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# Responsive Management: Municipal Leadership for an Aging Population

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The doubling of the U.S. baby boomer population is creating new dimensions in local government awareness to support this demographic cohort. Specifically, this group continues to express their preference to age in their home for as long as possible (Farber, Shinkle, Lynott, Fox-Grage, and Harrell, 2011). Aging in place is a term used by AARP and gerontology research to express a general sentiment among older people to age in their home and community rather than in an institutionalized setting (Binette, and Vasold, 2018). Older people may need assistance as they age and attention to policy making at the local level fosters independence, healthy living, community-based supports, and may help individuals maintain social interaction and a better quality of life (Greenfield, Oberlink, Scharlach, Neal, and Stafford, 2015; Lawton and Nahemow, 1973). As municipalities create environments appropriate for the doubling of an aging population, policy makers may be required to make difficult choices. The doubling of the boomer population is putting local economies through difficult predicaments as they face both a decline in the number of younger workers available to fund the increase demand of the aging population, and the loss of the boomers tax funds (Pisano, 2017). The direction each city will take, for instance, the adoption of zoning that facilitates more affordable housing for older people or the transportation options made available, will be the key to retaining this demographic group in the city and leveraging their contributions and assets to the viability of the community. This article contributes to the growing research on the role of local governments in creating policies friendly toward older people by determining the extent municipalities institutionalize responsive management principles and their association with respective policy action.

The World Health Organization's Age Friendly Cities' movement recognizes the importance of local policy in facilitating the interventions necessary to support the inclusion of older people in our communities (World Health Organization [WHO], 2007). Age friendly policies are intended to create the necessary social and physical environments to support older people's desire to age in place (Lui et al., 2009). Some cities in the United States and internationally are already designated as age friendly as part of the AARP Network of Age Friendly Cities, the U.S. affiliate for the WHO program, exemplifying local policy approaches supporting older people. Currently there are over 300 cities listed as members of the AARP Network. Case studies in Portland for instance, have continued to inform on the important role for cities in adopting local policies designed to support older people's long-term health and independence (Neal, DeLaTorre, and Carder, 2014; DeLaTorre and Neal, 2017). Evidence suggests specific municipal leadership, (Garon, Paris, Beaulieu, Veil, and Laliberté, 2014) and operational responses by municipalities (Lehning, 2011; Warner, Homsy, and Morkin, 2017) support older people to age in place. It is not clear, if these actions are just an affirmation of support toward older people in the community or if the local governments have integrated organizational and responsive management principles that lead to a comprehensive age friendly action plan. Responsive

management suggests municipal leaders have set a predetermined course of action to accomplish the community's goals and objectives.

Therefore, this article aims to address the gap, as the influence of responsive management, by exploring the extent municipal management institutionalizes support for older people. This article reviews the literature on the concept of age friendly policy action by cities. Scholars recognize certain policy standards and services as necessary for older people to age in place (Lui et al., 2009, Lehning, 2011, Keyes and Benavides, 2017). This study provides a research design necessary to examine the number of local age friendly policy actions in the areas of transportation, housing, the built environment, and services. A theoretical framework argues the importance of responsive management principles in guiding the decisions by municipal leadership to create supportive environments. Our findings suggest that cities that practice responsive management are associated with adopting and advancing aging in place strategies. A community with strong local advocacy on aging issues enhances this local support. Findings inform on the opportunities for municipal leadership to institutionalize local and long-term policy support for older people.

**Age Friendly Policy Action by Cities**

The international and national age friendly initiatives identified in the literature suggest that certain elements are necessary in communities to support healthy and independent aging. These policy action categories are typically identified as the built environment, mobility, housing, programs and services, access to information, civic participation, security, value, and leadership (Fitzgerald and Caro, 2014; Lui et al., 2009; Benavides and Keyes, 2015). Local governments may assess the needs of the public and lead changes through age friendly policies ensuring residents may remain in the community and access the services they need for maximum independence (Lui et al., 2009). Local governments promote age friendly environments through the facilitation of housing options and price points, the implementation of accessible transportation, and the offering of programming important to older people including senior centers, recreational opportunities, and other social services (WHO, 2007).

Previous age friendly cities research provides evidence of the significance of having a champion or local policy advocate for innovations in policy changes (Lehning, 2011), the involvement of older people in the city's comprehensive planning process (Warner et al, 2017), and the benefits of city staff training on aging issues (Keyes and Benavides, 2017). Keyes et al. (2014) informs us on the direct role local governments have in leading localized zoning code changes to promote housing options for older people. Qualitative findings reveal the importance of municipal leadership in advancing local interventions to create age friendly environments (Garon et al., 2014).

We expand upon the current scholarship relying on a national sample of cities examining the influence of responsive management principles and organizational values surrounding the needs of older people. The city's strategic plan, civic engagement strategy, needs assessment, and budgetary principles legitimize the responsibility of government to support community goals to age in place. Aging in place is a policy response supported by baseline public policy actions that extend to the community. Offering a new trajectory for independence and autonomy for older people, aging in place ensures stability for the elderly.

**Responsive Management**

Some scholars define the concept of responsive management as the balance between bureaucratic goals and public interest (Yang and Callahan, 2007; Vigoda, 2002). Municipal leaders consider a variety of factors including public engagement, adopted plans, budget policy, and a variety of risks and opportunities set the desired goals and objectives of the community. The process of city management establishes the tools needed to guide the necessary decisions to achieve the community's goals and objectives. Responsive management at the municipal level is a dynamic balance of matching the public needs with a preferred policy response (Besley and Burgess, 2001) relative to adopted plans and budget priorities. Municipalities may create specific processes to better understand, capture, and respond to citizen need, suggesting that the context of the rules for public participation themselves may limit responsiveness but a formal structure for citizen input may foster engagement and feedback (Bryer and Cooper, 2007).

Creating environments that support older people requires local governments to be aware of the needs of their changing demographics and to provide practical solutions. A number of key terms operationalize responsive management in the context of older people. In their argument, Benavides and Keyes (2015) identified 4 core components of responsive management. They consisted of developing strategic plans, assessing demographic and socioeconomic conditions, fostering community engagement, and allocating public resources as key factors in creating age friendly environments. Therefore, we argue that in the context of local government, the concept of responsive management principles means strategic plans, needs assessments, engagement plans, and budgetary principles.

The city's general strategic plan represents the community's mission, vision, and its core values. The plan should align with local opportunities, assets, and challenges while providing direction toward the implementation of long-term goals determined by a consensus of the community. Yang and Callahan (2007) found that bureaucratic values can help protect against the pressure of external forces for change. A strategic plan that incorporates the public's desire to age in place can help ensure age friendly policy outcomes.

A needs assessment plan provides the community with data on changing demographics and analyses of existing community conditions.

Public management values directed at supporting the needs of a certain demographic group are illustrative of responsive management. As an example of responsive management, Benavides (2008) found evidence of public manager leadership on developing knowledge about the public served and the evaluation of local conditions by specifically responding to interests of a growing Hispanic population in cities. Cities demonstrate responsive management in the form of diversity training for city employees. Similar effort of data gathering on aging needs provide practical solutions to support aging in place.

For instance, local civic engagement plans typically outline the operating procedures for the public to voice their needs. Public advocacy through individuals or associations raises attention on important social issues and may influence policy decisions (Frumkin, 2009; Yang and Callahan, 2007). Multilevel governance theory (Krane, Ebdon, and Bartle, 2004; Agranoff and McGuire, 2001) adds to our understanding of responsive management principles by arguing that to solve issues associated with aging in place policy development, local governments will allocate their own resources and maintain flexibility and control. Therefore, cities are more likely to adopt aging in place policies with the aid of state and federal resources (Keyes and Benavides, 2017). Local governments are the closest unit of government to the people and are more likely to know public needs.

The theory of public policy entrepreneurship also examines the role of the bureaucratic leader, but does so from the context that the leader can mobilize resources to support a creative and innovative policy change (Schneider and Teske, 1992). For instance, with regard to aging policy adoption, innovative policies such as flexible transit routing may create door-to-door transportation options that improves the daily living activity for older adults (Alsnih and Hensher, 2003). A policy action of this capacity requires political will and resource allocation. Public policy entrepreneurship relative to age friendly research is whether local government policies are integrated toward a comprehensive outcome of creating physical environments that support older people.

Finally, the local government budget serves as a conduit for reflecting tangible age friendly efforts. Scholars find evidence of the allocation of financial resources reflected as a line item budget item for a job position to support its age friendly policy efforts (Benavides and Keyes, 2015). They also find a requirement for department heads to report on their compliance with aging in place policy relative to the municipality's vision based budgetary principles. Keyes and Benavides (2017) provided evidence that dedicated budget resources for local government staff training on programs for older people relates to higher levels of local age friendly policy action. The budgeting process is an instrument to reflect the community vision.

The integration of the needs of older people in responsive management principles vary among local governments. The aim of this research is to identify the organizational and community values that influence age friendly

policy actions by cities. Finally, we examine the impact of responsive management principles on these policy decisions. The importance of this research is timely given the numbers of people aged 65 years and older in our communities. This research has the potential to inform local government policies to address the needs of older people residing in communities. Therefore, to support our argument, we first hypothesize that higher levels of adopted responsive management principles are associated with higher levels of age friendly policy action among cities. Second, a higher level of engagement as a representation of public interest increases the likelihood of age friendly policy adoption by local governments.

## Methodology

The research used a survey design to examine trends in decisions by cities to advance age friendly policy action. Primarily, this research determined the probability that municipal use of responsive management principles is associated with the total count of adopted municipal age friendly policy actions. A web-based questionnaire explored policy choices in the areas of mobility, housing, the built environment, and public service delivery administered between May and August 2016. In addition to collecting direct information from public managers on theoretical assumptions of responsive management, the web-based survey also addressed determinants of this research's sub-theories of multilevel governance and public entrepreneurship.

### Data and Sample

The authors developed the original IRB approved survey of age friendly policy adoption. The survey was based on the published research of Keyes and Benavides (2017) and Benavides and Keyes (2015). Their work provided a framework for additional questions on responsive management. Additionally, the survey used the World Health Organizations (WHO) 8 domains identified in the Age Friendly Cities Initiative which informed our questions pertaining to age friendly policy actions.

The population of those surveyed included mayors, administrators, and city managers. Researchers sent an introductory email to each subject identified on the sample list inviting them to participate in the survey and sharing important details about the survey. Multiple reminders through direct emails were sent to increase the response rate (Dillman, 2000). The data came from a purposive sample of 1050 selected cities extracted from a national list of cities identified from the U.S. census (United States Census Bureau, 2017). Additionally, we used the 2014 5-year U.S. census estimates to select cities based on a population of 10,000 or more. Our rational was based on the increased likelihood that these cities had the financial and staff capacity to deliver a broad range of services to their community (Damanpour and Schneider, 2006). The sample explored cities with a 14 percent, and above concentration of adults 65 years and older – the national average population for this cohort.

A final survey response of 371 cities provided a 35.2 percent response rate and comprised the final data set. The complete ordinal logistic regression model included 331 cases. Given the relative newness of the concept of age friendly cities, cities already experiencing a higher concentration of aging residents were more likely to respond to this survey. A comparison of means of demographic variables suggested that the sample of survey respondents is significantly different from the national population in areas of population density, median household income, population 65 and older, percent owner occupied, white, and African American. These cities may already support some level of action to support older people in their communities, which then helps to inform on the broader role of cities in this type of policy response.

**Policy Actions**

To examine the effect of responsive management principles on city age friendly policy action, we used the dependent variable *Age Friendly Policy Action*. The survey captures public manager responses to 25 potential actions of transportation policy (i.e. specialized transportation services), housing policy (i.e. variation in size and price point), built environment policy (i.e. facilitation of mixed-use development), and local government services policy (i.e. recreation facilities) (Fitzgerald and Caro, 2014; Lui et al., 2009; Benavides and Keyes, 2015). Table 1 in the Results section includes a list of policies and the frequency of city adoption. This model used an ordinal variable of low, medium, and high levels of policy action based on Jenks Natural Break algorithm and the visual distribution of the count of the total policy actions where 1= 0-8 policy actions (Low); 2 = 9-15 policy action (medium action), and 3 = 16-25 policy actions (high action). The Jenks Natural Break's method clusters municipalities with the smallest within group variances creating a natural grouping (North, 2009). The Jenks Natural Break's result provides support for a grouping of cities at low (0-8), medium (9-15), and high (16-25) policy actions.

**Municipal Leadership**

This research measures a city's responsive management principles toward the needs of older people based on a 4-item index measuring respondent perception to four survey items. The four questions supporting the *Responsive Index* ask respondents to indicate the extent their city performs a needs assessment for individuals aged 65 and over; integrates the needs of individuals aged 65 and over into the city's strategic plan; creates opportunities for civic engagement of individuals aged 65 and over; and establishes vision based budgetary principles to reflect the needs of individuals aged 65 and over. The questions were measured on a 1 to 5 Likert scale with 1 being "not at all" and 5 being "to a very great extent" with a Cronbach's alpha of .85. These four questions served as a basis for local government Responsiveness based on their association to daily functions of professional city management.

We conceptualized older people engagement with two proxies. First, from a demand side perspective, Frumkin (2009) argued that associations exist to address an urgent social need, mobilizing people to respond to the community concern. Total membership numbers in local Retired Senior Volunteer Program (RSVP) chapters, as an interval variable, served as measure for older people engagement (Corporation for National and Community Service, 2015). The RSVP program is one of the largest volunteer opportunities in the U.S. for individuals over the age of 55 to make a difference in the quality of life in their communities. We also operationalize the concept of older people engagement, relative to the policy impact of older people (MacDonald, 2008) as *Log Total Population 65 and over* and measured this as an interval variable.

Due to constant economic limitations and the need for local governments to balance efficiency with advocacy this paper argues that local governments are more likely to adopt policies friendly toward older adults when they receive supplemental funding from higher levels of government. The concept of multilevel governance is operationalized relative to the location or proximity of a city in the region of a funded US DOT, HUD, EPA Sustainable Communities Partnership Grant where 1 = Yes, 0 = Otherwise. Schneider and Teske (1992) identify public entrepreneurs in local government as either elected officials, city managers, or other officials as champions on specific community issues with direct responsibility toward policy adoption. The indication of a *Public Entrepreneur* is measured through survey responses where 1 = Yes and 0 = Otherwise.

**Control Variables**

The analysis controlled for a number of socio-economic factors including the number of grandparents raising grandchildren (Warner et al., 2017) a data point collected through the American Community Survey (U.S. Census Bureau, 2017). We also controlled for multiple community-based factors including whether the municipality has a senior center for its residents. Fiscal capacity, collected for each city from their 2014 financial statement in the respective Comprehensive Annual Financial Report, suggests the government may have access to slack resources to reallocate toward innovative policy adoption (Schneider and Teske, 1992). *Log Density*, data comes from the U.S. Census, and is an interval variable based on the total population per square mile.

**Analysis**

The model used an ordinal regression because the dependent variable is split into ordinal rankings where 1 = Low (0-8 policy actions), 2 = Medium (9-15 policy actions), and High (16-25) policy actions analytically justified using a Jenks Natural Break algorithm (North, 2009). The Pseudo $R^2$ is 0.32, which measured the model's predictive accuracy. The higher the number between 0-1, the better the fit. The test of parallel lines was not significant ($\chi 2 = 7.74$)

indicating our assumptions hold that the logit coefficients are equal across the levels of the outcome (UCLA Statistical Consulting Group, 2016). The ordinal regression model produced the log odds of a variable influencing adoption of age friendly policies as reported in Table 3 in the Results section. We calculated probabilities of the log odds and report these probabilities in Tables 4 and 5 in the Results.

**Results**

Overall, 48 percent of cities indicated adopting age friendly policies. Some cities expressed limitations in their ability to adopt policies due to this issue area not being a priority for the elected officials (28%) and the city lacking staff expertise to address this policy initiative (21%). The frequency of adoption per policy action as shown in Table 1 varied relative to the complexity of the policy. For instance, 85 percent of cities adopted policies for pedestrian crossings with proper markings and adequate crossing times, 80 percent of cities adopted policies for visible traffic signals and signage, and 91 percent of cities adopted policies for accessible parks and open space. However, only 43 percent of cities have adopted public transit policies with priority seating for older adults and disabled individuals and only 23 percent support policies for volunteer drive programs. Table 2 provides the general descriptive statistics for all variables in this model. On average, jurisdictions facilitated approximately 13.12 total age friendly policy actions (Table 2).

**Table 1: Frequencies of Age Friendly Policy Action Types**

| Policy Action Types | Total Policy Actions | | | |
|---|---|---|---|---|
| | Percent | | Count | |
| | Yes | No | Yes | No |
| T1: Public transit with priority seating for older adults and disabled individuals | 43% | 56% | 144 | 190 |
| T2: Specialized transportation services for older adults | 66% | 34% | 228 | 116 |
| T3: Volunteer driver program | 23% | 77% | 75 | 248 |
| T4: Transportation voucher program | 23% | 77% | 74 | 247 |
| T5: Pedestrian crossings with proper markings and adequate crossing times | 85% | 15% | 297 | 51 |
| T6: Highly visible traffic signals and signage | 80% | 20% | 275 | 69 |
| T7: Accessible taxis | 27% | 73% | 85 | 229 |
| H1: Rental housing | 58% | 42% | 198 | 143 |
| H2: Subsidized housing | 60% | 40% | 202 | 139 |
| H3: Single family homes with variety of price points and sizes | 57% | 43% | 195 | 146 |
| H4: Intergenerational housing (co-located near families or other age groups) | 28% | 72% | 9 | 235 |

| Policy Action Types | Total Policy Actions | | | |
|---|---|---|---|---|
| | Percent | | Count | |
| | Yes | No | Yes | No |
| H5: Segregated 55+ senior communities | 62% | 38% | 210 | 310 |
| H6: Assisted living | 72% | 28% | 249 | 97 |
| H7: Nursing homes | 67% | 33% | 226 | 114 |
| B1: More permitted mixed use development | 68% | 32% | 233 | 108 |
| B2: Required sidewalks in new development | 85% | 15% | 296 | 52 |
| B3: Permitted housing options for older adults near transit stops | 35% | 65% | 114 | 214 |
| B4: Permitted housing options for older adults near shopping and recreation | 53% | 47% | 176 | 156 |
| B5: Accessible parks and open space | 91% | 9% | 322 | 30 |
| B6: Building codes that allow for universal design | 57% | 43% | 192 | 144 |
| S1: Joint programming with parks and recreation | 57% | 43% | 195 | 146 |
| S2: Health services (e.g. wellness, preventative care, etc.) | 53% | 47% | 181 | 157 |
| S3: Multigenerational recreation center with programs supporting all age groups | 57% | 43% | 196 | 145 |
| S4: Meals and nutrition services | 67% | 33% | 227 | 114 |
| S5: Lifelong learning opportunities (e.g. workshops and training) | 63% | 47% | 215 | 124 |

**Table 2: Descriptive Statistics, Explanatory Variables for Local Government Adoption of Age Friendly Policies**

| Variables | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|
| Total Policy Actions | 13.12 | 5.69 | 0 | 25 |
| Responsiveness Index | 2.689 | 0.896 | 1 | 5 |
| RSVP | 226.9 | 286.89 | 0 | 1640 |
| Log Total Pop 65 and Older | 3.612 | 0.321 | 3.15 | 4.82 |
| HUD_Sustainability | 0.34 | 0.474 | 0 | 1 |
| Public Champion | 0.315 | 0.462 | 0 | 1 |
| Form of Gov_Appointed | 0.643 | 0.479 | 0 | 1 |
| Administrative Capacity | 1.78 | 0.514 | 1 | 3 |
| Log GrandParentPer1000 | 1.172 | 0.355 | 0 | 2.55 |
| Senior Center | 0.789 | 0.419 | 0 | 1 |
| Log HH Income | 4.72 | 0.175 | 4.39 | 5.32 |

| Variables | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|
| Log Density | 3.294 | 0.2962 | 2.09 | 4.28 |
| Log Revenue Per Capita | 3.115 | 0.489 | 0.64 | 4.54 |

The *Responsiveness Index* reflects municipal responses to four survey items, perceptions of city management integration of the needs of individuals aged 65 and over through needs assessments (17% high to very great extent), strategic goals (26% high to very great extent), engagement of older people (41% high to very great extent), and budgetary principles (16% high to a very great extent). Overall, respondents were more likely to indicate they had an attitude of responsibility toward the needs of older people with a mean of 2.69. On average, cities are likely to have access to fewer numbers of RSVP member volunteers with mean of 226.9 and a range from 0 to 1,640 members. Respondent cities have, on average, 4,092 (Log 3.625) number of older people based on the log total population of individuals aged 65 and older. Municipalities were less likely to indicate the leadership of a public policy entrepreneur. Respondents represented medium size staff, and were likely to indicate having a senior center.

An ordinal logistic regression equation examined total age friendly action. As shown in Table 3, the predictor variables, Responsiveness Index, RSVP, log total population aged 65 and over, public entrepreneurship, and senior center are statistically significant.

**Table 3: Ordinal Logistic Regression Policy Adoption (Low: 0-8), (Medium:9-15), (High: 16-25)**

| Variables | Coef | Wald | Exp_B |
|---|---|---|---|
| [TotalPolicy_Low = 1.00] | 2.16 | 0.25 | 8.71 |
| [TotalPolicy_Medium = 2.00] | 4.83 | 1.21 | 125.82 |
| Responsiveness Index | 0.89*** | 34.32 | 2.43 |
| RSVP | 0.01 * | 3.38 | 1.01 |
| Log10_Total_65_older | 1.23 * | 6.25 | 3.43 |
| Log_GrandparentPer1000 | 0.15 | 0.64 | 1.16 |
| Log_Revenue_Capita | 0.16 | 0.32 | 1.17 |
| Log10_HHINCOME | -0.62 | 0.64 | 0.54 |
| Log_Density | 0.03 | 0.03 | 1.03 |
| [PE_HUD=0] | -0.11 | 0.17 | 0.89 |
| [PE_HUD=1] | 0 | | 1.01 |
| [Public_entr=.00] | -0.83 ** | 8.49 | 0.44 |
| [Public_entr=1.00] | 0 | | 1.01 |
| [Form_Appointed=.00] | -0.13 | 0.28 | 0.88 |

| Variables | Coef | Wald | Exp_B |
|---|---|---|---|
| [Form_Appointed=1.00] | 0 | | 1.01 |
| [Q23=1] | 0.36 | 0.19 | 1.42 |
| [Q23=2] | 0.39 | 0.29 | 1.48 |
| [Q23=3] | 0 | | 1.01 |
| [SeniorCenter=.00] | -1.12 *** | 15.83 | 0.33 |
| [SeniorCenter=1.00] | 0 | | 1.01 |
| *p < .05, ***p < .01, ***p < .001 | | | |

Reference group = 3

n= 331

We predicted that an increase in a city's Responsiveness Index would increase the odds of a city adopting age friendly policy actions (β=0.89, $\rho$<.000). Holding all other variables constant, the predicted odds of a city falling into a higher level of total policy actions (scale 1-3, low, medium, and high) increases by 2.46 times with each unit increase in responsive management (scale 1-5), holding all other variables. Based on this odds ratio finding, Table 4 illustrates the cumulative probabilities of a city adopting age friendly policy action at low, medium, and high policy action levels based on a low or high level of responsive management. There is a 72 percent probability of a city falling into the category of low age friendly policy action when there is low responsive management holding everything else at the mean. The likelihood being in the categories of medium and high age friendly policy action reduces to 27 percent and 1 percent, respectively, when responsive management is low. There is only a 28 percent chance of being in the category of low policy action and a 71 percent chance of moving to the category of medium action when responsive management is high, holding all other variables at their mean. The categories of low and high responsive management reflect one standard deviation below and above the mean for the Responsiveness Index (scale 1-5).

**Table 4: Cumulative Probabilities of Falling into a Level of Low, Medium, and High Policy Action Levels based on Low or High Levels of Responsive Management**

| | Level of Policy Action | | |
|---|---|---|---|
| | Low | Medium | High |
| Responsive (Low) | 0.71 | 0.27 | 0.02 |
| Responsive (High) | 0.29 | 0.71 | 0.01 |

* Low (1 std dev below mean) High (
1 std dev above mean)

Further, relative to responsive management, an increase in older people engagement increases the odds of a city adopting age friendly policy action.

The two proxies used to examine the relationship between older people engagement and policy action, as shown above in Table 3, include total RSVP volunteers, and the log total population 65 and over. Holding all else constant, the predicted odds of a city adopting age friendly policy action (scale 1-3, low, medium, and high) increases by 1.001 times with each one-unit increase in the total number of RSVP volunteers ($\beta$=0.01, $\rho$<.05). Further, the predicted odds of adopting age friendly policy action (scale 1-3, low, medium, and high) increases by 3.43 times with each unit increase in the log total population of individuals aged 65 and over. This evidence suggests that a sheer concentration of a demographic is enough to push a municipality to make policy adjustments in response to their needs.

Based on the log total population 65 and over odds ratio finding, Table 5 shows the cumulative probabilities of falling into the low, medium, and high policy action levels relative to low and high older people engagement. Here, log total population 65 and over serves as the proxy for older people engagement. There is almost a 60 percent chance of falling into the category of low policy action when older people engagement is low, holding all other variables at their mean. The likelihood of being in the category of medium or high policy action level with low older people engagement is reduced to 34 percent and 5 percent, respectively, when older people engagement is low. There is only a 40 percent chance of being in the category of low policy action, and a 48 percent and 11 percent chance of moving in to the category of medium and high levels of policy action, respectively, when older people engagement is high, holding all other variables at their mean.

**Table 5: Cumulative Probabilities of Falling into a Level of Low, Medium, and High Policy Action Levels based on Low or High Levels of Older People Engagement**

| | **Level of Policy Action** | | |
|---|---|---|---|
| | **Low** | **Medium** | **High** |
| Older people engagement (Low)* | 0.60 | 0.36 | 0.06 |
| Older people engagement (High)* | 0.40 | 0.49 | 0.19 |

* Low (1 std dev below mean) High (1 std dev above mean)

We argue that intergovernmental financial support moves cities to age friendly policy action. The results of the ordinal regression do not support this hypothesis. Municipal access to national funding for age friendly policy action tends to be irrelevant.

Our findings suggest that a public policy entrepreneur influences age friendly policy action by cities. The coefficient for public entrepreneurship is negative and significant ($\beta$=-0.83, $\rho$<.01). Holding all else equal, the predicted odds of adopting age friendly policy action (scale 1-3, low, medium, and high)

decreases with the likelihood of a city indicating that they adopted age friendly policies based on local official champion.

Finally, the control variable of senior center is negative and significant ($\beta$=-1.12, $\rho$<.001). Holding all else equal, the predicted odds of falling into a higher category of a higher level of total policy action (scale 1-3, low, medium, and high) decreases with the likelihood of a municipality indicating they have already invested in age friendly policy action.

**Discussion**

The evidence from the age friendly policy adoption model confirms what others have done and aligns with the literature (Keyes and Benavides, 2017; Lehning, 2011; Warner et al., 2017). This research finds the responsive management matched with older people engagement is necessary to push cities to higher levels of adoption. In contrast to an economic argument for policy adoption (Peterson, 1981), it is not a city's revenue per capita or administrative capacity moving cities to take on higher levels of policy action. Rather, responsive management toward older people reflected through city management principles influences these age friendly policy actions by cities.

The lack of support for the intergovernmental financing as a component of this model calls into question whether national aging policy has any relevance on local age friendly community development. Findings suggest that responsive management toward aging policy tends to grow up from the community through local government leadership and awareness through bureaucratic values of a responsibility toward the needs of older people. The Responsiveness Index serves as a criterion supporting these bureaucratic values providing support for Frederickson's (1980) argument of a moral obligation for public administrators to address the needs of the disadvantaged and marginalized in their community. Global and national initiatives such as WHO and AARP Age Friendly Cities Network offer cities a framework to ensure planning decisions engage older adults in the process to produce fair results for a diverse community (Fainstein, 2000).

Relative to our findings of public entrepreneur, it is likely that a public policy champion is necessary to get a city to venture into a commitment or mayoral resolution in becoming an age friendly city, but is not necessary to move into higher levels of policy action. Responsive management as a public value creates a city's cultural awareness supporting advanced age friendly policy action. The public policy entrepreneur is only vital to a city taking initial steps in this policy arena. City management principles institutionalize a long-term commitment to policy actions that support older people.

Similarly, findings suggest that a city having a senior center is important to raising the city's awareness about the needs of older people, but the senior center alone is not enough to push municipalities to adopt higher levels of age friendly policy action. Senior centers are typically responsive to the needs of the individuals served because they offer a direct opportunity for older people to express their needs to city staff. Slowness in senior center

evolution with innovative programming on a broad scale (Pardasani and Thompson, 2012) to meet the progressive needs of today's baby boomer cohort may be the barrier in pushing cities with senior centers to a higher level of age friendly policy action. Our evidence suggests that a municipality having a senior center does not necessarily mean a municipality is working toward becoming age friendly through comprehensive policy action.

The variation in the number of age friendly policy actions by cities suggest some cities are trailblazers in responding to the needs of their aging population. This variation in policy actions among municipalities led us to consider a potential relationship between municipal leadership (as responsive management) and older people engagement relative to local aging in place policy. We present a 2 by 2 typology depicted in Figure 1 to explore how variations in responsive management and older people engagement influences municipal policy outcomes. Deliberative participatory efforts engage the public in collaborative local government decision-making for consensus driven policy outcomes (Nabatchi and Amsler, 2014).

The typology has two dimensions including*: public interest* reflected as how much does the public engage in expressiveness from silent and not mobilized on aging issues to highly mobilized on aging issues in the form of advocacy or special public interest groups; and *responsive management* principles reflected as how much does the local municipality support aging issues from lower levels of engagement (such as public meetings) on aging issues to higher levels of engagement (such as the allocation of resources for policy implementation).

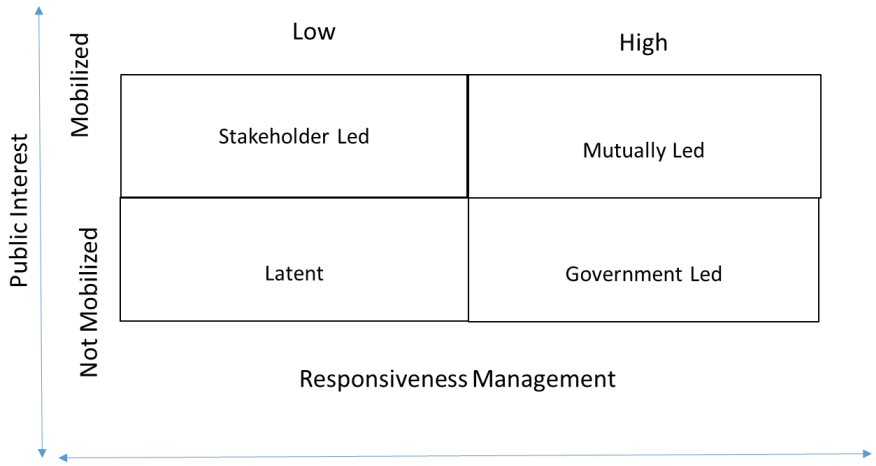


**Figure 1: A 2 by 2 typology on the relationship between public interest and responsiveness management principles and age friendly policy outcomes.**

The primary purpose of the typology is to help find a balance between municipal leadership and the vocalized need of older people across realized policy outcomes. The relationship in the upper right hand corner is most attractive in terms of achieving comprehensive policy action and reflects high levels of municipal leadership and public advocacy on aging. At the other extreme, the bottom left corner represents the potential for older people to be at a disadvantage with unresponsive municipal leadership. The variation in relationships on the typology inform on predicted effects of age friendly policy adoption by local governments in future research. We briefly consider these relationships.

As shown in Figure 1, mutually led, in the upper right corner, a relationship between the two dimensions illustrates the potential outcomes when advocacy stakeholders and municipal leaders champion public needs. Government led, as shown in the lower right corner, suggests older residents may not vocalize their needs to their government. Strategic plans and data collection tend to inform municipal leaders on current and forecasted demographic trends for their community surfacing a potential for age friendly policy actions likely by leveraging existing public services or programs.

Stakeholder led, as shown in the upper left corner illustrates the potential outcomes of limited municipal collaboration when organized public interest matches with low responsive management. For instance, the organized leadership of a local community's Area Agency on Aging or local chapter of AARP may coordinate support around age friendly policies, but groups do not have the integrated commitment from the local municipal leadership co-advocating for the allocation of financial resources. Finally, latent opportunity, as shown in the lower left corner, indicates a lack of local government participation suggesting the existing bundle of local government services may not meet the needs of the resident aging population.

Responsive management realized through city management policies provide an avenue to examine the decision by cities to adopt policies and allocate resources. We provide evidence to suggest that cities do adjust management policies relative to a city manager's understanding of the issues and voiced public interest. Furthermore, we provide empirical evidence of management activities and professional awareness of public needs identified in previous case study research (Benavides and Keyes, 2015). Responsive management principles are important to providing a voice to those that may not be able to come to the table.

Public managers may find opportunities to facilitate increased policy action and services to support a growing older adult population. The typology suggests that comprehensive age friendly policy action requires municipal leadership. Public managers may grow strong leadership through an understanding of changing demographics and expand their knowledge on the types of age friendly policy actions that are relevant to local government service delivery. The decline of both older people and younger adults in labor force participation will ultimately result in a reduction in taxation power to

fund local programs and services for an aging population (Pisano, 2017). Municipal leaders that facilitate a network of non-profit and government providers of services can likely support the doubling of the population through a comprehensive approach to aging in place.

Myers and Pitkin (2009) suggest that American cities are going to feel the pressure from the growing number of boomers selling off their homes in suburban communities as they age. They argue the impact will be much greater where there is an imbalance of potential new younger buyers leaving a pool of houses on the market without the prospect of purchase. White boomers make up the largest share of homeownership and according to Myers (2007) demand a higher purchase value already challenged by the lower purchasing capacity of younger Latinos, the highest growing segment of younger homebuyer. This changing dynamic between buyer and seller will influence local housing markets. Municipal leaders, through zoning and comprehensive planning, may facilitate local policy efforts to help stabilize the expected boomer bubble. For instance, cities with higher density and compact design where residential and shopping areas provide ease of pedestrian access, are gaining momentum among older and younger buyers in search of different housing options including rentals (Myers and Pitkin, 2009).

Additionally, an awareness of best practices from other communities can also provide insights for local governments. When municipal leaders integrate the vision for older people into the management principles and vision of the city, they reflect responsive government. Public administrators in their positions have the ability to lead on policy actions that support older people in their community. The findings in this research provide insight on appropriate policy actions in the context of responsive management:

- Adopt a local resolution in support of the municipality taking policy actions to become an age friendly community,
- Facilitate the networking of other government and non-profit providers of aging programs and services to understand the depth and breadth of current services available to older residents,
- Engage in visionary planning that explores and informs on the role of the municipality's mission and vision in supporting age friendly policy action in the strategic plan,
- Integrate engagement opportunities into the planning processes for older people, stakeholders, and community leaders to listen, learn, and provide feedback on life priorities to age in place,
- Collect and an examine the current and future demographics and socio-economic characteristics of the community considering the diversity of needs of older people across the areas of housing, transportation, and services,
- Establish a line item in the municipal budget to support age friendly policy initiatives or adopt vision based budgeting to ensure all

departments comply with the municipality's strategic goals and policies for creating age friendly environments,
- Seek continuing education and training for municipal leadership and staff on appropriate policy actions to support the development of age friendly environments, and
- Register the municipality to become part of the AARP Age Friendly Cities Network (Keyes, 2017).

The purposive sample design suggests limitations with inference and generalizability. Overall, cities with smaller to medium population sizes were more likely to respond to this survey likely because they are already experiencing pressure from an aging population.

**Conclusion**

Cities are important players in creating communities that foster independence and community for individuals as they age. This research confirms the importance of responsive management principles toward aging as a necessary component for ensuring older people have the potential to remain in their communities as their needs change. The variation in responsive management principles among cities surveyed suggests municipalities may adjust procedurally to respond to the needs of an aging population. The typology also suggests that public managers can experience change through leadership training on aging issues and the building of stronger relationships with stakeholders. Organizations such as RSVP and AARP already provide resources to communities on how to relate the changing needs of older people with expectations for public services, recreation, housing, transportation and other quality of life indicators. The age friendly concept is not a static list of policies nor is it a single policy action relegated to a single department or agency such as an office aging services. A bureaucratic value of a responsibility to be responsive to the needs of older people requires public managers to have a pulse on community demographics as well as the knowledge about the necessary policy adjustments. There are implications for older people to age in place when their community lacks municipal leadership and older people have limited voice on aging issues. Future research should examine objective measures for responsive management principles including actual budget allocation of resources toward programs and services for older people.

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