

SMALL TOWN AMERICA



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SMALL TOWN AMERICA
A RE-DESIGN

by

Clint Brantley Bailey

A thesis submitted in partial fulfillment
of the requirements for the degree

of

Master of Architecture in Architecture

MONTANA STATE UNIVERSITY
Bozeman, Montana

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Clint Brantley Bailey

April 2010

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ABSTRACT

The American Small Town will forever have a place in the undertones of American culture and in the American psyche. The small town has become an identifying piece of the fabric that the overall American Society as a whole uses to project its own image, not only to the world but to its self. This study is an examination of key elements of the American Small town and an exploration into why these places are disappearing. The study goes on to utilize this information to derive a plan for a small town that is free of modern day plights, such as sprawl and redundancy. In the end, it proposes a plan for the community of Four Corners, M.T. This case study re-design is an example of how small communities can be shaped early on to prevent waste, maximize efficiency and quality of life.

Thesis Statement:

1

Small Town America, A redesign: A discussion of density in Rural America

The American Small Town has developed unhealthy building practices that center on low density and personal transportation dependent lifestyles. These practices are not in the best interest of the environment or the residents. It will be the purpose of this study to examine what it is that makes a small town, what is of value, and what needs to be changed. In the end it will propose a new strategy for creating a small town that is cured of the issues of sprawl and redundancy.



Small Town America



that walkable urban housing sells for 40 to 200 percent more than its automobile dependent, sub-urban counterpart (Leinberger 99). This is the case because this type of living is simply in high demand. This is America's new Dream and these are the numbers that prove it.

Small Town America :

Why Small Towns

A small town, for the purpose of this exercise will be defined as a group of people numbering between 750 and 30,000 (Francaviglia xx) that live in proximity to each other. They rely on each other for common civil services, commerce, social and cultural interaction.

While it is a wide spread belief that small town America represents the nation at large, this has not been the case for some time (Bradley 1). In fact, the last census taken where rural America represented the majority of the population was 1910 (Bradley 2). The current statistic is that 84 percent of Americans now live in Metropolitan Areas (Bradley 2). These facts bring to surface the question, why are people moving out of small towns and into cities? A look at economic trends offers a glance into this phenomenon. More and more of America is moving toward a service based or "knowledge based" economy (Bradley 2). It is calculated that 76 percent of the "knowledge economy" is housed in Metropolitan areas. In this day and age of technology, with ever increasing ability to do business on a world wide stage while sitting nearly anywhere through the use of a laptop, it

cannot possibly be said that these businesses must be in metropolitan areas in order to have access to the resources that they need to succeed. There must be something else in these cities that businesses or heads of businesses are seeking. Is it not possible that those making decisions on where to house their businesses are falling under the same trends that have been outlined above? If this is the case then it would stand to reason that in order to draw these types of institutions back to small towns and the economic prosperity that they bring with them, one must simply replicate the highly sought after walkable urbanism that has been so recently rediscovered. While most small towns contain urban patterns and were laid out with urban characteristics (Francaviglia xxi) they have since grown away from these ideals. David Engwicht, an Australian activist and planning consultant said “The city is an invention for maximizing exchange and minimizing travel (Register 13).” It is this ideal that the small town has lost and it must find it once again lest we lose this unique American lifestyle forever.

The Romance of Country Living

What is it about Small Towns that captivates us and conjures positive images of

the lives that people live there? What is it that comes to mind when we reflect on Small Town America; children jumping rope, small farm houses surrounded by fields, quaint main streets capped with small white chapels, town greens fortified by old world brick court houses? The fact is that while these places exist, they are not representative of most of the small towns in America. These iconic images account for small portions of the Small Town of today which is made up of primarily widely spaced generic suburban houses made of discount materials with paving to connect them together (Leinberger 64). This is for the simple fact that buildings today are built to accommodate the automobile and are set back from the street and are usually viewed going 30 mph or faster (Leinberger 64). At these speeds and distances buildings did not need to be built to the quality that they used to. Cheaper construction and synthetic finishes serve the primary purpose of most construction, particularly sub-urban commercial construction. Their primary job being to catch the attention of the driver as they pass (Leinberger 64).

The form that the Small Town has taken in America's mind started between 1870 and 1900 (Francaviglia 35). It was during this time that builders began to build in the distinctly recognizable way of *tout ensembles* or intact assemblages (Fran

caviglia 35). This is the modular way of building found on most downtown main streets, where buildings are built with regard to the structures on either side on similar narrow lots (Francaviglia 25).

False fronts were one of the first stylistic fads to shape the American Downtown. Between 1850 and 1860 they became very popular for their ability to make very simplistic and cheap buildings appear grand (Hayden 32). The Victorian Revival was another of these styles to sweep the nation, this one hit the mid-west particularly hard. Many of the small towns in America had major portions of their commercial district re-faced in the Victorian style (Hayden 33). The point in bringing up these stylistic fads is to show that the feeling that one gets from a small town, its essence, is the sense of history that most of these small towns have maintained. It is the conglomeration of styles from years gone by that have been mashed together to create an urban fabric that is intrinsically unique and cherished by its residents. It is their out-of-the-way"ness" that has provided no need for change and thus has yielded none. The feeling of nostalgia and romance that so many Americans associate with the small town comes from the fact that small towns notoriously hold a sense of history within them.

There is no shortage of examples of how the small town is represented in the media. In the music industry rock greats such as John Mellencamp, Bob Dylan, and Bruce Springsteen have all sung ballads about the qualities of the small town. In addition to its prevalence in other genres, Small town America is perhaps the only place on earth with its own music genre. Country Music is a billion dollar a year industry. It has showed sustained growth even in periods where the entire music industry was in decline (Arango 1). In fact many artists have begun to crossover into the country genre looking to boost their careers by joining the proverbial Country Music band wagon that America has a seemingly endless thirst for (Arango 2). It is easy to postulate that this industry's success is based on a common vision of what America is supposed to be like, a vision that is rooted in the daily lifestyles of those in rural America, the inner workings of a Small Town.

On the silver screen, the Small Town has had a major role in building the identity of America as well. The "Western" genre of film takes place exclusively in small towns and has given America much of her image not only to the world, but to ourselves as well. There is a Western Culture that has arisen from the way of life that the Cowboy seems to embody. This way of life was born in the rural places

in America (Hoover 19), the Small Town. In these movies, towns are portrayed as random establishments that serve only to service the needs of the drifters that come and go (Leenhouts 176). The role of the small town in these movies is perhaps best described in the words of Jenni Calder in *There Must Be A Lone Ranger*, “to be no more than random communities with no obvious use other than to provide a drifting cowboy with a drink, a woman, and a fresh horse” (Leenhouts 176). While these movies have very little to do with frontier life in these small towns, they serve to define the relationship between the American Man and the American West (Leenhouts 177).

It is this relationship that has truly defined America's vision of itself (Leenhouts 177). Henry Nash Smith said this of this relationship in his study, *Virgin Land*, “the character of the American empire was defined not by streams of influence out of the past, not by a cultural tradition, nor by its place in a world community, but by a relation between man and nature ---- or rather, even more narrowly, between American man and the American West” (Leenhouts 177). In many ways we are a nation of cowboys. Not the realistic blue collar worker, but the cowboy that has been sold to us in movies, TV shows, and songs. Our vision of American strength is founded in this type of imagery.

Why Density Prevails_



To begin to understand what density is and what it means for the small town, perhaps it would be helpful to understand what it is not and what it does not mean. From an urban design standpoint density is the antonym of sprawl (Flint 53). The following is a simple laundry list of problems that have arisen from a sprawling built environment.

First off there is the fiscal burden that this type of development places on local governments. As a city sprawls it is responsible for extending roads, water, and sewer lines (Flint 54). Development of any kind is expensive for local governments, but non-dense development is the costliest (Flint 54).

Another major problem resulting from sprawling developments is water contamination. Rain water hits the hardscape, streets, roofs, parking lots, etc. and collects oil, grease, and grime before being funneled into the sewer system (Flint 54). Not only does this process contaminate the water it robs the aquifers that would normally receive it. This in turn promotes drought (Flint 54). In America we have almost four million linear miles of road that are already built, with more



being constructed everyday (Hayden 20). I believe that it would truly alarm Americans to find out how much of our supposedly rural based nation is covered in asphalt. In 1956, Eisenhower signed a piece of legislation that established 42,500 miles of road (Hayden 52). This one act sentenced a piece of ground the size of Delaware to be paved (Hayden 52).

As society sprawls, wildlife retreats. It is common sense that there is only so much land available in the world. However, what we as humans seem to have forgotten is that we are not the only ones inhabiting this planet. More and more common are news stories over controversies between man and beast. Perhaps one of the most recent and closest to home of this study, is the reintroduction of the wolf into the northwest. Many ranchers complain of their stock being picked off by wolves and are demanding costly compensation from the government. However, if these ranches were not so far away from the people that they feed, usually on secluded and very wild estates, then perhaps there would be enough territory for both the wolf and the rancher. It does not stop there though. The east coast has been suffering from an immersion of wildlife problems for a long time now. In Massachusetts in 2006 reports of coyote

attacks on household pets was a common cover story for the nightly news (Flint 55). In Quantico, Virginia they have so many deer hit by cars that they have begun to keep count annually and have road side signs projecting this years total, often in the mid 30s, but authorities believe that the actual number is double that because many of these types of accidents go unreported (<http://www.quantico.usmc.mil/Sentry/StoryView.aspx?SID=3545>). The point is that sprawling human development is overtaking wildlife habitat forcing an unnecessary confrontation. It cannot simply be men or wolves, it must be both. How do we achieve this, density.

Groups that are not usually associated with issues of sprawl are now being forced to deal with it. The National Rifle Association has successfully lobbied and obtained range protection legislation in forty four different states. It was beginning to see gun ranges become endangered because housing developments were encroaching and pressuring the ranges to close or move (Flint 56). Even the U.S. Military has taken measures against encroaching suburbia to make sure that it has adequate room for training while maintaining a safe distance from civilians. It has teamed up with state government, who rely on military bases for jobs, and wildlife groups to purchase lands around bases and training areas to

prevent development (Flint 56).

America will begin to jeopardize its ability to feed itself, if current trends continue. The very land that we rely on to grow the food to feed our population is becoming prime land for developers. The Department of Agriculture estimates that between 1992 and 1997 12.8 billion acres of cropland, pasture, and rangeland were lost to development (Flint 56). If the current pace continues then by 2100 America will have lost 30 percent of its overall cropland. Meanwhile the population will have doubled (Flint 57).

America makes up about 4.5 percent of the overall world population. However, we use 25 percent of the world's non-renewable resources to support our current settlement patterns, dominated by single family houses (Hayden 82). Sprawl is difficult on energy efficiency for a number of reasons. First off there is no sharing of conditioned air. This is particularly crucial in areas of extreme temperature. In a suburban neighborhood each house is paying its own way to heat or cool itself to an acceptable temperature. All the while it is losing this conditioned air through its large exterior surface area. In a more densely designed multifamily unit there are shared interior walls that allow sharing of this energy intensive

conditioned air. Another energy trap that a sprawled built environment falls prey to is the energy used to transport its residents. In America the automobile is the primary method of transportation. This is perhaps one of the most energy intensive systems in use. Cars and SUVs use a staggering 40 percent of the oil used on a daily bases in the U.S. (Bluejay 1). Only one in ten people in the world drive a car (Register xxi). While this fact is not a reflection of how the American people live, it is a statement that most of the world has built environments and cultural structures that allow for alternative transportation, if any at all, to take the forefront in the main stream. The best option being of course, a pedestrian dominated environment where the transportation energy consumption is nothing at all. This must be a conscious decision because once communities are shaped by cars they remain dependent upon them (Register 2).

There are two groups who are hit the hardest by the current sprawling trends of the American Landscape. Those who are too young to drive and those who are too old (New Horse Productions). These two groups are significantly excluded from much of society and are completely dependent, and thus a burden to those who can drive. People are living longer and longer due to advances in modern medicine and thus are living longer periods of their lives where they can not

drive. This is causing a shift toward the “nursing home” lifestyle. It stands to reason that these people would be able to maintain their independence much longer if they had easy access to everyday necessities without having to climb behind a wheel to get them. This does not even take into account the added benefit that this demographic would glean from daily exercise and social interaction that is inevitable in a well laid out dense environment. Children have essentially become prisoners within their own sub-urban homes. They are suffering from an ever increasing array of social and psychological disorders, Attention Deficit Disorder, Attention Deficit Hyper Disorder, poor social skills, etc. that could all be products of a loss in early childhood freedom (New Horse Productions). Parents also suffer in the current scenario. They must be ever present to shuttle children between school, friends, and extracurricular activities. In a more dense built environment children could simply walk to these functions yielding them more freedom and a sense of independence that is very much absent in the youth of today.

Of Dreams and Nightmares

The Single House alone on its individual plot of land, this is The America Dream.

It shares no walls, no common spaces, or tools with others, and requires long distance travel to bring in basic necessities such as food and social opportunities. It is this very popular, some may say the standard, practice of building that is the primary concern of today's building trends (Register 48). It is precisely the type of building that must stop.

Where did this dream come from? In 1940 the World's Fair was held in New York City (Leinberger 15). Forty-five million people attended, setting a new record. The most popular exhibit was titled "The Highways and Horizons," and was also known as "Futurama." As many as 10 percent of the nation's population was estimated to have visited the exhibit (Leinberger 17). To add to the exhibit's influence many magazines around the country ran articles on "Futurama," to include *Life* magazine which ran a five page spread. The exhibit showed the world as it would be in the far removed future of 1960 (Leinberger 17). Pedestrians, cars, and street cars no longer shared busy streets. "Superhighways" connected single family houses with connected garages and large spacious lawns (Leinberger 17). In this model, downtown was also reshaped. It had high rise office buildings, hotels, and grandiose parking structures. However, it had very few apartment buildings and they were all separated by those



“superhighways” (Leinberger 17). The influence of this exhibit is undeniable in the shaping of the American built environment. Brendon Lee, author of *The Planning Legacy of World's Fairs* said that it, “no doubt helped to influence the public perception of a publicly funded superhighway system and a society of automobile ownership” (Leinberger 18). This exhibit proposed a society that was built differently than any that had come before it (Leinberger 21). “Futurama” was funded by General Motors (Leinberger 19).

America's needs are evolving. There are multiple demographic trends that are having an effect on how Americans want to live. The first of which is that the baby boomers are beginning to retire. As they become “empty nesters” they are choosing to downsize their accommodations (Leinberger 89). In concurrence with this is the current generation, that is staying single much longer than any previous generation which is causing them to remain in smaller units (Leinberger 89). All of this adds up to one fact and that is that there are less children in the homes of Americans now than ever before. In fact by 2025 single households will equal the number of households with children (Leinberger 89). Children are indelibly tied to the American dream. However, when they are absent, people are becoming more and more willing to reconsider where and how they want to

live. They are more willing to recognize that there are other options besides the sub-urban lifestyle that we as Americans are supposed to crave.

Demographics are not the only things that are changing within the population of America. The desires of its citizens are changing as well. According to a 2004 poll conducted by the National Association of Realtors and Smart Growth America, 79 percent of Americans put having a 45 minute or less commute in the top tier of criteria when looking for a new house, this compared with only 57 percent who put having a large house on over an acre of land in their top tier (Flint 193). Americans are tired of living in a built environment that separates them from the everyday interaction of the rest of their lives.

These changes can be seen economically as well. As the market changes to accommodate the demands of the people, prices of housing in dense multi-use areas, those designed for the pedestrian, have skyrocketed (Leinberger 99). At the same time low density, single family dwellings, those designed for the automobile, have begun to lose value (Leinberger 99). In 2003, the average sales price, per square foot of condominiums was more than that of detached housing units for the first time (Leinberger 99). In fact, the current statistic states



The Future of Small Town America

With all of the talk about change to the Small Town it is important to outline what must remain the same in order to preserve the character and value of Small Town America. As so much of the identity of a Small Town is derived through its mix of historical buildings before a redesign can occur, key historical buildings must be identified so that these structures can be preserved and utilized in the new town plan. A sense of the town's history must not be lost if the value of the Small Town is to be maintained.

Ultimately the key feature of Small town America is a community that is proud of what they have. Small Towns value their unique character and utilize it to represent them as a whole but also to define their individual place in society. One must remember that those who live in a Small Town often sacrifice to do so. They identify with the relationship of the American Man and the American West and base their lives on being somewhere that is worth being. In redesigning the Small Town this must not be lost. A place of character must be created, one of value, one to be proud of.

The Future of Small Town America :

Finding Direction

Where to from here? At this point it can only be abundantly apparent that the Small Town must be rescaled. It needs to be built upon human dimensions and accessibility instead of vehicular dimensions and dependence on cars. The small town needs to be rebuilt and rise from its present disintegrated form. Buildings should be designed as part of a whole instead of as individual endeavors (Register 18).

There are multiple working models to observe as case studies. One of the most obvious is the Pueblo town of the Pueblo Indians from the southwest. In these settlements the town consisted of a many tiered, expansive, single building (Register 16). One of the largest of this type of settlement was the Pueblo Bonito. It was 5 stories, contained 800 rooms and was residence for almost 1,200 people (Register 59). This is well within the previously laid out parameters for a small town. The interior living quarters were all connected by interior passage ways. With a few rare exceptions there was no access to the exterior (Lekson 1). This may have been due to inferior knowledge of building

techniques and materials. However, the layout and practice of living in a mega structure is what is really to be gleaned from this settlement. They made use of indigenous materials, mostly stone and clay, and built very real pedestrian cities. This settlement was started around 919 A.D. and thrived for almost a hundred years (Lekson 1). This is evidence that this type of building comes very intrinsically to us as humans.

Paolo Soleri's Arcosanti is perhaps one of the best examples of density on a town wide scale. It is located in the deserts of Arizona just outside of Prescott. It is proposed to house 5,000 people upon its completion. His solution was also to create a town as a mega structure. Soleri coined the phrase arcology, of which Arcosanti is the first and only prototype. An arcology is architecture + ecology. It was Soleri's belief that in such an arcology the built environment could act as organs within a body of the natural surroundings (www.arcosanti.org). Soleri wrote this of Arcosanti's purpose:

It does not endorse the tribal syndrome, the return to nature, the withdrawal of man from society, or pseudoconservationist ethics. It endorses the Urban Effect and the eschatology of the transformation of the physical into the living, the social, the cultural, and the spiritual (Soleri 197).

Arcosanti utilizes an idea that Soleri calls “self-containment of habitat.” This is the realization that only the organisms with the lowest levels of evolution, and us, give into the idea of unlimited sprawl. Soleri cites the coral reef as a prime example of this type of behavior. More complex species with intricate social structures have opted for an “optimal” dimension within their habitat (Soleri 16). Soleri cites bees, termites, and ants as examples of this category. Soleri believes that “crowding” (Soleri’s word for density) is the natural order of life. After all organisms themselves are “crowded, self-contained, miniaturized realities” (Soleri 27). He points out that there are 3.5 eons of life that lead toward this type of lifestyle and that our current sprawling practices leave us vulnerable to waste, pollution, energy and time depletion, expensive logistics, segregation, and urban decay (Soleri 27). It is Soleri’s opinion that crowding should throw off its negative connotation and not be seen as an expedient or necessary evil, but as an indispensable asset (Soleri 27).

So what is it exactly that we are talking about? We are talking about creating built environments that are dense enough to support a completely pedestrian lifestyle. Most designers that investigate pedestrian environments say that a quarter mile radius is the maximum distance for an active pedestrian center (Register

21). Since there cannot possibly be enough infrastructure crammed into a single level quarter mile block to sustain a society, it makes sense that there are two options left; up and down. This logic is seen somewhat in the Pueblo society, with its multi story unistructure, but it is also seen in the earthen kivas that were built as integral portions of the city. As for arcossanti, Paolo Soleri explored extensively the possibilities of a city being both above and below ground, with the grade as nothing more than a sort of centerline for the city.

The mechanics of this vertical city now become complicated. Not only is the structural demands on such a city much more demanding than our current system, which leads to a host of social problems, cost, absence of knowledge of this type of building, and a new palette of materials from the normal everyday generic materials that fill our current cities, to name a few, but there are even more serious obstacles to be dealt with in thinking about this type of building. Perhaps one of the greatest, is how does one create a uni-structure that is self contained and efficient and yet allow for growth in a compatible and modular way?

Instead of subscribing to the mega structure as the only way of achieving density, what if there was another way? What if through systematically decreasing all new lot sizes and imposing city wide height minimums, instead of restrictions, we increased density in a much more conventional way. However, in addition to these changes the small town would need to prevent the dominance of motorized vehicles that they enjoy in our current practices. Streets could be rescaled to fit human proportions instead of the ones of the automobile. In places where the climate is especially brutal during portions of the year, perhaps enclosed streets could be utilized, utilizing the very popular mall type environment, except there would be no sea of asphalt and cars to isolate these structures from the rest of the community.

One of the most crucial points in developing a new strategy for these towns will be the pedestrian experience. The quality of life and many of the benefits listed in this study attributed to density are dependent on a positive pedestrian experi



ence. A mixture of hard and soft scapes must rise to meet the inhabitant as they move through the street. Retail displays should line pedestrian pathways adding visual interest to the walk. Buildings should maintain a similar scale and be brought right to the edge of the side walk to maintain an urban fabric that is fluid and not choppy. Parks and green spaces should not be placed along rows where buildings are expected to be, instead they should be planned as center pieces in the urban fabric that the built environment can cater to instead of the other way around.

Norman Foster is currently laying plans for a new town outside of Abu Dhabi named Masdar. This town is slated to be a zero waste, car free, and a carbon neutral city (Basantani 1). The city's transportation is stratified into three layers. The first is a light rail linking Masdar to Abu Dhabi. The second is for pedestrians and the third is for "Personalized Rapid Transport Pods" (Basantani 2). The city is designed so that no portion of the city is more than 200 meters from the nearest transportation hub (Basantani 2). The settlement will house 50,000 people and 1,500 businesses on just six square kilometers (Basantani 2). This project embodies many strategies that could be utilized in the redesign of Small Towns.

There are certain non-architectural factors that are controlling the way in which the built environment is being shaped. These factors must be changed if we are to shift toward the healthier density of a pedestrian environment. Zoning laws are among these factors. These laws separate retail and industrial activities from housing (Leinberger 151). They also separate rental from for sale, place hotels only near retail and offices, and so on (Leinberger 151). These type of laws make mixed use development illegal and thus eliminate many of benefits of building densely. To ensure the maximum benefit is gained from condensing our settlements these laws must be rewritten to mandate the mixing of these types of buildings instead of mandating their separation.

Another of these factors is the way in which the financial world thinks about building. As it stands, real estate is a fairly short term investment. Lenders are looking to invest as little equity as possible and try to recover it as soon as possible (Leinberger 160). This in turn has the effect of builders, developers, and designers trying to “value engineer” projects to make them as cheap as possible. There is little incentive in the current system to build long term because sprawling trends will simply move the focus of the town further out

TOWN CENTER MORTGAGE



ANTLER DESIGNS

ANTLER DESIGNS

FURNITURE
JEWELRY

ANTLER DESIGNS

HOME ACCENTS
LIGHTING

ANTLER
JEWELRY

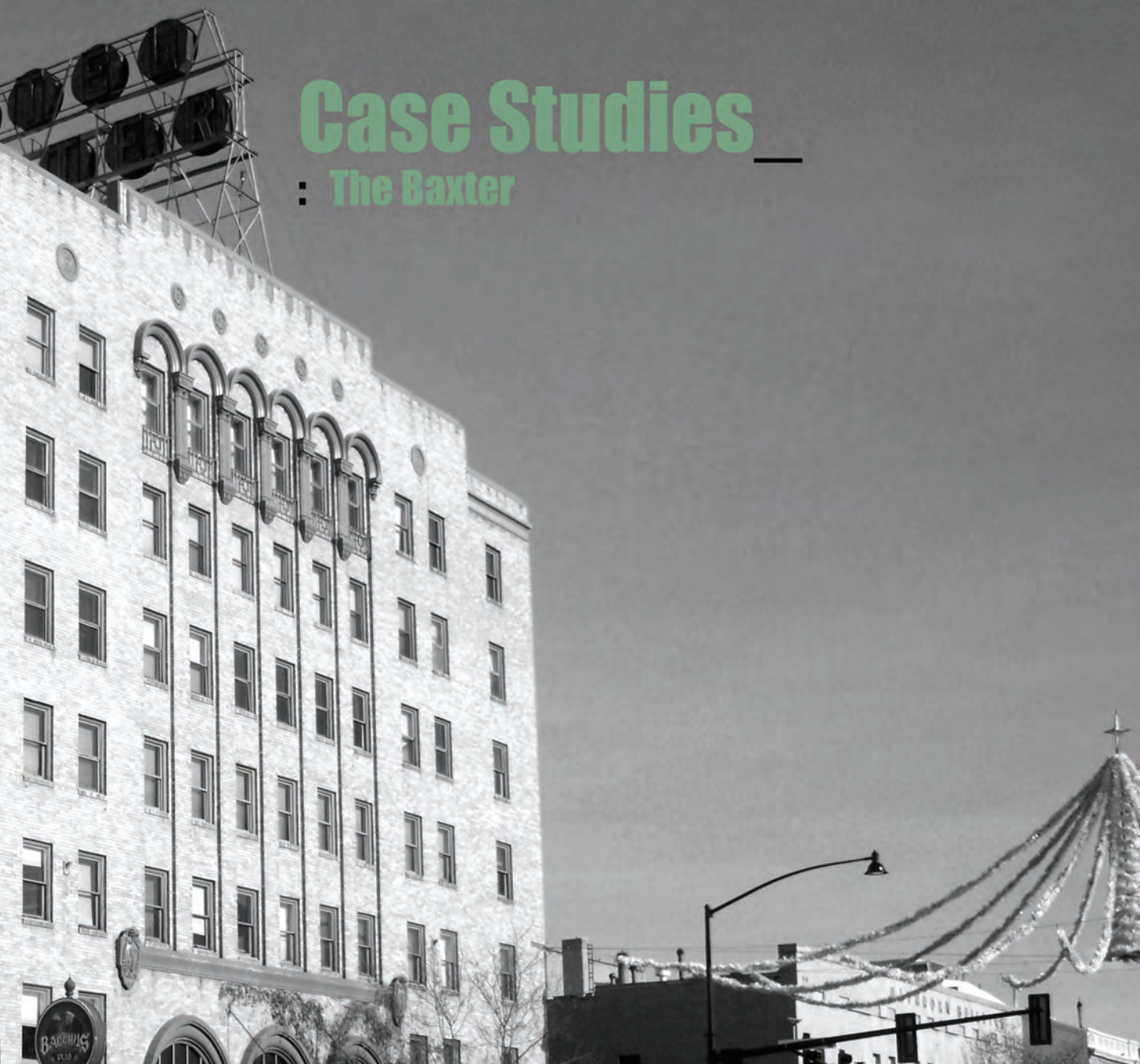
ANTLER DESIGNS

HOME ACCENTS
LIGHTING



Case Studies

: The Baxter



Case Studies :

The purpose of these case studies is to assess the successes and failures of other density based communities within the area. The study will also utilize these cases to make a case for the creation of another density based community within the county.

The Baxter

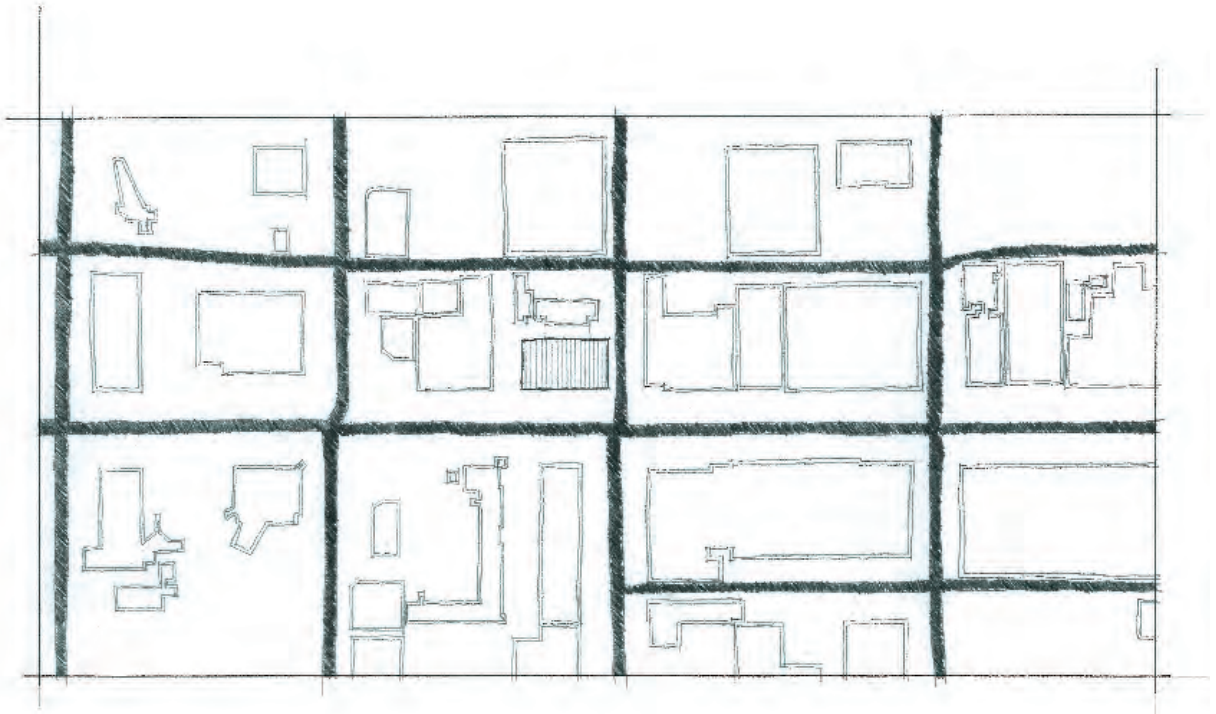
The Baxter Hotel, Main Street's greatest edifice, was built in 1929 at 105 West Main (Jenks). It was designed by Fred Willson, a prominent architect who did a lot of work in the Bozeman area (Jenks). The building features both classical elements, such as the paired column detail at the top level of fenestration, and elements from the newly emerging modern movement such as a simple cornice and stepped parapet (Jenks). The building even included elements from the Art Nouveau trends in the porticos that hang over Main Street (Jenks). It featured a thirty-two foot high electric sign that was a beacon for travelers (Smith 274). The Hotel showed that the residents of Bozeman had faith in the fact that their city had a future as a tourist attraction (Jenks).

In 1944 a new railroad tunnel was constructed that would ultimately turn the Bozeman stop into primarily a commercial station to load and drop freight. Passenger travel through and in Gallatin County soon began to abate and finally stopped. From there one by one all of the rail lines began to drop service to Bozeman; the Milwaukee Road, the Northern Pacific, the Turkey Red, and finally Amtrak (Smith 294). As this began to happen, people began relying on their cars for tourist travel and subsequently also began to rely on “tourist camps” along the road ways (Smith 295). These bedrooms with doors that led to parking lots, known as motels would ultimately be the end of the Baxter as a Hotel. The Baxter then turned its rooms into office space and apartments near the end of the 1970s (Smith 295). In doing this they created one of the first opportunities in the Gallatin County to actually live in a walkable urban environment.

Today the Baxter remains an option for those seeking to live an urban lifestyle. There are 20 residences according to the Baxter home-owner’s association. There are currently no vacancies. This building has a prime location in Bozeman that allows its residents to literally walk to every service that they would need on a daily basis. It also offers unfettered access to the urban charm and character that the downtown district of Bozeman has to offer (Smith 295).

The Baxter is a perfect example that there has been a sustained demand for this type of lifestyle in Gallatin county for almost 40 years now.

In the diagram on the following page (the Baxter is the lined building) it is easy to see that the density surrounding this project is fairly high. Particularly when it is considered with the rest of the county which is higher than that of most of the state. Gallatin County has increased in density to 33.6 persons per square mile. While both of these figures are much higher than the state average of 6.6, they still remain far less than the national average of 85.3 persons per square mile (Prospera) .



A black and white photograph of a residential street in winter. The street is paved and runs through the center, flanked by large, multi-story houses with gabled roofs and numerous windows. The ground is covered in a thick layer of snow, with some trees and bushes scattered throughout. In the background, a snow-covered hill rises under a cloudy sky. The overall scene is quiet and serene.

**: The Village
Downtown**

The Village Downtown

The Village Downtown was a project undertaken by the development company Delaney and Co. The project consists of a series of town houses and two large towers each with 41 units. Of the 82 condo units in the towers 69 have sold and closed.

The project was decided on by the two senior members of Delaney and Co. The representative for the company reported that they made no formal market research to verify that the project would be a success. Instead, the company relied on the experience of the its development team to determine if the project was sound or not. It was impressed on me by the project manager Tony Renslow, that the downtown in Bozeman is such a draw for both locals and out of towners that the adjacency of the project to the downtown area lessened the inherent risk within the project. The fact that it is a walkable distance to the downtown made it even more attractive, particularly to a development firm who is a member of the Urban Land Institute.

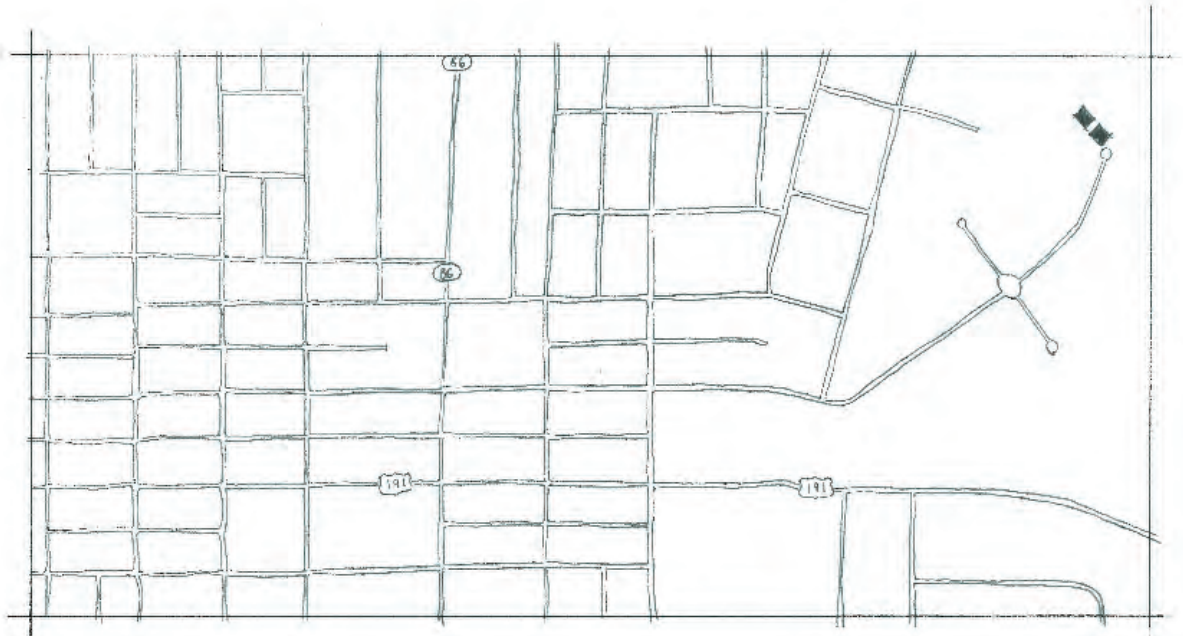
The Urban Land Institute is a non-profit research and education organization

whose mission is to provide leadership in responsible land use and creating sustaining, thriving communities world wide (www.uli.org). According to Renslow, the Institute gave a lecture at its last conference regarding density and the urban lifestyle. The institute said that the demand for urban living versus sub-urban living is like a pendulum that seems to swing one way or another. Renslow said that we have been on an outward swing for the last 20 years now, but are finally starting to see the pendulum switch directions. According to the ULI, contractors, architects, and developers have shifted toward a more dense urban landscape, to suit demand. Project such as the Village Downtown are becoming more and more common, allowing residents to tap into existing dense environments. These projects occupy holes in urban fabric, a practice known as infill.

Renslow explained that they built the units one step ahead of demand, attempting to not over extend themselves in a dead end housing project. However, the Village Downtown has been anything but a dead end. It has currently sold and closed 80 percent of all units built. Delaney and Co. said that the project was profitable and that they have plans to carry out the second half of the plan ,which calls for double the number of town houses and two more towers, when the market catches up, in other words, when all of the units have sold.

What can be gleaned from this particular case study is that there is in fact a demand in Gallatin County for this type of walkable, density based lifestyle. Further, there is an expected increase in demand in the short term future, enough to almost double what the village is currently providing. Having said this, Bozeman is not one of the designated growth areas in the county, as laid out by the county commission. Four Corners is. It seems logical to extrapolate this demand and state that if the county actually hopes to see the Four Corners area grow in any real dimension they will undoubtedly have to have at least an option for residents to live in a dense urban setting.

In the following diagram the two towers of the Village Downtown show up as poche. This project is clearly a speculative one. While it can still take advantage of the current downtown environment, it counts on the extension of the downtown area.



The Project_



The Project :

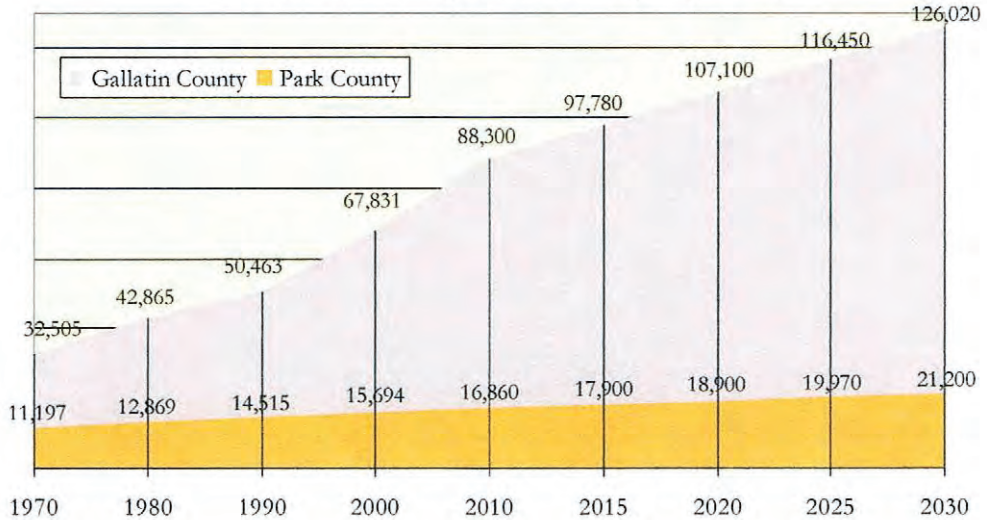
Four Corners, Montana is fast growing area in the Gallatin County. If its current population projections stay true then it will soon be a town all of its own. The basis for this project is to get in front of the growth and set forth a plan for the area that presents a Small Town that is free of the modern day problems such as sprawl, redundancy and waste.

The project will look at what the county currently has planned for this area and propose an amended version of this plan that keeps with the ideals of urban, dense living.

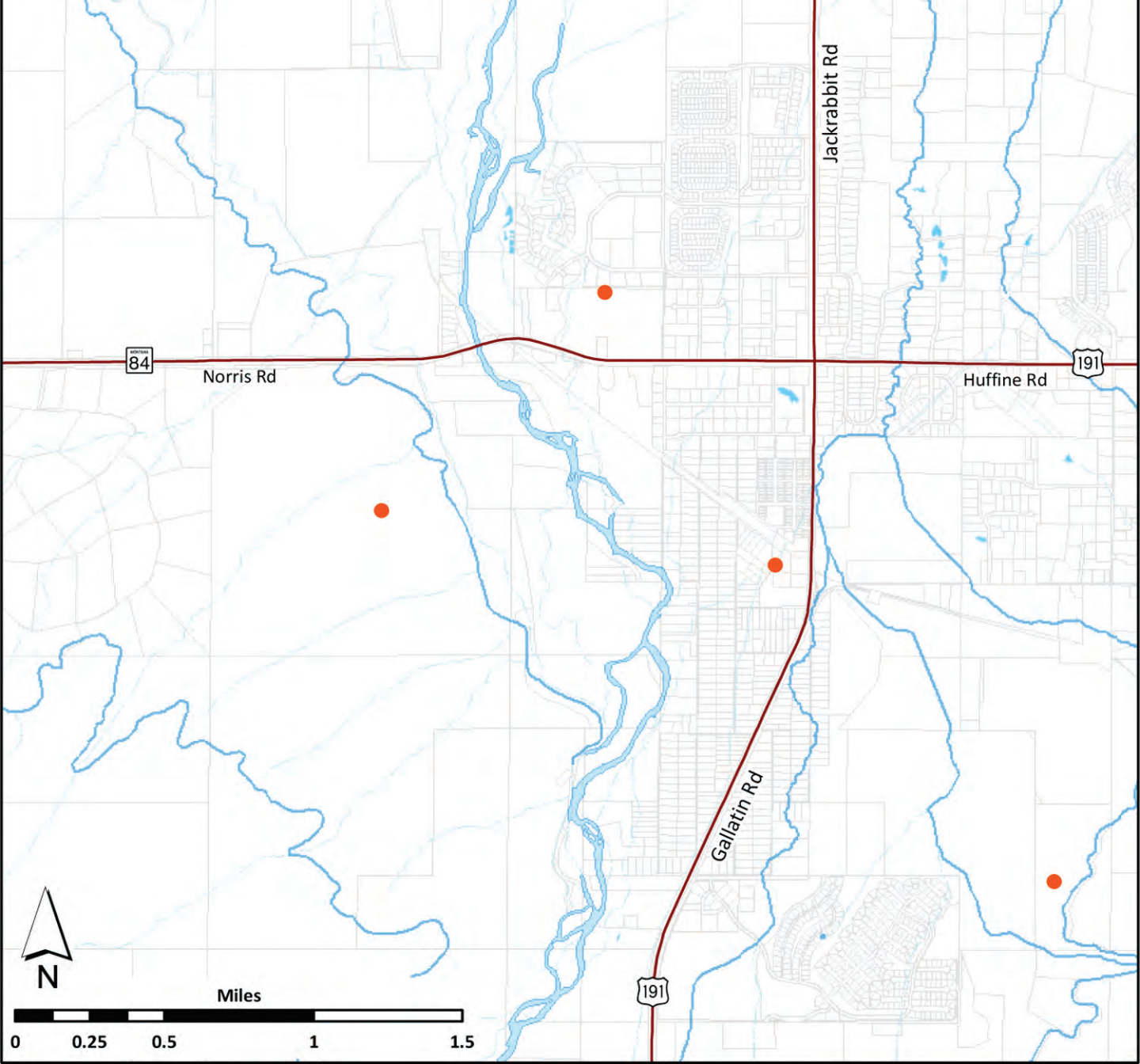
Background

Gallatin County is the fastest growing county in Montana (Prospera). It is slated to reach 126,000 by 2030 (Prospera). The Four Corners Area, the intersection of route 84 and highway 191, is a burgeoning area that has shown explosive growth in recent years. It is difficult to obtain data of specific population growth in such a finite area, but by tracking the construction and implementation of new wells in the area we are able to see how the area has grown. In the following diagrams

Historical and Projected County Populations



Courtesy Prospera Business Network



84

Norris Rd

191

Huffine Rd

Jackrabbit Rd

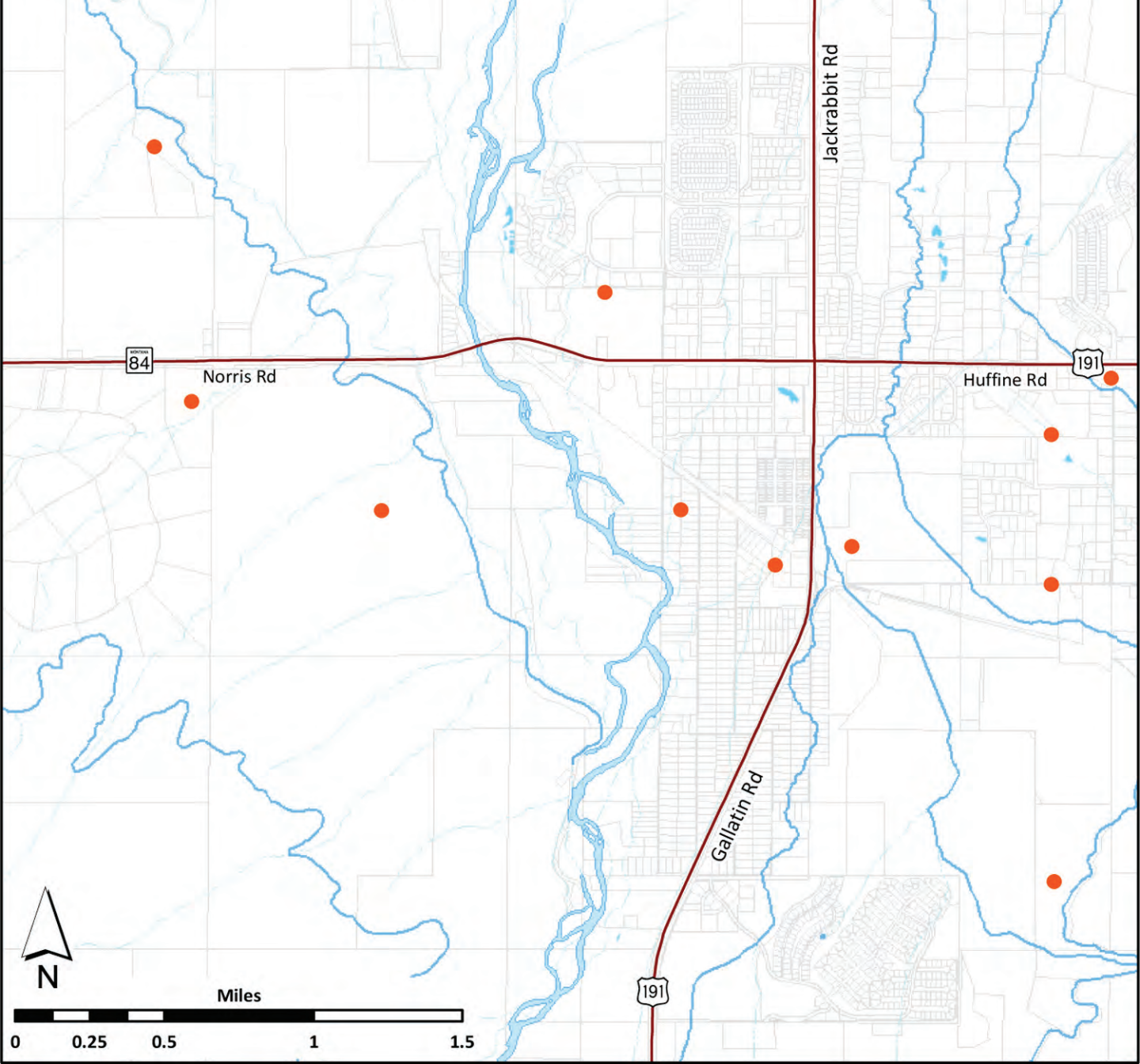
Gallatin Rd

191

Miles



Four Corners 1900



84

Norris Rd

Jackrabbit Rd

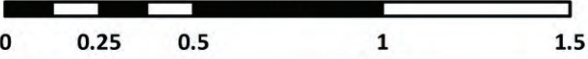
191

Huffine Rd

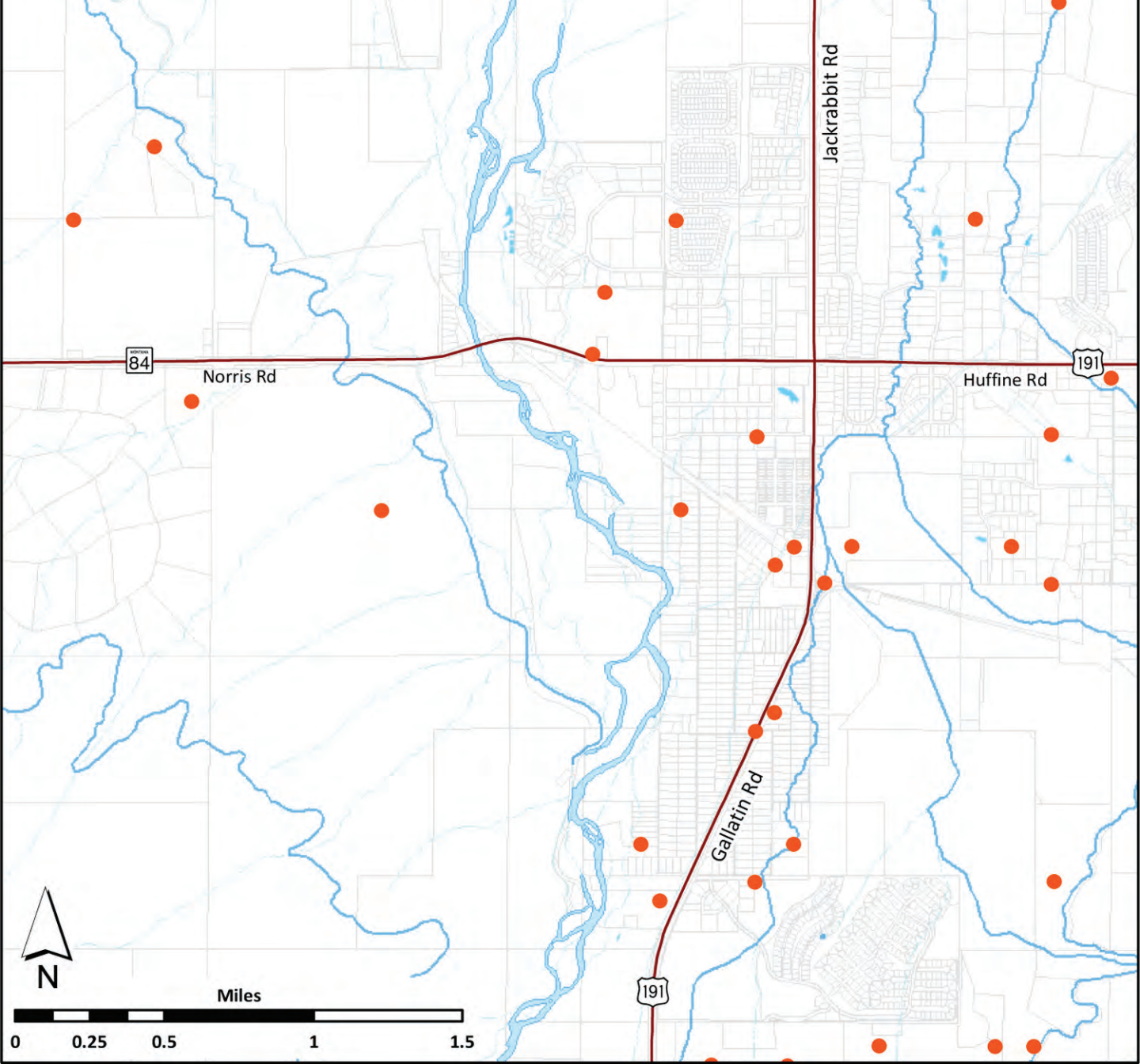
191

Gallatin Rd

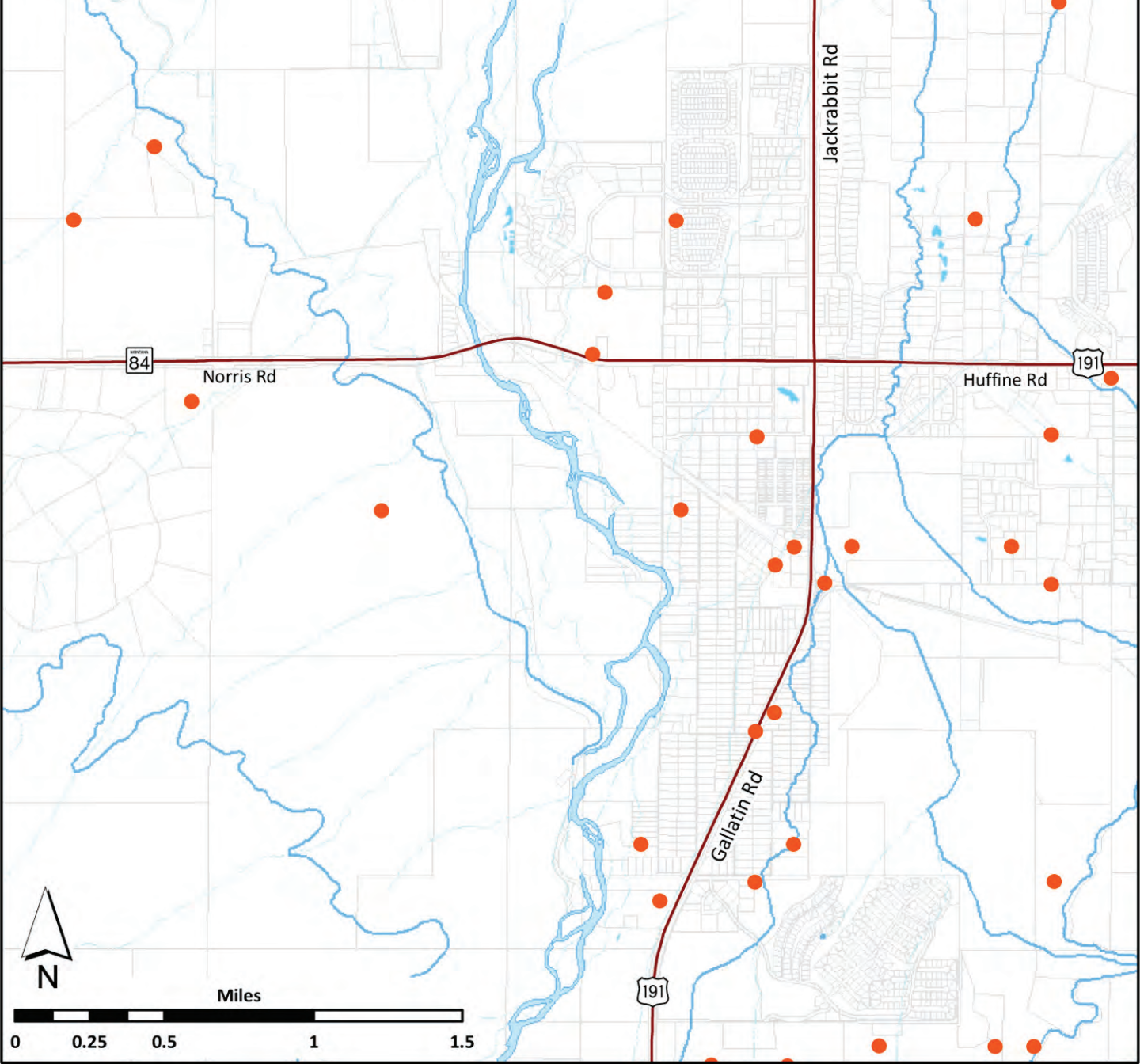
Miles



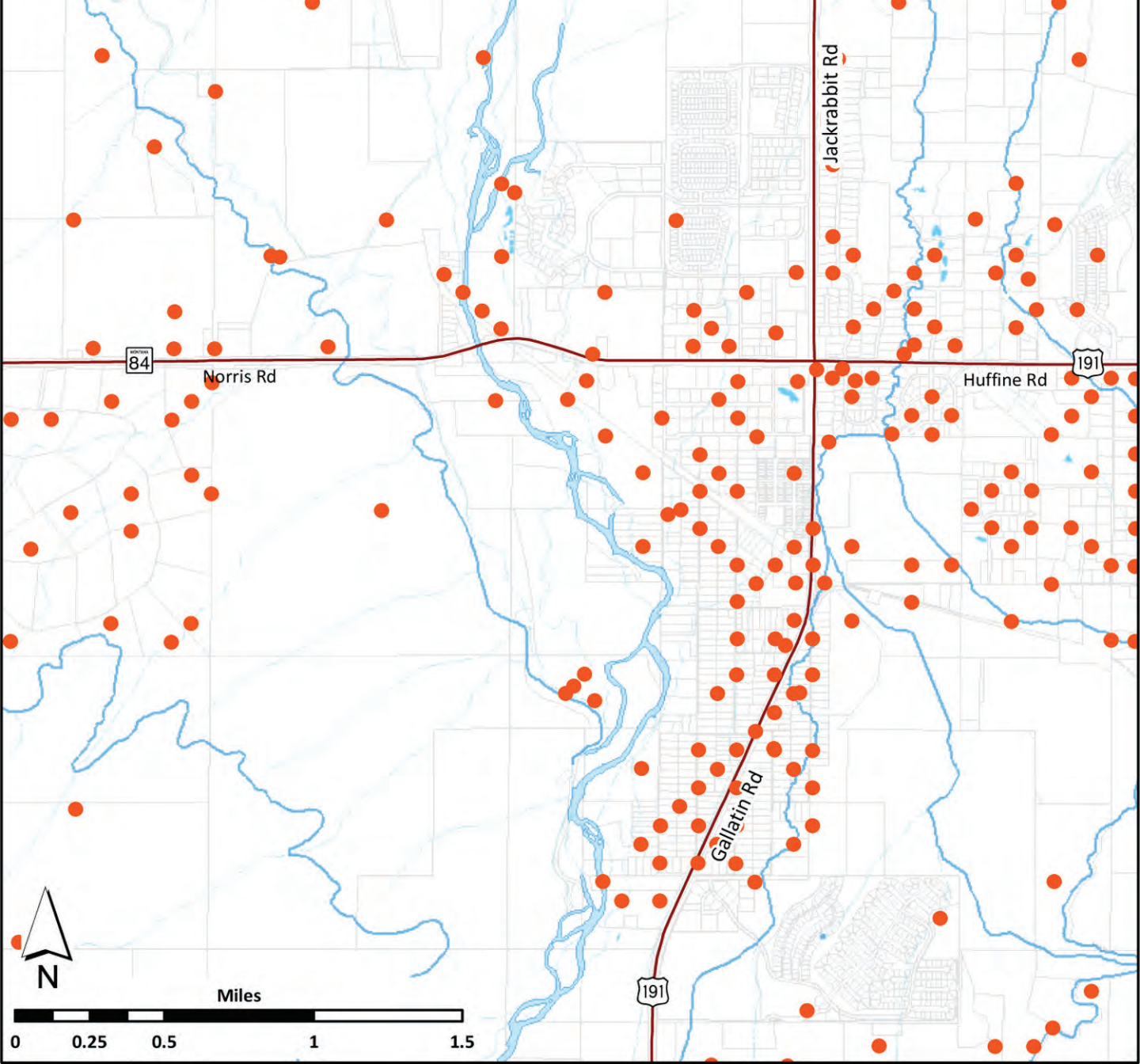
Four Corners 1925



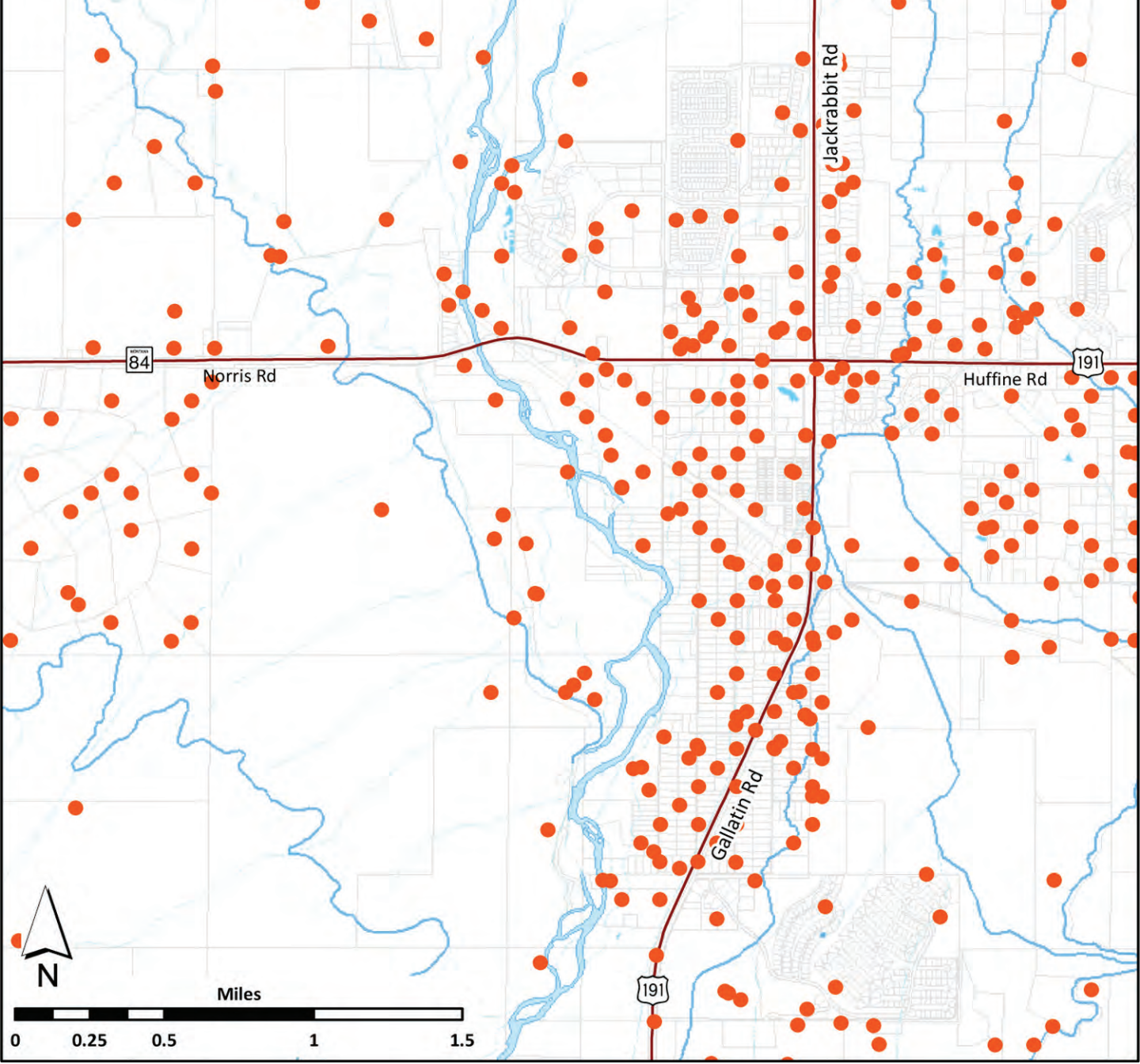
Four Corners 1950



Four Corners 1975



Four Corners 2000



Four Corners 2010

The Planning Department of Gallatin County along with the residents and land-owners of the area have been unable to reach any sort of definitive growth plan for the Four Corners district. What they have produced is a simple list of goals. These goals are requirements that need to be accomplished by a Master Plan. This current list is printed below in black while the writing in green has been added by this thesis to expound upon what the proposed new plan will achieve in reference to the stated goals.

The Current Master Plan reads as follows:

Four Corners Community Plan

Vision Statement

(As Adopted 4/11/06)

Four Corners is a community of diverse neighborhoods and a variety of uses mixed with rural development and agricultural production, all situated within a potentially fragile environment.

The Community:

- Supports new development that is compatible with and preserves the natural and historical environment, including water resources, and protects existing neighborhoods and uses within the community.
- Manages growth to reinforce the agrarian rural/small town character of the area

that includes agriculture, open space, and trails as important elements of the Four Corners community's economic, cultural, and social structure.

- Supports the provision of adequate public services by new development without compromising existing levels of service or burdening existing residents with the costs of growth. Adequate public services shall be provided as the needs for such services occur.
- Seeks to balance protection of private property rights with the property rights of others.
- Proactively protects the natural and social environment from degradation by existing and future development.

Policies and Strategies

1. Protect the right to farm and ranch by:

1.1. Supporting development standards that protect agricultural activities:

By designating a single place to put all of the future growth, in a dense living environment, it preserves the maximum amount of area for agricultural practice. This will become increasingly necessary as population rises and housing demands rise concurrently. If current building trends are allowed to continue, then agricultural practice will be extinguished in the area all together to make way for subdivision style housing.

- a) Control of domestic animals
- b) Maintenance of agricultural fencing
- c) Protection of agricultural water user facilities, ditches, and water rights.

1.2 Encourage protection of surface water and groundwater resources

critical to agriculture.

Minimize impact of the Four Corners community by implementing a cistern system to utilize for grey water applications. Also streamline the delivery system of county water by minimizing the demand to one high volume single area, instead of laying miles of low volume pipe to accommodate a suburban sprawling condition.

1.3 Supporting development standards that protect agricultural activities from incompatible land uses.

2. Encourage a variety of uses by:

2.1 Including residential (low, medium and high density), commercial (core and neighborhood), public services, industrial, agriculture, and park and trail development.

Offer a variety of housing options by grandfathering in multiple existing housing developments, that offer low to medium densities, and place an emphasis on new development of high density housing with a highly dense commercial and service core revolving around it.

2.2 Avoiding strip development along arterial roads

Provide zero allowances in the zoning plan for strip type commercial centers.

2.3 Having commercial development along major arterials (not to exceed approximately an 1/8 mile from the arterial), discouraging incompatible commercial development on secondary roads.

Allow for and encourage this type of development, but only within the designated zone. Create a commercial core that will ultimately create a "downtown" feeling that will foster a community spirit and ultimately become the face of Four Corners settlement.

2.4 Discouraging uses that negatively affect neighborhood values. Support compatible home-based businesses.

3. Support the provision of parks, recreation areas and open space by:

- 3.1 Establishing and supporting plans and policy for parks, trails and open space systems that integrate with each other and county and city plans.
- 3.2 Encouraging the establishment of open space, parks and trails along the Gallatin River and other waterways.
- 3.3 Supporting establishment of setbacks along the Gallatin River and other waterways.

While calling for an increase in use and exposure to the Gallatin River and its ecosystem, the new plan will create a buffer zone that will protect this resource from the dangers of over development.

- 3.4 Encouraging developers to provide viable parks and trails, with plans for long-term maintenance.

The new Four Corners settlement will have a strong pedestrian center with strategically placed green spaces and parks.

- 3.5 Supporting the protection of wildlife corridors and habitat.

By creating a highly dense community the growth in Four Corners will minimize the destruction of wildlife habitat and allow for the least impact on wildlife populations.

4. Support the use of centralized wastewater and water systems by:

- 4.1 Supporting establishment of water and sewer districts.
- 4.2 Supporting solutions for failing sewage systems
- 4.3 Supporting protection and comprehensive monitoring of wells and groundwater that preserves water quality and quantity.
- 4.4 Encouraging appropriate review and approval of wastewater disposal

systems.

5. Encourage the provision of economical and efficient public services by:

5.1 Supporting various means of infrastructure financing, including schools, resulting from growth.

The plan will include a provision for the creation of necessary schools.

5.2 Planning for street and infrastructure development which minimizes emergency (fire/ambulance/police) response times.

5.3 Planning for existing and anticipated utility requirements through linking easements and the efficient use of street and highway rights-of-way.

5.4 Promoting and planning for adequate police/fire protection in the Four Corners area.

5.5 Supporting establishment and implementation of a policy for the study of school impact fees.

6. Support a comprehensive transportation system by:

6.1 Reviewing transportation impacts of new development.

6.2 Extending a bicycle and pedestrian system that is separated from the road system. (Boulevard - type sidewalks or traffic barriers are the preferred means of separation.)

The plan will seek to create a walkable urban fabric that will alleviate the need for a motor vehicle within the Four Corners settlement. A central pedestrian boulevard will be at the

heart of the plan and the community with designated bicycle paths lining the pedestrian corridor and motor vehicle lanes will be pushed to the fringes of the transportation corridor.

6.3 Mitigating excessive traffic speeds

The creation of a speed zone will be integral. A 25mph speed limit within the limits of the settlement will maintain a comfort level for the pedestrian corridor adjacent to the motor vehicle corridors and produce opportunities to attract business to the settlement from those passing through it.

6.4 Exploring opportunities for better traffic flow patterns at and beyond major intersections.

6.5 Exploring opportunities to separate local from through traffic with adequate distance at a minimum of two miles, between major thoroughfares, and supporting provision of different street types.

6.6 Supporting adequate parking for commercial, public transportation, and carpooling purposes.

6.7 Encouraging provision for adequate off-street residential parking.

6.8 Encouraging adequate off-street residential parking within subdivisions.

A parking level will be created beneath the town center, with multiple entrances and exits.

7. Promote quality streetscape by:

7.1 Encouraging adequate and well maintained setbacks along roads

7.2 Discouraging off-site advertising signs and billboards.

7.3 Encourage on-site identification signs

8. Support constraints-based planning with emphasis on sustainability and suitable mixed-use developments by:

8.1 Supporting the use of cluster development techniques that integrate use of landscaping and/or open space.

The plan clusters all new development into one compact area. This in turn preserves the most possible open space. The plan then seeks opportunities to bring these vistas into the community, accessible by the largest amount of people possible.

8.2 Encouraging new development to balance density and diverse uses that work in harmony with existing development and topography.

The use of the existing low and medium density construction that is already present is crucial to providing the requested variety to the Four Corners community. These existing sub-divisions will ultimately remain, but will have limits on growth potential.

9. Support the provision of development options by:

9.1 Promoting a master plan or planned unit development approach.

9.2 Supporting use of conservation easements

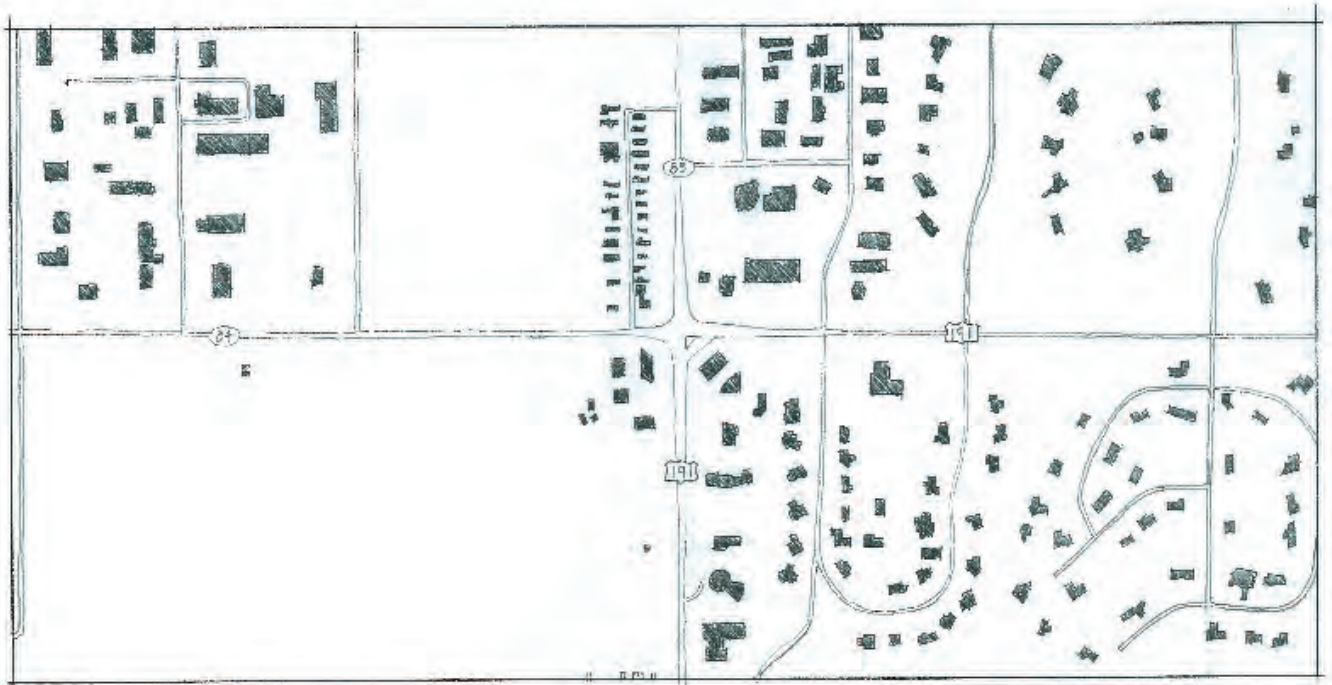
Small Town America : Redesigned

The following are a series of maps that represent either the built environment as it currently exists or proposals that have been considered during this study for how the Four Corners area should be molded. The first map is simply the four corners area as it is today. It is shown in two scales in order to understand how the intersection works, what building density currently exists, and how the intersection fits into the overall region.



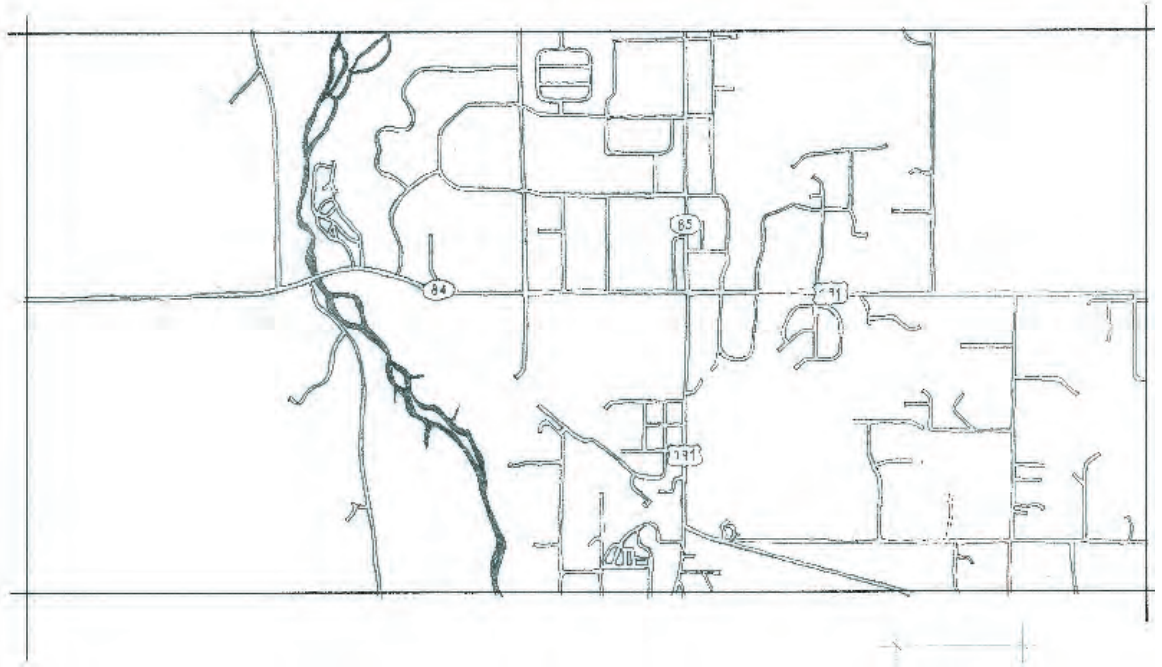
Four Corners: Close Up

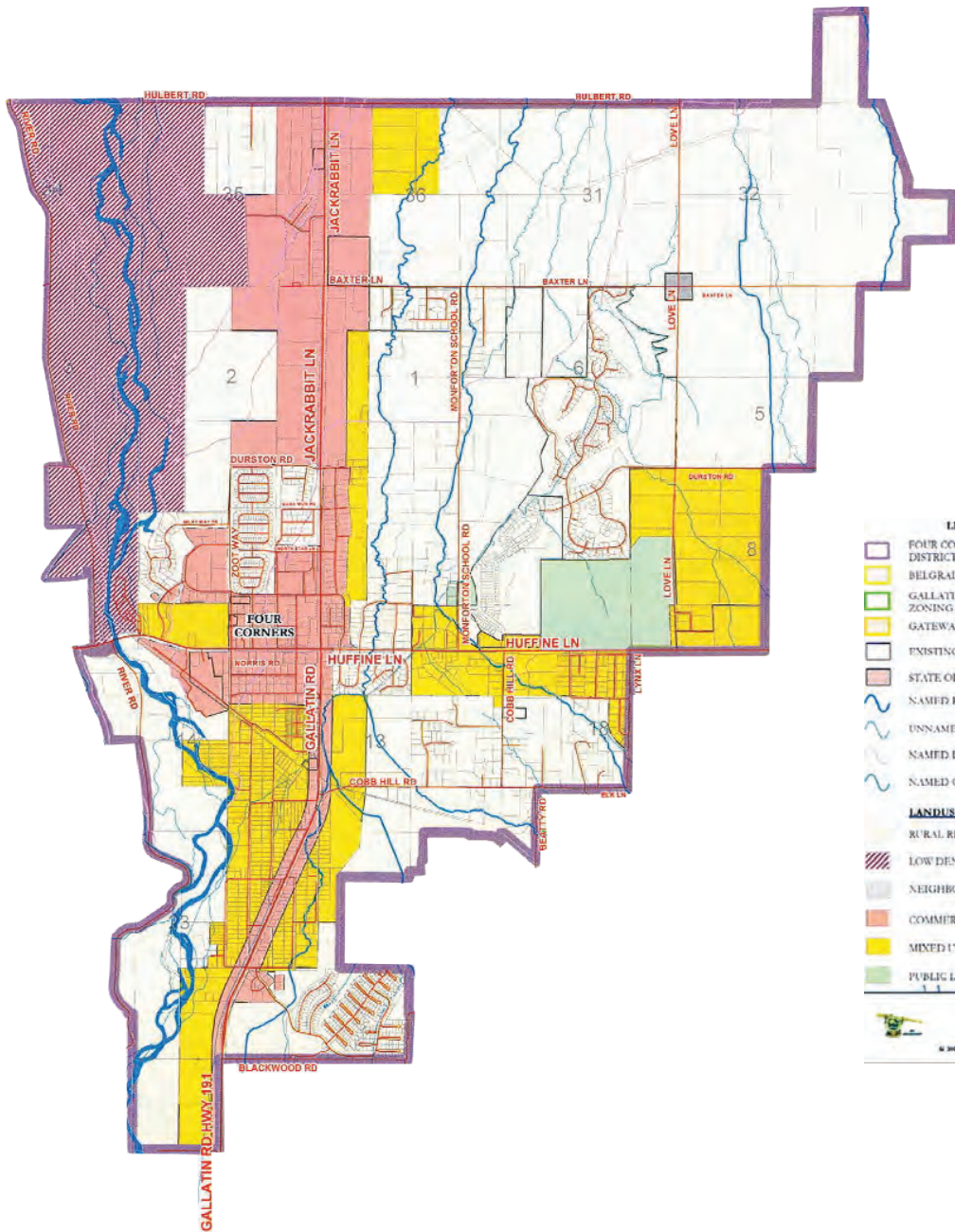
64



Four Corners: Region

65





- LEGEND**
- FOUR CORNERS ZONING DISTRICT BOUNDARY
 - BELGRADE PLANNING JURISDICTION
 - GALLATIN CO./BOZEMAN ZONING JURISDICTION
 - GATEWAY PLANNING JURISDICTION
 - EXISTING PARCELS
 - STATE OF MONTANA
 - NAMED RIVERS AND STREAMS
 - UNNAMED STREAMS
 - NAMED DITCHES
 - NAMED CANALS
- LANDUSE**
- RURAL RESIDENTIAL/AG (RR/A)
 - LOW DENSITY RURAL RESIDENTIAL/AG (LDRR/A)
 - NEIGHBORHOOD COMMERCIAL (NC)
 - COMMERCIAL (C)
 - MIXED USE (MU)
 - PUBLIC LANDS & INSTITUTIONS (PLI)

This is the zoning plan as it stands according to the Gallatin County Planning department and the current residents. It is based on lining the major through-fares with a strip like commercial district, much like the one that they specifically decided against in thier current vision statement, with low density housing filling in behind, on either side of the road way.

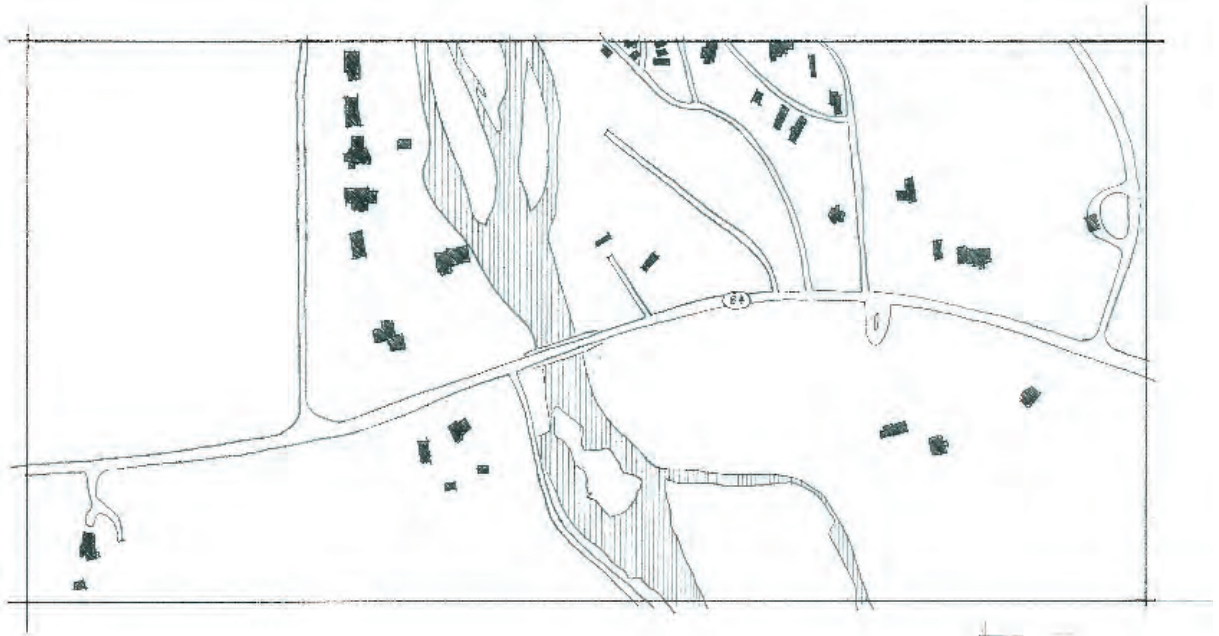
When this project was first under consideration my initial inclination was to move the settlement onto the river. It held many benefits for the town. The most obvious of which was the natural beauty and serene quality living on or near the river. It also offered the opportunity to generate some of the power utilized by the town from an adaptation of a hydroelectric plant.

The first map to follow is again how the river currently exists. The second is how it fits into the overall Four Corners Area. The third map shows my initial proposal for the Four Corners Settlement and the fourth map shows how the new community would fit into the greater context of the region. It was important within this particular draft of the plan to make sure that both the traffic from route 84 and highway 191 were still routed through the center of the community in order to make sure that the community continued to be economically viable.



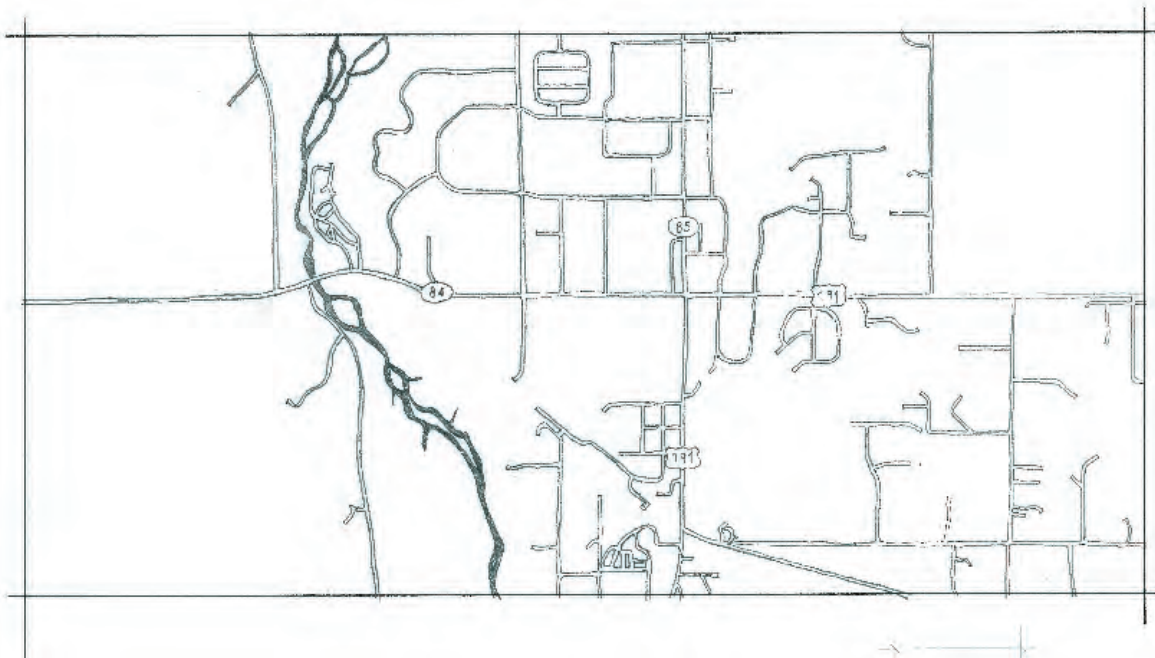
Gallatin River: Close-Up

70



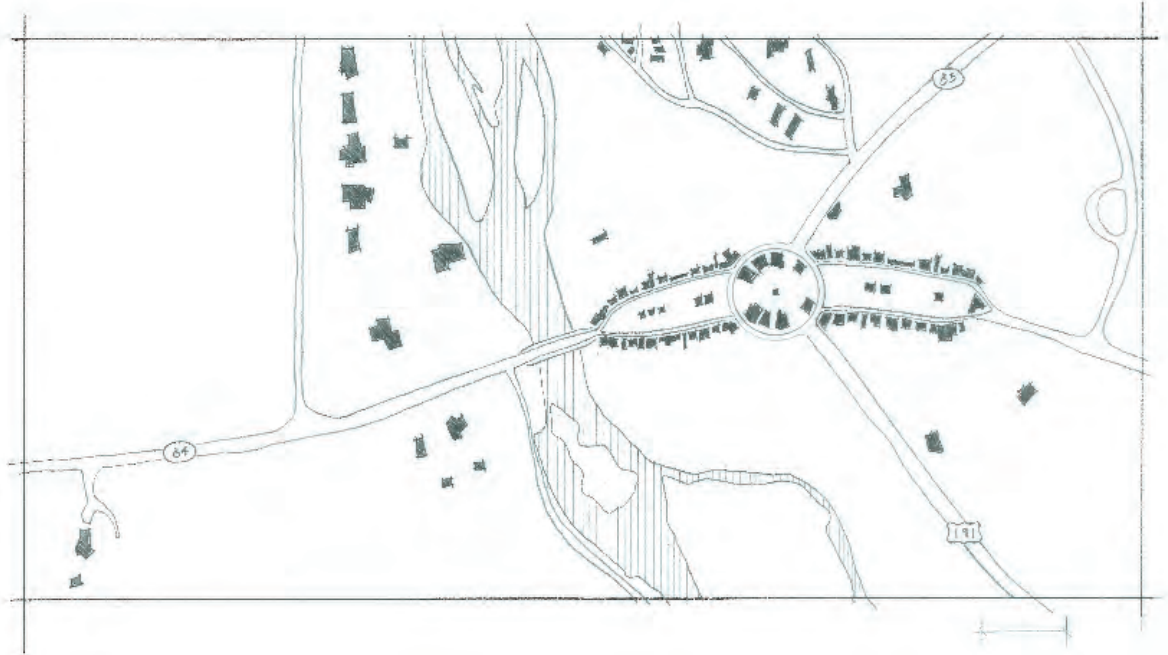
Gallatin River : Region

71



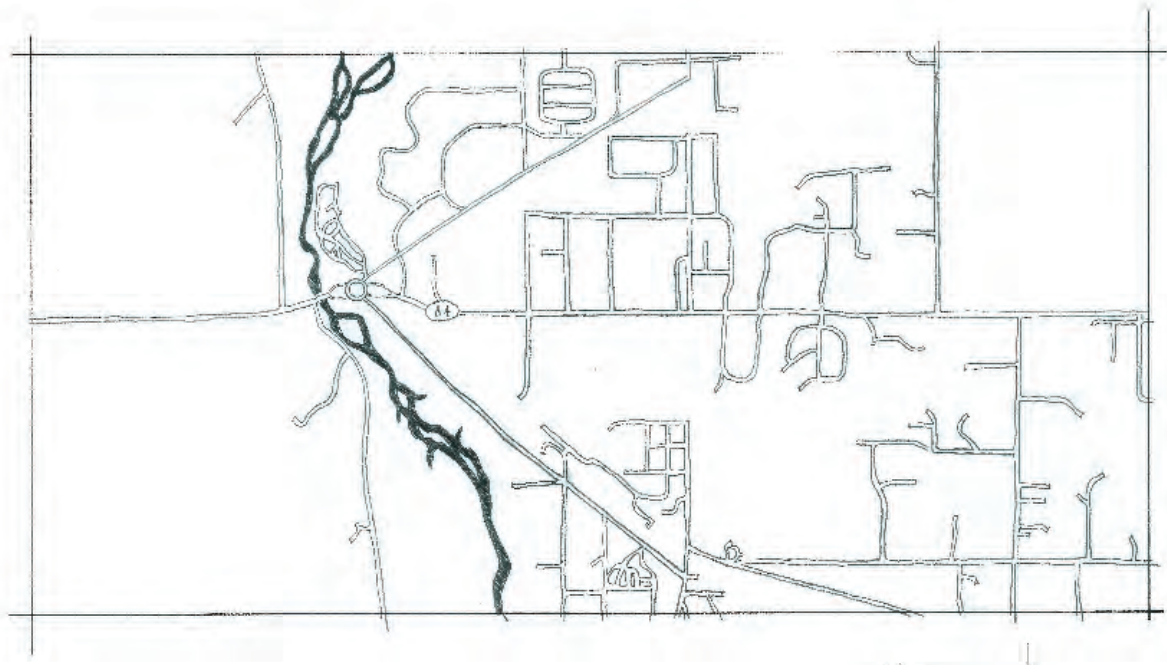
Gallatin River Re-designed : Close Up

72



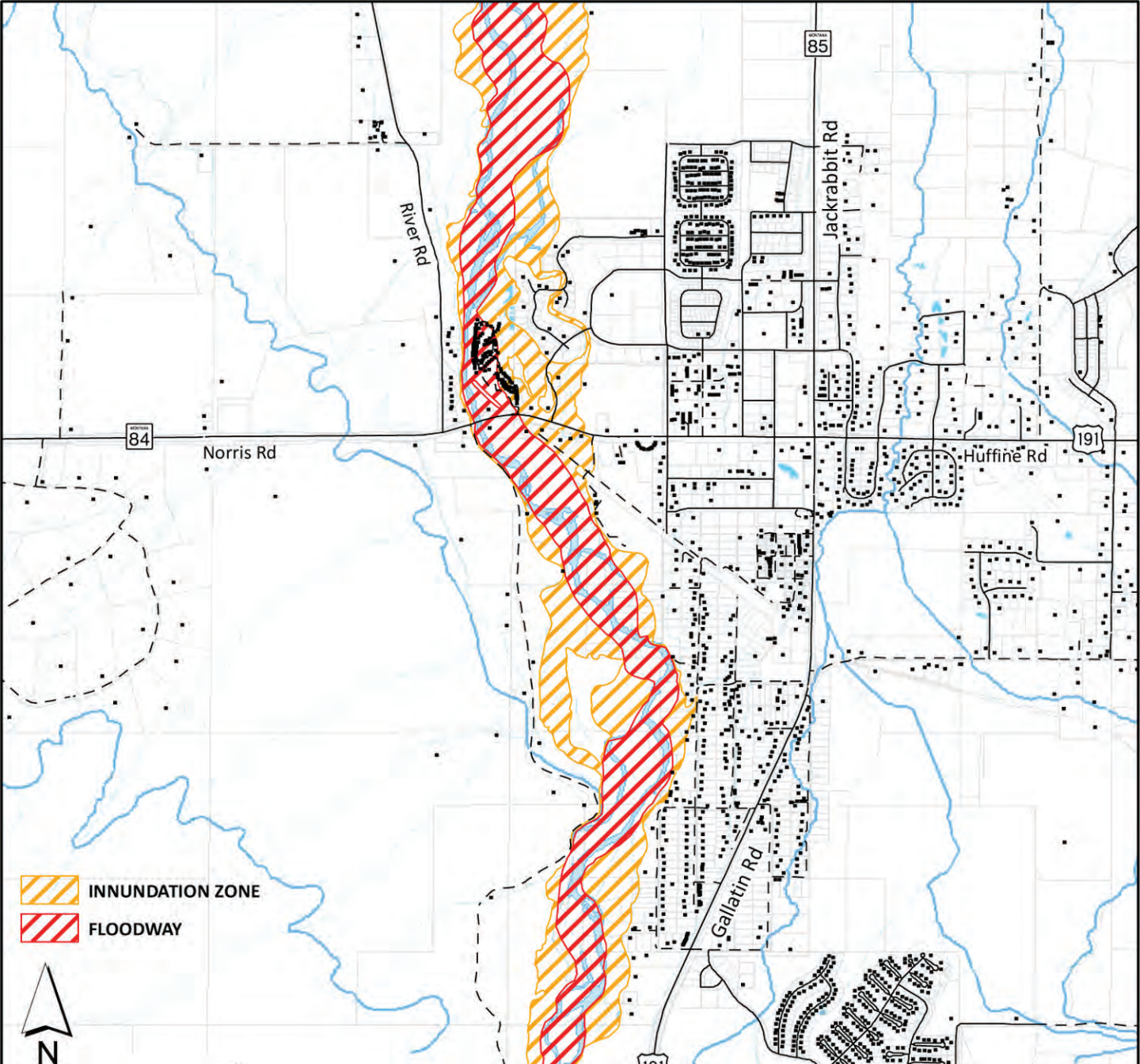
Gallatin River Re-designed : Region



73



It soon became apparent that the idea of shifting so much infrastructure was completely unfeasible. The shift also moved the project into the flood plane which would have added additional complexity and expense.

One of the main reasons for the growth that the Four Corners area is experiencing is that it is the intersection that serves as a middle point between the two greatest population centers in the county, Bozeman and Belgrade. The idea of lengthening the distance between these two centers would serve to divert the traffic that the previous plan was so meticulous to preserve, toward the interstate. Subsequently, the current location for the project must remain the same and that has been shown in the following two maps.

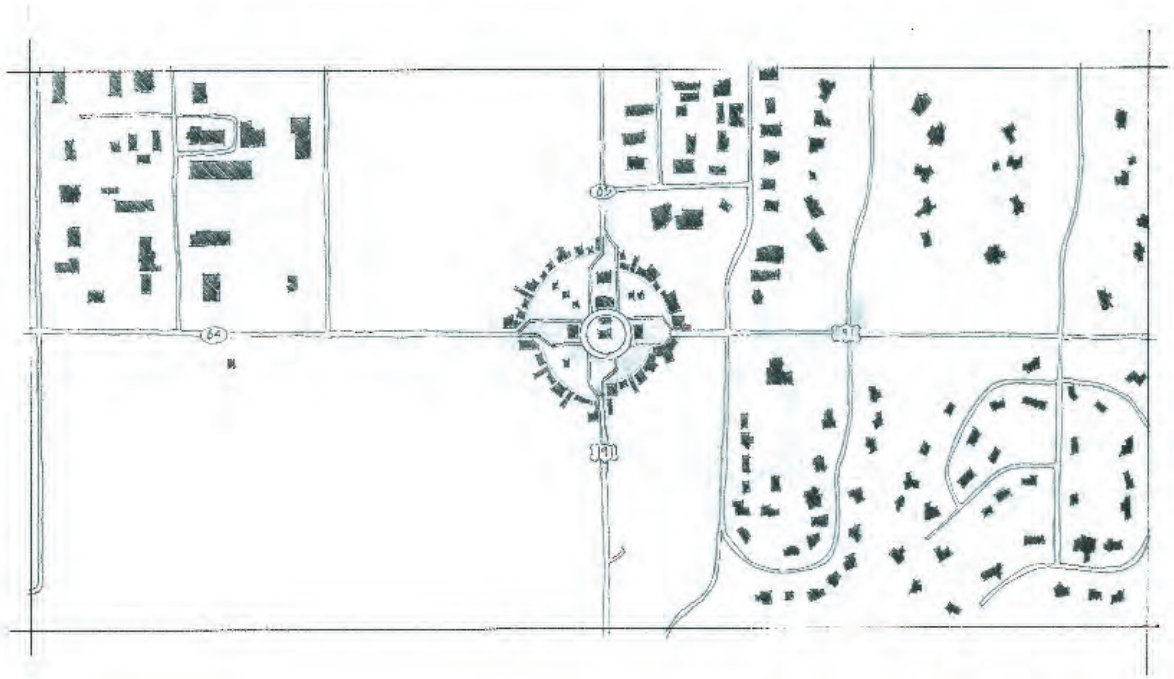


 INNUNDATION ZONE
 FLOODWAY



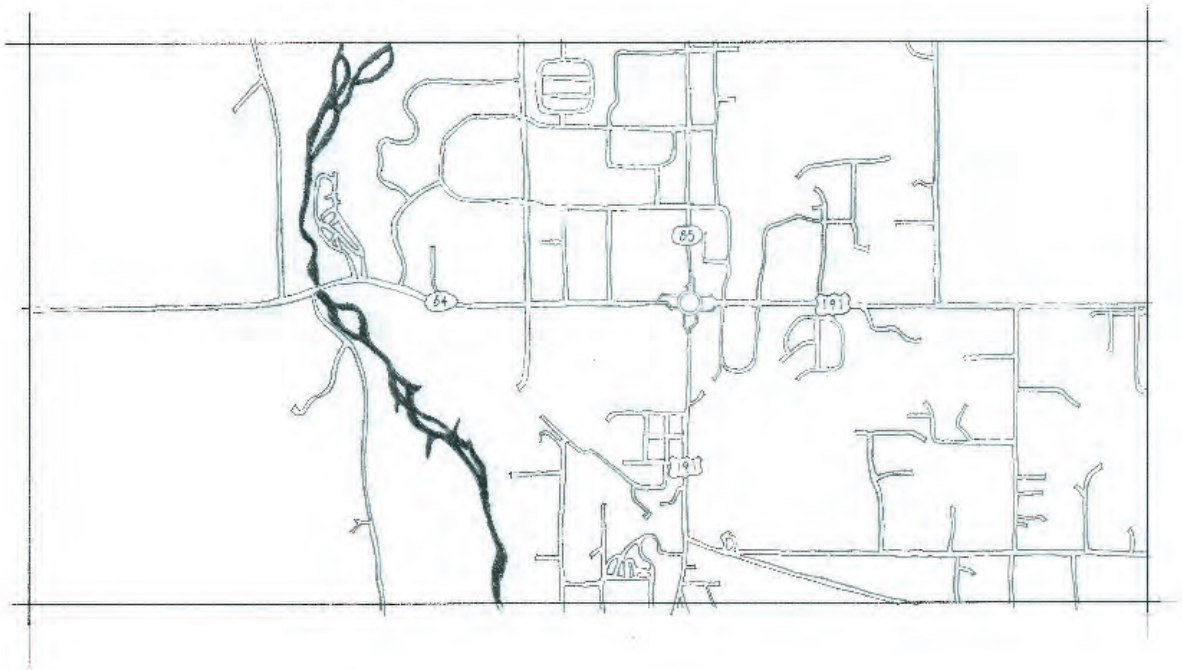
Four Corners Re-designed : Close Up

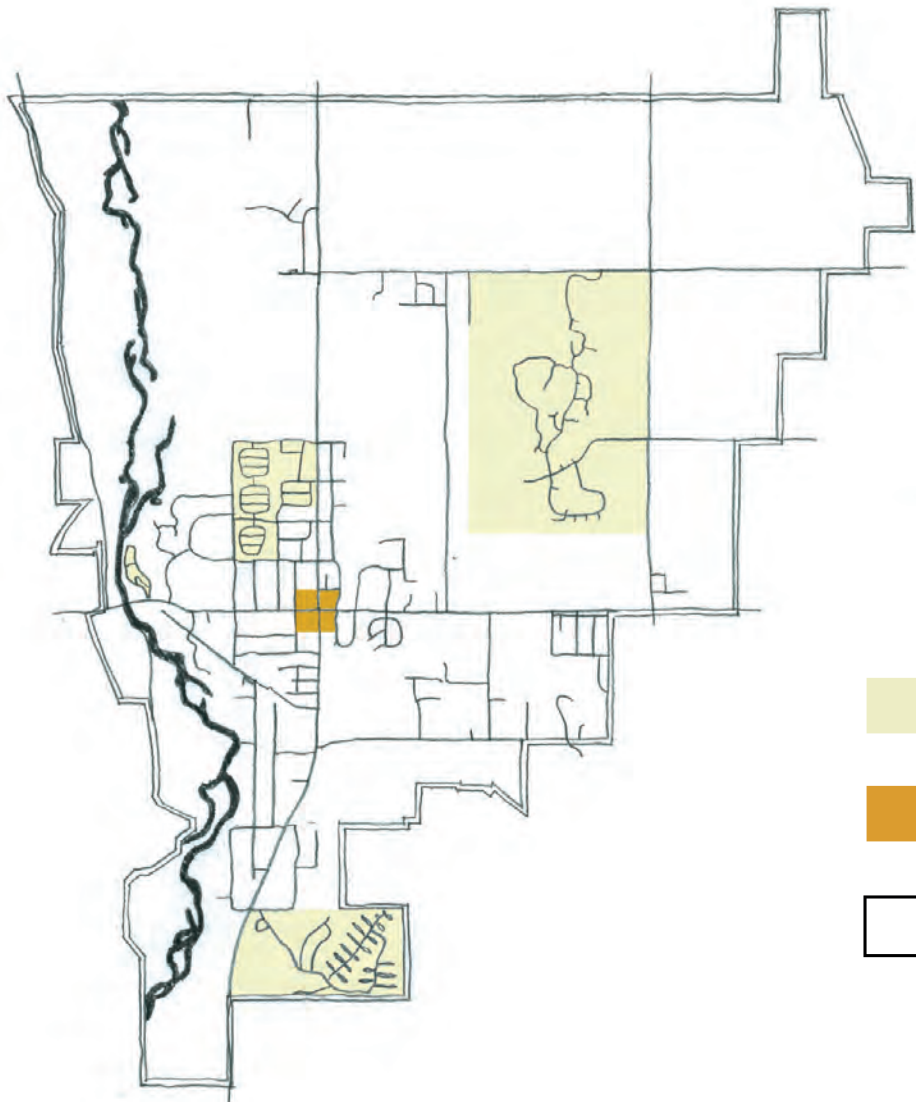
76



Four Corners Re-designed : Region

77





-  **Existing Low-Density Residential**
-  **Mixed Use**
-  **Agricultural Use**

In my revised plan I have concentrated all of the development into one centralized mixed use area. It is planned in accordance with the ideals and strategies laid out in the early portions of the thesis. It leaves provision for existing low density settlement but reserves most of the remaining land for that which was first upon the list of goals from the residents, and the county, rural farm and ranch use.

The Final_



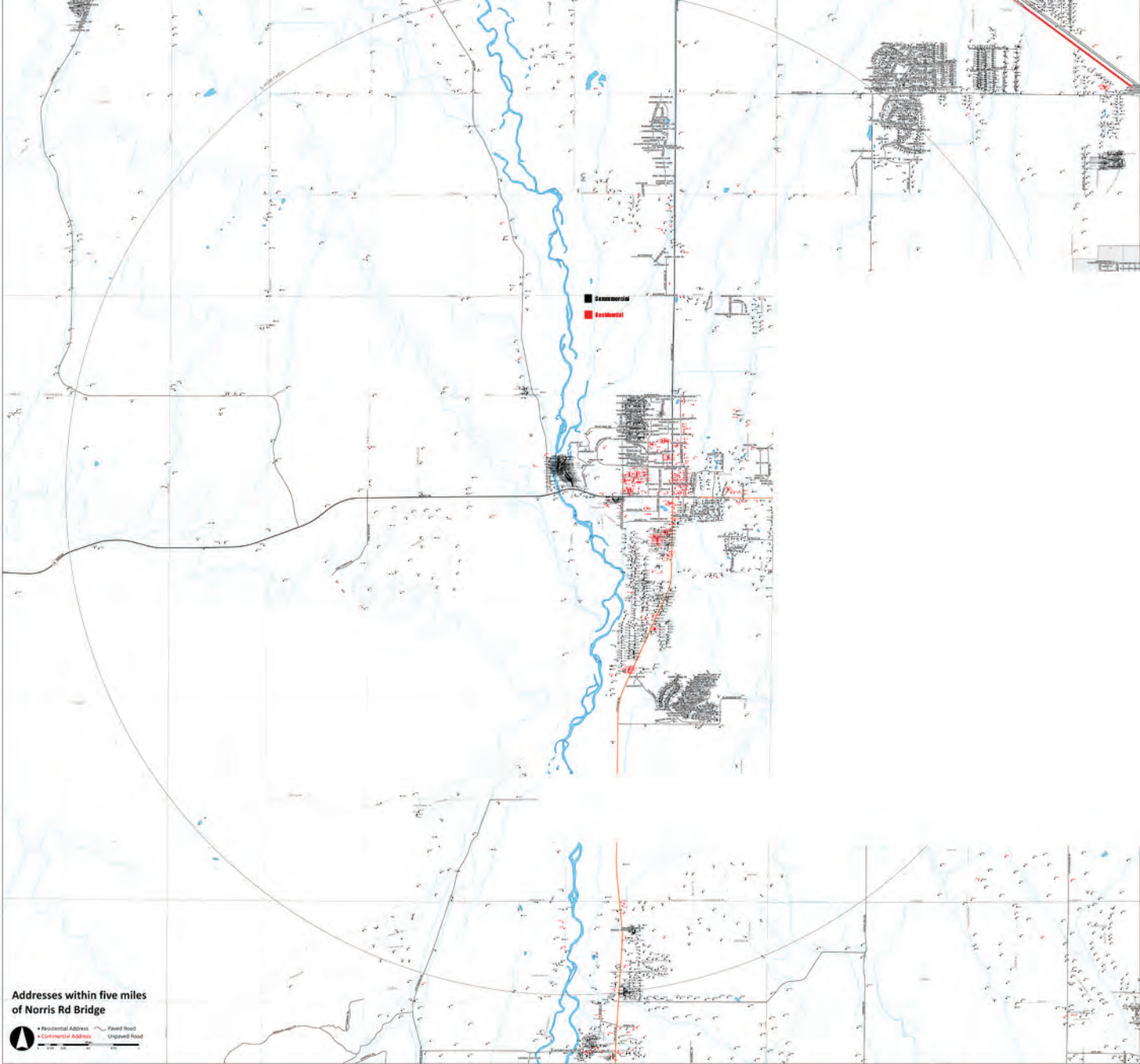
Existing Conditions

Gallatin County is experiencing massive growth. Four Corners has been designated as a Growth Node by the county planning commission. Its key position allows it to act as an intermediary or even substitute for both Bozeman and Belegrade. In addition, its location acts as a gateway to the Big Sky resort and community. All of these conditions culminate in one fact, Four Corners is headed for a population explosion.

The county has very few designs on this area, at the present. Most of the greater Four Corners area is zoned for low density housing and strip commercial development. While the Four Corners Community, does have a list of goals for its future development, among which is the control of sprawl and the preservation of farmland, it has no active plan to ensure that these goals come to fruition.

In this Master Plan steps have been taken to move the future of the community toward a more urban style of growth. This greater density will allow for the wild expansion that is predicted and maintains as much of the landscape in its most natural form as possible.

The Master Plan calls for the rezoning of the Four Corners area into a Transit Oriented Development. This will in effect change the style of building that Four Corners will experience and will also require some modification to the existing built environment. However, steps have been taken to ensure minimal demolition, with the plan calling for only 23 commercial structures and 38 residential structures to relocate.



Addresses within five miles of Norris Rd Bridge

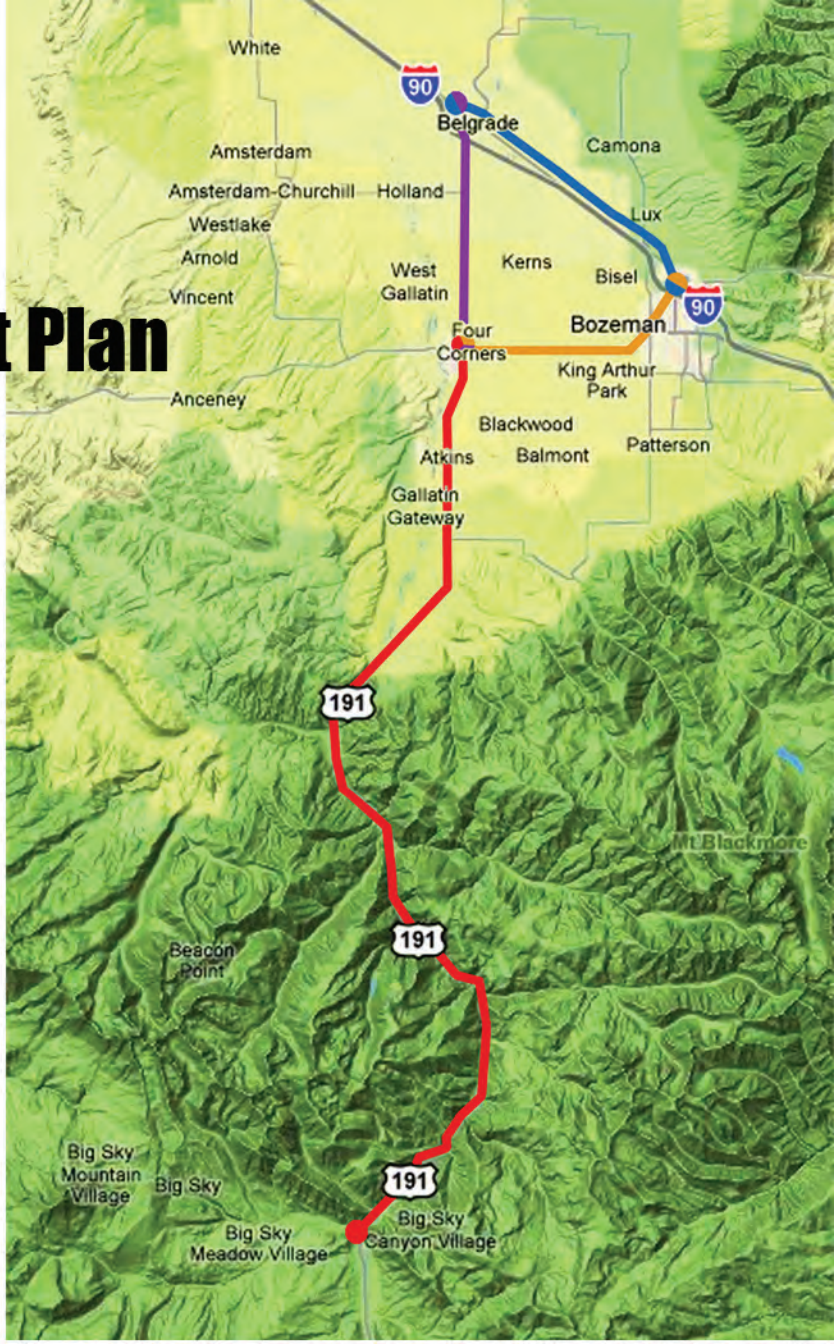
• Residential Address — Paved Road
■ Commercial Address - - - Unpaved Road

0 1 2 Miles

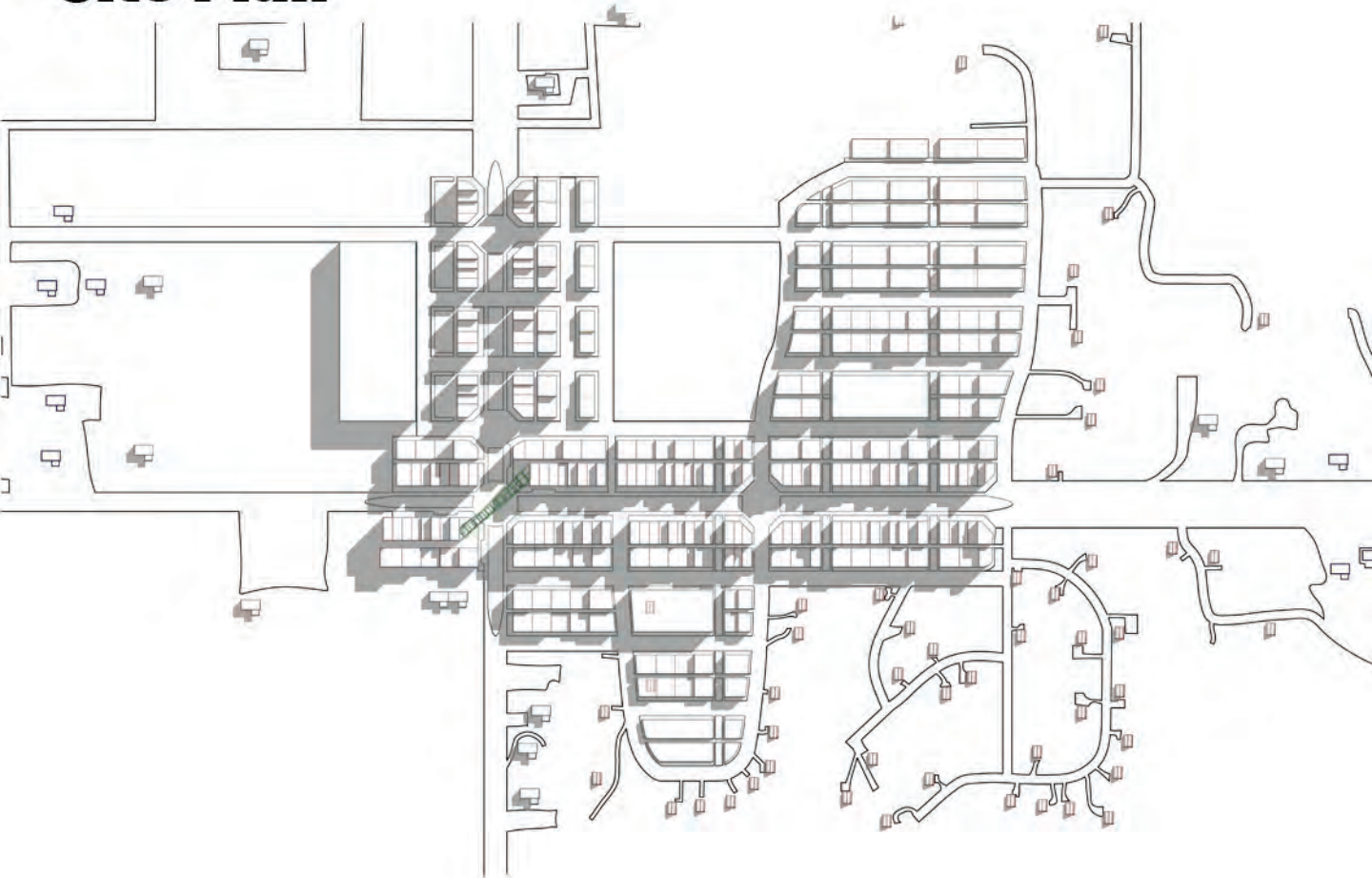
The Master Plan

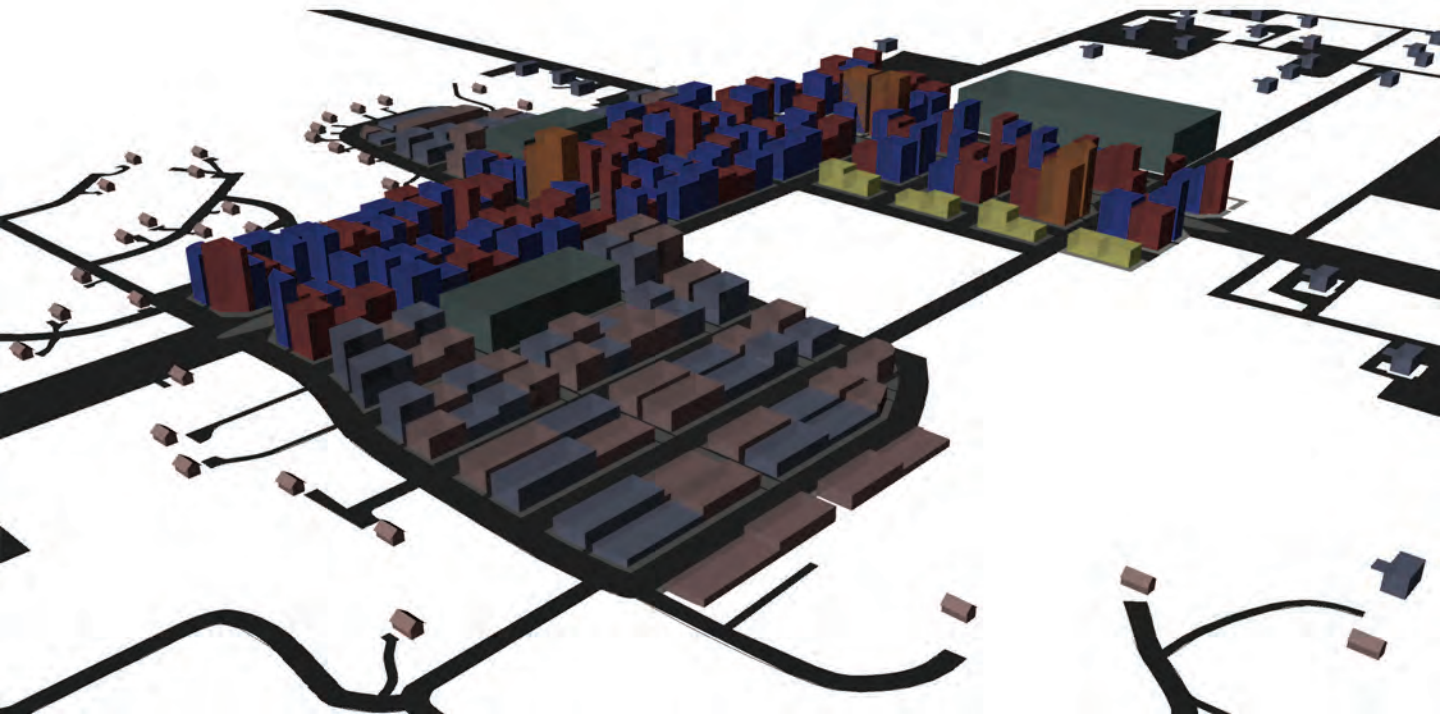
The Plan hinges on the creation of a county wide public transportation system. This system will link the communities of Bozeman, Belgrade, and Big Sky, with Four Corners serving as the centrally located transit hub. The Four Corners Intersection and its immediate surrounding will be zoned as a Transit Oriented Development or TOD, as described below. The rest of the area in the Four Corners planning district will be zoned and reserved for agricultural purposes. The actual transit system is an expansion of the existing Stream Line bus service with the addition of a county wide Light Rail circuit. It is a 20 year plan that takes into account current and projected population growth.

Proposed Transit Plan

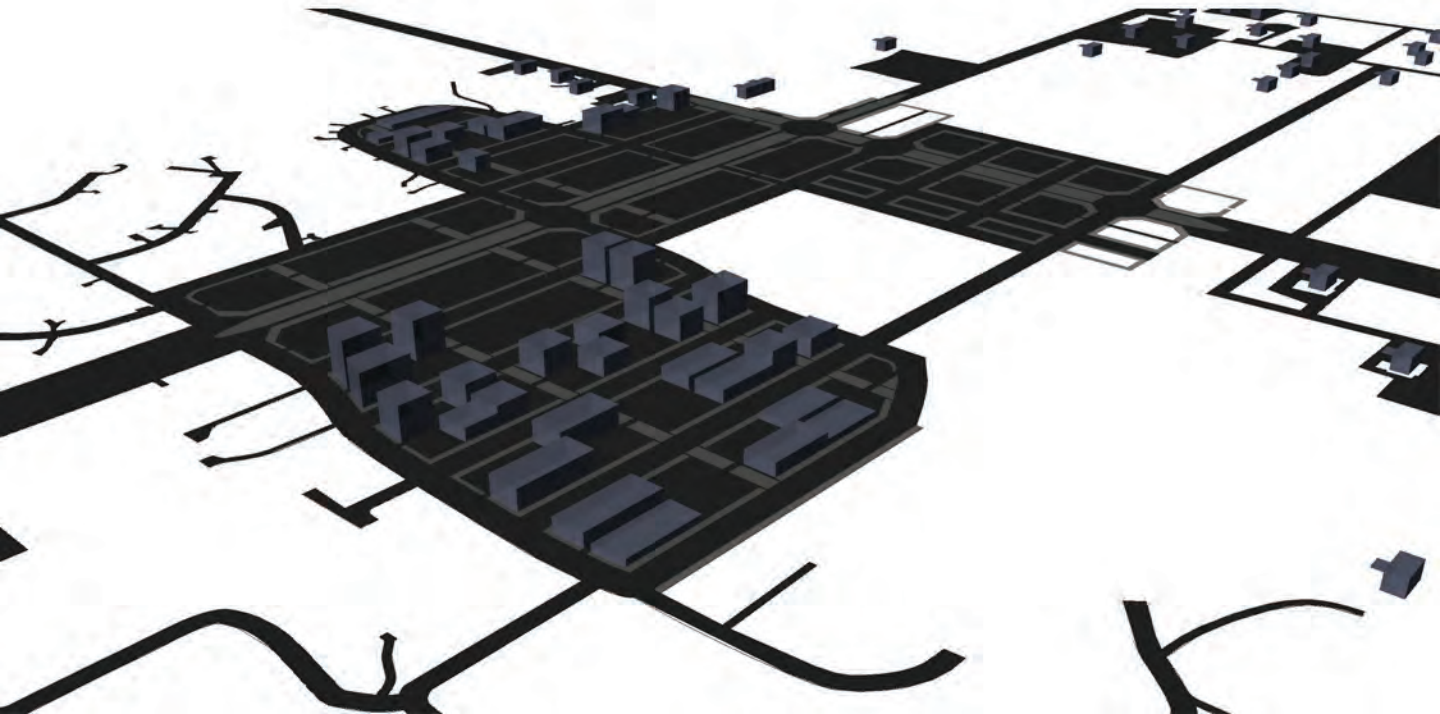


Site Plan

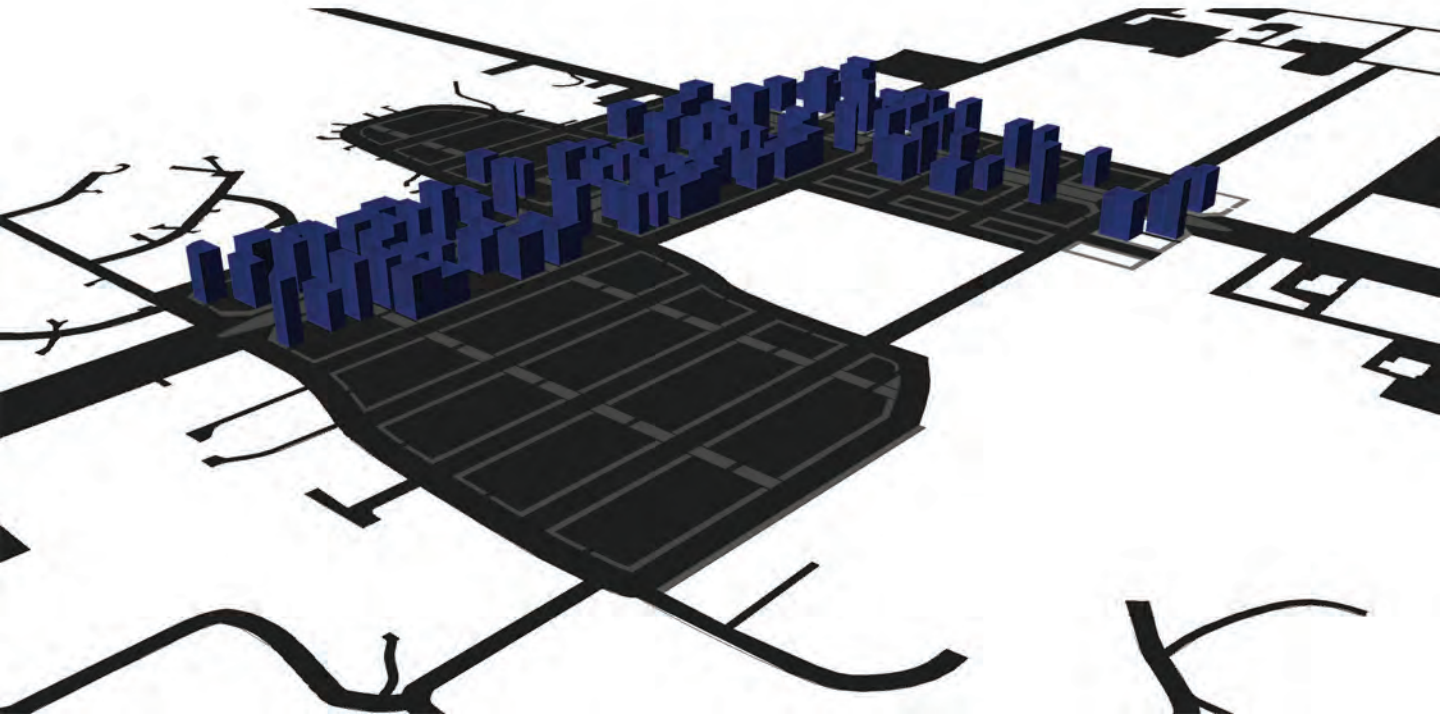




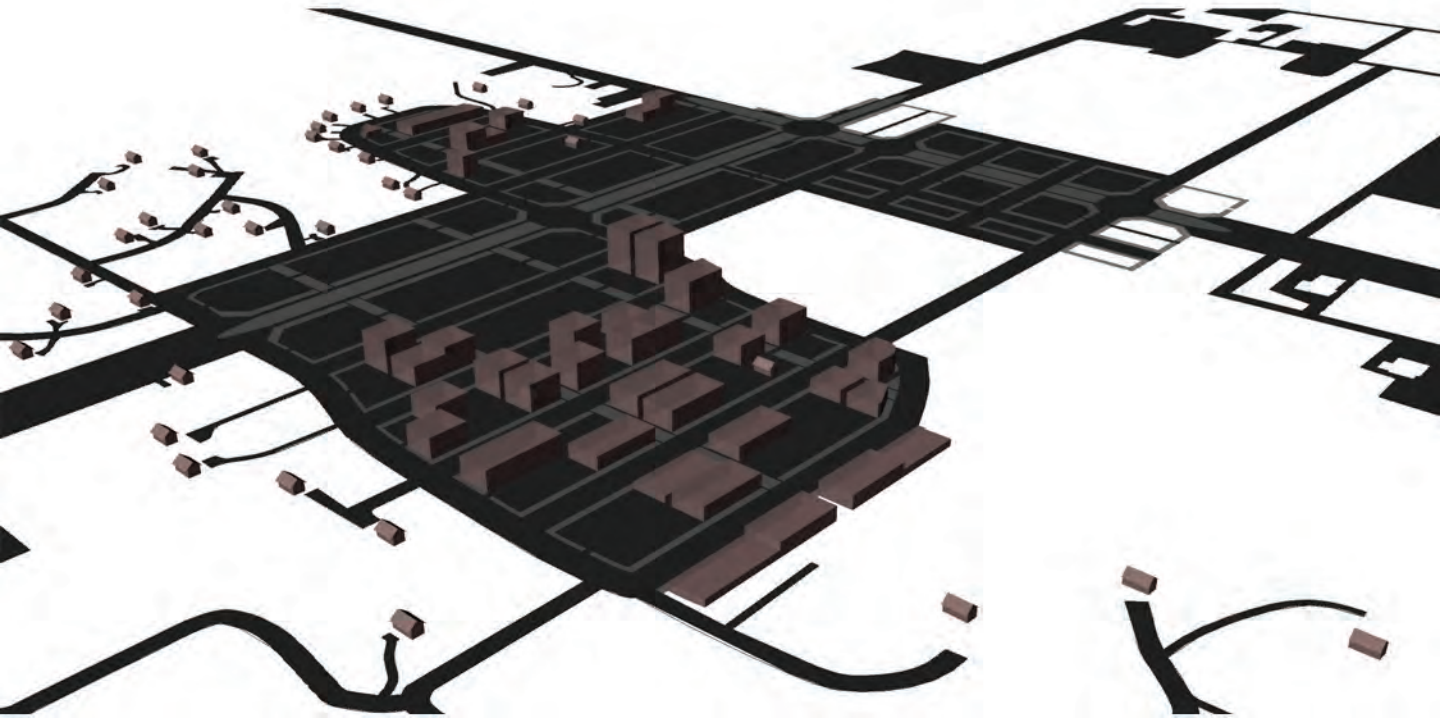
Commercial



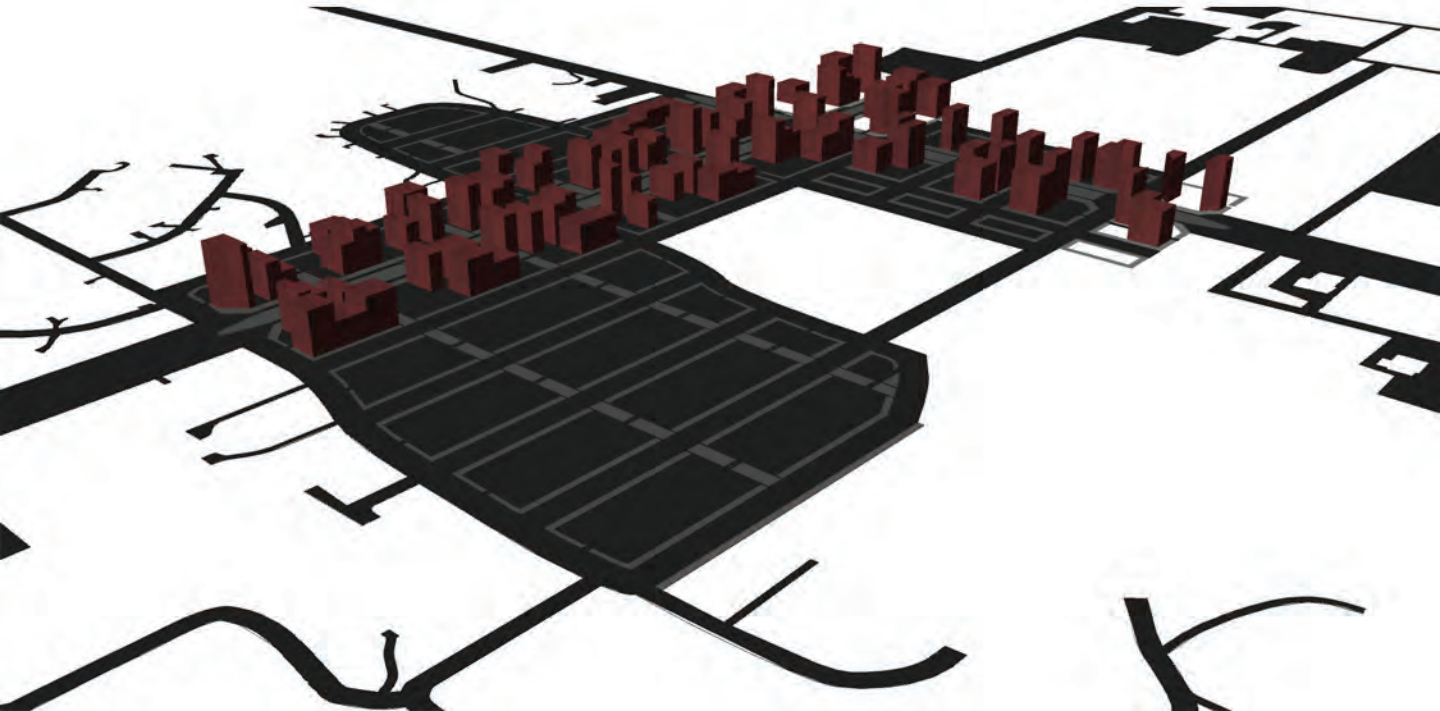
Commercial Over Retail



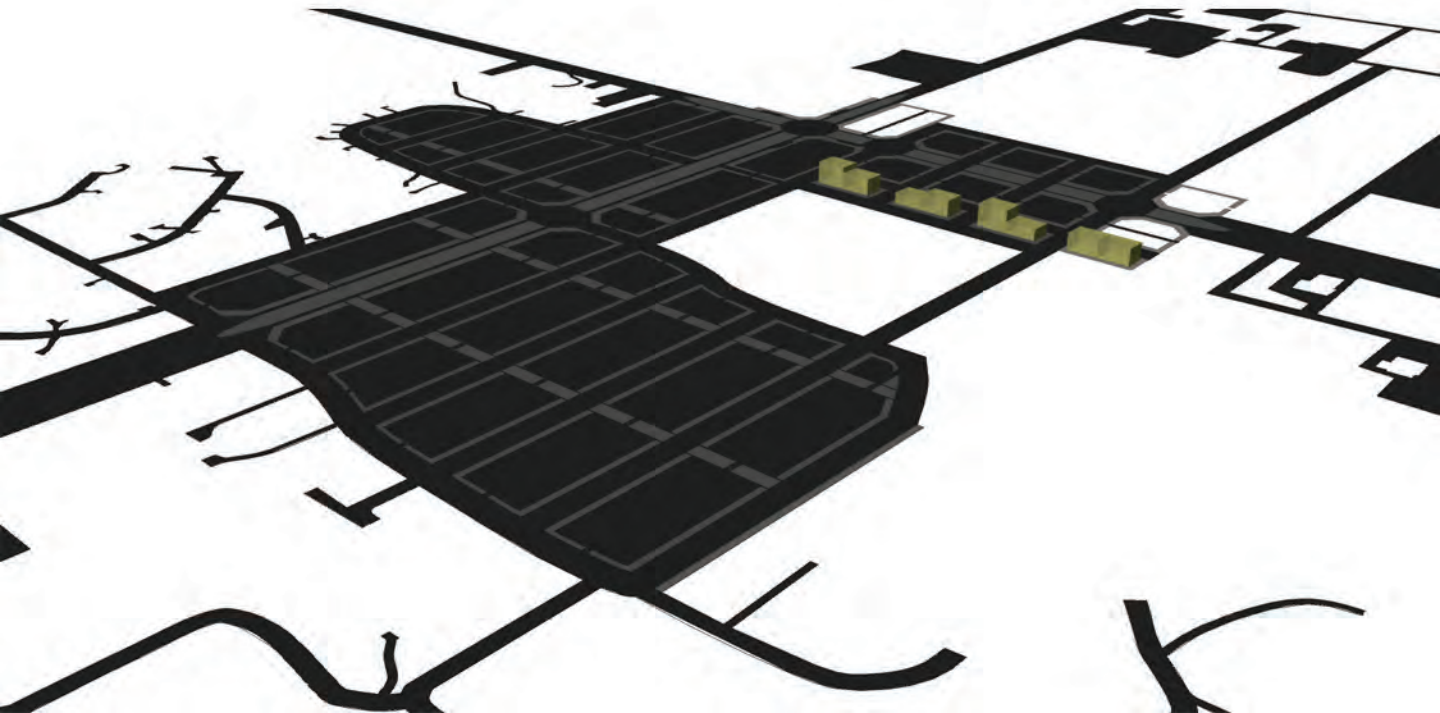
Residential



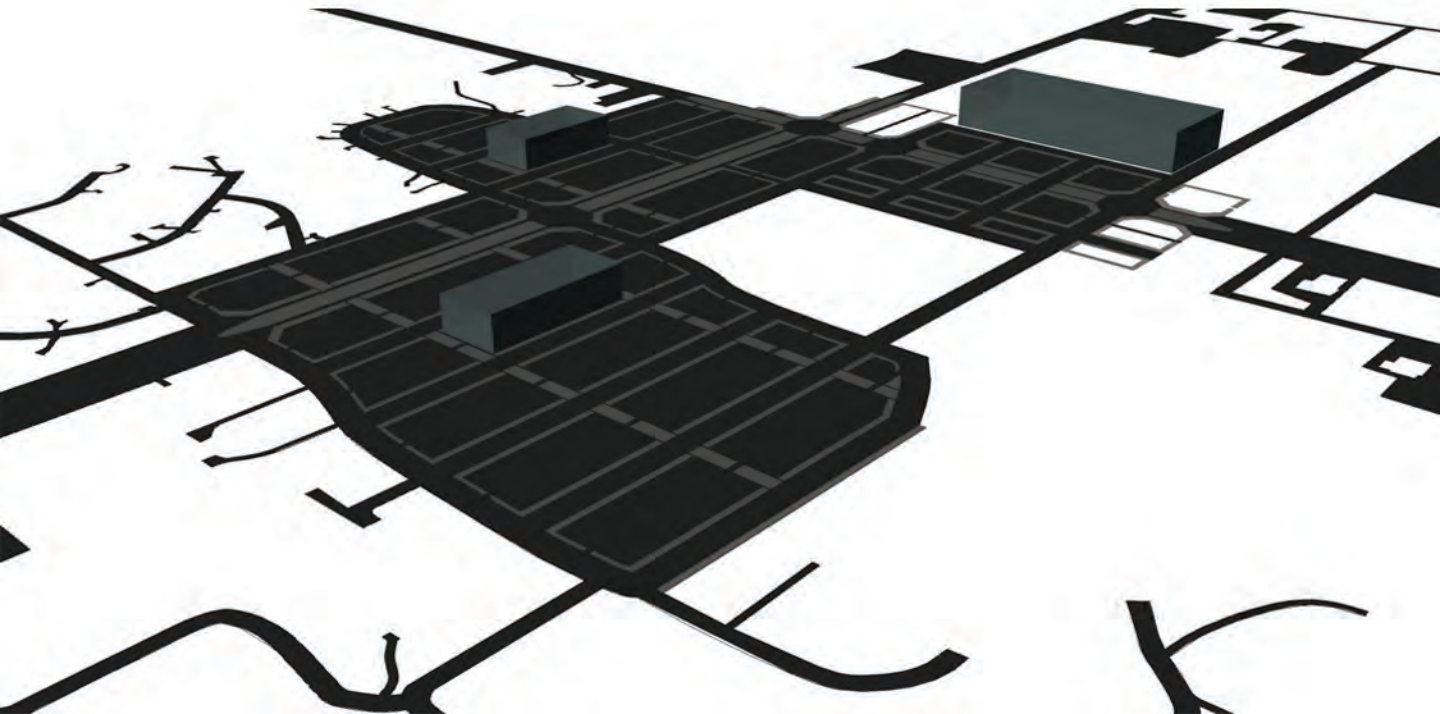
Residential Over Retail



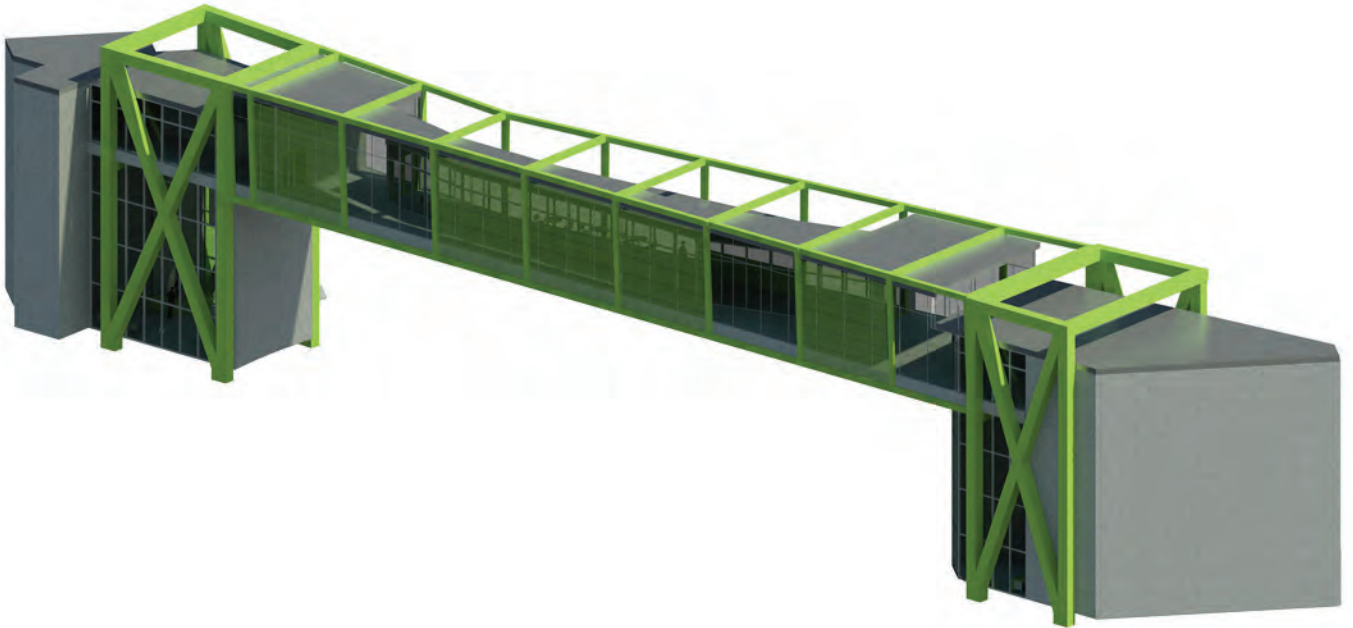
Retail



Parking



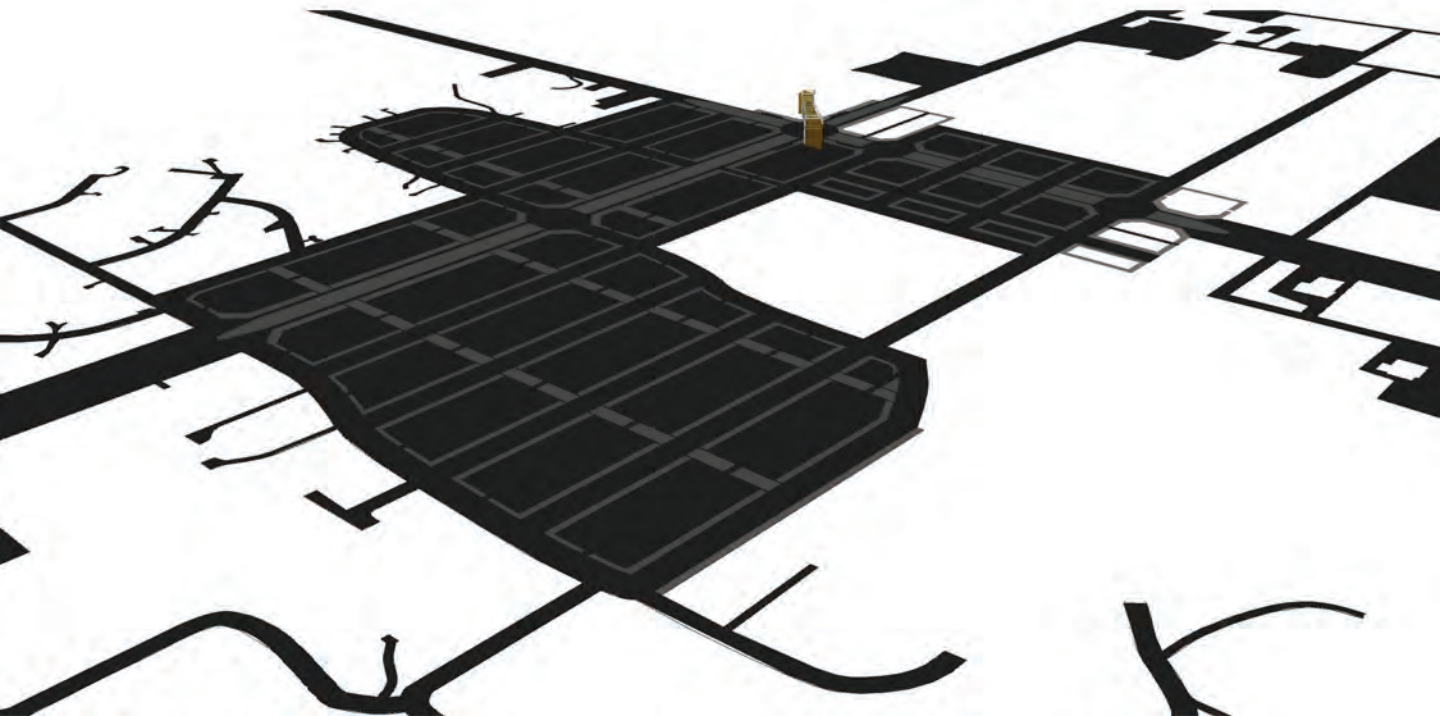
The Transit Center



The Transit Center

Within the process of creating Master Plan for the Greater Four Corners Area, it became apparent that if the plan was to hinge on a re-zoning of the area into a TOD (Transit Oriented Development) and the creation of a county wide transit system, then the next logical step was to design the building that would act as the catalyst for growth in the Four Corners community. This project is the Transit Center. This Architectural installation creates a sense of identity for the community as well as establishing the Four Corners intersection as the literal “Cross Roads of the County.”

Transit Center



Southern Exposure



Tower Entrance



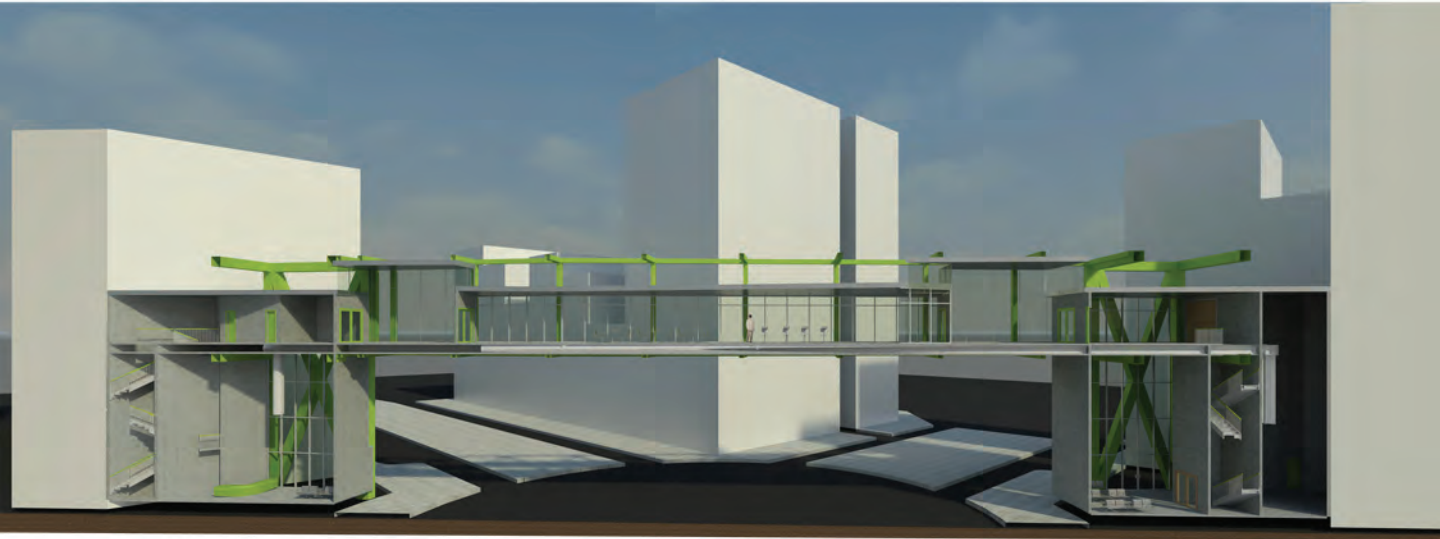
Northern Exposure



Sky Walk



Longitudinal Section



Transverse Section

North Tower



Transverse Section

South Tower



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