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### Age-Friendly Communities

The world's population has been migrating from the countryside into cities since the nineteenth century. This migration has transformed our society from an agrarian society into an urban society. Another phenomena has been occurring over the past few decades. The increase of the median world population age. The urbanization of the world population combined with the aging world population is the cause of two historically significant demographic shifts which pose a double challenge to today's society. The World Health Organization (WHO) estimates that by the year 2040 more than 60% of the world's population will live in urban environments and more than 20% of that urban society will be over the age of 60. The WHO has also predicted the number of people aged 60 and over will double from 11% in 2006 to 22% by 2050. For the first time in history, globally the number of people age 60 and over are expected to exceed the number of children under the age of 15. Population ageing and urbanization are the culmination of successful human development and are the major challenges for this century. These two historic demographic shifts with the convergence of urbanization and an aging population present challenges and opportunities.

Global and national level organizations have identified and researched the challenges society faces from the aging and urbanizing population. Scholars from a variety of disciplines have, and are currently, researching the effects of and responses to the aging and urbanizing global population. In response to this double challenge of urbanization and an aging population the WHO has developed a program of Age-Friendly City Initiatives. These initiatives address not only the health sector of society but also go beyond and address the aspects of natural and built environment, social services and programs, cultural attitudes, equity and inclusion, all of which influence the degree to which aging populations can function and participate in society.

From the historical perspective of population health and wellbeing, René Dubos reminds us to stay in tune with nature and revere its power over our lives. Present thinking is also taking a holistic approach to the problem through such enterprises as Thriving Cities Group by proposing a new paradigm, although it can be argued it is not unlike Dubos' approach to man's health and wellbeing. The history of mankind tells us that the ills of our species arise from our failure to follow the laws of nature. It has been our lack of reverence for nature which brings on the suffering of man. The biological mechanisms of adaptation are supplemented in man by conscious social processes. Social adaptations have been the most influential determinants of man's fate throughout the history of mankind. In his work *Mirage of Health*, Dubos points out modern diseases differ from one place to another and vary with economic status and professional activities. The Navajo of the western US wanted only to live "in accord with the mountain soil, the pollen of all the plants, and other sacred things (p 5)" and the ancient Chinese sought a proper balance between the yin and the yang for good health and long life (p 10). However, the most relevant observation of Dubos to this research project is that "Exact sciences give correct answers to certain aspects of life problems, but very incomplete answers (279)."

Thriving Cities Group posit human ecology must be taken into consideration in order for our future urban society to thrive. We are living in the information/knowledge age. In the next four years there will be more data generated than in the history of the world. Institutions in our society must fight for survival through quantitative analysis supporting its fiscal viability. However little to no consideration is given to the institutions relevance to society. Society must approach this issue in a way which is inclusive of all the aspects which support a healthy society. The Thriving Cities Group of Charlottesville Virginia, promotes a new paradigm in the way we think about cities and how they can address the unique challenges of our growing urban and

aging society. Public space, policy, and programs must be designed to work together holistically to produce a positive outcome for all citizens. Similar challenges are faced by multiple members of a society, so why not work together collectively to collaborate on solutions which will benefit all. Each city must collaborate within its citizens to seek the best outcomes for its location, so, although collaboration is a powerful tool in seeking solutions to urban challenges, each city must work within its own boundaries to find the solutions which work best for that city. Cities can no longer be thought of merely as a means of production, but must be conceived of and rebuilt as a place where humans, all humans, can thrive. In order for the human species to not just survive but thrive, the way our cities are constructed physically, environmentally, and socially must be rethought. For some years there has been much consideration, research, and collaboration on the question of how our current cities can be converted into places where all inhabitants can thrive.

Social research has produced works such as Scharlach's book *Creating Aging-Friendly Communities* which focuses on the interface between individuals and their environments and how communities can enhance how individuals perceive their well-being. Scharlach references Rowe and Kahn study which offers a functional perspective on aging by positing three interrelated functional criteria for successful aging: "(a) avoidance of disease and disability; (b) maintenance of high levels of physical and cognitive functioning; and (c) active engagement in social and productive activities (p 15)." Scharlach goes on to say Holstein and Minkler see the functional perspective as tending to ignore cumulative advantage and disadvantage processes. They site that those who are "advantaged earlier in life are more likely to avoid disease and disability, while adversity earlier in life can make one more vulnerable to functional limitations in one's later years, regardless of individual choice or effort (p 17)." In addition "older adults' perceptions of what it means to age well generally include not only functional aspects of aging

but also a number of interpersonal and attitudinal factors not captured by a functional perspective (p 18).” “Existing research based on older adults’ perceptions of successful aging suggests six primary domains: physical health, cognitive functioning, psychological well-being, social relationships, spirituality, and financial security (p 21).” “Adaptive processes in later life differ from earlier adulthood in two ways: (a) physical, cognitive, social, and role changes of later life are likely to call forth adaptive processes that are less noticeable at other periods of life; and (b) adaptive processes themselves are apt to change in response to age-related changes in abilities and priorities (p 21).” From the functional, phenomenological, and adaptational perspectives on successful aging Scharlach proposes “an integrated model of aging embodied in six interrelated constructs: continuity, compensations, control, connections, contribution, and challenge (p 23).

A study presented by Hogan, Leyden, Conway, Goldberg, Walsh and McKenna-Plumley in the *Social Science & Medicine Journal* has shown the city environment impacts residents’ happiness differently depending on age. Young adults’ happiness is predicted more by access to cultural amenities or place, whereas older adults’ happiness is predicted more by good government services, or performance. Perceived health mediates the relationship between place, performance and happiness. Design and policy have significant impacts on health and happiness for all ages. Interestingly the authors of this study form a multidisciplinary approach including Psychology, Political Science, Sociology, History, Philosophy, and American Studies as well as crossing national borders.

In their article in the *Journal of the American Society on Aging*, Gonzales and Morrow-Howell state that although some communities’ initiatives specify in their mission statements “employment and civic engagement are important”, it is universally agreed that a focus on

housing, safety, transportation, healthcare, and support services (often referred to as infrastructure) is essential for an engaged older population. They argue that a focus on productive engagement, the “employment and civic engagement”, are also essential and communities must have programs aimed specifically at employment and volunteering.

The research by Burholt, Roberts, and Musselwhite in the UK has addressed the inclusion of older people in observational environmental assessment tools which have previously been unsuitable for use by all ages. Their development of the *Older People’s External Residential Assessment Tool (OPERAT)* has opened the door to including older people in assessing the suitability of external environments for people over 65 with different physical and cognitive capacities living in urban areas. Previous designs have largely excluded older people from the planning process. This model assesses environmental aesthetics, neighborhood disorder, and environmental stress. OPERAT can directly measure neighborhood features relevant to understanding their influence on health, and thus crucial issues for older people. The authors come from the fields of Social sciences and Gerontology at the Centre for Innovative Ageing in the College of Human and Health Sciences, Swansea University.

*Perspectives on the Role and Synergies of Architecture and Social and Built Environment in Enabling Active Healthy Aging* by Chrysiku, Rabnett, and Tziraki assesses the success of the built environment while acknowledging the gap between human science and architecture. The argument is that the educational process of architects does not include evidence-based guidelines or best practices for reference as well as lacking translational research across fields. Interestingly, this is also an implication of the Burholt study. Challenges presented by an aging population to individuals and society are complex and multilevel, and can be best addressed with

a multidisciplinary approach including architects, doctors, planners, and aging persons. They propose this can be accomplished through a blended learning curriculum. The authors are from the fields of architecture and gerontology.

The common thread tying the cited literature together is a multidisciplinary approach to the dual issues of our global aging and urbanizing population. The multidisciplinary model makes a holistic approach all the more accessible by the very nature of the collaboration between such diverse disciplines. The inclusion of older individuals in the planning and design process is also highlighted as a key part of the success of any plan of action or implementation.

The purpose of this project is to assess where Charlottesville achieves an Age-Friendly Community, its strengths, and where Charlottesville is less Age-Friendly, where the areas of weakness are, and then assess how the community can address them best. In the areas where Charlottesville is found to be Age-Friendly, this project looks at how well it is meeting the determinants set out by the World Health Organization. The indicators provided by the World Health Organization assist in determining where a community is currently doing well and where improvements are needed. In addition, a checklist is provided as a tool for self-assessment and in mapping out a chart to progress. There are eight domains identified as a guideline for focus. They are outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community support and health services. The concept is that an age-friendly city encourages active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age. An age-friendly city emphasizes enablement rather than disablement and is friendly for all ages, not just elderly-friendly.

The project began with researching the WHO web-site for the criteria required for cities and communities to become a member of the Age-Friendly Community Network. The key guidelines and definitions consist of eight categories:

- the built environment,
- transport,
- housing,
- social participation,
- respect and social inclusion,
- civic participation and employment,
- communication, and
- community support and health services.

Using these eight criteria as a guide I conducted a preliminary analysis of national and state level data sets for pertinent data item categories. Next I conducted a preliminary analysis of academic and local data sets for pertinent data item categories.

Using the internet to search for agencies currently collecting data on populations within the US, I began at the federal agency level and moved to smaller and smaller population groups. The state, county, and city level data collection activities became smaller and smaller in number but perhaps more information rich for this project, where the population of interest is the Albemarle County and Charlottesville City. In addition to internet searches, Dr. Thomas Guterbock, Professor of Sociology and Director of the Center for Survey Research made it possible to include the JACS1 report. Elizabeth D. Beasley, MPH, Community Relations Lead, University of Virginia Health System provided links to the MAPP2 Health report. And my

faculty advisor Dr. Sarah Corse of the Sociology Department at the University of Virginia provided invaluable guidance and direction.

Federal agency level internet searches revealed vast amounts of data organized in multiple categories. The most relevant to this project are from four Federal Bureaus. The Bureau of the Census provides information on number, geographic distribution, social, and economic characteristics as well as a census of Governments which collects state and local data on public finance and employment, governmental organization, powers, and activities. The Bureau of Economic Analysis produces economic statistics made by government officials, business people, households, and individuals. Most relevant here would be the national income. The Bureau of Justice Statistics collects statistical information on crime, criminal offenders, victims of crime, and the operations of the justice system at all levels of government. The Bureau of Labor Statistics produces statistics on employment and unemployment, consumer expenditures, prices and living conditions, wages and employee benefits, productivity and technological changes in U.S. industries. In addition it also makes projections of economic growth, the labor force, and employment by industry and occupations.

State level internet searching provided particularly relevant data collections specifically representing the area of interest. The University of Virginia Weldon Cooper Center for Public Service produces the official annual population estimates for Virginia and its localities. The 2016 Mobilizing for Action through Planning and Partnerships Health Report created for the Thomas Jefferson Health District by 105 community partners and 10 community coalitions from September 2015 through December 2016. Finally the 2012 Jefferson Area Community Survey created for the Jefferson Area Board for Aging and area non-profit groups, government agencies, and academic researchers' information from a representative sample of area residents.



The purpose of this project was to determine if Charlottesville is currently an age-friendly city. During the course of the research it became obvious that the city's position among the six determinants (economic, health and social services, behavioral, personal, physical environment, and social) is a work in progress. Charlottesville has already achieved many of the criterion set forth by the World Health Organization. The answer to the question "is Charlottesville an age-friendly city" must be a qualified yes.

In addition to the original research question, the community partner of this project, Mr. Peter Thompson, Executive Director of the Senior Center of Charlottesville, was also keen to know what entities were collecting pertinent data for the Charlottesville area population. Research identified the following data collection entities: U.S Census Bureau, National Center for Education Statistics Institute of Education Sciences, University of Virginia Weldon Cooper Center for Public Service Center for Survey Research, University of Virginia Weldon Cooper Center for Public Service, and the Virginia Department of Health. These five organizations collect, maintain, and provide public access to data sets for the Charlottesville area population. Private data sets are beyond the scope of this project, but it was determined there are private data sets in existence. The information gathered in the collected data sets can be used in the application process Charlottesville must complete to become a member of the World Health Organization Age-Friendly Cities Network. This process is currently being addressed by a newly formed organization, the Charlottesville Area Alliance, which is made up of more than a dozen stakeholders collaborating to complete the application process.

Beyond finding the answer to the original research question, there were several questions raised by the project well worthy of further research. Identifying where the city is in each of the eight WHO topic areas (transportation, housing, social participation, respect and social inclusion,

civic participation and employment, communication and information, community support and health services, and outdoor spaces and buildings) set out in the World Health Organization model is beyond the scope of this paper but will assist in the success of the application process.

To determine where Charlottesville is in respect to age friendliness, this project used the framework proposed by the World Health Organization (WHO) as the gold standard. There are four indicators used as the framework for the selection of members of the World Health Organization (WHO) Age-Friendly Cities and Communities Network. Different types of indicators need to be considered while developing a strategy for the overall assessment and monitoring of the age-friendliness of the city.

First, Inputs are resources which act as key enabling factors. Domains of urban life are systemic, not isolated, and require a multifaceted approach. The cooperation of government with private and civil society organizations is necessary to solve those issues which affect the whole community. High-level political commitment is essential in collaboration with multiple stakeholders. The process requires shared ownership with older people. And finally, financial and human resources must be part of the process for success.

Second, Outputs are interventions to create an age friendly environment. In the physical environment planning, land use, design of public spaces and buildings, housing design and cost, and transportation design intervene between individuals and the built environment. The social environment considerations include culture and recreation programs, communication and advocacy, health and social care services, and employment and business opportunities. Successful production of the physical and social environment within a city adds to the age-friendliness of place.

Third, Outcomes are short to medium term changes achieved in creating an age friendly environment. Again the physical and social environment achieved enhances well-being. The physical environment requires walkability, accessibility of public spaces, buildings, and transport, affordable housing and safety. And the social environment requires volunteer activity, participation in decision making, economic security, positive social attitude toward ageing and older adults, and accessible information and services. The fourth factor, Impact is long term changes achieved as a result of improvements in an age friendly environment. The process of successful implementation of the first three indicators of inputs, outputs, and outcomes produce the long term changes or impacts which support the age-friendliness of a city.

The recently formed Charlottesville Area Alliance is made up of thirteen entities including non-profit organizations, local government, and civil society organizations. By including key stakeholders in the urban life of the area, the alliance has the ability to address systemic issues which affect the whole community. The existence of the logical interrelations of these stakeholders allows for a more holistic approach to common problems.

On March 6, 2017, the Charlottesville City Council approved the Resolution In Support of Charlottesville Area Alliance. The Charlottesville Area Alliance (CAA) will provide leadership and support in the advancement of goals using the WHO measurement and indicators for Age-Friendly Cities. Going beyond the public support for the Charlottesville Area Alliance, the City Council supports the participation of City of Charlottesville staff in the work of the Alliance. On March 1, 2017, the Albemarle County Board of Supervisors resolved to recognize the CAA and commended the Albemarle County Office of the County Executive staff participation in the work of the CAA. By gaining the official support of the local government

bodies, the CAA has achieved a key requirement in the application process to become a World Health Organization (WHO) Age-Friendly Cities and Communities Network.

The achievements of creating a collaborative community based alliance with the political commitment of local governments of the Charlottesville area is the realization of the first indicator – inputs. The city of Charlottesville City Council, the Albemarle County Board of Supervisors, and the CAA bring the resources and structures of the Charlottesville area together to form the key enabling factors which form the input indicator described above. As the CAA includes organizations specifically made for and by older people, the shared ownership aspect has been met. The financial and human resources are made possible through the recent approval from the government bodies as well as the alliance members.

The following three indicators, outputs, outcomes, and impact for the Charlottesville area do become apparent as the research project required physically traveling the area. The downtown walking mall, public transportation, health service, accessibility, and communication are visible on a casual level. However, to accurately determine the community’s comprehensive ability to meet the remaining three indicators would require further research and study.

The community partner for this research project was also specifically interested in what data was being collected, and by what organizations, which reflects the Charlottesville area population. Data collection representing the population of Charlottesville area was found to be available from several publically available sources. At the national level, the United States Census Bureau, and the National Center for Education Statistics Institute of Education Sciences provide data via web-sites. A state level source of publically accessible data is the Virginia Department of Health. Two sources found in the Charlottesville area are the University of

Virginia Weldon Cooper Center for Public Service Center for Survey Research and the University of Virginia Weldon Cooper Center for Public Service. As the Center for Survey Research provides independent surveys, the separate listing is included. These organizations provide a variety of formats for the data requested. The extent of the web-sites and multiple entry points provided are too vast to include here but the amount of data available is in the large data set category.

The Charlottesville Albemarle area appears to be well on the path to building an age-friendly community, although this research was not done to a deep enough level to provide any degree of quantitative assessment of those efforts. The eight WHO topic areas also appear to be the logical framework for focus of CAA and related interest group and individual efforts. The review of literature indicated that the WHO topic areas are sufficiently broad to cover all the research and studies reviewed. The biggest challenge, as Scharlach notes, is an intuitive holistic approach to the complete package of criteria. In order to achieve WHO recognition, the CAA will need to pursue efforts in all the eight WHO topic areas. Additional research will be required effectively, but is beyond the scope of this paper.

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