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Georgia Affordable Housing Health Impact Assessment

Georgia Health Policy Center

Georgia Department of Public Health

GEORGIA AFFORDABLE HOUSING HEALTH IMPACT ASSESSMENT

JANUARY 2017 | Georgia Department of Public Health

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Georgia Health Policy Center

DPH Georgia Department of Public Health

Executive Summary

Purpose of this Health Impact Assessment (HIA)

This HIA explores project-level implications of recommendations made in the HIA of Georgia's 2015 Qualified Allocation Plan (QAP) for Low Income Housing Tax Credits (LIHTC), aiming to maximize positive health effects through influence of final design and/or operation plans for three affordable housing projects that received tax credits through the 2015 QAP.

Project Team and Stakeholders

The Georgia Health Policy Center (GHPC) conducted this HIA on behalf of and in collaboration with the Georgia Department of Public Health (DPH). Other critical contributions to the project came from stakeholders at the Georgia Department of Community Affairs (DCA) and representatives of the developers of the three housing sites.

Three Affordable Housing Developments and Baseline Health Status

A systematic screening process was employed to arrive at three affordable housing developments that were approved for LIHTC financing under the 2015 QAP. The implementation of these three developments was the focus for the HIA:

- Hardin Terrace in Jackson County
- McRae-Helena Estates in Telfair County
- South Rome Apartments in Floyd County

Data on baseline health status were collected from existing sources such as the County Health Rankings and Community Health Needs Assessments. After a collaborative scoping process, four health topic areas were agreed upon for further exploration:

- Chronic Disease
- Healthcare Access
- Injury Prevention
- Mental Health

Key indicators were identified based on this analysis of baseline conditions that can be tracked over time as housing developments are put into service. The purpose is to build a consistent methodology for evaluating the health impacts of housing decisions in the future.

Assessment and Recommendations

A three-stage frame was used to organize assessment information that considered to what extent each development met recommendations from a previous HIA of the 2015 QAP and what additional information may be needed from developers to address the identified issues.

Siting

The location of affordable housing is critical for connecting low income residents to the communities in which they will live. Siting decisions are primarily influenced through the QAP, and stakeholders recommended that operating at this state policy level would likely be more efficient that zeroing in on individual developer siting decisions. Newer aspects of the QAP, such as use of demographic cluster data to target certain areas and the competitive criteria for access to quality educational opportunities, appear to be solid strategies to ensure housing developments are tuned to underlying health determinants for the communities in which they locate.

Design

While there are many emerging best practices for healthy design and housing, it was difficult to influence the three developments in this topic area. There was some success in incorporating a community garden amenity in one of the developments, but generally, influencing the design of a development requires involvement of public health perspectives earlier in the process – i.e., before the initial proposal. There are opportunities here to strengthen the health perspective in green building schemes, as developers have become accustomed to these requirements over the past several years.

Programs & Partnerships

This level of intervention was identified as the most adaptable post-QAP proposal for developers. They can alter planned services and programming much more easily than the physical design or site of the housing. Providing developers with timely and easily understandable data on the health concerns of the surrounding community, and/or the potential tenant population, allows them to more finely tailor service offerings to the needs of residents. Implementing this type of approach also fosters new partnerships at the local level between developers, property managers, housing service coordinators and local, community-based initiatives to improve health.

Future Directions

This HA provides an excellent opportunity to continue conversations about employing affordable housing as a tool for health improvement in Georgia. The body of the report includes several strategies for ongoing evaluation to test assumptions and measure success. In summary, there are many future opportunities to advance this type of work in Georgia (and nationally) by building on existing success and continuing to forge new partnerships between sectors.

Introduction & Background

The Georgia Health Policy Center (GHPC) at Georgia State University (GSU) agreed to conduct this health Impact assessment (HIA) for the Georgia Department of Public Health (DPH) as part of their CDC-funded HIA program. The agreed upon topic for this HIA is affordable housing, which allowed GHPC to leverage previous work with affordable housing policy in Georgia and to facilitate connections between DPH and the Georgia Department of Community Affairs (DCA).

Purpose of this HIA

This HIA explores project-level implications of recommendations made in the HIA of Georgia's 2015 Qualified Allocation Plan (QAP) for Low Income Housing Tax Credits (LIHTC), aiming to maximize positive health effects through influence of final design and/or operation plans for three affordable housing projects that received tax credits through the 2015 QAP.

Affordable Housing and Health

Housing is considered by many to be a foundational determinant of health – especially for those with lower incomes. The state of Georgia has numerous policies that aim to increase the supply of affordable housing across the state. This project focuses on the state's QAP, designed and implemented by DCA's Housing Finance & Development Division.

Affordable housing and health have a well-established relationship. The cost of housing relative to income affects household finances. Unaffordable housing is associated with the inability to buy food, medical care, and other basic needs.[1, 2] It is a leading cause of homelessness and housing instability (frequent moves) as well, and both can impair overall health status and mental health in adults and children.[3-6] Additionally, lower income households have very limited choices in terms of the location or quality of the housing they are able to obtain; both are factors which affect health. Poor housing quality – the presence of mold, pest infestation, lead contamination, inadequate heating or cooling, safety hazards, overcrowding – is prevalent in the low-cost, private rental market.[7-9] Lastly, housing location can be critical to health. It determines the quality of schools available, the transportation options and ease of access to jobs and services. It also determines the availability of parks and other healthful assets, the degree of social isolation from civic and economic activity, the safety and security of the surrounding neighborhood, the presence of nearby environmental hazards, and many other factors.[10-12] Average life expectancy can vary by as much as 20 years between ZIP codes in the same city or region.

HIA Project Team & Core Stakeholders

Members of the core project team and their roles are listed here. The core project team was responsible for the execution of the HIA and development of agreed upon deliverables.

- Jimmy Dills, Georgia Health Policy Center/Georgia State University

    - Project lead, responsible for overall coordination of the project and collating of materials into deliverables.
- Michelle Rushing, Georgia Health Policy Center/Georgia State University
    - Technical and data support as needed.
- Kate Furgurson, Emory University MPH Practicum Student
    - Background Research, data coordination and some stakeholder engagement.
- Jane Perry, Georgia Department of Public Health
    - Project sponsor, through CDC grant. Advisory role and review of deliverables.
- Faith Flack, Georgia Department of Public Health
    - Project support. Document review and stakeholder engagement as needed.
- Philip Gilman, Georgia Department of Community Affairs
    - Advisory role. Connections to housing stakeholders and possible recommendations target.

Representatives of the development teams for each of the three housing proposals were recruited to participate in this effort as available. They served as decision-making stakeholders, played an advisory role, and facilitated connections with local stakeholders.

- Tab Bullard – Zimmerman Properties - Hardin Terrace – Jefferson / Jackson County
- Chase Northcutt - Resource Housing Group, Inc. – McRae-Helena Estates – McRae / Telfair County
- Lee Cochran – Laurel Street Residential – South Rome Apartments – Rome / Floyd County + Bekki Fox - Community Development Director City of Rome

Three Affordable Housing Developments and Baseline Health Status

Selection of Developments

The four-step screening process took the list of potential affordable housing developments from 33 to nine to six, and finally to the three developments discussed below. First, application materials for all 33 projects selected for funding by DCA under the 2015 QAP were examined to determine which had competed for the HIA-informed scoring criteria. A subset of nine developments emerged from this review and were discussed by the HIA project team, which further refined the list to six developments for participation in the HIA. From this list, developers were contacted to gauge their interest in participating, and the final three were selected based on those responses. Each target development is briefly described below using language from their initial applications.

Hardin Terrace

Hardin Terrace is the first phase of a proposed two-phased development in Unincorporated Jackson County, adjacent to the city limits of Jefferson, Ga. Phase 1 is a planned 80-unit multi-family community targeting families with children, with phase 2 being a proposed 64-unit phase with the target population and unit mix yet to be determined. The proposed site is located on the north side of the City of Jefferson (Unincorporated Jackson County), a sought after community for its high-achieving school system and small town charm. The areas surrounding the site are the fastest growing in Jackson County with several new shopping centers being planned or built within the last five years. Tenants will be given a modern option for affordable, workforce housing that is built to the highest quality and modern sustainable standards.

McRae-Helena Estates

The proposed project involves the new construction of the 48-unit McRae-Helena Estates rental community on a four-acre site in McRae, Ga. The project will offer 12 one-bedroom, 24 two-bedroom and 12 three-bedroom garden-style units located within two (2) two-story walk-up style residential buildings. The project will also include a free-standing community building which will house the management office and common areas. The property will be developed using Low-Income Housing Tax Credit (LIHTC) financing and target lower-income family households earning up to 60 percent of Area Median Household Income (AMHI). Tax-credited rent collected monthly will range from $285 to $489, depending upon unit type. None of the units within the development will receive project-based rental assistance.

South Rome Apartments

South Rome Apartments is a proposed 84-unit, multifamily, scattered site, development in Rome, Ga. This community will be a continuation of the South Rome Redevelopment Master Plan, an overall neighborhood redevelopment strategy spearheaded by the City of Rome, South Rome Redevelopment Corporation (community based nonprofit created to oversee redevelopment activities in South Rome), community stakeholders and Purpose Built Communities (a national nonprofit community revitalization consulting firm). The redevelopment strategy encompasses a holistic approach including: a newly-constructed Boys and Girls Club, a newly-constructed Anna K. Davie Elementary School and Early Learning Center, health and wellness programs at the Floyd County Health Department in South Rome, streetscape improvements along the main neighborhood artery, supportive services for community residents, and single family and multifamily residential development. The first multifamily rental community, Etowah Terraces Senior Residences, was awarded low-income housing tax credits in 2009. Etowah Terraces Senior has proven to be an asset to South Rome and is fully-leased with an active waiting list.

Baseline Health Information by Development

Three existing sources of information were examined in order to determine what health topics are likely to be relevant when considering the potential risks for future residents of the three affordable housing developments. Data on leading causes of premature mortality by Demographic Cluster (Appendix C)

were obtained from DPH; County Health Rankings (CHR) from the Robert Wood Johnson Foundation were examined for the relevant counties; and finally, Community Health Needs Assessments for nearby nonprofit hospitals were consulted to provide information developed with local stakeholder input.

Using the above information, baseline health profiles were created for each of the sites. These profiles were used to guide telephone interviews with local stakeholders for each of the developments, and they were used during a scoping workshop with developers, DCA and other stakeholders. Based on these discussions, the scope of the overarching HIA narrowed to four health topic areas: chronic disease, healthcare access, injury prevention and mental health.

Baseline data and stakeholder insights, considering these four topic areas, are included below for each of the three developments. In addition to the data sources noted above, Community Commons was also employed as a tool to capture data not explicitly included in the other sources. For additional details on other health issues in each of the three communities, please see the baseline assessment summary document.

Hardin Terrace / Jackson County

Table 1 shows where Jackson County ranks in comparison to other Georgia counties on CHR categories. It performs better than half of the state in all categories except "Physical Environment," which includes transportation services, a noted concern from local stakeholders. Of the four health topic areas examined in this report, injury and chronic disease appear to be the areas in need of most improvement. Stakeholder interviews supported this view. Those interviews also identified teen pregnancy as an issue of local concern, but that topic was excluded from this HIA during the scoping workshop.

Table 1: Jackson County Rank of 159 GA Counties (1=best; 159=worst)

CHR Category	Rank
Health Outcomes	**33**
Length of life	58
Quality of life	15
Health Factors	**19**
Healthy Behaviors	28
Clinical care	58
Social & Economic Factors	14
Physical Environment	114

Chronic Disease

For chronic disease and its associated health determinants, Jackson County performs more poorly than the state on six of the ten indicators included here. This includes higher prevalence of heart disease and incidence of lung cancer -- two of the top leading causes of premature death in the C.2 Demographic Cluster. **Figure 1** displays the areas within Jackson County that are included in the C.2 Cluster, along with the location of the Hardin Terrace Apartments. There is also a higher prevalence of asthma in the

county. Also notable are the indicators around physical activity. Here the county does not perform as well as the state. **Table 2** displays baseline chronic disease indicators for Hardin Terrace / Jackson County.

Local stakeholder interviews confirmed tobacco use, heart disease and obesity as pressing issues. They also indicated challenges in accessing healthy food options.

Figure 1: C.2 Demographic Cluster in Jackson County & Hardin Terrace Location

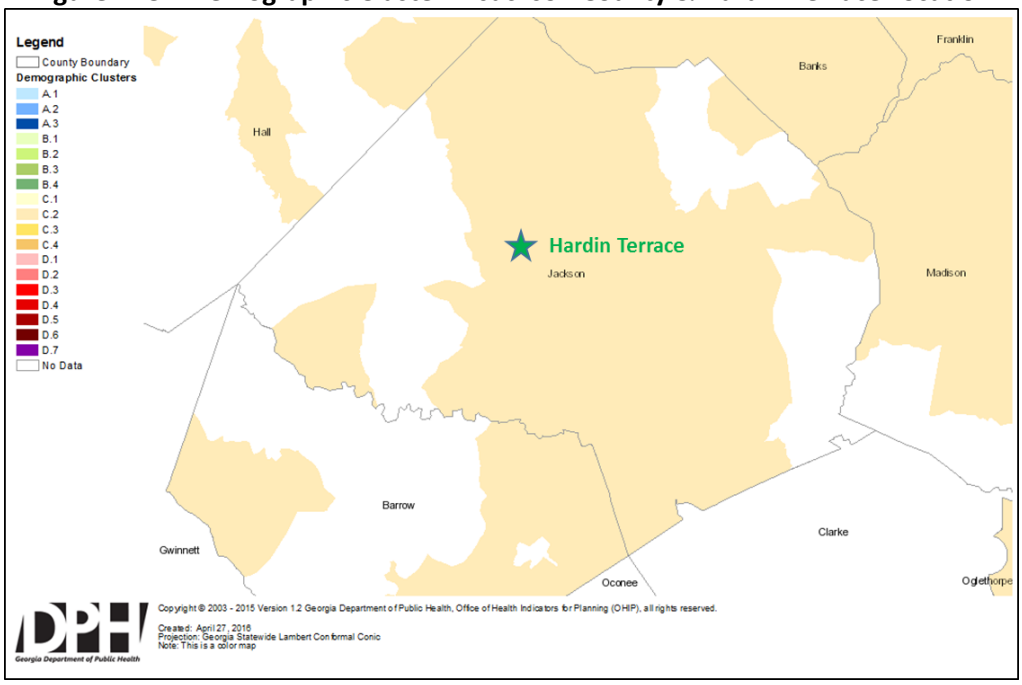

Table 2: Baseline Chronic Disease Indicators for Hardin Terrace / Jackson County

(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
Obesity	Adult Obesity: Percentage of adults that report a BMI of 30 or more	29%	29%	County Health Rankings / BRFSS*
Physical Activity	Adult Inactivity: Percentage of adults aged 20 and over reporting no leisure-time physical activity	28%	25%	County Health Rankings / BRFSS*
Physical Activity	Access to Exercise Opportunities: Percentage of population with adequate access to locations for physical activity	73%	75%	County Health Rankings / Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
Physical Activity	Walking or Biking to Work: Percentage of the population that commutes to work by either walking or riding a bicycle	0.42%	1.79%	Community Commons / US Census Bureau, American Community Survey
Nutrition	Food Insecurity: Percentage of population who lack adequate access to food	13%	19%	County Health Rankings / Map the Meal Gap
Nutrition	Adults with Inadequate Fruit / Vegetable Consumption: Percentage of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day	73.5%	75.7%	Community Commons / BRFSS*
Heart Disease (Leading cause of premature death in Demographic Cluster C.2)	Heart Disease Prevalence (Adult): Percentage of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina	7.8%	4.4%	Community Commons / BRFSS*
Tobacco Use	Adult Smoking: Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime	16%	17%	County Health Rankings / BRFSS*
Lung Cancer (3rd Leading cause of premature death in Demographic Cluster C.2)	Incidence of Lung Cancer: Per 100,000 population	78.4	67.3	Community Commons / State Cancer Profiles
Asthma	Asthma Prevalence: Percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma	17.3%	13.5%	Community Commons / BRFSS*

** The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.*

Healthcare Access

Healthcare access in Jackson County is comparable to the state as a whole. The county does not perform as well as the state on three of the six indicators included here, with the largest difference in access to non-physician primary care providers. **Table 3** displays baseline healthcare access indicators for Hardin Terrace / Jackson County.

Local stakeholders noted high rates of uninsurance and a perceived lack of access to care. Even though there are two hospitals in the larger area, neither is particularly close to Jefferson, where Hardin Terrace will be located.

Table 3: Baseline Healthcare Access Indicators for Hardin Terrace / Jackson County

(Orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
Insurance	Uninsured: Percentage of population under age 65 without health insurance	20%	21%	County Health Rankings / Small Area Health Insurance Estimates
Insurance	Uninsured Children: Percentage of children under age 19 without health insurance	11%	10%	County Health Rankings / Small Area Health Insurance Estimates
Insurance	Uninsured Adults: Percentage of adults under age 65 without health insurance	25%	26%	County Health Rankings / Small Area Health Insurance Estimates
Provider Access	Ratio of population to primary care physicians	1,740:1	1,540:1	County Health Rankings / Area Health Resource File / American Medical Association
Provider Access	Ratio of population to primary care providers other than physicians	2,133:1	1,349:1	County Health Rankings / CMS, National Provider Identification
Provider Access	Lack of Consistent Source of Primary Care: Percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or healthcare provider	26%	26%	Community Commons / BRFSS*

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Injury Prevention

Jackson County performs more poorly than the state as a whole on all four injury-related indicators included here. All four indicators were over 20 percent higher in the county than in the state. This includes motor vehicle crash deaths, which are the second leading cause of premature death in the C.2 cluster, and pedestrian deaths, which were two-thirds higher than the state figure. **Table 4** displays baseline injury prevention indicators for Hardin Terrace / Jackson County.

Local stakeholders also identified motor vehicle crashes as a major concern, noting the presence of Interstate 85 and the county's large geographic area as possible causes.

Table 4: Baseline Injury Prevention Indicators for Hardin Terrace / Jackson County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
All Injury	Injury Deaths: Number of deaths due to injury per 100,000 population	72	58	County Health Rankings / CDC WONDER mortality data
Motor Vehicle Injury (2nd Leading cause of premature death in Demographic Cluster C.2)	Motor Vehicle Crash Deaths: Number of motor vehicle crash deaths per 100,000 population.	18	14	County Health Rankings / CDC WONDER mortality data
Pedestrian Injury	Pedestrian Motor Vehicle Crash Mortality: Number of pedestrians killed by motor vehicles per 100,000 population	5.5	3.3	Community Commons / US DOT National Highway Traffic Safety Administration, Fatality Analysis Reporting System
Unintentional Injury	Unintentional Injury Mortality: Number of deaths due to unintentional injury (accident) per 100,000 population	51.3	39.6	Community Commons / CDC WONDER mortality data

Mental Health

In terms of mental health, Jackson County performs more poorly than the state on three of the eight indicators included here. This includes three times fewer mental health providers per population, pointing to a lack of access to mental health services in the county. For mental health related outcomes, the county has a higher rate of deaths due to drug overdoses and suicides than the state as a whole. Suicide is the fourth-leading cause of premature death in the C.2 Cluster. **Table 5** displays baseline mental health indicators for Hardin Terrace / Jackson County.

Local stakeholders noted that mental health, especially substance abuse, is a major concern in the community. They pointed to the lack of services available within the county to address these types of issues.

Table 5: Baseline Mental Health Indicators for Hardin Terrace / Jackson County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
Mental Health Status	Poor Mental Health Days: Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	3.6	4	County Health Rankings / BRFSS*

Outcome/Behavior	Indicator	Statistic for Jackson County	Statistic for Georgia	Source
Mental Health Providers	Ratio of population to mental health providers	2,690:1	850:1	County Health Rankings / CMS, National Provider Identification
Substance Use/Abuse	Excessive Drinking: Percentage of adults reporting binge or heavy drinking (defined as more than two drinks per day on average for men and one drink per day on average for women)	16%	16%	County Health Rankings / BRFSS*
Substance Use/Abuse	Alcohol-impaired Driving Deaths: Percentage of driving deaths with alcohol involvement	19%	24%	County Health Rankings / US DOT National Highway Traffic Safety Administration, Fatality Analysis Reporting System
Substance Use/Abuse	Drug Overdose Deaths: Number of drug poisoning deaths per 100,000 population	19	11	County Health Rankings / CDC WONDER mortality data
Social Connectedness	Social Associations: Number of membership associations per 10,000 population	9.5	9.0	County Health Rankings / County Business Patterns
Social Connectedness	Lack of Social or Emotional Support: Percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time	15.7%	20.7%	Community Commons / BRFSS*
Suicide (4th Leading cause of premature death in Demographic Cluster C.2)	Suicide Rate: This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population	18.3	11.9	Community Commons / CDC WONDER

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McRae-Helena Estates / Telfair County

Table 6 shows where Telfair County ranks in comparison to other Georgia counties on CHR categories. Telfair does not perform as well as half the state in all categories and ranks second to last for "Health Factors." These rankings point to a significant need for health resources and interventions tailored to the rural setting. Across the four health topic areas, the indicators suggest that chronic disease and mental health may be particularly suitable targets for improvement. Stakeholder interviews supported focus on these topic areas.

Table 6: Telfair County Rank of 159 GA Counties (1=best; 159=worst)

CHR Category	Rank
Health Outcomes	**109**
Length of life	81
Quality of life	128

Health Factors	158
Healthy Behaviors	155
Clinical care	155
Social & Economic Factors	143
Physical Environment	132

Chronic Disease

Telfair County performs more poorly than the state on seven of the ten chronic disease indicators included here. Particularly dramatic disparities between the county and state exist for access to exercise opportunities, nearly seven times lower in Telfair, and for asthma prevalence, which is roughly three times higher. Notably, the county performs better than the state on both indicators for leading causes of premature mortality here (heart disease and lung cancer). This discrepancy likely arises from the leading cause statistics being based on all C.4 Demographic Clusters across the state, while the county-level statistics include all parts of the single county. **Figure 2** displays the areas within Telfair County that are included in the C.4 Cluster along with the location of McRae-Helena Estates. Also notable is the relatively high percentage of people in Telfair County that walk or bike to work compared to the state statistic. **Table 7** displays baseline chronic disease indicators for McRae-Helena Estates / Telfair County.

Local stakeholders suggested that cancers were a particular concern in the community, in addition to more socio-environmental issues like access to healthy foods and poverty.

Figure 2: C.4 Demographic Cluster in Telfair County & McRae-Helena Estates Location

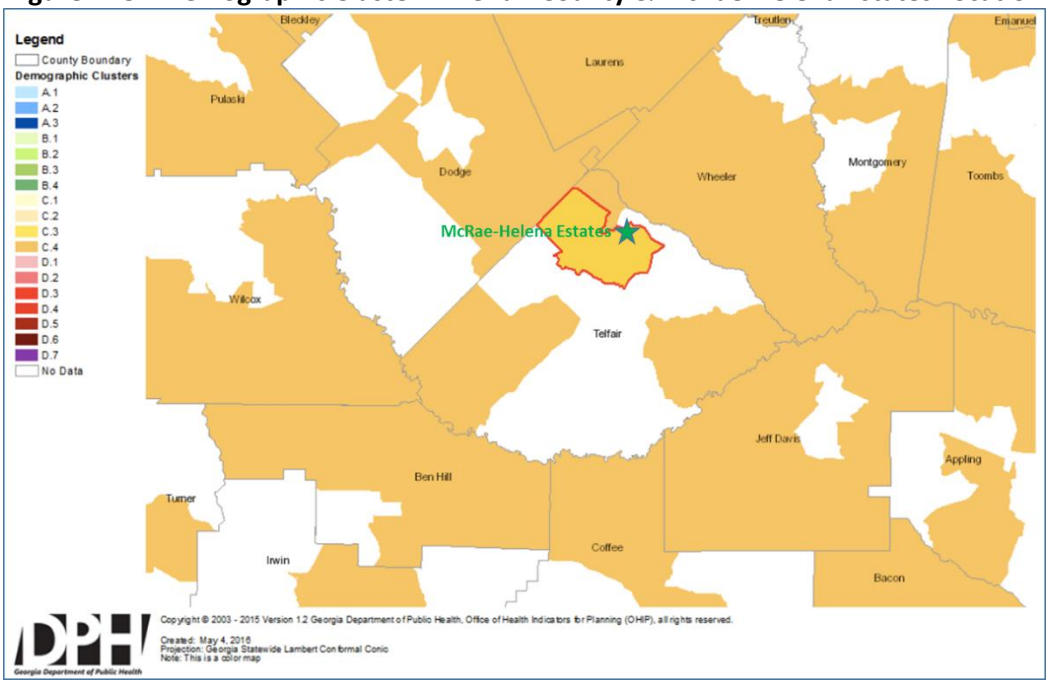

Table 7: Baseline Chronic Disease Indicators for McRae-Helena Estates / Telfair County

(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Telfair County	Statistic for Georgia	Source
Obesity	Adult Obesity: Percentage of adults that report a BMI of 30 or more	32%	29%	County Health Rankings / BRFSS*
Physical Activity	Adult Inactivity: Percentage of adults aged 20 and over reporting no leisure-time physical activity	32%	25%	County Health Rankings / BRFSS*
Physical Activity	Access to Exercise Opportunities: Percentage of population with adequate access to locations for physical activity	11%	75%	County Health Rankings / Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files
Physical Activity	Walking or Biking to Work: Percentage of the population that commutes to work by either walking or riding a bicycle	2.67%	1.79%	Community Commons / US Census Bureau, American Community Survey
Nutrition	Food Insecurity: Percentage of population who lack adequate access to food	24%	19%	County Health Rankings / Map the Meal Gap
Nutrition	Adults with Inadequate Fruit / Vegetable Consumption: Percentage of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day	87%	75.7%	Community Commons / BRFSS*
Heart Disease (Leading cause of premature death in Demographic Cluster C.4)	Heart Disease Prevalence (Adult): Percentage of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina	2.5%	4.4%	Community Commons / BRFSS*
Tobacco Use	Adult Smoking: percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime	22%	17%	County Health Rankings / BRFSS*
Lung Cancer (3rd leading cause of premature death in Demographic Cluster C.4)	Incidence of Lung Cancer: per 100,000 population	55.1	67.3	Community Commons / State Cancer Profiles.
Asthma	Asthma Prevalence: Percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma	41%	13.5%	Community Commons / BRFSS*

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Healthcare Access

For healthcare access, the indicators show that Telfair County is comparable to the state as a whole. The only two indicators for which the county performs poorly are the provider access ratios. This difference is logical, given the rural nature of the county. A lower percentage of people claiming to lack a consistent source of primary care would support an assertion that the lower number of providers may not be a critical issue in the county. Healthcare access issues were not mentioned as a major concern in interviews with local stakeholders. **Table 8** displays baseline healthcare access indicators for McRae-Helena Estates / Telfair County.

Table 8: Baseline Healthcare Access Indicators for McRae-Helena Estates / Telfair County
(Orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Telfair County	Statistic for Georgia	Source
Insurance	Uninsured: Percentage of population under age 65 without health insurance	21%	21%	County Health Rankings / Small Area Health Insurance Estimates
Insurance	Uninsured Children: Percentage of children under age 19 without health insurance	8%	10%	County Health Rankings / Small Area Health Insurance Estimates
Insurance	Uninsured Adults: Percentage of adults under age 65 without health insurance	26%	26%	County Health Rankings / Small Area Health Insurance Estimates
Provider Access	Ratio of population to primary care physicians	2,770:1	1,540:1	County Health Rankings / Area Health Resource File/American Medical Association
Provider Access	Ratio of population to primary care providers other than physicians	5,506:1	1,349:1	County Health Rankings / CMS, National Provider Identification
Provider Access	Lack of Consistent Source of Primary Care: Percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or healthcare provider	23.6%	26%	Community Commons / BRFSS*

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Injury Prevention

Telfair County performs more poorly than the state as a whole on two of the four indicators examined here. The overall death rate from injuries is higher than the state figure, as is the rate for motor vehicle crash deaths, which is the second leading cause of premature mortality in the C.4 Demographic Cluster. Despite the higher proportion of people who walk or bike to work noted above, the pedestrian death rate is lower in Telfair County than in the state as a whole. **Table 9** displays baseline injury prevention indicators for McRae-Helena Estates / Telfair County.

Local stakeholders noted domestic violence as a concern. Within the indicators included here, only the overall death rate from injuries would capture domestic violence. As noted by stakeholders, domestic violence is often severely underreported and thus difficult to track. The result is a need for better morbidity data related to intentional violence and injuries

Table 9: Baseline Injury Prevention Indicators for McRae-Helena Estates / Telfair County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Telfair County	Statistic for Georgia	Source
All Injury	Injury Deaths: Number of deaths due to injury per 100,000 population	61	58	County Health Rankings / CDC WONDER mortality data
Motor Vehicle Injury (2rd leading cause of premature death in Demographic Cluster C.4)	Motor Vehicle Crash Deaths: Number of motor vehicle crash deaths per 100,000 population.	17	14	County Health Rankings / CDC WONDER mortality data
Pedestrian Injury	Pedestrian Motor Vehicle Crash Mortality: Number of pedestrians killed by motor vehicles per 100,000 population	2	3.3	Community Commons / US DOT National Highway Traffic Safety Administration, Fatality Analysis Reporting System
Unintentional Injury	Unintentional Injury Mortality: Number of deaths due to unintentional injury (accident) per 100,000 population	38.8	39.6	Community Commons / CDC WONDER mortality data

Mental Health

In terms of mental health, Telfair County performs more poorly than the state as a whole on three of the eight indicators included here. Though data were not available for three of the total, it is likely due to the county's small population producing unstable estimates. People in the county report a slightly higher number of poor mental health days than the state as a whole. The percent of alcohol impaired driving deaths is over twice the state figure; though the percentage of adults reporting excessive drinking is slightly lower in the county. Nearly a third of Telfair residents report a lack of social support, compared to roughly one fifth for the state as a whole. Although the rate is not available for the county, suicide is the fifth leading cause of premature death in the C.4 Demographic Cluster. **Table 10** displays baseline mental health indicators for McRae-Helena Estates / Telfair County.

Local stakeholders noted substance abuse as an issue receiving special attention from local service providers.

Table 10: Baseline Mental Health Indicators for McRae-Helena Estates / Telfair County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Telfair County	Statistic for Georgia	Source
Mental Health Status	Poor Mental Health Days: Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4.3	4	County Health Rankings / BRFSS*
Mental Health Providers	Ratio of population to mental health providers	N/A	850:1	County Health Rankings / CMS, National Provider Identification
Substance Use/Abuse	Excessive Drinking: Percentage of adults reporting binge or heavy drinking (defined as more than two drinks per day on average for men and one drink per day on average for women)	14%	16%	County Health Rankings / BRFSS*
Substance Use/Abuse	Alcohol-impaired Driving Deaths: Percentage of driving deaths with alcohol involvement	57%	24%	County Health Rankings / US DOT National Highway Traffic Safety Administration, Fatality Analysis Reporting System
Substance Use/Abuse	Drug Overdose Deaths: Number of drug poisoning deaths per 100,000 population	N/A	11	County Health Rankings / CDC WONDER mortality data
Social Connectedness	Social Associations: Number of membership associations per 10,000 population	10.2	9.0	County Health Rankings / County Business Patterns
Social Connectedness	Lack of Social or Emotional Support: Percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time	31.2%	20.7%	Community Commons / BRFSS*
Suicide (5th leading cause of premature death in Demographic Cluster C.4)	Suicide Rate: This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population	N/A	11.9	Community Commons / CDC WONDER

** The Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.*

South Rome Apartments

Table 11 shows where Floyd County ranks in comparison to other Georgia counties on CHR categories. For overall health outcomes, Floyd ranks near the middle of Georgia's counties. It ranks below half of all counties in the state for length of life, and physical environment. Originally Polk County data were

included in scoping discussions, but they are excluded here for simplicity. Generally, Polk County performs more poorly than Floyd County in the rankings and subsequent indicators. From the indicators presented, chronic disease and mental health appear to be two area that warrant special attention. This was only partially validated by local stakeholder interviews, which focused mostly on factors relevant for chronic disease and on the variety of services available in the Rome area. Those interviews also identified teen pregnancy as an issue of local concern, but that topic was excluded from this HIA during the scoping workshop.

Table 11: Floyd and Polk County Rankings of 159 GA Counties (1=best; 159=worst)

CHR Category	Floyd Rank
Health Outcomes	**73**
Length of life	85
Quality of life	71
Health Factors	**39**
Healthy Behaviors	44
Clinical care	21
Social & Economic Factors	57
Physical Environment	88

Chronic Disease

In terms of chronic disease outcomes and related behaviors, Floyd County performs more poorly than the state as a whole on six of the ten indicators included here. There are higher levels of inactivity and lower access to exercise opportunities in the county than in the state. There is a lower percentage of people identified as food insecure, and the proportion of people who indicate inadequate consumption of fruits and vegetables is higher in Floyd County than in the state as a whole. In terms of outcomes, Floyd has a higher prevalence of heart disease and higher incidence of lung cancer than the state, the leading- and third-leading causes of premature mortality in the D.5 Demographic Cluster, respectively. **Figure 3** displays the areas within Floyd County that are included in the D.5 Cluster along with the location of South Rome Apartments. Asthma prevalence is also higher in the county than in the state. **Table 12** displays baseline chronic disease indicators for South Rome Apartments / Floyd County.

Local stakeholders confirmed these as important issues in the community, noting particular concern around tobacco use.

Figure 3: D.5 Demographic Cluster in Floyd County & South Rome Apartments Location

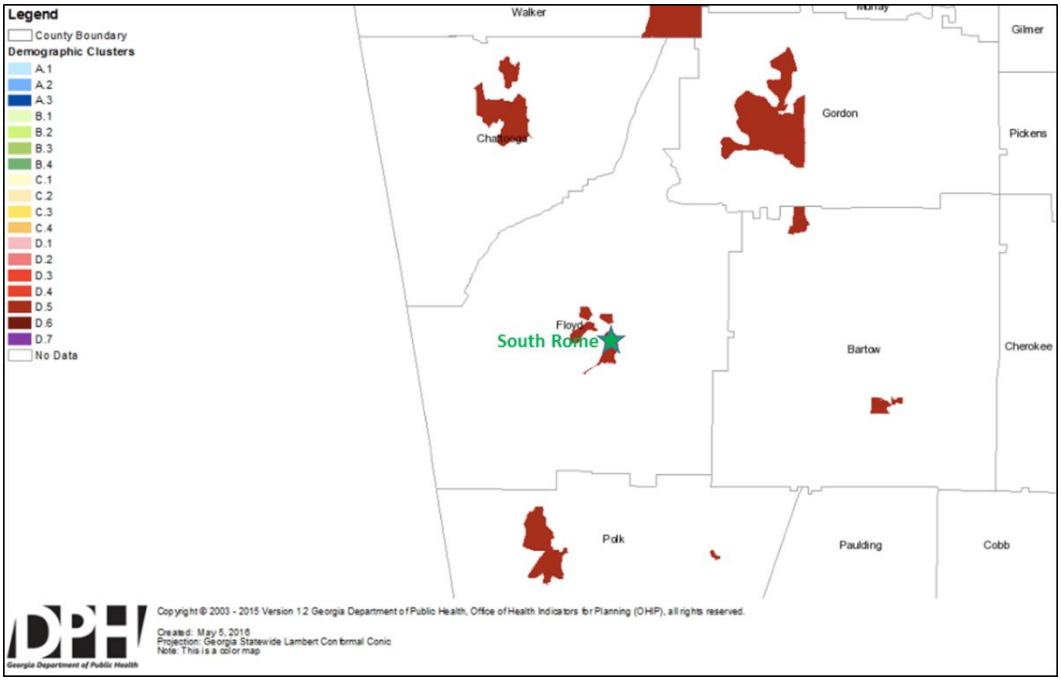

Table 12: Baseline Chronic Disease Indicators for South Rome Apartments / Floyd County

(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Obesity	Adult Obesity: Percentage of adults that report a BMI of 30 or more	29%	29%	County Health Rankings / BRFSS*
Physical Activity	Adult Inactivity: Percentage of adults aged 20 and over reporting no leisure-time physical activity	30%	25%	County Health Rankings / BRFSS*
Physical Activity	Access to Exercise Opportunities: Percentage of population with adequate access to locations for physical activity	71%	75%	County Health Rankings / Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files
Physical Activity	Walking or Biking to Work: Percentage of the population that commutes to work by either walking or riding a bicycle	3.46%	1.79%	Community Commons / US Census Bureau, American Community Survey
Nutrition	Food Insecurity: Percentage of population who lack adequate access to food	17%	19%	County Health Rankings / Map the Meal Gap

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Nutrition	Adults with Inadequate Fruit / Vegetable Consumption: Percentage of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day	80.8%	75.7	Community Commons / BRFSS*
Heart Disease (Leading cause of premature death in Demographic Cluster D.5)	Heart Disease Prevalence (Adult): Percentage of adults aged 18 and older have ever been told by a doctor that they have coronary heart disease or angina	5.7%	4.4%	Community Commons / BRFSS*
Tobacco Use	Adult Smoking: Percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime	17%	17%	County Health Rankings / BRFSS*
Lung Cancer (Third leading cause of premature death in Demographic Cluster D.5)	Incidence of Lung Cancer: Per 100,000 population	81.1	67.3	Community Commons / State Cancer Profiles.
Asthma	Asthma Prevalence: Percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma	17.4%	13.5%	Community Commons / BRFSS*

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Healthcare Access

Floyd County underperformed in comparison to the state as a whole on only two of the six healthcare access indicators: overall uninsured and uninsured adults. Local stakeholders indicated that despite having several healthcare facilities in the county, access to – and ultimately use of – care was still an issue. They attributed this to higher rates of uninsurance. **Table 13** displays baseline healthcare access indicators for South Rome Apartments / Floyd County.

Table 13: Baseline Healthcare Access Indicators for South Rome Apartments / Floyd County
(Orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Insurance	Uninsured: Percentage of population under age 65 without health insurance	22%	21%	County Health Rankings / Small Area Health Insurance Estimates
Insurance	Uninsured Children: Percentage of children under age 19 without health insurance	10%	10%	County Health Rankings / Small Area Health Insurance Estimates

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Insurance	Uninsured Adults: Percentage of adults under age 65 without health insurance	28%	26%	County Health Rankings / Small Area Health Insurance Estimates
Provider Access	Ratio of population to primary care physicians	810:1	1,540:1	County Health Rankings / Area Health Resource File/American Medical Association
Provider Access	Ratio of population to primary care providers other than physicians	589:1	1,349:1	County Health Rankings / CMS, National Provider Identification
Provider Access	Lack of Consistent Source of Primary Care: Percentage of adults aged 18 and older who self-report that they do not have at least one person who they think of as their personal doctor or healthcare provider	22.3%	26%	Community Commons / BRFSS*

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Injury Prevention

In terms of injury prevention, Floyd County performs more poorly than the state as a whole on three of the four indicators examined here. The overall death rate from injuries is nearly 30 percent higher than the state figure, as is the rate for motor vehicle crash deaths, which is the fourth leading cause of premature mortality in the D.5 Demographic Cluster. Despite the higher proportion of people who walk or bike to work noted above, the pedestrian death rate is lower in Floyd County than in the state as a whole. Deaths from unintentional injuries are nearly 30 percent higher in Floyd County than in the state as a whole. **Table 14** displays baseline injury prevention indicators for South Rome Apartments / Floyd County.

Table 14: Baseline Injury Prevention Indicators for South Rome Apartments / Floyd County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
All Injury	Injury Deaths: Number of deaths due to injury per 100,000 population	75	58	County Health Rankings / CDC WONDER mortality data
Motor Vehicle Injury (Fourth leading cause of premature death in Demographic Cluster D.5)	Motor Vehicle Crash Deaths: Number of motor vehicle crash deaths per 100,000 population.	16	14	County Health Rankings / CDC WONDER mortality data
Pedestrian Injury	Pedestrian Motor Vehicle Crash Mortality:	3.1	3.3	Community Commons / US DOT National Highway Traffic Safety

	Number of pedestrians killed by motor vehicles per 100,000 population			Administration, Fatality Analysis Reporting System
Unintentional Injury	Unintentional Injury Mortality: Number of deaths due to unintentional injury (accident) per 100,000 population	51.2	39.6	Community Commons / CDC WONDER mortality data

Mental Health

Floyd County underperforms on four of the eight mental health indicators when compared to state figures. The availability of mental health providers is slightly lower in the county than in the state, and the percentage of people indicating a lack of social support is slightly higher. In terms of outcomes in Floyd County, the rate of drug overdose deaths is over 35 percent higher than in the state as a whole. Suicide is the seventh leading cause of premature mortality in the D.5 Demographic Cluster, and in Floyd County the rate is 15 percent higher than the state rate. Despite these statistics, mental health was not emphasized by local stakeholders; though they did note the presence of a psychiatric center at one of the area hospitals. **Table 15** displays baseline mental health indicators for South Rome Apartments / Floyd County.

Table 15: Baseline Mental Health Indicators for South Rome Apartments / Floyd County
(Pink shading indicates a leading cause of premature death, and orange shading indicates where the county performed poorly compared to the state.)

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Mental Health Status	Poor Mental Health Days: Average number of mentally unhealthy days reported in past 30 days (age-adjusted)	4	4	County Health Rankings / BRFSS*
Mental Health Providers	Ratio of population to mental health providers	930:1	850:1	County Health Rankings / CMS, National Provider Identification
Substance Use/Abuse	Excessive Drinking: Percentage of adults reporting binge or heavy drinking (defined as more than two drinks per day on average for men and one drink per day on average for women)	15%	16%	County Health Rankings / BRFSS*
Substance Use/Abuse	Alcohol-impaired Driving Deaths: Percentage of driving deaths with alcohol involvement	13%	24%	County Health Rankings / US DOT National Highway Traffic Safety Administration, Fatality Analysis Reporting System
Substance Use/Abuse	Drug Overdose Deaths: Number of drug poisoning deaths per 100,000 population	15	11	County Health Rankings / CDC WONDER mortality data
Social Connectedness	Social Associations: Number of membership associations per 10,000 population	11	9.0	County Health Rankings / County Business Patterns

Outcome/Behavior	Indicator	Statistic for Floyd County	Statistic for Georgia	Source
Social Connectedness	Lack of Social or Emotional Support: Percentage of adults aged 18 and older who self-report that they receive insufficient social and emotional support all or most of the time	21.7%	20.7%	Community Commons / BRFSS*
Suicide (Seventh leading cause of premature death in Demographic Cluster D.5)	Suicide Rate: This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population	13.9	11.9	Community Commons / CDC WONDER

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Key Health Indicators to Track over Time

These are the health indicators from the above discussion that are both highly relevant and lend themselves to being tracked over time. **Table 16** list the indicator, a source of existing data, and a potential survey question that could be used to examine outcomes and behaviors of current or future residents.

Table 16: Key Health Indicators to Track over Time

Outcome/Behavior	Indicator	Existing Data Source	Possible survey question to track indicator
Chronic Disease			
Tobacco Use	Adult Smoking	County Health Rankings / BRFSS*	Do you now smoke cigarettes every day, some days, or not at all?
Obesity	Adult Obesity Prevalence (BMI >=30)	County Health Rankings / BRFSS*	What is your current height and weight?
Physical Activity	Adult Leisure Time Activity	County Health Rankings / BRFSS*	During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
Physical Activity	Commuting by Active Transportation	Community Commons / US Census Bureau, American Community Survey	How frequently do you walk or bicycle to work?
Nutrition	Fruit & Vegetable Consumption	County Health Rankings / BRFSS*	How many servings of fruits and vegetables do you eat on a regular day?
Asthma	Asthma Prevalence	Community Commons / BRFSS*	Have you ever been told by a doctor, nurse, or other health professional that you had asthma?

Outcome/Behavior	Indicator	Existing Data Source	Possible survey question to track indicator
Heart Disease	Heart Disease Prevalence (Adult)	Community Commons / BRFSS*	Have you ever been told by a doctor that you have coronary heart disease or angina?
Healthcare Access			
Insurance	Uninsured	County Health Rankings / Small Area Health Insurance Estimates	Do you currently have health insurance coverage?
Provider Access	Lack of Consistent Source of Primary Care	Community Commons / BRFSS*	Do you have one person you think of as your personal doctor or healthcare provider?
Injury Prevention			
Unintentional Injuries	Non-fatal injury incidence	Not readily available in existing data	In the past year, have you had an injury that resulted in seeking medical attention?
Mental Health			
Mental Health Status	Poor Mental Health Days	County Health Rankings / BRFSS*	Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?
Substance Use/Abuse	Excessive Drinking	County Health Rankings / BRFSS*	One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?
Social Connectedness	Lack of Social or Emotional Support	Community Commons / BRFSS*	How often do you get the social and emotional support you need?

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Assessment & Recommendations

Site Level Assessment

The siting of affordable housing is important for promoting public health, because the location of housing determines much of the context for residents' behaviors. QAP criteria for siting deal largely with the amenities, sociodemographics, and land use characteristics near proposed developments.

Addressing siting of developments is beyond the scope of the current HIA, as sites were already selected and approved before the beginning of the HIA. However, reflecting on the characteristics of these three sites provides insight that can inform future updates to the QAP, which will in turn influence the location of future affordable housing units in the state.

2015 QAP HIA Recommendations

Selected recommendations from the 2015 QAP HIA that consider siting decisions are summarized below and are grouped into the following topical categories: mixed use, transportation context, educational opportunity and community characteristics. A short summary of existing evidence connecting those categories to health behaviors and outcomes is followed by a brief analysis of each recommendation and how the three developments fared under these criteria. These recommendations are geared mainly toward DCA as they continue annual updates of the QAP, but developers could also consider many of them independently in their future development proposals. Each recommendation is labeled with the most relevant of the four health topics from the current HIA: healthcare access, chronic disease, injury risk, and/or mental health.

Mixed Use

Much of the research connecting the built environment to public health outcomes notes the value of development patterns that lead to a mix of uses.[13, 14] Ensuring that housing is located in areas with access to jobs, retail, schools and public transportation can impact specific health behaviors like physical activity, as well as provide residents with a stronger ability to participate in political processes, which addresses empowerment as an underlying social determinant health.[15]

There is strong evidence that design and land use policies, including mixed-use development, increase physical activity.[16] Increasing daily amounts of physical activity has been identified as a means for stemming the public health burden of obesity and associated **chronic diseases** such as diabetes, cardiovascular disease, hypertension and some types of cancer.[17] People walk and ride bicycles more often in mixed-use development areas, which have higher densities and incorporate places to work, shop or play within residential areas.[18, 19] Walking for transportation increases with variety in land use, residential density and shorter distances to non-residential destinations.[20, 21] When considering walking and/or biking for both recreation and transportation, evidence shows that having dedicated infrastructure (e.g. sidewalks, bike lanes, or trails) allows for increased physical activity and reduced **injury risk**.[22-25]

Incentivize proposals in locations zoned for mixed-use development, even if the project itself is not mixed use.

Relevant health topic: Chronic disease

How the three sites compare: Only one site, South Rome, appears to be located in an area designated as a mixed use zone by the local jurisdiction (‘Urban Mixed Use’). Hardin Terrace is in a residential zone (‘R-3’). McRae-Helena Estates is on a site zoned C-1 according to their application, but the research team was unable to find a copy of the McRae Zoning Ordinance in order to

determine what uses are allowed under this designation. From observation during a site visit and aerial images available through Google Maps, it appears likely that a variety of commercial and non-commercial uses are permitted near the McRae-Helena site (**Figure 4**).

Figure 4: McRae-Helena Estates Site (outlined in red) and Surrounding Non-residential Land Use

Source: Google Maps

Recommend that applicants evaluate the appropriateness of mixed use development in their market studies, including details regarding the type and amount of mix.

Relevant health topic: Chronic disease

How the three sites compare: None of the sites' application documents indicate a concerted evaluation of the appropriateness of mixed use development; though Hardin Terrace and South Rome do mention land use mix in their respective market analyses. The Hardin document notes the "mixture of surrounding land uses in northwest Jefferson, Jackson County." The South Rome document states that, "The sites are located in a mixed-use neighborhood consisting of single family homes..., multifamily communities..., and retail and commercial uses..." The McRae-Helena Estates market analysis makes no mention of land use mix.

Incentivize locations that are directly connected by walkways or bikeways (on or off street) to a town center, commercial district or retail center within a half mile (preferably within a quarter mile).

Relevant health topics: Chronic disease and injury prevention

How the three sites compare: The South Rome site is the only one of the three that is both within a half mile of a commercial center (downtown Rome) and has sidewalks connecting the site to that center. Stakeholders also indicated that there is a good trail network in the area, but it is unclear how well this existing network connects to the apartment sites. McRae-Helena Estates are located on a roadway that has sidewalks, but the site is not near any concentrated commercial areas. Hardin Terrace is in an area that is neither close to a commercial center nor has existing sidewalks, paths or trails.

Transportation Context

Health and transportation are linked through many mechanisms.[26] Transportation is often noted as a major barrier to accessing services, especially healthcare services for lower income persons.[27, 28] Within the scope of this section, however, the two most relevant recommendations from the 2015 HIA consider the characteristics of the roadway itself, not necessarily the transportation services offered.

Exposure to busy roadways can impact several health outcomes, including chronic disease, injury risk, and mental health. Elevated levels of air pollution near roadways have consistently been found to associate with increased rates of numerous **chronic diseases** in populations that live or spend extended periods of time near high-traffic areas. These chronic diseases include asthma, chronic obstructive pulmonary disease, cardiovascular disease, adverse reproductive outcomes, and mortality.[29] The most noticeable and consistent effects occur within 200 meters of roadways with Annual Average Daily Traffic (AADT) of more than 25,000 vehicles per day; though some studies suggest elevated risk at exposures as low as 10,000 vehicles per day.[29-31] High volume roadways are also associated with increased **injury risk**, especially for vulnerable road users, such as pedestrians and cyclists.[32] The risk of injury is especially pronounced for children who are exposed to high traffic areas.[33] Finally, there is some limited evidence connecting high levels of vehicular traffic and poorer **mental health** in chronically exposed populations, primarily through exposure to high noise levels and stress; though more research is needed to more firmly establish this link.[34-36]

One approach to promoting multimodal transportation options is the implementation of Complete Streets policies. These types of policies explicitly focus on making the roadway and the street usable for pedestrians, bicyclists, transit users and automobiles. Intuitively, policies that make the street safer and more attractive for non-motorized users should increase the presence of these modes and reduce **risk of injury** and **chronic disease** (mainly by increasing physical activity), among other benefits. However, most of the scientific evidence focuses on specific streetscape characteristics and their effects on health and health determinants, not on the policies behind these characteristics.[37-41] Many jurisdictions across the U.S. have begun to pursue Complete Streets as a policy option to achieve more efficient and healthy streetscapes, but scientific evaluations to determine their effectiveness are still needed.[26, 42] Similar but more programmatic interventions, like Safe Routes to School, have been demonstrated to reduce injuries in the target population.[43]

Remove incentives from plans that propose buildings within 200 meters (650 feet) of a road with an AADT that exceeds 25,000 motor vehicles per day.

Relevant health topics: Chronic disease, injury prevention and mental health

How the three sites compare: None of the three developments is within 200 meters of a road with 25,000 vehicles per day according to available GDOT data.[1] The two nearest counts for Hardin Terrace are 5,280 vehicles/day on US-129-BR a little over a mile northwest of the site and 11,100 vehicles/day almost a mile and a half southeast of the site on Washington Street (US-129-BR). In McRae, a monitor roughly a quarter mile north of the site on Spalding Drive estimated 1,110 vehicles/day, and one approximately three quarters of a mile west of the site on East Oak Street (US-23) estimated 4,160 vehicles/day. The counts in South Rome were 12,100 vehicles/day on the Broad Street bridge less than a quarter mile north of the site and 8,180 vehicles/day less than a quarter mile south of the site, also on Broad Street.

Incentivize sites located in a jurisdictions that have adopted Complete Streets ordinances, Safe Routes to School policy/programs, or similar mechanisms for supporting safe pedestrian activity.

Relevant health topics: Injury prevention and chronic disease

How the three sites compare: According to the National Complete Streets Coalition, none of the local jurisdictions examined here have a complete streets policy in place as of summer 2016.[2] The Rome-Floyd MPO has recently completed a bicycle and pedestrian plan that proposes to adopt such an ordinance and to gain walk-friendly and bike-friendly status by 2018. Both Rome and Jefferson have had some level of participation in Safe Routes to School, but it is unclear if these activities are active at the schools nearest the development sites.[3] No resources were readily available regarding the extent of these types of policies or activities in McRae-Helena and/or Telfair County.

Educational Opportunity

Educational attainment is one of the most important health determinants and can influence all four health areas considered in this HIA. Over 44 percent of adults who have not completed high school report that their health is fair or poor (rather than good or excellent) compared to just 7 percent of adults with a college degree. Compared with college graduates, adults over 25 without a high school degree are more than twice as likely to have diabetes or suffer heart disease, and their babies are more than twice as likely to die before their first birthday. In total, a U.S. college graduate can expect to live eight to nine years longer than someone who has not obtained a high school degree by age 25.[44]

Early childhood, spanning birth to age five, represents a brief but irreplaceable developmental window that influences future outcomes. The importance of this window for child development and lifelong health, success and well-being cannot be overstated. The Institute of Medicine has endorsed effective early learning programs as one of the greatest and most cost-effective ways to improve future health status.[45]

[1] http://trafficserver.transmetric.com/gdot-prod/gdot_report.html
[2] http://www.smartgrowthamerica.org/complete-streets/changing-policy/complete-streets-atlas
[3] http://www.saferoutesga.org/content/current-partners-1

In terms of associations between **healthcare access** and educational attainment, a comprehensive review of the evidence in 2014 shows that higher education levels produce many downstream benefits that improve health through promoting higher levels of health literacy and higher lifetime wages, which increase income and likelihood of having health insurance.[46] Other evidence reviews suggest insufficient evidence to fully characterize the relationships between health literacy, healthcare utilization and outcomes.[47] However, the evidence is clear that patients with lower educational levels are disadvantaged to some extent in their interactions with providers due to poorer communication quality, an important determinant of accessibility to healthcare.[48]

Because educational attainment is often grouped with other indicators of socio-economic status, there is limited evidence for a direct link between education and **injury risk**. Fatal injuries are most consistently shown to have an inverse relationship with socio-economic status, while non-fatal injuries lead to less consistent associations, depending on injury type.[49, 50]

Similarly, the impact of educational attainment and quality on **chronic disease** risks are intertwined with broader socioeconomic associations, but generally, higher education levels are associated with lower prevalence of chronic diseases, such as hypertension, diabetes and cardiovascular disease.[51] A recent study that aimed to model impacts of school quality on disparities in obesity between blacks and whites note the time-dependent nature of this relationship, wherein short-term, direct positive effects are seen through 12 years of school and longer-term, indirect effects are seen as a result of a neighborhood feedback loop that includes school quality, education level, household income, neighborhood income and residential mobility.[52] Other research suggests that improvements in school quality (as indicated by pupil-teacher ratio, average teachers' wage and length of the school year) amplify the beneficial effects of education on several measures of health in later life, including self-rated health, smoking, obesity and mortality.[53]

Finally, **mental health** is another topic considered in this HIA that has been associated with educational attainment and quality. Attending a low-quality high school, as measured by average daily attendance, has been linked with higher odds of being diagnosed with depression in adulthood.[54] A review of the literature in 2013 found that attending a school with a higher-quality environment, combined with living in a high-quality neighborhood, was associated with better mental health and fewer problems or risky behaviors in youth.[55] A link between better-quality schools and reduced substance use has also been demonstrated.[56]

Use the Georgia Department of Education's CCRPI scores to incentivize sites to locate in the attendance zones of high-performing schools, giving the most incentive to locations where all schools score above average, and removing incentives in locations where schools have failing scores.

Relevant health topics: Healthcare access, injury prevention, chronic disease and mental health

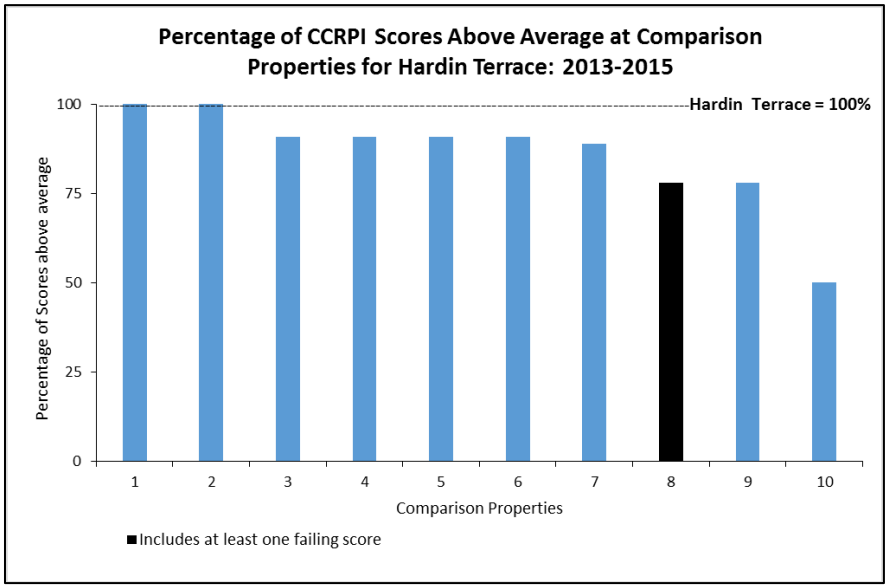
How the three sites compare: All three proposals received points under this scoring criteria in 2015. All three schools for Hardin Terrace (North Jackson Elementary, West Jackson Middle and Jackson County High) had above average CCRPI scores in 2013, 2014 and 2015. For the South Rome

Apartments, both Rome Middle and Rome High Schools had above average scores in 2014 and 2015. In 2013, only Rome Middle School was above average, and there appears to be a discrepancy between the figures used in the development application and those available as of summer 2016. For McRae, only Telfair High School had an above average score in 2013, 2014 and 2015. Telfair Elementary was above average in 2014. None of the three properties have a school designated as failing (CCRPI<60) in the three years for which data were available.

School quality was also examined for the comparison properties used in each of the three Market Analyses available as part of the original QAP applications. Available CCRPI data from 2013, 2014 and 2105 were collected for each school that serves each comparison property. Simple comparisons were made between the target site (Hardin, McRae or South Rome) and the relevant comparison properties based on the proportion of scores that were above average for each school over all three years.

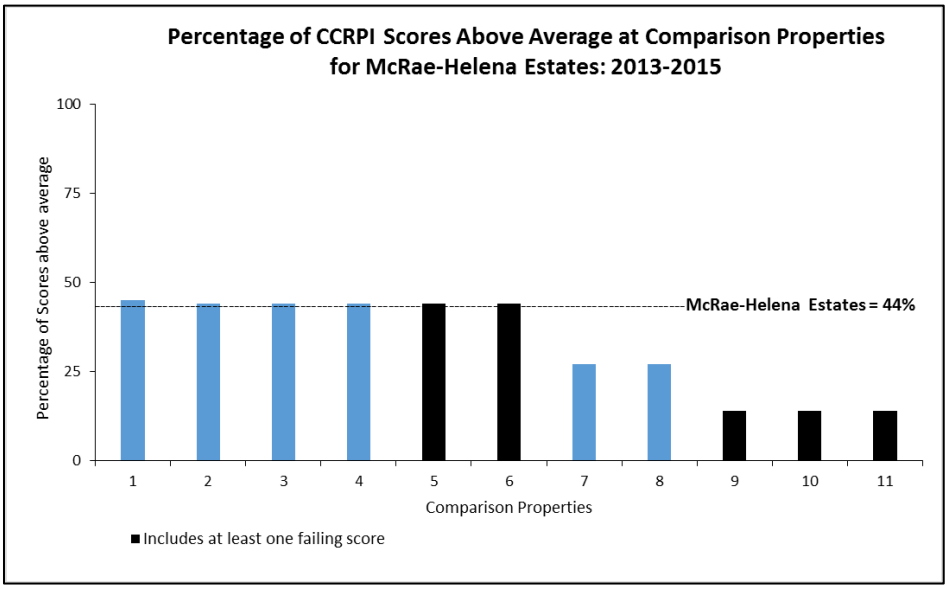
As illustrated in **Figure 5**, there were 10 relevant comparison properties for Hardin Terrace, two of which matched it in having 100 percent of scores above average. Seven had 70 percent or more above average scores, and just one had less, at 50 percent. Of schools serving the comparison properties, only one had a failing score in any of the three years examined.

Figure 5: Educational Quality at Schools Serving Hardin Terrace Comparison Properties



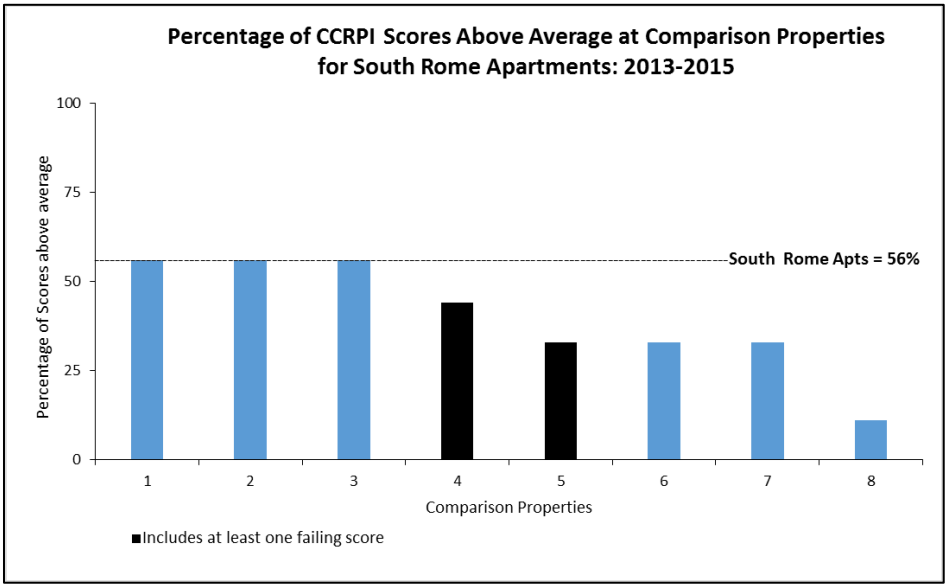
As illustrated in **Figure 6**, of the 11 comparison properties for McRae (excluding senior properties), five had a lower percentage of above average scores. Six were comparable to McRae, for which 44 percent of scores were above average. There were also at least five comparison properties that were in the attendance zone of one or more schools with a failing score in any of the three years examined.

Figure 6: Educational Quality at Schools Serving McRae-Helena Estates Comparison Properties



As illustrated in **Figure 7**, there were eight comparison sites for the South Rome Apartments, and five had a lower proportion of above average scores. The remaining three matched South Rome and had 56 percent above average scores. There were also at least two comparison properties that were in the attendance zone of one school with a failing score in any of the three years examined.

Figure 7: Educational Quality at Schools Serving South Rome Apartments Comparison Properties



Incentivize sites within two miles of a Quality Rated child care facility and a Georgia's Pre-K Program (or within a quarter mile of the same transit route as the property).

Relevant health topics: Healthcare access, injury prevention, chronic disease and mental health

How the three sites compare: According to data available from the Georgia Department of Early Care and Learning,[4] none of the sites fully meet this criteria, and only South Rome has both Quality Rated child care and Pre-K programs within 2 miles; though none appear to be co-located.

South Rome is just over a mile from Quality Rated child care facilities at House of the Children Academy Child Care Learning Center. The development site is within 2 miles of Pre-K programs at Anna K. Davie Elementary (half a mile away) and Elm Street Elementary (2 miles away). It is also within 2 miles of three licensed Pre-K programs: Kids Stop Child Care Learning Center (1.6 miles away), Toddler's Inn Child Care Learning Center (1.7 miles away), and Rebecca Blaylock Child Development Center II Child Care Learning Center (1.9 miles away).

Hardin Terrace does not have any Quality Rated child care facilities within 2 miles. The closest is Elite Academy Child Care Learning Center in Hoschton (6.8 miles away). The Hardin site is within 2 miles of Bright Beginnings of Jefferson Child Care Learning Center (0.4 miles away) and Easter Seals Child Development Center (1.8 miles away), both of which have licensed Georgia Pre-K programs. It is also one and a half miles from Jefferson Elementary School, which offers Pre-K.

McRae Helena Estates is approximately a mile from Telfair County Pre-K. Eastman Head Start Child Care Learning Center is the nearest Quality Rated facility (20 miles away in Eastman).

Community Characteristics

This topic area addresses interactions between proposed housing developments and the socio-demographic fabric of the surrounding communities. Neighborhood social characteristics have significant influence on health outcomes, including all four considered in the current assessment.[57] Studies examining concentrated poverty have found that areas with over 20 percent of households living below 100 percent of the federal poverty level have significantly poorer outcomes in health and quality of life; below that 20 percent, other factors, such as diversity, education, access and mobility are more influential.[58, 59] The Demographic Cluster classification system developed by the Georgia Department of Public Health (GDPH) is a method for considering many of the socio-demographic factors that contribute to a community of opportunity.[60]

Studies of affordable housing redevelopment projects found that plans that address broader physical revitalization and community service needs had greater chances of being funded and of leveraging external capacity to provide supportive services that can increase **healthcare access**.[61] Health care is often noted as a barrier that prevents lower income people from moving to other areas, because they feel that a move may cost them access to a familiar provider.[62] Because access to clinicians and facilities tend to be in shortest supply in rural and low-income areas, residents may struggle to find local

[4] http://families.decal.ga.gov/

primary care providers, specialists and hospitals that provide quality healthcare services – even if they have insurance coverage.[46]

Community social characteristics also influence risk of **chronic disease**. A review of multiple studies found that greater levels of social deprivation at the neighborhood level were consistently associated with poorer health outcomes across a range of chronic diseases, including cardiovascular disease, asthma and others.[63] Much of the benefit of more socially-integrated communities comes from increased social capital, which has been shown to have inconsistent associations with chronic disease; though isolating and measuring social capital in the context of health behaviors and outcomes remains an important area for future research.[64]

In terms of **injury risk**, the sociodemographic characteristics of neighborhoods have been associated with both intentional (violence) and unintentional injuries. A study of pedestrian-vehicle crashes and neighborhood social characteristics in Chicago found that these crashes were more prevalent in census tracts defined as environmental justice areas.[65] Other research has found that much of the discrepancy in crashes between richer and poorer areas can be attributed to roadway features and design, but note that controlling for these environmental features does not completely account for the excess incidence in poorer areas.[66] The connection between neighborhood sociodemographics and violent crime has been noted as one piece of a broader web of interactions wherein the reduced collective efficacy of disadvantaged neighborhoods contributes to increased levels of violence.[67]

Finally, higher concentrations of poverty have been significantly associated with poor **mental health**.[68] Emerging evidence suggests social and structural features in certain neighborhoods are beneficial for residents' mental health, and a recent examination of the Moving to Opportunity for Fair Housing Demonstration Program found that escaping concentrated disadvantage in both the immediate and surrounding neighborhoods was associated with a significant increase in measures of mental health.[69, 70]

Incentivize development in locations with more stable or lower risk sociodemographic characteristics, as defined by GDPH demographic subclusters: 1 point for B3 or C2; 3 points for A1, B2 or C1; and 4 points for locating in subclusters A2, A3 or B1.

Relevant health topics: Health care access, injury prevention, chronic disease and mental health

How the three sites compare: Hardin Terrace, located in a C2 subcluster, is the only site that would receive any points under this recommendation. All of the comparison sites from the Hardin Terrace Market Analysis are located in the same subcluster or in one with a lower designation (C2, C4, D1, D3 or D5). There are some parts of the county designated as A3 that are somewhat near the site, but none of the other referenced subclusters is present in Jackson County (A1, A2, B1, B2, B3 or C1).

McRae-Helena Estates is in a C4 subcluster. Market-rate comparison properties from the McRae Market Analysis were all in lower D subclusters (D4 or D7); subsidized comparison properties were mostly in comparable subclusters (C3 or C4), though some were in lower D subclusters (D3 or D5).

There were no C1 areas near the project site in McRae, and none of the other referenced subclusters is present in Telfair County (A1, A2, A3, B1, B2, B3 or C2).

Of the three developments considered here, South Rome is in the lowest subcluster (D5). Most comparison properties in the South Rome Market Analysis are in areas with a higher designation (C2, C3, or C4). Of the comparison properties, one market-rate and one subsidized site are in lower, D6 areas. Areas designated as B3 and C2 subclusters exist near the South Rome site, and A3 is present in the county, but not nearby. The other referenced subclusters are not present in Floyd County (A1, A2, B1, B2 and C1).

The QAP should be structured such that no awards will be made in a QCT (Qualified Census Tract) without a concerted community revitalization plan. Provide an incentive for sites that are subject to local revitalization/redevelopment plans outside of QCTs, HUD Choice Neighborhoods or Promise Neighborhoods.

Relevant health topics: Health care access, injury prevention, chronic disease and mental health

How the three sites compare: As indicated in the application, McRae-Helena Estates is located in a QCT and is subject to a local revitalization plan. Neither Hardin Terrace nor South Rome Apartments are in a QCT. The presence of the South Rome Redevelopment Corporation and South Rome Redevelopment Authority indicates that there are concerted planning and revitalization efforts in Rome that are likely to influence the South Rome Apartments development. It is unclear the extent to which any local revitalization plans apply to Hardin Terrace.

Design Level Assessment

Design features within affordable housing developments are environmental determinants of health. These features include site layout, internal and external amenities, as well as building materials. Design decisions around these features set the immediate context for resident behaviors and exposures, with both positive and negative implications for health. This assessment focuses mainly on-site layout and amenities. While building materials are an important component of environmental sustainability and have implications for resident exposures to chemicals or allergens, they are mostly beyond the scope of this project.

2015 QAP HIA Recommendations

Selected recommendations from the 2015 QAP HIA that consider design decisions are summarized below and grouped into the following categories: active transportation access, trees, development amenities and unit design. A short summary of existing evidence connecting those categories to health behaviors and outcomes is followed by a brief analysis of each recommendation and how the three developments fared under these criteria. These recommendations are geared toward developers as they make final design decisions about these properties and for DCA to consider how these types of features could be included in future iterations of the QAP or in associated architectural standards. Determining how the existing design plans for the developments meet these criteria is challenging

without further input from developer teams and/or more detailed project documentation. Questions for developers are included where a determination could not be easily made from available documentation. Each recommendation notes which of the four health topics from the current HIA are most relevant (health care access, chronic disease, injury risk, and/or mental health).

Active Transportation Access

Developing activity-supporting environments is a critical upstream approach to addressing the high levels of inactivity that lead to obesity and associated **chronic diseases**, as well as achieving other co-benefits for health.[71] Active transportation typically includes walking and bicycling, and the more these human-powered modes of transportation are integrated into daily routines, the greater likelihood that sufficient physical activity will take place to see positive effects on health.[26] Increases in biking and walking can lead to greater exposure to **injury risk**, which is why special consideration needs to be paid to design features that mitigate this risk while simultaneously promoting activity.[24]

Existing streets should not be abandoned; the surrounding street network should carry through the property. Site design should avoid fencing off the entire property; although single buildings, yards, or parking areas may be enclosed by fencing.

> **Relevant health topic:** Chronic disease; injury prevention
>
> **How the three sites compare:** Unknown. Are existing streets surrounding the property being abandoned? Will the entire property be fenced off?

Pedestrian ingress and egress should be provided to all adjoining streets, including along all vehicular entrances with crosswalks at street connections.

> **Relevant health topic:** Injury prevention; chronic disease
>
> **How the three sites compare:** Unknown. Will pedestrian ingress and egress be provided to all adjoining streets, including along all vehicular entrances with crosswalks at street connections?

Safe pedestrian crossings should be provided at logical points, such as intersections or building entrances, including at vehicular entrances. Crossings should at least have a painted crosswalk; this may be combined with features such as curb extensions or raised pavement to slow traffic.

> **Relevant health topic:** Injury prevention; chronic disease
>
> **How the three sites compare:** Unknown. Will safe pedestrian crossings be provided at logical points such as intersections or building entrances, including at vehicular entrances? Will crossings have a painted crosswalk? Curb extensions? Raised pavement?

The distance between access points or crossings should not exceed 600 feet. Site design should "stub out" potential connections for future development or redevelopment.

> **Relevant health topic:** Injury prevention; chronic disease

How the three sites compare: Unknown. Will distance between access points or crossings be less than 600 feet? Does site design "stub out" potential connections for future development or redevelopment?

Provide vehicular or shared-use nonmotorized access points to adjacent streets or properties on all sides of the property

Relevant health topic: Injury prevention; chronic disease

How the three sites compare: Unknown. Will vehicular or shared-use nonmotorized access points to adjacent streets or properties be provided on all sides of the property?

Include an incentive (one point) for connecting to adjacent bicycle facilities such as bike lanes, bicycle boulevards or paths.

Relevant health topic: Injury prevention; chronic disease

How the three sites compare: Are there any bicycle facilities such as bike lanes, bicycle boulevards or paths, adjacent to the property? If so, do site roads/pathways connect to them?

Provide bicycle parking at building entrances, including amenities such as playgrounds or community buildings.

Relevant health topic: Chronic disease

How the three sites compare: Unknown. Will bicycle parking be provided at building entrances, including amenities such as playgrounds or community buildings?

For multistory, multifamily buildings without elevators, provide a secured room with a rack or rail for locking bicycles.

Relevant health topic: Chronic disease

How the three sites compare: Unknown. Because commuting by bike is so low in these areas, amenities like this should be geared more toward children and recreational biking than primary transportation.

Trees

Beyond aesthetic benefits, the presence of trees and greenery in residential environments is also associated with positive health. Living in neighborhoods with a high density of trees is associated with improved health perceptions and health outcomes – including **chronic disease**, and there is strong evidence for a positive connection with **mental health**.[71-73] In longitudinal analyses the connection is less clear, with changes in quantity or quality of greenspace in deprived neighborhoods not yielding consistently positive results; however, interventions targeted at specific subgroups, namely youth, demonstrated promising results.[74]

Use the Georgia Forestry Commission's report, 'How to Conserve Natural Resources on Construction Sites' as a resource specific to preserving large mature trees on- site.

Relevant health topic: Chronic disease; mental health

How the three sites compare: Unknown - Are there mature trees on-site? If so, will steps be taken to preserve them during construction?

Resource Link: http://www.gatrees.org/resources/publications/HowtoConserveNaturalResourcesonConstructionSites.pdf

When planting trees on-site consider both environmental factors (temperature, moisture, light, pests, soil, air pollution, etc.) and utility (shade, aesthetics, windbreaks, boundaries, etc.) to determine the best type of tree and location. Use "The Right Tree for the Right Place" from Tree City USA for reference.

Relevant health topic: Chronic disease; mental health

How the three sites compare: Unknown. Are there any specific resources the developers' landscape architects are using in this design? Will the landscape architect use the "Right Tree in the Right Place" or some other method to place trees in environmentally and structurally appropriate locations on the site?

Resource Link: https://www.arborday.org/programs/treecityusa/bulletins/documents/004-summary.pdf

Development Amenities

Note that this content is the same as/closely overlaps with some of the information in the programs and partnerships assessment.

This category of recommendations considers the inclusion of specific health-supporting features within the development, which differs slightly from the access to active transportation grouping above. Here, the focus is on-site amenities included in the development design. There is strong evidence that improving access to places to be active increases physical activity, which improves physical fitness and can reduce or help manage **chronic disease**. [16, 18, 75] Physical activity is also connected to improved **mental health**.[76] It is critical to note that these types of recreational amenities are only one component of the built environment and are more likely to be effective when implemented in combination with other supportive features, both within the development site and the larger community.[40] In addition to promoting physical activity, dedicated infrastructure like walking paths can also reduce the **risk of injuries**.[25]

On-site amenities like community kitchens can also have an impact on **chronic disease** by influencing eating habits and nutrition. It is unclear how much these types of resources actually impact nutritional

intake; however, when combined with suitable programming, there is evidence that they can enhance food skills and food security.[77, 78]

Provide dedicated walking paths on-site.

Relevant health topic: Injury Prevention; chronic disease; mental health

How the three sites compare: Hardin includes a walking path, but it is unclear if McRae or Rome also include this type of amenity.

Walkways should be at least five feet wide with at least four feet of separation from driving and parking areas.

Relevant health topic: Injury prevention; chronic disease

How the three sites compare: Unknown. Will walkways be at least five feet wide with at least four feet of separation from driving and parking areas?

Provide an 'adult playground' or outdoor fitness course on-site.

Relevant health topic: Chronic disease; mental health

How the three sites compare: Does not appear to be a feature at any of the three developments

Sample Resources:

- *Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Increase Physical Activity in the Community*. This document provides guidance for program managers, policy makers, and others on how to select strategies to increase physical activity in the community. It includes content on designing programs for youth and adults. http://www.cdc.gov/obesity/downloads/pa_2011_web.pdf
- Fit-trail - A 10 station Fit-Trail is an outdoor exercise system installed along a walking or jogging trail. It contains instruction signs and exercise equipment designed for the novice or conditioned athlete (illustrated in **Figure 8**). $5,995 plus shipping & handling: http://www.fittrail.com/10station.html

Figure 8: Example of Fit-trail Equipment

Source: http://www.fittrail.com/images/station_photos/10station_2lg.jpg

- Greenfields Outdoor Fitness is a leading provider of outdoor fitness equipment to parks, schools, senior centers, greenspaces, colleges and universities, and the U.S. military. http://www.gfoutdoorfitness.com/

Include a room that can be used for fitness classes on-site.

Relevant health topic: Chronic disease; mental health

How the three sites compare: Assuming community rooms/buildings can be used for classes, all three developments meet this recommendation.

Consider providing a functional kitchen in the community room, which would allow cooking classes to be held there. If the property has a garden, classes or events based around food growing could be included.

Relevant health topic: Chronic disease

How the three sites compare: Unclear. Where community gardens are available, programming could target use by residents regardless of the presence of a community kitchen.

Unit Design

Note that this content is the same as/closely overlaps with some of the information in the programs and partnerships assessment.

Though not the main focus of this assessment, the 2015 QAP HIA did include a handful of recommendations about building materials and in-unit features focused on asthma management and injury prevention. As a **chronic disease**, asthma can have severe impacts, especially in lower income populations.[79] Therefore, specific "asthma-friendly" design features should be considered here, as they have proven effective in decreasing asthma morbidity and exposure to triggers.[80] In terms of reducing asthma risk by relying on non-carpeted surfaces, there is a trade-off with **injury risk**, as falls on harder surfaces can be more impactful.[81]

Allow up to 15 percent of units to be built with smooth/hard surface flooring (such as wood, laminate or tile) in bedrooms.

Relevant health topic: Injury prevention; chronic disease

How the three sites compare: Unknown. Will any of the units have smooth/hard surface flooring (such as wood, laminate or tile) in bedrooms?

Households with one or more members diagnosed with asthma should be able to request a unit with hard-surfaced bedrooms, especially if symptoms are currently active, uncontrolled or severe (ER visit in past year or doctor's note).

Relevant health topic: Chronic disease

How the three sites compare: If these types of units exist, would it be possible for people with asthma to request them?

Programs & Partnerships Assessment

After affordable housing is designed and constructed, there are opportunities for health promotion activities to take place through regular operation of the developments. Developers can work with property managers to define the service portfolio for each property based on anticipated resident needs, but once units are in service residents should be consulted regarding the types of programming they would like to see. There are numerous potential partners that can help in delivering these types of programs.

2015 QAP HIA Recommendations

Selected recommendations from the 2015 QAP HIA that consider programming and partnerships are summarized below and grouped into the following categories: partnerships, health-oriented programming and site amenities to support these programs. A short summary of existing evidence connecting those categories to health behaviors and outcomes is followed by a brief analysis of each recommendation and how the three developments fared under these criteria. Recommendations here are aimed at developers and their property managers; though DCA can also consider them during annual updates of the QAP. Though determining the status of local partnerships and eventual services offered is somewhat difficult from looking at the original proposals, this is an area where stakeholders indicated the greatest ability to make changes to their accepted proposals. Each recommendation notes which of the four health topics from the current HIA are most relevant (health care access, chronic disease, injury risk, and/or mental health).

Partnerships

Approaching health improvement from a systems perspective requires partnerships that extend beyond traditional public health actors.[82] In the context of this report, these partnerships include not only housing developers, but also other local partners involved in community development activities. While collaborative partnerships to improve community health have become more popular over that past decades, there remains only limited empirical evidence regarding their direct effects on specific community-level health outcomes.[83] The growing body of evidence does suggest that multi sectoral partnerships are an effective approach to addressing physical activity promotion and **chronic disease** prevention.[84] Some evidence supporting the role of these types of community partnerships in addressing **injury risk** also exists, mainly focused on fall prevention and domestic violence.[85, 86] As a result of changes to the health system from the Affordable Care Act, there has been increased emphasis placed on the role of community partnerships – especially within the housing sector - in promoting **access to health care**.[87] Finally, strategies for addressing **mental health** issues can also be enhanced by strong community partnerships, especially through a systems of care model where supportive services for individuals are coordinated across multiple systems and actors in the community.[88, 89]

Local government: Apply for Georgia Initiative for Community Housing (GICH), a three-year program of collaboration and technical assistance related to housing and community development; developers:

choose site location from GICH participating municipalities (or "alumni"); DCA: advertise/promote GICH program to LIHTC applicants in late spring/early summer.

Relevant health topic: Chronic disease; injury prevention; health care access; mental health

How the three sites compare: Jefferson and McRae do not appear to be alumni of, or current participants in, the GICH program. Rome is a program alumni, recognized as a success story for community transformation:

> The City of Rome was recognized with the Community Transformation Award highlighting innovative neighborhood revitalization by incorporating the GICH team plan with creative partnerships that improve educational opportunities within the community, provide transportation options, increase retail development and incorporate walk-ability -- which together improve the overall quality of life for residents. With more than $60 million in investments from Rome, Floyd County and other sources since 1982, the accomplishments include the construction of the Floyd County Health Department, the Boys and Girls Club, the Etowah Village LIHTC multi-family senior complex, the Pennington Place multi-family rental complex in partnership with the Northwest Georgia Housing Authority, the Ann K. Davie Elementary School, the Silver Creek Trail, and the Kingfisher Trail and Bridge; the rehabilitation of 58 owner-occupied homes; and the improvement to the S. Broad Street Corridor streetscape.[5]

Resource for more information: http://www.fcs.uga.edu/fhce/gich

If high-performing schools do not exist in the area, partner with the school district, a not-for-profit organization with a successful history and a detailed funding plan, or a for-profit organization with a successful history and a detailed funding plan to establish a school. Successful history means at least two previous school improvement, charter, or establishment of Quality Rated (or equivalent in another state) early education programs. Co-location is encouraged for early education facilities.

Relevant health topic: Chronic disease; injury prevention; health care access; mental health

How the three sites compare: All three sites are served by at least one high-performing school, so there is little need to create partnerships to establish new ones. This does not diminish the value of creating partnerships or programming that connect residents to ongoing activities at existing schools.

Based on the analysis of proximity to Quality Rated early child care facilities elsewhere in this HIA (under the Site Level Assessment), none of the three sites has particularly easy access to this type of service. It is unclear if any of the three developments intend to make a concerted effort to improve access to or partner with these types of facilities.

[5] http://www.fcs.uga.edu/fhce/gich-success-stories

Allow for innovations in proposed LIHTC projects that address issues involved with community connections.

Relevant health topic: Chronic disease; injury prevention; health care access; mental health

How the three sites compare: None of the sites appears to be implementing innovations to connect residents with the surrounding communities. Discussions with stakeholders revealed barriers to accomplishing this type of innovation. For instance, the required amenities conditions make it difficult to create amenities that the low-income residents and existing neighbors could use jointly, which would support social cohesion. These amenities might include 'public' playgrounds, walking paths open to non-residents, or fitness centers that sell memberships to the public.

Develop site design and programming through a community planning approach.

Relevant health topic: Chronic disease; injury prevention; health care access; mental health

How the three sites compare: All three sites held some level of public meeting regarding the development plans. It is unclear how impactful the meetings were on final design or on what types of programming will be offered to residents.

In the Core Plan Appendix II, Competitive Scoring Criteria, section XVI on Superior Project Concept and Design, HIA could be added to the criteria for B. Community Driven Housing, if any of the applications fall into a jurisdiction with documented adoption of HIA or using a housing plan that incorporated an HIA.

Relevant health topic: Chronic disease; injury prevention; health care access; mental health

How the three sites compare: None of the properties are in jurisdictions that have actively pursued HIA as a regular practice. The participation of the three development teams in this current HIA would satisfy this recommendation.

Health-oriented Programming and Policies

There are a wealth of evidence-based programs aimed at improving health and reducing risk. For **chronic disease** prevention and management, educational activities around healthy behaviors, such as physical activity and healthy eating, show various levels of effectiveness.[84, 90] These types of programs are most effective when they are implemented in combination with policy, systems and environmental approaches to facilitate healthy behaviors.[16, 91] Policies like smoke-free housing are also an effective approach to reducing the impact of chronic disease and are included in the recommendations below.[92] Exercise programs have been demonstrated as an effective approach for reducing **injury risk** from falls in older populations, and younger people can also be influenced by programs or services aimed at reducing this type of risk.[93, 94] For **mental health**, the programming may need to be more focused on education about available services rather than directly targeting mental health issues.[95] However, some programs focusing on areas like mental health, first aid and

substance abuse could be effectively implemented in a housing setting.[96] Physical activity promotion is also closely associated with low risk of negative mental health outcomes.[16]

Organize health-oriented classes/activities as part of DCA required services. This could include a range of activities related to nutrition, fitness, asthma, heart disease, diabetes, smoking cessation, bicycle safety or others. There could also be additional activities specifically tailored to the residents of the property such as older adults, children or parents).

Appendix A lists various options for health-oriented classes that each development could pursue.

> **Relevant health topic:** Chronic disease; injury prevention; mental health
>
> **How the three sites compare:** None of the three development proposals noted specific health-oriented programming to meet the DCA requirement. All intend to offer regular holiday/birthday parties or similar events. South Rome specifies financial literacy classes, which could contribute broadly to health improvement.

Properties should prohibit smoking indoors and within 25 feet of two-family and multi-family buildings, including inside residential units. Properties should have an enforcement policy. However, eviction should not be an enforcement method, except for repeated, flagrant and intentional violations.

> **Relevant health topic:** Chronic disease
>
> **How the three sites compare:** McRae-Helena Estates and South Rome Apartments are planned to be smoke free. Hardin Terrace does not include this stipulation.

Site Amenities to Support Health-oriented Programming and Policies

Note that this content closely overlaps with some of the information in the design-level assessment.

There is strong evidence that improving access to places to be active increases physical activity, which improves physical fitness and can reduce or help to manage **chronic disease**.[16, 18, 75] Physical activity is also connected to improved **mental health**.[76] It is critical to note that these types of recreational amenities are only one component of the built environment and are more likely to be effective when implemented in combination with other supportive features, both within the development site and the larger community.[40] In addition to promoting physical activity, dedicated infrastructure like walking paths can also reduce the **risk of injuries**.[25]

On-site amenities like community kitchens can also have an impact on **chronic disease** by influencing eating habits and nutrition. It is unclear how much these types of resources actually impact nutritional intake; however, when combined with suitable programming, there is evidence that they can enhance food skills and food security.[77, 78]

Include a room that can be used for fitness classes on-site.

Relevant health topic: Chronic disease; mental health

How the three sites compare: Assuming community room can be used for classes, all three developments could meet this recommendation.

Provide fitness equipment on-site.

Relevant health topic: Chronic disease; mental health; injury prevention

How the three sites compare: Hardin Terrace and South Rome both include furnished fitness centers in their proposals. McRae-Helena Estates does not include this type of amenity.

Consider providing a functional kitchen in the community room, which would allow for cooking classes. If the property has a garden, classes or events based around growing food could be included.

Relevant health topic: Chronic disease

How the three sites compare: Unclear. Where community gardens are available, programming could target use by residents regardless of the presence of a community kitchen.

Households with one or more members diagnosed with asthma should be able to request units with hard-surfaced bedrooms, especially if symptoms are currently active, uncontrolled or severe (as demonstrated by an ER visit in the past year or a doctor's note).

Relevant health topic: Chronic disease

How the three sites compare: Unknown. If units like these are available, is this a request that prospective tenants can make?

Additional Recommendations and Actions by Health Topic

In addition to examining the project-level implications of the 2015 QAP HIA recommendations above, the current project also led to additional recommendations, which are presented below by health topic area.

Chronic Disease

Each developer already has at least one intervention planned that could help to mitigate residents' risk of chronic disease.

Smoke-free policies:

McRae-Helena Estates and South Rome Apartments will both be smoke-free properties. Developers have already had success implementing these policies in other sites. As noted above, research shows

that smoke-free policies significantly reduce secondhand smoke exposure, a risk factor for health problems, such as heart disease and asthma.

Community gardens:

Zimmerman Properties has included a resident garden in the Hardin Terrace design plan. The South Rome Apartments are located in a neighborhood with an established community garden. Community gardens are widely endorsed by public health experts for their potential to increase access to fresh produce and encourage healthy eating habits, as well as positive social interactions.

A potential resource for implementing community gardens is WellCare of Georgia. Their community gardens initiative began in May 2013. In its inaugural year, WellCare funded 18 community gardens in 13 counties across Georgia. Today, there are 72 WellCare-sponsored community gardens in 48 counties across the state being tended by 65 community organizations. Contact: CommunityRelations@wellcare.com.

Health education:

LIHTC developers are required to offer periodic events for residents. This programming provides an opportunity to deliver health education on topics such as chronic disease management and prevention. Property management staff could receive training through programs such as EmPOWERED to Serve, a curriculum developed by the American Heart Association that complies with LIHTC programming requirements. See **Appendix A** for more information.

Healthcare Access

As noted earlier, this is a top concern since high uninsured rates, limited referral networks, and inability to pay were recurring issues for all three communities. Furthermore, the Affordable Care Act (ACA) has created new opportunities for the housing community to partner with healthcare providers.

Community benefits:

Housing developers could establish partnerships to help hospitals meet their community benefit requirements under the ACA. This would improve residents' healthcare access and possibly provide an additional source of funding for health programs at housing sites. Since community benefits are a relatively new requirement, the exact mechanism for such a partnership is not well established.

Resource awareness:

Some areas have a wealth of existing health services; however, residents may not have knowledge of these programs. Property managers can offer information about available local resources and make referrals in order to increase utilization.

On-site services:

Property managers could establish partnerships with local health departments and other service providers in order to host events to provide free or discounted screenings on-site for residents.

Injury Prevention

Motor vehicle crashes are a leading cause of death in all three sites, so interventions aimed at reducing injury risk will address an established community need.

Road design:

Zimmerman Properties has a unique opportunity to design the road leading into the Hardin Terrace site. Intentional design elements can be used to make roads surrounding housing sites feel more residential. This can reduce the risk of motor vehicle crashes, and make pedestrians and bicyclists feel more comfortable. It will also facilitate the connection of the site to any future community infrastructure, such as sidewalks or public transportation.

Safe Routes to Schools:

This national program enables and encourages children to walk and bike to school. Sites located within walking distance of schools, such as the South Rome Apartments, could partner with this program to improve safety and increase physical activity. This type of intervention would also enhance the benefits of locating in a high-performing school district. For more information on this type of initiative, please see The Georgia Safe Routes to School Resource Center: www.saferoutesga.org.

Mental Health

Developers of all three sites have agreed to accept Section 811 project-based rental assistance in order to provide integrated housing opportunities to Persons with Disabilities.

Stigma:

Developers expressed concern that residents who receive assistance through Section 811 may face discrimination. They are interested in programing/interventions to reduce the stigma surrounding mental illness. Local Community Service Boards are potential partners for these projects. At the state level, increased collaboration between DCA and the Georgia Department of Behavioral Health and Developmental Disabilities would help ensure this population is given due attention.

Future Collaboration and Research Opportunities

Stakeholders also provided insight into future research topics around affordable housing and health in Georgia. These are intended to guide future collaborations that aim to continue current efforts to better understand how the QAP can contribute to creating healthy communities.

Develop a method for consistent follow-up and evaluation of programs implemented as a result of health-related QAP points.

Upon implementation of any of the program-related recommendations included in this report, the program managers or local partners should devise an evaluation strategy that is feasible within their context. Residents or other participants in the evaluation should be given the opportunity to provide input on the design. Collecting basic information, such as program attendance, may be a good starting point. From the health standpoint, the indicators and potential survey questions included in this report should be helpful.

Data and findings from evaluations should be shared through a common database, where DCA and other partners can readily access them. This database would help determine which methodologies emerge as the strongest candidates for further use across a larger number of sites. Future research should include cost-benefit analysis whenever possible.

Further explore the connection between green housing policies and health outcomes.

As sustainable building practices become more normative, there are ample opportunities both to measure the human health impacts of green strategies and to augment those strategies with additional public health perspectives. Examples of this are in the health components of the Enterprise Green Communities Criteria.[6] Earthcraft and other certification programs could be similarly enhanced by a more robust health consideration. In all cases there should be genuine effort to engage the local communities and current or future residents.

Investigate the trade-off between developing housing in areas of opportunity versus. revitalizing areas of need and supplementing with additional services.

While both strategies should ideally be pursued in tandem, considerations will inevitably need to be made regarding what strategies to pursue and where. Using Demographic Cluster data to compare sites through this lens can be an underlying component of research designs to examine this issue. Stakeholders identified this as a major data gap.

Studies should be designed in a way that does not overtly single out affordable housing residents.

In order not to increase stigma around affordable housing residents, any research design should include the broader community as part of the research sample. It should also be made clear that any participation is voluntary. Participants should also be informed that any data collection is intended to help improve programming.

[6] http://www.enterprisecommunity.org/solutions-and-innovation/green-communities/criteria

Dissemination Strategy

Report Review

Upon receipt of the final deliverable packet from GHPC, DPH will go through its standard review process before making any public release of this content. Once delivered, the HIA becomes a DPH document though GHPC will share and promote as needed. Any additional products (e.g., one-page project summaries) will also need to be approved by DPH. A preliminary presentation summarizing the project in included as ***Appendix B***.

A version labeled as "review draft" can be shared with developers and other key stakeholders, especially at DCA. This will ensure that the target decision-makers have a close-to-final version of the assessment and recommendations and will be able to act on that content in a timely fashion. Until an official version is released by DPH however, this document cannot be cited directly.

Once approved by DPH, GHPC will share the final version on its website and "own it" in terms of promotion and any media inquiries; though it will always be made clear that this effort was funded by DPH and produced in collaboration with them.

Potential Venues for Presentation of Results

The HIA project team brainstormed several potential opportunities for further dissemination of the results of this project:

- Georgia Affordable Housing Conference – October
- Georgia Public Health Association annual meeting – April
- Various DCA events as they discuss future QAP updates or other initiatives
- The Atlanta Regional Housing Forum
- Potential journal articles – GPHA, Chronicles of HIA, SOPHIA newsletter
- National Community Development & Public Health meetings

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Appendix A: Resources for Health-Oriented Programming

The following is a sampling of resources intended to inform implementation of recommendations to include health-oriented programming as part of the services offered at affordable housing developments. National- or state-level resources, along with possible resources for each of the three development locations considered in the HIA, are presented for asthma, cycling, fitness, nutrition and smoking cessation.

Asthma

The Georgia Asthma Program and Georgia Healthy Homes Program provides self-management education and in-home trigger reduction assessments to children with a diagnosis of not-well controlled or very poorly controlled asthma in DPH's Maternal and Child Health—Children's Medical Services (CMS) Program. Georgia is currently piloting a multi-trigger, multicomponent approach in the Macon and Augusta health districts. https://dph.georgia.gov/home-visits

Northeastern Integrated Pest Management Center: A group of science educators seeking to improve pest control in affordable housing by teaching everyone who works, lives and plays in housing how to use integrated pest management (IPM). Since 2007, The Northeastern IPM Center at Cornell University has been bringing IPM to affordable housing across the country with funding from a U.S. Department of Housing and Urban Development (HUD) and U.S. Department of Agriculture (USDA-NIFA) interagency agreement. http://www.stoppests.org/

Local Resources

McRae:

- Telfair County Health Department: http://southcentralhealth.info/telfair.html
- South Central Health District: http://southcentralhealth.info/home.html

Hardin:

- Jackson County Health Department: http://publichealthathens.com/wp/clinics/health-departments/jackson-county/
- Northeast Health District: http://publichealthathens.com/wp/

Rome:

- Floyd County Health Department: http://nwgapublichealth.org/counties/floyd/
- Northwest Health District: http://nwgapublichealth.org/

Cycling Classes

The League of American Bicyclists represents bicyclists in the movement to create safer roads, stronger communities and a bicycle-friendly America. They include numerous courses on bicycle (and pedestrian) safety: http://bikeleague.org/content/take-class

They also certify League Cycling Instructors (LCIs) to teach the Smart Cycling classes to children as well as adults. Their goal is to help people feel more secure about getting on a bike, to create a mindset that bikes are treated as a vehicle and to ensure that people on bikes know how to ride safely and legally. LCIs are members of the league and have completed an intense three-day seminar training. Our certified instructors are active within the bicycling community and are covered by the league's liability insurance. A list of LCIs in Georgia can be found here: http://www.bikeleague.org/bfa/search/list?bfaq=georgia#education

Local Resources

Rome:

- Coosa Valley Cycling Association: http://www.cvca.org/
- T.R.E.D. Rome/Floyd Inc.: http://tredromefloyd.org/
- Closest LCIs in Atlanta or Canton

McRae:

- Closest LCIs in Macon or Savannah

Jefferson:

- Closest LCIs in Athens

Fitness Classes

UGA Cooperative Extension - Walk Georgia: A web-based fitness program dedicated to helping you track your activity, eat healthier and exercise more efficiently. Participate individually or with a group. http://walkgeorgia.org/

Local Resources

Rome:

- Rome-Floyd County YMCA
  810 E 2nd Ave
  Rome, GA 30161
  Phone: 706-232-2468
  https://ymcarome.org/

Jefferson:

- Jefferson Fitness: https://www.jefferson-fitness.com/

- Parks and Recreation: http://www.jacksonrec.com/
- Northridge Medical Center Wellness Center: http://www.northridgemc.com/wellnesscenter.html
- YMCA of Georgia's Piedmont, Inc
  50 Brad Akins Dr
  Winder, GA 30680
  Phone: 770-868-2917
  http://www.gapiedmontymca.org/

McRae:

- Tiftarea YMCA Inc.
  1657 S Carpenter Road
  Tifton, GA 31793
  Phone: 229-391-9622
  http://www.tiftareaymca.org/

Nutrition Classes & Community Kitchens

Strategies to Prevent Obesity and Other Chronic Diseases: The CDC Guide to Strategies to Increase the Consumption of Fruits and Vegetables. This document provides guidance for program managers, policy makers and others on how to select strategies to increase the consumption of fruits and vegetables. It includes content on designing programs for youth and adults.
https://www.cdc.gov/obesity/downloads/fandv_2011_web_tag508.pdf

Spokane Regional Health District (SRHD). Community kitchen toolkit: A guide for community organizations in Spokane, Washington. Spokane: Spokane Regional Health District (SRHD), Neighborhoods Matter; 2012. https://www.srhd.org/documents/NM/CommunityKitchen-2012-RS.pdf

Leadership for Healthy Communities (LHC) Rural Childhood Obesity Prevention Toolkit. Rockeymoore M, Moscetti C, Fountain A. 2014. http://www.leadershipforhealthycommunities.org/resource/rural-childhood-obesity-prevention-toolkit/

Lowitt K. **Community kitchen best practices toolkit**: A guide for community organizations in Newfoundland and Labrador. Saint John's, NL: Food Security Network of Newfoundland and Labrador (FSN); 2011.
http://www.foodsecuritynews.com/Publications/Community_Kitchen_Best_Practices_Toolkit.pdf

Local Resources

Rome:

- Floyd Medical Center – Diabetes Education Phone: 706.509.5184.
  http://www.floyd.org/services/Pages/diabetescare.aspx

- UGA Floyd County Cooperative Extension - Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program Education (SNAP-ED). Phone: 706.295.6210. http://www.romefloyd.com/departments/cooperative-extension or http://www.fcs.uga.edu/extension/efnep
- Action Ministries Northwest: Action Ministries Rome seeks to serve those in need of hunger relief in Floyd County through the provision of accessible pantries, agency partnerships, client education and referral services. Phone: 706.291.7731. http://actionministries.net/locations/rome/
- Berry College (provides nutrition classes for Action Ministries at community garden) http://www.berry.edu/stulife/service/communitypartnerships/#sthash.QgW4DxFD.dpuf

McRae:

- UGA Telfair County Cooperative Extension - Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program Education (SNAP-ED). Phone: 229.868.6489. http://ugaextension.org/county-offices/telfair.html or http://www.fcs.uga.edu/extension/efnep

Hardin Terrace:

- Jackson County Cooperative Extension - Expanded Food and Nutrition Education Program (EFNEP) and the Supplemental Nutrition Assistance Program Education (SNAP-ED). Phone 706.367.6344. http://ugaextension.org/county-offices/jackson.html or http://www.fcs.uga.edu/extension/efnep

Smoking Cessation

The Georgia Tobacco Quit Line is a public health service funded by the Tobacco Master Settlement Agreement through the Georgia State Legislature. It is a free, confidential and effective service available to assist Georgians with quitting smoking and all forms of tobacco. The quit line is monitored by GTUPP (The Georgia Tobacco Use Prevention Program) and partners with a national tobacco cessation vendor to provide telephone and web-based counseling services in accordance with the United States Public Health Service Treating Tobacco Use and Dependence Clinical Practice Guidelines. The services provided by the Georgia Tobacco Quit Line (GTQL) are effective, evidence-based interventions to help Georgians quit smoking and using any other smokeless tobacco products (i.e., dip or snuff). https://dph.georgia.gov/ready-quit

Smokefree.gov is intended to help people quit smoking. Different people need different resources as they try to quit smoking cigarettes. The information and professional assistance available on this website can help to support both your immediate and long-term needs as you become, and remain, a non-smoker. The website was created by the Tobacco Control Research Branch of the National Cancer Institute. http://smokefree.gov/

American Lung Association – Freedom from Smoking This group clinic consists of eight sessions. It is delivered by a facilitator who has been trained by the Lung Association in a small-group setting (usually eight to 10 people). Participants receive personalized attention. At the same time, individuals benefit from the support of their peers, who are going through the same stages at the same time. The curriculum includes the latest research about nicotine replacement therapy (gum, inhalers, patches, lozenges and nasal spray) and other smoking cessation medications such as Zyban® and Chantix®.

- **Become a facilitator**: http://www.lung.org/stop-smoking/join-freedom-from-smoking/become-a-facilitator.html
- **Online class**: http://www.ffsonline.org/?referrer=http://www.lung.org/stop-smoking/join-freedom-from-smoking/about-freedom-from-smoking.html

Local Resources

Rome:

- Floyd Medical Center: free weekly smoking cessation class. For additional information, call 706.509.3412. http://www.floyd.org/news-events/Pages/event.aspx?key=86.0.2016-06-27T18:00:00Z&date=1467050400

McRae:

- South Central Health District – Hypertension Management Outreach Program: a direct service and educational program available to adults with limited annual income or uninsured (no health insurance) with a primary diagnosis of high blood pressure (also known as hypertension). The Hypertension Management and Outreach Program provides direct services including: blood pressure screening and assessment, referral to physicians, disease case management and treatment. The program also provides counseling on lifestyle modifications including healthy eating, physical activity, smoking cessation, weight management and medication adherence. Clinical and behavioral care guidelines are based on United States Preventive Health Services Task Force recommendations and other national standards. http://southcentralhealth.info/programs/shapp/

Hardin Terrace:

- Northeast Health District – the Tobacco Use Prevention Program is coordinates strategy in tobacco use prevention and control, provides assistance on policy development and serves as a resource center for tobacco issues. http://publichealthathens.com/wp/health-info/healthy-living/tobacco-prevention/

Appendix B: Sample Presentation

The following is a reproduction of a slide deck used to present this work (in preliminary form) to the Healthy Places Research Group in November 2016. Future slide decks can be tailored to specific audiences and formats. The original PowerPoint files are available upon request.

Affordable Housing & Health

Using HIA to Enhance Georgia's Qualified Allocation Plan for Low Income Housing Tax Credits

Healthy Places Research Group

November 15, 2016 | Atlanta, GA

Georgia Health Policy Center

YOUR PRESENTERS

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GEORGIA HEALTH POLICY CENTER

Create the RIGHT environment to have IMPORTANT *conversations*

Bring in *relevant information* that is integrated translated, and interpreted from primary and secondary research, best practices, and thought leaders

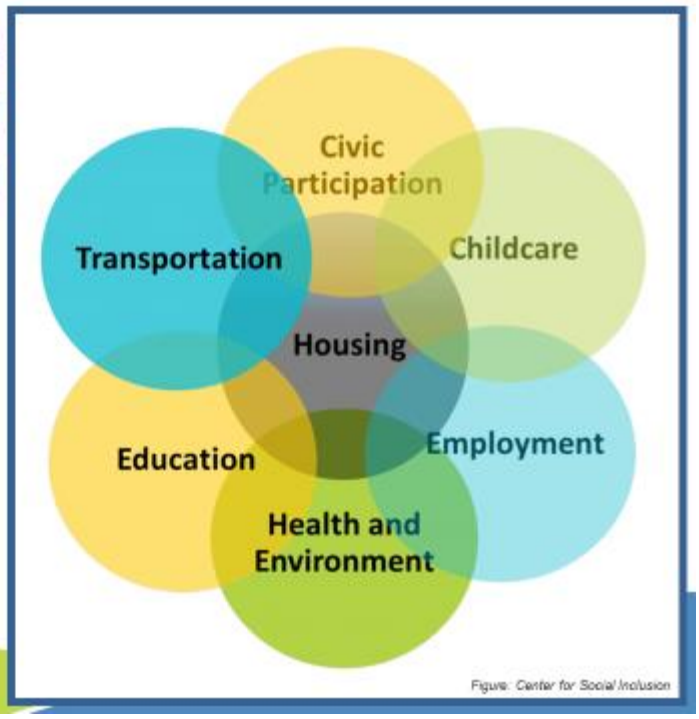
PRESENTATION OVERVIEW

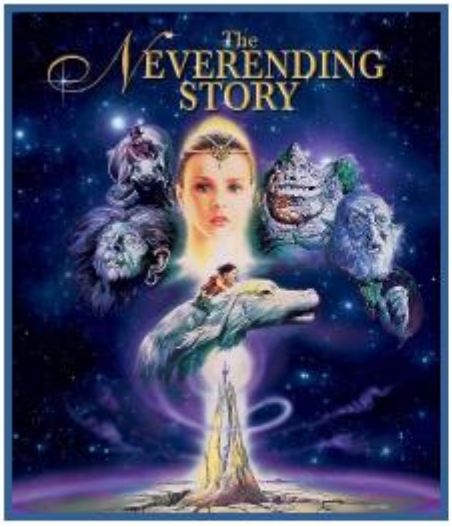
- Background
- The Story so Far
- Project-level HIA
- The 2017 QAP
- Discussion

BACKGROUND

How do you see the intersection of housing and health?

HOUSING and HEALTH

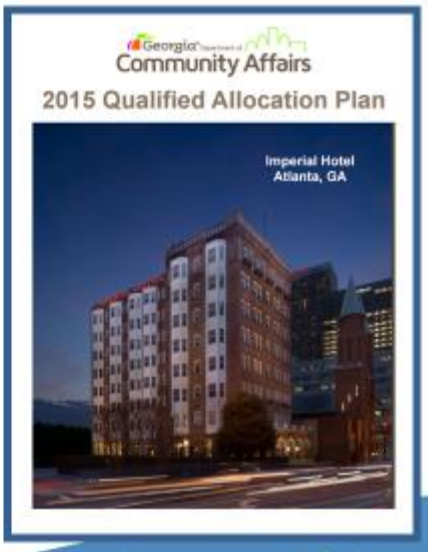




THE STORY SO FAR…

GHPC WORK IN AFFORDABLE HOUSING

- **Initial HIA of 2015 QAP**
- GA DPH funded follow-up
- Continued involvement in QAP discussions
- Bridging for Health
- Collaboration on funding proposals



Funded by the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts

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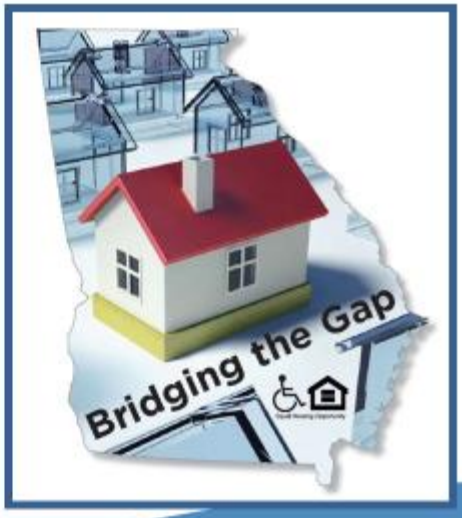

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- GA DPH funded follow-up
- Continued involvement in QAP discussions
- Bridging for Health
- **Collaboration on funding proposals**

ONGOING COLLABORATION

- **In HIA – Health Impact Project Community Development Cohort**
- **Build Healthy Places Network: Health and Design Practitioner Workshop @ CDC**
- **Informing 2017 QAP in GA**
- **Federal Reserve Bank of Atlanta**
- **Follow-up affordable housing HIA at site level with GA DPH**

PROJECT-LEVEL AFFORDABLE HOUSING HIA

PROJECT-LEVEL AFFORDABLE HOUSING HIA: BACKGROUND

- **Purpose of this HIA**
  - Explore project-level implications of recommendations made in the HIA of Georgia's 2015 Qualified Allocation Plan (QAP) for Low Income Housing Tax Credits (LIHTC)
  - Maximize positive health effects through influence of final design and/or operation plans for three affordable housing projects that received tax credits through the 2015 QAP.

PROJECT-LEVEL AFFORDABLE HOUSING HIA: SCREENING & SITE SELECTION

From 33 to 3:

- GHPC review of 33 projects selected for development by DCA using the 2015 QAP
- Based on proposal scoring, GHPC selected a subset (n=9) to offer for discussion with DCA and DPH
- Narrowed selection to six most viable projects
- Final three selected based on developers' willingness to participate

PROJECT-LEVEL AFFORDABLE HOUSING HIA: SCREENING & SITE SELECTION

Project Sites

- Hardin Terrace Apartments in Jackson County (1A)
- South Rome Apartments in Floyd County (2A)
- McRae-Helena Estates in Telfair County (3A)

PROJECT-LEVEL AFFORDABLE HOUSING HIA: BASELINE DATA

Prepared one-pagers for developers based on three existing sources of data:

- **Leading causes of premature mortality by Demographic Cluster from GDPH**
- **County Health Rankings from the Robert Wood Johnson Foundation**
- **Community Health Needs Assessments for nearby hospitals**

PROJECT-LEVEL AFFORDABLE HOUSING HIA: SCOPING TOPICS OF CONCERN

Hardin Terrace
Jackson County

- Tobacco Use
- Obesity
- Heart Disease
- Health Care Access
- Injury Prevention

McRae-Helena
Telfair County

- Tobacco Use
- Obesity
- Heart Disease
- Alcohol Abuse
- Teen Pregnancy

South Rome
Polk & Floyd Counties

- Tobacco Use
- Obesity
- Heart Disease
- Health Care Access
- Teen Pregnancy

PROJECT-LEVEL AFFORDABLE HOUSING HIA: SCOPING WORKSHOP

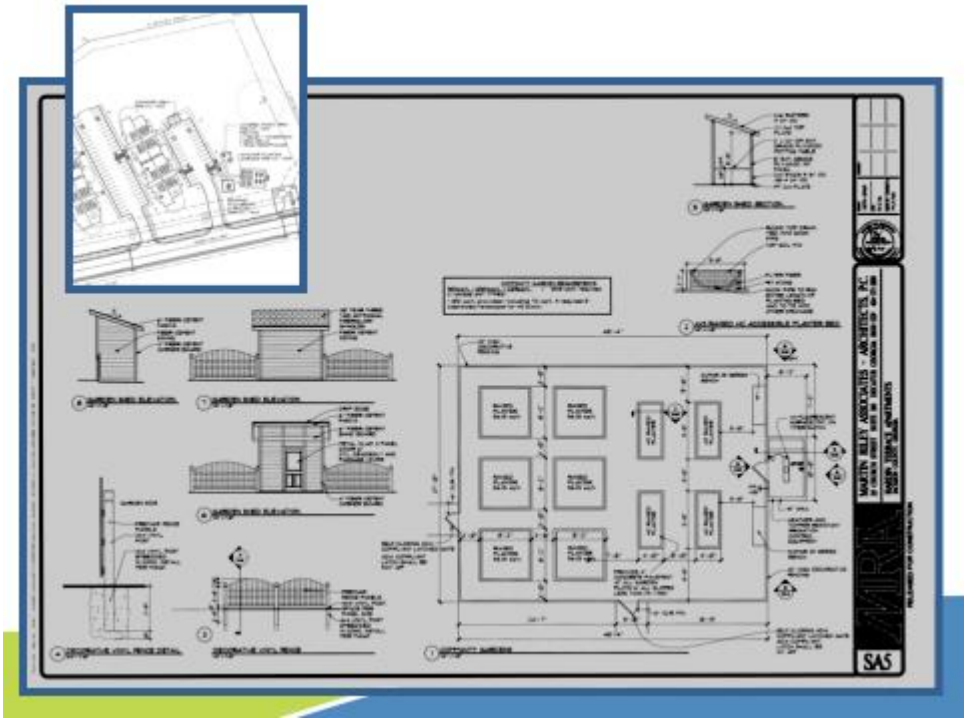
- Range of stakeholders, including developers, DPH, and DCA
- Siting, design, and operations framing of decisions
- Focus narrowed to these health topic areas:
  - chronic/heart disease
  - access to health care
  - mental health
  - injury prevention

PROJECT-LEVEL AFFORDABLE HOUSING HIA: SITE-LEVEL ASSESSMENT EXAMPLE

- Access to quality educational opportunities
- Broad determinant relevant for all four health topic areas
- All three proposals received some amount of points under this scoring criteria in 2015
- None has a school designated as failing (CCRPI<60) in the three years for which data were available
- All three had better access than comparison properties in respective market analyses
- Limited applicability for current projects – but demonstrates value of continued inclusion in future QAPs

PROJECT-LEVEL AFFORDABLE HOUSING HIA: DESIGN-LEVEL ASSESSMENT EXAMPLE

- Community gardens
- Associated with chronic disease and mental health
- Several opportunities noted across the three sites
- Inclusion in final design for Hardin Terrace
- Challenge to influence design under current timeline



PROJECT-LEVEL AFFORDABLE HOUSING HIA: OPERATION-LEVEL ASSESSMENT EXAMPLE

- Programs & partnerships to tailor programming to identified health needs
- Can be relevant for all health topics
- South Rome partnerships
- Providing a list of resources and local contacts for each site
- "Easiest" level to influence

PROJECT-LEVEL AFFORDABLE HOUSING HIA: ADDITIONAL PERSPECTIVES

- Start with DCA activities and policies (QAP)
- Overlap between "Green" standards, health targets, & the QAP
- Tradeoffs between revitalization and communities of opportunity
- Need a way to track programs with the most success
- Need to preserve feeling of market rate "normal" housing

Mentions of "health" in Georgia's QAP:

- 2014 = 12
- 2015 = 15
- 2016 = 27
- 2017 = 80

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

- Under "State Priorities":

> 2. ***Health Outcomes for Residents:*** Physical and mental health are necessities for thriving individuals and families. The location where a household lives strongly influences household health through things like access to quality care, education, and healthy foods. In addition, safe, quality affordable housing provides the foundation and central location for encouraging healthy lifestyles. As such, DCA has a strong commitment to encouraging better health outcomes for residents through site selection, site design, community partnerships, and focused services.

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

- In Scoring Criteria – Healthy Housing Priority

Applicants that claim points under this category are expressing a commitment to work with DCA in encouraging and measuring healthy outcomes for Georgia residents that live in a completed DCA funded property. Measuring success can be accomplished while assuring

Applicants are encouraged to target healthy initiatives to local community needs. Applicants should use the following needs data to more efficiently target the proposed initiative for a proposed property:

- A local Community Health Needs Assessment (CHNA)
- The "County Health Rankings & Reports" website http://www.countyhealthrankings.org/health-gaps/georgia
- The Center for Disease Control and Prevention – Community Health Status Indicators (CHSI) website

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

- In Scoring Criteria – Healthy Housing Priority (continued)

A. Preventive Health Screening/Wellness Program for Residents **3 Points**

Three (3) points will be awarded to Applicants that agree to provide on-site preventive health screenings and or Wellness Services at the proposed project. In order to be eligible for points in this category, the services must be provided at least monthly and be offered at minimal or no cost to the residents. The preventive health initiative should include wellness and preventive health care education and information for the residents. Examples of Preventive health care screenings/Wellness Programs can consist of, but are not limited to:

B. Healthy Eating Initiative **2 Points**

Two (2) points will be awarded to Applicants that agree to provide a Healthy Eating Initiative at the proposed project. The Initiative must include the following:

C. Healthy Activity Initiative **2 Points**

Two (2) points will be awarded to Applicants that agree to provide a Healthy Activity Initiative at the proposed project. Examples of such initiatives might include structured exercise programs, walking program, weight or stress reduction programs. The Initiative must include the following:

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

- In Scoring Criteria – Increasing points for education

XX. QUALITY EDUCATION AREAS **23 Points**

~~***Two (2***~~***Up to three (3)*** ***points*** will be awarded to an Application ~~proposing to develop a Family property which is~~ located in the attendance zone of a high performing school. To qualify, the school cannot have district wide enrollment unless the school is the only school in the district. Points in categories B and C below are available for properties with either a Senior or Family tenancy, as quality education areas are a strong predictor of the stability of a local community.

THE 2017 QAP: MOVING TOWARD HEALTH IN ALL POLICIES

- In Scoring Criteria – continuing use of DPH Demographic Clusters

C. *Georgia Department of Public Health Stable Communities* **32 Points**

1. ~~***Three (3***~~***Two (2)*** ***points*** will be awarded to projects that are located in sub-clusters A1, A2, A3, ~~or~~ B1, B2, or C1 according to the most recent GDPH data hosted on ~~the DCA~~DCA's "Multi-Family Affordable Housing Properties" map (http://georgia-dca.maps.arcgis.com/home/).

2. ~~***Two (2) points*** will be awarded to projects that are located in sub-clusters A1, B2, or C1 according to the most recent GDPH data hosted on the DCA "Multi-Family Affordable Housing Properties" map (http://georgia-dca.maps.arcgis.com/home/).~~

2. ***One (1) point*** will be awarded to projects that are located in sub-clusters B3 or C2 according to the most recent GDPH data hosted on ~~the DCA~~DCA's "Multi-Family Affordable Housing Properties" map (http://georgia-dca.maps.arcgis.com/home/).

THANK YOU

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Appendix C: Demographic Clusters

Demographic Clusters of Georgia

By Frank Millard
Revised by Kim Zhou, July, 2012

Demographic clusters were created from EASI Demographics data (2011) available at the census block group level of the 2010 census geographies, containing 25 variables relating to age, income, family structure, housing value and type, education attainment and employment type.

A classification model composed of Two-Step-Clustering and Discriminant Analysis was used to classify census block groups based on the 25 selected variables. The census block groups were first classed into four major groups, which were further partitioned into a total of eighteen distinct demographic clusters.

The legend is arranged by the derived socioeconomic status, from "higher" to "lower", within the four major groups and their respective demographic clusters.

A.1 Georgia's wealthiest cluster is primarily populated by "new money" executives and professionals living in tract mansions of metropolitan suburbs and exurbs. Predominantly White with an above average index for Asians, this highly educated cluster is composed of married couples in their middle adulthood ages (45-64) with young and adolescent children.

A.2 This well-educated, suburban cluster, dominated by professionals and managers, has the second highest level of affluence in the state. Mostly White with a high percentage in their middle or late adulthood (55+), they have adolescent and grown children.

A.3 Found in the metro suburbs, this mixed-ethnicity with majority of Whites and high index for African-Americans, more youthful cluster is populated by married couples in their late 20's through early 40's with young children. The majority has some college degree or are college graduates. Most are employed in sales and other white-collar jobs, while some are high-earning blue-collar families. This cluster has a median household income well above the state average.

B.1 This cluster is characterized by its high concentration of White and Asian non-family households renting in upscale apartments. With easy access to major highways, this cluster is the home for young managers and professionals in their late 20's through early 40's, predominately with college degrees and beyond. They live a modern urban lifestyle in the most densely populated urban neighborhoods before they establish families and move to suburban areas.

B.2 This small cluster is populated by military personnel in their early and young adulthood ages (18-34) with some college degrees. Majority of the population are White. They live in rented apartments and condos in urban areas. Their median income is around the state average.

B.3  This is a mixed-ethnicity cluster with a high index of Asian and Multiracial non-family households living in middle-range value apartments in urban/suburban areas. Although many have some college degrees or are college graduates, their median income is below the state average due to their recent entry into the workforce.

B.4  This mixed-ethnicity cluster mainly represents the college populations in Georgia (populations living in group quarters). They are mostly between 18-24 years of age and have incomes lower than the state average.

C.1 This is a White, middle-class rural cluster dominated by married families of people aged 55 years and over. They are mainly home owners, but the value of their housing is lower than in some of the urban and suburban clusters. Many in this cluster are high school graduates. Found predominantly in N/NE rural counties of Georgia, this cluster is highly represented in farming, production, and construction.

C.2 This rural cluster is dominated by married families of people in their middle adulthood ages with young and adolescent children. Found widespread in rural counties of Georgia, the cluster is White with some African-American population. Many people are in construction and production jobs; their incomes are average compared to the state.

C.3 Found in relatively populated areas in rural counties, this mixed-ethnicity cluster with high index of African-Americans is populated by older people living in old houses. With mixed levels of education, people in this cluster mainly work in lower paying service, sales and managerial jobs earning below state average incomes.

C.4  This rural cluster is composed of married and single parent families of predominantly White population with or without children. Most have high school diploma or less; they mainly work in farming, production, and construction earning well below the state average income.

D.1 An urban cluster, this mixed-race group has a high representation of single-parent families with or without children. Most have a high school diploma or less; this group mainly works in the service industry earning lower than state average income. They live in rented apartments or old houses of low housing values.

D.2  This is a small cluster composed of military personnel in their early and young adulthood ages (18-34) with some college degrees. A mixed-ethnicity group with majority of Whites, this cluster is populated by married and single families with young children. The percentage of population 18 years of age and younger is higher than any other cluster in the state.

D.3  This is the oldest urban cluster with high proportion of 55 years of age and older. Primarily African-American with a high index for non-Hispanic Whites, this cluster is characterized by single family or non-family households living in their own old houses in urban/suburban areas. They work in low-paying service and sales jobs earning incomes lower than the state average.

D.4  This cluster is composed predominantly of African-Americans with a high percentage of single family households with or without children. It is relatively young among urban clusters with a high percentage of population between 18-34 years of age. They are primarily renters, have high school or less than high school educations and work in service industry--making 30% below the state average in income.

D.5  This is a mixed-ethnicity cluster with a high index of Hispanics and Multiracial groups. Most have high school diploma or less; they mainly work in low-paying blue collar jobs in production and construction industries. The cluster's housing is half owner-occupied and half renter- occupied with a high percentage of vacant housing.

D.6  This cluster is predominantly populated by African-Americans with high percentage of population in their 60's and over. Most have a high school diploma or less; they mainly work in service industries. Their median income is second lowest in the state.

D.7  This cluster is predominantly composed of very young African-Americans with more females than males. The cluster has the highest percentage of population less than 18 years of age in non-military clusters in the state, of whom most live in female-headed households. Most have a high school diploma or less; they work in low-paying jobs and live in rental units. The median household income in this cluster is the lowest in the state.