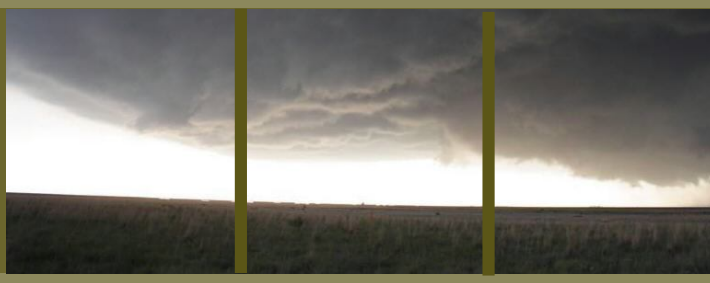
The Perfect Storm



Aging
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The Perfect Storm

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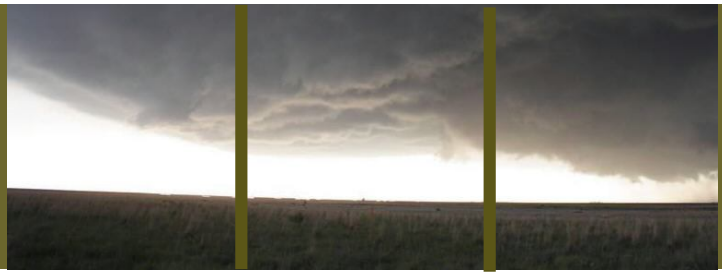


The "Perfect Storm"
Surviving and possibly even thriving will require a dramatically new framework of thinking. We have no choice.

The Community Service Council of Greater Tulsa, Inc. provides leadership in community-based planning and mobilization of resources to address health and human service needs in much of Eastern Oklahoma. During the past several months, the Council has analyzed a wide view of global, national and local developments, their interfacings with each other, and their possible impact on the future. This analysis will guide the Council's strategic thinking for itself and for the broader community.

The analysis reveals that the developments and forces in play are so powerful and numerous that it is likely a "perfect storm" effect may be imminent or possible upon us in some aspects. This conclusion led the Council to additional study which indicated research focused on an individual critical issue (e.g., education, labor force, aging, immigration, food and water supplies) commonly predict some version of a "perfect storm" of unprecedented challenges affecting their particular critical issue. Based on these predictions, the Council took a second, closer look at this storm effects, which will possibly be comprised of converging, individual perfect storms and concluded we may be in for a "super" perfect storm.

Understanding the magnitude and relevance of this phenomenon and its significant to the Council's work and the Tulsa community is the Council's most critical step in its long rang planning. The second step would be a new framework of thinking, based on the likely results of the anticipated perfect storm.

Aging

Global Perspective

According to "Financing Retirement: Preparing Today for the Challenges of Tomorrow" an article by the Honorable Constance A. Morella, U.S. Ambassador to the Organization for Economic Cooperation and Development (OECD), "globalization is bringing countless benefits to societies around the world."[1] Globalization has enabled people to increase life expectancy as well as the access to health care services. "Developed countries are themselves struggling to secure globalization's benefits, while the developing world is struggling to reform fast enough to raise living standards."[1] However, due to the growth of the global population at such an unprecedented rate both developed and undeveloped countries are noting difficulties surrounding the need to support and fund services for an aging population with decreasing number of available workers.

OECD "includes 30 of the most industrialized nations in the world, [where] challenges posed by demographic changes are well recognized."[1] Member nations share common contributions of population aging such as a decrease in the number of childbirths, the ability to lead healthier lives, and an increase in life expectancy. Most importantly, "the share of the population[,] aged 65 years and over[,] is projected nearly to double between 2000 and 2050. Unless fertility rates rise, future gains in longevity will continue to increase the 'old-age dependency ratio' -- the number of people of retirement age relative to the number of working age."[1] It is therefore paramount for member nations to focus not only on governmental reform but to encourage its residents to take an active role in planning for retirement.

World Economic and Social Survey 2007 Factsheet

It is necessary to point out that all references of "Ageing" have been altered to reflect the common U.S. spelling of "Aging".

As a result of decreased fertility and increased longevity, the populations of most countries are aging rapidly. Between 2005 and 2050, it is expected that an increase in the population aged 60 years or over will account for about half of the total growth in world population.

Continued population aging in future decades is expected and even inevitable, as it will be driven mostly by changes in fertility, mortality and migration that have already occurred.

Different regions of the world are at different stages in the process of population aging. The proportion of older persons in the developed countries (21%) is currently much higher than that of developing countries (8%). However, even though the oldest populations are found in developed countries and countries with economies in transition, a majority of older persons globally live in developing countries (63%in 2005).

Population aging will occur more rapidly in developing countries in future decades than it did in developed countries and in countries with economies in transition. As a consequence, the world's population of older persons will increasingly be concentrated in developing countries. By 2050, it is expected that 79% of those aged 60 years or over will live in developing countries.

Unlike other developing regions, Africa is expected to retain a relatively youthful population well into the twenty-first century. In 2005, 41% of Africa's population was under age 15, whereas only 5% was aged 60 or over. By 2050, the proportion of children will decrease to 29%, while that of older persons will increase to 10%. The [labor] force is itself aging. For the world as a whole in 2005, less than one- fifth of the working-age population (aged 15-64) were older workers (aged 50-64). This proportion is expected to grow to more than one-fourth by 2050. For the developed countries, those aged 50 or over are expected to make up almost one-third of the working-age population by 2050.

A notable aspect of population aging is the progressive demographic aging of the older population itself. At the global level, the most rapidly growing age group consists of persons aged 80 or over. Although this age group now accounts for less than 1.5 per cent of the total world population, it is expected to more than quadruple over the next four decades (from less than 90 million in 2005 to almost 400 million in 2050).

Life expectancy at birth increased worldwide by almost 18 years between 1950 and 2005. In most countries, reductions in mortality have been greater for females than for males. For the world as a whole, the female advantage in life expectancy at birth has increased from 2.8 years in 1950 to 4.5 years in 2005.

Because women live longer than men, women constitute the majority of older persons in almost all countries. Furthermore, [… female numbers… increase] markedly with age. Worldwide, women account for 55% of the population aged 60 years or over and outnumber men by about 70 million. Among those aged 80 years or over, women are nearly twice as numerous as men, accounting for 65% of the population in this age group.

At the global level, the total dependency ratio — the number of children (aged 0-14) plus older persons (aged 65 or over) per one hundred persons in the working-age population (aged 15-64) — is projected to decline slightly in the next two decades (from 55 in 2005 to 53 in 2025) and then to begin a steady increase (to 57 by 2050). The increase in the dependency ratio after 2025 will be due entirely to an increasing population of older persons, as the population of children will stop growing.

In […] developed countries, the total dependency ratio is projected to increase steadily in future decades (from 49 in 2005 to 72 in 2050). In [these] developing countries, the total dependency ratio is expected to change only slightly over the same period (from 57 in 2005 to 55 in 2050), since the growth in the population aged 65 or over will be balanced almost exactly by a decline in the population aged 0-14.

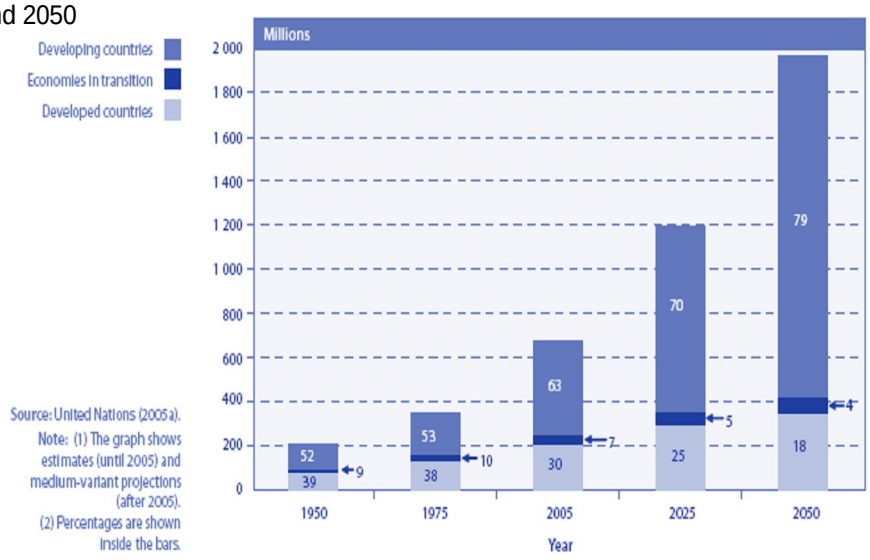
Global Presentation

The *World Economic and Social Survey 2007* report offers a comprehensive view of both challenges and opportunities associated with aging populations.[1] In modern society, "improvements in nutrition, sanitation, medicine, health care, education, knowledge and economic well-being in general have made it possible for people to live longer."[2] The aging of the world population forces many difficult decisions onto policy makers. Both developed and developing countries have similar concerns; implications of global population aging, older persons confronted with modern societal views and the shift away from traditional household structures, overall financial impacts of aging and "old-age income security", as well as "health and long-term care systems for ageing societies."[2]

Definition on Aging

There is no clear definition for old age; old age is not identifiable by one specific number. "Old age, then, cannot be defined exactly because the concept does not have the same meaning in all societies."[2] It is important to remember, however, population aging "as a process of physiologic deterioration that gradually impairs the capacity of people to function socially constitutes a continuum that requires multiple development responses."[2] Developed countries are currently experiencing the third stage of the "demographic transition"—generally "reached after lengthy periods of fertility and mortality decline—the proportion of both children and adults of working-age decline and only the proportion of older persons rises."[2] Concurrently, evidence suggests that most of the global aging population reside in developing regions. (Figure 1) "In 2005, 63% of the world's population aged 60 years or over lived in developing countries. By 2050, 79% of the world's older population, amounting to nearly 1.6 billion people, will reside in these countries."[2] Another characteristic of world aging is a growing number of the oldest old. "In most countries, the population aged 80 years or over is growing more rapidly than other segments of the older population. The world population aged 60 years or over is expected to nearly triple between 2005 and 2050, whereas the population aged 80 years or over is projected to increase by a factor of 4.5 over the same time period."[2]

Figure 1. Size and distribution of world population aged 60 years or over by groups of countries, 1950, 1975, 2005, 2025 and 2050



Source: United Nations, http://www.un.org/esa/policy/wess/wess2007files/chap2.pdf

Review of statistical data presented one may deduce that global aging is both progressive and inevitable. "These observations suggest that trends in the dependency ratios considered here are merely indicative of the constraints that a society may face as its population ages and unprecedented changes occur in the size of key age groups."[2] In short, a key question is: *will the world economy be able to sustain production while the number of dependants per worker increases?* "Figure 2 shows the value of the three dependency rations from 1950 to 2050 for the world, the developed and developing countries and the countries with economies in transition. The total dependency ratio for the world as a whole had increased from 65 dependants per 100 persons aged 15-64 in 1950, to 74 in 1975[…] Between 1975 and 2005, the total dependency ratio declined from 74 to 55 dependants per 100 persons of working age […] This decline is expected to come to a halt in the coming decade and then to reverse itself, so that the total dependency ratio is projected to be 53 in 2025 and to reach 57 by 2050. This projected increase in the total dependency ratio is due entirely to rising dependency at older ages."[2]

Figure 2. Trends in three types of dependency ratio for the world and groups of countries, 1950-2050

Source: United Nations, http://www.un.org/esa/policy/wess/wess2007files/chap2.pdf

Workforce and Aging

As mentioned, a key aspect of world aging is the fact that the workforce is itself aging. "For the world as a whole, the proportion of those aged 50 years or over within the population aged 15-64[, has] remained stable in recent decades, at about 17% between 1975 and 2005. The weight of this age group is projected to grow rapidly in the future, rising to 27.1% in 2050."[2] Modern society must as a whole recognize that, with aging workers and without adequate replacement workers, it will be difficult for the economy to sustain the demands of the older age population.

> *The social environment within which people grow older is rapidly changing. The size of families is decreasing, the role of extended families is diminishing, and perceptions of intergenerational support and caring for older persons are rapidly changing.*[2]

Also, while the world becomes industrialized, opportunities for women improve. Transportation has allowed workers to migrate both internally and internationally. These changes challenge "traditional concepts of intergenerational solidarity as ensuring the provision of care and support to older persons [… and provoke] three areas that require better policy responses:

> [1] *improving the conditions of housing and living arrangements for the [older adults];*
> [2] *promoting empowerment and political participation of older people; and*
> [3] *improving the legal framework and social awareness so as to protect their human rights.*[2]

Developed countries are realizing that more older persons are living with a spouse or alone, resulting increases of formalized care options via long-term care, including in-home services and institutional options. At the same time, developing regions must face "new demands with respect to meeting the specific needs of an [aging] population […]in competition with the demand for the resources needed to extend the coverage of the most basic services and infrastructure."[2] Here, a balance between basic needs services (clean water, housing) and aging related services must be found.

Health, Healthcare, and Aging

It is important to realize that challenges present opportunities to begin dialogue; countries must establish methods to review and to update current health service structures in order to meet the needs of developing countries research and findings ought to be incorporated or applied to balance demands for medical services as well as specialized needs for the aging. As the world population reaps the benefits of globalization, aging societies are also experiencing "an epidemiological transition from the predominance of infectious diseases to the predominance of chronic diseases."[2] Developed regions are enjoying increased life expectancy accompanied by "compression of morbidity". Populations rapidly aging are forcing governments around the world to evaluate and to review health care services. Developing countries are faced with even greater difficulties in attempts to address the needs of its older residents. Some countries are still battling basic necessities such "as sanitation, clean water, better nutrition […while also attempting to lower rates] of the incidence of HIV/AIDS and tuberculosis. While grappling with these challenges, which largely impact upon the younger generation, developing countries are also confronting rapid population [aging], which is leading to greater demands for health-care services by older persons."[2]

These findings support the research on challenges population aging bring to both developed and developing countries. Global aging may have attributed to an increase in health care expenditures; however, it "is not necessarily the most significant cost-driver[.] By itself, health care costs associated with aging's impact would be reflected in no more than a few percentage points of GDP. Indeed, the experience of many countries suggests that changes in health-seeking [behaviors], in productivity in the health sector, in prices of pharmaceuticals and medical care services and in health policies [remain…] significant cost-drivers."[2] Some countries have taken steps to address potential funding issues associated with population aging.

> *Germany established a new system of statutory long-term care insurance in 1995-1996[…] and Singapore formulated a family based saving account scheme, called Medisave, in 1983.*
> *[…]The establishment of a medical savings account scheme to finance acute care for those over age 65 has been proposed in Hong Kong SAR. […]*[2]

The *Survey* "argued that population [aging] is most likely to affect the health-care system in two ways[:]

> *First, [by way of] the increase in the total number of cases of chronic illness and the larger number of persons with disabilities […requiring] large shifts in health-care inputs and the acquisition by health-care professionals and workers of new skills. As noted […], per capita health expenditures on older persons in developing countries are significantly lower than those in developed countries, partly reflecting the shortage of access to the nursing, palliative care and more intensive medical treatment that are widely available to older persons in developed countries. It is suggested that developing countries need to expand such health-care services for older persons and to expand access through a combination of new tax sources and public pensions so as to cover high medical costs at older ages.*[2]

The second item of influence involves "the concern over how to provide long-term care for those whose health conditions are irreversible. The challenge is to find solutions that preserve the dignity and independence of those who need care, while allowing them to maintain contact with a familiar environment and not to be fearful of the consequences of entering long-term care, such as the loss of their house or other assets.

Caregiving

Informal care for an aging population, sometimes referred to as "natural or caregiver supports." Within a traditional family structure across most cultures, the role of women, has been to provide much of the care for aging family members. At the same time, and in relationship to workforce concerns discussed earlier, women are also the dominant sex in the demographics of aging simply because women continue to live longer than men. The public must be educated on the significant impact population aging has had on diverse cultures and in relationship to the phenomena of informal care for older persons. The number of children per family is also declining in many parts of the world adding to the challenge for most developing countries to maintain traditional forms of informal and long-term care arrangements provided by family or friends of older persons in their community."[2]

Cost and Cost Containment in an Aging Society

Countries must note that because modern society is evolving—to provide for the needs of the older population while keeping positive traditions—planning is paramount. How much will population aging cost? According to United Nations Economic and Social Council,

> *Projections are based on, among other things, the recent trends of epidemiological patters and per capita health-care costs by age and sex, together with information on health cost inflation, public expenditures on preventive care and collective health. Several studies show that non-demographic factors have at least as significant an impact on future health expenditure as the demographic factors. The non-demographic factors include medical price inflation, the productivity of the health sector as a whole and new technologies and pharmaceuticals. It has been noted [...], however, that these non-demographic factors are also sources of uncertainties in all the projections.*[2]

It is with certainty that population aging will impact overall health care spending. On the other hand, must the older population consume a major or even an uncontrollable portion of a country's health care expenditures? United Nations Economic and Social Council states that:

> *What the projections into the future and the recent trends show is that population ageing will not only alter the composition of health-care spending by age, but also require the health system to introduce or to strengthen, if they are already in place, certain types of medical and long-term care services so as to cope with the increasing number of cases of chronic illness and disabilities.*[2]

In short, prevention is often cheaper than drastic medical treatments necessary to treat chronic illnesses resulting from long-term use of tobacco, alcohol abuse, or even symptoms as a result of obesity.

Medical Personnel

Concomitantly, the demand for medical personnel is also increasing. The delicate balance exists between finding ways to provide services to an aging population while also meeting the desires of the older persons and their family members. The concern for developing countries is not to educate its working class only to lose workers due to the "brain drain of skilled medical staff" as workers shift to developed countries' to meet the need for increased medical services and service providers. The *World Economic and Social Survey* (2007) suggests that "developed countries should expand their teaching facilities in order to train domestic medical students and also students from developing countries."[2] The success of this approach depends on countries' willingness to work cooperatively in order to guarantee an overall increase in the number of medical service personnel to meet the demands of the global aging population.

An American Perspective

> *The National Institute on Aging (NIA), part of the National Institutes of Health (NIH) at the United States Department of Health and Human Services, leads[…] Federal research[…]to increase our understanding of the nature and implications of aging[…]to find ways to extend the health […and our] active years of life.*[3]

Population aging impacts modern society in an unprecedented manner. As the working class move toward retirement, certain changes are recognized by "individuals, families, governments, and private-sector organizations as they grapple with questions related to health care, housing, social security, work and retirement, caregiving, and the burden of disease and disability."[3]

Preventive Action for an Aging Society in the United States

How will the United States address these concerns? According to *The State of Aging and Health in America 2004* report

> *[M]ore Americans are living longer, and the proportion of the U.S. population that is age 65 or older is growing rapidly. Life expectancy increased dramatically during the past century, from 47 years for Americans born in 1900 to 77 years for those born in 2001.*[4]

Various factors contributed to this shift, specifically, "improved medical care and prevention efforts."[4] Such factors "have also produced a major shift in the leading causes of death in the United States in the past century, from infectious diseases and acute illnesses to chronic diseases and degenerative illnesses."[4] Fortunately, chronic diseases are manageable with preventive care and even though "the risk of disease and disability clearly increases with age, poor health is not an inevitable consequence of aging."[4] It is imperative, therefore, "to assess the health status of the growing number of older Americans and to make recommendations to improve the mental and physical health of all Americans in their later years."[4]

Two Key Reasons for Increased American Lifespan

To better understand the health status of our nation's older adults, we again note the progress of medical services and remind readers of significant improvements in population education. Both factors "have contributed to dramatic increases in life expectancy in the United States over the past century."[5] Advancements in medical care have improved quality of life for individuals of all age groups. And while successful treatments decreased the rate of mortality "from infectious diseases and acute illnesses", this shift also creates conditions such as "chronic diseases and degenerative illnesses."[5] Approximately "80% of older Americans are living with at least one chronic condition."[5] In summary, increased life expectancy due to improved medical opportunities reducing infant mortality while increasing chronic conditions, along with the development of a more educated people, resulted in "longer life spans and aging baby boomers", both contributing to the doubling of "the population of Americans aged 65 and older during the next 25 years."[5]

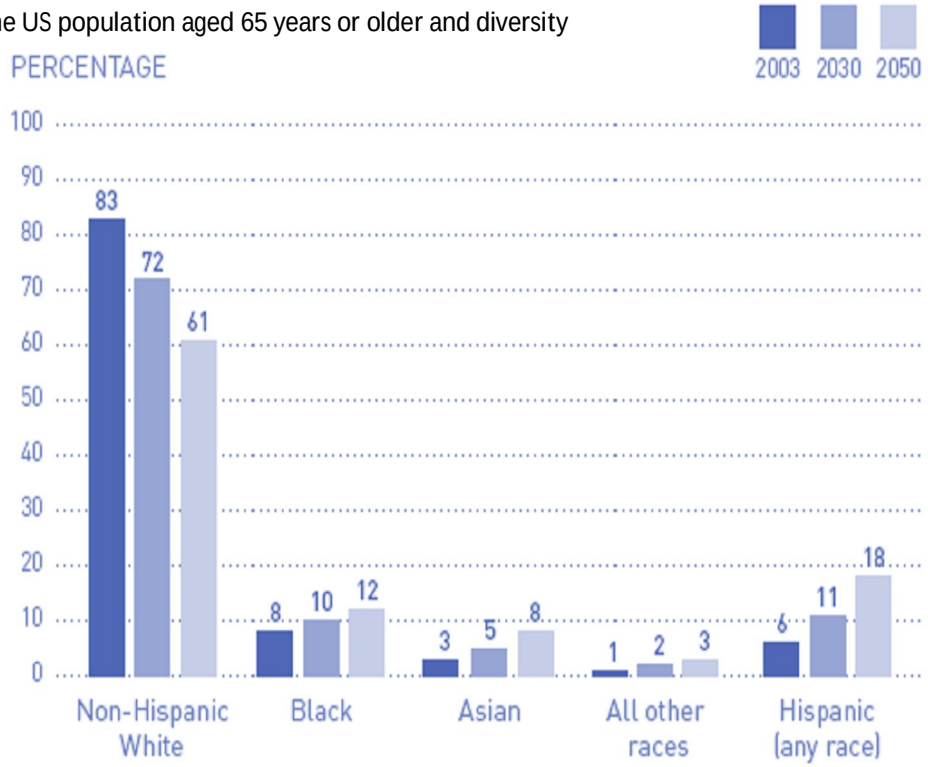
Race and Ethnicity in Relationship to Aging in America

> *By 2030, there will be 71 million American older adults accounting for roughly 20% of the U.S.population.*[5]

The American older population is also "more racially and ethnically diverse."[5] Evidence shows that "the health status of racial and ethnic minorities lags far behind that of non-minority populations."[5]

> *In 2003, 83% of older adults in the United States were non-Hispanic white; 8% were non-Hispanic black; 6% were Hispanic; and 3% were Asian. By 2030, the changing face of older adults in the United States will be evident: only 72% of this population will be non-Hispanic white; 11% will be Hispanic; 10% will be Black; and 5% will be Asian.*[5] (Figure 3)

Figure 3. The US population aged 65 years or older and diversity



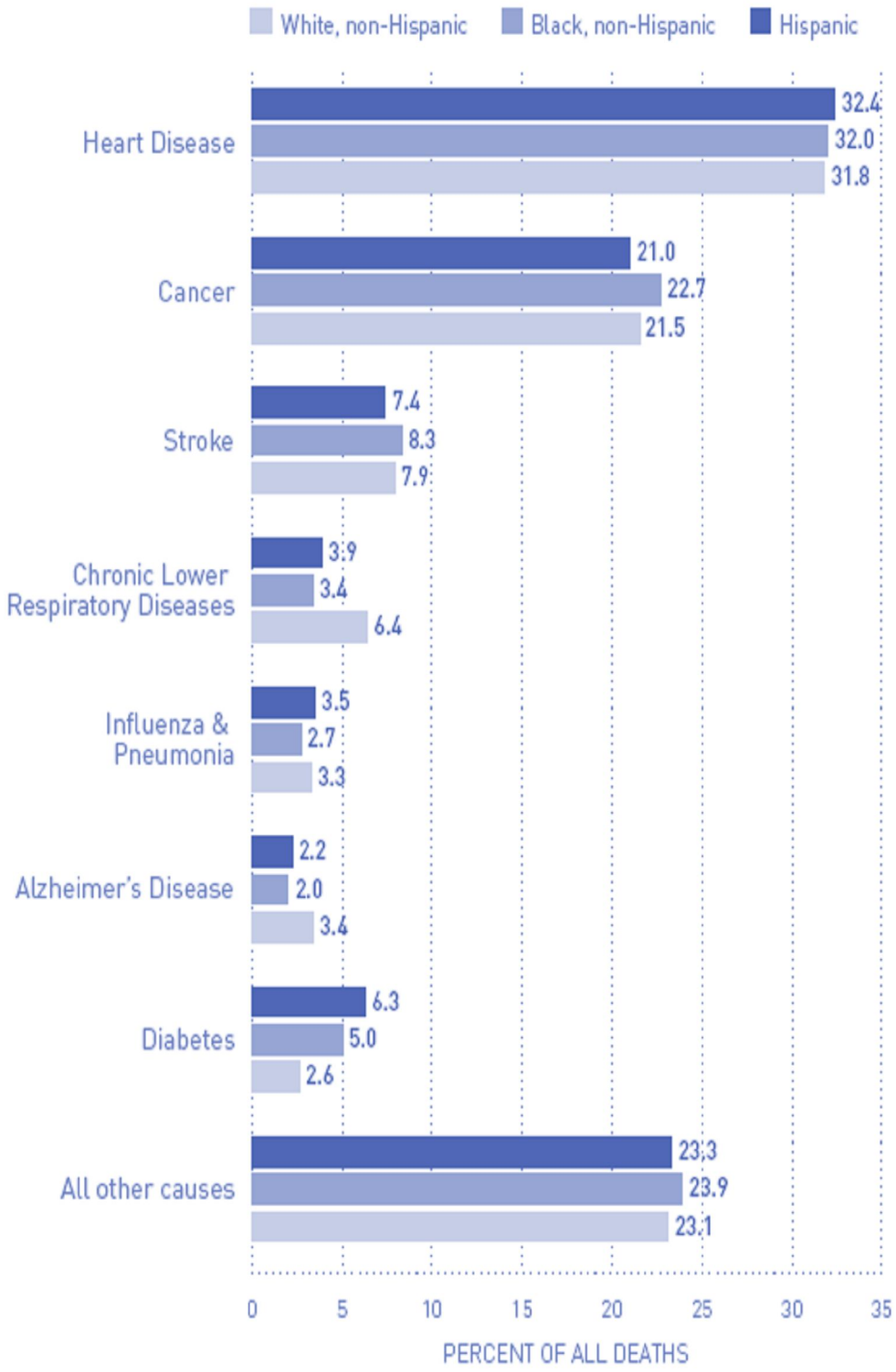
Source: Centers for Disease Control and Prevention, *The State of Aging and Health in America, 2007*. Retrieved from http://www.cdc.gov/aging/pdf/saha_2007.pdf.

Chronic diseases and old age disabilities require long-term health care services and therefore funding. According to *The State of Aging and Health in America* (2007) publication,

> *The cost of providing health care for an older American is three to five times greater than the cost for someone younger than 65. As a result, by 2030, the nation's health care spending is projected to increase by 25% due to these demographic shifts.*[5]

Preventive measures may provide a financial incentive for American taxpayers. "Three behaviors—smoking, poor diet, and physical inactivity—were the root causes of almost 35% of U.S. deaths in 2000. These behaviors are risk factors that often underlie the development of the nation's leading chronic disease killers: heart disease, cancer, stroke, and diabetes."[5] (Figure 4)

Figure 4 Chronic disease was the leading cause of death in 2002



Source: Centers for Disease Control and Prevention, *The State of Aging and Health in America, 2007*. Retrieved from http://www.cdc.gov/aging/pdf/saha_2007.pdf.

Prevention: Services and Behaviors

The aforementioned leading causes of death are generally preventable behaviors. "Adopting healthier behaviors, such as engaging in regular physical activity, eating a healthy diet, leading a tobacco-free lifestyle, and getting regular health screenings (for example, mammograms and colonoscopies) can dramatically reduce a person's risk for most chronic diseases, including the leading causes of death."[5] Our already expensive health care costs will be affected by the increasing number of Americans approaching retirement age. "Currently, more than two-thirds of health care costs are for treating chronic illnesses; among older Americans, almost 95% of health care expenditures is for chronic diseases."[5] To further demonstrate the importance of prevention it is estimated "[b]y 2030, health care spending will increase by 25% largely because the population will be older, without taking into account inflation or the higher costs of new technologies. Medicare spending has grown about nine-fold in the past two decades, from $37 billion in 1980 to $336 billion in 2005."[5]

Summary on American Aging

To summarize, it is inevitable that the United States' population is aging. By 2030 the U.S. aging profile is projected as:

> *[O]ne out of every five people in the nation will be an older adult. The fastest growing segment of America's aging population includes those people over the age of 85 who are most likely to need the support of family, friends and the community to remain living independently.*[6]

Most older adults prefer to remain in their own homes. This preference presents new challenges associated with "the delivery of local services such as health care, recreation, housing, transportation, public safety, employment and education."[6] Modernized American communities allow people to travel for work while the working class is no longer bound by transportation limitations. People are now able to move to diverse communities to find better employment, posing a potential challenge for aging populations. When families are no longer as close as they were a century ago, aging adults are unable to call upon adult children for immediate assistance. Absence of "natural supports" will create the need for formal services and stress an already aging workforce. Because appropriate and natural supports "have a major impact on the quality of life"[6] after an older adult retires, States must also take advantage of "opportunities as the nation's communities realize the largest population of educated and skilled older adults in its history."[6]

Solutions to Healthy Aging in the US.

The Maturing of America – Getting Communities on Track for an Aging Population project was instituted to assist governments at the local level to evaluate services available in order to provide improved services to their aging communities. Data compiled from numerous agencies within its governing communities in order to:

- *Determine their "aging readiness" to provide programs, policies and services that address the needs of older adults and their caregivers;*
- *To ensure that their communities are "livable" for persons of all ages; and*
- *To harness the talent, wisdom and experience of older adults to contribute to the community at large.*[6]

The results from the *MOA* provide evidence that Americans who require services and supports must have options available as well as "a real choice about how they get their care."[7] The *MOA* "survey found that only 46% of American communities have begun to address the needs of the rapidly increasing aging population. The survey results show that although many communities have some programs to address the needs of older adults, few have undertaken a comprehensive assessment to make their communities 'elder friendly' or livable communities for all ages."[6]

Services at the local level often include general health and meal programs. However, these basic services do not "promote the quality of life and the ability of older adults to live independently and contribute to their communities for as long as possible."[6] *MOA* identified services which promote healthy aging like:

> *job retraining, flextime and other job accommodations; home chore services, home modification and senior-friendly housing options, tax relief, roadway redesign or public transportation assistance as well as volunteer opportunities targeted to older adults.*[6]

These suggestions do not translate into overwhelming a community's budget for one group. For example, modifying street signs and road markings benefit older adults and also contribute to the quality of life for the rest of the community. Updating street signs with larger words will assist every driver and all pedestrians see the signage. Maintaining cross-walks and increasing the timing at road crossings helps older residents and parents with children. In short, small adjustments offer improvements in daily living activities and increase the quality of life for all ages. Local governments must pay closer attention to the makeup of its community, particularly as its citizens age, in order to better meet the evolving needs of diversity and culture, including large numbers of aging adults.

Nutrition and Aging

Nutrition is necessary to sustain life. "Adequate nutrition is critical to healthy functioning and to quality of life."[6] Proper nutrition is required for both mental and physical activities. Americans often neglect nutrition due to habit, work and family responsibilities. Yet most American adults understand that forgoing healthful food choices simply leads to chronic diseases such as heart disease, cancer, stroke, and diabetes. In addition, a growing number of older adults need assistance in food preparation.

> *Although 3.2 million older Americans participate in senior meal programs each year, an estimate 4 million more older adults in the United States suffer from food insecurity or the inability to afford, prepare or gain access to food.*[6]

Communities have an obligation to provide nutritional sustenance to its members. Additionally, when isolation becomes a problem for an aging adult, necessary socialization is enhanced with supports for preparation or delivered meals. Local government must invest in diverse means to assure access to adequate nutrition and food preparation.[6]

Transportation and Housing

Transportation is necessary for persons of all ages. Transportation "connects individuals to the places where they can fulfill their basic needs – the grocery store for food, medical facilities for health care, the worksite for employment, friends' and families' homes, recreation sites for social interaction, and houses of worship for spiritual sustenance."[6]

Another essential policy that local government must attend to involves housing.

> *Although the myth persists that older adults move en masse to the Sunbelt states once they retire, the overwhelming evidence is that older adults prefer to 'age in place' in their existing homes and communities.*[6]

The Maturing of America survey "noted that only 5% of older adults age 55 and older change residences in a given year compared to 17% of the population under 55. Almost half of those older adults who do move remain in the same county."[6]

In regard to transportation and housing, it is fair to surmise that supports required by older adults are generally interconnected. Housing supports "will not be sufficient if residents lack transportation to [be able to…access] basic services such as medical [appointments], the pharmacy or [the] grocery store."[6]

As identified in *The Maturing of America – Getting Communities on Track for an Aging Population* publication,

> *The core values of Americans – autonomy and independence are reflected in the fact that most prefer and rely on the convenience of their own automobile to maintain their access to the outside world. By 2030, 25% of licensed drivers in the United States will be over the age of 65. As individuals age, physical limitations may impede their ability to drive. However, there are community -based enhancements to assist older drivers to overcome many of these limitations. Modifications to help make older drivers safer drivers range from older driver assessment and retraining programs to road improvements, such as larger print signs, dedicated left-turn lanes or signal arrows, and grooved lane markings.*[6]

In addition, the make-up of today's communities prevent most persons from walking to desired destinations.

> *In suburban and rural areas, which are home to nearly 80% of the older population, destinations are often too far to walk, public transportation is poor or unavailable, taxi service is costly and special services can be limited.*[6]

Policymakers must be wary that without alternative means to travel, laws which place limitations on an older driver will also contribute to increased numbers of isolated older adults resulting in poor outcomes like self-neglect with increased health risks.

> *Transportation options are needed at the community level to help older drivers stay on the road for as long as possible and then, once they must limit their driving or can no longer drive at all, to provide a range of transportation options to ensure that older adults can maintain their mobility and independence.*[6]

For these reasons, local governments must re-assess current transportation options. Factors to review should include availability, accessibility, affordability, and adaptability. In conjunction with transportation needs assessment, local governments should also correlate assessments with housing supports and current

> *land use plans, zoning ordinances and building codes to promote the development of a range of housing options that meet the needs of an aging population – from active adult communities, smaller 'universally designed' multi-unit dwellings, congregate housing developments, assisted living facilities, continuing care retirement complexes as well as shared housing options such as accessory dwelling units (i.e. independent housing units within existing single-family homes or an attached or separate cottage on the lot of existing homes).*[6]

Policies associated with housing improvements, living options, social services, and available modes of transportation are essential in order to meet the needs of the aging population.

As employment opportunities expand so must communities' plans to cater to the needs of their older citizens. Family members are no longer just a phone call away or just a house or two down the street. *The Maturing of America* survey identified among various issues *that older adults and their caregivers confront is*

> *navigating a maze of fragmented systems to access these services. Since older adults and caregivers typically do not seek out these services until they are in or near a crisis situation, it is important that they can readily access the information they need in a 'one-stop shop'manner.*[6]

Single Point of Entry

In order for local communities to prepare for the range of needs for older adults, it is necessary to "promote the development of a single point of entry for information and access to all aging services."[6] Communities should work together at all levels, including city, county, and state arenas. Community involvement and awareness are paramount to assure "that older individuals access both informal and formal supports for aging in place, a less expensive and more successful way to ensure healthy aging."[6] Communities must review existing laws and statutes in concert with baby boomers and older citizens. "Many communities are reaching out to older adults, either periodically or routinely, to engage them in discussions about changing existing services and policies or developing new programs that will enhance their quality of life."[6]

Aging in Place—an Example

What happens to a 70 something member of a community without family members nearby or any family at all after an accident requiring medical attention? "About 10% of Americans 65 and older live in nursing homes, assisted living or residential care settings. But that number rises dramatically among people who reach their 80s or 90s[…]The number of people 65 and older is expected to double in the next 2 1/2 decades as 78 million baby boomers, the oldest of whom are turning 62 this year, enter their golden years."[10] In a Los Angeles article by Shari Roan (2008) "Homeward bound" Claire Soroko in her 70s injured herself which resulted in hospitalization. Soroko does not have family close and was quoted "'my daughter and son-in-law are very busy. I couldn't ask them to come and stay with me.'"[10] This sentiment and others alike by individuals 65 and older are prevalent due to our 21st century lifestyle - marked by increased mobility due to professional and even personal demands of the working age.

Certain accidents common among older adults often lead to an end to independent living. "Twenty percent of falls among elderly people require medical attention, and serious injuries, such as hip fractures, often require nursing-home care."[10] Residents of Park La Brea like many of their American counterparts demand and express "their desire to avoid nursing homes or assisted living. And they now have a movement to back them up. Called 'aging in place,' it has a beautifully simple premise: Keep seniors safe, well-cared for – and in their homes."[10] What makes Park La Brea different from nursing facilities or assisted living service providers? Claire Soroko contacted "LIFE (Living Independently in a Friendly Environment) office in building 49 in Park La Brea" when she was discharged from the hospital.[10] Soroko's recovery process was made simple because LIFE's "staff had lined up daily caregivers, transportation to doctor's visits and the hair salon, and visits from neighbors who brought meals and encouragement."[10]

Sustaining Programs Such as LIFE

It is important to note that participation at all levels is paramount in order to ensure a program's success. "LIFE started in 2005 as a federally funded pilot project designed to see if such communities – called naturally occurring retirement communities – could help people remain in place as they age."[10] These communities often consists of large number of older adults with the main focus of assisting people 65 and older age in place—at home. "The programs are operated by a lead agency, often a nonprofit organization, but are directed and propelled by the community itself."[10] Volunteers from within such communities work with the lead agency and other residents to ensure active participation and are able to voice concerns as well in order to maintain services necessary "to help these seniors maintain their independence, safety and connection to the community as they age"[10].

Due to active involvement by residents of Park La Brea—"seniors have grown attached"; yet, "when it lost its federal funding last year, members worked together to save it, says Sally Miller, 75, a LIFE member who also volunteers in the office."[10] Residents of Park La Brea pulled together and collectively made contacts to legislators in attempts to seek funding. When people feel closer to the cause and that results affect them directly there is a sense of ownership. The LIFE "program survived and has received a fresh infusion of federal funding."[10] Park La Brea is no longer segmented and distant. LIFE enabled "a new sense of community and connectedness."[10]

An Oklahoma Perspective

Oklahoma must address a number of issues associated with its residents regarding healthy aging. According to *The State of Aging and Health in America 2007*, Oklahoma rarely achieved upper third ranking (top performing 33%) in the report's "State-by-State Report Card On Healthy Aging".[5] Several indicators push the state of Oklahoma to focus on health care screening and preventive care programs across the lifespan. The following examples illustrate some of the Oklahoma's challenges.

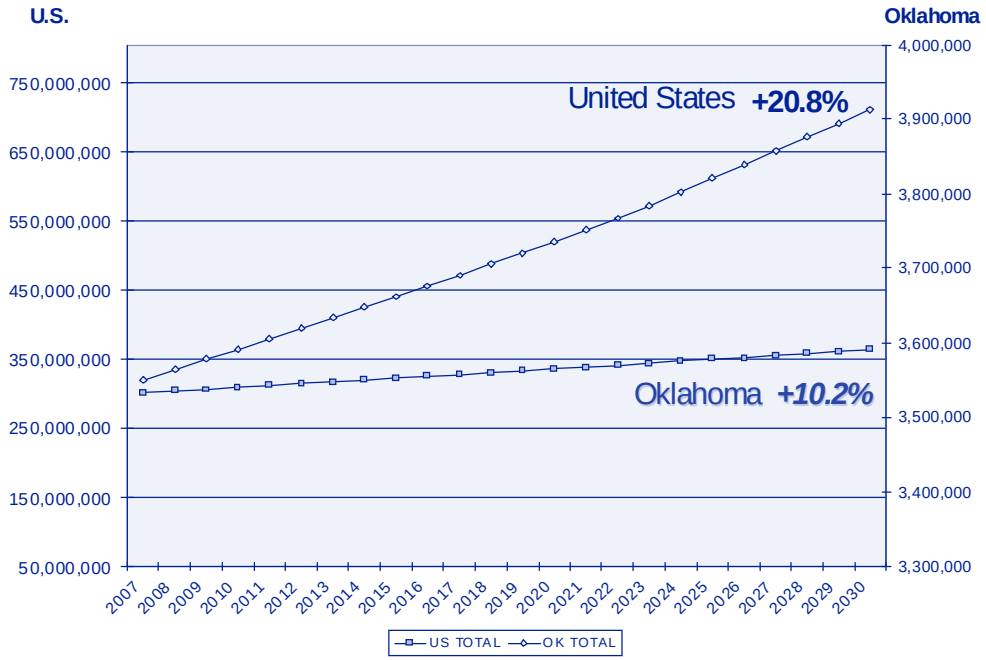
- *Oklahoma and unhealthy aging—disability*. Oklahoma received a lower third ranking (lowest performing 33%) in disability. Here, "[d]isability was defined on the basis of an affirmative response to either of the following two questions on the 2004 BRFSS: 'Are you limited in any way in any activities because of physical, mental, or emotional problems?' or 'Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special phone?'"[5]
- *Oklahoma and unhealthy aging—eating habits*. Under health behavior 'Eating [3] five servings of fruits and vegetables daily' the report card indicators and *Healthy People 2010* targets "At least 75% of people aged 2 years or older who consume at least two daily servings of fruit." and "At least 50% of people aged 2 years or older who consume at least three daily servings of vegetables, with at least one-third of these servings being dark green or orange vegetables."[5] Oklahoma ranked 50th which means performance in the lowest performing 33%.
- *Oklahoma and unhealthy aging—mammograms*. To continue, Oklahoma received a grade in the lower third when compared with other states in mammogram screening within the past two years; "At least 70% of women aged 40 years or older who had a mammogram within the past two years."[5] It is essential that Oklahoma improve from the lowest performing 33 % grade in up-to-date on selected preventive services for women; services included under preventive care and screening are influenza vaccine in the past year, ever had a pneumonia vaccine, and colorectal cancer screening. In order to prevent and to combat certain chronic diseases early diagnosis and treatment are required.
- *Oklahoma and unhealthy aging—cholesterol*. Oklahoma again received a grade in the lower third performance in the category of having cholesterol checked within the past five years.[5]
- *Oklahoma and unhealthy aging—cognitive disability*. Among older adults, it is mandatory that Oklahoma concentrate on improving conditions and behaviors that cause "cognitive decline"; conditions such as high blood pressure, elevated cholesterol, diabetes, overweight and obesity, smoking, and physical inactivity.[5]

Overall, these results serve as grim reminders that chronic diseases decrease the quality of life, increase the risk of disability, and contribute to increases in the cost of health care, alongside other economic costs, including reduction in workforce—all impacting our prosperity. Oklahomans must do better to prevent and amend chronic afflictions (high blood pressure, arthritis, coronary heart disease, any cancer, diabetes, and stroke).[5] As a community, we must actively promote and provide incentives for healthy behaviors such as nutrition, exercise, and methods to prevent as well as alleviate chronic diseases. We must look at promoting a culture which embraces preventive behaviors and open communication across the lifespan. By taking a lifespan preventive approach, Oklahoma will further overall population health and therefore, prosperity, creating the necessary commitment to preventive action. Prevention across the lifespan not only benefits those aging in place but ensures a significant investment in self-sufficiency and the general good of the community.

Plan of Action—Oklahoma

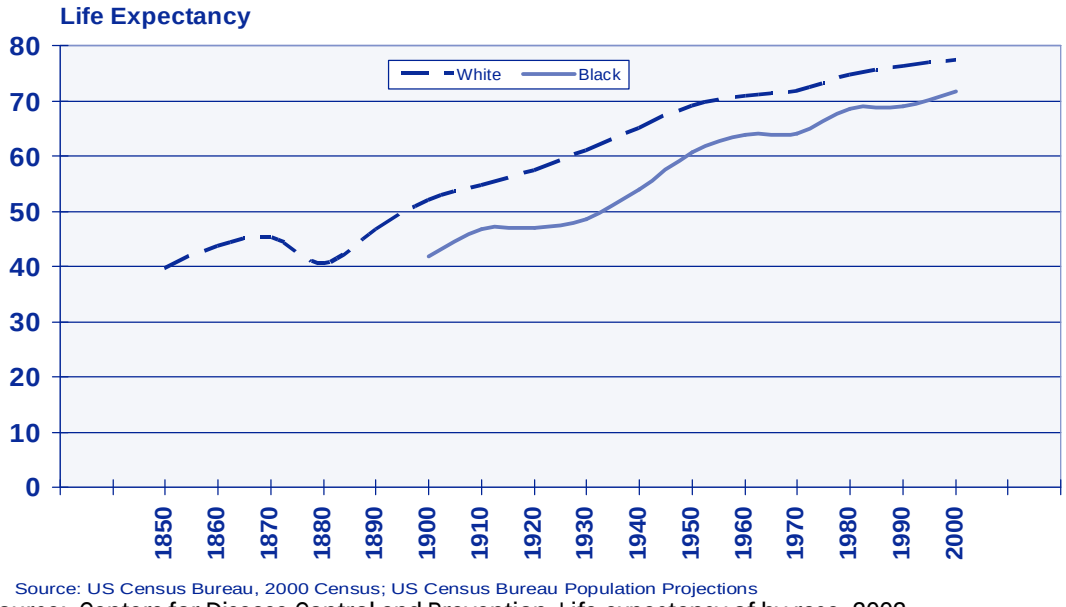
Oklahoma needs a plan to mark the way to lifespan prevention and healthy aging. Here the call is for a plan of action and one which ensures Oklahoma's commitment to healthy aging. According to the October 18, 2007 presentation by Dan Arthrell, Community Service Council of Greater Tulsa, in 2006, the state has 451,139 persons age 65 and over while the number of individuals age 85 and over is 65,571. (Figure 5)

Figure 5. Total population projections 2007-2030, US compared to Oklahoma by year



Such data reiterates the aging trends comparing Oklahomans with all Americans in aging and also living longer. (See figure 6)

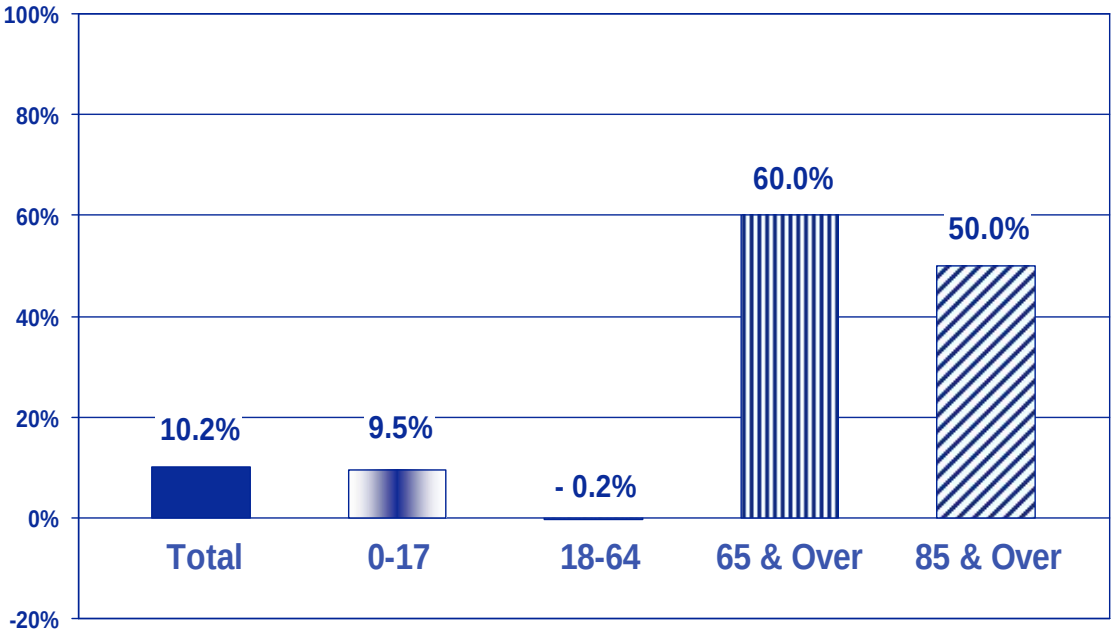
Figure 6. Life Expectancy of US Whites and Black 1850 to 2000



Source: Centers for Disease Control and Prevention, Life expectancy of by race, 2002

Oklahomans must also realize that even though the population growth projection (at + 10.2%) as a state is less than half of the total population projections for the U.S. (at + 20.8%) for the 2007-2030 time frame, this state has a fast increasing elder population. (Figure 7)

Figure 7. Percentage growth of aging population in Oklahoma, 2007 compared to 2030



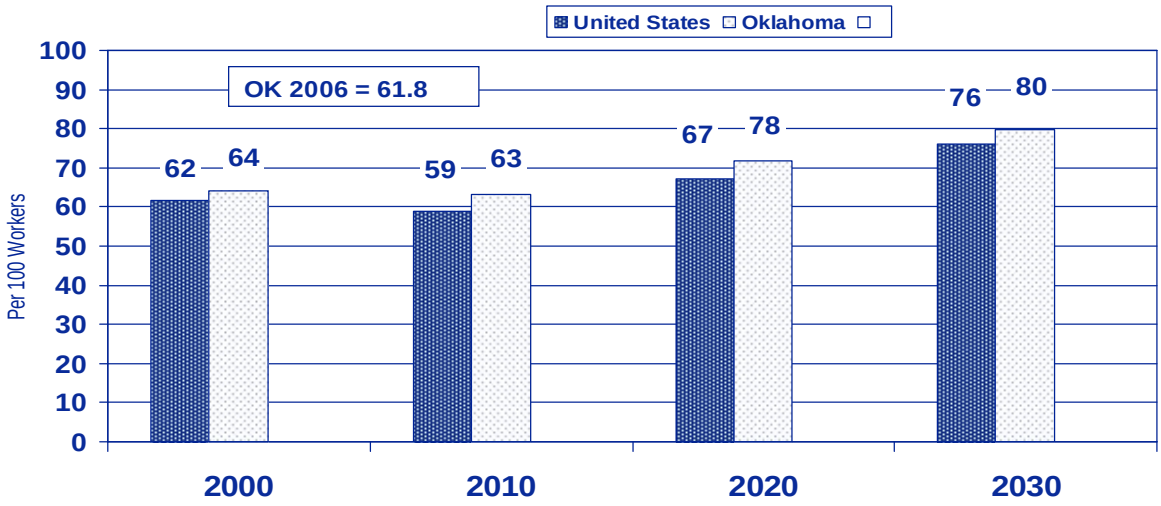
Source: US Census Bureau, Population estimates, 2008.

Plan Components for Oklahoma's Aging Trends

As we look to creating a plan, several areas require further examination in order to ensure appropriate supports for an aging population. Components have been discussed throughout this report and include: healthcare needs assessment looking at informal and formal supports (such as medical options, care giving options, financial supports, etc.), relevant cultural issues (such as ethnic and racial), best practices in housing and transportation, and most importantly preventive measures to mitigate poor outcomes associated with poor health and related costs.

It is crucial that residents of the state of Oklahoma explore the implications—positive and negative—that, by year 2030, one out of five Oklahomans will be 65 years and older. Within these implications, the state of Oklahoma must identify labor and employment trends for the future in order to assess available workers required to sustain the state's economy and an aging population. (Figure 8)

Figure 8. Age dependency ratio 2000 to 2030 for US and Oklahoma



Source: US Census Bureau, Population estimates, 2008.

Chronic conditions can diminish quality of life. On the other hand, life style changes incorporating improvements in nutrition, diet, exercise, and routine physical checkups will improve an individual's life, lower relevant costs to the person and the community, and mitigate the already burdened and diverse resources. Oklahomans need to participate and become proactive regarding the phenomenon of aging as it is changing in this era. Aging persons, family members, neighbors, and communities must work together to understand age-related concepts and possible impact on diverse aspects of life. Population aging should not warrant healthcare cost increases. In order to promote healthy aging and to decrease chronic illness hospitalizations, Oklahoma must address certain common causes of age related disability. Obesity contributes to health complications and "increases the risk of diabetes, heart diseases, stroke, hypertension, osteoarthritis, high cholesterol, cancer, and complications during surgery."[9]

Uninsured and Aging

Sister M. Therese Gottschalk, president and chief executive officer of the St. John Health System was quoted in April 20, 2008 Tulsa World article "Within our own state [Oklahoma], nearly one out of every five has no health insurance."[11] Why is this observation relevant to aging? "Oklahoma ranks above the national average in the number of uninsured; within a population of nearly 3.5 million people, more than 644,000 – about 18.5% – are without coverage. Nationally, 15.1% do not have health insurance."[11] When "women and men, and their families, have little ability to protect themselves financially in the event of a catastrophic illness or injury or, too often, even pay for a visit to a doctor's office"[11] due to lack of insurance the impact is transcended. Health service providers, hospitals, and clinics are not going to be able to sustain operation when individuals cannot pay or when funds are cut at the federal level.

To add emphasis, "the administration has proposed a $15-billion reduction in federal Medicaid payments over five years (other calculations place the reduction of payments to states at closer to $50 billion), and an astounding $178-billion cut to Medicare over the same period."[11] Health insurance ensures the sharing of risks within a community.

> *Budget cuts to – or the elimination of – these programs would only make the health-care problem worse. Not keeping Medicare, Medicaid and SCHIP* [State Children's Health Insurance Program] *at their present levels opens the door for more to join the ranks of the uninsured, and put additional financial burdens on the health-care facilities and physicians who care for them (Medicare and Medicaid already pay hospitals less than the actual cost of most services).*

Oklahoma must not forget "those in the middle, who for the most part work and have incomes above the poverty level"[11] in order to provide services for the aging while securing funds for existing programs "in an increasingly expensive medical health-care marketplace."[11]

Legislations to provide safety net and aging

Dr. Lynn Mitchell, Oklahoma State Medicaid director, stated that "the medical community has been uneasily observing the effects of Oklahoma's substantial uninsured population on our hospitals. Hospitals often serve as 'safety nets' for people who are uninsured or have low incomes; they do not turn patients away for health care or emergency treatment because they are unable to pay for it."[12]

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