States and in California indicate that one of the greatest challenges facing older adults is dementia. Nationwide, 1 in 9 adults 65 years (approximately 6.7 million Americans) and older currently have Alzheimer's Disease.

Based on age and geographically related population change projections, the West is expected to experience one of the largest percentage increases in persons with Alzheimer's. **In California, it is projected that there will be a 21.7% increase in incidence (number of new cases) from now until 2025**. In Orange County alone, over 60,000 residents already struggle with dementia.

As reported by Alzheimer's Orange County, dementia prevalence (the proportion of the population with dementia during a particular time period) is on the rise. Using census data and adjusting for the number of seniors in Orange County, they overlaid that number with census ethnicity numbers. Applying established dementia prevalence figures, they then extrapolated the number of older adults (65+) in Orange County with some level of dementia (MCI included). These estimates do not factor in gender or include younger onset. The estimated number of OC residents experiencing dementia is 63,450. With MCI included, the estimate jumps to 164,346, or 33% of county residents over the age of 65. These numbers are estimates using widely published and generally accepted prevalence and census figures. Gender has not been factored nor has "younger onset" or dementia occurring before 65 been included.

Alzheimer's Orange County released a similar estimate in 2014 stating that 84,000 residents of Orange County either have or are at immediate risk of dementia. Even though data available in 2023 are more finely tuned to incorporate MCI, the current estimates represent a doubling of prevalence in the county since 2014.

Given the staggering progression of dementia rates in the county, **it is imperative that any organization serving older adults begin to systematically track cognitive status, as likely 1 in 3 clients in Orange County will be affected**.

At 68, Dave was diagnosed with Alzheimer's disease. Although the first few years were manageable, the disease has progressed to the point where his wife, Caroline, can no longer provide care on her own. She felt lost, tired and overwhelmed, not knowing where to turn for help and felt increasingly isolated.

One day, she attended a resource fair in their local community and came across a booth for a local Alzheimer's organization. The organization connected her with its helpline to schedule a consultation to assess her and her husband's needs and match her to resources and services to help care for her husband and provide her the caregiver support she needs.

Caroline now attends a support group at the local Alzheimer's organization, where she finds comfort and support from others going through similar experiences. Dave now receives the care he needs, and Caroline has a supportive community to turn to when she needs help.

This data needs to include concrete, at a minimum, demographic data, including age (the number one risk factor for Alzheimer's) and socioeconomic status (SES). As noted by the Alzheimer's Association, in their 2023 Alzheimer's Disease Facts and Figures report, "SES" is not a biological entity, but rather a social construct reflecting inequities…" This is especially critical given the growing population of diverse older adults in Orange County.

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RECOMMENDATIONS AND FUTURE CONSIDERATIONS

As evidenced by the success stories throughout this report, Orange County agencies are making a difference in the lives of aging community members. However, unmet needs remain; for the sake of our seniors and our community, it is imperative that gaps are identified and closed.

At the outset of this report's construction, the original intent was to inform on all five areas of interest at the county level, supplementing with more detailed subset data when available. It quickly became clear that **new comprehensive county-wide data did not exist**, resulting in a reliance on subset reporting, which was often specific to limited groups or geographic areas. This made extrapolation nearly impossible. Even aggregation was difficult, given the varied operationalizations of common demographic variables and the likely duplication of participants across agencies.

The **lack of a central aggregated data repository** is severely hampering our ability to discern the entirety of older adults' experiences across the five areas investigated above. For example, despite multiple agencies providing transportation services to older adults and people with disabilities, we have yet to determine the number of residents still in need of transportation, let alone who they are and how to reach them.

Orange County needs to take a leadership role in establishing a unified, county-wide data collection system. This should include a **county-wide, formalized, comprehensive needs assessment**. Ideally, all partner agencies would agree to standardized measurements.

Target data could be organized into the following categories:

- *Demographic and Cultural Diversity* (including age, income/education, religious affiliation, gender, marital status, sexual orientation, ethnicity/race, primary language spoken, family role, disability status, veteran status, immigration status).
- *Socioeconomic status* (including education, employment status, income, income sources, insurance status, McKenny Vento status, homeless status, zipcodes/neighborhood)
- *Health* (including physical and psychological health status/conditions/diagnoses, social and emotional well-being, disability and supporting equipment)
- *Housing* (including household type, housing type, bed type and living situation)
- *Services/Referrals* (including reasons for referral, services provided, where referred to, and service planning area).

A clearly established **systematic approach** would create a streamlined process for the integration of new agencies and data. **Standardized measures** would permit the analysis of data across multiple agencies, reducing both duplication of services and service gaps. Finally, a **county-run dashboard** would encourage collaboration between agencies and allow for easy identification of service providers for community members.

Orange County agencies need support to obtain more robust data so they can ensure appropriate services are provided and that current services are sufficient. Only with detailed, comprehensive data will Orange County be able to create an infrastructure to support its rapidly aging and demographically changing population.

Actionable recommendations include, but are not limited to: systematic operationalization of key constructs (e.g., age, income); pre-established county-wide goals and objectives for data collection, by year, for the next 5 years, with clearly defined data to collect and related methods and measures; ongoing training for data collection and submission for agency partners, including ongoing management and tracking; increasing stakeholder and agency engagement, as well as establishment of coordination mechanisms between them; and establishing methodology and timelines for evaluation, including, at a minimum, process (assessment of how data were collected) and outcome (measurement of extent to which data collection efforts accurately represent Orange County) in order to draw timely and meaningful conclusions regarding gaps and services provided to older adults who call Orange County their home. ■

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REFERENCES

Alley, D. E., Lloyd, J., Pagán, J. A., Pollack, C. E., Shardell, M., & Cannuscio, C. (2011). Mortgage delinquency and changes in access to health resources and depressive symptoms in a nationally representative cohort of Americans older than 50 years. *American Journal of Public Health, 101*(12), 2293–2298. https://doi-org.lib-proxy.fullerton.edu/10.2105/AJPH.2011.300245

Alzheimer's Association. (2020). *Fact sheet: Race, ethnicity, and Alzheimer's*. https://aaic.alz.org/downloads2020/2020_Race_and_Ethnicity_Fact_Sheet.pdf

Alzheimer's Association (2023). *Alzheimer's disease facts and figures. Special report*. https://www.alz/org/media/Documents/alzheimer's-facts-and-figures.pdf

American Hospital Association. (2023). *Social determinants of health series: Housing and the role of hospitals*. https://www.aha.org/ahahret-guides/2017-08-22-social-determinants-health-series-housing-and-role-hospitals

Anderson, M., & Perrin, A. (2017). *Tech adoption climbs among older adults*. Pew Research Center. https://www.pewresearch.org/internet/2017/05/17/tech-adoption-climbs-among-older-adults/

Arthanat, S., Wilcox, J., & Macuch, M. (2019). Profiles and predictors of smart home technology adoption by older adults. *OTJR: Occupation, Participation and Health, 39*(4), 247–256. https://doi-org.lib-proxy.fullerton.edu/10.1177/1539449218813906

Barnes, M., Blom, A., Cox, K., Lessof, C., & Walker, A. (2006). *The social exclusion of older people: Evidence from the first wave of the English Longitudinal Study of Ageing (ELSA): Final Report. Social Research in Transport (SORT) Clearinghouse*. https://www.researchgate.net/publication/37183878_The_social_exclusion_of_older_people_evidence_from_the_first_wave_of_the_English_Longitudinal_Study_of_Ageing_ELSA_final_Report

Bishop, N. J., & Wang, K. (2018). Food insecurity, comorbidity, and mobility limitations among older US Adults: Findings from the Health and Retirement Study and Health Care and Nutrition Study. *Preventive Medicine: An International Journal Devoted to Practice and Theory, 114*, 180–187. https://doi-org.lib-proxy.fullerton.edu/10.1016/j.ypmed.2018.07.001

California Budget & Policy Center. (2023). *Who is experiencing homelessness in California. Sustaining diverse housing interventions is needed to end homelessness*. https://calbudgetcenter.org/resources/who-is-experiencing-homelessness-in-california/

California Department of Social Services. (2023, April 3). *CalFresh data dashboard. California Department of Social Services*. https://www.cdss.ca.gov/inforesources/data-portal/research-and-data/calfresh-data-dashboard

California Mobility. (2023). *21 senior technology statistics*. https://californiamobility.com/21-senior-technology-statistics/

CAP OC Planning and Business Development Department. (2019). *2019 community needs assessment*. https://www.capoc.org/wp-content/uploads/2020/09/2019-Community-Needs-Assessment_final.pdf

Census Reporter. (2021). *Orange County, CA*. https://censusreporter.org/profiles/05000US06059-orange-county-ca/

Center for Strategic & International Studies. (2021). *Food insecurity among Veterans: Who is at risk and how to respond*. https://www.csis.org/analysis/food-insecurity-among-veterans-who-risk-and-how-respond

Centers for Disease Control and Prevention (2021). *Loneliness and social isolation linked to serious health conditions.* https://www.cdc.gov/aging/publications/features/lonely-older-adults.html

Choi, N. G., DiNitto, D. M., Lee, O. E., & Choi, B. Y. (2020). Internet and health information technology use and psychological distress among older adults with self-reported vision impairment: Case-control study. *Journal of Medical Internet Research, 22*(6), e17294.

Coleman-Jensen, A., Rabbitt, M., Gregory, C., & Singh, A. (2021). *Household Food Security in the United States in 2020, ERR-298*. Washington, DC: Department of Agriculture, Economic Research Service.

Columbia University Irving Medical Center. (2022). *One in 10 older Americans has dementia*. https://www.cuimc.columbia.edu/news/one-10-older-americans-has-dementia#:~:text=In%20the%20first%20nationally%20representative,22%25%20have%20mild%20cognitive%20impairment.

County of Orange California. (2022). *Everyone counts. 2022 point in time summary*. https://www.ochealthinfo.com/sites/hca/files/2022-05/2022%20PIT%20Data%20Infographic%20-%205.10.2022%20Final.pdf?fbclid=IwAR1ZPr6ENcl6Dr042t3IGNhTNNYebquEvvUbVLC7RD-xmP9OMVRwB7pEZfY

Cox, R., Henwood, B., Rodnyansky, S., Rice, E., & Wenzel, S. (2019). R oad map to a unified measure of housing insecurity. *Cityscape, 21*(2), 93-128.

Cronk, I. (2015). *The transportation barrier*. https://www.theatlantic.com/health/archive/2015/08/the-transportation-barrier/399728/

Cudjoe, T. K. M., Roth, D. L., Szanton, S. L., Wolff, J. L., Boyd, C. M., & Thorpe, R. J., Jr. (2020). The epidemiology of social isolation: National Health and Aging Trends Study. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 75*(1), 107–113. https://doi-org.lib-proxy.fullerton.edu/10.1093/geronb/gby037

Czaja, S. J., Charness, N., Fisk, A. D., Hertzog, C., Nair, S. N., Rogers, W. A., & Sharit, J. (2006). Factors predicting the use of technology: Findings from the Center for Research and Education on Aging and Technology Enhancement (CREATE). *Psychology and Aging, 21*(2), 333–352.

Davalos, M., & Kimberlin, S. (2023). *Who is experiencing homelessness in California? Sustaining diverse housing interventions is needed to end homelessness*. California Budget and Policy Center. https://calbudgetcenter.org/resources/who-is-experiencing-homelessness-in-california/

Doza, A., Mahmoudi, E., & Tarraf, W. (2022). Changes in functional status among US adults in late mid-life from the Health and Retirement Study 2004–2016. *Innovation in Aging, 6*(Supplement_1), 291–291. https://doi.org/10.1093/geroni/igac059.1155

Eby, D.W., Molnar, L.J., Kostyniuk, L.P., St Louis, R.M., & Zanier, N. (2020). Characteristics of informal caregivers who provide transportation assistance to older adults. *PLoS One, 12*(9), e0184085. doi: 10.1371/journal.pone.0184085.

Feeding America. (2020). *Food insecurity among overall (all ages) population in Orange County*. https://map.feedingamerica.org/county/2020/overall/california/county/orange

Feeding America. (2023). *Feeding America study shows deepening divide in senior hunger*. https://www.feedingamerica.org/about-us/press-room/senior-hunger-2020#:~:text=The%20Feeding%20America%20study%20shows%20that%20food%20insecurity,4.2%25%2C%20leading%20to%20wider%20disparities%20between%20most%20groups.

Garcia Diaz, L., Savundranayagam, M. Y., Kloseck, M., & Fitzsimmons, D. (2019). The role of cultural and family values on social connectedness and loneliness among ethnic minority elders. *Clinical Gerontologist: The Journal of Aging and Mental Health, 42*(1), 114–126. https://doi-org.lib-proxy.fullerton.edu/10.1080/07317115.2017.1395377

Goldberg, S. L., & Mawn, B. E. (2015). Predictors of food insecurity among older adults in the United States. *Public Health Nursing, 32*(5), 397–407. https://doi-org.lib-proxy.fullerton.edu/10.1111/phn.12173

Hall, J. P., Kurth, N. K., & Goddard, K. S. (2022). Assessing factors associated with social connectedness in adults with mobility disabilities. *Disabil Health J.*,15(1S), 101206. doi: 10.1016/j.dhjo.2021.101206

Health Affairs. (2021). *Public transportation in the US: A driver of health and equity*. https://www.healthaffairs.org/do/10.1377/hpb20210630.810356/

Holt-Lunstad, J. (2017). The potential public health relevance of social isolation and loneliness: Prevalence, epidemiology, and risk factors, *Public Policy & Aging Report, 27*(4), 127–130, https://doi.org/10.1093/ppar/prx030

HUD USER. (2017). *Housing for seniors: Challenges and solutions.* https://www.huduser.gov/portal/periodicals/em/summer17/highlight1.html

HUD USER. (2023). *Measuring housing insecurity in the American housing survey.* https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-111918.html

Jivraj, S., Nazroo, J., & Barnes, M. (2016). Short- and long-term determinants of social detachment in later life. *Ageing & Society, 36*(5), 924–945

Justice in Aging. (2023). *Snapshot of older adults in Orange County. https://justiceinaging.org/wp-content/uploads/2023/03/Snapshot-of-Older-Adults-in-Orange-County-Accessible-Outline.pdf*

Lamanna, M., Klinger, C., Liu, A., & Mirza, R. (2020). The association between public transportation and social isolation in older adults: A scoping review of the literature. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement, 39*(3), 393-405. doi:10.1017/S0714980819000345

Lara, E., Caballero, F. F., Rico, U. L. A., Olaya, B., Haro, J. M., Ayuso, M. J. L., & Miret, M. (2019). Are loneliness and social isolation associated with cognitive decline? *International Journal of Geriatric Psychiatry, 34*(11), 1613–1622.

Lee, J. S., & Frongillo, E. A. (2001). Factors associated with food insecurity among US elderly persons: Importance of functional impairments. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 56*(2), S94–S99.

Litman, T. (2022). *Evaluating transportation equity: Guidance for incorporating distributional impacts in transport planning. Victoria Transport Policy Institute*. https://www.vtpi.org/equity.pdf

National Aging and Disability Transportation Center. (2018). *New national poll: Inability to drive, lack of transportation options are major concerns for older adults, people with disabilities and caregivers*. https://www.prnewswire.com/news-releases/new-national-poll-inability-to-drive-lack-of-transportation-options-are-major-concerns-for-older-adults-people-with-disabilities-and-caregivers-300761774.html

National Aging and Disability Transportation Center. (n.d.). *Trends report 2020.* https://www.nadtc.org/wp-content/uploads/4-2020-Trends-Diverse-Older-Adults.pdf#:~:text=Based%20on%20a%20supplemental%20analysis%20of%20NADTC%E2%80%99s%202017,to%20know%20more%20and%20decided%20to%20dig%20deeper.

National Aging and Disability Transportation Center. (2023). *Older adults and transportation*. https://www.nadtc.org/about/transportation-aging-disability/unique-issues-related-to-older-adults-and-transportation/

National Cooperative Highway Research Program Transportation Research Board of the National Academies of Science, Engineering, and Medicine. (2019). *A research roadmap for transportation and public health*. https://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_932MethodsBackground.pdf

National Institute on Aging. (n.d.). Goal F: *Understand health disparities related to aging and develop strategies to improve the health status of older adults in diverse populations*. https://www.nia.nih.gov/about/aging-strategic-directions-research/goal-health-disparities-adults

Nielsen, R. B., Garasky, S., & Chatterjee, S. (2010). Food insecurity and out-of-pocket medical expenditures: Competing basic needs? *Family and Consumer Sciences Research Journal, 39*(2), 137–151. https://doi-org.lib-proxy.fullerton.edu/10.1111/j.1552-3934.2010.02052.x

Orange County Business Council, First 5 Orange County, Orange County United Way, CalOptima & the Orange County Community Foundation. (2019). *OC community indicators (2020-2021) [Report]*. https://www.ocbc.org/wp-content/uploads/2020/09/2020-Community-Indicators-Report.pdf

Orange County Senior Citizens Advisory Council. (SCAC) (2021). *Immediate action. Technology request for Orange County Senior Citizens*. https://www.officeonaging.ocgov.com/sites/officeonaging/files/2021-08/SCAC%20-%20BOS%20letter%207-27-21%20report%20.pdf

Orange County Strategic Planning for Aging. (2022). *Report on aging in Orange County 2022*. https://data.ocagingplan.org/

Orange County Strategic Planning for Aging. (2023). *Food insecurities*. https://data.ocagingplan.org/food-insecurity

PD&R Edge. (2018). *Measuring housing insecurity in the American housing survey*. https://www.huduser.gov/portal/pdredge/pdr-edge-frm-asst-sec-111918.html

Penninkilampi, R., Casey, A.N., Singh, M.F., & Brodaty, H. (2018). The association between social engagement, loneliness, and risk of dementia: A systematic review and meta-analysis. J Alzheimers Dis., 66(4), 1619-1633. doi: 10.3233/JAD-180439. PMID: 30452410.

Pinto, J. M., Kern, D. W., Wroblewski, K. E., Chen, R. C., Schumm, L. P., & McClintock, M. K. (2014). Sensory function: Insights from wave 2 of the National Social Life, Health, and Aging Project. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 69*(Suppl 2), S144–S153.

Public Policy Institute of California (2022). *California's LGBT population*. https://www.ppic.org/blog/californias-lgbt-population/

Routhier, G. (2019). Beyond worst case needs: Measuring the breadth and severity of housing insecurity among urban renters. *Housing Policy Debate, 29*(2), 235-249.

Rural Health Information Hub. (2022-2023). *Older adults with disabilities*. https://www.theatlantic.com/health/archive/2015/08/the-transportation-barrier/399728/

Sanchez, T.W. (2008). Poverty, policy, and public transportation. *Transportation Research Part A: Policy and Practice, 42*(5), 833-841. https://doi.org/10.1016/j.tra.2008.01.011.

Shrestha, B.P., Millonig, A., Hounsell, N.B. et al. (2017). Review of public transport needs of older people in European context. *Population Ageing*, 10, 343–361. https://doi.org/10.1007/s12062-016-9168-9

Statista. (2022). *Share of renting households experiencing housing insecurity in the United States from 2017 to 2020, by race, ethnicity*. https://www.statista.com/statistics/1350801/share-of-households-experiencing-housing-insecurity-us-race-ethnicity/

Statista. (2022). *Share of homeowner households experiencing housing insecurity in the United States from 2017 to 2020, by race, ethnicity*. https://www.statista.com/statistics/1350841/share-of-homeowners-experiencing-housing-insecurity-us-race-ethnicity/

Statista. (2023). *Estimated number of homeless veterans, by state, U.S. 2022*. https://www.statista.com/statistics/727819/number-of-homeless-veterans-in-the-us-by-state/#:~:text=This%20statistic%20shows%20the%20estimated,living%20in%20California%20were%20homeless.

Statista. (2023). *Housing insecurity among American renters by race*. https://www.statista.com/statistics/1350801/share-of-households-experiencing-housing-insecurity-us-race-ethnicity/

Su, Y. Rao, W., Li, M., Caron, G., D'Arcy, C., & Meng, X. (2023). Prevalence of loneliness and social isolation among older adults during COVID-19 pandemic: A systematic review and meta-analysis. *International Psychogeriatrics, 35*(5), 229-241. doi:10.1017/S1041610222000199

Syed, S.T., Gerber, B.S. & Sharp, L.K. (2013). Traveling towards disease: Transportation barriers to health care access. *J Community Health, 38*, 976–993. doi.org/10.1007/s10900-013-9681-1

United States Census Bureau. (2022). *American Community Survey (ACS)*. https://www.census.gov/programs-surveys/acs

United States Census Bureau. (2023). *QuickFacts. Orange County, California*. https://www.census.gov/quickfacts/orangecountycalifornia

U.S. Department of Transportation (n.d.). *Coming together for equity.* https://www.planning/dot.gov/planning/topic_transportationequity.aspx

USA Facts. (2023). *Our changing population: Orange County, California.* https://usafacts.org/data/topics/people-society/population-and-demographics/our-changing-population/state/california/county/orange-county/?endDate=2021-01-01&startDate=2010-01-01

USDA Economic Research Service. (2022). *Definitions of food security.* https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/definitions-of-food-security/

Vaccaro, J. A., & Huffman, F. G. (2017). Sex and race/ethnic disparities in food security and chronic diseases in U.S. older adults. *Gerontology & Geriatric Medicine, 3*, Cal2333721417718344. https://doi.org/10.1177/2333721417718344

Voice of OC. (2023). *Orange County seniors are expected to be hit hardest by incoming food cliff*. https://voiceofoc.org/2023/03/orange-county-seniors-are-expected-to-be-hit-hardest-by-incoming-food-cliff/

Waite, L.J., Duvoisin, R., Kotwal, A.A. (2021). Social health in the National Social Life, Health, and Aging Project, *The Journals of Gerontology: Series B, 76*(3), S251–S265, https://doi.org/10.1093/geronb/gbab138

ORANGE COUNTY AGING SERVICES COLLABORATIVE MEMBERS

211 OC	2-1-1	www.211oc.org
AARP	1-888-687-2277	www.aarp.org
Abrazar	714-893-3581	www.abrazarinc.com
Age Well Senior Services	949-855-8033	www.agewellseniorservices.org
Alzheimer's Association, Orange County Chapter	800-272-3900	www.alz.org/oc
Alzheimer's Family Center	714-593-9630	www.afscenter.org
Alzheimer's Orange County	844-373-4400	www.alzoc.org
Braille Institute	1-800-272-4553	www.brailleinstitute.org
California Senior Legislature	916-767-4382	www.4csl.org
California State University, Fullerton	657-278-7057	www.fullerton.edu
CalOptima Health	1-888-587-8088	www.caloptima.org
CalOptima Health PACE	714-468-1100	www.caloptima.org/en/ForMembers/PACE
Caregiver Resource Center Orange County	714-446-5030	www.caregiveroc.org
Council on Aging Southern California	714-479-0107	www.coasc.org
Community Legal Aid SoCal	714-571-5200	www.communitylegalsocal.org
Easterseals Southern California	714-834-1111	www.easterseals.com/southerncal
Healthy Aging Center: Acacia	714-530-1566	www.alzoc.org/orange-county-adult-day-services/acacia-adult-day-services
Healthy Aging Center: Laguna Woods	949-855-9444	www.alzoc.org/adultday
Hoag Pickup Family Neurosciences Institute	949-764-6066	www.hoag.org/specialties-services/neurosciences
Human Options	949-737-5242	www.humanoptions.org
Institute for Healthcare Advancement	800-434-4633	www.iha4health.org
Jamboree Housing	949-263-8676	www.jamboreehousing.com
LGBTQ Center Orange County	714-953-5428	www.lgbtqcenteroc.org
Meals on Wheels Orange County	714-220-0224	www.mealsonwheelsoc.org
Multi-Ethnic Collaborative of Community Agencies	714-202-4750	www.ocmecca.org
Office on Aging Orange County	1-800-510-2020	www.officeonaging.ocgov.com
OMID Multicultural Institute for Development	949-502-4721	www.omidinstitute.org
Orange County Health Care Agency	N/A	www.ochealthinfo.com
Orange County Community Foundation	949-553-4202	www.oc-cf.org
Orange County Social Services Agency	N/A	www.ssa.ocgov.com
Providence St. Jude Medical Center	714-871-3280	www.providence.org/locations/socal/st-jude-medical-center
Radiant Futures	714-992-1939 Ext. 100	www.radiantfutures.org
Radiant Health Centers	949-809-5700	www.radianthealthcenters.org
Saahas For Cause	562-526-2508	www.saahasforcause.org
Saddleback College Emeritus Institute	949-582-4835	www.saddleback.edu/learning-saddleback/emeritus-institute
SCAN Health Plan	877-452-5898	www.scanhealthplan.com
Second Baptist Church	714-741-0590	www.sbc.family
Somang Society	562-977-4580	www.somangsociety.org
Soul Rapha	714-251-6760	www.soulrapha.org
South County Outreach	949-380-8144	www.sco-oc.org
The Cambodian Family	714-571-1966	www.cambodianfamily.org
UC Irvine Health School of Medicine Division of Geriatric Medicine and Gerontology	714-456-5530	www.familymed.uci.edu/geriatrics
UCI MIND – Institute for Memory Impairments and Neurological Disorders	949-824-3253	www.mind.uci.edu