ADAMS COUNTY
COLORADO

Brighton

DISTRICT PLAN

ADOPTED DRAFT - APRIL 2016

Adams County
Office of Long Range
Strategic Planning

www.adcogov.org
720-523-6863

City of Brighton
Community
Development

www.brightonco.gov
303-655-2000

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RESOLUTION APPROVING APPLICATION IN CASE #PLN2016-00005 THE DISTRICT PLAN

WHEREAS, this case involved an application for: An amendment to the Adams County Comprehensive Plan to institute a District Plan that includes the Hazard Identification and Risk Assessment as well as incorporates components of the Transportation Plan and Open Space, Parks and Trails Master Plan on the following described property:

> APPROXIMATE LOCATION: Generally bounded by Bromley Lane on the north, Buckley Road on the east, E-470 on the south, and the South Platte River corridor on the west.

WHEREAS, Adams County and the City of Brighton worked cooperatively to create and approve an amendment to the Comprehensive Plan; and

WHEREAS, on the 24th day of March, 2016, the Planning Commission held a public hearing on the application of The District Plan, Case # PLN2016-00005, and approved the Plan; and

WHEREAS, substantial testimony was presented by members of the public and the applicant.

NOW, THEREFORE, BE IT RESOLVED, by the Planning Commission, County of Adams, State of Colorado, that based upon the evidence presented at the hearing and the recommendations of the Office of Long Range Strategic Planning and the Planning Commission, the application in this case be hereby APPROVED based upon the following findings of fact and subject to the fulfillment of the following conditions by the applicant.

Findings of Fact:

1. Development patterns or factors have substantially changed in ways that necessitate or support the amendment.

2. The District Plan is consistent with the goals and policies of Adams County.

3. The District Plan is consistent and/or compatible with the land use, transportation, and open space Plans.

4. The District Plan advances the health, safety, and welfare of the citizens and property owners of Adams County.

5. The proposed plan does not overburden the County's existing or planned infrastructure systems, or else provides measures to mitigate such impacts.

Note:

1. Up until May 31, 2016, the Office of Long Range Strategic Planning staff may make minor corrections to the District Plan, including but not limited to typographical errors, to ensure that there is consistency throughout the plan, and to coordinate consistency with the Be Brighton Plan.

Upon a motion duly made and seconded, the foregoing resolution was adopted.

I, Rosie Garner, Chairperson/Acting Chairperson of the Adams County Planning Commission do hereby certify that the annexed foregoing resolution is a true and correct record of the proceedings of the Adams County Planning Commission.

Rosie Garner

Chairperson/Acting Chairperson Adams County Planning Commission

PLANNING COMMISSION RESOLUTION

THE LOCAL DISTRICT PLAN

RESOLUTION NO.: 16-06

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BRIGHTON, COLORADO, A COLORADO HOME RULE MUNICIPALITY, APPROVING AND ADOPTING THAT CERTAIN LOCAL DISTRICT PLAN, FOR THE PURPOSE OF GUIDING THE PLANNING AND DEVELOPMENT OF THE CITY

WHEREAS, Adams County and the City of Brighton have jointly developed The District Plan (Exhibit "A"), which is a community-based regional vision for guiding the development of, among other things, local food production, agri-tourism, conservation, and future land use planning in the area south of Brighton; and,

WHEREAS, the Planning Commission recognizes that the Adams County Open Space, Parks, and Trails Master Plan and Comprehensive Plan identify an opportunity to create a Local Food Production District south of Brighton, and the Brighton Comprehensive Plan similarly encourages the preservation of significant farmlands within the area; and,

WHEREAS, the Local District Plan provides Adams County and the City of Brighton with advisory tools and resources intended to improve the viability of continued agricultural and related uses in the District area, while preserving private property rights and increasing landowner options; and,

WHEREAS, the Local District Plan reflects investigation, analysis, understanding and updated information regarding economic development, housing stock, market trends, and recognition of Brighton's agricultural heritage balanced with responsible development opportunities; and

WHEREAS, the Local District Plan contains concepts and goals intended to assist the City in assessing the financial commitments and responsibilities associated with agri-planning, land and farming preservation, and possible future development of this area; and,

WHEREAS, the Planning Commission conducted a public hearing on the Local District Plan on March 22, 2016 and thereupon confirmed that written Notice of such public hearing was properly published in the *Brighton Standard Blade* for no less than fifteen (15) days prior to the Planning Commission meeting; and

WHEREAS, at the public hearing, the Planning Commission properly received and considered all relevant evidence and testimony regarding the Plan from City Staff, professional consultants, citizens and stakeholders, and all other Interested Parties, including the public at large; and

WHEREAS, the Planning Commission of the City of Brighton has reviewed the Local District Plan and finds and declares that the Plan is generally consistent and harmonious with the

Comprehensive Plan in providing for the future of the City, provides consistency with the purpose and intent of goals and policies contained within, fosters compatibility with surrounding communities, is harmonious with the character of the community, and is not detrimental to the immediate area, future development of the area, or to the health, safety or welfare of the inhabitants of the City; and

NOW THEREFORE, BE IT RESOLVED, that the City of Brighton Planning Commission does hereby approve the Local District Plan draft, subject to the following condition(s):

1. Up until May 31, 2016, City of Brighton staff is authorized to make minor corrections to the District Plan text, including such corrections as typographical errors, grammar, spelling, etc., to ensure accuracy and consistency throughout the Plan, and to coordinate consistency with any similar Plan proposed for adoption by Adams County; and
2. Although the Commission acknowledges the relevance of certain supporting information contained in the various Appendices, the Commission disapproves of the Appendices as being or constituting any part of the Plan itself. Therefore Staff shall insert language into the Plan document, to be installed after the Plan text and before the Appendices, clearly indicating that the Appendices are <u>not</u> a substantive part of the Plan, but are attached to the Plan document, if at all, only for reference purposes.

RESOLVED, this 22nd day of March 2016.

CITY OF BRIGHTON, COLORADO
PLANNING COMMISSION

Matthew Johnston, Chairperson

ATTEST:

Jennifer Holmes, Acting Secretary

Acknowledgements

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Adams 12 School District

Brighton 27J School District

Adams County Economic Development

Brighton Economic Development

Tri County Health

CSU Extension

The Conservation Fund

Colorado Heritage & Agritourism Committee

Brighton Shares the Harvest

Brighton Agricultural Land Preservation Sub-Committee

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DISTRICT PLAN

Adams County, Colorado and the City of Brighton, Colorado

PLAN SUMMARY | APRIL 2016

Adams County and the City of Brighton partnered to draft the District Plan to study the feasibility of preserving farmland in southern Brighton that remains valuable for food production, while allowing for a range of development opportunities that consider the most efficient and sustainable use of the land.

This plan helps decision-makers guide investment in the area for compatible residential, commercial, and industrial development, as well as farmland conservation, and local food and agritourism promotion.

DISTRICT VISION

The District has been in a state of transition since E-470 opened in 2003, making the area more accessible and developable, threatening its farming heritage, the local food economy, and the buffer that farmland provides between Brighton and the Denver region.

Although some development is desirable, thoughtful and proactive coordination are necessary to ensure the South Platte River's prime farmland will remain a southern gateway to Brighton, balancing a mix of neighborhoods with small and medium-sized farms. Rural uses, such as farming, food processing, and clustered housing on 1-2 acre lots, will be focused in the County. Urban uses, such as multifamily, mixed use, and neighborhood commercial developments, will be encouraged in the City.

The Fulton Ditch trail network will tie destinations together – farm stands, farm-to-table restaurants, pick-your-own farms, a historic farm and special events venue, bed and breakfasts, working lands, and food storage and processing facilities – from the South Platte River to Barr Lake. Properly developed and preserved, the District will retain its status as a hub of local foods, enhance the local food economy, become a tourist destination for food connoisseurs, promoting the distinctive image of a freestanding community that grows a significant portion of the region's produce.

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To view the entire plan, please visit

www.adcogov.org/districtplan

ENGAGING THE COMMUNITY

City and County staff and their consultants held five neighborhood meetings in five months to present area strengths and weaknesses, a market study about the local food economy, water rights information, and case studies. These meetings allowed concerned citizens to voice their preferences for farmland conservation and various development options.

Throughout the process, study sessions with City and County Planning Commissioners, Brighton City Council Members, and the Board of County Commissioners offered additional insight into community values. This plan considers the aspirations of everyone who participated and attempts to balance the livelihoods of all who are affected, by encouraging a thoughtful transition of the area.

OUTREACH

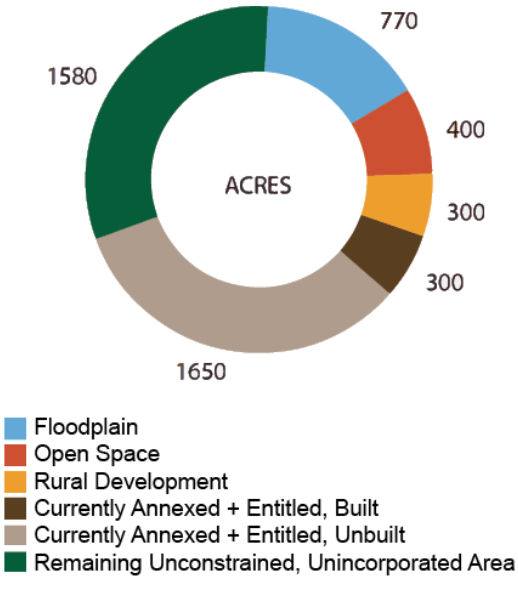
- Sent 1600 postcards to properties in and near the area on two separate occasions
- Newspaper ads
- Press releases
- Posters placed in the community
- Posting on DistrictPlan.org and Brighton's websites, YouTube and city channels
- Insert into Brighton's Utility bills
- Special Spanish Speaking outreach including dual translation posters and postcards, community outreach by Hispanidad, dual translation at neighborhood and public hearing meetings, Spanish radio ads

LAND DEVELOPMENT MARKET

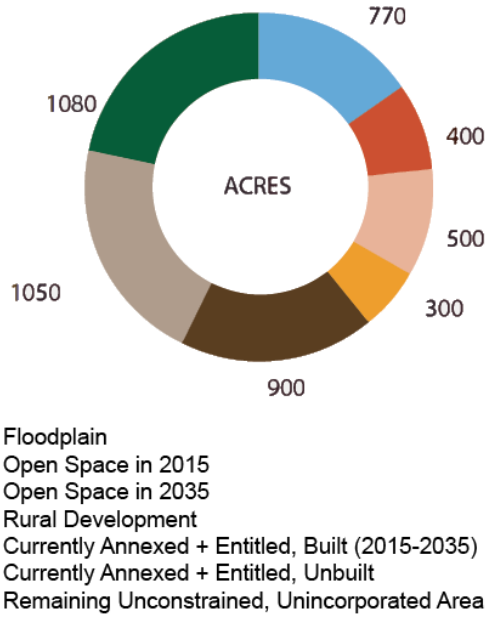
A market assessment prepared for the Be Brighton Comprehensive Plan Update estimated future demand for residential and non-residential uses. The pie chart below represents the existing commitments and constraints within the 5,000-acre study area. Nearly two-fifths of the study area is already annexed and entitled by the City of Brighton (1,950 acres). Most of the market demand for residential and commercial uses will be accommodated in these already annexed and entitled areas, which will build out over the next 30 years.

The County and City open space programs have funding capacity to add 250 acres or more each decade to the 400 acres already conserved. By 2035, nearly 20% of the study area could be designated open space / farmland. This leaves much of the unconstrained, unprotected land for future development, which may not experience direct development pressures for several decades; however County and City preservation efforts will create a market for these lands.

EXISTING COMMITMENTS AND CONSTRAINTS

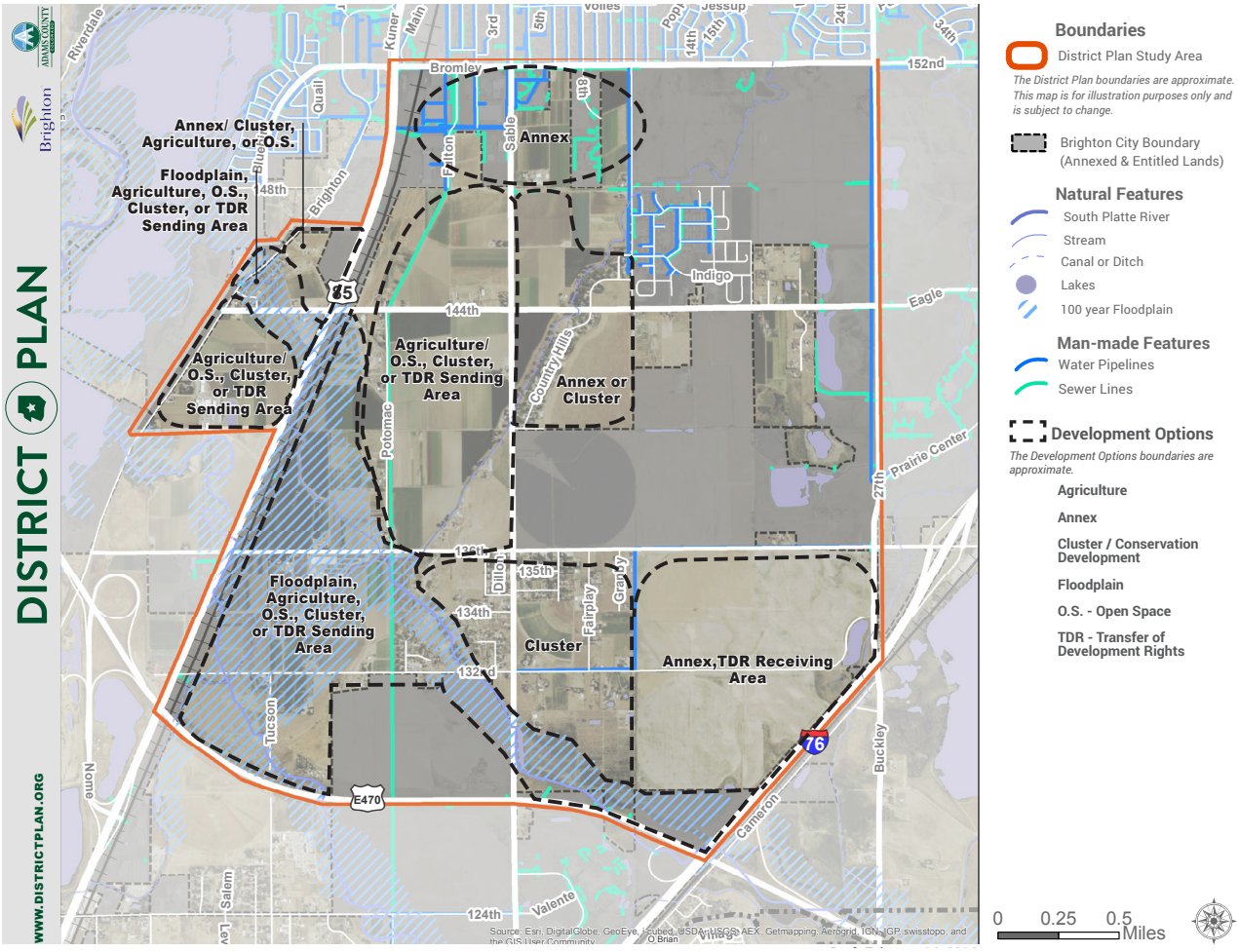


FUTURE DEMAND (2035)



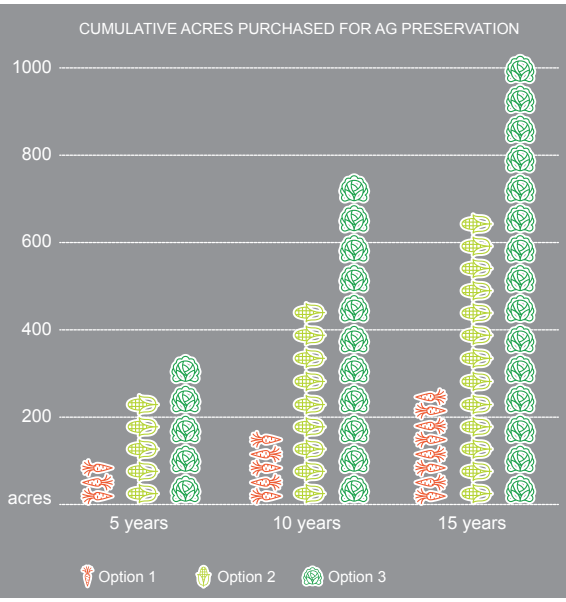
EXPANDING LANDOWNER OPTIONS

The Landowner Options Map outlines the conservation and development options most likely to be appropriate for each unincorporated area due to infrastructure availability, proximity to the City of Brighton boundary, and existing environmental constraints such as the 100-year floodplain. These are in addition to rural residential and agricultural uses presently available through current County zoning, with the intent of broadening flexibility for landowners to make the highest and best use of their land within the bounds of the public health, safety, and welfare. Complimenting each of these five options is an invigorated local food system designed to increase the profitability of farm properties and enhance our quality of life. Each of these options and potential uses is further described in Chapter 3, which includes a Future Land Use Map and use table.



AGRICULTURAL LAND AND WATER CONSERVATION RECOMMENDATIONS

This graphic provides an estimate of how many acres including water shares could be purchased applying fee-simple acquisition within the City and County funding possibilities. Land protection efforts in the District will be guided by the vision and practical realities outlined in the District Plan. In the interim, its success will be dependent on the willingness of landowners who wish to keep some or all of their land in agriculture or by selling or donating land rights to protect their property.



KEY SUPPORT SYSTEMS: LAND MANAGEMENT & GROWING A LOCAL FOOD SYSTEM

The broader scope of Adams County and Brighton's proposed land preservation efforts could need supportive infrastructure and examination of new management approaches. For the short term, the Agricultural Land Preservation Sub-Committee, as re-imagined, would help support many plan action items, as it is well-positioned to make policy recommendations for next steps. Over time the committee would advise County and City officials as they devise a long-term organizational structure. Initially the sub-committee could be formalized and recognized by both Adams County and Brighton, members of the committee would be appointed by both the County Commission and the City Council, and funded by both entities.

The preservation of farmland would also benefit from a connection to consumers who will purchase products from local farmers and local food businesses, which could help promote agritourism.

A full-time equivalent position dedicated to developing the programs and marketing plan necessary to support building a more robust local food system may strengthen the recommended outcomes of this plan. Funding for marketing and programming efforts may be derived from existing department budgets and various grants. Larger marketing initiatives may be funded through existing lodging tax funds. This position may be funded for a two-year evaluation period, with the goal the position will be self-sustained with grant funding thereafter, and would work with the revamped Agricultural Land Preservation Sub-Committee.

PLAN RECOMMENDATIONS/ NEXT STEPS:

Both Adams County and Brighton are committed to the implementation of the District Plan. In order to cultivate a local food system, preserve prime agricultural lands in the District Area, and increase the likelihood of agritourism development, the following are recommended, but not limited to, appropriate next steps in the process:

1. Adams County and Brighton should commit to annually and jointly applying for a minimum of $1M of competitive Adams County Open Space Grant Funds, and applying 250K each of their Open Space share-back funding for preserving agricultural lands within the District. Grant funds are derived from a combination of existing Open Space sales tax, matching GOCO grant funds, and other funding sources which may be available.[1]
2. Adams County and Brighton will develop an evaluation matrix[2] for agricultural land preservation opportunities to include:
    - Prioritize lands that inherently help maintain agricultural operations and wildlife habitat.
    - Define goals around water resources to sustain agricultural production and address future municipal need.
    - Focus on designated prime agricultural lands that are contiguous to optimize farming efficiencies.
    - Where possible, focus on existing view sheds.
    - Assess existing and future transportation constraints.
3. Explore the creation a revolving fund to ensure a portion of property tax funds from the District area are allocated for reinvestment and future land acquisition of strategically located land that would enhance agricultural preservation and help to define the character of development as outlined in this plan. Seek out other funding opportunities and financing to implement and sustain the District Plan's recommendations.
4. Adams County and Brighton should jointly enhance the Ag-Land Preservation sub-committee and appoint key members.
5. As part of the plan, a new, full-time equivalent employee dedicated to local food system programming and marketing efforts would be beneficial. This position could be funded equally by Adams County and Brighton for a minimum of two years, with evaluation thereafter, with the goal of the position to be self-sustaining via grant funds thereafter.
6. Contemplate the release of a request for proposals to meet the objectives of the District Plan by the development community.
7. Amend Adams County and City of Brighton regulations and standards to help implement the Local District Plan in regards to transfer of development rights (TDR), and other zoning and design related amendments.
8. Adams County and the City of Brighton will explore other opportunities to work together to implement the District Plan's strategies, actions and recommendations.
9. Pursue opportunities in which historic preservation grants and tax credits might help to rehabilitate historic farm properties.

[1] Actual grant funding request may vary year over year depending upon available lands for fee-simple acquisition in terms of available acreages. Grant applications will be evaluated annually by the Open Space Board and the Board of County Commissioners, and others. All land purchases are subject to annual appropriation procedures.

[2] See discussion of additional, potential land conservation criteria in Chapter 3 of the Plan.

Chapter 1: INTRODUCTION + PROCESS

Adams County and the City of Brighton partnered to create the District Plan to study the feasibility of preserving farmland in southern Brighton that remains valuable for food production, while allowing for a range of development opportunities that consider the most efficient and sustainable use of the land.

This area has been a priority for farmland preservation for several years, and residents of both the County and City have emphasized that maintaining its farming heritage is important to the area's character. Nevertheless, several farmers want to sell their land for various reasons – there is no heir to take over the farm, they need to fund their retirement, and / or encroaching development and traffic congestion are making it increasingly difficult to grow crops in the area. Development pressure over the years has already resulted in the loss of farmland, breaking what remains into smaller, less contiguous areas. The Adams County Comprehensive Plan and Brighton's Comprehensive Plan, currently being updated, have identified goals for preserving area farms as described on pages 4 and 5, thus necessitating this in-depth study to craft a unified vision and action plan for the area that provides landowners with development and conservation options.

Created with area landowners, farmers, developers, City and County leaders, and the general public, the District Plan addresses the area's future food economy, land use, transportation, open space, parks, natural resource conservation, recreation, water rights, historic and cultural preservation, and capital improvements. This plan helps decision-makers guide investment in the area for compatible residential, commercial, and industrial development, as well as farmland conservation, and local food and agritourism promotion.

KEYS TO PLAN SUCCESS

Balanced land development options

Realistic implementation techniques

Comfort level with process and plan

Broad public participation during plan creation

PLAN CHALLENGES

Differing motivations of stakeholders

Joint County and City approval

Property owners' and neighbors' perceptions

Evolving farming practices

Education & communication

PLAN OPPORTUNITIES

Unique identity for City and County

Regional, possibly national, economic and tourist draw

Unique model for balancing development and agriculture

Consistency between City and County

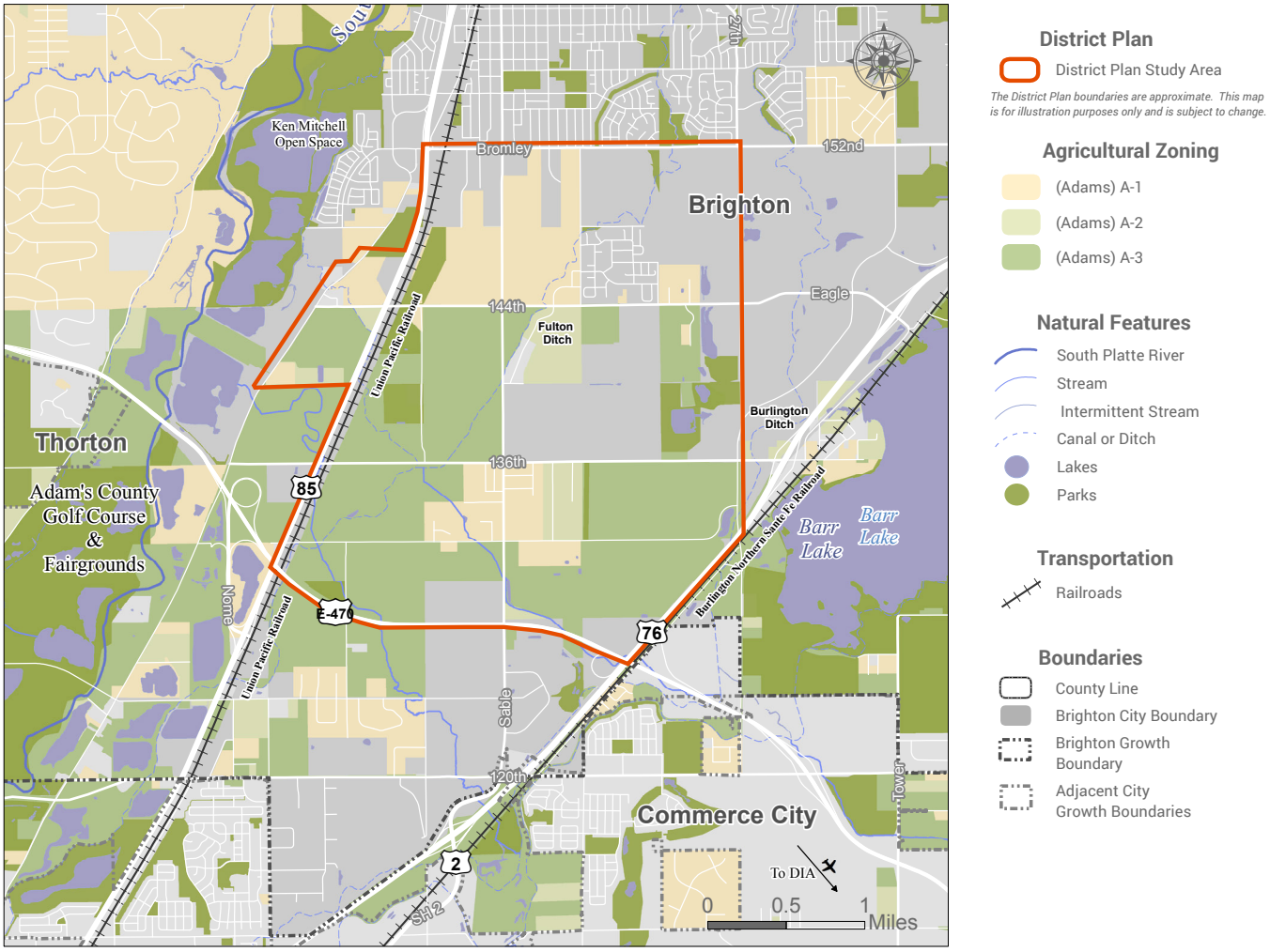
STUDY AREA

Encompassing approximately 5,000 acres northeast of the Denver metro area, the District study area lies in a fertile pocket of soil that has been farmed for generations, and where many farms continue to operate. The area includes historic farmsteads, land cultivated by two of the largest vegetable growers and one of the largest nursery growers in the state, multiple farmstands, and Berry Patch Farm, a you-pick-it destination and community-supported agricultural operation.

Almost two-thirds of the study area is within the rural Adams County, with the remainder in Brighton, a fast-growing community of 36,000 residents with pressure to develop southward. The District Plan area serves as a gateway between Denver and the northeastern plains, and provides excellent regional access by three highways (US 85, E-470, and I-76), and two major railroads, and is 15 minutes from the Denver International Airport (DIA).

"No other town in Colorado has four farm markets and is home to the two largest vegetable farm growers in the state."

-Tim Ferrell, Berry Patch Farm



DISTRICT VISION

The District has been in a state of transition since E-470 opened in 2003, making the area more accessible and developable, threatening its farming heritage, the local food economy, and the buffer that farmland provides between Brighton and the Denver region. Although some development is desirable, thoughtful and proactive coordination are necessary to ensure the South Platte River's prime farmland will remain a southern gateway to Brighton, balancing a mix of neighborhoods with small and medium-sized farms. Rural uses, such as farming, food processing, and clustered housing on 1-3 acre lots, will be focused in the County. Urban uses, such as multifamily, mixed use, and neighborhood commercial developments, will be encouraged in the City.

The Fulton Ditch trail network will tie destinations together – farm stands, farm-to-table restaurants, pick-your-own farms, a historic farm and special events venue, bed and breakfasts, working lands, and food storage and processing facilities – from the South Platte River to Barr Lake. Properly developed and preserved, the District will retain its status as a hub of local foods, enhance the local food economy, become a tourist destination for food connoisseurs, and promote the distinctive image of a freestanding community that grows a significant portion of the region's produce. This vision is supported by several County and City plans completed in recent years, as described on the following pages.

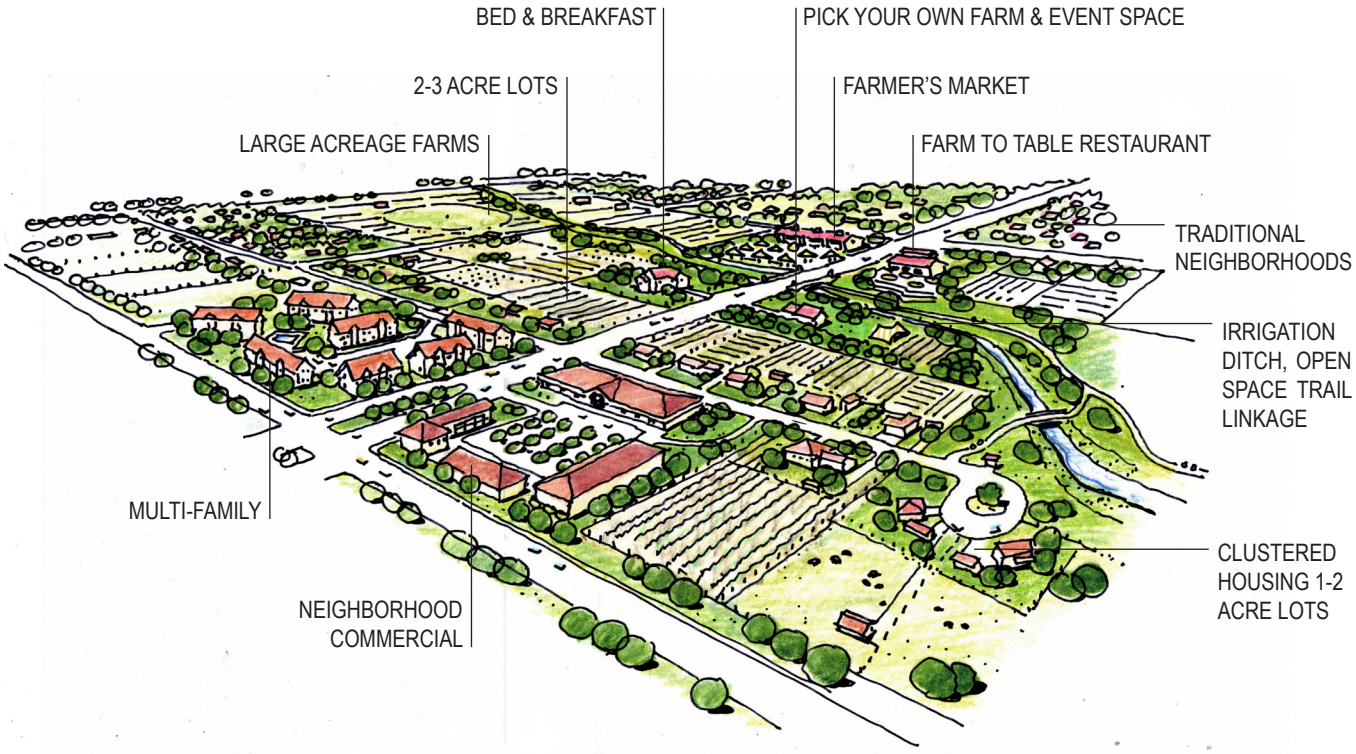
GUIDING VALUES OF THE STUDY

Advance Brighton & Adams County's agricultural heritage

Respect private property & landowners

Ensure transparency

Protect the rural landscape



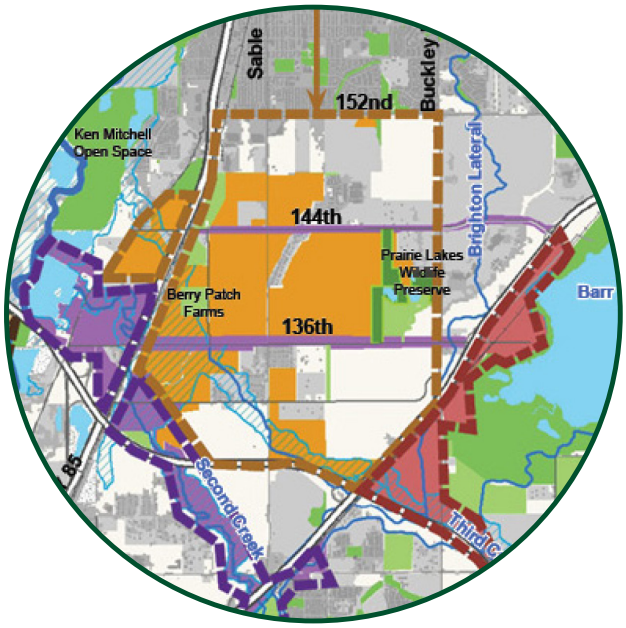
This sketch doesn't represent any particular location in the District, but rather provides an orientation of how development may appear in a desired spatial layout, and illustrates how the area could transition over time; blending boutique and commercial farms with large-lot homes, apartments, commercial development, recreation, and food destinations.

RELATED PLANS

ADAMS COUNTY PARKS, OPEN SPACE & TRAILS MASTER PLAN (2012)

The Adams County Parks, Open Space and Trails Master Plan established the creation of an Agricultural Tourism Study Area south of Brighton with a broad mix of uses intended to support the development of a thriving agricultural production area and destination for agricultural tourism. Public input helped inform and shape plan recommendations.

According to this plan, which was completed at the same time as the Adams County Comprehensive Plan, "The single best place within the Denver Metro region for cultivating, processing and distributing food that is integrated into an urban surrounding is within the County, south of Brighton. The rich agricultural lands, local specialty foods, and easy access from major highways and regional trails make this location ideal for creating a destination for residents and visitors to experience the bountiful products of the land and scenic qualities of the area."

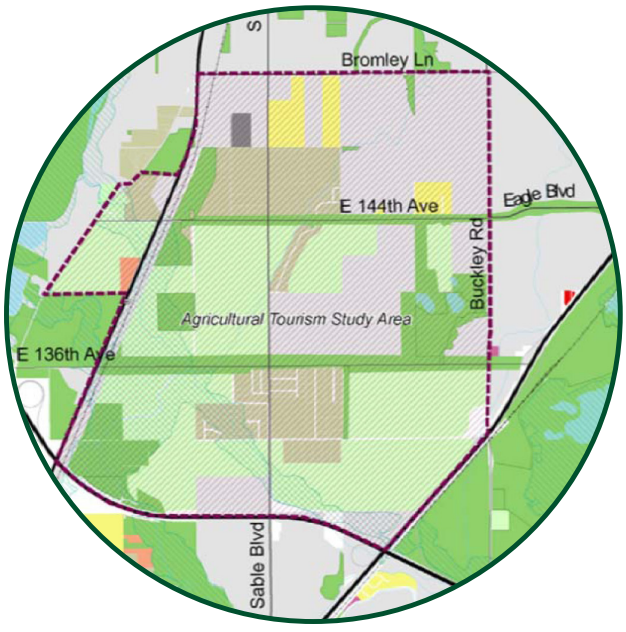


The Adams County Parks, Open Space & Trails Master Plan identified South Brighton as the Denver region's best place to grow, process, and distribute local foods.

IMAGINE ADAMS COUNTY COMPREHENSIVE PLAN (2012)

The Adams County Comprehensive Plan identifies this area as an Agricultural Tourism Study Area and reinforces the concept of local food production and tourism. Such uses are envisioned to include, but would not be limited to: working farms, bed and breakfasts, farm stay and tour operations, farmers markets or farmstands, agricultural processing facilities, and clustered, sustainably designed residential developments that focus on backyard and neighborhood or community farms.

The plan contemplates recent infrastructure development, existing entitlements, and the recommendations of the City of Brighton's South Sub-Area Plan; and envisions a codeveloped and adopted agritourism centered-plan. It also recommended a subarea planning effort in partnership with the City of Brighton and other stakeholders to explore the full range of opportunities that exist within the study area. The District Plan fulfills this intent.

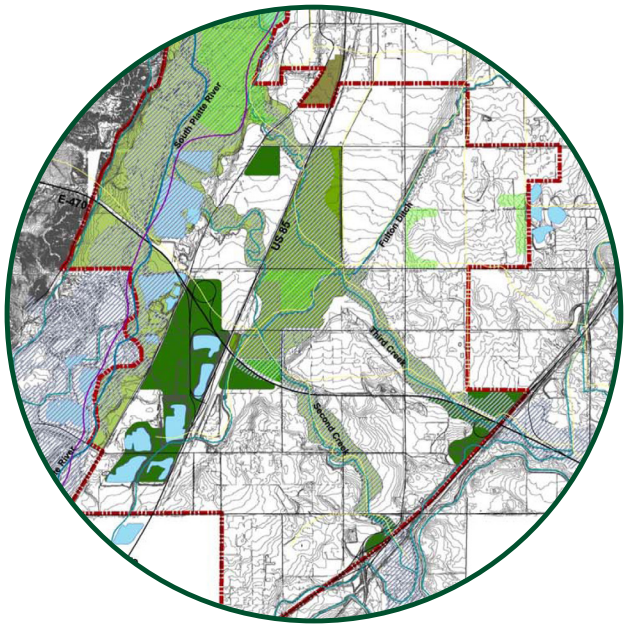


The Adams County Comprehensive Plan reinforced the boundary of an agritourism district that could attract visitors and enhance the local food economy.

BRIGHTON SOUTH SUB-AREA PLAN (2005)

The South Sub-Area Plan was developed as a companion document to Brighton's 1999 Comprehensive Plan. After the construction of E-470, Brighton anticipated significant residential, commercial, and industrial growth southward, and subsequently extended water and sewer lines to the area. Nevertheless, the plan recognized the importance of preserving historically prime agricultural lands in the area, and due to the economic downturn and other trends, this area remains largely agricultural.

The District Plan represents an update of the vision and goals for this subarea. The conservation and development strategies recommended as part of this District Plan will supersede the South Sub-Area Plan and be integrated into the City's comprehensive plan update mentioned below.

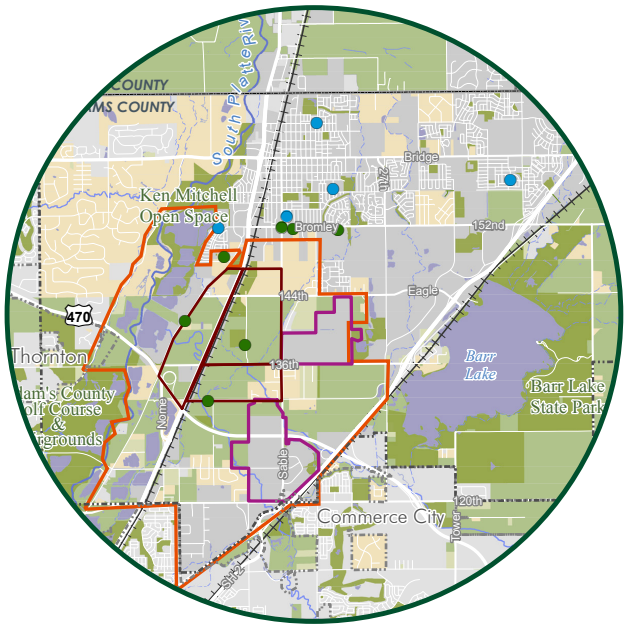


For 10+ years, the South Sub-Area Plan has targeted environmentally sensitive lands in the study area, including the floodplain, for open space and agriculture.

BE BRIGHTON COMPREHENSIVE PLAN & TRANSPORTATION PLAN UPDATES (2016)

Concurrent with the District Plan, the City of Brighton is updating its Comprehensive Plan (originally adopted in 1999 and last amended in 2009) and Transportation Master Plan (originally adopted in 2002). With input from the public and advisory committees, the new Comprehensive Plan will guide the entire City's future growth and development for the next 20 years. These plans are identifying and fulfilling the future vision for Brighton and aligning City policies with current trends and values.

One of four major themes in the Comprehensive Plan update includes "A Future Rooted & Growing in a Shared Heritage & Small Town Feel," focused on maintaining and enhancing the City's agricultural assets. The results of a public survey indicated widespread support for preserving farmland, agritourism, scenic gateways, and cultural resources. In recent years, the Brighton Economic Development Corporation launched a new branding effort, "*It All Grows in Brighton*," which highlights the City's past and future rooted in a rich agricultural history.



Be Brighton Comprehensive Plan analysis confirmed community support for a concentration of agricultural assets in the District Plan study area threatened by encroaching development.

PUBLIC PROCESS + SCHEDULE

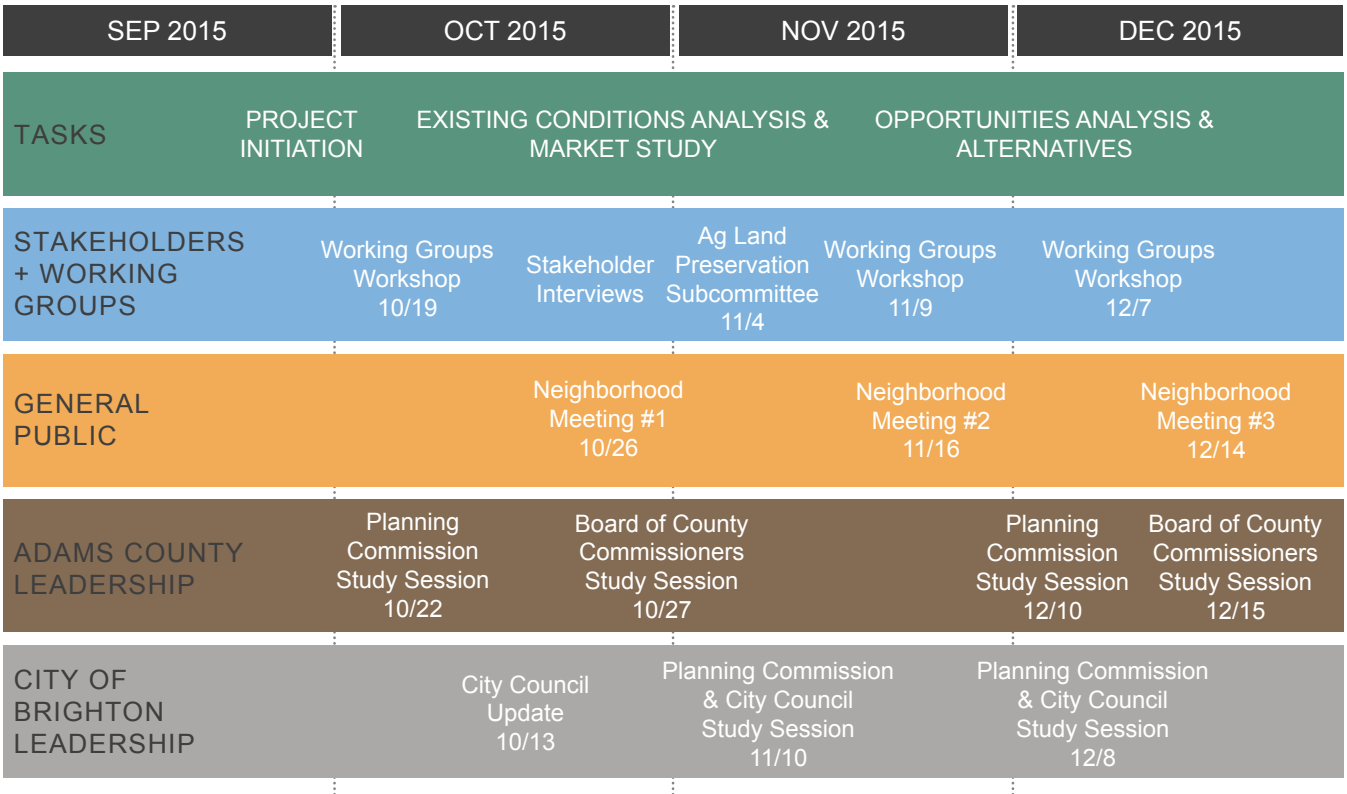
The County and City conducted neighborhood meetings in June and July of 2015 to gain an initial understanding of area issues and opportunities prior to approval of an intergovernmental agreement to fund this plan. Over 250 people attended the June and July meetings. In September, the County and City hired a consultant team that led the plan through an 8-month public outreach and approvals process.

To encourage public participation throughout plan development, the County and City managed a project website, posted five informational videos, mailed 1,600 postcards on two separate occasions, inserted notices into utility bills, ran newspaper ads, and provided Spanish translation.

In October, the consultant team personally interviewed several area stakeholders and held the first of three meetings with working groups, consisting of landowners, farmers, developers, area residents, and County and City staff. These meetings allowed for a thorough vetting of area conditions and interests, provided for one-on-one conversations with those most affected by the plan, and helped shape the dialogue of future neighborhood meetings. The project team also met individually with property owners on three separate occasions throughout the planning process.

County and City staff and their consultants held five neighborhood meetings in five months to present area strengths and weaknesses, a market study about the local food economy, water rights information, and case studies. These meetings allowed concerned citizens to voice their preferences for farmland conservation and various development options. Several hundred people participated over the course of all public meetings.

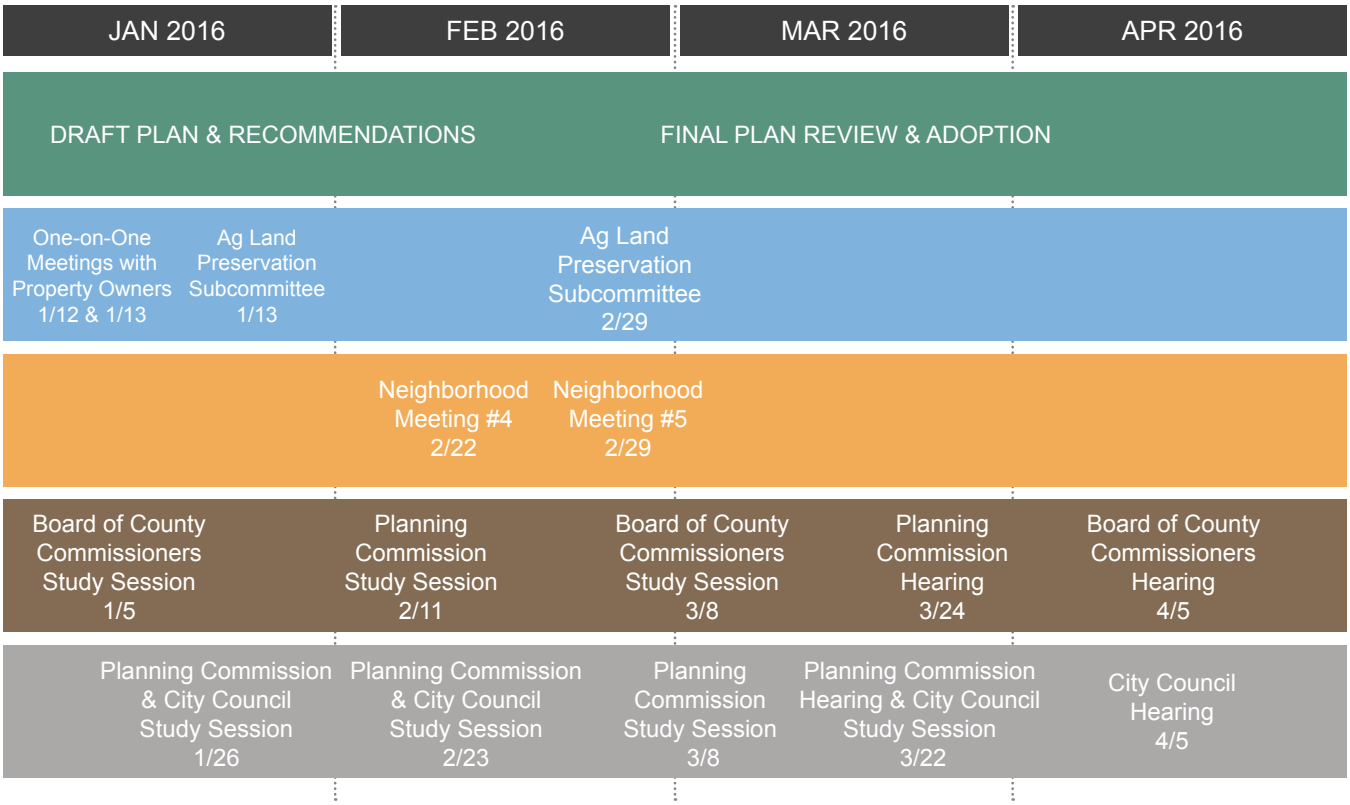
Throughout the process, study sessions with County and City Planning Commissioners, Brighton City Council Members, and the Board of County Commissioners offered additional insight into community values. This plan considers the aspirations of everyone who participated and attempts to balance the livelihoods of all who are affected, by encouraging a thoughtful transition of the area.



SPANISH TRANSLATION & OUTREACH

Development of the District Plan emphasized inclusive outreach and participation, including Spanish-speaking stakeholders and residents. Postcards, meeting posters, and website content were provided in Spanish, and consultant Hispanidad placed 500 fliers and 200 posters in key locations, including churches, schools, community spaces, and businesses. Hispanidad also reached out to established community networks including non-profit advocacy groups. Radio advertisements and interviews were had with Spanish media, and an informational phone line was set up. Dual translation was provided at neighborhood and public hearing meetings, and resident, stakeholders, and referral agencies were asked to comment on the plan in a bilingual letter.

Three workshops with Working Groups allowed area stakeholders and County and City staff to discuss District opportunities and constraints in depth.



PUBLIC INPUT RESULTS

As part of the Be Brighton comprehensive plan update, 95 individuals from Brighton and unincorporated Adams County took a survey to help prioritize future land use opportunities throughout the City's Growth Management Area (see Appendix B). Several questions assessed public support for the proper balance between urban expansion and agricultural uses. The colored circles below summarize the findings from the online survey for those that selected "support" or "strongly support." The word cloud at the bottom of the page summarizes the common words we heard from the public during the District Plan development process. Additional public input that helped to determine plan objectives came from the 2014 Adams County Quality of Life Survey, which identified open space, parks, and trails as high-priority services.

"Open spaces are important to provide for. I really enjoy the farms surrounding us. They are disappearing too fast."

-Adams County Quality of Life Survey Respondent

90% *Support Produce Stands & Agritourism*

85% *Continue to Encourage Prime Farmland Preservation & Retain Major Growers*

79% *Retain Lands East of I-76 as Rural and Recreational*

77% *Activate the Bromley Hishinuma Farm*

84% *Continue to Preserve Historic Resources*

Chapter 2: OPPORTUNITIES + CONSTRAINTS

This chapter highlights the key findings and opportunities from an analysis of the District's business, transportation, agriculture, and land development conditions. This page provides a brief overview of each topic.

Business

Adams County has a diverse economic base with opportunity to expand its agricultural market. Its ideal growing conditions, convenient access to Denver, agrarian landscape, and strong farming culture provides an ideal situation for agritourism.

Transportation

The 2016 Brighton Transportation Master Plan and the Adams County Comprehensive Plan and Transportation Plan recommend future road alignments and improvements to existing roads to enhance connectivity and safety, and accommodate future land development and increased economic activity.

Farming Heritage

The City and County have a rich agricultural history, which is shared in the District Study Area. This farming heritage is integral to the area's identity, and its preservation is valued by many.

Agricultural Assets

There are several obstacles to maintaining farming, including rising land prices. Yet there are many opportunities to support crop production and processing, including attracting secondary industries and sharing equipment.

Water Rights

The Burlington and Fulton ditches convey water rights to the study area, and the amount distributed is sufficient to maintain farming in the long term or support development. These rights add considerable value to area properties.

Land Use and Development

County lands currently contain agricultural uses and clustered or larger lot residential development, while City lands include a variety of residential and commercial development. Chapter 3 provides a future land use plan that recommends a mix of uses that integrate agriculture, such as breweries, cottage industries, farm-to-table restaurants, and bed-and-breakfast inns.

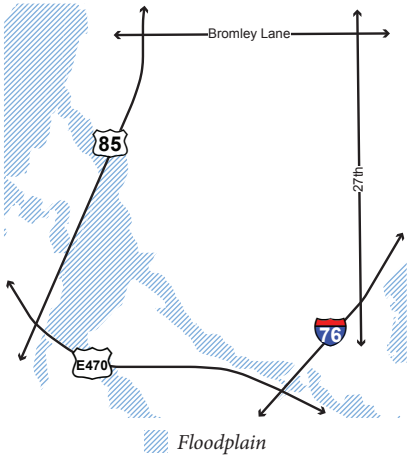
Farming, Food and Economic Development Opportunities

While there has been a trend of losing ground to market forces, there exists a great opportunity to shift towards innovative practices and technology, and to leverage diverse agricultural systems to reverse this trend. Farmland protection and local food system support are the building blocks for this success.

EXISTING KEY INFLUENCES

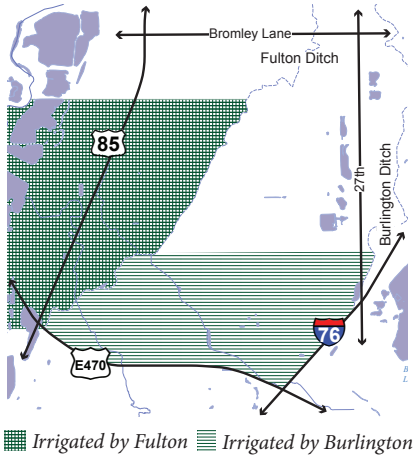
The diagrams on these two pages provide an overview of some of the key factors influencing development in the District study area, including the presence of floodplains and prime agricultural land, a constrained transportation network, existing and emerging commercial centers, the distribution of City vs. County land, and the impact of farm views upon the area's identity.

Floodplains



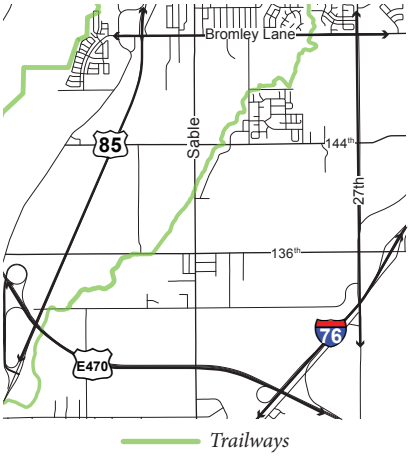
Fifteen percent of the study area is within the regulatory 100 year floodplain, which severely constrains land development yet helps maintain agricultural operations and wildlife habitat. Directing development away from the floodplain is a priority for the County and City to safeguard public health and safety, and it is typically the last area to experience development pressures.

Prime Irrigated Land



Lands irrigated by the Burlington and Fulton ditches are some of the oldest, most productive farms in Colorado. Prime, irrigated agricultural land is a finite and irreplaceable resource. According to the 2012 Adams County Open Space Plan, over 90% of County residents support conserving prime farmlands. Preservation is also supported by the Adams County Quality of Life Survey, last conducted in 2014.

Transportation System

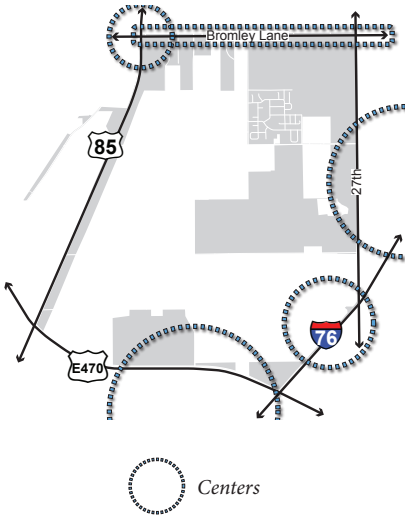


Rural roadways (especially 136th, 144th, and Sable) are experiencing higher traffic volumes due to regional traffic originating outside of the study area. All of the arterial and collector roads are planned for upgrades in Brighton's 2016 Transportation Plan if development occurs, as is a future trail envisioned along the Fulton Ditch, Brighton Lateral, and 2nd and 3rd Creeks.

Burlington Ditch

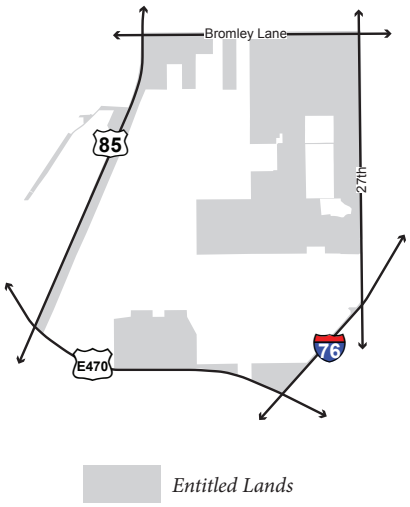
Local Road in District

Retail and Employment Centers



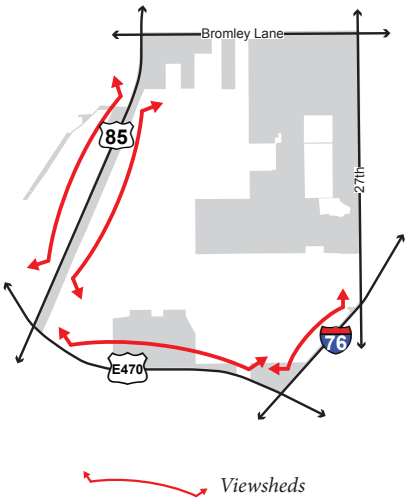
South Main Redevelopment Area, Bromley Lane, Prairie Center, and Adams Crossing are all emerging retail centers. A new urban center is anticipated by Brighton and DRCOG at 136th Avenue and I-76. Urban centers are intended to have higher densities and a finer mix of uses than surrounding areas, and are pedestrian- and bicycle-friendly and well served by transit.

Honoring Existing Commitments



Approximately forty percent of the study area lies within the City limits and has been zoned for a mix of uses (shown in grey above). Much of this land within the City remains undeveloped and is likely to attract growth before unincorporated County lands. Appropriate transitions and compatibility between urban and rural areas are key to public acceptance of new growth.

Viewsheds and Identity



Every southern gateway into Brighton passes through cultivated fields, giving credence to its nickname, "the green mile." From US 85, E-470, and I-76, views of wide open spaces are typical, with crops in the foreground, the South Platte River corridor and mountains to the west, and Barr Lake to the east. Brighton's identity has been shaped by its surrounding agricultural lands since its founding in 1881.

Prairie Center Signage

Undeveloped Land in Brighton

Field of Cabbage

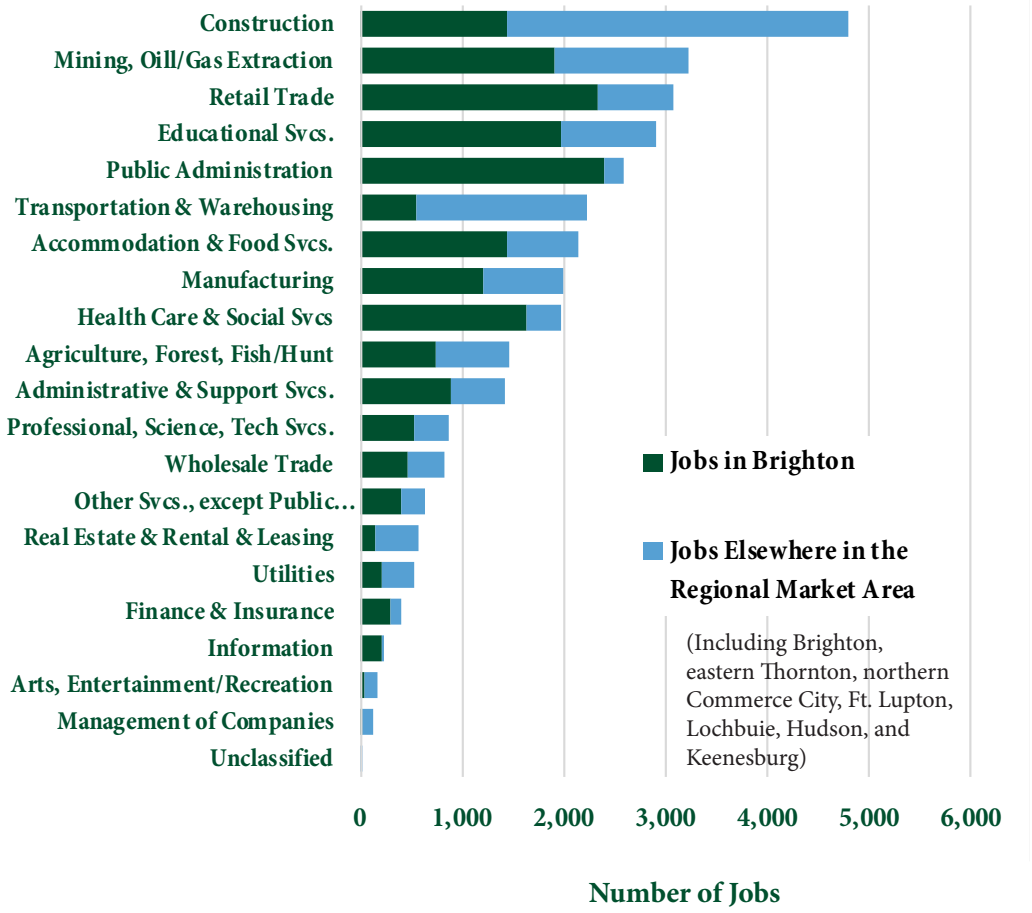
BUSINESS

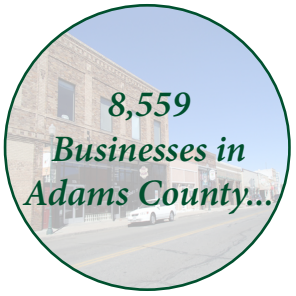
Adams County contains a variety of communities that range from urban to rural. In between sits Brighton, a hardworking community with a small-town feel, whose history is closely tied to food and farming. Surrounding Brighton, Adams County houses 841 farms comprised of some of the best farmland in Colorado. With deep agricultural roots, commitment to land stewardship, and an attitude of self-reliance that has persisted for generations, the County's residents are passionate about protecting their rural landscape. At the same time, there is strong value in private property rights and using land for productive purposes. Adams County residents are committed to being involved in shaping decisions about the future of their county. The rural Great Plains landscape sets this area apart from other metro suburbs, and offers an excellent opportunity for future economic growth in light of the movement towards local, healthy and organic food, the area's proximity to Denver, and convenient freeway access. Adams County has the ability to serve as a destination for those who want to enjoy visiting a productive, rural landscape and savor its unique foods and culture.

From 1969 to 2013, the population in Adams County increased 150%, while personal income rose 300%, suggesting that income gains far outstripped population change. County residents receive a total of $16.6 billion dollars of income per year. In the regional market area, including Brighton, eastern Thornton, northern Commerce City, Ft. Lupton, Lochbuie, Hudson, and Keenesburg, the construction sector is the largest source of jobs. Key findings from a market study (Appendix A, Farming, Food, and Markets in Adams County) follow.

Top Employment Centers in the Brighton Market Area

Source: ESRI and Leland Consulting Group; Note: this data does not include farms or farm owners





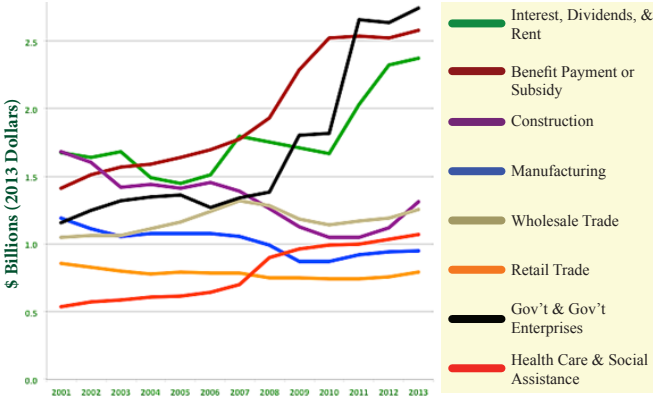
KEY FINDINGS

- Adams County's population is projected to increase 1% to 1.9% per year from 2015 to 2040, according to the Bureau of Economic Analysis. The population would grow to 691,000 by 2040, 1.5 times the current level.
- Brighton is estimated to capture 2,700 single-family units, 760 townhomes and condos, and 1,900 rental units over the next 10 years. This would require between 570 and 859 acres of land; however, Brighton has already entitled enough residential land to accommodate projected growth for the next 20-30 years.
- Brighton will require from 290 to 362 acres of land to meet commercial and industrial demand over the next 10 years; however the City already has enough land capacity to accommodate 60 to 80 years of commercial and industrial development.
- Manufacturing income has been declining steadily.
- Over the past 25 years, farmers have spent more producing crops and livestock than they earned by selling them for all but three years.
- County farmers earned $38 million less selling ornamentals and nursery crops in 2012 than they had earned in 2007.
- 61% of the County's farms reported a net loss in 2012, slightly above the Colorado average.
- At least 14% of the county's employees (19,000+) are involved in the food trade. Adams County hosts at least 991 firms involved in the food trade.
- The county has 841 farms, and farmers sell an average of $145 million of crops and livestock each year.
- County residents purchase $1.3 billion of food each year. If every resident purchased $5 of food each week from a local Adams County farm, farmers would earn $122 million over a year-almost as much as they earn now selling all crops and livestock.

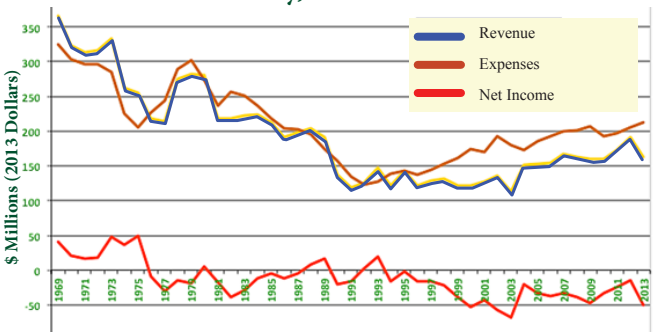
OPPORTUNITIES

- Residents at community meetings have expressed interest in creating a regional destination around the County's heritage of food and farming. Coupled with its proximity to Denver and excellent freeway access, Adams County can serve as a destination for those who want to enjoy visiting a productive landscape and savor its unique foods and culture. Community meetings have expressed strong desire for more fresh, local food choices and organic products.
- Adapt to a changing food culture and agriculture system. Encourage farms and markets of varying scales, including agriburbia-type developments, farm co-ops, farmers markets, and community supported agriculture.
- Housing can be integrated with agriculture. Developers in several states have integrated productive farms into new housing developments.
- Expand value-added processing. Existing and new food businesses can capture more of the value of high-quality foods.
- Create supportive infrastructure that creates new local efficiencies and fosters local food trade.

Main Sources of Personal Income for Adams County Residents, 2001 - 2013



Net Cash Income for Farmers (adjusted) in Adams County, 1969 - 2013



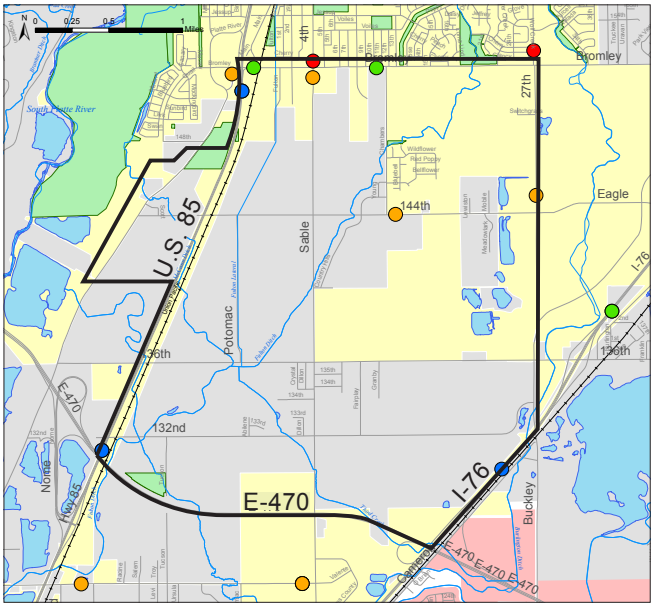
TRANSPORTATION

Some key factors that affect traffic movement throughout the District are as follows:

- The District has excellent regional access, bordering US 85, I-76, E-470, Union Pacific railroad, and Burlington Northern Santa Fe railroad; in proximity to Highway 7, Denver, Boulder, and Greeley; and only 15 miles from DIA.
- The local transportation network represents a rural pattern with east-west roads spaced 0.5 to 1 mile apart. These roads are typically two lanes without shoulders, which means cars frequently get stuck behind slow moving farm equipment. Although these roads have relatively low traffic volumes, a lack of sidewalks and trails makes them unsafe for walking or biking.
- Bromley is a major four-lane road located along the District's northern boundary at the southern edge of original Brighton. Traffic volumes on Bromley are forecast to increase to between 15,001 and 32,000 vehicles per day by 2040. The intersection of Bromley and US 85 is a key gateway to the District from the northwest.
- Sable is the only continuous north-south road in the District's interior and 27th Ave. runs along the eastern edge. Both of these roads are two lanes without shoulders, but 27th Ave. includes a turn lane and a sidewalk on the east side. Sable and 27th Ave. have relatively high traffic volumes, which are forecast above 15,000 vehicles per day in 2040. The intersection of Sable and 136th Ave. is already congested during rush hour and needs to be improved.
- A trail system supplements the road network, and includes the South Platte River Trail that is currently being linked to Denver. A map of existing and future trails is on page 78.
- Future road improvements could include widening roads to increase vehicular capacity and adding shoulders and bike lanes to create complete streets that would better accommodate cyclists as well as tractors.
- CDOT is conducting a Planning and Environmental Linkage study of US 85 to identify safety and operational needs and determine its short-term and long-term transportation priorities. This could include closing intersections or limiting access to US 85 from study area roads. See https://www.codot.gov/projects/us85pel
- Multimodal facilities and services near the area may expand. A park-n-ride for bus rapid transit exists Downtown and could see increased service. Future transit demand will likely be accommodated by express buses until ridership and funding levels can support commuter rail, which could potentially use the UPRR railroad right-of-way along US 85.
- This year, CDOT and Boulder County are starting a Bus Rapid Transit Study for State Highway 7 between Boulder and Brighton to identify possible multimodal improvements to reduce congestion and enhance safety along the corridor. See http://www.bouldercounty.org/roads/transit/pages/sh7brtstudy.aspx

2013-2014 Average Daily Traffic (i.e. Vehicles Per Day)

Source: DRCOG

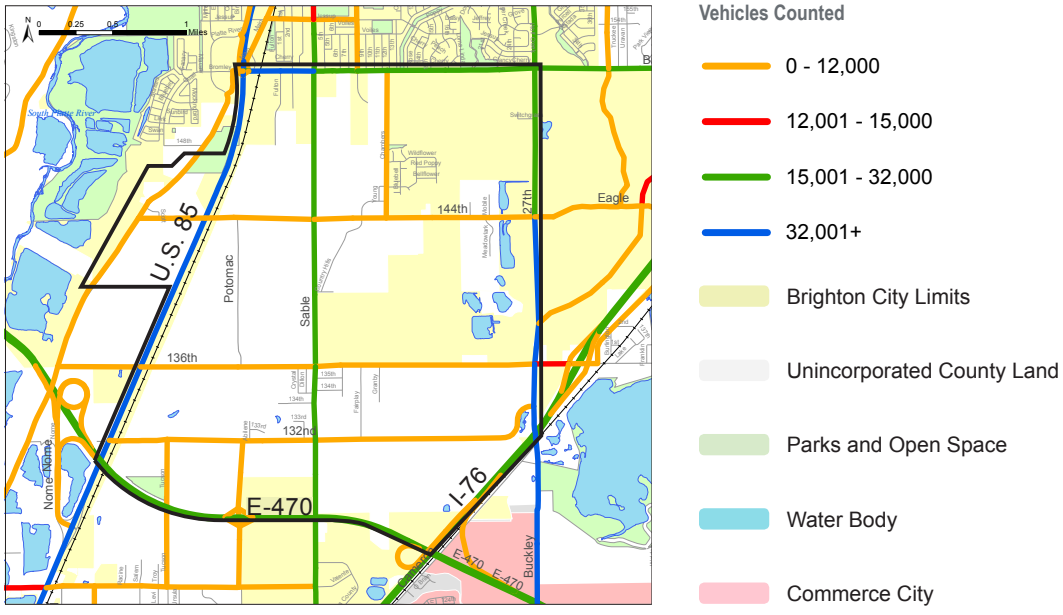


Brighton's 2016 Transportation Master Plan, informed by Adams County's Transportation Plan, proposes where future roads will be located and which existing roads need to be upgraded to improve connectivity, mobility, and safety, while providing a sustainable foundation for future land development and increased economic activity. See Chapter 3 for transportation recommendations.

In the District, it is common for tractors to share the road with other vehicles, often creating traffic conflicts. These conflicts are addressed in later sections of this Plan along with recommendations for potential solutions.

DRCOG Focus Model (2014 cycle) 2040 Average Daily Traffic Volumes

Source: DRCOG



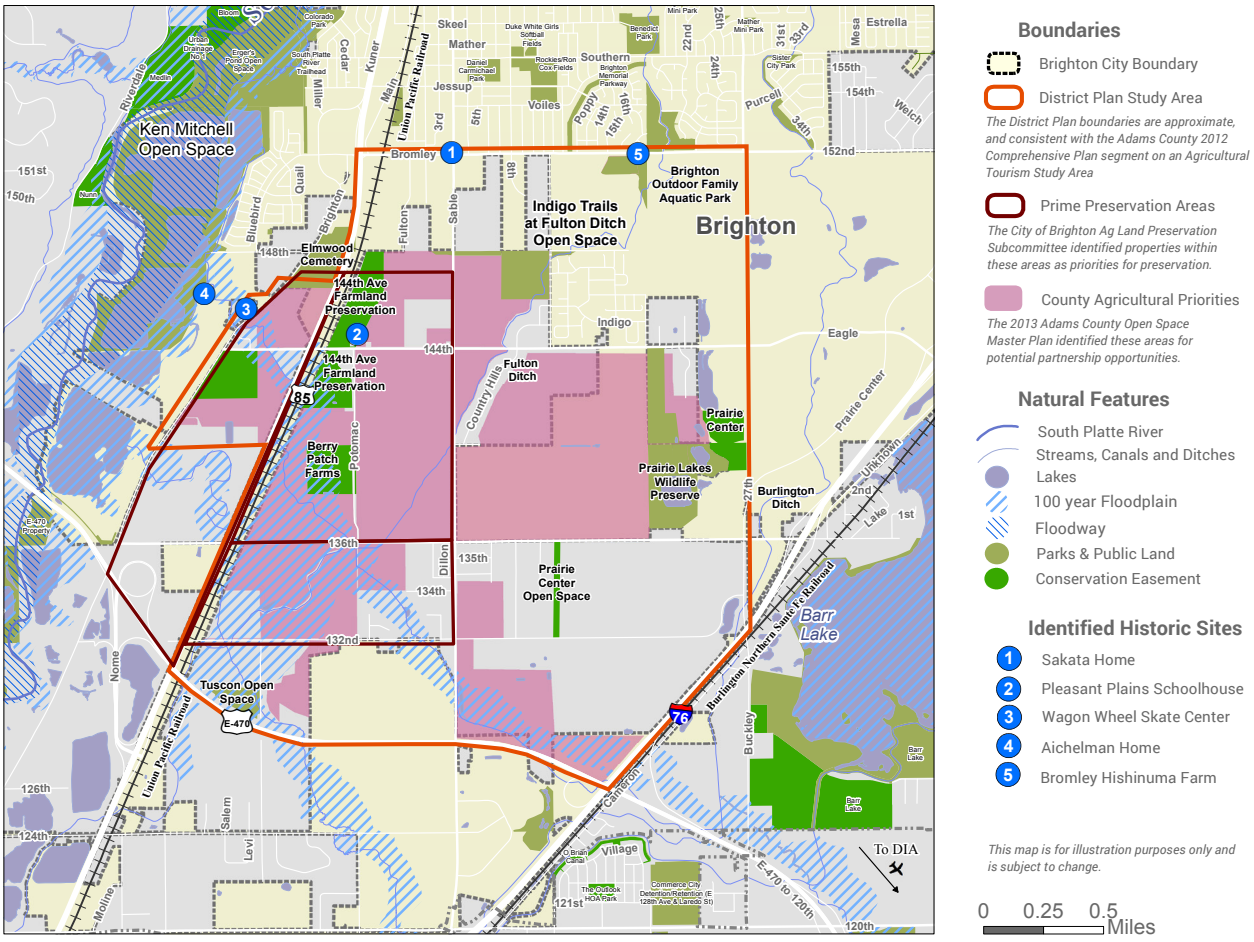
FARMING HERITAGE

Adams County has long been an agriculturally based community. The soils in Adams County are among the best in Colorado for agriculture. In the last decade, the century-old farming heritage in the District has experienced dramatic shifts and changes due to market trends and land development.

The area's history of farming is evidenced by the number of historic sites related to farming throughout the City of Brighton. For several years, Brighton's Agricultural Land Preservation Subcommittee, comprised of farmers and citizens, has helped identify issues and prioritize opportunities related to preserving, growing, and marketing the area's agricultural assets. In 2015, the City began an historic and architectural survey of the most important agricultural properties in and around the District study area, and survey findings will be completed in the fall of 2016. Designation of historic sites is determined based on age and associations with significant people, places, and events. By applying tools such as historic preservation tax credits, conservation easements, open space grants, Transfer of Development Rights (TDR), and resources available through land trusts and non-profits such as The Conservation Fund, some of this farming heritage can be voluntarily retained in partnership with willing land owners.

The intent of historical and agricultural preservation is to help willing owners or operators remain in business through voluntary and incentive-based methods.

Farming Heritage Map



Boundaries

- Brighton City Boundary
- District Plan Study Area

The District Plan boundaries are approximate, and consistent with the Adams County 2012 Comprehensive Plan segment on an Agricultural Tourism Study Area

- Prime Preservation Areas

The City of Brighton Ag Land Preservation Subcommittee identified properties within these areas as priorities for preservation.

- County Agricultural Priorities

The 2013 Adams County Open Space Master Plan identified these areas for potential partnership opportunities.

Natural Features

- South Platte River
- Streams, Canals and Ditches
- Lakes
- 100 year Floodplain
- Floodway
- Parks & Public Land
- Conservation Easement

Identified Historic Sites

1. Sakata Home
2. Pleasant Plains Schoolhouse
3. Wagon Wheel Skate Center
4. Aichelman Home
5. Bromley Hishinuma Farm

This map is for illustration purposes only and is subject to change.

0 0.25 0.5 Miles

KEY FINDINGS

- Agricultural land supplies products with considerable market value and enormous cultural importance.
- More cost-effective methods of preserving prime agricultural lands need to be identified.
- Farmland offers environmental benefits, including wildlife habitat and the potential for groundwater recharge.
- 92% of residents agree that working farms and ranches should be preserved in Adams County (2013 Adams County Open Space Master Plan).
- Respondents felt that allocating open space funds to preserve working farms and ranches was just as important as purchasing land for trails, recreation, or wildlife protection (2013 Adams County Open Space Master Plan). This sentiment was also echoed in the Adams County Quality of Life Survey.
- The loss of farms means a loss of economic diversity, local food security, less stormwater infiltration, as well as changes to the rural character and scenic views and community identity.

OPPORTUNITIES

- Promote our existing farms alongside key historical sites.
- Transform key historical sites into spaces that can be enjoyed as event or educational centers, as well as promoting access to a large variety of local produce. Establish the Bromley Hishinuma Farm as a living farm with events and training.
- Develop a museum that celebrates the District's rich agricultural history.
- Create an agricultural district that would be unique to Adams County and Brighton.
- Continue to develop partnerships with agencies that can help fund agricultural land preservation and promote agritourism to sustain their area's heritage.
- Raise funds from external sources to leverage City and County investments.
- Partner with CSU and other universities to promote innovative, agricultural research and development, as well as the cultivation of heritage crops and seeds.
- Use sales tax in addition to grants to execute land acquisition and reduce overall costs.

Existing Conserved Properties within the District Study Area (see map on previous page)

NAME	OWNER	USE	TYPE	PUBLIC ACCESS	ACRES
144th Ave Farmland Preservation	City of Brighton	Agriculture	Farmland	No	76
Berry Patch Farms	Tim and Claudia Ferrell	Conservation Easement	Farmland	No	39
Prairie Center	The Prairie Center Development LLC	Undeveloped	Neighborhood	No	32
Prairie Center Open Space	The Prairie Center Development LLC	Greenway	Greenway	No	10

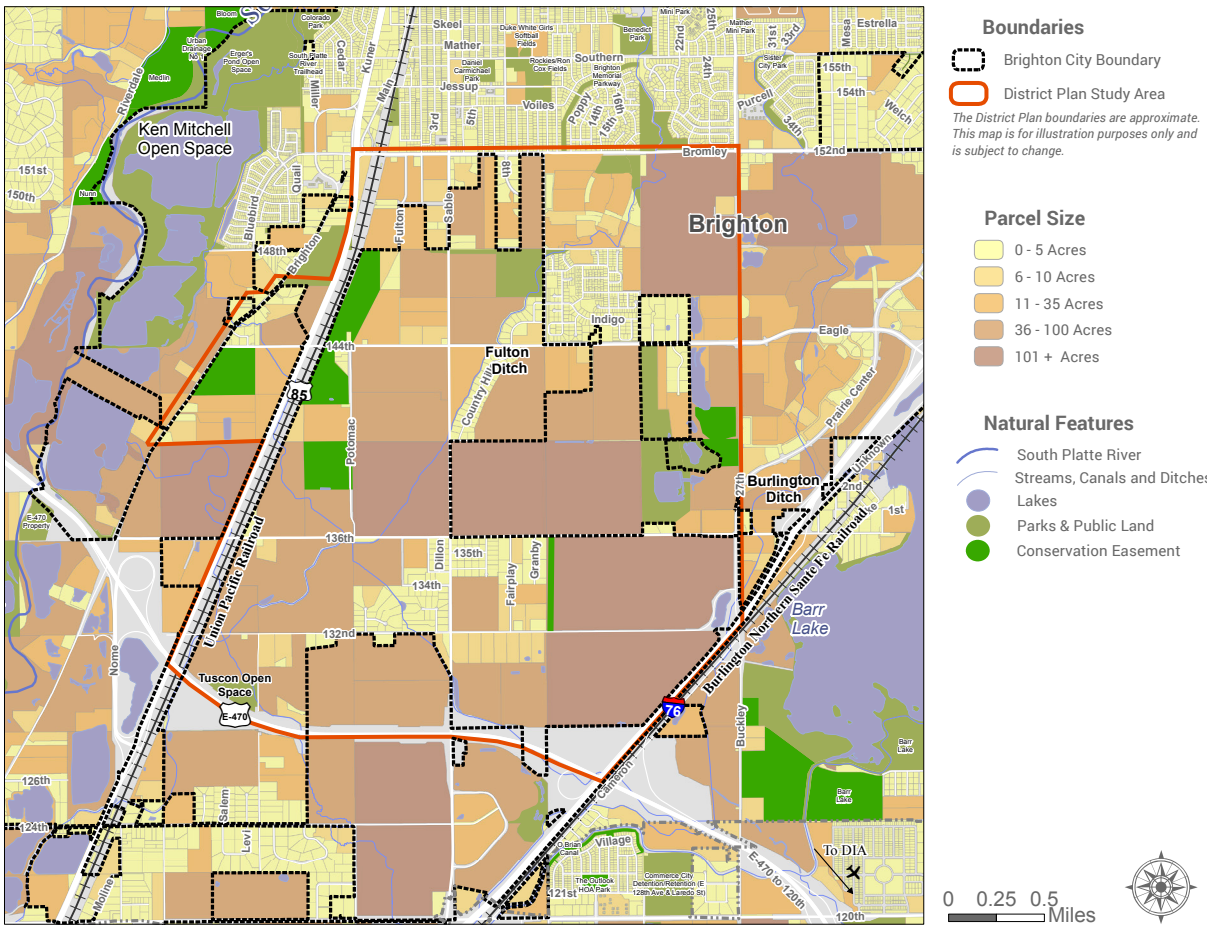
Farmers have expressed the concern that they are never certain whether or not their neighbors will be rezoned for development that will render farming difficult if not impossible. Such unpredictability can persuade some farmers that land conversion is inevitable, and that farming and rural life in general are doomed in their area thereby deferring stewardship and foregoing agricultural investments. Avoiding further fragmentation of the farmland and sustaining farm-supporting businesses (such as feed and equipment dealers, veterinarians and other agricultural services) is essential for sustaining farming operations.

AGRICULTURAL ASSETS

Adams County is one of the leaders in Front Range agriculture production. The Local District area contains some of the oldest, most productive farms in Colorado, with row crops, vegetables, grains, oilseeds, dry beans, dry peas and wheat grown in large quantities. But these lands are at risk. As Brighton, Commerce City, and Thornton continue to grow, along with rural residential uses in the County, their expansion encroaches on agricultural operations. Tension between agricultural and non-agricultural uses is occurring because of restrictions on normal farming practices and increased traffic when residential and commercial uses encroach on agricultural areas. Further, as farmers retire or as urban development creeps nearer, many are selling their properties to developers, with homes and businesses rapidly replacing fertile soil.

Both Adams County and the City of Brighton have identified the need to both accommodate our growing population and to preserve our agricultural lands. The 2005 South Sub Area Plan laid the foundation to accomplish the mutual goals of urban development and prime farmland preservation along the US 85 corridor. The Adams County 2012 Comprehensive Plan and 2012 Parks & Open Space plans from both the County and City have further identified prime agricultural lands and the need to retain this asset. The County and City are working with willing land owners to identify ways to preserve agricultural land and ensure local food production remains a viable part of our character and economy.

Parcel Size Map

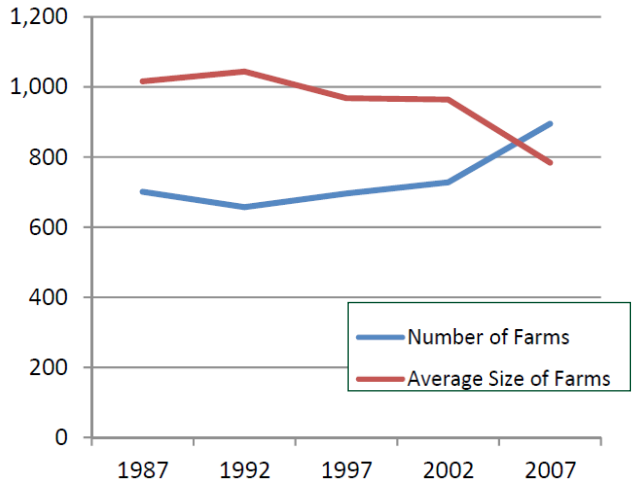


KEY FINDINGS

- Many farmers would like to sell their land and water. Some water rights have already been removed from the land.
- Agriculture is most viable when a number of operations are adjacent to one another with limited interruption by development.
- The majority of agricultural land is outside of city limits but within Brighton's future Growth Management Area.
- City and County zoning can be enhanced to support cottage industries or agritourism.
- Prime, irrigated agricultural land is a finite and irreplaceable natural resource.
- As land prices in Adams County rise, many farmers are making a transition to more profitable crop production, such as vegetable farming.
- In terms of the cost of public services, farms are a net positive – they pay more in taxes than for the community services they require. For every dollar the government makes, it costs $0.35 to service working and open land compared to $1.16 to service residential land.
- The area's climate and water availability limit the growing season and the types of crops that can be grown in the area, which may reduce crop diversity and profitability.
- Many markets described in this plan favor local food districts. While much of the present agricultural operations in this area are large-scale vegetable operations that serve national markets, smaller-scale, localized cultivation and distribution operations present economic and environmentally sustainable opportunities.

Number of Farms and Farm Size in Adams County

Source: USDA Census of Agriculture, 2012 Adams County Open Space, Parks, and Trails Master Plan



OPPORTUNITIES

- Attract secondary industries such as processing and distribution, restaurants, breweries, distilleries, bed and breakfasts, culinary education, and clustered residential or mixed use buildings along major arterials and intersections.
- Encourage smaller farms to share equipment to reduce costs.
- Encourage hydroponic crop production (growing plants in water without soil) and greenhouses to extend the growing season.
- Encourage farm to school sales.
- Consider 'controlled designation of origin' for products like hops to protect the geographic identity of certain varieties.
- Expanding SNAP eligibility for local produce helps to expand the market and provide healthy options to low-income residents.
- Local food production helps reduce the miles food travels from farm to market.

PRIME FARMLAND

A USDA designation for land that has the best combination of physical, chemical and biological characteristics for producing food, feed, and fiber, and oilseed crops. Prime Farmland areas have the soil quality, moisture supply, and growing season to economically produce sustained high yields of crops when those lands are treated and managed, including water management, according to acceptable farming methods.

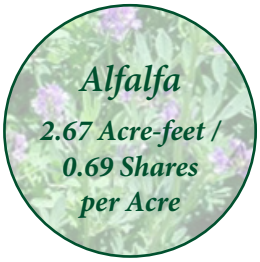
WATER RIGHTS

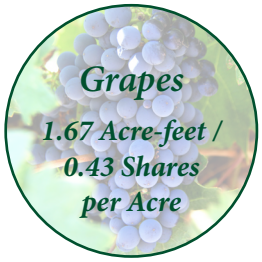
Water rights convey the right to use a particular amount of water. In Colorado, water is allocated based on a priority system whereby senior water rights holders get water before those with junior rights. The source of these water rights could be from rivers and streams, reservoirs, transmountain waters, or wells. The water is typically conveyed to a property via a ditch or pipeline. Water rights are often associated with the property where they're applied, but water rights are real property independent of the land and they can be sold separately. However, land that is sold with water rights is much more valuable and easier to develop as the state requires developers proposing to subdivide land to provide adequate evidence that a sufficient water supply is available. The City and County require developers to provide adequate water for development. The City of Brighton assesses impact fees on all new development, including water plant investment and water resource fees, and the fees are significantly higher without water rights. For example, a 3/4" water meter currently costs $9,790 for a single-family home if water rights are donated by the developer and $18,633 without water rights.

The amount and value of water rights, measured by shares, was researched for large parcels within the District (see Appendix C). The majority of these parcels are zoned agricultural and have historically been irrigated or are currently irrigated as shown on the Water Rights Map. Most properties shown with "0" water rights have been dried up or are used for dry land farming. All of the parcels are served by one of two ditch companies: the Burlington Ditch, Reservoir and Land Company and the Fulton Irrigating Ditch Company. The Burlington generally serves farms within the east portion of the study area, while the Fulton serves farms in the west portion. Both ditches have fairly senior water rights in the South Platte River Basin, but the Fulton has more senior rights and is more reliable in dry years.

Where relevant data are available, water rights values are typically estimated based upon comparable sales of shares in the subject ditches, or nearby ditches. Because the Fulton and Burlington have been the subject of numerous share sales and changes of uses, there were recent comparable sales transactions available for estimation of value.

The number of shares associated with study area farms is shown on the map on the next page, with the Fulton Ditch providing 93% of the shares. Each year these shares yield different amounts of water. Historically, on average, the Fulton Ditch delivers approximately 3.76 acre-feet per share on an annual basis, compared to the Burlington's approximate 4.00 acre-feet per share. Both ditches experience ditch loss due to seepage, direct evaporation from the water surface in the ditch, and evapotranspiration from ditch bank vegetation. The Fulton Ditch normally provides sufficient water supply to farms under the system, and any irrigation well use is generally a supplemental backup supply to the primary supply provided by the ditch. The same is generally true of farms irrigated by the Burlington Ditch. While there is enough water in the District Area for farming and development, greater conservation is needed long term. The 2015 Colorado Water Plan outlines actions the Colorado Water Conservation Board will take to help support Colorado's agricultural industry to make it more efficient, resilient, and capable of reducing water consumption without affecting agricultural productivity. By working in tandem with these initiatives and establishing policies around irrigation efficiencies including soil health and rehabilitation of ditches, these efforts will help in addressing Colorado's future water supply gap and provide evidence of the long term commitment to sustainability.





KEY FINDINGS

- Water impact fees are significantly higher for development without water rights.
- The amount of water rights is adequate to continue crop production long term for most properties served by the Fulton Ditch.
- Fulton Ditch shares are currently valued in the range of $15,000 - $20,000 per share; Burlington shares are currently valued in the low $20,000's. Translated into a price per volume of water diverted, the Fulton is approximately $4,670 per acre-foot. Burlington's value at the headgate is approximately $5,000 per acre-foot. This means that water can be more valuable than the land itself.
- The South Adams County Water and Sanitation District, which provides water and sewer service adjoining the study area on the south, does not intend to provide municipal service to District farms in the future.
- Water rights or a portion of a property's water rights can be sold independent of the land. Water rights from one property can also be used by or leased to another property within the same ditch company. However, water cannot be redirected to municipal uses without readjudicating water rights from the original property through the water courts.

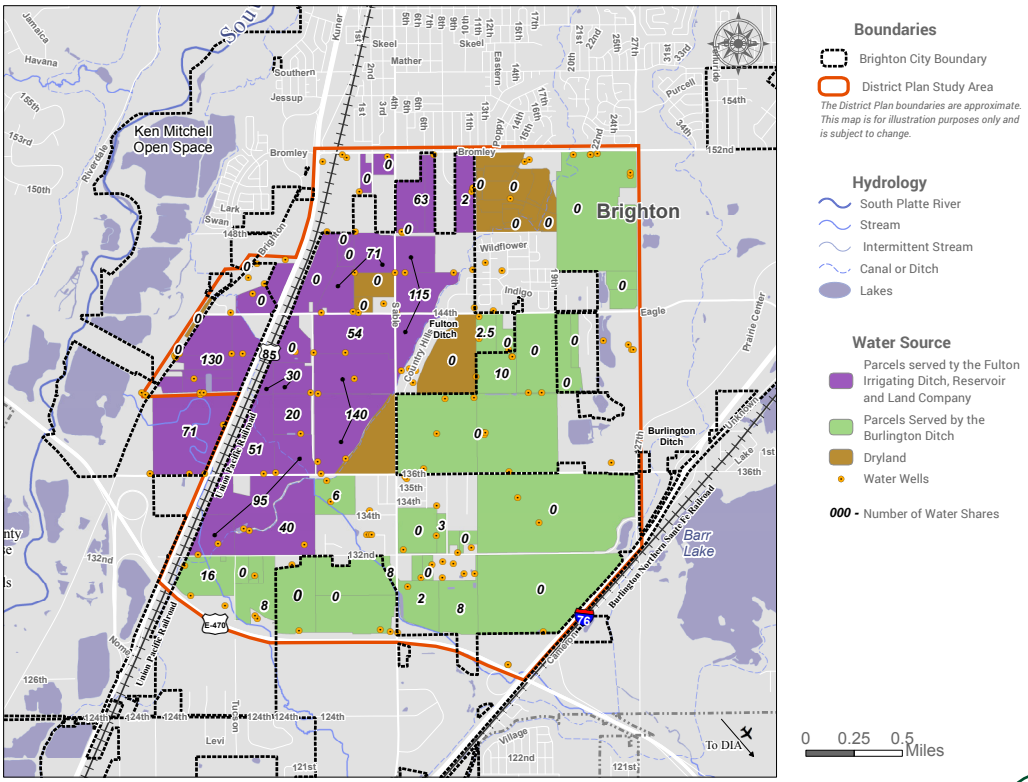
OPPORTUNITIES

- Continue to require developers to prove they have sufficient water for future residential, commercial, agricultural, and industrial development.
- Encourage landowners to utilize their water rights until they're ready to sell their land to maintain the value of the property and ensure future development flexibility.
- Purchase or lease water rights for municipal or agricultural use from owners interested in selling.
- Purchasing water rights in tandem with open space purchases. "Tie water to the land" through conservation easements so that it remains in use for agriculture.
- Continue to ensure impact fees for new development are sufficient to cover the cost of supply and treatment of water.
- Encourage water conservation.
- Complete the ongoing City of Brighton Water Master Plan. The master plan is assessing City water supply, future demand, and augmentation needs to estimate the total water rights needed to accommodate future growth. The plan is scheduled for completion in early 2017.

Acre-foot = the volume of water equivalent to covering one acre of land to a depth of one foot, equal to 43,560 cubic feet or 325,851 gallons. Crops have varying water requirements, with a few illustrated at left.

A typical household uses 0.30 acre-feet annually, according to the Colorado Division of Water Resources.

Water Rights Map

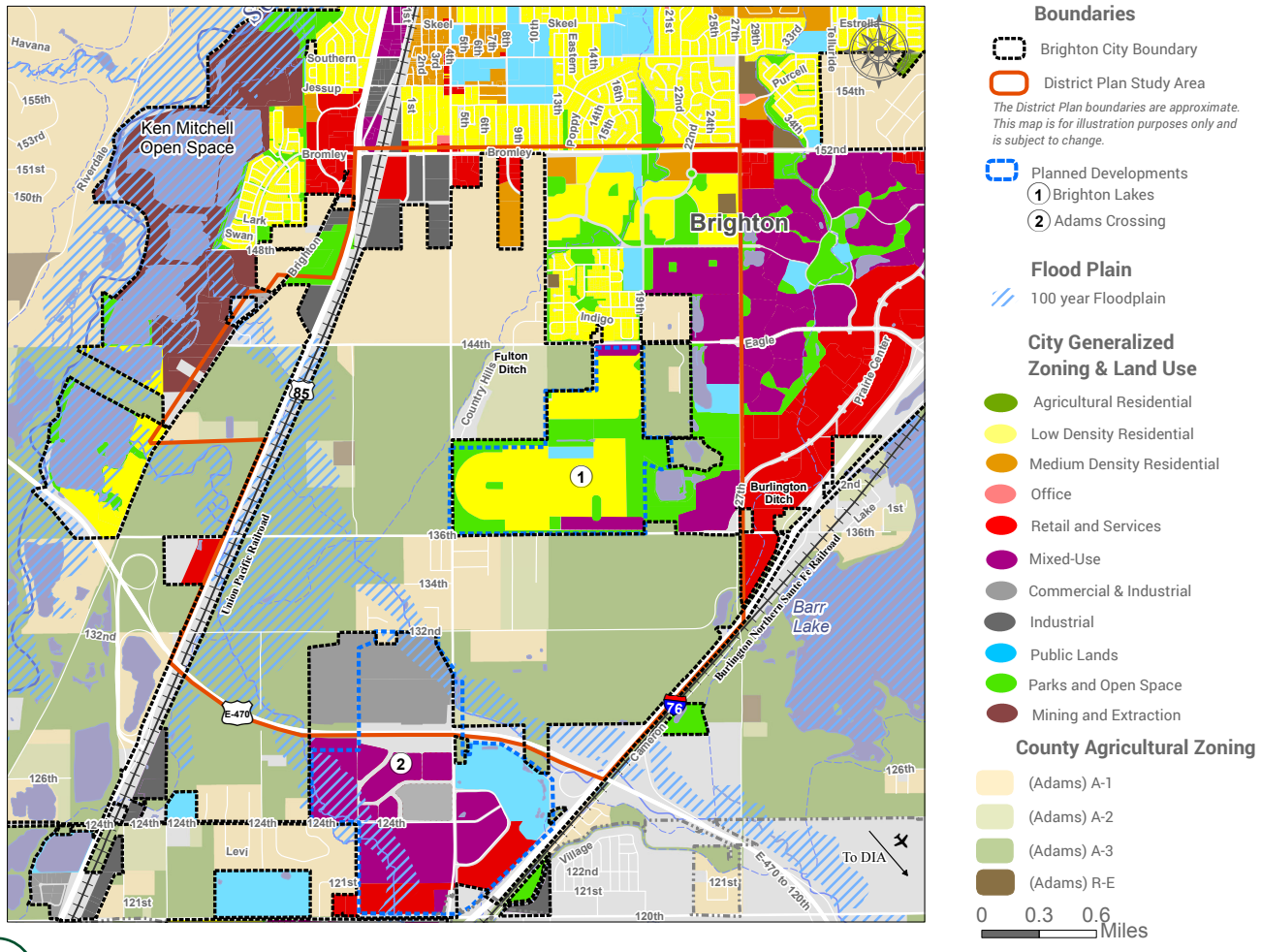


LAND USE AND DEVELOPMENT

Zoning, which regulates allowed uses and development standards by parcel, and future land use plans, which illustrate desired development patterns city- and county-wide over the long term, influence how the District will develop.

- Sixty percent of the land in the study area is within the County and is used for agricultural production, small-scale animal husbandry, and large-lot residences.
- The majority of land in Adams County is zoned Agricultural-3, which allows farming and ranching on lots greater than 35 acres. Land zoned Agricultural-2 permits farming and limited ranching on lots at least 10 acres in size, while Agricultural-1 provides for rural single-family dwellings and limited farming on lots at least 2.5 acres in size. There is also one small area zoned Residential Estate that allows for 1 house/acre.
- In Brighton, land is zoned and planned for a variety of uses, including low and medium density residential, retail and services, industrial, public, parks and open space, and mixed-use development. The majority of the land is already entitled, meaning it's zoned, platted, and approved for development.
- There are two planned developments in the study area including Adams Crossing and Brighton Lakes. Adams Crossing contains 780 acres with up to 2,500 multi-family and 750 single-family homes at a range of prices oriented in an agriburbian style development with small-scale farming, a CSU extension center, a commercial kitchen, the Adams County Government Center, and more. Brighton Lakes is a 450-acre community with housing and limited commercial uses.
- Brighton is currently updating its Comprehensive Plan, titled Be Brighton, which will guide growth in the City for the next 10-20 years. The recommendations of the District Plan will be incorporated into the City's and County's comprehensive plans.

Generalized Zoning Map



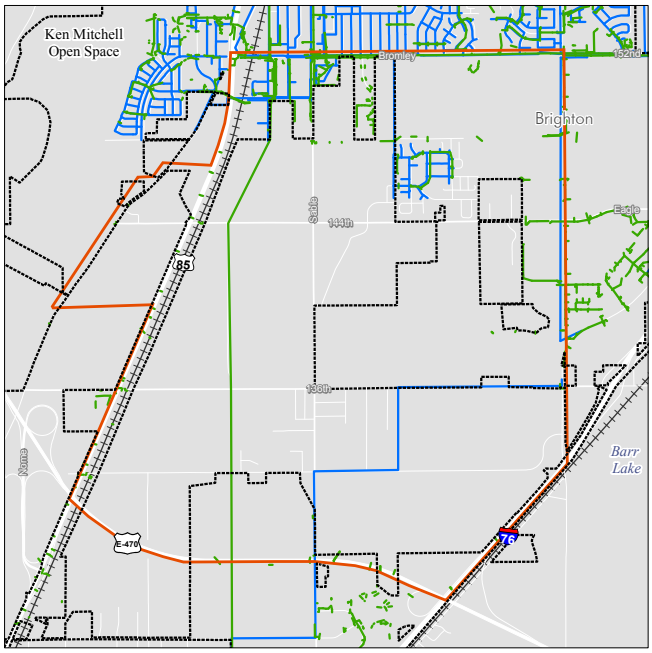
KEY FINDINGS

- In order for agricultural land in Adams County to be developed as residential, commercial, or industrial development, the County would need to approve rezoning, unless annexed into the City.
- The City has extended water and sewer infrastructure throughout much of the study area since 2005 when there was significant pressure for this area to be developed for residential, commercial, and industrial uses after construction of E-470.
- The recession slowed development pressure in the study area, but recent regional growth makes this area desirable for urbanization. There is sufficient land entitled to accommodate City growth in this area for approximately 20 years.
- Some properties no longer have adequate water resources to support farming, but water demand for future residential development is also unmet.
- The cost to provide public services, including water, emergency, and education, varies by use. Working and open lands cost $0.35 for every dollar made from development. Residential uses cost $1.16 to service, but they attract commercial development that contributes tax revenue (American Farmland Trust, Farmland Information Center, Cost of Community Services Study August 2010).
- The study area includes several oil and gas wells, which require a buffer from adjacent development, and the area could be subject to more energy extraction, generally more compatible with agricultural uses. Oil and gas uses are addressed at the end of Chapter 3.

OPPORTUNITIES

- Create a vision for the District shared by the City, County, property owners, and other stakeholders, and provide clear land use guidance and criteria for evaluating development proposals.
- Create a zoning district that is the same for the City and County that specifies allowed uses, development standards and incentives to ensure consistency in the area regardless of jurisdiction.
- Ensure that zoning allows compatible and desirable uses that meet the District vision, including breweries, bed-and-breakfasts, cottage industries, and similar supportive development.
- Identify areas that the City is likely to annex in the next 10 years where urbanization will occur.
- Prioritize growth in coordination with transportation, water and energy infrastructure.
- Capitalize on the proximity to Denver International Airport in marketing agricultural products and agritourism.
- Identify the highest and best land uses for all properties in the District, while ensuring land use compatibility and conservation of environmental resources in coordination with Adams County.
- Develop a museum that celebrates the District's rich agricultural history.

Available Infrastructure



FARMING, FOOD AND ECONOMIC DEVELOPMENT OPPORTUNITIES

The heritage and economic benefits of agriculture in the study area are threatened by market pressures, and the existing powerhouse farms are considering moving north. Action is needed. If Brighton and Adams County wish to protect farmland in the District, it will be complementary to design, build, and support a local food system. An agricultural market study was conducted (see Appendix A: Farming, Food, and Markets in Adams County), which helps community members, residents, governmental bodies and land owners of Adams County and the City of Brighton better understand the agricultural dynamics influencing the Local District. It found that farms have to be connected with markets that support farms in the District. That is to say, a local food system.

There are strong economic reasons for enhancing the local food network. Residents of Brighton spend about $83 million each year buying food, based on Bureau of Labor Statistics data. The vast majority of this food is sourced from outside of the City, so a conservative estimate is that $75 million of these food payments leave the City each year. Stakes are even higher when it comes to Adams County, where County residents spend about $1.3 billion each year buying food. Once again, most all of this food is sourced outside the County, so $1.2 billion leaks out of the County annually.

Reclaiming these dollars, such as through a revolving tax fund, would help the Brighton region pay for many refinements to the region's strong quality of life — including future development, city and county services, and further efforts to protect open space.

Food consumption for Brighton households.

Food consumption for Adams County households.

Leaks out of the County every year.

Key Findings:

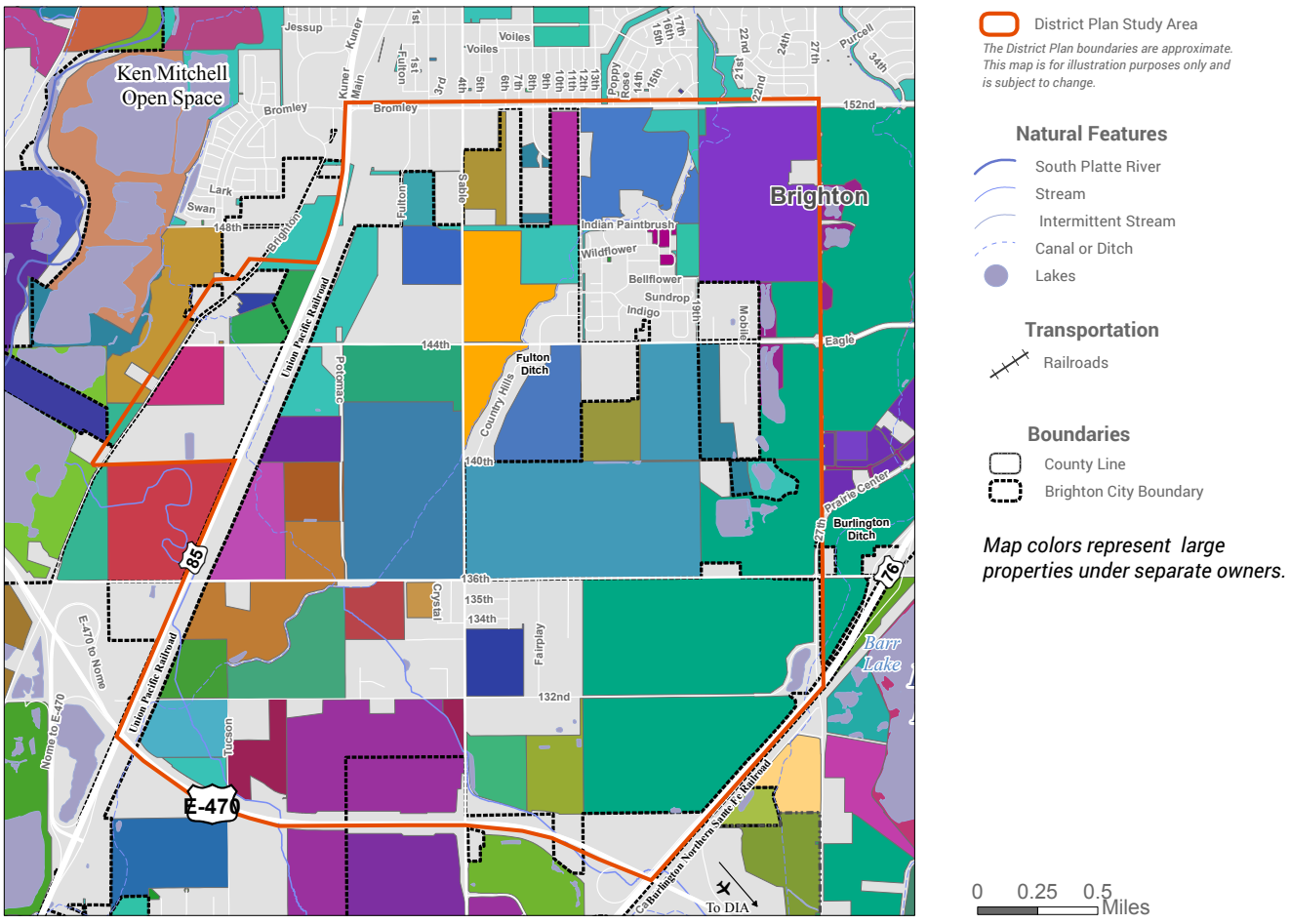
1. *Preserving farmland and developing a local food system are complementary activities.*
2. *Protecting farmland in the District creates an opportunity for millions of dollars in locally sourced food and wages.*
3. *Losing direct contact with this heritage would, in turn, threaten Brighton's ability to position itself as a destination for agritourism.*
4. *Supporting agriculture provides multiple economic and cultural benefits, and keeps future opportunities open that have not yet been capitalized on such as agritourism.*

URGENCY AND VULNERABILITY

Interviews with local residents show that current agricultural land uses are very vulnerable. One major produce company, Petrocco Farms, leases land throughout the study area from several different landowners. Celebrating its 100th year of farming in Brighton in 2016, Petrocco Farms is critical to the local economy. The firm supports a family with deep roots in Brighton, but also contributes to the $22 million payroll for farm laborers in Adams County every year. Similarly, Sakata Farms, which took root after World War II, maintains its packing shed and wholesale operations at Sable and Bromley Lane, but no longer farms land in the study area. The region would suffer if this employment or this dedication to community relocated elsewhere.

The opportunities in this chapter and landowner options in Chapter 3 and the Action Plan address how farming can overcome the difficulties that accompany development pressures. The heads of the Petrocco and Sakatas families expressed considerable concern about whether their way of farming will continue to be compatible with suburban development on surrounding land for three reasons: First, farmers do not want to shoulder the costs of buying land in the District, since land values have been inflated by development pressure to levels that cannot be covered by farming. Purchasing water rights is even more expensive, as described previously. Second, farmers expressed a concern that the chemical sprays (fertilizers, herbicides, fungicides, and pesticides) they rely on to ensure crop quality may pose a conflict when people live nearby. A third concern raised by farmers is that they increasingly have difficulty moving tractors and other field equipment from farm

Large Property Owners



to farm, as more and more suburban drivers occupy the roadway, or traveling at such speed they cannot adjust to the slow pace of farm equipment. Owner Bob Sakata has ordered his farm crews to move their equipment only on larger trucks that can keep pace with fast traffic. The City's Transportation Plan recommends tractor lanes that would better accommodate farmers, while this plan recommends actions that will protect farming and promote compatible development.

For these and other reasons, as the Petrocco and Sakatas family have seen strip malls and storage facilities encroach on farmland, they have planned for a future that would allow them to move to larger acreages if need be. These farmers lease thousands of acres elsewhere, not only because land is cheaper, but also as a hedge against localized weather calamities, and also to position themselves favorably if development requires them to leave the Brighton area.

Both farms say they would prefer to remain where they are, and the options presented in Chapter 3 and the Action Plan are designed to accomplish this. Retaining both farms is a priority for Adams County and Brighton, since if either were to leave, the County and City would lose 1) a substantial connection to its heritage, 2) a significant claim to being an agricultural community, and 3) the income earned by farmers and farmworkers.

Agricultural practices are evolving. Many farmers acknowledge that future farms in and near Brighton must pursue sustainable and organic practices if farming is to be compatible with residential housing and other development.

RECONNECTING CONSUMERS WITH A CULTURE OF FOOD

Losing direct contact with the agricultural heritage would, in turn, threaten Adams County and Brighton's ability to position themselves as a destination for agritourism. If the County and City wish to welcome visitors who are interested in experiencing rural culture, they must not only protect their farmland, they must also embrace a culture of food that expresses a sense of place. The reason for this is straightforward: if County residents do not themselves celebrate food that is produced and processed locally, it is difficult to imagine why any visitor would be attracted to visit Brighton to see farms and food destinations, especially with competing options such as Boulder so close by.

Strong support from area and regional consumers will be important to protect this farmland in the future. Another intangible loss would be Brighton's very identity which is centered on being a rural community located close to a major urban center. Many residents say they moved to Brighton because of the open landscape, the relative quiet, and the rural qualities of life.

The economics of farming in Adams County shows the dangers that are posed to the sustainability of farms and farmland. County farmers earned $95 million less by farming in 2013 than they had earned in 1969, after adjusting for inflation, even though both the number of farms in Adams County and acres farmed have remained relatively constant. Since 1994, there has not been a single year when Adams County farms (as a group) covered their production costs by selling crops and livestock — often one or more family members had to work off the farm to offset farm production losses. In the most recent Census of Agriculture, 2012, 61% of Adams County farms reported a net loss.

Further, this data shows how disconnected farming in Adams County has become from local consumers. Over the past 45 years, county population has increased

Key Findings:

1. *County farmers earned $95 million less by farming in 2013 than they had earned in 1969. Since 1994, there has not been a single year when Adams County farms (as a group) covered their production costs by selling crops and livestock.*

2. *For agriculture to enjoy a more profitable, resilient future in Adams County, farmers must once again connect to local markets, and grow for consumers who are more loyal to spending money for locally produced foods.*

3. *No outside party or developer can create a local food culture for the region; it must be built by local residents, businesses, and public bodies.*

150%, while personal income has risen at twice that rate (300%) after adjusting for inflation. Yet farm income has steadily declined. The two most important farm commodities, cattle and wheat, have lost ground nationally due to global economic trends. The industries that have survived the best, ornamentals and produce, have been those most connected to Denver markets — but these are also subject to national and international market forces. Case studies have demonstrated that creating a culture that celebrates local eating will require public action and investment.

Market forces, if left to themselves, will only deepen the patterns noted above. These days, profitable farming often depends on land consolidation, whereas farmland in the District is becoming increasingly fragmented, with smaller output and inefficient distribution systems. City and County action will be required to create a thriving local food system, as well as to protect farmland. This action could include public private partnerships, an agritourism district, support from the CSU extension agency with possible research plots, and potentially a museum which further celebrates the culture of agriculture in the area. Encouraging developers to utilize the TDR program and clustering development will also help conserve farmland.

One implication of the conclusions drawn above is that potentially the best buyers of premium farmland in the District who might want to use this land for agricultural purposes would be public bodies — the City and the County with non-profit land trusts. This places a special responsibility upon the City and County to act deliberately to purchase lands that remain viable for farming. Once these lands are acquired, they could be leased back to existing agricultural operators or new farmers, thus providing rental income to the City or County. As such, these farms could ultimately contribute to tax revenues. This lease-back program could include partnerships with non-profits and area colleges to train and mentor emerging farmers and reduce their start-up costs, creating a new generation of land stewards.

"The small town community that is Brighton is wonderful, but we are losing some of that."

- Adam Kniss, Former Production Manager at Sakata Farms

Why are Local Food Systems Important?

Positive economic impact on the local community

Local food promotes health and nutrition

Improving food security on a local level

Reduction in energy use and pollution

STRENGTHS OF THE DISTRICT

Contains some of the best land in the state

Water is available to significant portions of farmland

Holds a rich heritage of produce farming, a sentiment that is shared by the community

Vegetable farming has been more rewarding financially than raising other products

Excellent highway, rail, and airport access

Farms are near to robust consumer markets

LIMITATIONS OF THE DISTRICT

Suburban development has surrounded the area

Prevailing farming practices appear to be incompatible with residential development

Major produce growers may move north

Land is too expensive to be paid for through farm production alone

Water rights are even more expensive

OPPORTUNITIES FOR THE DISTRICT

Serve as a champion for protecting farmland and rural quality of life

Produce vegetables, meat, and processed food products for Brighton, Adams County, and Metro Denver markets

Maintain farming practices that are compatible with residential development

Serve as the core of a vibrant local food culture in Brighton

Provide agritourism experiences for visitors

Both County and City residents have voted to tax themselves to conserve farmland, and limited open space funds are available

Landowners want to sell land (or water rights) at development prices to fund retirement

Partnering with the development community to conserve lands using TDR and Cluster Developments

Encouraging a mix of uses that celebrate a vibrant local food culture in the District

OBSTACLES FOR PROTECTING FARMLAND

Stakeholders may perceive that it is too late to protect the tradition of rural living

Few landowning families have heirs who want to farm

County and City have limited financial resources for purchasing farmland and water rights, so outside sources will be required

Chapter 3: RECOMMENDATIONS

For decades, the Adams County Comprehensive Plan, Brighton Comprehensive Plan, and every past and current open space and parks master plans for both entities have previously identified goals for farmland preservation in this area, including Brighton's South Sub-Area Plan. As described in Chapters 1 and 2, the City of Brighton's unique heritage is centered upon farming, and Adams County has historically been a strong farming locale. With nearby suburbs now dedicated to housing and shopping malls, the remaining farms in the District stand out as a resource unique to the region.

Several challenges and dissatisfaction with the status quo stimulated this planning effort. Some of the information we heard includes:

- Landowners and developers seek greater development options than those presently available under current County zoning. Some perceive past entitlements as ad-hoc and opportunistic.
- Past landowner initiated annexations and development entitlements have put established rural estate neighborhoods on the defensive.
- Farmers have become increasingly uncertain whether additional development will complicate their livelihoods and ultimately render agricultural operations impossible.
- Established businesses see the incremental fragmentation of agricultural land and uncertainty in the region's ability to sustain essential business infrastructure (such as feed and equipment dealers, veterinarians, and processors) as a signal of the inevitable demise of the region's dominant industry.
- Residents – many of whom have made a living working on area farms – want more of these farms to raise food for local use.
- New and old residents value Brighton's identity as a freestanding community surrounded by an open, working landscape. Some are concerned by the loss of identity resulting from regional development pressures.
- Managing the incremental decisions by landowners, developers, neighbors and consumers in a complex and ever changing real estate market is a daunting task. New needs, opportunities, market trends, and consumer demands arouse bottom-up pressures that challenge long-range plans. Offering policy flexibility in such a dynamic environment allows for business innovation. At the same time, greater certainty is needed to safeguard public interests and allow for business investment. Thus County and City planning systems face an inevitable certainty–flexibility dilemma: on the one hand, strict, detailed land-use plans quickly become functionally obsolete, and on the other hand, vague, discretionary plans are ultimately incapable of determining future land uses and providing businesses and stakeholders with sufficient certainty.

Thus, a fundamental philosophy of this plan is to build both certainty and flexibility for the future. The long-range strategies described in this chapter are intended to reiterate a serious intent to promote agricultural uses in the District, thus offering the certainty agricultural landowners and operators need to make long-term investments. The plan also broadens landowner options for land development in unconstrained areas including alternatives for those waiting to sell their property for development. Conservation easements or alternative development patterns offer financial benefits along with greater compatibility with long-term agricultural uses. The food system options also broaden the market choices available to producers and consumers, in a way that increases the region's economic wellbeing. Together, all of these options will help implement the vision of the District Plan through a new Local District Mixed Use future land use category, as described on page 38.

The recommendations in this chapter and in the subsequent Action Plan promote the County and City's fiscal health (extending infrastructure where cost-effective), public safety and welfare (encouraging development in appropriate areas), protect natural resources, advance economic development goals (sales tax capture, business retention and attraction), and enhance the quality of life of area residents (access to local food, connection to green space).

MARKET SUPPORTED OPTIONS

THE FARM MARKET

The agricultural market analysis in Appendix A showed that farming vegetable crops is among the most profitable modes of farming, as evidenced by the fact that Sakata and Petrocco have thrived while cattle and wheat farms struggled. Vegetable sales for Colorado farms averaged $3,370 per acre in 2012, fifteen times the receipts earned by selling wheat. Petrocco is celebrating its 100th year of operation in 2016, while significant cattle infrastructure lies dormant, and wheat fields have been sold for development. As the average size of farms continues to decrease as it has for the past two decades, a new economic model is needed.

A University of Nebraska study found that small-acre farms raising high value products, including specialty crops, are more likely to be profitable at the urban edge.[1] Bureau of Economic Analysis data show that metropolitan counties in the U.S., which represent a small percentage of overall farmland, earned 52% of the net cash income earned by all U.S. farmers from 1989 to 2014.[2]

Small-acre farms raising high value products including specialty crops are more likely to be profitable at the urban edge.

Innovative farms in other parts of the country have pushed income levels to even greater heights. Woodland Gardens, near the university town of Athens, Georgia, reported sales of $77,000 per acre for a 3-acre farm in 2008, sufficient to hire four young and energetic workers full time. Greensgrow Gardens in Central City Philadelphia commands $1 million of total sales. Their operation includes raising food

[1] Esseks, D; Oberholtzer, L; Clancy, K; Lapping, M; and Zurbrugg, A (2009). Sustaining Agriculture in Urbanizing Counties. Center for Great Plains Studies, University of Nebraska—Lincoln, January 16.
[2] Bureau of Economic Analysis (series). Regional Personal Farm Income data for Metro and Nonmetro counties. http://www.bea.gov/

on a one-acre urban farm as well as brokering sales for dozens of rural farmers who serve 12 restaurants near the farm. The majority of their income comes from nursery sales and landscaping products for residents in the surrounding neighborhoods.

An example closer to home is the Full Circle Certified Organic Farm near Longmont. This farm is actually ten separate farms that work their own plots on the 1,100-acre farmstead, but collaborate on marketing more than 70 varieties of vegetables as well as small grains, grass hay and alfalfa. The farms sell through a farm stand on the property but also market wholesale products delivered by two distributors, LoCo, and Door to Door.

The legacy of Sakata Farms is instrumental in the District Plan boundary. Bob Sakata got his start by working as a laborer at a neighboring farm after the end of World War II. Had there been no farms near him, he never would have had this opportunity and the region would not have gained his presence as an exemplary business and civic leader. Without profitable farms, it will be very difficult to protect farmland, sustain food businesses, and have the District serve as an agritourism destination.

LAND DEVELOPMENT MARKET

A market assessment prepared for the City of Brighton Be Brighton Comprehensive Plan Update estimated future demand for residential and non-residential uses. It estimates that growth in the number of households in the Brighton market area (a larger region than the City of Brighton) will average 4% per year from 2015 to 2025, increasing the number of households from 38,234 to 55,800. This would result in 17,600 new housing units over a 10 year period.

From these market area-wide estimates, low and high capture rates achievable within the City of Brighton were estimated by product type to identify a reasonable range of what may occur over each future 10-year time span. These estimates account for varying levels of development quality, competitive activity, local amenities, and other market conditions. The City of Brighton will likely capture 20-50% of market-area single family and multi-family residential demand, with 50-80% of demand being distributed in the rest of the northeast metro area. This equates to roughly 2,700 single-family units, 760 townhomes and condos, and 1,900 rental units, for a total of 5,455 residential units (projections range from 4,230 to 6,640). The City of Brighton will also likely absorb about 200,000 square feet of grocery space, which is equivalent to three or four typical large grocery markets, and 150,000 square feet of food and drinking establishments, over the next 10 years.

Most of the growth in housing need is projected to involve buyers aged 20 to 49, earning incomes of $50,000 to $150,000, with houses valued at $250,000 to $500,000 and perhaps higher.

An increasing number of seniors for both ownership and rental housing may also be attracted to the Brighton area.

The Land Development Program Table shows that the District study area may capture 25% of the City of Brighton's overall demand per decade, an aggressive estimate given that the District occupies only 11% of Brighton's Growth Management Area. The demand for the District is estimated at 1,068 to 1,660 residential units requiring between 176 and 263 acres of land, which shaped the 2040 Urban Service Area boundary shown on the County Future Land Use Map (later in this chapter). Actual demand per decade may be more or less than the development program anticipates.

Except along Bromley Lane, at I-76 / 136th Avenue and Adams Crossing, and other state or Federal highway intersections, the District is not well positioned to capture significant retail, office, lodging or other commercial uses. Demand is estimated at 70 to 90 acres of land (on smaller parcels) per decade. Much of this demand will be absorbed at Adams Crossing where a major employment center is anticipated at E-470 / Sable.

LAND DEVELOPMENT PROGRAM TABLE

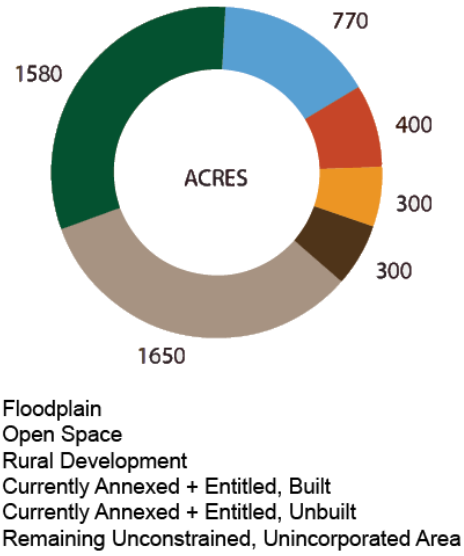
Use	10-year Absorption in Local District Study Area (low)	10-year Absorption in Local District Study Area (high)	Approximate Development Density	Acreage Required (low)	Acreage Required (high)	Focus Locations across the Brighton Growth Management Area
Residential (units)	**25% of Brighton GMA Absorption**	**25% of Brighton GMA Absorption**	**Gross Dwelling Units/ Acre**			
Single Family Detached	565	823	4	141	206	Existing central and eastside subdivisions. Accessory Dwelling Units in Downtown. Limited new subdivisions north of Bridge and in Local
Attached Ownership (Townhome, Condo, Plex)	143	238	12	12	20	Downtown, Prairie Center, Bromley Park, East Brighton, Adams Crossing, some existing subdivisions
Rental Apartments	360	600	16	23	38	Prairie Center, Downtown, South Brighton, Local District, possibly Adams Crossing
Residential Subtotal per Decade	**1,068**	**1,660**		**176**	**263**	
Retail (square ft.)	**25% of Brighton GMA Absorption**	**25% of A Brighton GMA Absorption**	**Floor Area Ratio**			
Neighborhood Center/Grocery/ Convenience Goods	75,000	92,500	0.25	7	8	Already-identified retail corners in existing residential/ mixed subdivisions; Downtown, expansion of Prairie Center, Bromley Lane corridor
Community Center/Big Box/ Shoppers Goods	152,500	190,000	0.25	14	17	Expansion of Prairie Center, Adams Crossing
Freestanding/ Specialty/Mixed-Use/Other	100,000	127,500	0.25	9	12	Prairie Center, Adams Crossing, Barr Lake gateways, Downtown, Local District, Bromley
Lodging	22,500	30,000	0.25	2	3	Downtown, South Main, Adams Crossing, Local District, Prairie Center
Office	67,500	87,500	0.25	6	8	Adams Crossing, Prairie Center, Downtown, (possibly Energy Corridor)
Industrial/ Employment	372,500	457,500	0.25	34	42	Energy Corridor, Bromley Interstate Business Park, (also, depending on suitability: Sugar Mill site, Adams Crossing, Prairie Center)
Non-Residential Subtotal per Decade	**790,000**	**985,000**		**73**	**90**	

One way to understand the development program, relative to land capacity, is shown in the pie charts below. The pie charts represent the 5,000-acre study area. Nearly two-fifths of the study area is already annexed and entitled by the City of Brighton (1,950 acres). Another one-fifth of the study area is constrained by the 100-year floodplain (770 acres) and existing rural subdivisions (300 acres). Adams County and the City of Brighton have conserved approximately 400 acres through conservation easements and fee-simple purchases. Approximately 1,550 to 1,580 of unconstrained acres remain in the County.

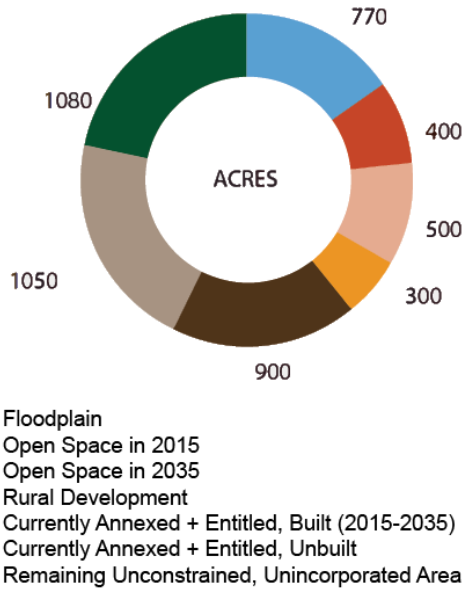
Over the next two decades, 600 acres that are currently annexed and entitled will likely build out (300 acres per decade). Approximately 500 acres could be conserved by willing landowners (250 acres per decade) as described in the Agricultural Land and Water Conservation option. The remaining approximately 1,000 acres of unconstrained, unprotected land may not experience direct development pressures for more than two decades.

New demand will likely only absorb a small amount of already annexed and entitled areas over the next 10 to 20 years. What should the remaining unincorporated owners do in the meantime? Six expanded land development options are presented in this chapter.

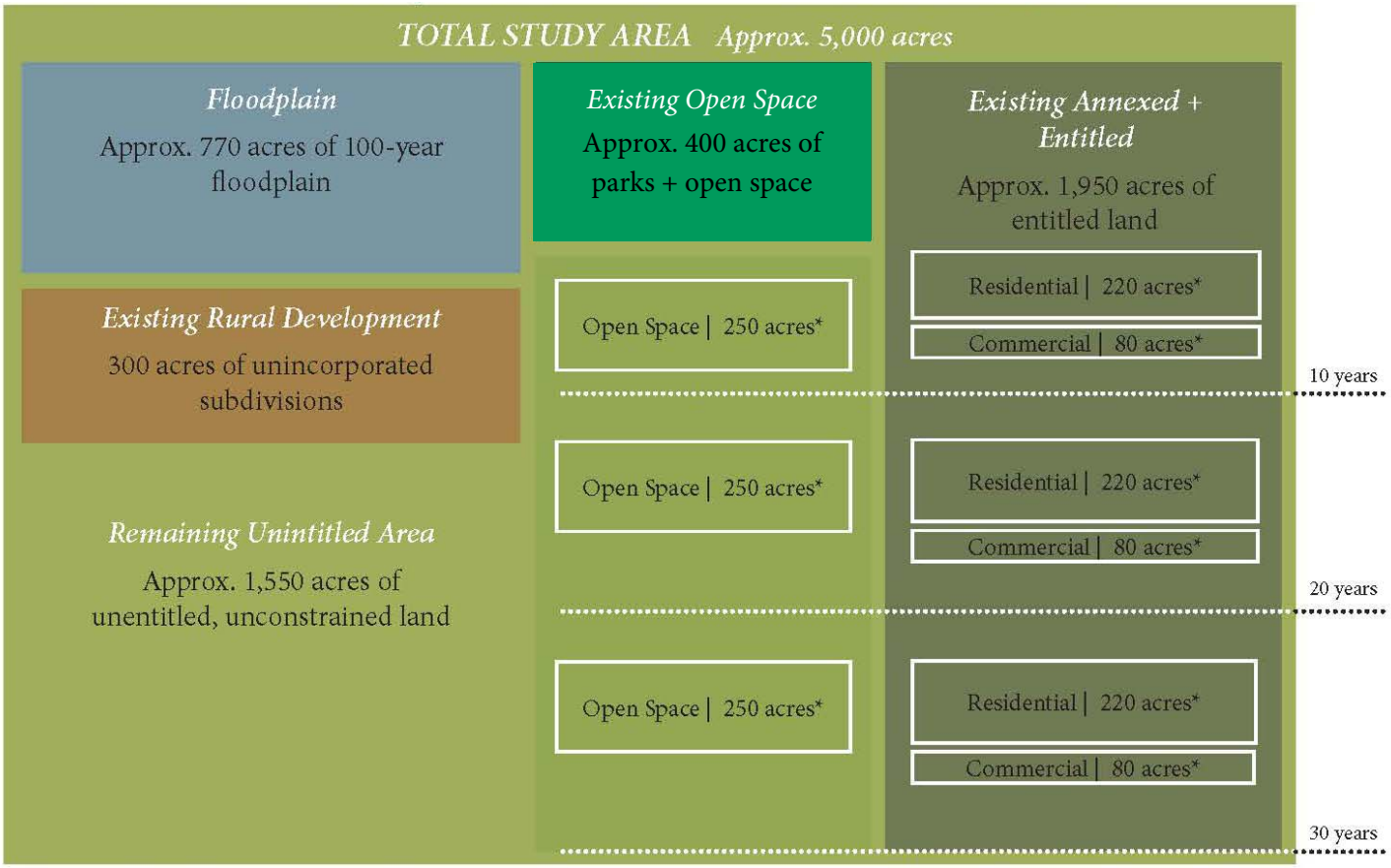
EXISTING COMMITMENTS & CONSTRAINTS



FUTURE DEMAND (2035)



LAND PLAN OPPORTUNITIES | Current Land Allocation and Projected Growth by Decade



**Average of High/Low projections of Development Program*

A second way of understanding the development program is shown above in the Land Plan Opportunities chart. Most of the market demand for residential and commercial uses will be accommodated in these already annexed and entitled areas, which will build out over the next 30 years. These annexed areas are already served by water utilities, making development in these areas much less costly than extending infrastructure to other lands. The development projections and absorption rates, which are based on historical and current growth trends, will require only a small amount of entitled land (approximately 250 to 353 acres) per decade.

Adams County, the City of Brighton and other partners have the financial capacity to conserve much of the remaining unconstrained, unincorporated land.

The County and City open space programs have funding capacity to add an estimated 250 acres or more each decade to the 400 acres already conserved, depending on partnerships with willing landowners. This number may be revised or may vary with other aspects depending upon utility acquisition of excess water rights, availability of additional funds, and other variables as described in the Agricultural Land and Water Conservation option.

EXPANDING LANDOWNER OPTIONS

The District Plan describes six opportunities for properties within the District Plan area:

1. Current Zoning
2. Agricultural Land and Water Conservation
3. Local Food System
4. Cluster Development
5. Transfer of Development Rights (TDR)
6. Apply for Annexation with additional performance criteria

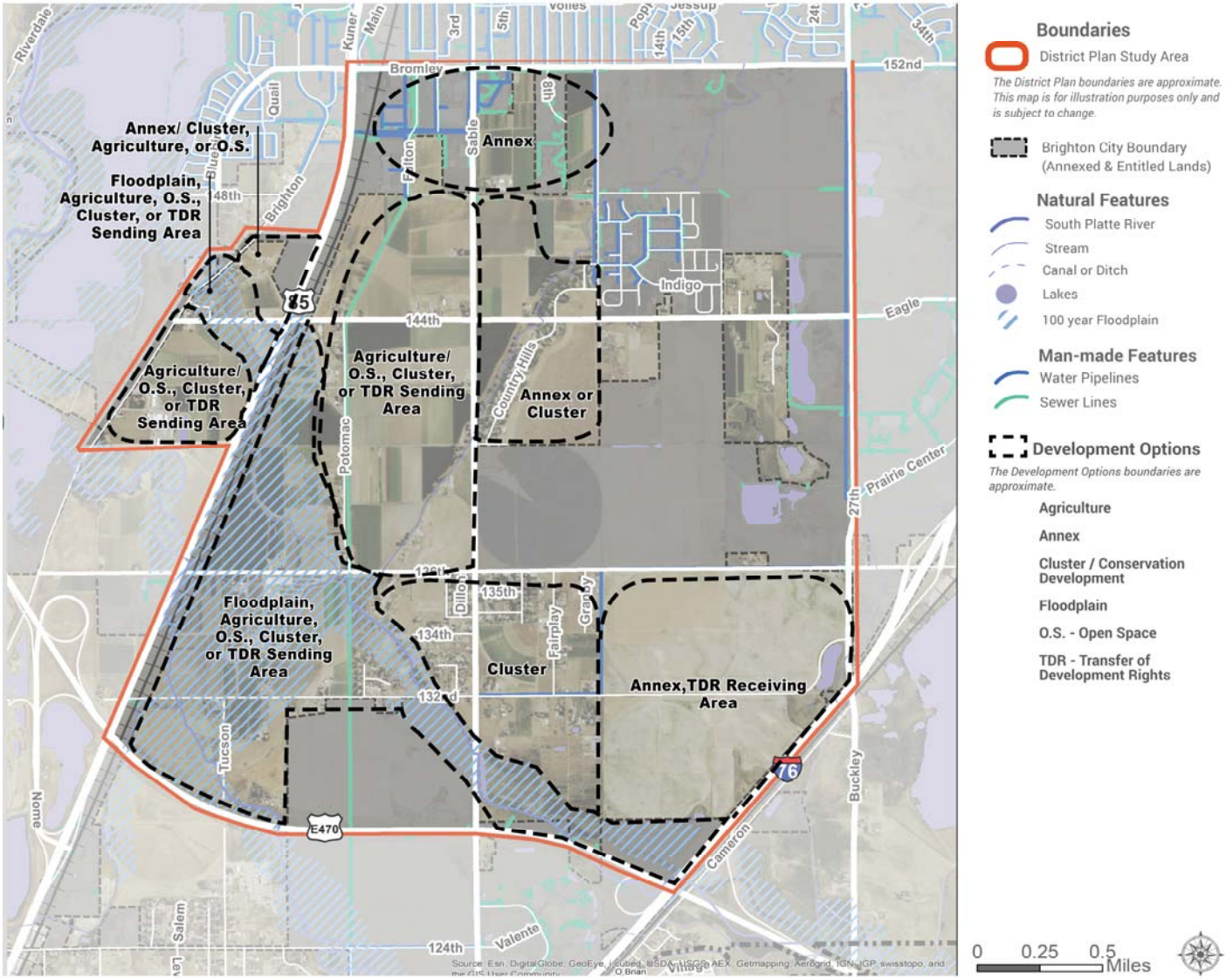
The Landowner Options Map establishes a range of possibilities for different areas, allowing landowners flexibility to make decisions regarding the highest and best use of their land within the bounds of the public health, safety, and welfare. For example, annexation is a logical option where property is contiguous to existing city boundaries and water and sewer infrastructure. Continuing agriculture, open space conservation, cluster development, or creating TDR sending areas are logical options for lands within the 100-year floodplain.

These six landowner options work in tandem with two complementary tools: 1) the County and City Comprehensive Plans and accompanying Future Land Use Maps showing recommended future uses and intensities, and 2) County and City zoning maps, ordinances, and regulations that specify the terms for permitted land uses and development procedures. Together these tools reflect a long-term vision and instruct relevant stakeholders as to their options that could be made binding through subsequent zoning and development review.

Due to public interest in broadening landowner options and capitalizing on opportunities, one new future land use category was created to address how the Landowner Options Map translates to the County and City Future Land Use Map. As described on the following pages, this "Local District Mixed Use" category was proposed for properties where agricultural, residential, and/or tourism development compatible with agriculture are expected in the future. Areas with adequate public infrastructure are more likely to become urban in nature while other areas may retain their lower intensity use. The crosswalk table shows which future land use categories are applicable to each option.

LANDOWNER OPTION	CROSSWALK TO COUNTY FUTURE LAND USES MAP
Current Zoning	Agriculture, Estate Residential
Agricultural Land and Water Conservation	Local District Mixed Use, Agriculture
Local Food System	Local District Mixed Use, Agriculture
Cluster Development	Local District Mixed Use, Agriculture, Estate Residential
Transfer of Development Rights (TDR)	Local District Mixed Use, Agriculture
Apply for Annexation with additional performance criteria	Uses where central water and sewer is feasible and necessary. Could include Local District Mixed Use and other residential and commercial categories except for Agriculture and Estate Residential which are County designations.

LANDOWNER OPTIONS MAP



COUNTY FUTURE LAND USE

The County Future Land Use Map and land use categories, adopted in 2012 as part of Imagine Adams County, guide the distribution and intensity of future growth for all areas within the County's unincorporated limits in conjunction with the goals, policies, and strategies established in Imagine Adams County and accompanying plans. Land use designations shown on the map are based on existing conditions and current infrastructure plans as well as population and market estimates for the year 2040.

As a county-wide effort, Imagine Adams County called for additional study in the Agricultural Tourism Study Area to "establish a clear vision, supporting policies, and implementation strategy … to guide future land uses and activities in the area that:

- Reflects the input of area stakeholders, Adams County, and the City of Brighton;
- Addresses each of the issues and opportunities…, as well as others that emerge through the Sub-Area Plan process;
- Includes a marketing strategy or branding concept for the area;
- Identifies which portions of the Agricultural Tourism Study Area would likely remain in unincorporated Adams County and which portions would likely be annexed into the City of Brighton.
- Identifies necessary updates to the County's zoning regulations and design standards and TDR program to support the implementation of a sub-area plan framework" (page 75-76).

HOW IS THE FUTURE LAND USE MAP DIFFERENT THAN ZONING AND CODE REGULATIONS?

Zoning refers to property entitlements and requirements that regulate appropriate use, bulk, height, density, and other characteristics appropriate for a specific site. The Future Land Use Map and recommendations in this chapter, help direct long-term development patterns and infrastructure improvements to achieve the District Plan vision.

The advisory recommendations of the District Plan form the basis for subsequent zoning and land development code regulations. For example, following a county-wide market study, the County's TDR and cluster programs should be revised to address present barriers to the programs and make them more attractive in this area, such as allowing the TDR program on smaller parcels and allowing clustered lots to be smaller, etc. While the City of Brighton presently does not have TDR or cluster codes, the District Plan recommends consideration of such programs by the City, and ways in which the County's TDR program may be multi-jurisdictional in terms of sending and receiving areas.

The Agricultural Tourism Study Area identified in the Imagine Adams County Comprehensive Plan will be amended upon adoption of the District Plan as an element of the County Comprehensive Plan in accordance with County standards and regulations and as permissible by state law through the District Plan's recommendations.

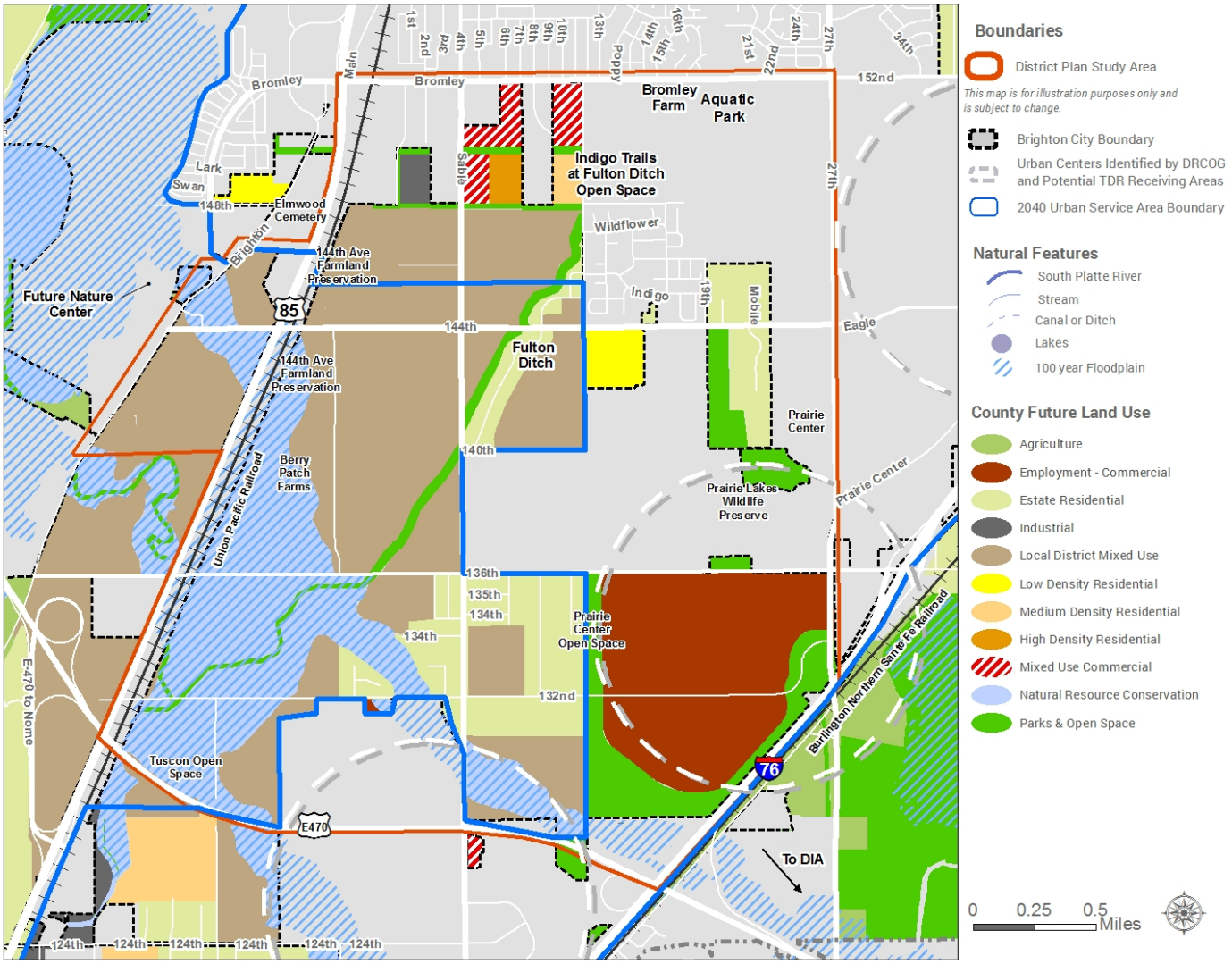
The County Future Land Use Map for the Agricultural Tourism Study Area (page 39) shows unincorporated land uses which may be needed through the year 2040. Brighton's 2040 Urban Service Area boundary (shown in blue on the Future Land Use Map) provides a spatial framework for urban scale capital facility needs and the funding commitments required for the location, capacity, and financing for the roads, schools, utilities, transit and other public facilities necessary to support development for approximately 20 years. As time passes, it is understood that market conditions will change and new infrastructure plans and population and employment projections will have to be made. As these changes occur, the Future Land Use Map, including land use designations, transportation, and other features should be reviewed and updated to make it easier for development to occur in line with vision.

The land use categories remain as defined in Imagine Adams County (see pages 96-105 of Imagine Adams County), with the addition of a new Local District Mixed Use category defined in the following table.

LAND USE CATEGORY	CHARACTERISTICS & USES	PURPOSE	CRITERIA FOR DESIGNATION
Local District Mixed Use	**Primary:** Concentrated food cultivation, processing, and distributing. Agricultural tourism uses such as farmers markets, cottage industries, bed and breakfast establishments, restaurants, breweries, tourism services. **Secondary:** Sustainably designed clustered residential developments that focus on backyard, neighborhood or community farms integrated within the development. Balance development to utilize TDR as a sending area and cluster development on site.	Lands where development compatible with agriculture is expected in the future. Areas with adequate public infrastructure may become urban in nature while other areas may remain a lower intensity use. Development supports agricultural economic development, agritourism, and/or preserves agricultural areas for long term farming Conserve environmentally sensitive areas Prevent urban nuisance complaints Limit the extension of services where they are costly and difficult to provide Provide adequate intensity and mix of uses to create a pedestrian environment.	Ability to support agricultural tourism uses Incorporated into a municipality where central water and sewer is feasible and necessary Adequate transportation access Avoid uses that are incompatible with agricultural uses Clustered development pattern that maximizes development while preserving adequate open area to support the District Plan objectives Development should be arranged in such a manner to allow viewsheds of the agricultural amenities and create scenic vistas into and throughout the area. Architecture should reflect the agricultural heritage of the area in a complementary manner Suitable for agriculture, environmentally sensitive; or historically significant Contributes to separating and defining urban areas

The Future Land Use Map identifies the options available for those properties interested in land development. The County's future land uses can employ the sending and receiving Transfer of Development Rights option presented later in this chapter (see also the Transfer of Development Rights Map).

ADAMS COUNTY FUTURE LAND USE MAP



The City of Brighton's Future Land Use Map was adopted in 2009 and is being updated through the Be Brighton effort in tandem with the District Plan. Lands already annexed into the City of Brighton have been zoned and entitled and the future land uses proposed for such areas (shown in grey on the map) are depicted and described in the Be Brighton Comprehensive Plan. The City anticipates providing infrastructure necessary to support growth within the Urban Service Area through 2040, while areas outside this boundary will continue to be serviced by the County. The adopted plan and map can be found at http://www.brightonco.gov/553/Comprehensive-Plan, and the proposed plan and map at www.BeBrighton.net.

To implement the District Plan, targeted amendments to the County and City's zoning codes, development standards, and regulations will be undertaken. In particular, a priority for the County is to establish development policies to encourage innovative projects aligned with the Local District Mixed Use vision. An example from the City of Phoenix of a zoning category which supports the Local District Mixed Use future land use category is provided in Appendix D. This zone may be used as an example for code revisions for the County or the City. Property owners, the City and the County may initiate code amendments.

CURRENT ZONING

The current property rights of landowners in unincorporated areas are defined by one of three County zoning districts: A-1, A-2, or A-3 (see the Generalized Zoning Map in Chapter 2). While some property owners hope to obtain greater development opportunities, the rights below are their only current entitlement.

CURRENT COUNTY ZONING EXAMPLE		
ACRES	CURRENT ZONING	MAX UNITS: CURRENT ZONING
70	A-1 (provides for rural single-family dwellings and limited farming on lots greater than 2.5 acres)	28
70	A-2 (permits farming and limited ranching on lots greater than 10 acres)	7
70	A-3 (allows farming and ranching on lots greater than 35 acres)	3

As mentioned in the introduction, some landowners and developers contend that the present zoning does not represent the highest and best use of their land. City leaders similarly recognize that A-1 and A-2 zoning does not result in an efficient and cost-effective infrastructure pattern once encompassed by urban development. Some stakeholders contend that the A-1 and A-2 residential pattern more closely resembles sprawl when agriculture is discontinued (resulting in weedy, underutilized large lots).

AGRICULTURAL LAND AND WATER CONSERVATION RECOMMENDATIONS

The County Open Space Sales Tax, approved by voters in 1999, collects 1/4 of one percent (or 25 cents on every $100 purchase) to benefit parks, recreation and open space projects countywide. It expires in 2026. Funds are distributed in three ways: 1) 68% is awarded through a competitive grant program, 2) 30% is distributed back to the jurisdiction where the tax was generated, and 2% is allocated to administration costs. The open space sales tax funds offer a targeted funding source for Plan implementation, subject to annual grant awards and appropriations..

Some of these conservation options may result in a return much sooner than waiting for the land development market, and may reinforce the desire of some landowners to stay in agriculture. Therefore, this plan advocates for additional conservation funding to assist those landowners interested in selling their land.

Additional land acquisition will build upon significant investments in protecting open space already made by Adams County and the City of Brighton. There is a total of approximately 41,570 acres of parks and open space within Adams County owned and managed by a variety of entities, funded in large part by the County open space sales tax. The City of Brighton has purchased 1,035 acres of parks and open space; comprised of 520 acres of open space, 250 acres of farmland, and 265 acres of active parks. Similar efforts have been under way in other Front Range communities for more than half a century. Boulder County currently owns 60,000 acres of open space, and protects 40,000 more. Of these, 19,500 acres are farmed, the majority through leases to farmers.

Land protection efforts in the District will be guided by the vision and practical realities outlined in this Plan. However, its success will be dependent on the willingness of landowners who wish to keep some or all of their land in agriculture by voluntarily selling or donating land rights or exploring the innovative development options explored in the Plan.

Purchasing the approximately 1,500 acres in the District that do not have City entitlements or development agreements appears to be within the range of public budgets; indeed the City and County already have funds sufficient to purchase land and water rights for 200 to 800 acres over the next decade, and have potential partners who could furnish additional resources.

Feasibility analysis demonstrates that Adams County and the City of Brighton could each contribute $250,000 annually towards the purchase of land in the District Area for agricultural preservation through their existing open space sales taxes. Further, it is estimated that Great Outdoors Colorado (GOCO), land trusts, historic preservation grants, and grants obtained from existing Open Space sales tax revenues could be able to contribute up to $1 million each year for a total annual budget of $1.5 million.

The table on the following page provides an estimate of how many acres, including water shares, could be purchased applying fee-simple acquisition at current prices with existing budgets. It further outlines two more proactive strategies if additional funds could be procured.

The County and City could nearly double the amount of land conserved by utilizing conservation easements, which typically cost substantially less than fee-simple land purchases. This would increase the number of acres placed into preservation at a lower cost without encumbering the County or City with long-term management responsibilities. Another option to lower the cost of conserving land would be to encourage land owners to make a donation of land or a conservation easement, which could generate a tax credit or other financial incentives for the landowner.

How are agricultural lands voluntarily conserved?

Fee-Simple Lands *are purchased by a local jurisdiction from a willing seller, are generally open to the public, and provide a variety of non-motorized recreational activities. Farmlands under agricultural leases may or may not be open to the public depending on the terms of the lease.*

Conservation Easements *are voluntary agreements that private landowners place on their property to preserve certain values, such as agriculture, wildlife habitat, and scenery. The property remains privately owned and managed and is not generally open to the public. In most instances a conservation easement is tax deductible and tax credits are often available as an added incentive. Property may be sold and the easement stays with the property.*

Rural Land Use Plan, Deed Restrictions, Covenants, or Conservation Developments *are voluntary, flexible ways to encourage development that protects the county's rural character, critical areas, distinct features, and continues agricultural production while recognizing current zoning.*

Trail Easements *are permanent agreements between a private landowner and an organization or agency through which the landowner preserves a linear corridor from development and allows public trail use.*

Transfer of Development Rights *allows property owners to transfer rights from areas where conservation is desirable to areas where higher density development is appropriate.*

ANNUAL PURCHASE OPTIONS	OPTION 1	OPTION 2	OPTION 3
Funds available (in millions)***	$1.0	$1.5	$2.5
Average acres purchased *	27	40	67
Approximate number of water shares needed for vegetable production **	10	15	24
Excess water shares *	8	12	20

**Land and water costs will change over time. The average cost/acre estimate is based on past and recent comparative sales in the area. The average water share valuation was derived from a recent study performed by HRS Water and is an average of both Fulton and Burlington water shares Costs not adjusted for inflation or heightened development pressure. Additionally, these figures represent traditional irrigation methods and advances in sustainable technology have the potential to positively affect the water needs described above.*

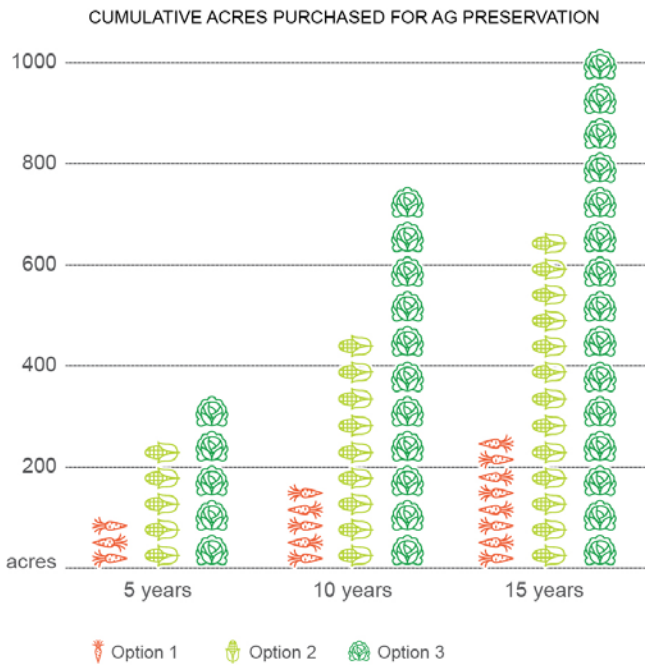
***Vegetables – 16" of irrigation water per acre per year (1.33 acre feet per year) = 0.34 shares per year per acre = 4 shares/10 acres*

****Subject to successful grant applications and City and County appropriations*

The charts below show how the leveraged open space sales tax funds can increase over time. Through a combination of landowner options and fee simple preservation approaches outlined, the District Vision will begin to organically take shape, preserving the heritage of the region and laying the foundation for future agritourism opportunities.

CUMULATIVE ACRES PURCHASED FOR AGRICULTURAL PRESERVATION			
	5 YEARS	10 YEARS	15 YEARS
Option 1	75	150	225
Option 2	225	450	675
Option 3	375	750	1,125

Three different preservation strategies are based on the feasibility analysis performed. Option 1 outlines what could be achieved annually with existing open space budgets. Option 2 and 3 are accelerated annual preservation approaches that would require additional funds either through larger County and City Open Space budget allocations with equitable GOCO matching, or/and additional funds acquired through USDA preservation grants or other types of funding mechanisms such as conservations easements, TDR and encouraging public/private partnerships.



By applying the three preservation approaches across a time frame of 5, 10 and 15 years we can better illustrate the preservation impact in the District area. This chart also demonstrates a market demand that currently does not exist.

The water requirements necessary to continue agricultural practices need to be factored into this equation. The water study conducted by HRS water (Appendix C) confirmed that both the Burlington and Fulton Ditch currently provide sufficient water to continue agricultural production. However, two factors place these resources at risk: 1) the desire of existing landowners to sell off their water rights, and 2) the high cost of acquiring water rights. The costs of water rights determined by the study are $15,000 - $20,000 for Fulton Ditch shares, Burlington shares are estimated to be in the low $20,000s, and paired Burlington/Wellington shares are in the low $40,000s. Rates will be revalued if and when water rights are acquired.

Based on this information the following measures are recommended:

- Complete the ongoing City of Brighton raw water master plan to estimate the total water rights needed at build-out and projected cost to acquire (estimated to be complete in 2017).
- Commit to water efficiency measures in both agricultural and urban applications. Conserving water would allow for leasing excess water rights to other farmers and/or transferring secondary use of agricultural water rights to municipal users.
- Land acquisition/conservation easements should include water rights acquisition in an amount sufficient to allow continued farming of historically produced crops. The County and City should anticipate the cost of acquiring water rights necessary for continued agricultural production.

As parcels within the District area become available for purchase it will be necessary to ensure each land acquisition/conservation easement supports an agricultural preservation strategy that at minimum takes into consideration the following criteria:

LAND AND WATER CONSERVATION CRITERIA
1. Maintain development restrictions in the floodplain/encourage farming there. 2. Define goals around water resources to sustain agricultural production. 3. Focus on designated prime agricultural lands that are contiguous to optimize farming efficiencies. 4. Where possible, focus on preserving existing views of farmland and open space. 5. Evaluate additional transportation and trail needs and improve connectivity to nodes and neighborhood activity centers and regional trails (see Transportation Recommendations). 6. Avoid previously annexed or entitled land (approved and zoned for development). 7. Maintain contiguity to other open space and agricultural lands. 8. Prioritize strategic locations to meet the objectives for the District Plan character and intent.

In order to move toward preserving agricultural lands, it will be necessary to address the following items:

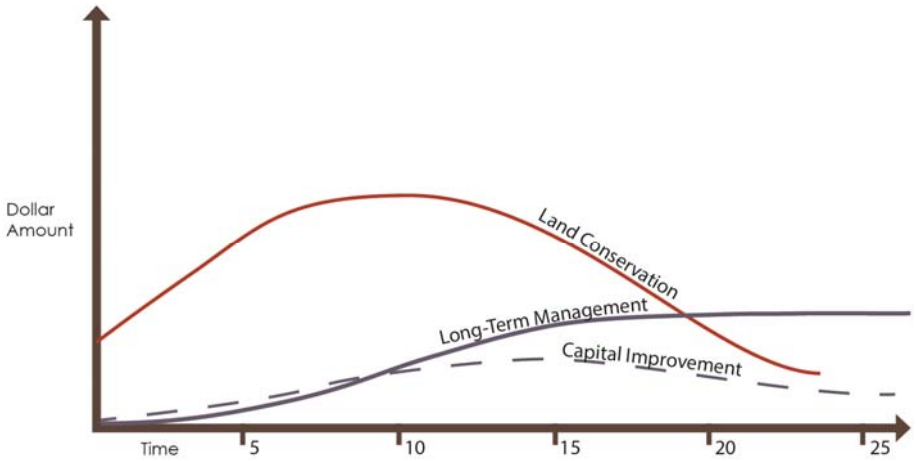
- Identify willing landowners who desire to conserve their land in partnership with local governments and/or land trusts. This may be accomplished by surveys and outreach performed by a dedicated staff person or the Agricultural Preservation Sub-Committee as outlined in the plan recommendations in this chapter.
- Prioritize the lands to be conserved.
- Identify the entity that will conserve and manage these lands.
- Define appropriate land management priorities and procedures. This may also be a function of a dedicated staff person or the Agricultural Preservation Sub-Committee as outlined in the plan recommendations in this chapter.
- Update the County's Transfer of Development Rights program to incentivize its use by developers in a manner that conserves priority lands and encourages new development that meets the intent of the Local District Mixed Use future land use category.

In concert with the other landowner options in this Chapter, the current priority for both Adams County and the City of Brighton's Open Space Departments is to explore fee-simple acquisition and conservation easement opportunities, preserving agricultural lands in the District as they come up for sale. As lands are acquired and then leased, the County and City must consider the integration of agricultural management, educational programs, and local food marketing to support existing and emerging farmers (see Costs Over Time diagram).

WHO WILL CONSERVE AND MANAGE THESE LANDS?

The previous section explained that most dollars will be directed initially towards land acquisition. Because conserving agriculture is a long-term land management commitment as shown in the Costs Over Time Diagram, this section explores organizational alternatives that can care for the land and make necessary capital improvements. Appendix E contains a range of case studies on innovative farm organizations and operations.

COSTS OVER TIME DIAGRAM



Most agricultural preservation programs reside under existing County or City open space programs. They use a combination of existing funding sources, grant funding and sometimes funds from land trust partnerships to support their efforts. Existing open space programs already have the resources and necessary infrastructure to conserve and manage lands. However, many of these programs were put in place before development pressures drove up land prices. This means economical land acquisition and preserving larger contiguous parcels has become more difficult.

Moreover, the broader scope that future land acquisition efforts will require, and the need to surround farms with supportive infrastructure, will require new management approaches. For the short-term, the County and City could support one full-time employee and work together to support the Agricultural Land Preservation Sub-Committee as a recommending body for future steps.

Agricultural Land Preservation Sub-committee

Currently the Agricultural Land Preservation Sub-committee resides under Brighton's Parks and Open Space Department. This sub-committee is currently comprised of City and County residents and local farmers, with support from City and County open space and planning staff. It has been tasked with providing recommendations for the preservation of agricultural lands.

The Agricultural Land Preservation Sub-committee should be formalized as a standalone, joint committee of both the City of Brighton and Adams County through an intergovernmental agreement (IGA). Members would be appointed by both the County Commission and the City Council, and selected to ensure diverse representation including farmers, landowners, food buyers, and other experts, among others. The committee would be responsible to advise on Plan implementation and to highlight key issues that demand attention from a new, joint City and County staff person. This position, whether a traditional employee or hired via a RFQ process, would serve as the staff liaison to this new board, and could be jointly (50/50) funded by Brighton and Adams County.

Over time, the committee would advise City and County officials as they devise a long-term organizational structure. This might include establishing a non-profit management entity or land trust, forming a Special District, or other organizational options listed below. The County and City may consider these and other potential solutions.

County – City Collaborative Management

A natural partnership between counties and cities often emerges between agencies who share similar growth management and economic development goals. As an example, Boulder County and the City of Boulder have worked in concert to invest hundreds of millions of dollars in open space, including considerable farmland. The County has formed both a Food and Agriculture Policy Council and a Cropland Policy Advisory Group to make policy recommendations on land management and related policy.

The City of Boulder's Open Space and Mountain Parks (OSMP) Department currently leases almost 15,000 acres to local farmers and ranchers for the production of livestock, fruits, vegetables and forage.[3] Nearly 80 percent of this acreage is used exclusively for cattle grazing because of water availability, slopes, and compatibility with ecological conservation. Currently, 470 acres of agricultural land are used for the production of locally marketed food products, including natural beef, lamb and honey, as well as fruits and vegetables. OSMP also manages 6,555 acres of mountain parks. The City of Boulder states that the first land acquisition was carried out in 1898 when a bond issue was used to purchase the alfalfa fields and apple orchards of Bachelder Farm, which has since become a public park.

Both Boulder County and the City of Boulder have agricultural preservation policies within their respective Comprehensive Plans and Open Space Plans. In 2011 Boulder County adopted a Cropland Policy whose vision is "to be a national leader in sustainable agriculture." The Cropland Policy is the guiding document for managing the 25,000 acres of agricultural lands the County owns. An additional 27,000 acres are privately held agricultural lands with conservation easements in place. The Cropland Policy Advisory group is comprised of conventional and organic farmers and county citizens tasked with developing policies for the Boulder County Parks and Open Space staff. The City of Boulder is developing its own Agricultural Resources Management Plan with the purpose of ensuring the long-term sustainability of agricultural operations and the ecological health of OSMP lands, and to foster connections between the community and agricultural operations.

Some of the unique policies Boulder City and Boulder County have framed and implemented (in part through RFPs and lease-back agreements) include:

- Funding for open space acquisition is collected largely through Boulder County and Boulder City open space sales taxes, and from proceeds of lease agreements and other sources.
- Partnerships with local land trusts help coordinate land management activity.
- Boulder County revenues from agriculture produced a net income of nearly $1 million in 2014.
- Boulder County and Boulder City are jointly responsible for the local food initiative; each has allocated resources separate from those focused on agricultural land management.
- Farmers using organic practices receive a 50% reduction in lease costs.

WHO WILL IMPLEMENT THIS PLAN?

Landowners who seek to conserve or develop their land.

Land Trusts who manage conservation easements.

Developers who propose projects that meet the intent of the Local District Mixed Use future land use category.

One County/City employee who will oversee study area projects, programs, and marketing.

County/City Open Space Departments that will purchase farmland.

The Agricultural Land Preservation Sub-committee, comprised of farmers, landowners, food buyers, and other stakeholders, which will advise the County and City.

[3] https://bouldercolorado.gov/osmp/osmp-agriculture

- Lease revenues have prioritized allocations, the primary one being the Agricultural Resource Program (for educational programing) and then capital improvements.

A proactive strategy with the opportunity to program and/or assemble land to implement the District Plan vision may be undertaken by either the City of Brighton, Adams County, or as a unified activity under an IGA, depending upon the location of available lands and the consideration of environmental constraints, density, and infrastructure availability. This strategy would consider the issuance of a competitive request for proposals/qualifications (RFP/RFQ) for a qualified master developer (or "developer matchmaker", see below) to propose development, infrastructure and programming for publically owned lands, or private lands of owners wishing to sell or engage in a long-term lease strategy. Under a "developer matchmaker" scenario, this strategy would invite local, already engaged developers to find ways to work together and to leverage outside investment in more impactful ways.

This strategy would allow for private/public partnerships to invite private investment in fulfilling the District's Vision of productive agricultural uses, education components, support of a local food system, and necessary infrastructure improvements. The Agriculture Sub-Committee, as re-imagined, may have the capacity to contribute to the design of the proposal and appropriate locations. The implementation of this strategy would include private capital investment in infrastructure, including pedestrian and non-motorized transportation options and transportation systems for agricultural-related equipment and needs. Provision for water, sewer, stormwater and electric would also be imperative depending on the intensity of development and programming. Aesthetic improvements fitting the local character, and a mix of uses working together to promote the local food system would be a foundation of any such area. Buildings and uses that create a sense of place and the arrangement and density to meet the vision of this Plan would be promoted.

While conditions in Adams County and the City of Brighton are somewhat different from Boulder, the two local entities could adapt these programs to create approaches that suit local requirements. Another partnership opportunity would be to create a revolving fund that reinvests property taxes collected within the District into supporting agricultural or tourism infrastructure. Applicability of each strategy to specific properties will be carefully considered depending upon funding source limitations.

PROS	CONS
• Farmers and local citizens help design applicable policies that align with preservation priorities. • These long-established programs now earn net income. • County/City can partner to structure a revolving property tax fund that reinvests taxes collected within the District into supporting infrastructure. • Requires increased staffing: Agricultural management and programming is handled by County and City Open Space programs, on a ratio of approximately only 1 FTE for 1,500 acres.	• Multiple layers of decision making

CONSERVATION EASEMENTS AND LAND TRUSTS

Land conservation and management could also be leveraged through a partnership with a land trust. Land trusts are non-governmental, non-profit organizations that work with landowners to voluntarily conserve open lands located in the land trust's service area. Land trusts typically facilitate and hold conservation easements, allowing farmers to stay on the land. Farming and ranching is usually permitted, indeed some land trusts are set up specifically to protect farmland. Generally development is limited, and surface mining not allowed. Landowners are eligible for a sizable tax credit for voluntary conservation easements.

Any nonprofit corporation could offer similar services, though land trusts carry a deeper commitment to conservation.

Land trusts currently active in Adams County include:

- Colorado Cattlemen's Agricultural Land Trust
- Colorado Open Lands
- Colorado Wildlife Heritage Foundation
- Ducks Unlimited, Inc.
- The Nature Conservancy

Non-profit agencies providing technical assistance in land and conservation easement transactions include:

- The Trust for Public Land
- The Conservation Fund

McIntosh Dairy Case Study

In 1999, the Trust for Public Land partnered with Adams County to conserve farms and open space in the path of growth, first by helping county residents mount and pass a voter initiative that created a dedicated sales tax for the protection of open space. TPL later helped the county broker a conservation easement for 245 acres of the McIntosh Dairy, which is located south of 120th Avenue along Riverdale Road, guaranteeing that the land will never be developed while allowing farming to continue. The County paid $3,127,000 for the easement, while the landowner donated $173,000 in value. Owned and operated by the same family since 1906, the farm includes cottonwood and willow bottomlands along the South Platte River, home to deer, elk, nesting raptors, and wild turkeys. Additional funds for the project came from the Great Outdoors Colorado Trust Fund.

McIntosh Dairy Farm (TPL Archives)

PROS	CONS
• Conservation easements may be purchased more economically than land acquisitions. • Vests responsibility for land preservation in a non-profit, non-governmental entity. • Land management remains with the landowner.	• Land trusts cannot be easily changed, often strictly focus on conservation, and do not provide related support programs.

Land Cooperatives

Another option for land conservation and management would be for County and City residents to form a private land cooperative to cultivate multi-landowner-driven land conservation and food production. Investment would come from individual financial commitments.

One nearby example is Poudre Valley Community Farms west of Fort Collins, a land cooperative whose goal is to create ways for community members to purchase agricultural lands and lease this land to local farmers. Their mission is: "To cultivate innovative models for community ownership of land and water for food production by purchasing threatened agricultural land and providing long-term access to farmers and ranchers."

Poudre Valley Community Farms is a blend of the traditional consumer co-op model and a producer cooperative to create a multi-stakeholder cooperative, providing the ability to preserve agricultural lands using conservation easements and other financing mechanisms. Members receive preferred access to products, membership, which includes voting rights and dividends based on food purchased from producers, and other benefits. The organization is a non-profit monitored by a board comprised of entrepreneurs, farmers, non-profit partners, and CSU's Front Range Regional Specialist.

PROS	CONS
• Community-driven approach that would reflect producers' and consumers' commitments to preserving agricultural lands. • Vests responsibility for land preservation and management with non-profit, non-governmental entity.	• Requires highly motivated group of individuals motivated to champion the initiative. • Private investors may not have sufficient resources to purchase land at development value. • Strictly focused on matching existing farmers to land for production and marketing. No support or educational programs are provided. • Requires sufficient mass of property owners, funds or acreage (including County and City) to be effective in both the short- and long-term. • Would take substantial time to develop.

LOCAL FOOD SYSTEM RECOMMENDATIONS

For any of the models described above, building new connections between farmers and consumers, and new clusters of food businesses geared to the local market will be required, since global commodity markets have not in general been rewarding to Adams County farmers. The preservation of farmland requires a connection to consumers who will purchase products from local farmers and food businesses and who will support them in broader ways as well. The promotion of agritourism can be accomplished with residents of the City and County who embrace local agriculture and purchase a significant portion of their food from local farms.

With residents of the City of Brighton spending an estimated $83 million per year buying food, there is considerable economic opportunity to be tapped by focusing local farm production on feeding local residents. Even wider markets exist nearby. Adams County residents purchase $1.3 billion of food each year, and the Denver Metro area residents purchase $7.3 billion of food each year. These consumers are currently served by global commodity markets primarily because existing infrastructure favors distant travel of food — but not local farms. Comparable infrastructure that creates efficiencies in local food trade will be required if farmland is to be protected.

The USDA Supplemental Nutrition Assistance Program (SNAP) provides debit cards to low-income citizens to help them purchase groceries at authorized retail food stores and farmers' markets, including those shown on the map below. The City and County should encourage all farmers' markets to participate while informing SNAP recipients of participating vendors where they can access healthy foods and support the local food system.

For Adams County, building a more resilient food system will complement current economic development approaches. For the City of Brighton, this would serve as a natural extension of its vision to become a sustainable city. The map below identifies foundational elements of a local food system within the District.

The District already has strong agricultural assets. In addition to Sakata and Petrocco Farms, several vegetable farms in the area have on-site farm markets. Berry Patch Farms offers a unique agritourism destination with pick-your-own berries and flowers as well as access for on-site events and classes. The City of Brighton holds annual Market Day Events celebrating local farmers. Sod farms and nurseries offer additional agricultural presence.

Future plans include adding community gardens, hiking and biking trails linking the South Platte River with the City of Brighton, and preservation of historical buildings and farm sites in the area. These existing and planned activities will build a strong agricultural and agritourism foundation that can be leveraged to build a stronger local food system.

Adams County and the City of Brighton will explore the recommendation to hire an employee dedicated to developing the programs and marketing plan necessary to support building a more robust local food system. This person will work in partnership with diverse community stakeholders, including County and City farmland preservation efforts, economic developers and communications staff, school districts, non-profits, CSU Extension as well as Adams County and City of Brighton Open Space agencies, and the Agricultural Land Preservation Sub-Committee.

Funding for marketing and programing efforts will be derived from a variety of sources, including funding from Adams County, the City of Brighton, and various grants. There is also an opportunity to fund larger marketing initiatives through existing lodging tax funds. The action plan outlines both short-term and long-term activities to be undertaken by the County and City working cooperatively.

CLUSTER/CONSERVATION DEVELOPMENT

PURPOSE

Farmers, local governments, and non-profits are not the only ones who can conserve farmland. Many developers have successfully integrated farmland with land development. A combination of the above preservation methods can be paired with residential and commercial development. The Cluster Standards presented here and the Transfer of Development Rights and Annexation options presented later in this chapter are specific methods to achieve conservation development. Vision, creativity, and flexibility are required to successfully implement conservation development.

Currently, landowners or developers in the County can apply to rezone property as a County Planned Unit Development (P.U.D.) meeting the County's Cluster Development Standards. The purpose of Cluster Development, also known as Conservation Development, is to allow additional residential units than would typically be allowed under existing zoning to be concentrated on a portion of the site while conserving the remainder of the property. Rather than developing the entire property with large residential lots, Cluster Development encourages developers to build a higher number of homes on smaller lots that are closer together. More homes and fewer infrastructures mean developers can make a profitable return on investment. The remaining land is then conserved in larger areas that protect sensitive natural resources, including farmland, floodplains, and wildlife habitat, providing a connected green space network. This type of sustainable development benefits the environment and area residents by creating a stronger sense of community and opportunities for farming and recreation. Note that a tax credit is not available if the conservation easement is part of a land use proposal where density bonuses were received.

According to the County's existing Cluster Development regulations, projects are limited to those designated Agriculture or Residential Estate on the Future Land Use Map of the County Comprehensive Plan. Clustered lots must be between 2.5 and 5 acres. The number of bonus units is equal to the total acres divided by 17.5, and the maximum number of bonus units is 100.

Example

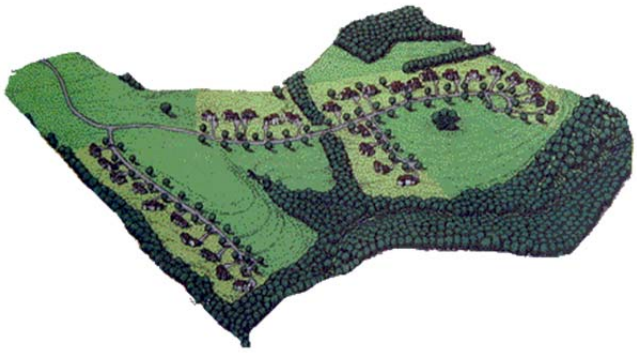
As shown in the table on the following page, under existing County zoning, a 70-acre property zoned in A-3 would be limited to two 35-acre lots. With clustering under current standards, the same property could get 4 additional lots (70/17.5), each a maximum of 5 acres. Thus, 10 to 20 acres would be developed while 50 to 60 acres would be placed into a conservation easement.

To make clustering even more desirable, this plan recommends that the Cluster Development regulations be revised so that a minimum of 50% of the site be conserved, to encourage smaller lot sizes (1 to 5 acres), and to allow clustering on Residential Estate zoned lots and smaller if approved in a PUD and meets approved criteria. The County will also consider increasing this density bonus to make conservation development more enticing.

CLUSTERING COMPARISON TO CURRENT ZONING			
ACRES	CURRENT ZONING	MAX UNITS: CURRENT ZONING	MAX UNITS: CURRENT CLUSTER DEVELOPMENT
70	A-1 (provides for rural single-family dwellings and limited farming on lots greater than 2.5 acres)	14 to 28	32
70	A-2 (permits farming and limited ranching on lots greater than 10 acres)	3 to 7	11
70	A-3 (allows farming and ranching on lots greater than 35 acres)	2	6

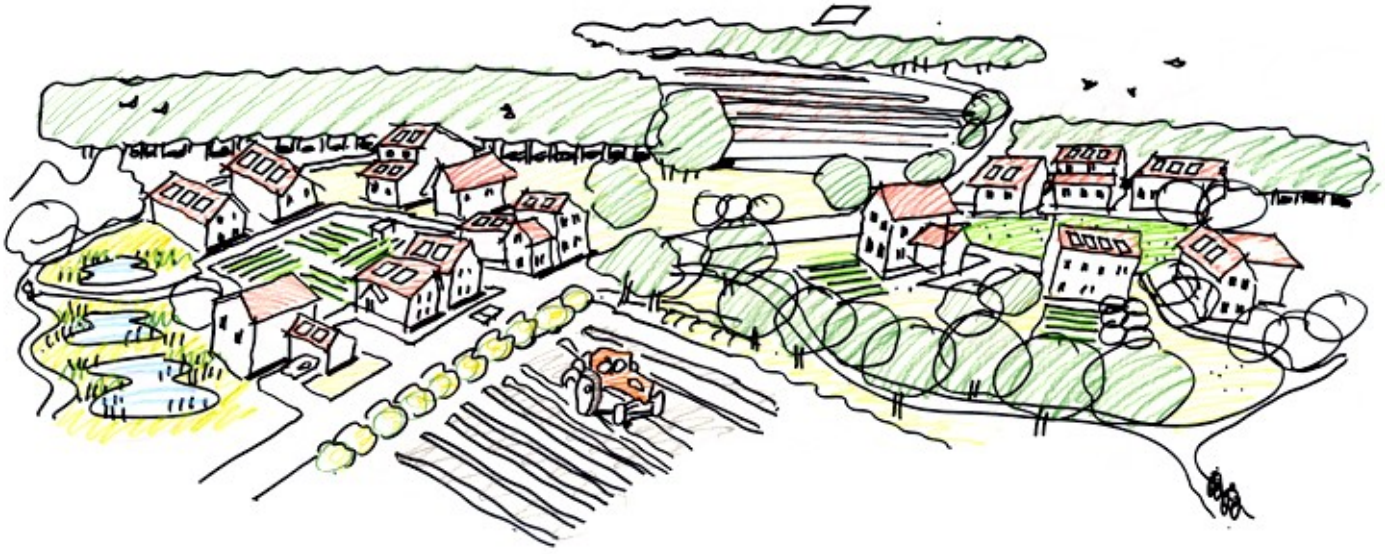
Current Development Trends Conceptual Diagram

Cluster Conceptual Diagram



Source: Middle Country Road Renaissance Project

Cluster Illustrative Drawing



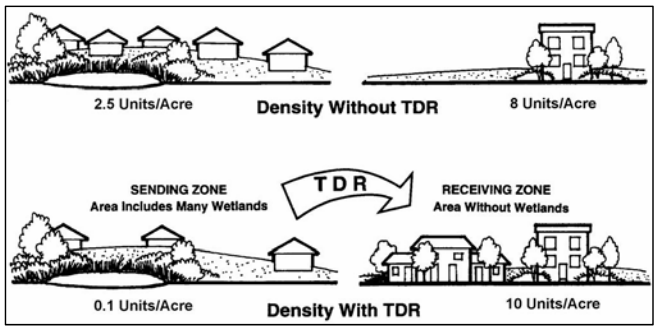
TRANSFER OR PURCHASE OF DEVELOPMENT RIGHTS

PURPOSE

A Transfer of Development Rights (TDR) program is intended to preserve open space, wildlife habitat, farmland and floodplain areas with a conservation easement while transferring development rights from one area to another to encourage higher density development in more appropriate areas. As shown in the example graphic below, an area where it's desirable to conserve land may currently allow the majority of the property to be developed at 2.5 units/acre. With TDR, the same area is designated a sending zone, the density is decreased to 0.1 units/acre, land is conserved, and development rights are transferred to a receiving zone that benefits from increased density.

TDR CONCEPTUAL DIAGRAM

Source: Vermont Natural Resources Council



Property owners granting a conservation easement to the undeveloped land may reap economic benefits not otherwise available to them due to current constraints on development of their property, such as being located in a floodplain. Farmers may also find relief from financial difficulties by selling a conservation easement, which prevents future residential development on their property but allows them to continue to farm their own land.

DEFINITIONS

TDR: *Property owners with land in designated sending areas can sell development rights to property owners with land in designated receiving areas.*

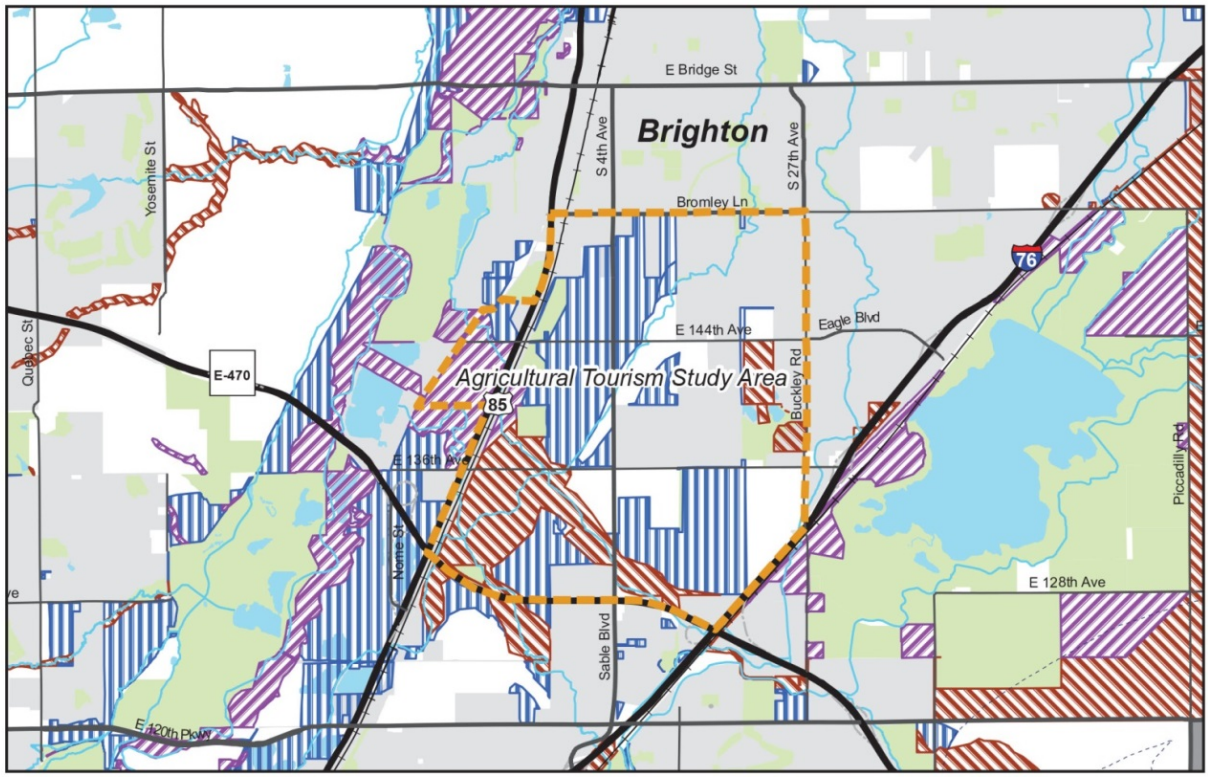
Sending Areas: *Lands preserved by selling off the development rights. Property owners in this area may sell their rights to developers to build homes in the receiving area.*

Receiving Areas: *Lands developed with additional density because other land has been preserved. Property owners or developers in this area may buy the rights to build additional homes on their property from property in a sending area.*

Transfer Ratio: *Used to calculate the number of additional housing units that can be built in the receiving area. The size of the sending parcel, divided by 35, times the transfer ratio number, equals the number of units that can be transferred.*

The County's existing TDR program identifies several sending areas in the District, as shown on the next page, but the only receiving areas are located outside the District study area (a map of the entire program can be found in the Adams County Comprehensive Plan at http://www.adcogov.org/DocumentCenter/View/2785). To date, the County has conserved 3,000 acres using TDR, but the program hasn't been used since 2005, so adjustments are likely needed to make the program more marketable. **The County and City should cooperatively update the TDR program to allow land to be preserved in the County and create receiving areas within Brighton's Urban Service Area to accommodate urban level densities proximate to existing infrastructure.**

ADAMS COUNTY TDR PROGRAM MAP



Source: 2012 Adams County Comprehensive Plan

Transferable development rights can help achieve the preservation goals of the District Plan. A preliminary study indicated that modifications of the County's current TDR program could make this preservation tool more manageable and attractive for both sending site owners and receiving site developers. Specifically, TDRs could be issued for the retention of water rights shares as well as for the preservation of land by conservation easement. Under one approach, a sending site owner would be able to sell one TDR unit for each acre of land placed under easement plus one TDR unit for each water share retained on the sending site. For each TDR unit purchased from sending site owners, receiving site developers might be permitted one bonus dwelling unit, meaning one additional dwelling above the number that would otherwise be allowed. The preliminary study suggested that these ratios would result in transactions that provide the compensation sending area owners want at a cost that receiving area developers can afford. These changes would also simplify the program and allow smaller parcels in the District Plan area to qualify as sending sites. **However, before making any changes in the code sections that control the TDR program, the County should conduct a comprehensive economic study of all development components to verify or change the assumptions used in the preliminary study.**

The preliminary study of Adams County's TDR program compared two alternatives to the approach described above, referred to as the Alternative Options 1 and 2. Alternative Option 1 offers a less generous formula of one TDR per 1.4 acres of preserved sending site land and one TDR per 1.4 water shares. These two approaches would have the following results for a hypothetical 42-acre property in the District Plan sending area that has 42 water shares to be retained on the sending site. This example assumes sending area property owners receive $18,000 per acre of sending area land placed under easement plus $18,000 per each water rights share required to be retained on the sending site. Under both approaches, the compensation to the sending site property owner and the cost paid by the receiving site developer remains the same: $1,512,000. Under Alternative Option 1, the receiving site developer gets 60 TDR units enabling the construction of 60 bonus dwelling units at an assumed cost of $25,200 each. The Alternative Option 2 generates 84 TDR units, or 84 bonus dwelling units at an assumed price of $18,000 per TDR as detailed below.

Sending Site

- 42 acres under conservation easement at $18,000 per acre = $756,000
- 42 water shares at $18,000 per share = $756,000

Total sending site compensation: $1,512,000

Receiving Site Option 1: Each TDR results in one bonus dwelling unit on the receiving site

- 42 acres at one TDR per 1.4 acres = 30 TDRs (30 receiving site bonus units at $25,200 each = $756,000)
- 42 water shares at one TDR per 1.4 shares = 30 TDRs (30 receiving site bonus units at $25,200 each = $756,000)
- Total TDR cost to developer: $1,512,000 for 60 TDRs or $25,200 per TDR (with each TDR allowing one receiving site bonus dwelling unit)

Receiving Site Option 2: Each TDR results in one bonus dwelling unit on the receiving site

- 42 acres at one TDR per acre = 42 TDRs (42 receiving site bonus units at $18,000 each = $756,000)
- 42 water shares at one TDR per share = 42 TDRs (42 receiving site bonus units at $18,000 each = $756,000)
- Total TDR cost to developer: $1,512,000 for 84 TDRs or $18,000 per TDR (with each TDR allowing one receiving site bonus dwelling unit)

EXAMPLE

COMPARISON TO IMAGINE ADAMS COUNTY COMPREHENSIVE PLAN (not existing Adams County Zoning or Alternative Options)				
ACRES	CURRENT ZONING	MAX UNITS: CURRENT ZONING	TDR MULTIPLIER	MAX UNITS: TDR RECEIVING AREA*
70	A-1 (provides for rural single-family dwellings and limited farming on lots greater than 2.5 acres)	28	1:25	77
70	A-2 (permits farming and limited ranching on lots greater than 10 acres)	7	1:25	57
70	A-3 (allows farming and ranching on lots greater than 35 acres)	3	1:25	53

** TDR multipliers shown above are recommended in the Imagine Adams County Comprehensive Plan; the District Plan recommends the County and City should further evaluate the Alternative Options and amend the existing TDR regulations to meet the objectives of the District Plan.*

APPLY FOR ANNEXATION WITH PERFORMANCE CRITERIA

PURPOSE

In order to develop land at urban level densities (lots smaller than 1 acre), landowners would need to apply for annexation into Brighton. Standard procedures and development requirements would apply with the following criteria:

- Compliance with the District Plan, Comprehensive Plan, Transportation Plan, and Municipal Code
- Street and Pedestrian/Bicycle Connectivity
- Urban Level Densities
- Infrastructure Serviceability
- Rural Transition
- Agricultural Production
- Architectural Character
- Sustainability

Compliance with the District Plan, Comprehensive Plan, Transportation Plan, and Municipal Code

Annexation should comply with the intent of this District Plan, as shown in the vision sketch, the Landowner Options Map, and the Future Land Use Plans contained herein and in the City's Comprehensive Plan. As part of the Be Brighton Comprehensive Plan Update, the City has created a Future Land Use Plan for the entire area within its growth boundary. The Plan accommodates a full spectrum of urban and rural uses and is a statement of how and where Brighton wants to grow over the next 20 years. In this timeframe, the City is likely to annex additional portions of the District study area, particularly those adjacent to city limits, served by water and sewer infrastructure within the Urban Service Area defined in the Comprehensive Plan. However, much of the area will likely remain within the County. As such, the Plan incorporates three future land uses identified in the County's Comprehensive Plan, including a Natural Resource Conservation Overlay, Agriculture, and Estate Residential.

A municipal land use code amendment might establish a new overlay zoning district that would address specific standards for annexation applications and PUDs that have exceeded their vesting period.

Street and Pedestrian/Bicycle Connectivity

To ensure maximum connectivity within and to surrounding parcels, the average block size would be 500 feet. Well-developed internal sidewalks, trail systems, and streetscapes would maximize active living. New developments would also contribute to building out the City's Transportation Plan including regional trail systems; specifically the Fulton Ditch Trail and connections to the South Platte River Trail (see the Active Transportation Plan later in this chapter).

Urban Level Densities

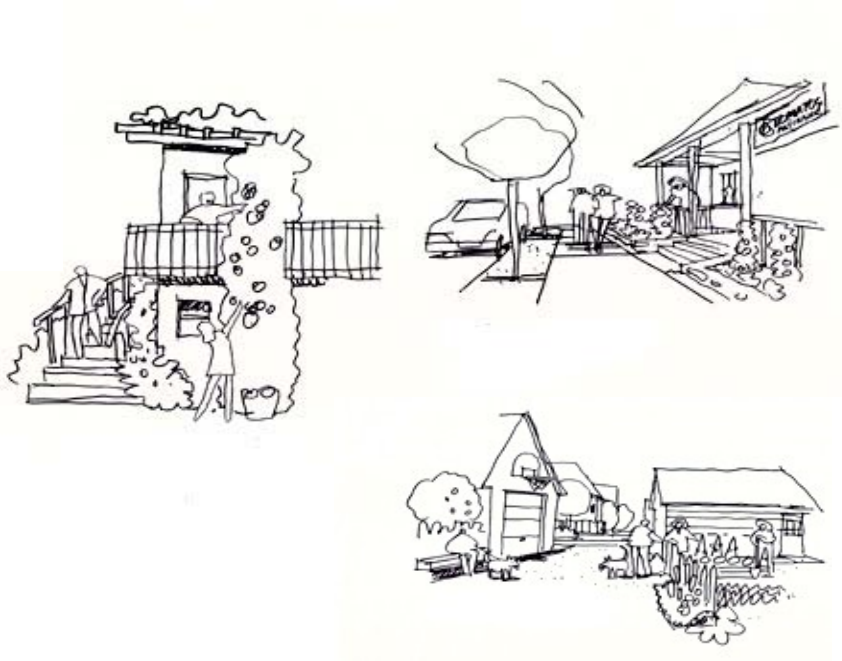
Development areas would be highly dense with a mix of housing types. A minimum lot coverage requirement would be established to grant flexibility in home size, while maintaining small yards and maximizing open space areas. Concentrating development to maximize the contiguity of open space and agriculture is encouraged.

Infrastructure Serviceability

Priority would be given to annexation proposals within proximity of existing infrastructure - streets, water, sewer, and storm water.

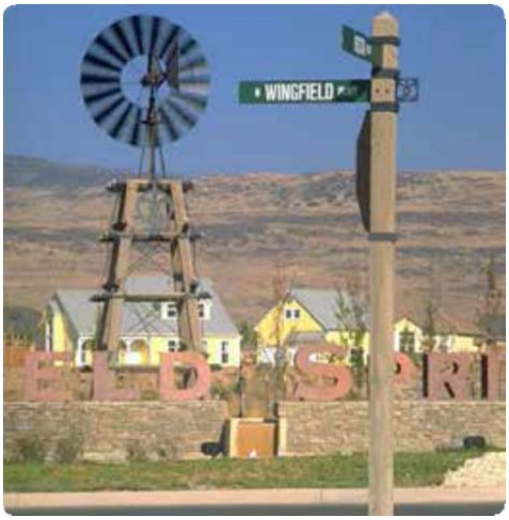
Rural Transition

Standards would be developed to address sensitive transition between urban and agricultural uses, such as density, bufferyards, screening, and protection of agricultural operators from nuisance complaints.



Agricultural Production

Agricultural character would be retained, such as windrows, ditches, community supported agriculture, etc. A high percentage of land would be dedicated as open space, with a high percentage retained in agricultural production or wildlife habitat.



Architectural Character

Agricultural placemaking would be emphasized via architectural design, historic resource preservation, community gardens, greenhouses, edible landscaping, public art, signage, civic greens, etc.

Sustainability

Local land-use planning measures that include water conscious policies requiring conservation, energy efficiency, solar power, composting, and other sustainability measures compatible with farming heritage as outlined in section 6.33 of the 2015 Colorado Water Plan are encouraged. An example of such low impact development is shown in the graphic below.

Prairie Crossing Case Study

One of the pioneers of such efforts is Prairie Crossing in Grayslake, Illinois, which has published a booklet outlining several more developments that learned from their early experiences.[4]

Prairie Crossing is the result of a residents' initiative launched in 1987 when a group of neighbors pooled their resources to purchase 677 acres of land where a developer had planned to build 2,400 homes. The neighbors formed a corporation that sought to develop this land far less intensively, limiting construction to 359 single-family homes and 36 condominiums.

That goal has been achieved. The development also includes a 40-acre for-profit organic farm which leases land from Prairie Crossing, as well as an incubator and teaching farm, the Farm Business Development Center (FBDC), and a charter school[5]. Established farmers serve as mentors and teachers to beginning farmers as part of their lease

[4] Ranney, V; Kirley, K; & Sands, M (2010). "Building Communities with Farms: Insights from developers, architects and farmers on integrating agriculture and development." Grayslake, IL: The Liberty Prairie Foundation.
[5] See also http://www.prairiecrossing.com/ and the publication "Building Communities with Farms," available at http://www.prairiecrossing.com/libertyprairiefoundation/LPF-Publication9-10.pdf

agreement. Beginning farmers can participate in courses and training for up to five years and can also lease small parcels of land from the FBDC.

A 0.5% transfer fee from Prairie Crossing home sales, grants and fee-for-service contracts goes to support the FBDC's long-term operations. The foundation's executive director noted that this incubator did not have the same financial constraints that many others face, because the land was owned from the beginning and therefore does not require the same amount of startup capital.

Bucking Horse (Fort Collins, Colorado)

Bucking Horse, a 300-acre residential development, was based around a producing farm originally established in the 1880s. The Jessup Farm was among the Fort Collins Urban Growth Area's best-preserved and most intact farm complexes. It received landmark preservation designation from the city, state and federal governments. This cleared the way for the developers to get the necessary renovation permits and provided preservation tax credits to help fund the renovation process. The vision for an artisan village incorporated into a residential community that showcases local businesses and restaurants with locally sourced food and goods has been realized.

This is just one example of an emerging trend for developers to integrate housing development with farmland. Some propose that farmland is better protected if homes are built nearby, and that these homes will also provide a market for food raised by farms in the area.

PROS	CONS
• Developers will take the lead, freeing up agency staff time. • Private financing may be easier to obtain than public. • New tax base created by building new housing may help pay for preservation of farmland.	• Developer priorities may not be the same as public priorities. • Only in rare cases do local residents have substantial say in planning or implementation. • Housing development removes farmland from production. • Costs of providing new services to new residents often negate increase in tax base.

ADDRESSING EXISTING CONSTRAINTS

All of the above recommendations would function within the following transportation and oil and gas constraints, as outlined in the next few pages.

MOVING TRANSPORTATION FORWARD

As mentioned in Chapter 2, the District is served by an excellent regional transportation network. However, within the District, a rural road pattern constrains traffic flows. Since the inception of the District Plan, area residents and commuters have expressed concern about increasing traffic congestion. During rush hour, in particular, long queues of vehicles form at intersections, especially 136th Avenue and Sable Boulevard. Vehicles also occasionally get stuck behind slow-moving tractors, creating animosity between farmers and motorists. Lastly, a lack of sidewalks, bike lanes, trails, and transit facilities inhibit safe pedestrian, bicycle, and bus mobility.

Brighton is currently updating its Transportation Master Plan (TMP), which can be found at http://brightonco.gov/943/2015-Transportation-Master-Plan-Project. The TMP, which was updated in conjunction with the Be Brighton Comprehensive Plan and the District Plan, outlines transportation improvements for the City's entire Growth Management Area to accommodate projected growth and development through build-out. This network is development driven, in that roads will only be built if development occurs. The TMP Map indicates the roads which would provide access to land between the South Platte River and I-76 should the area be developed to urban densities. The TMP Map's build out uses long-range Denver Regional Council of Governments (DRCOG) population and traffic forecasts. In actuality however, future projects will be prioritized according to actual trends and needs, as opposed to forecasts. This means that many of the roads shown in the Build-Out Thoroughfare Plan, for example, might not be necessary should land be conserved or remain in lower intensity uses.

The Adams County Transportation Plan was updated in 2012 as part of Imagine Adams County. It emphasizes collaboration with cities to ensure the regional transportation network supports local needs. The Adams County Transportation Plan will be amended upon adoption of the District Plan in accordance with County standards and regulations and as permissible by state law through the District Plan's recommendations for vehicular thoroughfares, active transportation, and transit. As the District develops, the City and County will continue to coordinate the review of transportation plans and improvements. The plans for each are described below.

Vehicular Thoroughfares

The TMP identifies Bromley Lane, 27th Avenue, and 136th Avenue as major arterials, consistent with the previously adopted County Transportation Plan; major arterials are designed as 140' wide. A change from the previous plan is to reclassify 144th Avenue and Sable / Potomac from major arterials to minor arterials with a 110' right-of-way and Potomac as a collector street with an 82' right-of-way. These streets should only be upgraded to a level that accommodates sufficient traffic flow while minimizing the impacts of road widening. Residents along Sable have been particularly concerned with the takings of their property that would be necessary to expand the road width beyond a minor arterial. The widening of Sable will depend on future traffic congestion and development and is unlikely to occur prior to 2040. Nevertheless, the City is currently evaluating potential improvements for the intersection of Sable and 136th Avenue to improve traffic flow.

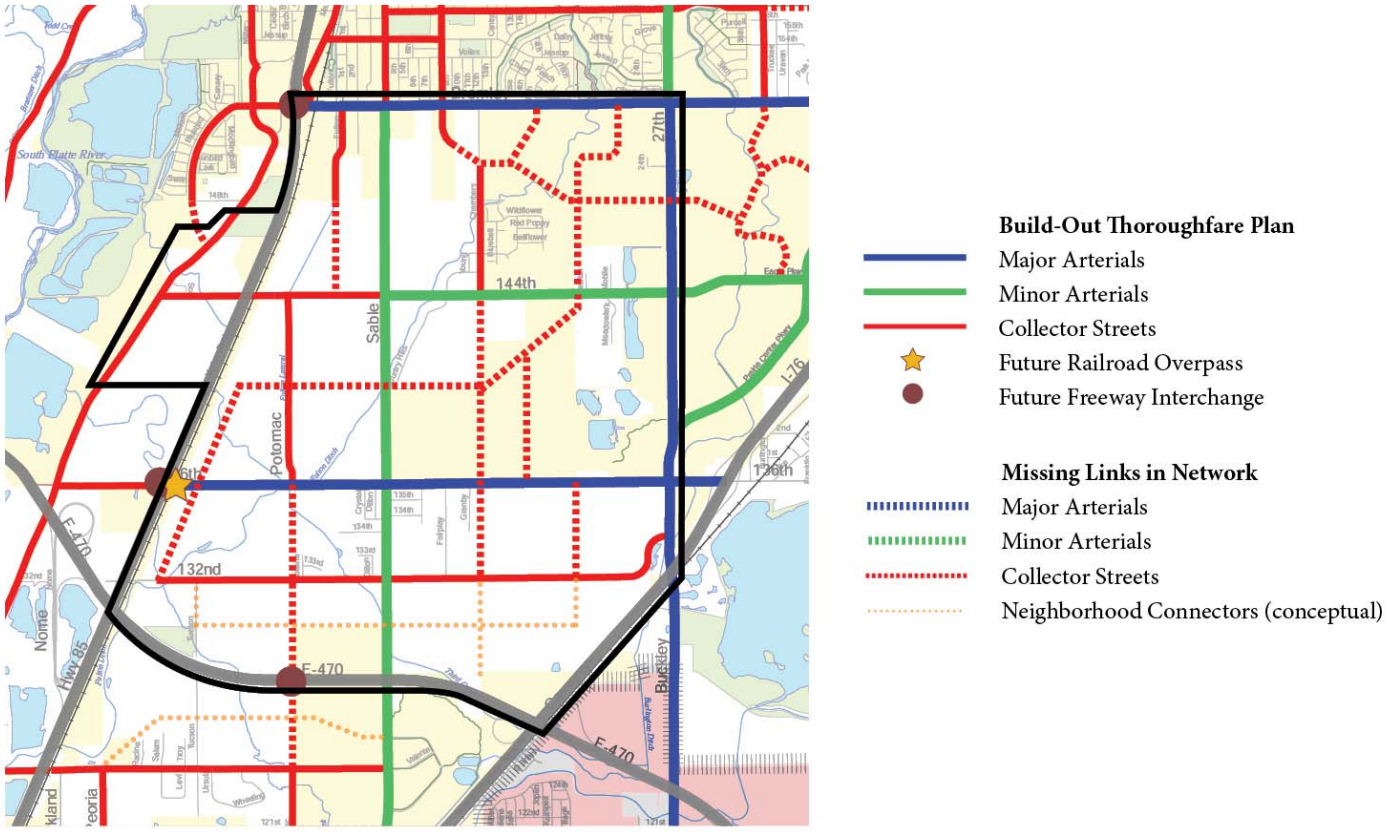
Both this TMP and the County's previous Transportation Plan anticipate an interchange at E-470 aligned with Potomac; however, Sable may be better suited for an interchange, and the land around the existing grade-separated intersection of Sable and E-470 should be preserved in case future plans and land uses support an interchange at this location.

If development begins to fill in the District, new roads may be necessary, and their preliminary alignment is identified on the Thoroughfare Plan, shown below. The final alignments will be established by developers working in conjunction with the City or County, depending on the intensity of the development. All of the new roads in the study area are anticipated to be collector streets and even-narrower neighborhood connectors (44' wide). In the interim, the TMP suggests a rural collector cross-section with bike lanes and a wide shoulder that would better accommodate tractors. Example cross-sections for the rural collector, minor and major arterials are shown on the following page.

It is important to note that there are slight discrepancies between how the TMP and County Plan classify streets. For example, both plans require approximately 80' for a collector right-of-way. However, within this right-of-way, the County includes a median/turn lane and attached sidewalks, while the City proposes detached sidewalks. Furthermore, the City's TMP acknowledges that only 50' of the right-of-way would be owned by the City, while a 16' easement on both sides of the road would be acquired from adjacent property owners to build separated sidewalks. The City and County are committed to working closely together to ensure the careful design of safe and smooth transitions between different cross-sections, while minimizing impacts to existing homes and natural features.

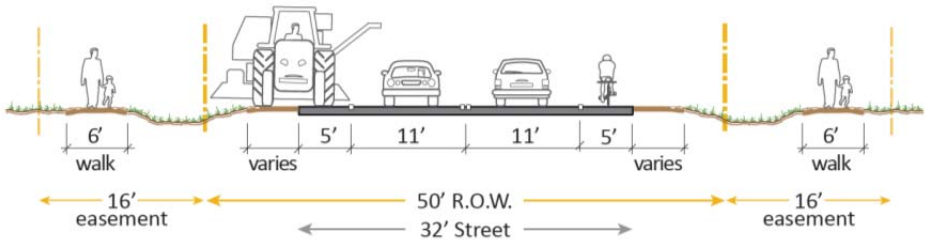
BUILD-OUT THOROUGHFARE PLAN

(2016 Brighton Transportation Master Plan)



RURAL ROADWAY COLLECTOR OPTION

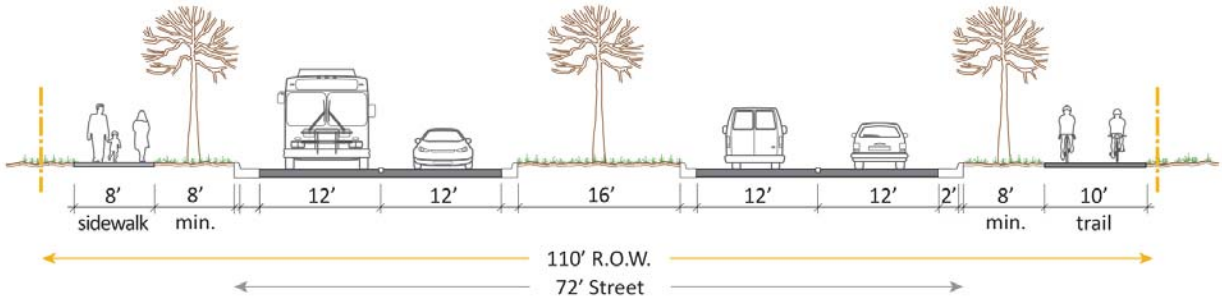
(2016 Brighton Transportation Master Plan)



Note: The sidewalk could range from 6'-10' to accommodate a multi-use trail and the 10' foot tractor lane could all be paved.

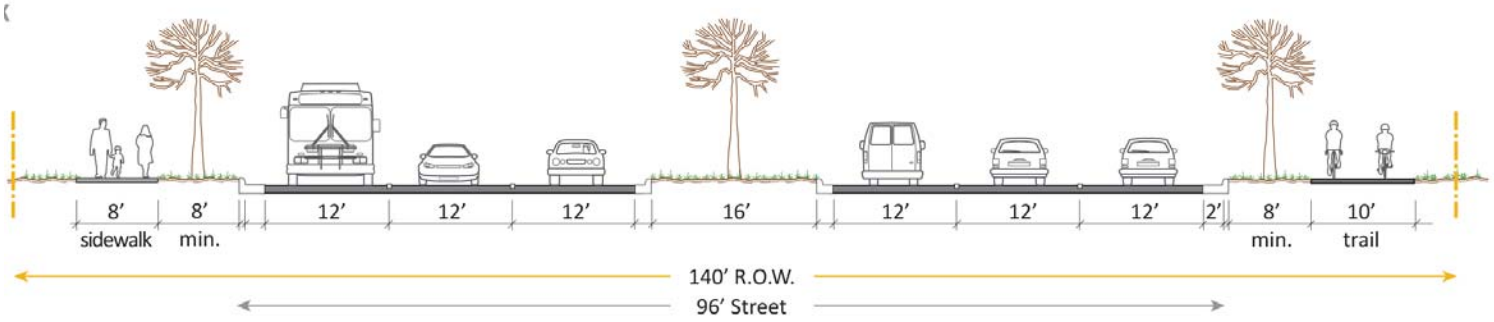
MINOR ARTERIAL OPTION

(2016 Brighton Transportation Master Plan)



MAJOR ARTERIAL OPTION

(2016 Brighton Transportation Master Plan)



Active Transportation

The TMP's Active Transportation Plan reinforces the County's Bicycle Plan with new off-road trail connections and collector streets with signed and striped bike lanes. Both plans emphasize bicycle infrastructure on the east-west corridors of Bromley Lane and 132nd Avenue, as well as the north-south corridors of Sable, Chambers, and 27th Ave. Both plans also identify the South Platte River, Second Creek, Fulton Ditch, and E-470 as regional greenways and/or off-street trails. The TMP further classifies Third Creek and the Brighton Lateral Ditch as greenway corridors. The TMP also suggests that all new collector streets will include bike lanes. Getting people from the South Platte River Trail to the District will require new grade separated crossings where Second and Third creeks cross US 85 and the railroad.

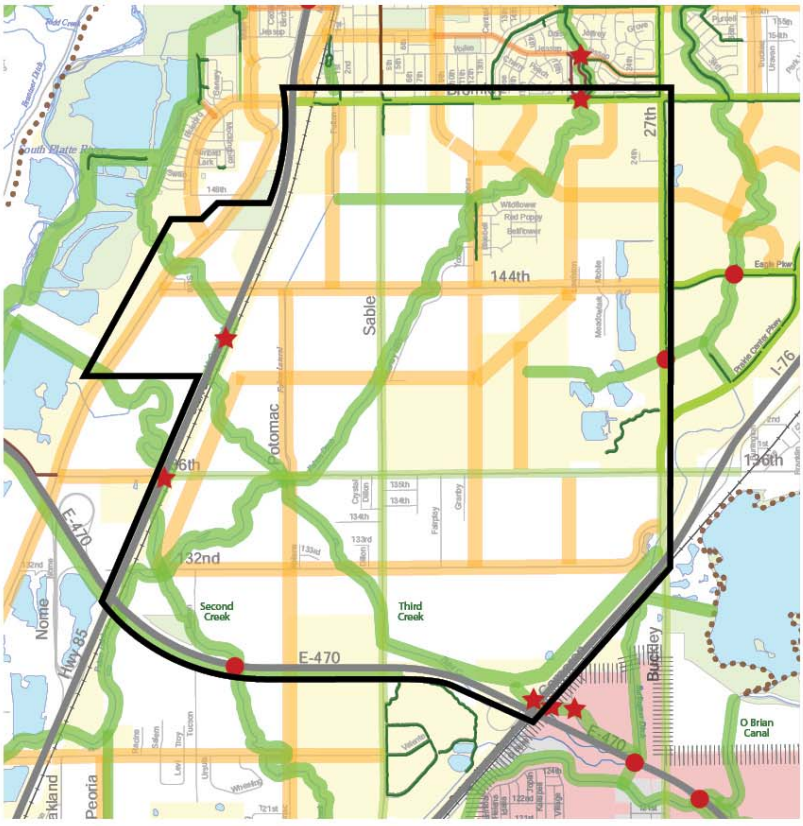
Even without new collectors and associated bike lanes, the proposed active transportation plan would greatly improve pedestrian and bicycle mobility and safety throughout the District, making it friendlier to residents, commuters, and tourists alike.

Transit

Improving bus service to the District could help draw day tourists from the west and south, and the TMP's transit vision supports enhanced bus services along Sable, 27th Avenue, Bromley Lane, US 85, and State Highway 7 similar to the County's Transportation Plan. However, unlike the County, the City did not identify E-470 for future transit corridor preservation.

ACTIVE TRANSPORTATION PLAN

(2016 Brighton Transportation Master Plan)



Capital Improvement Plan

The following table lists the City's and County's capital improvement projects for the District study area. The expansion of major and minor arterials, as well as the addition of collector streets, will be developed if population, employment, or congestion increases in the area. If preservation of agricultural lands occurs at the pace proposed, increased congestion will be the main determining factor. It is recommended that the Brighton TMP be evaluated in tandem with land preservation acquisitions to identify what improvements may be required in the immediate term if population and employment densities or congestion do not trigger the improvements outlined in the capital improvement plan.

City of Brighton Transportation Capital Improvement Plan			
Corridor Name	Project Type	Description	Priority
Brighton Lateral Ditch	New trail construction	Construct regional multi-use trail along Brighton Lateral Ditch, from Bromley Lane south to Prairie Center, then west (roughly along the 140th Avenue alignment) to future north-south Brighton Lakes Collector Street (see project #28c)	Near term (by 2025)
E. Bromley Lane	New trail construction	Complete missing links to provide a continuous 10' trail along south side of Bromley from Hwy 85 to I-76 Frontage Road/Medical Center Drive; stripe crosswalks	Near term (by 2025)
E. Bromley Lane	Spot improvement	Retrofit roundabout at 50th and Bromley to enhance bicycle, pedestrian and vehicle safety	Near term (by 2025)
Fulton Ditch Trail	New trail construction	Construct regional multi-use trail along Fulton Ditch, from Bromley Lane south to Henderson Elementary; includes a trail underpass across Bromley Lane	Near term (by 2025)
W. Bromley Lane	Street retrofit	Retrofit Hwy 85 intersection and street segment from Macaw Street to Hwy 85 to provide bicycle accommodation	Near term (by 2025)
132nd Avenue	Street widening/ improvement	Widen and upgrade to a collector street from future US 85 frontage road just east of UP railroad tracks to east to Buckley Road	Long term (beyond 2025)
136th Avenue	Street widening/ improvement	Widen and upgrade to a collector street from Brighton Road east to US 85	Long term (beyond 2025)
136th Avenue	Spot improvement	Construct a grade-separated crossing over the UP railroad tracks	Long term (beyond 2025)
136th Avenue	Street widening/ improvement	Widen and upgrade to a major arterial street from US- 85 east to I-76	Long term (beyond 2025)
140th Avenue	New street construction	Construct new collector street from future US 85 Frontage Road (just east of railroad tracks - see project 24c) east to future 22nd Avenue collector just east of future Chambers Road (see projects 28c and 26g respectively)	Long term (beyond 2025)
E. Bromley Lane	Street widening/ improvement	Widen and upgrade to a major arterial street segments from US 85 east to I-76	Long term (beyond 2025)
Fulton Ditch Trail	New trail construction	Construct a multi-use trail spur from Fulton Ditch west to Fulton Lateral Ditch to address gap in collector street network	Long term (beyond 2025)

City of Brighton Transportation Capital Improvement Plan			
Corridor Name	Project Type	Description	Priority
Sable Boulevard	Street widening/ improvement	Widen and upgrade Sable Boulevard to a minor arterial street from Bromley Lane south to north entrance of South Adams County Parkway; may require widening bridge over E-470	Long term (beyond 2025)
Sable Boulevard	Street widening/ improvement	Upgrade Sable Boulevard to a minor arterial street from north entrance of South Adams County Parkway south to 120th Avenue	Long term (beyond 2025)
Second Creek	New trail construction	Develop multi-use trail from Platte River southeast for regional greenway connection with Commerce City trails; utilize existing trail underpass provided at E-470; includes new grade-separated trail crossings at US 85/UP RR, Sable Blvd, I-76 and BNSF RR	Long term (beyond 2025)
Third Creek	New trail construction	Develop multi-use trail from Platte River southeast to I-76/Buckley; includes new grade-separated trail crossings at US 85/UP RR, I-76, BNSF RR and E-470 to I-76 ramp	Long term (beyond 2025)
Bromley Lane	New street construction	Construct new collector street from existing terminus of W. Bromley Lane at E. 148th Ave, south to Brighton Road	Long term (beyond 2025)
Adams County Transportation Capital Improvement Plan			
All County roads in District	Resurfacing	Resurface the existing pavement on all County roads	Near term (2016)
136th Avenue	Ditch maintenance	Reconstruct the ditch on the south side of 136th Ave. At Sable Boulevard	Near term (2016)

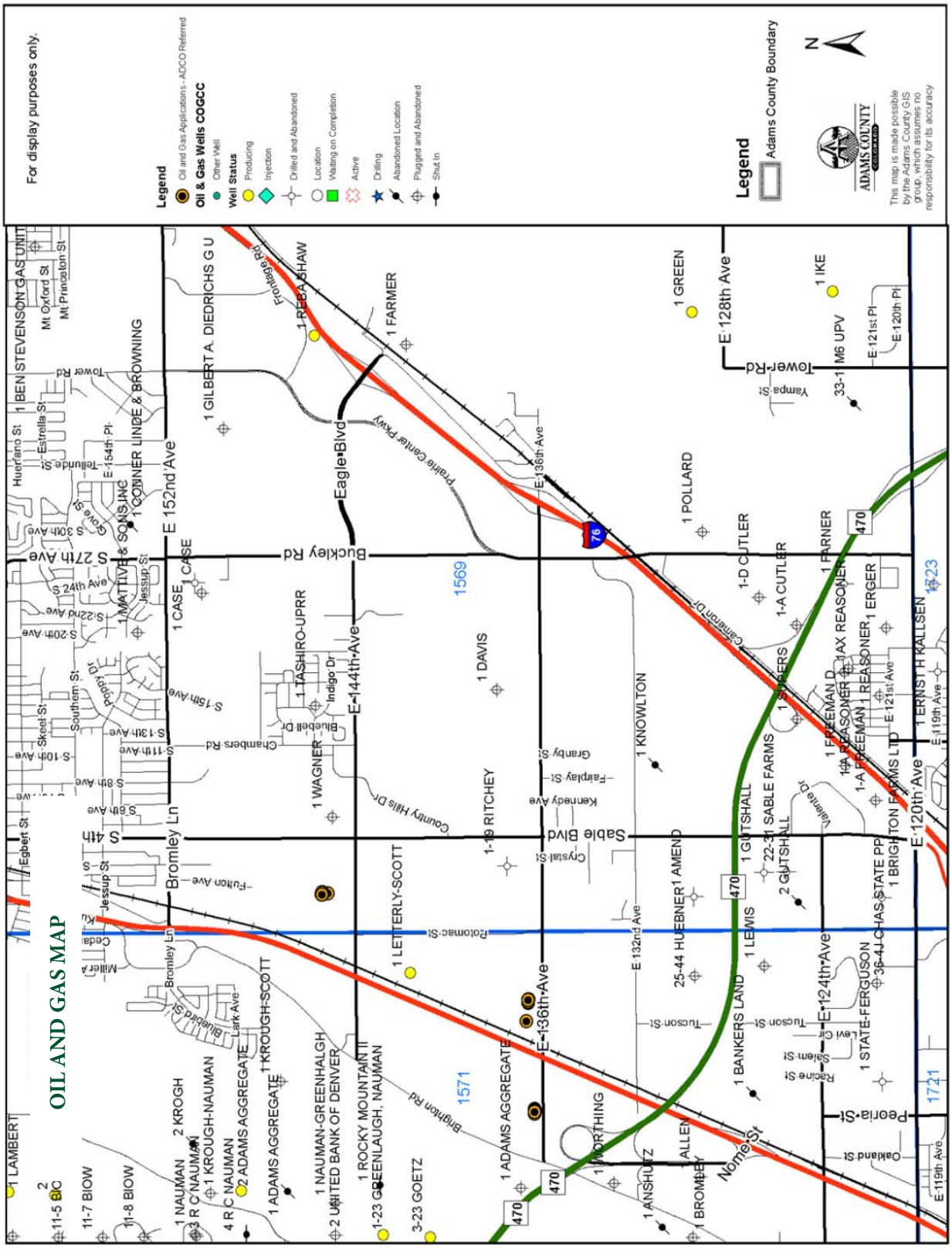
OIL & GAS & EMERGENCY MANAGEMENT

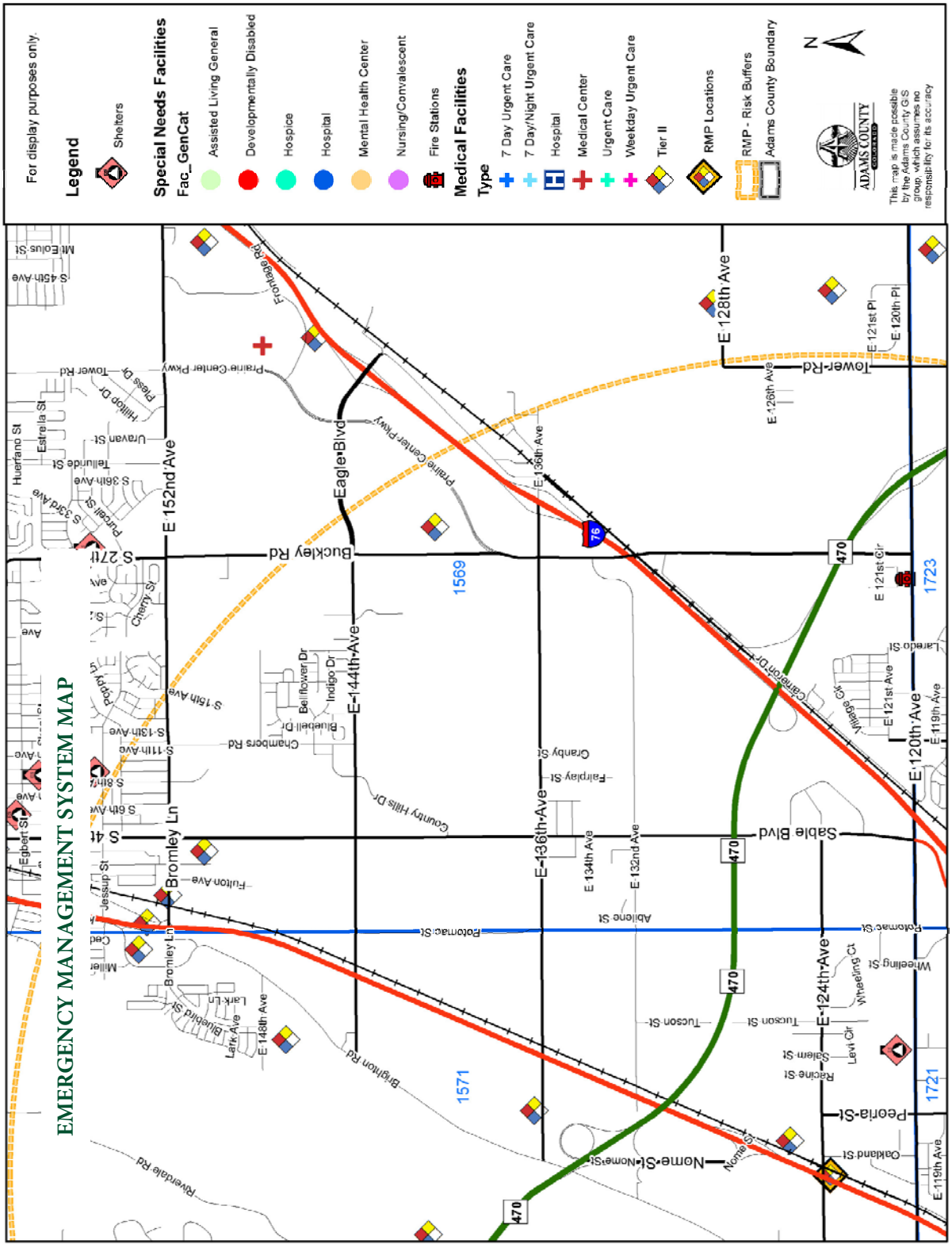
Oil and gas production currently occurs within the District Plan study area, as shown on the following map, and is expected to continue. Appendix F contains a complete list of wells in the area along with their status. Ward Petroleum Corporation is the most active operator in the area. Currently, they have three wells in production. Ward Petroleum plans to drill an additional 2-3 wells on existing pads in the upcoming year. Each pad can accommodate 8-12 wells.

Adams County and the City of Brighton's interest in oil and gas development is two-fold. First, local governments along with the Colorado Oil and Gas Commission are responsible for safeguarding public safety, health, and welfare. The City of Brighton should continue to utilize the memorandum of understanding presently established with oil and gas operators. This memorandum of understanding and County and City regulations should be evaluated frequently in coordination to ensure that best management practices are protecting the health and safety of citizens and landowners. A copy of the report issued to the Colorado Oil and Gas Commission outlining these practices is included in Appendix F along with a template of the memorandum of understanding that is required from all operators.

Second, Adams County and the City of Brighton are interested in controlling the mineral rights for surface use of properties that they own. Some land conservation funding sources such as GOCO may be deterred by the possibility of oil and gas development on conservation projects that they fund. Currently, oil and gas development may occur on County open space lands that had existing extraction facilities prior to their purchase. However, the County would prefer extraction facilities be located off-site of parks and open space, thus necessitating horizontal drilling to access mineral rights that are severed from the surface property.

The Emergency Management System Map, on page 70, indicates special needs facilities within the District Plan area, including places of assisted living and healthcare, which must be carefully considered and planned for in terms of evacuation, communications, and safe transportation in times of emergency, and/or natural and man-made hazards. This map also represents Tier II and Risk Management Program (RMP) facilities which, due to potential risk to the public in terms of environmental contaminants and hazardous materials, are required to provide information and hazard mitigation/emergency operations plans to the County Emergency Management Department and Local Emergency Planning Committee (LEPC). Careful planning, siting, and communications and transportation system considerations are inherent to these locations, as is the relative siting of conflicting and complementary uses.


OIL AND GAS MAP
For display purposes only.
Legend
Oil and Gas Applications - ADCO Referred
Oil & Gas Wells COGCC
Other Well
Well Status
Producing
Injection
Drilled and Abandoned
Location
Waiting on Completion
Active
Drilling
Abandoned Location
Plugged and Abandoned
Shut In
Legend
Adams County Boundary
N
ADAMS COUNTY
This map is made possible by the Adams County GIS group, which assumes no responsibility for its accuracy
Buckley Rd
Eagle Blvd
Sable Blvd
Bromley Ln
Tower Rd
Peoria St
Nome St
E 152nd Ave
E 144th Ave
E 136th Ave
E 128th Ave
E 124th Ave
E 120th Ave
S 27th Ave
S 4th
1569
1571
1723
1721
470
76


EMERGENCY MANAGEMENT SYSTEM MAP
For display purposes only.
Legend
Shelters
Special Needs Facilities
Fac_GenCat
Assisted Living General
Developmentally Disabled
Hospice
Hospital
Mental Health Center
Nursing/Convalescent
Fire Stations
Medical Facilities
Type
7 Day Urgent Care
7 Day/Night Urgent Care
Hospital
Medical Center
Urgent Care
Weekday Urgent Care
Tier II
RMP Locations
RMP - Risk Buffers
Adams County Boundary
N
ADAMS COUNTY
This map is made possible by the Adams County GIS group, which assumes no responsibility for its accuracy
E 128th Ave
Tower Rd
Eagle Blvd
E 152nd Ave
Buckley Rd
E 144th Ave
E 136th Ave
E 120th Ave
Sable Blvd
E 124th Ave
Peoria St
Nome St
Bromley Ln
Brighton Rd
Riverdale Rd
Prairie Center Pkwy
Frontage Rd
Cameron Dr
Country Hills Dr
Potomac St
Abilene St
Tucson St
Wheeling St
Salem St
Racine St
Oakland St
Laredo St
Fairplay St
Granby St
Chambers Rd
Indigo Dr
Bellflower Dr
Bluebell Dr
Fulton Ave
Jessup St
Egbert St
Huerfano St
Estrella St
Tellunde St
Uravan St
Hilltop Dr
Pless Dr
Mt Eolus St
S 45th Ave
S 36th Ave
S 33rd Ave
S 27th
S 15th Ave
S 13th Ave
S 11th Ave
S 8th Ave
S 6th Ave
S 4th
E 148th Ave
E 134th Ave
E 132nd Ave
E 126th Ave
E 121st Pl
E 120th Pl
E 121st Cir
E 121st Ave
E 119th Ave
E 119th Ave
Wheeling Ct
Levi Cir
Lark Ln
Lark Ave
Bluebird St
Miller
Cherry St
Poppy Ln
Purcell St
Cedar
1569
1571
1723
1721
470
76

Chapter 4: ACTION PLAN

Both Adams County and Brighton are committed to the implementation of the District Plan. In order to cultivate a local food system, preserve prime agricultural lands in the District Area, and increase the likelihood of agritourism development, the following are recommended, but not limited to, appropriate next steps in the process:

1. Adams County and Brighton should commit to annually and jointly applying for a minimum of $1M of competitive Adams County Open Space Grant Funds, and applying $250K each of their Open Space share-back funding for preserving agricultural lands within the District. Grant funds are derived from a combination of existing Open Space sales tax, matching GOCO grant funds, and other funding sources which may be available.[1]

2. Adams County and Brighton will develop an evaluation matrix[2] for agricultural land preservation opportunities to include:

   - Prioritize lands that inherently help maintain agricultural operations and wildlife habitat.
   - Define goals around water resources to sustain agricultural production and address future municipal need.
   - Focus on designated prime agricultural lands that are contiguous to optimize farming efficiencies.
   - Where possible, focus on existing view sheds.
   - Assess existing and future transportation constraints.

3. Explore the creation a revolving fund to ensure a portion of property tax funds from the District area are allocated for reinvestment and future land acquisition of strategically located land that would enhance agricultural preservation and help to define the character of development as outlined in this plan. Seek out other funding opportunities and financing to implement and sustain the District Plan's recommendations.

4. Adams County and Brighton should jointly enhance the Agricultural Land Preservation Subcommittee and appoint key members.

5. As part of the plan, a new, full-time equivalent employee dedicated to local food system programming and marketing efforts would be beneficial. This position could be funded equally by Adams County and Brighton for a minimum of two years, with evaluation thereafter, with the goal of the position to be self-sustaining via grant funds thereafter.

6. Contemplate the release of a request for proposals to meet the objectives of the District Plan by the development community.

7. Amend Adams County and City of Brighton regulations and standards to help implement the Local District Plan in regards to transfer of development rights (TDR), and other zoning and design related amendments.

8. Adams County and the City of Brighton will explore other opportunities to work together to implement the District Plan's strategies, actions and recommendations.

9. Pursue opportunities in which historic preservation grants and tax credits might help to rehabilitate historic farm properties.

[1] Actual grant funding request may vary year over year depending upon available lands for fee-simple acquisition in terms of available acreages. Grant applications will be evaluated annually by the Open Space Board and the Board of County Commissioners, and others. All land purchases are subject to annual appropriation procedures.

[2] See discussion of additional, potential land conservation criteria in Chapter 3 of the Plan.

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
Create a comprehensive vision/mission for the future of agriculture in The District Area and the City of Brighton	Organizational Structure Recommendation	Adams County and City of Brighton to create an IGA: identify areas of expertise needed in order to meet the requirements needed for the advisory committee as outlined in The District Plan. This may include recruiting specific individuals to the Agricultural Land Preservation Committee and/or creating a mentoring program with another open space program that has developed an effective agriculture preservation program.	Completed within 9 months of plan adoption	Adams County, City of Brighton, Open Space Departments	Agricultural Preservation Subcommittee	Adams County, City of Brighton
	Organizational Structure Recommendation	Develop a matrix of guiding principles which will guide the actions of the governing body(ies) who will oversee agricultural preservation efforts.	Completed within 9 months of plan adoption	Adams County, City of Brighton	Agricultural Preservation Subcommittee	Adams County, City of Brighton, Grants
	Land Preservation	Define goals around maintaining soil health and quality as part of an agricultural land preservation management strategy.	Ongoing	Adams County, City of Brighton	Agricultural Preservation Subcommittee, Open Space mentor program with another city or county	
	Land Preservation	Define goals around water resources for agricultural purposes.	Ongoing	Adams County, City of Brighton	Agriculture Preservation Subcommittee, Open Space mentor program with another city or county	
	Policy Recommendations	Evaluate the County's Land Development Code to further explore Transfer of Development Rights and/or improve Cluster Standards to align with market realities and recommendations of the District Plan and Be Brighton. Key outcomes include reflecting market conditions, identifying receiving areas within the Brighton GMA, establishing maximum densities in receiving areas, applying the programs to properties under 160 acres, and outlining potential City code revisions to incentivize TDR and Clustering.	Short Term (1-2 years)	Adams County, City of Brighton	TDR Consultant	Adams County, City of Brighton
	Policy Recommendations	Develop a City zoning overlay or design guidelines to address the performance criteria in this chapter. Apply the overlay to properties that could potentially apply for annexation, as shown on the Development Options Map.	Short Term (1-2 years)	Adams County, City of Brighton		Adams County, City of Brighton

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
(cont.) Create a comprehensive vision/mission for the future of agriculture in The District Area and the City of Brighton	Capital Projects/ Investment	Periodically review area plans for future trails as lands are placed into conservation within the District Area to develop the proper connectivity and access to help support the vision of the District Plan.	Ongoing	Adams County, City of Brighton		Adams County, City of Brighton
	Capital Projects/ Investment	Periodically review City of Brighton and Adams County transportation plans as lands are placed into conservation within the District area to develop the proper road improvement/maintenance strategy for the area as it develops	Ongoing	Adams County, City of Brighton		Adams County, City of Brighton, Grants
Increase community awareness, education and engagement	Marketing	Create a marketing campaign utilizing "It all grows in Brighton" or newly identified Local Foods campaign such as "Eat Five, Buy Five."	Short Term (1-2 years)	Local Food Systems FTE	Brighton Economic Development, Chamber of Commerce, Adams County Economic Development	Lodging Tax
	Marketing	Create a local and regional public relations plan to promote the efforts of the District plan including agricultural preservation, local farms and local food.	Short Term (1-2 years)	Local Food Systems FTE	County/City PIO Departments	Adams County, City of Brighton
	Education	Facilitate a local foods workshop with community members (schools, small businesses, CSU Extension,Tri County Health, etc.) to brainstorm and outline individual goals and programs that will address food access, health, wellness and education. Next steps: 1. Utilize existing resources for facilitating a local foods workshop: EPA's Smart Growth Program- Local Foods Local Places. 2. Engage community members and key stakeholders 3. Outline a plan with tactics, funding requirements and time line.	Short Term (1-2 years)	Local Food Systems FTE	Adams County, City of Brighton	

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
Increase community awareness, education and engagement	Health & Wellness	Engage the local non-profit, Brighton Shares the Harvest and Tri-County Health to develop a program focused on encouraging farm markets to accept SNAP and possible additional WIC benefits. Initial steps would include: 1. Engaging both groups to identify resources and approach. 2. Outline next steps and financial requirements. 3. Locate funding sources through grants and other funding opportunities.	Short Term (1-2 years)	Local Food Systems FTE	Tri County Health/ Brighton Shares the Harvest	
	Marketing	Create more community events around local foods (Example: Farmers market promotion program, building on existing efforts such as Market Day)	Short Term (1-2 years)	Local Food Systems FTE	Adams County, City of Brighton	USDA
		Create incentives to incorporate more local food within existing meal programs for seniors. Initial steps: 1. Engage Eagle View Adult Center and Tri County Health to explore existing efforts and opportunities. 2. Identify 2-3 programs that could be implemented over the next 12 months. 3. Identify funding requirements and sources of funding. 4. Outline next steps.	Short Term (1-2 years)	Local Food Systems FTE	City of Brighton/Tri County Health/Eagle View Adult Center	
	Marketing	Expand marketing capacity for locally- and regionally-grown products. This could include working with Brighton Business Development project 'It all grows in Brighton', identifying possible incentive programs for businesses locally and facilitating connections with regional buyers.	Short Term (1-2 years)	Local Food Systems FTE	City of Brighton & Adams County Business Development/Local Producers	USDA Value Added Producer Grants
	Health & Wellness	Increase school nutrition programming within existing school system. Initial activities would include: 1. Bringing together Adams 12 and District 27J's nutrition coordinators to explore current initiatives around nutrition education and where opportunities exist. 2. Work with Tri-County Health, USDA and CO Farm to School to identify programs that have been effective in other districts and would be applicable. 3. Incorporate key programs into existing strategic plans for each district.	Short Term (1-2 years)	Local Food Systems FTE	Brighton School District 27J Colorado Farm to School, Tri County Health	USDA FTS Grant Programs

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
(cont.) Increase community awareness education and engagement	Health & Wellness	Implement on site school gardens within the 27J school district. Initial steps: 1. Examine Adams 12's existing school garden policies and procedures. 2. Identify where a similar programs could be adopted for District 27J. 3. Identify and engage strategic partnerships such as Denver Urban Gardens, Slow Food and The Kitchen Community.	Short Term (1-2 years)	Brighton School District 27J/ Adams 12	Denver Urban Gardens-DUG Adams 12	DUG/ Whole Kids Foundation School Gardens Grant Program
	Health & Wellness	Explore the opportunity to begin a farm to school program for Adams 12 and District 27J to incorporate more local product in schools.	Near Term (2-4 years)	Brighton School District 27J/ Adams 12	Colorado Farm to School-Nutrition Services	USDA FTS Grants
	Health & Wellness	Incorporate salad bars into the school throughout the Brighton 27J School District (Program: Let's move salad bars to schools) -Initial steps would include: 1. Working with Adams 12 and District 27J to identify schools that would be a good fit for this program. 2. Apply for the program 3. Future steps could include identifying existing school gardens that could be incorporated into the program and/or encourage existing distributors to focus on procuring local products.	Near Term (2-4 years)	Brighton School District 27J/ Adams 12	Colorado Farm to School-Nutrition Services	HUSSC-Healthier US School Challenge
	Capital Projects/ Investment	Once an agritourism direction has been established, focus on highway and street signage promoting agritourism, farmer markets.	Short Term (1-2 years)	Local Food Systems FTE	Colorado Tourism: Heritage and Agritourism/ CDOT/Agricultural Preservation Subcommittee	

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
Identify new opportunities for production and food related businesses	Land Preservation	Adams County and City of Brighton to create RFP(s)/RFQ(s) to seek out strategic partnerships that align with the vision for The District. The partnerships could be developers with a consistent vision and desire for agricultural preservation or food related co-op model that focuses on production and distribution.	Near Term (2-4 years)	Adams County, City of Brighton	Agricultural Preservation Subcommittee,	
	Capital Projects/ Investment	Based on the support system recommendations for local farms outlined in the agricultural market study, as lands are preserved and farm programs take hold explore creating a capital improvement plan for local foods infrastructure, such as farmers markets, food processing facilities and opportunities to re purpose historical sites for seasonal housing and distribution food center. Utilize Brighton's Attainable Housing Matrix to explore ways to incentivize future affordable housing projects.	Long Term (5+ years)	Local Food Systems FTE	Adams County, City of Brighton	
	Business Development	Network with existing local firms to explore the possibility of establishing or expanding a local and regional food business enterprise. Next steps: 1. Outline a vision for a local/regional food business enterprise. 2. Identifying what additional information may be needed to move forward such as market research, feasibility studies, and business planning. 3. Construct a business plan with next steps	Ongoing	Local Food Systems FTE	Adams County, City of Brighton	LFPP Planning Grants USDA
	Business Development	Identify and cultivate alternative labor forces that may be available by utilizing local sources such as juvenile detention inmates, youth crop workers and other non-traditional labor types.	Near Term (2-4 years)	Local Food Systems FTE	Adams County, City of Brighton, Agricultural Preservation Subcommittee	-
	Education	Explore and implement with the help of local experts and Universities, innovative farm techniques-organic agriculture research through educational programs for organic growing and research partnerships.	Short Term (1-2 years)	Adams County, City of Brighton, Agricultural Preservation Subcommittee	Adams County CSU Extension, Open Space mentor program with another city/county	Innovations in Agriculture
	Business Development	Encourage (through local conferences and networking) collaborative ventures among farmers and agriculture related businesses to reduce expenses and secure markets.	Short Term (1-2 years)	Local Food Systems FTE	Brighton Business Development, Chamber of Commerce	USDA Grant: RDBCP-09-RBEG-ARRA-

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
Promote the highest and best use of the land and environmentally conscious practices	Land Use	Work with the Colorado Water Conservation Board to develop water conservation policies and incentives for agricultural lands that align with the conservation action items outlined in section 6.34 of the 2015 Colorado Water Plan.	Near Term (2-4 years)	Adams County, City of Brighton, Agricultural Preservation Subcommittee		
	Land Preservation	Identify possible land lease incentives for soil building farming practices, sustainable irrigation practices, and organic farming practices.	Short Term (1-2 years)	Agricultural Preservation Subcommittee	Adams County, City of Brighton, CSU Extension, Open Space mentor program with another city or county	
	Land Preservation	Create incentives for landowners to implement conservation easements.	Short Term (1-2 years)	Agricultural Preservation Subcommittee	Preservation Subcommittee City of Brighton, Adams County, Land Trusts, Farm and Ranch Lands Protection Program,Open Space mentor program with another city or county	USDA
	Capital Projects/ Investment	Encourage farmers and ranchers in planning and implementing conservation practices that improve the natural resources (e.g. soil, water, wildlife) on their agricultural land. For example, the installation of seasonal high tunnels (i.e., hoop houses) to extend a producer's growing season while conserving resources.	Long Term (5+ years)	Agricultural Preservation Subcommittee	Adams County, City of Brighton	USDA

Goal	Category	Tactic	Timeline	Lead	Partners	Funding
Create strong foundational food related educational support programs	Education	Identify and implement programs to address food safety education needs in production and consumer markets. Specifically targeting food safety and safe handling techniques for consumers, distributors and producers.	Short Term (1-2 years)	Local Food Systems FTE	Adams County, City of Brighton, Agricultural Preservation Subcommittee, CSU Extension	
	Education	Incubator program cultivating new farmers through farmer, business education and land access (i.e. farmer training program)	Ongoing	Local Food Systems FTE	CSU Adams County Extension/Colorado Heritage Agritourism (CHAP Program). Incorporate existing farmers who would like to participate in mentorship programs	Beginning Farmer Program USDA

Appendix

THE FOLLOWING APPENDICES INFORMED DEVELOPMENT OF THE DISTRICT PLAN, BUT ARE NOT A SUBSTANTIVE PART OF THE PLAN ITSELF AND DO NOT CONSTITUTE PLAN RECOMMENDATIONS. THEY ARE INCLUDED HERE ONLY FOR REFERENCE.

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Appendix A,
FARMING, FOOD, AND MARKETS IN ADAMS COUNTY

Crossroads Resource Center

7415 Humboldt Ave. S. / Minneapolis, Minnesota 55423 / 612.869.8664
kmeter@crcworks.org www.crcworks.org

Tools for Community Self-determination

Farming, Food, & Markets in Adams County

Ken Meter, Crossroads Resource Center
Compiled for
Adams County District Plan process
Adams County, & City of Brighton, Colorado
Logan Simpson Design

November 30, 2015

Guiding Values of This Study

(Adopted by consultants)

Advance Adams County's agricultural heritage. Adams County's history is closely connected to food and farming, and its future is tied to healthy food.

Protect private property & landowners. Landowners should be free to use their land for productive purposes, and their rights of ownership will be respected.

Ensure transparency. Residents should be involved in shaping decisions for the future of the County, and should know how these decisions were made.

Protect the rural landscape. Adams County's rural landscape sets it apart as unique from other metro suburbs. The Special District contains some of the best farmland left in Colorado.

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APPENDIX: QUANTITATIVE DATA **86**

Executive Summary

If Brighton and Adams County wish to protect farmland in the Special District, it will be necessary to design and build a local food system as well — since without strong support from Brighton area consumers, there will be no constituency to protect this farmland in the future.

There are strong economic reasons for doing so. Residents of the City of Brighton spend about $83 million each year buying food. The vast majority of this food is sourced from outside of the City, so a conservative estimate is that $75 million of these payments for food leave the City each year.

Stakes are even higher when it comes to Adams County, where County residents spend about $1.3 billion each year buying food. Once again, most all of this food is sourced outside the County, so $1.2 billion leaks out of the County annually.

Reclaiming these dollars would help the Brighton region pay for many refinements to the region's strong quality of life — including future development, city and county services, and further efforts to protect open space.

Moreover, **if public agencies do nothing to protect farmland in the Special District, this farmland will go away.** Much of it will be lost to development over time. This would be a severe loss, since Brighton's very identity is centered on being a rural community that is located close to a major urban center. Many residents say they moved to Brighton because of the open landscape, the relative quiet, and the rural qualities of life. Without farms and open space, Brighton — at least in the form it has been known to generations of residents — will cease to exist.

The situation is urgent. **Interviews with local residents show that current land uses are very vulnerable.** One major produce company farms land in the Special District — Petrocco Farms, which leases from several different landowners. Celebrating its 100th year of farming in Brighton in 2016, Petrocco Farms is critical to the local economy. The firm supports a family with deep roots in Brighton, but also pays a considerable share of the $22 million Adams County farmers pay for farm laborers every year. The region can hardly afford to lose this employment, nor this dedication to community.

Yet the head of the Petrocco family also **expressed considerable concern about whether their way of farming will continue to be compatible with suburban development on surrounding land.** David Petrocco said that the firm does not want to shoulder the costs of buying land in the Special District, since land values have been inflated by development pressure to levels that cannot be covered by farming. Purchasing water rights is even more expensive, with some estimating this to be 1.5 times the sale price of the land alone.

Moreover, the farm relies upon chemical sprays — fertilizers, herbicides, fungicides, and pesticides — to ensure crop quality, but this may pose conflicts when people live nearby. A third concern raised by the Petroccos is that they increasingly have difficulty moving tractors and other field equipment from farm to farm, as more and more suburban drivers occupy the roadway, oblivious to the flow of farm traffic, or traveling at such speed they cannot adjust to the slow pace of farm equipment.

For these and other reasons, as the Petrocco family has seen strip malls and storage facilities encroach on farmland, they have planned for a future that would allow them to move north if need be. The farm leases thousands of acres in Weld County, not only because land is cheaper there, but also as a hedge against localized weather calamities, and also to position themselves favorably if development requires them to leave the Brighton area. They have stated that they could consider moving their entire operation to Weld County if they could sell their established packing houses off Brighton Road for enough money to build new facilities further north.

Similarly, **Sakata Farms, which took root after World War II, maintains its packing shed and wholesale operations in Brighton, but no longer farms land in the Special District.** Owner Bob Sakata also sees traffic conflicts, and has ordered his farm crews to move their equipment only on larger trucks that can keep pace with faster traffic. He also states that farm chemical use may not be compatible with residential development. Sakata's son, who currently manages the company, has considered moving operations further north, the elder Sakata said.

Both farms say they would prefer to remain where they are, if conditions were right. Retaining both farms appears to be a priority for Brighton, since if either were to leave, the City would lose substantial connection to its heritage, and would lose a significant claim to being an agricultural community. The County would also lose the income earned by farmers and farmworkers.

Losing direct contact with this heritage would, in turn, threaten Brighton's ability to position itself as destination for agritourism. Indeed, if the City wishes to welcome visitors who are interested in experiencing rural culture, Brighton must not only protect its farmland, it must also embrace a *culture of food that expresses a sense of place*. The reason for this is straightforward. If Brighton residents do not themselves celebrate (and savor eating) food that is produced and processed locally, it is difficult to imagine why any visitor would be attracted to visit Brighton to see farms and food destinations, especially with competing options such as Boulder so close by.

Even a quick glance at the economics of farming in Adams County shows the dangers that are posed to the sustainability of farms and farmland. **County farmers earned $95 million less by farming in 2013 than they had earned in 1969**, after adjusting for inflation, even though both the number of farms in Adams County and acres farmed have remained relatively constant [See Charts 6 and 7 on pages 17-18]. Since 1994, there has not been a single year when Adams County farms (as a group) covered their production costs by selling crops and livestock — often one or more family members had to work off the farm to offset farm production losses. In the most recent Census of Agriculture, 2012, 61% of Adams County farms reported a net loss.

Further, this **data shows how disconnected farming in Adams County has become from local consumers.** Over the past 45 years, county population has increased 150%, while personal income has risen at twice that rate (300%) after adjusting for inflation. Yet farm income has plummeted steadily. The two most important farm commodities, cattle and wheat, have lost ground nationally due to global economic trends. The industries that have survived the best, ornamentals and produce, have been those most connected to Denver markets — but these are also subject to national and international market forces.

This strongly suggests that if agriculture is to have a future in Adams County, farmers must once again connect to local markets, and grow for consumers who are more loyal to spending money for locally produced foods.

Market forces, if left to themselves, will only deepen the patterns noted above. **City and county action will be required to create a thriving local food system, as well as to protect farmland.** Only if Brighton consumers eat food raised on nearby fields will they feel any determination to protect those lands for farming. Creating a culture that celebrates local eating will require public action and investment.

One implication of the conclusions drawn above is that **the only real buyers for premium farmland in the Special District who might want to use this land for agricultural purposes would be public bodies** — the City and the County — unless some very wealthy individual were to take a strong interest in developing a farm in the District. This places a special responsibility upon the City and County to act deliberately.

Furthermore, **no outside party or developer can create a local food culture for the region; it must be built by local residents, businesses, and public bodies.**

It also seems clear that despite reluctance on the part of some growers, future farms in and near Brighton **must pursue sustainable and organic practices** if farming is to be compatible with residential housing and other development.

Strengths of the Special District

- Contains some of the best land in the state
- Water is available in significant portions of farmland
- Holds a rich heritage of produce farming
- Vegetable farming has been more rewarding financially than raising other products
- Farmworkers in Adams County earn $20 million per year
- Farms are near to robust consumer markets

Limitations of the Special District

- Suburban development has encroached
- Prevalent farming practices appear to be incompatible with residential development
- Major produce growers may move north
- Land is too expensive to be paid for through farm production alone
- Water rights are even more expensive
- Few local residents have farming skills
- Farm labor is in short supply

Opportunities for the Special District

- To serve as a symbol for protecting farmland and rural quality of life
- To raise food for Brighton, Adams County, and Metro Denver markets
- To maintain farming practices that are compatible with residential development
- To serve as the core of a vibrant local food culture in Brighton
- To provide agri-tourism experiences for visitors

Potential obstacles for protecting farmland

- Residents may perceive that it is too late to protect the tradition of rural living
- Landowners want to sell land (or water rights) at development prices to fund retirement
- Few landowning families have heirs who want to farm
- The City may be the only buyer of land for agricultural use

We suggest the following specific investments in local food systems for the Special District south of Brighton:

1. The City of Brighton must announce a clear priority, and take definitive action steps, to show its commitment to protecting farmland if efforts to protect land are to be credible. This outreach should make the City's long-term strategy clear and show how the City is targeting its resources to achieve its vision.

2. **The City of Brighton should build (or cause to be built) a washing, packing, aggregation, & distribution facility scaled to small farm production**, located near growers who raise produce for local markets. This could be built on a working farm raising food for local markets, or in close proximity to several such farms. The old school site may be a prime location for this. Such an investment would hopefully help attract additional farms to locate nearby over time.

3. The City should explore investing in (or facilitating investment by private parties in) **flash-freezing equipment**, most likely at the same site, for local farms to use to extend shelf life of fresh produce items.

4. **The City already owns enough land to launch an incubator farm for training new farmers**, with leasable land (roughly in 5 to 50 acre plots) nearby, so that graduates may remain in the community of farmers, and make use of some of the infrastructure listed above. This might be an excellent use of the Anderson farm, should it be purchased by the City. Local sources state that there are young people in Boulder County who are looking for land; CSU runs a farmer training program in Boulder County, and urban farmer training programs also operate in Denver.

5. **The City must resell or lease this land to new small-scale growers at price levels that can be paid through farm production** (the use-value of the land) rather than at the development value.

6. **To raise the visibility of local foods, it will be critical to create a prominent connection point that brings together town and rural residents** to celebrate local foods and buy from local farms (e.g., at Bromley Farm or Palizzi's farm stand).

7. **The City and County must actively market local foods**, including publicizing the seasonal availability of the foods raised on Brighton area farms, the farmers who raise these foods, where local foods may be purchased, and the chefs and households who use them.

8. **The City and County should jointly launch (perhaps in collaboration with local health care providers) an "Eat 5, Buy 5" campaign similar to the one devised in**

Montezuma County, Colorado. This would call for each county resident to eat five fruits and vegetables each day for health reasons, and buy five dollars of food from an Adams County farm each week. If each county household purchased this much food from county farms per person each week, this would amount to $122 million of revenue for the County's farms — almost as much as the $145 million of crops and livestock county farms currently sell each year.

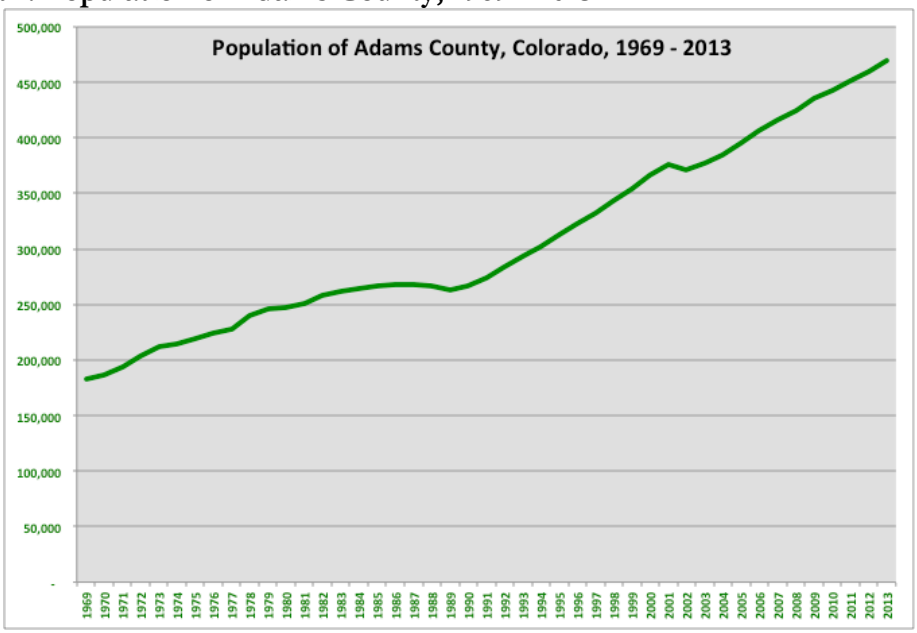
9. In the future, the City and County may wish to raise funds from external sources to purchase additional farmland as it becomes available for sale by current landowners. Private individuals, conservation funds, state, or federal sources could be used to leverage City and County investments.

Market Conditions in Adams County

Population & personal income

- As Charts 1 and 2 show, Adams County population increased 150% from 1969 to 2013, while personal income rose 300%, so income gains far overtake population change.

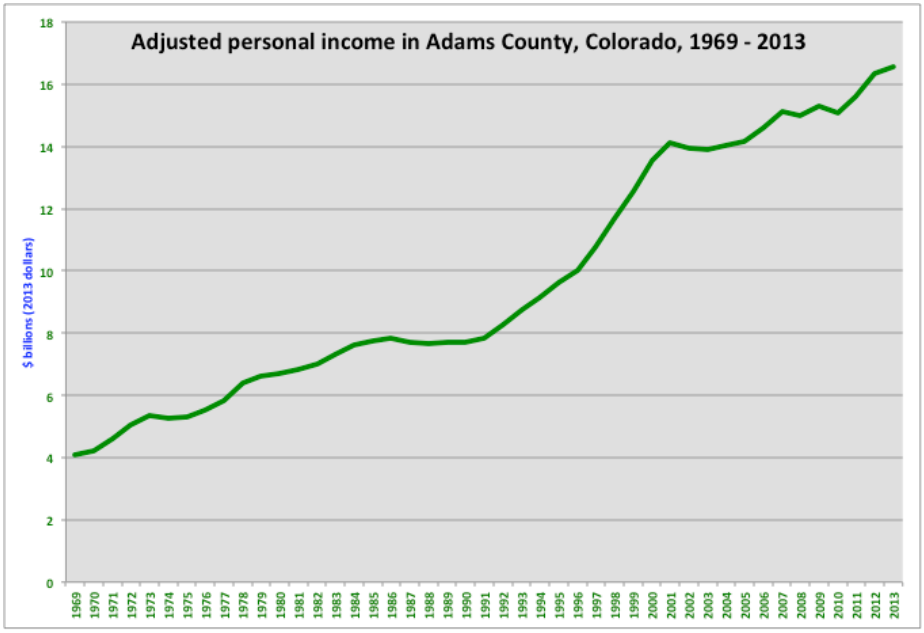
Chart 1: Population of Adams County, 1969 - 2013



150% increase in population

Source: Bureau of Economic Analysis

Chart 2: Personal income earned in Adams County, 1969 – 2013 (adjusted to 2013)

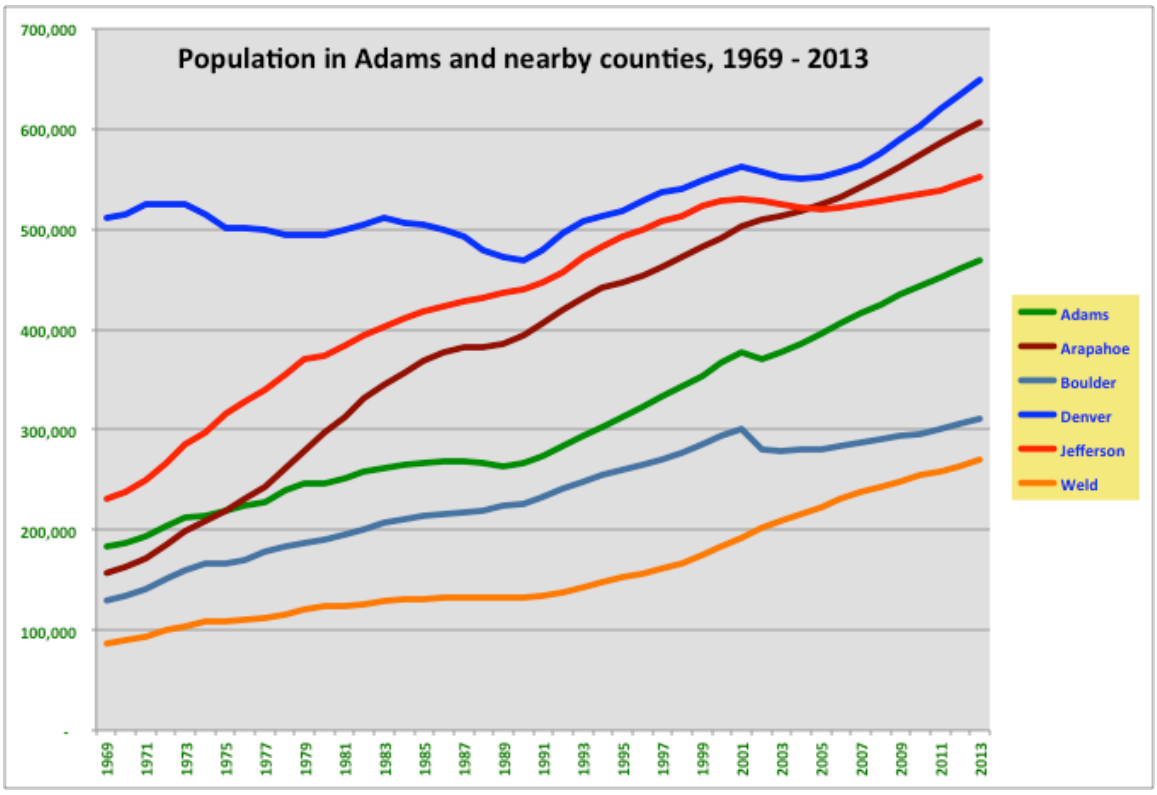


300% increase in personal income

Source: Bureau of Economic Analysis (in 2013 dollars)

- In recent years, Adams County's population has grown more rapidly than for surrounding counties, as Chart 3 shows.

Chart 3: Population in Adams County and nearby counties, 1969 - 2013



Source: Bureau of Economic Analysis

Table 1: Population Growth for Adams and surrounding counties, 1969 – 2013
Source: Bureau of Economic Analysis

Adams	157%
Arapahoe	287%
Boulder	139%
Denver	27%
Jefferson	139%
Weld	213%

- The populations for both Brighton and Adams County are relatively mobile, with one of every seven people moving within the past year, as Table 2 shows.

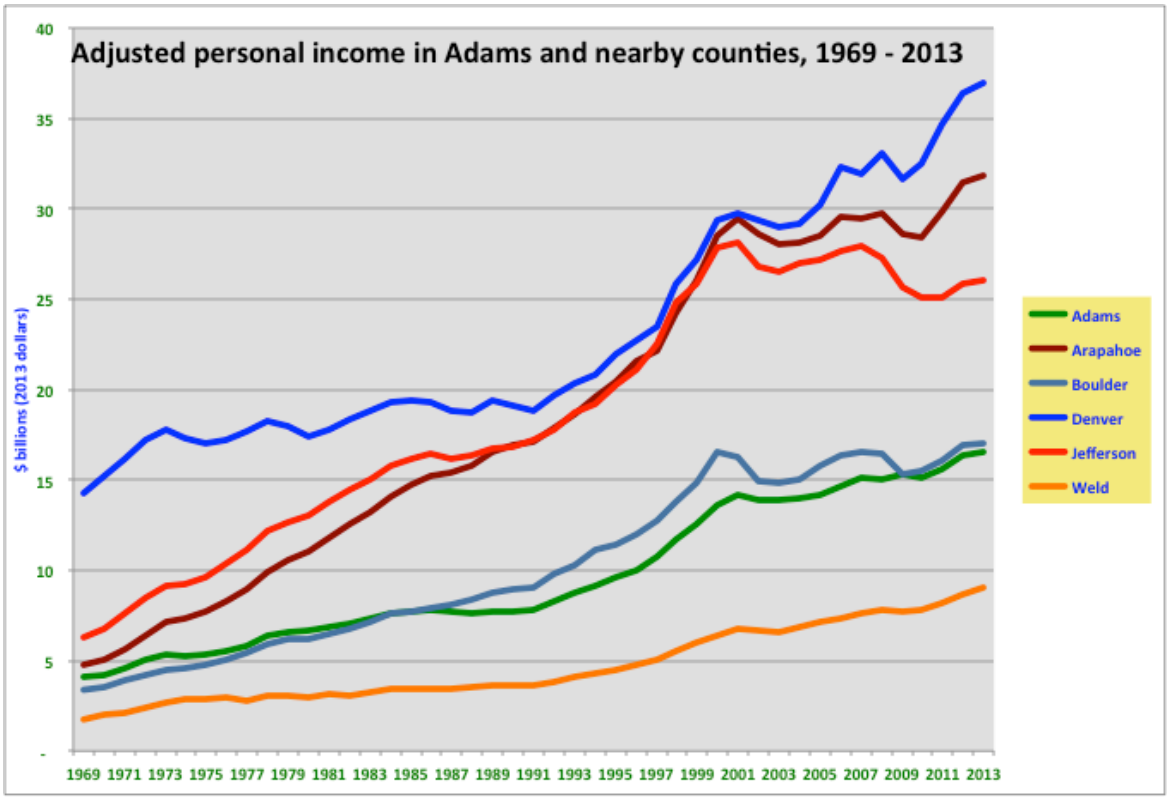
Table 2: Population mobility, averages for the years 2009-2013
Source: Federal Census

	Brighton	Adams Co
Moved within last year	15%	18%

- Adams County's population is projected by the State Demographer to increase 1% to 1.9% per year from 2015 to 2040. This would mean the population would total an estimated 691,000 by 2040, 1.5 times the current level *[State Demographer web site, calculated assuming 1.5% average growth rate per year]*.

- Personal income earned by Adams County residents resembles income earned in nearby counties, but is not growing as rapidly as in some.

Chart 4: Personal income earned in Adams nearby counties, 1969 – 2013 (adjusted to 2013)

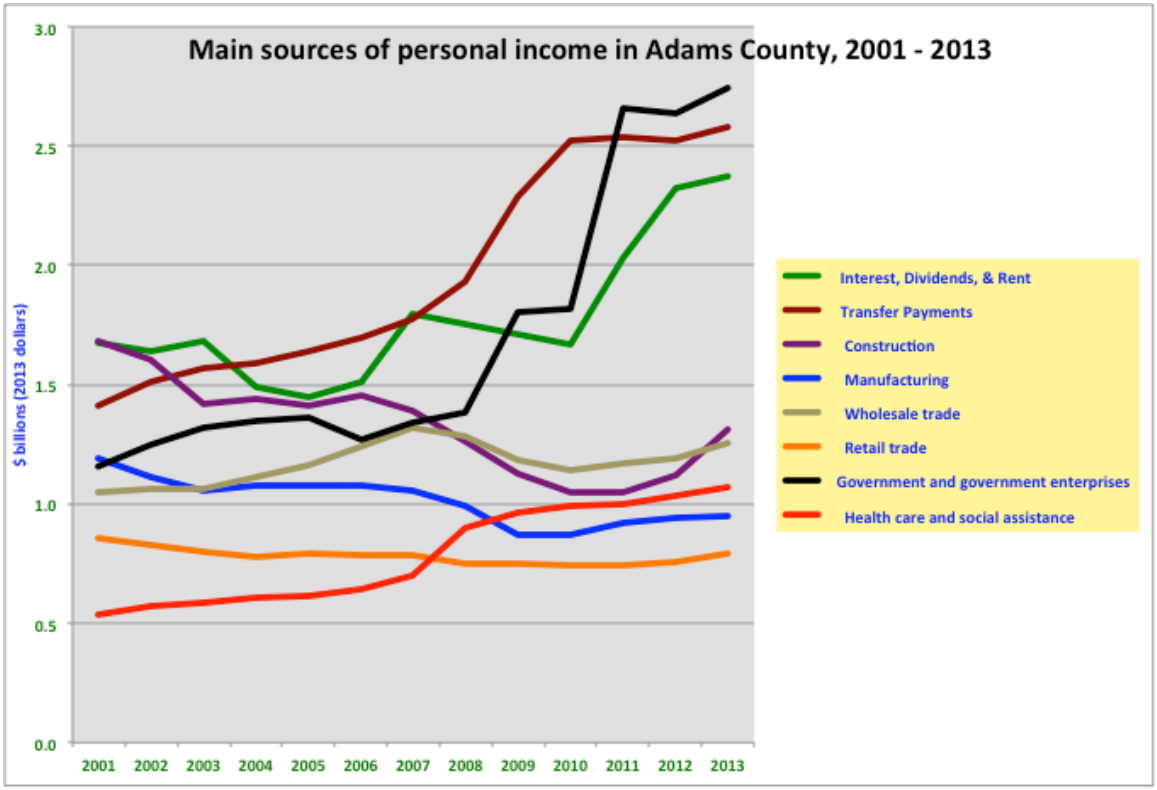


Source: Bureau of Economic Analysis (in 2013 dollars)

Table 3: Growth in personal income for Adams and surrounding counties, 1969 – 2013
Source: Bureau of Economic Analysis. Adjusted for inflation.

Adams	305%
Arapahoe	568%
Boulder	403%
Denver	159%
Jefferson	316%
Weld	416%

Chart 5: Main sources of personal income in Adams County, 1969 - 2013 (adjusted)



Source: Bureau of Economic Analysis (in 2013 dollars)

- County residents receive $16.6 billion of income per year *[Bureau of Economic Analysis]*. Sources include:
    - The largest source of personal income is government jobs (mostly state and local government), accounting for $2.7 billion of income.
    - Transfer payments (from government programs such as pensions) rank second, at $2.6 billion.
    - Capital income (from interest, rent, or dividends) totals $2.4 billion.
    - Construction workers earned $1.3 billion in 2013.
    - Wholesale workers earned $1.2 billion.
    - Health care professions bring in $1 billion of personal income.
    - Manufacturing jobs produce $951 million of personal income.
    - Transportation workers earn $871 million.
    - Retail workers earned $790 million of personal income.

- The County's 469,193 residents receive $10 billion of income from sources other than employment *[Bureau of Economic Analysis] and [Federal Census, County Business Patterns, 2013]*.

- Income from public sources makes up 33% of all income received. This includes government jobs, primarily for state and local government, and public programs such as retirement pensions *[Bureau of Economic Analysis]*.

- Manufacturing income has been declining steadily, when inflation is taken into account *[Bureau of Economic Analysis]*.

Employment in Adams County

- 8,559 businesses in the County hire 137,849 employees, earning a total payroll of $6.2 billion *[Federal Census, County Business Patterns, 2013]*.

- At least 14% of the employees (19,700 and perhaps more) holding jobs in the County are involved in the food trade. Adams County hosts at least 991 firms involved in food trade, paying $474 million in annual payroll. See Table 4. *Due to confidentiality concerns, more detailed data is not reported at the County level [Federal Census, County Business Patterns, 2013]*.

Table 4: Employment and payroll for food-related businesses in Adams County, 2013

NAICS code		No. Employees	($) Payroll	No. Establish-ments
	Adams County totals	**137,849**	**6,204,748,000**	**8,559**
115	Support of Agriculture	9	214,000	4
311	Food manufacturing	2,288	82,041,000	44
4244	Grocery & Related Wholesale	2,085	105,523,000	53
4245	Farm Product Raw Material	(D)	759,000	4
4248	Beer, Wine, & Alcohol	(D)	(D)	9
42491	Farm Supplies, Wholesale	(D)	(D)	5
445	Food & Beverage Stores	3,339	86,802,000	208
49312	Refrigerated Warehousing	(D)	(D)	1
722	Food Services & Drinking	12,013	198,890,000	663
	Food-related employment	**19,734**	**474,229,000**	**991**
	Percent of county total	14%	8%	12%

Source: Federal Census, County Business Patterns. (D) indicates data that is suppressed to protect confidentiality. Note: this data does not include farms or farm owners.

Market data from Leland Consulting

- ESRI (Environmental Systems Research Institute, Inc.) projects that household growth rates in the Brighton market region (a larger region than the City of Brighton) will average 4% per year from 2015 to 2025, from 38,234 to an estimated 55,800 households. This would require 17,600 new housing units over 10 years *[p. 24-25 of Leland's Market Assessment]*.

- Leland Consulting estimates that the City of Brighton can capture about 20-30% of this demand, roughly 2,700 single-family units, 760 townhomes and condos, and 1,900 rental units, for a total of 5,455 residential units (projections range from 4,230 to 6,640). This would require between 573 and 859 acres of land *[p. 27 of Leland's Market Assessment; note that totals in the final row of Leland's Table 10 are incorrect]* and about $1.2 billion of investment over ten years, assuming an average cost of $240,000 for single-family homes (the current median sale price, so this is a high estimate) and $200,000 for each multiple-occupancy unit. This investment would produce an (roughly) estimated $43 million in mortgage payments and $38 million in rental income per year, as well as additional property taxes and consumer spending. These housing units would also demand additional costs to service new homes and residents, as the Agricultural Preservation Subcommittee has pointed out using data from American Farmland Trust.

- Most of the growth in housing need is projected to involve buyers aged 20 to 49, earning incomes of $50,000 to $150,000, with houses valued at $250,000 to $500,000 and perhaps higher *[Table 9; p. 26 of Leland's Market Assessment]*.

- The City of Brighton is also likely to attract a separate demographic, an increasing number of seniors for both ownership and rental housing *[Figure 11; p. 14 of Leland's Market Assessment]*.

- Leland Consulting also projects that the City of Brighton can add about 200,000 square feet of grocery space, and 150,000 square feet of food and drinking establishments, over the next 10 years. *[Figure 23; p. 31 of Leland Market Assessment]*.

- Leland Consulting estimates that job growth in the wider market area will add 12,570 jobs over the next 10 years *[Table 11; p. 33 of Leland's Market Assessment]*. Since Adams County appears to have about 60% of the jobs counted in the wider market area, this would mean about 7,000 new jobs for Adams County alone over the next 10 years. This would require construction of about 300,000 square feet of office space in Brighton proper, primarily Class B (Class B office space is not in prime condition like Class A space, but still well maintained) *[p. 34 of Leland's Market Assessment]*. About one-quarter of this is expected to be medical offices.

- Leland Consulting points out that the City of Brighton holds 80% of the wider market area's office space, but with a vacancy rate of 5.6%, Leland considers this a tight market that requires additional construction *[p. 32+ of Leland's Market Assessment]*.

- Leland Consulting estimates that another 1.6 million square feet of industrial/flex space may be needed in Brighton proper over the next ten years, as well. This future is clouded by the fact that a 1.4-million square foot distribution center for K-Mart now stands empty *[p. 34+ of Leland's Market Assessment]*.

- Leland further estimates that Brighton will require from 285 to 356 acres of land to meet demand for commercial property. With 2,500 acres already set aside in the City's comprehensive plan for commercial development, this means the City already holds an oversupply of commercial acreage that should be adequate for as much as 65 years *[p. 36 of Leland's Market Assessment]*.

Table 5. Ranges of cash rent values for irrigated land in three Colorado regions, 2013 (dollars/acre)

	Northern region	Southern region	Western region
Corn & sorghum	150 – 200	185 – 325	200 – 350
Small grains	190 – 250	185 – 325	200 – 350
Alfalfa	190 – 255	200 – 300	225 – 250
Sugar beets	255 – 350	250 – 350	250 – 350

Source: Colorado State University Extension Agriculture and Business Management Notes (ABM). "Custom Rates for Colorado Farms & Ranches in 2013." (www.coopext.colostate.edu/ABM/)

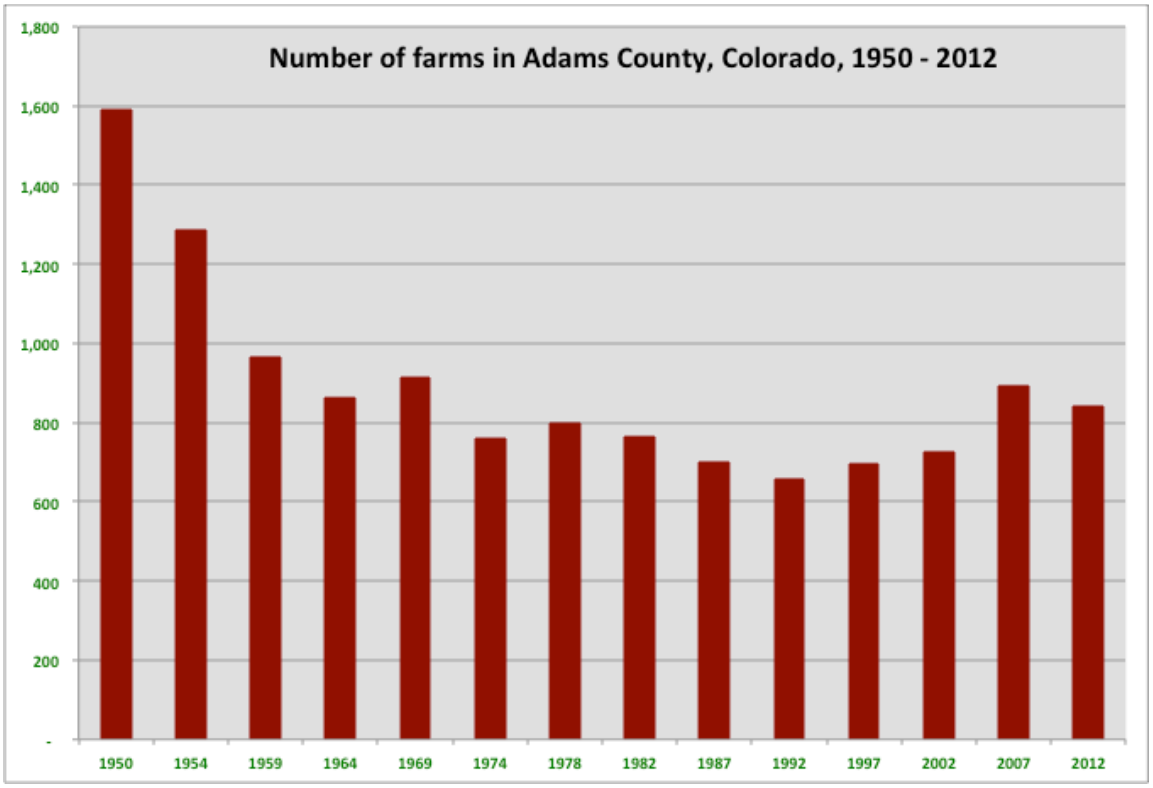
Farms in Adams County

- Adams County had 841 farms in 2012 *[Census of Agriculture]*.

- This is more farms than the County had in recent years, primarily because the Census of Agriculture became more effective at counting smaller farms and farms owned by minorities in 2012.

- While Adams County has only half the number of farms it had in 1950, the number of farms has been relatively constant since 1970. Note that the number of farms decreased dramatically after World War II due to labor-saving mechanization in the farm sector, increased mobility for rural residents as cars became commonplace, and also industrial job development.

Chart 6: Number of farms in Adams County, 1950 - 2012



Source: Census of Agriculture. Note that there have been changes in the definition of what constitutes a "farm" during the years this data was collected, and this explains some of the change in farm numbers.

- The number of acres in farmland has held relatively steady over the past 65 years.

- The Special District includes some of the best farmland in Colorado, especially below the Fulton Ditch where rich alluvial topsoil and sufficient irrigation create excellent conditions. Even lands above the ditch are considered prime soils by USDA. These have historically been farmed with grains that tolerate dry conditions, or pastured to livestock.

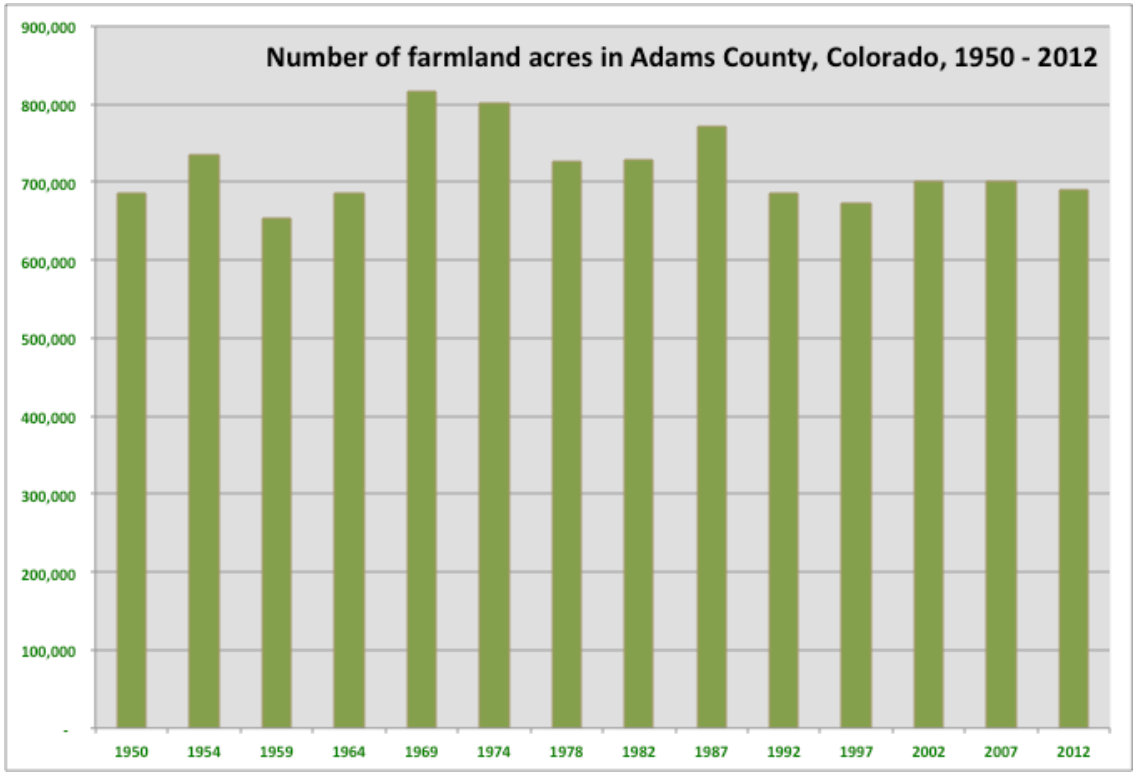
- 158 Adams County farms reported hiring 1,366 farm workers with a total payroll of $22 million to the 2012 Census of Agriculture. Most of these workers work on farms hiring 10 or more farmworkers. Nearly 800 of these workers worked less than 150 days during the year. Only 22 of these workers were listed as migrants. *Note:* The Bureau of Economic Analysis reported farmworker and custom work for hire income for 2014 of $31 million.

- 378 Adams County farms reported using 877 unpaid farm laborers.

- It should also be noted that the overall trends noted here for Adams County do not necessarily reflect economic conditions within the Special District itself. No data source exists that would show financial conditions within the District proper.

- Arable soils are also available in Weld County. Several farms have relocated there, seeking less developed areas where land prices are less pressured by development. This land is perhaps more suited to larger-scale farming than in the Special District, but also has been subject to considerable wind erosion.

Chart 7: Farmland acres in Adams County, 1950 - 2012



Source: Census of Agriculture. Note that there have changes in the definition of what constitutes a "farm" during the years this data was collected, and this explains some of the changes in acreage recorded.

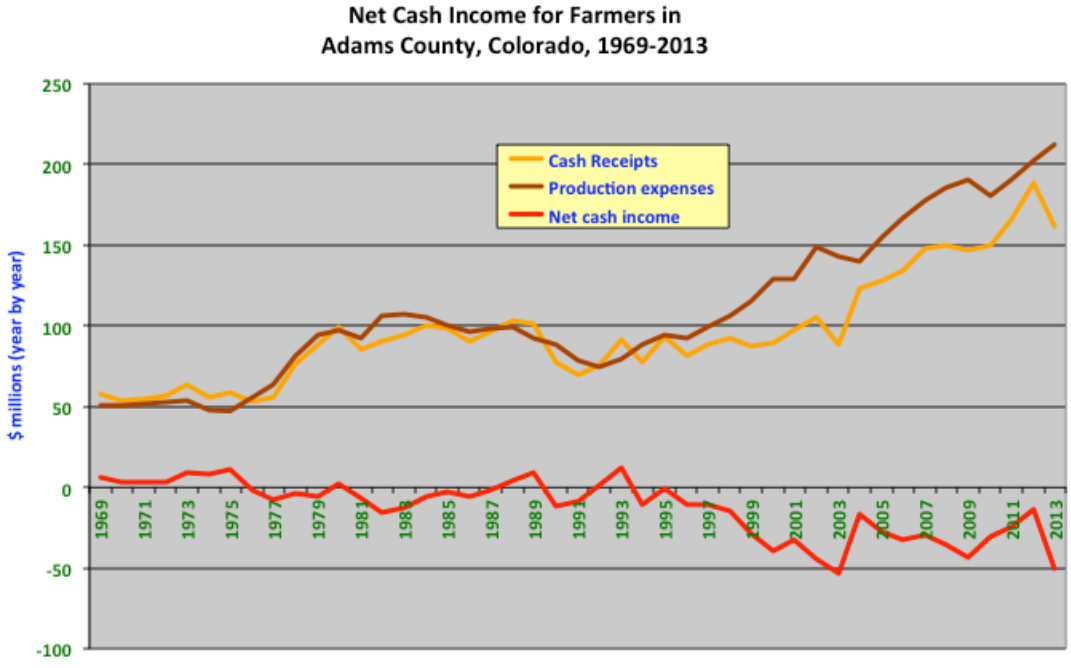
- Farmers sell an average of $145 million of crops and livestock each year *[Bureau of Economic Analysis]*.
- Four major commodities are sold by Adams County farmers, as shown in the table below.

Table 6: Top farm products of Adams County
Source: Census of Agriculture

	$ millions
Nursery crops and ornamentals	45
Wheat	43
Livestock	14
Corn	7

- Nursery crops and ornamentals are the largest single category of farm production sold by county farms. Yet Adams County farmers earned $56 million less selling these crops in 2012 than they had earned in 2007 *[Census of Agriculture]*. This decline appears to be related to the housing finance crisis that started in 2008 — there had been a boom of new housing nationwide, and much of this slowed down when the banking system encountered difficulties. Most likely, with fewer homes and developments being built, there was less need for landscaping. Often, when demand is reduced suddenly, prices also fall because there is surplus supply in the market.

Chart 8: Net cash income for farmers in Adams County, 1969 - 2013



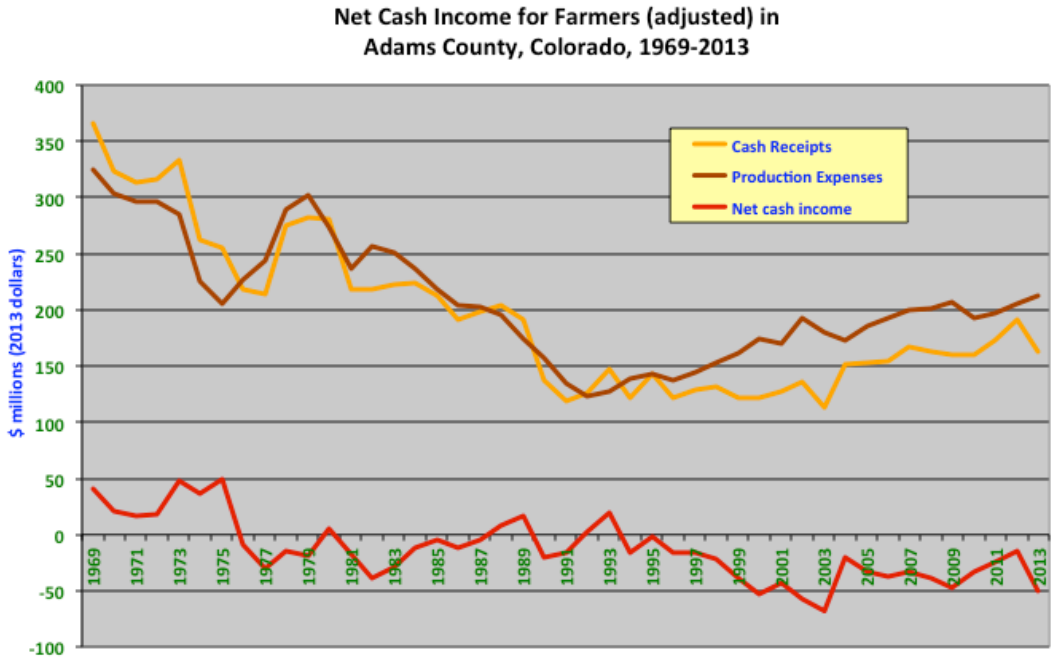
Source: Bureau of Economic Analysis (in dollars at current value for each year)

- This suggests that a combination of reduced demand and falling prices for those who did make sales accounts for the large decline. There is also the possibility that one or more major farms stopped selling ornamentals, or that there was some very local disruption in the ornamentals market.

- Historically, Adams County farms have excelled in producing both cattle and wheat. Yet as we will see later [see sections starting on page 26 and page 42], both industries have declined markedly since World War II. In both cases, farmers became exceptionally efficient at producing these commodities, only to find that global financial trends (a) transformed cattle production from farmsteads to feed lots (many of which are in Weld County), making it uneconomic for smaller farms in the County to produce livestock, and (b) eroded the wheat price so that it became difficult to make money raising one crop that is well-suited to dry land farming.

- Chart 8 above shows that, although cash receipts have steadily increased for Adams County farmers, production expenses have risen even faster.

Chart 9: Net cash income for farmers in Adams County, 1969 – 2013 (adjusted)



Source: Bureau of Economic Analysis (in 2013 dollars)

- Moreover, as Chart 9 shows, once dollars are adjusted for inflation, it is clear that both cash receipts and production expenses are far lower today than they were in 1969. Adams County farmers sold $95 million less of crops and livestock in 2013 than they had sold in 1969. Production costs were far lower than 1969 levels, but still overran cash receipts. The number of farms remained more or less the same, as did the acreage of land farmed, during this period.

- Although several important farms in the Brighton region are profitable, Bureau of Economic Analysis data show that all county farmers combined spend on average $26 million more in production expenses than they earn by selling their products. This is an average loss of $31,200 per farm, and a total loss to the farm sector of $656 million over the years 1989 – 2013. *[Bureau of Economic Analysis]*.

- Over the past 25 years, farmers have spent more producing crops in livestock than they earned by selling them for all but three years, and have spent more in production expenses than they earned in cash receipts each year since 1994 *[Bureau of Economic Analysis]*. 61% of the County's farms reported a net loss in 2012, slightly higher than the Colorado average of 59% *[Census of Agriculture]*.

- Farmers often sell crops, livestock or milk at prices lower than the cost of production, but need to sell at these prices to earn money they can use to pay off production expenses.

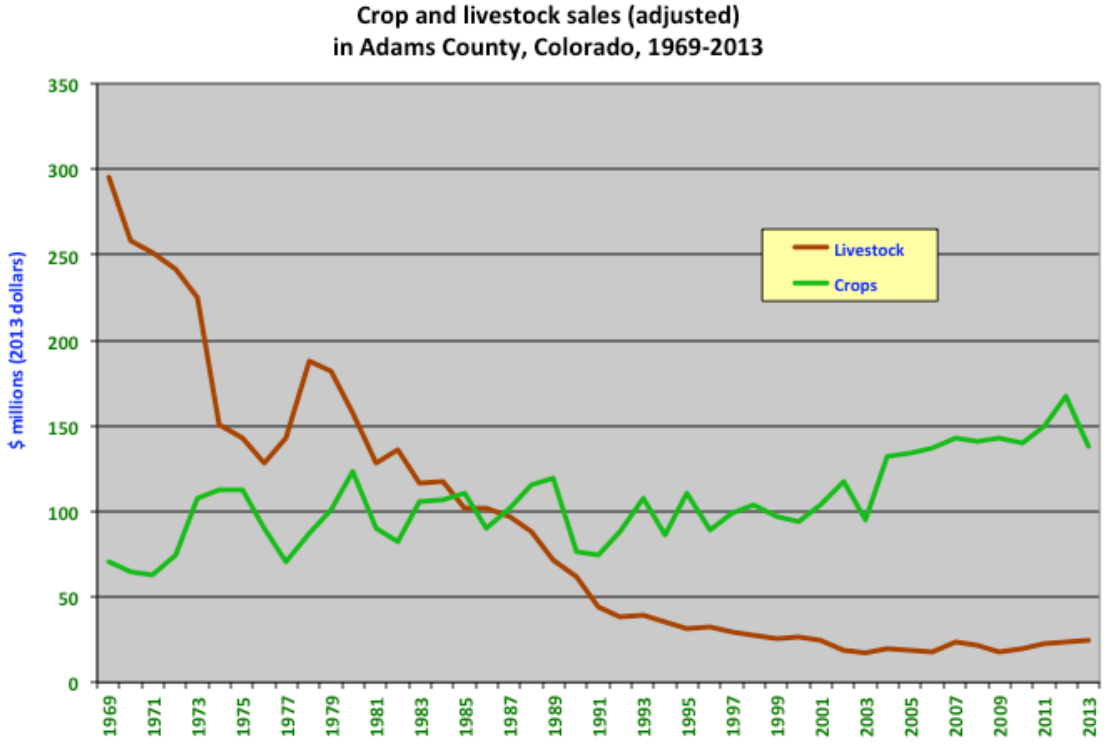
- How is it that farmers can sustain such losses? There are several reasons, listed below.
    - When farm families account for their production costs, they would typically list money paid to workers (who may be family members) as costs of production, which would tend to make the finances of the farm less favorable than they actually are. This should not apply to payments made to the owner of each farm, which should be accounted as operator income.
    - Many farmers hold on to their farms even if farming at a loss because they hope to sell the land for development someday. They would prefer to stay on the land rather than leave, because they enjoy rural living and hold a sense of connection to the land. Selling for development becomes in a very real sense the family retirement plan, and the family does what it needs to do to make ends meet until that time.
    - Most farm families have one or more members of the family working off the farm in order to have a steadier source of income than farming, and to obtain health benefits.
    - Adams County is also very dependent on wheat production, and the price of wheat has been low and declining for years, except for 2012-2013 when grain prices were artificially high. The trends here also mirror those from other wheat growing areas. 2015 is projected to be a difficult year for grain farmers now that prices have returned to lower levels.
    - When times are good, farmers may take on debt to purchase land, or to buy new equipment, and this may make their farm more effective at producing, but also holding greater debt. Some may purchase land in the hopes of selling it to a developer later, or because they see land as a long-term investment, or because they want to increase their land base for growing cash grains at larger volume. This, however, is unlikely inside the Special District because land prices are so high that most produce farms are renting or leasing land, and few can afford to buy land.
    - To reduce tax liabilities, farmers may shoulder additional expenses in years when income is high enough to allow this.
    - As farmland prices are shaped more by the costs of development (i.e., a developer or urban investor may pay far more for the land than the farmer paid for it) any new farm owner — either an investor who declares their farm an agricultural operation

by raising a few cattle, say, or a young farmer starting out, have more interest costs to carry, and this increases farm expenditures.

- Many landowners rent out their land, because the return is often higher than for farming, which means they gain income from rents, not from farming itself. This shows up as a different income stream. This is especially true in the Special District area, where development pressures have raised land purchase prices.

- Livestock farmers in Adams County sold $295 million of livestock and related products in 1969 (in 2013 dollars), but sold only $24.5 million in 2013 *[Bureau of Economic Analysis]*. These declines also mirror national trends. Nationally, smaller livestock producers have abandoned cattle production due to a combination of pressures: (a) with the advent of larger feedlots (many of which are in Weld County) margins have been reduced, and many livestock (mostly cattle in this case) have been raised to maturity in large feedlots, rather than on smaller farms. (b) These lower margins encourage smaller ranches to decide they cannot make money selling cattle, so many got out of the business. (c) Older farmers have retired with no younger person interested in taking over the operation. (d) Some farms that once grazed livestock have been sold for development. (e) As Adams County has become more suburban and less rural, new residents may try to separate themselves physically from livestock farms due to perceived odors or visual concerns, and this may have placed pressure on farmers to get out of the business, as well. (f) These data also reflect a decline in dairy production (see later charts). Dairy has also shifted to larger farms in other counties.

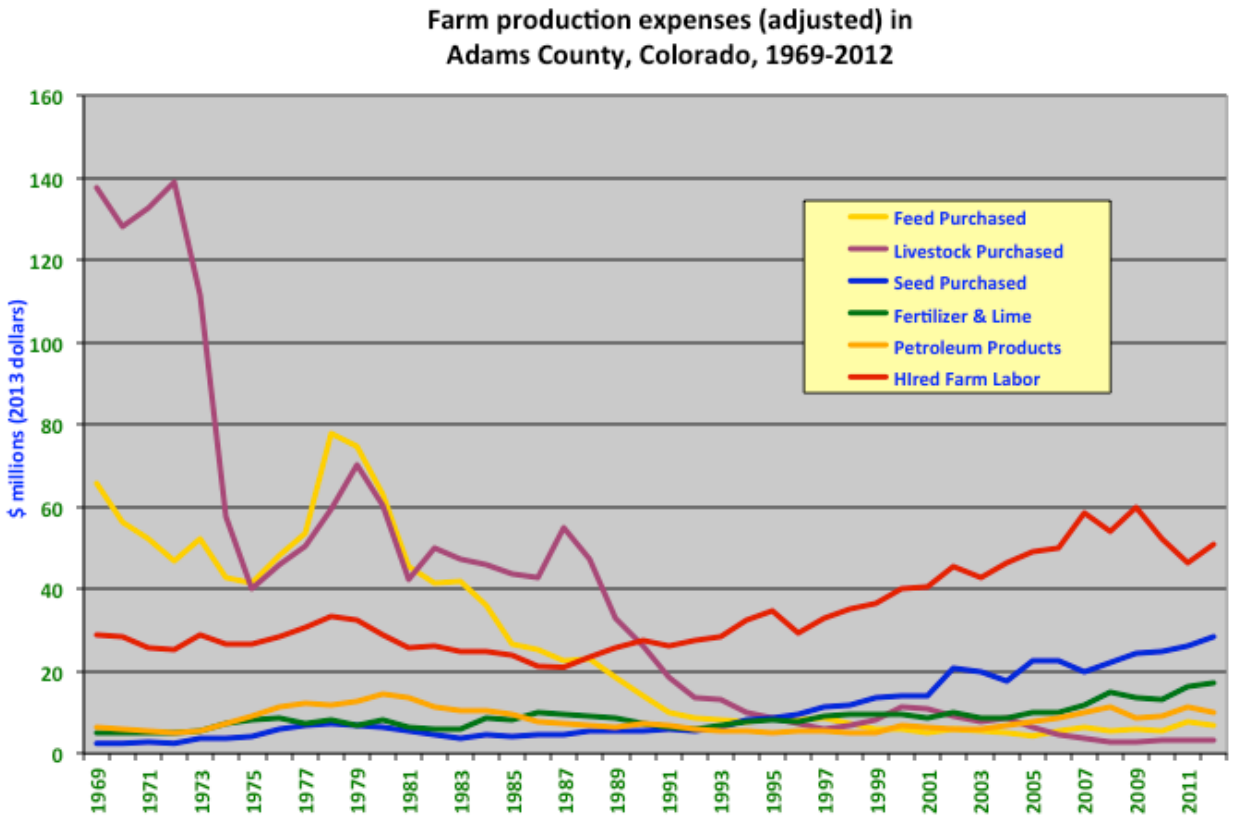
Chart 10: Crop and livestock sales by Adams County farms, 1969 – 2013 (adjusted)



Source: Bureau of Economic Analysis (in 2013 dollars). This chart shows cash receipts only, not production expenses.

- Note that income from crops has increased steadily since 1969, even after inflation is taken into account, despite the fact there are now fewer farms.

Chart 11: Production expenses for Adams County farms, 1969 – 2012 (adjusted)

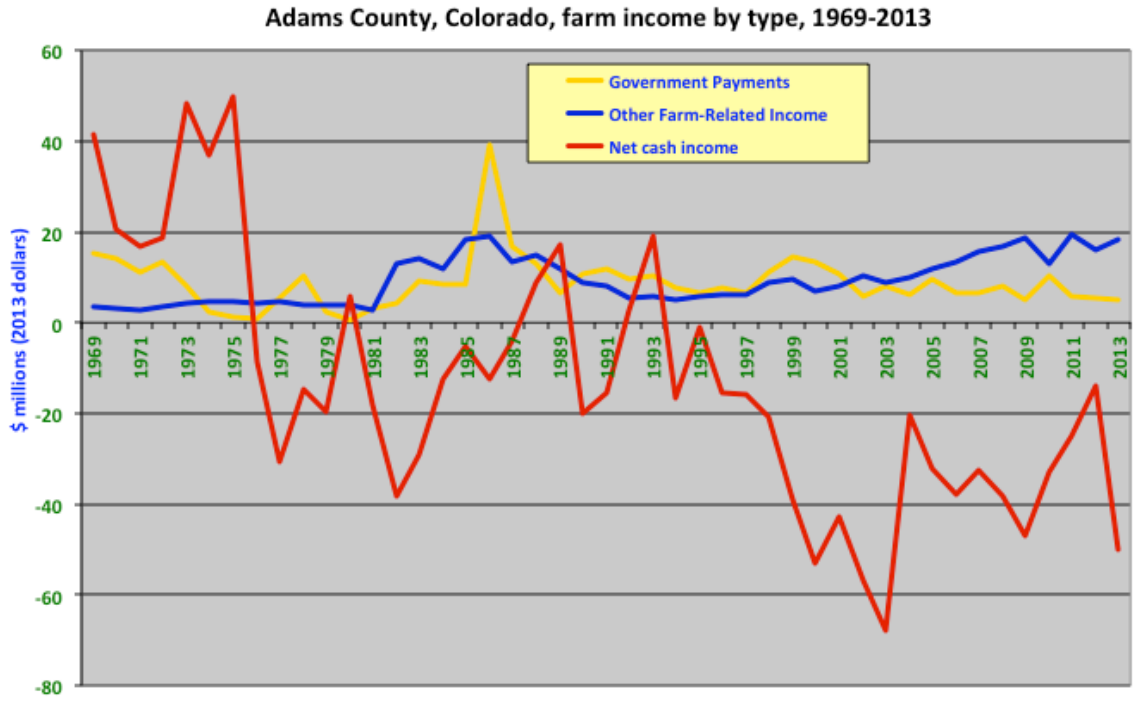


Source: Bureau of Economic Analysis (in 2013 dollars). This chart reflects cash receipts only, not production expenses. Note that detailed data were not made available for 2013 due to budget shortfalls.

- Labor costs are the highest single production expense for Adams County farmers. These have diminished since 2009, presumably as land was taken out of production.

- Note that the decline in livestock purchases and feed purchases also reflect the fact that fewer farmers are raising livestock (primarily cattle and dairy).

Chart 12: Net farm income by type for Adams County farms, 1969 – 2013 (adjusted)



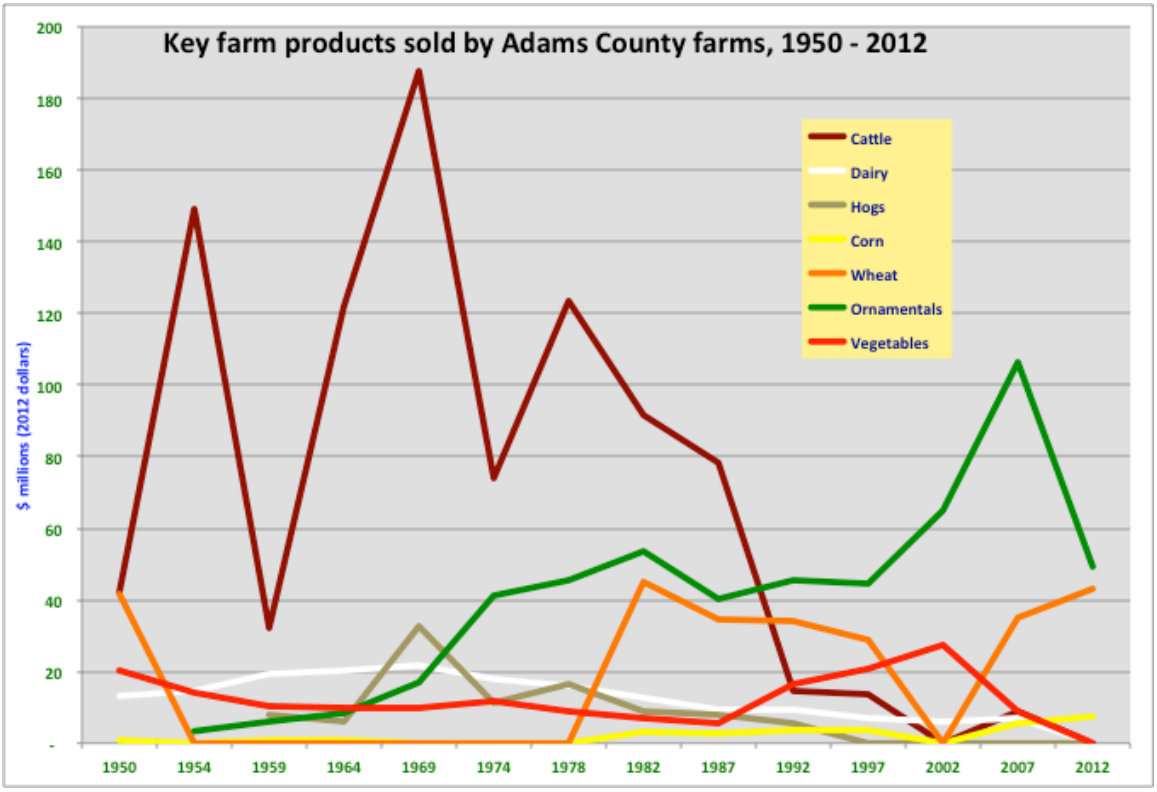
Source: Bureau of Economic Analysis (in 2013 dollars).

- The steadiest source of net income for Adams County farmers has been renting out land.
- The second most important source of net income has been federal payments, although these only accrue to farmers that raise corn, wheat, or soybeans that are covered under crop programs.
- Actual production has been one of the least reliable ways of gaining net income for farmers in Adams County.

Specific Farming Sectors in Adams County

Overall trends in farm product sales

Chart 13: Key farm products sold by Adams County farms, 1950 – 2012 (adjusted)



Source: Census of Agriculture, various years

- Note that a once-thriving cattle market for farms in Adams County has dwindled to very small sales figures.

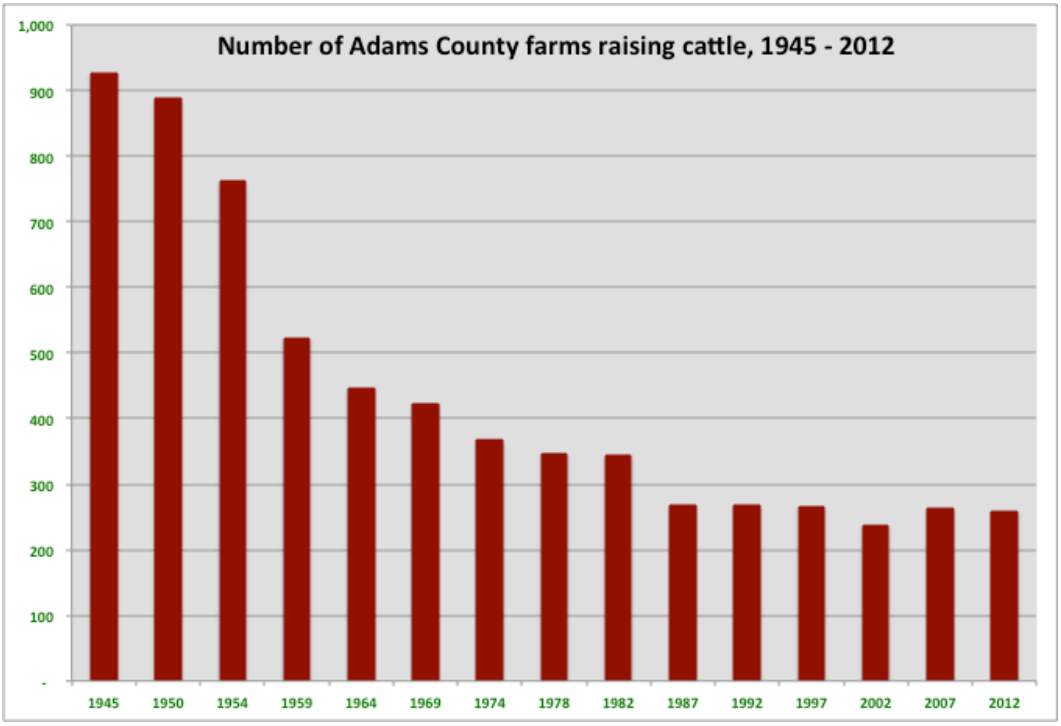
- The main product sold by Adams County farms since 1992 has been nursery crops, ornamentals, and other landscaping products, which are strongly related to suburban development. The global housing finance crisis of 2008 took a severe toll on ornamental sales, since housing starts declined precipitously.

- Note that wheat sales data are missing for several years, but overall sales of wheat have remained fairly steady over the past 65 years.

- Sales of milk and dairy products by Adams County farms have fallen to about half of their 1950 levels.

Cattle

Chart 14: Number of Adams County farms raising cattle, 1945 – 2012



Source: Census of Agriculture

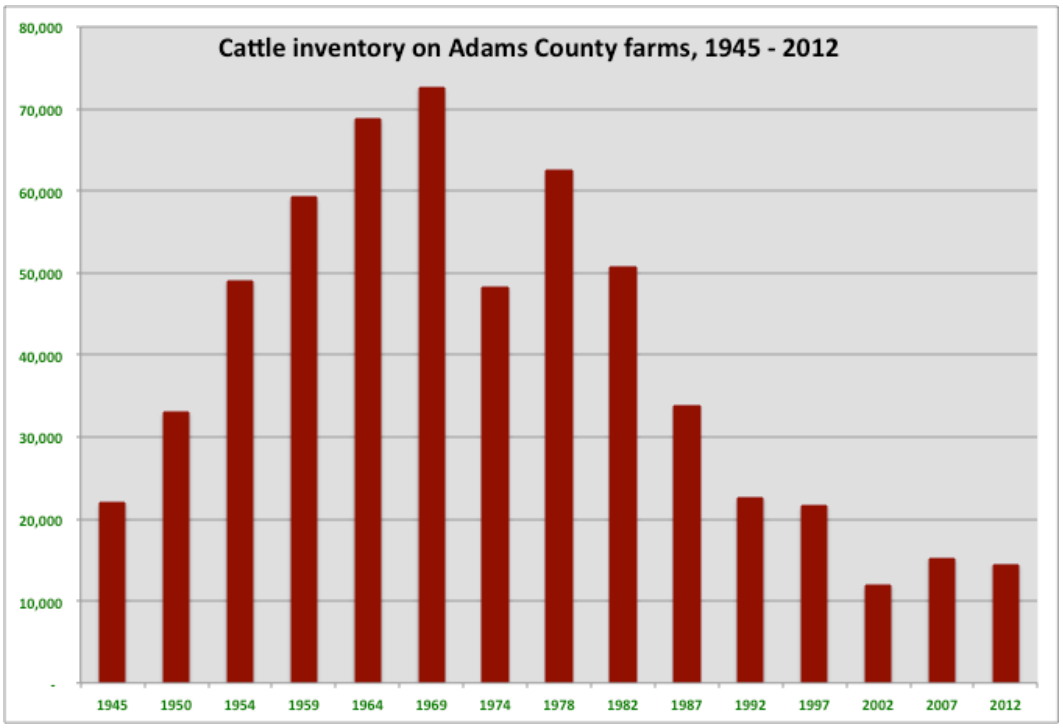
- More than 900 farms in the County raised cattle in 1945.

- Cattle production on Adams County farms remained high during World War II when demand for beef was high to feed troops. County farmers enjoyed considerable prosperity after the war as well, but many farm youth, or returning soldiers, opted to move away from farms.

- Farms also consolidated into larger units as increased mechanization allowed farmers to work more land and tend more animals.

- The number of Adams County farms raising cattle has held relatively steady since 1987. Yet as Chart 15 (next page) shows, the number of cattle fell steadily. This likely reflects the growth of feed lots such as those near Greeley, general decline of margins in the cattle industry as a result of greater concentration of production, and an aging farm population.

Chart 15: Cattle inventory on Adams County farms, 1945 – 2012



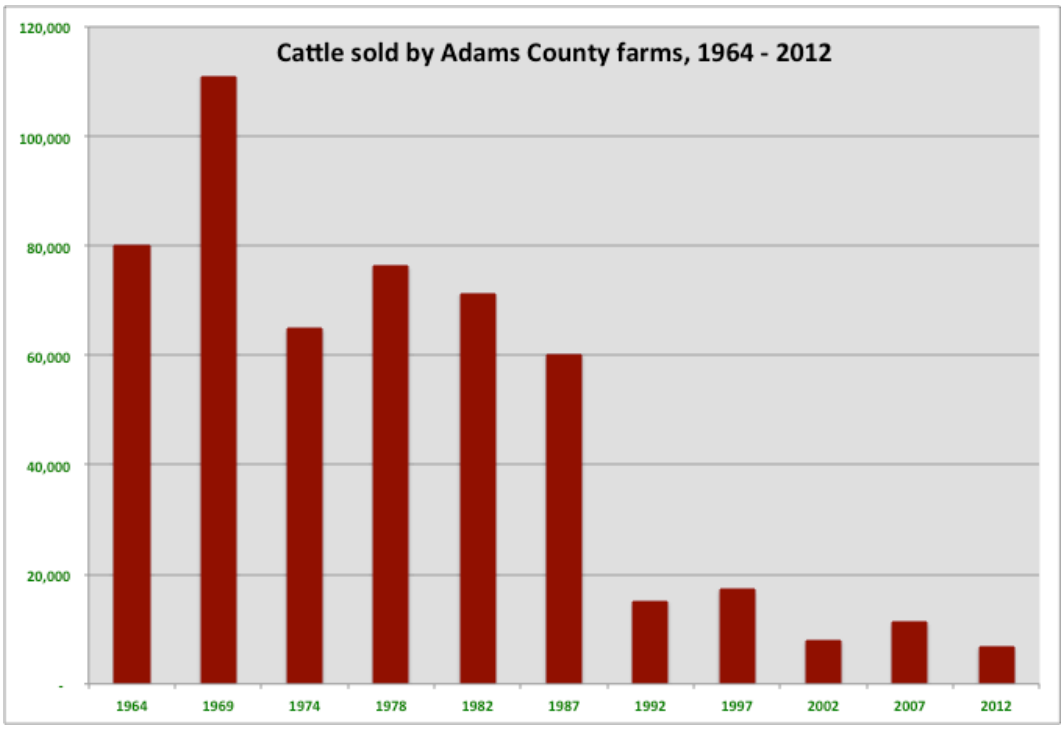
Source: Census of Agriculture

- The number of cattle held by Adams County farms peaked at 72,000 in 1969, despite the decline in the number of farms raising cattle.

- Many farmers sold off their herds due to rising grain prices during the OPEC energy crisis of 1973-1974, when grain prices were artificially high.

- The advent of concentrated feedlots also contributed to a shift away from Adams County farms.

Chart 16: Cattle sold by Adams County farms, 1964 – 2012

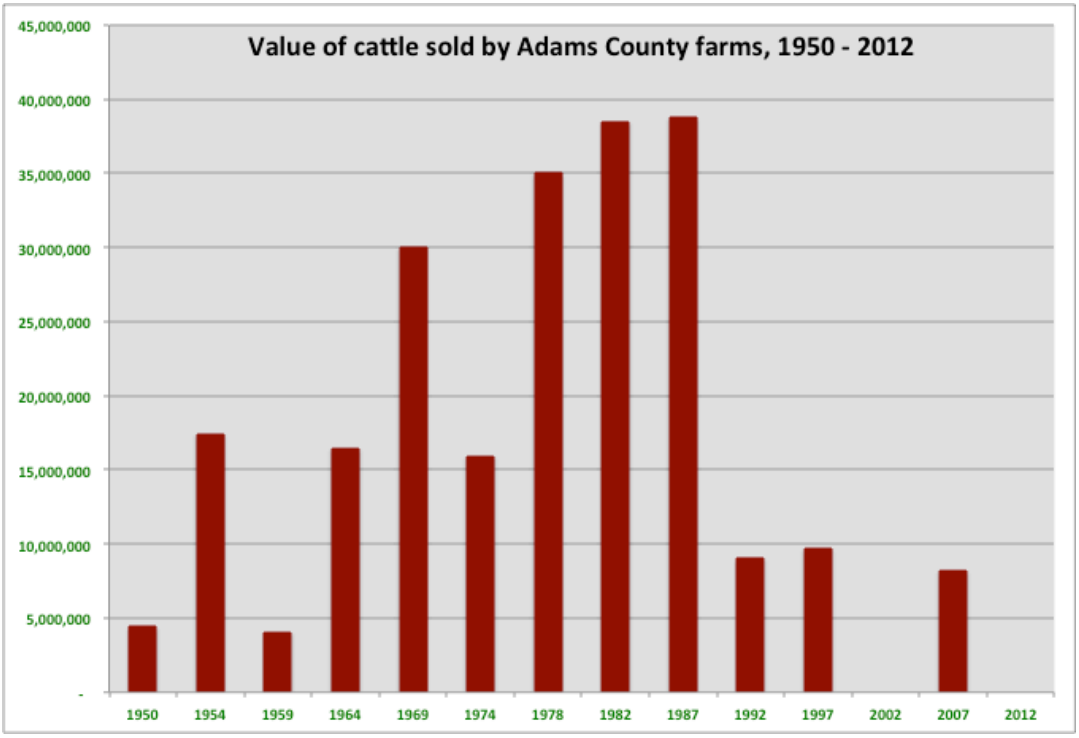


Source: Census of Agriculture

- The number of cattle sold by Adams County farms also peaked in 1969 at 110,000.

- There was a dramatic decline in the number of cattle after 1987. Sales in 1992 were less than one-third the level recorded five years earlier.

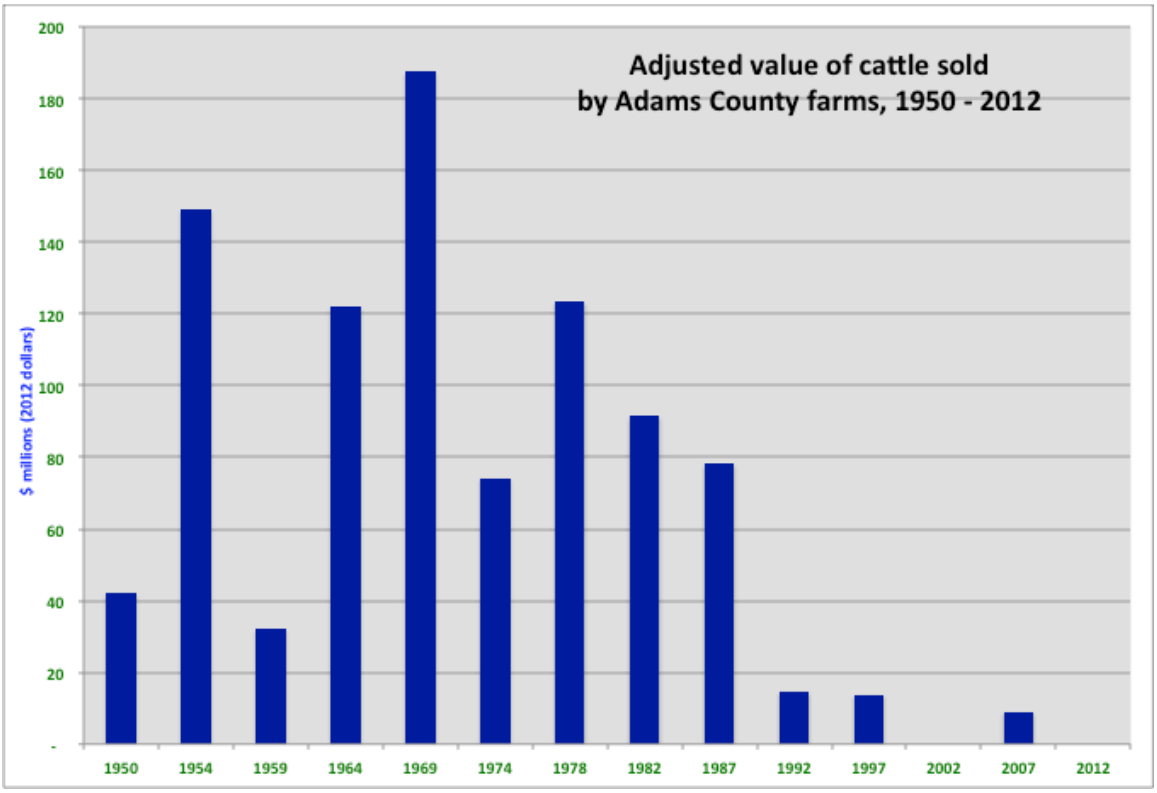
Chart 17: Value of cattle sold by Adams County farms, 1950 – 2012



Source: Census of Agriculture (value year by year).

- The value of cattle sold peaked in 1987, when county farms sold $39 million in a single year.
- Yet sales fell to one-quarter of that level five years later, in 1992.
- Data on sales for Adams County cattle farmers was not reported for 2002 or 2012. This appears to be an effort to protect confidentiality since so few farmers were selling livestock.
- Note than when many cattle were sold off in 1974, the price per animal also fell, so total sales plummeted by 50%.

Chart 18: Cattle sold by Adams County farms, 1950 – 2012 (adjusted)



Source: Census of Agriculture (Adjusted for inflation)

- Once adjusted for inflation, however, it becomes clear that the peak year for cattle sales was 1969, reflecting the large number of animals sold.

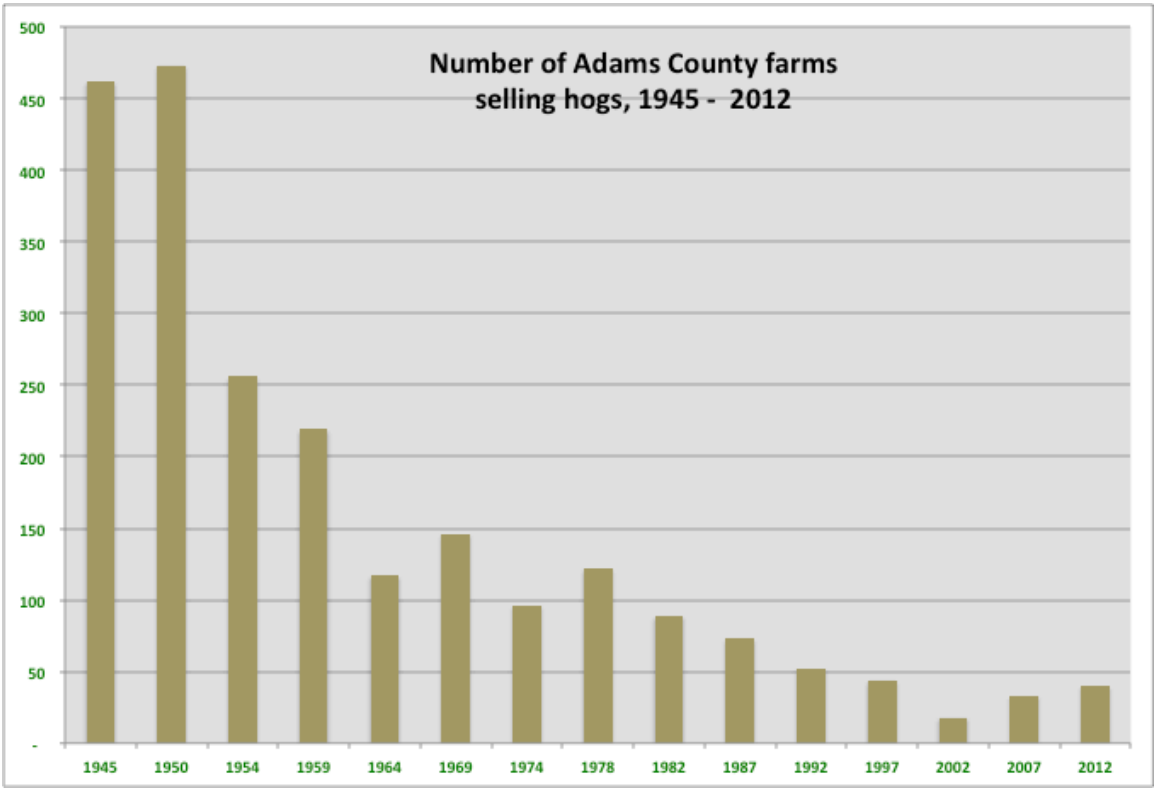
- In 1969, Adams County farmers sold $185 million of cattle, in 2013 dollars.

- 1954 was also a strong year for cattle sales, since the overall farm economy was quite prosperous.

- Each year since 1992, Adams County farmers have earned less selling cattle than they had in 1950. Current sales of less than $10 million are now only one-quarter of their 1950 levels, and only one twentieth of 1969 levels.

Hogs & Pigs

Chart 19: Number of Adams County farms selling hogs & pigs, 1945 – 2012



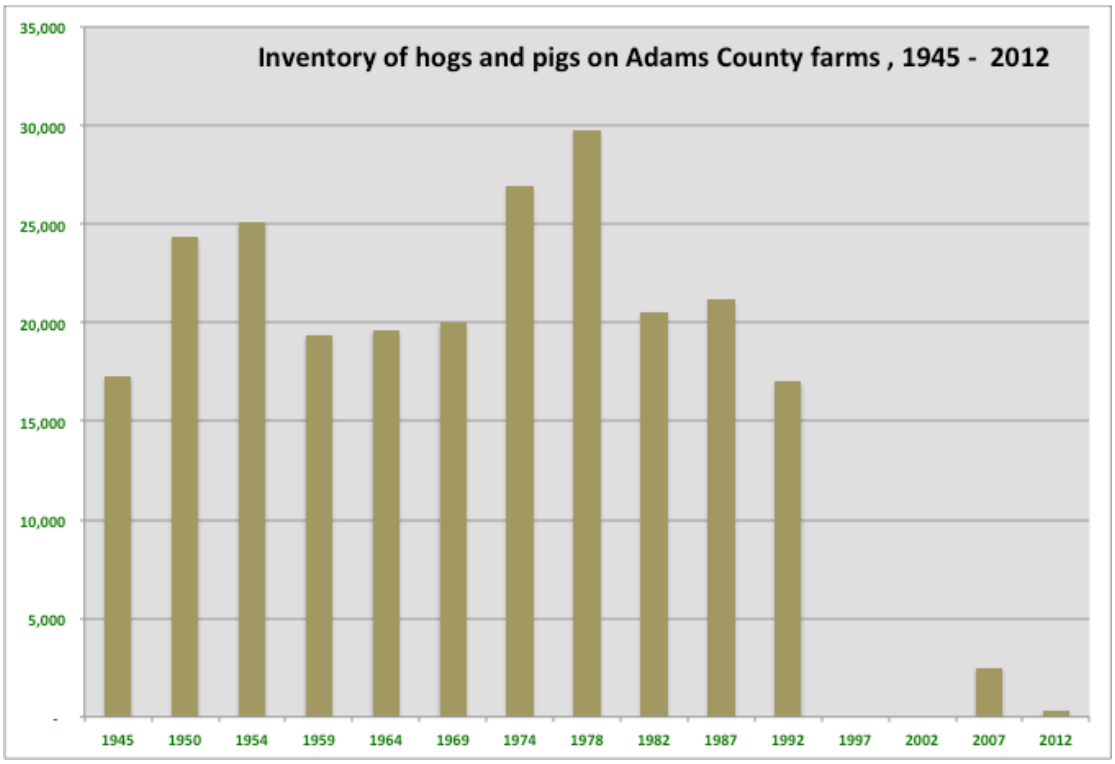
Source: Census of Agriculture

- The number of farms selling hogs and pigs peaked at 470 in 1954, and reached its lowest levels in 2002.

- Many of the same trends during the World War II era, noted above for cattle, also affected hog farmers.

- As Chart 20 shows, the number of pigs raised on Adams County farms remained fairly steady despite the decline in the number of farms, which means more pigs were raised on each farm.

Chart 20: Inventory of hogs & pigs on Adams County farms, 1945 – 2012



Source: Census of Agriculture

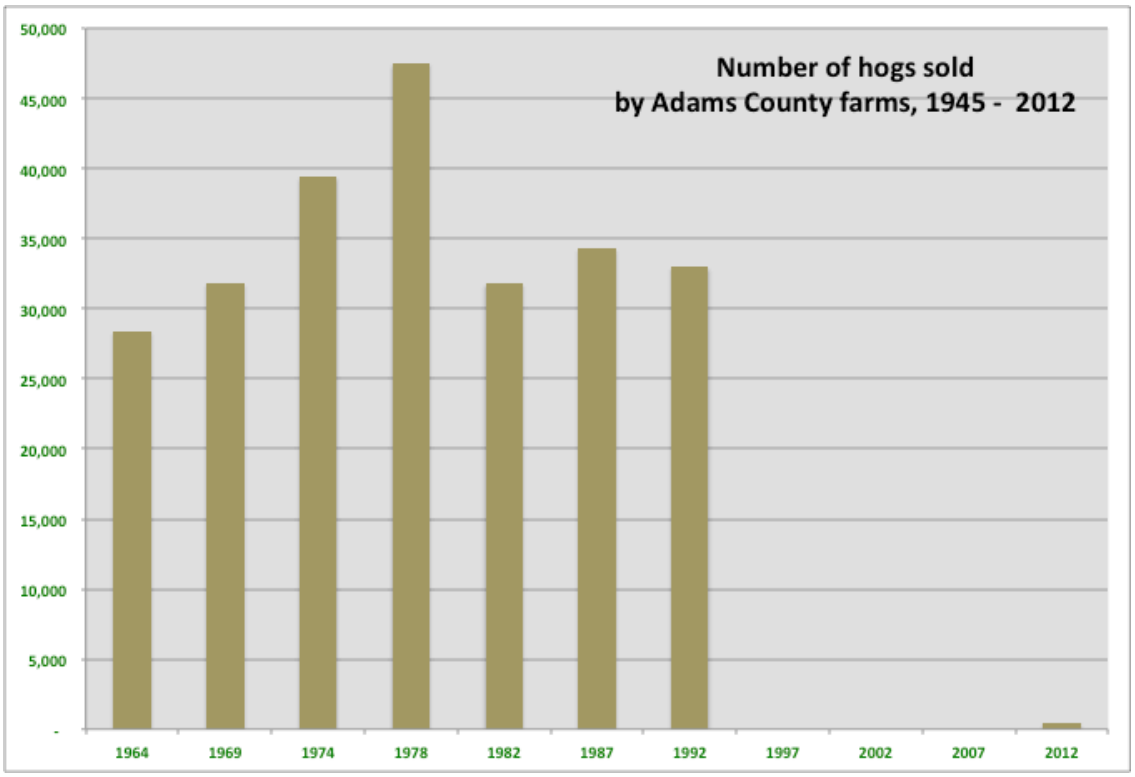
- Inventory of hogs and pigs on Adams County farms peaked in 1978 at nearly 30,000 animals.

- The number of hogs and pigs held on Adams County farms fell considerably after 1992, most likely because of increased housing density, resident concerns about odors, and declining margins for pig production.

- Data were not made available covering inventory of hogs and pigs for 1997, 2002, or 2012.

- 2007 inventory was one-tenth of the peak year.

Chart 21: Number of hogs & pigs sold by Adams County farms, 1945 – 2012

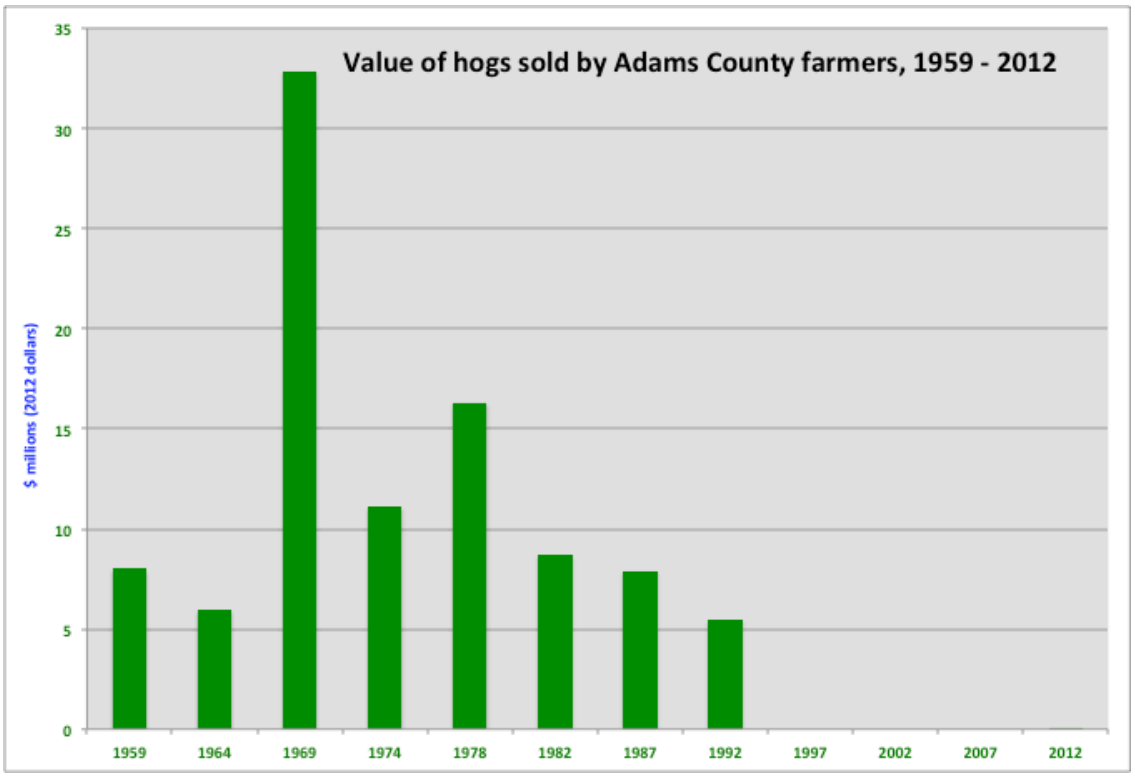


Source: Census of Agriculture

- Hog and pig sales peaked in 1978, when more than 47,000 were sold by Adams County farmers.

- Data on hog and pig sales have seldom been recorded since 1997, but the sales recorded in 2012, of several hundred animals, were exceptionally low compared to previous years.

Chart 22: Value of hogs & pigs sold by Adams County farms, 1959 – 2012 (adjusted)

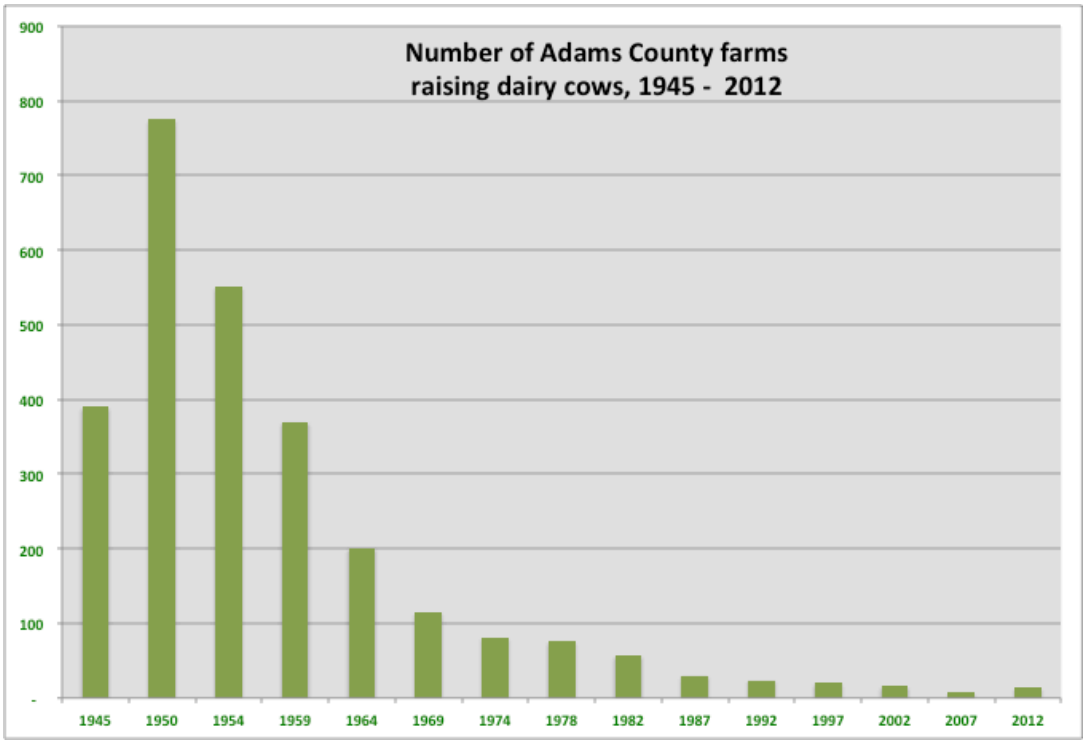


Source: Census of Agriculture

- Value of hogs sold by Adams County farms peaked in 1969 at $33 million.
- Sales plummeted to far less than half these figures only five years later, despite rising inventories and sales.
- Data covering hog and pig sales have seldom been reported since 1997, but total sales of $71,000 recorded in 2012 were exceptionally low compared to previous years.

Dairy

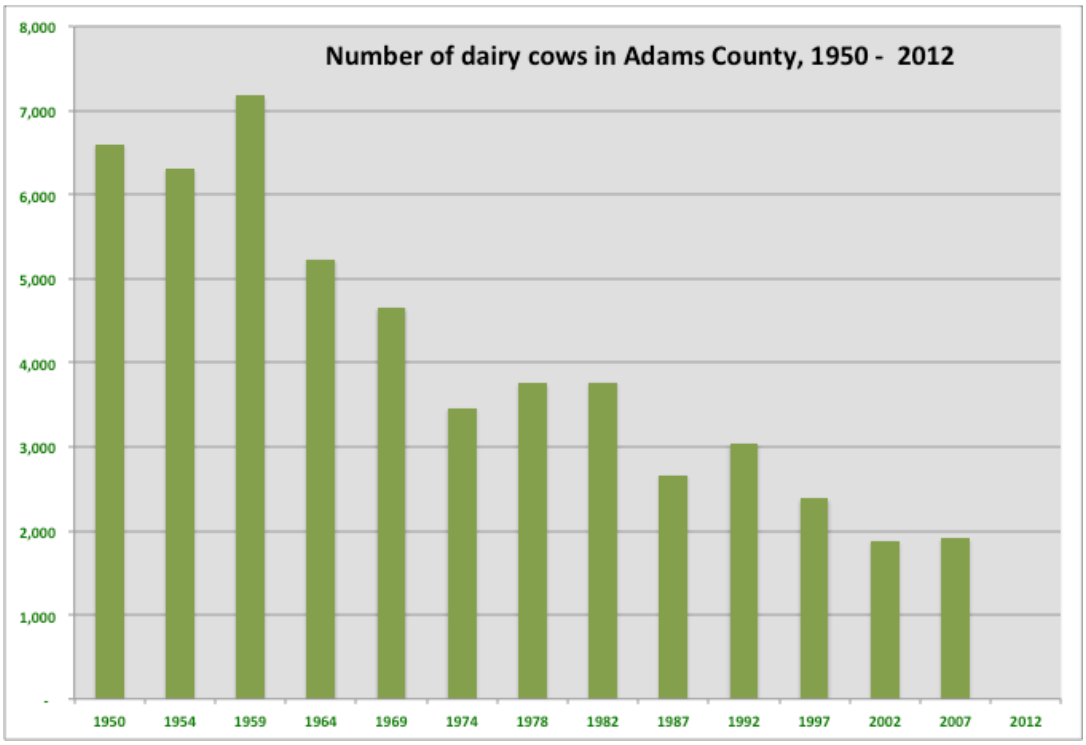
Chart 23: Number of Adams County farms raising dairy cows, 1945 – 2012



Source: Census of Agriculture

- The number of dairy farms peaked at 780 in 1950.
- At this point, almost half of the County's farms raised dairy cows.
- Farms with dairy herds diminished rapidly until 1969, then trailed off more slowly until reaching their lowest level in 2007.
- Currently, the Census of Agriculture reports 14 farms in the County raising dairy cows.

Chart 24: Inventory of dairy cows on Adams County farms, 1945 – 2012



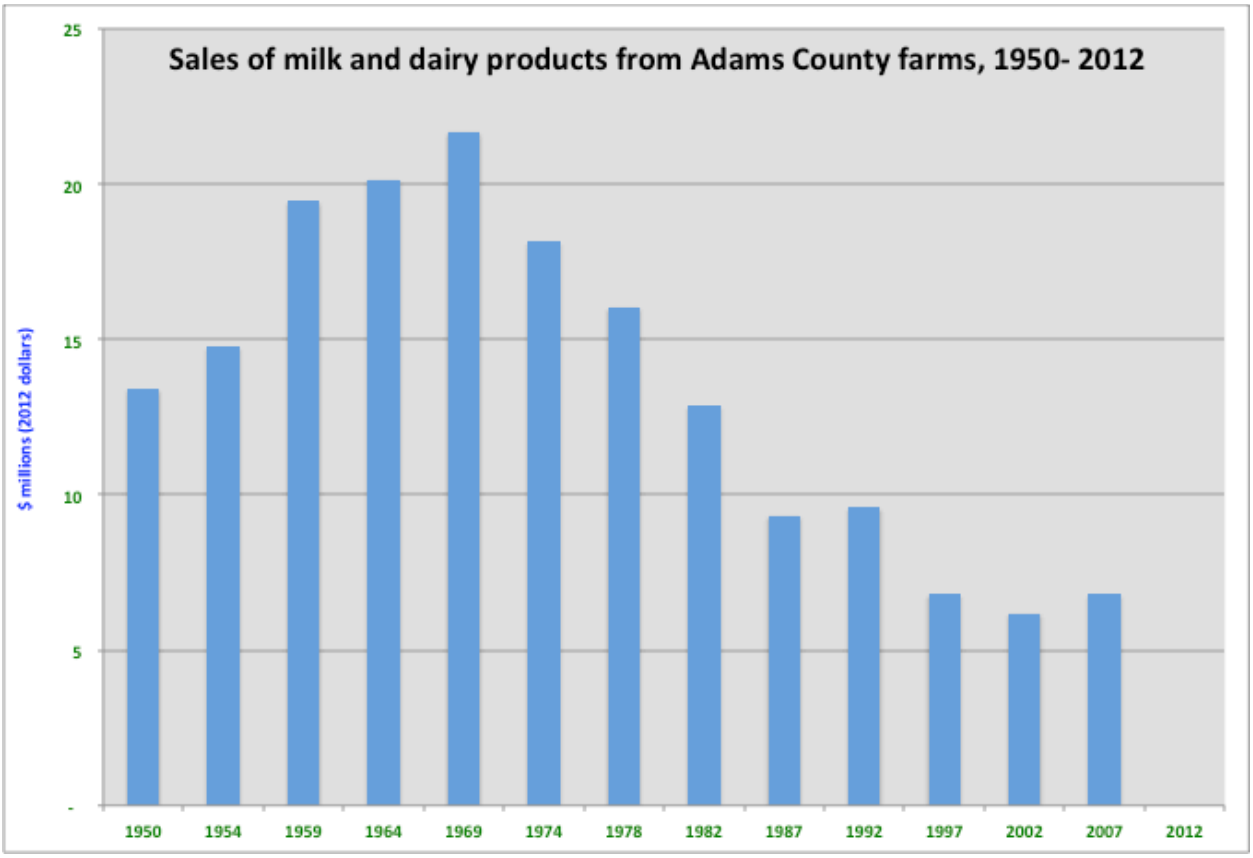
Source: Census of Agriculture

- The inventory of dairy cows peaked in 1959, when more than 7,000 cows were raised in Adams County. The population fell dramatically in 1964, and decreased steadily.

- By 2012, the Census of Agriculture suppressed data on the number of dairy cows to protect confidentiality of the remaining farms.

- The population appears to be less than 2,000, apportioned on 14 farms.

Chart 25: Sales of milk and dairy products by Adams County farms, 1950 – 2012

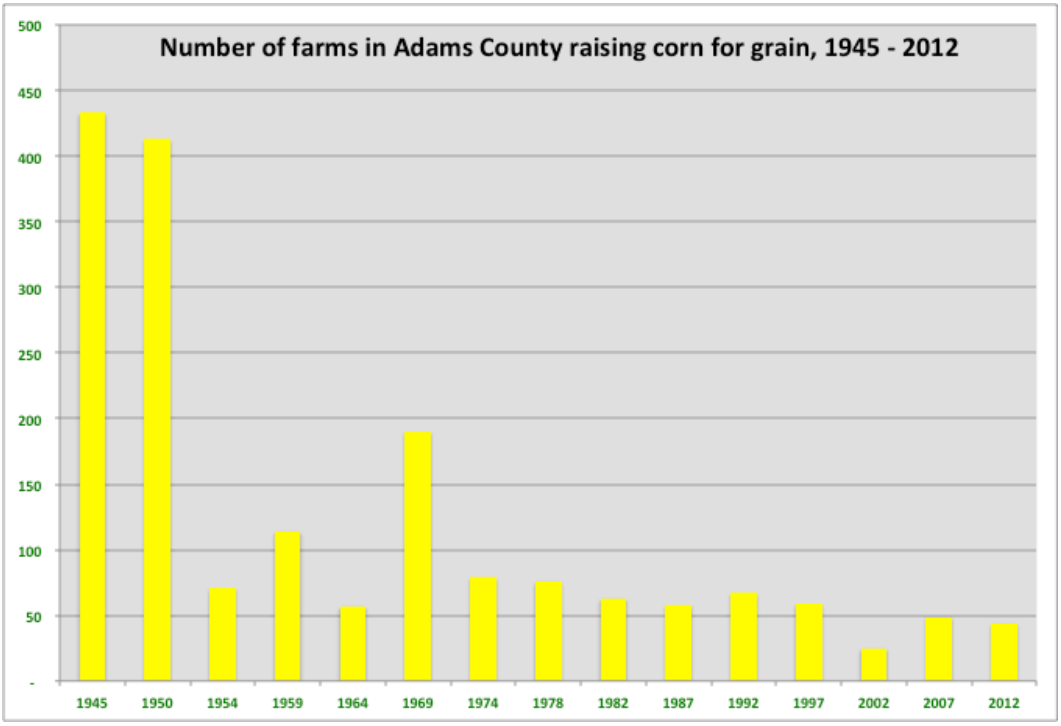


Source: Census of Agriculture

- Sales of milk, cheese, and other dairy products peaked at $22 million in 1969.
- From then on, sales declined steadily.
- By 2012, the Census of Agriculture suppressed data dairy sales to protect confidentiality of the remaining farms.

Corn for grain

Chart 26: Number of Adams County farms selling corn for grain, 1945 – 2012



Source: Census of Agriculture

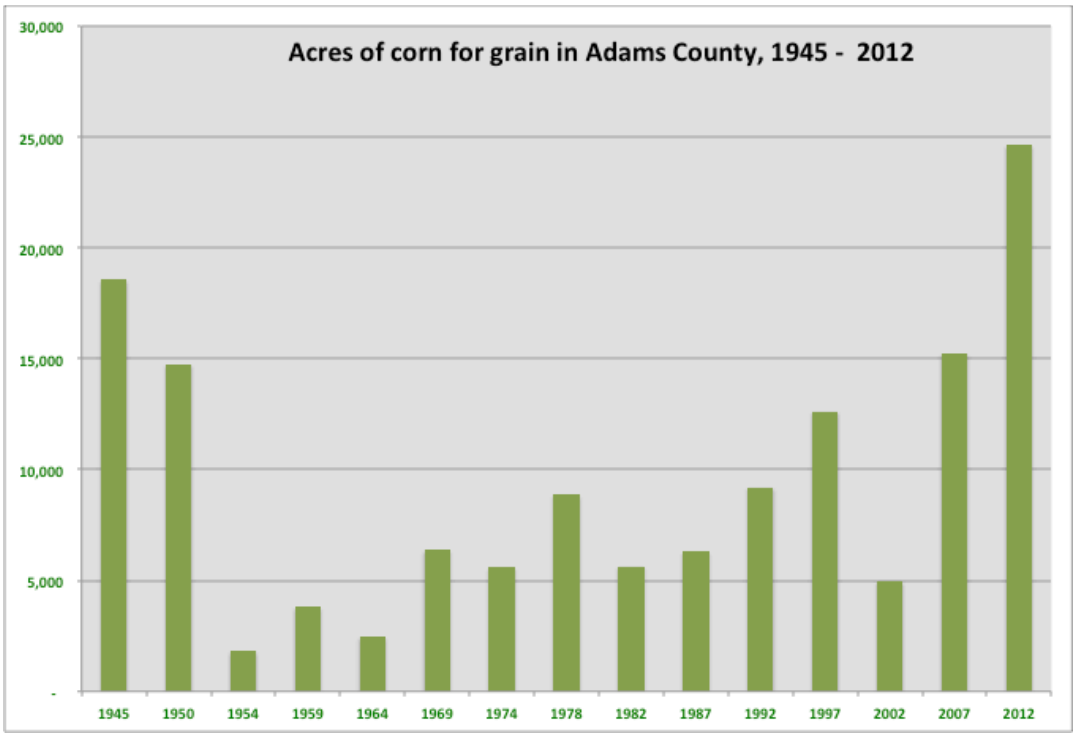
- Reflecting similar trends noted above in the livestock industry, the number of farms raising field corn was at its highest level in 1945, when more than 430 farms raised corn for grain.

- The number of farms raising corn fell precipitously from 1950 to 1954, when only 70 farms raised corn.

- Corn farming experienced a small peak in 1969, when nearly 200 farms raised field corn.

- From 1974 to 2012, however, the number of farms raising field corn held fairly steady, only declining a small amount to less than 50 farms.

Chart 27: Number of acres of corn raised by Adams County farms, 1945 – 2012



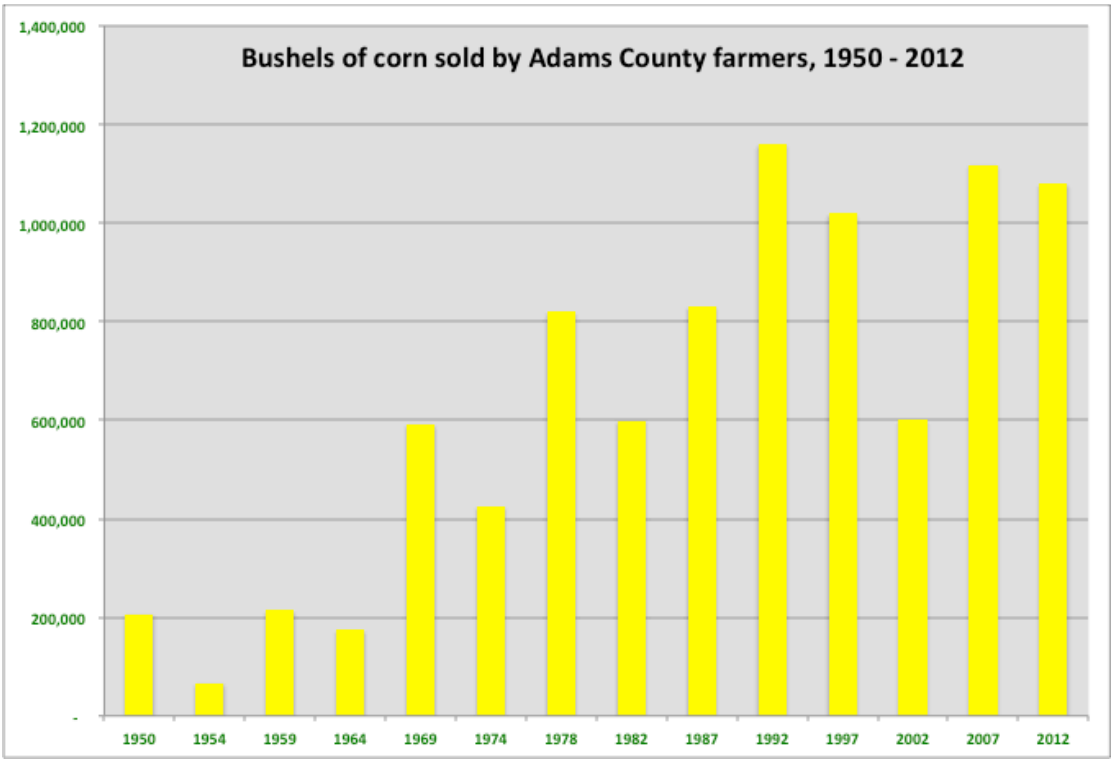
Source: Census of Agriculture

- After reaching a low point in 1954, field corn acreage has risen steadily, despite the decline in the number of farms.

- In 2012, Adams County farmers reported 25,000 acres of corn production – an all time high for the post-war period.

- However, acreage planted in corn fell to low levels of less than 5,000 acres in 2002.

Chart 28: Bushels of corn harvested by Adams County farms, 1950 – 2012

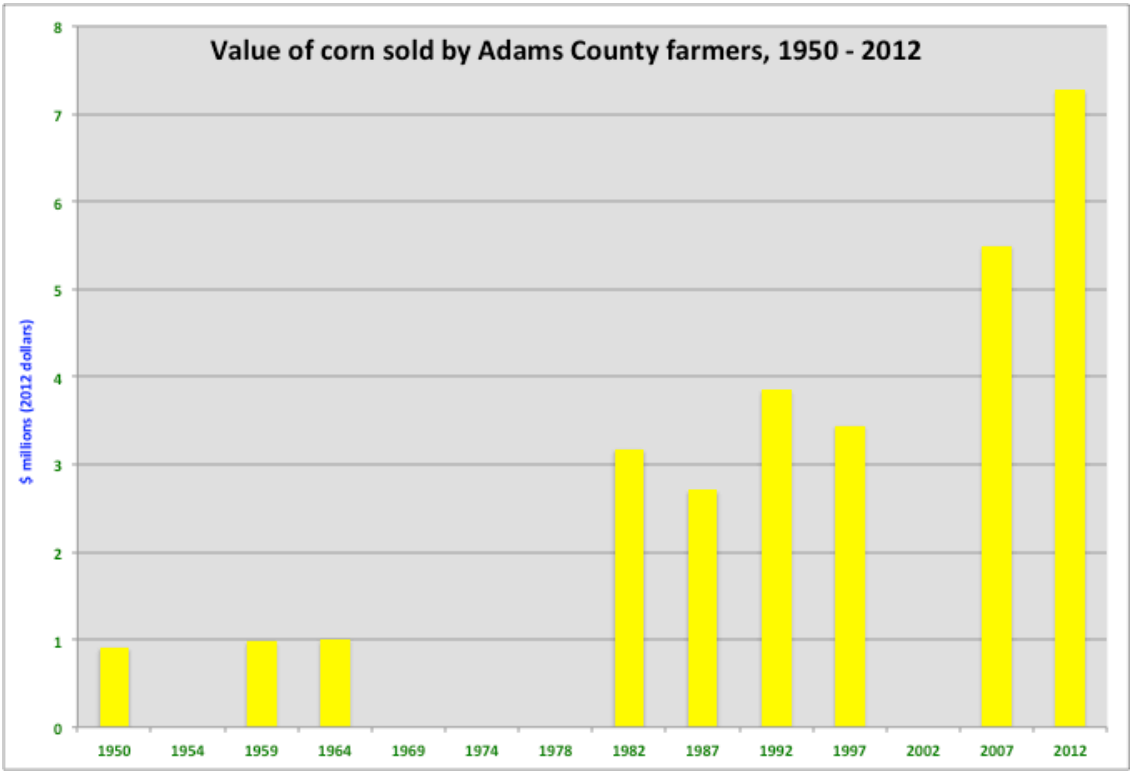


Source: Census of Agriculture

- Production of corn increased dramatically from 1964 to 1987, as new production technology was adopted by Adams County farms.

- Since 1992, county farms have produced more than 1 million bushels most every year.

Chart 29: Value of corn sold by Adams County farms, 1950 – 2012 (adjusted)



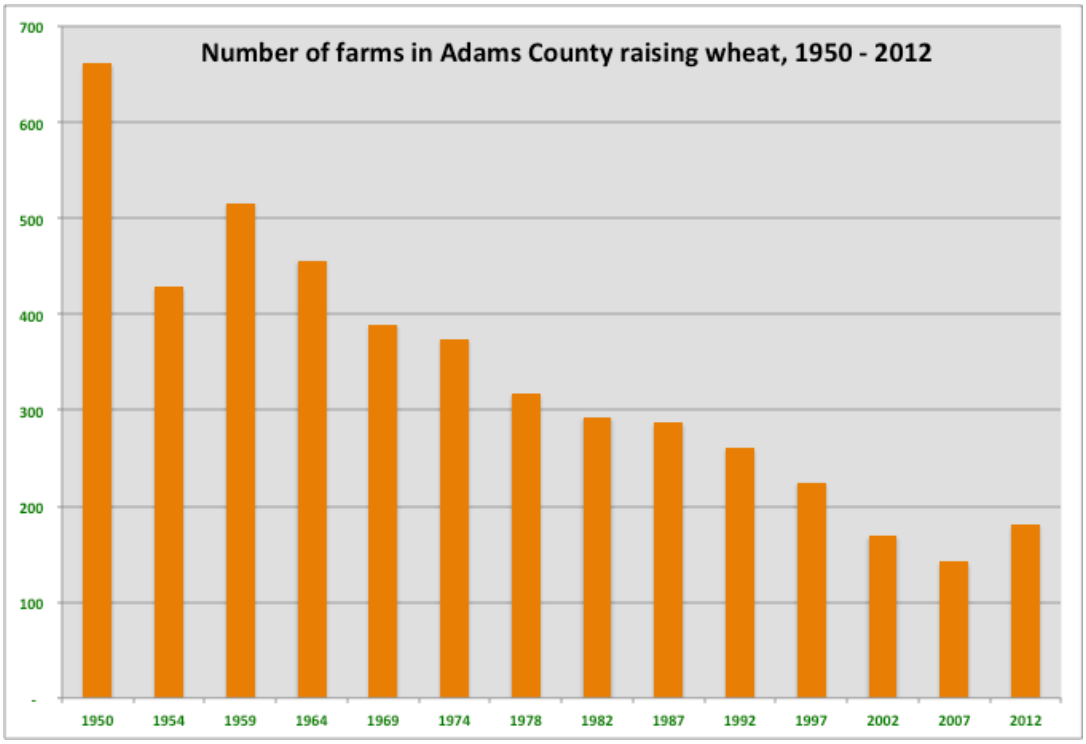
Source: Census of Agriculture (Adjusted for inflation to 2012 dollars)

- Corn sales reached high levels in 2012, when Adams County farmers sold more than $7 million of corn.

- However, 1974 was probably also a very strong year for corn sales, based on state and national trends. Data for corn sales were not reported for the County in 1969, 1974, 1978, or 2002.

Wheat

Chart 30: Number of Adams County farms raising wheat, 1950 – 2012

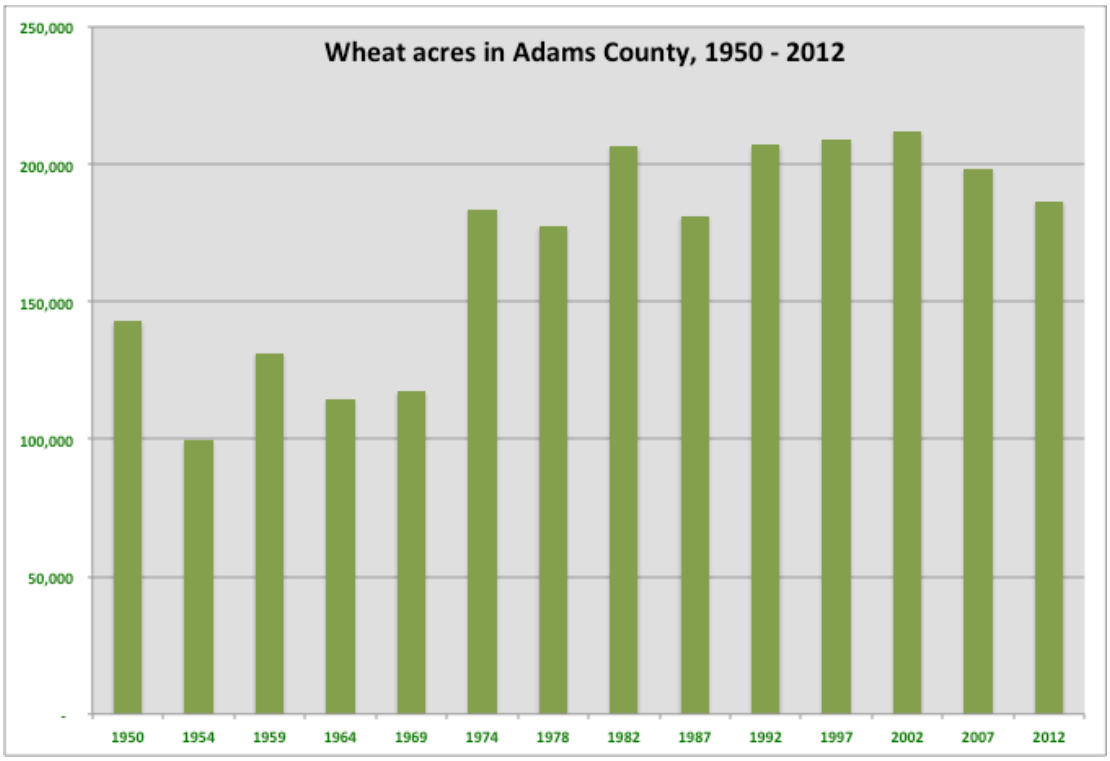


Source: Census of Agriculture

- The number of Adams County farms raising wheat has generally fallen steadily since 1950, when more than 650 farms grew wheat.

- Now, however, fewer than 200 farms raise wheat.

Chart 31: Acres of wheat grown by Adams County farms, 1950 – 2012

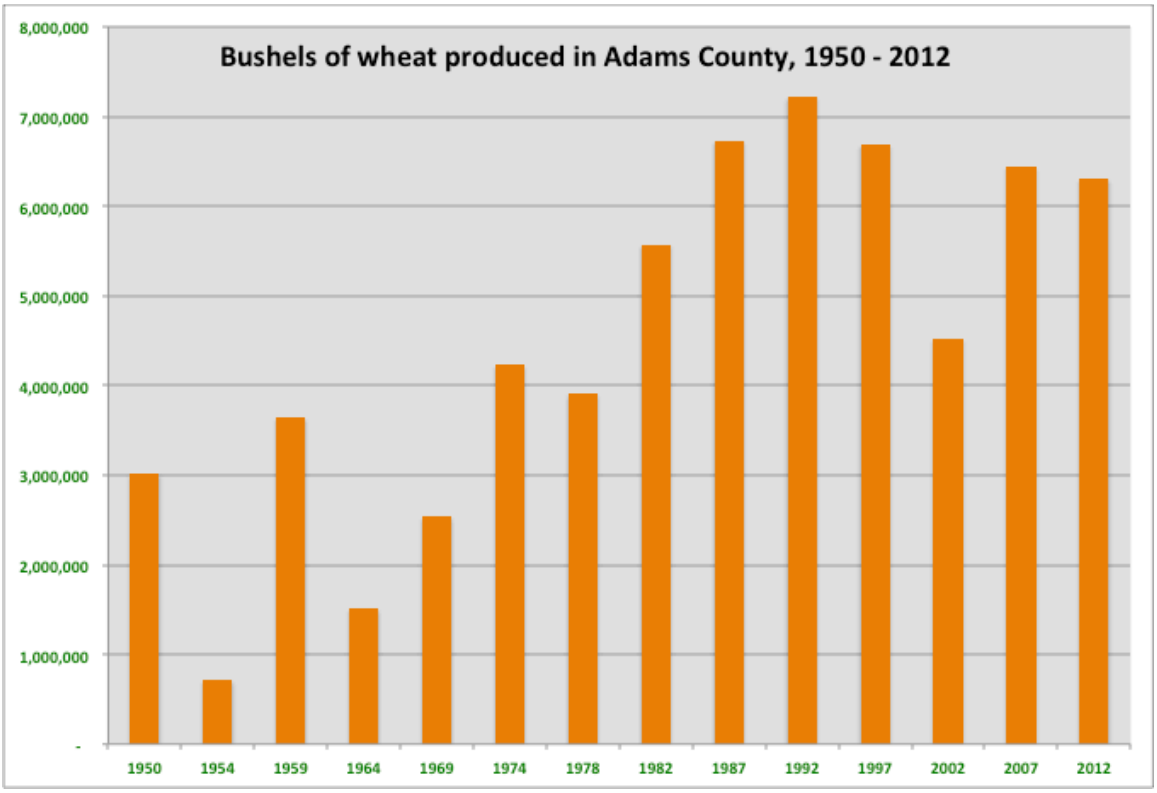


Source: Census of Agriculture

- Even as the number of wheat farmers declined, acreage generally increased, reaching a peak in 2002 with 210,000 acres under cultivation.

- Acreage has declined by roughly 30,000 acres since that peak.

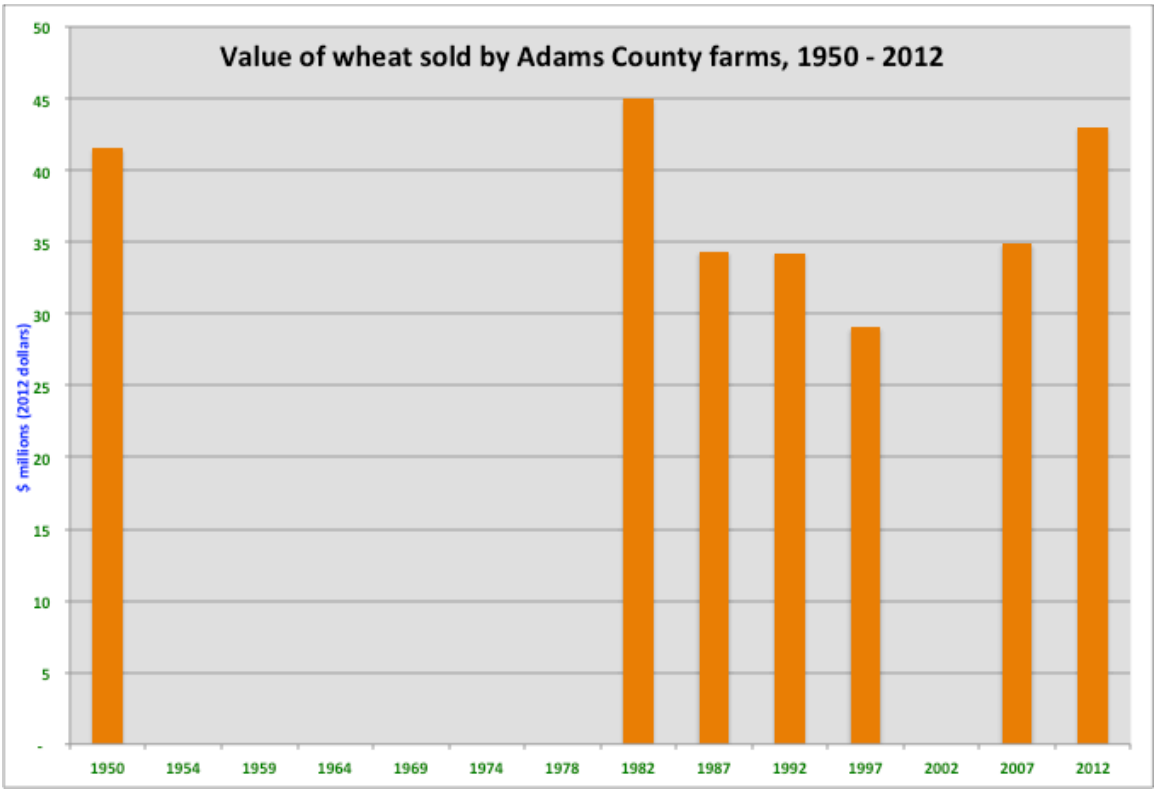
Chart 32: Bushels of wheat produced by Adams County farms, 1950 – 2012



Source: Census of Agriculture

- Even though acreage of wheat rose fairly steadily, production began to fall in 1997 after reaching a peak of over 7 million bushels.

Chart 33: Value of wheat produced by Adams County farms, 1950 – 2012



Source: Census of Agriculture

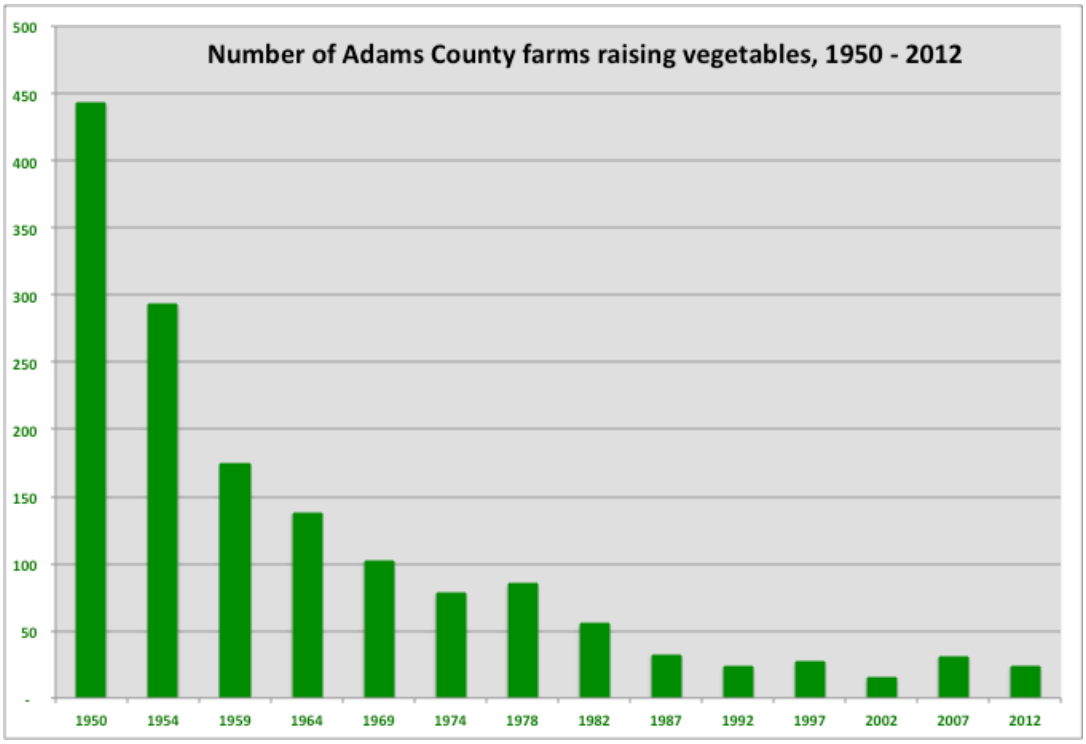
- Considerable data regarding value of the wheat crop is missing from Census of Agriculture reports covering Adams County.

- One period in which considerable wheat was probably sold was 1973-1974, when U.S. farmers shipped large amounts of wheat and corn to the Soviet Union during the OPEC energy crisis.

- Lacking data from the period 1954 to 1978, it is notable that sales of wheat (in inflation-adjusted dollars) are about the same today as they were in 1950. Loss of wheat acreage and declining prices have contributed to an erosion of the wheat industry in Adams County that has offset gains in productivity per acre.

Vegetables

Chart 34: Number of Adams County farms raising vegetables, 1950 – 2012

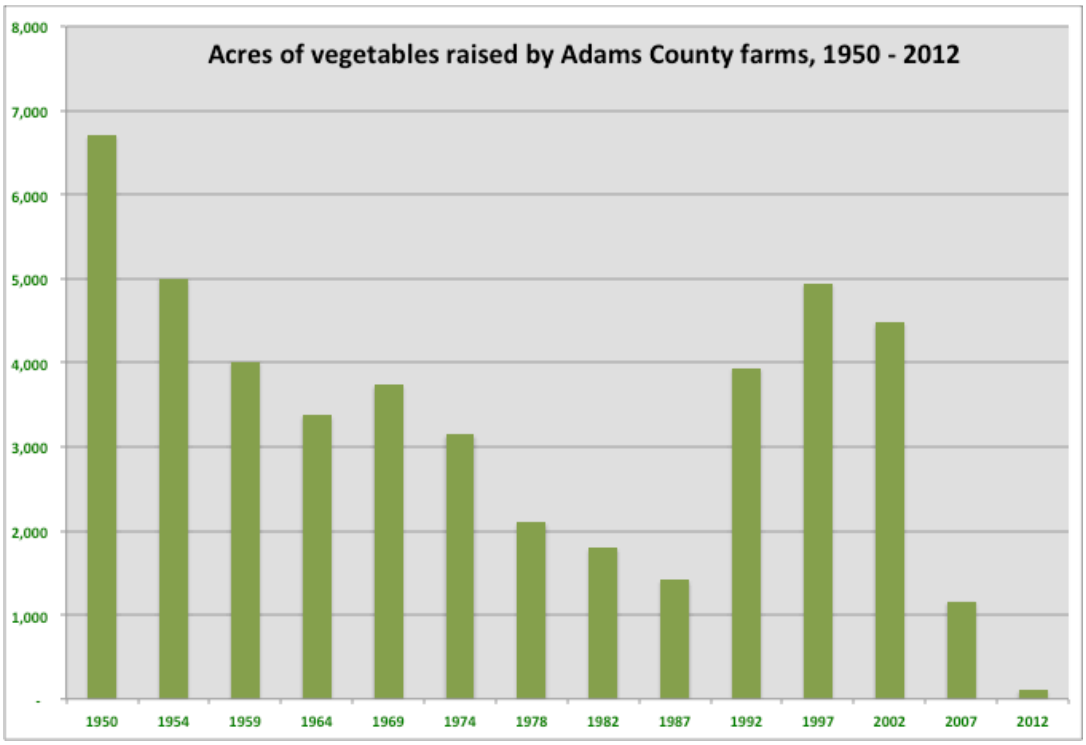


Source: Census of Agriculture

- In 1950, one of every four farms in Adams County raised vegetables.
- However, vegetable production fell steadily until 1974, when farm families began to depend on grocery stores for their food.
- Today only 24 farms raise vegetables, but some of these farms are quite large, and many of these larger farms lease acreage from nearby landowners, as in the Special District.

SAKATA FARMS

Chart 35: Acres of vegetables raised by Adams County farms, 1950 – 2012



Source: Census of Agriculture

- Acreage of vegetables have not fallen as fast as the number of farms, showing that some farms became larger.

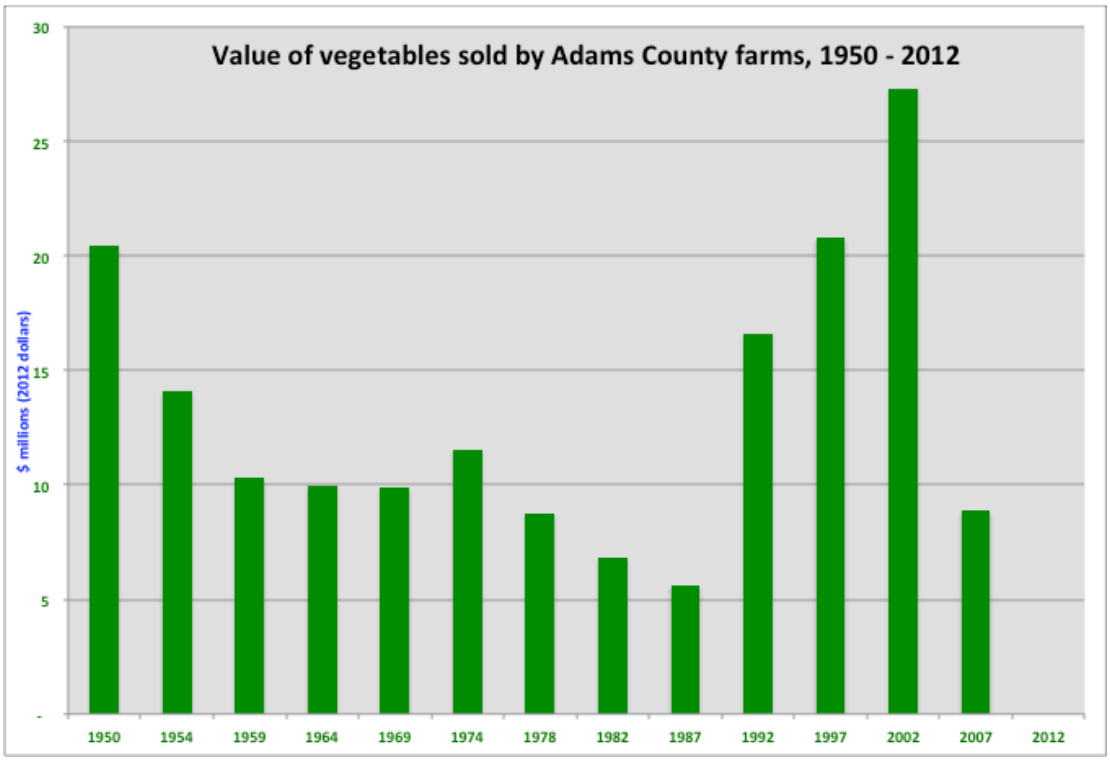
- From 1992 to 2002, between 4,000 and 5,000 acres of vegetables were raised in Adams County each year, after reaching a low point in 1987 following the farm credit crisis.

- Currently, the Census of Agriculture shows only 108 acres planted to vegetables in Adams County. Some of this may also be an undercount due to leased land not being reported in Adams County.

- Vegetable production in Weld County is far more prevalent, with 9,955 acres — yet even in Weld County, acres of vegetables decreased, from 13,085 acres in 2007.

- For the state of Colorado, vegetable acreage also decreased, from 97,251 acres in 2007 to 83,266 acres in 2012. Only 39,526 acres of vegetables were reported for Colorado farms in 2002, so there have been dramatic shifts in recent years.

Chart 36: Sales of vegetables raised by Adams County farms, 1950 – 2012 (adjusted)



Source: Census of Agriculture (Adjusted to 2012 dollars)

- Vegetable sales peaked at $27.5 million in 2002, but fell by more than two-thirds over the next five years, to $8 million.

- Adams County vegetable sales were not reported by the Census of Agriculture in 2012, in an effort to protect the confidentiality of growers.

- Note than in 2007, vegetable sales were less than half the value sold in 1950.

- In Weld County, sales of vegetables peaked in 2007, rising from $51 million in 2002 to $55 million in 2007, and then falling to $44 million in 2012 (all in 2012 dollars).

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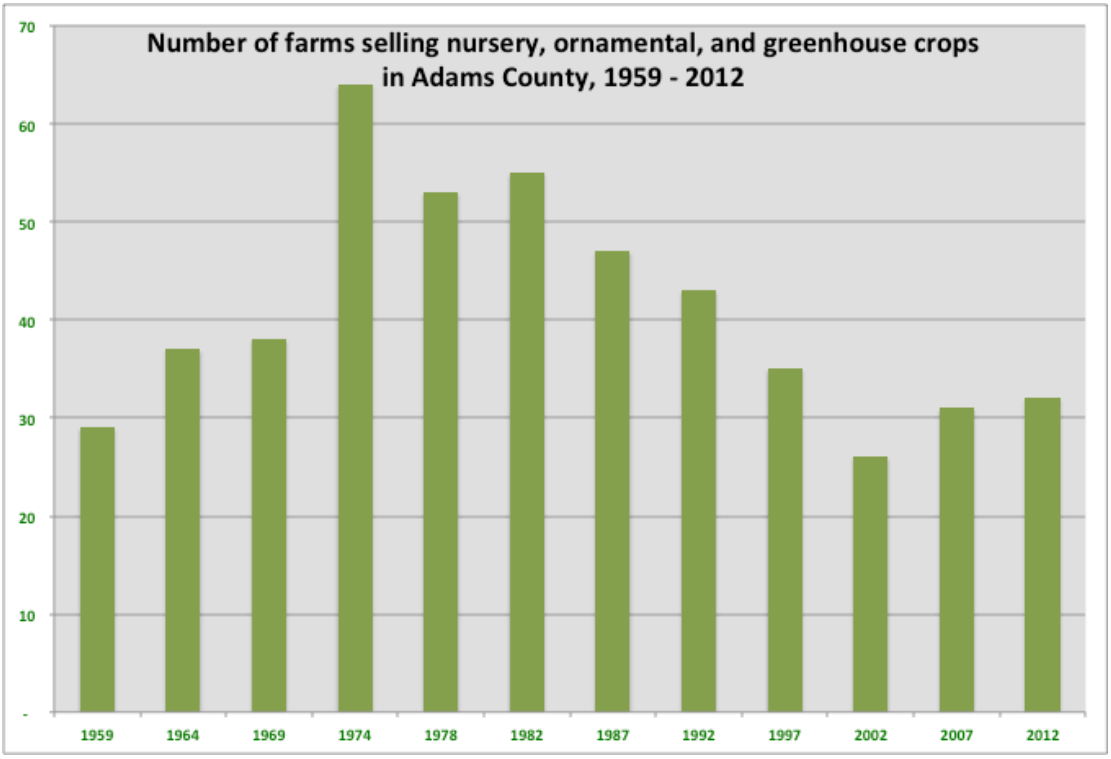
ROCCO'S
"GROWING PRODUCE FOR OVER 90 YEARS"
DAVID PETROCCO FARMS, INC.
ONIONS
NET WT. 11.34 kg
PRODUCE OF U.S.A.

Ornamentals & Nursery Crops

Chart 37: Number of Adams County farms selling ornamentals, 1959 – 2012

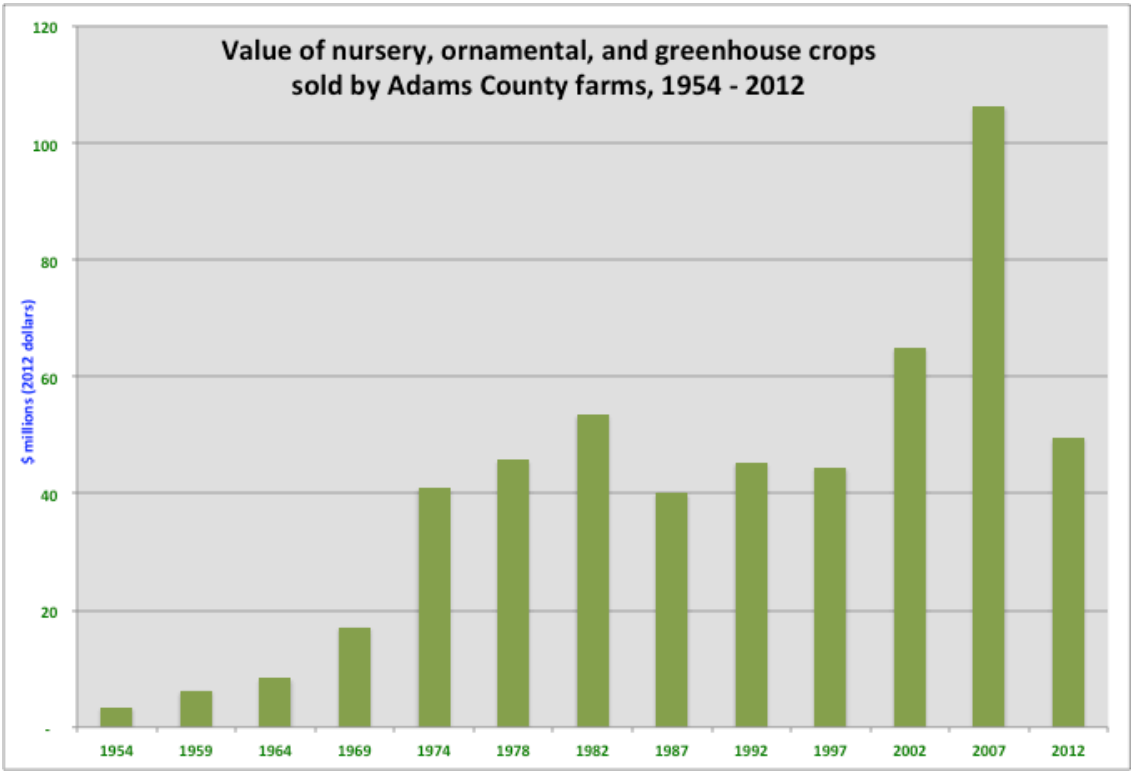


Source: Census of Agriculture

- The number of farms selling ornamental, nursery, and greenhouse crops peaked in 1974 with 60 farms.

- Current levels are half this at just over 30 farms in Adams County.

Chart 38: Value of ornamental sales by Adams County farms, 1954 – 2012 (adjusted)



Source: Census of Agriculture

- Despite declining numbers of farms selling ornamentals, sales increased fairly steadily until 2007, when more than $106 million were sold.

- This number was high due to intense construction of new homes in the Denver Metro area.

- After the global housing finance crisis was over, and housing starts stalled, sales plummeted to $45 million.

- This is nevertheless still the largest single farm product sold in Adams County today.

Local Foods Opportunities

This section by Megan Phillips Goldenberg & Ken Meter

Consumers Build the Communities They Want With Purchasing Decisions
Shifting consumer preferences for purchasing consumer goods from local purveyors and manufacturers has created a sea change in most marketplaces, from US-based automotive manufacturers to hand crafted gifts to foods grown on a nearby farm to craft microbrews. Spending money locally isn't just about a preference for certain inherit product qualities, its also a preference for community, fair pay, good jobs, resilient businesses, connection, environmental stewardship, etc. Food is the most widely available local good and increasingly people are choosing to build the communities they want by purchasing local foods.

What is Local Food Really About?
But local food isn't just about the approximate distance between producer and consumer (Meter & Goldenberg, 2014). It is much more than that. Research reveals that food purchasing decisions do not depend primarily on the distances foods travel. A preference for "local" food is often overlaid with several deeply held values, and "local" is only the catch phrase used to capture these values (Meter, 2011; Born & Purcell, 2006). Not all of these values can be expressed in the selection of any one "local" product. For example, a given consumer who seeks to buy a locally raised chicken may choose not to purchase from a nearby farm if they are persuaded that management or labor practices are more sustainable on a farm 200 miles down the road.

"Local" is largely in the eye of the consumer, contingent on individual values. A basic industry trends report examined various motives for purchasing local, and yielded the following survey results (DaSilva, 2014):

- 64% of surveyed consumers state a desire to support local businesses
- 39% believes the taste and quality of a local product is better
- 31% has more trust in the standards for locally produced foods than those of other regions or countries
- 28% believes that local products are healthier
- 26% thinks it is better for the environment when food doesn't travel as far

So What Do Consumers Actually Want?
Above all, consumers are concerned about quality, freshness, nutrition, and food safety. A food trends survey shows 97% of consumers are primarily concerned with family satisfaction, 93% of survey respondents are concerned about nutritional quality and 92% are concerned about food safety, followed by 77% being concerned about sustainability. When forced to choose just one concern, family satisfaction (54%) and nutritional quality (41%) split the vote, with sustainability receiving only 5% (DaSilva, 2014). An interesting survey comparing producer and consumer perspectives found that *consumers* were far more likely to describe local food with words such as a "freshness," "taste" and "quality" than *producers*, who defaulted to "miles traveled" or other geographic descriptors (Selfa & Qazi, 2005).

Local Versus Organic

Although local food does not directly correlate to any one set of production practices, consumers often consider local products to be more natural or humanely raised, especially when they are grown on a smaller farm. One study found that 20% of survey respondents thought local produce carried less pesticide residue; 22% thought local produce was non-GMO; and 23% perceived local produce to also be organic (Campbell, Khachatryan, Behe, Dennis, & Hall, 2014). Despite such assumptions, studies reveal that "local" and "organic" are not jointly demanded. Some consumers will chose an imported organic product over a local conventional product, and vice versa. Willingness-to-pay studies find that consumers will pay more for a local product than an organic product (Thilmany, Bond, & Bond, 2008) and are more likely to purchase local products over organic products (Campbell, Khachatryan, Behe, Dennis, & Hall, 2014). Strict locavores and a strict organic consumers may share similar primary and secondary values and motivations, but prioritize such values differently.

Building Community Through Local Production and Purchasing

Community interaction is the essential and defining element of local food, and indeed to building consumer loyalty to a farm, a label, or a brand. The greatest indicator of the magnitude of consumers' preference for community interaction may be the widespread growth of farmers markets and CSAs. Research suggests that at least in the eyes of some, direct interaction between producer and consumer is just as important as geographic distinctions and public good factors (Eriksen, 2013; Meter, 2003, 2011). A regression analysis of consumer traits, market atmosphere, and consumer spending found that consumer interaction with the farmer was a greater predictor of spending than product attributes (freshness, quality) or household income (Hunt, 2007). This is supported by a general belief among farmers that they make more money at market when they go themselves instead of sending staff.

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Figure 1: Consumer Values (Glassman, 2015)

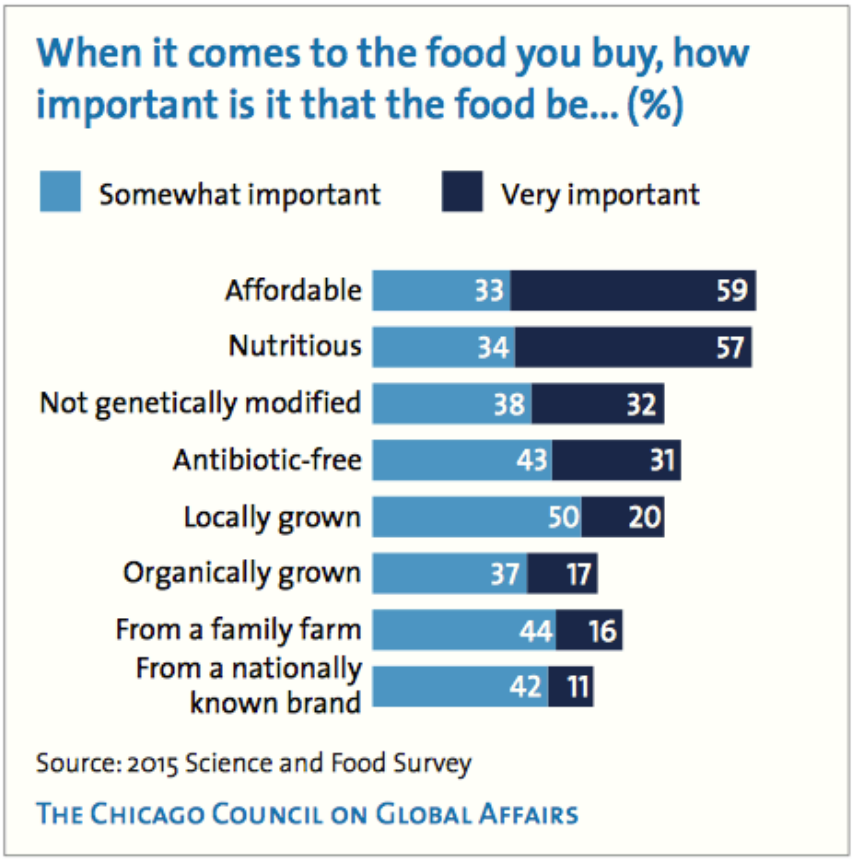
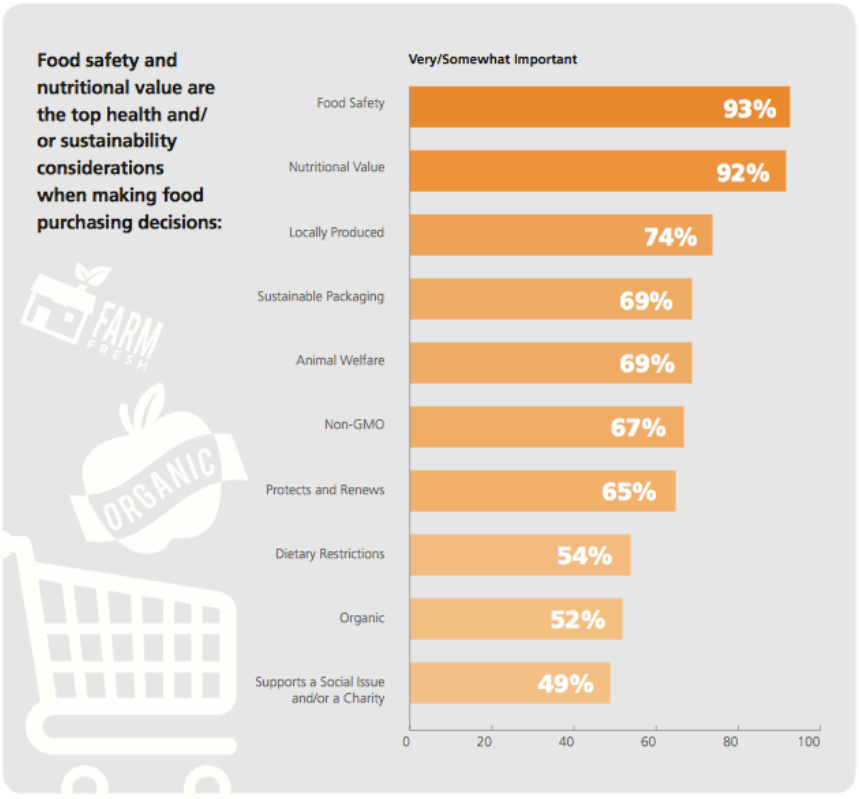


Figure 2: Consumer Values



Farms or value-added businesses selling local food

in the Denver Metro and Northeast Colorado regions

Wholesale distribution to local accounts

LoCo Distribution
Fort Collins, Colorado

Picks up produce at Petrocco Farms, Brighton, and many other farms in the Front Range.

Delivers to:

- Boulder
- Colorado Springs
- Denver
- Estes Park
- Fort Collins

Grocery Delivery Services

Door-to-Door Organics
Lafayette, Colorado

Farms selling to local consumers

(*not necessarily a complete list)*

Ambrosia Farms
Bennett, Colorado
Free-range turkeys

Bartels Land and Livestock
Fort Collins, Colorado
Organic vegetables; U-pick

Becker's Produce
6888 CR 18
Merino, Colorado
Vegetables & apples

Berry Patch Farms
Brighton, Colorado
Organic vegetables & berries

Big Willy's Farm
Longmont, Colorado
Organic vegetables (year-round)

Boulder Organic Foods LLC
Niwot, Colorado
Prepared soups

Boulder Lamb LLC
Longmont, Colorado
Pastured lamb

Colorful Ranch
Matheson, Colorado
Grass-fed beef

Cure Organic Farm
Boulder, Colorado
Organic vegetables, fruits, & pastured meats

Ela Family Farms
Hotchkiss, Colorado
Organic tree fruits & berries

Fossil Creek Farms
Fort Collins, Colorado
Organic vegetables

Fresh Start Family Farms
Aurora, Colorado
Eggs

Fritzler Farms
Lasalle, Colorado
Vegetables & fruits

Full Circle Organic Farms
Longmont, Colorado
Organic vegetables & small grains

Garden Sweet Farm
Fort Collins, Colorado
Sustainably grown vegetables, berries, herbs, & flowers; U-pick strawberries

Golden Prairie
Nunn, Colorado
Organic wheat & millet

Harvest Farm
4240 East County Road 66
Wellington, Colorado
Beef, honey

Hazel Dell Mushrooms
Loveland, Colorado
Mushrooms

Hoot 'n' Howl Farm
Boulder, Colorado
Sustainably raised berries, veggies, honey bees, beef, & chickens; U-pick berries

Inglorious Monk Bakery
Longmont, Colorado
Gluten-free baked goods

Isabelle Farms
Lafayette, Colorado
Organic produce

Johnson's Acres
Brighton, Colorado
Unpasteurized cow's milk, cream, yogurt, whey, eggs, & honey

Just What Grows Gardens
Brush, Colorado
Salad greens, herbs, flowers, lavender, & native plants

Kiowa Valley Organics
Roggen, Colorado
Organic produce, grass-fed beef, naturally raised beef & free-range chickens

Kovach Family Farms
Fort Lupton, Colorado
Vegetables & berries; U-pick

Leffler Family Farms
Eaton, Colorado
Transitional potatoes & sugar beets

Lukens Farms
Fort Collins, Colorado
Apples, pumpkins, flowers, & turkeys

Miller Farms
Platteville, Colorado
Vegetables, U-pick; agri-tourism

MMLocal
Boulder, Colorado
Canned Colorado vegetables & fruits

Monroe Organic Farm
Kersey, Colorado
Organic vegetables & meats

Nelms Farm
Golden, Colorado
Organic apples; U-pick

On The Vine at Richmond Farm
Fort Collins, Colorado
Sustainably raised/transitional vegetables, fruits, & herbs

Ozuké
Lafayette, Colorado
Organic fermented foods

Quixotic Farming
Cañon City, Colorado
Tilapia

Petrocco Farms
Brighton, Colorado
Conventionally grown vegetables

Plowshares Community Farm
Longmont, Colorado
Organic vegetables & heritage pork

Ray Domenico Farms
Platteville, Colorado
Organic beets, jalapenos, chard, green beans, kale, & other vegetables

Red Wagon Farm
Niwot, Colorado
Organic vegetables

Scarecrow Gardens
Greeley, Colorado
Sustainably grown vegetables & fruits

Schnorr Organics
Fort Collins, Colorado
Organic vegetables

Simply Natural at Desiderata Ranch
Berthoud, Colorado
Grass-fed beef, free-range poultry, eggs, unpasteurized cow's milk, & yogurt

Skål Farm
Golden, Colorado
Permaculture farm raising goats and chickens; also sell raw milk, yogurt, kombucha starters, & kefir grains

Strohauer Farms
La Salle, Colorado
Organic and conventional vegetables, corn, & wheat

Vert Kitchen
Denver, Colorado
Prepared soups & salads

Winking Girl Salsa
Louisville, Colorado
Salsas

Ya Ya Farm & Orchard
Longmont, Colorado
Apples, U-pick, & agri-tourism

Farmers Markets

(not necessarily a complete list – check local listings for days and hours of operation)

Arvada
57th & Olde Wadsworth

Aurora
6626 S. Parker Rd.
(Arapahoe Crossing in Big Lots parking lot)

Aurora
Southlands Shopping Center

Bennett
401 S. 1st St.

Boulder
13th & Canyon

Broomfield
1700 W. 10th Ave.

Centennial
6400 S. University

Centennial
13050 E. Peakview Ave.

Denver
200 Santa Fe Dr.

Denver
1st & University (Cherry Creek Shopping Center)

Denver
1500 block of Boulder St.
(between 15th and 16th Streets)

Denver
44th Ave. & Vallejo Street

Denver
1420 Larimer St.
(Larimer Square, Bistro Vendome Courtyard)

Denver
E. 29th Ave. & Roslyn St.
(Stapleton Founder's Green)

Denver
E. Colfax Ave. & Columbine St.
(Sullivan Fountain, across from the Tattered Cover)

Denver
32nd & Lowell

Denver
970 S. Pearl St.
(1500 block of S. Pearl St. between Florida and Iowa)

Edgewater
2401 Sheridan Blvd.

Erie
Wells St. between Piece and Biggs

Estes Park
Bond Park
(Main St., next to the public library)

Fort Collins
200 West Oak St.

Fort Collins
Harmony & Lemay

Fort Collins
810 Harmony Rd.
(in front of Ace Hardware parking lot)

Fort Collins
802 West Drake Road

Frederick
105 5th St.
(5th St. between Main St. and Elm St.)

Greeley
902 Seventh Ave.

Greenwood Village
7600 Landmark Way

Highlands Ranch
9288 Dorchester St.
(Highlands Ranch Town Center Square)

Lafayette
400 W. South Boulder Rd.
(Behind the Laayette Marketplace)

Lakewood
Denver Federal Center
(6th Ave. & Kipling St.)

Lakewood
6501 W. Colfax
(Lamar Station Plaza)

Lakewood
9077 W Alameda Ave
Alameda & Garrison (Mile Hi Church)

Littleton
7301 S. Santa Fe

Littleton
8501 W. Bowles
(W. Bowles & S. Wadsworth)

Longmont
9595 Nelson Road

Louisville
824 Front Street

Loveland
700 S. Railroad
(Fairgrounds Park)

Loveland
3133 N. Garfield
(Garfield St. & Orchards Rd., in parking lot in front of Hobby Lobby)

Lowry
7581 E. Academy Blvd.

Parker
East Main Street

Wellington
3815 Harrison Ave.

Westminster
Sheridan & 72nd

Wheat Ridge
4252 Wadsworth Blvd.

Farm Stands & Roadside Stands

(*not necessarily a complete list)*

Becker's Produce
6888 CR 18
Merino, Colorado
Vegetables & apples; peaches from other farms

Berry Patch Farms
13785 Potomac St.
Brighton, Colorado
Organic vegetables & berries

Boulder Family Farms
1005 Cherryvale Rd.
Boulder, Colorado
Produce (some organic), eggs, artisanal products, & crafts

Cure Organic Farm
7416 Valmont Rd.
Boulder, Colorado
Organic vegetables & fruits, honey, & eggs

Everitt Farms
9300 W Alameda Ave.
Lakewood, Colorado
V*egetables & fruits, artisanal foods*

Fritzler Farms
20861 County Road 33
Lasalle, Colorado
Vegetables & fruits

Garden Sweet
719 W. Willox Lane
Fort Collins, Colorado
Vegetables, U-pick strawberries

Just What Grows Gardens
County Road T.9
Brush, Colorado
Salad greens, herbs, flowers, lavender, & native plants

Heinie's Market
11801 W 44th Ave.
Wheat Ridge, Colorado (not located at farm)
Vegetables, fruits, eggs, fresh-pressed cider, honey, & baked goods

Hoot 'n' Howl Farm
6033 Jay Road
Boulder, Colorado
Vegetables, fruits, beef, & fresh eggs

Kovach Family Farms
754 South Denver Avenue
Fort Lupton, Colorado
Vegetables & berries; U-pick

Lukens Farms
9320 East State Highway 14
Fort Collins, Colorado
Apples, pumpkins, flowers, & turkeys

Lulu's Farm
13201 E. 144th Ave.
Brighton, Colorado
Vegetables, fruits, & specialty foods

Palombo Farms Market
11500 Havana St.
Henderson, Colorado
Vegetables, fruits, & honey

Palizzi's Farm
15380 E Bromley Lane
Brighton, Colorado
Vegetables & fruits

Plowshares Community Farm
8040 Oxford Rd
Longmont, Colorado
Vegetables, fruits, & eggs

Rocky Mountain Green Market
Rainbow Plaza — 4229 West Eisenhower
Loveland, Colorado
Vegetables & fruits, other Colorado food items

Scarecrow Gardens
2235 North 47th Avenue
Greeley, Colorado
Sustainably grown vegetables & fruits

Veggiescapes
7777 Oxford Road — Yarmouth & North 26th Ave.
Boulder, Colorado
Vegetables & fruits; U-pick

Zweck's Fresh
10901 Airport Road
Longmont, Colorado
Vegetables & fruits

Other Agri-tourism farms

(not necessarily a complete list)

Aspen Lodge at Estes Park
6120 State Highway 7
Estes Park, Colorado
Horse rentals, lessons, bed & breakfast

Harvest Farm
4240 East County Road 66
Wellington, Colorado
Petting zoo; beef, honey

Kiowa Creek Coaches
14200 W. County Road 7
Mead, Colorado
Horse ranch, boarding stables, rising, hosts events

Tigges Farm Produce and Pumpkin Patch
12404 Weld County Road 64 ½
Greeley, Colorado
Vegetables & fruits; U-pick

All of the following crops have been grown commercially in Adams County
Source: Census of Agriculture, various years

Beans, Snap
Beets
Broccoli
Brussels Sprouts
Cabbage, Head
Cantaloupes & Muskmelons
Carrots
Cucumbers
Eggplant
Herbs, Fresh Cut
Kale
Lettuce, leaf
Lettuce, romaine
Okra
Onions, dry
Onions, green
Peas, green
Peppers, bell
Peppers, Chili
Potatoes
Pumpkins
Radishes
Rhubarb
Spinach
Squash, summer
Squash, winter
Sweet corn
Sweet potatoes
Tomatoes
Watermelons

Food Consumption

- Brighton residents purchase $83 million of food each year *[Calculated using Bureau of Labor Statistics using regional averages for Western states]*.

- County residents purchase $1.3 billion of food each year *[Calculated using Bureau of Labor Statistics using regional averages for Western states]*.

- Metro Denver residents purchase more than $7 billion of food each year *[Calculated using Bureau of Labor Statistics using regional averages for Western states]*.

- If every Adams County residents purchased $5 of food each week from some farm in the County, farmers would earn $122 million over a year – almost as much as they earn now selling all crops and livestock *[Calculation: population x $5 x 52 weeks]*.

Table 6: Food markets in Brighton and Adams County

	Brighton $ millions	Adams Co $ millions
Total food consumed by households	83.3	1,279
Food for home consumption	49.8	766
Cereals and cereal products	2.2	33
Bakery products	4.2	64
Beef	2.4	37
Pork	1.9	29
Other meats	1.3	20
Poultry	2	30
Fish and seafood	1.7	26
Eggs	0.7	11
Fresh milk and cream	1.8	27
Other dairy products	3.6	56
Fresh fruits	4.2	64
Fresh vegetables	3.4	52
Processed fruits	1.4	22
Processed vegetables	1.3	20
Sugar and other sweets	1.9	29
Fats and oils	1.5	23
Miscellaneous foods	9.2	141
Alcoholic beverages	6.2	531
Nonalcoholic beverages	4.4	68
Food eaten away from home	33.4	514

Consumer Markets for Food in Brighton and Adams County

(Assuming consumption is typical of rest of U.S.) Source: Economic Research Service

Table 7: Estimated food consumption in pounds by local consumers

If Brighton or Adams County wanted to feed itself all the foods it currently consumes, these are the approximate amounts local farms would have to produce.

Vegetables

	Brighton pounds	Adams Co. pounds
Artichokes	47,146	601,675
Asparagus	59,975	765,397
Dry Beans	212,304	2,709,407
Dry Peas	40,713	519,580
Beans, Lima	13,055	166,612
Beans, Snap	242,031	3,088,786
Beets	21,023	268,300
Broccoli	345,856	4,413,798
Brussels Sprouts	15,843	202,184
Cabbages	291,085	3,714,814
Carrots	384,545	4,907,547
Cauliflower	61,247	781,625
Celery	201,343	2,569,534
Greens, Collard	46,727	596,324
Corn, Sweet	795,938	10,157,720
Cucumbers	387,337	4,943,180
Eggplant	31,175	397,859
Escarole	7,159	91,364
Garlic	73,759	941,305
Kale	20,502	261,639
Lettuce, Head	517,941	6,609,935
Lettuce, Romaine	419,801	5,357,479
Mushrooms	139,499	1,780,283
Greens, Mustard	8,152	104,030
Okra	11,318	144,438
Onions	718,969	9,175,445
Peas, Green	87,631	1,118,341
Pepper, Bell	368,550	4,703,411
Peppers, Chili	256,401	3,272,182
Potatoes	4,251,795	54,261,186
Pumpkins	172,034	2,195,490
Radishes	17,032	217,357
Spinach	90,239	1,151,630
Squash	163,019	2,080,437
Sweet Potatoes	245,772	3,136,530
Tomatoes	3,167,079	40,418,097
Greens, Turnip	8,495	108,414

Meat

	Brighton pounds	Adams Co. pounds
Beef	2,060,166	26,291,733
Veal	11,451	146,132
Lamb	33,400	426,243
Pork	1,700,246	21,698,450

Source: Economic Research Service

Poultry

	Brighton pounds	Adams Co. pounds
Broilers	2,992,671	38,192,310
All chicken	3,025,760	38,614,584
Whole turkeys	584,564	7,460,169

Source: Economic Research Service

Dairy

	Brighton pounds	Adams Co. pounds
Fluid milk & cream	7,000,202	89,336,209
Butter	201,088	2,566,268
Cheese	1,228,808	15,681,979
Cottage cheese	75,401	962,265
Frozen dairy products	850,139	10,849,426
Evaporated or condensed milk	264,235	3,372,152
Dried milk	127,413	1,626,035
All dairy (milk equivalent)	22,273,473	284,252,888

Source: Economic Research Service

Eggs

	Brighton number	Adams Co. number
Eggs	9,367,722	119,550,376

Source: Economic Research Service

Fish & Shellfish

	Brighton pounds	Adams Co. pounds
Fish	202,208	2,580,562
Shellfish	180,149	2,299,046

Source: Economic Research Service

Grains

	Brighton pounds	Adams Co. pounds
Wheat flour	4,954,348	63,227,134
Rye flour	17,910	228,573
Rice	750,006	9,571,537
Corn	1,247,808	15,924,458
Oats	193,856	2,473,983
Barley	26,301	335,654
Total grains & cereals	**6,440,224**	**82,189,801**

Source: Economic Research Service

Apples

	Brighton pounds	Adams Co. pounds
Apples	1,684,436	21,496,684

Source: Economic Research Service

Issues affecting low-income residents in Adams County

- 5% percent of the County's households (over 23,000 residents) earn less than $10,000 per year. *[Source: Federal Census of 2009-2013]*.

- Over 144,000 county residents (32%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school.

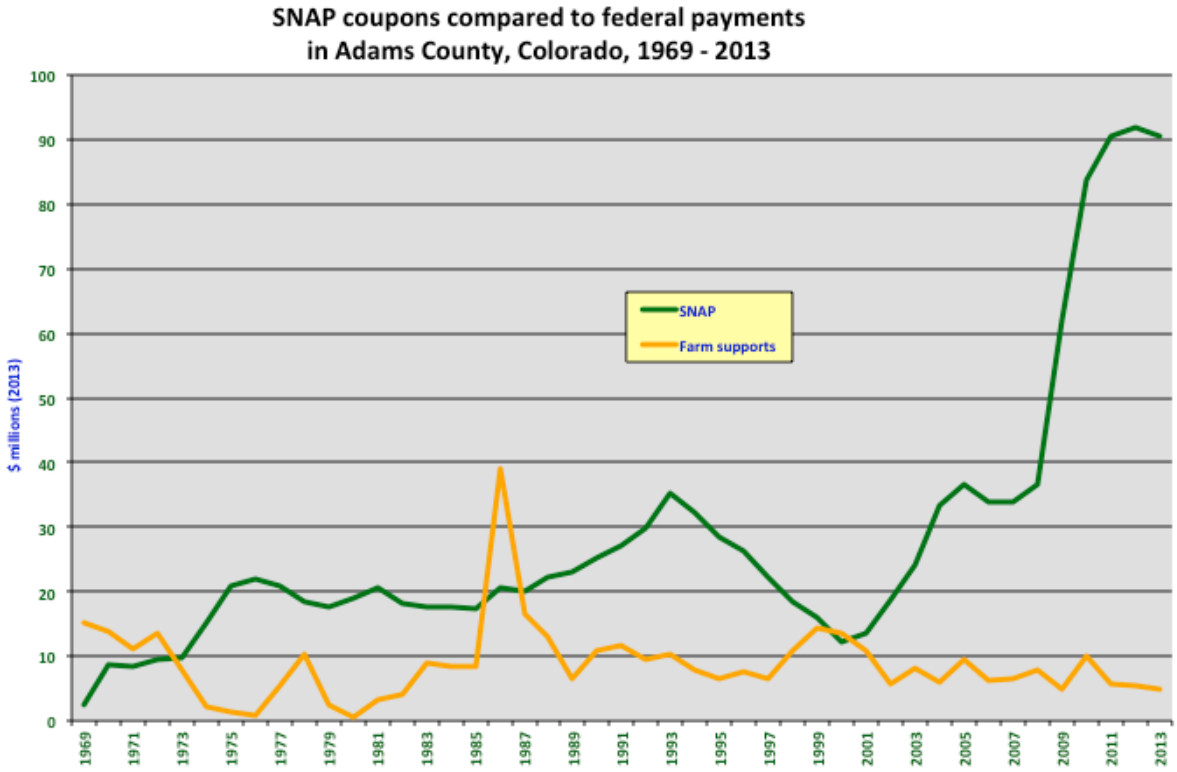
- These lower-income residents spend an estimated $300 million each year buying food, including an average of $30 million of SNAP benefits (formerly known as food stamps) for the years 1989 to 2013, as well as additional WIC coupons.

- However, since 2008 there has been a dramatic increase in SNAP collections, from $36 million in 2008 to $90 million for each year 2011 to 2013.

- The County's 841 farmers receive an annual combined total of $8 million in subsidies (25-year average, 1989-2013), mostly to raise crops such as wheat or corn that are sold as commodities, not to feed local residents *[Sources: Federal Census of 2009-2013, Bureau of Labor Statistics, & Bureau of Economic Analysis]*.

- More than $80 million of SNAP coupons were received by Adams County residents each year since 2011, while farmers receive on average less than $10 million in federal payments per year.

Chart 39: SNAP coupons (formerly known as food stamps) compared to federal payments to Adams County farms, 1969 – 2013 (adjusted)



Source: Bureau of Economic Analysis (in 2013 dollars).

Farming & Food in the Special District

The predominant land use is raising produce on rented land

- Most of the farmland in the District is rented or leased to larger produce farms.
- Petrocco Farms is leasing a large portion of the land in the District.
- Sakata Farms is not currently leasing land within the District for growing vegetables.
- Both Petrocco and Sakata sell produce nationally or internationally, but also sell to stores in Brighton and Denver. Among their customers are WalMart, Safeway, and King Soopers.
- Even when produce raised by Petrocco crews is sold in Brighton stores (for example, King Soopers has a display featuring local farms and Safeway features local produce) it is primarily channeled through warehouses in Denver.
- Sakata reports that some vendors purchase produce from their farm to re-sell at roadside stands or farmers markets.

Vegetable farming may be more profitable than other types in District

- While financial information is not readily available for individual farms in the District, some conclusions may be drawn from data covering both Adams County and the state of Colorado. First, despite lower overall sales for vegetables by Adams County farms compared to other products ($9 million sales in 2002; no data reported for 2012), on smaller plots of land (a total of 1,100 acres planted in vegetables in Adams County in 2007; only 100 acres reported for the entire county in 2012), several prominent produce farms have attained considerable financial presence in the region, while cattle ($39 million in sales in 1987; $8 million in 2012) and wheat production ($43 million in sales from 200,000 acres in 2012) have declined. Data from the 2012 Census of Agriculture show that Colorado had 763 farms that raised vegetables on 83,266 acres, selling a total of $280 million of vegetables. This means the average vegetable farm was 109 acres in size, selling $3,370 of vegetables per acre for an average total of $367,747 per farm. On the other hand, the 3,653 Colorado farmers who raised wheat planted an average of 597 acres of wheat, which sold for $477 million, or $219 per acre and an average total of $130,685 per farm. This means that even though the average wheat acreage per farm was almost six times the average vegetable acreage, sales per farm were nearly three times higher, and sales per acre were more than fifteen times higher for the vegetable farms. While this data does not include the costs of production, so cannot address profitability, the fact remains that produce farms have expanded while cattle and wheat production have declined.

- Augmenting these broader statistics are two dynamics that clearly apply in the Special District: (a) farmers have recognized the special nature of the alluvial soil and irrigation available in the Platte Valley, and its high quality for raising produce; and (b) vegetable growers have a somewhat closer connection to local buyers and wholesalers than if they sold to a global commodity industry.

- Both Sakata and Petrocco are important to the local economy and for keeping District land in farm production. Both remain committed to Brighton, but nonetheless appear to be positioning themselves to withdraw from farming within the District if conditions change. Both firms have packing sheds in the District, yet both lease land in locations further north in Weld County or Platte County, where there is more open land, less development pressure, lower lease and rental rates, and fewer land use and transportation conflicts.

- Petrocco Farms maintains an office in Weld County already; Sakata says it has considered moving its distribution center and offices further north as well.

Farming practices may not be compatible with residential development

- Both Sakata and Petrocco note that they increasingly see conflicts between farm equipment and suburban traffic on local roads. Sakata has adopted a policy that none of its tractors should be driven on highways from field to field, but rather should be transported on trailers, which can fit better into the flow of traffic because they can drive at higher speed.

- Both Petrocco and Sakata Farms say they see conflicts between suburban development and farms because of their need to spray fungicides, pesticides, and farm chemicals on their fields. People are not likely to want to live near these chemical applications.

- Organic farming is a rising force in food markets nationally, growing faster than overall grocery sales. Organic Trade Association (OTA) data released earlier this year show that organic food sales nationally rose 11 percent in 2014 to reach $35.9 billion.[1]

- OTA further concluded that organic fruits and vegetables led organic sales, growing 12% from 2013 to $13 billion in 2014. Fruits and vegetables accounted for more than 36 percent of all organic food sales. Organic dairy product sales rose 11% to $5.5 billion.

- OTA has tracked organic food sales since 1997, when total sales across the U.S. were $3.4 billion, making up less than 1 percent of total food sales. "In 2014, organic food claimed almost 5 percent of the total food sales in the United States, and has consistently far exceeded the 3-percent growth pace for the total food industry," *Food Product Design* concluded in reporting on the OTA data.

- According to the newly released 2014 Organic Survey of farmers conducted by USDA, Colorado is the eighth-largest state in the U.S. for organic sales by farmers, with 157 certified organic farmers selling $147 million of organic products in 2014 — nearly $1 million in average sales per farm.[2]

- Looking at vegetable production only, 46 Colorado farms raised 4,233 acres of organic vegetables in 2014, selling these for $18.8 million. These farms, then, averaged 92 acres per farm, and sold $409,000 of products per farm, or $4,441 per acre — considerably higher than the Colorado average sales of $3,370 per acre for all vegetable farms in 2012.

- Nationally, sales of organic farm products increased 72% from 2008 to 2014.

Land & water prices are higher than farming can support

- Dave Petrocco, Sr. says that the cost of land is prohibitive today; due to pressures from development, it is impossible to purchase land at a price that farming can cover, so the firm relies upon leasing land for vegetable production.

- Purchasing water rights is even more expensive, with some estimating this to be 1.5 times the sale price of the land alone.

- Sakata Farms says it has successfully produced higher quantities per acre to help offset these rising land costs.

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[1] Bizzozero, J. (2015). "U.S. Organic Food Sales Grow to $36 Billion." *Food Product Design* (blog) http://www.foodproductdesign.com/blogs/trending-foods/2015/04/u-s-organic-food-sales-grow-to-36-billion.aspx. See also https://www.ota.com/resources/market-analysis

[2] USDA NASS 2014 Organic Survey http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Organics/

- Critical to the presence of both Sakata and Petrocco in the District is the fact that both farms were started long ago when land was cheaper, and were able to build strong businesses free from development pressure. It is unlikely that either firm could be launched with the same success today given higher overall costs of production, greater competition for land, and less supportive infrastructure. This also means that should they leave, new farm businesses are unlikely to replace them.

- As one farmer put it, "Farm production will never repay the investment in the land." This means that if family farming is to continue in the District, public agencies (or some wealthy private entity) will have to make land available for lease or repurchase at rates commensurate with what can be earned by farming the land.

The primary buyer for farmland for agricultural use is the City

- This suggests that the primary buyer for farmland in the District (for agricultural uses) would be the City of Brighton. The City's choice of parcels to buy, their locations, and which supportive infrastructure are created, is likely to determine whether there is farming in the District, and what types of farming it might be. If the City and County do not develop a proactive policy for protecting this prime farmland, it is likely to be lost forever.
- Further, it seems that developers, very wealthy individuals, conservation-minded funds, or public entities are some of the few parties able to consider purchasing land in the District, but few would have economic reasons to retain farmland uses.

- Therefore, if farming is to survive in the District, its survival will depend on public investment. Smaller farms, in particular, would require supportive infrastructure that helps create local efficiencies in food trade.

Investment is critical for both economic and noneconomic reasons

- Although it would be easy to consider public investments in farming and food to be questionable economically, the costs of a proactive land protection strategy should also be balanced against the costs of doing nothing. For example, the state of Colorado pays more than $2 billion per year to cover the medical costs of diabetes and related health conditions — all connected to the food Coloradans currently eat, and perhaps preventable with a healthier diet and more consistent exercise.

- There are less tangible, but nonetheless critical reasons to protect working farms: farms are training grounds for youth learning work skills, offer starting job opportunities for Brighton youth, and knowing food production processes appears to be central to making healthier eating choices as a consumer. Farm involvement cultivates a sense of connection to nature and open space. If farmed properly, property values for nearby homes may rise. Engagement in growing food through gardens and farms is often a strong inspiration for learning about science and technology. The community of Brighton appears to depend on farming as a central core of its unique identity, and there would be economic consequences if this were lost.

Local markets for food are robust

- Since residents of the City of Brighton spend an estimated $83 million per year buying food, there is considerable economic opportunity to be tapped by focusing local farm production on feeding local residents. Since Adams County residents purchase $1.3 billion of food each year, and the Denver Metro area residents purchase $7.3 billion of food each year, there are considerable markets in nearby communities as well.

Berry Patch Farm focuses on Brighton markets

Note: Berry Patch owner Tim Ferrell is a leader in the Agricultural Land Preservation Subcommittee.

- Claudia Ferrell considers the 40-acre farm she works with her husband Tim to be the "best soil in the state." She adds that it is the "best soil for organic agriculture anywhere." Sited largely in the Platte River floodplain, it draws benefit from centuries of alluvial deposits.

- Like other farms in the District, the farm relies upon irrigation water from the Fulton ditch and its system of waterways.

- The owners of Berry Patch have farmed since 1991. The couple hired nine part-time workers this year; some of these want to go into farming for themselves. The Ferrells have arranged for a conservation easement on the land, hoping to protect it for agricultural purposes. They say they have no descendants who would wish to take over their farm.

- The farm grows a wide variety of vegetables, for sale at their on-farm store, which is open year-round. Hardy crops such as kale are grown indoors in high tunnels. The Ferrells view season extension as critical if Brighton is to be viewed as a food destination.

- One crop the Ferrells have found to be too difficult to grow is sweet peas, since the cool-weather season is so short.

- Berry Patch also offers pick-your-own from May through September, including strawberries, raspberries, currants, pie cherries, plums, apples, basil, flowers, and pickling cucumbers.

- The couple also has tapped a variety of other markets; for example working with one local baker to use their farm's zucchini for baking bread. By offering recipes to their customers, they have generated new interest in less-known vegetables such as leeks, rutabagas, and celeriac. These lesser-known crops that are easy to grow in the District would likely assume more importance in our diet as consumers become more attuned to healthy eating, eating within season, and purchasing locally raised produce.

- Hosting farm-to-table events at the Berry Patch maintain the farm's visibility with local consumers; hosting parties or other special events brings in additional income.

- The Ferrells would like to offer value-added products such as frozen and dehydrated vegetables, but lack the equipment to produce these. Additional storage would also help, they said.

- Joe Petrocco and Tim Ferrell are starting organic production on a field owned by the City of Brighton, located north of the old school house at the north end of Potomac Street.

Other land parcels in the District

- Few other landowners in the District appear to be engaged in farming as a way of making a living, though several farms maintain livestock herds and gardens.

- Few of the landowners who rent to Petrocco appear to have descendants who would be interested in farming on their land in the District.

- Land above the Fulton ditch (with limited irrigation potential) has historically been planted to grains or pasture for livestock, and should not be overlooked as the site of future agricultural production, since much of it is prime farmland. Maintaining pastures for raising small livestock, for example, would help add fertility to the soil, and could provide agri-tourism opportunities, as well as increase the diversity of District agriculture and food systems.

- One farm near the District raises food to donate to the less privileged.

- The County has already negotiated conservation easements for about 3,000 acres of land, primarily west of the Platte or east of Brighton.

Labor is a critical issue

- Several farmers (both large and small) said that one of the largest obstacles to sustaining their farm is the lack of youth with the skills or interest in doing farm work.

- Lack of labor is one more reason that the current forms of agriculture do not regenerate themselves over time. If Brighton wishes to save farm land and fashion itself into a tourist destination, it would be important for local schools to teach skills in gardening and farming as part of generating a new identity as a contemporary agricultural community.

- Laboring on farms is currently an important income source for Adams County residents, who earn $22 million per year through farm labor.

The District holds strong potential for agri-tourism

- Brighton has strong potential for creating a regional destination around the District's heritage of food and farming. With its proximity to Denver, excellent highway access, and future bike and light rail access, Adams County could serve as a destination for those who want to enjoy visiting a productive rural landscape, and savor its unique foods and culture.

- However, it will be difficult to attract tourists to visit farms in Brighton unless Brighton itself embraces local farms and local foods in a wholehearted manner. This would mean: having more working farms that produce food for local residents; creating closer connections among local farms and local consumers; running consistent and frequent marketing campaigns to encourage Brighton residents to buy food from local farms; encouraging restaurants to feature local food items on their menus; featuring local foods in local school nutrition programs; and other steps.

- A distribution firm focused on local markets, LoCo Distribution (based in Fort Collins), already picks up food from Brighton area farms for distribution to Front Range outlets, so increasing local distribution points should be relatively straightforward if local consumers ask for local food deliveries.

- The Sakata and Petrocco distribution facilities are tangible expressions of Brighton's rich agricultural heritage, and their heritage could potentially be a strong part of a tourist draw for the District, for example through a Brighton food heritage center. Yet these facilities would not seem to be significant attractions as working farm operations, nor are they likely to welcome visitors, for either food safety or liability reasons, during production seasons.

- Expansive vegetable fields are excellent stretches of open space, and worth protecting for that reason. These would be attractive fields to bike past, for example. They are critical as income sources for farmworkers and owners, and as a source of produce. Yet these also do not create agri-tourism destinations by themselves, without accompanying activities and locations: for example, signboards showing the history of produce production or displays at a Brighton food heritage center.

- Culinary destinations such as food processors, gourmet restaurants, breweries, wineries, beds and breakfasts, and the like, could be developed without having agricultural land nearby, but will have greater tourist appeal if they express a unique sense of place for, and a commitment to protecting farmland, by Brighton. Fostering these qualities would likely center around locally produced foods.

- These commercial destinations are likely to prove more profitable than the farms themselves, because they face fewer difficulties than farmers, who have to farm in uncertain weather conditions, and sell products that have lower value to begin with. They might therefore be asked to help support local farm and food activity financially.

- The predominant cuisine in Brighton today is Latino; this might become central to the town's sense of place and appeal to tourists.

Overall summary

Strengths of the Special District

- Contains some of the best land in the state
- Water is available in significant portions of farmland
- Holds a rich heritage of produce farming
- Vegetable farming has been more rewarding financially than raising other products
- Farmworkers in Adams County earn $20 million per year
- Farms are near to robust consumer markets

Limitations of the Special District

- Suburban development has encroached
- Prevalent farming practices appear to be incompatible with residential development
- Major produce growers may move north
- Land is too expensive to be paid for through farm production alone
- Water rights are even more expensive
- Few local residents have farming skills
- Farm labor is in short supply

Opportunities for the Special District

- To serve as a symbol for protecting farmland and rural quality of life
- To raise food for Brighton, Adams County, and Metro Denver markets
- To maintain farming practices that are compatible with residential development
- To serve as the core of a vibrant local food culture in Brighton
- To provide agri-tourism experiences for visitors

Potential obstacles for protecting farmland

- Residents may perceive that it is too late to protect the tradition of rural living
- Landowners want to sell land (or water rights) at development prices to fund retirement
- Few landowning families have heirs who want to farm
- The City may be the only buyer of land for agricultural use

Farmland protection strategy: Develop nodes of activity that support local foods

If Brighton and Adams County wish to support a vibrant agriculture and cluster of food businesses as part of its future identity, here are some suggestions for how that might be accomplished:

- To preserve farms as open space over the long term, they must be productive and sustainable businesses. It will be difficult to protect farmland, or to protect agriculture, by themselves; these must be part of a local **food** system that sustains working family farms and engages consumers in supporting these local farms. City and County policy should focus on food and farming, not simply on protecting agricultural lands — although of course protecting farmlands is critical if Brighton wishes to preserve open space and farms.

- No external developer will construct a local food system for the District; if the City and County wish this to happen it will take concerted proactive effort on the part of both public bodies. These must be grown from the inside, starting with what is already in place and emerging, rather than by importing businesses from elsewhere.

- Local foods planning should embrace what is already emerging in local foods trade, and make strategic investments that strengthen and leverage this activity to help create a coordinated and sustainable local food system.

- Just as the City and County have considerable control over the location of housing development by decisions they make with regard to zoning, and where water and sewer infrastructure are installed, these public bodies can play an active role in creating more

profitable small farms by investing in supportive infrastructure (see specific suggestions below) that creates new efficiencies in local food trade.

- It seems clear that despite reluctance on the part of some growers, future farms in and near Brighton must pursue sustainable and organic practices, if farming is to be compatible with residential housing and other development.

- For organic farming to flourish, livestock must be raised on farms in and near the District in such a way that is compatible with housing. Crops should be rotated with pastures, to balance nutrients, increase diversity, build healthier soil, and maintain high productivity.

Specific investments

We suggest the following specific investments in local food systems for the Special District south of Brighton:

1. The City of Brighton must announce a clear priority, and take definitive action steps, to show its commitment to protecting farmland if efforts to protect land are to be credible. This outreach should make the City's long-term strategy clear and show how the City is targeting its resources to achieve its vision.

   Timeline: Assuming the City and County decide to preserve farmland in the Special District, this action should be taken immediately. Since some parcels of farmland in Brighton have already been sold for development, several residents seem persuaded that nothing can be done to curtail development; others wish to be free to sell their land to developers and hope further development will make this possible. The City and County should publish detailed information showing how much land has already been dedicated to development, and how much farmland could be purchased with available resources, along with longer-term projections showing how much farmland could be protected in the future.

2. **The City of Brighton should build (or cause to be built) a washing, packing, aggregation, & distribution facility scaled to small farm production**, located near growers who raise produce for local markets. This could be built on a working farm raising food for local markets, or in close proximity to several such farms. The old school site may be a prime location for this. Such an investment would hopefully help attract additional farms to locate nearby over time.

   Timeline: This action should be taken at whatever point a grower or group of growers who grow for local markets, or a firm or organization working closely with growers, presents a detailed business plan for building and operating such a facility for at least five years. If this plan were to show that several growers will share use of the facility, that would likely have more positive impact in building a local food system over time.

3. The City should explore investing in (or facilitating investment by private parties in) **flash-freezing equipment**, most likely at the same site, for local farms to use to extend shelf life of fresh produce items.

Timeline: As above, this step should be taken when a grower or group of growers offers a credible plan for building and operating such a facility.

4. **The City already owns enough land to launch an incubator farm for training new farmers**, with leasable land (roughly in 5 to 50 acre plots) nearby, so that graduates may remain in the community of farmers, and make use of some of the infrastructure listed above. This might be an excellent use of the Anderson farm, should it be purchased by the City. Local sources state that there are young people in Boulder County who are looking for land; CSU runs a farmer training program in Boulder County, and urban farmer training programs also operate in Denver.

   Timeline: Planning for this training farm should be initiated immediately under the City's initiative; it is unlikely that an outside vendor would conform to the City's vision unless such a vision is spelled out and held by the City itself. For more information on incubator farms, see Meter & Goldenberg (2013), "Making Small Farms into Big Business," http://www.crcworks.org/scfood.pdf). The most difficult element of this is likely to be locating an expert farmer who is also an expert instructor. Actual creation of an incubator farm should be undertaken when a firm or organization has been identified (perhaps in response to an RFP from the City) that can develop and implement an effective farmer training program with sufficient resources to ensure the project's sustainability. A softer start might be launched once emerging farmers (perhaps graduates of other programs) apply to the City for access to land with water rights so they can grow food for local markets. Investments in infrastructure noted above could encourage such farmers to relocate to these farms.

5. **The City must resell or lease this land to new small-scale growers at price levels that can be paid through farm production** (the use-value of the land) rather than at the development value.

   Timeline: Considerable preparation work may be required to establish clear policies, procedures, and pragmatic regulations that would allow the City to formally lease or re-sell land to small-scale farmers growing for local markets at the use-rate of the land (and water) for farming. Creation of these legal frameworks could begin immediately.

6. **To raise the visibility of local foods, it will be critical to create a prominent connection point that brings together town and rural residents** to celebrate local foods and buy from local farms (e.g., at Bromley Farm or Palizzi's farm stand).

   Timeline: This is a longer-term priority that should be considered early in planning for agritourism, and local foods marketing, but could be developed at a later date. Such a connection point will also serve as a focal point for agritourism and other visitors.

7. **The City and County must actively market local foods**, including publicizing the seasonal availability of the foods raised on Brighton area farms, the farmers who raise these foods, where local foods may be purchased, and the chefs and households who use them.

Timeline: This should commence immediately, since it will be important to increase consumer awareness of the availability of locally grown food, if farmers are to be profitable in selling food to local consumers.

8. **The City and County should jointly launch (perhaps in collaboration with local health care providers) an "Eat 5, Buy 5" campaign similar to the one devised in Montezuma County, Colorado.** This would call for each county resident to eat five fruits and vegetables each day for health reasons, and buy five dollars of food from an Adams County farm each week. If each county household purchased this much food from county farms per person each week, this would amount to $122 million of revenue for the County's farms — almost as much as the $145 million of crops and livestock county farms currently sell each year.

   Timeline: This should commence immediately. Such a campaign could be launched with minimal cost, and expanded over time. The initial campaign in Southwest Colorado was launched with $500.

9. In the future, the City and County may wish to raise funds from external sources to purchase additional farmland as it becomes available for sale by current landowners. Private individuals, conservation funds, state, or federal sources could be used to leverage City and County investments.

   Timeline: This is a long-term strategy.

Appendix: Quantitative Data

Adams County (Bureau of Economic Analysis, 2013)
469,193 Adams County residents receive $16.6 billion of income annually. Aggregate personal income for county residents increased 300% from 1969 to 2013, after dollars were adjusted for inflation. Adams County population has increased more than 150% since 1969.

The largest source of personal income is government jobs, accounting for $2.7 billion of income. Transfer payments (from government programs such as pensions) rank second, at $2.6 billion *[see below]*. Capital income (from interest, rent, or dividends) totals $2.4 billion. Construction workers earned $1.3 billion in 2013, while wholesale workers earned $1.2 billion. Health care professions bring in $1 billion of personal income. Manufacturing jobs produce $951 million of personal income, and transportation workers earn $871 million. Retail workers accounted for $790 million of personal income.

Note that income from public sources makes up 33% of all personal income in the County.

During the years 2003 and 2004, construction workers in Adams County earned an aggregate total of $8 billion of personal income each year. These income levels returned to about $1 billion per year from 2005 to 2013.

Income earned from transfer payments includes $834 million of retirement and disability insurance benefits; $1.1 billion of medical benefits; $307 million of income maintenance benefits; $88 million of unemployment insurance; and $97 million of veterans' benefits.

Government income includes $137 million of income earned by federal workers and $2.5 billion earned by state and local government workers. Military personnel earn $71 million of personal income.

Issues affecting low-income residents of Adams County:
Over 144,000 residents (32%) earn less than 185% of federal poverty guidelines. At this level of income, children qualify for free or reduced-price lunch at school. These lower-income residents spend an estimated $300 million each year buying food, including an average of $30 million of SNAP benefits (formerly known as food stamps) for the years 1989 to 2013, as well as additional WIC coupons. However, since 2008 there has been a dramatic increase in SNAP collections, from $36 million in 2008 to $90 million for each year 2011 to 2013. The County's 841 farmers receive an annual combined total of $8 million in subsidies (25-year average, 1989-2013), mostly to raise crops such as wheat or corn that are sold as commodities, not to feed local residents. *Data from Federal Census of 2009-2013, Bureau of Labor Statistics, & Bureau of Economic Analysis.*

5% percent of the County's households (over 23,000 residents) earn less than $10,000 per year. *Source: Federal Census of 2009-2013.*

15% of all adults aged 18-64 in Colorado carried no health care coverage in 2014. *Source: Centers for Disease Control.*

Food-related health conditions in Colorado:
36% of the state's residents reported in 2013 that they eat less than one serving of fruit per day. 19% eat less than one serving of vegetables. This is a key indicator of health, since proper fruit and vegetable consumption has been connected to better health outcomes. Many providers recommend consumption of at least five servings of fruit and vegetables each day, while others suggest even higher rates. *Source: Centers for Disease Control.*

84% of Colorado adults report they get sufficient exercise each week to meet recommended guidelines. *Source: Centers for Disease Control.*

7% of Colorado residents have been diagnosed with diabetes as of 2014. *Source: Centers for Disease Control.* Medical costs for treating diabetes and related conditions in the state are estimated at $2.5 billion. *Source: American Diabetes Association.*

56% of residents in Colorado were overweight (35%) or obese (21%) in 2014. *Source: Centers for Disease Control.*

Adams County's farms (Census of Agriculture, 2012)
Agriculture Census data for 2012 were released May 2, 2014

The Census of Agriculture defines a "farm" as "an operation that produces, or would normally produce and sell, $1,000 or more of agricultural products per year."

Land:

- 841 farms in 2012. This is a 6% decrease in farms since 2007.
- Adams County has 2.3% of Colorado's farms.
- 122 (15%) of these are 1,000 acres or more.
- 424 (50%) farms are less than 50 acres.
- The most prevalent farm size is 10-49 acres, with a total of 331 farms (39% of farms).
- Average farm size is 821 acres, slightly less than Colorado's average of 881.
- The County has 690,528 acres of land in farms, a decrease of 2% since 2007.
- This amounts to 2.2% of the state's farmland.
- 80% of farmland is cropland, and 2% is pasture.
- Adams County farms have 249,000 acres of harvested cropland.
- 178 (21%) farms have a total of 17,649 acres of irrigated land.
- Average value of land and buildings per farm is $1.2 million. This is just above the state average of $1.1 million.

Sales:
With the exception of foods sold directly to consumers (see below), farmers typically sell commodities to wholesalers, brokers or manufacturers that require further processing or handling to become consumer items. The word "commodities" is used in this report to mean the crops and livestock sold by farmers through these wholesale channels. The term "products" encompasses commodity sales, direct sales, and any other sales.

- $116 million of crops and livestock were sold in 2012, 1.5% of state ag sales.

- $102 million of these sales were crops.
- $14 million of these sales were livestock and products.
- This was a decline of 24% from 2007 sales of $153 million.
- 575 (68%) of the County's farms sold less than $10,000 of products in 2012. Their aggregate sales of $1 million amounted to 1% of the County's farm product sales.
- 128 farms (15%) sold more than $100,000 of products, an aggregate total of $111 million, 95% of county farm product sales.
- 342 (41%) farms received $5.5 million of federal payments in 2012. Federal crop subsidies accrue only to farmers who raise specific crops such as wheat or corn. *[Note that Agriculture Census data differ from Bureau of Economic Analysis data; see below.]*
- 61% (511) of the County's farms reported net losses in 2012 even after subsidies are taken into account. This just above the Colorado rate of 59%.

Top farm products in Adams County, 2012

	$ millions
Ornamentals & nursery crops	44.7
Wheat	42.9
Livestock & milk	13.9
Corn	7.3

Production Expenses:

- Total farm production expenses were $99 million, down from $130 million in 2007.
- Hired farm labor expenses were $22 million (22%).
- Supplies, repairs, and maintenance cost farmers $8.2 million (8%).
- Costs for seeds, plants, and vines ranked third at $8.2 million (8%).
- Farmers charged $7.9 million to depreciation (8%).
- Chemical purchases totaled $7.7 million (8%).
- Gasoline, oil, and fuels cost $7.6 million (85).
- Fertilizer, lime, and soil conditioners ranked seventh, at $7 million (7%).
- Feed purchases totaled $6 million (6% of production expenses).

Grains, Dry Edible Beans, Oil Crops, and others:

- Adams County farms sold $53 million of grains, oil crops, and edible beans, more than the $40 million sold in 2007 .
- 181 county farms sold 6.3 million bushels of winter wheat from 186,439 acres.
- The County's wheat crop brought a total of $43 million, an increase from 2007 sales of $31 million.
- 42 Adams County farms raised $7.2 million (1 million bushels) of corn on 24,638 acres in 2012.

- This was an average price of $7.20 per bushel. *Note that this price is an approximation, and does not necessarily represent an actual price at which corn was sold.*

Cattle & Dairy:

- Livestock and livestock products worth $14 million were sold from 354 Adams County in 2012, but *sales figures for specific livestock items were suppressed by USDA in an effort to protect confidentiality.*
- 259 farms hold an inventory of 14,433 cattle and calves.
- 6,770 cattle were sold from 198 farms in 2012.
- 14 farms were reported as selling milk or dairy products, but *neither the number of dairy animals nor sales were disclosed by USDA in an effort to protect confidentiality.*
- 165 farms produced 19,481 dry tons of forage crops (hay, etc.) on 13,361 acres of cropland. *Forage sales figures were suppressed by USDA in an effort to protect confidentiality.*

Other livestock & animal products:

- 48 farms sold hogs and pigs worth a total of $71,000.
- 45 farms hold an inventory of 345 hogs and pigs.
- 67 farms sold a total of $704,000 of horses.
- 69 farms raise sheep or goats, selling $294,000 worth.
- 42 county farms hold an inventory of 863 sheep and lambs.
- 138 farms hold an inventory of 3,600 laying hens.
- 79 farms sold $61,000 of poultry and eggs in 2012.
- Adams County has 11 broiler chicken producers, with a total inventory of 623 birds.

Nursery, Landscape and Ornamental Crops:

- 32 farms sold $45 million of ornamental and nursery crops. This was a substantial decline from the $83 million that was sold by county farms in 2007.
- 2 county farms sold Christmas trees.

Vegetables & Melons (some farmers state that Ag Census data does not fully represent vegetable production):

- Vegetable and potato sales figures for farms in Adams County were withheld by the Census of Agriculture in 2012. In 2007, county vegetable sales totaled $8 million.
- 24 farms produced these vegetables on 108 acres of land.
- 3 farms raise potatoes.

Fruits (some farmers state that Census of Agriculture data does not fully represent fruit production):

- The County has 11 farms with a total of 15 acres of orchards.

Direct & organic sales and related practices:

- 96 (11%) farms sold $502,000 of food directly to household consumers. This is a four-farm decrease in the number of farms selling direct (100 in 2007), and a 78% decrease in direct sales from $2.2 million in 2007. Direct sales account for 0.4% of county farm sales, higher than the national average of 0.3%.
- 3 county farms reported selling $500,000 of organic foods.
- 4 county farms reported to the Census of Agriculture that they market through community-supported agriculture (CSA).
- 17 farms sell directly to retail customers.
- 3 farms reported having on-farm packing facilities.
- 11 county farms reported earning $422,000 from agri-tourism.
- 48 farms produce added-value products on the farm.

Conservation practices:

- 134 farms use rotational management or intensive grazing.

Sources of farm-related income for Adams County farmers in 2012 (Census of Agriculture)
(other than sales of crops or livestock)

	dollars
Insurance payments	3,790,000
Custom work	3,640,000
Other	2,750,000
Cash rents	2,110,000
Agri-tourism	420,000
Patronage dividends	180,000
State & local governments	90,000

Adams County highlights (Census of Agriculture, 2012):

- Ranks 1st of 18 counties in Colorado for inventory of pheasants.
- The County ranks 2nd in state for sales of nursery, greenhouse, and floriculture crops.
- Ranks 4th in Colorado for acreage devoted to wheat.
- Adams County ranks 6th in state for inventory of goats, with 1,441.
- Ranks 7th in Colorado for value of crops sold, with $102 million.
- Ranks 8th in state for dairy sales.
- Ranks 10th in state for sales of grains, oilseeds, and dry peas, with $53 million.
- Ranks 11th in Colorado for sales of fruit and nuts.

Colorado highlights (Census of Agriculture, 2012):

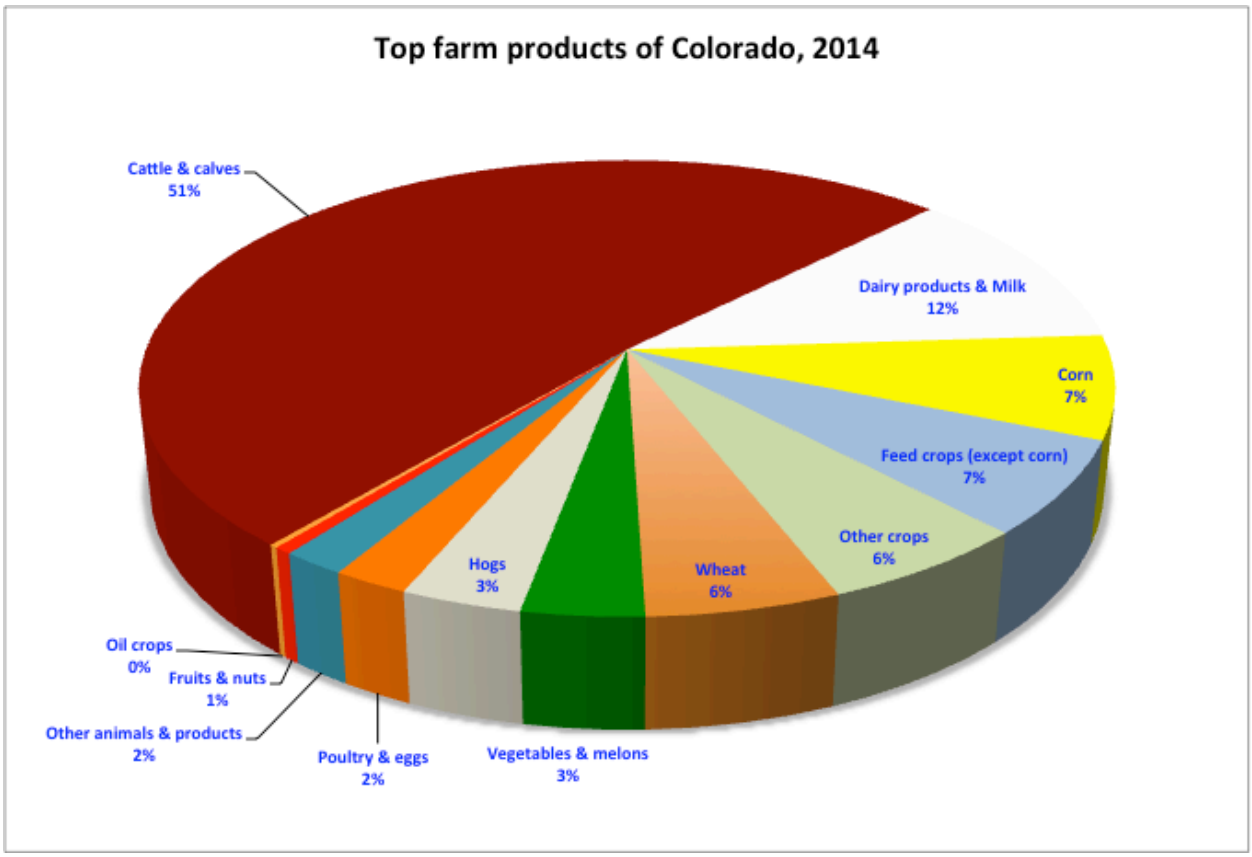
- Colorado has 36,180 farms, down 2% from 37,054 farms in 2007.
- The state has 31.6 million acres in farms, up one percent from 2007.
- Colorado farmers sold $7.8 billion of farm products in 2012, 28% higher than five years earlier.
- Crop sales totaled $2.4 billion, 31% higher than in 2007.
- Livestock sales totaled $5.3 billion, up 69% from 2007.
- Federal payments to Colorado farmers totaled $165 million, up 6% from 2007.
- Average payment per farm receiving federal payments was $14,897.
- The most prevalent farm size was 10-49 acres, with 10,008 farms at this scale.
- Colorado is the 10th-most important state for livestock sales, with $5.4 billion.
- The state ranks 20th in overall farm product sales.
- Colorado is the third-most important state in the U.S. for both inventory of sheep and lambs, with 401,376, and in sales of sheep, lambs, and goats at $87 million.
- The state ranks 5th in the U.S. for sales of cattle, with $4.3 billion.
- Colorado is the 5th-most important winter wheat producing state, with 2.2 million acres.
- 2,896 Colorado farms sold $19 million of food products directly to household consumers in 2012.
- This was a 4% increase in the number of farms selling direct, from 2,777, but overall direct sales fell 15% from 2007 level of $22.6 million.
- The value of direct sales from Colorado farms was just less than the value of the 12th-ranked product, oil crops.
- 234 farms reported to the Census of Agriculture that they operated community-supported agriculture (CSA) farms.
- 407 farms have on-farm packing facilities.
- 848 farms marketed directly to retail outlets such as grocery stores.
- 1,798 farms produced value-added products on the farm.
- 176 farms sold $68 million of organic products in 2012.
- 6,712 farms practiced rotational or management-intensive grazing.
- 3,897 farms received water from the Bureau of Land Reclamation.
- 22 farms practiced alley cropping or silvopasture.
- 247 farms harvested biomass for renewable energy use.

Table 8: Colorado's top farm products in 2014 (Economic Research Service)
The data in the table below and Chart 40 on the following page cover Colorado as a whole.

	$ millions
Cattle & calves	3,832
Dairy products & milk	857
Corn	546
Feed crops (except corn)	496
Other crops	452
Wheat	412
Vegetables & melons	259
Hogs	256
Poultry & eggs	161
Other animals & products	136
Fruits & nuts	38
Oil crops	17

Note also that at $19 million, direct sales from farmers to household consumers are valued at just less than the 12th-ranking product, oil crops.

Chart 40: Colorado's top farm products in 2014 (Economic Research Service)
See Table 8 on previous page



Source: USDA Economic Research Service

Balance of Cash Receipts and Production Costs (BEA):
Adams County farmers sell $145 million of food commodities per year (1989-2013 average), spending $171 million to raise them, for an average loss of $26 million each year. This is an average net cash income of $30,916 per farm. *Note that these sales figures compiled by the BEA may differ from cash receipts recorded by the USDA Census of Agriculture (above).*

Overall, farmers spent $656 million more to produce crops and livestock over the years 1989 to 2013 than they earned by selling these products. Farm production costs exceeded cash receipts for all but three years of that 25-year period. Moreover, 61% of the County's farms reported that they lost money in 2012 (Census of Agriculture), and Adams County farmers and ranchers earned $91 million less by selling commodities in 2013 than they earned in 1969 (in 2013 dollars).

Farmers and ranchers earn another $11 million per year of farm-related income — primarily custom work, and rental income (25-year average for 1989-2013). Federal farm support payments are a more important source of net income than commodity production, averaging $8 million per year for the County for the same years. These do not fully compensate for production losses, meaning Adams County farmers rely upon off-farm sources of income to make ends meet.

These are aggregate figures for all farmers in the County, and do not reflect the financial situation of any individual farm. Many farms in the study area report they have lucrative markets. Some farmers who inherited land or who purchased land at lower prices years ago have more favorable financial returns.

The County's consumers:
See also information covering low-income food consumption and food-related health conditions, page 1-2 above.
Adams County consumers spend $1.3 billion buying food each year, including $766 million for home use. Most of this food is sourced outside the County, so the Adams County consumers spend about $1.1 billion per year buying food sourced outside. Only $502,000 of food products (0.4% of farm cash receipts and 0.04% of the County's consumer market) are sold by farmers directly to household consumers.

Farm and food economy summary:
Farmers lose $26 million each year producing food commodities, which is only partially compensated by $8 million of federal payments (and these payments only go to farmers producing certain crops). Moreover, farmers spend an estimated $60 million buying inputs sourced outside of the County.

Meanwhile, consumers spend $1.1 billion buying food from outside. Thus, total loss to the County is $1.1 billion of potential wealth *each year*. This loss amounts to more than seven times the value of all food commodities raised in the County.

Metro Denver: markets for food eaten at home (2013):
Metro Denver residents purchase $7.3 billion of food each year, including $4.4 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 886
Fruits & vegetables	908
Cereals and bakery products	562
Dairy products	477
"Other," incl. sweets, fats, & oils	1,569

If Metro Denver residents purchased $5 of food each week directly from farmers in the region, this would generate $701 million of farm income for the region.

Adams County: markets for food eaten at home (2013):
Adams County residents purchase $1.3 billion of food each year, including $766 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 154
Fruits & vegetables	158
Cereals and bakery products	98
Dairy products	83
"Other," incl. sweets, fats, & oils	273

If Adams County residents purchased $5 of food each week directly from farmers in the County, this would generate $122 million of farm income for the County — nearly as much as farmers now sell in an average year.

Arapahoe County: markets for food eaten at home (2013):
Arapahoe County residents purchase $1.7 billion of food each year, including $991 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 199
Fruits & vegetables	204
Cereals and bakery products	127
Dairy products	107
"Other," incl. sweets, fats, & oils	353

Broomfield County: markets for food eaten at home (2013):
Broomfield County residents purchase $162 million of food each year, including $97 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 20
Fruits & vegetables	20
Cereals and bakery products	12
Dairy products	11
"Other," incl. sweets, fats, & oils	35

Clear Creek County: markets for food eaten at home (2013):
Clear Creek County residents purchase $25 million of food each year, including $15 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 3
Fruits & vegetables	3
Cereals and bakery products	2
Dairy products	2
"Other," incl. sweets, fats, & oils	5

Denver County: markets for food eaten at home (2013):
Denver County residents purchase $1.7 billion of food each year, including $1 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 213
Fruits & vegetables	219
Cereals and bakery products	135
Dairy products	115
"Other," incl. sweets, fats, & oils	378

Douglas County: markets for food eaten at home (2013):
Douglas County residents purchase $834 million of food each year, including $500 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 100
Fruits & vegetables	103
Cereals and bakery products	64
Dairy products	54
"Other," incl. sweets, fats, & oils	178

Elbert County: markets for food eaten at home (2013):
Elbert County residents purchase $65 million of food each year, including $39 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 8
Fruits & vegetables	8
Cereals and bakery products	5
Dairy products	4
"Other," incl. sweets, fats, & oils	14

Gilpin County: markets for food eaten at home (2013):
Gilpin County residents purchase $15 million of food each year, including $9 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 2
Fruits & vegetables	2
Cereals and bakery products	1
Dairy products	1
"Other," incl. sweets, fats, & oils	3

Jefferson County: markets for food eaten at home (2013):
Jefferson County residents purchase $1.5 billion of food each year, including $900 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 181
Fruits & vegetables	186
Cereals and bakery products	115
Dairy products	98
"Other," incl. sweets, fats, & oils	321

Park County: markets for food eaten at home (2013):
Park County residents purchase $44 million of food each year, including $26 million to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 5
Fruits & vegetables	5
Cereals and bakery products	3
Dairy products	3
"Other," incl. sweets, fats, & oils	9

Colorado: markets for food eaten at home (2013):
Colorado residents purchase $14 billion of food each year, including $9 billion to eat at home. Home purchases break down in the following way:

	millions
Meats, poultry, fish, and eggs	$ 1,730
Fruits & vegetables	1,773
Cereals and bakery products	1,098
Dairy products	932
"Other," incl. sweets, fats, & oils	3,064

Key public data sources:

Bureau of Economic Analysis data
http://www.bea.doc.gov/bea/regional/reis/

Food consumption estimates from Bureau of Labor Statistics Consumer Expenditure Survey
http://www.bls.gov/cex/home.htm

U.S. Census of Agriculture
http://www.nass.usda.gov/census/

USDA/Economic Research Service food consumption data:
http://www.ers.usda.gov/data/foodconsumption/

USDA/ Economic Research Service farm income data:
http://ers.usda.gov/Data/FarmIncome/finfidmu.htm

For more information:

To see results from *Finding Food in Farm Country* studies in other regions of the U.S.:
http://www.crcworks.org/?submit=fffc

To read the original *Finding Food in Farm Country* study from Southeast Minnesota (written for the Experiment in Rural Cooperation): http://www.crcworks.org/ff.pdf

For further information: http://www.crcworks.org/

Contact Ken Meter at Crossroads Resource Center
<kmeter@crcworks.org>
(612) 869-8664

Appendix B,
BE BRIGHTON OPPORTUNITIES SURVEY RESULTS

APPENDIX B

PUBLIC SURVEY COMMENTS

BE BRIGHTON
COMPREHENSIVE PLAN

JANUARY 2016

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Introduction 2
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INTRODUCTION

Be Brighton - the City's comprehensive plan update – will guide future growth and development for the next 20 years. The creation of this new plan is essential to identifying and fulfilling the future vision for Brighton, aligning City policies with current trends and values, and unifying these policies in one cohesive document. Public involvement and feedback are essential to this process.

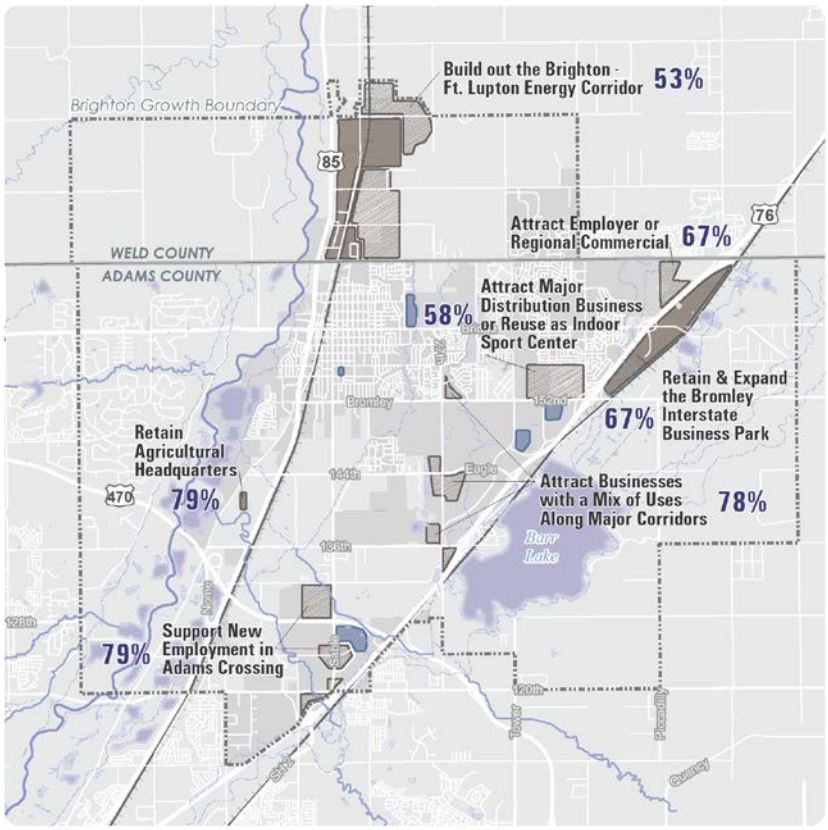
The Opportunities Survey was designed to collect and harness public feedback that was then ultimately used to inform the outcome of the new comprehensive plan. The survey content was based on the public feedback collected from a Citizens Steering Committee and conversations and mapping exercises with community members at the BeBrighton kickoff event. The survey was released to the public in October and closed at the end of December, 2015. The survey was publicized online through social media, the City of Brighton website at www.brightonco.gov, and the BeBrighton project website at bebrighton.net. The survey was further conveyed to the public through email announcements sent to everyone who signed up for the contact list and/or attended a previous BeBrighton meeting.

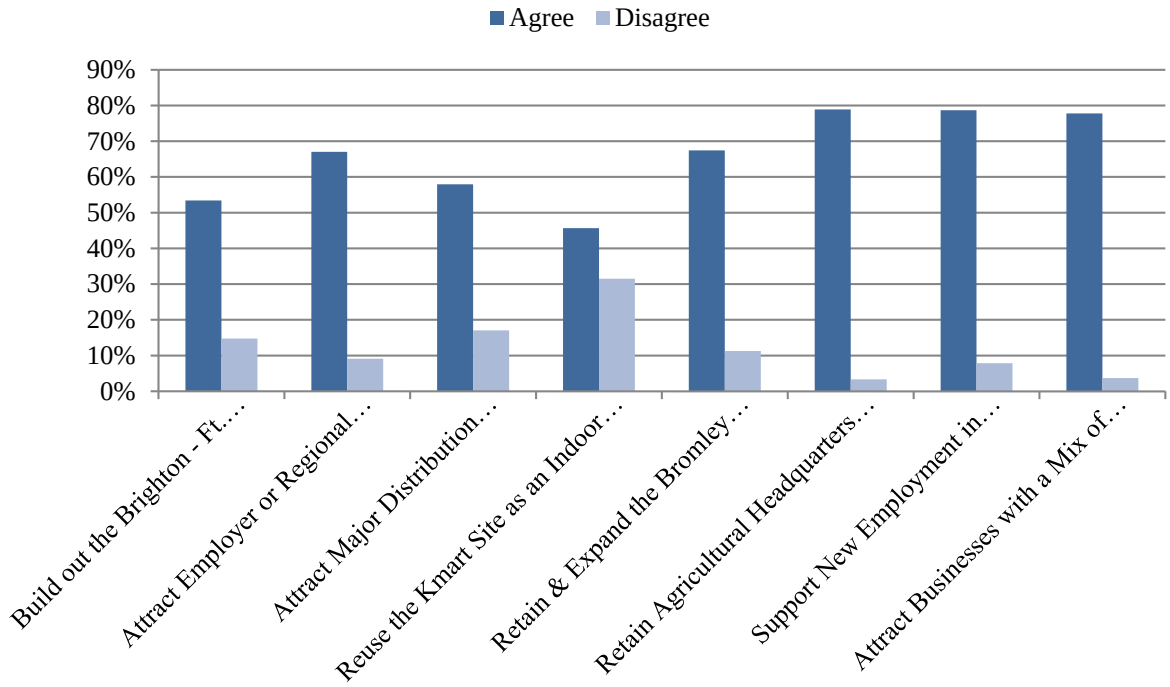
Comments were collected by means of an online survey posted on the BeBrighton project website and hard copies that were distributed and collected during public meetings and events. The survey participants were encouraged to provide open-ended responses in addition to their multiple choice selections. The public events and outreach efforts were comprised of a Community Choices iPad kiosk exhibited at the Recreation Center, Eagle View Adult Center, and AnyThink Library during the months of October and November; the Nonprofit Coalition on November 18th; the Community Choices public meeting on October 29th; the Craft Fair at Eagle View Adult Center on November 7th; the Agritourism and Heritage Work Shop on November 13th; a collaborative public workshop with the Adams County Local District Plan on November 16th; the Chamber of Commerce Brighton Builders Breakfast on December 3rd; and the Youth Commission meeting also held on December 3rd, 2015.

Through the online survey and the hard copies, 95 survey responses were collected. The feedback from the Opportunities Survey is summarized below, with a full list of additional open-ended comments at the end of each summary.

ONLINE SURVEY RESULTS

THE REGIONAL LEADER FOR THE NORTHEAST METRO AREA



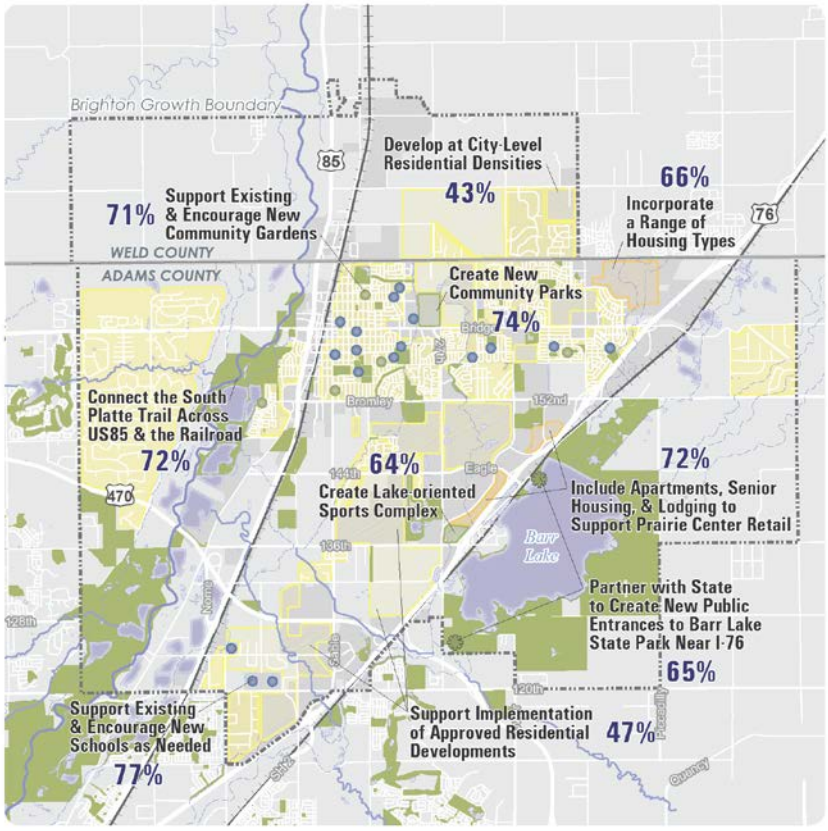


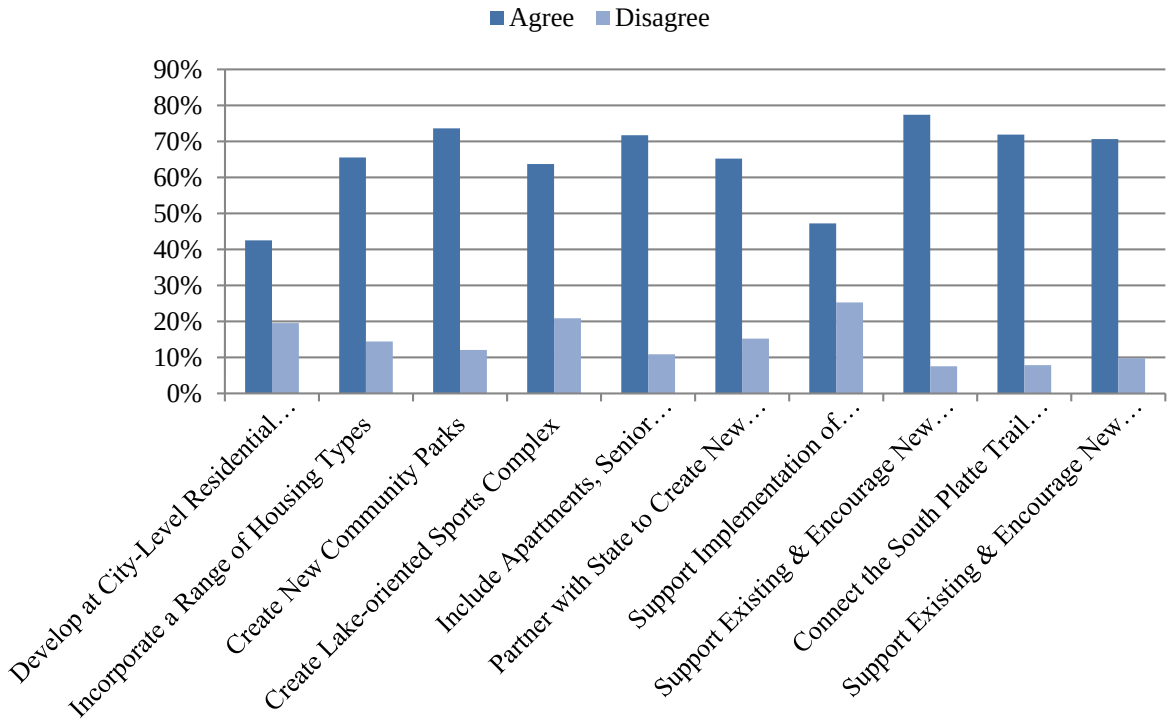
Additional Comments

One of the major problems in Brighton is the lack of Quality Eating Establishments. I would like to see a more active role in getting Restaurants, such as Bonefish, Panera's Bread, Out Back and Olive Garden to name a few. Today, we must leave Brighton to go to quality eating establishments.
Less big business, more community
We need more restaurants. Shopping, and family friendly activity. Parks and recreation is fast growing but I'd love to see a specific recreation area (similar to Thornton, Northglenn recreation center. I have a Brighton address but am largely left out of being a Brighton "resident" by way if I pay water or not (per your rec center front desk hosts). A larger emphasis on small business growth is just as important to commercial growth. Start building a 21st century community! Seek advice of Adams 12 school district for future potential growth, expansion and needs!
Have developers pay for new schools instead of dunning established taxpayers to raise taxes for more new schools.
Re-pave older streets and manage weeds alongside walks better
"Denver Art District" in Brighton
Shopping Center?
More youth-related stuff
Bring in new business & family friendly restaurants (not bars) to Main Street
More walking/outdoor ideas
Make Main Street a big attraction
More art.
Underground shopping
Art/Murals
Homeless youth shelter
We need Sprouts and Trader Joes in Brighton
WE NEED A SOCCER COMPLEX!
I would love if Brighton had more safe, connecting paths. It is hard to be active in a community when you are running in the street because there is no sidewalk or the side walk just ends. Especially connecting the east side neighborhoods of Brighton. I would like to see a nice sports complex here which includes a place for soccer, the fields we use are bad. It would be nice to get more businesses out here.
Sit down family restaurants

I envision a "higher end" look to the city along the US85 corridor between Bromley and WCR2 with replacement of the ugly pedestrian bridge, better landscape and easy access to new shopping and quality restaurants on the east side of the highway. Thanks!
Railroad traffic is a problem! I propose 1 crossing (Highway 2) be made into an underpass. Highway 2 would make a great route to use for this traffic. The train noise also needs to be toned down- the loud horns can be replaced with high intensity strobe lights. Deaf and hearing impaired persons would benefit.

INCLUSIVE COMMUNITY WHERE WE COLLABORATE AND SHARE



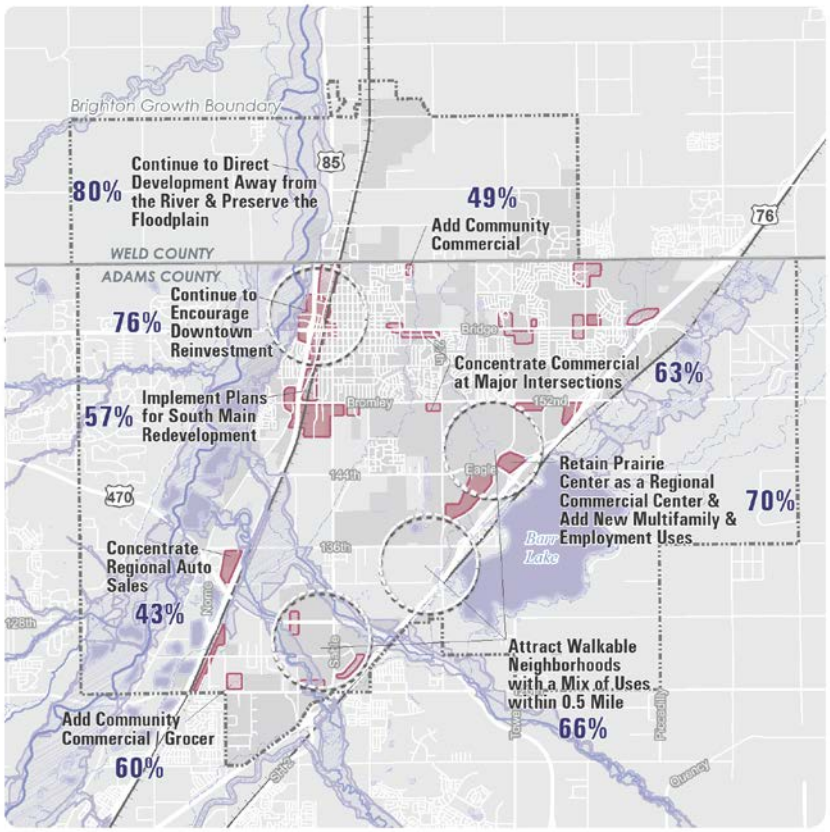


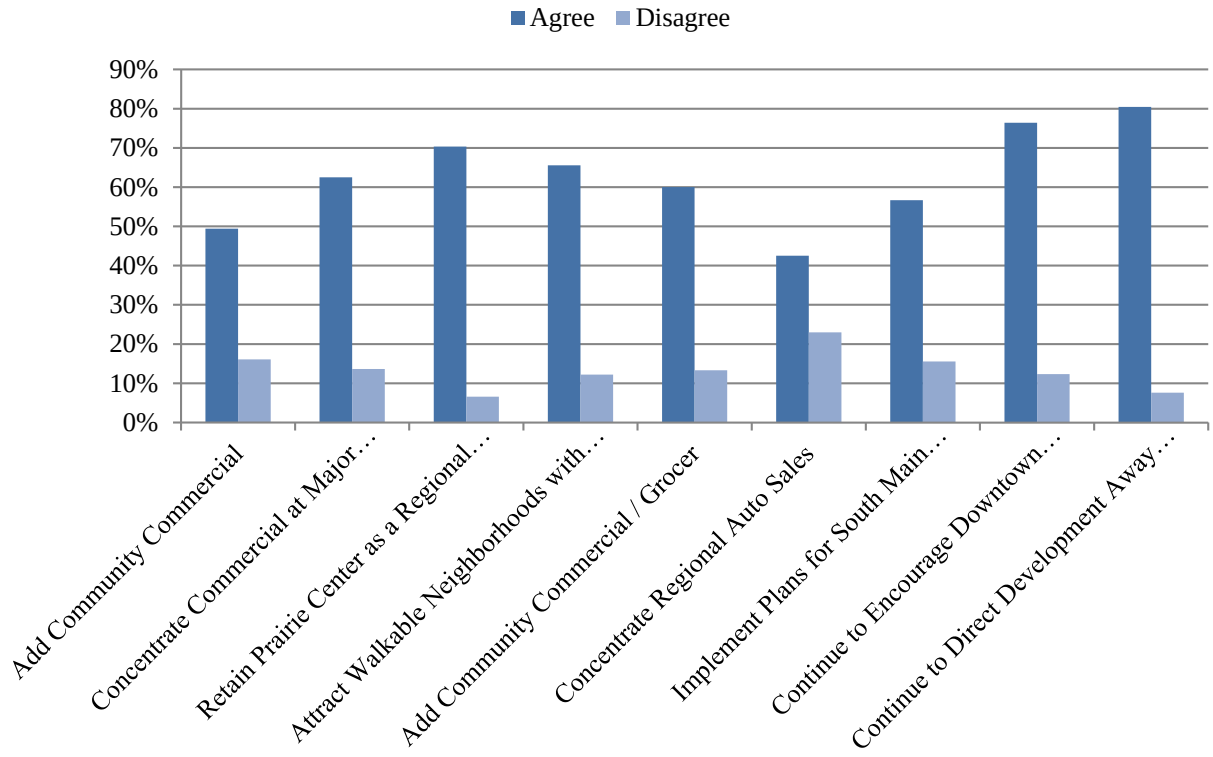
Additional Comments:

I would like to see the developers become more involved in providing new schools as needed. Today we tax the older population who have already given for the schools in our area and the newer developments should be contributing more for our growth in new schools.
More family-driven and outdoor opportunities
We need more restaurants. shopping, and family friendly activity. Parks and recreation is fast growing but I'd love to see a specific recreation area (similar to Thornton, Northglenn recreation center. I have a Brighton address but am largely left out of being a Brighton "resident" by way if I pay water or not (per your rec center front desk hosts). A larger emphasis on small business growth is just as important to commercial growth. Start building a 21st century community! Seek advice of Adams 12 school district for future potential growth, expansion and needs!
Develop and sustain a Downtown environment - North Main Street to help it grow and expand an existing area.
Campground at Barr Lake
Multi-use communities where health and economic development is considered into planning.
We desperately need to attract more restaurants to the Brighton area!
Ice skating
Shopping center
Recreational Activities
Red Mango!
Ice skating
Winter activities
Additional affordable housing
Retail shopping
Youth homeless shelter
Ice skating
Restore downtown Brighton
I really like the idea of community gardens.
HOMELESS SHELTER! ☺
Minneapolis has an art garden, with lots of sculptures and murals.

New community park at water tower fields
It's great to support outdoor related sports.
Better biking accessibility throughout the city
Focus on fixing run down Brighton areas and fix school crowding before even thinking of adding any income housing
Get more affordable housing and apartments here and more businesses and restaurants
Add shade structures to open space.
Need more senior space.

A SUSTAINABLE AND COMPLETE COMMUNITY

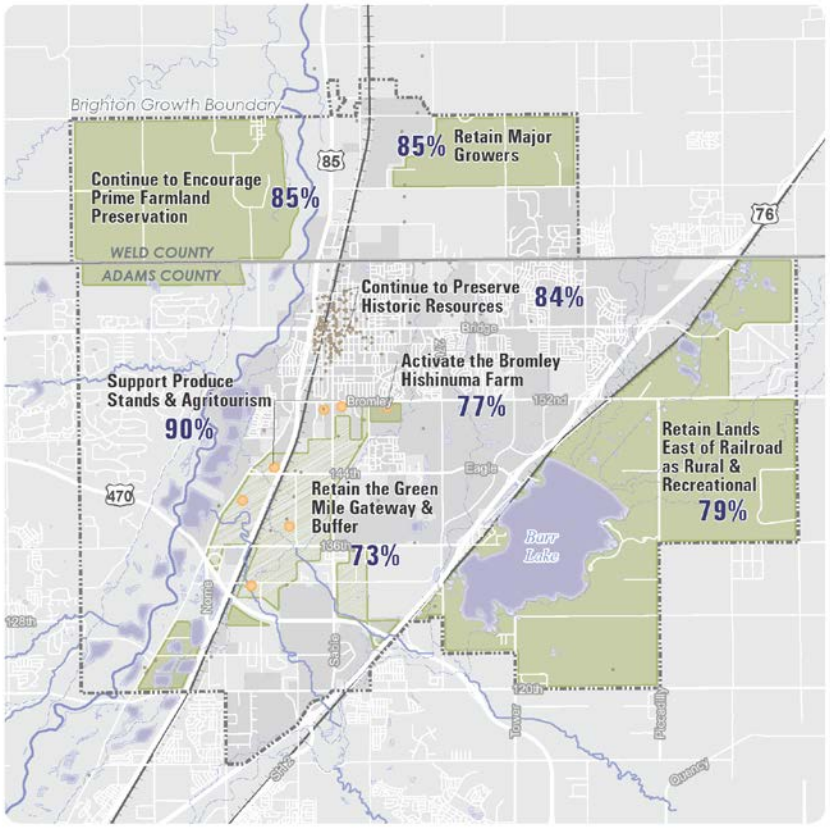


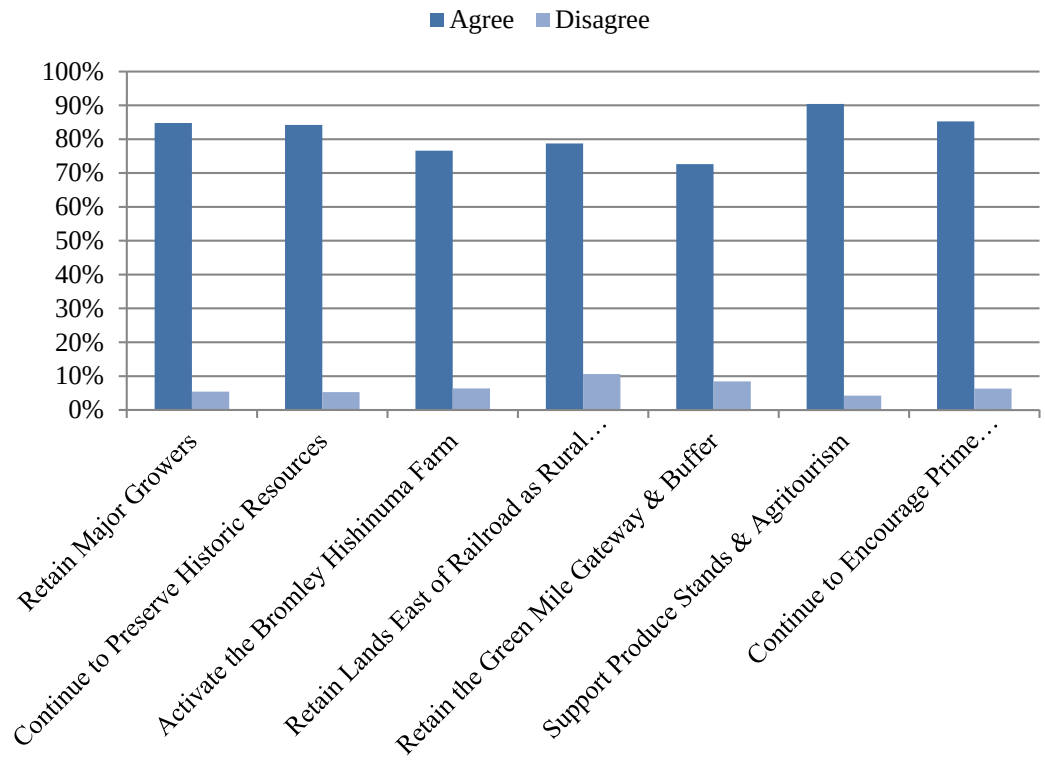


Additional Comments:

We need more restaurants. Shopping, and family friendly activity. Parks and recreation is fast growing but I'd love to see a specific recreation area (similar to Thornton, Northglenn recreation center. I have a Brighton address but am largely left out of being a Brighton "resident" by way if I pay water or not (per your rec center front desk hosts). A larger emphasis on small business growth is just as important to commercial growth. Start building a 21st century community! Seek advice of Adams 12 school district for future potential growth, expansion and needs!
Brighton's main street has always had a problem expanding because of the railroad and Highway 85. It will never be a main shopping area again without major anchor stores.
Stop traffic on Main and make better walking mall with adequate parking
Add Sprouts Grocery Store
Recycling
Recycling in all schools
More efficient energy
WIND POWER!
Concentrating regional auto sales looks trashy.
Empty retail already exists
Need more community meeting space

A FUTURE ROOTED IN A SMALL TOWN IDENTITY AND FARMING HERITAGE





Additional Comments:

Give farmers better benefits to stay and grow here
More Farmer's Markets & more incentives for farmers & those markets.
bebrighton.net
Incorporate school to community gardens
Art studio!
Thrift Store!
Local Variety of restaurants by the new King Soopers and Prairie Center
Soccer complex would be great!!!!
More solar projects, green initiatives, movements towards highly sustainable community. Discounts to developers, attract tech companies like Google and Amazon (specifically cloud services). Colorado is ripe for tech... tech jobs are coming to DTC and Boulder... why not Brighton?
Provide shade structures in outdoor recreation areas, outdoor events
More/another dog park with shade
Cultural Center
Please upgrade the recycling program to the equivalent of the Broomfield program. It is sorely lacking + would be beneficial to upgrade it!!
More bus service + a way to get over tracks in town for 911
Let Brighton grow, already. Everybody wants the economy to boom, but it seems like the "old timers" want Brighton to remain in a stagnant state of growth. As a contractor, it's hard for me to watch other cities keep reeling in tax dollars, while improving roads, schools and other things Brighton so sorely needs. No more initiatives, bonds or other creative ways to band-aid, please. Just grow, already.

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Appendix C,
WATER RIGHTS FINDINGS

Memorandum

HRS Water Consultants, Inc.
303.462.1111 Fax 303.462.3030
sbarrett@hrswater.com

Project: 15-17

To: Mr. Jeremy Call, Logan Simpson

From: Steven Barrett and Eric Harmon, P.E. – HRS Water Consultants, Inc.

Date: December 4, 2015

Subject: **Water Rights Evaluation of Parcels within Adams County and the City of Brighton's Local District Plan Study Area**

On behalf of Logan Simpson, HRS Water Consultants, Inc. ("HRS") has prepared this memorandum to summarize our findings regarding water rights within the Local District Plan Study Area ("study area"). The study area is located within the boundaries of Adams County and the City of Brighton as shown in Figure 1. HRS has been tasked with the examination of water rights associated with select parcels within this study area in order to support Adam County's and the City of Brighton's preservation planning project being conducted by Logan Simpson, Crossroads Resource Center, Two Forks Collective, and Urban Interactive Studios.

Parcel Selection Process

HRS initiated the water rights evaluation task by collecting relevant data from State, County, and other government sources, and then importing these data into a GIS for analysis of parcels within the study area. Parcels of interest were narrowed down using GIS queries along with input from the other consultants and the City and County. The majority of these selected parcels were parcels zoned as agriculture that were historically irrigated or are currently irrigated. All of the parcels are served by one of two ditch companies: the Burlington Ditch, Reservoir and Land Company ("Burlington") and the Fulton Irrigating Ditch Company ("Fulton"). The Burlington generally serves farms within the east portion of the study area, while the Fulton Ditch serves farms in the west portion (see Figure 1). Based on feedback from City and County representatives, the focus of HRS' effort was primarily limited to parcels under the Fulton Ditch system on the southwest side and parcels irrigated by the Burlington system on the southeast side. Parcels in the northern and eastern sections of the study area were not considered relevant to this project.

After identifying parcels of interest, HRS contacted the superintendents of the Burlington and Fulton ditch companies to obtain general information on each ditch, along with share ownership

information for the selected parcels. Steve Barrett from HRS, met with Mr. Bernie Widhalm, Ditch Superintendent for the Burlington Ditch Company and Mr. George McDonald, Ditch Superintendent for the Fulton Ditch Company. Both ditch company representatives have been with their respective companies for over 20 years and each was generally familiar with the selected parcels and their water use. HRS was able to collect specific share information for most properties as shown in Figure 2. This share information is summarized in Table 1 at the end of this memo. Figure 2 shows the number of shares owned by each of these farms. Many of these property owners no longer have shares in the ditch company or may practice dryland farming (so no ditch water is necessary). The number of shares has been consolidated in Table 1 and on Figure 2 for larger family farms such as the Petrocco and Palizzi farms.

General Background on the Burlington & Fulton Ditches

The Fulton and Burlington Ditches have fairly senior water rights in the South Platte River Basin. Both ditches divert water from the South Platte River and both have large lateral branches that enable water to be distributed to a large number of users. The Burlington system delivers water through the main Burlington (aka O'Brian Canal), the Little Burlington and the Brighton Lateral. Selected Burlington parcels within the study area are all served by the Little Burlington Ditch. The Fulton Ditch delivers water through the main Fulton and the Fulton Lateral. Selected Fulton parcels in the study area are served by both the Fulton Lateral and the main Fulton Ditch. The Fulton Ditch has more senior water rights priorities than the Burlington system, and therefore, is capable of delivering a more reliable supply in priority in dry years.

It should be noted that, unlike Fulton Ditch shares, shares in the Burlington system are often paired together with Wellington shares. In simple terms, a Burlington share provides a certain amount of water delivered to the farmers via its direct-flow ditch conveyance system, and a Wellington share provides water storage[1] that can be released and delivered downstream at critical times to allow the Burlington system to divert water in priority for its shareholders. Therefore, two "paired" shares would equal two individual shares of Burlington Company and two individual shares of Wellington Company. The Fulton Ditch has approximately 7,185 shares and the Burlington has approximately 4,000 individual shares. Each year these shares will yield different amounts of water under each ditch system. Historically, on average, the Fulton Ditch has diverted 26,992 acre-feet annually at the headgate. This equates to approximately 3.76 acre-feet per share on an annual basis, compared to the Burlington's approximate 4.00 acre-feet per share diverted at the ditch headgate. Both ditches experience ditch loss due to seepage, direct evaporation from the water surface in the ditch, and evapotranspiration from ditch bank vegetation. The Fulton's total ditch loss is typically around 20% while the Burlington's ranges from approximately 20% to 35% depending on time of year and flow rates. Per George McDonald, the Fulton Ditch normally provides sufficient water supply to farms under the system, and any irrigation well use is generally a supplemental backup supply to the primary

[1] In Wellington Lake, in NE Park County south of the town of Bailey.

supply provided by the ditch. The same is generally true of farms irrigated by the Little Burlington Ditch.

Water Rights Valuation

The last item in our water rights evaluation task was to research market values for the Fulton and Burlington ditch shares and to assign a water rights value to each selected parcel based on share ownership. Where relevant data are available, water rights values are typically estimated based upon comparable sales of shares in the subject ditches, or nearby ditches. Because the Fulton and Burlington have been the subject of numerous share sales and changes of uses, there were recent comparable sales transactions available for estimation of value.

HRS contacted several entities that have recently bought shares in these ditches or had knowledge of recent sales. This included contacting representatives from the Fulton Ditch Company, Burlington Ditch, Reservoir and Land Company, City of Brighton, South Adams County Water & Sanitation District, and other sources. Based on our research, we determined an approximate value for Fulton Ditch shares in the range of $15,000 - $20,000 per share and a value for individual Burlington shares to be in the low $20,000's, or in the low $40,000's for paired Burlington/Wellington shares. Based upon these ranges, which in our professional opinion are reflective of current market conditions, water rights values have been estimated for each selected shareholder within the study area and are summarized in Table 2 below. For these estimates, we used an average value of $17,500 for shares in the Fulton Ditch and a value of $20,000 for individual Burlington shares.

The water rights share value can also be translated into a price per volume of water diverted. The Burlington value per acre-foot of water diverted at the headgate is approximately $5,000, while the Fulton is approximately $4,670 per acre-foot. However, due to higher ditch loss, the amount of water delivered at the farm headgate, and the associated farm delivery value, may be less under the Burlington system.

Additional Tasks Performed

Question of South Adams County Water & Sanitation District Expansion

South Adams County Water and Sanitation District ("SACWSD") is the water and sewer service provider in the area adjoining the Local District Study Area on the south. A question arose within the Study Team as to whether any expansion of the boundaries or service area of SACWSD is anticipated in the future, such that current agricultural water rights within the Local District area may change due to acquisition and transfer by or for SACWSD for municipal or augmentation use. The northern boundary of SACWSD is shown on Figure 1, relative to the Local District Study Area.

Research and inquiries by HRS show that expansion of boundaries or service area by SACWSD is not anticipated in the foreseeable future for the following reasons.

1. The majority of the Local District Study Area is presently included in the corporate boundaries of the City of Brighton (Ward 3), and could only be served by a special contractual arrangement with the City. Such a contractual arrangement does not exist, and is not contemplated by SACWSD.
2. Current SACWSD Rules and Regulations[2] state as follows:

> Service Outside the District's Service Area: No future service is available outside the District's service area except as specifically authorized by the Board, at its sole discretion. Any service outside the District's service area would be dependent on, among other issues, discussions with other service providers, inclusion into the District boundaries or payment of extraterritorial fees, extension of District water and wastewater facilities, consideration of urban growth boundaries, and any other factors deemed relevant by the District.[3]
>
> Policy: The District's boundaries may be expanded by inclusion of property pursuant to § 32-1-401, et seq., C.R.S., in compliance with these Rules, ***provided that the property lies within the service area of the District.*** [4] (emphasis added).

3. HRS has communicated with the SACWSD Water System Manager, Mr. Kipp Scott. Mr. Scott confirmed that SACWSD cannot expand its boundaries or service area without special contractual arrangements, and SACWSD has no plans to expand services or its boundaries.[5]

[2] South Adams County Water and Sanitation District, Rules and Regulations for Receiving Public Water and Wastewater Service. Effective August 6, 2013.
[3] Ibid, Article I, Rule 3.12, p. 21.
[4] Ibid, Article I, Rule 4.1, p. 22.
[5] Kipp Scott, email communication, 11-18-2015.

Table 1 - Shares by Owner & Potential Annual Yield from Diversions at the Headgate			
Owner	**Ditch Company**	**Share Ownership**	**Annual HG Diversion Estimate (Acre-Feet)**
A M TAYLOR LIMITED PARTNERSHIP	Burlington Ditch, Reservoir & Land Company	0	
ADAMS CROSSING LLC C/O WOODBURY CORPORATION	Burlington Ditch, Reservoir & Land Company	0	
APPELHANZ FAMILY TRUST 1/3 AND APPELHANZ GLORIA J 1/3 & 13080 SABLE BLVD LLC 1/3	Burlington Ditch, Reservoir & Land Company	2	8
BRIGHTON LAKES LLC	Burlington Ditch, Reservoir & Land Company	0	
CASE 238 LLC UND 50 PERCENT INT AND BROMLEY AND BUCKLEY LLC UND 50 PERCENT	Burlington Ditch, Reservoir & Land Company	na	
CITY OF BRIGHTON THE	Burlington Ditch, Reservoir & Land Company	na	
DE CRESCENTIS LOUIS J	Burlington Ditch, Reservoir & Land Company	na	
DECRESCENTIS LOUIS J 1/2 INT AND DECRESCENTIS RAYMOND L 1/2 INT	Burlington Ditch, Reservoir & Land Company	na	
EDMUNDSON LAND LLC	Burlington Ditch, Reservoir & Land Company	8	32
FORTERRA INVESTMENTS LTD	Burlington Ditch, Reservoir & Land Company	10	40
HARTLEY THOMAS L AND HARTLEY GAIL M	Burlington Ditch, Reservoir & Land Company	Dryland	
KAISER LELAND R AND KAISER BETTY LOU	Burlington Ditch, Reservoir & Land Company	0	
KELLEY JEFFREY CHARLES	Burlington Ditch, Reservoir & Land Company	6	24
KIZAKI TOSHIHIRO	Burlington Ditch, Reservoir & Land Company	0	
L AND R LEASING LLC	Burlington Ditch, Reservoir & Land Company	0	
MADER CLINT AND MADER KARNA	Burlington Ditch, Reservoir & Land Company	0	
MC FADDIN CHARLES WAYNE AND MC FADDIN JOANNE	Burlington Ditch, Reservoir & Land Company	3	12
OKADA FARMS INC	Burlington Ditch, Reservoir & Land Company	16	64
STARBUCK KEVIN	Burlington Ditch, Reservoir & Land Company	0	
THF PRAIRIE CENTER DEVELOPMENT LLC C/O THF REALTY INC	Burlington Ditch, Reservoir & Land Company	0	
TWO BAR C DAIRY INC	Burlington Ditch, Reservoir & Land Company	2.5	10
WARNER ROBERT L	Burlington Ditch, Reservoir & Land Company	8	32
ZAISS BRIAN RONALD AND ZAISS AMY LYNN	Burlington Ditch, Reservoir & Land Company	0	
PALIZZI FARMS LLC C/O DEBORA M PALIZZI AND GLORIA A BENNET	Burlington Ditch, Reservoir & Land Company	Dryland	
RIVAS JIM AND RIVAS JANET	Fulton Irrigating Ditch	Dryland	
RODRIGUEZ ANSELMO	Fulton Irrigating Ditch	Dryland	
STEWART-DUNBAR EDIE	Fulton Irrigating Ditch	Dryland	
SASAKI FAMILY PARTNERSHIP LLLP	Fulton Irrigating Ditch	40	150
ANDERSON JERRY D AND ANDERSON ANNE	Fulton Irrigating Ditch	70.8	266
BENNETT GLORIA A	Fulton Irrigating Ditch	na	
BUTLER JOE	Fulton Irrigating Ditch	na	
C & L WALKER LLC	Fulton Irrigating Ditch	na	
CITY OF BRIGHTON	Fulton Irrigating Ditch	50.5 historically	
CITY OF BRIGHTON	Fulton Irrigating Ditch	na	
FERRELL TIMOTHY R AND FERRELL CLAUDIA M	Fulton Irrigating Ditch	20	75
H F INVESTMENT COMPANY LLC	Fulton Irrigating Ditch	94.5	354
HALLOCK A R AND CO LLLP 49/005% INT C/O ANNE E SMITH	Fulton Irrigating Ditch	na	
HARTLEY THOMAS L AND HARTLEY GAIL M	Fulton Irrigating Ditch	Dryland	
HARTLEY THOMAS L DBA HARTLEY COMPANIES	Fulton Irrigating Ditch	Dryland	
HATTENDORF ROBERT H 1/2 INT ANDERSON ANNE E 1/2 INT	Fulton Irrigating Ditch	70.8	266
LAMMERS FAMILY TRUST	Fulton Irrigating Ditch	2	8
MORIMITSU FAMILY TRUST ET AL	Fulton Irrigating Ditch	54	203
MURATA STEVEN T	Fulton Irrigating Ditch	30	113
PALIZZI AND SON INC	Fulton Irrigating Ditch	63.33	237
PALIZZI DEBORA M	Fulton Irrigating Ditch	63.33	
PALIZZI DEBORA M AND BENNETT GLORIA A	Fulton Irrigating Ditch	63.33	
PALOMBO JEFFREY A	Fulton Irrigating Ditch	0	
PETROCCO ALBERT J JR	Fulton Irrigating Ditch	129.99	487
PETROCCO DAVID A AND SUSAN K	Fulton Irrigating Ditch	129.99	
PETROCCO DAVID A SR AND PETROCCO SUSAN K	Fulton Irrigating Ditch	129.99	
PETROCCO DOMINIC A 1/3/PETROCCO FAMILY PARTNERSHIP 1/3/PETROCCO ALBERT J 1/3	Fulton Irrigating Ditch	129.99	
PETROCCO DOMINIC AND GENIE A	Fulton Irrigating Ditch	129.99	
PETROCCO FAMILY LIMITED PARTNERSHIP LLLP	Fulton Irrigating Ditch	129.99	
PETROCCO JOSEPH P	Fulton Irrigating Ditch	129.99	
READY MIXED CONCRETE CO 50% INT AND SPRAT-PLATTE RANCH CO LLLP 50% INT	Fulton Irrigating Ditch	na	
RITCHEY INVESTMENT COMPANY LLC 84.3% RITCHEY NAOMI JO RESIDUARY TRUST 15.7%	Fulton Irrigating Ditch	140	525
SAKATA FARMS	Fulton Irrigating Ditch	0	
SCHAEFER ELAINE A ET AL	Fulton Irrigating Ditch	51	191
SHARP AC LAND LLC	Fulton Irrigating Ditch	71	266
VEAL INC UND 50/995% INT	Fulton Irrigating Ditch	na	
WAGNER BERNARD TRUST 1/2 INT AND MAYHEW PHYLLIS K TRUST 1/2 INT	Fulton Irrigating Ditch	115	431
Note: Dryland = dryland farming with no shares, na = share info not available for this property			

Table 2 - Estimated Share Value by Owner & Ditch			
Owner	**Ditch Company**	**Share Ownership**	**Estimated Value of Shares**
A M TAYLOR LIMITED PARTNERSHIP	Burlington Ditch, Reservoir & Land Company	0	
ADAMS CROSSING LLC C/O WOODBURY CORPORATION	Burlington Ditch, Reservoir & Land Company	0	
APPELHANZ FAMILY TRUST 1/3 AND APPELHANZ GLORIA J 1/3 & 13080 SABLE BLVD LLC 1/3	Burlington Ditch, Reservoir & Land Company	2	$ 40,000.00
BRIGHTON LAKES LLC	Burlington Ditch, Reservoir & Land Company	0	
CASE 238 LLC UND 50 PERCENT INT AND BROMLEY AND BUCKLEY LLC UND 50 PERCENT	Burlington Ditch, Reservoir & Land Company	na	
CITY OF BRIGHTON THE	Burlington Ditch, Reservoir & Land Company	na	
DE CRESCENTIS LOUIS J	Burlington Ditch, Reservoir & Land Company	na	
DECRESCENTIS LOUIS J 1/2 INT AND DECRESCENTIS RAYMOND L 1/2 INT	Burlington Ditch, Reservoir & Land Company	na	
EDMUNDSON LAND LLC	Burlington Ditch, Reservoir & Land Company	8	$ 160,000.00
FORTERRA INVESTMENTS LTD	Burlington Ditch, Reservoir & Land Company	10	$ 200,000.00
HARTLEY THOMAS L AND HARTLEY GAIL M	Burlington Ditch, Reservoir & Land Company	Dryland	
KAISER LELAND R AND KAISER BETTY LOU	Burlington Ditch, Reservoir & Land Company	0	
KELLEY JEFFREY CHARLES	Burlington Ditch, Reservoir & Land Company	6	$ 120,000.00
KIZAKI TOSHIHIRO	Burlington Ditch, Reservoir & Land Company	0	
L AND R LEASING LLC	Burlington Ditch, Reservoir & Land Company	0	
MADER CLINT AND MADER KARNA	Burlington Ditch, Reservoir & Land Company	0	
MC FADDIN CHARLES WAYNE AND MC FADDIN JOANNE	Burlington Ditch, Reservoir & Land Company	3	$ 60,000.00
OKADA FARMS INC	Burlington Ditch, Reservoir & Land Company	16	$ 320,000.00
STARBUCK KEVIN	Burlington Ditch, Reservoir & Land Company	0	
THF PRAIRIE CENTER DEVELOPMENT LLC C/O THF REALTY INC	Burlington Ditch, Reservoir & Land Company	0	
TWO BAR C DAIRY INC	Burlington Ditch, Reservoir & Land Company	2.5	$ 50,000.00
WARNER ROBERT L	Burlington Ditch, Reservoir & Land Company	8	$ 160,000.00
ZAISS BRIAN RONALD AND ZAISS AMY LYNN	Burlington Ditch, Reservoir & Land Company	0	
PALIZZI FARMS LLC C/O DEBORA M PALIZZI AND GLORIA A BENNET	Burlington Ditch, Reservoir & Land Company	Dryland	
RIVAS JIM AND RIVAS JANET	Fulton Irrigating Ditch	Dryland	
RODRIGUEZ ANSELMO	Fulton Irrigating Ditch	Dryland	
STEWART-DUNBAR EDIE	Fulton Irrigating Ditch	Dryland	
SASAKI FAMILY PARTNERSHIP LLLP	Fulton Irrigating Ditch	40	$ 700,000.00
ANDERSON JERRY D AND ANDERSON ANNE	Fulton Irrigating Ditch	70.8	$ 1,239,000.00
BENNETT GLORIA A	Fulton Irrigating Ditch	na	
BUTLER JOE	Fulton Irrigating Ditch	na	
C & L WALKER LLC	Fulton Irrigating Ditch	na	
CITY OF BRIGHTON	Fulton Irrigating Ditch	50.5 historically	
CITY OF BRIGHTON	Fulton Irrigating Ditch	na	
FERRELL TIMOTHY R AND FERRELL CLAUDIA M	Fulton Irrigating Ditch	20	$ 350,000.00
H F INVESTMENT COMPANY LLC	Fulton Irrigating Ditch	94.5	$ 1,653,750.00
HALLOCK A R AND CO LLLP 49/005% INT C/O ANNE E SMITH	Fulton Irrigating Ditch	na	
HARTLEY THOMAS L AND HARTLEY GAIL M	Fulton Irrigating Ditch	Dryland	
HARTLEY THOMAS L DBA HARTLEY COMPANIES	Fulton Irrigating Ditch	Dryland	
HATTENDORF ROBERT H 1/2 INT ANDERSON ANNE E 1/2 INT	Fulton Irrigating Ditch	70.8	$ 1,239,000.00
LAMMERS FAMILY TRUST	Fulton Irrigating Ditch	2	
MORIMITSU FAMILY TRUST ET AL	Fulton Irrigating Ditch	54	
MURATA STEVEN T	Fulton Irrigating Ditch	30	
PALIZZI AND SON INC	Fulton Irrigating Ditch	63.33	$ 1,108,275.00
PALIZZI DEBORA M	Fulton Irrigating Ditch	63.33	
PALIZZI DEBORA M AND BENNETT GLORIA A	Fulton Irrigating Ditch	63.33	
PALOMBO JEFFREY A	Fulton Irrigating Ditch	0	
PETROCCO ALBERT J JR	Fulton Irrigating Ditch	129.99	$ 2,274,825.00
PETROCCO DAVID A AND SUSAN K	Fulton Irrigating Ditch	129.99	
PETROCCO DAVID A SR AND PETROCCO SUSAN K	Fulton Irrigating Ditch	129.99	
PETROCCO DOMINIC A 1/3/PETROCCO FAMILY PARTNERSHIP 1/3/PETROCCO ALBERT J 1/3	Fulton Irrigating Ditch	129.99	
PETROCCO DOMINIC AND GENIE A	Fulton Irrigating Ditch	129.99	
PETROCCO FAMILY LIMITED PARTNERSHIP LLLP	Fulton Irrigating Ditch	129.99	
PETROCCO JOSEPH P	Fulton Irrigating Ditch	129.99	
READY MIXED CONCRETE CO 50% INT AND SPRAT-PLATTE RANCH CO LLLP 50% INT	Fulton Irrigating Ditch	na	
RITCHEY INVESTMENT COMPANY LLC 84.3% RITCHEY NAOMI JO RESIDUARY TRUST 15.7%	Fulton Irrigating Ditch	140	$ 2,450,000.00
SAKATA FARMS	Fulton Irrigating Ditch	0	
SCHAEFER ELAINE A ET AL	Fulton Irrigating Ditch	51	$ 892,500.00
SHARP AC LAND LLC	Fulton Irrigating Ditch	71	$ 1,242,500.00
VEAL INC UND 50/995% INT	Fulton Irrigating Ditch	na	
WAGNER BERNARD TRUST 1/2 INT AND MAYHEW PHYLLIS K TRUST 1/2 INT	Fulton Irrigating Ditch	115	$ 2,012,500.00

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Appendix D,
EXAMPLE OF A MIXED USE AGRICULTURAL DISTRICT ZONING ORDINANCE

649 Mixed Use Agricultural (MUA) District.

A. **Purpose and Intent.** The Mixed Use Agricultural District is intended to help preserve the character of agricultural areas of Phoenix while allowing appropriate development, including compatible commercial uses, which will reflect and enhance that character. Although it is unrealistic as the City develops to expect all agricultural property to continue functioning with the purely agricultural uses permitted in other zoning districts, it is possible to maintain an agricultural/rural environment in designated areas; accomplishing this requires a mixture of uses and special development and design standards which are more restrictive in some ways and more flexible in other ways than the Traditional Suburban Ranch Districts. This district encourages new development which is consistent with the traditional design of a rural and agricultural area through special design and use standards; it supports maximum preservation of existing plant materials and the agricultural character of the district, while allowing additional commercial and office uses to increase the economic viability of the district within the evolving urbanizing character of Phoenix. *4

B. **Applicability.** The MUA District is a zoning district available for rezoning of property designated as mixed use agricultural on the *General Plan for Phoenix Land Use Map.*

C. **Permitted Primary Uses.** The following uses are permitted in accordance with the regulations and special standards established below. *4

1. Agricultural crops: raising, harvesting and indoor/outdoor retail sales. +4
2. Aviary. +4
3. Art supplies, retail sales. +4
4. Art gallery and studio. +4
5. Antique shop. +4
6. Bakery, retail sales. +4
7. Bank and trust companies. +4
8. Barber and beauty shops. +4
9. Bicycle shop, new and used, retail sales and repairs. +4
10. Book and magazine, retail sales. +4
11. Butcher shop (no slaughtering). +4
12. Camera shop, retail sales and repair. +4
13. Candy shop, retail sales. +4
14. Cigar store. +4
15. Coin and stamp dealers. +4

16. Clothing, retail sales. +4

17. Equestrian stable, commercial including boarding and instruction, subject to the following conditions: +4

    a. Minimum lot size of ten acres; and

    b. Minimum perimeter set back of one hundred feet for all animal sheltering buildings.

18. Farmer's market. +4

19. Farms, including dairies, devoted (as applicable) to hatching, raising, breeding, and marketing of fowls, horses, dogs, sheep, goats, cows, llamas, rabbits, fur-bearing animals and fish subject to the following conditions: +4

    a. This use shall not include commercial feeder lots.

    b. Areas devoted to the raising of fowl shall be located at least one hundred feet from any property line which is contiguous with a residentially zoned lot or parcel.

    c. The total site area shall not exceed 10 acres.

20. Feed, retail sales. +4

21. Fine art, instruction. +4

22. Fish, retail sales. +4

23. Florist, retail sales and wholesale. +4

24. Grocery, retail sales. +4

25. Furniture, retail sales. +4

26. Group home for the handicapped, provided that: +4

    a. No such home is located on a lot with a property line within one thousand three hundred twenty feet, measured in a straight line in any direction, of the lot line of another such group home;

    b. Such home contains more than five but not more than ten residents, not including staff; and

    c. Such home is registered with, and administratively approved by, the Zoning Administrator as to compliance with the standards of this section as provided in Section 701

27. Craft studio, retail sales and handcrafting of; textiles, pottery, glass blowing, jewelry, wood, leather and photography. +4

28. Health club. +4

29. Hobby and craft products, retail sales. +4

30. Home furnishing, retail sales. +4

31. Household appliance, retail sales and repair. +4

32. Ice cream shop. +4

33. Jeweler, retail sales and repair. +4

34. Music instruction, musical instrument repair and retail sales. +4

35. Office, administrative or professional. +4

36. Pet store, retail sales. +4

37. Pharmacy. +4

38. Photographic developing and printing. +4

39. Photographic equipment and supplies, retail sales. +4

40. Picture framing. +4

41. Places of worship. +4

42. Plant nursery, wholesale or retail sales, provided that: +4

    a. Any bulk or hardscape materials shall be stored in contained areas or bins and not be visible from the public right-of-way.

    b. Boxing of plants and other similar processing shall not be visible from the public right-of-way.

    c. Sales may include garden-related items including, fertilizers, pest and weed control items, gardening implements, and garden furniture.

43. Residential. +4

44. Restaurant, provided that: +4

    a. Music and entertainment is limited to recorded music or one entertainer

    b. Entrances to the restaurant shall be from the side of the restaurant which does not face a contiguous residentially zoned property, including undeveloped or residentially developed R-5 parcels, on the same block, and side of the street as the restaurant. For the purpose of applying this provision, property separated by a right-of-way of twenty (20) feet or less in width shall be considered contiguous.

45. Saddlery and tack shops, custom crafting and retail sales. +4

46. School, public, parochial and institutions of higher education. +4

47. School, commercial. +4

48. Veterinary office and hospital. +4

49. Veterinary supplies, wholesale and retail sales. +4

50. Vineyard, production and retail sales. +4

51. Window treatment and upholstery; custom fabrication and retail sales. +4

D. **Use Permit Uses.** Land in the MUA District may be used for the following purposes, subject to obtaining a use permit in accordance with the standards and procedures of Section 307. *4

1. Animal boarding. +4

2. Bed and breakfast provided that: +4

   a. The establishment must be owner-occupied as a principal residence;

   b. Not more than eight guestrooms with sleeping accommodations for sixteen guests may be provided;

   c. Separate cooking facilities for guestrooms are prohibited;

   d. Guest stays shall be a minimum of one night and shall not exceed thirty-one consecutive nights in any ninety-day period. The owner of the bed and breakfast establishment shall maintain a reservation book or registration log. The book or log shall show the arrival and departure dates of all guests and shall be open to inspection by a Zoning Enforcement Officer.

   e. One off-street parking space shall be provided for each guestroom in addition to the parking required for the principal residence.

3. Dependent care facility, as an accessory use, for seven to twelve dependents, subject to the following conditions: +4

   a. Resident dependents under the age of twelve years shall not be counted when they are present on the premises.

   b. Outdoor play areas shall be screened from adjacent properties by a six-foot-high landscape hedge, solid fence or solid wall.

   c. Hours of operation shall only be between 6:00 a.m. and 10:00 p.m. These hours may be restricted as part of the use permit approval.

   d. Nonresident employees may be permitted with the use permit if necessary to meet State requirements.

   e. One parking space shall be provided for each employee who does not reside at the facility.

   f. If a swimming pool is on the site, it shall be screened in accordance with Section 1109 of the Building Construction Code.

g. Smoke detectors shall be installed in the house in accordance with Section 1210(A) of the Building Construction Code.

h. No signage shall be permitted.

i. The facility shall be subject to Arizona licensing requirements.

4. Environmental remediation facility, subject to the following conditions: +4

a. The aboveground area of land occupied by the environmental remediation facility shall not exceed the minimum number of square feet necessary to implement the remedial or corrective action.

b. All structures and devices constructed above ground level shall be shielded from the view of persons outside the property boundary by an opaque fence or solid landscape screen, as approved by the Planning and Development Department.

c. Outdoor equipment installed as part of the final environmental remediation facility shall not exceed a height of ten feet and shall be set back from the screen wall or landscape material a minimum of three feet for every one foot of height over six feet.

d. After installation, no equipment or materials beyond that necessary to operate the facility shall be stored on the lot.

e. Any lighting shall be placed so as to reflect the light away from adjacent residential districts. The facility shall not emit noise, odor or vibration at any time so that it exceeds the general level of noise, odor or vibration uses emit outside the site. Such comparison shall be made at the boundary of the lot on which the treatment facility is located.

f. The facility shall comply with all applicable provisions of the Fire Code.

g. A permit issued under Section 307 shall include reasonable restrictions on the operation of the facility to mitigate any adverse impacts on nearby land, including but not limited to restrictions on vehicular traffic and hours of operation of the facility.

h. This section allows authorization of activities to undertake all on-site investigative, construction, and maintenance activities ancillary to the operation of the facility. All off-site discharges of any substance shall be separately authorized pursuant to applicable laws.

i. The structures used for the facility shall not exceed a total area of five thousand square feet.

j. Neither the Zoning Administrator nor the Board of Adjustment shall have the jurisdiction to vary these provisions.

5. Game court, lighted, as an accessory use. *4

6. Massage therapy, performed by a licensed massage therapist, as an accessory use. +4

7. Processing of off site grown agricultural products, including, pressing cider, oil, or wine. +4

8. Outdoor public assembly uses/special events, including seasonal festivals. +4

9. Restaurant with: +4

   a. Sales of alcoholic beverages permitted upon approval by the Zoning Administrator or the Board of Adjustment of a specific floor plan for the restaurant facility.

   b. Live music or entertainment of more than one entertainer

   c. Patron dancing

   d. Outdoor dining, outdoor recreation uses, and associated lighting

   e. Drive-through facility as an accessory use, access to the site is to be from an arterial or collector street as defined on the street classification map

10. Reserved. -5

E. **Permitted Accessory Uses.** Land in the MUA District may be used as permitted accessory uses and structures, incidental to and on the same zoning lot as the primary use, for the following uses:

1. Amateur communication tower.

2. Dependent care facility for six dependents, subject to the following conditions:

   a. Resident dependents under the age of twelve years shall not be counted when they are present on the premises.

   b. Outdoor play areas shall be screened from adjacent properties by a six-foot-high landscape hedge, solid fence or solid wall.

   c. There shall be no employees who do not reside at the site unless required by the Arizona Department of Health Services.

   d. If a swimming pool is on the site, it shall be screened in accordance with the Building Construction Code.

   e. Smoke detectors shall be installed in the house in accordance with the Building Construction Code.

3. Guesthouse, provided that it does not exceed six hundred square feet or twenty-five percent of the floor area of the principal structure, whichever is larger.

4. Instruction/classes pertaining to the primary use of the site, including, culinary classes at a restaurant or horticulture classes at a plant nursery. *4

5. Reserved. -5

F. **Special Permit Uses.** Land in the MUA District may be used for the following purposes, subject to obtaining a special permit in accordance with the standards and procedures of Section 504.1

1. Environmental remediation facility which cannot satisfy the standards of section 649.D.,

above. *4

2. Farms and dairies on sites larger than ten acres. +4

G. **Commercial Uses** on a site shall be limited to a maximum of 15,000 (fifteen thousand) gross square feet per each establishment. +4

H. **Height, Building Setbacks, Density and Area Requirements.** All property in the MUA District shall be developed in accordance with the following standards. *4

1. For any non-residential uses permitted in the district, the following requirements shall apply: +4

a. A maximum building height of one story (1) not to exceed twenty (20) feet shall be permitted.

b. Request to exceed the above height limit may be granted by the City Council for development up to two (2) stories not to exceed thirty (30) feet upon recommendation by the Planning Commission or the Zoning Hearing Officer finding that such additional height is not detrimental to adjacent property or the public welfare in general.

2. Except as provided in Section 649.H.1., the following development standards shall apply: +4

DEVELOPMENT STANDARDS		
MAXIMUM BUILDING OR STRUCTURE HEIGHT		
	Residential	Thirty (30) feet
	Non-residential	Twenty (20) feet
BUILDING SETBACKS (EXCLUDING CANAL RIGHT-OF-WAY SETBACKS)		
Baseline Road		
	Maximum fifteen (15) foot high building	Fifty (50) feet
	Maximum thirty (30) foot high building	Sixty (60) feet
Front Yard		
	Arterial/collector streets	Forty (40) feet
	Local streets	Thirty (30) feet
Side Yard		
	Interior	Fifteen (15) feet
	Street	Twenty (20) feet
Rear Yard		
	Rear yard	Twenty (20) feet
LOT COVERAGE		
	Maximum lot coverage	35% Shade structures accessory to agricultural or plant nursery uses which are fabric or plastic

		film covered and which do not exceed twelve feet in height shall not be included in lot coverage calculations.
DENSITY		
	Maximum density	2 units per acre

3. **Landscape setbacks (excluding canal right-of-way setbacks).** +4

STREETSCAPE	
Landscaped setback	Average 35' along arterial/collector streets, minimum 30' permitted for up to 50% of the frontage. Average 25' along local streets, minimum 20' for up to 50% of the frontage.
PLANT TYPE	**MINIMUM PLANTING SIZE**
Trees	Min. 2-inch caliper (50% of required trees) Min. 3-inch caliper or multi-trunk tree (25% of required trees) Min. 4-inch caliper or multi-trunk tree (25% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

PARKING LOT AREA	
Interior surface area (exclusive of perimeter landscaping and all required setbacks)	Min. 10%
Landscaped planters	At ends of each row of parking & approximately every 110'
Landscaped planters, single row of parking	Min. 120 sq. ft.
Landscaped planters, double row of parking	Min. 240 sq. ft.
Additional parking lot landscaping	As needed to meet 10% minimum requirement, evenly distributed throughout the entire parking lot.Min. interior dimension 5' (length and width).
PLANT TYPE	**MINIMUM PLANTING SIZE**
Trees	Min. 2-inch caliper (60% of required trees)Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

PERIMETER PROPERTY LINES (NOT ADJACENT TO A STREET)	
Property lines not adjacent to a street	Min. 10-foot landscaped setback
PLANT TYPE	**MINIMUM PLANTING SIZE**

Trees*	Min. 2-inch caliper (60% of required trees) Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

ADJACENT TO A BUILDING	
Building facades within 100' of the public right-of-way or adjacent to public entries to the building (excluding alleys)	Min. 25% of the exterior wall length shall be treated with either a landscaped planter a min. five (5) feet in width or an arcade or equivalent feature.
PLANT TYPE	**MINIMUM PLANTING SIZE**
Trees	Min. 2-inch caliper (60% of required trees) Min. 1-inch caliper (40% of required trees)
Shrubs	Min. five (5) 5-gallon shrubs per tree

I. **Signs.** The following standards are intended to permit only signs which are attractive, low in profile, and consistent with the agricultural and rural character of the MUA District. Signs for nonresidential development in the MUA District shall be governed by the regulations of Section 705 applicable to nonresidential uses of residential property except as modified below. Signs for residential development in the MUA District shall be governed by the regulations of Section 705 applicable to residential uses of residential property except as modified below. Sign which are not visible beyond the boundaries or the lot or parcel upon which they are situated shall not be regulated as signs. *4

1. **Prohibited signs.**

   a. Outdoor advertising/off-premises signs.

   b. Backlit awnings with or without sign copy.

   c. Balloons and banners adjacent to multiple-use trails.

   d. Roof-mounted signs.

   e. Multiple tenant identification ground signs identifying more than one tenant. *4

   f. Signs which move, rotate, flash, automatically or manually change copy, or simulate movement.

2. **Permitted signs for nonresidential development.**

   a. Ground-mounted monument signs identifying a commercial/agricultural center: not to exceed six feet in height, sixteen square feet in sign area, and thirty-two square feet in total area for the monument structure.

   b. Signs painted on the building surface or letters mounted directly to the building surface:

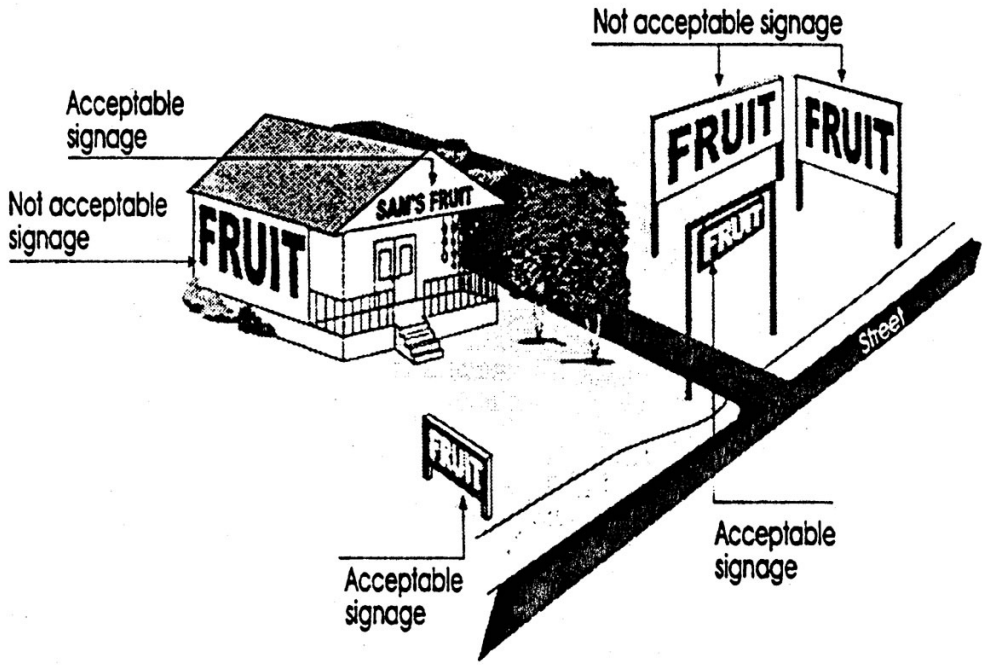
      (1) Maximum of one square foot of signage for each lineal foot of building elevation

to a maximum of one hundred square feet.

(2) Minimum of twenty square feet.

(3) Placed no closer to the roofline than one-half the vertical dimension of the sign.

(4) Placed only on the building wall of the suite or building space used by the tenant which the sign identifies.



Acceptable and Not Acceptable Signage

c. Window signs shall not exceed ten percent of each window area located on the ground floor of a building. For computation of area, window panels separated by muntins or mullions shall be considered as one continuous windowpane. Window signs shall be assessed as wall signs. Window signs shall not be located on glass doors, as regulated in Section 705.B.3.i.

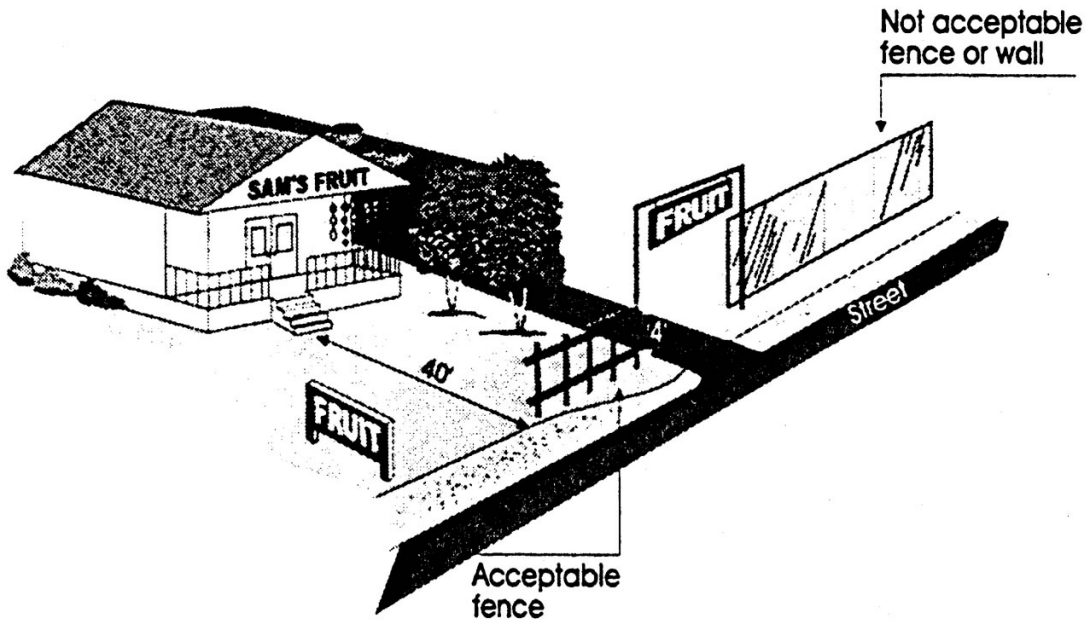
J. **Design Guidelines and Standards.** The design guidelines and standards contained in this section reflect the desired goals and policies for development in the MUA District. The intent of the guidelines and standards is to encourage new development in the district which is consistent with the traditional design of a rural and agricultural area. The open, heavily landscaped character of agricultural properties should be reflected in new projects which build on past successes and ensure the future viability of the district. The City's general design review guidelines of Section 507 Tab A of the Zoning Ordinance shall apply to development in the MUA District to the extent they do not conflict with the following standards. All development in the MUA District is subject to site plan review to ensure maximum preservation of existing plant materials and the agricultural character of the district. *4

The guidelines and standards consist of requirements (R), presumptions (P), and considerations (C) as set forth in Section 507.

1. **Fences and walls.**

a. Solid fences and walls should be prohibited on the perimeter of a lot or development except for screening of parking or mechanical equipment. (P) *4

Rationale: Solid fences and walls obstruct views of properties and detract from a rural/agricultural character. Although solid screening of particular uses which are interior to a site may be appropriate, such as around a dependent care play area or an environmental remediation facility's equipment, a solid perimeter wall is not acceptable.



Not Acceptable Fence or Wall

b. Open fences in the required front yard shall be up to six feet in height. (R) *4

Rationale: In rural areas, higher front fences can be necessary for various forms of livestock, including horses, emus and llamas.

c. Fence and wall materials in the required front yard and on the street or canal side perimeter of a lot or development shall be limited to wrought iron, split rail, corral fencing, or a combination of three feet of solid masonry topped by open wrought iron or a similar material, or a combination of the aforementioned fence types and open farm fencing. Chainlink, barbed wire, concertina wire, razor wire, and other similar materials are prohibited in the required front yard and on the street or canal side perimeter of a lot or development. (R)

Rationale: Open fencing in the MUA District should be both functional and attractive.

2. **Building orientation and massing.** +4

a. Commercial and office buildings should incorporate architectural elements that emphasize horizontal plains, such as overhangs, projections, alcoves, varied roof-plains, and building offsets that are designed to minimize mass and volume of the structure. (P)

Rationale: Incorporating such building design elements reduces the impact of expansive building facades and massing for pedestrian and semicircular traffic.

b. Covered walkways should be provided along the street facing facade for all commercial and office buildings. (P)

Rationale: Covered walkways will increase the usability of building throughout the year, and will promote pedestrian activities.

c. Changes in facade, such as, material, window design, facade height or decorative details should be expressed so that the composition appears to be a collection of smaller buildings. (P)

Rationale: Varied building facades promote a traditional and rural building design that minimizes the visual impact of the building.

d. The amount of cut and fill should be the minimum amount necessary to accommodate site infrastructure. (P)

Rationale: Building layouts that follow and blend into the natural landscape are compatible with traditional agrarian design.

e. Buildings should be oriented towards the street by placing the primary entrance on the street frontage. (P)

Rationale: Building orientation towards street will reinforce community orientation in the MUA District.

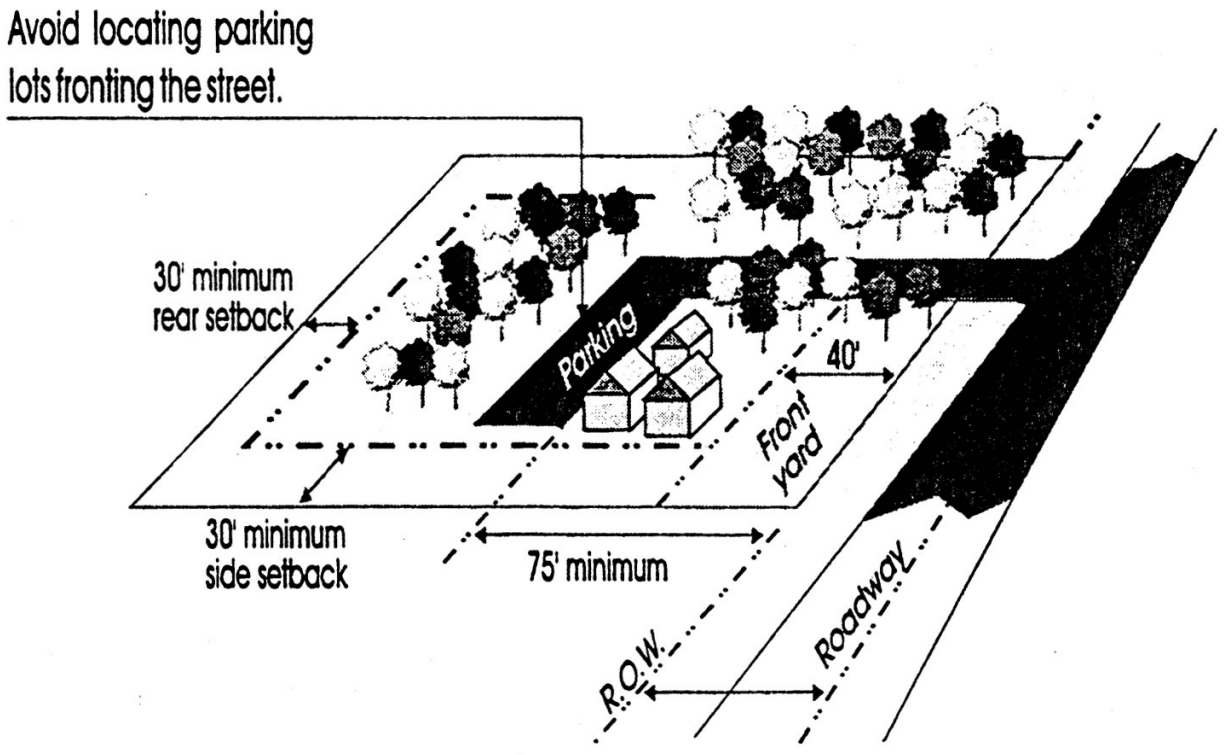
3. **Parking and maneuvering areas.** *4

a. No parking or maneuvering areas, other than required driveways, shall be permitted in the perimeter setbacks of a lot or development. (R)

Rationale: Parking areas are intrusive and have a more urban character than is appropriate in this district. At a minimum, parking and maneuvering areas must be placed outside of the site's perimeter setbacks. An exception is needed for driveways to bring vehicles onto the site.

b. Parking areas should be placed behind or along the nonstreet side of a building. (P) *4

Rationale: A building can provide an effective screen for a parking area and help prevent the parking area from dominating the appearance of the site.



c. The surface of parking stalls should be composed of an alternative to asphalt or concrete, as approved by the Zoning Administrator. (P) *4

Rationale: Although it is critical that parking and maneuvering areas be dustproofed due to problems with air pollution from particulates, rural and agricultural developments have traditionally used a form of decomposed granite rather than asphalt. With current dustproofing technology, an acceptable level of protection is possible with an alternative surface material. These alternatives are consistent with the desired character for the MUA District.

d. A maximum of one row of parking should be permitted between the building and right-of-way for commercial, office or mixed use buildings, except when the parking is located along an arterial street. (P) +4

Rationale: A single row of parking facing the street reinforces the rural/agrarian character of the development. +4

e. No single surface parking area should exceed 50 spaces unless divided into two or more sub-areas by a building, roadway or landscaping equal to 25% of the width of the parking area. (P) +4

Rationale: Expansive parking lots should be avoided to preserve a rural agriculture identity. +4

4. **Lighting.** +4

a. On site lighting should be accomplished with low level, uniform lighting fixtures dispersed throughout the site with a lumen rating of 3,000 or less. (P) +4

Rationale: Uniform lighting avoids abrupt changes from lit to dark areas, providing an even low intensity lighting pattern. +4

5. **Building materials.** +4

a. The following building materials should be incorporated into commercial buildings: (P) +4

1) Board and batten;

2) Clapboard siding;

3) Wood/heavy timbers;

4) Adobe;

5) Stone or stone veneer;

6) Stucco, not to exceed 70% of the exterior wall surface area.

Rationale: These types of building materials ensure the agrarian character of the MUA

District. +4

6. **Roofs.** +4

a. Barrel tile roofs shall be prohibited. (P) +4

b. Pitched roof elements should be encouraged for commercial buildings. (P) +4

c. If flat roofs are proposed for commercial buildings a false front parapet should be included. (P) +4

d. Overhanging wooden eaves and exposed rafters should be encouraged. (P) +4

Rationale: Barrel tile roofs are not consistent with the desired character of the MUA Zoning District. Pitched or flat roofs with false front parapets and exposed rafters are more reminiscent of a rural or farm building style. +4

7. **Signs.** +4

a. Neon tubed exterior accent light, external neon tubed signs and internally illuminated signs are not permitted. (R) +4

Rationale: Such lighting is symbolic of an urban setting and is not compatible with the rural character of the MUA District. +4

b. Ground, shingle or wall mounted signs made of wood, or similar appearing material should be encouraged. (P) +4

Rationale: Signs mounted to the building reinforce the agrarian character of the MUA District. +4

8. **Windows.** +4

a. All windows in commercial buildings shall be either divided lite or double hung. (R) +4

Rationale: Divide lite or double hung windows prevent the introduction of large single pane windows that will create a building facade out of character with the MUA District. +4

b. Ground floor building elevations which face the public right-of-way or pedestrian plazas shall provide a minimum of 40% and maximum of 70% by means of windows and doors between three (3) feet and seven (7) feet above the finished floor elevation. (R) +4

Rationale: Window and door openings create an interactive and appealing pedestrian and right-of-way building facade. +4

c. All windows must achieving a visible transmittance rating (VTR) of 0.85 or higher. (R) +4

Rationale: Transparency along the street encourages pedestrian activities and enhances security. +4

9. **Open space.** +4

a. A minimum of twenty-five percent of the net site area of a commercial, office or mixed use development, not including landscaping setbacks, shall be set aside as open space accessible to the public. For sites less than two acres a minimum of ten percent shall be set aside. (R) +4

Rationale: Open space will enhance the agricultural character of the development supporting the MUA District. +4

b. Open space accessible to the public should be centrally located. (P) +4

Rationale: In addition to providing an open character for the surrounding area, it is equally important for the development's occupants to be able visually and physically to enjoy the open space. +4

c. Required open space accessible to the public may be used for storm water retention. (C) +4

Rationale: The open space can serve as a retention area. +4

d. Required open space accessible to the public may be active (pasture/riding ring, food or flower garden, citrus grove) or passive (landscaped area). (C) +4

Rationale: The open space should respect the traditional agricultural uses. +4

10. **Landscape standards.**

a. Plant materials in required landscape areas shall be limited to those listed on the Mixed Use Agricultural plant list, a copy of which is available at the Phoenix Planning and Development Department, or their equivalent as approved by the Zoning Administrator. (R)

Rationale: A key method to preserve and foster the agricultural character of this district is landscaping with plant materials which have historic significance for ornamental or crop use in agricultural areas of Phoenix or provide the visual equivalent to those plants. The mixed use agricultural plant list combines plants (trees, shrubs, ground covers, accent plants, and vines) which Phoenicians have historically used in farming areas and drought tolerant plants which have the potential for crop use or have a lush appearance which complements the color, texture, and density of the traditional plants. The landscape palette enhances the district's character through its contrast to the plant materials which are used in and appropriate for Sonoran desert areas without an agricultural heritage.

b. Any plants listed in the invasive species list in Appendix B of the Sonoran Preserve Edge Treatment Guidelines, Section 507 TAB A3.7 shall be prohibited in the MUA District. (R) +4

Rationale: Invasive species shall be prohibited to protect the plant materials in the vicinity and to preserve the environment. +4

c. Where prominent existing plant materials are native species then the landscaping should be limited to the Sonoran Plant List. (P) +4

Rationale: Native Sonoran Desert landscaping should be encouraged where appropriate to promote uniform landscaping themes in areas with native vegetation. +4

d. A minimum of five percent of the landscaped area should be planted in flowers. (P) *4

Rationale: Flowers will contribute to the beauty of the project. *4

Date of Addition/Revision/Deletion - Section 649

+1 Addition on 6-9-1999 by Ordinance No. G-4189
*2 Revision on 5-22-2002 by Ordinance No. G-4435, eff. 6-21-2002
*3 Revision on 6-26-2002 by Ordinance No. G-4447, eff. 7-26-2002
+4 Addition on 7-2-2008 by Ordinance No. G-5217, eff. 8-1-2008
*4 Addition on 7-2-2008 by Ordinance No. G-5217, eff. 8-1-2008
-5 Deletion on 3-4-2009 by Ordinance No. G-5329, eff. 4-3-2009

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Appendix E,
SELECTED EXAMPLES OF INNOVATIVE FARM ORGANIZATIONS AND OPERATIONS

APPENDIX E: SELECTED EXAMPLES OF INNOVATIVE FARM ORGANIZATIONS AND OPERATIONS

FULL CIRCLE CERTIFIED ORGANIC FARM

(Longmont, Colorado)

www.fullcircleorganicfarms.com/

1,100-acre farm located in Longmont, Colorado. Actually ten separate farms under one umbrella. Combined, these ten farms grow more than 70 varieties of vegetables as well as small grains, grass hay and alfalfa.

Applicability to District:

- Similar growing season
- Adequate water available
- Close to Boulder and Fort Collins markets
- Reach wholesale as well as direct markets (farm stand on property)
- Served by produce distributors (LoCo; Door to Door)

AGRITOPIA

(Gilbert, AZ)

http://agritopia.com/ and http://joesfarmgrill.com/

Agritopia is a 166-acre mixed use community in Gilbert, AZ. This site was originally a family farm, establishing the future community to embrace its agrarian roots. The community was established in 2000. There are currently 450 single family homes. The initial farm size was a 22-acre USDA certified organic farm. The long term goal is to have up to 8 acres of full production.

Applicability to District:

- Farmer operates farm under lease structure
- Staff (owners: head farmer and spouse, farm manager; 3 month interns)
- Infrastructure (tractors, small walk-in cooler, packing shed, well, irrigation, hut, farm stand and delivery truck.)
- Vegetable output includes CSA (50 shares, shifting to 100 in 2015); Farmers Market (three markets including farm stand on premise); Wholesale (25 restaurant accounts); and U-pick
- Farm to Table Restaurant (Joe's Farm Grill)

WOODLAND GARDENS

(Athens, Georgia)

woodlandgardensorganic.com/

This four-acre farm is owned by a couple that hires younger staff to manage the farm. Selling organic produce through a variety of channels: direct sales through delivered boxes, farmers' market sales, sales to restaurants, etc., the farm reportedly sold $80,000 per acre several years ago, and had a goal of selling $100,000 per acre. The previous farm manager said that the difference between where they were and where they wanted to be was all in marketing – it was easy to produce that much food on the land. The farm hires four full-time staff who earn salaries of about $30,000 per year.

Applicability to District:

- Longer growing season in Georgia
- Adequate water available
- Consumers are close to farm
- Experienced farm manager, trained at UC Santa Cruz with exceptional motivation
- Like Brighton, in a smaller town with a large metro area nearby
- Unlike Brighton, in a university town

GREENSGROW GARDENS

(Center City of Philadelphia, Pennsylvania)

www.greensgrow.org/

This one-acre farm took over a brownfield site in a severely depressed area of town. The land is owned by the City, which offered a 99-year lease for $1. Owners Mary Seton Corboy and Tom Sereduk began the farm in 1998 hoping to sell wholesale to nearby restaurants; over time a retail model surfaced that combines selling 20 vegetables in smaller quantities to nearby restaurants (see list below); brokering food from rural farms to these same restaurants; selling 2,000 pounds of food to immediate neighbors through CSA shares; selling landscape plants to nearby residents who are fixing up their homes; and sales from a farm stand. The farm won a three-year grant from the USDA Community Food Projects Competitive Grant Program that allowed this vision to flourish. By 2012, the farm realized $1 million in sales (the largest share of this is landscape plants).

Greensgrow has now opened a farm in a suburban location, and is becoming a solar demonstration site as well as a working farm. In addition to sales noted above, the farm receives considerable support through philanthropic donations that help focus service to inner-city residents who are low-income, and to build innovative new sustainable technologies. This includes installing a closed-loop water system for hydroponic lettuce production. Rain water is saved in barrels. The entire farm sits on a slab of concrete.

Restaurant Partners serve a variety of dining styles:

Bufad Pizza: bufadpizza.com
Cafe Lift: cafelift.com
Capogiro: capogirogelato.com
Cedar Point Bar & Kitchen: cedarpointbarandkitchen.com
Franklin Fountain: franklinfountain.com
Johnny Brenda's: johnnybrendas.com
Little Baby's Ice Cream: littlebabysicecream.com

London Grill: londongrill.com
The Standard Tap: standardtap.com
Pizza Brain: pizzabrain.org
Prohibition Taproom: theprohibitiontaproom.com
Vedge Restaurant: vedgerestaurant.com

Applicability to District:

- Growing season is similar to Brighton
- Brighton Special District has better land and water
- Water is managed very carefully; may be able to rely on city water supply
- This farm's access to urban consumers is the most significant factor in its viability
- Earns main income from sales; receives grants for special projects
- Multiple market channels make the farm more sustainable
- Demonstration site that attracts visitors

THE CROP STOP

(Charleston, South Carolina)

www.postandcourier.com/article/.../150329997

Clemson Extension agent Harry Crissy has worked with small growers in South Carolina's Lowcountry to design a small, and potentially mobile, produce processing plant that will make it easier for small farms to gain access to light processing capability, such as washing, chopping, blanching, and freezing, right on the farm. The first Crop Stop has been installed on a farm on the outskirts of Charleston, and has been certified by the state of South Carolina for food processing. A second is planned for the Greenville-Spartanburg area. Initial cost runs about $100,000.

Applicability to District:

- This facility could be located anywhere
- Locating close to several farms that raise produce would offer them more choice in deciding where and how to sell
- A small facility such as this can prepare foods for school or hospital use
- Since the Crop Stop is mobile and modular, it can be expanded or moved as farms grow new capacity

LAS MILPITAS DE COTTONWOOD FARM

(Tucson, Arizona)

https://www.communityfoodbank.org/las-milpitas

Las Milpitas is a farm wholly within the city limits of Tucson, founded by the Community Food Bank of Southern Arizona, as a training and demonstration farm where organic practices are pursued in near-desert soils. It is run in partnership with the nearby Pima County, City High School, and many other community organizations. Food that is raised here is sold at lower cost to low-income residents of the city through a subsidized farmers' market. While not a model of a farm that is commercially independent, the farm is an excellent example of capacity building among low-income residents, and of producing food in a scarce-water environment.

Applicability to District:

- Grows organic produce in near-desert conditions
- Owned and operated by a food bank to serve low-income population
- Trains low-income residents in food production
- Located inside an urban area
- Uses drip irrigation to conserve water
- Formed around community partnerships

TRELLIS SYSTEMS

(Fort Wayne, Indiana)

trellisgrowingsystems.com/

Richard Barnes, a manufacturing engineer, began to farm in 2000 with a small, 9,000-row-ft. operation in Wells County, Indiana, growing seven varieties of raspberries and blackberries. As markets expanded, and with the help of several research grants, he was able in 2007 to design and build a modular system for growing berries on trellises that significantly increases the yield by forcing production to one side of the plant. He moved the operation from a rural site to a demonstration farm that covers about 40 acres inside the city of Fort Wayne. Barnes partners with more than 50 growers with 300 acres in Indiana, Ohio, and Pennsylvania (many of them Amish), projecting a 2016 harvest of 1,000,000 pounds. The firm represents each of these growers as a marketing agent and works through a national produce distributor.

Applicability to District:

- Successful and profitable berry production on irrigated land inside a city
- Vertical integration allows scattered small farmers to market collaboratively
- Technology offers a competitive advantage and should be applicable to Brighton
- Sales are more to national markets than to local consumers
- Engages producers who are marginalized from the mainstream economy

SEVEN SONS FARM

(Roanoke, Indiana)

https://sevensons.net/

The Hitchfield family has developed a vertically integrated farm operation that is actually several different businesses under one family umbrella. They raise grass-fed beef, pastured pork, and eggs, selling through an extensive network of buying clubs with 46 drop sites in Chicago, Detroit, and Indianapolis, and also sell $250,000 of products from a self-serve farm stand. They also sell a limited amount to mid-sized grocery stores. Each separate product is organized under its own business entity, both to reduce liability and for tax advantages.

By nesting production (rotating different livestock through the same plots of land), they can increase profits dramatically. The Hitchfields calculate that the farm earns a profit of $400-$500 per acre by direct marketing beef. Chickens are pastured on the same land (typically after the cattle have grazed, in order to clean up insects that have settled on the manure, and also to clip the grass one more time). So the cost of producing the chickens can be justified both as a sanitation strategy and as a production strategy (largely for laying eggs). The brothers estimate that grazing chickens adds value of about $3,000 per acre above what is earned by raising beef – on the same land. The presence of the chickens also lower veterinary costs for the cattle. Raising 200 hogs per year on the same land

adds about $800 profit per acre. Feed costs for these hogs (Duroc, Large Black, Hampshire) are reduced by 20% if they rotate the animals through pasture, rather than feeding them grain continuously. All in all, the brothers claim profits of $4,300 per acre of livestock. Total acreage of their farm (not all pastured) is 550 acres The farm also earns money by selling internet services, having developed their own ordering platform that is unique in that it allows farmer to set prices that vary with the price of inputs and the weight of the animal. Their files show 5,200 total members, but not all of these are actively purchasing food from Seven Sons at any one time.

Applicability to District:

- Rainfall is more plentiful in Indiana than in Colorado
- Soil is richer in Indiana
- Brighton is closer to more lucrative urban markets
- Nested business structures and vertical integration can be implemented in any location
- Intensive use of livestock builds soil fertility as well as profitability
- Direct marketing is performed at considerable scale
- Relies upon prior family wealth

CULTIVATE KANSAS CITY

http://www.cultivatekc.org/

Nonprofit organization in Kansas City whose tagline is "Growing food, farms, and community for a healthy food system." This is one of the more successful urban agriculture ventures we know, running three separate farms within city limits, and growing new farms in the future. They work in collaboration with the City of Kansas City which has just launched a grant program to help farmers and community gardens get access to water and improve their water management practices. The program, KC Grow, will provide funding to growers in Kansas City, MO for:

- Municipal water line tap and hydrant installation
- Rainwater and storm water catchment systems
- Supply lines from existing water supplies
- Farm design/ development to maximize rain water catchment and soil management practices that improve the water holding capacity of the soil.

Applicability to District:

- Close enough to serve as a technical resource to Brighton
- Fosters use of municipal water
- Commercially viable farming in urban settings
- Greater rainfall in Kansas City than in Brighton
- Brighton has more effective irrigation system in place

PRAIRIE HERITAGE FARM

(Power, Montana)

http://www.prairieheritagefarm.com/p/grain-and-seed-csa.html

This diversified, certified organic farm near Great Falls is a family farm owned and operated by Jacob and Courtney Cowgill. The couple offers CSA shares in the Great Falls, Montana area, offering organic vegetables, ancient and heritage wheat, and lentils in what they call the "Grainy Day CSA Box." They have installed a small grain mill so they can mill flour to custom order. The couple once sold heritage turkeys, but is taking a break from this. They also sell at local farmers markets.

Applicability to District:

- Dryland grain farming on a small scale
- Differentiated grains marketed directly to residential customers
- Custom milling offers added value and agritourism opportunities
- Suited to those limiting gluten intake

MEADOWLARK FARM

(Nampa, Idaho)

http://www.meadowlarkfarmidaho.com/description

Meadowlark Farm raises grass-fed lamb and pastured poultry from a suburban Boise farm, selling primarily direct to local residents in eastern Oregon and southwest Idaho. They have been in operation 24 years, and have become leaders in fostering the Boise local food movement, helping to start the new Boise Farmers Market, and creating a food destination zone in downtown Boise where food businesses are locating close to each other to create synergy and to raise visibility among consumers.

Applicability to District:

- Could serve as a technical resource to Brighton on constructing a local food system
- Experienced in clustering local food businesses
- Small scale livestock production should be very compatible with housing development on dry land in Brighton; this also builds soil fertility
- Idaho is also a relatively dry region with large scale vegetable production (onions and potatoes)

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Appendix F,
OIL AND GAS INFORMATION

02234984

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF THE PROMULGATION AND ESTABLISHMENT OF FIELD RULES TO GOVERN OPERATIONS IN CERTAIN LANDS WITHIN AND ADJACENT TO THE CITY OF BRIGHTON, ADAMS COUNTY, COLORADO	)))))	CAUSE NO. 1 DOCKET NO. 1407-GA-02 ORDER NO. 1-189

REPORT OF THE COMMISSION

The Colorado Oil and Gas Conservation Commission ("Commission") heard this matter on July 28, 2014, at a public hearing at the Weld County Administration Building Events Center 1150 "O" Street, Greeley, Colorado, 80631 upon application for an Order to establish a system of requirements and best management practices ("BMPs") to protect the Public Water System ("PWS") within and adjacent to the City of Brighton ("Brighton") ("Brighton PWS") located in Adams County, Colorado.

FINDINGS

The Commission finds as follows:

1. Commission Staff ("Staff") is an interested party in the subject matter of the above-referenced hearing.

2. Due notice of the time, place, and purpose of the hearing has been given in all respects as required by law.

3. The Commission has jurisdiction over the subject-matter contained in said notice, and of the parties interested therein, and jurisdiction to promulgate the hereinafter prescribed Order pursuant to the Oil and Gas Conservation Act.

4. Commission Rule 317B provides a regulatory framework for protecting the Brighton PWS; however, this Rule is limited in scope.

5. Brighton obtains between 70% and 100% of its municipal water supply from two networks of shallow groundwater wells known as the Beebe Draw Wells and the South Platte Wells (collectively, "PWS Wells").

a) The Beebe Draw Wells are comprised of four groundwater wells which are classified by the Colorado Department of Public Health and Environment ("CDPHE") as groundwater under the direct influence of surface water ("GUI"). These wells are completed in the Beebee Draw alluvium at depths of no more than 80 feet below ground surface ("BGS") and static ground water elevations are between 15 and 20 feet BGS. The Beebe Draw Wells have a decreed right to pump at rates up to 2,000 gallons per minute ("GPM") each.

b) The South Platte Wells are comprised of seven groundwater wells which are completed in the alluvial aquifer of the South Platte River but, with one exception, are not classified as GUI wells. These wells are completed at depths of no more than 85

feet BGS and static groundwater elevations are no deeper than 50 feet BGS. The South Platte Wells pump at rates up to 1,500 GPM, depending on the well.

6. Brighton is responsible for providing a safe and reliable water supply to its 34,000 citizens, as well as commercial and industrial customers. Water from the PWS Wells is treated at one (1) of two (2) water treatment facilities prior to distribution to Brighton's customers. Although Brighton has an additional supply of water from an adjacent water provider, this supplemental supply is insufficient on its own to meet the needs of the Brighton's customers; accordingly, the PWS Wells are the primary water source for Brighton.

7. The following components of the Brighton PWS relevant to this Order are integral to the Brighton PWS:

a) The PWS Wells;

b) The Ken Mitchell Lakes and Barr Lake (collectively "Lakes"), which store water as part of the Brighton PWS system; and

c) Specified segments of the South Platte River and of certain streams and ditches, including but not limited to Second Creek, Third Creek, Fulton Ditch and Lateral, Brighton Ditch and Lateral, and Brian Canal (collectively, the "River, Stream, and Ditch Segments"). The relevant River, Stream, and Ditch Segments are indicated on the map entitled Brighton PWS Management Map, Commission Order No. 1-XXX ("Brighton PWS Map") attached hereto as Exhibit A.

8. Based on the facts noted in paragraphs 5, 6, and 7 above, and following consultation with Brighton, CDPHE, and oil and gas Operators with lease holdings proximate to the Brighton PWS (" Brighton Operators"), Staff found a unique set of circumstances associated with the Brighton PWS: a high percentage of Brighton PWS is obtained from shallow groundwater wells; the groundwater wells are or may be under the direct influence of certain surface water; and the Lakes and specified River, Stream, and Ditch Segments are essential to Brighton's PWS.

Based on this unique set of circumstances, Staff determined certain requirements and BMPs are warranted for New Oil and Gas Locations proximate to the Brighton PWS to eliminate, minimize, or mitigate potential significant adverse impacts associated with Oil and Gas Operations

9. Based on the foregoing, Staff requests the Commission to enter an Order establishing:

a) A **Brighton PWS Exception Zone** ("Exception Zone"), in which no new Oil and Gas Location will be constructed unless the Operator obtains a Rule 502.b. variance. The Brighton PWS Exception Zone is defined as:

i. The area within a 500 foot radius circle measured from each PWS Well's center point; and

ii. The area within 300 feet on each side of the River, Stream, and Ditch Segments, and the area within 300 feet around the

perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake.

The Exception Zone around the Lakes and the River, Stream, and Ditch Segments is depicted on the Brighton PWS Map. To protect the precise location of the PWS Wells from public disclosure as required by Federal Law, the Exception Zone around the PWS wells is not shown on the Brighton PWS Map. Operators proposing to build a new Oil and Gas Location within the Groundwater Sampling Zone around the PWS Wells (describe in section 9.b., below) should consult with the Commission regarding the exact area of the Exception Zone around the PWS Wells.

b) A **Brighton PWS Groundwater Sampling Zone** ("Groundwater Sampling Zone), defined as:

i. The area within a 2,640 foot radius circle measured from each PWS Well's center point; and

ii. The area between 301 and 500 feet on each side of the River, Stream, and Ditch Segments and the area between 301 and 500 feet around the perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake. This Groundwater Sampling Zone shall not be applied to lands based solely on proximity to the Fulton Ditch or Lateral, the Brighton Ditch or Lateral, or the Brian Canal.

c) A **Brighton PWS BMP Buffer Zone** ("BMP Buffer Zone"), defined as:

i. The area within a 2,640 foot radius circle measured from each PWS Well's center point (co-extensive with the Groundwater Sampling Zone around the PWS Wells); and

ii. The area within 2,640 feet on each side of the River, Stream, and Ditch Segments, and the area within 2,640 feet around the perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake.

10. This Order shall only apply to Drilling, Completion, Production, and Storage ("DCPS") Operations and Non-Exempt Linear Features as defined in Commission Rule 317B.a. at New Oil and Gas Locations proposed within the Exception Zone, Groundwater Sampling Zone, and BMP Buffer Zone described in paragraph 9. Requirements for New Oil and Gas Locations proposed within the Exception Zone, Groundwater Sampling Zone, or BMP Buffer Zone are set forth in the proposed Order, below.

11. On July 28, 2014, Staff, in consultation with Brighton, CDPHE, and Brighton Operators, initiated a request for an Order to establish requirements and BMPs for DCPS Operations at New Oil and Gas Locations in proximity to the Brighton PWS.

12. Brighton Operators were notified regarding this proposed Order concerning protection of the Brighton PWS by the Commission, negotiated the terms of the proposed Order

in good faith with the Commission, Brighton and CDPHE, and agree to the material terms of this proposed Order No 1-189 as applied only to the Brighton PWS.

ORDER

IT IS HEREBY ORDERED the following shall apply to DCPS Operations at New Oil and Gas Locations for the protection of the Brighton PWS:

1. **Buffer Zones.**

The following buffer zones are hereby established around specified features of the Brighton PWS:

a) A **Brighton PWS Exception Zone** ("Exception Zone"), in which no new Oil and Gas Location will be constructed unless the Operator obtains a Rule 502.b. variance. The Brighton PWS Exception Zone is defined as:

i. The area within a 500 foot radius circle measured from each PWS Well's center point; and

ii. The area within 300 feet on each side of the River, Stream, and Ditch Segments, and the area within 300 feet around the perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake.

b) A **Brighton PWS Groundwater Sampling Zone** ("Groundwater Sampling Zone), defined as:

i. The area within a 2,640 foot radius circle measured from each PWS Well's center point; and

ii. The area between 301 and 500 feet on each side of the River, Stream, and Ditch Segments and the area between 301 and 500 feet around the perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake. This Groundwater Sampling Zone shall not be applied to lands based solely on proximity to the Fulton Ditch or Lateral, the Brighton Ditch or Lateral, or the Brian Canal.

c) A **Brighton PWS BMP Buffer Zone** ("BMP Buffer Zone"), defined as:

i. The area within a 2,640 foot radius circle measured from each PWS Well's center point (co-extensive with the Groundwater Sampling Zone around the PWS Wells); and

ii. The area within 2,640 feet on each side of the River, Stream, and Ditch Segments, and the area within 2,640 feet around the

perimeter of the Lakes, measured from the ordinary high water mark of each River, Stream, or Ditch Segment or Lake.

EXHIBIT A, entitled "Brighton PWS Management Map, Commission Order No. 1-189" depicts the Exception Zone, Groundwater Monitoring Zone and BMP Buffer Zone and is incorporated into this Order. An Operator proposing to locate a New Oil and Gas Location within the Groundwater Sampling Zone shall consult with the Commission regarding the exact Exception Zone boundaries.

2. Requirements for DCPS Operations Conducted at New Oil and Gas Locations in the Exception Zone.

DCPS Operations are prohibited within the Exception Zone unless a variance is granted pursuant to Rule 502.b and consultation with the CDPHE occurs. Furthermore, a Form 2 or Form 2A with appropriate Conditions of Approval ("COA") and/or BMPs must be approved, or the operation is covered in an approved Comprehensive Drilling Plan pursuant to Commission Rule 216.

In determining appropriate COAs or BMPs for such operations, the Director shall consider the extent to which the COAs or BMPs are required to prevent adverse impacts to the Brighton PWS.

a) The Director shall grant a variance if the Operator demonstrates that site-specific BMPs and operating procedures will result in substantially equivalent protection of drinking water quality as in the Groundwater Sampling Zone and BMP Buffer Zone at the proposed Location. Any DCPS Operation at a New Oil and Gas Location within the Exception Zone will be required to comply, at a minimum, with requirements for the BMP Buffer Zone; and

b) Either:

i. Conducting the DCPS Operation outside the Exception Zone would pose a greater risk to public health, safety, or welfare, including the environment and wildlife resources, such as may be the case where conducting the DCPS Operations outside the Exception Zone would require construction in steep or erosion-prone terrain or result in greater surface disturbance due to an inability to use infrastructure already constructed such as roads, well sites, or pipelines; or

ii. Conducting DCPS Operations beyond the Exception Zone is technically infeasible and prevents the Operator from exercising its mineral rights.

c) A variance within the Exception Zone will require a groundwater sampling point or dedicated monitoring well to be installed between the proposed Oil and Gas Facility and the closest PWS Well, Lake, or River or Stream Segment as applicable, including pre- and post-drilling/completions sampling consistent with Paragraph 4 below.

3. Requirements for DCPS Operations at New Oil and Gas Locations within the BMP Buffer Zone.

The following shall be required for all DCPS Operations at New Oil and Gas Locations within the BMP Buffer Zone:

(1) Pitless drilling systems;

(2) Flowback and stimulation fluids shall be contained within tanks that are placed on a well pad or in an area with downgradient perimeter berming;

(3) Berms or other containment devices shall be constructed around crude oil, condensate, and produced water storage tanks as follows:

a. Secondary containment shall be sized to contain a minimum of 150% of the volume of the largest primary containment vessel within the secondary containment area.

b. Containment berms shall be constructed of steel rings, designed and installed to prevent leakage and resist degradation from erosion or routine operation.

c. Secondary containment areas for tanks shall be constructed with a synthetic or engineered liner that contains all primary containment vessels and flowlines and is mechanically connected to the steel ring to prevent leakage.

d. Tertiary containment, such as an earthen site berm, is required around the downgradient and side-gradient portions of Production Facilities, including process vessels.

(4) Production Facilities will be installed with automated fluid level monitoring, capable of alerting the Operator if a sudden change in fluid level or upset condition occurs. Additionally, wells will be equipped with remote shut-in capability.

(5) All loadlines shall be bullplugged or capped.

(6) Notification to the Brighton Public Works Department prior to commencement of new surface disturbing activities at the site; and

(7) An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for Brighton. The emergency response plan shall specify when notifications to Brighton shall be made and must be prepared in consultation with Brighton.

In the event of a spill or release, the Operator shall immediately implement the emergency response procedures in the above-described emergency response program.

If a spill or release results in significant adverse impacts or threatens such impacts to a portion of the Brighton PWS, the Operator shall notify Brighton immediately following discovery of the release in addition to reporting in accordance with Rule 906.b.

4. Groundwater Sampling Zone

An Operator will conduct the following groundwater sampling regime at any New Oil and Gas Location within the Groundwater Sampling Zone, in addition to groundwater monitoring required by Commission Rule 318A.e.(4):

a. Initial baseline samples and subsequent monitoring samples shall be collected as follows from the following Available Water Sources, up to a maximum of four (4), within a one-half (1/2) mile radius of the proposed New Oil and Gas Location:
   i. Only Available Water Sources, as defined in Commission 100-Series Rules, completed within the alluvial aquifer shall be considered for sampling.
   ii. No more than one (1) Available Water Source selected for sampling may be located a greater distance from the PWS Well or River, Stream or Ditch Segment or Lake than the proposed Oil and Gas Location, as measured to the farthest point on the Oil and Gas Location.
   iii. Provided good faith effort is made to obtain access to a Water Source for sampling, lack of Available Water Source shall not be grounds for permit denial by the Commission.

b. As an alternative to the program described in 4.a., Operators may propose the following to satisfy initial and subsequent groundwater monitoring requirements:
   i. Prior to spud, the Operator shall select a sample site at or near the edge of the New Oil and Gas Location, on the side nearest the Brighton PWS. The selected sample site shall be identified to the Commission on the Form 2A for a proposed New Oil and Gas Location and shall be recorded upon establishment per Commission Rule 215.
   ii. The Operator shall contract a third party to utilize direct push technology, hollow stem auger, or other equivalent method in accordance with an established Standard Operating Procedure ("SOP") to install and log a temporary monitoring and observation hole. The temporary monitoring and observation hole shall be noticed, installed, and subsequently abandoned in accordance with applicable Colorado Division of Water Resources rules, regulations, and policies.
   iii. The temporary monitoring and observation hole shall be advanced a minimum of five feet (5') into alluvial groundwater or to refusal, whichever is first. If refusal is encountered prior to groundwater, at least one (1) subsequent attempt must be made to advance to groundwater.
   iv. Depending on the lithologic characteristics of the boring, a temporary monitoring point (such as with one-inch (1") slotted PVC) may be completed or the sample point may be left open for the purposes of collecting a groundwater sample.
   v. Following sample point development, if possible, a water sample will be collected from the sample point in accordance with standard environmental sampling practices, with proper chain-of-custody maintained.
   vi. Each subsequent sampling event (described in paragraph 4.c. below) shall be conducted within five feet (5') of the previous.
   vii. If no water sample can be obtained from the boring, or refusal is encountered before groundwater is encountered, the Operator shall inform the Commission and propose an alternative method for sample collection or request a variance from this requirement. Provided good faith effort is made,

failure to obtain access to a groundwater sample will not be grounds for permit denial by the Commission.

c. Initial sampling shall be conducted within twelve (12) months prior to spud of the first well on a well site Oil and Gas Location, preferably as near as possible to the first spud date, and may occur after the Oil and Gas Location has been constructed, but must occur prior to the first production to an Oil and Gas Location where no wells are present. One (1) subsequent sampling event shall be conducted between six (6) and twelve (12) months, and a second subsequent sampling event shall be conducted between sixty (60) and seventy-two (72) months following completion of the Well, Dedicated Injection Well, or the last Well on a Multi-Well Site, or the date of first production to a Production Facility Location.

d. Sampling and analysis shall be conducted in conformance with an accepted industry standard as described in Rule 910.b.(2). Sampling and analysis conducted in conformance with the Commission Model Sampling and Analysis Plan, as posted on the Commission website, shall be deemed to satisfy the requirements of this subsection. Upon request, an Operator shall provide its sampling protocol to the Director and/or Brighton.

e. The initial baseline testing described in this section shall include pH, specific conductance, total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO3), major anions (bromide, chloride, fluoride, sulfate, nitrate and nitrite as N, phosphorus), major cations (calcium, iron, magnesium, manganese, potassium, sodium), other elements (barium, boron, selenium and strontium), presence of bacteria (iron related, sulfate reducing, slime forming), total petroleum hydrocarbons (TPH) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). Field observations such as odor, water color, sediment, bubbles, and effervescence shall also be documented.

f. Subsequent sampling shall include total dissolved solids (TDS), dissolved gases (methane, ethane, propane), major anions (bromide, chloride, sulfate, and fluoride), major cations (potassium, sodium, magnesium, and calcium), alkalinity (total bicarbonate and carbonate as CaCO3), BTEX compounds (benzene, toluene, ethylbenzene and xylenes), and TPH.

g. If free gas or a dissolved methane concentration greater than 1.0 milligram per liter (mg/l) is detected in a water sample, gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) shall be performed to determine gas type.

h. The Operator shall notify the Director, Brighton, and the surface owner within twenty-four (24) hours if methane is detected at or above 10 mg/l; the test results indicate thermogenic or a mixture of thermogenic and biogenic gas; the methane concentration increases by more than 5.0 mg/l between sampling periods; or BTEX compounds or TPH are detected in a water sample.

i. Copies of all final laboratory analytical results shall be provided to the Director, Brighton, and the water well owner or landowner within three (3) months of collecting the samples. The analytical results, the surveyed sample Water Source locations,

and the field observations shall be submitted to the Director in an electronic data deliverable format.

j. An Operator may elect to install one or more groundwater monitoring wells to satisfy, in full or in part, the requirements of this Order, but installation of monitoring wells is not required under this Order. If a monitoring well is installed, it shall be installed in such a manner to prevent contaminant migration from the ground surface to the shallow alluvial aquifers for the life of the well.

k. The sampling results obtained to satisfy the requirements of this Order, including any changes in the constituents or concentrations of constituents present in the samples, shall not create a presumption of liability, fault, or causation against the owner or Operator of an Oil and Gas Location who conducted the sampling, or on whose behalf sampling was conducted by a third-party. The weight and admissibility of any such sampling results in a legal proceeding shall be determined by the presiding body according to applicable administrative, civil, or evidentiary rules.

5. Consultation.

a. Where a discrepancy between the Zones as described above and the attached Brighton PWS Management Map exists, the Operator shall request a consultation with Brighton and Staff to determine the applicability of this Order.

b. Operators will make diligent efforts to avoid locating new Oil and Gas Facilities within 300 feet of the Brighton Lateral or the Fulton Ditch from the point of diversion to the Ken Mitchell Lakes downstream to the point of diversion to the South Platte River. If a new Oil and Gas Location is proposed in that area, the Operator will consult with the Director regarding site-specific BMPs and Operating practices in addition to those required for the BMP Buffer Zone that may be required to avoid potential significant adverse impacts to the ditches or South Platte River.

IT IS FURTHER ORDERED:

1. The provisions contained in the above Order shall become effective immediately.

2. The Commission expressly reserves its right, after notice and hearing, to alter, amend or repeal any and/or all of the above Orders.

3. This Order has been developed to address a unique set of circumstances arising in and adjacent to Brighton, Colorado and shall not be construed as a template for application elsewhere in the State. COGCC considers the need for orders or variances on a fact-specific basis.

4. Nothing in this Order shall alter, impair, or negate the authority of Brighton to regulate land use related to Oil and Gas Operations, so long as such local regulation is not preempted by Oil and Gas Act or regulations promulgated thereunder.

5. Nothing in this Order shall be construed to alter the intent, scope, language, or basis and purpose of Rule 317B or Rule 609.

6. Under the State Administrative Procedure Act the Commission considers this

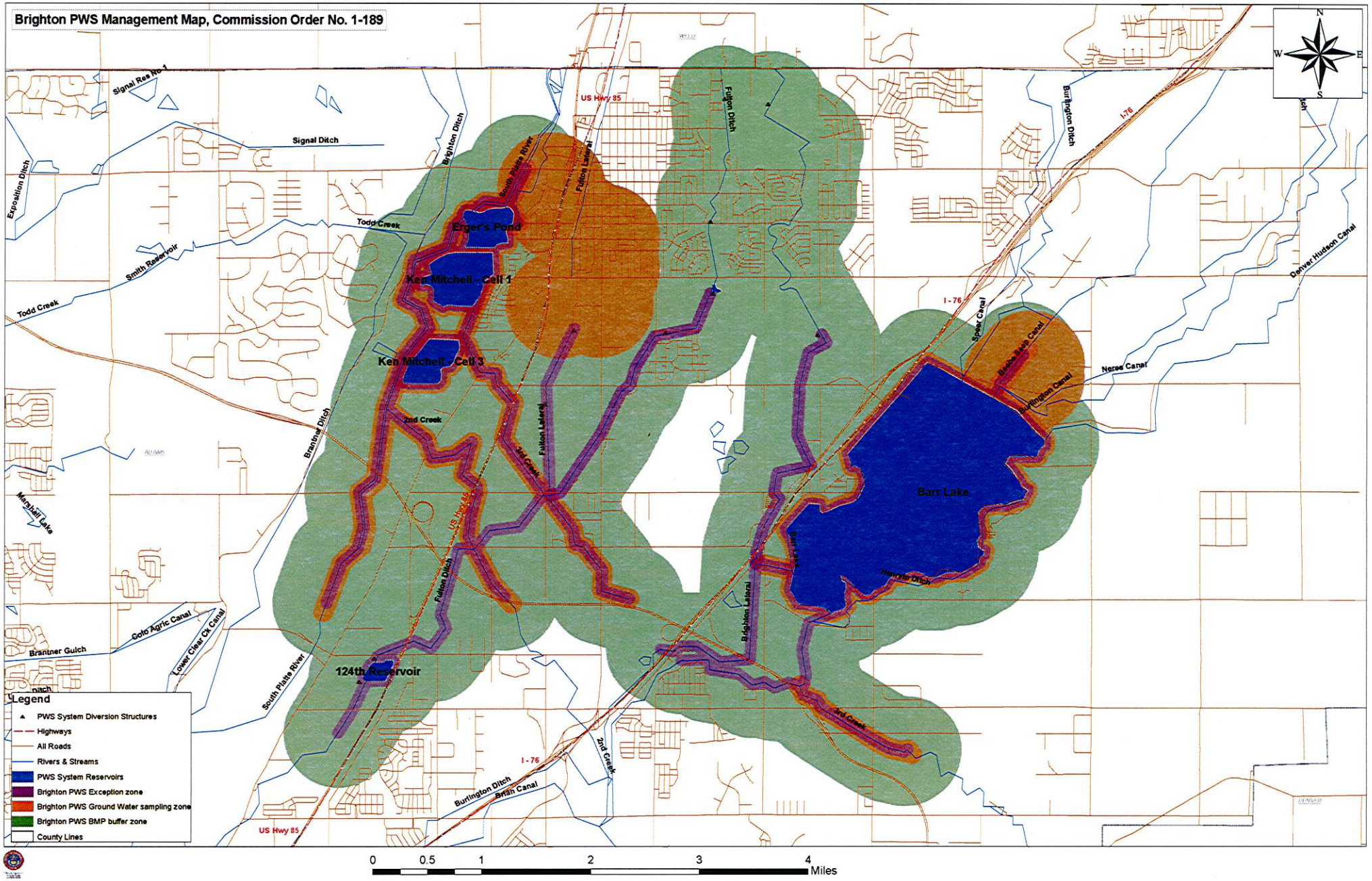
Order to be final agency action for purposes of judicial review within 35 days after the date this Order is mailed by the Commission.

7. An application for reconsideration by the Commission of this Order is not required prior to the filing for judicial review.

ENTERED this 31st day of July, 2014, as of July 28, 2014.

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

By_____
Robert J. Frick, Secretary


Brighton PWS Management Map, Commission Order No. 1-189
Signal Res No 1
Signal Ditch
Exposition Ditch
Brighton Ditch
South Platte River
Fulton Lateral
US Hwy 85
Fulton Ditch
Burlington Ditch
I-76
Todd Creek
Smith Reservoir
Erger's Pond
Ken Mitchell - Cell 1
Ken Mitchell - Cell 3
2nd Creek
3rd Creek
Brantner Ditch
Marshall Lake
Speer Canal
Beebe Seep Canal
Burlington Canal
Neres Canal
Denver Hudson Canal
Barr Lake
Henrylin Ditch
Brighton Lateral
Colo Agric Canal
Lower Clear Ck Canal
Brantner Gulch
124th Reservoir
Brian Canal
Legend
PWS System Diversion Structures
Highways
All Roads
Rivers & Streams
PWS System Reservoirs
Brighton PWS Exception zone
Brighton PWS Ground Water sampling zone
Brighton PWS BMP buffer zone
County Lines
0
0.5
1
2
3
4
Miles
N
S
E
W

Well Summary Adams/Brighton Planning District

ID	Well Name	Well #	Operator Name	Operator #	Status	Date	Location	Notes
05-001-09847	Anderson	19-1-10HC	WARD PETROLEUM CORPORATION	10359	DG	5/29/2015	SWSW 18 1S 66W 6	Pad approved for 12 wells, only 1 Form 2 submitted
05-001-09801	SHARP	24-3-11HC	WARD PETROLEUM CORPORATION	10359	WO	3/13/2015	SWSW 24 1S 67W 6	Pad approved for 2 wells
05-001-09802	Sharp	24-3-9HC	WARD PETROLEUM CORPORATION	10359	XX	2/8/2014	SWSW 24 1S 67W 6	
05-001-09842	Schaefer	25-1-4HC	WARD PETROLEUM CORPORATION	10359	XX	1/28/2015	SWSE 24 1S 67W 6	Form 2A for 16 wells, 14 Form 2s, 0 drilled, exp. 1/2017
05-001-09849	Schaefer	25-1-2HC	WARD PETROLEUM CORPORATION	10359	XX	7/13/2015	SWSE 24 1S 67W 6	
05-001-09858	Schaefer	25-1-5HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09859	Schaefer	24-3-3HC	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09860	Schaefer	24-3-8HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09861	Schaefer	25-1-6HC	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09862	Schaefer	24-3-4HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09863	Schaefer	24-3-7HC	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09864	Schaefer	24-3-2HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09865	Schaefer	25-1-3HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09866	Schaefer	25-1-8HC	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09867	Schaefer	24-3-6HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09868	Schaefer	24-3-5HC	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-09869	Schaefer	25-1-7HN	WARD PETROLEUM CORPORATION	10359	XX	9/29/2015	SWSE 24 1S 67W 6	
05-001-06790	CASE	1	NOBLE ENERGY INC	100322	PA	6/20/2013	NENE 17 1S 66W 6	
05-001-06841	TASHIRO-UPRR	1	NOBLE ENERGY INC	100322	PA	9/17/2013	SWSW 17 1S 66W 6	
05-001-08670	WAGNER	1	BRANDLY OILMAN CONSULTANTS INC	9800	PA	6/7/1985	SWSE 18 1S 66W 6	
05-001-06809	DAVIS	1	EXTRACTION OIL & GAS LLC	10459	PA	4/21/2014	NESW 20 1S 66W 6	
05-001-09002	HUEBNER	25-44	PETRO-CANADA RESOURCES (USA) INC	72085	PA	7/1/1999	SESE 25 1S 67W 6	
05-001-06679	LETTERLY-SCOTT	1	PDC ENERGY INC	69175	PR	7/1/2013	NENE 24 1S 67W 6	PA in 2014, status in error on scout card
05-001-06999	CASE	1	CON PETRO INC	19175	DA	6/10/1975	NENE 17 1S 66W 6	
05-001-08515	RITCHEY	19-Jan	PETRODYNE PROD CO INC	69085	DA	9/19/1984	SESW 19 1S 66W 6	
05-001-07215	AMEND	1	CHAPARRAL RESOURCES INC	16250	DA	3/4/1977	SWSW 30 1S 66W 6	
05-001-06700	KNOWLTON	1	XO EXPLORATION INC	98000	AL	1/11/1974	NESE 30 1S 66W 6	