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## Comparative Analysis of Zoning of Food Retail and Urban Agriculture for Richmond, Virginia


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### Abstract

This research partnership between local public health practitioners and urban food systems scholars suggests improvements to City of Richmond, Virginia's zoning code related to food retail and urban agriculture by drawing inspiration from other American central cities. The authors created an empirical process to identify potential sister cities to Richmond as a source for high quality comparative examples. Next, the authors then engaged in a non-empirical, purposive process of identifying potential zoning code improvements from both identified sister cities, as well as other communities. Time and capacity constraints dictated the non-empirical nature of this search. Recommendations for improvement to Richmond's zoning code are included. Local government officials and potential urban food entrepreneurs of jurisdictions with comparable characteristics to the City of Richmond could benefit from this analysis.

### Acknowledgements

The authors wish to thank the [Richmond Henrico County Combined Public Health District](#), as well as the [Institute for Inclusion, Inquiry, and Innovation \(iCubed\)](#) and the [Office of Undergraduate Research and Creative Inquiry \(UROP\)](#) at [Virginia Commonwealth University](#) for supporting this research.

## Introduction

In 2022, a team of staff practitioners from the City of Richmond (Virginia) Department of Public Health and researchers from Virginia Commonwealth University sought to identify potential reforms and innovations to the City of Richmond, Virginia zoning code as a means of encouraging development of the city's local food system. The team employed a practitioner focus to conduct this research; but was loosely guided by qualitative research methods.<sup>1</sup> This effort anticipated the rewrite of the City of Richmond's Zoning Ordinance supporting the recently adopted [City Master Plan Richmond300](#). As a part of a larger effort to analyze the impact of zoning on public health, the team focused their investigation on two major topic areas at the intersection of urban food systems and zoning: food retail and urban agriculture.

As part of this process, the team engaged in an empirical process to identify potential sister cities to Richmond, Virginia that could potentially serve as an apples-to-apples comparison for potential zoning reforms and innovations related to food retail and urban agriculture. The team then engaged in a non-empirical, purposive process to identify potential zoning code innovations from both the identified sister cities, as well as other municipal governments. The team did not restrict their wider investigation to exclusively these sister cities; but rather were informed by that analysis. Much of the data collection and analysis for this research began in the second half of 2021 and concluded in late 2022. Municipal governments with roughly similar characteristics to the City of Richmond, such as those communities listed in Appendix 1, will find potential comparable policy recommendations in this document. What follows is a short background on the City of Richmond, Virginia; an overview of the team's research method, including the sister city coding process; findings of the team's search for potential zoning reforms; recommendations to the City of Richmond's planning department staff responsible for the City's zoning update, and an appendix.

## Background on the City of Richmond

Richmond is the capital city of the Commonwealth of Virginia, and is located at the navigable head of the James River in the central part of the state. Established in 1737, the city's central role in America's tobacco industry shaped its development throughout the 18th and 19th centuries. Tobacco facilitated Richmond's rise to be one of the central cities of the pre-industrial American South, but that prosperity was built upon exploitation through the American system of chattel slavery.<sup>2</sup>

Throughout the antebellum period, Richmond emerged as the largest slave trading center in the upper American south. Forced slave labor constructed much of the city's infrastructure, man-made canals such as the Kanawha Canal, and large-scale manufacturing plants. Tobacco aggregation and processing became a dominant economic force in Richmond, gathering the attention of the Early Republican government under Washington, as its position at the navigable head of the James River created an ideal location for tobacco interests seeking to ship large quantities downriver to the Atlantic ports of Norfolk and Hampton Roads to access

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<sup>1</sup> Namely Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences*. Pearson.

<sup>2</sup> Campbell, B. (2012). *Richmond's unhealed history*. Brandylane Publishers Inc.

European markets.<sup>3</sup> Much later in 1940, the municipal government would build the James River Port, a rare publicly owned river port supporting the transport of tobacco products to the American eastern seaboard and across the globe.<sup>4</sup>

Land use in Richmond throughout much of the 19<sup>th</sup> and 20<sup>th</sup> centuries reflected its central position in the tobacco and the slave trades. Port facilities as well as industrial processing and storage uses dominated the city's built environment on both sides of the James River. The legacy of this land use is still apparent today and informs Richmond's nature as primarily a 19<sup>th</sup> century city. At its height in the late 20<sup>th</sup> century, the multibillion-dollar tobacco industry employed over 10,000 Richmonders across more than 70 plants or warehouses around the city.<sup>5</sup>

In the post-war years, Richmond's place as the political and cultural heart of the Confederacy unwound as the city worked to reconstruct infrastructural damages as conflicts between whites and freed African-Americans played out. During Reconstruction, wealthy elites built new neighborhoods westward from downtown, including the expansion of Franklin street, into the (in)famous Monument Avenue. Proponents of the Lost Cause narrative funded the construction of statues to celebrate Confederate generals on Monument Avenue and elsewhere in the city.<sup>6</sup> Other Richmonders spoke in opposition to the Lost Cause narrative; such as Maggie L. Walker who championed women's suffrage, entrepreneurial success of African Americans, and equal opportunity education through the Richmond Education Association.<sup>7</sup>

Richmond was home to the first successfully implemented electric streetcar system; a major milestone in Victorian era urbanization. Implemented by inventor Frank Sprague in 1888, the Richmond Union Passenger Railway operated over 44,000 miles of track at the height of its operations in 1917.<sup>8</sup> Subsequent intrusion of the automobile into American urban life post World War I eventually eroded ridership, leading to the company's closure in 1949.<sup>9</sup>

Mid-century saw the construction of Interstate-95 directly through the City of Richmond. Planners bisected Jackson Ward, the majority African American neighborhood, to construct the highway, thereby highly distributing the nature and prosperity of that neighborhood. Several

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<sup>3</sup> Moeser. (2000). The Best of Times and The Worst of Times: An Overview of Richmond, Virginia. Interpretation (Richmond), 54(1), 36–44. <https://doi.org/10.1177/002096430005400104>

<sup>4</sup> Port of Virginia. (2022). <https://www.portofvirginia.com/facilities/richmond-marine-terminal-rmt/>

<sup>5</sup> Federal Reserve Bank of Richmond. (2022). *A Tale of Three Cities: Richmond, Charlotte, and Baltimore*. [https://www.richmondfed.org/research/regional\\_economy/regional\\_matters/2017/rm\\_10\\_18\\_2017\\_cities](https://www.richmondfed.org/research/regional_economy/regional_matters/2017/rm_10_18_2017_cities)

<sup>6</sup> Virginia Department of Historic Resources. (2022).

<https://www.dhr.virginia.gov/blog/cornerstone-contributions-creating-monument-avenue/>

<sup>7</sup> Allison, S. T. (2017). [Introduction to] *Heroes of Richmond: Four Centuries of Courage, Dignity, and Virtue*. Palsgrove.

<sup>8</sup> Brittain, J. E. (1997). Frank J. Sprague and the electrification of urban transportation [Scanning the Past]. *Proceedings of the IEEE*, 85(7), 1183-1184. <https://ieeexplore.ieee.org/abstract/document/611124>

<sup>9</sup> Institute of Electrical and Electronics Engineers (1992). *Richmond Union Passenger Railway, 1888*. [https://ethw.org/Milestones:Richmond\\_Union\\_Passenger\\_Railway,\\_1888](https://ethw.org/Milestones:Richmond_Union_Passenger_Railway,_1888)

years later city leaders constructed the Richmond Coliseum nearby, further damaging the remaining integrity of Jackson Ward.<sup>10</sup>

Conventional regional bus transit lines, operated by Greater Richmond Transit Company (GRTC), connect Richmond's downtown to other parts of the municipality, with limited service out into the surrounding county of Henrico, and to a lesser extent Chesterfield. These connection points are mostly nodally based in Richmond's downtown, and along the Broad Street corridor that runs the length of Richmond and into Henrico County at two points. In the late 2010s, the GRTC implemented the regional Pulse Corridor Plan, a high frequency, bus rapid transit (BRT) plan that spans most of the length of Broad Street.<sup>11</sup> Opening in 2018, the GRTC Pulse is the first rapid transit system to operate in the Richmond metropolitan region since the closure of the electric Richmond Union Passenger Railway in 1949.

The City is surrounded by two suburban counties that form its larger metropolitan area; Henrico County surrounding Richmond to the west, north, and west; and Chesterfield County to the south. Under Virginia statute, the City of Richmond exists as a politically distinct jurisdiction from its neighboring county governments. Richmond's struggles to annex land from its neighbors during the 20th century influenced the city's demographics and socio-economic characteristics; namely due to waves of, mostly white, suburban flight. There was significant fluctuation of white and African American communities throughout the 20th century, but the city remained predominantly African American.

In the beginning of the 21st century, suburban populations in neighborhoods skyrocketed in the greater Richmond area, in part due to a wave of suburban flight around the turn of the century. According to the American Community Survey 2022, combined with the surrounding counties, the greater Richmond metro area now has a joint population total of over 700,000 people.<sup>12</sup> However, this wave of suburban flight also lowered median household incomes within the city.<sup>13</sup>

## **Richmond Today**

The early 2020s finds the City of Richmond at an inflection point. The City is the fourth most populous metropolitan area in the state of Virginia, hosting a diverse demographic of more than 200,000 residents in the central city. According to the 2020 Census, 42.02% of the city's population is White and 39.93% is Black or African-American.<sup>14</sup> The 2020 summer protests

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<sup>10</sup> Virginia Department of Transportation. (2022). Reconnect Jackson Ward Feasibility Study. [https://reconnectjacksonward.com/wp-content/uploads/2022/09/RJW\\_FS\\_Report\\_2022-09-07DRA\\_FT\\_v3.pdf](https://reconnectjacksonward.com/wp-content/uploads/2022/09/RJW_FS_Report_2022-09-07DRA_FT_v3.pdf)

<sup>11</sup> Jordan, R. (2019). Transit Access Equity in Richmond, VA. [www.scholarscompass.vcu.edu](http://www.scholarscompass.vcu.edu)

<sup>12</sup> U.S. Census Bureau. (2022). American Community Survey. <https://factfinder.census.gov>

Richmond Magazine (2022.) *Counting Change*. <https://richmondmagazine.com/news/features/counting-change/>

<sup>13</sup> Moeser. (2000).

<sup>14</sup> U.S. Census Bureau. (2022). <https://data.census.gov/table?g=1600000US5167000&tid=DECENNIALPL2020.P2>

demonstrating police violence against African-Americans are interwoven with the slow removal of the Confederate monuments across the city. The removal of the final statue occurred just days before the completion of this research in December of 2022.<sup>15</sup> City leaders and the Richmond community continue to grapple with the fate of these statues and the spaces they used to inhabit.

Food insecurity continues to be a challenge for many Richmonders; a challenge made only worse by the lingering effects of the COVID-19 pandemic. The Virginia Department of Health Index highlights how this affects community health with Richmond experiencing a “very high” wellness disparity compared to other Virginia jurisdictions.<sup>16</sup> Notably, 14% of Richmond residents are food insecure, compared to 8.2% of Henrico and 6.4% of Chesterfield County residents.<sup>17</sup> Geographic based food access insecurity also is a challenge for many neighborhoods of Richmond, with large sections of the municipality identified by the US Department of Agriculture's Food Access Research Atlas as experiencing a combination of low-income and low access to full service grocery stores (referred to by some as “food deserts”).<sup>18</sup>

Various governmental, private sector, and community organizations have sought to mitigate this problem in recent years with limited success. Examples include: construction of [The Market on 25th](#), a full-service grocery store in Richmond's East End considered by many to be a food desert; the Virginia Department of Health's [Healthy Corner Store Initiative](#); the [F.E.E.D. The Culture](#) campaign created by the Richmond Food Justice Alliance and the Virginia Department of Health<sup>19</sup>; and the [Resiliency Garden Initiative](#) by Happily Natural during the height of the COVID-19 pandemic. This research collaboration between practitioners and scholarly researchers joins these other efforts in working to improve Richmond's urban food system.

## Method

### Sister City Identification

Significant differences exist across various levels of state and local levels of governance in the American federal system. These differences can make comparative analysis between cases challenging. A dramatic example of this is New York City and Casper, Wyoming. Both are municipal governments and their municipal governments in theory have similar powers; but vast

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<sup>15</sup> Khalil, J. (2022). *Removal of A.P. Hill statue points to new era in Richmond history*.

<https://vpm.org/news/articles/38029/removal-of-ap-hill-statue-points-to-new-era-in-richmond-history>

<sup>16</sup> Virginia Department of Health. (2022). The Health Opportunity Index.

<https://apps.vdh.virginia.gov/omhhe/hoi/dashboards/counties>

<sup>17</sup> Feeding America. (2020). Mapping the Meal Gap.

<https://map.feedingamerica.org/county/2020/overall/virginia/county/richmond-city>

<sup>18</sup> U.S. Department of Agriculture. (2022). Food Access Research Atlas.

<https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx>

<sup>19</sup> F.E.E.D the Culture: Community Strategies for Food Justice in Richmond. (2020).

<https://drive.google.com/file/d/1RFtDIGalaPCUTdTvNtdPxM5xg6-3i4zA/view>

differences across a host of characteristics exist between these communities that make them poorly suited for comparison over many matters of policy. Richmond, Virginia is perhaps more like New York City than Casper, Wyoming, but that does not necessarily mean that looking for examples of local policy from New York City for implementation in Richmond is necessarily prudent.

To better identify good apples-to-apples communities to the City of Richmond, the research team created a simple empirical scoring system to help identify potential apples-to-apples sister cities. Beginning from an initial universe of all American municipal governments, the team employed two sequential exclusion criteria to condense the list of all possible American cities to a more manageable data set. Separately, the team purposively identified seven variables relevant to questions of urban agriculture and food retail, for which national level data was available for all potential cities in the initial sample frame. Those variables were: walkability, bikeability, presence of public transportation, population density, median household income, percentage minority population, and social vulnerability.

### **Exclusion Criteria**

The first exclusion criteria draws from Richmond's history as a redlined city. Much of Richmond's evolution occurred during the 19th century, and was an established metropolitan area during the New Deal when the Federal Housing Administration (FHA) rated neighborhoods for suitability for home loans subsidized by the federal government. Appraisers used the color red to code for risky or undesirable neighborhoods. This racist housing policy shaped the development patterns of cities so evaluated. The University of Richmond's [Digital Scholarship Lab](#) hosts the "redlining maps" of all affected cities on their website [Not Even Past](#). Given the impact of redlining on Richmond's development pattern in the 20th century, only cities that were redlined by the FHA were included in this analysis.

The second exclusion criteria draws upon wellness disparity profiles of American city governments affected by economic insecurity. The [University of Wisconsin Population Health Institute](#) created the County Health Rankings & Roadmaps, a county-based health ranking data set that provides a statistical measurement known as the [County Health Rankings](#), that is based on factors such as racism, discrimination, and disinvestment. The Richmond City Health Department uses this data set in other aspects of that agency's work; which supports the appropriateness of the data set for creating an exclusion criteria.

Part of the County Health Rankings data set includes peer groups to the City of Richmond. Within Virginia, city governments are mutually exclusive to county governments, thus the City of Richmond is potentially comparable to Marion County, Indiana, the home county of Indianapolis. Only counties, or the major municipalities within those counties, identified as peer-group counties to the City of Richmond were included in this analysis.

Each exclusion criteria significantly reduced the size of the initial universe of data. After applying our inclusion criteria, 22 cities emerged as potential sister cities to Richmond: Atlanta, Georgia; Baltimore City, Maryland; Birmingham, Alabama; Boston, Massachusetts; Chicago,

Illinois; Cleveland, Ohio; Columbus, Ohio; Dallas, Texas; Detroit, Michigan; Houston, Texas; Indianapolis, Indiana; Jacksonville, Florida; Los Angeles, California; Memphis, Tennessee; Miami, Florida; Milwaukee, Wisconsin; New Orleans, Louisiana; Norfolk City, Virginia; Philadelphia, Pennsylvania; Providence, Rhode Island; Sacramento, California; St. Louis City, Missouri; Tampa, Florida. The team then created analysis variables to examine this 22 city data set.

## **Analysis Variables**

Richmond is a mid-sized city with a variety of defining factors that contributes to the community's access to healthy food options. For the purpose of identifying cities comparable to Richmond, the team narrowed these factors down to seven: walkability, bikeability, public transit, population density, median household income, percent minority population, and social vulnerability. What follows is the summary of each variable, its data source, and basic descriptive statistics of that variable across the 22 city data set.

### ***Walkability***

The ability of people to access amenities, including parks, full-service grocery stores, and public transit plays an important role in someone's overall health. This is especially true for those financially unable to use a car on a regular basis. What might be accessible via walking is important. [Walk Score](#), part of the real-estate company Redfin, created this variable using proprietary methodology based on walking routes to amenities; distances up to 5 minutes away are awarded the most points, while distances of more than 30 minutes away were not scored. The City of Richmond scored 86 out of 100 for this variable. The mean and median score for all examined cities was 55 and 51 respectively; with a standard deviation of 16.38. For this variable, Boston, Massachusetts was the closest sister city with a score of 83 out of 100.

### ***Bikeability***

The ability of people to access amenities, including parks, full-service grocery stores, and public transit plays an important role in someone's overall health. This is especially true for those financially unable to use a car on a regular basis. What might be accessible via bike lanes is important. [Walk Score](#), part of the real-estate company Redfin, created this variable using proprietary methodology based on bike routes to amenities; distances up to 5 minutes away are awarded the most points, while distances of more than 30 minutes away were not scored. The City of Richmond scored 81 out of 100 for this variable. The mean and median score for all examined cities was 54 and 53 respectively; with a standard deviation of 10.69. For this variable, Chicago, Illinois was the closest sister city with a score of 72 out of 100.

### ***Public Transit***

The ability of people to access amenities, including parks, full-service grocery stores, and public transit plays an important role in someone's overall health. This is especially true for those financially unable to use a car on a regular basis. What might be accessible through public



transit systems is important. [Walk Score](#), part of the real-estate company Redfin, created this variable using proprietary methodology based on public transit routes to amenities; distances up to 5 minutes away are awarded the most points, while distances of more than 30 minutes away were not scored. The City of Richmond scored 61 out of 100 for this variable. The mean and median score for all examined cities was 42 and 43 respectively; with a standard deviation of 14.5. For this variable, Chicago, Illinois and Miami, Florida were the closest sister cities with a score of 65 and 57 out of 100.

### ***Population Density***

The population density, age and sex, race, education level, and geography of a particular population plays an important role in someone's overall health and quality of living. This is especially true for those confined within city limits. What might be accessible within a particular area is important. [Census Tracts](#), established by the Geographic Products Branch of the U.S. Census Bureau, were designed to separate populations within a statistical subdivision of a county. It is important to note variables such as population density, age and sex, race, education, and geography of a particular area when determining the progress of a county. The City of Richmond has a population density of 3,781.6 people. The mean and median population density for all examined cities was 5,775.9 and 4,606.8 respectively; with a standard deviation of 3,706.2. For this variable, Dallas, Texas was the closest sister city with a population density of 3,841.1 people.

### ***Median Household Income***

The population density, age and sex, race, education level, and geography of a particular populated area plays an important role in someone's overall health and quality of living. This is especially true for those confined within city limits. What might be accessible within a particular affordable price point is important. [Census Tracts](#), established by the Geographic Products Branch of the U.S. Census Bureau, were designed to separate populations within a statistical subdivision of a county. It is important to note variables such as population density, age and sex, race, education, and geography of a particular area when determining the progress of a county. The City of Richmond has a median household income of \$51,421. The mean and median household incomes for all examined cities was \$52,010 and \$53,026 respectively; with a standard deviation of \$10,808.2. For this variable, Indianapolis, Indiana was the closest sister city with a median household income of \$50,813.

### ***Percent Minority Population***

The population density, age and sex, race, education level, and geography of a particular populated area plays an important role in someone's overall health and quality of living. This is especially true for those confined within city limits. What might be accessible within a particular demographic is important. [Census Tracts](#), established by the Geographic Products Branch of the U.S. Census Bureau, were designed to separate populations within a statistical subdivision of a county. The City of Richmond has a percent minority population of 58.8%. The mean and

median percent minority population for all examined cities was 55% and 53.6% respectively; with a standard deviation of 12.5%. For this variable, Cleveland, Ohio was the closest sister city with a percent minority population of 60.3%.

### ***Social Vulnerability***

The ability of people to access safe housing conditions, proper education, employment opportunities, adequate transportation infrastructure, quality healthcare, and economic stability plays an important role in someone's overall health and quality of living. This is especially true for those experiencing social vulnerability. What might be accessible within a community is important. [Social Vulnerability](#) statistics are gained through subsequent Home Owners' Loan Corporation (HOLC) records from the 1930's to present day census tracts. This phenomenon is measured through disadvantaged neighborhood zoning that affects homeownership based on racially motivated redlining practices defining areas deemed undesirable to potential buyers. The City of Richmond has a social vulnerability score of 29%. The mean and median social vulnerability score for all examined cities was 46.8% and 46.9% respectively; with a standard deviation of 10.2%. For this variable, Atlanta, Georgia was the closest sister city with a social vulnerability score of 29.7%.

### **Coding**

The team scored each variable from one (1) to three (3) point range based on how many standard deviations the city was from the City of Richmond's relevant number for that variable. Cities within one standard deviation from the City of Richmond's value for that variable were considered comparatively excellent and received three (3) points. Cities within two standard deviations from the City of Richmond's value for that variable were considered moderately comparative and received two (2) points. Finally, cities outside of two standard deviations from the City of Richmond's value for that variable were considered acceptably comparative and received one (1) point.

For example, the City of Richmond's median annual household income is \$51,421. The standard deviation of median annual household income for cities within the sample set was \$10,808. The City of the City of Cleveland, Ohio's median household income was \$31,838 annually, which is within two, but not one, standard deviations of the City of Richmond's value. Thus the City of Cleveland was awarded two points for that variable. Final scores are the sum of each of the seven variables, divided by the total numbers of points; in this case 21. Appendix 1 shows the final scoring for each city in the sample set.

### ***Identified Sister Cities***

Five cities emerged as best case sister cities for Richmond, Virginia for this research based on our coding process (in descending order): Baltimore City, Maryland; New Orleans, Louisiana; Chicago, Illinois; Providence, Rhode Island; and Philadelphia, Pennsylvania.

## Literature Search and Analysis

The research team sought to review existing zoning codes as well as related policy briefs from other municipalities; they approached this work from a practitioner perspective. The professional bandwidth, target audience, and the desired publication method informed the team's perspective to this research. A deeper empirical investigation might result in different recommendations. The team engaged in an informal analysis of the data collected, but was inspired by content analysis; a qualitative research method often used in policy analysis.<sup>20</sup> Primary analysis of collected data, as well as the sister city coding process, occurred throughout 2022.

Informed by the sister city identification process, the research team engaged in a purposive, convenience sampling web search to find examples of relevant zoning code of other jurisdictions as well as policy white papers existing potential reforms. Web searches focused on the following terms: "city planning for food access", "public policy for food access", "city code examples for food access", "municipal strategies food access". Internet based research occurred preliminary in late 2021.

Specific publication examined include:

- ChangeLab Solutions' [Long-Range Planning for Health, Equity & Prosperity: A primer for local governments](#)
- Healthy Food Policy Project's [Local Planning and the Food System: Tools for Increasing Access to Healthy Food](#)
- Sustainable Development Code's [Food Security and Sovereignty](#)
- Kimberly Libman, MPH, PhD; Nessia Berner Wong, MPH; Katie Hannon Michel, MELP, JD, "[Health Equity and Food Systems: Critical Thinking on 8 Policies.](#)"

Additionally, the research team conducted informal interviews with the founders or staff of the following organizations in the greater Richmond region and one national example: the [Reinvestment Fund](#); [Happily Natural Day](#); [Richmond Food Justice Alliance](#); [Shalom Farms](#); and the [Dorey Park Farmers Market](#). These interviews occurred throughout 2021 and were conducted with the primary purpose of learning more about the organization's experience in local food justice efforts, their near term goals, and barriers to meeting those, if any. Each of the interview participants had five or more years experience navigating food security, access or justice programming. These interviews influenced recommendations by grounding each of them in Richmond historical and current cultural and community context.

## Findings

In this section, two topics pertaining to food retail and urban agriculture are analyzed in depth. Each topic contains definitions, existing conditions, case studies, and recommendations based on research done by comparable municipalities.

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<sup>20</sup> Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences*. Pearson.

## Food Retail

Developing a better understanding of food retail is necessary to diversify access to healthy foods for different population groups. In this section, the following three topics are discussed: grocery stores, seasonal produce stands, and farmers markets.

### *Grocery Stores*

#### *Definition*

Grocery stores are typically defined as a retail business where the majority of the floor area open to the public is occupied by food products packaged for preparation and consumption away from the store. To be defined as a full-service grocery, the store must stock a minimum inventory in the following food groups: fresh and frozen meats and poultry; canned, fresh, and frozen fruits and vegetables; dairy products; dry groceries and baked goods; and infant food and formula.

#### *Existing Conditions*

Grocery stores are currently permitted by right in all business (UB, UB-2, B-1 - B-7) and Transit-Oriented Development (TOD-1) districts, and conditionally permitted in Urban Residential District (R-8), provided that the building was constructed or converted to commercial use prior to 1943. They are also permitted principal use on corner lots in some multifamily urban residential districts (R-63). Currently, 1 off-street parking spot is required for every 150 sq ft or every 300 sq ft of floor area, for stores occupying more than 5,000 sq ft of floor area<sup>21</sup>.

Within Richmond city limits, there are currently 19 full-service grocery stores, as defined by the description above. This number does not include Target or Walmart stores that carry some food items. According to the most recent data from the USDA, 21.5% of Richmond residents live more than a mile from a grocery store and while the stores themselves may be located in walkable areas, nearly half of stores are located a mile from the nearest transit stop, which is significant, given that census tracts within food deserts also have the lowest rate of household vehicle ownership.

Though increasing the number of full-service groceries improves access to healthy food, there are substantial barriers for developers and grocers seeking to open stores in low-food access neighborhoods, sufficient residential density, the spending potential, consumption patterns and employment rates of the residents surrounding the development.

#### *Case Studies*

- **Philadelphia, PA** in conjunction with the [Pennsylvania Fresh Food Financing Initiative](#), offers a package of zoning incentives through its Fresh Food Market Bonus. The program began in 2004 and ended in 2014 when all funds were deployed ([zoning code](#)).

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<sup>21</sup> Virginia Code 1993, § 32-700; Code 2004, § 114-700; Code 2015, § 30-700; Ord. No. 2015-151-164, § 1, 9-14-2015

- Eligible “fresh food retailers” were allowed to exceed floor area limits by 50 percent, floor area ratio limits, height maximums, and off-street parking minimums
- Similar programs exist in [New York](#) and [New Orleans](#)
- **Prince George’s County, MD** offers a tax credit (75% of the property tax imposed on the increased assessment” attributable to expansion of, construction on, or reuse for grocery store purposes) against the property tax in specific focus areas.
- **Baltimore, MD** offers a 10-year 80% credit against property tax for supermarkets that either locate or make significant improvements in incentive [areas](#)
- **New York City’s** FRESH program also allows qualified food retailers to exceed floor area and height maximums and flexibility in parking requirements to make the development more affordable.
- **Chicago, IL** [adopted an ordinance](#) that limits the ability of supermarkets and pharmacies/drug stores to use restrictive covenants in an anti-competitive manner at the time of closure of business and sale of property. This practice resulted in limiting food access in areas for years.
- **Greenville, SC** council is [considering reducing business license fees](#) for certain new businesses, including grocery stores in historically minority and low-income neighborhoods.
- **Birmingham, AL** established a [Healthy Food Fund](#), allocating \$500,000 of a larger neighborhood revitalization fund to offset the cost of opening grocery stores in USDA-defined food deserts. The city also created a [Healthy Food Overlay](#) zoning district, which loosened restrictions for traditional, full-service grocery stores, community gardens, and mobile solutions like food trucks and mobile groceries and prohibited new Dollar Stores or discount food retail stores from opening within a mile of an existing store of the same kind.

#### *Recommendations*

- Alter floor area requirements, density bonuses, or height increases to make development more feasible
- Lower parking requirements for new grocery stores proposed in low-access areas
- Clarify and expand definition of grocery stores to include smaller retail that stocks a significant proportion of fresh and frozen meats and poultry, canned, fresh, and frozen fruits and vegetables, and dairy products
- Offer tax credits to incentivize building in food deserts. Consider the creation of specific overlay zones within which these credits would apply. Note, however, that incentive programs might prompt developers to initially locate a grocery store in a particular neighborhood, they alone would not likely be enough to support grocers in maintaining stores in those locations.
- Review and revise existing negative use restrictions, as they relate to grocery stores and pharmacies
- Reduce the cost of business licenses and permitting fees for groceries in priority areas

## Seasonal Produce Stands

### *Definition*

A produce stand is traditionally defined as a structure used for the sale of produce or other food items that are grown or processed on the property in which they are grown. In urban areas, a produce stand is typically a seasonal temporary structure used for the sale or produce or other food products grown or processed by an individual farmer.

### *Existing Conditions*

Richmond does not explicitly regulate produce stands, as defined above. Rather, a produce stand can legally operate under any of the following programs or licenses:

- A Peddler's [license](#)
- A [special event permit](#) to operate on City & public property
- As a vendor at Richmond's [City Market](#)
- As a vendor in one of the multiple other privately ran farmers markets in the city

The City's [sidewalk vending](#) ordinance regulates the areas, hours and methods that a produce stand (or other mobile vendor) could sell their items.

As a result of the current structure, an individual could potentially require one or all three permits in order to sell their produce in the City. This process can lead to confusion, present barriers for small urban growers, and create excessive permitting fees for a product that does not have a significant profit margin.

### *Case Studies*

- [Henrico County, VA](#) allows for produce stands as a temporary use without a permit in agricultural, conservation, heavy industrial, and a subset of form-based alternative overlay districts. Some limits on size and parking requirements apply.
- [Atlanta, GA](#) allows for urban farms to sell produce grown onsite directly to consumers in residential zoned areas of the city.
- [Minneapolis, MN](#) allows farm stands as an accessory to a community garden, market garden, or urban farm, subject to the seven conditions
- [Hopkinton, RI](#) allows farm stands as long as it sells only products grown or raised on the premises; some specific restrictions on size and structure of the stands

### *Recommendations*

- Within City Code, define a seasonal produce stand with structural and retail specifications.
- Create a low food access overlay area definition and allow for the sale of fruits and vegetables grown onsite in residential, and neighborhood, community, and corridor mixed use areas that qualify under the low food access area zone.
- In an effort to incorporate City facilities with the broader needs of the community, allow for seasonal produce stands as a primary use on all City-owned land, including parcels managed by Parks, Recreation and Facilities, that are located in a national/regional and neighborhood node.

- Farmers operating a seasonal produce stand would still be required to hold an appropriate peddler's license. However to reduce barriers and ensure Richmond300 vision, fees associated with the peddler's license should be waived when the applicant demonstrates that they are a local<sup>22</sup> farmer seeking to operate a stand where vended items are at least 60% fresh produce.
- Allow for the sale of fruits and vegetables grown onsite for all community gardens participating in the Richmond Grows Gardens program.

## Farmers' Markets

### *Definition*

Agriculture is the leading industry in Virginia and as a result, there is generally support to promote environments that are favorable for farmers and agricultural producers. VA Code allows for the establishment, operation and maintenance of local retail farmers markets specific to locality needs.<sup>23</sup> In Richmond, a farmers' market is generally defined as an established area set apart for the sale by vendors of products, goods, wares and merchandise.<sup>24</sup> Products include a wide variety of options, both farm products and non-farm products.

### *Existing Conditions*

Richmond explicitly defines Farmers' Markets in City Code but restricts it to specifically "City Market," as defined in Chapter 8, Article IX. This identifies the historic 17th street market area between Main Street and Franklin Street as the City Market, but allows for additional market areas to be created by a City Council ordinance. As a result, this space and market are maintained by City resources, vending requirements are not as extensive as the peddlers' license, and fees are often less expensive than those associated with other markets in the City. Vendors are required to have appropriate state grower certifications from the Virginia Department of Agriculture. Outside of the city-sponsored farmers' market, other current farmers markets in Richmond (RVA Big Market, Birdhouse Farmers Market, Carytown Farmers Market, South of the James) are held on City or Parks and Recreation Property, where they follow Special Event [permitting standards](#) and pay [associated fees](#).

### *Case Studies*

- [Minneapolis, MN](#) established a "mini-market" permit, designed to reduce administrative and costly barriers for smaller markets that were targeting sales in low-access areas. Each vendor maintains their own personal license/certification, as defined by the regulatory body. Markets are limited to a max of five vendors and are required to be all local farms selling their own products grown or minimally processed.

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<sup>22</sup> For the purposes of this initiative, an eligible farmer is one who primarily operates within the Greater Richmond area, as defined by the [Virginia Economic Development Partnership](#).

<sup>23</sup> [Virginia Code](#) § 3.2-3502

<sup>24</sup> [Richmond City Code](#) 1993, § 8-257; Code 2004, § 26-517; Code 2015, § 8-432; Ord. No. 2009-220-2010-8, § 2, 1-25-2010

- [San Francisco, CA](#) requires all farmers' markets to accept federal, state and local food assistance, including EBT. Prior to mandating it, the health department provided technical assistance to existing markets that were not accepting SNAP benefits.

#### *Recommendations*

- Update the City Market code to expand city-managed market areas to include existing markets or other well-suited sites that would increase access to local, fresh goods.
- Create a “mini market” program that allows for small-scale, temporary farmers' markets in specific zones and nodes, which increases the number of available locations and reduces costly permits through special event processes. Ensure fees are reasonable.
- Identify specific parcels or sites that are suitable for safe markets and increase access to fresh foods, such as: parks, school grounds, libraries, university property, and other government property. Define farmers' market as an allowed use in zones where these sites reside.
- Incentivize the acceptance of SNAP and Virginia Fresh Match at farmers' markets by waiving portions of permit fees or allowing for extended operating hours of participating markets.

## **Urban Agriculture**

Practicing agricultural methods in an urban environment is necessary to diversify access to healthy foods for different population groups. In this section, two topics pertaining to urban agriculture and agricultural infrastructure are analyzed.

#### *Definition*

Agriculture is typically defined as the act of farming to grow crops or raising of livestock to provide food, wool, or other byproducts. It is often used in a broader context to also include flowers and ornamental plants. In an urban setting such as Richmond, individuals can directly cultivate into the soil or use a variety of other techniques to accommodate limited access to land, such as grow houses, raised bed structures, pots, buckets, etc.

#### *Existing Conditions*

The City of Richmond values agriculture and horticulture to an extent of enabling it in residential zones, both on private property and on any sidewalk, public right-of-way, or grass strip adjacent to property or unimproved street or alley.<sup>25</sup> This is inclusive of all agricultural plants, garden vegetables, flowers or ornamental plants, and with an additional permit, residents can raise chickens.<sup>26</sup> For those with limited land access, residents can utilize roof gardens as a bonus area.<sup>27</sup>

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<sup>25</sup> [Richmond City](#) Code 1993, § 19-54; Code 2004, § 38-154; Code 2015, § 11-105; Ord. No. 2015-191, § 1, 1-11-2016

<sup>26</sup> [Richmond City](#) Code 2004, § 10-95; Code 2015, § 4-124; Ord. No. 2013-17-35, §§ 2, 3, 3-11-2013; Ord. No. 2018-294, § 1, 1-28-2019

<sup>27</sup> [Richmond City](#) Code 1993, § 32-690.2; Code 2004, § 114-690.2; Code 2015, § 30-690.2



The City values maximizing city-owned parcels and recognizes that communal gardening can influence the health of the community. As a result, the city established a Community Garden Program that allows for community organizations or associations to permit parcels owned by Parks, Recreation & Community Facilities (PRCF) to cultivate a variety of agricultural items.<sup>28</sup>

Current enabling code primarily promotes the personal cultivation of agricultural products but limits the potential for improving community food access or promoting entrepreneurship within low-income communities. Other cities offer examples of pathways to encourage both.

#### *Case Studies*

- [Washington, DC](#) established an Office of Urban Agriculture that offers a property tax abatement program for individuals who are actively using their property for urban agriculture and manages city parcels to lease to individuals for cultivation.
- [Fitchburg, WI](#) authorizes community gardens in all zoning districts with production limited to fruits, vegetables, flowers, and herbs, and infrastructure requirements for adequate water supply. The city states that the community garden must be led by an organization willing to oversee operations.
- [Highland Park, MI](#) values and promotes urban gardening explicitly in their zoning ordinance. In addition to authorizing community gardens in all districts, they authorize market gardens or community supported agriculture (CSA) gardens in their mixed use urban village and residential urban village districts and exempt any permit requirements.
- [Chicago, Illinois](#) values community gardens and urban agriculture as a tool to improve access to healthy foods and promote entrepreneurship. In addition to authorizing community gardens and urban agriculture in all zones (excluding cemeteries and manufacturing), they allow sales of produce onsite so long as they are limited to incidental sales of plants or produce generated on site.

#### *Recommendations*

- Maintain the City of Richmond's progressive zoning and allowances for urban agriculture by ensuring horticulture and agriculture remain an allowed primary use in residential areas and on any sidewalk, public right-of-way, or grass strip adjacent to property or unimproved street or alley
- Define and authorize market gardens or CSA gardens for an allowed use on PRCF community garden parcels and other well-suited neighborhood and community mixed-use areas in the City.
- Create a low food access area zone definition and allow for the sale of fruits and vegetables grown onsite in residential, and neighborhood, community, and corridor mixed use areas that qualify under the low food access area zone.
- In alignment with the City's sustainability goals to reduce impervious surfaces, decrease water runoff, and promote biodiversity within the city, create incentives and pathways to promote the removal of asphalt in vacant lots to create land conducive for urban agriculture.

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<sup>28</sup> [Richmond City](#) Code 2004, § 26-491; Code 2015, § 8-394; Ord. No. 2011-50-45, § 1, 3-28-2011

## Agricultural Infrastructure

### *Definition*

Virginia code defines agriculture or farm infrastructure to mean a building or structure not used for residential purposes, located on property where farming operations take place, and used primarily for any of the following uses:

- Storage, handling, production, display, sampling or sale of agricultural, horticultural, floricultural or silvicultural products produced in the farm;
- Sheltering, raising, handling, processing or sale of agricultural animals or agricultural animal products;
- Business or office uses relating to the farm operations;
- Use of farm machinery or equipment or maintenance or storage of vehicles, machinery or equipment on the farm;
- Storage or use of supplies and materials used on the farm; or
- Implementation of best management practices associated with farm operations.<sup>29</sup>

Richmond City code defines “vegetable garden” as any noncommercial vegetable garden planted primarily for household use. The term “noncommercial,” as used in this definition, includes the incidental direct sale of produce from such a vegetable garden to the public.<sup>30</sup>

### *Existing Conditions*

Virginia Construction Code exempts farm buildings and structures (defined above) from Virginia Construction Code requirements, except for a building or a portion of a building located on a farm that is operated as a restaurant as defined in Section 35.1-1 of the Code of Virginia. However, due to the majority of community gardens and urban agriculture operating on PRCF parcels, they are limited to specific City Park regulations. This creates an additional barrier to community initiatives and limits propagation and safe storage. Other cities outline ways to enable infrastructure while maintaining safety.

### *Case Studies*

- [Baltimore, Maryland](#) has exempted hoop houses (shade cloth or plastic film structures constructed for nursery or agricultural purposes) from the need to acquire building permits before their erection.
- [Highland Park, MI](#) has exempted hoop houses from prior building permits, as long as they are erected in mixed use urban village and residential urban village districts where community gardens and urban agriculture is an allowed use.
- [Chicago, IL](#) defines accessory buildings for community gardens, which includes sheds, greenhouses and farm stands, and limits them to 575 square feet. Hoop houses and other fabric based shelters are not considered accessory buildings and are exempt from building permits.

### *Recommendations*

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<sup>29</sup> [Virginia Code](#) § 36-97

<sup>30</sup> [Richmond City](#) Code 1993, § 29-281; Code 2004, § 106-497; Code 2015, § 28-543

- Define allowed uses for community gardens on PRCF owned land with specific parameters so that organizations and neighborhood associations can easily build agricultural infrastructure on site. To comply with PRCF aesthetics across all public sites, design templates could be provided and required.
- Identify other residential, and community, neighborhood, and corridor mixed-use zones where agricultural infrastructure, such as sheds and hoop houses, would be allowed without prior permit.

## **Recommendations**

According to Richmond300, by 2037 the City of Richmond envisions itself as a welcoming, inclusive, diverse, innovative, sustainable, and equitable city of thriving neighborhoods, ensuring a high quality of life for all.<sup>31</sup> One of the six steps to accomplish this vision includes updating the City's Zoning Ordinance to ensure neighborhoods can support the health of communities, maintain unique cultural characteristics, and expand to meet the growing population.

The authors of this paper sought to identify zoning and local level policy precedents that could be incorporated into Richmond City's Zoning Ordinance update to promote public health and food justice by increasing access to food retail and land for cultivation. Research findings demonstrated that this can't be accomplished exclusively through zoning, but there are modest changes to city zoning code that can enable impactful community and individual initiatives.

Food access for an individual is often defined through their geographical proximity to a full-service grocery store. Conversations with numerous community residents and community-based organizations highlighted the desire for a grocery store with affordable and quality selection of food. However, zoning has limitations in influencing the necessary investment for larger commercial retail often required for full-service stores. Traditional urban planning principles focus on increasing residential density as a means of increasing economic potential and purchasing power<sup>32</sup> but these tactics have tendencies to displace the existing community residents that are requesting the store, rather than investing in options that celebrate and invest in the current neighborhood and cultural context.

The following three major recommendations included in this paper primarily seek to identify city code precedents that highlight localized approaches to promoting food access, while maintaining community connectivity and well-being. In order to fully actualize recommendations, updates to the zoning code have to be paired with additional city investment or community development techniques, such as the mini-market examples in Minneapolis, MN or the Office of Urban Agriculture in Washington, D.C. Based on the research findings and preliminary

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<sup>31</sup> Richmond City Planning Department. (2020). Richmond300. <https://www.rva.gov/planning-development-review/master-plan>

<sup>32</sup> Grocery Store Attraction Strategies. (2007) The Food Trust. <https://www.policylink.org/sites/default/files/grocery-store-attraction-strategies.pdf>

conversations with community members and stakeholders, the City of Richmond should consider the following guiding recommendations.

**1) Improve access to fresh and healthful foods while supporting a local economy**

Reduce barriers for farmers and families alike by simplifying the process for selling and buying produce via mobile, seasonal, or temporary markets; with an investment focus in low-access areas that are defined through the appropriate overlay zones. Richmond City Council and the Planning Department have already identified national/regional and community nodes that will be the focus for future community investment. They should include this intentional emphasis on food retail for improved access.

**2) Encourage urban agriculture as a tool for food justice, community development, and climate resiliency**

When updating the Zoning Code, it is critical to maintain the existing progressive urban agricultural allowances throughout the City. The demonstrated success of community gardens and urban agricultural ventures over the past ten years rely on this enabling code. Increase the viability and success of existing and future urban agriculture and community gardens by allowing sheds and hoop houses, without a prior permit, in appropriate residential, and community, neighborhood, and corridor mixed-use zones.<sup>33</sup> Concerns for safety and appearance can be mitigated by designing and making publicly available approved structural and design templates for these structures. Any such designs should be created alongside current farmers and agricultural entrepreneurs so that they reflect realities of operations in an urban environment.

**3) Ensure beneficial impact and reduce unintended consequences by incorporating genuine community input**

The recommendations outlined throughout this paper have been guided by input from community stakeholders and residents, but their ongoing input is critical. City Planning staff and council members among the Land Use, Housing, and Transportation committee responsible for the development of the zoning ordinance text should organize further conversations with local farmers, farmers markets, mobile retail, and food justice organizations who have experienced barriers to navigating current regulations. While the legislative precedents outlined in this paper spurred community benefit, there may need to be adjustments to the provisions based on Richmond contexts. Community stakeholders currently navigating these dynamics are the content experts that can most reliably provide feedback.

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<sup>33</sup> See Jones dissertation examining Dayton, Ohio and Newark, New Jersey for more details on hoop houses in urban areas <https://rampages.us/cultivatingcities/>

## Appendix

**Table 1.** Results of the Sister City Coding Process

City	Total Score	Walk	W_Score	Bike	B_Score	Transit	T_Score	Pop Density	P_Score	Median House Income	I_Score	% Minor Pop	M_Score	Vulnerability	V_Score
Baltimore, MD	2.7	64	3	53	1	53	3	7,235.80	3	52,164	3	70.3%	3	38.3%	3
New Orleans, LA	2.6	58	2	66	2	44	2	2,265.60	3	43,258	3	66.6%	3	33.3%	3
Chicago, IL	2.6	77	3	72	3	65	3	12,059.80	1	62,097	3	52.3%	3	42.7%	2
Providence, RI	2.4	76	3	61	2	47	3	10,373.50	2	49,065	3	46.8%	3	52.9%	1
Philadelphia, PA	2.4	75	3	67	2	67	3	11,936.90	1	49,127	3	60.7%	3	47.9%	2
St. Louis, MO	2.3	66	2	58	1	43	2	4,885.00	3	45,782	3	53.6%	3	44.0%	2
Sacramento, CA	2.3	49	1	67	2	34	2	5,323.40	3	65,847	2	56.5%	3	31.3%	3
Milwaukee, WI	2.3	62	2	58	1	49	3	6,001.20	3	43,125	3	42.0%	2	48.3%	2
Los Angeles, CA	2.3	69	3	59	2	53	3	8,304.20	2	65,290	2	51.1%	3	56.1%	1
Norfolk City, VA	2.1	46	1	47	1	36	2	4,467.50	3	53,026	3	53.7%	3	40.2%	2
Miami, FL	2.1	77	3	64	2	57	3	10,774.70	2	57,211	3	31.5%	1	65.9%	1
Cleveland, OH	2.1	57	2	52	1	44	2	4,793.50	3	31,838	2	60.3%	3	46.9%	2
Boston, MA	2.1	83	3	69	2	72	3	13,976.70	1	76,298	1	47.9%	3	39.3%	2
Atlanta, GA	2.1	48	1	42	1	44	2	3,685.70	3	64,179	2	62.0%	3	29.7%	3
Tampa, FL	2.0	50	1	55	1	31	1	3,376.40	3	55,634	3	55.9%	3	43.2%	2
Houston, TX	2.0	47	1	49	1	36	2	3,598.40	3	53,600	3	48.5%	3	52.3%	1
Dallas, TX	2.0	46	1	49	1	39	2	3,841.10	3	54,747	3	42.3%	2	42.6%	2
Columbus, OH	2.0	41	1	48	1	30	1	4,116.30	3	54,902	3	42.6%	2	35.6%	3
Indianapolis, IN	1.9	31	1	43	1	25	1	2,454.50	3	50,813	3	46.5%	3	49.6%	1
Memphis, TN	1.7	35	1	41	1	22	1	2,131.80	3	41,864	3	72.1%	2	67.2%	1
Jacksonville, FL	1.6	26	1	41	1	21	1	1,270.70	3	55,531	2	43.7%	2	53.1%	1
Detroit, MI	1.6	51	1	52	1	36	2	4,606.80	3	32,498	2	85.6%	1	56.3%	1
Birmingham, AL	1.6	33	1	31	1	21	1	1,365.30	3	38,332	2	73.4%	2	59.4%	1
<b>Stats</b>	Mean	55.08		54.08		42.13		5,775.86		52,010		55.0%		46.8%	
	Median	51		53		43		4,606.80		53,026		53.6%		46.9%	
	<b>S.Dev</b>	<b>16.37</b>		<b>10.68</b>		<b>14.49</b>		<b>3706.20</b>		<b>10808.21</b>		<b>0.12</b>		<b>0.10224626</b>	