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The Effects of Crystal Bridges in Downtown Revitalization of Bentonville, Arkansas in The Last Decade

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The Effects of Crystal Bridges in Downtown Revitalization of Bentonville, Arkansas in The Last
Decade

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Science in Geography

by

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Bachelor of Science in Geography, 2015

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Abstract

Bentonville started the process of downtown revitalization in 2007 after they passed a bond measure. However, research on the impacts of the revitalization and the factors associated with it is limited or focused for the private sector. This study identified Crystal Bridges Museum of American Art as a catalyst for the process of downtown revitalization and aimed to fill the gap in urban development and economic opportunities that arose due to the museum.

Using the “Monitoring annual urban changes in a rapidly growing portion of Northwest Arkansas with a 20-year Landsat records” (Reynolds, Liang, Li, & Dennis, 2017) it is evident that Bentonville has experienced urban growth and the structure of the city has changed. Walmart is the driving economic factor in the city, but Crystal Bridges is providing Bentonville with an identity. The data from the Downtown vitality report and the U.S. Census data suggests that Bentonville has the largest number of people living (Center for Business and Economic Research, 2018). Also, the median household income has increased from \$51,305 in 2009 to \$76,447 in 2016, the highest increase in the region, allowing for the city to invest in new amenities, causing an increase in the number of businesses, mostly restaurants, in the downtown area.

According to interviews with the Chamber of Commerce and city officials related to planning and urban development during this process, the respondents claim that the city had begun the process of revitalization, but Crystal Bridges was the primary factor in this process. Furthermore, the museum provided business opportunities and visitors to the city which allowed for making a change to the downtown district and investing in more amenities to provide for the increasing number of the residents and visitors in the downtown area. Those findings suggest that indeed Crystal Bridges was the most crucial factor of the downtown revitalization process in Bentonville in the last decade.

Keywords: *downtown revitalization, Crystal Bridges, urban change*

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Dedication

This thesis is dedicated to my loving family, especially my parents who always provided me with a world of opportunities.

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1 Introduction

Urban growth and downtown revitalization are highly essential to understand how they relate with one another. The process of how a city approaches the process of growth depends on their local policies and the Master Plan that they draft. Moreover, the investments occurring around the city to improve the quality of life of its citizens through anchor projects are some of the other areas of research a local government focuses its policies. However, studying the geography of a city and its social differences are never the same for every city. Therefore, urban geographers have taken a more radical approach to the problems of the city. In the literature review discusses some of their thoughts.

The importance of anchor projects is vital to the quality of life and how the process of revitalization helps the cities undergo processes of rebuilding their identity. Following the practices of similar projects in other cities around the United States, local governments with public-private partnerships have implemented projects to help rebuild cities. These projects focus on downtowns most of the time since the idea to fight sprawl and bring back residents to downtown is essential to revitalizing the city (Zielenbach, 2000). Similar to this, yet on a smaller scale, is the case of Bentonville, which began the process of revitalizing downtown after passing a measure bond in 2007 aiming to improve the quality of life for its residents. The city emphasized the need for providing a better quality of life and a healthy downtown in the Master Plan of 2007.

The Crystal Bridges Museum of American Art is considered a compelling anchor project for a city of the size of Bentonville. Moreover, this project and its capital from its investors, not only increased the chances of it being successful but how it will influence the city, its urban growth, downtown revitalization process, and the overall growth of the Northwest Arkansas

region. In this thesis, we will discuss the effects that Crystal Bridges had on the downtown revitalization of Bentonville, how it improves the city's quality of life, urban growth, and its downtown revitalization by bringing businesses in the area, further attracting talent and younger generations to move in this ever-growing city. Has Crystal Bridges Museum of American Art contributed to the urban growth and density of the Bentonville over the last decade and in turn influence the revitalization that started in 2007?

2 Study site

Bentonville is the largest city in Benton County and the 2nd largest in the Northwest Arkansas Region. Bentonville is home to 47,093 residents, as of 2016 (U.S. Census, 2016). The U.S. Census data show that of these, 74.2% are white, 9.2% Hispanic or Latino, 10.2% are Asian, 2.6% are African American, American Indian with 0.9%, native Hawaiian and other races 0.6%, and 2.2% mixed races.

According to the data from the U.S. Census retail trade accounts for the highest area of employment in the city with 33.5%, followed from educational services with 15.8%, and professional services with 14% and other occupations account for the rest (U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, 2018). The median household income in Bentonville as of 2016 was \$76,447, well above the U.S. average which as of 2016 was \$57,617.

Bentonville is also the home to Walmart Inc. ranked 1st in the Fortune 500 companies in the U.S. (Fortune 500, 2017). Having this economic power, a company that employs more than 28,000 people in the region, it continually seeks investments in the area, and Bentonville is the most significant beneficiary of its presence in the city. Therefore, investing in the city overall, not only benefits the city and its residents but for future employees and the corporate's image

overall. The addition of The Crystal Bridges Museum of American Arts is another gem provided by the Walmart family, enabling, and further helping rebuild the city downtown.

2.1 Field of study

Bentonville is one of the major cities in Northwest Arkansas. This area is home to several Fortune 500 companies, including Walmart. Providing prosperity to Bentonville, Walmart helped boost the city's economy. The change in Bentonville's economy changed the urban form of the city since its residents could make investments in other areas of the economy to the city. Walmart with its home office in Bentonville employs 18,600 (Desjardins, 2017) people and an estimate of 1,198 vendors based on their website data (Walmart, 2018). Thus, Walmart is considered the most important employer in the city of Bentonville. Moreover, its associates can afford the quality of life and the ever-increasing real estate prices in the downtown and the edges of the city. Crystal Bridges, on the other hand, employs around 200 people based on the information obtained from their website.

This thesis could have taken several directions when decided to focus on the effects of Crystal Bridges on the downtown revitalization. Social and economic aspects of life with the differences between residents was one theory. However, Crystal Bridges brings an attraction, an anchor project not seen before on a city of this scale. It provided amenities, high-end restaurants, and walkable spaces for its tourists created a lodging industry that was not thought of to be as effective in the past for Bentonville with only Walmart vendors coming in.

It is essential to acknowledge the fact that Walmart provided the resources, the name, and the people, but Crystal Bridges brought the culture. Nonetheless, the museum put Bentonville on the map in the art world. That is why it was important to approach it from a revitalization perspective. How has the museum changed the city's composition, put Bentonville on the map

and further improved the quality of life? Nonetheless, the amenities provided from the city facilitated this growth and contributed to the experience of the visitors in the city, but it is worth noting that Crystal Bridges made available a whole new level of experience with more than 600,000 visitors in the city according to the museum's website.

This thesis focuses on the study of the downtown area in the city; it discusses and provides information about the effect of revitalization influenced from Crystal Bridges. The addition of the museum increased the visibility and provided recognition for the city, its area, and the state of Arkansas. Moreover, in the day and age of technology, the addition of this museum to a city built around the retail market provides a more cultural identity. There is a distinct connection of Bentonville with Walmart; however, this thesis tries to analyze how the Crystal Bridges Museum of American Art has affected the demography, culture, businesses, and the quality of life in the city.

2.2 Economy

The population and income growth that Bentonville has experienced is nothing new. This city has greatly benefited from some of the significant Fortune 500 companies located in the regional cities in Northwest Arkansas area. Besides Walmart, its residents work for Tyson located in Springdale, and for J.B. Hunt Transport Services which is another Fortune 500 company in Lowell. Furthermore, in lower numbers, people are employed at the University of Arkansas as well, which is the state's most prominent university. The different employment opportunities have significantly influenced the income growth of Bentonville. These companies have not only increased the median household income to above the U.S. average, but it has also proved to be a backbone for the constant growth of the area, and the city overall (Fortune 500, 2017).

3 History of Crystal Bridges



Figure 3.1 - Crystal Bridges Museum of American Art¹

Considered as one of the wealthiest women in the world Alice Walton presented the idea for the museum in 2005. She is the daughter of Sam Walton, the founder of Walmart Inc (Forbes Billionaires, 2018). She focused on curating art and used her wealth to open the museum, the value of her art collection is at a hundred million dollars. However, this idea further benefited from a push that was given from then Representative Horace Hardwick from special legislation that he drafted to exempt Crystal Bridges from taxes. Act 1865 of 2005 makes Crystal Bridges the only museum in the state excluded from paying taxes in art acquisitions (Hardwick, 2005).

¹ Arkansas.com Crystal Bridges Museum

The act passed even though it was debated at the time because the city is losing tax revenue. However, from representative's Hardwick point of view, it was seen as a gesture to keep the museum in Bentonville and beat competition from other states that wanted to attract this project with blank tax offers like Tennessee and Texas (Dungan, 2011).

The Crystal Bridges Museum of American Art is a 201,000 square foot complex that sits in 120 acres of forest, and it was designed to portray the spirit of America (The Encyclopedia of Arkansas History & Culture, 2018). The museum got its name from a Crystal Spring—a natural spring on the Museum's wooded site that feeds into the museum ponds—and from the unique bridge construction incorporated into the building design from the architect Moshe Safdie (Crystal Bridges Museum of American Art, 2018).

Crystal Bridges intends to present its visitors with the main artworks across U.S. history. Though criticized from many newspaper outlets when it first opened the doors, due to their acquisitions, Crystal Bridges collection includes five centuries of American masterwork (Helmore, 2011). With works from renowned artists such as Asher B. Durand's *Kindred Spirits*, *Rosie the Riveter* by Norman Rockwell, and Andy Warhol's *Dolly Parton*, each reflects a distinct moment in American artistic evolution. However, in addition to historical works, the museum exhibits significant modern and contemporary American artists works, including Roy Lichtenstein, James Turrell, and Georgia O'Keeffe (Crystal Bridges Museum of American Art, 2018).

The museum's total worth, in building, art, and endowment, it is close to 2 billion dollars (Peacock, 2011). Something that distinguishes this museum from other major museums around the U.S. and the world is that it has created an identity for itself. Crystal Bridges was able to bring together a collection and make it available to the visitors for free. They did it in a matter of

a 10-year span. As Amy Cappellazo, chairman of post-war and contemporary development, at Christie's declared: "There are American museums out there with vast, amazing collections, but they have been buying artworks for decades. No one seeking to do that achieved such thing in their lifetime (Dungan, 2011)".

4 Literature Review

There exist some theories in place that elaborate on the spatial expansion models of American cities, the concentric model (Burgess, 1967), the sector model (Hoyt, 1939), the polycentric model (Harris & Ullman, 1945). These models are different in each city, yet, they represent the identity and characteristics of a community. The amalgamation of individual elements of the towns and cities in which we live, work, play, and travel is known as urban form (Frumkin, Frank, & Jackson, 2004). These elements help shape our communities. Part of urban form is sprawl; this field as well has attracted a great deal of research interest. Sprawl is an amazingly disruptive force, and even though there is no universal definition for it, sprawl triggers conflict and rearranges the rural and village geography, economy, and society in the most profound ways (Furuseth & Lapping, 1999). Furthermore, there is a widely accepted approach on how to measure activity in downtown areas from Ewing, Pendall, and Chen. Incorporating land use and transportation they were able to identify four categories for this measurement: the strength of activity in downtown areas, accessibility of the street networks, density, and neighborhood mixture (Ewing, Pendall, & Chen, 2002). Ewing et al claim that sprawl is a type of urban form, which endangers farmland.

Previous urban theorists have highly studied this urban imperative. Many have attacked the process of revitalization and how gentrification, where instead of providing an affordable way of life, has prohibited low-income citizens from living in such areas, pushing them to the

outskirts of the cities, all in the name of revitalization. Thus, revitalization even though very important comes at a cost (Gallagher, 2013).

The list of urban activists that influenced urban form is long, but it includes the likes of Ebenezer Howard, Le Corbusier, Lloyd Wright, and Arturo Soria y Mata. Howard's idea conceptualized the city with the industry decentralized, and the town built around the decentralized plant. His concept is known as a garden city. (Hall, 1975) Lloyd Wright presented The Broadacre City a low-density city, single-homes owning an acre of land. He presented the concept of highway and the car. Soria y Mata was a Spanish architect who presented the linear city (Hall, 1975). Developing the city along the axis of high-speed transit connecting two cities with areas of green space. Le Corbusier is known for the towers in the park as mentioned in *The Radiant City* (Corbusier, 1967). He focuses on efficient transportation system above ground level and high buildings giving space for parks and green-space for residents. All of these urban theorists offer a more innovative way of structuring the city, increasing land use, and improving the economy.

One of Weber's accounts is that the mixture of commerce and trade, with all the associated activities, gives the city its unique character (Weber, 1958). Considered as one of the most prominent urban theorists of twentieth-century Lefebvre in *The Production of Space* presents the compatibility between Marx's analysis of capitalist power relations and how these strategies of urban domination are embedded, above all in the fabric of urban society (Parker, 2015, p. 23). It is Lefebvre that refers to the city as a political entity. However, Kevin Lynch talks more about the form of the city and how we related to it. He expounds upon the physical environment and community's purposes. He emphasizes the fact that urban form can be achieved throughout five essential elements to create mental maps: paths, edges, districts, nodes, and

landmarks (Lynch, 1960). An essential part of his work is the mental maps and how we move around. In his book, he approaches this problem by surveying people on what they focus when going from one place to the other if they are looking for paths or landmarks for the most of this time.

Urban form, as we encountered from the urban theorists, focuses on how local government is working to provide social justice and to improve the quality of life for its residents. Achieving such improvement can be done through multiple initiatives: building a new mall, improving a sports field, building a new high school, adding amenities near low-income neighborhoods, supplying the community with affordable housing, or increasing density near downtown. The process of rebuilding and or renewal in American cities, mostly known as revitalization, consists of many factors and they differ depending on the location of the city.

When discussing downtown revitalization author of *The Art of Revitalization*, Zielenbach, explains that the most widely accepted definition of revitalization is gentrification, which is the physical restoration of central-city neighborhoods by and for middle- and upper-income professionals. According to him, for revitalization to occur it requires relatively high levels of education located near the downtown business district. However, his definition states the improvement of economic conditions for existing residents and the re-integration of the neighborhood into the market system (Zielenbach, 2000). Similarly to Bentonville, relatively young, well-educated professionals fill these positions (Kasarda, 1989).

Revitalization can be achieved from private investments as well. A developer can see a long-term profit and invest in development. The money put towards an investment seeks not only the benefit but also the prospects of the neighborhood (Zielenbach, 2000).

Dieleman and Wegener claim that in order to regulate the development of an urban form to avoid sprawl many believe that it is the government's responsibility to intervene (Dieleman & Wegener, 1978). "New Urbanism" and "Smart Growth" are the movements that attempt government regulation of urban form (Knaap, 2002). These government regulations to achieve the necessary urban form are possible through adopting from traditional codes to form-based codes. According to the City of Bentonville Zoning Code booklet, a zoning district is a section of the city in the zoning ordinance text where the requirements for land use, development, and building are prescribed. Moreover, the district boundary is the line that separates different zoning districts (City of Bentonville, Zoning Code Definitions, 2017). Form-based codes allow for focus on building form and encourages design in relation to adjacent uses. Moreover, it focuses on mixed uses and preserves the characteristics of the community, with both residential and nonresidential in a single building (City of Bentonville, Zoning Code Definitions, 2017).

4.1 Urban Growth

Living near their primary activities have influenced the idea where people move and how cities grow. Thus, the governments draw policies and comprehensive plans as to in which directions the city will grow and where to direct these developments. Urbanization influences the growth process, and growth influences the urbanization process, driving the spatial evolution of production and population agglomeration (Black & Henderson, 1999).

One of the bases of urban growth is transportation, and it was Henry Ford with his Model T in 1908 that gave rise to the concept of rapid urban growth (Gallagher, 2013). To better understand urban growth, we must understand its concept. Author Sarah Peskin best explains it as: Changes in our physical environment, characterized by a new building in areas that were not built-up before. Replacing new structures or different uses of the land occurs with changes on

where buildings existed. These changes are called growth (Peskin, 1976). On the other hand, land use is the natural landscape which accommodates human needs; decisions are made determining the changes. Developers, investors, local agencies, and legislators make these decisions (Peskin, 1976).

Mainly urban growth theory deals with the four Cs of urban experience: culture, consumption, conflict, and community. Culture includes systems of belief in the built environment with the traditional cultural productions like art, theatre, literature, orchestral music being one of them (Parker, 2015). Thus, being a cultural product of urban experience Crystal Bridges fuels in this gap in the case of Bentonville.

Edward Banfield argues on his three imperatives of how a city functions: demographic (city expands if its population increases), technology (transporting a large number of people outside of city), and the third is economic (due to their income residents can afford new housing and to commute back in to the city) (Banfield, 1974). However, he excludes the political imperative (Schneider, 1980), Sundquist supports this idea because as he explains “the United States has no policy of active intervention regarding population distribution” (Sundquist, 1978).

Glaeser et al. claim that diversification contributes to growth (Glaeser, Kallal, Scheinkman, & Shleifer, 1992). This growth mostly starts from the central business district (CBD). City government can implement strategies that encourage economies of agglomeration effect in the downtown area that benefits businesses. In Bentonville’s case, the mixed use of businesses and the policies that encourage businesses to operate in the CBD have assisted in the diversity of economies of agglomeration effect. The line of restaurants, boutiques, local stores, farmers markets, residential areas, and office spaces provide the mixture to interact with one

another and bring the spirit in the downtown area. This level of growth has been more present in the past twenty years, which will be discussed and shown in the chapters below.

In the coming chapters, we will delve deeper how culture affects the community and the city. How do culture nodes serving as landmarks for revitalizing city downtowns and increasing their quality of life? Crystal Bridges serves as a landmark and at the same time as an anchor project to the City of Bentonville.

5 Methodology

5.1 Data collection

Dividing the process into different stages was necessary while working on the methodology for the effect of Crystal Bridges in the downtown revitalization of Bentonville. This approach was because different factors were essential to the existence of the museum. Compiling the data for this project consisted of separating the project into different areas. Starting with a chronological order of the importance each played for the museum primarily and Bentonville as a city is the cornerstone of this methodology for the thesis.

5.2 Landsat land-cover imagery representation

The primary source of data however was obtained from the paper named Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record (Reynolds, Liang, Li, & Dennis, 2017), in order to study the patterns of growth in Northwest Arkansas area, specifically for the purposes of this thesis in Bentonville. The authors gave the rights to use their work and Landsat data records for this thesis. These data provide Landsat imagery for the years 1994 until 2015; the authors erased the 2012 data from the inventory due to the failure of the Landsat 7 Scan Line Corrector failure in 2003. The

decommission of Landsat 5 because of multiple mechanical failures in 2012, which made it impossible to obtain the data from Landsat 8 with the early release of 2013 date².

The processing of these data focused on obtaining urban growth patterns for the Northwest Arkansas region with two most applied change detection methods of anomaly detection and temporal filtering. The NLCD dataset has a 30 m resolution national land-cover dataset. Presenting the urban land-cover change in the NWA, consisted of achieving very satisfying results for this case study that show the areas of urban growth. Moreover, for this thesis, this dataset will be focused on the area near downtown Bentonville, and the emerging site of Crystal Bridges to show the urban growth that affected this city. Furthermore, this dataset will provide means to study if Crystal Bridges affected downtown revitalization.

5.3 Aerial imagery analysis

In addition to the land-cover imagery provided for this thesis, creating a Time Lapse of aerial imagery urban change using time ranges from Google Earth aerial images (Google Earth, 2018) is another asset of identifying urban growth in Downtown Bentonville. Exporting the images for the thesis consisted of a lack of datasets. In comparison to the primary source of aerial imagery, except 1996 other years were not available until 2001 in the Google Earth database. Moreover, there is a lack of aerial imagery in Google Earth for the following years: 2002, 2003, 2007, 2008, 2011, 2013, and 2015. However, the available aerial imagery is sufficient to conduct an aerial imagery comparison to support the case of urban growth, and urban change in the city of Bentonville in one side, and with the same method to approach the urban change around

² Reynolds, Liang, Li, & Dennis, 2017; page 4.

Crystal Bridges museum, changes in urban form, and urban growth that has occurred in downtown.

5.4 Qualitative analysis: Downtown report

The Center for Business and Economic Research at the University of Arkansas (Center for Business and Economic Research, 2018) published a report and made available another set of data. This report presents a more in-depth analysis on “Measuring the vitality of downtowns in Bentonville, Fayetteville, Rogers, Siloam Springs, and Springdale.” The primary purpose of this report was to research and study the economic indicators of these downtowns and how that has influenced and affected the revitalization process. It also focuses on the opportunities for housing and increased density. An aspect of the data provided for this report used ESRI Business Analyst through the demographic data of U.S Census block group data provided for population growth, median age, median income, employment and unemployment, businesses, and specifics of the retail sector for the city. Through Business Analyst, manual searching, and site visits also yielded data on the number of high-end businesses in the Downtown Bentonville. Even though this number is not high, when compared to the city size is quite considerate. These restaurants started explicitly to emerge in the city with the opening of Crystal Bridges Museum.

U.S. Census used the same data on their 2010 report and the projections up until 2016 for the economic components of the city to study the economic impact over time and how that has affected the median household income. Moreover, this data is used to show the overall change and income growth in the city’s total population. Fact Finder website was used to obtain these data.

5.5 Qualitative analysis: Interviews

The last part of the data gathering focused on interviewing residents and selected essential actors in the downtown revitalization efforts of Bentonville, and the effect that Crystal Bridges had on it. These interviews served as a means to obtain qualitative data to compare and to check if they correlate based on the questions asked to each entity.

For this thesis project the interviews phase aimed to interview: a member of Planning Commission from the City of Bentonville, a representative from the Crystal Bridges Museum of American Art, the president of Greater Bentonville Area Chamber of Commerce, planners and developers from the Planning Department at the City of Bentonville, and the city Mayor. It is worth mentioning that the Mayor of Bentonville did not agree to interview for this thesis on the issue of confidentiality.

5.6 Qualitative survey analysis comparison

Residents participated in a survey about the city in different locations around downtown Bentonville. This survey was designed on a Likert scale and asked citizens different questions to obtain data on the topic of the effect that Crystal Bridges has had on the downtown revitalization of Bentonville. Gathering these data, helped obtain personal knowledge and more in-depth experience from residents and how they perceived this part of the revitalization. Furthermore, it gained a perspective of what the citizens think, and how does each question reflect upon their day-to-day life and affect their quality of life.

5.7 Kevin Lynch identity mapping approach

As a final method of gathering qualitative data was used to analyze the method of mental mapping. Kevin Lynch in his book *The Image of the City*, mentions that the city is constructed in space and presents the urban form which people can read. Thus, people create these mental maps

that consist of streets, edges, districts, nodes, landmarks. (Lynch, 1960), which are analyzed to present the identity, structure, and meaning of how people relate to the location. Hence in this thesis as a part of the survey conducted with residents, was aimed to use this method to show what the residents identify within the city to the selected destinations in the question. The exciting part about this method is that respondents would adjust to their surroundings, trying to make connections with their location and the point of destination, then identify the fastest path to the point of destination.

5.8 Restaurants in downtown

The restaurant industry in Bentonville is considered the highest financial beneficiary from the opening of Crystal Bridges Museum. Hence the number of restaurants in the city has increased. The method applied for this part required reaching out to the businesses to obtain data on when they founded their business. This survey was conducted to compare the data on how many businesses emerged after the museum opened.

6 Results

Walmart employs almost 5800 employees working for vendors who moved to the area to provide services for the company (Souza, 2012). These people worked for almost 1300 vendors for the company in Bentonville and the region. The increase in vendors provided the economic and social stimulus for people to invest and spend in the city in one way or another. Moreover, this improved the real estate market with new developments occurring in the edges of the city, and new residents moving in the downtown area. However, this caused the prices of the real estate to increase primarily in the downtown.

The Census data shows that Bentonville has had a considerable rise in the median household income, one that is not similar to the U.S. or comparable to any other city in the state

of Arkansas. The estimate data provided in Chart 6.1, shows that Benton County, in comparison to Washington County and the U.S average was on the rise from 2002, and has had a higher median household income than the U.S average. This topic will be discussed below in more detail. This supports the claim that there was the economic incentive for people to invest in the city and expected the city to invest in more amenities, resources and other development that would, in turn, increase their quality of life. Moreover, since the young professionals employed from Walmart were moving into the city, this offered another incentive to support the city with more amenities.

In the Downtown Bentonville Master Plan of 2004, as shown in Figure 6.1, the downtown boundaries consist of this area: NW 7th St. to the north and SW 14th St. to the south, extended to SE J St. to the east and bordered with S Walton Blvd. to the west. An area of 1.49 square miles is the most massive downtown in Northwest Arkansas. These changes were made to include the Walmart Home Office as well (City of Bentonville, Downtown Bentonville Master Plan, 2004). However, in 2009 a recommendation was suggested to adopt new zoning areas to accustom for the downtown. Thus creating two new districts: Downtown Core and Downtown Edge (City of Bentonville, SE Downtown Area Plan, 2014). Bentonville aims for a vibrant community focused on people as the main picture. The strategy to draw people to downtown focuses on providing them with clean streets, beautiful buildings, fountains, food trucks.

Study Area Boundaries

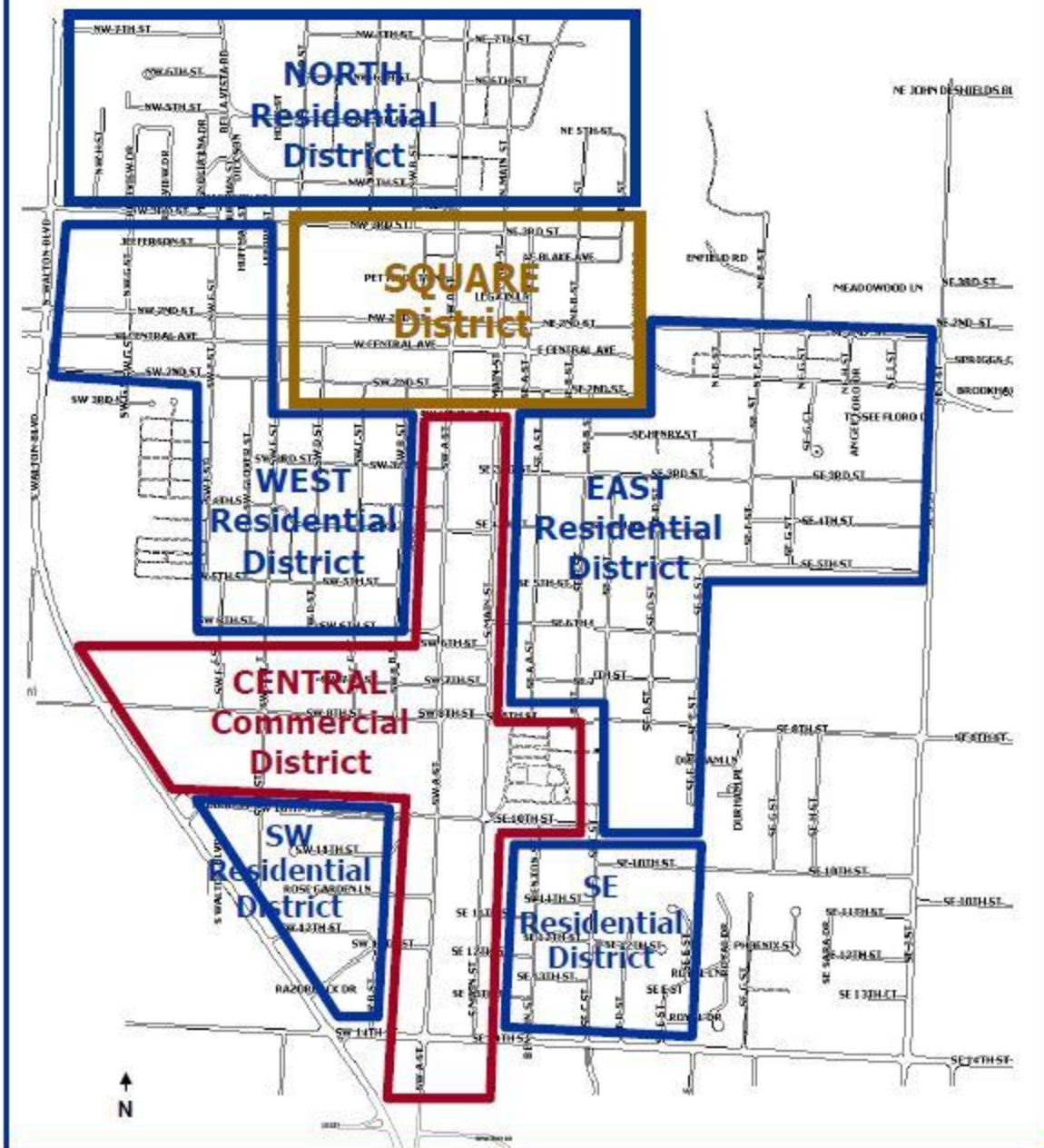


Figure 6.1 - Downtown Bentonville Area

In its 2007 General plan, the city acknowledges the importance that Crystal Bridges will have in its economy. In order to capitalize on this attraction, they suggested further investments in the amenities and facilities to accommodate the increasing number of visitors would be attracted to Crystal Bridges. These amenities were suggested to focus on the downtown area (City of Bentonville, General Master Plan, 2007). Moreover, it was on the city plans to continue investments in the trails, parks, and open space amenities that would serve the residents and visitors of the city. These amenities would provide the opportunity for the city to have economies of agglomeration effect.

The city of Bentonville made other zoning changes in its city plan with further adoptions to promote mixed uses in its city downtown and encourage medium and high-density residential. Furthermore, to promote an environment where new types of housing like live/work would be present. Promoting this type of environment helped new type of developments appear in the downtown Bentonville like small lot single-family developments, townhouse development, apartments & townhouses just off the square, high density mixed use multi-family development in the downtown, cottage community development (Bentonville Planning Department, 2016). These types of development increased the missing middle housing development types that provide a new feel for the residents, increase their quality of life, and encourage more walkability in the city downtown.

Crystal Bridges had an estimate of 150,00 – 300,000 visitors per year when they opened. However, after its opening in November 2011, the museum had approximately 500,000 visitors per year when they hit 2013 (DeBerry, 2015). This massive influx of tourists benefited the city, especially the downtown businesses who saw an advantage to provide for the visitor and to convert on the investment.

6.1 Landsat land-cover imagery representation

The monitoring of LANDSAT land-cover urban change detection from Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record provides valuable information of the urban growth in Bentonville. The levels of urbanization in Northwest Arkansas were analyzed using remote sensing. The authors used a change detection method to characterize the corridors of growth in NWA. The growth detected corresponds with new land uses being developed downtown and especially around Crystal Bridges. There were 30 training samples taken for each land-cover type from the researchers in the training model. These models were first classified into five classes, then sorted to only two classes to identify the urban and non-urban areas selected for the project.

The accuracy of the land cover samples is tested every five years. The authors mention that 1995 was the first year of study, followed from 2001, 2006, 2011, and 2015³ which was the last year of this study.

The method of temporal filtering was used to remove the misclassified areas such as bodies of water, and the results are presented in Figure 6.2. The pre-temporal filtering in 2006 results shows a clustered area with the body of water and green areas included in the imagery. In this imagery the consistent areas of urban growth cannot be identified properly. Authors applied the temporal filtering methods, through which the urban areas are visible, the patterns of growth, and a visible urban structure of the city. In the post temporal filtering imagery in Figure 6.3 can be identified the corridors of growth for Bentonville stretching from the southern part of the city, to the west and throughout the downtown area.

³ Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record, page 9

Pre-Temporal Filtering of NWA 2006



Figure 6.2 - Pre-Temporal filtering results 2006

Post-Temporal Filtering of NWA 2006



Figure 6.3 - Pre and Post- Temporal filtering results 2006

After applying different qualitative methods from the authors and classifying the land use areas, they were able to classify the two primary forms of land use which they classify as: urban and not urban. The authors created a confusion matrix which aimed to generate accuracy measures for each test year in the sample data including overall accuracy (OA), producer's accuracy (PA), and user's accuracy. These types of measures obtain different information contained in the matrix. They are classified, overall accuracy (presents the overall proportion of area correctly classified). Producer's accuracy presents (the errors of omission), and user's accuracy (measures errors of commission). The results from confusion matrix can be seen below.

Table 6.1 - Before Temporal Filtering Results⁴

	Overall Accuracy	Producer's Accuracy		User's Accuracy	
Year		Urban	Non-Urban	Urban	Non-Urban
1995	82%	87%	78%	74%	90%
2001	77%	96%	69%	58%	97%
2006	84%	95%	76%	74%	96%
2011	81%	98%	68%	69%	98%
2015	88%	87%	90%	93%	82%

Table 6.2 - After Temporal Filtering Results⁵

	Overall Accuracy	Producer's Accuracy		User's Accuracy	
Year		Urban	Non-Urban	Urban	Non-Urban
1995	88%	71%	100%	100%	83%
2001	94%	81%	100%	100%	92%
2006	92%	83%	99%	98%	89%
2011	95%	89%	99%	98%	93%
2015	88%	87%	90%	93%	82%

⁴ Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record, page 9

⁵ Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record, page 9

The overall accuracy with the benchmark approach of MLC (Maximum Likelihood Classification) in the test years was 82%, 77%, 84%, 81%, and 88%, but this improved after applying temporal filtering to the results with 88%, 94%, 92%, 95%, and 88% accuracy, a mean increase from 82% to 91%. The accuracy results from 2015 are the same before and after temporal filtering since no post year can offer the means to make a comparison and show if the urban growth occurred.

2005

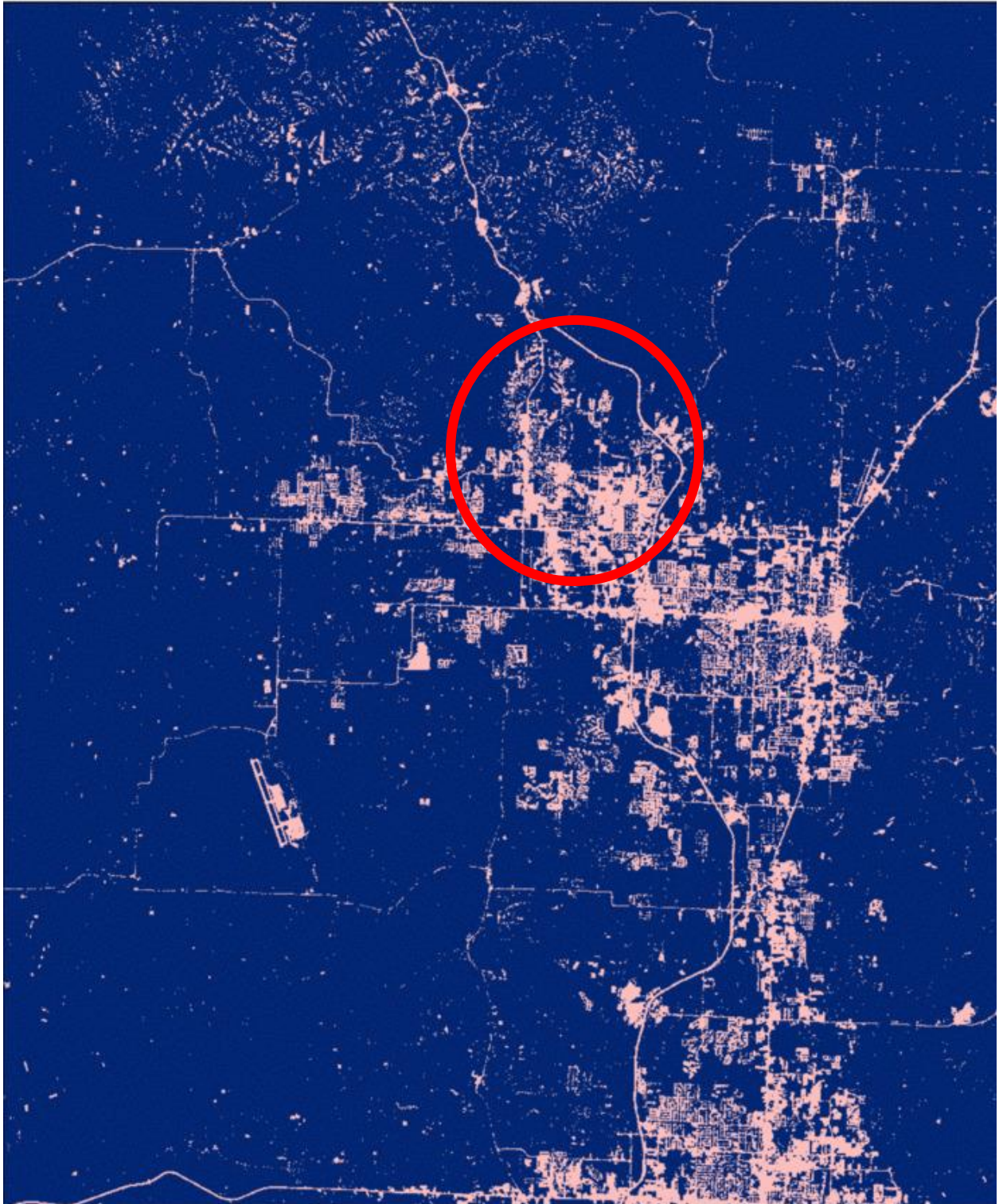


Figure 6.4 - Landsat imagery of downtown Bentonville before Crystal Bridges construction 2015

2015

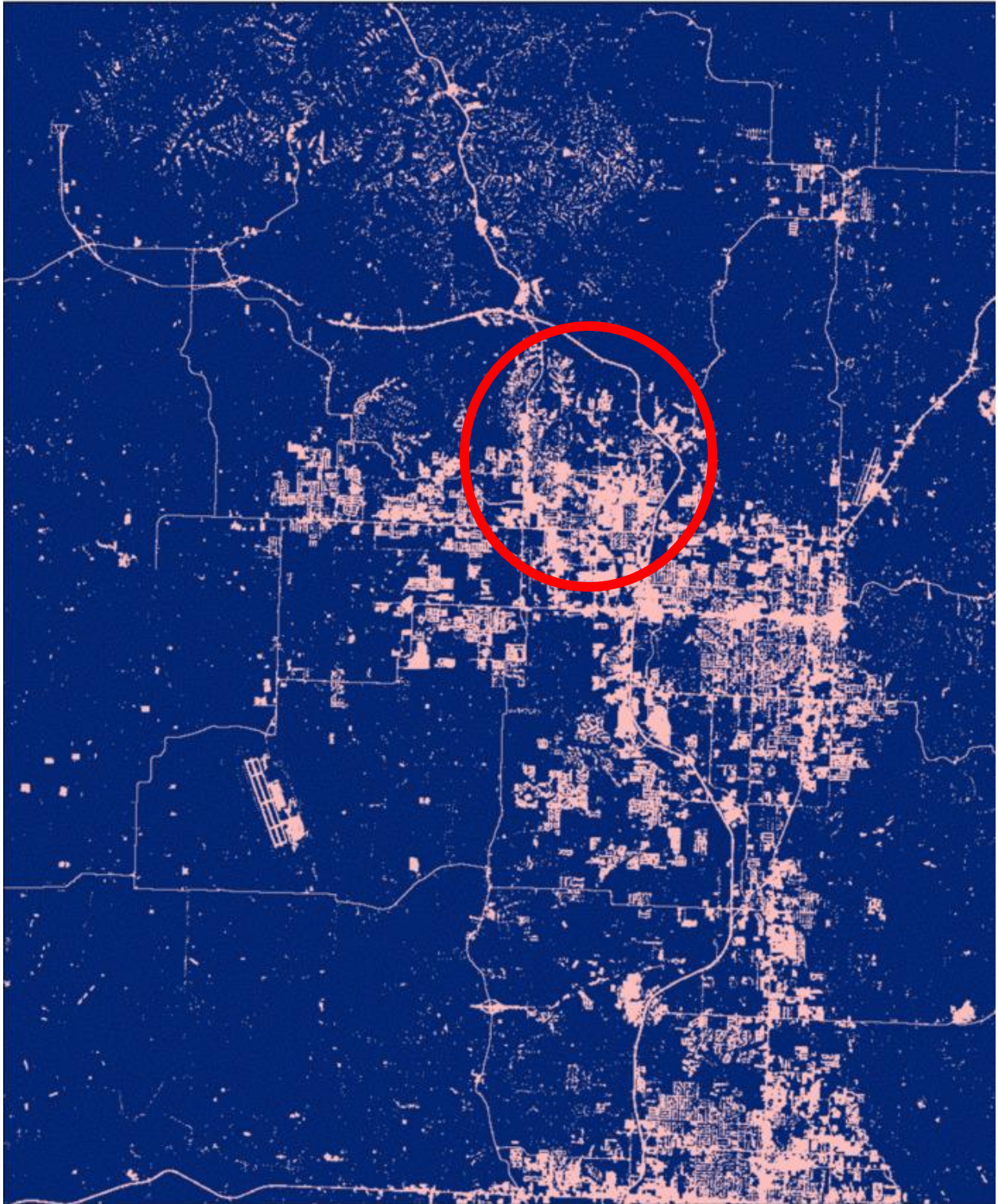


Figure 6.5 - Landsat imagery of Downtown Bentonville nowadays 2015

An area analysis of the Landsat images provided for this study demonstrates that there was a change in the development in the downtown area of Bentonville. Furthermore, the change detection over the years shows that the northeastern part of the downtown, especially the area near Crystal Bridges, started developing around 2002, but it emerged as a highly developed area after 2005, as demonstrated in the Landsat imagery comparison between the years 2005 and 2015. The urban development is evident in the downtown, and the urban land change has emerged from a new volume of development involving Crystal Bridges. The whole area around the museum as seen from the Landsat images has changed with new development, real estate, and other amenities are introduced in the area, which has, in turn, increased the price of the property.

There is a close correlation between the announcement to begin construction of Crystal Bridges and increases in property prices. This increase in property price indicates that developers understood the economic potential this museum could have for the area and invested in the surrounding land nearby. In the appendixes section the whole imagery of 20 Landsat images from 1995 to 2015 from the paper of (Reynolds, Liang, Li, & Dennis, 2017) except 2012 imagery is included for comparison. Additionally, the real estate benefited from the growing economy and the wave of talent moving to the area which started working for Wal-Mart as well.

6.2 Aerial imagery analysis

Google Earth is an excellent asset for accessing aerial imagery and is a great tool to make imagery analysis comparison. Patches of land developed around the downtown, land use change, infill development, and some minor investments are the most crucial takeaway points taken when comparing two images gathered from (Google Earth, 2018). Figure 6.6, shows aerial imagery of downtown Bentonville in 2004 and is a good comparison to show where urban land use change

occurred. In Figure 6.7 is the current imagery of downtown Bentonville area, with the now significant changes in the urban land use structure, with more investments, developments, new neighborhoods in the area, and most importantly the build location of Crystal Bridges.

A close area analysis also demonstrates continuous changes in land use in the downtown area and the infill development in downtown. The urban structure is not available for study with Google Earth imagery; however, slight changes of the urban buildings are visible with the human eye. Moreover, the concentration of investments toward the eastern side of the city provides a new strip of development, yet, it is not as massive as the development in the western side of the city. The impression that these developments present is the feeling of growth, something that has followed Bentonville with Walmart, then with Crystal Bridges, which provided the opportunity to empower that development and influence growth and give the city a cultural identity.

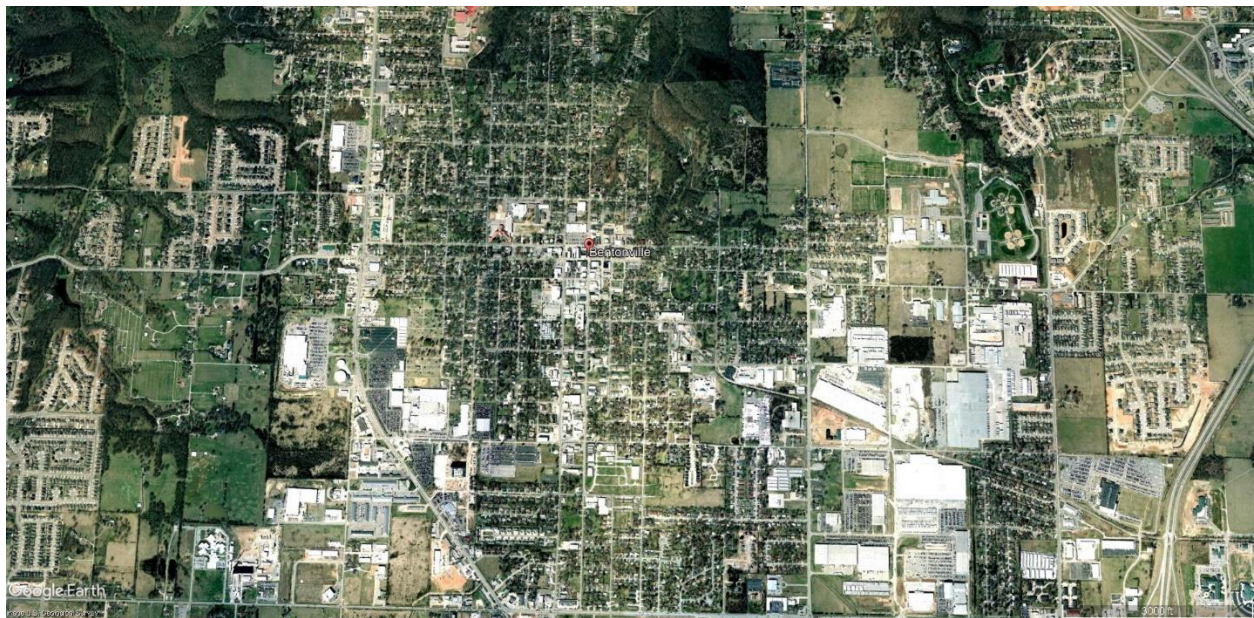


Figure 6.6 - Google Earth Downtown Bentonville 2004

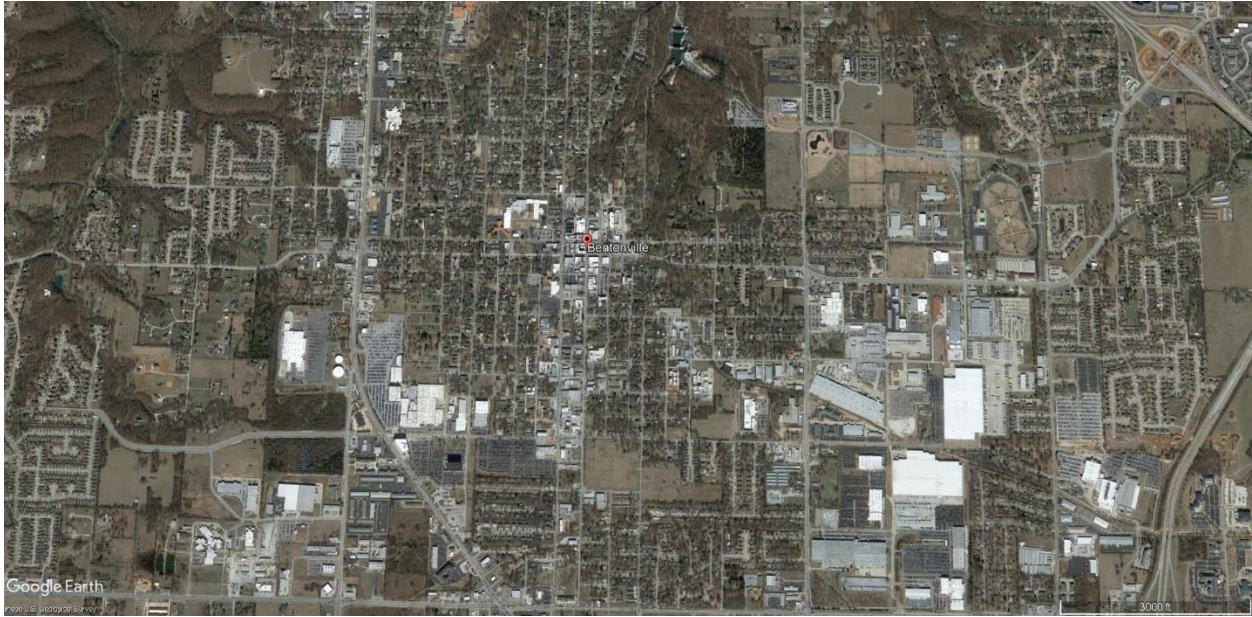


Figure 6.7 - Google Earth Downtown Bentonville 2017

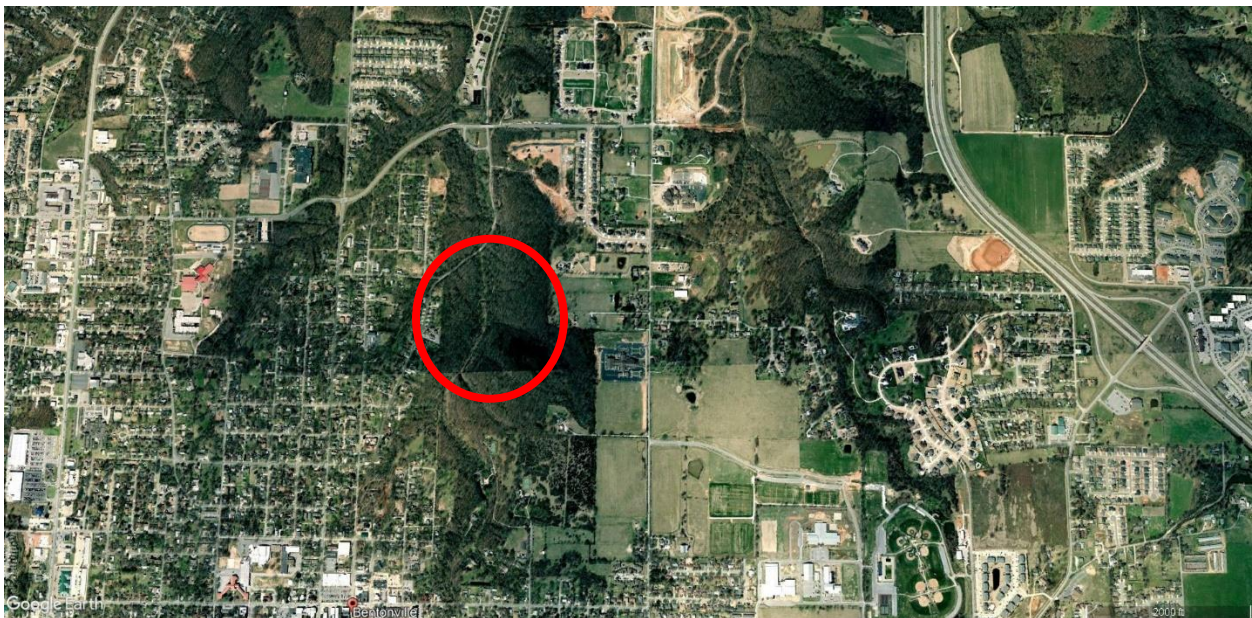


Figure 6.8 - Google Earth Imagery of Crystal Bridges area 2004

The oldest imagery photo available for the area of downtown Bentonville from the available data obtained for this study dates to 1996, and that is when a relative number of real estate developments occurred. Nevertheless, it is worth mentioning that these real estate

developments blossom around the next-to-be one of the most excellent museums in Modern America, the Crystal Bridges Museum of American Art. Nonetheless, in the eastern side of the city, John Deshields Boulevard that connects Crystal Bridges museum with the highway is the street with different leisure amenities provided by the city.

As seen in Figure 6.8, not all these amenities existed besides the park. Not even the Crystal Bridges Museum for which the constructions had not even started yet. However, the 2007 bond presented the opportunity for the city to invest more in parks with \$15 million out of \$110 million (Pearce, 2016). This bond was a referendum passed from the residents in which they had to vote, using public money to improve their life. From that investment, this area benefited with further investments in the Orchards Park and Memorial Park. The later offers soccer, tennis, basketball, baseball, and softball fields amongst other amenities to use for the residents of Bentonville. All this is aiming to increase the quality of life and enhance the opportunities for the residents and provide the vibe of a healthy, safe, and vibrant environment.

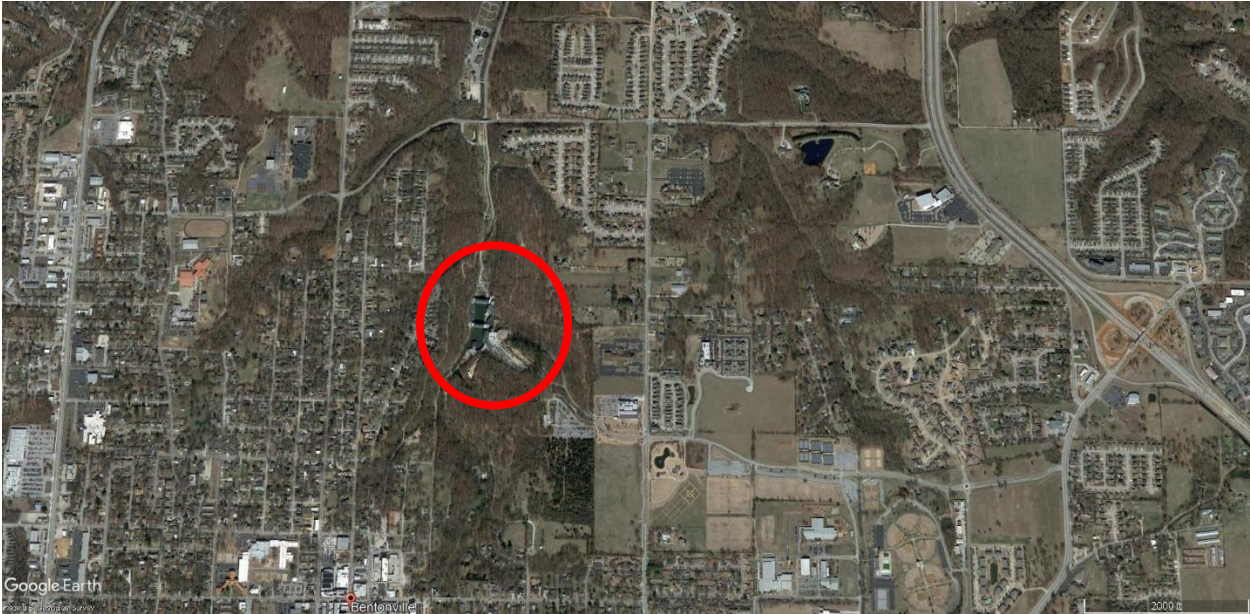


Figure 6.9 - Google Earth Imagery of Crystal Bridges area 2017

As seen in Figure 6.9, all these amenities provided, and the open corridor connecting to the highway, with more infrastructure brought in to support the museum, the building of trails and the proximity to the downtown. Crystal Bridges has an immediate effect on the increasing viability and the visibility of the downtown area. However, the building of Crystal Bridges did not start until early September. Provided in Figure 6.10 is the Google Imagery when the construction on the site began. As Figure 6.11 shows, the location allocated for the museum is an agriculture land, and it is zoned such. It is worth noting that Crystal Bridges was strongly supported from the legislators as well, especially after passing of The House Bill 2480 Act 1865 of 2005 from Representative Horace Hardwick which intended to support tax exemptions of sales for qualified museums.

After doing a thoughtful qualitative analysis of the Google Imagery, it was evident that the urban landscape form of Bentonville changed over the years. Moreover, it has brought a new cultural identity, new businesses, amenities, and new real estate developments for Bentonville.

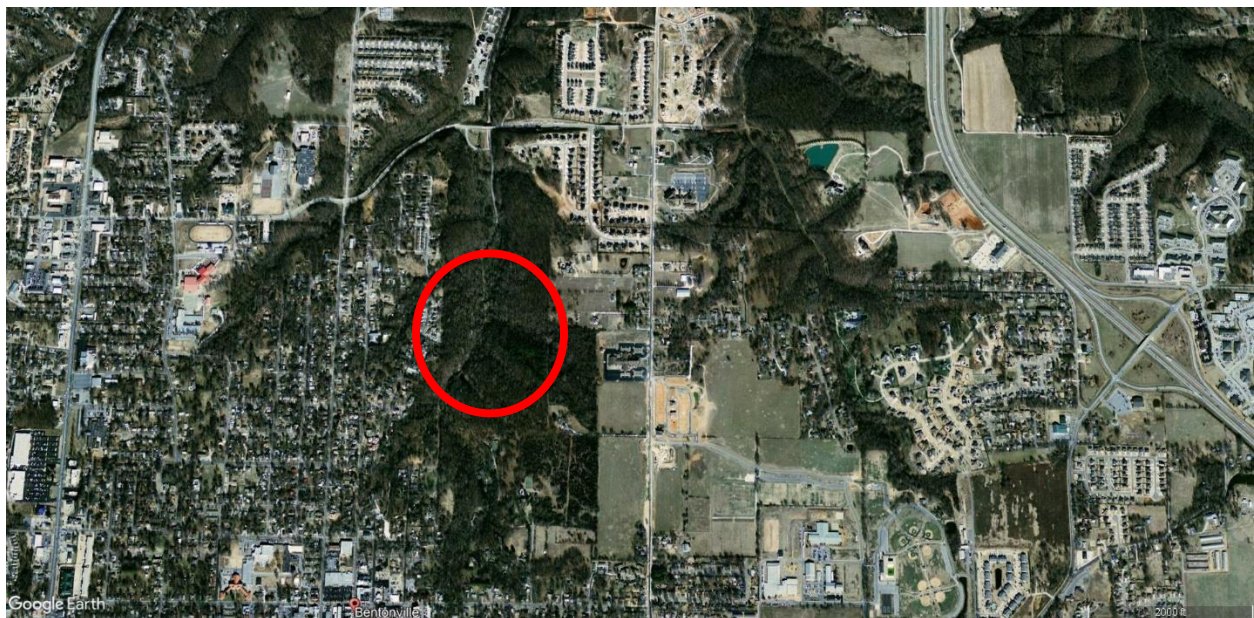


Figure 6.10 - Google Imagery before Crystal Bridges construction started 01-10-2006

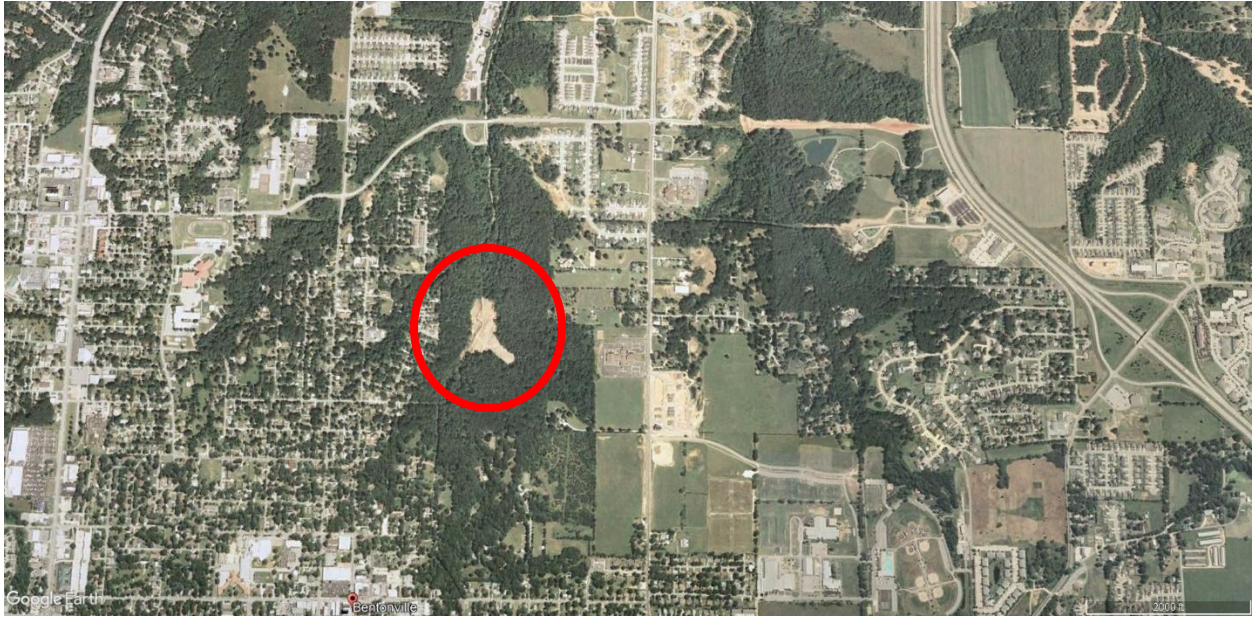


Figure 6.11 - Google Imagery when Crystal Bridges construction started 09-17-2006

6.3 Qualitative analysis: Downtown report

The report by the Center for Business and Economic Research at the University of Arkansas (Center for Business and Economic Research, 2018), funded by the Walton Foundation, aimed to study the downtown vitality for Northwest Arkansas. This report measures how the revitalization has affected life in the downtown area. Its primary objectives are the study of economic factors, housing, and increasing density in the downtown.

This report presents the set of data used for this thesis for downtown Bentonville. The data gathered from ESRI Business Analyst indicated that downtown Bentonville had a population of 4,167 in 2016, and the annual population growth between 2010 and 2016 was 1.1 percent⁶. The downtown constitutes 10.3 percent of total population, making Bentonville have the most extensive population that lives in downtown areas in Northwest Arkansas.

⁶ Center for Business and Economic Research, page 9

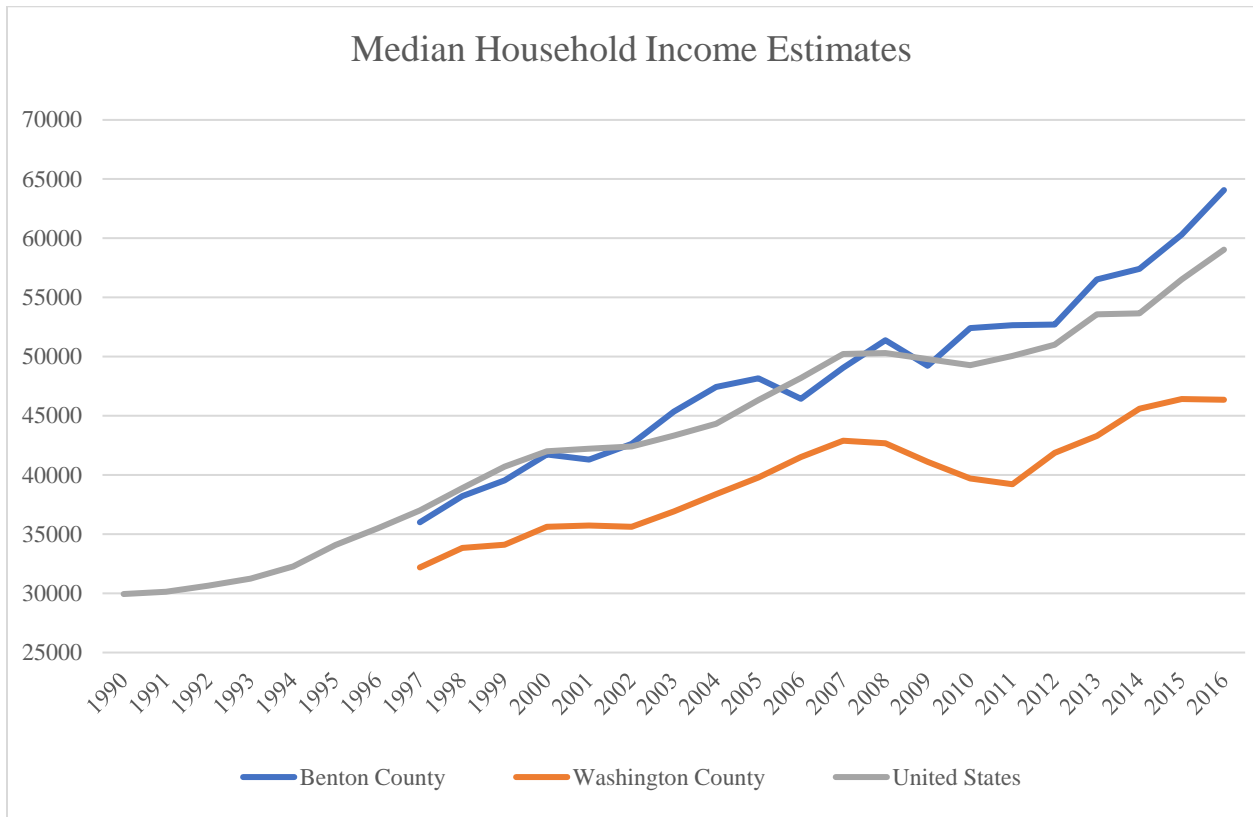
Table 6.3 - ESRI Business Analyst⁷

Downtown Bentonville General Demographics	
2016 Population	4,167
2010-2016 Annual Population Growth	1.1%
Median Age	33.9
Median Household Income	\$35,119
Total businesses	451
Total Employees	24,188
Unemployment rate	4.2%
% of the population with bachelor's degree	26%

The data shows that the median age in downtown Bentonville constitutes young professionals who generate a high median household income. The median household income for the downtown is \$35,119. However, Bentonville has a higher median household income than the United States and the other cities in Washington County. The chart below presents the median household income for Benton County since the early 1990s. Data for Washington County and the United States served as comparisons for Benton County (U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE) Program, 2016).

⁷ Center for Business and Economic Research, page 10

Chart 6.1 - Population Estimates for Benton County⁸



Benton County’s median household income started to increase after 2003 making it above the U.S. median. The big leap occurred after 2009 when Benton County’s median household income was significantly higher than the U.S. average. These data are a complete representation for Benton County, whereas, for Bentonville, a more detailed look exists from the American Community Survey which shows that the average income for a household is higher than the estimates presented in Chart 6.1. As we see from the chart, there was no data available for the estimates of the household incomes for Benton and Washington County for the years: 1990, 1991, 1992, 1994, and 1996.

⁸ Small Area Income and Poverty Estimates (SAIPE) Program

Table 6.4 - Median Household Income for Bentonville

Median Household Income, Bentonville		Increase
2009	\$51,305	
2010	\$51,956	1.27%
2011	\$54,194	4.31%
2012	\$61,680	13.81%
2013	\$62,339	1.07%
2014	\$71,461	14.63%
2015	\$71,941	0.67%
2016	\$76,447	6.26%

The results in Table 6.4 present a compelling economic representation of the average income in Bentonville, especially for the years 2012 and 2014 when Bentonville experienced 13.81% and 14.63% increase respectively. This growth represents the economic power in the city and the opportunities for the investments that followed. The growth provided employment opportunities which are evident from the data presented in Table 6.3 where the unemployment rate in the downtown is only 4.2%, and graduates with a bachelor’s degree are up to 26%, another indicator that Bentonville is a hub for attracting young talent to the area. Moreover, in Table 6.5, there is a representation of the retail industry for the downtown area. Retail employees employed by the Walmart Home Office account for over 90% of workers in downtown Bentonville.

Table 6.5 - Downtown Bentonville Retail Summary⁹

Downtown Bentonville Retail Summary		
	Establishments	Employees
Retail Trade Summary	102	20,434
Home Improvement	2	9
General Merchandise Stores	9	19,694
Food Stores	11	157
Auto Dealers, Gas Stations, Auto Aftermarkets	6	61
Apparel & Accessory Stores	12	43
Furniture & Home Furnishing	8	22
Eating & Drinking Places	28	304
Miscellaneous Retail	27	144

The downtown businesses have evolved and so has the practice of investments, the office space, building permits, and the market value of the property. From Table 6.6 it is important to notice how the property value has increased in the commercial and residential types of buildings in the downtown area. Bentonville went from a total of \$271 million valuations in 2012 to \$591 million in 2017. The commercial valuation increased from \$133 million in 2012 to \$259 million in 2017, followed from the residential valuation in the downtown area which experienced a boom in the real estate valuation from \$135 million in 2012, and increased to \$332 million in 2017, a 145.1% increase of real estate evaluation. This in part is due to the new restaurants in the area, increase in the quality of life, investments from the City of Bentonville, but overall, the data show that especially after 2011 when Crystal Bridges opened, the downtown area had

⁹ Center for Business and Economic Research, page 10

experienced a significant increase in investments and valuation, proving that the museum had a significant effect on the city’s revitalization.

Table 6.6 - Property Value Type Downtown¹⁰

Property Value Type in the Downtown Area						
Type	2012	2013	2014	2015	2016	2017
Commercial	\$133 mil	\$136 mil	\$152 mil	\$161 mil	\$255 mil	\$259 mil
Exempt	NA	NA	NA	NA	NA	NA
Industrial	\$2 mil	\$2 mil	NA	NA	NA	NA
Mobile Home	\$24,300	\$24,300	\$24,300	\$24,300		
Residential	\$135 mil	\$138 mil	\$140 mil	\$142 mil	\$315 mil	\$332 mil
Total	\$271,8 mil	\$277,3 mil	\$292,6 mil	\$304 mil	\$570,8 mil	\$591,9 mil

7 Discussion

A series of interviews were conducted to support the claim of the downtown’s revitalization and measure the impact that Crystal Bridges had in the process of revitalization. These interviews aimed to select subjects that were involved in the process of the downtown revitalization. These interviews would include essential people who had a crucial part in the revitalization of the downtown, and who was very involved with the events around the downtown revitalization. Moreover, it aimed to include experienced people who have a history of the city and who could identify the urban changes that took place around the downtown area and how Crystal Bridges fit there.

The subjects provide an extensive and in-depth approach to the subject matter with their experience. For reference from now on the representative of Planning Commission will be

¹⁰ Value rounded to the nearest million; source Benton County Assessor

referenced as RPC, the Chamber of Commerce as RCC, the Planning Department as RPD, and the Crystal Bridges Museum representative as RCBM.

When asked if the planners are involved with the decisions made in the city, the RPC and the RPD responded that they are very much involved in the planning process. The RPD claimed that they serve in an advisory capacity giving their professional recommendations that meet city code and laws for proper developments in the city of Bentonville. While the RPC claims that the city had to seek a new comprehensive plan due to the rapid level of development taking place in the city downtown, the RPD suggest that they have accomplished their 2007 comprehensive planning goals and are currently in the process of adopting a new plan due to the change that has occurred in the city. Moreover, they consider having been successful in implementing their 2007 comprehensive plan.

Since the land around Crystal Bridges was undeveloped land (zoned agriculture), both claim that no zoning needed to be changed to accomplish the results of the development that took place. The only requirement passed was a conditional use for large development which is a similar procedure to other developments in the city. However, the RPC mentions that since development on this scale had not been present in the city before the Planning Commission had to protect the green space, they did not change the zoning for Crystal Bridges' location. However, residents started to buy real estate around the museum where different zoning codes were changed, with new development in that area. The new development of properties resulted in the increase of the residential property value in the surrounding area.

When asked about how Crystal Bridges and Walmart have affected the downtown revitalization, both entities answered as to what caused that change. The RPD claim that they adopted their Master Plan in 2004 before the announcement of construction of Crystal Bridges,

and having that momentum enabled the city to reach its goals at the same time as the development for the museum was taking place. Moreover, it brought a sense of awareness to the business community and the residents for the urban change that was about to come. Hence, Walmart renovated their Five and Dime museum at the square on the one hand, and on the other hand, the Downtown Bentonville Inc organization which manages the events that occur in the downtown area was a factor to bring people downtown. Furthermore, the RPD agree that they would have eventually achieved the level of revitalization that exists today, but at the current pace without Crystal Bridges being in the area. The revitalization also was possible due to the presence of new restaurants, small businesses, the first boutique hotel 21C.



Figure 7.1 - Walton's Five & Dime Museum¹¹

On the other hand, the RPC suggests that it was the bond issue that changed the structure of the downtown and paved the way for the revitalization that took place in the city. The bond issue of 2007 was for \$110 million and addressed five aspects: the municipal airport for the cost of \$750,000; police department and fire department each allocated with \$4,750,000; parks and recreation with \$15 million, and street improvements with \$85 million (Gute, 2017). There was a referendum in which the residents voted to pass this bond measure. According to the RPC, the parks and the street improvements had the most impact that helped the downtown revitalization, mainly to handle the infill development in the city. These amenities helped the downtown

¹¹ 11 Small Towns Around America That Have Interesting Claims To Fame, Huffington Post

revitalization and improved upon the building of the new Community Center, as well as the rehabilitation of Memorial Park and Orchard Park, for which J Street was the catalyst of this bond.

While Crystal Bridges affected influencing the downtown revitalization on a bigger scale by shifting the culture of the city, Walmart influenced it by attracting talent by offering employment opportunities, claims RPC—Not just attracting them but keeping them in the area. Making sure that these young professionals stay in Bentonville was the issue that the Planning Commission had to work and provide better conditions in the city. They approached it by rethinking the strategy of housing in the downtown, switching from single-family housing to an increase in the density by introducing that missing middle-density housing and building apartments to support this increase of residents in the downtown. By developing the missing middle housing types, they hope to retain these young professionals in the city of Bentonville.



Figure 7.2 - Orchards Park¹²

Crystal Bridges affected the downtown revitalization by also providing a sense of pride according to the RCBM. The museum provided a place where people from all over the world can come and stay, and, while not necessarily providing opportunities for economic success, if the city is succeeding with taxes and providing more amenities to the community, then through that they can have an economic benefit overall. In other words, Crystal Bridges is a cultural destination, an amenity that has lifted the self-esteem and the morale of the city, and represents the idea of providing an identity that the residents are proud.

¹² Bentonville Parks & Recreation

Downtown revitalization is a crucial part of the city, but it would not have been as successful without an economic environment where businesses could perform. Furthermore, Crystal Bridges was a catalyst because it influenced the city growth at a level that no one expected to according to RCC. The museum according to the RCC served as agglomeration effect for other businesses in the downtown and the future ideas emerging from it, the same way that Walmart led the way with the vendors moving into the city when it announced that its Home Office would be in Bentonville for the near future.

Indeed, small businesses would not have had the same success operating only within the local business environment and offering services to the residents. Hence, Crystal Bridges provided this opportunity with people visiting the museum, which in turn brought more business to the businesses in the downtown area. The RPD confirms this, and they claim that businesses in the downtown benefited from the revitalization, even though they have not conducted any study for that purpose. However, the businesses that have been present in the area are actual examples of successful businesses and what effect the revitalization has had. The other examples are entrepreneurs starting their businesses, current local businesses expanding their stores in other locations, and food trucks emerging in different areas of downtown, which demonstrate some of the ways of how the revitalization has affected the downtown.



Figure 7.3 - Food trucks at the square¹³

The revitalization brought life to the downtown area according to the RCC: the Central Business District had changed tremendously over the past ten years. There was only one restaurant in the square, and the decades before that there was almost nothing on the square beside the Arvest and the courthouse. After Crystal Bridges opened, the Downtown Bentonville Inc started to organize events focused on bringing people to the downtown and using Crystal Bridges traffic as an incentive for keeping people interested in their events downtown. Moreover, the city provided a palette for these businesses to operate in the downtown area, a walkable environment where the resident or the visitor can go from store to store and an urban landscape. The city did not need to offer incentives for the businesses to move to the downtown area

¹³ Photo Courtesy of Scott C Wood

because of the economic development occurring there, but mostly because of Crystal Bridges. The RPD also claims that the city did not offer any incentives except for some impact fees in the outskirts of the downtown boundary there was no need from the city to offer incentives for downtown businesses. Another thing that the city did was rezone the downtown into two zones: downtown core and downtown edge. According to RPD, this provides a walkable area and maximum use of property, from the existing policies in the general plan that promotes the development to focus in the city, and furthermore, by updating the codes to allow for taller buildings to increase density. That is why the city has not needed to encourage growth since that was already occurring around the CBD. That did not affect the land use in the square; however, it did have some impact on the edges of the city, where the residential land uses have increased in density.

The downtown area is still a hotspot for businesses, and that is the reason why the city has not offered incentives to the downtown businesses, according to the RPC, and instead tries to focus on how to manage that square footage cost, so the existing businesses can afford to continue operating since the cost is always increasing. The cost of rental space is going to be a challenge, to maintain a momentum of the ever-increasing cost of having a business in the downtown area. The zoning changes in the downtown confirm a thriving environment to open a business in the downtown and operate with the flux of visitors in the square. Furthermore, what the city is trying to do is provide that diversity for people with goods and services available to residents and not only for the businesses with office space; by doing so businesses would be able to stay open until late, and that according to the RCB is what keeps people in the downtown, the idea of mom and pop stores offering services to the residents in a walkable distance. If the city provides more policies for attainable housing and increasing the density or the missing middle

housing types, then residents can quickly come to the museum as well since it is in a walking distance from the trail, or by bike. Crystal Bridges is that anchor project that provides the opportunity for the new generation of people to live in the downtown center.

According to the data provided above from ESRI Business Analyst, the downtown area has a total of 451 businesses which constitute a significant part of the city's economy. The importance of the city's businesses is also confirmed by the RCC, who claims that the downtown businesses serve the city's economy and the businesses in the area are the engines that drive it. Furthermore, the small businesses not only serve the economy, but they also build the identity with the people who want to move there, increasing the number of residents in the downtown. The downtown businesses also affect the quality of life for their customers more than the businesses on the outskirts of the city, each building into the identity of Bentonville.

Walmart is the most significant employer in the city and has helped shape the economy of Bentonville, especially with the vendors moving in, and the data supports that claim. The RCC confirms that and adds that Walmart has created an improved quality of life and their presence increases the opportunities for small businesses because of the number of people they attract. Since the people who move to Bentonville are young talents and high performers, these customers also help small businesses to thrive. Moreover, they allow the bar scene to thrive since Crystal Bridges is open Thursday through Sunday, and Walmart fills in Monday through Thursday, and so people can go out after work hours. The hospitality industry accommodates people visiting Bentonville to do business with Walmart, or attend an exhibition at Crystal Bridges, so they use the amenities provided in the downtown area to eat or enjoy a drink on an afternoon.

Keeping people in the downtown area was a goal for the Planning Commission, and they intended to find ways to attract people there. Since Crystal Bridges served as a magnet, the focus was on the goods and services needed in the downtown area for people moving in. Thus, serving these young professionals offers a whole new perspective on what they are looking for regarding a city to live. Since most businesses in the downtown area used to close around 9:00 p.m. or 10:00 p.m. the city officials were seeking strategies to retain this group of the population and the services they need. Downtown Bentonville is a very clustered small area. The Planning Commission thought that these new districts would attract lots of new small businesses, which are great for the local economy. Thus, they intended to extend this downtown field; the city executive achieved this through new zoning districts. Updating new zoning meant the better use of the land, allowing for mixed use of the property, with multi-family, townhouses, real estate, all in one block. Also, this created a field for new opportunities for development within the downtown area.



Figure 7.4 - Farmer's Market Bentonville¹⁴

The culture of events in the downtown and the people attending them is another way to bring people to the downtown area according to RPD. Events like First Friday and the Farmer's Market served as channels to bring people downtown. However, the number increased when they became more organized; this is where the Downtown Bentonville Inc took over the planning of these events, which in turn increased the number of residents attending. This raised awareness of the downtown as a center of the community and civic activities. Since the residents started to come to the downtown area, this was an opportunity for the restaurants to emerge since people would congregate after the events, which contributed the success of restaurants in the downtown

¹⁴ Courtesy of Scott C Wood Photography

area. The partnership between Crystal Bridges, Downtown Bentonville Inc, restaurant businesses, and the city, whom all had a common goal, made it possible for this to occur. The investments in the downtown infrastructure, the streets, sidewalks, street furniture, and other attractions from the city, showed the city’s commitment to invest and support the developments in the downtown.



Figure 7.5 - First Fridays¹⁵

Since the developments in the city are within the public-private partnership, the RPC suggests that the bond issue had the most impact toward implementing the core projects to start

¹⁵ Courtesy of Scott C Wood Photography

the process of revitalization, especially building the infrastructure to facilitate the growth. Amenities offer a way to enjoy outdoor activities in the city. Some of these amenities include the mountain biking experience and Razorback Greenway, which both have public-private partnership funding. More amenities provide other areas where businesses can perform their activities, like the convention area called The Record, which is owned by a private entity. The city also provided opportunities on H Street for the development of the culinary school and the market district. These investments, especially the culinary school provided the restaurant industry with chefs and fed the young professionals in the downtown area. Other amenities help improve health and wellness such as the Downtown Community Center, along with Crystal Bridges, a private entity who fills the cultural and educational void. Furthermore, Crystal Bridges as a project had great support from the city by providing them all the infrastructure and services necessary for them to operate correctly. It is worth noting that Crystal Bridges, a privately funded museum, now is a public entity offering a sense of shared ownership where the community can participate and take care of it.

For Bentonville to accomplish what it has realized today, they had to follow a set of strategies and partners they collaborated with according to the RPC. The Bentonville Blueprint plan was the critical component to acknowledging innovation in the city and maintain a healthy downtown. The second strategy was implementing the comprehensive plan, identifying the corridors of growth, and specifically focusing on the downtown. The third strategy was implementing the Master Plan for parks, since in every growing area of the city, between real estate developments, businesses, and schools, the city had to make sure to provide park and recreation areas. Moreover, the fourth strategy was the development of 8th Street which connects Walmart Home Office with the downtown urban area. Furthermore, the new connection to the

interstate serves to discharge the cars from downtown and increase the walkability around the square. These strategies raised the public awareness and public participation through committees to take care of the public amenities in the city and be involved. Then according to the RCB despite being a contained development Crystal Bridges is quickly accessible from downtown. The boutique hotel 21C connected the art visitor with the commercial district downtown, and furthermore, Crystal Bridges opened its restaurant for its visitors offering a place to drink and eat. Implementing the goals from the comprehensive plan with the infill development and the mixed land uses, the property values went up. However, this was achieved with the support of the residents who embraced the idea of change and helped the city to accomplish its Master Plan goals according to the RPD. Involving residents in public hearings allowed them to comment on changes in and around downtown, so their input has contributed to the results of downtown Bentonville as it is today.

The question asked next was whether Bentonville has a walkable downtown and how that connects with Crystal Bridges. According to the RPC, Bentonville has a walkable downtown, and the city is trying to increase the number of sidewalks, street trees, and safety measures to encourage walkability. Both entities with RPD and RCBM support this claim, who believe that Bentonville has a walkable downtown and they are working to improve upon that by increasing density in the downtown area. Walkability has already increased because of the bike trails, parks, and other amenities provided by the city. The bike trails have been successful not only for Bentonville but the more significant region as well. Moreover, the city is continuously working to provide other amenities, such as public art in the parks, with its Master Plan according to the RPC. They are also working toward educating the community about the benefits of attainable housing.



Figure 7.6 - Bike Trails Bentonville¹⁶

Since supply and demand started to increase downtown, businesses had to adapt and provide better goods and services to residents. Crystal Bridges was aiming to bring around 200,000 visitors to the museum according to the RCBM, but actual numbers tripled, and this provided an opportunity to accommodate the number of people visiting in the hotels and Airbnb places around the city. Crystal Bridges extended its schedule by being open on Monday as well and closed on Tuesday when the vendors operate with Walmart and other businesses. Moreover, the museum claims that the city has provided all the necessary infrastructure for a museum of this scale to operate. The museum is in approximate distance to downtown which increases the likelihood for residents to walk there and the environment around it offers this opportunity

¹⁶ Photo courtesy of Visit Bentonville

because of the trails and parks that surround it. Visitors take the trail to get to the museum, or bike there, the same way some people drive to the museum, which creates a diversity of modes of transportation to get there since it is a safe and healthy environment for all.



Figure 7.7 - Crystal Bridges Art Trail¹⁷

The last part focuses on the approach that the city must support businesses. The RCC claims that the city should be engaged in planning for continued development and provide different types of housing that would reinvent the city itself. However, the city's support influences all of the activities that occur in the downtown, and that helps small businesses emerge. On the other hand, the Chamber of Commerce offers networking opportunities for small

¹⁷ Photo Courtesy of Crystal Bridges Museum of American Art

businesses to learn from one another, moreover, it offers a platform to promote small businesses in the city with multiple activities and events that happen throughout the year.

A healthy, safe, and clean downtown provides numerous lots for parking. Even though they exist, some visitors have difficulty locating them. Moreover, the city is trying to promote different ways, according to RPD, to provide information on the locations of these parking lots. Businesses claim that they have enough parking, yet, with increasing density the city will face parking shortages around the square. However, walking a couple of blocks is currently the solution to finding a suitable parking lot. Additionally, with the new modes of transportation and public transit, the increase in walkability and bike ridership is forever going up. Even though the number of visitors has tripled from 200,000 to 600,000 per year according to the RCBM, the museum can provide enough parking, and in fact, they claim that they intend to maintain the green spaces rather than build parking lot; that way they encourage walkability, bike rides, and a healthy lifestyle.

7.1 Qualitative survey analysis comparison

The survey conducted with the residents provided a fascinating insight into the downtown area. The majority of them strongly agreed that the downtown has a positive atmosphere with the businesses and the activities surrounding it. Moreover, they firmly believe that Bentonville is a walkable community with 80% supporting this option. When asked if Crystal Bridges has influenced city growth 80% of respondents said that they firmly believe it has. The question regarding the businesses and if they have shaped the culture of the city was more diverse with half of the respondents believing and the rest being neutral and not claiming that they had any influence toward shaping the city's culture or way of life. Furthermore, it was the issue of parking that concerns residents the most. They do not believe that there is enough parking in the

downtown area, thus they believe that the city should provide more opportunities for parking. As the last question to answer on a Likert scale, the residents strongly support the idea that Walmart has been successful in the city and the growth that has occurred there.

When asked what are the most significant ways that the city has changed over the years the residents offered different perspectives. However, they mostly agreed that a diversity emerged in the city with people out of state moving in, more tourists, different cultures. The diversity, in turn, changed the culture of the city with restaurants opening, nightlife scenes evolving, new structures built, Walmart growing and its vendors moving to the area, the significance of other major companies in the area like Tyson and JB Hunt, and its culinary school. Furthermore, different activities and events in the city such as the film festival added to the culture that came with Crystal Bridges opening in the city.

7.2 Kevin Lynch identity mapping approach

Identifying how people approach the city downtown and how they get from point A to point B through their mental maps was an additional way to survey the residents. The city of Bentonville does not offer lots of landmarks to work with, however, the respondents on this survey had high spatial awareness, and were able to relate to the surrounding environment. The majority of respondents used the city square as the starting node for the orientation of their mental maps, probably due to this being the survey location.

It is interesting since they mostly connect their mental images with significant streets in the city. Since Bentonville street system North to South consists of alphabet letters and the east to west of numbers, it provides for better awareness and natural orientation throughout the city. Since the points of destination for this survey, both Walmart Home Office and Crystal Bridges, are in proximity to the downtown area they did not provide the respondents with any difficulties

to draw their maps. When asked for the points of orientation for how to get from point A to point B the respondents claimed that the shortest way to get to the Home Office was following Central Avenue, then turn left on Walton Boulevard, the Home Office will be at the left. Similar is the case of getting to Crystal Bridges from the city square; if one follow the Central Avenue all the way to J Street, then turn left and continue straight to the roundabout where one can take a left onto Museum Way and arrive at Crystal Bridges. Furthermore, the residents are aware of the landmarks along the way that they encounter and identify when getting to these destinations. They identify different landmarks that they use such as 8th Street, the Public Library, Compton Gardens, and Main Street connections. The conducting of interviews occurred near these landmarks. It is worth noting that these landmarks and this type of experiment showed similarity to what Kevin Lynch achieved with his experiment and that people will identify significant landmarks when getting to their point of the destination through orientation in the city.

7.3 Restaurants downtown

As a final step of identifying restaurant businesses in the downtown, a short survey was conducted to compile the data when the existing restaurants opened in downtown Bentonville. There was only one simple question asked to the respondents, the primary purpose of which was to identify when these businesses started their operation, and also, to check if after the Crystal Bridges Museum opened its doors, they emerged as businesses and are successful in this particular area of the city. The list contains nine restaurants in the city downtown; most them started their operation after Crystal Bridges opened. Moreover, as the data from the table suggests Tusk & Trotter and Table Mesa were operating in the city before Crystal Bridges, with the latter being the first restaurant in the square, as mentioned by RCC.

Table 7.1 - List of restaurants in downtown Bentonville

Name of the restaurant	Year of establishment
The Preacher’s Son	2016
Tusk & Trotter	2009
MOD Restaurant	2016
Pressroom	2011
The Hive	2013
Blu Fresh Fish Marketplace	2015
Oven & Tap	2015
Table Mesa	2008
Eleven at Crystal Bridges	2015

The restaurants that are close to the square in Bentonville started emerging right after Crystal Bridges opened, and as the RCC mentions the entrepreneurs in the city saw an opportunity, and they wanted to benefit from it. The increasing number of visitors, and the demand for places to visit while being in Bentonville provided that need to supply these visitors for their time being. Thus, the new type of economy with these restaurants appeared in the urban landscape of Bentonville. They offer a high-end experience of dining, culture, and environment surrounding the downtown. The activity of these businesses is a reliable indicator to support the argument that Crystal Bridges was the catalyst for this area of the economy, with the restaurants opening downtown.

7.4 Problems

The primary study limitation and problem during this thesis were time constraint and the data availability. Moreover, the access to the business data, time limitations, approaching the essential human subjects and interviewing them was another problem. However, through gaining access to the study of Monitoring Annual Urban Changes in a Rapidly Growing Portion of Northwest Arkansas with a 20-Year Landsat Record and their qualitative data for Northwest Arkansas, especially to the area around the downtown, it was possible to provide historical imagery comparison for this thesis. Furthermore, the Appendix will provide the whole set of imagery. The imagery of urban change for the past 20 years in NWA, suggests that downtown Bentonville experienced urban growth and change in its landscape.

Further limitations included but were not limited to the access to the data of the businesses in the downtown area of Bentonville. The City of Bentonville offices informed that the city does not provide data on the number of registered businesses in the city. Furthermore, this was a significant limitation to understand the business environment and the types of businesses in the downtown area especially about the restaurants and their date of operation. However, through the downtown vitality report conducted from the Center for Business and Economic Research at the University of Arkansas through the application of ESRI Business Analyst approach, it was possible to gain access to the type of businesses in downtown Bentonville and overcome this obstacle.

Gaining access to data was not the only limitation towards this study, reaching out to human subjects to interview for this thesis was another. Hence, this is the reason that interviewing the Mayor of Bentonville was not possible since he did not agree to sit for an interview with the reasoning that he does not want to be identified for a public interview if his

identity cannot be kept secret. Related but not to this level were obstacles when approaching other subjects for an interview. Since the intent was to the representatives from Downtown Bentonville Inc, this was not possible due to their time limitations and schedule, and even though they expressed interest in participating in this research. However, with the significant support of other human subjects interviewed for this thesis and survey respondents I was able to gather the data necessary to proceed with the results and discussion of this thesis.

7.5 Future study

This thesis only looks at the economic aspects of the Crystal Bridges Museum of American Art in downtown Bentonville and how that has affected the city's revitalization, and moreover, how the bond measure affected this revitalization, and how businesses thrived after Crystal Bridges was opened, focusing on the economic impacts that the museum has had on the city, increasing the number of visitors, young people moving in and the different types of businesses appearing across the city, as well as the investments in infrastructure to provide for this development, especially with parks and recreation to create a vibrant community feeling of outdoors activities in the city.

However, this study does not look into the social issues and how they have affected the lives of the current residents. Future studies can focus on: How is gentrification affecting the downtown livability? Another area of research is: Can lower-income residents afford to live in downtown and how has that affected affordable housing?

These areas of research can help provide an answer to these questions since the boost in the economy that Bentonville has experienced from Walmart and the Crystal Bridges Museum. Thus, looking at other social aspects of the issue with different social levels of study can offer a more thorough approach of how their lives were affected from the increase of real estate prices

and the affordability to live in the downtown area. Acknowledging the fact that this economic boom caused the prices of property to increase and push people to live in the outskirts of the city can provide more information for future research on how that affected the quality of life for other residents in the city.

8 Conclusions

After conducting the research, data collection, face-to-face discussion, analyzing the urban change over the years through Landsat and Google imagery, it is mandatory to understand that the urban landscape of Bentonville experienced a significant change, to the point that the built structures started to change from what they were in the beginning. The process of revitalization not only brought substantial economic opportunities to the city, but it shaped the city's culture and its identity. Even though it still is considered a retail city with Walmart's Home Office, the data show that the people that visit the city come for the whole purposes of art and culture provided from the Crystal Bridges Museum. Moreover, it is Crystal Bridges and Walmart who offered to Bentonville a city in Northwest Arkansas the opportunities to grow and attract visitors, something that no one had imagined before, not even when one accounts for a museum of the scale of Crystal Bridges, which caught the world by storm. However, this museum put Bentonville on the map for good and encouraged city growth, and the museum overall gained the deserved respect among the world of art.

The urban landscape changed, so did the way of doing business. The business environment was affected in particular to the vendors that moved to the area to work with Walmart. Furthermore, the increase of the employees in the Home Office, an attraction for young professionals, made Bentonville a hotspot for talented graduate professionals to move in the area. The income of young professionals provided a challenge since they had to adapt and plan to

provide for this wave of newcomers to the city. Moreover, the 2004 Master Plan presented from the city offered a picture of the city's approach to revitalize the city downtown and attract businesses to the area. Furthermore, they were able to do so by investing in the infrastructure, parks, and other outdoor amenities to encourage walkability and a healthy lifestyle to provide for the number of people moving to the area, high quality of life as a magnet for more people to choose Bentonville as their work destination.

The Master Plan offered the blueprint, but the initiative took a whole different turn when the Crystal Bridges Museum of American Art was announced from Alice Walton in 2005 after she chose Bentonville for its location; when the constructions began in 2006, it was evident that something significant was coming. Bentonville started to grow, people were moving in but yet, it did not have that economic boom even with the vendors working for Walmart, and the city was going through a revitalization phase trying to rehabilitate specific areas of downtown when they passed the bond measure of 2007. As discussed above the economic impact in the city of Bentonville was evident especially after Crystal Bridges opened. The economic impact was discussed above from the data of the median household income which from \$51,000 in 2009, increased to \$61,000 in 2012, and again went up to \$71,000 in 2014. Crystal Bridges provided the economic impact and the economic boost for Bentonville.

However, not only did Crystal Bridges affect the income of the residents of Bentonville, but it also emerged as a successful attraction for businesses, it provided the incentive for small businesses to flourish, and especially to bring people back to the downtown area. Moreover, it influenced activities outdoors and walkability since as discussed, the museum is approximately close with significant parks and trails. Additionally, it served as the success story of the revitalization process that the city had started in 2007. Nonetheless, the city was going to

revitalize the downtown and invest in amenities for its residents, however, the impact level that Crystal Bridges provided for the process of revitalization influences all the areas of the economy in the city.

Crystal Bridges provided opportunities for more boutiques to open in downtown and provided choices for the incoming visitor, and it also served as an incentive for the emerging restaurants in the city downtown. Businesses saw this growing demand, and they wanted to serve these visitors. Thus the number of high-end restaurants increased in the city, so did the services. People started coming back to the downtown area from the cooperation of the city and other organizations in Bentonville with different events that aimed to bring citizens to the square and promote a healthy, safe, and clean downtown and promote outdoor activities.

Finally, we can conclude that Crystal Bridges is the most influential factor in the revitalization process of Bentonville. Throughout the public-private partnership and a community that supported and was involved in this idea, it provided this region with massive opportunities for development. No one imagined the effect that Crystal Bridges would have in the city's revitalization when the project began. By creating business opportunities, encouraging a healthy and hybrid environment, promoting walkability, drafting policies to address the needs of the growing downtown, and providing for a cultural downtown, Crystal Bridges gave Bentonville an identity and a name to be proud and identify around the United States and the world. The museum influenced the urban growth and the density in the downtown area, increasing the number of businesses in the downtown area, number of residents, and activities over the last decade.

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10 APPENDICES

Appendix A: Landsat imagery of Bentonville from 1995-2015, missing 2012.

1995

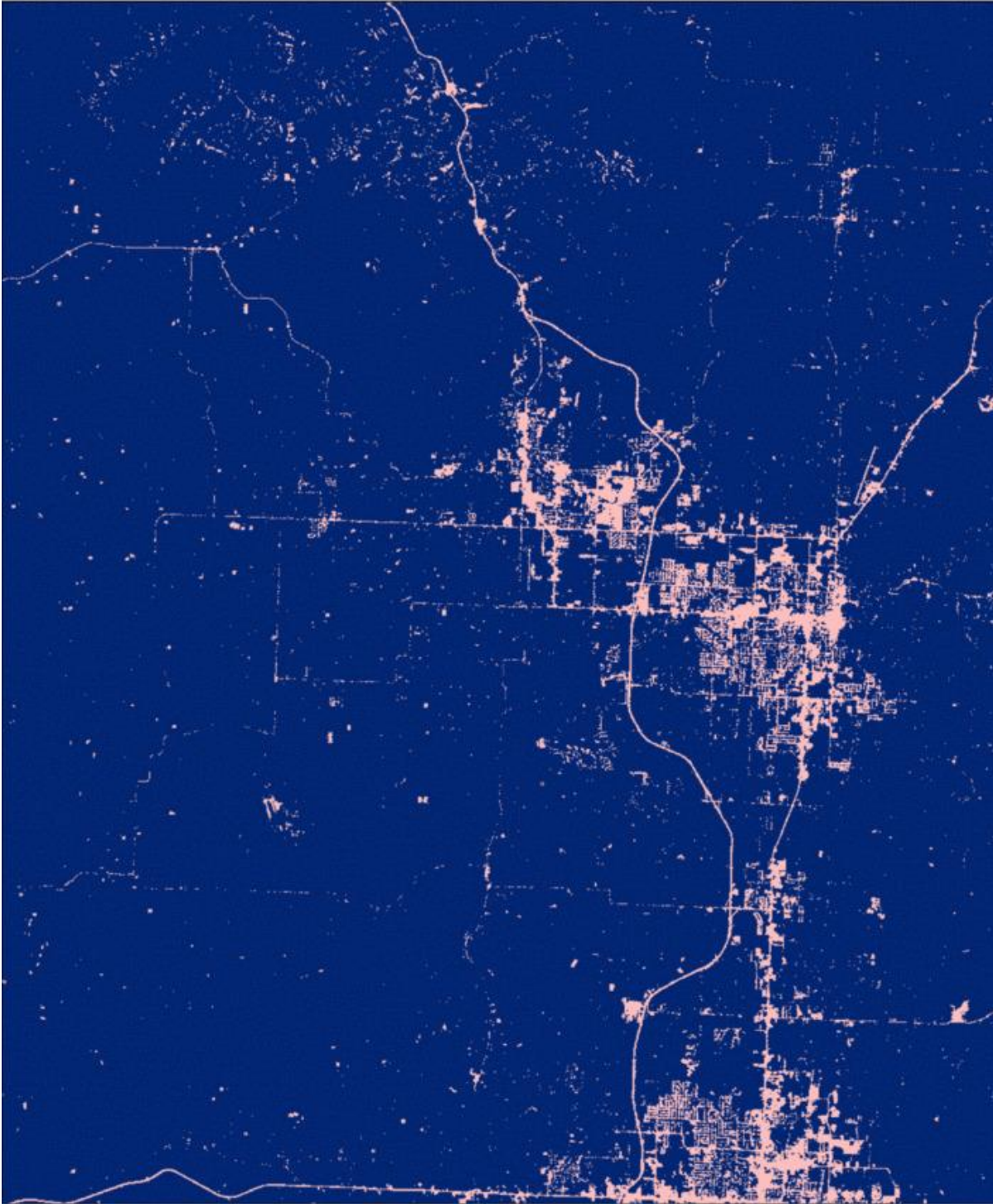


Figure 10.1 - Landsat Imagery of Bentonville 1995

1996



Figure 10.2 - Landsat Imagery of Bentonville 1996

1997

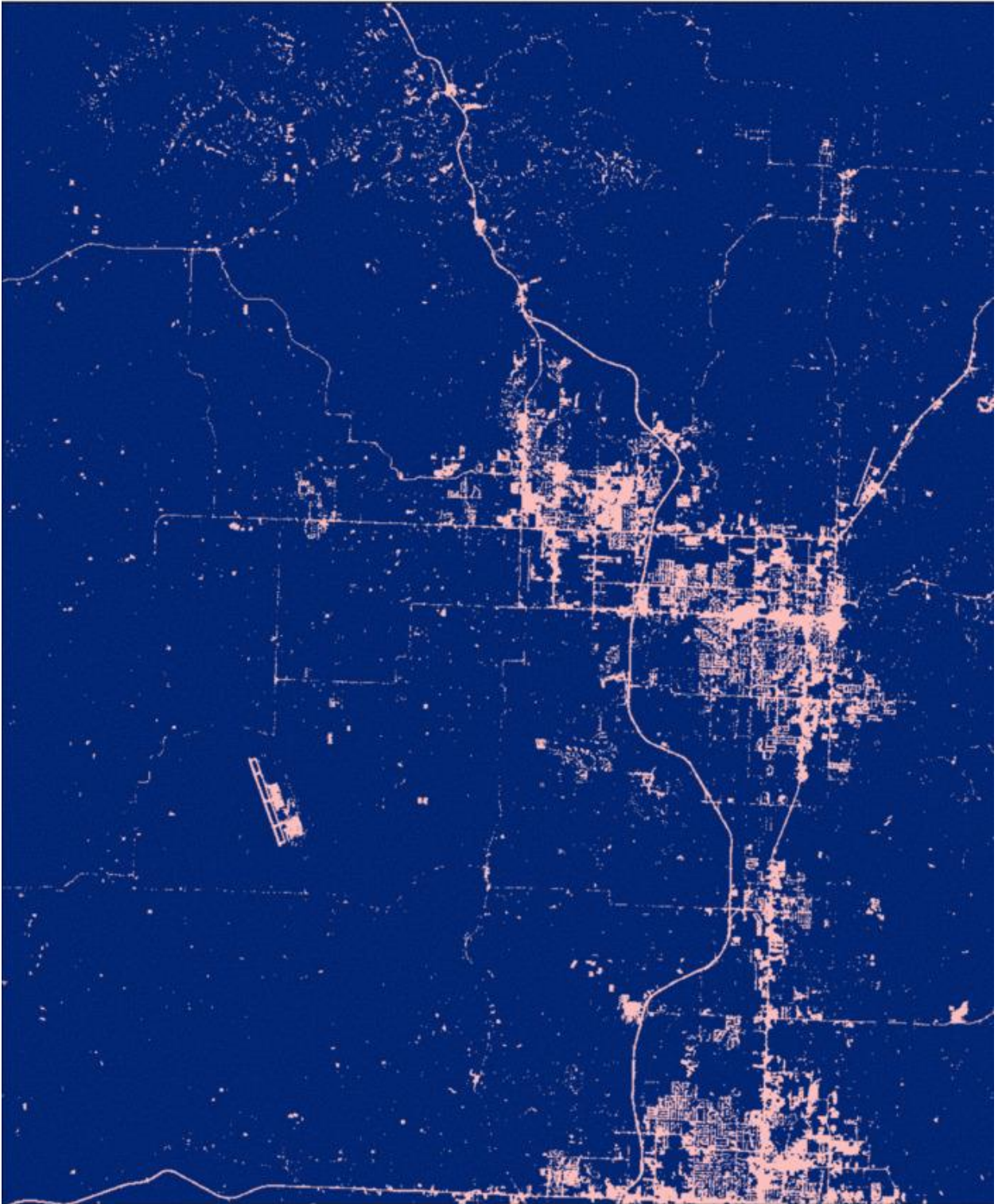


Figure 10.3 - Landsat Imagery of Bentonville 1997

1998



Figure 10.4 - Landsat Imagery of Bentonville 1998

1999



Figure 10.5 - Landsat Imagery of Bentonville 1999

2000

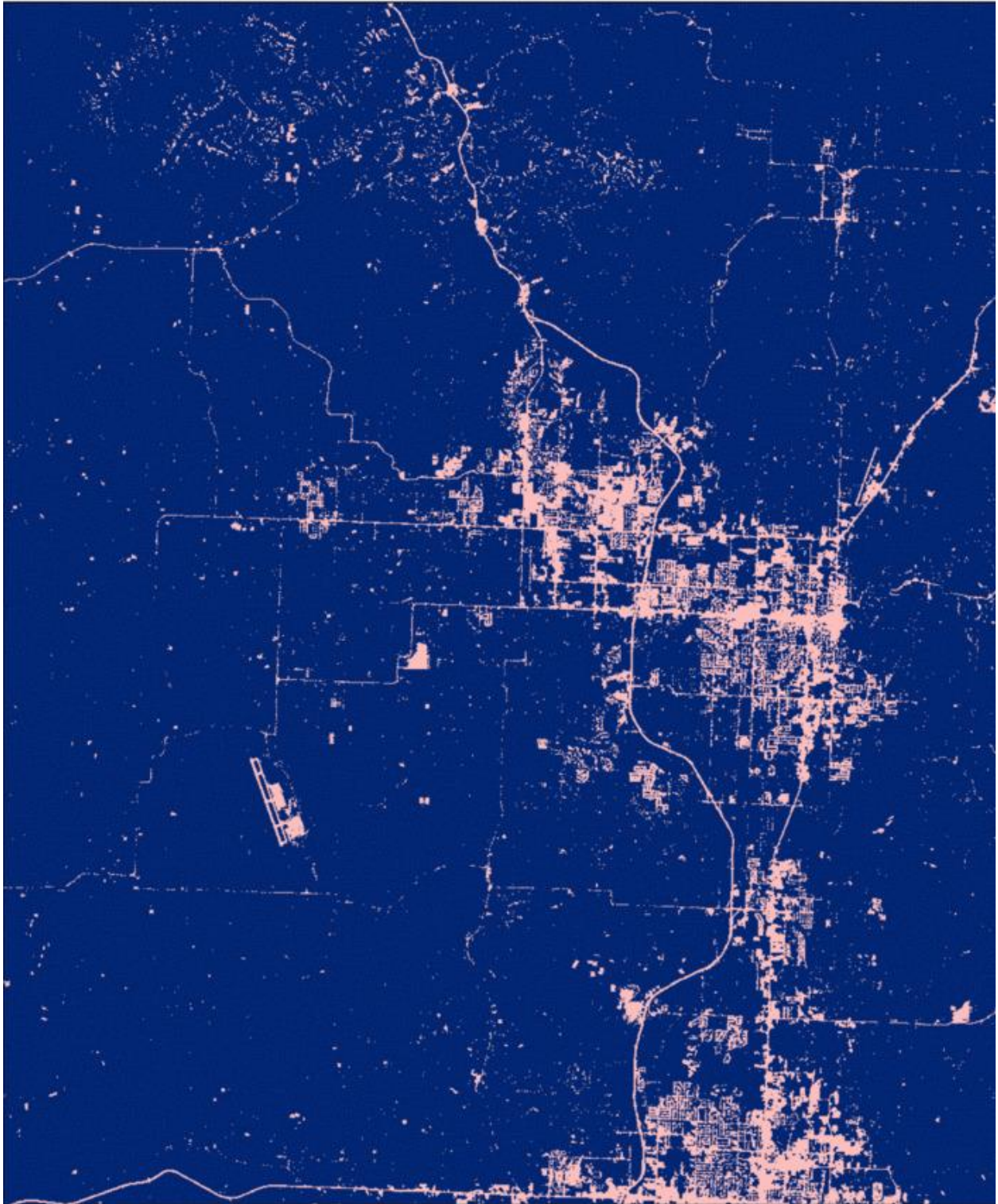


Figure 10.6 - Landsat Imagery of Bentonville 2000

2001

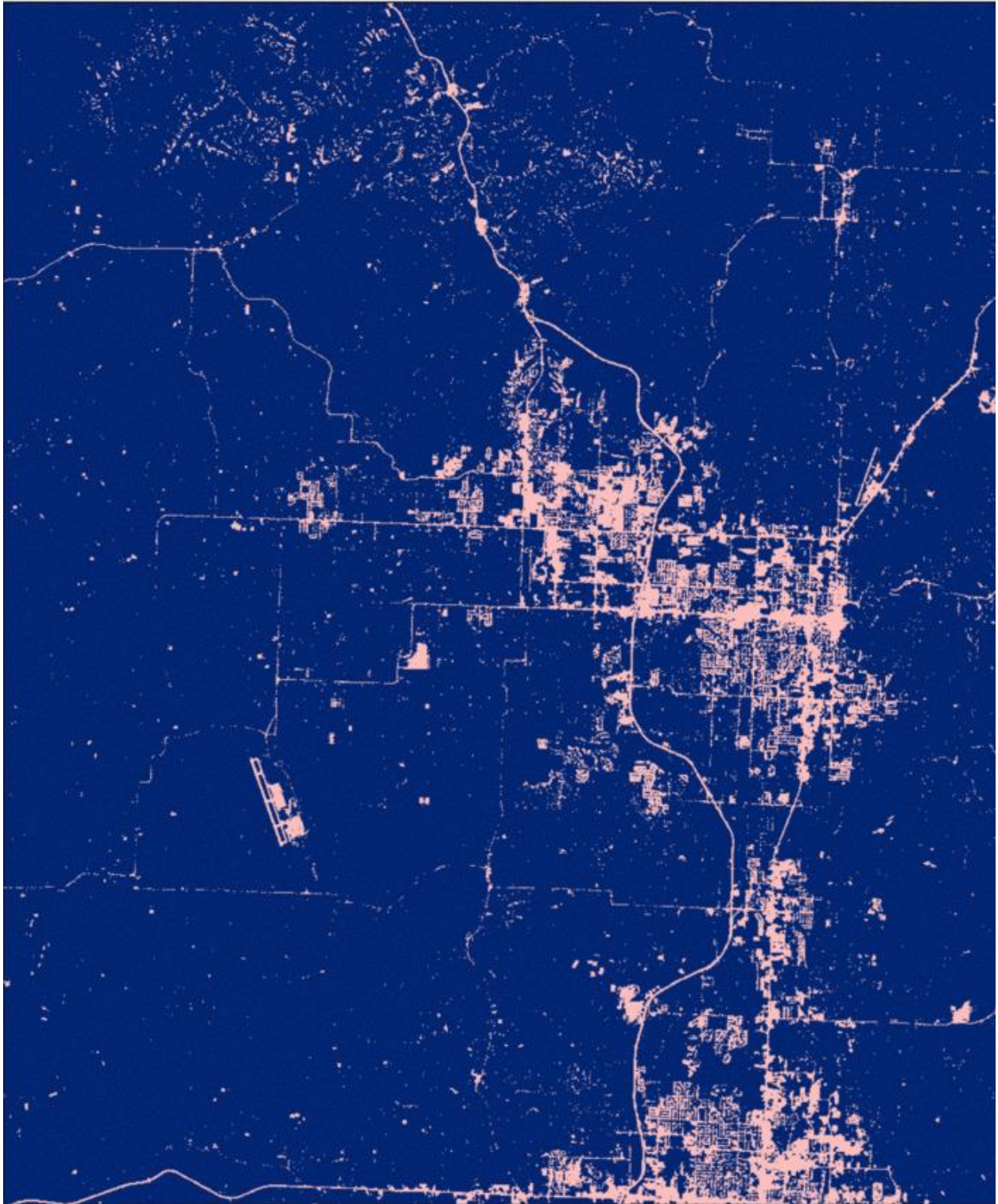


Figure 10.7 - Landsat Imagery of Bentonville 2001

2002



Figure 10.8 - Landsat Imagery of Bentonville 2002

2003



Figure 10.9 - Landsat Imagery of Bentonville 2003

2004

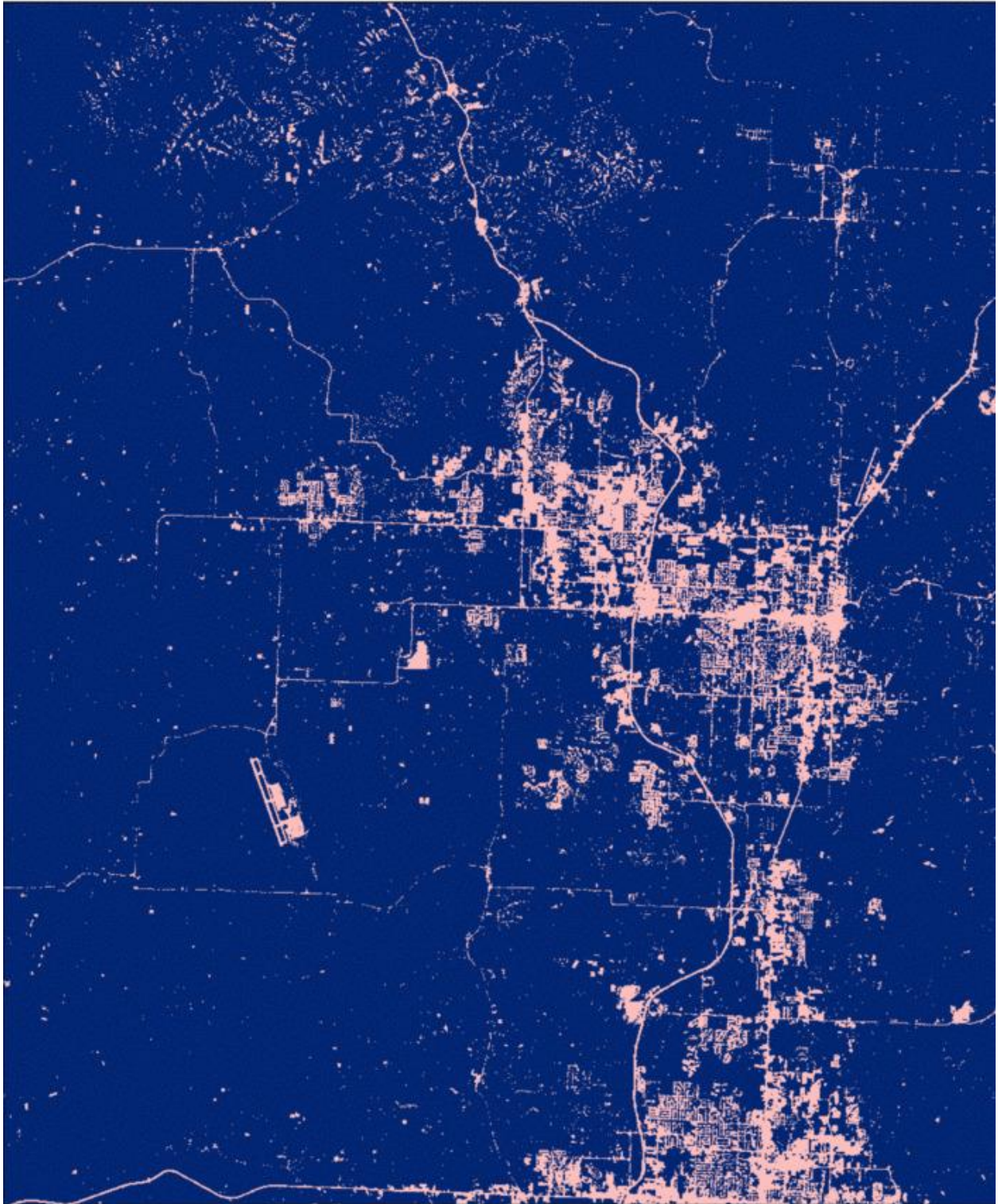


Figure 10.10 - Landsat Imagery of Bentonville 2004

2005



Figure 10.11 - Landsat Imagery of Bentonville 2005

2006

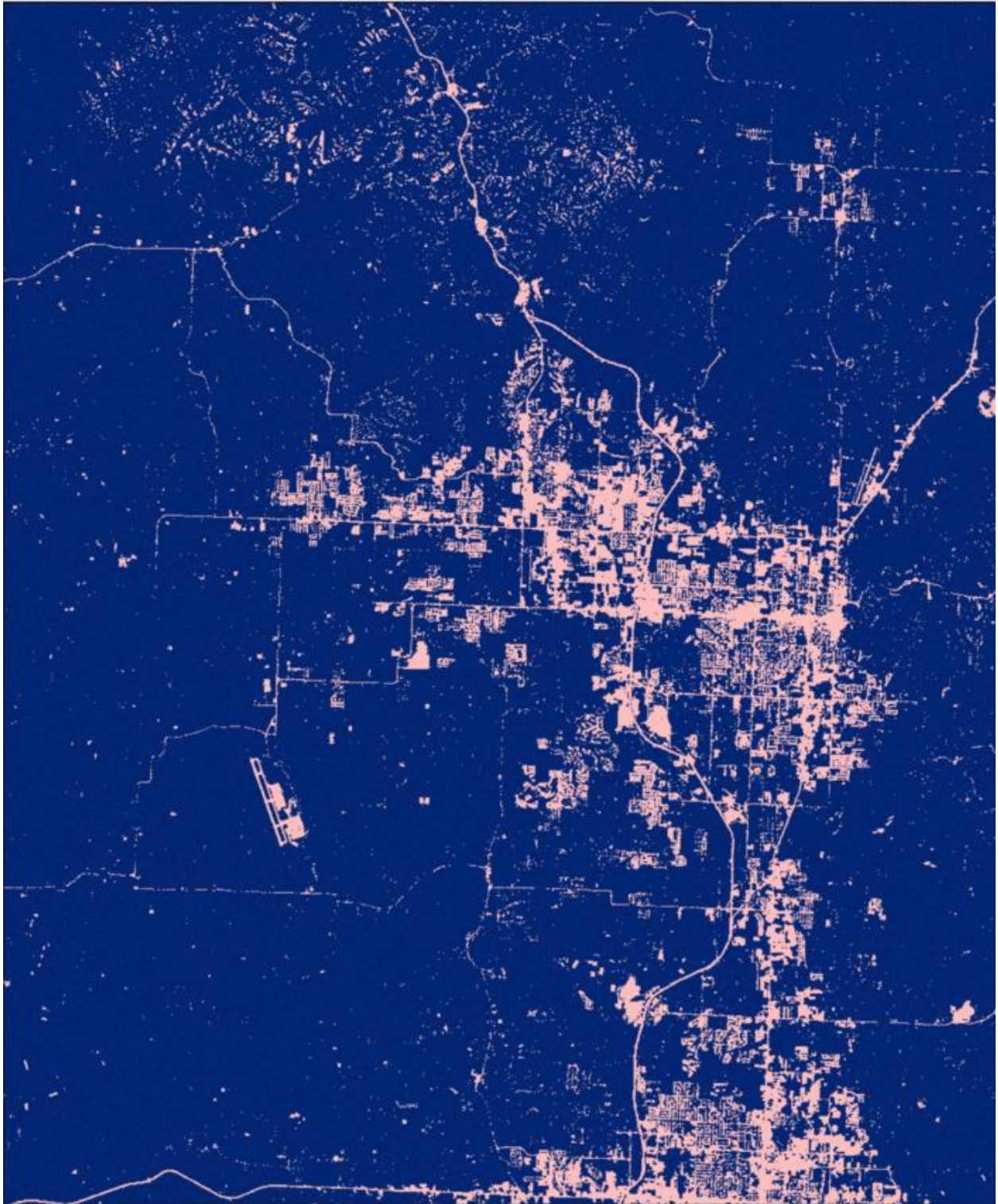


Figure 10.12 - Landsat Imagery of Bentonville 2006

2007

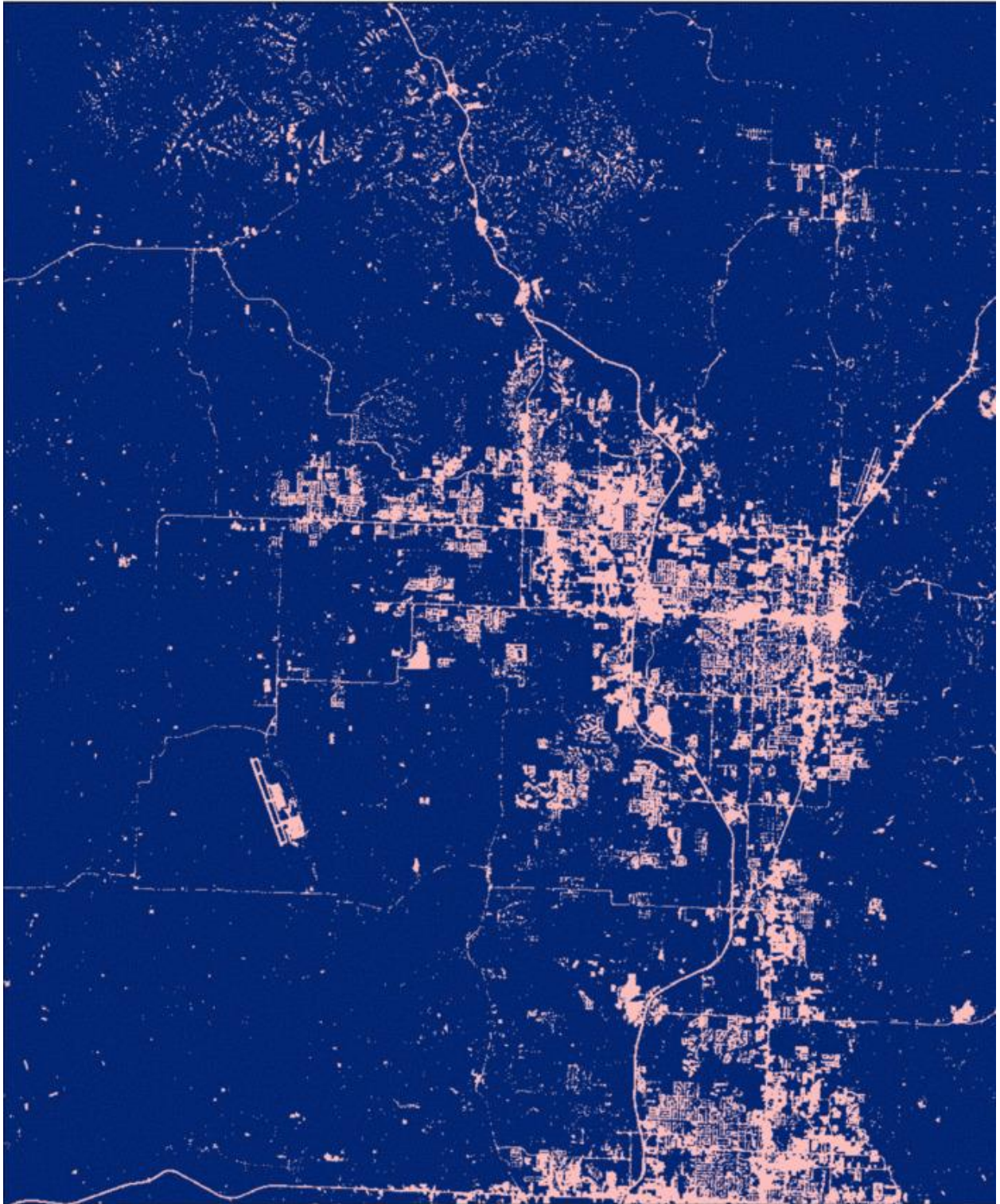


Figure 10.13 - Landsat Imagery of Bentonville 2007

2008

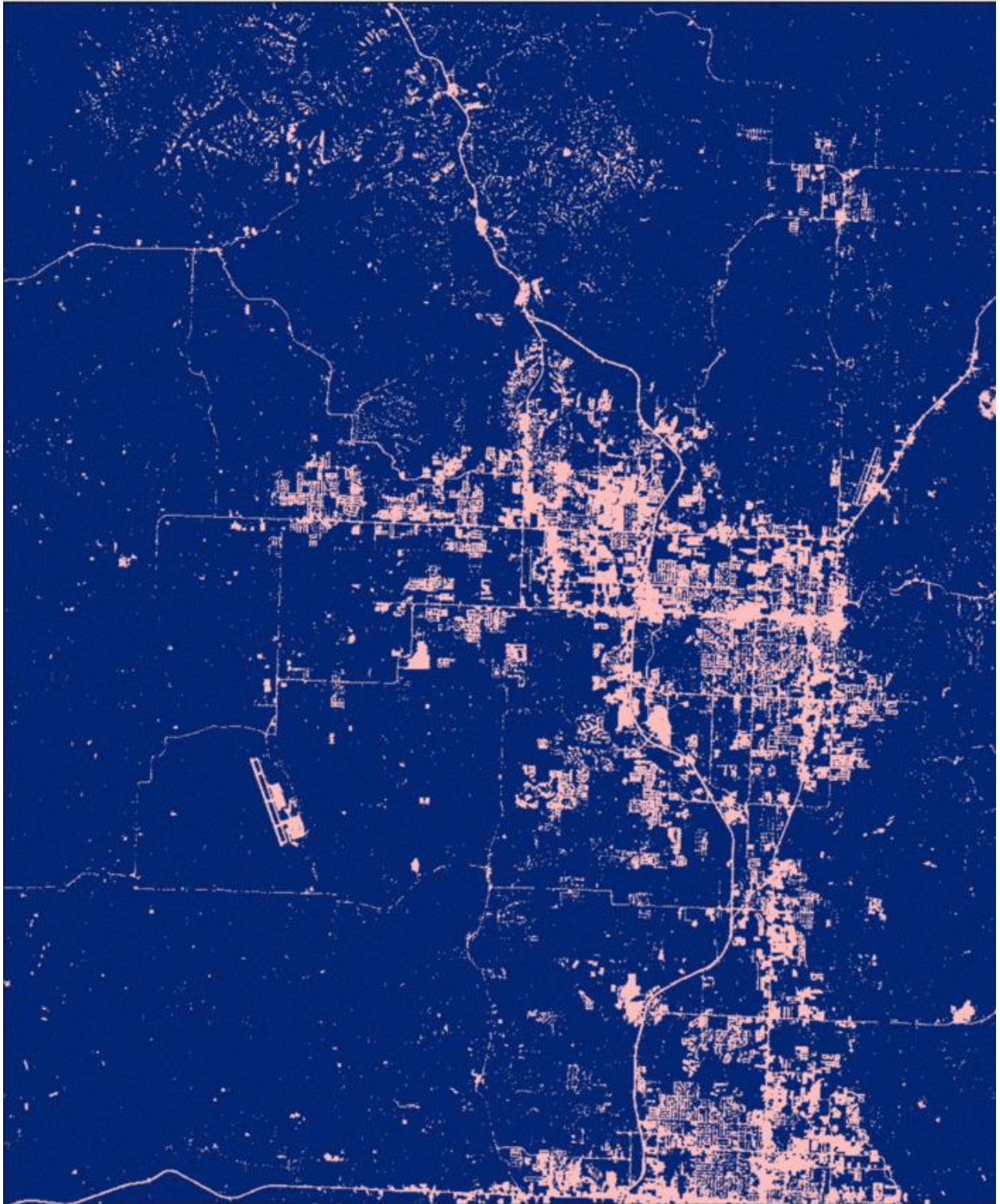


Figure 10.14 - Landsat Imagery of Bentonville 2008

2009



Figure 10.15 - Landsat Imagery of Bentonville 2009

2010



Figure 10.16 - Landsat Imagery of Bentonville 2010

2011

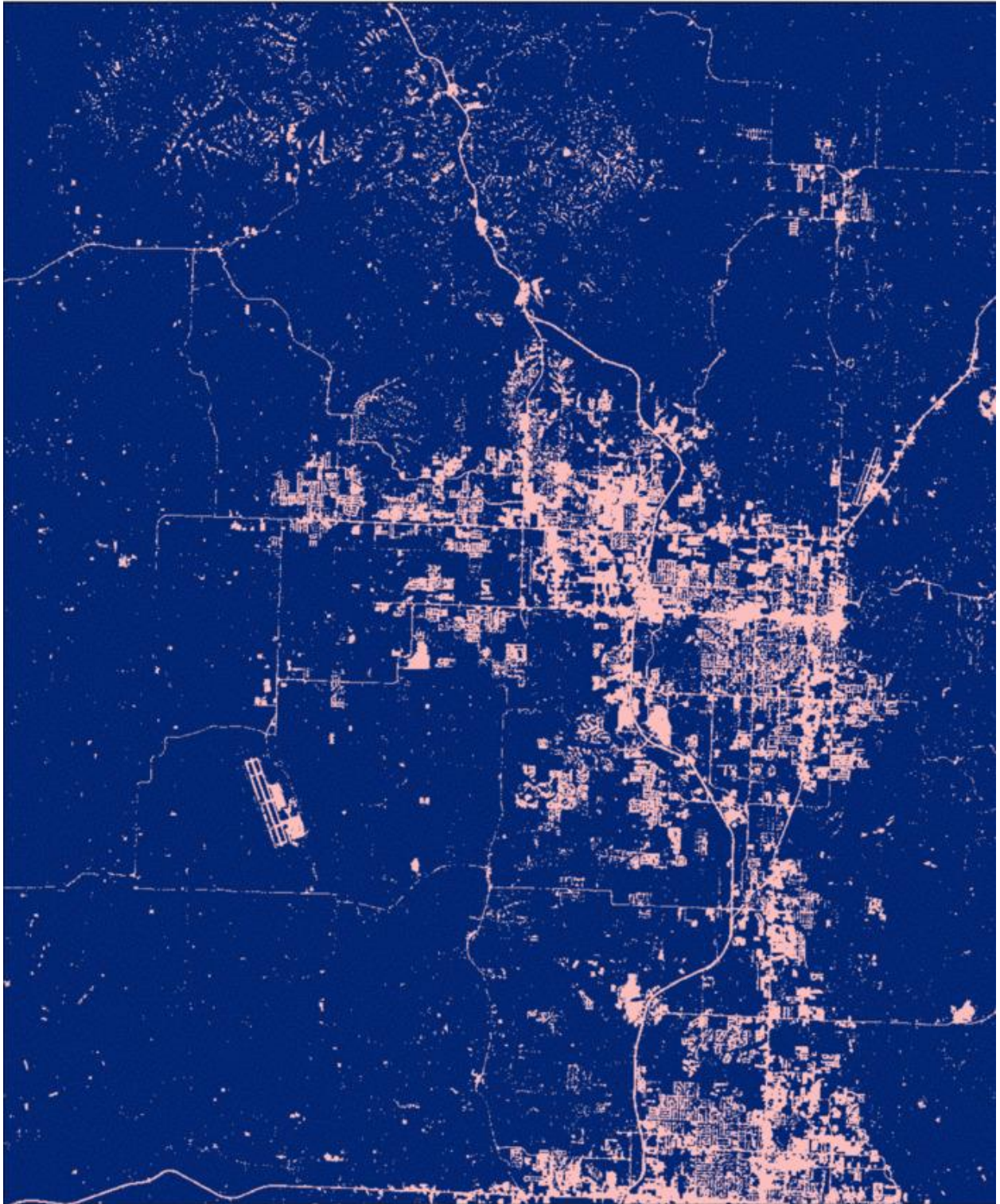


Figure 10.17 - Landsat Imagery of Bentonville 2011

2013

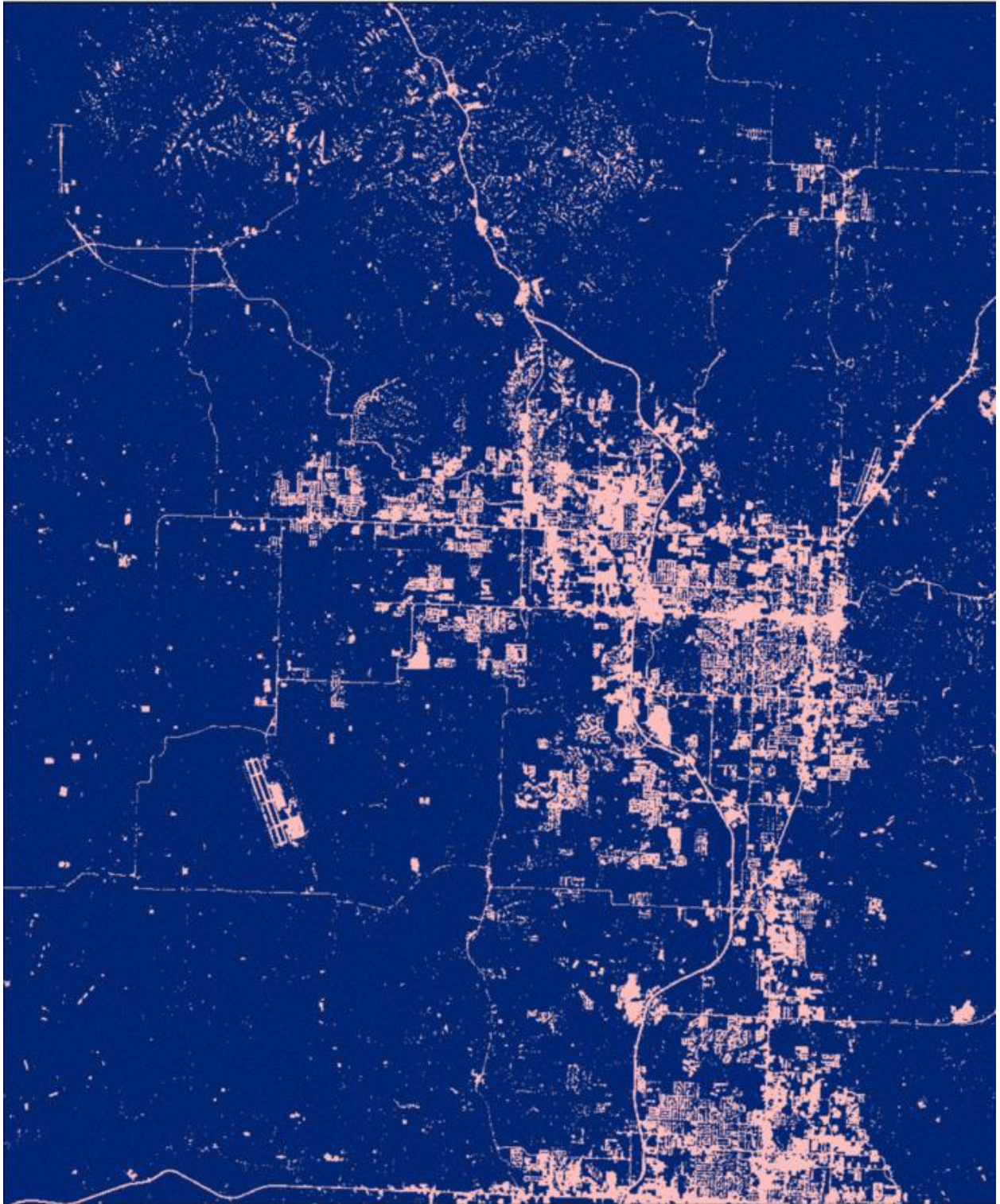


Figure 10.18 - Landsat Imagery of Bentonville 2013

2014

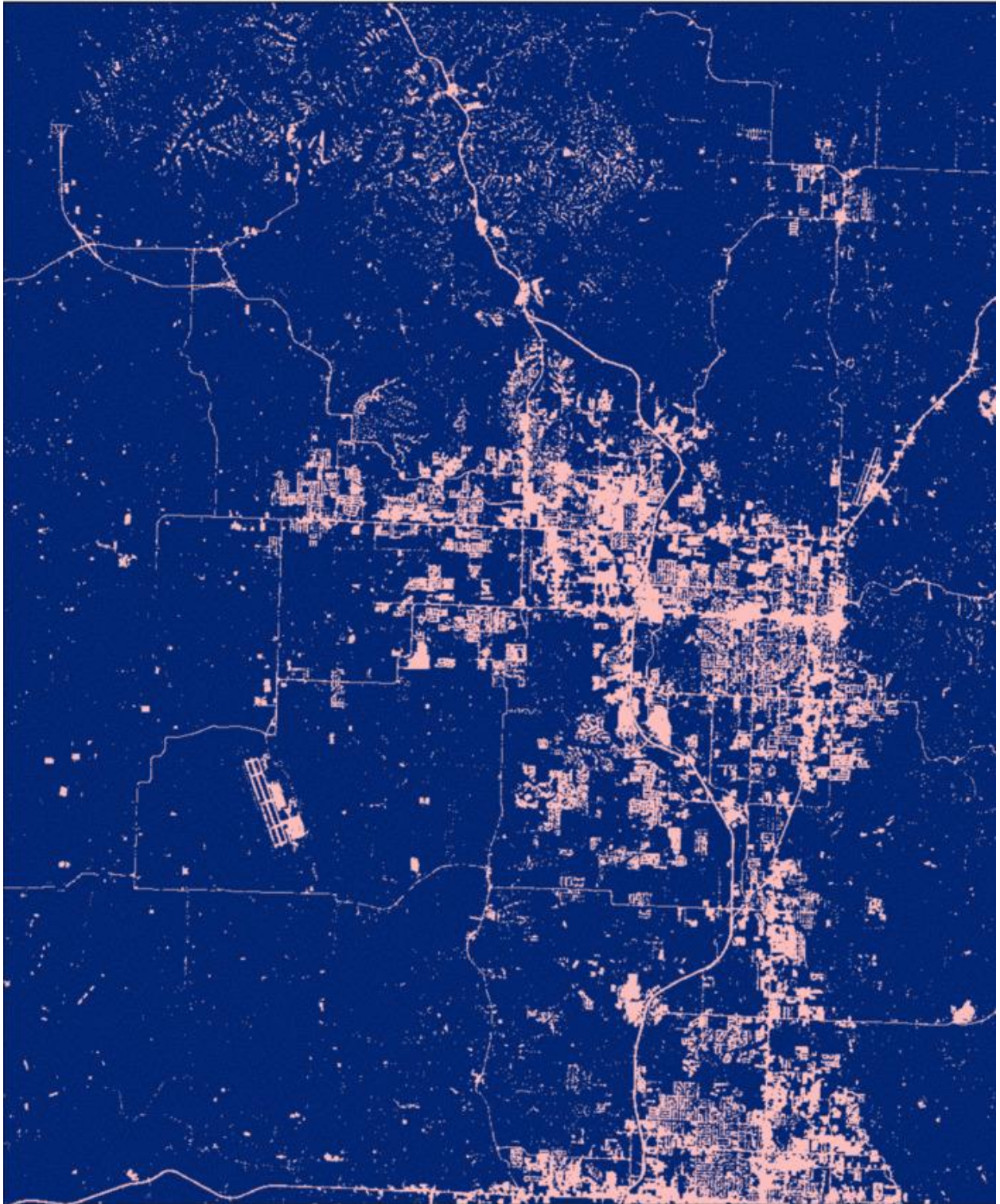


Figure 10.19 - Landsat Imagery of Bentonville 2014

2015

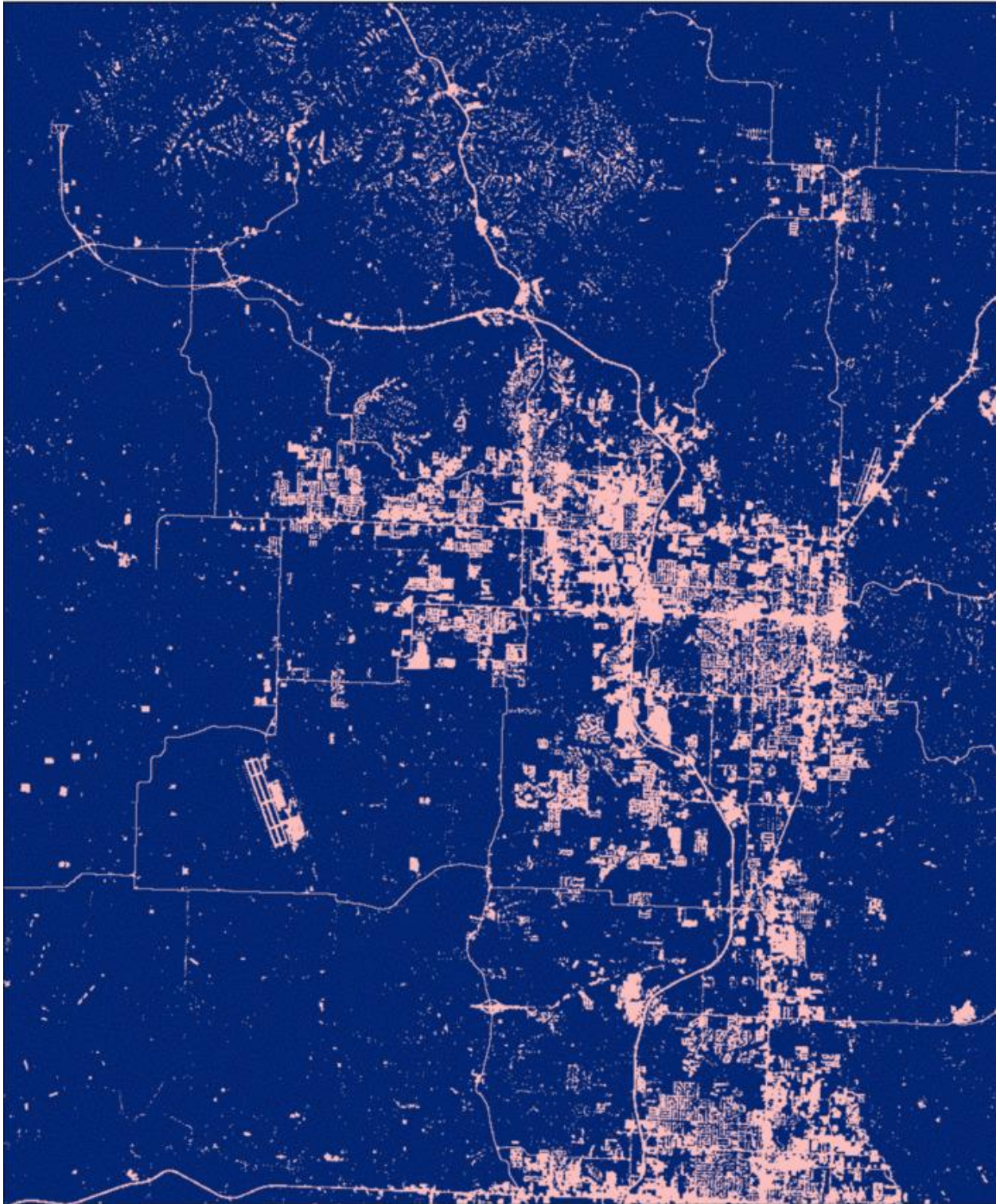


Figure 10.20 - Landsat Imagery of Bentonville 2015

Appendix B: The research compliance form



To: Korab Vranovci
From: Douglas James Adams, Chair
IRB Committee
Date: 02/01/2018
Action: Exemption Granted
Action Date: 02/01/2018
Protocol #: 1801092721
Study Title: The effect of Crystal Bridges on downtown revitalization of Bentonville

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or irb@uark.edu.

cc: Fiona M Davidson, Key Personnel

Figure 10.21 - Research Compliance Form