AGENDA SUMMARY: An Ordinance to amend the Knoxville City Code, Appendix B, Zoning Regulations in order to define terms and uses related to Urban Agriculture. (MPC approved 14-0) (File No. 5-B-15-OA)

COUNCIL DISTRICT AFFECTED: All districts.

BACKGROUND:
On behalf of the City, the Office of Sustainability developed amendments that better allow for “Urban Agriculture” within the City of Knoxville. The proposed ordinance amendments are shown in the attached draft ordinance and described in Urban Agriculture Zoning Ordinance: Recommendations to Enhance Urban Food Systems, also attached. Over the last year, City of Knoxville staff worked closely with MPC staff and representatives from Knox County Health Department and UT Extension to evaluate ways to revise local zoning codes and ordinances to promote urban agriculture in Knoxville. Led by the City’s Office of Sustainability, the team has developed a set of foundational recommendations that establish the expected uses and needs for successful urban agriculture opportunities in Knoxville.

By proposing these amendments to the City’s zoning ordinance, the City of Knoxville desires to affirm the City’s commitment to the local food production goals outlined in the Bloomberg Philanthropies application of 2013 and the regional goals outlined during the PlanET regional planning process as detailed below:

- **Support the local food economy.** These amendments increase the ability for citizens to garden for pleasure or profit, and enable greater entrepreneurial opportunities for urban food production, sales, and job creation.
- **Increase access to healthy, local food for all communities.** The City of Knoxville wants to develop zoning code provisions that support its residents’ ability to grow, sell, and buy healthy food. Part of this process includes reducing zoning review and permitting requirements for smaller or less intensive agricultural activities.
- **Support healthy, livable neighborhoods by creating opportunities for reuse of vacant or blighted properties.** Viewed as an opportunity to both preserve green space and promote food security, accommodating urban agriculture in zoning opens the door to innovative ways for residents to grow their own food while opening the door for a creative low-cost reuse of often unused properties.

The current zoning ordinance language can be unclear in defining which agricultural practices are allowed in the City. The proposed amendments will add clarity while removing
potential barriers to food production on private property. These amendments will also allow for additional, productive, uses of often unused or vacant properties. By removing these barriers, the City of Knoxville and community partners can better develop programs that increase access to healthy, local food.

These revisions to the zoning ordinance are meant to establish a stronger legal foundation for the use of urban agricultural practices and to subsequently foster healthier neighborhoods by increasing access to local healthy food sources and growing opportunities for the local agricultural economy. The proposed amendment introduces two definitions for urban agricultural uses and redefines the existing language on “Community Gardens” to align with new garden definitions. The proposed revisions also include aesthetic, safety and performance standards to enable effective enforcement in cases where gardens are poorly maintained or abandoned. These are designed to better accommodate common urban agriculture practices while protecting the community health, safety and welfare.

OPTIONS
1. Approve
2. Deny
3. Postpone for future consideration

RECOMMENDATION
The Metropolitan Planning Commission recommended that City Council adopt the draft ordinance amending Article II through Article V by a vote of 14-0.

ESTIMATED PROJECT SCHEDULE
Not applicable.

PRIOR ACTION/REVIEW
MPC Meeting 5/14/2015 5/1/2015
City Council 6/9/2015 5/22/2015

FISCAL INFORMATION
Not applicable.

EXHIBITS

ATTACHMENTS:
- Ordinances - Ag Zoning Changes (DOCX)
- 5-B-15-OA Pkg (PDF)
ORDINANCE

AN ORDINANCE OF THE COUNCIL OF THE CITY OF KNOXVILLE TO AMEND THE KNOXVILLE CITY CODE, APPENDIX B, ZONING REGULATIONS IN ORDER TO DEFINE TERMS AND USES RELATED TO URBAN AGRICULTURE.

WHEREAS, urban agriculture ensures the health and safety of all residents by increasing access to healthy, local food and promoting food security through support for communities and residents’ ability to grow, sell, and buy healthy food; and

WHEREAS, urban agriculture contributes to the local economy by generating jobs, sales of food at farmers markets, grocery stores, and on-site farm stands and offering the opportunity for entrepreneurship in creating food-related small-businesses; and

WHEREAS, urban agriculture provides a proven tool for both supporting and improving healthy, livable neighborhoods by reducing the negative impact of blighted, vacant lots and buildings and further helps to support neighborhood stabilization and recovery; and
WHEREAS, the City of Knoxville desires to strengthen its commitment to local food production and, in order to achieve this goal, desires to remove potential barriers to food production on private property;

WHEREAS, a significant barrier for local food production in the City of Knoxville is the language of the current zoning code, which can be unclear in defining which agricultural practices are allowed within the City of Knoxville; and

WHEREAS, the proposed amendments modify the zoning code to provide clarity by creating definitions and standards for urban agriculture, personal gardens, market gardens, community gardens, and various, associated accessory uses and structures; and

WHEREAS, the proposed amendments also encourage achievement of local and regional food production goals, as outlined respectively in the City of Knoxville’s 2013 Bloomberg Philanthropies application and during the PlanET (Plan East Tennessee) regional planning process; and

WHEREAS, the Metropolitan Planning Commission recommended approval of an Ordinance of the Council of the City of Knoxville to Amend the Knoxville City Code, Appendix B, Zoning Regulations, in order to Define Terms and Uses Related to Urban Agriculture; and

WHEREAS, the Council of the City of Knoxville finds it to be in the public interest to amend its zoning ordinance to adopt the amendments proposed by the Office of Sustainability, which amendments are designed to better accommodate common urban agriculture practices in the City of Knoxville while protecting the community health, safety and welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF KNOXVILLE:
SECTION 1: Appendix B, Article II, Definitions, of the Code of Ordinances of the City of Knoxville hereby shall be amended by adding the following definitions in the correct alphabetical location to:

Apiary: A collection of one (1) or more colonies of bees in beehives at a location.

Aquaponics: The cultivation of fish and plants together in a constructed, recirculating system utilizing fish culture to increase nutrient concentrations of irrigation water for the purpose of producing food or non-food crops.

Cold Frame: A four-sided enclosure with a transparent or translucent and removable or adjustable roof, built low to the ground to house and protect food or non-food crops outside the typical growing season.

Compost, Backyard: The composting of organic solid waste, such as grass, clippings, leaves, or food waste (excluding meat and dairy), generated on-site by a property owner or other person with an interest in the property, where composting occurs at the site of origin and the resulting product is for on-site use only.

Garden, Market: An area of land managed and maintained by an individual, group, or business to grow and harvest food and non-food crops to be sold for profit on-site, off-site, or both. A Market Garden may be a principal or accessory use.

Garden, Personal: An area of land on which food or non-food crops are grown by the property owner or other person with an interest in the property for personal or family consumption and enjoyment. A Personal Garden may be a principal or accessory use. On-site sales may be allowed through a temporary use permit issued for a Seasonal Produce Stand.

High Tunnel (also known as Hoop House): A type of freestanding, covered structure that has a supported framework, typically made with metal piping and covered with a translucent material such as plastic or glass. Crops can be grown either in the natural soil profile or by installing permanent beds. A High Tunnel does not have heat or electrical power and its purpose is to house and protect food or non-food crops outside the typical growing season.

Hive (also known as Beehive): A container or structure used by a beekeeper to provide a cavity in which a colony of bees is expected to establish a permanent nest.

Hydroponics: The propagation of plants using a mechanical system designed to circulate a solution of minerals in water and without soil.

Low Tunnel: A temporary, freestanding structure that has a supported framework, typically made with hooped PVC pipe or wire and covered with plastic. A Low Tunnel does not have heat or electrical power and its purpose is to house and protect food or non-food crops outside the typical growing season.
Seasonal Produce Stand: A temporary sales space of portable or sectional construction and no more than 100 square feet, which is used to sell produce and non-food crops that are grown on-site.

Urban Agriculture: An umbrella term that describes a range of growing practices for food and non-food crops implemented in an urban or suburban setting. Urban Agriculture includes personal gardens, community gardens, market gardens, apiaries (beekeeping), aquaponics, hydroponics, backyard composting, domesticated chickens, and seasonal produce stands.

SECTION 2: Appendix B, Article II, Definitions, of the Code of Ordinances of the City of Knoxville hereby shall be amended by deleting the definition for “Community Garden” in its entirety and substituting the following in lieu thereof:

Garden, Community: An area of land managed and maintained by a nonprofit or group of individuals to grow and harvest food and non-food crops for personal or group use, consumption, or donation. A Community Garden may be a principal or accessory use.

SECTION 3: Appendix B, Article II, Definitions, of the Code of Ordinances of the City of Knoxville hereby shall be amended by deleting the definition for “Greenhouse” in its entirety and substituting the following in lieu thereof:

Greenhouse: A type of freestanding covered structure that has a supported framework and covered with a translucent material such as plastic or glass. A Greenhouse may use generated or electrical heat or power and its purpose is to house and protect food or non-food crops during all seasons of the year.

SECTION 4: Appendix B, Article II, Definitions, of the Code of Ordinances of the City of Knoxville shall hereby be amended by deleting the definition for “Open space, conservation” in its entirety and substituting the following in lieu thereof:

Open space, conservation: Any public or privately owned parcel, lot or area of land or water essentially unimproved with any residential, commercial, or industrial uses or structures, and set aside or reserved for scenic, environmental, or preservation purposes. Conservation open space may include horticulture, floriculture, forests and woods, personal and community gardens, recreational open space, and natural features located on a site, such as steep slopes, flood plains, hazard areas, unique vegetation and critical plant communities, stream/river corridors, wetlands and riparian areas, wildlife habitat and migration corridors, areas containing threatened or endangered species and archeological, historical, and cultural resources.

SECTION 6: Appendix B, Article IV, Sections 2.1.1.C, 2.1.2.C, 2.1.3.Ba, 2.1.4.D, 2.1.6.C, 2.1.7.C, 2.1.8.Ba, and 3.1.C of the Code of Ordinances of the City of Knoxville, which are the uses and structures permitted on review sections for basic and planned residential districts, shall hereby be amended by adding Market Garden as a separately listed category of a use permitted on review.

SECTION 7: Appendix B, Article IV, Sections 2.2.1.B, 2.2.2.B, 2.2.3.B, 2.2.4.D, 2.2.5.B, 2.2.6.B, 2.2.7.B, and 2.2.8.B, 2.2.9.B, 2.2.10.B, and 3.2.B of the Code of Ordinances of the City of Knoxville, which are the permitted uses sections for office and commercial districts, shall hereby be amended by adding Personal Garden, Community Garden, and Market Garden as separately listed categories of permitted uses.

SECTION 8: Appendix B, Article IV, Sections 2.3.1.B, 2.3.2.B, 2.3.3.B, and 3.9.B of the Code of Ordinances of the City of Knoxville, which are the permitted uses sections for industrial districts, shall hereby be amended by adding Personal Garden, Community Garden, and Market Garden as separately listed categories of permitted uses.

SECTION 9: Appendix B, Article IV, Sections 2.4.2.B.1 of the Code of Ordinances of the City of Knoxville, which is the permitted uses section for the Open Space Preservation (O-1) zoning districts, shall hereby be amended by deleting the section in its entirety and substituting the following in lieu thereof:

Horticulture, floriculture, forests and woods, Community Garden.

SECTION 10: Appendix B, Article IV, Section 2.4.4.B.1 of the Code of Ordinances of the City of Knoxville, which designates uses permitted in the F-1 zoning district adjacent to agricultural and residential districts, hereby shall be amended by adding Personal Garden, Community Garden, and Market Garden after the words “livestock grazing” in the series of permitted uses.

SECTION 11: Appendix B, Article IV, Sections 3.4.B, 3.5.B, 3.11.B, and 3.12.B of the Code of Ordinances of the City of Knoxville, which are the permitted uses sections for various planned districts, hereby shall be amended by adding Personal Garden, Community Garden, and Market Garden as separately listed categories of permitted uses. For the Town Center (TC-1) zoning district,
Personal, Community, and Market Gardens shall be permitted in the Core and Peripheral Areas of the district.

SECTION 12: Appendix B, Article IV, Section 3.10.C of the Code of Ordinances of the City of Knoxville, which is the permitted uses section for the Business and Technology Park (BP-1) zoning district, hereby shall be amended by adding Personal Garden and Community Garden as separately listed categories of permitted uses.

SECTION 13: Appendix B, Article IV, Section 3.10.D of the Code of Ordinances of the City of Knoxville, which is the uses permitted on review section for the Business and Technology Park (BP-1) zoning district, hereby shall be amended by adding Market Garden as a separately listed category of uses permitted on review.

SECTION 14: Appendix B, Article IV, Section 4.2.5.D of the Code of Ordinances of the City of Knoxville, which is the Allowed Use Table for the Cumberland Avenue Corridor (CU) zoning district, hereby shall be amended (1) by adding Personal Garden as a newly listed category under Residential Uses with further indication that the use is allowed in all districts and indicating the definition is at Sec. 4.2.5.E.1.e; (2) by adding Market Garden as a newly listed category under Commercial Uses with further indication that the use is allowed in all districts and indicating the definition is at Sec. 4.2.5.E.3.l; and (3) by adding Community Garden as a newly listed category under Public Uses with further indication that the use is allowed in all districts and indicating the definition is at Sec. 4.2.5.E.2.e.

SECTION 15: Appendix B, Article IV, Section 4.2.E of the Code of Ordinances of the City of Knoxville, which is the Use Categories for the Cumberland Avenue Corridor (CU) zoning district, hereby shall be amended (1) by adding the following definition for Personal Garden as a newly numbered Section 4.2.5.E.1.e:

Personal Garden: An area of land on which food or non-food crops are grown by the property owner or other person with an interest in the property for personal or family consumption and enjoyment. Personal gardens may be principal or accessory use. On-site sales are permitted through the use of a temporary use permit issued for a seasonal produce stand;

(2) by adding the following definition for Market Garden as a newly numbered Section 4.2.5.E.3.l:

Market Garden: An area of land managed and maintained by an individual, group, or business to grow and harvest food and non-food crops to be sold for profit on-site, off-site, or both. Market gardens may be principal or accessory uses;
and (3) by adding the following definition for Community Garden as a newly numbered Sec. 4.2.5.E.2.c:

Community Garden: An area of land managed and maintained by a nonprofit or group of individuals to grow and harvest food or non-food crops for personal or group use, consumption, or donations. Community gardens may be principal or accessory uses.

SECTION 16: Appendix B, Article IV, Section 4.1.4.A.1.c of the Code of Ordinances of the City of Knoxville, which is the Prohibited Uses section for the South Waterfront (SW) zoning district, hereby shall be amended by deleting the section in its entirety and substituting the following in lieu thereof:

Major agriculture includes animal raising including horses, hogs, cows, sheep, goats, and swine, poultry, aquaculture, dairying, personal or commercial animal breeding and development; floriculture, pasturage, tree or sod farm, silviculture; animal boarding, outdoor; livestock auction; milk processing plant; packing house for fruits or vegetables; plant nursery; plant nursery with landscape supply; retail or wholesale sales of agriculturally-related supplies and equipment; stable; or any similar use. Major Agriculture does not include Urban Agriculture or its subcategories, Personal Garden, Market Garden, or Community Garden.

SECTION 17: Appendix B, Article V, Section 4.B. of the Code of Ordinances of the City of Knoxville, which governs accessory uses, buildings, and structures, hereby shall be amended by adding a newly numbered Section 9, titled “For Community Gardens, Personal Gardens, and Market Gardens,” which shall include the following appropriately lettered subcategories:

a. High Tunnels.
b. Greenhouses.
c. Cold Frames.
d. Low Tunnels.
e. Storage Shed or Utility Building.
f. Backyard Compost Containers.
g. All accessory structures or uses for Community Gardens, Personal Gardens, and Market Gardens are subject to the performance standards set forth in Section 24 of this Article and may be subject to review and approval according to the design guidelines for overlay districts, including, but not limited to the Historic (H-1), Neighborhood Conservation (NC-1), and Downtown Design (D-1) overlay districts.

SECTION 18: Appendix B, Article V, Section 13.B.5 of the Code of Ordinances of the City of Knoxville, which governs temporary uses, hereby shall be amended by deleting the section in its entirety and substituting the following in lieu thereof:
In any district, other than agricultural, a temporary use permit may be issued for the sale of food or non-food crops grown only on the premises. Acceptable seasonal produce stands shall be a portable table or cart, and shall not exceed an area of one hundred (100) square feet. Such stands shall be removed when not in use. A permit shall be valid for not more than nine (9) months per calendar year. Applicants may submit for a subsequent seasonal produce stand permit one (1) calendar year from the issuance of their last permit for this purpose. Seasonal produce stands shall be set back from all public rights-of-way a distance of not less than fifteen (15) feet.

SECTION 19: Appendix B, Article V, *Supplementary Regulations Applying to a Specific, to Several*, or to *All Districts*, of the Code of Ordinances of the City of Knoxville, hereby shall be amended by adding a newly numbered Section 24, titled “Performance Standards for Urban Agriculture,” with language as follows:

Urban Agriculture includes a variety of structures and uses. These structures must adhere to setbacks and building codes as specified in the base zoning district. This section is meant to clarify additional setback and standards for uses related to Urban Agriculture:

A. General guidance on setbacks and accessory buildings related to Urban Agriculture

1. Accessory buildings and uses
   i. A shed or utility building that is incidental or necessary for the use’s operation may be allowed for the storage of tools and gardening materials without a primary structure.
   ii. All accessory buildings and uses are subject to compliance with all other applicable codes and regulations of the city.
   iii. No accessory building shall be used, erected, or maintained as living quarters.

B. Apiaries are permitted in all districts. Apiaries shall comply with the following regulations:

1. New apiaries shall be registered with the Tennessee Department of Agriculture
2. Hives shall be located only in side or rear yards.
3. Hives shall be set back at least fifteen (15) feet from lot lines and public sidewalks, unless the yard is screened by a solid wall or opaque fence.
4. Hive openings shall face away from the nearest abutting lot.
5. Hives shall have a fresh water supply located on property.
6. For any rooftop apiary within twenty (20) feet of doors and/or windows of the principal building on an abutting lot, one of the following conditions must exist:
   i. The hive opening shall face away from doors and/or windows of the principal building on the abutting lot; or
   ii. A flyway of at least six (6) feet in height comprising of a lattice fence, dense hedge, or similar barrier shall be established in front of
the opening of the hive such that the bees fly upward and away from neighboring properties. The flyway shall be located within three (3) feet of the hive opening and shall extend at least two (2) feet in width on either side of the hive opening. An example of a flyaway is depicted in the image below.

C. Backyard composting is allowed in all districts and shall comply with the following regulations:
   1. Bins or piles are allowed only in rear yards and shall be set back five (5) feet from lot lines.
   2. Bins or piles shall not exceed 5% of the parcel area and six (6) feet in height.
   3. Bins or piles shall be located outside of the required Riparian Buffer Zone.
   4. Compost shall be enclosed or contained.
   5. Compost shall only be used for the composting of materials generated on-site, and shall not contain any meat or dairy.
   6. Compost is subject to enforcement due to odor performance standards described in Appendix B, Article 5, Section 1(B)(3).

D. Hydroponics and aquaponics:
   1. All systems must comply with applicable Federal, State, and local regulations for water use and discharge, and for the possession, propagation, culture, sale, and disposition of living marine organisms.
   2. Where applicable, aquaponics and hydroponics structures or systems must be permitted by the Plans Review and Inspections Department.

E. Low tunnels and cold frames:
   1. Cold frames and low tunnels shall have a height that is less than seventy-two (72) inches above grade.
   2. All covers must be securely fastened.
   3. Once the growing season is complete, all hoops, covers, and materials must be removed.

F. High tunnels and Greenhouses
1. High tunnels and Greenhouses shall be at least seventy-two (72) inches in height, but equal to or less than the allowable height for an accessory building in the applicable zoning district.

2. High tunnels must be placed over an area designated for crop cultivation where crops are grown in the natural soil profile or in raised beds.

3. High tunnels and greenhouses must use greenhouse-grade, UV-resistant covers.

4. The maximum high tunnel bow spacing is six (6) feet.

5. Where applicable, a greenhouse or high tunnel structure must be permitted by the Plans Review and Inspections Department.

6. All high tunnels and greenhouses must comply with all Federal, State, and local regulations for runoff, erosion, and sediment control.

SECTION 20: This Ordinance shall take effect seventeen (17) days from and after its passage, the public welfare requiring it.

______________________________
Presiding Officer of the Council

______________________________
City Recorder
April 8, 2015

Dear Metropolitan Planning Committee members,

The Knoxville/Knox County Food Policy Council (KKCFPC) would like to express our full support for the recommendations laid out in the February 2015 City of Knoxville document entitled, Urban Agriculture Zoning Ordinance: Recommendations to Enhance Urban Food Systems. At our April 8th meeting, the KKCFPC unanimously voted in favor of the recommendations.

These recommendations will enable our citizens to better access healthy foods through home, community, and business agricultural activities. Additionally, the recommendations will allow for entrepreneurial opportunities in food production for citizens located in food deserts (and non-food deserts alike). Increased access of healthy food and job creation is particularly important in light of the fact that about 11% of Knoxville’s households live in food deserts. Food deserts are places without adequately access to healthy foods, and where obesity, diabetes, and heart disease are common among residents.

We urge you to support the recommendations laid out by the City of Knoxville and to work to make them a reality.

Sincerely,

Chad Hellwinckel, PhD
Chair
Knoxville/Knox County Food Policy Council
Urban Agriculture Zoning Ordinance

Recommendations to Enhance Urban Food Systems

Prepared by the City of Knoxville’s Office of Sustainability
April 2015
Table of Contents

Acknowledgments ........................................................................................................ p.1

Section 1: Background

  1.1 Intentions .............................................................................................................. p.2
  1.2 Identifying Need ..................................................................................................... p.2
  1.3 What is Urban Agriculture? .................................................................................... p.2-3
  1.4 Why is an Ordinance Amendment Needed? ............................................................ p.3
  1.5 Why Regulate Urban Agriculture Through Zoning? .............................................. p.3
  1.6 Who Was Involved in the Development of This Proposal? .................................... p.3
  1.7 Intentions .............................................................................................................. p.4
  1.8 Areas in Need of Further Research ....................................................................... p.4-5

Section 2: Descriptions of Proposed Amendments

  2.1 Garden, Personal .................................................................................................... p.6
  2.2 Garden, Community ............................................................................................... p.6
  2.3 Garden, Market ....................................................................................................... p.7
  2.4 Apiary ..................................................................................................................... p.7
  2.5 Accessory Structures ............................................................................................ p.7-8
  2.6 Compost, Backyard ............................................................................................... p.8
  2.7 Supplementary Regulations .................................................................................... p.8
  2.8 Full Text of Proposed Amendment ......................................................................... p.9-14

Section 3: Urban Agriculture Public Comments ................................................................ p.15-18
City of Knoxville

Mayor Madeline Rogero
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Brian Blackmon, Project Manager; Office of Sustainability
Peter Ahrens, Director; Plans Review and Inspections
Tom Reynolds, Deputy Director; Plans Review and Inspections
Scott Elder, Zoning Coordinator; Plans Review and Inspections
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Anne Wallace, Cumberland Avenue Project Manager, Policy & Redevelopment

Knox County Health Department
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Katheryne Nix, Health Educator; Food Access

Metropolitan Planning Commission
Mark Donaldson, Executive Director
Liz Albertson, Sector Plans and Environmental Resources

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Neal Denton, Extension Agent & Knox County Director
David Vandergriff, Extension Agent

Cover Photo Acknowledgments
(Clockwise from top left)
CAC Beardsley Community Farm
El Puente
Parkridge Community Garden
CAC Green Thumb
New Harvest Park Community Garden
Knoxville Permaculture Guild

Please email Sustainability@CityOfKnoxville.org with any comments.
Section 1: Request

The City of Knoxville Office of Sustainability requests that the Metropolitan Planning Commission consider the proposed updates to the zoning ordinance, detailed herein, and make a recommendation to City Council to approve revisions that better allow for “Urban Agriculture.”

1.1 Intentions

By proposing these amendments to the City’s zoning code, the City of Knoxville desires to affirm the City’s commitment to the local food production goals outlined in the Bloomberg Philanthropies application of 2013 and the regional goals outlined during the PlanET regional planning process as detailed below:

Support the local food economy. These amendments increase the ability for citizens to garden for pleasure or profit, and enable greater entrepreneurial opportunities for urban food production, sales, and job creation.

Increase access to healthy, local food for all communities. The City of Knoxville wants to develop zoning code regulations that support its residents’ ability to grow, sell, and buy healthy food. Part of this process is reducing zoning review and permitting requirements for smaller or less intensive agricultural activities.

Support healthy, livable neighborhoods by creating opportunities for reuse of vacant or blighted properties. Viewed as an opportunity to both preserve green space and promote food security, accommodating urban agriculture in zoning opens the door to innovative ways for residents to grow their own food while opening the door for a creative reuse of otherwise unused properties.

1.2 Identifying Need

The Knoxville and East Tennessee region is known for its rich agricultural history and scenic farmland. Knoxville is home to the nationally distinguished Market Square Farmer’s Market, commissioned the first Food Policy Council in the nation, and serves as an educational hub through the University of Tennessee’s Institute of Agriculture program. The PlanET Health Impact Assessment identified a prevalence of major health issues such as obesity, diabetes, and heart
disease among residents, which are strongly linked to lack of access to healthy, affordable food.\textsuperscript{1} Through PlanET’s assessment and community input processes, local food production was identified as a regional goal that would not only help grow the local food economy, but would also help address the serious health concerns facing residents.\textsuperscript{2} A staggering 11.26% of Knoxville’s households are located in food deserts, or areas where there are very few, or no, healthy food options\textsuperscript{3}. That amount is higher than Anderson, Blount, Loudon, and Union counties. In addition, Knoxville is also home to vacant and blighted lots that cost the city in excess of $117,000 to maintain, and countless more dollars in community impacts.

In response to the 2013 Bloomberg Philanthropies Mayors Challenge, Mayor Rogero proposed an outside-the-box idea to address blight and strengthen our local food system while emphasizing our local agricultural heritage. This idea, sourced from extensive community input, was to create an “urban food corridor” in Knoxville by creating mechanisms to allow for the expansion of local food production within the city. In addition, the City wishes to support the many residents and groups who wish to grow food on their property and in other areas in the city.

The proposed zoning ordinance updates detailed in this document are the foundational recommendations that establish the expected uses and needs of successful urban agriculture in Knoxville. They represent the input of multiple governmental departments and community members alike.

\subsection*{1.3 What is Urban Agriculture?}

Urban agriculture refers to agricultural practices designed for the urban environment. The idea of urban agriculture in the United States has roots in the war gardens and victory gardens of World Wars I and II. These gardens were critical pieces of public and private infrastructure, and were a way for communities to be more self-sufficient in a time of great need. At their peak, victory gardens rivaled commercial production and accounted for 44% of the fresh vegetables produced in the United States.\textsuperscript{4} Marketing of victory gardens ended after the end of World War II. During the 1970s, the community garden movement began spreading throughout the U.S. Community gardens are the most common form of urban agriculture in Knoxville, and the Knoxville-Knox

\textsuperscript{1} Plan East Tennessee Health Impact Assessment 2013. \url{http://www.planeasttn.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=1271&Command=Core_Download&PortalId=0&TabId=143} (p. 29-30)

\textsuperscript{2} “Plan East Tennessee Playbook,” \url{http://www.planeasttn.org/GrowStronger/RegionalPlaybook.aspx} (pp. 24-28).

\textsuperscript{3} “Plan East Tennessee Equity Profile,” \url{http://www.planeasttn.org/Learn/RegionalAssessments.aspx}, (March 2014).

County Community Action Committee has worked with community groups to develop and maintain community gardens since 1978. Recently, following national trends, local interest has grown in more profit-driven urban agricultural endeavors. These market gardens, or urban farms, present economic opportunities such as job creation and increased local revenue as well as opportunities to alleviate urban blight while providing fresh local produce.

1.4 Why is an ordinance amendment needed?

Knoxville’s zoning code has not kept pace with changes in the local food economy. The current code can be unclear in defining which urban agriculture practices are allowed, and in some cases, is unnecessarily restrictive. The proposed amendments will remove potential barriers to food production on private property. These amendments will also allow for additional, productive uses of otherwise unused or vacant properties. By removing these barriers, the City of Knoxville and community partners can better develop programs that increase access to healthy, local food.

1.5 Why regulate urban agriculture through zoning?

These proposed changes in zoning regulations are designed to better accommodate urban agriculture best practices while protecting the environment and the community. During public information gathering conducted by the City, there were concerns raised about regulation and enforcement of poorly maintained or abandoned gardens. Inevitably, the addition of urban agriculture in communities will change the visible landscape; however, there are aesthetic and safety standards that can and will be enforced to preserve the overall integrity of neighborhoods. These additions to the zoning ordinance are meant to establish a stronger legal foundation for the use of urban agricultural practices and to subsequently foster healthier neighborhoods by increasing access to healthy food sources. While the City of Knoxville wants to promote the development of gardens and agricultural entrepreneurship, we also recognize the need to mitigate potential negative impacts of on-site sales, larger scale gardens, and other aspects of urban agriculture.

1.6 Who was involved in the development of this proposal?

The Office of Sustainability worked with a team comprised of the City’s Law Department, Plans Review & Inspections, Neighborhood Codes Enforcement, the Office of Neighborhoods, Knoxville-Knox County Metropolitan Planning Commission, the Knox County Health Department, and University of Tennessee Extension. Community comment was sought through a public meeting on July 14, 2014. The summary of that meeting and comments are included in Section 3 of this document for reference.
1.7 Areas in need of further research

The public input process helped identify community concerns about issues ranging from potential barriers for successful gardens to potential negative impacts to neighborhoods. The Office of Sustainability recognizes that there are many variables that affect access to healthy, affordable food. The Urban Agriculture Initiative has been broken down into three phases based on topic and effectiveness. The recommendations outlined in this document address Phase 1 of the City’s Urban Agriculture Initiative. The Office of Sustainability intends to address topics related to Phases 2 and 3 in 2015.

Phase 1

General Framework. Phase 1, as outlined in this document, establishes the general framework for accommodating urban agriculture in the zoning ordinance. The language reflected in these amendments is based on best practices as implemented by peer cities and by recognized municipal leaders in urban agriculture.

Phase 2

Phase 2 focuses on food distribution and livestock. These are two areas of need identified by community members and peer cities for creating more self-sufficient local food systems.

Food distribution. Food production is only a small portion of agriculture. Distribution is a key component of the food system, and there are various obstacles to get food to markets within the City of Knoxville. Approaches to address these barriers include establishing food distribution sites for community supported agriculture (CSA) farms, creating more opportunities for farmer’s markets, and developing tools for farmers, both experienced and new, to increase our local food availability.

Livestock. The City of Knoxville currently provides a process to keep hens for egg production, but residents have asked for additional research into the keeping of ducks and goats. The current hen ordinance is not without its limitations; for example, the ordinance allows for only six (6) hens whereas the minimum amount of chicks required for participation in the 4-H Poultry Project is 15. The Office of Sustainability will continue to research best practices from peer cities to evaluate the best approach for the keeping of livestock in city limits.

Phase 3

Phase 3 is focused on creating a mechanism to turn City-owned vacant and blighted properties into gardens and community assets.
Gardening on city-owned property. Community gardens are permitted in OS-1 and OS-2 (open space) districts, but this document proposes the expansion of community gardens as a permitted use in all zones. The City of Knoxville is currently researching best practices to allow forms of urban agriculture on city-owned properties that are not zoned as open space. This also includes exploring options for land transfers and sales to private parties.

Section 2: Descriptions of the Proposed Amendments

The aforementioned goal of these updates is to clarify the language related to urban agriculture and to promote its use in the City of Knoxville. The proposed changes add definitions to expand urban agriculture uses on private property. Below are more detailed descriptions of the most significant proposed amendments.

2.1 Garden, Personal

Proposed Definition: An area of land on which food or non-food crops are grown by the property owner or other person with an interest in the property for personal or family consumption and enjoyment. Personal gardens may be principal or accessory use. On-site sales are permitted through the use of a temporary use permit issued for a seasonal produce stand.

Regulations: Personal gardens are grown on the lot of the property owner or other person with an interest in the property (e.g. a renter or guest). Personal gardens are the most common form of gardening. Currently, personal gardens are considered a landscaping feature and allowed in the useable open space of a lot. Gardeners have had questions about acceptable features, uses, and permitting required for their home gardens. Supplementary regulations are proposed to clarify acceptable structures, permitting requirements, setbacks, and performance standards for gardeners.

2.2 Garden, Community

Proposed Definition: An area of land managed and maintained by a nonprofit or group of individuals to grow and harvest food or non-food crops for personal or group use, consumption, or donations. Community gardens may be principal or accessory uses.

Regulations: A community garden represents the gardening interests of multiple non-family members. This allows for garden clubs, non-profits, or other community organizations to establish gardens for their membership. A community garden is space shared by multiple individuals or groups of individuals.
for personal enjoyment or consumption. They are community features, not businesses. For that reason, on-site sales are prohibited for community gardens. Groups, businesses, or individuals who are seeking to engage in sales are encouraged to start a market garden. Donation of community garden produce is permitted. Community gardens are currently allowed uses in open space (OS-1 and OS-2) districts; proposed changes would allow community gardens as a permitted use in all base zones. The Office of Sustainability will launch a voluntary community garden registration that will provide interested community members with a resource for finding a place to garden in or near their neighborhood.

### 2.3 Garden, Market

**Proposed Definition:** An area of land managed and maintained by an individual, group, or business to grow and harvest food and non-food crops to be sold for profit on-site, off-site, or both. Market gardens may be principal or accessory uses.

**Regulations:** Market Gardens focus on sales. Their consumers may be individuals, restaurants, stores, or aggregators. Because of the potential impact on neighborhoods of the for-profit production and sale of crops, Market Gardens are subject to use on review for residential zones. The use on review approval by the Metropolitan Planning Commission (MPC) allows for consideration of a proposed project’s impacts in a specific location and ensures that the use on review complies with standards set forth in the zoning code.

### 2.4 Apiary

**Proposed definition:** A collection of one (1) or more colonies of bees in beehives at a location.

**Regulations:** Bees are integral to pollination, plant health, and vegetable and fruit production industries. The right to keep bees is protected by the Tennessee State Apiary Act of 1995. While bees pose little risk to the general population, the Office of Sustainability is sensitive to those with bee allergies and the dangers of general proximity to beehives. In crafting the language about apiaries within the City, the Office of Sustainability referred to best practices from cities that had addressed urban beekeeping in zoning ordinances and consulted with the University of Tennessee extension agents.

### 2.5 Accessory Structures

**Regulations:** Accessory structures defined in the proposed amendments include: cold frames, greenhouses, high tunnels, etc.
low tunnels, and seasonal produce stands. These definitions were added to provide clarification of acceptable uses and structures related to urban agriculture, and to establish standards for their use. When applicable, language from the United States Department of Agriculture was used to craft definitions that would ensure proposed structures meet the standards of the Environmental Quality Incentives Program (EQIP). All accessory structures are subject to standard permitting procedures to construct, enlarge, alter, repair, demolish, or change the use of a building. Building permit fee schedules and FAQs can be found at the City of Knoxville’s Plans Review and Building website. The application process is detailed in the Department’s Permits and Inspections Guide.

2.6 Compost, Backyard

**Proposed Definition:** The composting of organic solid waste, such as grass, clippings, leaves, or food waste (excluding meat and dairy), generated on-site by a property owner or authorized tenant, where composting occurs at the site of origin and the resulting product is for on-site use only.

**Regulations:** Backyard composting will be allowed with certain regulations to mitigate the negative impacts such as smell and attracting rodents. While we did hear from some community members who were interested in small-scale composting businesses, there are TDEC regulations affecting the development of composting facilities that collect and process waste generated off-site. Parties interested in starting a compost collection business are encouraged to refer to Chapter 1200-1-7-.11 of the TDEC Rules.

2.7 Supplementary Regulations

The City of Knoxville Neighborhood Codes Enforcement will still be the primary investigator regarding dirty or overgrown lots. In the case of activities related to urban agriculture, enforcement officers determine violations in gardens based on the accumulation of debris and the height of underbrush and grass. The correction process for dirty or overgrown lots is detailed on the City of Knoxville Neighborhood Codes Enforcement website.

To establish performance standards, we recommend the amendments to the Zoning Code at Article V, Section 4 (Supplementary Regulations) for many uses and new structures introduced. These regulations are crafted to maximize safety and enjoyment of all residents, and include performance standards to guide neighborhood codes enforcement officers to make informed decisions when responding to nuisance complaints.

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5 http://www.cityofknoxville.org/plansreview/
6 http://www.cityofknoxville.org/plansreview/guide.pdf
8 www.cityofknoxville.org/publicservice/codes/dirtylots.asp
2.8 Full Text of Proposed Amendments

The subsequent tables outline the proposed amendments to Appendix B of the City of Knoxville’s Code of Ordinances in full detail. The items are sorted into their respective sections. The tables below are sorted into the sections that will be amended, and include the suggested action for each item.

<table>
<thead>
<tr>
<th>Action</th>
<th>Item</th>
<th>Proposed Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add</td>
<td>Urban Agriculture</td>
<td>An umbrella term that describes a range of food and non-food growing practices implemented in an urban or suburban setting. Urban agriculture includes personal gardens, community gardens, market gardens, apiaries (beekeeping), aquaponics, hydroponics, backyard composting, domesticated chickens, and seasonal produce stands.</td>
</tr>
<tr>
<td>Add</td>
<td>Garden, Personal</td>
<td>An area of land in which food or non-food crops are grown by the property owner or other person with an interest in the property for personal or family consumption and enjoyment. Personal gardens may be principal or accessory uses. On-site sales are permitted through the use of a temporary use permit issued for a seasonal produce stand.</td>
</tr>
<tr>
<td>Amend</td>
<td>Garden, Community</td>
<td>An area of land managed and maintained by a nonprofit or group of individuals to grow and harvest food or non-food crops for personal or group use, consumption, or donation. On-site sales are prohibited for community gardens. Community gardens may be principal or accessory uses.</td>
</tr>
<tr>
<td>Add</td>
<td>Garden, Market</td>
<td>An area of land managed and maintained by an individual, group, or business to grow and harvest food or non-food crops to be sold for profit on-site, off-site, or both. Market gardens may be principal or accessory uses.</td>
</tr>
<tr>
<td>Add</td>
<td>Apiary</td>
<td>A collection of one (1) or more colonies of bees in beehives at a location.</td>
</tr>
<tr>
<td>Add</td>
<td>Aquaponics</td>
<td>The cultivation of fish and plants together in a constructed, re-circulating system utilizing fish culture to increase nutrient concentrations of irrigation water for the purpose of producing food or non-food crops.</td>
</tr>
<tr>
<td>Add</td>
<td>Cold Frame</td>
<td>A four sided enclosure with a transparent or translucent and removable or adjustable roof, built low to the ground to house and protect food or non-food crops outside the typical growing season.</td>
</tr>
<tr>
<td>Add</td>
<td>Composting, backyard</td>
<td>The composting of organic solid waste, such as grass, clippings, leaves, or food waste (excluding meat and dairy), generated on-site by a property owner or authorized tenant, where composting occurs at the site of origin and the resulting product is for on-site use only.</td>
</tr>
<tr>
<td>Amend</td>
<td>Greenhouse</td>
<td>A type of freestanding covered structure that has a supported framework and covered with a translucent material such as plastic or glass. A greenhouse may use generated or electrical heat or power and its purpose is to house and protect food or non-food crops during all seasons of the year.</td>
</tr>
<tr>
<td>Add</td>
<td>High Tunnel</td>
<td>A type of freestanding, covered structure that has a supported framework, typically made with metal piping and covered with a translucent material such as plastic or glass. Crops can be grown either in the natural soil profile or by installing permanent beds. A high tunnel does not have heat or electrical power and its purpose is to house and protect food or non-food crops outside the typical growing season. Also referred to as hoop houses.</td>
</tr>
<tr>
<td>Add</td>
<td>Hive or Beehive</td>
<td>A container or structure used by a beekeeper to provide a cavity in which a colony of bees is expected to establish a permanent nest.</td>
</tr>
<tr>
<td>Add</td>
<td>Hydroponics</td>
<td>The propagation of plants using a mechanical system designed to circulate a solution of minerals in water and without soil.</td>
</tr>
<tr>
<td>Add</td>
<td>Low Tunnel</td>
<td>A temporary, freestanding structure that has a supported framework, typically made with hooped PVC pipe or wire and covered with plastic. A low tunnel does not have heat or electrical power and its purpose is to house and protect food or non-food crops outside the typical growing season.</td>
</tr>
</tbody>
</table>
| Add | Seasonal Produce Stand | A temporary sales space of portable or sectional
construction and no more than 100 square feet, which is used to sell produce grown on-site.

Amend

Open space, conservation

Any public or privately owned parcel, lot or area of land or water essentially unimproved with any residential, commercial, or industrial uses or structures, and set aside or reserved for scenic, environmental, or preservation purposes. Conservation open space may include horticulture, floriculture, forests and woods, community gardens, recreational open space, and natural features located on a site, such as steep slopes, flood plains, hazard areas, unique vegetation and critical plant communities, stream/river corridors, wetlands and riparian areas, wildlife habitat and migration corridors, areas containing threatened or endangered species and archeological, historical, and cultural resources.

### Article IV – Specific District Regulations Amendments

<table>
<thead>
<tr>
<th>Action</th>
<th>Section(s)</th>
<th>Zones Affected</th>
<th>Item</th>
<th>Proposed amendments(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add</td>
<td>2.1.1 - 2.1.8</td>
<td>R-1, R-1A, R-1E, EN-1, EN-2, R-1HK, R-2, R-3, R-4</td>
<td>B. Permitted principal and accessory uses and structures.</td>
<td>Personal Garden, Community Garden</td>
</tr>
<tr>
<td>Add</td>
<td>2.1.1 - 2.1.8</td>
<td>R-1, R-1A, R-1E, EN-1, EN-2, R-1HK, R-2, R-3, R-4</td>
<td>C. Uses and structures permitted on review</td>
<td>Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>2.2.1 - 2.2.10</td>
<td>O-1, O-2, O-3, C-1, C-2, C-3, C-4, C-5, C-6, C-7</td>
<td>B. Uses permitted</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>2.3.1 - 2.3.3</td>
<td>I-2, I-3, I-4</td>
<td>B. Uses Permitted</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Amend</td>
<td>2.4.2</td>
<td>OS-1</td>
<td>B. Permitted principal and accessory uses and structures</td>
<td>1. Horticulture, floriculture, forests and woods, and community gardens.</td>
</tr>
<tr>
<td>Add</td>
<td>2.4.4</td>
<td>F-1</td>
<td>B. Permitted Uses</td>
<td>Personal Garden, Community Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.1</td>
<td>RP-1, RP-2, RP-3</td>
<td>B. Permitted Principal and accessory use structures</td>
<td>Personal Garden, Community Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.1</td>
<td>RP-1, RP-2, RP-3</td>
<td>C. Uses and structures permitted on review</td>
<td>Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.2</td>
<td>SC-1</td>
<td>B. Uses permitted</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.4, 3.4, 3.9</td>
<td>PC-1, PC-2, I-1</td>
<td>B. Permitted uses</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.10</td>
<td>BP-1</td>
<td>C. Uses permitted</td>
<td>Personal Garden, Community Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.10</td>
<td>BP-1</td>
<td>C. Uses permitted (10) c.</td>
<td>Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.11</td>
<td>TND-1</td>
<td>B. Permitted principal and accessory uses and structures</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>3.12</td>
<td>TC-1</td>
<td>C. Uses permitted (Core Area Ground and Peripheral)</td>
<td>Personal Garden, Community Garden, Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>4.2.5</td>
<td>All CU</td>
<td>D. Allowed Use Table (Commercial Uses)</td>
<td>Market Garden</td>
</tr>
<tr>
<td>Add</td>
<td>4.2.5</td>
<td>All CU</td>
<td>D. Allowed Use Table (Residential Uses)</td>
<td>Personal Gardens</td>
</tr>
<tr>
<td>Add</td>
<td>4.2.5</td>
<td>All CU</td>
<td>D. Allowed Use Table (Public Uses)</td>
<td>Community Gardens</td>
</tr>
<tr>
<td>Amend</td>
<td>4.1.4</td>
<td>All SW</td>
<td>C. Major Agriculture</td>
<td>Major agriculture includes animal raising including horses, hogs, cows, sheep, goats, and swine, poultry, apiculture, aquaculture, dairying, personal or commercial animal breeding and development; floriculture, horticulture, pasturage, row and field crops, viticulture, tree or sod farm, silviculture; animal boarding, outdoor; livestock auction; milk processing plant; packing house for fruits or vegetables; plant nursery; plant</td>
</tr>
</tbody>
</table>
nursery with landscape supply; retail or wholesale sales of agriculturally-related supplies and equipment; stable; or any similar use. Major Agriculture does not include Urban Agriculture (Personal Gardens, Community Gardens, or Market Gardens).

### Article V – Supplementary Regulations

#### Section 4 – Accessory uses, buildings and structures

<table>
<thead>
<tr>
<th>Action</th>
<th>Item</th>
<th>Proposed amendment(s)</th>
</tr>
</thead>
</table>
| Add    | B. Permitted accessory structures | 9. For Community Gardens, Personal Gardens, and Market Gardens  
  a. High tunnels  
  b. Greenhouses  
  c. Cold frames  
  d. Low tunnels  
  e. Storage shed or utility building  
  f. Backyard compost containers.  
  g. All accessory structures or uses for Community Gardens, Personal Gardens, and Market Gardens are subject to the performance standards set forth in Section 24 of this Article and may be subject to review and approval according to the design guidelines for overlay districts, including, but not limited to the Historic (H-1), Neighborhood Conservation (NC-1), and Downtown Design (D-1) overlay districts. |

#### Section 13 – Temporary Uses

| Amend | B(5). Seasonal Sale of farm produce | In any district, other than agricultural, a temporary use permit may be issued for the sale of farm produce grown only on the premises. Acceptable seasonal produce stands shall be a portable table or cart, and shall not exceed an area of one hundred (100) square feet. Such stands shall be removed when not in use. A permit shall be valid for not more than nine (9) months per year. Applicants may submit for a subsequent seasonal produce stand permit one (1) calendar year from the issuance of their last permit for this purpose. Seasonal produce stands shall [be] set back from all public rights-of-way a distance of not less than fifteen (15) feet. |
Add New

Section 23 – Urban Agriculture

Urban Agriculture includes a variety of structures and uses. These structures must adhere to setbacks and building codes as specified in the base zoning district. This section is meant to clarify additional setback and standards for uses related to urban agriculture:

A. General guidance on setbacks and accessory buildings related to urban agriculture
   1. Accessory buildings and uses
      i. A shed or utility building that is incidental or necessary for the use’s operation may be allowed for the storage of tools and gardening materials without a primary structure.
      ii. All accessory buildings and uses are subject to compliance with all other applicable codes and regulations of the city.
      iii. No accessory building shall be used, erected, or maintained as a living quarters.

B. Apiaries are permitted in all districts. Apiaries shall comply with the following regulations:
   1. New apiaries shall be registered with the Tennessee Department of Agriculture
   2. Hives are located in side or rear yards.
   3. Hives adhere to a fifteen (15) foot minimum setback from lot lines and public sidewalks, unless the yard is screened by a solid wall or opaque fence.
   4. Hive openings must face away from the nearest abutting lot.
   5. Hives shall have a fresh water supply located on property.
   6. For any rooftop apiary within twenty (20) feet of doors and/or windows of the principal building on an abutting lot, one of the following conditions must exist:
      i. The hive opening must face away from doors and/or windows of the principal building on the abutting lot; or
      ii. A flyway of at least six (6) feet in height comprising of a lattice fence, dense hedge, or similar barrier must be established in front of the opening of the hive such that the bees fly upward and away from neighboring properties. The flyway shall be located within three (3) feet of the hive opening and shall extend at least two (2) feet in width on either side of the hive opening.
C. Backyard composting is allowed in all districts and shall comply with the following regulations:
   1. Bins or piles will be kept to rear yards and shall be set back five (5) feet from lot lines.
   2. Bins or piles shall not exceed 5% of the parcel area and six (6) feet in height.
   3. Bins or piles be located outside of the required Riparian Buffer Zone.
   4. Compost shall be enclosed or contained.
   5. Compost shall only be used for the composting of materials generated on-site, and shall not contain any meat or dairy.
   6. Compost is subject to enforcement due to odor performance standards described in Appendix B, Article 5, Section 1(B)(3).

D. Hydroponics and aquaponics:
   1. All systems must comply with applicable Federal, State, and local regulations for water use and discharge, and for the possession, propagation, culture, sale, and disposition of living marine organisms.
   2. Where applicable, aquaponics and hydroponics structures or systems must be permitted by the Plans Review and Inspections Department.

E. Low tunnels and cold frames:
   1. Cold frames and low tunnels shall have a height that is less than seventy-two (72) inches above grade.
   2. All covers must be securely fastened.
   3. Once the growing season is complete, all hoops, covers, and materials must be removed.

F. High tunnels and Greenhouses
1. High tunnels and Greenhouses shall be at least seventy-two (72) inches in height, but equal to or less than the allowable height for an accessory building in the applicable zoning district.
2. High tunnels must be placed over an area designated for crop cultivation where crops are grown in the natural soil profile or in raised beds.
3. High tunnels and greenhouses must use greenhouse-grade, UV-resistant covers.
4. The maximum high tunnel bow spacing is six (6) feet.
5. Where applicable, a greenhouse or high tunnel structure must be permitted by the Plans Review and Inspections Department.
6. All high tunnels and greenhouses must comply with all Federal, State, and local regulations for runoff, erosion, and sediment control.
Section 3: Community Garden Ordinance

Public Meeting Comments & Summary

July 14, 2014

Summaries:

On July 14, 2014, City of Knoxville officials asked for public input on proposed ordinances regarding the definition of Urban Agricultural practices. The topic of the meeting was to discuss proposed definitions of “Community Garden” and “Market Gardens” to allow for primary-use gardening in all zones rather than just R-1.

About 47 people attended the public meeting held at the Cansler Family YMCA, 616 Jessamine St. The Office of Sustainability received 12 comments through comment card and email following the meeting. The commenters asked for clarification on the sale of produce, the assessment of garden size, fees and permits associated with gardens, and how to deal with abandoned or mismanaged gardens. Officials emphasized that the City is dedicated to highlighting the region’s agricultural roots and fostering the development of a vibrant local food economy. The Office of Sustainability will take all input into consideration as it develops new Urban Agriculture ordinances.

Comments:

Comment Card:

- The hen allowance should be increased to accommodate for larger, more production-focused gardening operations.
- The Seasonal Sale Permit should be adjusted to accommodate for co-operative farming practices and CSA distributions.
Comment Card:

- There should be considerations for invasive species and non-indigenous pests.
- What regulations will be in place to provide protections to the care of bees and animals (e.g. hens) on community garden sites.

Comment Card:

- Placing too many strict regulations and oversights may be too onerous on small, upstart inner city agricultural businesses.

Comment Card:

- Concern over the potential neglect of hens on property where manager doesn’t live nearby.
- Who is ultimately accountable for the welfare of livestock at a community garden?

Comment Card:

- How will theft be addressed by the police: Is the produce in community gardens considered a private asset or personal property?

Comment Card:

- Would like to see more information on soil testing and public health safety for garden sites.
- Would like to see a program provided by the city, or subsidized by the city, for lead testing and abatement for future garden sites.
Online Comment:

- The present zoning ordinance allows agricultural crops to be grown as Principal Use in R-1 zoning districts, and the new ordinance would ask them to register their garden.
- Recommend an alternative definition of Community Garden that distinguishes between an owner growing on their own empty lot from many individuals growing on an empty lot and from an individual (other than the owner) growing on an empty lot.

Online Comment:

- Would like to reduce the restrictions of the Seasonal Sales Permit. Particularly reducing the price and the restrictions that produce sold must have been grown on-site.
- If possible, would like to have personal and community gardens exempt from the Seasonal Sales Permit.

Online Comment:

- Can there be such a thing as a market garden smaller than a ¼ acre under these definitions?
- Will meat and/or dairy be allowed in compost? What protections will neighbors have for smelly/poorly managed compost?
- Are bee hives allowed on top of structures?

Online Comment:

- Fees should be assessed for community gardens to prevent abandonment.
- There should be accountability for the aesthetics of the garden.

Online Comment:

- There be a clear definition of how the garden size will be assessed; Will it be total lot size or garden size?
• Recommend a definition of “Garden Area” to encompass that delineation, or an “and/or” qualifier for the size and sales relationship.

• Clarification is recommended for low-tunnels and hoop houses in the way of adding “from growing soil height.” This would reduce the ambiguity in measurement when considering the use of raised beds.

• Composting dimensions should consider height and/or volume. A 7yd3 limit is recommended based on the approximate carrying capacity of a single-axle dumptruck.

Online Comment:

• Providing general statement defining “Urban Agriculture.”

• Should not state that it is not exempt from Federal, State, or Local regulations for erosion control and sediment discharges.
To the members of the Metropolitan Planning Commission:

Nourish Knoxville fully supports the Urban Agriculture Zoning Ordinance: Recommendations to Enhance Urban Food Systems being presented to you for consideration. Our organization strives to connect our citizens with local food, and our growers to consumers. We feel that these recommendations are in line with our organization’s commitment to make local food as convenient as possible to all of our community, be it by growing for personal consumption, for profit, or for donation to others in need. We also fully support decreasing barriers to growing food in our community, and feel these recommendations do just that.

Thank you for considering this proposal. We hope you will support these recommendations and help to increase access to local food for all our citizens.

Sincerely,

Charlotte Tolley
Executive Director, Nourish Knoxville
The Metropolitan Planning Commission met in regular session on May 14, 2015 at 1:30 p.m. in the Main Assembly Room, City/County Building, and Knoxville, Tennessee. Members:

Ms. Rebecca Longmire, Chair
Mr. Herb Anders
Mr. Bart Carey, Vice Chair
Ms. Laura Cole
Mr. Art Clancy
Ms. Elizabeth Eason
Mr. Mac Goodwin

Mr. Michael Kane
Mr. Charles F. Lomax, Jr
Mr. Jeff Roth
Mr. Jack Sharp
Mr. Scott Smith
Ms. Janice Tocher
Mr. Jim Wakefield

A Mr. Len Johnson
* Arrived late to the meeting.
** Left early in the meeting.
A – Absent from the meeting

7. CITY OF KNOXVILLE

Amendment to the City of Knoxville Zoning Ordinance to define Urban Agriculture uses and supplementary regulations.

STAFF RECOMMENDATION: Recommend that the City of Knoxville’s City Council adopt the draft ordinance amending Article II through Article V of the City of Knoxville Code.

Brian Blackmon, Office of Sustainability for the City of Knoxville, Project Manager. The definitions that we are proposing are really to add clarity to the zoning ordinance by creating additional provisions and supplementary regulations. I am happy to answer any questions about that. These change affirm regional goals that have been set by the City of Knoxville through the Bloomberg Philanthropies Mayors Challenge of 2013 as well as the PlanET community input and planning process. I will turn it over to Ms. Charlotte to figure her comments.

Charlotte Davis, 104 Crawford Road, Had several concerns regarding the proposed agricultural zoning ordinance. As stated in the handout prepared by the City of Knoxville’s Office of Sustainability the idea of expanding local food
production was sourced from extensive community input. I can be wrong, but I believe there was only one publicized public meeting. I would like to present a few potential problems. A request for an increase for the number of hens from 5 to 15. The Office of Neighborhoods worked a long time in coming up with this ordinance and there would have to be some noticeable changes to that ordinance if this was permitted. Residents have asked for additional research into the keeping of ducks and goats, ducks and/or goats. This would be a noise factor and a possible odor factor. Surprisingly the Bill Landry Series just the other day had a segment on goats. It was brought out that female goats do not have an odor but that males have a bad odor.

Longmire: Kind of like young boys. Yes they do.

Davis: Composting could be a problem. Sale of produce using produce stands that could become a traffic hazard. Not because the stands would be too close to the road, but because of cars parking to stop at the stand. Accessory structures such as greenhouses. Cold frames, high and low tunnels, lack of upkeep of garden areas, runoff from the gardens into adjacent properties. As stated the City of Knoxville Code Enforcement will continue to be the primary investigator determining violations. Without an increase in the staff in that department, I believe that it would take a long time to have reported violations investigated. To address the problem of neighborhoods that do not have access to fresh produce has anyone thought of having produce trucks to out into these areas or to utilize more church parking lots to use as farmers markets. I would ask that you please give serious thought to this proposed change in zoning. Thank you.

Blackmon: For clarity we are not proposing any change to the amount of hens on any lots nor are we promoting ducks or goats in these amendments. Regarding compost we have added additional provisions for compost regulations including provisions for monitoring smell by enforcement which exists already in the zone, in our ordinance. The concern about road side stands, the seasonal produce stand temporary permit already exists. As far as I know we do no takers on that permit nor do we have any violations of it. Stopping, standing in a roadway is already covered under Section 7 in the ordinance, not our ordinance but the pre-existing ordinance. These are already clarified and not any new issues that we would need to broach. I am happy to answer any other questions.

Longmire: The concern about the accessory structures and upkeep and/or runoff off the gardens.

Blackmon: Runoff. We have worked with stormwater engineering. There are statements in there that you need to comply with all Federal, local, State control for sediment erosion, runoff, anything like that. Regarding... what was the one before that?

Longmire: Well there was another one about garden upkeep.
Blackmon: Upkeep. We’ve introduced standards for greenhouses and low tunnels including materials that would be acceptable for use and spacing so the goal is to allow folks like Peter Ahrens with Building Inspections to make a very informed decision whenever somebody request a permit to construct it but also if there were complaints about somebody using a tarp and calling it a row cover. We have clarified what we expect in that regard. So we are establishing standards both for the inspections on the front end and enforcement of any potential violations that may result.

Longmire: Will the inspections be totally complaint driven though?

Blackmon: Yes as are any other dirty lot complaints.

Longmire: I do share the fact that codes has a hard time because of the lack of, the number of people working, but I understand.

Blackmon: I think they do a fantastic job.

Longmire: They do. They really do.

Herb Anders: With regards to the complaint driven aspect of this, once a permit is issued and I am guessing unlike other permits, building permits and that sort of thing, there is follow up to see that it is constructed properly and everything is in order before they are allowed to proceed. Is there going to be a follow-up on this because the complaint driven part of this I think there should be follow up instead of leaving it to the citizens to complain about it.

Blackmon: There is already a permit process for greenhouses and any other accessory structure, shed would be treated the same as it would be if you were building it on your lot with a house.

Anders: What about the stormwater and that sort of thing?

Blackmon: Stormwater there are no... I mean for a construction standards somebody would inspect it but if you are having issues with runoff that is complaint driven. It is the same with construction.

Michael Kane: I guess you kind of touched on this but I want to make sure. In the permitting process if somebody makes an application, is there a site visit at that time at all? I guess my question is the permit when you make application for a permit is there an automatic requirement for a site visit or does it just depend on what that is. Like you were saying building a structure or something like that.

Blackmon: We are not proposing any changes to the permitting processes to clarify. If you are proposing to build a structure that process would be the same as if you were building it anywhere else. If Pete Ahrens wants to step up
and speak to the permitting process I think that he is probably the best person
to do so.

Peter Ahrens: City of Knoxville Plans Review and Inspections. Right now the
way we permit chicken coops, they present a site plan to us. We verify
setbacks. We verify the size of the coop to make sure that it complies with the
requirements that are set forth already. We don't do a site visit beforehand but
we certainly do an inspection and a site visit once it is constructed to make
sure that it meets the standards which we review for.

Kane: So if there was a temporary market stand, I know that is not the right
terminology, but the produce stand and it is temporary where you have to take
it down every day or whatever there is no real discussion. I guess would there
be site plan as to where are you going to put your temporary stand or whatever
like that?

Ahrens: Sure anytime that we issue permits where there is any sort of structure
whether permanent or temporary we require a site plan to ensure the traffic
safety from an engineering standpoint, setbacks. We verify that ahead of time.
As far as the temporary nature we don't have a concrete system in place but
we are aware of it and we drive by after the expiration date just to make sure
the structure are down or whatever temporary permitted issue is taken down.

Art Clancy: First of all I would like to thank Mr. Blackmon for all the work he
has done on these changes. I think it was well prepared. I think sustainability
and local food sourcing is extremely important for the vision of Knoxville and
Knox County for the future. With that being said I would like to recommend
that the City of Knoxville City Council adopt the draft ordinance amending
Articles II through Articles V of the City of Knoxville Code.

MOTION (CLANCY) AND SECOND (ROTH) WERE MADE TO APPROVE
STAFF RECOMMENDATION TO RECOMMEND THAT THE CITY OF
KNOXVILLE’S CITY COUNCIL ADOPT THE DRAFT ORDINANCE
AMENDING ARTICLE II THROUGH ARTICLE V OF THE CITY OF
KNOXVILLE CODE.

Longmire: I do have another question. There was a question about the
neighborhood meetings. Was there more than one?

Blackmon: We had a public meeting to unveil the phase and the general
structure of the changes. We received excellent feedback. I believe Ms.
Charlotte provided feedback as well. Then we broadcast it to ask if any
neighborhood groups would like to have additional meetings. Those were sent
out in March whenever we began circulating the packet that you have seen.
We received no takers. We did through the Neighborhood Advisory Council
present to the Neighborhood Advisory Council formal meeting at their next
meeting in April. I believe that was April 8th. We sought input to see if anybody
wanted us to come to their groups and speak to them.
Longmire: Commissioner Clancy would you restate your motion because I need numbers.

Clancy: Yes let me find it here. I read it pretty much... Recommend that the City of Knoxville’s City Council adopt the draft ordinance amending Article II through Article V of the City of Knoxville Code.

**MOTION CARRIED 14-0. Approved.**