HIGHWAY TO HEALTH LIFE EXPECTANCY IN LOS ANGELES COUNTY

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Foreword

Public health has a fundamental obligation to ensure communities have the opportunities and resources needed to promote and sustain good health for all. Remarkable progress was made in extending the average life expectancy in the US population during the last century, from approximately 49 years in 1900 to 77 years in 2000. Much of this progress was attributable to improvements in basic living conditions, such as sanitation, safer foods, and improved housing. Unfortunately, not all groups benefited equally, and life expectancy in the US now lags behind many other economically developed countries. In addition, great variation in life expectancy has been observed across the nation. As highlighted in this report, nowhere is this more evident than in Los Angeles County.

Residents of some cities and communities in the county live, on average, ten to fifteen years longer than residents of other cities and communities. In some cases, these cities and communities are only several miles apart. What explains these dramatic differences? How can we best intervene to eliminate them?

This report provides important context for addressing these questions. Most past efforts to improve health and reduce health disparities have focused on health care, other direct services, and education and encouragement to promote healthy lifestyles. These efforts have met with very limited success in reducing the community-level variation in life expectancy described in this report because this variation is to a large degree driven by conditions in the community that fall outside the control of the individual. For example, average life expectancy in a community is powerfully influenced by social, economic, and environmental conditions within that community and by larger societal conditions. Hence, meaningful progress in reducing the glaring disparities described in this report requires addressing these conditions, in large part through policy change and other strategies that change systems and environments in ways that better support health.

Because the disparities described in this report are both preventable and unjust, they are often referred to as "health inequities." On behalf of the Los Angeles County Department of Public Health, I commend our colleagues at Measure of America of the Social Science Research Council for producing the report. We hope it will generate a greater sense of urgency for the multi-sector action needed to address the health inequities described in the report. In so doing, we must ensure that all county residents have the opportunities, resources, and protections in their communities and beyond that support optimal health and well-being.

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About This Report

This report, *Highway to Health*, presents life expectancy calculations for cities and unincorporated areas in Los Angeles County as well as for planning areas and city council districts within the City of Los Angeles. These place-based life expectancy calculations are the most up-to-date figures available; calculating life expectancy by place is a complicated exercise, and updated estimates had not been released for over a decade.

Highway to Health is a preview of the forthcoming A Portrait of Los Angeles County, slated for release on November 29, 2017. A Portrait of Los Angeles County will also include life expectancy calculations for the county's major racial and ethnic groups (including Asian subgroups), USand foreign-born residents, and women and men.

In addition to exploring life expectancy and health data, *A Portrait of Los Angeles County* will examine well-being more broadly using the human development framework and index. The report will present Human Development Index scores for LA County places and demographic groups and explore a range of critical issues, including education, living standards, environmental justice, homelessness, inequality, and access to opportunity. It will conclude with an Agenda for Action, developed in partnership with a wide range of stakeholders, that outlines key priorities for improving well-being countywide.

The *Portrait* and Agenda for Action are an integral part of the county's prevention work, which is outlined in the Los Angeles County Office of Child Protection report *Paving the Road to Safety for our Children:* A Prevention Plan for Los Angeles County. Several public and private partners across the county have made commitments and investments in countywide prevention efforts, and the *Portrait* will further catalyze systems change to improve well-being for at-risk families and children.

Measure of America has worked with local stakeholders to produce human development reports for individual states and counties—including California, Sonoma County, and Marin County.





Introduction

A baby born today in Los Angeles County can expect to live **82.1 years, on average**—a longer life expectancy than that of the average Californian or the average American. If Los Angeles County were a country, it would rank an impressive eleventh in the world in terms of longevity (see TABLE 1).

Life expectancy is a commonly used gauge of population health the world over. Knowing how long different groups of people live is vitally important for understanding what contributes to long lives, for designing and delivering health services, and for monitoring the impact of actions taken to improve health.

Measure of America routinely calculates this summary measure for different population groups and geographies as part of its American Human Development Index. The index is an easy-to-understand numerical measure made up of what most people believe are the basic building blocks of human well-being: health, education, and income. Life expectancy accounts for one-third of the total index value (see BOX 1).

The overall Los Angeles average of 82.1 years¹ masks sharply different life expectancy outcomes within the county. In some parts of Los Angeles, residents routinely live into their 90s, an astonishing decade longer than the already impressive countywide average; in others, life expectancies in the mid-70s reflect far too many premature deaths.

This brief presents life expectancy at birth for the 106 cities and unincorporated neighborhoods in Los Angeles County with sufficiently large populations to allow for reliable estimates. It also presents estimates for the City of Los Angeles's thirty-five community plan areas and fifteen city council districts. Finally, it provides a graphic of life expectancy in these neighborhoods by supervisorial district (see TABLE 3).

TABLE 1 If LA County Were a Country, ItWould Rank Eleventh in Longevity

RANK	COUNTRY	LIFE EXPECTANCY AT BIRTH (YEARS)
1	Japan	83.5
2	Switzerland	83.2
3	Singapore	82.9
4	Australia	82.7
5	Spain	82.6
6	lceland	82.5
7	Italy	82.5
8	Sweden	82.3
9	France	82.2
10	Israel	82.2
11	Los Angeles County	/ 82.1

Source: World Health Organization. World Health Statistics, life expectancy data by country, 2014. LA County data: Measure of America calculations using mortality data from the California Department of Public Health and population data from the US Census Bureau Population Estimates Program 2010–2014.

BOX 1 Human Development and the American Human Development Index

Human development is defined as the process of enlarging people's freedoms and opportunities and improving their well-being. It is about the real freedom ordinary people have to decide who to be, what to do, and how to live. The United Nations launched the first measure of human development, the Human Development Index, in 1990; the UN used it to rank all the countries in the world not by the size of their economies but rather by the well-being of their people and has done so annually ever since.² In addition to the UN global report, national reports have been produced in at least 150 countries since 1992.

In 2008, Measure of America adapted the standard United Nations Human Development Index for use in the United States. The resulting American Human Development Index is a composite measure made up of health, education, and income indicators. It is



expressed on a scale from 0 to 10, with 10 being the highest score. Measure of America calculates scores for the country as a whole; for US states and congressional districts; for counties, census-designated places, cities, and census tracts within states; and for racial and ethnic groups, foreign- and US-born residents, and women and men. Within California, scores range from over 9 in several communities in Santa Clara County in the Bay Area to a low of 2 in areas of the San Joaquin Valley and of South Los Angeles.³

The index score is a snapshot that makes visible inequalities in human development and well-being. To understand why those inequalities exist, Measure of America explores and presents a host of other data alongside the HD Index. In a sense, the index score is analogous to a person's temperature—an elevated temperature indicates that something is wrong, but doctors need more information to identify the underlying cause (is the person ill with influenza, laid low with strep throat, suffering from heat exhaustion?). Similarly, a low HD Index score tells us that people in a given population lack many of the fundamental opportunities, resources, and support systems required to lead freely chosen, rewarding lives. Understanding why this is the case requires close exploration of a host of other factors.

In the HD Index, life expectancy at birth stands as a proxy for the capability to live a long and healthy life and counts as one-third its overall value. Advancing human development requires, first and foremost, expanding the real opportunities people have to avoid premature death by disease or injury, to enjoy protection from arbitrary denial of life, to live in a healthy environment, to maintain a healthy lifestyle, to receive quality medical care, and to attain the highest possible standard of physical and mental health. Securing a long and healthy life is integrally connected to the other two components of the index: access to knowledge (measured by adult educational attainment and school enrollment for children and young adults) and a decent standard of living (measured by median personal earnings of all workers aged 16 and older).⁴

Life Expectancy in Los Angeles County

Life expectancy at birth in Los Angeles County is **82.1 years**—2.8 years longer than the life expectancy of the average American (79.3 years) and just above that of the average Californian (81.9 years). Defined as **the number of years that a baby born today can expect to live if current patterns of mortality continue throughout that baby's life**, life expectancy at birth is a widely used summary measure of population health. Life expectancy in this report is calculated using mortality data from the California Department of Public Health and population data from the US Census Bureau Population Estimates Program, both from 2010–2014. For more details, see the Methodological Note on page 15.

Life expectancy in Los Angeles County steadily increased over the first decade of the 2000s. In 2000, the average county resident could expect to live to 78.7 years; ten years later, life expectancy had increased to 81.5 years—an improvement of almost three years (see FIGURE 1). The trend line shows a very slight drop-off in 2013 but an uptick in 2014.

Life expectancy at birth in Los Angeles County is 2.8 years longer than the life expectancy of the average American.

FIGURE 1 Life Expectancy in Los Angeles County since 2000



Source: Death records are from linked 2010–2014 California DPH Death Statistical Master Files for Los Angeles County Residents, Los Angeles County Department of Public Health (DPH), Office of Health Assessment and Epidemiology. Population estimates are from July 1, 2010–2014 Population Estimates, prepared by Hedderson Demographic Services for Los Angeles County Internal Services Department (ISD).

Note: These historical estimates should not be compared to other data in this report because they were calculated using a different methodology.

Los Angeles County has a huge population—at over ten million people, it is the country's largest county, twice the size of next-in-line Cook County, home to Chicago. This makes comparing Los Angeles to other counties difficult. North Carolina, which has nearly the same population as Los Angeles County, has a life expectancy of 78.3 years—almost four years shorter than that of Los Angeles. In fact, Los Angeles outperforms all nine states with populations of similar size (in the range of seven to thirteen million residents). See FIGURE 2.

Part of the difference stems from the racial and ethnic composition of Los Angeles County as well as its share of immigrants. Immigrants, Asian Americans, and Latinos are all overrepresented in Los Angeles County, and these groups live longer, on average, than US-born white or black residents. The two largest racial and ethnic groups in Los Angeles County live longer than their US counterparts. Latinos in Los Angeles County (48 percent of the county population) can expect to live 1.4 years longer than the average US Latino. The second-largest group, whites (26 percent of the county population), can expect to live 1.8 years longer than whites in the US as a whole. Black and Asian American residents of Los Angeles County, on the other hand, live 0.2 years less than their US counterparts. (Life expectancy among racial and ethnic groups will be explored in detail in *A Portrait of Los Angeles County*.) Los Angeles outperforms all nine states with populations of similar size in terms of life expectancy at birth.

FIGURE 2 Los Angeles County Life Expectancy in Context



Source: State data are Measure of America calculations using mortality data from the CDC National Center for Health Statistics 2014 and population data from the CDC WONDER database. Los Angeles County data are Measure of America calculations using 2010–2014 data.

Though average life expectancy is higher in Los Angeles County than in much of the rest of the country, sharp disparities within the county exist. Life expectancy in the 106 cities and unincorporated areas⁵ included in this study ranges from 75.8 years in Sun Village, a small community in a sparsely populated corner of the Antelope Valley, to 90.5 years in Walnut Park, a community in crowded Southeast Los Angeles (see MAP 1 and TABLE 2)—a difference of nearly fifteen years. On the map, areas with higher life expectancies are denoted by darker shades. Clusters of long-lived LA communities are found in Malibu, West LA, Palos Verdes, and Diamond Bar/Rowland Heights/Walnut.⁶There are two pockets of adjacent communities with below-average life expectancies, one in the southeast portion of the county and one in the northeast.



TABLE 2 Life Expectancy in Top and Bottom Ten Cities/Unincorporated Areas

RANK	CITY/UNINCORPORATED AREA	LIFE EXPECTANCY (YEARS)
TOP 10		
1	Walnut Park	90.5
2	Malibu	89.8
3	Castaic	88.9
4	Rowland Heights	87.0
5	Rancho Palos Verdes	86.7
6	Beverly Hills	86.6
7	San Marino	86.5
8	Bell	86.5
9	Cerritos	86.4
10	Stevenson Ranch	86.2
воттом	10	
97	Vincent	79.0
98	Compton	78.4
99	Signal Hill	78.4
100	Florence-Graham	78.0
101	Lennox	76.8
102	Lancaster	76.4
103	Westmont	76.3
104	Lake Los Angeles	76.2
105	East Rancho Dominguez	76.1
106	Sun Village	75.8

Life expectancy ranges from 90.5 years in Walnut Park to 75.8 years in Sun Village, a difference of nearly fifteen years.

Note: Values have been rounded to one decimal place. The resulting values may appear to be tied, but the rankings reflect the original values, not the rounded values.

MAP 1 Life Expectancy in Los Angeles County by City, Unincorporated Area, and City of LA Community Plan Area



This map presents life expectancy for seventy-seven cities, twenty-nine unincorporated areas, and thirtyfive community plan areas in the City of LA. Darker colors represent higher life expectancy. Table 3 sorts the cities and unincorporated areas into the five county supervisorial districts.



Source: All estimates but life expectancy: US Census Bureau American Community Survey 5-Year Estimates 2011–2015. Life expectancy is calculated by Measure of America.

Walnut Park is a small, densely populated, almost entirely Latino community in Southeast LA. The average life expectancy at birth of Walnut Park residents is an astonishing 90.5 years. This figure is over eight years longer than the Los Angeles average and longer than that of any city or unincorporated area covered in this study, including communities like Malibu and Beverly Hills that are among the country's most affluent. Some two miles to the east is a slightly larger community of roughly the same population density, also more than 96 percent Latino, but with very different health outcomes: the **City of Cudahy, where life expectancy is 79.2 years.**

At first glance, Walnut Park and Cudahy seem quite similar. Each is among the most densely populated communities in California. In both places, median personal earnings hover around \$19,000, and most workers have low-wage jobs in service, production, and transportation. Adult educational levels in both communities are likewise low, and health insurance coverage is around 70 percent. More than half the residents in both locales are foreign born. Three in four immigrants hail from Mexico, and 12 percent come from El Salvador.⁷

Yet the statistics markedly diverge in other important areas. Despite nearly identical personal earnings, Cudahy has a poverty rate of over 31 percent, compared to about 19 percent in Walnut Park. The child poverty rate in Cudahy is a worrying 43.6 percent, over 15 percentage points higher than in Walnut Park. (It may seem strange that the two locales could have the same earnings but different poverty rates. Poverty is a measure that applies to the whole household, whereas median personal earnings measure the wages and salaries of individuals. The difference could be attributed to various factors. For example, the poverty rate would be lower in Walnut Park if there were more workers per household there than in Cudahy; a household of four with two workers each earning \$19,000 would be above the poverty line, whereas a household of four with just one worker earning \$19,000 would be below the poverty line.)

BOX 2 A Tale of Two Communities: Walnut Park and Cudahy, cont'd.

Cudahy residents are far more likely to rent than Walnut Park residents (84 percent and 48 percent, respectively). This could contribute to greater community cohesion in Walnut Park, as owners tend to be more invested, socially as well as financially, in their neighborhoods than renters.⁸ It could also flag greater financial stability among Walnut Park residents, who, to buy, had to have saved money for a down payment and documented a solid salary history and creditworthiness to qualify for a mortgage.

Indicators of child well-being also diverge. In Walnut Park, 13.5 percent of families are headed by a single parent, and in Cudahy, 23.8 percent⁹ are; growing up in single-parent households is associated with poorer outcomes for children.¹⁰ The share of teens and young adults who are not working (the youth unemployment rate) in Cudahy, 28 percent, is more than double the share in Walnut Park, 13 percent.

Lastly, a visit to Walnut Park and Cudahy makes abundantly clear another important difference: their levels of exposure to pollution. Directly to the east of Cudahy lies the heavily trucked I-710, a key route from the ports of Long Beach and Los Angeles to distribution and processing centers inland in Los Angeles and beyond. The southern portion of Cudahy as well as its western border, the Salt Lake Avenue Corridor, is replete with industry and manufacturing, including furniture, paint, rubber, and plastics factories, machine shops, auto-body workshops, truck depots, waste and recycling businesses, and warehousing and storage sites. The "City of Cudahy 2010 General Plan" notes that "illegal hazardous material/waste dumping is a concern in the City." As a result, people living in Cudahy, which is just one-mile square in size,¹¹ may be exposed to high levels of particulate matter and industrial releases like lead,¹² increasing their risk of cancer,¹³ heart disease,¹⁴ and asthma.¹⁵

Walnut Park, on the other hand, lies at the center of a large square formed by four freeways, including the I-710 and I-110, yet a buffer zone of some two miles or more lies between Walnut Park's modest but meticulously kept houses and these diesel-spewing routes. This buffer means that people living in Walnut Park have a slightly lower exposure level to traffic-related pollutants than people living in Cudahy.¹⁶ In addition, Walnut Park is largely residential, with the light industry that does exist there primarily located at the periphery.

Any one of the differences between Walnut Park and Cudahy explored above may contribute to the divergent life expectancies of these two areas; this study is not able to determine whether and to what degree one factor or another affects life expectancy. But research suggests that the cumulative disadvantages we see in Cudahy act together to wear away human health.

DISTI	RICT 1	DISTI	RICT 2	DIST	RICT 3	DIST	RICT 4	DIST	RICT 5
PLACE	E EXPECTANCY (YEARS)	PLACE	E EXPECTANCY (YEARS)	PLACE	E EXPECTANCY (YEARS)	PLACE	FE EXPECTANCY (YEARS)	PLACE	E EXPECTANCY (YEARS)
Walnut Park	90.5	Del Aire	83.8	Malibu	89.8	Rowland Heights	87.0	Castaic	88.9
Bell	86.5	Gardena	83.5	Beverly Hills	86.6	Rancho Palos Verdes	86.7	San Marino	86.5
Walnut	85.8	West Carson	83.5	Calabasas	84.0	Cerritos	86.4	Stevenson Ranch	86.2
South El Monte	85.6	Culver City	83.4	West Hollywood	83.3	Manhattan Beach	86.1	Arcadia	85.3
Monterey Park	85.1	View Park- Windsor Hills	83.3	Santa Monica	83.2	Palos Verdes Estates	85.5	South Pasadena	85.2
El Monte	85.1	Lynwood	81.7	San Fernando	82.7	Hermosa Beach	85.4	East San Gabriel	85.2
Avocado Heights	84.1	Carson	80.8	Agoura Hills	81.8	Diamond Bar	85.4	San Gabriel	84.3
Rosemead	83.8	Lawndale	80.6			Hacienda Heights	84.3	Glendale	84.1
Montebello	83.7	Hawthorne	80.5			Torrance	84.1	Santa Clarita	84.0
South Gate	83.6	Inglewood	79.8			Hawaiian Gardens	83.6	La Cañada Flintridge	83.9
West Covina	83.2	Compton	78.4			East Whittier	83.6	Alhambra	83.7
Claremont	82.9	Florence- Graham	78.0			El Segundo	82.7	Altadena	82.9
La Puente	82.9	Lennox	76.8			Santa Fe Springs	82.3	Pasadena	82.9
Baldwin Park	82.6	Westmont	76.3			Redondo Beach	82.3	Temple City	82.6
Valinda	82.3	East Rancho Dominguez	76.1			La Mirada	82.2	Burbank	82.4
South San Jose Hills	82.2					Whittier	82.1	Quartz Hill	82.4
West Puente Valley	82.2	_				West Whittier- Los Nietos	82.0	La Crescenta- Montrose	82.3
Whittier	82.1					Downey	81.4	Citrus	81.9
Huntington Park	81.9	-				South Whittie	r 81.1	San Dimas	81.9
Bell Gardens	81.8	_				Norwalk	81.0	La Verne	81.8
Pomona	81.7	_				Artesia	80.3	Sierra Madre	81.8
Commerce	81.7	-				Lakewood	80.2	Glendora	81.1
East Los Angeles	81.3	_				Bellflower	80.2	Covina	80.8
Pico Rivera	81.3	_				Paramount	80.2	Duarte	80.5
Maywood	81.3	_				Lomita	80.2	Monrovia	80.3
Azusa	80.7	_				Long Beach	79.4	Palmdale	79.8
Cudahy	79.2					Signal Hill	78.4	Vincent	79.0
		-						Lancaster	76.4
								Lake Los Angeles	76.2
								Sun Village	75.8

TABLE 3 Life Expectancy by County Supervisorial District

Source: Life expectancy is calculated by Measure of America.

Note: Each supervisorial district contains many geographies for which there is no corresponding statistical unit and therefore no way to calculate life expectancy. This table contains only census-designated places for which Measure of America was able to calculate life expectancy.

Life Expectancy in the City of LA

The largest of the county's eighty-eight cities, the City of Los Angeles has a life expectancy nearly identical to that of the county, **82.1 years**. A further zoom into the City of Los Angeles, however, reveals a ten-year life expectancy range among the city's thirty-five community plan areas (CPAs). Community plan areas, designated by the City of Los Angeles Department of City Planning, average about 110,000 residents each, though the population size varies.

The longest lives are found in Westwood, where the life expectancy is 87.7 years. In sharp contrast, residents of Southeast Los Angeles can expect to live 77.7 years. The three CPAs where residents live longest are adjacent to one another in West Los Angeles: Westwood (87.7 years), Bel Air–Beverly Crest (87.4 years), and Brentwood–Pacific Palisades (86.3 years). Life expectancies in these three areas are longer than or as long as those of the most exclusive neighborhoods in New York City, the Upper East Side (86.4 years) and Tribeca (85.9 years).¹⁷ Education is a common thread: residents in these three CPAs are the most highly educated in Los Angeles—virtually all adults have completed high school, more than 70 percent are college-educated, and over one-third have a graduate degree.

BOX 3 City of Los Angeles City Council Districts

Health is often framed as a matter of personal behaviors and free will. Yet many social and environmental factors as well as policies greatly impact health outcomes; health is not just a personal but also a public matter.

Data on residents living in areas tied to elected officials like the City of Los Angeles's fifteen city council districts are particularly useful for policymakers, providing insight into their constituents' achievements and challenges. Health data like life expectancy can serve as a tool to pinpoint public health challenges, advocate for solutions, and inform policy priorities at the local level.

Among the City of Los Angeles's city council districts, life expectancy ranges from 78.0 years in District 8 in South LA to 85.3 years in District 5, which includes communities on the West Side and in the San Fernando Valley (see MAP 2). In the three districts with the highest life expectancies—Districts 5, 11, and 12—over 90 percent of adults have at least a high

ISTRICT	COUNCIL MEMBER	LIFE EXPECTANCY (YEARS)	
	United States	79.3	
	California	81.9	
	Los Angeles County	82.1	
5	Paul Koretz	85.3	
11	Mike Bonin	84.5	
12	Mitchell Englander	83.8	
1	Gilbert Cedillo	83.6	
4	David Ryu	83.5	
3	Bob Blumenfield	82.8	
13	Mitch O'Farrell	82.4	
14	Jose Huizar	82.2	
7	Monica Rodriguez	81.7	
6	Nury Martinez	81.4	
2	Paul Krekorian	81.3	
10	Herb J. Wesson, Jr.	81.2	
15	Joe Buscaino	79.3	
9	Curren D. Price, Jr.	78.9	
8	Marqueece Harris-Dawson	78.0	

BOX 3 City of Los Angeles City Council Districts, cont'd.

school diploma and 40 percent or more have graduated college. Median personal earnings fall between \$36,300 and \$47,300—higher than the earnings of the average Californian. At the other end of the scale, the only three districts with life expectancies under 80 years—Districts 8, 9, and 15—face steep well-being challenges. The proportion of adults who have completed high school is considerably lower in these three districts (between 44 and 69 percent), and four-year college completion among adults is quite low; only 6 to 17 percent of adults have at least a bachelor's degree. Personal earnings are well below the county median of \$31,000, ranging from roughly \$16,000 to \$24,000.



MAP 2 Life Expectancy in the City of LA's City Council Districts

BOX 4 The Social Determinants of Health



- Green spaces
- Sidewalks and bike paths
- Affordable housing



- Fresh produce stores
- High-quality schools
- Affordable health care
- Accessible public transportation



- Jobs with decent wages
- Work/life balance
- A diverse economy
- Affordable, safe childcare
- Equality under the law
- Accountable government
- Safety and security

Health-care access and affordability have been front and center in the national debate about health over the past decade. The Affordable Care Act expanded insurance coverage dramatically and spurred delivery system reform in California, an impressive feat lauded by the public health world. Today, the future of health insurance legislation and health-care reform is uncertain. But political hurdles do not necessarily have to stop progress in population health at the local level.

While access to affordable, quality health care is vital once a person is sick and key for advancing health equity more broadly, a key driver of health outcomes that lies outside traditional health care is often overlooked: the conditions of our daily lives. Increasingly, access to healthy food to eat, clean air to breathe, safe places to play and get exercise, secure jobs that reduce the damaging stress of economic uncertainty, good schools in which to learn and grow, and safe neighborhoods in which to build thriving families and communities are joining doctors and medicines on the list of ingredients essential for good health. These conditions, which are called the social determinants of health, are often best addressed through local policies and programs.

Looking Ahead: Increasing Life Expectancy and Reducing Disparities

Building a thriving Los Angeles means fostering the conditions that allow all county residents—regardless of where they live—to enjoy good health and live to their full potential. Doing so requires a commitment to eliminating the persistent inequities in health outcomes that start at the very beginning of life and continue across the life span, culminating in the dramatic life expectancy gaps discussed in this report. From birth onwards, outcomes differ both by race and ethnicity and by place: black babies are more than three times as likely as white babies to die before their first birthday in LA County, for example, and the low birth weight rate is 50 percent higher in the Antelope Valley than in the San Gabriel Valley.¹⁸ Understanding and addressing the root causes of these and other stark disparities must be a countywide priority.

The good news is that much can be—and already has been—done to improve population health in Los Angeles County. Efforts against leading causes of premature and largely preventable death—smoking, homicide, suicide, and traffic fatalities—are good examples of effective prevention in action.

Smoking. Although smoking rates have fallen sharply, smoking remains the leading cause of premature death in the United States, and one in every seven deaths annually in LA County is directly linked to cigarette smoking.¹⁹ California recently became the second state to raise the minimum age to purchase tobacco products from 18 to 21 and closed loopholes in smoke-free workplace and hotel lobby laws.²⁰ In tandem with these laws, the LA County Department of Public Health has expanded its smoking-cessation resources and services.²¹ Similar efforts are being led by the Long Beach and Pasadena health departments in their respective cities.

Homicide. Homicide is the second-leading cause of premature death in the county population as a whole and the leading cause among black and Latino young men and in parts of South Los Angeles.²² The Los Angeles County Department of Public Health is working with a large number of partners, such as the Sheriff's Department, the Department of Parks and Recreation, libraries, and community groups, to reduce the personal, family, and community trauma of violence. Youth and gang violence, intimate partner violence, and firearms are priorities.

Traffic fatalities. The county and the City of Los Angeles are implementing major initiatives, referred to as Vision Zero, to reduce traffic fatalities, the third-leading cause of premature death in the county population and the second-leading

One in every seven deaths annually in LA County is directly linked to cigarette smoking. cause of death for children and young adults aged 5–24 years.²³ Vision Zero is a commitment to eliminate all traffic deaths by 2025 that brings together transportation engineers, the police, policymakers, and others to make the streets safer for everyone, especially the most vulnerable road users—children, older adults, and people walking and biking.

Suicide. Suicide is the fifth-leading cause of premature death in the county and the fourth-leading cause for men. The Los Angeles County Department of Public Health is working with partners to educate the public that suicide is preventable, to reduce the stigma associated with seeking mental health care services, and to underscore the importance of limiting access to means of lethal self-harm, particularly guns and stockpiled medications. The LA City Council has enacted laws mandating the safe storage of guns and other commonsense measures that reduce access to firearms.

The Los Angeles County Department of Public Health and the Long Beach and Pasadena health departments also support a host of broader measures focused on making community environments healthier, such as initiatives to reduce pollution in highly impacted communities and to promote greater access to affordable and healthy food in communities with few healthy options. They are uniquely well placed to improve population health by fully integrating community health and prevention with medical care. The Los Angeles County Department of Public Health is also targeting stark health inequities; for instance, in partnership with community stakeholders, it has launched an initiative to reduce the high rate of infant mortality in the black population, an important contributor to the county's racial inequities in life expectancy.

In addition, other county departments as well as nonprofit organizations, foundations, policymakers, and the business community all have important roles to play in fostering health and well-being. Spearheading efforts to increase park access, as the County Department of Parks and Recreation is doing, paying living wages, supporting place-based initiatives, and organizing communities to fight for environmental justice are all ways a host of actors are contributing to improved population health in LA County.

A Portrait of Los Angeles County will explore these issues further as well as present and analyze life expectancy and other well-being data for many additional population groups, including major racial and ethnic groups (Asian, black, Latino, Native American, Native Hawaiian and other Pacific Islander, and white residents), the most populous Asian subgroups, women and men, and native- and foreign-born LA County residents.

To learn more about health in Los Angeles County, stay tuned for the report's release in November 2017!

Violence is the secondleading cause of premature death in the County.

Methodological Note

Most residents of Los Angeles County live in one of eighty-eight incorporated cities, ranging in population size from around four million residents in the City of LA to fewer than one hundred inhabitants in Vernon City. Together these cities account for nearly 90 percent of the county's total population. The vast majority of the remaining roughly one million residents live in fifty-three census-designated places in unincorporated areas of the county.

The analysis in this report includes life expectancy estimates for seventy-eight of the eighty-eight cities and for twenty-eight unincorporated census-designated places. The remaining cities and unincorporated places are not included in the analysis due to their small population size and the resulting lack of data necessary for reliable life expectancy estimates. Together, the included cities and unincorporated places account for 97 percent of the county's total population.

There is further breakdown of the City of LA into the thirty-five community plan areas, designated by the City of LA Department of City Planning, and the fifteen city council districts of the City of LA, each represented by an elected official.

The following cities and unincorporated areas are not included in this analysis because the population sizes were too small for reliable calculations:

Acton		Littlerock
Agua Du	lce	Marina del Rey
Alondra	Park	Mayflower Village
Avalon C	City	North El Monte
Bradbur	y City	Rolling Hills City
Charter	Oak	Rolling Hills Estates City
Desert V	ïew Highlands	Rose Hills
East Pas	adena	San Pasqual
Elizabet	h Lake	South Monrovia Island
Green Va	alley	South San Gabriel
Hasley C	Canyon	Topanga
Hidden H	Hills City	Val Verde
Industry	City	Vernon City
Irwindal	e City	West Athens
La Habra	a Heights City	West Rancho Dominguez
Ladera I	leights	Westlake Village City
Lake Hu	ghes	Willowbrook
Leona Va	alley	

Life expectancy at birth was calculated by Measure of America using data from the California Department of Public Health, Health Information and Research Section, Death Statistical Master File from 2010–2014 and population data from the US Census Bureau Population Estimates Program from 2010–2014. Population data for LA city council districts and community plan areas are custom tabulations obtained from the American Community Survey prepared by special arrangement with the US Census Bureau for this report.

Measure of America has calculated life expectancy based on life tables constructed using Chiang's II²⁴ method of abridged life tables. These abridged life tables aggregate death numerators and population denominators into age groups, rather than using single year of age as in complete life tables. These groups aggregate into ages under 1, 1–4, 5–9, 10–14......80–84, 85 and older. The upper age band is capped at 85 and over.

Age-specific mortality rates are used within the life table to calculate the probability of a death event at each age interval. These probabilities are then applied to a hypothetical population cohort of newborns (e0). Life expectancy at birth in a geographic area can be defined as an estimate of the average number of years a newborn baby would live if they experienced the particular area's age-specific mortality rates for that time period throughout their life.

Geographic areas with fewer than fifty thousand residents over the 2010–2014 period were deemed too small to accurately calculate a life expectancy estimate. The 95 percent confidence interval is used because it is the most widely accepted and is comparable to international standards.

Deaths were matched to census-designated places, public use microdata areas, LA city council districts, and LA community plan areas. These geographic regions were selected after consultations with local LA community groups, local agencies, and project stakeholders. By using the decedent's zip code of residence, the most complete subcounty geographic identifier included in the California Death Statistical Master File, we allocated the mortality data to each LA County subregion. Correspondence files matching zip codes to the geographic units used in this report were generated by Measure of America in-house and with the MABLE/Geocorr14: Geographic Correspondence Engine. Deaths of unknown age were allocated to age groups proportionally based on the known distribution of deaths by age group within each population. Geographic areas with fewer than fifty thousand residents over the 2010–2014 period were deemed too small to accurately calculate a life expectancy estimate.

Endnotes

- ¹ Life expectancy in this report is calculated using mortality data from the California Department of Public Health and population data from the US Census Bureau for 2010–2014.
- ² United Nations Development Programme: Human Development Reports.
- ³ Lewis and Burd-Sharps, *Portrait of California 2014–2015: California Human Development Report.*
- ⁴ Of course, living a long life is not the same as living a healthy life, but the two are not unrelated, and life expectancy at birth is a more readily understood indicator than measures that calculate years of healthy life, such as health-adjusted life expectancy.
- ⁵ Geographic areas studied in this report include 106 places of the US Census Bureau, called census-designated places. This group includes seventy-seven cities and twenty-nine unincorporated areas, which together encompass 97 percent of the total Los Angeles County population. See Methodological Note for further details.
- ⁶ Walnut Park and Walnut are two different places.

- ⁷ Los Angeles Times, "Mapping L.A." Walnut Park and Cudahy City.
- ⁸ McCabe, "Are Homeowners Better Citizens?"
- ⁹ Los Angeles Times, "Mapping L.A." Walnut Park and Cudahy City.
- ¹⁰ Sawhill, Generation Unbound: Drifting into Sex and Parenthood without Marriage.
- ¹¹ City of Cudahy Planning Department, "City of Cudahy 2010 General Plan."
- ¹² California Department of Public Health, Childhood Lead Poisoning Prevention Branch, "An Analysis of Children's Blood Lead Levels in the Area Around the Exide Site."
- ¹³ Hamra et al. "Outdoor Particulate Matter Exposure and Lung Cancer: A Systematic Review and Meta-Analysis."
- ¹⁴ Du et al. "Air Particulate Matter and Cardiovascular Disease: The Epidemiological, Biomedical and Clinical Evidence."
- ¹⁵ Khreis et al. "Exposure to Traffic-Related Air Pollution and Risk of Development of Childhood Asthma: A Systematic Review and Meta-analysis."

- ¹⁶ Environmental Protection Agency, "Environmental Justice Screening and Mapping Tool (Version 2017)"
- ¹⁷ See Measure of America's www. Data2Go.NYC.
- ¹⁸ Los Angeles County Department of Public Health, "Los Angeles County Infant Mortality, Preterm Births, and Birthweight 2009 Factsheet."
- ¹⁹ Los Angeles County Department of Public Health, "Adult Smoking on Decline, but Disparities Remain."
- ²⁰ American Lung Association, "State of Tobacco Control 2017: California Local Grades."
- ²¹ California Smokers' Helpline, "Free Quit Smoking Services."
- ²² Los Angeles County Department of Public Health, "Mortality in Los Angeles County 2010."

²³ Ibid.

²⁴ Chiang, The Life Table and Its Applications.

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The mission of the Los Angeles County Department of Public Health is to protect health, prevent disease and injury, and promote health and well-being for everyone in Los Angeles County. The Department provides

residents with protection from health threats, such as foodborne illnesses, natural and intentional disasters, toxic exposures, and preventable injury. Public Health also works to prevent chronic diseases, such as heart disease, cancer, and diabetes and their risk factors: poor nutrition, inadequate physical activity, and tobacco use. Measure of America (MOA), a nonprofit, nonpartisan project of the Social Science Research Council, provides easy-to-use yet methodologically sound tools for understanding the distribution of well-being in America and stimulating fact-based dialogue about issues we all care about: health, education, and living standards.

Through national and state reports, thematic briefs, and interactive websites such as DATA2GO.NYC, MOA aims to breathe life into numbers, using data to create compelling narratives that foster greater understanding of our shared challenges and greater support for people-centered policies.

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