

ENCOURAGING THE GROWTH OF URBAN AGRICULTURE IN
TRENTON AND NEWARK THROUGH AMENDMENTS TO THE
ZONING CODES: A PROVEN APPROACH TO ADDRESSING THE
PERSISTENCE OF FOOD DESERTS

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INTRODUCTION

The 2008 Farm Bill defines “food desert” as “an area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower-income neighborhoods and communities.”¹ In New Jersey, food deserts abound. Supermarket disinvestment from lower-income neighborhoods means twenty-five percent fewer supermarkets per capita in the State compared to the national average.² Consequently, many city dwellers purchase most of their food from convenience and liquor stores, which generally do not sell fresh fruits and vegetables.³ Although people in general prefer eating a balanced diet, the estimated 340,000 New Jersey residents who live in food deserts simply lack access to fresh vegetables.⁴ This lack of access to nutritious food has its consequences: New Jersey spends \$630 million each year on obesity-related disease,⁵ and its 18.1% incidence of obesity among lower-income children aged two to five years old is the highest in nation.⁶

This article looks at zoning ordinances in Newark and Trenton, where food deserts persist on a large scale in spite of recent efforts to provide greater access to affordable, nutritious food. Part I reviews the history and purpose of urban zoning laws. Part II details the negative health impacts food deserts pose and how increased access to nutritious food improves the health of urban residents. Part III examines recent scholarship, including model zoning codes and how other cities have successfully amended their zoning codes to foster the growth of urban agriculture. Part IV discusses the extent of food deserts, and the current state of urban agriculture in Trenton

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1. Food, Conservation, and Energy Act of 2008, Pub. L. No. 110-234, 122 Stat. 923, 401-402 (2008).

2. THE FOOD TRUST, FOOD FOR EVERY CHILD: THE NEED FOR MORE SUPERMARKETS IN NEW JERSEY 1 (2009), available at <http://www.thefoodtrust.org/pdf/2009NJneed.pdf>.

3. SARAH TREUHAFT & ALLISON KARPYN, POLICYLINK & THE FOOD TRUST, THE GROCERY GAP: WHO HAS ACCESS TO HEALTHY FOOD AND WHY IT MATTERS 2 (2010), available at <http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/FINALGroceryGap.pdf>.

4. *Food Deserts Strike a Blow to a Healthy Jersey*, THE TIMES OF TRENTON, Aug. 14, 2011, http://www.nj.com/times-opinion/index.ssf/2011/08/food_deserts_strike_a_blow_to.html; Katie Walker, *A Tale of Two Food Deserts*, ORGANIC GARDENING, Feb./Mar. 2012, at 51 (quoting Sheelah Muhammad, co-founder of an urban agriculture initiative in Chicago, that “getting people to buy things like kale isn’t a problem—they aren’t ignorant about vegetables; they just haven’t had access to them”).

5. THE FOOD TRUST, *supra* note 2, at 1.

6. *Id.* at 3.

and Newark. Part V analyzes the zoning ordinances currently in effect in Trenton and Newark and provides policy recommendations to spur the growth of urban agriculture. This article concludes that zoning amendments are a sensible and effective way to address the negative effects of food deserts, wherever they exist.

I. HISTORY AND PURPOSE OF ZONING REGULATIONS

A. The Emergence of Zoning as a Tool for States and Municipalities to Regulate Land Use

Zoning ordinances dictate whether a specific use of land is permitted, conditional, or prohibited. “In zoning, urban agriculture can be treated either as a district or as a use category.”⁷ Historically, since the 1926 *Village of Euclid v. Ambler Realty Co.* decision, the Supreme Court has upheld the police power of municipalities to regulate land use via zoning ordinances as constitutional.⁸ As a result of that landmark decision, “Euclidean” zoning, which controls how land may be used, spread across the country as the dominant form of local land use regulation.⁹

The *Euclid* decision prompted the federal government to enact legislation designed to encourage widespread adoption of use-based zoning ordinances.¹⁰ The Advisory Committee on City Planning and Zoning (ACCPZ), formed in the Department of Commerce under then Secretary of Commerce Herbert Hoover, published two acts in the late 1920s that provided states and municipalities with the essential framework for adopting zoning and planning legislation within their jurisdictions.¹¹

The revised version of the first piece of legislation, the Standard State Zoning Enabling Act (SZA), was published in 1926.¹² The Act “endeavors to provide, so far as it is practicable to foresee, that proper zoning can be undertaken under it without injustice and without violating property

7. Nina Mukherji & Alfonso Morales, *Zoning for Urban Agriculture*, 3 ZONING PRACTICE 4 (Mar. 2010), available at <http://www.planning.org/zoningpractice/2010/pdf/mar.pdf>.

8. *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 397 (1926).

9. Jay Wickersham, *Legal Framework: The Laws of Sprawl and the Laws of Smart Growth*, in URBAN SPRAWL: A COMPREHENSIVE REFERENCE GUIDE 26, 27 (David C. Soule ed., 2006).

10. Kevin S. Woodhouse, *Zoning in America: The 100 Year Recurring Timeline*, URBAN ACTION, 91, 95, 98 (2010), available at https://dusp.sfsu.edu/Urban%20Action%20Folder/ua2010/Urban_Action_2010_web.pdf.

11. Ruth Knack et al., *The Real Story Behind the Standard Planning and Zoning Acts of the 1920s*, 48 LAND USE L. & ZONING DIG. 1, 4, 6 (1996).

12. *Id.* at 3–6.

rights.”¹³ The Act was a response to litigation in state courts surrounding the constitutionality of state zoning enabling acts and municipalities that had already adopted their own zoning codes.¹⁴ It “creat[ed] a national framework that could survive scrutiny when the constitutionality of zoning came before state and federal courts.”¹⁵

Formulated to promote health, safety, morals, and general welfare, the SZEA authorized municipalities:

to regulate and restrict the height, number of stories, and size of buildings and other structures, the percentage of lot that may be occupied, the size of yards, courts, and other open spaces, the density of population, and the location and use of buildings, structures, and land for trade, industry, residence, or other purposes.¹⁶

Municipalities must make such regulations “in accordance with a comprehensive plan.”¹⁷ The ACCPZ specifically designed the regulations:

to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provision of transportation, water, sewerage, schools, parks, and other public requirements.¹⁸

Additionally, municipal legislatures retain discretion in determining the manner that zoning regulations are implemented and enforced.¹⁹

The ACCPZ published its second Model Act, the Standard City Planning Enabling Act (SCPEA), in 1928.²⁰ The SCPEA recommended forming municipal planning commissions and charged them with formulating comprehensive land use plans. The Act urged municipalities to enact such plans and conform to them “in the laying out of new streets, the construction of public works and utilities, and the private development of

13. U.S. DEP’T OF COMMERCE, A STANDARD STATE ZONING ENABLING ACT iii (1926).

14. Knack, *supra* note 11, at 4.

15. *Id.*

16. U.S. DEP’T OF COMMERCE, *supra* note 13, at § 1.

17. *Id.* § 3.

18. *Id.*

19. *Id.* § 4.

20. Knack, *supra* note 11, at 6.

land.”²¹ Although comprehensive in nature, the Act “is not meant to be slavishly followed in every word, sentence, or section, but rather to be used as a model and to be followed but with such adjustments as may be dictated by local constitutional and statutory law and legislative customs and traditions.”²² Planning is optional under the SCPEA, and the Act stipulated no mandatory elements of a comprehensive plan.²³ “Consequently, according to one historian, [c]ountless cities produced lopsided plans omitting some of the essential community facilities and almost none included the full complement of utilities.”²⁴ In spite of this, the influence of the Model Acts on the development of zoning legislation “cannot be ignored”: “[B]y 1930, 35 states had adopted the Standard State Zoning Enabling Act in whole or in part, and eventually all of the states adopted zoning enabling legislation, with most reflecting the influence of the Standard Act.”²⁵

Conventional Euclidean zoning codes enacted in the early 20th century are slowly yielding to New Urbanism, a movement originating in the early 1980s that spawned form-based codes.²⁶ Such codes seek to create the “proper urban form” by facilitating the growth of “vibrant mix-use communities.”²⁷ Form-based codes are an alternative to conventional, use-based codes, which by some accounts tend to degrade a community’s character by promoting “sprawling low-density, single-use, automobile dependent development.”²⁸ The Town of Seaside, a planned community located on the Florida panhandle, embodies the principles of the burgeoning New Urbanism movement.²⁹

21. U.S. DEP’T OF COMMERCE, A STANDARD CITY PLANNING ENABLING ACT, REVISED EDITION, iii (1928).

22. *Id.* at 2.

23. Knack, *supra* note 11, at 8.

24. *Id.* (quoting MEL SCOTT, AMERICAN CITY PLANNING SINCE 1890 244 (1971)).

25. Patricia E. Salkin, *From Euclid to Growing Smart: The Transformation of the American Local Land Use Ethic into Local Land Use and Environmental Controls*, 20 PACE ENVTL. L. REV. 109, 109 n.2 (2003) (citing KENNETH A. YOUNG, ANDERSON’S AMERICAN LAW OF ZONING § 2:21 (WestGroup, 4th ed. 1996)).

26. Jeffrey R. Purdy, *Form-Based Codes – New Approach to Zoning*, 28 SMART GROWTH TACTICS MAG 1, 2 (Dec. 2006), available at http://www.planningmi.org/downloads/issue_28_formbased_codes.pdf.

27. *Id.*

28. Brian W. Ohm & Robert J. Sitkowski, *Integrating New Urbanism and Affordable Housing Tools*, 36 URB. LAW. 857, 857 (2004).

29. Doris S. Goldstein, *New Urbanism: Recreating Florida by Rewriting the Rules*, 80 FLA. B.J. 63, 63 (Apr. 2006) (“Seaside demonstrates the principles of new urbanism: A mixture of uses and housing types with commercial uses clustered in the town center, well-designed, centrally-located parks and other civic spaces, small lot sizes with narrow frontage and the garage pushed to the rear of the lot,

*B. The Range of Powers Conferred by States on Local Governments:
Dillon's Rule v. Cooley Doctrine*

Most states apply Dillon's Rule, first articulated in Iowa in *Clinton v. Cedar Rapids and the Missouri River Railroad*³⁰ and later reaffirmed by the United States Supreme Court, to specify the narrow and constricted powers held by local governments. Dillon municipalities possess powers of governance only to the extent conferred by the state, and the state may retract these powers at any time.³¹

New Jersey is one of ten states that have adopted the Cooley Doctrine, also known as home rule, for municipal governance.³² In home rule jurisdictions, certain absolute powers are delegated from state government to local municipalities; local matters are left for local control.³³ Chief Justice Thomas J. Cooley of the Michigan Supreme Court first articulated the doctrine in 1871, holding that states cannot withdraw a municipality's absolute right to govern local affairs.³⁴ Home rule states, however, retain discretion in deciding "[t]he number, nature and duration of [municipal powers]."³⁵

Home rule "conjures an image of the 'local' as a relatively small-scale, geographically based community that possesses the autonomy to control its own affairs."³⁶ Home rule advocates argue that it enables local governments to respond effectively to community concerns³⁷ and "ensure[s] that people can define the character of the communities in which they live."³⁸ Each home rule state differs in the amount of authority it grants to municipalities

sidewalks, street trees, and a variety of other design elements intended to treat the streets as outdoor rooms and make it pedestrian-friendly.").

30. *City of Clinton v. Cedar Rapids & M.R.R. Co.*, 24 Iowa 455, 478–480 (1868).

31. *Id.* at 475.

32. *Local Government Authority*, NATIONAL LEAGUE OF CITIES, <http://www.nlc.org/build-skills-and-networks/resources/cities-101/city-powers/local-government-authority> (last visited Sept. 22, 2012).

33. *Id.*

34. *People ex rel. Le Roy v. Hurlbut*, 24 Mich. 44, 108 (1871) ("The state may mould [sic] local institutions according to its views of policy or expediency; but local government is matter of absolute right; and the state cannot take it away. It would be the boldest mockery to speak of a city as possessing municipal liberty where the state not only shaped its government, but at discretion sent in its own agents to administer it; or to call that system one of constitutional freedom under which it should be equally admissible to allow the people full control in their local affairs, or no control at all.").

35. *Hunter v. City of Pittsburgh*, 207 U.S. 161, 178 (1907) ("The number, nature and duration of the powers conferred upon these corporations and the territory over which they shall be exercised rests in the absolute discretion of the state.").

36. David J. Barron, *Reclaiming Home Rule*, 116 HARV. L. REV. 2257, 2260 (2003).

37. *Local Government Authority*, *supra* note 32.

38. Barron, *supra* note 36, at 2259–60.

and the extent to which municipalities exercise the power delegated to them.³⁹ Most home rule municipalities possess the zoning power.⁴⁰ Typically, a state's constitution or zoning enabling legislation confers the zoning power on municipalities.⁴¹

C. History and Current State of Home Rule in New Jersey

Home rule for New Jersey municipalities is conveyed by statute⁴² and reinforced in its constitution.⁴³ Municipalities in New Jersey are "significant, formidable entities" that possess a broad array of powers.⁴⁴ Their powers include "the power to sue and be sued, to acquire and dispose of property, to make contracts, to tax, and to enact ordinances."⁴⁵

New Jersey has a tradition of home rule dating back to the Township Act of 1798. The Act established a system of local government by officially incorporating all municipalities within the state.⁴⁶ Most importantly, the Act established the town meeting as the mode of municipal governance.⁴⁷ In 1875, New Jersey amended its constitution to ensure that legislation enacted concerning local governments "be liberally construed in their favor."⁴⁸ The amendment stipulated that municipal powers "shall include not only those granted in express terms but also those of necessary or fair implication, or incident to the powers expressly conferred, or essential thereto, and not inconsistent with or prohibited by this Constitution or by law."⁴⁹

39. *Local Government Authority*, *supra* note 32.

40. MICHAEL A. EGENTON ET AL., MODERN FORMS OF MUNICIPAL GOVERNMENT, STATE OF NEW JERSEY STATE COMMISSION ON COUNTY AND MUNICIPAL GOVERNMENT 5 (1992), *available at* <http://dspace.njstatelib.org/xmlui/bitstream/handle/10929/18624/m9661992g.pdf>.

41. Barron, *supra* note 36, at 2318.

42. Municipalities Given Fullest Powers N.J. STAT. ANN. § 40:42-4 ("In construing the provisions of this subtitle, all courts shall construe the same most favorably to municipalities, it being the intention to give all municipalities to which this subtitle applies the fullest and most complete powers possible over the internal affairs of such municipalities for local self-government.")

43. N.J. CONST. art. IV, § VII ¶ 11.

44. EGENTON, *supra* note 40, at 1.

45. *Id.*

46. Township Act of 1798, N.J. Pub. L. No. 1798, 1798 N.J. Laws, 332 ("Be it enacted . . . [t]hat the inhabitants of every township, precinct and ward within this state be, and they hereby are constituted a body politic and corporate in law . . .").

47. EGENTON, *supra* note 40, at 2.

48. N.J. CONST. art. IV, § VII ¶ 11.

49. *Id.*

The Township Act of 1899 amended the State's home rule legislation by firmly rooting municipal powers in township committees.⁵⁰ The Home Rule Act of 1917 defined the fundamental powers of New Jersey municipalities and the procedures for enacting ordinances.⁵¹ Finally, general dissatisfaction with local government structures employed to date resulted in the New Jersey legislature enacting the "Optional Municipal Charter Law."⁵² This legislation sanctioned four different types of municipal government: Mayor-Council, Council-Manager, Small Municipality, or Mayor-Council-Administrator.⁵³ Newark, Trenton, and many other cities across the State, operate under the Mayor-Council form of government.⁵⁴ This form of government, a classic "strong-mayor" charter, is akin to the federal-state arrangement: "[t]he Mayor is the municipal chief executive, the council the municipal legislature."⁵⁵ The Mayor-Council plan stipulates that the mayor and nine members of the Municipal Council each serve four-year terms.⁵⁶

Legislation currently in effect confers broad powers to New Jersey municipalities. The Optional County Charter Law, enacted in 1972, characterizes municipalities as "the broad repository of local police power in terms of the right and power to legislate for the general health, safety and welfare of their residents."⁵⁷ Nothing in this law "shall be construed to impair or diminish or infringe on the powers and duties of municipalities under the general law of this State."⁵⁸ New Jersey law affirms the municipality's right to pass regulations in the exercise of its police power:

Any municipality may make, amend, repeal, and enforce such other ordinances, regulations, rules, and by-laws not contrary to the laws of this state or of the United States, as it may deem necessary and proper for the good government, order, and protection of persons and property, and for the preservation of the public health, safety, and welfare of the municipality and its inhabitants, and as

50. ALBERT J. WOLFE, A HISTORY OF MUNICIPAL GOVERNMENT IN NEW JERSEY SINCE 1798 23(2004).

51. *Id.* at 22.

52. *Id.* at 23.

53. N.J. Stat. Ann. § 40:69A.

54. *Government*, CITY OF NEWARK, NJ, <http://www.ci.newark.nj.us/government/> (last visited Sept. 28, 2012); *Government*, CITY OF TRENTON, NJ, <http://www.trentonmillhill.org/trenton-government.html> (last visited Sept. 28, 2012).

55. WOLFE, *supra* note 50, at 24.

56. N.J. STAT. ANN. §§ 40:69A-33, 40:69A-34.

57. *Id.* § 40:69A-28.

58. *Id.*

may be necessary to carry into effect the powers, and duties conferred, and imposed by this subtitle, or by any law.⁵⁹

In 1975, New Jersey enacted the Municipal Land Use Law (MLUL), which granted municipalities the express right to enact zoning ordinances.⁶⁰ Specifically, the MLUL provides a municipality's planning board the authority to adopt a Master Plan "to guide the use of lands within the municipality in a manner which protects public health and safety and promotes the general welfare."⁶¹ The MLUL's general purpose is to encourage municipalities to enact smart, efficient ordinances. In particular, the MLUL envisions "municipal action to provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space."⁶² The statute permits a zoning ordinance to provide for a conditional use permitting system⁶³ and suggests what ordinances should contain.⁶⁴ A "conditional use" per the MLUL:

means a use permitted in a particular zoning district only upon a showing that such use in a specified location will comply with the conditions and standards for the location or operation of such use as contained in the zoning ordinance, and upon the issuance of an authorization therefore by the planning board.⁶⁵

II. NEGATIVE IMPACTS OF FOOD DESERTS AND HOW INCREASED ACCESS TO NUTRITIOUS FOOD IMPROVES THE HEALTH OF URBAN RESIDENTS

Food deserts are a national problem. In densely populated areas, seven percent of the zip codes do not have a grocery store or supermarket, and fifty-three percent do not have a chain supermarket.⁶⁶ Of all households in the United States, 2.2% live more than a mile from a supermarket and do

59. *Id.* § 40:48-2.

60. *Id.* § 40:55D-1.

61. *Id.* § 40:55D-28.

62. *Id.* § 40:55D-2.

63. *Id.* § 40:55D-67.

64. *Id.* § 40:55D-65.

65. *Id.* § 40:55D-3.

66. INST. OF MED. AND NAT'L RES. COUNCIL, PUBLIC HEALTH EFFECTS OF FOOD DESERTS, 12 (2009).

not have access to a vehicle.⁶⁷ Furthermore, 23.5 million people live in low-income areas with no supermarket within a mile.⁶⁸ Black and Hispanic populations have half and one-third as much access to chain supermarkets as Caucasians and non-Hispanics, respectively.⁶⁹

Food deserts predominate in urban and rural low-income areas.⁷⁰ Research confirms that people living in these areas may be more likely to suffer from diabetes and premature death due to diabetes, cardiovascular disease, and obesity.⁷¹ Food insecure populations are more likely to have an increased incidence of obesity.⁷² The increased availability of foods lacking in nutrition and the dearth of nutritional foods available for purchase in food deserts are major causes of this urban health crisis.⁷³ Diet-related diseases are more prevalent in places with limited access to healthy food than neighborhoods in which residents have easy access to nutritious foods like fresh fruits and vegetables.⁷⁴

Experts argue that the solution to food deserts and the accompanying health problems that afflict their residents lies in a multifaceted,

67. U.S. DEP'T OF AGRIC., REPORT TO CONGRESS, ACCESS TO AFFORDABLE AND NUTRITIOUS FOOD: MEASURING AND UNDERSTANDING FOOD DESERTS AND THEIR CONSEQUENCES iii (June 2009), available at http://www.ers.usda.gov/media/242675/ap036_1_.pdf.

68. *Id.*

69. INST. OF MED. AND NAT'L RES. COUNCIL, *supra* note 66, at 12–13.

70. *Id.* at 5.

71. *Id.* (including research showing food desert residents more likely to suffer from diabetes, heart disease, and obesity); *Determining the Extent of Food Deserts, in* INSTITUTE OF MEDICINE AND NATIONAL RESEARCH COUNCIL WORKSHOP ON PUBLIC HEALTH EFFECTS OF FOOD DESERTS: WORKSHOP SUMMARY 15 (2009), available at http://www.caction.org/research_reports/reports/PublicHealthEffects.pdf (explaining research findings that food desert residents suffer from higher rates of premature death due to diabetes and higher BMIs than those living with access to supermarkets).

72. LYNN PARKER, FOOD RESEARCH AND ACTION CENTER, OBESITY, FOOD INSECURITY AND THE FEDERAL CHILD NUTRITION PROGRAMS: UNDERSTANDING THE LINKAGES 13 (Oct. 2005), available at http://www.virtualcap.org/downloads/WCEH/FRAC_Obesity_Paper_05.pdf.

73. INST. OF MED. AND NAT'L RES. COUNCIL, *supra* note 66, at 37 (“The excess availability of energy-dense snacks and fast foods in food deserts is a concern because both have been linked to obesity.”); Frank B. Hu & Walter C. Willett, *Optimal Diets for Prevention of Coronary Heart Disease*, 288 J. AM. MED. ASS'N., 2569, 2569 (2002), available at <http://jama.jamanetwork.com/article.aspx?articleid=195543> (indicating higher consumption of nuts, fruits, vegetables, and whole grains is associated with a lower risk of heart disease); DEL. VALLEY REG'L PLANNING COMM'N, FOOD SYSTEM PLANNING: MUNICIPAL IMPLEMENTATION TOOL #18 1 (Apr. 2010), available at http://www.ruaf.org/ruaf_bieb/upload/3304.pdf (“There is a direct connection between access to healthy food and rates of diet-related diseases, such as diabetes, heart disease, and obesity.”).

74. TREUHAFT & KARPYN, *supra* note 3, at 5 (reviewing 132 studies examining access to healthy food and its impacts, and concluding that “decreased access to healthy food means people in low-income communities suffer more from diet-related diseases like obesity and diabetes than those in higher-income neighborhoods with easy access to healthy food, particularly fresh fruits and vegetables”).

comprehensive approach.⁷⁵ One such expert, Joel Gittelsohn of Johns Hopkins University, argues for a “trifecta” approach to improve community eating habits and nutritional environments: “increase availability, reduce price, and promote healthier choices.”⁷⁶ Merely improving access to nutritious food, some experts say, will not by itself alleviate the rampant obesity problem in food deserts.⁷⁷ Admittedly, improving access to healthy food should progress hand-in-hand with other initiatives to encourage healthy eating. Until food desert residents have access to healthy food in their neighborhoods, however, they do not have the choice to purchase fresh produce in lieu of candy and other processed foods with little to no nutritional benefit. Easy access to healthy food is the initial foundation required for further progress.

Thus, changing the food environment in food deserts by increasing the availability of affordable and nutritious foods “is a practical way, perhaps the only practical way, to address the obesity epidemic.”⁷⁸ Urban agriculture is a proven method of addressing the health problems that plague residents of fresh food deserts. It increases access to fresh produce and “promotes awareness of healthy foods and more nutritious eating habits.”⁷⁹ In Philadelphia, for example, The Food Trust has opened up many farmers’ markets throughout the city, which has resulted in increased fruit and vegetable intake among customers.⁸⁰ Urban agriculture has price and nutritional benefits for city dwellers, too. Food grown in the city does not have to be transported in, resulting in lower transportation costs⁸¹ and

75. Steven Yaccino, *In Chicago, Michelle Obama Takes On ‘Food Deserts,’* THE CAUCUS (Oct. 25, 2011), <http://thecaucus.blogs.nytimes.com/2011/10/25/in-chicago-michelle-obama-takes-on-food-deserts> (including statement by Mari Gallagher, market research consultant that “[t]here’s not one single reason we have food deserts, and not one single solution”); Gina Kolata, *Studies Question the Pairing of Food Deserts and Obesity*, N.Y. TIMES, (Apr. 17, 2012), <http://www.nytimes.com/2012/04/18/health/research/pairing-of-food-deserts-and-obesity-challenged-in-studies.html> (highlighting the opinion of Justin DeJong, spokesperson for Department of Agriculture, who argues fighting obesity in food deserts “requires ‘a comprehensive response’” and that “the federal effort . . . includes not just improving access to healthy foods but also improving food in schools, increasing physical education time, and educating people on the importance of healthy diets”).

76. INST. OF MED. AND NAT’L RES. COUNCIL, *supra* note 66, at 46.

77. Kolata, *supra* note 75.

78. INST. OF MED. AND NAT’L RES. COUNCIL, *supra* note 66, at 46.

79. Norman Glickman, et al., RUTGERS SCH. OF PLANNING AND PUB. POLICY, FOOD SECURITY IN TRENTON: WHAT FAMILIES, COMMUNITIES, AND GOVERNMENTS CAN DO TO PROMOTE HEALTHY LIVING, 77 (2011), available at <http://policy.rutgers.edu/academics/projects/practicums/trenton2011.pdf>.

80. INST. OF MED. AND NAT’L RES. COUNCIL, *supra* note 66, at 62.

81. Alexandra Dapolito Dunn, *Siting Green Infrastructure: Legal and Policy Solution to Alleviate Urban Poverty and Promote Healthy Communities*, 37 B.C. ENVTL. AFF. L. REV. 41, 52 (2010) (“Green infrastructure can lower food costs for the urban poor by creating space to grow produce that

higher nutritional values and quality.⁸² “[I]t has been shown that a five to ten day transportation and storage lag between production and consumption leads to losses of 30-50% in some nutritional constituents.”⁸³ Finally, “[d]irect marketing improves the producer-consumer relationship and maximizes opportunities and interest in increased consumption of fresh fruit and vegetables.”⁸⁴

III. HOW SCHOLARSHIP AND CASE STUDIES INFORM THE PROCESS FOR AMENDING ZONING CODES TO BETTER FACILITATE URBAN AGRICULTURE

A. APA's Growing Smart Project

The American Planning Association published “The Growing Smart Legislative Guidebook: Model Statutes for Planning and the Management of Change” in January 2002.⁸⁵ In charging that the SZEA and SCPEA “are shopworn and inadequate for the job at hand,”⁸⁶ the Guidebook “detail[s] best practices to guide state legislatures in their efforts to modernize state planning and zoning enabling acts.”⁸⁷ The Guidebook is “intended to provide governors, state legislators, state legislative research bureaus, local elected and appointed officials, planners, citizens, and advocates for statutory change with ideas, principles, methods, procedures, phraseology, and alternative legislative approaches drawn from various states, regions, and local governments across the country.”⁸⁸ It asserts that land use policy has changed to recognize “vacant, developable land as having competing social values—it can be used for the construction of affordable housing or

can supply an urban center. The urban poor pay more for their food, particularly produce, than suburban or rural residents.”).

82. Susan A. Schneider, *A Reconsideration of Agricultural Law: A Call for the Law of Food, Farming, and Sustainability*, 34 WM. & MARY ENVTL. L. & POL'Y REV. 935, 954 (2010) (“Nutrition is lost in transit, and crops are selected for transportability rather than nutrition or taste.”).

83. ANNE C. BELLOWS ET AL., HEALTH BENEFITS OF URBAN AGRICULTURE 4 (2003), available at http://www.bordbia.ie/aboutgardening/GardeningArticles/ScientificArticles/Health_Benefits_Of_Urban_Agriculture.pdf.

84. *Id.*

85. AM. PLANNING ASS'N, GROWING SMART LEGISLATIVE GUIDEBOOK: MODEL STATUTES FOR PLANNING AND THE MANAGEMENT OF CHANGE (2002), available at <http://www.planning.org/growingsmart/guidebook/print>.

86. AM. PLANNING ASS'N, GROWING SMART LEGISLATIVE GUIDEBOOK: MODEL STATUTES FOR PLANNING AND THE MANAGEMENT OF CHANGE xxx (Stuart Meck ed., 2002).

87. Salkin, *supra* note 25, at 126.

88. AM. PLANNING ASS'N, *supra* note 86, at xli.

for the continuation of agriculture.”⁸⁹ To encourage urban agriculture activities within cities, the Guidebook urges states to pass agricultural enabling statutes, which allow municipalities to make zoning amendments establishing agricultural districts, “where commercial agriculture is encouraged and protected.”⁹⁰

B. Seeding the City: Land Use Policies to Promote Urban Agriculture

The National Policy & Legal Analysis Network to Prevent Childhood Obesity (NPLAN), a nonprofit organization formed under Public Health Law & Policy (PHLP), published in October 2011 a comprehensive guide for city planners interested in enacting land use policies aimed at promoting urban agriculture.⁹¹ Although the Guide offers a “Model Comprehensive Plan Language for Urban Agriculture” and a “Model Zoning Ordinance for Urban Agriculture,” the underlying message of *Seeding the City: Land Use Policies to Promote Urban Agriculture* is that “there is no one-size-fits-all urban agricultural use land policy.”⁹² Cities, in crafting their land use policies, should take into account factors like suitability and availability of land for agriculture, the level of interest of urban residents, and population density.⁹³ In addition, legislators must consider what forms of agriculture to allow and where to allow them within the city; whether to classify urban agriculture as a permitted use (i.e. “as-of-right” use) or a conditional use (i.e. urban farmers must obtain approval); what operating standards to impose on urban farmers that will ensure community harmony and compatibility with neighbors; and what uses incidental to farming to allow.⁹⁴

The Guide suggests adhering to EPA guidelines for evaluating urban parcels for soil contamination.⁹⁵ The EPA process, also known as “All Appropriate Inquiries” (AAI), requires “conducting due diligence or a Phase I Environmental Site Assessment to determine prior uses and

89. *Id.* at xxix.

90. *Id.* at 14-1.

91. HEATHER WOOTEN & AMY ACKERMAN, NAT’L POLICY & LEGAL ANALYSIS NETWORK TO PREVENT CHILDHOOD OBESITY & CHANGELAB SOLUTIONS, SEEDING THE CITY: LAND USE POLICIES TO PROMOTE URBAN AGRICULTURE 5 (Oct. 2011), *available at* http://changelabsolutions.org/sites/changelabsolutions.org/files/Urban_Ag_SeedingTheCity_FINAL_%28CLS_20120530%29_20111021_0.pdf.

92. *Id.* at 5.

93. *Id.*

94. *Id.* at 6-8.

95. *Id.* at 8.

ownership of a property and assess conditions at the property that may be indicative of releases or threatened releases of hazardous substances at, on, in, or to the property.”⁹⁶ Only an “Environmental Professional,” defined in 40 C.F.R. § 312.10, may perform the AAI investigation.⁹⁷ EPA’s “Interim Guidelines for Safe Gardening Practices” recommend researching a site’s history including its past uses and pursuing various options for testing a site for contamination and cleanup, using “existing residential cleanup standards . . . as a benchmark for safe gardening.”⁹⁸

A city may take steps to ensure that land remains undeveloped and available for agriculture by designating areas as “open space districts.”⁹⁹ These districts “enhance the protection of land as open or green space, because once the district is established, a change of use requires a vote by the local legislative body” or the public.¹⁰⁰ In other words, a city that designates open space districts in its code provides community and market gardeners with a certain peace of mind that they can continue to farm their plots over the long term. Long-term security over land is necessary for the growth of urban agriculture.

The most helpful section of the Guide for municipal legislators seeking to implement farmer-friendly adjustments to zoning codes is the “Model Comprehensive Plan Language for Urban Agriculture.”¹⁰¹ The Guide outlines three goals for such legislators. First, land use policy should “protect existing and establish new urban agriculture sites.”¹⁰² This includes removing barriers to gardening in residential districts, adopting regulations that designate community gardens as a permitted use and urban farms as a conditional use in appropriate locations, and “prioritiz[ing] the development of new urban agriculture sites in low-income and underserved neighborhoods.”¹⁰³ Second, the Guide recommends that opportunities for urban agriculture accompany any new development.¹⁰⁴ Third, cities should form food policy councils that “promote urban agriculture through ongoing

96. U.S. ENVTL. PROT. AGENCY, EPA BROWNFIELDS GRANTS, CERCLA LIABILITY, AND ALL APPROPRIATE INQUIRIES 3 (2009), available at <http://www.epa.gov/brownfields/aa/aaicerclafs.pdf>.

97. *Id.*

98. U.S. ENVTL. PROT. AGENCY, BROWNFIELDS AND URBAN AGRICULTURE: INTERIM GUIDELINES FOR SAFE GARDENING PRACTICES (2011), available at http://www.epa.gov/brownfields/urbanag/pdf/bf_urban_ag.pdf.

99. WOOTEN & ACKERMAN, *supra* note 91, at 10.

100. *Id.*

101. *Id.* at 17.

102. *Id.*

103. *Id.* at 17–18.

104. *Id.* at 18.

programming and partnerships.”¹⁰⁵ The guide concludes by emphasizing the importance of how a code defines different types of agriculture. These definitions “will guide decisions about what types of agriculture are appropriate in different areas within the community.”¹⁰⁶

C. Case Studies

1. Seattle, Washington

2010 was the Year of Urban Agriculture in Seattle, Washington. The City passed amendments to its zoning ordinance allowing urban farming activities in almost all zoning districts.¹⁰⁷ The amendments were enacted following a period of research and deliberation. In June 2010, Seattle’s Department of Planning and Development released a report summarizing its recommendations with regard to amending the City’s zoning code to enhance the local food system.¹⁰⁸ The report lists numerous benefits of local food production: it ensures fresh food for local residents with higher nutrient content compared with food shipped over large distances; it enhances community relations, especially farmer-consumer relationships; it reduces poverty by allowing residents to sell crops cultivated on unused urban plots; and it increases the City’s degree of self-sufficiency.¹⁰⁹ The report asserts that removing land use code barriers would open up a “tremendous opportunity for urban agriculture in residential yards, commercial/industrial rooftops, and in open space.”¹¹⁰

In August 2010, Seattle’s City Council adopted Ordinance 123378, and it took effect a month later.¹¹¹ Taking the new amendments into consideration, Seattle’s code represents one of the Country’s most progressive zoning ordinances in terms of facilitating urban agriculture. In general, the legislation permits farmers’ markets in wide areas of the City

105. *Id.*

106. *Id.* at 20.

107. SEATTLE, WASH., ORDINANCE 123378 (2010), *available at* http://clerk.ci.seattle.wa.us/~archives/Ordinances/Ord_123378.pdf

108. ANDREA PETZEL, URBAN AGRICULTURE LAND USE CODE AMENDMENTS, DIRECTOR’S REPORT AND RECOMMENDATIONS 4 (June 16, 2010), *available at* http://www.seattle.gov/dpd/cms/groups/pan/@pan/@plan/@urbanagriculture/documents/web_informatonal/dpds017589.pdf.

109. *Id.* at 5.

110. *Id.* at 4.

111. *Agriculture: Overview*, Seattle Department of Planning and Development, SEATTLE.GOV (May 20, 2010), <http://www.seattle.gov/dpd/planning/UrbanAgriculture/Overview>.

and residents to sell the food that they grow on their property.¹¹² Urban farms, or those operations growing plants on-site for sale, are permitted in all zones.¹¹³ The code does not require a permit for urban farms with up to 4,000 square feet of planting area and accessory to a residential use.¹¹⁴ Entrepreneurs seeking to start urban farms in residential zones must apply for a conditional use permit.¹¹⁵ In most zones, rooftop greenhouses can exceed height restrictions by up to fifteen feet, “if the greenhouse is dedicated to food production.”¹¹⁶ Further, the changes to the code are not limited solely to vegetable production; the code now permits eight chickens per lot as opposed to three under the old code.¹¹⁷

2. Cleveland, Ohio

In 2007, Cleveland adopted an amendment to its code establishing an Urban Garden District.¹¹⁸ The main permitted uses within this district are community and market gardens, including the sale of crops grown on the sites.¹¹⁹ Permitted secondary uses are greenhouses, hoopouses, cold-frames, open space intended for use as a garden, fences, signs, benches, bike racks, raised beds, compost bins, seasonal farm stands, garden art, rain barrels, chicken coops, beehives, and certain buildings used for agricultural purposes.¹²⁰ This amendment spurred an explosion of urban gardening and what many believe is Cleveland’s “biggest proliferation of big-lot gardens since the Victory Garden days of World War II.”¹²¹

Even greater change was on the way. In October 2010, the Cleveland City Council passed more amendments facilitating urban gardening, this time changing urban agriculture on vacant residential lots from an accessory to a principal use.¹²² In addition, the City’s Department of

112. *Id.*

113. SEATTLE, WASH., *supra* note 107, at 15.

114. *Id.* at 12.

115. WOOTEN & ACKERMAN, *supra* note 91, at 9 (citing SEATTLE, WASH. MUN. CODE § 23.44.051(B)(1) (2010)).

116. SEATTLE, WASH., *supra* note 107, at 21.

117. *Seattle City Council Approves Urban Farm and Community Garden Legislation Improving Access to Locally Grown Food*, SEATTLE.GOV (Aug. 16, 2010), <http://www.seattle.gov/council/newsdetail.asp?ID=10996&Dept=28>.

118. CLEVELAND, OHIO, CODE OF ORDINANCES § 336.01 (2007).

119. *Id.* § 336.03.

120. *Id.* § 336.04.

121. Marty Sterpka, *Cleveland’s For-Profit Urban Gardens are Growing*, CLEVELAND.COM (July 6, 2009), http://blog.cleveland.com/metro/2009/07/clevelands_forprofit_urban_gar.html.

122. CLEVELAND, OHIO, CODE OF ORDINANCES §§337.02, 337.23-25 (2007); Morgan Taggart, *City Council Changes Residential Zoning to Support Urban Agriculture*, CLEVELAND-CUYAHOGA

Economic Development sponsors “Gardening for Greenbacks,” a program designed to ensure city residents have access to fresh food. Grants up to \$3,000 are available to eligible urban farmers for the purchase of tools, irrigation equipment, and greenhouses.¹²³ All of this makes Cleveland’s urban agriculture policy one of the most progressive in the country. Greater Cleveland has over 225 community gardens¹²⁴ and more farmers’ markets per capita than any other metro area in the country.¹²⁵

3. Madison, Wisconsin

After four years of work, the Madison Common Council adopted a new zoning code in March 2011.¹²⁶ Similar to Cleveland’s code, it establishes a new Urban Agricultural District “to ensure that urban garden and farm areas are appropriately located and protected to meet needs for local food production, and to enhance community health, community education, garden-related job training, natural resource protection, preservation of green space, and community enjoyment.”¹²⁷ Permitted uses within the Urban Agriculture District include: market and community gardens; composting/vermiculture facilities; outdoor storage; and solar or wind energy devices.¹²⁸ The new code seeks to achieve a goal of “[m]aintain[ing] existing agricultural operations in the City and encourag[ing] new, smaller farming operations.”¹²⁹ In keeping with this goal, the code should resolve

COUNTY FOOD POLICY COALITION (Oct. 20, 2010), <http://cccfoodpolicy.org/blog/city-council-changes-residential-zoning-support-urban-agriculture>.

123. CITY OF CLEVELAND DEP’T OF ECON. DEV., GARDENING FOR GREENBACKS: FUNDS TO DEVELOP URBAN GARDENS FOR COMMERCIAL MARKET SALE OF FRUIT & PRODUCE (2010), available at cccfoodpolicy.org/sites/default/files/resources/Gardening%20for%20Greenbacks%20Brochure.pdf.

124. *Go Local or Go Home*, WHAT LOCALS LIKE ABOUT CLEVELAND PLUS (May 25, 2012), <http://fleetothecleve.wordpress.com/2012/05/25/go-local-or-go-home/>.

125. Kathy Carr, *Chefs dish out the goods about Cleveland*, CRAIN’S CLEVELAND BUSINESS, (July 12, 2010), <http://www.crainscleveland.com/article/20100712/BLOGS02/100719986>.

126. *Zoning Rewrite—Neighborhoods*, CITY OF MADISON, WISCONSIN, <http://www.cityofmadison.com/neighborhoods/zoningrewrite> (last visited Sept. 30, 2012).

127. MADISON, WIS., ZONING CODE ch. 28.093(1) (adopted in 3/20/11, effective pending adoption of revised zoning map expected to occur 10/16/2012).

128. *Id.* at ch. 28.091.

129. CITY OF MADISON COMPREHENSIVE PLAN: VOLUME II, NATURAL AND AGRICULTURAL RESOURCES -THE PLAN: GOALS, OBJECTIVES, POLICIES & IMPLEMENTATION RECOMMENDATIONS 6-16 (Jan. 2006) available at <http://www.cityofmadison.com/planning/ComprehensivePlan/dplan/v2/chapter6/v2c6.pdf>.

some of the problems that formerly faced urban farmers, such as restrictions on the size and location of hoopouses.¹³⁰

Growing Power, perhaps the best-known urban farm in the country, has proposed building a vertical farm in the middle of Madison.¹³¹ The plans include building a 34,000 square-foot, five-story farm and educational facility.¹³² It will be the first facility of its kind in the country.¹³³ Although the financing plan has not yet been put into place, the vertical farm received zoning approval in December 2010.¹³⁴ Further indication of Madison's enthusiasm for the growth of agriculture within its city is the Badger School for Urban Agriculture and Community. Although still in the project stage, the yet-to-be-constructed charter school will be "geared toward urban agriculture, nutrition and the environment."¹³⁵ Community gardens, gracing the exterior areas of the school, will serve the local community by providing fresh produce to its residents.¹³⁶

IV. FOOD DESERTS AND THE CURRENT STATE OF URBAN AGRICULTURE IN TRENTON AND NEWARK

A. Food Deserts in Trenton and Newark

The United States Department of Agriculture (USDA) conducted extensive research to qualify, quantify, and publicize the food desert problem in America. To that end, it recently released an "[i]nternet-based mapping tool that pinpoints the location of 'food deserts' around the country and provides data on population characteristics of census tracts

130. See, e.g., Matthew DeFour, 'Hoop Houses' Draw Urban Farmers in Madison and Critics, WIS. STATE J. (Sept. 30, 2009), http://host.madison.com/wsj/news/local/environment/article_ec30c9aa-ae08-11de-aba5-001cc4c002e0.html.

131. Karen Herzog, *Growing Power's Proposed Vertical Farm up for Zoning Review*, MILWAUKEE-WIS. J. SENTINEL (Nov. 3, 2010), <http://www.jsonline.com/blogs/lifestyle/106621613.html>.

132. *Id.*

133. *Growing Power Vertical Farm Receives City Approval*, THE KUBALA WASHATKO ARCHITECTS, INC. (Jan. 27, 2011), <http://www.tkwa.com/blog/growing-power-vertical-farm-receives-city-approval>.

134. *Id.*

135. *Urban Agriculture Charter School Gets Approval in Madison*, WIS. STATE J. (Dec. 13, 2010, 8:14 PM), http://host.madison.com/news/local/education/local_schools/urban-agriculture-charter-school-gets-approval-in-madison/article_83df762e-0728-11e0-8d11-001cc4c03286.html.

136. Michael Levenston, *Badger School for Urban Agriculture and Community*, CITY FARMER NEWS (Jan. 13, 2010), <http://www.cityfarmer.info/2010/01/13/badger-school-for-urban-agriculture-and-community>.

where residents have limited access to affordable and nutritious foods.”¹³⁷ The tool defines “food desert” as a low-income census tract in which at least one-third of the population lives greater than a mile from a supermarket.¹³⁸ The research reveals shocking statistics: over 6,500 food deserts exist in the continental United States, and approximately 13.6 million people, mostly urban residents, have low access to a supermarket.¹³⁹

According to USDA’s research criteria, Trenton, a city of approximately 85,000 residents,¹⁴⁰ has four food deserts with a total population of 18,588 people. Specifically, 4,800 of those residents have low access to a supermarket. Newark, a city of approximately 277,000 residents,¹⁴¹ has one food desert with a population of 2,471 people. All of those people have low access to a supermarket.¹⁴²

Although these numbers are relatively insignificant, they do not accurately characterize the food access problem in Trenton and Newark. Even though certain areas of Trenton and Newark do not fall under the USDA’s definition of “food desert,” it is clear that this problem is more severe than the USDA lets on. A study by The Reinvestment Fund, a Philadelphia nonprofit organization, delineates vast areas of Trenton and Newark where access to supermarkets is limited.¹⁴³ Both cities boast substantially less supermarkets per capita than the national average.¹⁴⁴ Countless articles and research underscore the almost-ubiquitous presence

137. *USDA Introduces Online Tool for Locating ‘Food Deserts,’* USDA NEWSROOM (May 2, 2011), <http://www.usda.gov/wps/portal/usda/usdahome?contentid=2011/05/0191.xml>.

138. *USDA Food Desert Locator: About the Locator*, USDA ERS (July 6, 2012), <http://www.ers.usda.gov/data-products/food-desert-locator.aspx> (follow “Enter the Map”).

139. *USDA Food Desert Locator: Documentation*, USDA ERS (July 6, 2012), <http://www.ers.usda.gov/data-products/food-desert-locator/documentation.aspx>.

140. *Profile of General Population and Housing Characteristics: 2010 Demographic Profile, Trenton City, U.S. CENSUS BUREAU* (2010), http://factfinder2.census.gov/bkml/table/1.0/en/10_DP/DPDP1/0600000US3402174000.

141. *Profile of General Population and Housing Characteristics: 2010 Demographic Profile, Newark City, U.S. CENSUS BUREAU* (2010), http://factfinder2.census.gov/bkml/table/1.0/en/DEC/10_DP/DPDP1/0600000US3401351000.

142. *USDA Food Desert Locator*, USDA ERS (July 6, 2012), <http://www.ers.usda.gov/data-products/food-desert-locator.aspx> (follow “Enter the Map” hyperlink; click “Find Address” hyperlink; then search “Trenton, NJ” and “Newark, NJ”; click food desert areas to see statistics); *see* Appendix A (including comprehensive statistical breakdown).

143. *2011 Limited Supermarket Access Analysis*, THE REINVESTMENT FUND, <http://www.trfund.com/TRF-LSA-widjet.html> (search “Newark, NJ” and “Trenton, NJ”) (last visited Sept. 28, 2012).

144. THE FOOD TRUST, *supra* note 2, at 5 (stating that Trenton and Newark have thirty-one percent and seventy-seven percent of the United States average supermarkets per capita, respectively).

of food deserts in Trenton and Newark.¹⁴⁵ Recent positive developments (like the first opening of a full-service supermarket in Newark in over twenty years¹⁴⁶) are undoubtedly exciting and indicate that progress is being made. Still, far too many residents of Trenton and Newark lack convenient access to fresh food, particularly fruits and vegetables.

B. Urban Agriculture in Trenton and Newark

Recent trends and legislative developments suggest interest in widespread access to fresh, healthy food in New Jersey is on the rise. According to the state Department of Agriculture, the number of seasonal farmers' markets increased from thirty-five in 2001 to 148 in 2011.¹⁴⁷ Main Street New Jersey, a state program established in 1989, facilitated this large increase by "provid[ing] technical support to towns and farmers in operating a farmers' market in downtown districts."¹⁴⁸ In addition, New Jersey Governor Chris Christie has recently signed two pieces of legislation that specifically address food deserts in cities like Trenton and Newark.

The first act, signed by the Governor in March 2011, "will allow nonprofit corporations and associations located in [Trenton and Newark, among other New Jersey cities] to transform vacant properties into gardens for growing fruits and vegetables."¹⁴⁹ Nonprofit farming practices on previously vacant property, and the sale of the produce grown on that land, are "considered a public purpose for which exemption from property taxation is warranted."¹⁵⁰ The Act presents an opportunity for

145 See, e.g., Steven Gray, *Can America's Urban Food Deserts Bloom?*, TIME (May 26, 2009), <http://www.time.com/time/nation/article/0,8599,1900947,00.html> ("For years, major supermarket chains have been criticized for abandoning densely populated, largely black and Latino communities in cities like Detroit, Los Angeles, Memphis and Newark, N.J.—contributing to what many experts call food deserts."); Jarrett Kerbel, *Trenton Fresh: New Farmers' Market to Open June 12 in East Trenton*, PRINCETON ONLINE (June, 2, 2010) ("The capital of the Garden State is a food desert."), http://www.princetonol.com/summerfare/polAnnouncements.cfm?doc_id=2951; JAMES BENNETT, ET AL., A COMMUNITY FOOD ASSESSMENT OF TRENTON, NEW JERSEY 5 (2005), available at <http://policy.rutgers.edu/academics/projects/studios/trenton05.pdf> ("Overall, we found that there are few healthy food options in low-income neighborhoods.").

146. Richard Khavkine, *First Supermarket in Decades Opens in Newark's Central Ward*, THE STAR LEDGER (Feb. 28, 2012, 8:02 PM), http://www.nj.com/news/index.ssf/2012/02/new_supermarket_opens_in_newar.html.

147. Joe Moszczynski, *Farmers Markets Flourish in Garden State*, THE STAR LEDGER (Apr. 8, 2012), http://www.nj.com/news/index.ssf/2012/04/farmers_markets_flourish_in_ga.html.

148. *Id.*

149. Memorandum from Patricia Wright, Assistant Dir., Div. of Taxation, on P.L. 2011, ch. 35, to Mun. Assessors, Cnty. Tax Bd. Adm'r and Members (Apr. 1, 2011), available at <http://www.state.nj.us/treasury/taxation/pdf/urbanfarmexemptionlaw.pdf>.

150. *Id.*

“municipalities and non-profit organizations . . . to lower the cost of urban agriculture projects by making public land available, tax-free.”¹⁵¹ The Act also stipulates that any proceeds from the sale of produce are used only for nonprofit purposes.¹⁵² These proceeds represent “a source of funding for non-profits to sustainably manage urban agriculture projects and contribute to the stream of fresh fruits and vegetables in urban areas of New Jersey.”¹⁵³

In January 2012, the Governor signed another act, the New Jersey Fresh Mobiles Pilot Program, which also has great potential to ease New Jersey’s food desert crisis.¹⁵⁴ The legislation “authorizes the Department of Agriculture to establish a mobile farmers’ market pilot program to be conducted in one or more municipalities . . . in which residents are unable to obtain adequate access to nutritious foods.”¹⁵⁵ The program operates by transporting fresh, local produce into those municipalities that agree to partake in the program for direct sale to residents.¹⁵⁶ The legislation will also benefit struggling New Jersey farmers by opening up new urban markets.¹⁵⁷

Not all legislative efforts to address food deserts on a state-wide basis, however, have succeeded. In January 2012, Governor Christie pocket-vetoed the Fresh Food Access Act.¹⁵⁸ If signed into law, the legislation would have “provide[d] loan and grant funds to assist businesses in providing fresh and healthy foods in areas of the State where there is a demonstrated lack of availability of such foods.” Additionally, the Fresh Food Access Act would have “specifically target[ed] areas where

151. Glickman, *supra* note 79, at 84.

152. *Id.*

153. *Id.*

154. *Governor Chris Christie Takes Action on Pending Legislation from the 214th Legislative Session*, OFFICE OF GOVERNOR (Jan. 17, 2012), <http://www.nj.gov/governor/news/news/552012/approved/20120117g.html>.

155. News Release, Assembly Democrats, Wilson Bill to Create a Pilot Program Bringing Fresh Produce to Urban Areas Signed Into Law (Jan. 18, 2012), *available at* <http://www.assemblydems.com/Article.asp?ArticleID=4970>.

156. *Id.*

157. *Mobile Farmers Markets to Enrich Low-Income Neighborhoods*, LIVEABLECITIES.ORG, <http://www.livablecities.org/blog/mobile-farmers-markets-enrich-low-income-neighborhoods> (last visited Sept. 28, 2012).

158. *NJ SB 3089—Fresh Food Access Act*, YALE RUDD CENTER FOR FOOD POLICY & OBESITY, LEGISLATION DATABASE, <http://www.yaleruddcenter.org/legislation/bill.aspx?i=18&s=33> (last visited Sept. 28, 2012).

infrastructure costs and credit needs are often unmet by conventional financing institutions.”¹⁵⁹

At the city level, Trenton has seen an expansion of urban agriculture. Small-scale community gardening “is a strategy that many people employ to cope with poverty and its attendant health and social problems.”¹⁶⁰ Although community gardens in Trenton only occupy 1.4 acres of city land, they are bountiful.¹⁶¹ Gardeners reaped over 22,000 pounds of summer crops in 2009 on twenty-nine gardens.¹⁶² Isles, Inc., a nonprofit community development organization, runs a program that facilitates the growth of community gardening in Trenton. The program “teaches gardeners how to grow food and provides materials for raised beds, seeds and organic pest control; volunteer help; and tools and equipment to prepare the soil.”¹⁶³ Isles supports the vast majority of gardens in Trenton, which supply thousands of people with fresh produce.

One of two farmers’ markets in Trenton is Capital City Farmers’ Market.¹⁶⁴ It is open once a week for three hours from mid-July to late-September.¹⁶⁵ It is located near the state government complex, and targets state government workers.¹⁶⁶ The other farmers’ market is Trenton Farmers’ Market, located in North Trenton in Lawrence Township near many other supermarkets.¹⁶⁷ The market is open year round and sells fresh fruit and vegetables, meat products, and baked goods.¹⁶⁸ There are also numerous roadside stands selling fresh produce in areas surrounding Trenton, but only two roadside stands are in the city itself.¹⁶⁹ The two inner-city stands are run by the Rutgers Youth Farmstand Program, and are open three days per week during the summer.¹⁷⁰

159. Fresh Food Access Act, S. 3089, 214th Leg. Sess. (N.J. 2011), *available at* http://www.yaleruddcenter.org/resources/upload/docs/what/policy/legislation/NJ_SB_3089_Fresh_Food_Access_Act_Norcross_9_26_2011.pdf.

160. DOMENIC VITIELLO, ET AL., COMMUNITY GARDENING IN TRENTON, NJ: HARVEST REPORT 39 (2010), *available at* <https://sites.google.com/site/urbanagriculturephiladelphia/harvest-reports>.

161. *Id.* at 32.

162. *Id.*

163. *Community Gardens, ISLES FOSTERING SELF-RELIANCE*, <http://isles.org/main/services/environment/community-gardens> (last visited Sept. 28, 2012).

164. BENNETT, *supra* note 145, at 21.

165. *Capital City Farmers Market, LOCAL-FARMERS-MARKETS*, <http://www.local-farmers-markets.com/market/3146/trenton/capital-city-farmers-market> (last visited Sept. 28, 2012).

166. BENNETT, *supra* note 145, at 3.

167. *Id.* at 21.

168. *Farmers Market, THE TRENTON FARMERS MARKET*, <http://thetrentonfarmersmarket.com> (last visited Sept. 28, 2012).

169. BENNETT, *supra* note 145, at 23.

170. *Id.*

Like Trenton, Newark has in recent years experienced something of an urban farming revolution.¹⁷¹ Garden State Urban Farms (GSUF), also known as Brick City Urban Farms, is the best-known urban farming operation in Newark. This not-for-profit organization has transformed previously vacant lots into efficient urban farms by employing the Small Plot Intensive Farming, or “SPIN,” technique.¹⁷² GSUF successfully uses Earthboxes, “aboveground plastic containers that self-water and contain all waste and nutrients from the plants, completely preventing agricultural runoff.”¹⁷³ Earthboxes circumvent the problem of soil contamination.¹⁷⁴ GSUF also operates a market once a week at Newark Beth Israel Medical Center.¹⁷⁵ Another urban farm, the Lincoln Park Community Farm, was launched in 2010. For twenty dollars a week, Newark residents can purchase a weekly share in the CSA and receive a supply of fresh vegetables grown on the farm.¹⁷⁶ Production on the farm has been suspended for the 2012 season due to construction.¹⁷⁷

Greater Newark Conservancy, an environmental conservation organization, has assisted residents in establishing over twenty farms on vacant, city-owned lots.¹⁷⁸ “The Conservancy helps Greening Clubs lease vacant lots from the City of Newark, provides assistance in garden design, helps residents acquire materials to renovate the lots, lends tools for garden cleanup, and assists with garden construction.”¹⁷⁹ The Conservancy’s work to improve access to fresh produce cannot be understated.

Emblematic of the increased investment in and growth of urban agriculture in Newark is EcoVeggies, “a hydroponic/aeroponic farm that

171. George Washington, *Gardens are Growing in Newark*, THE STAR LEDGER (Sept. 11, 2008), http://www.nj.com/newark/index.ssf/2008/09/post_26.html.

172. Abby Caparros-Janto, *A Garden Grows in Newark: Urban Farming in the Garden State*, ONEARTH (Oct. 7, 2009), <http://www.onearth.org/blog/a-garden-grows-in-newark-urban-farming-in-the-garden-state>.

173. *Id.*

174. *By The Box*, EARTH BOX, <https://www.earthbox.com/newsletters/education/mar-apr2009.html> (last visited Sept. 28, 2012).

175. *About Us*, GARDEN STATE URBAN FARMS, <http://www.gardenstateurbanfarms.com/about-us> (last visited Sept. 28, 2012).

176. Andaiye Taylor, *Community Farm Launches in Newark's Lincoln Park*, NEIGHBORHOOD BEAT BOX (Aug. 28, 2010), <http://neighborhoodbeatbox.org/2010/08/28/community-garden-launches-in-lincoln-park>.

177. Rob Wisniewski, *2012 Farm Season Status*, LINCOLN PARK COMMUNITY FARM (Mar. 20, 2012), lpcdfarmer.wordpress.com.

178. *Urban Farming: A Growing Program*, GREATER NEWARK CONSERVANCY CITY BLOOM 4 (2011), available at http://www.citybloom.org/index_232_989684036.pdf.

179. *Community Gardening Program*, GREATER NEWARK CONSERVANCY, <http://citybloom.org/community-gardens.htm> (last visited Sept. 28, 2012).

will grow high quality, pesticide free vegetables and herbs in eco-friendly greenhouses.”¹⁸⁰ Further reflective of Newark’s increased emphasis on agricultural sustainability is the planned Newark Vertical Farm,¹⁸¹ which, if completed, will house a vertical greenhouse and several research laboratories.¹⁸² The major stumbling block for this ambitious project is financing, as “nothing will be official until VFT [Vertical Farms Technology, the company in charge of development for the project] can put a tidy business plan on [Deputy Mayor for Economic Development Stefan] Pryor’s desk.”¹⁸³

Thus, urban agriculture is gaining a foothold in Newark and Trenton, just like it is in many if not most other major American cities. The problem is that many Newark and Trenton residents still lack adequate access to fresh vegetables. Fully addressing this access problem means specific action from legislators, as outlined below.

V. FOOD POLICY RECOMMENDATIONS

A. *Revising the Codes*

While investment in urban agriculture ventures like vertical farms is slowly increasing, such investment is not robust enough to be the major catalyst for increasing residents’ access to fresh produce in Trenton and Newark. The major thrust for change must come from government action. “[P]lanners interested in urban agriculture can do valuable work by reviewing and redesigning ordinances related to urban agriculture.”¹⁸⁴

Pursuant to the MLUL, Trenton adopted its zoning ordinance with the ultimate goal of “promot[ing] the public health, safety, morals and general welfare.”¹⁸⁵ The Planning Board retains the authority to grant conditional use approval.¹⁸⁶ Trenton’s Zoning Board of Adjustment hears appeals, interprets the zoning ordinance, grants bulk variances, and issues permits.¹⁸⁷

180. *Urban Farm Coming Soon to Newark*, ECOVEGGIES, <http://ecoveggies.com> (last visited Sept. 28, 2012).

181. *Newark Vertical Farm*, WEBER THOMPSON, <http://www.weberthompson.com/newark-vertical-farm.html> (last visited Sept. 28, 2012).

182. Ariel Schwartz, *Newark, New Jersey: Farming Mecca*, FAST COMPANY (Sept. 20, 2010), <http://www.fastcompany.com/1690170/newark-new-jersey-farming-mecca>.

183. *Its Happening in Newark*, THE VERTICAL FARM BLOG (May 17, 2010), <http://verticalfarmblog.blogspot.com/2010/05/its-happening-in-newark.html>.

184. Mukherji, *supra* note 7.

185. CITY OF TRENTON LAND DEVELOPMENT ORDINANCE § 315-2 (2010).

186. *Id.* § 315-20.

187. *Id.* § 315-30.

The City's zoning ordinance contains no express provisions regarding urban agriculture. One provision related to gardening is a restriction on the location and use of greenhouses in residential zones.¹⁸⁸

To bring Trenton's zoning code up-to-date with the more progressive codes will require significant amendments. Trenton must implement a set of urban agriculture regulations that remove all major barriers to gardening and urban farming in areas of the City deemed appropriate for such activities. Pursuant to *Seeding the City*, the code should designate community gardens as a permitted use, and urban farming operations as a conditional use. The use of vacant city-owned lots for farming should be encouraged as a way to green the City and provide more opportunities for residents to access nutritious food.¹⁸⁹ In the same vein, the code should also facilitate the widespread establishment and operation of farmers' markets, particularly in underserved, low-income areas. As in Seattle, greenhouses should be permitted to operate on rooftops.

Newark's zoning ordinance permits "community gardens" in all residential districts, three out of four business districts, and two out of three industrial districts.¹⁹⁰ The ordinance does not define "community gardens," and there is no other mention of urban agriculture. The City's Land Use Plan is a set of recommendations in place for codification into city zoning law by 2012.¹⁹¹ It stipulates four distinct categories of land use and twenty-four separate designations. In spite of the desire to "guide positive change" in Newark,¹⁹² the Plan does not mention urban agriculture at all.

The Plan seeks to amend Newark's zoning code to reflect the view that Newark's numerous vacant lots are "opportunities for repopulating and rebuilding neighborhoods and communities with new housing, industries, offices, shops, recreational and other community facilities."¹⁹³ Although there are many abandoned lots, most lack open space, or are

188. *Id.* § 315-233.

189. Glickman, *supra* note 79, at 83 ("Trenton has a plethora of vacant lots, which the city can make available to interested community groups.").

190. REV. GEN. ORD. OF THE CITY OF NEWARK § 40:3-65 (2011), *available at* http://70.168.205.112/newark_nj/lpext.dll?f=templates&fn=site_main-j.htm&2.0.

191. *An Introduction to Newark's Master Plan*, NEWARK'S MASTER PLAN (2011), *available at* <http://www.newarkmasterplan.com/dev/wp-content/uploads/2011/07/NWRK-Planning-101-Handout-7-6-11-1.pdf>.

192. CITY OF NEWARK: DEP'T OF ECON. & HOUSING DEV., LAND USE ELEMENT OF THE MASTER PLAN FOR THE CITY OF NEWARK 143 (2004), *available at* <http://www.ci.newark.nj.us/userimages/downloads/5.0%20Newarks%27%20Land%20Use%20Plan.pdf>.

193. *Id.* at 151.

environmentally contaminated.¹⁹⁴ This does not mean, however, that they are unsuitable for urban farming operations, as demonstrated by the success of vertical farming, rooftop gardens, and GSUF's use of EarthBoxes. Although the current ordinance allows community gardens in most districts, these are generally smaller-scale operations. The Land Use Plan should incorporate elements of Seattle's code, including: permitting farmers' markets in more areas of the City, allowing residents to sell the food they grow on their own property, allowing greenhouses to exceed maximum height requirements, and designating urban agriculture as a permitted use, particularly in the neighborhoods where residents are most strapped for access to fresh produce. As recommended in *Seeding the City*, Newark's Plan should place special emphasis on developing urban agriculture on vacant lots in its low-income food deserts.

B. Forming Urban Agricultural Districts

Another legislative option to facilitate the growth of urban agriculture in Trenton and Newark is to create districts devoted to open space and agricultural use. New Jersey has already passed an agricultural district enabling statute titled "Agriculture Retention and Development Act."¹⁹⁵ The statute allows counties to establish Agriculture Development Boards, which may recommend to the county planning board that certain lands be designated as agricultural development areas.¹⁹⁶ The relevant municipal zoning ordinance must first classify agriculture as a permitted use on the lands proposed to be set aside for the agricultural district.¹⁹⁷ Newark is located in Essex County, which has not formed an agriculture development board.¹⁹⁸ The county must take steps to form such a board in order to assess whether designating a particular area of Newark as an agricultural district is prudent. Trenton, on the other hand, lies under the authority of the Mercer County Board of Agriculture.¹⁹⁹ Once Trenton's zoning code designates agriculture as a permitted use, the Board should take steps to identify and

194. *Transforming Newark Lot by Lot*, GERALDINE R. DODGE FOUNDATION: THE DODGE BLOG (Nov. 15, 2010), <http://blog.grdodge.org/2010/11/15/transforming-newark-lot-by-lot>.

195. Agricultural Development and Farmland Preservation, N.J. STAT. ANN. § 4:1C-11 (2012).

196. *Id.* §§ 4:1C-14, 18.

197. *Id.* § 4:1C-18(a).

198. *County Agriculture Development Boards*, STATE OF N.J. DEP'T OF AGRIC., STATE AGRIC. DEV. COMM., <http://www.nj.gov/agriculture/sadc/farmpreserve/contacts/cadbs.html> (last visited Sept. 24, 2012).

199. *Mercer County Board of Agriculture*, RUTGERS COOP. EXTENSION OF MERCER CNTY. (Oct. 19, 2011), <http://mercer.njaes.rutgers.edu/ag/board+of+ag.html>.

recommend a site in Trenton to set aside for urban agriculture and open space. Thus, the cities' planning boards should work together with their county department counterparts to assess the viability of establishing urban agriculture zoning districts. The path to creating such districts in urban areas is well-worn, as demonstrated in Cleveland and Madison.

C. Utilizing Charter Schools

Trenton and Newark should establish agriculture programs at their charter schools as another way to bring fresh produce into their food deserts. Charter schools in these cities can emulate the planned Badger School for Urban Agriculture and Community in Madison. In the least, Trenton and Newark should push to implement an urban agriculture element into the curriculums of charter schools, and have students run gardens that serve the local community. The EcoSpaces program at St. Phillip's Academy in Newark is a great example of the direction charter schools should take in fostering urban agricultural and sustainability education. Students in kindergarten through eighth grade plant, cultivate, and harvest a rooftop garden; in doing so, students learn the value of fresh, nutritious food and what it takes to run a small-scale gardening operation.²⁰⁰

D. Creating Food Policy Councils

Food policy councils, enacted in thirty-five jurisdictions, "work to strengthen local and regional food systems."²⁰¹ "Food Policy Councils bring together stakeholders from diverse food-related sectors to examine how the food system is operating and to develop recommendations on how to improve it."²⁰² There are many examples of how Food Policy Councils effect positive change in local food policy. These include "mapping and publicizing local food resources; creating new transit routes to connect underserved areas with full-service grocery stores; persuading government agencies to purchase from local farmers; and organizing community

200. *Rooftop Garden*, St. PHILLIP'S ACADEMY, http://web2.stphilipsacademy.org/content/Rooftop_Garden (last visited Sept. 30, 2012); *see also* <http://web2.stphilipsacademy.org/sites/default/files/pan/garden.html> (providing a panoramic view of the rooftop garden).

201. AM. PLANNING ASS'N, POLICY GUIDE ON CMTY. AND REG'L. FOOD PLANNING: MAKING GREAT CMTYS. HAPPEN 7 (May 11, 2007), *available at* <http://www.planning.org/policy/guides/pdf/foodplanning.pdf>.

202. N. AM. FOOD POLICY COUNCIL, <http://www.foodsecurity.org/FPC/> (last visited Sept. 30, 2012).

gardens and farmers' markets."²⁰³ Over 100 Food Policy Councils throughout the country are performing invaluable work to ensure everyone has access to fresh produce.²⁰⁴ Each city should pass legislation to provide for such councils.

CONCLUSION

Trenton and Newark must amend their zoning codes to foster an environment conducive to the growth of urban agriculture and protective of existing farming ventures. Food policy is constantly progressing, and these cities face falling even further behind the curve, lest their policymakers take action. Many cities across America have laid the foundation for such changes, so Trenton and Newark do not have to engage in experimental pioneering efforts to bring easy access to healthy food for their underserved neighborhoods. Zoning amendments specifically tailored to the situation in each city is a proven approach to address the persistence of food deserts in two of the Garden State's largest and most recognizable urban areas.

203. *Id.*

204. *Id.*

APPENDIX A

	Newark	Trenton 1	Trenton 2	Trenton 3	Trenton 4
Total Population	2,471	4,032	4,833	6,199	3,524
Number of people with low access (percentage of total population)	2,471 (100%)	1,267 (31.4%)	1,885 (39%)	525 (8.5%)	1123 (31.9%)
Number of low income people with low access (percentage of total population)	454 (18.3%)	101 (2.5%)	117 (2.4%)	36 (0.6%)	102 (2.9%)
Number of children age 0-17 with low access (percentage of total child population)	498 (20.2%)	368 (9.1%)	453 (9.4%)	115 (1.9%)	270 (7.7%)
Number of people age 65+ with low access (percentage of total senior population)	232 (9.4%)	73 (1.8%)	239 (5%)	98 (1.6%)	187 (5.3%)

