

## CHAPTER 4. THE LAND USE RESEARCH

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1. Ubic, H (2011) Towards Integration of Community Gardening in Community Planning. Boise State University October 30.
2. Ubic, H (2011) Local food Provision as a Community Planning Goal. Boise State University August 22.
3. Ubic, H (2011) Role of Agricultural Land in Ada County. Boise State University March.
4. Kushlan, D. Ubic, H. & Cruz, E. (2011) Sustaining Agriculture, Measuring Success. Presented at the Annual meeting of the American Planning Association Idaho Chapter Conference. Oct 12-14.
5. Charts, graphs and inventories

**Fall Internship**

**Urban Land Institute**

**Preservation of Agricultural Land**

**Towards Integration of Community Gardening in  
Community Planning.**

Helen Ubic

Boise State University

Fall 2011

CRP 590

The City of Boise Draft Urban Agriculture Ordinance defines community gardens as “Land used to grow plants and harvest food or ornamental crops for educational purposes, donation, use by those cultivating the land, or to be sold to other residents of the community.” (Riddle, 2011, p.1) Access to local food is the fastest growing social concern in the U.S.A and increasingly considered a cornerstone in achieving sustainable cities (APA report no. 565, 2011). Interest in local food often manifests itself as a desire to participate in community gardening. While some consider this simply the latest fad, research by the American Planning Association (APA) suggests that this resurgence in gardening for food is “expected to increase over the next decade... therefore urban agriculture has implications for urban planning.” (Hodgson, 2011, p.2)

The attraction of community gardening is many-fold. The participant gains knowledge of an important life skill, increasing their food security; eats tasty, fresh, healthy food; gets physical exercise; avoids food-borne diseases, and minimizes environmental damage caused by chemical use during production and transportation of food. (Lehrer, 2011, p.1) Gardening fosters an understanding of the importance of local agriculture. Also, as Raj Patel, author of *Stuffed & Starving*, observed in his presentation at Boise State, “local food tastes better.” (Patel, 2011) Industrial agriculture grows varieties which transport well at the expense of taste; consequently, preserving the seeds of tasty varieties often falls to community gardeners.

Unfortunately, urban agriculture in general, and community gardens in particular, disappeared off the planning profession’s radar about the same time that American families achieved widespread ownership of cars; although agriculture has been part of North American cities for centuries, and Howard’s Garden City considered common gardens or allotments “necessary to the city’s proper function.” (Howard, 1898, p.318) “In the 20<sup>th</sup> century professional planners, seeking to regulate land use and improve public health...defined farming as a rural

activity” due to its increasingly industrial nature. “By the mid 20<sup>th</sup> century many cities’ zoning codes no longer included farming as a recognized land use.”(Hodgson, 2011, p.10) As society faces fuel insecurity and climate change, public officials are reconsidering how food can be delivered reliably to the populace. Also, with obesity approaching epidemic proportions “city planners... are challenged to consider how... health is affected by the physical and social environment.” (Lehrer, 2011, p. 1)

Planners like Putman lament the loss of “social capital” following a falling off in membership of social groups. He contends that a society of individuals pursuing materialism and personal happiness, is increasingly “bowling alone,” no longer exercising the social skills “that facilitate coordination and cooperation for mutual benefit.” (Putman, 1995, p.125). Jane Jacobs long held that knowing and trusting neighbors is a pre-requisite for looking out for them. To re-establish the “heightened degrees of community that she describes in the *Death and Life of Great American Cities*” (LeGates, 2007, p.342) society needs to develop new places to meet. Maria of Boise City Parks and Recreation notes that Borah Community Garden is functioning as the perfect venue for building social capital. (Minnicucci, 2011) It is enabling friendships and community cooperation. This strengthening of the “social fabric” could have longer-term effects. Temkin and Rohe argue that neighbourhoods decline, stabilize or upgrade. “A neighborhood’s trajectory results from its ability to position itself favourably, acquiring ... social resources” such as community gardens (Temkin, 1996, p.159). Gardens can help neighborhoods to “mature” rather than decline. Sustainable neighborhoods mature.

Several initiatives to encourage community gardening are progressing in the valley, some started by planners and others which would benefit from the involvement of planners.

- **Revising the Urban Agriculture Ordinance in Boise** will update the rules to better reflect the needs of citizens while maintaining “neighborhood compatibility and

protecting the health, safety and welfare of the general public.” (Draft 11-09-09.01) The addition of a definition for urban agriculture to the ordinance will protect community gardeners from neighborhood prejudice and recognize the land use, albeit still as an interim one. Community gardening will be allowed by right in all zones subject to the standards in section 11-09-12. Obligations include: clean up in a timely manner; use of home gardening mechanical equipment where possible and only in daylight hours; signage on vacant parcels displaying contact information for the garden manager. “Pick-up and delivery of food, including purchased shares of locally grown produce... will not be considered retail sales.” (11-09-12 K). Retail sales will be allowed by the Planning Director with a Zoning Certificate. Produce for sale should be mostly grown on-site. Up to three hives of bees, six chickens (without a rooster), four ducks and four rabbits can be kept on community gardens. These will be considered pets under section 11-09-09.03.

- **Establishing development incentives** to encourage community gardens is the next city goal (Medlin, 2011) Clustering and development density bonuses in exchange for inclusion of community gardening space offer the opportunity for planners to proactively negotiate the inclusion of gardens. (Hodgson, 2011, p.54)
- **Adopting Smart-Growth strategies** like “concentrated development and mixed uses” (APA, PAS 565, 2011, p.23) and revising zoning codes to allow mixed use. Cody Riddle noted that Boise’s Planning and Zoning Ordinances date from the 1960s and are therefore still Euclidean in nature. Encourage transit and complete streets to enable access to gardens.
- **Enabling of Community Gardens** is occurring in a piecemeal fashion. It is included as a goal in the Boise City Parks and Recreation Comprehensive Plan which was developed through a process of public participation. “Respondents to the 2009 Household Survey favor the development of gardens as “one of the most important public-park and recreational facilities needed.” (Boise Parks Comp plan 2010. p.5-7) Boise initiated a pilot garden at Borah Park, so the process for leasing, establishing and running a garden on city property exists. Their guidance note details the extent of the “limited staff support” available for design development, finding a location and garden preparation (Boise, 2009, p.2-3). A non-profit or neighborhood association must run the community garden (Boise, 2009, p.1). The experience indicates that community gardens could be best located outside parks unless the criteria are changed. Parks require onerous standards like insuring the city against injury to persons or property. (Boise, 2011, section 5); graffiti must be removed within 24 hours, and there is no opportunity for personalizing plots. Other participating organisations include Canyon County Agriculture Extension and Boise Urban Garden School. The Idaho Office for Refugees runs eight gardens. Their success results from federal funding, strong charitable support, and permanent staff.
- **Organising a Community Food Assessment (CFA)** will establish the need for local food, the current extent of activity, and the resources available. Results provide the basis for future community action plans (Carmichael, 2011). The Collister Neighborhood Association intends to carry out a CFA next summer. Following this pilot the CFAs should be repeated for each neighborhood resulting in a comprehensive picture of the state of the local food system.

Considering the lack of information to define needs, organizations to run gardens and benchmarks to track progress, planners could create a support framework by:

- **establishing a Treasure Valley Food Policy Council** or task force with planners on staff. Besides solving local food market problems, the council would organize and run community gardens. It should also establish and review benchmarks every two years, demanding changes to policies if they are ineffective. These benchmarks could be based on acreage and quality-of-life indicators like the “Genuine progress indicator” (APA PAS 565, 2011, p.28). These benchmarks should be “developed through working with the community.” (APA PAS report no. 565 p.16)
- **creating a Land Trust** whose focus is urban agriculture and community gardens not environmental conservation. (Medlin, 2011) This group should fundraise to buy and lease land and promote agricultural easements. Like “Urban Garden share” they should match gardeners with landowners. They could encourage companies like Micron to lease land or buy it for the community in the same way that John Hantz of the Detroit-based Hantz Group has committed up to \$30 million to buy land in Detroit.” (Lehrer, 2011, p.82) They could educate the public and lobby for tax levies like the successful Foothills Levy. Precedent exists; public support of Seattle’s P-Patch program is so extensive that in 2008 “residents approved a special levy of \$2 million to develop new gardens.” (Hodgson 2011, p.57)
- **carrying out a land audit** to locate vacant and under-utilised land. The map can then be made available to the Land Trust and the public. Boise is launching an updated interactive mapping system on 1 November 2011 which will identify suitable city-owned open space.

A community garden is in fact a major public participation tool assisting city planners with their goal to “assure a secure and stable food supply.” (Meter, 2010, p.1) They are vital to sustainable-lifestyle education; however, most planners are themselves actively developing “a sufficient and functional level of understanding of urban agriculture” (Hodgson, 2011, p.110) while creating a framework within which community gardens can flourish. City planners will realize that this movement to grow food close to home is part of a cultural shift resulting in change to the food choices of Americans, rich and poor. Thus community gardens “present an opportunity to grow healthier, more sustainable, more resilient communities.” (Hodgson, 2011, p.110) and could generate community commitment to maintaining adequate local farmland while nurturing the next generation of local agricultural entrepreneurs.

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**Summer Internship**

**Urban Land Institute**

**Preservation of Agricultural Land**

**Local Food Provision as a Community Planning Goal.**

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CRP 590

The Urban Land Institute (ULI) received a grant in May 2011 to investigate how agricultural land can become more economically viable, more sustainable and not so easily converted to urban development in Ada and Canyon Counties. As their research intern I studied why our current system of agriculture and land development is simultaneously reducing supply of agricultural land, making agriculture unprofitable and resulting in health and energy-source problems.

In Ada County only around 10% of land is classed as arable for tax purposes. (Comp Plan 2006) Crossroads Resource Center (CRC) found that locally there has been “rapid population increase since 1969,” and the 2010 U.S. census recorded growth in Meridian of 125% since 2000. Should the economy recover, this growth is likely to resume. Nationally the amount of developed land increased by 57% from 1982 to 2007. “Our food is increasingly in the path of development. An astounding 91% of our fruit and 78% of our vegetables are produced in urban-influenced areas.” (American Farmland Trust, 2011) CRC concludes that “there has been limited public planning to assure a secure and stable food supply.” (Meter, 2010, p.1) In the Treasure Valley the balance of payments regarding agriculture is significantly negative.

*[There is] a net outflow of \$400 million from the region’s economy. Meanwhile, consumers spend more than \$1.7 billion buying food from outside... Total loss to the region is \$2 billion of potential wealth each year. This loss amounts to more than the value of all commodities raised in the region. (Meter, 2010, p.3)*

The primary energy source for agriculture is oil. “It takes ten fossil-fuel calories to make one food calorie.” (Burns, 2011) The increasingly unreliable supply will affect food prices and force energy efficiency improvements. As Janie Burns, local farmer and member of the Treasure Valley Food Coalition, put it we are currently “eating oil.”

In a recent New York Times article, Hannah Fairfield states that “Americans eat 31 percent more packaged food than fresh food.” (Fairfield, 2010, p.1) Society is disconnected from the food sources on which it depends. Most are unaware that in the Treasure Valley “less than 7% of farm

production could be eaten by consumers directly.” (Meter, 2010, p.2) No one takes responsibility for maintenance of adequate agricultural land.

Agri-business considers profit its only criteria for success. Until recently it viewed land, fuel and water as inexhaustible commodities and animals as capital investments. In the meantime society trusted them to provide healthy food inexpensively. The local food movement on the other hand has an appealing argument for everyone, encompassing food security, sustainability, health, and ethics. It offers the opportunity for communities to rethink solutions to planning and development while understanding the connections between health, lifestyle, and the economy of the region. Those who choose local food realize that adequate agricultural land should be maintained near their city. They want their farmers to stay in business and will not live in a home built on farmland. The local food movement is the most feasible vehicle for achieving the desired outcomes.

### **Improving the Resources for Local Food**

Local food is struggling to establish itself in a system closely aligned with the needs of large agricultural operations. After identifying the myriad of stakeholders in the Treasure Valley and interviewing many of them, some common themes emerged. There is clearly a need for resources in four major areas: water, land, economic development and labor. Improvements are needed in these areas to encourage local food production.

#### **Water**

A sufficient quantity of clean water is vital for agriculture, aquaculture and personal use. These uses must co-exist with each other for society to function. Land preservation is futile without water preservation. Threats to water quantity come from wastage and climate change. Threats to water quality include fracking, excess nitrates, and aquifer depletion.

Hydraulic fracturing or “fracking” extracts oil or gas from shale by injecting “water and sand” (Energy from Shale, 2011, p.1). Nationally aquifer water has been contaminated with

hydrocarbons. Farming in Idaho relies heavily on water pumped from aquifers, which have thus been heavily depleted, dropping by 100 feet since records began. Studies show that recharge takes many years and demand is exceeding supply. When agricultural land is developed, existing agricultural wells become drinking water; therefore, agriculture infrastructure is effectively subsidizing new housing development. The amount of domestic water used, including irrigation, is the same as that used agriculturally in the same area, but excessive applications of nitrate fertilizers are creating inhospitable rivers and lakes. Fish populations are decreasing and our aquaculture is under threat.

### **Water Solutions**

- Planners should advocate for the creation of a permanent Agriculture Advisory Committee (AAC). With community planners this body should continually analyze water access rights, current and future population needs and the valley's water resource carrying capacity.
- Water resource analysis should inform locations to be zoned for long-term agriculture.
- Planners should prioritize farming water use over domestic use. Where water use for new development is likely to compromise availability to farmers, permitting should require an additional water source or set a maximum allowed use.
- Irrigation is the major residential/commercial load. Conditional use permits for new development could restrict irrigation use.
- Planners should work with farmers, scientists, and the Idaho legislature to legislate for protection of water supplies.

### **Economic Development**

The missing link for local food is a distribution company to store food and move it to market. Storage is essential for local food success (Burns, 2011). It enables continued supply into winter and through unpredictable events. For longevity, processing capacity is also needed. Currently there are no processing plants in the Treasure Valley except for meat and one flour mill.

Following the recent recession and the practical disappearance of the development industry, it is apparent that agriculture is the bedrock of our economy; however, large agri-business has been stagnant and under threat for some time now.

*“...a declining agricultural land base, continued urbanization of rural areas and rising land prices are likely to have significant impacts on large-scale agricultural operations in the future. Smaller-scale operations may continue to be a viable source of local produce.” (Ada County Comp Plan, chapter 4.4)*

Indeed, the number of small farms increased from 1293 to 1420 between 1987-2002. This statistic implies a change in the type of agriculture being practiced local to cities.

*“A just released Zagat survey found that 68 percent of restaurant goers say they prefer locally grown food. Sixty percent of those would pay more for that food....Boise’s downtown farmers’ market is expanding by 20% a year.” (Hand, 2010, p.1)*

More accessible market venues for the sale of local food are needed. A handful currently exists generally founded on local grass-roots action with some city and state support from the Department of Agriculture and Capitol City Public Market.

Pre-planting contracts are needed for local crops with a distributor or buyer (Burns, 2011). Support for research and development should be provided to broaden the array of crops available in the Treasure Valley and explore new farming techniques. Recognition of local farming as an entrepreneurial business would enable a rethink of the current system.

Information on quantity, variety and profitability of food grown in Idaho is either unavailable or unreliable (Menasco, 2011). A culture of non-disclosure exists nationally.

*“[There is] an increased tendency for the USDA to suppress data to protect confidentiality...The main audiences excluded from information about farm production are typically the public and policy makers.”(Meter, 2010, p.2)*

When in the dark “the best way to get representative views is through surveys.” (Kelly, 2010) ULI brainstormed to compose a local farmer survey. It will be distributed through a trusted, non government organisation such as the Coalition for Agricultural Futures.

### **Economic Development Solutions**

- The locally based AAC should be the driver of economic development since State bodies are focused on overall state performance. AAC should also plan for the development of required infrastructure; provide crop contracts, and bond local farmers moving into new areas. It should also conduct continuing outreach to the community. Planners should advocate for the review of federal subsidies which currently ignore local food markets.

- Planners and economic development specialists should encourage the reconnection of citizens to their food source by encouraging agritourism and give preference to related development like tasting rooms in the permitting process.
- Economic development tools should be applied to the agri-urban fringe. Incentives include property tax relief, “*investment tax credits, low-interest loans, [and] infrastructure grants.*” (Levy, 2009,p.255)
- Planners should work for prioritization of Capital Improvement funds to preserve agricultural land through the planning process.
- Residential zoning should be amended to accommodate small commercial selling and exchanging of local food.
- Planners should re-examine the conditional use permits needed for farm stands.

### **Labor**

Agriculture has developed “structural unemployment” as defined by Levy. The “mismatch between the supply of labor and the demand for labor.” (Levy, 2009, p.250) is being filled by migrant workers while US citizens are unemployed. Ron Bintner stated that the wine industry in Idaho depends on migrant workers. (City Club, August 2011). Social equity is one of the three legs of the sustainability stool which most local farmers hold dear. They are unlikely to accept this solution to their labor shortage. Most local farmers use different techniques than large farmers, and teachers of these techniques are in short supply (Burns, 2011); consequently, local farms are short of committed, knowledgeable employees. The lack of labor is preventing growth. The other major problem is finding wages for workers. Peaceful Belly, a local organic farming concern, relies on volunteers. Davidoff “urged planners to champion...low- and moderate-cost housing.” (1965, p.406) Considering the low incomes available, polices to provide affordable housing need review. Idaho favors “trickledown” to provide affordable homes. This concept relies on continued suburban sprawl which is threatening farms. The rentable homes resulting from this policy are located in the city center far from the farms.

### **Labor Solutions**

- The Agricultural Advisory Committee and planners should work with non profits and businesses as well as the State Departments of Commerce, Agriculture and Labor, to

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create a larger market for local food. Perhaps this committee should monitor labor markets in agriculture and examine urban fringe issues like affordable housing and training.

- Demand development policies which demand a percentage of affordable housing.
- Perhaps “rural” as opposed to “urban” homesteading would be appropriate, as it fills homes “with people who have a strong commitment to that [location]” (Levy, 2009, p.216)

## **Land**

Maintenance of adequate, quality agricultural land close to and possibly within population centers is crucial to the local-food movement. Currently land zoned for agriculture is considered available for development, and the rezoning process from agricultural to residential is not difficult. (Bob Thornton, 2011) Also local farms find that rents increase as development approaches. Though local farmers often do not own land, they improve the soil, an investment which is wasted without secure, long-term land use (Hutchinson, 2011).

As a state predominantly settled by the Homesteading Act of 1862 Idahoans regard land ownership rights highly. A backlash against planners, who prevent the sale of agricultural land for the best price, is likely. Before changing the zoning codes, an extensive program of public participation is needed. Farmland is ultimately a “common” resource. Like air and water, the produce of farmland is essential to society and is irreplaceable. The “Tragedy of the Commons” is that society benefits from farmland without contributing enough to either maintain it or adequately support the farmers. Cheap food and gradual loss of the resource is the consequence. Planners need to balance the needs of society against the rights of the owner.

“Social crisis is usually conceived as a sudden, drastic and widely perceived deterioration in vital conditions.” (Downs, 1994, p.191) Potential for a crisis exists since there is usually only 3 days worth of food in the Treasure Valley (Burns, 2011) Maintenance of a supply of prime farmland, on the other hand, is more akin to a “Creeping Crisis” (Downs, 1994). While the Ada County Comprehensive Plan recognizes a need to protect it (Comp. Plan, Chapter 6.11) there are no

policies to enable such preservation. The perception of a social crisis undermines achievement of an alternative vision. Ada County's communities have plentiful vacant land zoned for development which could be "infilled" instead of using farmland. Encouraging "infill" development is growth management. Since land pressures spring "from several causes, attacking one [will] do little to achieve effective growth management." (Downs, 1994, p.191) A systematic approach is needed.

Idaho's right to farm law *Idaho Code* §22-4501 limits "the circumstances under which agricultural operations may be deemed to be a nuisance." Conventional farming is a nuisance neighbor. Complaints include dangerous over-spray from pesticides and "the twenty-four hour operations that are typical of harvest season, the use of heavy equipment and the dust and odors from a farm." (Kelly, 2010, p.253) Commercially viable farming adjacent to suburbs is needed. The low technology and organic farming practiced by local farming businesses is low-nuisance.

Zoning agricultural land will have the same effect as establishing a growth boundary. The sudden shortage of cheap developable land would raise development costs, but increasing possible densities may mitigate the resulting increase in property prices. The value of agricultural land may increase. Food prices would increase, affecting those with less disposable income; therefore, affordable housing policies and programs would need to be revisited.

### **Land Solutions**

- Create a single-use zone type for agriculture. Define agriculturally related uses which will be conditionally permitted in this zoning. Apply zone to appropriate land for agricultural preservation. Update the County's zoning ordinances to include an amended agricultural zone.
- Amend the two counties' zoning maps to show new agricultural zones.
- Establish a "low-nuisance farming" zoning overlay near homes and businesses and "organic agriculture" zoning overlay adjacent to sensitive lands.
- Insert a new component in the Comprehensive Plans titled Agriculture. Use the data and analysis gathered above to compile a chapter with the same format as the other components, including stated goals, objectives and policies to guide future County decisions.
- Consider whether the counties should buy agricultural land which is under threat of development? Could this expense be covered by bonds? The counties may be able to pay



back the bond by farming the land with tenant farmers. Using the recent Foothills Open Space levy as a model, a tax levy might be used to buy land.

- Consider incentives such as clustering and density bonuses for development that preserves agriculture-zoned land. Study feasibility of Transferring Development Rights from agricultural land to vacant infill sites. Could an Urban Renewal District buy TDR's from farmers with Tax Increment Financing instead of the developer paying the farmer?
- Examine the feasibility of levying "loss of agricultural infrastructure" impact fees on developers who deprive the community of their irreplaceable resource by building on it.
- Include effective smart-growth policies in the comprehensive plans, including maximum parking, public transit, and higher densities to ease development pressure on agricultural land. (chapter 5.6)
- AAC should work with planners to review progress every two years, demanding changes to policies if they are ineffective, and set up benchmarks to check that agricultural land is being maintained over the plan's lifetime.
- Create a zone for "local farm incubation units." Land owned by the city should be available for new local farms that are business start-ups.
- Assign special planning advocates to ease and speed local farmers' journeys through the permitting process.
- Calculate the amount of land that must be retained. If farmers decide to grow a healthier crop, does that require more land? Should there be a space weighting which takes into account the quality of the land retained? Grazing land is required too.
- Calculate land available as infill. Vacant buildings should count as infill lots. How many years of projected growth does it meet? How many parcels are underutilized? Planners could proactively rezone or approach owners to suggest subdividing under-utilized lots, insisting that maximum density is achieved

Preservation of agricultural land is part of a wider strategic problem not easily compressed within the confines of a 100-hour internship or this short paper. Essentially, planning cannot resolve many issues surrounding the provision of local food. When developing and implementing policy, planners must work in concert with other government bodies, non-profit groups, universities and private companies. Society is coming to a consensus on the importance of local food, and the next steps will require appropriate policy, entrepreneurship and community commitment.

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**Policy Report**

**ADA County Comprehensive Plan**

# **The role of agricultural land in Ada County**

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PUBADM 523 Spring 2011

## **1.Statement of the problem**

Although Ada County is increasingly urban, agriculture remains fundamental to the land use patterns; yet the county's Comprehensive Plan does not plan for the future of agriculture. The American Farmland Trust defines the reason that planning for agriculture is necessary as follows.

*"Our food is increasingly in the path of development. An astounding 91% of our fruit and 78% of our vegetables are produced in urban-influenced areas. Wasteful land use is the problem, not growth itself. From 1982 to 2007, the U.S. population grew by 30 percent. During the same time period, developed land increased 57 percent." (American Farmland Trust, 2011)*

The supply of quality agricultural land remaining in the county is dwindling. The Agricultural Analysis Plan 6.7 (2006) shows that just over 10% of the land is classed as arable for tax purposes. About 30% is meadow and dry grazing. Clearly prime agricultural land is a limited, irreplaceable resource; therefore, the role of agricultural land, especially that adjacent to communities, is being overlooked. Although it may have more financial value to the individual owner when developed, farmland has great value for the community as a whole. Once developed it cannot be returned to agriculture. The community relies on food; therefore, agriculture is integral to the future sustainable development of communities.

While there was a predictable decrease in agricultural acreage from 247,084 acres to 223,388 between the years 1987-2002, statistics included in the Comprehensive Plan indicate that trends in the agriculture sector are changing:

*"...a declining agricultural land base, continued urbanization of rural areas and rising land prices are likely to have significant impacts on large-scale agricultural operations in the future. Smaller-scale operations may continue to be a viable source of local produce and other specialty agricultural products and opportunities." (chapter 4.4)*

Indeed, Table 4.3 shows that there was an increase in the number of small farms from 1293 to 1420 between 1987-2002, implying more jobs in farming.

*"Most of the increase in the number of farms during this period was for farms of less than 10 acres and those 10-50 acres in size. The market value of agricultural products increased between 1997 and 2002." (chapter 4.3)*

These statistics imply a change in the type of agriculture being practiced. The Cornucopia Institute explains the phenomena as follows:

*"A just released Zagat survey found that 68 percent of restaurant goers say they prefer locally grown food. Sixty percent of those would pay more for that food. That's good news for the small, but increasing number of farmers and ranchers who grow products for local markets." Participation in Idaho Preferred — a state program that promotes agricultural products grown and purchased in Idaho — has doubled since 2006. Boise's downtown farmers' market is expanding by 20% a year." (Hand, 2010, p.1)*

Since growing food for local markets is currently one of the few growth economies, it is clear that Ada County should be planning to encourage it, and maintenance of a good supply of quality agricultural land close to population centers is crucial to the local-food movement. Ada County's communities have a plentiful supply of vacant land for development which could be "infilled" instead of using greenfield land.

Some citizens feel that the county needs to recognize agriculture as vital to the economy. We need to realize its true value as a resource and plan for its use as though it were a part of the county's vital infrastructure, adopting regulations that reinforce those plans. The Plan currently views agricultural land as "undeveloped," implying that it will be developed in future despite the limited supply. Seeing agricultural land as "undeveloped" *"fails to recognize the productive value of agricultural land and the substantial investment farmers make in their land"* (Kelly, 2010, p.273) The message Ada County sends to developers by not addressing preservation of agricultural land as a resource is "build baby build." Ada County needs to envision the ideal future role of agriculture in the county and pose the question "Where would we like to be in 20 years and how do we get there?"

## **2.Fact Finding**

Based on the level of information included in the Comprehensive Plan, further analysis into several areas needs to be carried out in order to determine the current state of agriculture. Only then is a discussion about the appropriate goals for the future possible. It is necessary to:

- Determine the full extent of agricultural land available in Ada County from the National Geological Soil Survey and by talking to farmers and others in the agricultural industry. The current Agricultural Analysis Plan is produced from tax-code data and therefore may not give an entirely accurate picture of the nature of the land available and suitable for agricultural use.

Build a GIS model of agricultural land in the county so that it can be interrogated. Is all of it being used. If not, why not? Is there a policy which would encourage its use?

- Analyze what other uses for which the agricultural land is earmarked. Is the land "sensitive" or in an Area of City Impact for instance? Is it zoned already? What for? Which use should take priority in the best interests of the community?
- Analyze of the urban development pressures on current and potential agricultural land to see where agriculture is most likely to be turned into building land so that vulnerable areas can be protected.

Find out what happened to the 1580 acres a year of agricultural land which Ada County lost between 1987-2002. Is some of it lying fallow? The comprehensive plan suggests that: *"much of the County's farmlands are being converted to urban or rural residential development," (chapter 6.6) but a more detailed account is needed.*

- *Determine how much agricultural land should be retained. Is the assumption that there is a need for all of it correct? Where do we find land to meet the growth needs of the community? Should we encourage denser patterns of development?*
- Analyze the potential for preserving existing agricultural land whether currently in use or not. How can we protect it? Should we amend the zoning category named "agricultural"?
- Look into the likely growth of the local-food market and find incentives for encouraging local food production.
- Update the calculation of what proportion of land in Ada County is currently agricultural. Set a schedule for frequent rechecking of the quantity available so that success in maintaining the land can be measured.

### **3. Community involvement**

The urgency and importance of planning to preserve agricultural land in the County is not well understood. It was not identified during public outreach while compiling the Comprehensive Plan; therefore, a different approach to public participation is needed than the one taken during the comprehensive planning process. Public awareness and understanding of how loss of agricultural land is likely to affect Ada County in the next 20 years is needed so that citizens can assess how best to obtain the desired outcome. A timeline of about 18 months is appropriate to bring citizens along with the process while keeping up the momentum. It is best to do this in between the comprehensive plan review process so that the issue does not get lost.

In parallel with general citizen outreach it is crucial that community stakeholders are identified and involved in the decision-making process so that a representative view is obtained from all interested parties. Ada County could convene an Agriculture Advisory Panel, with representatives from the following groups encouraged to participate:

1. Individual representatives of relevant sectors of society to identify long-term regional needs. In this case tenant farmers, conventional farmers, organic farmers, local farmland owners, landowners adjacent to farmland, developers, local food growers and sellers, as well as other interested representatives of business groups and agencies.  
*“These people are chosen because their views may be typical or because they have personal knowledge.” (Steiner, 2007, p.35)*
2. Individuals who represent organised interests, not the typical public’s view. Someone from the Boise Consumer Co-op, the Treasure Valley Food Coalition, the American Farmland Trust, Idaho Working Lands, the Chamber of Commerce, and historical groups like the Sons and Daughters of Idaho Pioneers would be appropriate.
3. Leaders of government from each of the incorporated cities in the county and from adjacent county, state and federal agencies. These leaders should have discretion to act innovatively. They bring technical understanding of the possible solutions. A representative from Blueprint for Good Growth should be present because they should understand the concepts and goals of BPGG and this issue should be included in that framework.  
*“It is essential that these groups collaborate to develop and adopt a long term, stable, publicly supported funding strategy and specific tools to meet these needs.” (comp plan, chapter 9.12)*
4. Elected officials, as they are accountable to the electorate.

Meanwhile, Perhaps the Agriculture Advisory Panel should focus on public education. *Professional educators could be present at as many public venues as possible, e.g., the chamber of commerce, university campuses, local food groups, schools. The aim would be to create a buzz and an understanding of the issues.*

Since the issue has been identified already, a Goal-Driven, Opportunities and Constraints (O&C) analysis is recommended to explore the question “Where can we go?” and “Where do we want to go?” This hybrid technique is more appropriate than SWOT analysis for studies which cover defined issues like agricultural preservation where “natural and human-made opportunities and constraints are the driving issues.” (Kelly, 2010, p.93). The realization that loss of agricultural land is an issue is largely based on technical studies towards which O&C is geared. A well-managed O&C exercise will help narrow the range of discussion and result in a greater likelihood of consensus. It also helps identify opportunities that are possible.

The next step would be to conduct public/stakeholder design meetings (charrettes) and present the problems and solutions suggested in the O&C so the participants can explore the likely outcomes of leaving things alone versus the effects of different policy options. Charrettes are a good vehicle for dealing with a very “narrowly defined area of a comprehensive plan.” (Kelly, 2010, p.102) Exercises like this give citizens the opportunity to develop awareness of the agriculture situation and to modify their perception of the desirable outcomes for their county. With reference to Arnstein’s ladder of participation (Steiner, 2007, p.32) we need to be as close to the top as possible. Citizens need to be heavily involved in the decision-making process so that they will accept the outcomes. Participation results in a realization that others in their community share their values/goals. This will promote a sense of community which is fundamental to long-term success.

Out of this process the favorite strategies for the preservation of agriculture can be identified and planning policy tools formulated. The public consensus for policies can be sought through surveys. *“The best way to get representative views is through surveys.”* (Kelly, 2010, p.99). Surveys can be distributed in several ways to ensure a broad demographic of participation, e.g., with electricity bills, via direct email, on the Ada County website, and on Facebook. The results and comments will be analysed and final proposed amendments to the Comprehensive Plan presented at an open house. Following a comments period and further refinements, adoption of the proposals would be voted on at a public hearing.

#### **4. Decision-making and possible conflicts/outcomes of research and participation.**

While it is widely known that agricultural land is quickly being lost and the plan recognizes a need to protect it (Comp. Plan, Chapter 6.11) there are no policies to enable such preservation. Few currently perceive it is a significant issue. It is also novel to see local food production as vital to the community’s quality of life and economic diversity.

Given the current level of understanding, the process of education may not result in public appreciation of the need to alter the Comprehensive Plan to deal with the loss of agricultural land. Given the priority which Idahoans give to land ownership rights, there could be a backlash of feeling towards Ada County for trying to prevent the sale of land for the best price. This is why an extensive program of public participation is proposed.

Finding the funds and political will necessary to carry out the process outlined above for data gathering, analysis and public participation will be a challenge. Success depends on the community identifying with the need; therefore, a cost-effective desk study using available data to analyze the rough extent of the problem would be a good way to assess the seriousness of the issue.

Strategies to protect the land could get expensive. Farmers and other rural landowners are not always enthusiastic about retaining their land in agricultural use. They often see the land as their pension. Should Ada County mitigate this loss? Should the county buy agricultural land which is under threat of development? Could this expense be covered by bonds? Maybe the county could pay back the bond by farming the land with tenant farmers. Using the recent Foothills Open Space levy as a model, maybe a tax levy could buy land. Maybe “loss of agricultural infrastructure” impact fees should be levied on developers who deprive the community of their irreplaceable resource by building on it.

Perhaps no money should change hands. Current accepted policies to protect open land could be applied to agricultural land including regulation of resource areas as well as development and design guidelines. Purchase or transfer of development rights might be applied to encourage development of infill land rather than farmland. This may work well with

the increased pressure for higher densities on developable land resulting from restricting development on farmland. Could an Urban Renewal District buy development rights from farmers with Tax Increment Financing and hand that benefit to the developer as an incentive to use infill land?

Farmland preservation efforts must clearly define what the stated goals are. How do you monitor protection of the best agricultural land? Is it adequate to maintain enough acres or should there be a weighting which takes into account the quality of the land retained?

All proposed policies to preserve agricultural land will be considered with respect to Idaho's right to farm law *Idaho Code §22-4501*: which limits "*the circumstances under which agricultural operations may be deemed to be a nuisance.*" This protection for farmers only half solves the problem. Conventional farming *is* a nuisance neighbor. There are health issues associated with over-spray from pesticides and "*neighbors often complain about the twenty-four hour operations that are typical of harvest season, the use of heavy equipment and the dust and odors from a farm.*" (Kelly, 2010, p.253)

Farmland preservation should seek to enhance and maintain economic activity. We need to learn how to accommodate commercially viable farming adjacent to suburbs and plan to encourage it. The low technology organic farming practiced by local farming businesses is very low-nuisance. Maybe the answer is to create an agriculture zone with "low nuisance" overlay applicable where agricultural land is within a certain distance of development. Perhaps an organic farming overlay is applicable near sensitive land like the World Center for Birds of Prey area.

Zoning for agriculture does not ensure that land continues to be farmed. It only ensures availability should the owner choose to use it that way. It is probably in the community's interest to establish other ways to promote agriculture to ensure land continues to be used. This is particularly important for encouraging small-scale, local-food farmers who don't have access to the subsidies, crop insurance and bank loans common to large scale farming operations.

Since most arable land in the county is irrigated, the long-term viability of its use depends on water supply. Reference to the Idaho Department of Water Resources (IDWR) overall assessment of water resources conducted in 2002 will help determine the availability of irrigation water. Rights and access to that water need to be assessed in deciding what to zone for agriculture. Can water rights be attained or wells sunk to irrigate good land which is not currently in agricultural use? Could the potential additional load on the aquifers be sustained? Can policies be introduced to recharge the aquifers where needed? "*Some form of managed aquifer recharge may be required if increased efficiencies or reductions in irrigation associated with agricultural production lead to declining water levels.*" (Comp plan, chapter 7.6)

Change to agricultural land policy will inevitably affect other areas and require policy changes to accommodate a planned outcome. Here are some examples of areas requiring review.

If all the agricultural land is preserved, where will we accommodate new development? Basically most of the open land in the Nampa, Meridian, and Kuna areas is irrigated arable land, so any land development along the valley in that direction deprives us of a future limited resource. Consequently, if all agricultural land is zoned this will have the same effect as establishing a growth boundary. The sudden shortage of cheap developable land would raise the cost of development generally. Increasing possible densities may mitigate the resulting increase in property prices.

If land is zoned for agriculture the value of the land may increase. This may result in an increase in food prices which will disproportionately affect those with less disposable income.



Problems with home affordability may result, and affordable housing policies and programs may need to be revisited.

Enabling policies for public transit are needed to allow for denser development of the existing community. Rail transit and buses move more people per square foot of infrastructure than roads. Less dependence on cars enables reduction of land use for low-revenue generating uses like parking and means a maximum space standard can be introduced along with requirements which encourage sharing between businesses and uses during the day and evening.

Sub Area plans should be reviewed for agricultural impacts on open space, especially in the North Foothills, South Central and Central plans where most of the currently identified Agricultural land is mapped.

This examination of a few possible outcomes of agricultural land protection shows that stakeholders would need to be onboard with this approach and value the benefits it would give them. Based on this consensus, preservation could go forward with a common sense of purpose. This agreement would generate the necessary “good will” between landowners, developers, and planners. Stakeholder cooperation is needed to achieve this major attitude shift towards agricultural land.

A range of optional policy positions will be brought to the public and stakeholders to consider because some tools are more culturally acceptable than others; however, stakeholders need to be aware of all the policy options possible to enable them to decide on the best course of action. It is better to present alternatives for stakeholders to discuss so that they can *“generate their own plan rather than react to one provided for them. The product is more likely to succeed because is more responsive to the needs of the people.”* (Steiner, 2007, p.33)

More culturally acceptable policies should be tried first. The outcome should be monitored carefully to assess whether the policies in place are enabling the county to retain arable land. If agricultural land is being lost despite the tools available to planners, then the tools and/or their use (or neglect) need to be revisited with the stakeholders. Hopefully they will feel that the importance of achieving the goal justifies the slight curtailment of the individual’s property rights for the benefit of the community as a whole, and more effective policies can be advanced at that point.

Occasionally policies for retaining agricultural land may need to be enforced. This would cause anxiety for landowners and may be considered a violation of land-use rights; nevertheless, strategies to deal with contravention of agricultural land preservation are needed because once land has been developed it is almost impossible to return it to agriculture.

## **5. Recommendation**

The preservation of agricultural land will result in significant benefits to the community long-term and therefore implementation policies should be included in the comprehensive plan. Outputs of the analysis and community participation could include:

1. Creation of a plan showing land in current agricultural use and the location of land with potential for agricultural use. Account should be taken of the availability of irrigation water on which production from this land relies.
2. Create single use zone type for just agriculture. Apply zone to appropriate land for agricultural preservation. Update the County's zoning ordinances to include an amended agricultural zone.
3. Amendment of the County's zoning map to show new agricultural zones.
4. Establishment of an "organic agriculture" zoning overlay adjacent to sensitive lands and homes.
5. Establishment of 'low nuisance farming" zoning overlay near homes and businesses.
6. Benchmarks to check that agricultural land is being maintained over the plan's life.
7. A new component in the Comprehensive Plan titled Agriculture. Use the data and analysis gathered above to compile a chapter with the same format as the other components, including stated goals, objectives and policies to guide future County decisions.
8. Assessment of the policies expressed in other land use related plans like the North Foothills Sub-Area Plan and Parks, Waterways, Open Space and Trails Plan and make suggestions for appropriate amendments to enable the preservation of agriculture while maintaining access to open space.
9. A permanent Agriculture Advisory Committee to ensure agricultural land is not developed with responsibility to review progress every two years and demand changes to the policies if they are ineffective. It will also educate the community and conduct continuing outreach.
10. An examination of the feasibility of establishing impact fees for loss of community resource.
11. A feasibility study of using TDR's from agricultural land to vacant infill sites.
12. Suggested policies and strategies for the rehabilitation and retention of prime farmland.
13. Consideration of incentives such as clustering and density bonuses for development that preserves agriculture zoned land.
14. Inclusion of effective smart-growth policies in the comprehensive plan, including maximum parking, public transit, and higher densities to ease development pressure on agricultural land. Work with Blue Print for Good Growth, which is being implemented currently, to establish areas for the different levels of future growth. (chapter 5.6)
15. A continued review of surface and groundwater supplies in Ada County and the Treasure Valley to assess long term availability and quality of future supplies.
16. Prioritization of funds needed in the Capital Improvement Plan to preserve agricultural land through the planning process.
17. An examination of methods for enforcement of zoning to preserve agricultural land.

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## Sustaining Agriculture: Measuring Success

A Research Project of the Urban Land Institute in partnership with the University of Idaho, Boise State University, the Community Planning Association of Southwest Idaho (COMPASS), Idaho Center for Sustainable Agriculture, Treasure Valley Food Coalition and Idaho Smart Growth

APA Idaho Chapter Conference  
October 13, 2011  
2-3:15 PM



## Presenters

**Erinn Cruz** is a research assistant in the Office of Community Partnerships at the University of Idaho

**Helen Ubic**, is an architect and urban planner, AIA. Certified Sustainable Building Advisor, LEED AP BD+C and research assistant on the Urban Land Institute project.

**Diane Kushlan**, AICP, is coordinator for the Urban Land Institute Idaho District Council



## Session Overview

Introductions and Background

Land Use Research

Economic Research

Outcomes

Questions ?



## About ULI and ULI Idaho

### About ULI

- Nonprofit research and education organization supported by its members.
- Founded in 1936
- 30,000 members in over 90 countries
- ULI Idaho is a district council with 130 members
- Membership entire spectrum of professions involved in land use

*The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.*



## Background on the Research

- In May ULI Idaho received a \$25,000 grant from the ULI Foundation.
- Grant was to research the relationship between sustainable agriculture and land use
  - Premise: Improving the economics of agriculture will preserve more agricultural land use and has a direct correlation with creating more compact, sustainable communities.*
- Build upon earlier research
  - Crossroads Research Center that examined the local farm and food economy of the region.
  - University of Idaho, College of Agriculture and Life Sciences "Senior Ag. Econ. Capstone" project on what is required for 20% of the food economy to come from local agriculture.
- Focus on Canyon and Ada County



## Needed Partners for Success

- Community Planning Association of Southwest Idaho (COMPASS)
- University of Idaho
- Boise State University
- Idaho Center for Sustainable Agriculture
- Treasure Valley Food Coalition
- Idaho Smart Growth



## Objectives of the Research

- Identify the current agricultural benchmarks and create a scorecard for measuring agricultural sustainability over time.
- Translate those measurements into land use and infrastructure requirements.
- Provide information that will inform local land use decision makers, professionals and the public about the importance of local agriculture in creating a sustainable future.



## Questions to research

1. What is the current level of direct sales from farmers to local customers?
2. What portion of the population's current food needs is supported by the local farmers?
3. What is the amount and location of vacant or fallow agricultural land.
4. What is the level of economic activity generated by agritourism, farming and local farming?
5. What is the amount, location, diversity and supporting infrastructure needed to sustain agriculture?
6. What are the trends in agricultural land conversion?
7. What is the attractiveness of available water rights on the conversion of agriculture land for urban use?



## Under Construction

What we are presenting today is a work in progress.



## Objectives of the Research

Importance of local agriculture in our sustainable future.

- What is sustainability?**  
"development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland Commission )
- Economics, Social Equity and Environment.**  
Three legged stool of sustainability. ( Jason McLennan "Philosophy of Sustainable Design.")



## Objectives of the Research

Importance of local agriculture in our sustainable future.

- Current Economics :**
  - Most of the money spent on food and agricultural supplies in the region goes out of state.
    - Spend \$600 million on feed, fertilizer, and seed.
    - Spend \$1.7 billion on food from out of state. (Crossroads Research Institute)
  - Grow most profitable crops, not locally needed ones.
  - Good Agriculture land is a finite resource
    - Treasure Valley population could double by 2035.
    - Between 2002 and 2007:
      - Ada County lost 14% of it's farmland.
      - Canyon County lost 4% of it's farmland (Agricultural Census 2007)



## Objectives of the Research

Importance of local agriculture in our sustainable future.

- Economic outlook :**
  - If we bought locally we could expect :
    - "If Ada and Canyon County residents bought 15% of food each year locally. We could expect \$118 million in new income to farmers each year." (Treasure Valley Food Coalition 2010)
    - 1000 new jobs.
    - \$13 million in labor income
  - Agriculture as entrepreneurship.
- Maintaining local agricultural land makes this possible.**



**Urban Land Institute** Objectives of the Research

Importance of local agriculture in our sustainable future.

**Social Equity :**

- Health:
  - "1 in 3 people born in 2000 will be diagnosed with diabetes." (National Diabetes Information Clearing House)
  - \$399 Million is currently spent on treating diabetes alone in the Treasure Valley. (American Diabetes Association)
- Need to motivate people to change their diet.
  - Re-engage citizens with agriculture.
  - Get to know your farmer.



**Urban Land Institute** Objectives of the Research

Importance of local agriculture in our sustainable future

**Social Equity :**

- Essential life skill
- Access to healthy food:
  - SNAP accepted at Boise City Farmers Market
  - "Local food tastes better " (Raj Patel, author of *Stuffed & Starving*)
- Community Gardening builds community. (Maria Minicucci Boise Dept of Parks and Recreation)

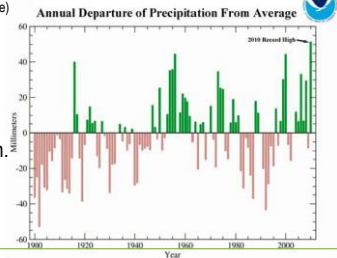


**Urban Land Institute** Objectives of the Research

Importance of local agriculture in our sustainable future.

**Environment:**

- "limited public planning to assure a secure and stable food supply." (Crossroads Research Institute)
- Increasing climate unpredictability. (NOAA Climatic data center)
- Soil depth depletion (Sustainable Growth)



**Urban Land Institute** Objectives of the Research

Not only do we need agriculture, we need sustainable agriculture.

**Antimicrobial drugs:**

"Use and misuse of antimicrobial drugs in food animal production and human medicine is the main factor accelerating antimicrobial resistance." USDA Technical Review June 2011

**Food Security.**

"most grocery stores have 3 days worth of food in the store."

**Energy**

"current food system uses 10 fossil fuel calories to produce 1 food calorie"



**Urban Land Institute**

**Research Question #1**

What is the current level of direct sales from farmers to local customers?

and

**Research Question #2**

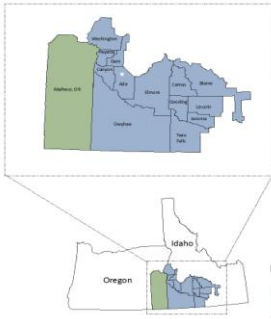
What portion of the population's current food needs is supported by the local farmers?

**Urban Land Institute**

**Task: Find the "Local Share"**

Definition: *the amount of food being produced in the Treasure Valley food shed that is being consumed in Canyon & Ada Counties.*

**Urban Land Institute** What is the Treasure Valley Food shed?



- 13 Idaho counties, 1 Oregon county
- Generally follows Snake River from Twin Falls to Ontario, OR
- Growing number of farmers live outside Boise Metro Area, but sell products to area residents

Image courtesy of University of Idaho

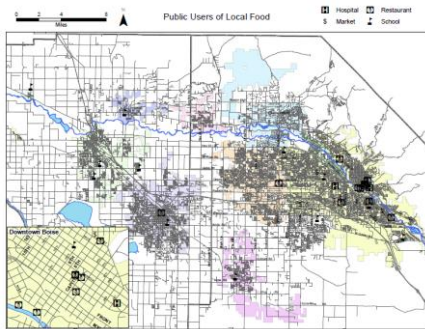
**Urban Land Institute** Measuring the Local Share

1. Farmers Markets
  - 9 farmers' markets in study area
  - Open longer than 3 months per year
2. Retail Grocery Store
  - 64 grocery stores in study area
  - Does not include convenience stores

Farmers Markets and grocery stores thought to be the largest measurable channels for local food in our study area

3. Local restaurants, hospitals, schools
  - Insignificant source of local share at this time

**Urban Land Institute** Public Users of Local Foods



**Urban Land Institute** Part 1: Farmers' Markets



Image courtesy of Boise Daily Photo

**Urban Land Institute** Rapid Market Assessments (RMA)

- ❑ Conducted RMAs at 7 farmers' markets
  - A survey tool that allows farmers' market managers to collect data from shoppers and estimate attendance for the day
  - Developed by Oregon State University
- ❑ Assessments done over a 2- week period in July
- ❑ 3 common questions were asked at each market
  - Managers had the option of adding 1-2 additional questions if they wanted.

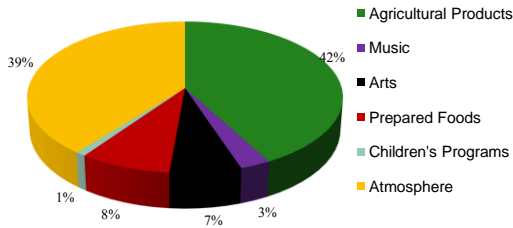


**Urban Land Institute** Results

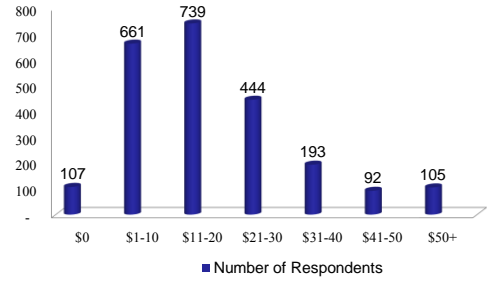
- ❑ Estimated Total Attendance: 19,297
- ❑ Total Respondents Surveyed: 2,349
- ❑ Questions asked:
  - What is your primary reason for coming to the Market today?
  - About how much have you/will you spend at the Market today?
  - When you're done shopping at the Market today, how much of your total purchases will be food?



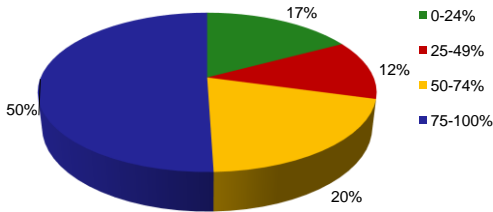
Question 1: What is Your Primary Reason for Coming to the Market Today?



Question 2: About How Much Have You/Will You Spend at the Market Today?



Question 3: When You're Done Shopping at the Market Today, How Much of Your Total Purchases will be Food?



Local Share for Farmers' Markets

|   |   |
|---|---|
| Per Capita Spent on Food at Farmers' Markets      | \$16.28                                 |
| Estimated Annual Attendance at Farmers' Markets   | 528,581                                 |
| Annual Expenditures on Food at Farmers' Markets   | \$4,302,654.02                          |
| Total of Per Capita Spent on Food per Year        | \$3,495.25                              |
| Treasure Valley Population                        | 581,325                                 |
| Total Annual Food Expenditures in Treasure Valley | \$2,031,746,882                         |
| Farmers' Market Local Share                       | $\$4,302,654 / \$2,031,746,882 = 0.2\%$ |

Part 2: Retail Grocery Stores



Department Managers' Surveys

- Visited 24 grocery stores
  - 18 in Ada County
  - 6 in Canyon County
- Interviewed Produce, Meat, and Dairy Managers
- Rates of success varied, response rates were
  - Produce: 83%
  - Meat: 57%
  - Dairy: 39%



Urban Land Institute **Results**

- Managers were asked, “How much money does your store spend weekly on hyper-local produce during these periods?”
  - Hyper-local was defined as being grown/produced in the Treasure Valley Foodshed

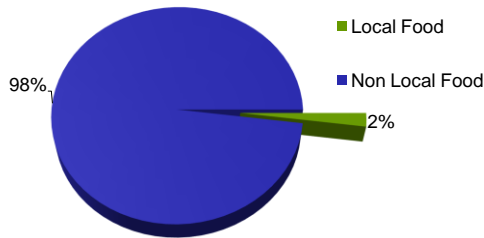
|                     | Produce Managers    | Meat Managers      | Dairy Managers      |
|---------------------|---------------------|--------------------|---------------------|
| April – June        | \$2,361.31          | \$331.86           | \$3,825.00          |
| July – October      | \$9,481.25          | \$377.32           | \$3,691.67          |
| November – March    | \$2,297.33          | \$322.77           | \$3,891.67          |
| <b>Annual Total</b> | <b>\$245,178.15</b> | <b>\$17,806.63</b> | <b>\$197,478.50</b> |

Urban Land Institute **Local Share for Grocery Stores**

|              | Average Annual \$ (Wholesale) | Gross Margin Percent | Annual Average \$ (Retail) | Total Stores | Total Annual Average \$ (Retail) |
|--------------|-------------------------------|----------------------|----------------------------|--------------|----------------------------------|
| Meat         | \$17,806.63                   | 26.6%                | \$22,543.19                | 64           | \$1,442,764.16                   |
| Dairy        | \$197,478.50                  |                      | \$250,007.78               |              | \$16,000,497.92                  |
| Produce      | \$245,178.15                  |                      | \$310,395.54               |              | \$19,865,314.56                  |
| <b>Total</b> | <b>\$460,463.28</b>           |                      | <b>\$582,946.51</b>        |              | <b>\$37,308,576.64</b>           |

**Annual Expenditures on Local Food Divided by Total Spending of \$2,031,746,882 = local share of 1.8%**

Urban Land Institute **Current Local Share**



Urban Land Institute

**Research Question #3**

What is the amount and location of vacant or fallow agricultural land?

- Still researching data from:
  - USDA Farm Service Agency
  - USDA NASS Cropscape

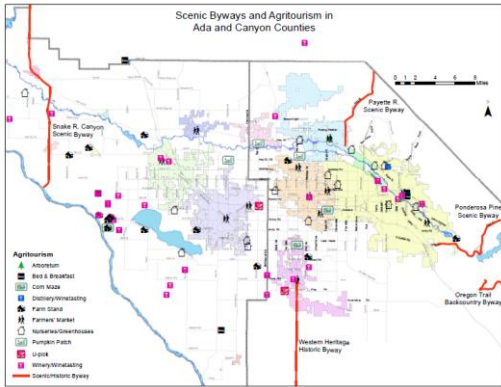
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**Research Question #4**

What is the level of economic activity generated by agritourism, farming and local farming?

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- **Farming:**
  - Baseline of our economy.
  - Idaho net farm income 2008 was 1.8 billion. (2010 Idaho Agricultural Statistics)
  - In 2007, 32% of all sales in Canyon County were for agribusiness.
- **Agritourism:**
  - Lack of economic information
  - Who is active in agritourism? (Around 70 businesses)



**Research Question #5**

What is the amount, location, diversity and supporting infrastructure needed to sustain agriculture?



**Amount:**

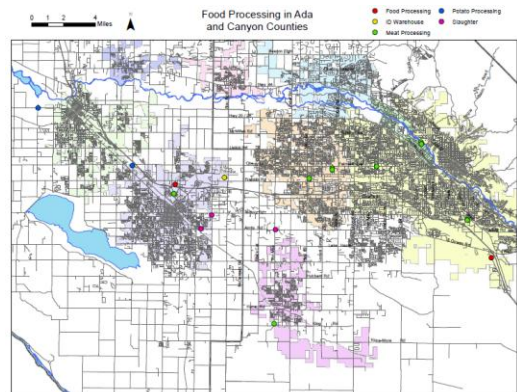
- Depends on type of agriculture
  - Different crops.
  - Healthy food discussion
  - Different techniques (grass fed versus feed lot)

**Location:**

- Prime agricultural land is our prime development land.
  - Flat, easy to excavate. (valley bottom)
  - Grid of roads.
  - City Services

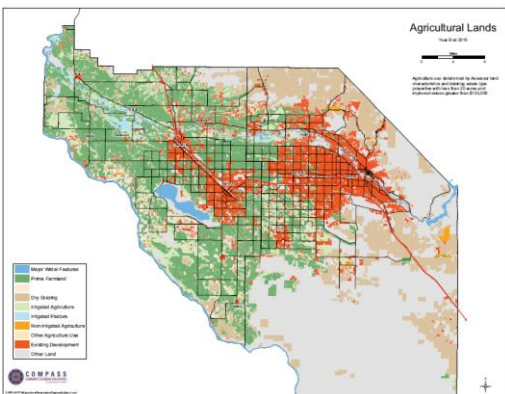
**Infrastructure:**

- Need for more local facilities
- Zoning and permits to enable

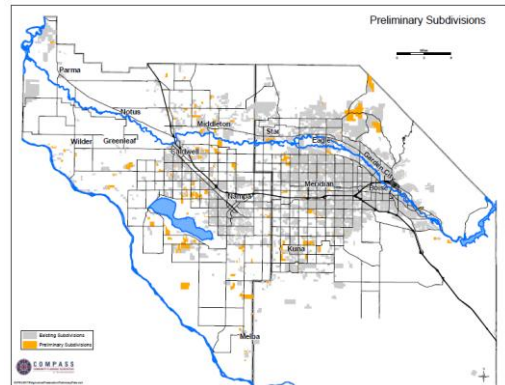


**Research Question #6**

What are the trends in agricultural land conversion?



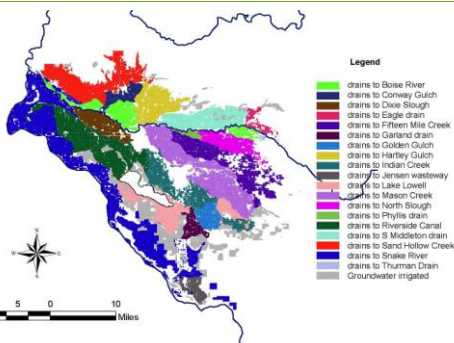
- ❑ Pre-Recession:
  - City Services, Roads, Flat ground.
  - Cheap land & site development
  - Avoiding FEMA flood zones.
  - Often Zoned for Agriculture.
- ❑ Post-Recession:
  - Land close to cities
  - Vacant platted land
  - Preliminary subdivisions
- ❑ Opportunity to assess locations of this land and at what density.
  - Is it appropriate to develop? At what density?



**Research Question #7**

What is the effect of water rights on conversion of agriculture land?

- ❑ All agriculture and other land development in Treasure Valley depends on snow melt:
  - Upper Boise Basin **Max > 60 inches/yr.** Mostly snow.
  - Lower Boise Basin **Average~ 12 inches/yr.** Mostly rain.
- ❑ Finite Irrigated Acreage: **348,000 acres**
- ❑ Abundance of water: (8 million estimated population capacity)
- ❑ Irrigation water rights **not** driver for development land selection. (almost all flat land has irrigation)



**Why this is Important to Planners**

1. The need to look at local foods as a necessity for a sustainable community.
2. Value agricultural land as a permanent land use.
3. Inform citizens, commissioners and elected officials.
4. Requirements of the Local Land Use Planning Act.



## 1. Recognize local foods as a necessity for a sustainable community.

- Local Food is the fastest growing social concern in U.S.A.
- It differentiates the Treasure Valley from anywhere else.
  - Create metrics to measure economic progress of local food market and track it.
  - Create opportunities for local, urban and community agriculture in zoning ordinances, county and city comprehensive plans.
  - Simplify permitting process for local agriculture.
  - Permit small businesses on farms that support agriculture.



## 2. Value agricultural land as a permanent land use.

- Agricultural land is not vacant. It is a use.
- Maintain the resource needed by successful and vital business.
 

*"While recognizing the critical importance of agriculture to the local economy and overall quality of life, the commissioners are increasingly concerned about loss of farmland and the health of local agriculture." (Keep Lancaster County Farming.)*

  - Create metrics to measure quantity of land needed and track maintenance rates.
  - Plan strategically to maintain enough land in right places.
  - Develop dedicated staff.



## 3. Inform citizens, commissioners and elected officials.

- Community outreach
- Communicate and collaborate with interest groups like:
  - Treasure Valley Food Coalition
  - Building Sustainable Communities Initiative.
  - Idaho Center for Sustainable Agriculture
  - Coalition for Agriculture's Future's mission is:

*"educate the public about the threats to its agricultural heritage, traditions and economy posed by irresponsible urban development...work closely with elected officials to help them better identify and incorporate critical land management principles and practices."*



## 4. Requirements of the Local Land Use Planning Act.

- 2011 Idaho Legislature passed House Bill 148
- House Bill 148 modified section 67-6508 of the Idaho Land Use Planning Act to require that agriculture be included as an independent component of a comprehensive plan.
 

*"An analysis of the agricultural base of the area including agricultural lands, farming activities, farming-related businesses and the role of agriculture and agricultural uses in the community."*
- House Bill 148 also requires the comprehensive plan to consider compatibility of land uses.



## Research Yet to be Completed

- Focus groups
  - Farmers
  - Big agricultural interests
  - Other direct buyers: restaurants
- "Healthy dozen"
  - 12 crop and livestock products that are or could be produced in the Treasure Valley food shed.
  - Use to estimate the number of acres needed to provide a 20% local share of food consumed now and in 2020
- Score Card
- Complete work by November 2011

Urban Land Institute Score Card

| Indicator   | Benchmark  | Target   |
|---|--|--|
| <ul style="list-style-type: none"> <li>A measurement</li> </ul> | <ul style="list-style-type: none"> <li>A starting point</li> <li>The existing indicator</li> </ul> | <ul style="list-style-type: none"> <li>A quantifiable outcome</li> <li>A framework to measure progress.</li> </ul> |

Urban Land Institute Score Card

| Indicator  | Benchmark     | Target          |
|--|---------------|-----------------|
| <ul style="list-style-type: none"> <li>% of local food consumed locally</li> </ul>                                   | 2%            | 20% by 2020 (?) |
| <ul style="list-style-type: none"> <li>Annual sales at farmers' markets</li> </ul>                                   | \$4.3 million |                 |
| <ul style="list-style-type: none"> <li>Annual direct sales</li> </ul>  | \$2.6 million |                 |
| <ul style="list-style-type: none"> <li>Acres of farmland</li> <li>Acres of land in agricultural easements</li> </ul> |               |                 |

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Questions?

## Charts, graphs and Inventories

### Inventory of Agricultural Zoning

This is an inventory of city zoning codes in Ada and Canyon County for zones that have a primary purpose for allowing agricultural uses. Also identified are other zones that may allow agriculture uses, but which that is not their primary purpose.

| City       | Primary Agricultural Zone   | Zones that allow agricultural uses               |
|------------|---|--|
| Ada County | <p><b>COMMON PURPOSE STATEMENTS OF THE RURAL PRESERVATION (RP) DISTRICT AND THE RURAL RESIDENTIAL (RR) DISTRICT:</b></p> <p><i>1. Promote the public health, safety, and welfare of the people of Ada County by encouraging the protection of <b>prime agricultural lands</b>; ...to direct urban density development inside areas of city impact; and ...</i></p> <p><i>2. Implement the Ada County Comprehensive Plan goal to protect <b>prime agricultural land</b> and to maximize opportunities for agricultural activities and an <b>agricultural lifestyle</b> in areas designated as Agriculture/Rural Lifestyle on the Comprehensive Plan Generalized Future Land Use Map; 3. Allow the development of <b>agricultural industries</b> and <b>agriculture service establishments</b> when such uses do not take prime agricultural land out of crop production;</i></p> <p><i>4. Protect <b>agricultural and range land uses</b> ... from undue adverse impacts from adjacent development; and 5. Permit the development of schools, churches, and other public and quasi-public uses in rural areas consistent with the applicable comprehensive plan.</i></p> <p><b>RP Rural Preservation District.</b> <i>Permit the continued use of <b>agricultural lands</b>, rangelands, and wildlife management areas within the Boise Front Foothills ...Allow a limited number of uses with excessive space requirements or buffering</i></p> | Agriculture use allowed in all zoning districts. |

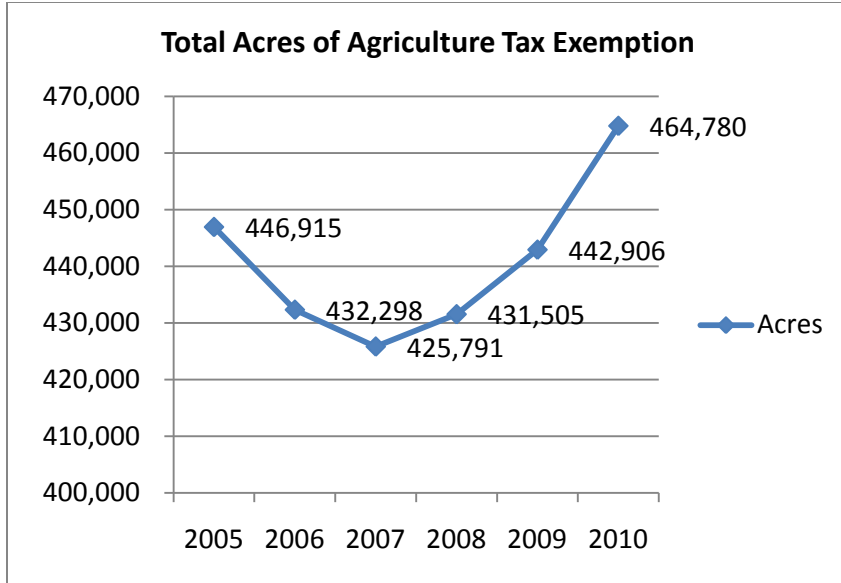
| City          | Primary Agricultural Zone  | Zones that allow agricultural uses   |
|---------------|--|--|
|               | <p><i>needs on non-prime agricultural lands.</i></p> <p><b>RR RURAL RESIDENTIAL:</b> <i>Permit the development of rural residential uses where the property is annexed into a fire district, public street access is available, and such development would not require excessive expansion of public services.</i></p>   |  |
| Boise         | <p><b>Open Land A-1 District</b> <i>classification to provide a zoning district within the City for low density residential use and land uses requiring larger land areas for development such as parks, schools, golf courses, agriculture, rural residential neighborhoods, and other uses in conformity with the Comprehensive Plan.</i></p> <p><b>Open Land A-2</b> <i>It shall be the purpose of the Open Land A-2 District classification to provide a zoning district within the City for property intended for permanent open space and to properly guide growth of the fringe areas of the City. The A-2 District classification should be applied to property that is not intended for development... Lands assigned to an A-2 District classification may be done so in conformity with the Comprehensive Plan, to set aside lands for open space uses, including floodways, riparian areas, steep slopes and flood control facilities; to enhance and preserve the character of parks and other publicly owned properties; agricultural and grazing lands; and, to serve as a low intensity use zone to properly guide growth in fringe areas of the City.</i></p> | <ol style="list-style-type: none"> <li>1. Agricultural uses are allowed in the A-2 zone and a conditional use permit in the A-1.</li> <li>2. Livestock keeping is allowed on lots of a minimum of one (1) acre.</li> </ol>         |
| Caldwell      | NONE   | <ol style="list-style-type: none"> <li>1. Agricultural is permitted in all zones.</li> <li>2. Farm stands and greenhouses are allowed in most non-residential districts and a conditional use in residential districts.</li> </ol> |
| Canyon County | <p>A AGRICULTURE ZONE: <i>To A. Promote the public health, safety, and welfare of the people of the county by encouraging the protection of viable farm land and farming operations; B. Limit urban density development to areas of city impact in accordance with the comprehensive plan;...D. Protect agricultural land uses, and rangeland uses, and wildlife</i></p>   | <p>Agriculture is an allowed use in all zones except 2 commercial districts.</p>   |

| City        | Primary Agricultural Zone  | Zones that allow agricultural uses  |
|-------------|--|---|
|             | <i>management areas from unreasonable adverse impacts from development; and E. Provide for the development of schools, churches, and other public and quasi-public uses consistent with the comprehensive plan.</i>  |   |
| Eagle       | <p>A AGRICULTURAL DISTRICT: <i>To maximize opportunities for agricultural activities by preserving land for the purposes of cultivating the soil and raising livestock.</i></p> <p>A-R AGRICULTURAL-RESIDENTIAL DISTRICT: <i>To provide for the transition of agricultural land no longer used for extensive agricultural purposes into residential areas, while preserving agricultural uses compatible with residential development.</i></p> | <ol style="list-style-type: none"> <li>1. Agriculture is permitted in A, but not AR.</li> <li>2. Other agricultural uses:<br/>Agricultural and forest Dairy farm, Farm, Farmer's markets (outdoor)<br/>Feedlot and stockyard , Horticulture (general)<br/>Horticulture (limited), Roadside stand (temporary structure), Turf and/or tree farm, and Vineyard are permitted or a conditional use in several zones.</li> </ol> |
| Garden City | None   | Agricultural uses allowed in all districts except C-2.  |
| Greenleaf   |  |   |
| Kuna        | <i>A AGRICULTURE: To preserve and protect the decreasing supply of prime agriculture land. ...to control the infiltration of urban development into agricultural areas which will adversely affect agricultural operations.</i>  | 14 agricultural related land use categories are enumerated and allowed or a conditional use in a variety of zones, both residential and non-residential.  |
| Melba       |  |   |
| Meridian    | None   | Nursery of urban farm land use designation allowed in commercial districts and industrial zone.   |
| Middleton   | <i>A-R AGRICULTURAL RESIDENTIAL: The purpose of the A-R agricultural residential zone is to accommodate by zoning procedures land areas that are being used predominantly for agricultural uses, i.e., crops, livestock and related uses in order to properly guide growth.</i>  | None  |
| Nampa       | <i>AG AGRICULTURAL DISTRICT allows the establishment of agricultural operations within the city. Such agricultural district is deemed necessary to preserve the economic and social values of agricultural lands and to provide a district, the boundary of which will provide the transition between "rural" and "urban".</i>   | 13 agricultural related land use categories are enumerated and allowed or a conditional use in a variety of zones, both residential and non-residential.  |
| Notus       |  |   |
| Parma       | None   | 1. Agricultural land uses allowed in all districts except   |



| City   | Primary Agricultural Zone | Zones that allow agricultural uses   |
|--------|---------------------------|--|
|        |                           | conditional use in industrial zones.<br>2. Road side stand allowed in all non-residential zones.<br>3. Livestock keeping subject to a conditional use in any zone. |
| Star   | None                      | 1. Agricultural land uses are permitted in the rural transition zone.  |
| Wilder |                           |  |

## Agricultural Land Use Inventory



### Loss of Farmland (2002 – 2007)

|        | Acreage in farms |         | Percentage Lost |
|--------|------------------|---------|-----------------|
|        | 2002             | 2007    |                 |
| Canyon | 271,992          | 260,247 | 4               |
| Ada    | 223,388          | 191,477 | 14              |

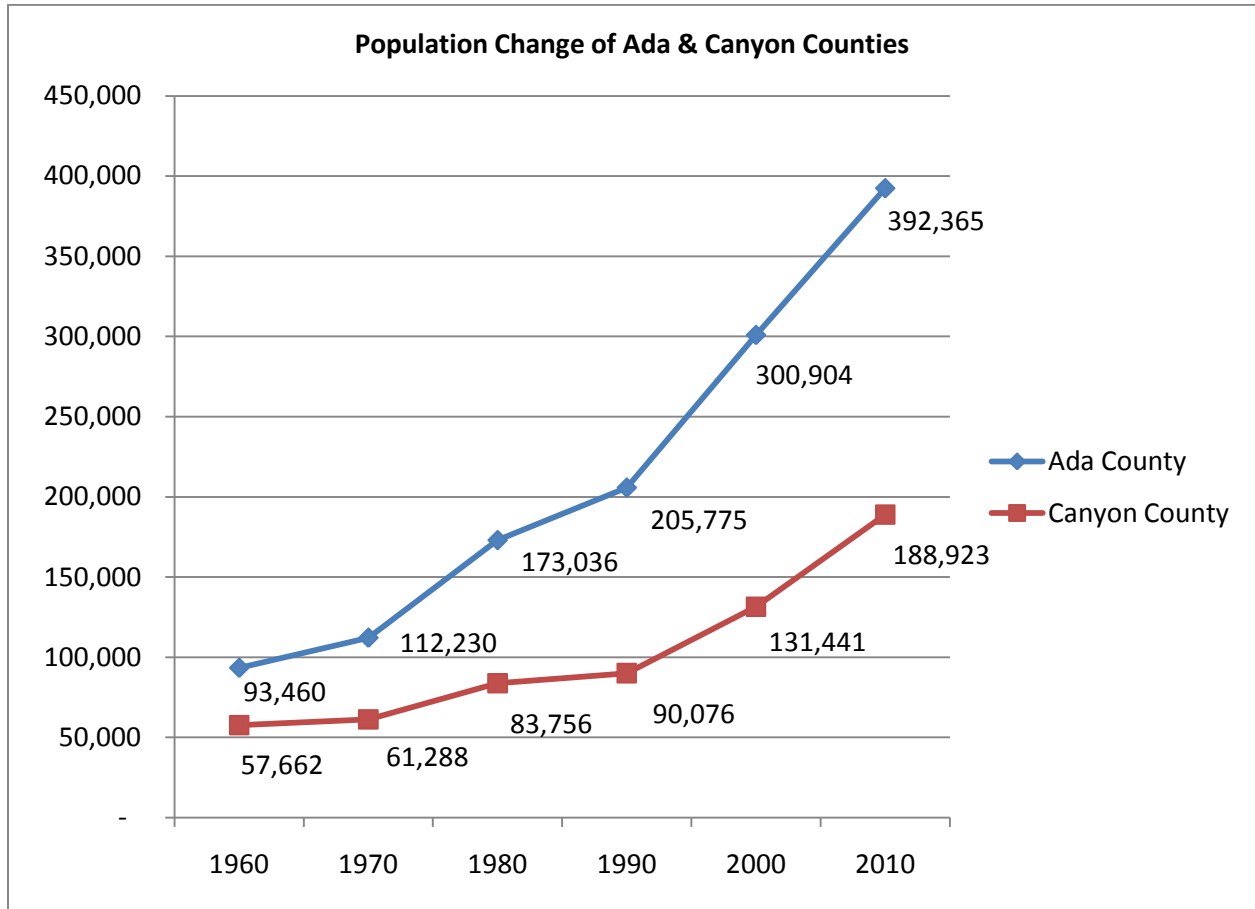
(USDA, 2007)

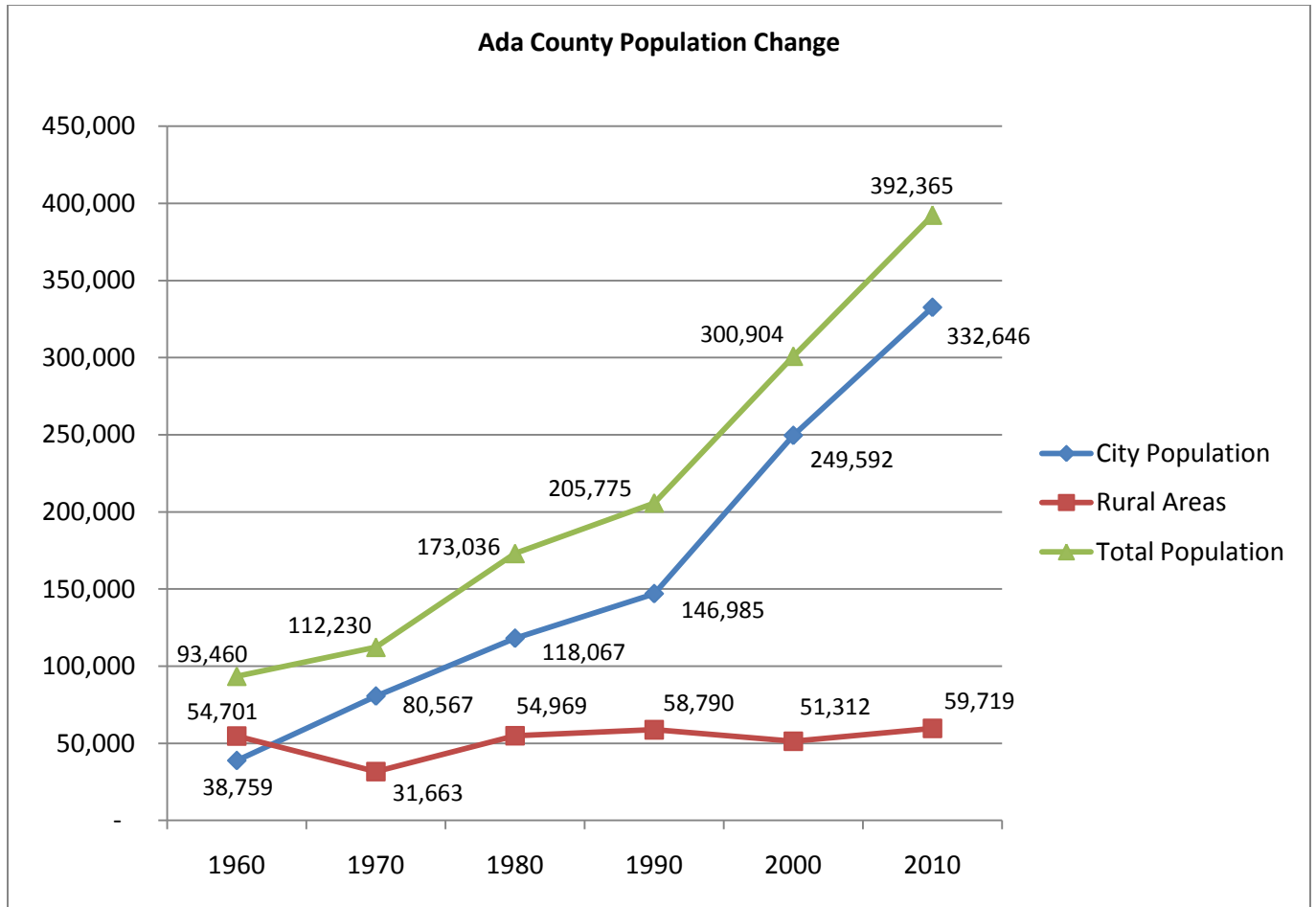
### Zoning that Allows for Agricultural Uses (2011)

|          | Acres   |
|----------|---------|
| Cities   | 23,529  |
| Counties | 802,725 |
| TOTAL    | 826,254 |

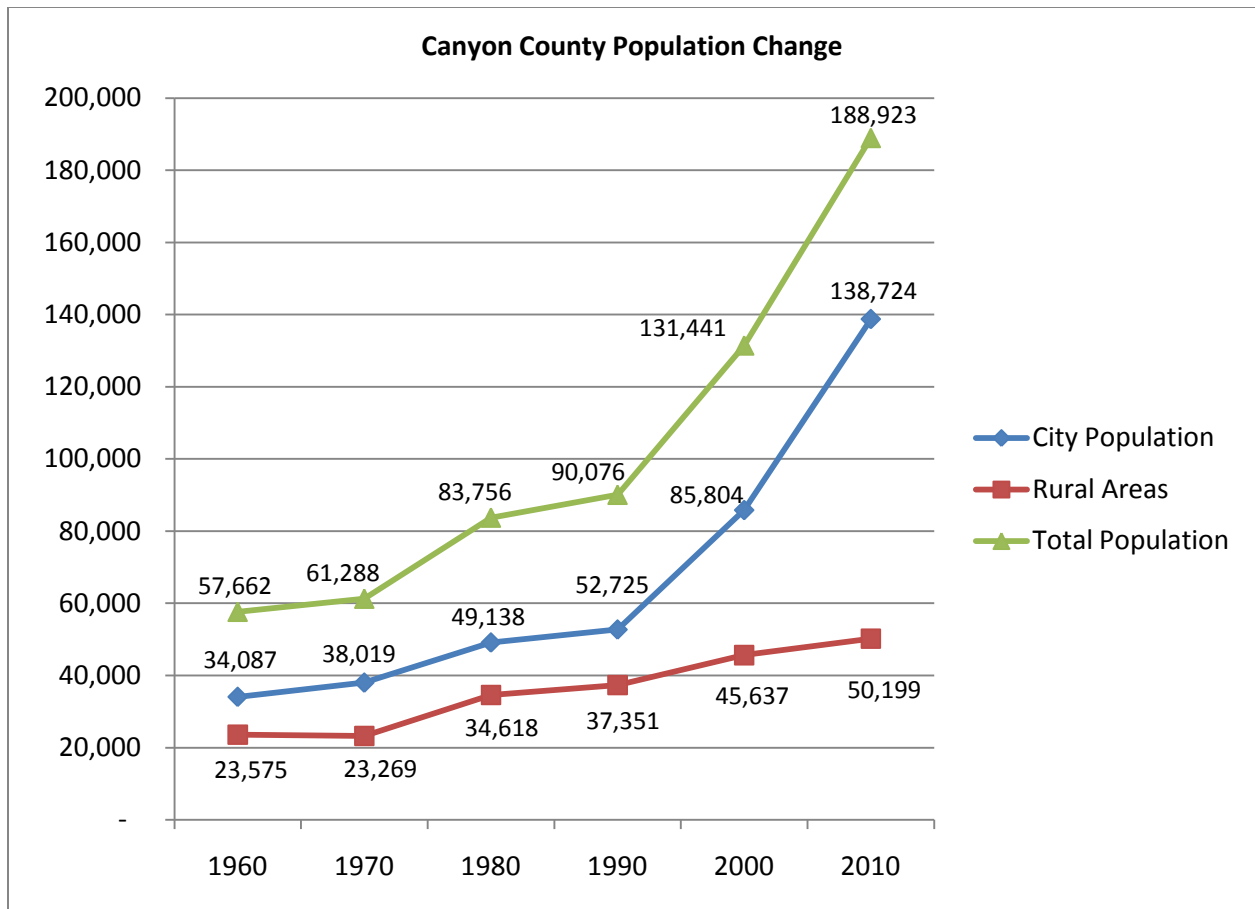
| <b>Land Type in Ada and Canyon Counties</b>  | <b>Total Acres</b> | <b>Total In Cities</b> | <b>Total In County</b> |
|--|--------------------|------------------------|------------------------|
| Original Prime Farmland Soils (If irrigated)   | 504819             | 99111.00               | 405708.00              |
| Remaining Prime Farmland Soils (If irrigated) after Roadways   | 483335             | 84268.00               | 399067.00              |
| Remaining Prime Farmland Soils (If irrigated) after Roadways and Current Development (includes some rural residential) | 399627             | 36248.00               | 363379.00              |
| Remaining Prime Farmland Soils (If irrigated) after Roadways and Current Development. Government Owned Lands Removed.  | 275396             | 28640.00               | 246758.00              |
| Current Ag exemption on Prime Farmland Soils. These have known access to irrigation.                                   | 195940             | 16251.00               | 179689.00              |

# Population Changes (1960 – 2010)



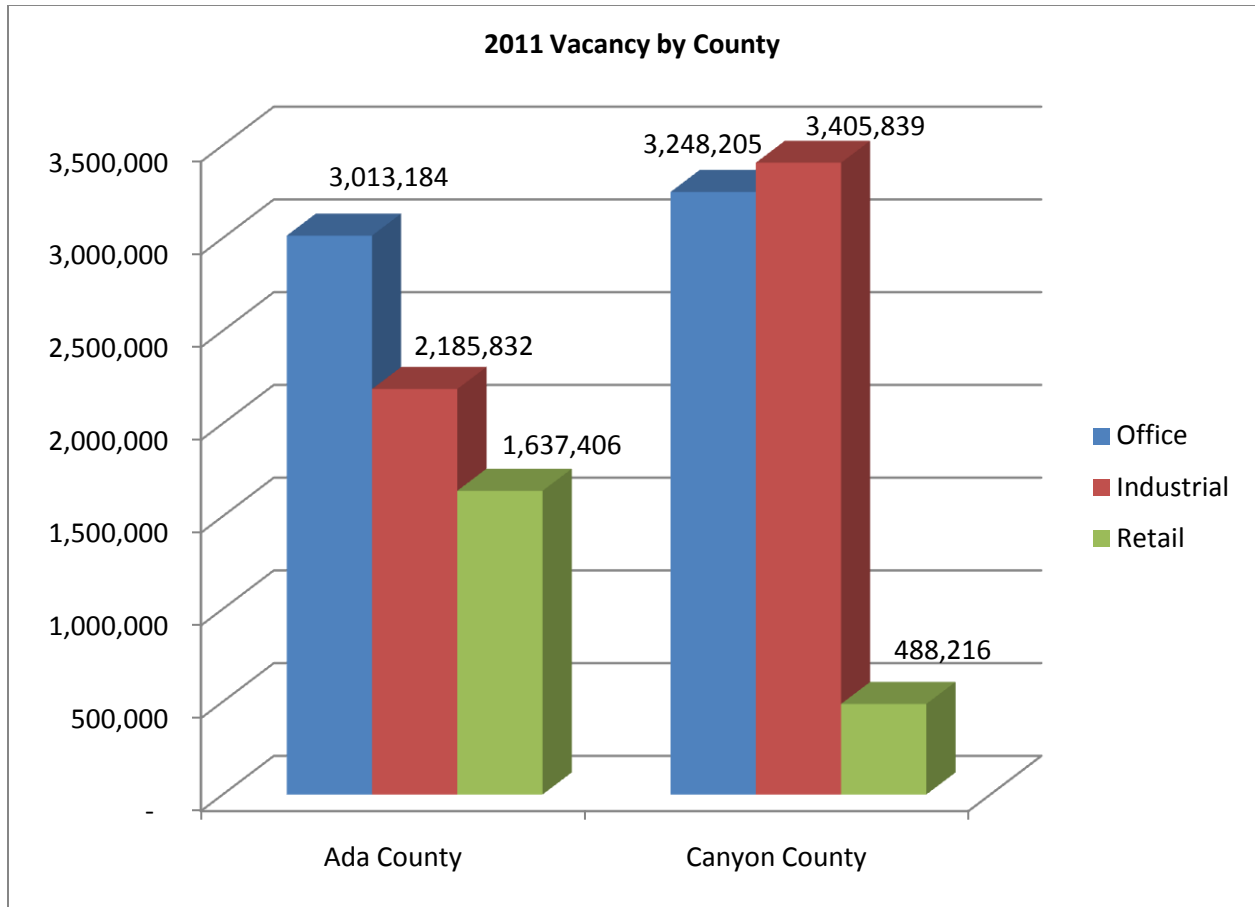


| Ada County City Population Change 1960 - 2010 |        |         |         |         |         |         |
|---|--------|---------|---------|---------|---------|---------|
|   | 1960   | 1970    | 1980    | 1990    | 2000    | 2010    |
| <b>Boise</b>                                  | 34,481 | 74,990  | 102,451 | 125,738 | 185,787 | 205,671 |
| <b>Eagle</b>                                  | -      | -       | 2,620   | 3,327   | 11,085  | 19,908  |
| <b>Garden City</b>                            | 1,681  | 2,368   | 4,571   | 6,369   | 10,624  | 10,972  |
| <b>Kuna</b>                                   | 516    | 593     | 1,767   | 1,955   | 5,382   | 15,210  |
| <b>Meridian</b>                               | 2,081  | 2,616   | 6,658   | 9,596   | 34,919  | 75,092  |
| <b>Star</b>                                   | -      | -       | -       | -       | 1,795   | 5,793   |
| <b>County Total</b>                           | 93,460 | 112,230 | 173,036 | 205,775 | 300,904 | 392,365 |

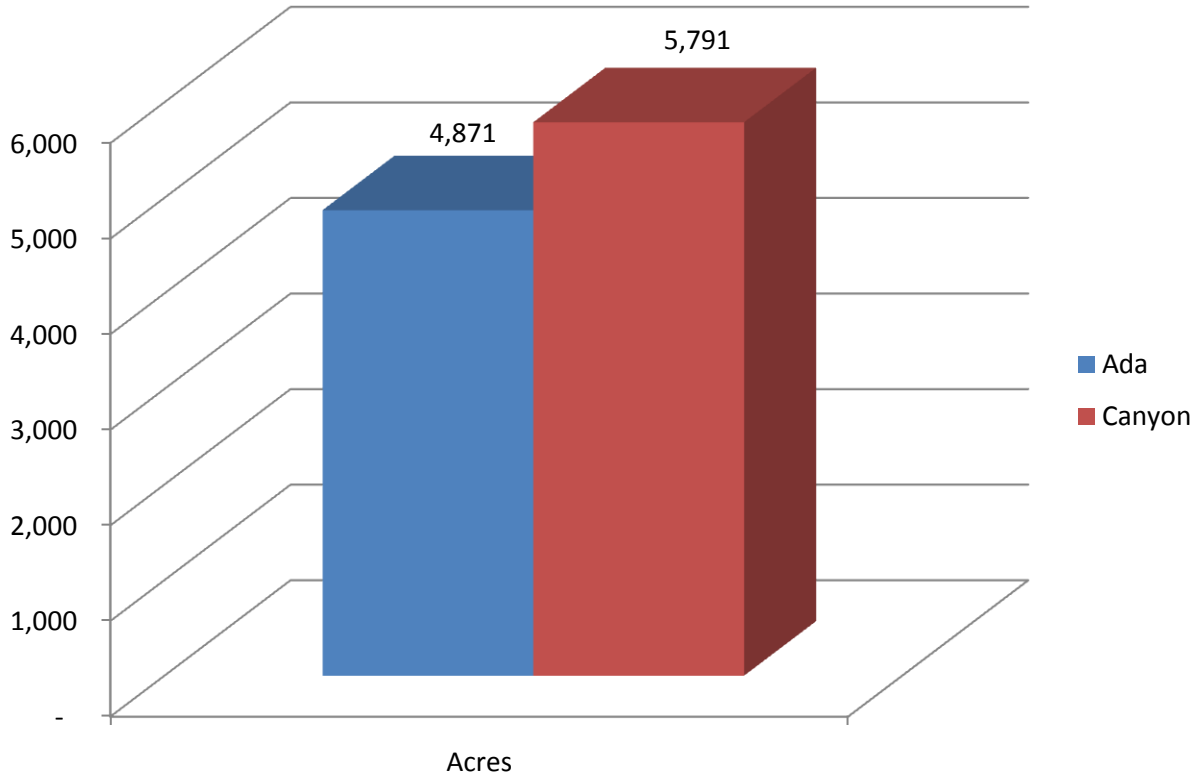


| Canyon County City Population Change 1960 - 2010 |        |        |        |        |         |         |
|--|--------|--------|--------|--------|---------|---------|
|  | 1960   | 1970   | 1980   | 1990   | 2000    | 2010    |
| <b>Caldwell</b>                                  | 12,230 | 14,219 | 17,669 | 18,400 | 25,967  | 46,237  |
| <b>Greenleaf</b>                                 | -      | -      | 663    | 648    | 862     | 846     |
| <b>Melba</b>                                     | 197    | 197    | 276    | 252    | 439     | 513     |
| <b>Middleton</b>                                 | 541    | 739    | 1,901  | 1,851  | 2,978   | 5,524   |
| <b>Nampa</b>                                     | 18,897 | 20,768 | 25,112 | 28,365 | 51,867  | 81,557  |
| <b>Notus</b>                                     | 324    | 304    | 437    | 380    | 458     | 531     |
| <b>Parma</b>                                     | 1,295  | 1,228  | 1,820  | 1,597  | 1,771   | 1,983   |
| <b>Wilder</b>                                    | 603    | 564    | 1,260  | 1,232  | 1,462   | 1,533   |
| <b>County Total</b>                              | 57,662 | 61,288 | 83,756 | 90,076 | 131,441 | 188,923 |

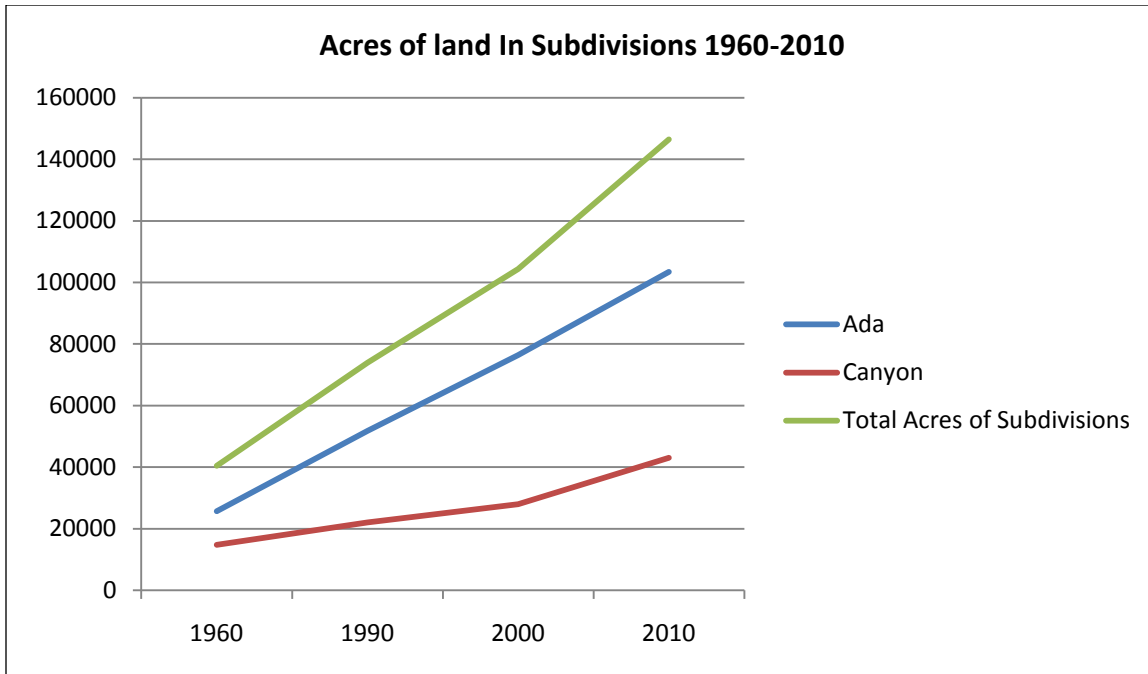
# Land Use Trends and Inventories



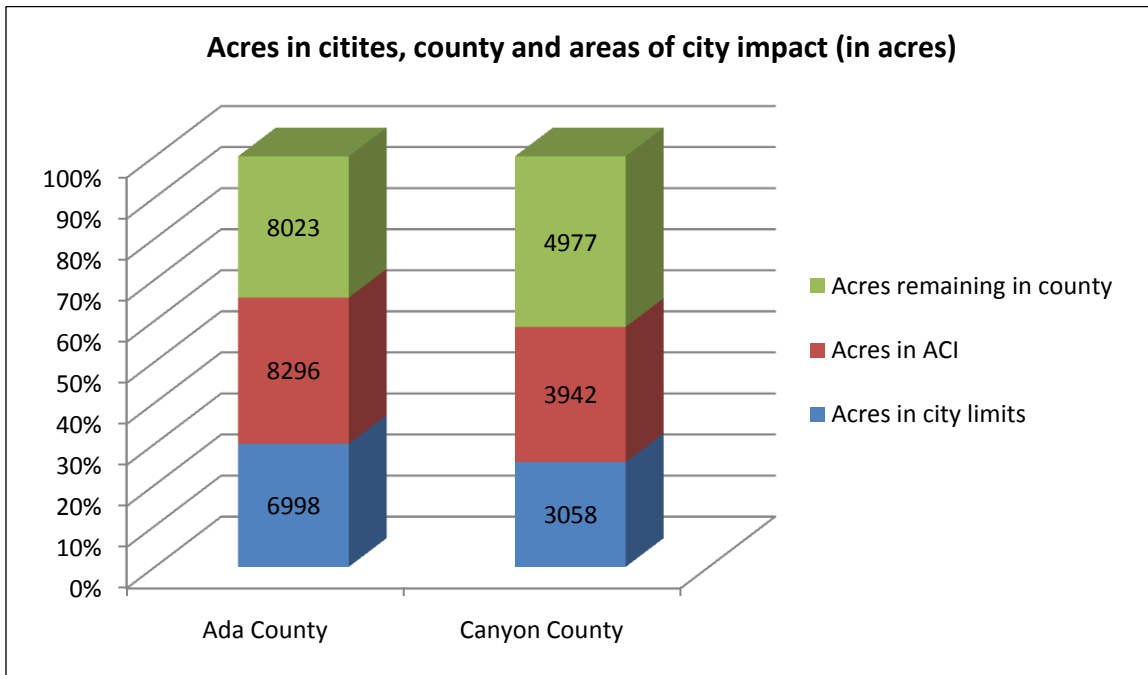
Vacant Land by County







(COMPASS)



(COMPASS)