



A TOOL FOR VISIONING A GREAT CITY

DRURY CENTER FOR COMMUNITY STUDIES



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DRURY CENTER FOR COMMUNITY STUDIES

HAMMONS SCHOOL OF ARCHITECTURE

FALL 2013



Overview

Carthage Connect

A comprehensive set of strategies to help visualize the future of the Parks and Recreation System of Carthage, MO.

Center For Community Studies, Hammons School of Architecture, Drury University, Fall 2013

C O N T E N T S

OVERVIEW

Acknowledgments | 8
Introduction | 9
Special Thanks | 10
Executive Summary | 11

PART 1



SMART GROWTH

Overview | 22 City Growth | 26 Conservation | 30
Network | 42

PART 2



ACTIVE LIVING BY DESIGN

Overview | 52 Case Study | 56 Programs | 58
Network | 60 Activities | 62

PART 3



SOCIAL INTEGRATION

Social Integration | 68

Volunteering | 76

New Parks | 82

Analysis | 72

Programming | 78

Implementation | 74

Partnerships | 80

PART 4



IMAGE PROMOTION

Overview | 84

Regional Image | 94

Other Precedents | 100

History | 88

Enhancement | 96

Signage | 93

St. Louis County Parks | 98

PART 5

SYNTHESIS

Parks | 106

Network | 130

PART 6

PHASING | 132



DOCUMENT ARCHIVE | 142

APPENDIX | 162

BIBLIOGRAPHY | 168

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We would like to especially thank the Carthage Community Members for their active support throughout the visioning process. Your commitment to and participation in this parks and recreation visioning process has helped to guide the city to a better and healthier future for all citizens

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“Great cities do not just happen.
Overwhelmingly, the best cities derive from
a conscious act of conception and creation
of the city as a whole. The hands of decision
making are visible.”

-Allan B. Jacobs

Overview

Introduction

In the fall of 2012, Tom Short, City Manager, City of Carthage contacted the Center for Community Studies at Drury University regarding a second community visioning project similar to the CCS project that explored concepts for the city center. This time, the community was interested in exploring vision for the development of the community's parks and recreation activities over the next 20 years. In the fall 2013, the CCS, in collaboration with the community of Carthage, explored this visioning challenge and prepared this "visioning tool kit" that outlines the issues, concerns and recommendations for helping the community of Carthage become a more socially, economically, environmentally, vibrant and healthy city.

Overview

Executive Summary

Through working with the city of Carthage and its citizens, during various workshops and meetings, many issues, needs and wants were presented to the CCS team regarding the current and future Carthage Parks and Recreation system. This executive section summarizes the exploration of those issues, needs and wants and the CCS team's recommendations pertaining to the collaborative parks and recreation vision for the city of Carthage its implementation over the next 20 to 30 years.

Citizens helping each other replant a park.



Fig. 0.1



Fig. 0.2

People from around the community cooperating to refurbish part of a park.

Partnerships have several benefits that help the community development.



Fig. 0.3



Fig. 0.4

Administrative Concerns

ISSUE: Maintenance

CONCERN: The existing maintenance and supervision of the city's parks and recreation programs needs strengthening. The some park structures are in need of upkeep, which left unchecked can lead to an uninviting environment and deter potential park use. The current limited park budget and the resulting lack of adequate maintenance has exacerbated this problem.

RECOMMENDATION: We recommend implementation a fee system for the use of the park facilities, pavilion, and ball fields. This payment system would ask the users of those park amenities to pay a fee to aid in the administration, operation, and maintenance of those parks. This would assist in keeping the park facilities updated, in good condition and more equitably spread the operation cost of these group use areas. This fee system would aid the Parks and Recreation Department by allowing it to augment its limited budget and, thus, utilize its allocated funds more efficiently throughout the community.

ISSUE: Organizational Support

CONCERN: Carthage has many local organizations that can help the community and city government in the development of the city. Several local organizations have and are assist the Carthage Parks and Recreation system through volunteerism and financial support. We believe that an even greater collaboration between the city and local community organizations with direct interests in and ties to the community's parks and recreational system could be fostered to aid in overcoming some of the financial shortfall that the Parks and Recreation Department is experiencing.

RECOMMENDATION: We recommend that the city and local organizations come together

to explore opportunities for establishing public/private partnerships that help assist the Parks and Recreation Department's in enhancing and expanding its facilities and services in the community as the vision for the future Carthage park system is developed. The public/private partnerships might include churches, schools, YMCA, sport clubs, Boys and Girls Scouts, garden clubs, social and fraternal organization who choose to give of their time and money to help Carthage become an "Active Living community" ..

ISSUE: Land Acquisition

CONCERN: As the city of Carthage plans for its future growth and development, the expansion of existing and development of new parks must be considered, along with the preservation of wetlands and flood plain conservation areas in and near the city. We are concerned that these sensitive and important park and conservation areas will not be set aside early enough to protect them, to keep them from becoming cost prohibitive to acquire at a later date because of their surrounding developmental activity, and to use the news park lands as a catalyst for directed city

growth. The city of Carthage and the Parks and Recreation Department should take a proactive stance in acquiring and protecting these important "public" lands.

RECOMMENDATION: We recommend that the city of Carthage follow Smart Growth planning principles and take steps to limit the physical size of the city. We further recommend that consideration be given to setting the city's service area to the current city limit configuration (with the many current out reaching tendrils of the city limits map filled in). WE strongly recommend that the city of Carthage consider increasing the density per square mile of the community within the city limits, instead of following the current trend of sprawling ever-further outward. Within the compact city area, the park system can be enhance by a combination of improvement to existing parks and the creation of new parks to provide evenly distributed parks and recreation services across the community. We recommend that the city set as its goal "the establishment of a park, greenway trail, and or conservation area within a quarter-mile of every home in the city.

We recommend that the city explore county, state and federal partners in the

acquisition of the wetland and flood plain areas in city and immediately adjacent to the city. We recommend that you approach the City of Webb City to learn more about their relationship with the US Department of Fish and Wildlife with whom they have partnered to set aside a 1200 acre wildlife preserve north of their community.

ISSUE: Regional Wayfinding

CONCERN: The city of Carthage has many cultural, historic, and architectural; parks and landscapes, byways, and civic institutional treasures help to shape the character of the city. However, we are concerned that the community is not effectively telling its story to the passersby through the use of wayfinding signs and, therefore, much of the beauty and significance of Carthage is not made apparent.

RECOMMENDATION: We propose a system of wayfinding signs be strategically placed throughout the city and regional area to highlight the cultural treasures of Carthage and make it easier for motorist and cyclist to find their way to these community treasures and throughout the community. This series of wayfinding signs should start well before you arrive at the main entrances

to Carthage, but be reinforced by the gateway signage into town, and the network of signs that direct you throughout the community. This system of wayfinding signage should provide a comprehensive and coordinated educational and directional informational network that relates well to motorist at highway traffic speed and elsewhere in the network to pedestrians walking down a trail or sidewalk. (For more information view part 4.)

ISSUE: Accommodation of Crowds

CONCERN: The city of Carthage is home to several significant annual festivals. The Maple Leaf Festival and the Marian Days festival each brings in many thousands people to Carthage every year. We are concern that the city is not utilizing its parks system to their fullest during these festivals.

RECOMMENDATION: We recommend that the city consider ways to utilize its park system more completely during these festivals. We encourage the city to examine the possibility of using some of the parks to handle the car parking so that it is removed from the city center festival area, some park areas may be utilized as festival staging areas

or event locations, possibly some of the park facilities could be set up for overnight camping or RV areas, possibly some of the parks might be used a location for some festival programs, which would encourage visitors to travel more throughout the community during their stay in Carthage.

ISSUE: Phasing

CONCERN: The improvement of the park system is going to take many years to achieve. A systematic plan that outlines what tasks need to be implemented before others can be started will save the city money and time. Such a phased plan should be developed by the Parks Advisory Committee after the vision plan is ratified. This phased plan however must be reviewed periodically to keep it up to date or it will become outdated and unusable.

RECOMMENDATION: We recommend that the Advisory Committee identify those actions that will take the least amount of effort and money, but will have a significant visual impact and functional benefit and implement them first to develop excitement in the community and to demonstrate physical progress. We also recommend that tasks that will require long term preparation of planning begin immediately. We encourage the development of public/private partnerships that can come together and once the vision plan is set, discrete portions or tasks may be taken on by various groups in collaboration with the Parks and Recreation Department. The city should follow the phasing plan proposed by the CCS team, which starts with the minimal investment of cleaning the parks and ends with the maximum investment of improving and building on the existing infrastructure. The phasing process is a guideline that keeps the growth of the City in order, but does not define specific years in when it should be accomplished.

Partners should help with the revitalization of the parks.

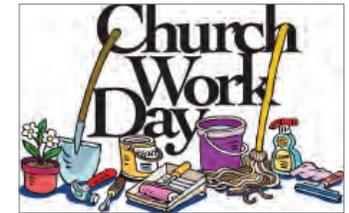


Fig. 0.5



Fig. 0.6

As people travel through the region, something as simple as a farmers market could serve as a landmark.

The city of Carthage should consider its growth as something that happens over several generations. Planting a seed today might be harvested by future generations.



Fig. 0.7

The City should encourage a way to workout on the way to work.



Fig. 0.8



Fig. 0.9

Bicycling should become one of the dominant modes of transportation.

Property value is a key factor when moving to a new city.



Fig. 0.10



Fig. 0.11

Economic Concerns

ISSUE: Fee Structure

CONCERN: Carthage’s park and recreation system focuses on providing the city with parks that accommodate the needs and wants of the people of Carthage. For many years the Parks and Recreation Department has had to support the Carthage park system solely using its limited budget. Our concern is that given the city’s project growth and the need to expand the parks and recreation system over the next 25 years, we do not believe that the current percentage of the city’s budget allocation for parks and recreation is sufficient to enhance, expand and connect the parks system as needed.

RECOMMENDATION: We recommend that the Carthage Parks and Recreation Department explore the idea of introducing a park use fee system for large group and organized sport and event park users to cover their cost of operation, maintenance, upkeep, and utilities. This would augment the Parks and Recreation Department by requiring the heavy use organizations to pay for the operational cost of the facilities and staff needs for their events, utilities, and a service fee for upkeep.

ISSUE: Property Value

CONCERN: Carthage is a rapidly growing city whose property value is increasing. However, we are concerned that the city is not taxing the property at a sufficient enough rate to maintain the existing the streets, sidewalks, and parks adequately.

RECOMMENDATION: We recommend that the city explore options to increase its revenues so that the necessary public funds can be raised to assure that the existing streets and sidewalks are maintained, sidewalks and greenway trails are added throughout the community, and



Fig. 0.12

As the city of Carthage grows, there will be a rising need for the utilization of alternate mode of transportation.

Automobile transportation will have to start sharing the streets with bicycles.

that the Parks and Recreation Department’s budget is enlarged to adequately maintain the existing parks and recreations programs and allow for expansion of park services to support the city’s new Active Lifestyle Initiative.. By improving the quality of the transportation infrastructure throughout the community through these funded initiative, the city is not only encouraging connectivity around the city, but also economic development, a more Active Living lifestyle, and an increase in property value.

ISSUE: Increase In Gas Prices

CONCERN: Studies indicate that gas prices will continue to rise in cost in the coming decades. As throughout the United States, Carthage’s infrastructure has been built to support the automobile as the

primary means of transport. Other modes of transportation such as public transit, walking and cycling are limited to non-existent. Carthage should begin now to plan for a time when fuel prices are so high that it restricts travel and the distribution of goods, thus impacting the local economy.

RECOMMENDATION: We recommend that the city start now to develop a pedestrian and bicycle greenway network throughout the community that would:

- Encourage a more Active Living lifestyle
- Save the city money by lowering health care cost
- Provide an efficient transportation alternative to the car

This greenway network should connect key locations and services throughout the

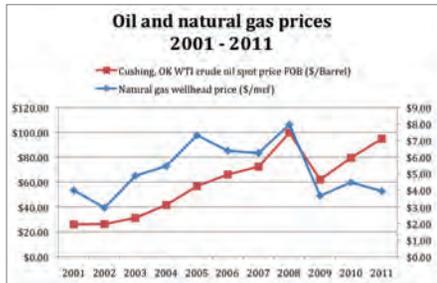


Fig. 0.13

community like neighborhoods, schools, churches, retail, parks, and conservation areas.

ISSUE: Connectivity

CONCERN: From our observations, the parks in Carthage cater to a specific user groups because of their programmed function, locations and neighborhood adjacencies. Our concern is that this has lead to some segregation of user groups due to the parks location and the community's limited mobility.

RECOMMENDATION: We recommend that the Parks and Recreation Department reevaluate the park system and the distribution of park services from the perspective of limited mobility. The department should explore how every citizen in the community can have "equitable" access to the parks and recreation services



Fig. 0.14

given the cost, distribution of park amenities, neighborhood socioeconomic makeup, mobility of the service users, and age of population served.

We recommend that the Parks and Recreation Department and city seek to connect each of the parks via a pedestrian and bicyclist greenway network. This greenway network itself should be conceived of as a linear park that unifies the Carthage Park System. We believe that this will help create a more active park system, to serve a more diverse socioeconomic population, not only to connect the parks but the users well as, and create a greater sense of connectivity. (For more information refer to part 3.)

ISSUE: Budget

CONCERN: Our concern is that the current parks and recreation budget is not sufficient to adequately maintain the current parks and recreation activities and, further, at its current percentage of the overall city budget that parks and recreation budget would be insufficient to operate the envisioned expanded parks and recreation plan.

RECOMMENDATION: We recommend that the city of Carthage explore ways to increase the parks and recreation budget. This should include increasing taxes, establishing park fees, developing public/private partnerships and volunteerism, and seeking grant monies.

ISSUE: Park Tax

CONCERN: Our concern is that the residents of Carthage are being taxed for the parks and recreation programs, while the park users who live outside the city limits use the parks and recreational programs for free.

RECOMMENDATION: We recommend that the city of Carthage explore the following budget strategies:

- The promotion of a Jasper County Parks and Recreation System with funding coming from a countrywide Park Tax levy
- That a community regional Park Tax levy be explored to capture the people who live within a certain radius of Carthage
- That a non-resident park and recreational fee be charged to all people who use the parks and programs, but do not live within the city limits of Carthage

Economic equality should impact all ages and races that makes up a city.



Fig. 0.15



Fig. 0.16

Economic equality should also be tied to the development of a city. Farmers should be a key part of economic distribution.

As well as the working class, kids are considered to be the future of a city. They should be part of an balanced system that provides opportunity to all.



Fig. 0.17

The construction of Route 66 gave birth to many small towns along its side.



Fig. 0.18



Fig. 0.19

The Courthouse is an important historical element in Carthage.

The health of a community is an important aspect of community development.



Fig. 0.20



Fig. 0.21

Social Concerns

ISSUE: The Lack of Historic Education

CONCERN: The city of Carthage has a rich history that is not being utilized fully in the social sense.

RECOMMENDATION: We recommend the exploration of history oriented activities that enhances and promotes the social growth of the community. (For more information refer to part 4.)

ISSUE: The Social System of Encouragement

CONCERN: We are concerned about the overall “health of the community”, which begins with a comprehensive and coordinated promotion of healthy lifestyles by the city government and public and private institutions throughout the city. Such a community initiative for a “healthy lifestyle” will become ever more important to the city in the next few decades.

RECOMMENDATION: We recommend the education of healthy living habits that will increase the overall health of the community. The implementation of programs such as Active Living by Design, Healthy Living Initiative, and Smart Growth promotes the well-being of the community through activities and improved city design standards. These activities focus on group reinforcement that creates an initiative to create a stronger social system of encouragement. (For more information refer part 2.)

ISSUE: Demographic Induced Separation

CONCERN: Carthage has a large Latino and a small Vietnamese community. Our concern is that skills and resources that these individuals bring to the community may not be currently



Route 66 and its connection through Carthage should be a celebrated crossing, enhancing Carthage’s history.

Fig. 0.22

The city could start implementing signage to encourage visitors that travel along route 66 to stop in Carthage.

used to its fullest potential. We are concerned that a socio-ethnic separation may occur between groups due to a lack of awareness, misunderstandings, stereotyping, language and cultural differences, residential distribution within the community, and frequency of social contact.

RECOMMENDATION: We recommend that social opportunities for the interaction of the various community groups be foster whenever and wherever possible. We particularly see that the parks and recreation programs could be a wonderful catalyst for such social opportunities if the parks and recreation programs were more accommodating. We recommend that the careful review and assurance that park amenities and services are easily accessible

to individuals of all ages and ethnic backgrounds, that the park system be physically interconnected with the pedestrian and bicycle greenway trails, and that neighborhood parks be developed within a half-mile of every residents home in the community. Our aim is to create a more integrated and aware community that focuses on the reduction of the cultural gap. (For more information refer part 3.)

ISSUE: The Involvement of the Carthage Churches and Schools

CONCERN: The churches and schools in Carthage develop their own smaller communities and people in those groups tend to mix almost solely with others within their group.



Fig. 0.23

RECOMMENDATION: We recommend the creation of partnerships between the city and churches and schools within the community. These partnerships could involve such activities as Adopt-A-Park programs, the establishment of neighborhood parks adjacent to these community institutions to share resources such as land and park equipment, the use of the linear greenway park to connect these community institutions and to promote more walking and bike riding throughout the community, and to optimize opportunities for interaction among community groups. (For more information refer part 3.)

ISSUE: Education of Youth

CONCERN: The education of the youth is crucial to the future development and growth of any city and country. We believe that the community,



Fig. 0.24

the Parks and Recreation Department specifically, can do a better job of providing educational enrichment programs not only for the youth, but for all individuals in the community in regards to conservation and preservation.

RECOMMENDATION: We recommend the implementation of programs that aim to educate the community, specifically the youth, about the conservation and preservation best practices for parks, wetlands and flood plains, watersheds, and community forests. The aim of such programs would be to get young people involved in volunteerism and community partnerships and develop within them a strong sense of responsibility and ownership toward their park system and city. (For more information refer part 1 and 3.)

ISSUE: Neighborhood Parks

CONCERN: Some sections of the city of Carthage do not have sufficient parks and recreation programs. Our concern is that many citizens of Carthage do not have parks in close proximity to where they live so they may easily walk or bike to them. This increases the community's dependency on motor vehicles and has the potential of decrease community social integration.

RECOMMENDATION: We recommend that the city of Carthage develop neighborhood parks throughout the community so that every resident living within the city limits is within a half-mile of such a neighborhood park.

ISSUE: Interconnectivity of the City

CONCERN: The city of Carthage is growing rapidly. Our concern with the community's rapid growth and planning is the lack of community interconnectivity other than by automobile.

RECOMMENDATION: We recommend that the city of Carthage begins the development of a pedestrian and bicyclist friendly community that is interconnected by a series of linear greenway trails to provide a safe and efficient alternative mode of travel throughout the community other than by the car. Such a linear greenway trail network should link the parks, schools, churches, retail, entertainment, and governmental areas of the community.

Elementary education is the most important phase of education.

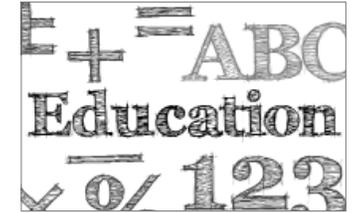


Fig. 0.25



Fig. 0.26

One of the most important aspects of city development is the education of its citizens. This will secure that future generations will carry the future of the city.

As students move to college the city of Carthage should be able to have a social system that encourages them to return and form part of the community development.



Fig. 0.27

The quality of streetscape determines the walkability of any city.



Fig. 0.28



Fig. 0.29

The quality of sidewalks is an attractive way of beautifying the city.

It could also serve as ways of pumping the economic viability.



Fig. 0.30



Fig. 0.31

Physical Concerns

ISSUE: Safety and Quality of Streets

CONCERN: Our concern is the lack of safe pedestrian friendly streetscapes in Carthage.

RECOMMENDATION: We recommend that the city consider the development of transportation corridors that equally accommodate the car, pedestrian and biker. We believe that in the future, these corridors will shift to handle less vehicular volume and that they will over time see an increase in both pedestrian and cyclist traffic. The streets currently are not safe for cyclist and pedestrians. We encourage the development of the streets so that they are more pedestrian friendly; careful consideration of the physical, perceptual, social and wayfinding characteristics is required. The development of on and off-street bike lanes and the utilization of parallel alleyways should be explored to safely and freely allow the movement of cyclist throughout the community. The wider streets within Carthage might be modified by narrowing or reducing the number of traffic lanes to allow for the addition of a vegetated median and bike paths along side the street.

ISSUE: Sidewalk Safety

CONCERNS: The current condition, and general lack of sidewalks, makes it difficult and unsafe to walk in some sections of the community.

RECOMMENDATION: We recommend that the city of Carthage repair its existing sidewalks and bring them up to ADA standards. Further, we recommend that all neighborhoods that lack sidewalks be provided sidewalks and that all new developments include sidewalks. These sidewalks should be spacious, landscaped, safe, lit, accessible, and continuous throughout the community. We recommend constructing medians that encourage traffic to slow down,



Streets and its sidewalks are the most important part of a city and its livability level.

Fig. 0.32

If livability is increased the city is more prone to flourish and grow at a more considerable rate.

while improving the aesthetics of the streets. At intersections, pedestrian sanctuary zones should be provided within these medians to increase the safety at crossing points.

ISSUE: Aesthetics of the City

CONCERNS: We are concerned about the aesthetic disparity that exists within the community and along the streets.

RECOMMENDATION: We recommend that the city develop streetscape standards that seek to promote along the public street corridors a visually appealing and compatible aesthetic quality for Carthage that expresses the community's heritage, culture, values, and arts. Coordination of wayfinding

signage, landscaping, materials, lighting, architecture, and scale would be some of the issues that should be considered. This streetscape should highlight the beauty of the Carthage and create a place where people wish to stroll and socialize.

ISSUE: Growth Rate of the City

CONCERNS: We are concerned that Carthage continues to sprawl to the south and southwest.

RECOMMENDATION: Although growth is necessary for the community, uncontrolled growth can be costly and damaging. We recommend that the city establish Smart Growth planning principles that limit the outward growth of the community and focuses

Part 1

Smart Growth

“Cities need to get a lot smarter about how they use their water and energy, where their food comes from, how they move people around, and where they build housing. Healthy food, adequate clean water, accessible transit, and affordable housing are the building blocks of a quality urban life.”

- Francesca Vietor

Smart growth incorporates six points.



Fig. 1.1



Fig. 1.2

San Francisco - One of America's Smart Growth cities.

Smart Growth promotes the preservation of nature and its natural processes.



Fig. 1.3



Fig. 1.4

What is Smart Growth?

Smart Growth is a better way to build and maintain our towns and cities. Smart Growth incorporates multiple types of living inside the urban context. Smart Growth accommodates multiple forms of transportation choices near housing, jobs, shops, and schools. This approach supports local economies and protects the environment.

Everyone wants to live in a neighborhood that is beautiful, safe, affordable, and easy to get around. Smart growth promotes healthier communities with strong local businesses. These healthier communities create neighborhoods with schools and shops nearby. It also attempts to create low-cost ways to get around the city. The promotion and education of Smart Growth is essential to its success. The implementation of these three Smart Growth principles will begin to foster a healthier community. There are methods in many developing cities like Portland, Oregon, San Francisco, California, and New York City that have created a very profitable future for themselves.

Conservation

Conservation is the preservation of land so that natural environment can function as it needs to sustain itself. The preservation of the earth's natural processes like the water cycle, are vital to maintaining our ecosystem. The preservation of nature around the city is essential to preserving those processes. This will help create a better ecosystem for the city of Carthage. Conservation also considers the health of the wildlife in the ecosystem. Plant life as well as wildlife conservation are key parts to the ecosystem.

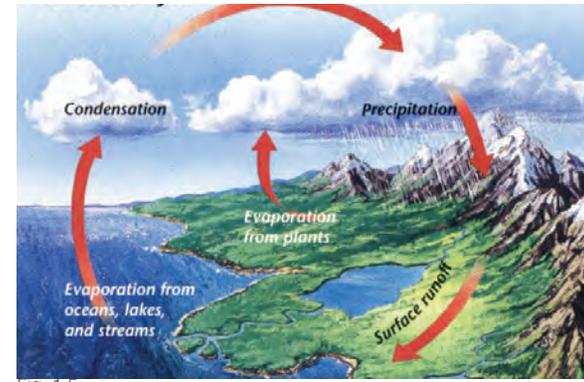


Fig. 1.5

Futuristic city with multiple forms of transportation.

Carthage Connect 2040 is a visionary plan for the city to grow and evolve.

City Growth

Cities tend to want to sprawl out into the natural environment, however, Smart Growth proposes to maintain the city's existing boundaries and increase the city's density.

Connected

A connected city is one that provides all its citizens with safe, accessible multimodal transportation options throughout the community.

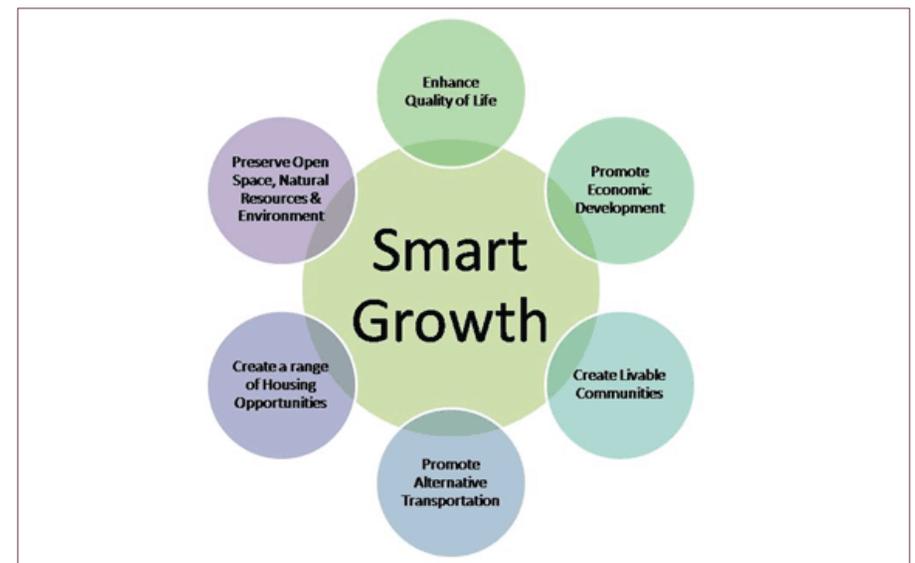


Fig. 1.6

Portland, Oregon

Portland, Oregon is located on the west coast. The city of Portland has been called the Greenest City in America. Portland has implemented extremely sustainable solutions in the city to combat the many problems that many modern cities face today. Portland, Oregon has made very large strides in how one can move around the city. Transportation in Portland has become a model of ways to improve and promote more than just vehicular transportation throughout the city. Portland has accommodated its streets with not only bike lanes, but lanes at the front of intersections so that bikers can be much more visible at these junctions of traffic. An example of this can be seen on the top left. One can see the blue lane dominating the front of the car lane making the drivers much more conscience of bicycle riders in the city. The city has divided the bicycle trails into five different sections about the city. This division can be seen on the far right of this page. This division was created to better display the entire bike trails that the city has to offer its residents. Bicycles are the main form of transportation throughout the city; however the city does accommodate other forms of transportation as well. The city has implemented what is called transit-oriented development in the city. This means there is mixed use between residential areas and commercial area of cities to create better access to mass transit throughout the city. The larger public transport that services Portland is the MAX Light rail. This is a larger transport system throughout the city and it is contrasted by the Portland Streetcar. Portland, Oregon is on the forefront of Smart Growth design and they are constantly developing. They are using newer and more efficient ways to create a connected and healthier Portland.



“Portland, Oregon won’t build a mile of road without a mile of bike path.” -Lance Armstrong



Fig. 1.7 | Fig. 1.8

Portland’s location within the state of Oregon.



Fig. 1.9



Fig. 1.10

Context map of the bike routes of Portland, Oregon by region.

One of Portland’s countless beautiful trails spread throughout the city and landscape allowing visitors to enjoy the city at its fullest.



Fig. 1.11

Diagram of New York's Smart Growth Plan.

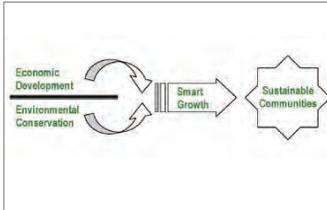


Fig. 1.12



Fig. 1.13

The hard edges of the city contrast and complement the natural space it contains here at Central Park in New York City.

The New York park system host an abundant amount of trails, such as ones like this below. This large walk creates an avenue of possible interactions and purposes.



Fig. 1.14

Smart Living

Smart growth, as it applies to living in a community, incorporates many aspects. It looks to preserve the existing communities while exploring interventions that benefit its infrastructure. Smart growth calls for the use of multiple forms of housing in the city. This includes garden apartments, row housing, single family house living, duplexes, studios above garages or shops, lofts, and condominiums. The implementation of these multiple living styles needs to be done on a smaller community scale. At the neighborhood scale, the different housing types become more stable and reliable sources of smart growth. The neighborhoods should have a multitude of different housing styles inside of them. When a variety of housing styles are implemented, home prices become more stable. In a study of housing prices, home prices were most stable within a ten mile radius of the city center. Trends also showed that home prices generally decreased as the distance increased away from the city center.

Carthage needs to consider these five areas of the city, seen on the map to the right, as starting points to the implementation of the different housing styles. These areas of the city were chosen through defining high activity areas in the city. For example, these areas include businesses, high employers, schools, and churches. These areas connect to the overall city extremely well in physical, social, and economic aspects. These areas are connected through a network of roads, trails, and developed walkable space to create a better dialogue between the neighborhoods and their surroundings. By growing the communities in this manner it will help protect against sprawling out into the open space surrounding the city, creating even more problems.

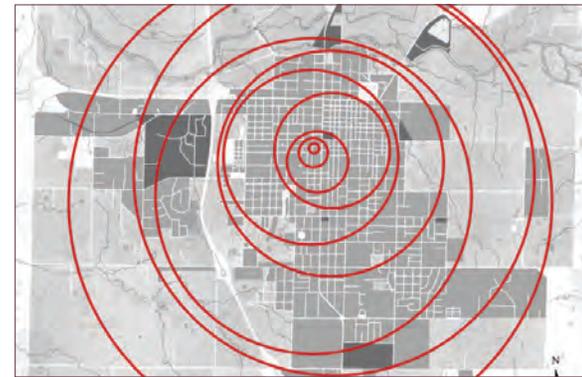


Fig. 1.15

Ideal growth for the city of Carthage is Smart Growth.

The circles are regions of the city that have strong potential for growth. The call out bubble explains what is in each region.



Fig. 1.16



Fig. 1.17

Highline

The Highline in New York is the perfect example for most of these principles being touched on in one project. What the High Line sits on is an old abandoned railway in New York. The railway just sat there unused growing grass until Diller Scofidio and Renfro architects intervened. They transformed this once abandoned eye sore into a functioning walking path that creates an experience for the people that visit it. It aims at connecting the city and creating views in the city. One can find small interventions spread throughout the walkable path. These interventions frame views of not only of the built environment surrounding it but the natural ones as well. The High Line was designed to create smart growth in the city. Its presence has boosted the local economy. Businesses want to be located near the High Line because the possibility of profits is much higher than other places in the city. The Highline has also appreciated the land surrounding it as well. The economic, social, and physical aspects of the High Line are quite prevalent when looking at it within a larger scope. This kind of smart development is how a city can bolster its existing amenities while still engaging the practice of smart growth in a community.

New York City

The city has laid out twelve principles to implement in the city context that will help the city grow into its future vision. The first principle that New York wants to promote is sustainable businesses in the community centers. This discourages scattered development of the businesses. Second, they want to preserve the green spaces inside and around the city as well. The use of the irreplaceable resources creates better opportunities for local economies, increases the quality of life in the city, and it will promote growth introspectively. Thinking introspectively, the city wants to also bolster the development of the existing communities to help promote growth inwards. The fourth principle is aimed at beatification; the city wants to build attractive communities with a strong sense of identity. Identity in the city will help create a connection in the public's eyes and start to create ownership and pride in the community. The fifth principle creates walkable neighborhoods. This aims to provide multiple forms of safe transportation on the streetscape. They want to use more innovative approaches to optimize green building design in the city. Using this green design strategy they want to create a range of housing opportunities and choices. The eighth principle encourages a community and stakeholder collaboration in development decisions. This aims at getting the communities more involved to help make decisions so the community can progress together instead of leaving its citizens in the dark. They want the community to collaborate on decisions like land use. Smart growth promotes the idea of mixed land uses. This means that there is commercial, residential, and open space all within the same region. This also goes with their idea of making development decisions predictable, fair and cost effective. The final principle of the city is to have a long term comprehensive plan.

Garden apartments have landscaping surrounding it.



Fig. 1.18



Fig. 1.19

Row housing is high density housing used in cities around the world. Its a developing trend that helps the city save space.

Apartment style living greatly increases the density as well as helps houses in a community maintain their value.



Fig. 1.20

Low Density Housing includes buildings like single family houses.



Fig. 1.21



Fig. 1.22

Higher density housing like apartments as seen above allow cities to save space and increase density and lowering the cost of living.

Below shows the projected sprawling growth for the Carthage community to the southwest.

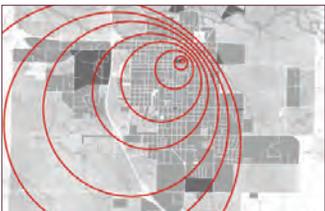


Fig. 1.23

Consequences of Sprawl

Sprawl is the movement away from urban living into the suburbs of a larger city. It also is generally the shift away from high density living to low density living. Sprawl creates many problems in a city. One of these increased air pollution. By sprawling out into the suburbs the commutes to work become longer. On average, Americans who live in the suburbs spend four hundred and forty four hours behind the wheel commuting to work annually. People commuting this often have a large impact on our ecosystems health. Overconsumption of water starts to become a large concern as well. Sprawling out into the open space can create water distribution problems for a city. Also people in suburban areas tend to use more water than those inside a city. This is partially due to landscaping at every house. Thirty percent of water used daily in the United States is classified as outdoor use. Loss of wildlife and land also starts to be a large concern when sprawl is occurring. For example, the San Francisco Bay area now has ninety plant and wildlife species listed as endangered. The plan they have for Smart Growth intends to correct this problem and pull these ninety species off of the endangered species list. Even the land itself becomes extremely valuable when considering sprawl and its impacts. The use of land can impede on earth natural processes creating future problems to be solved. Sprawl has also created an increase in racial and economic disparity. When people sprawl to suburbs of a larger city they take their tax dollars with them. When people leave the city center, minorities are usually left behind to pick up the fiscal slack. This creates funding problems for those left in the city. Sprawl uses, land, natural resources, and increases pollution of our ecosystem. These consequences should always be avoided in the growth of cities.



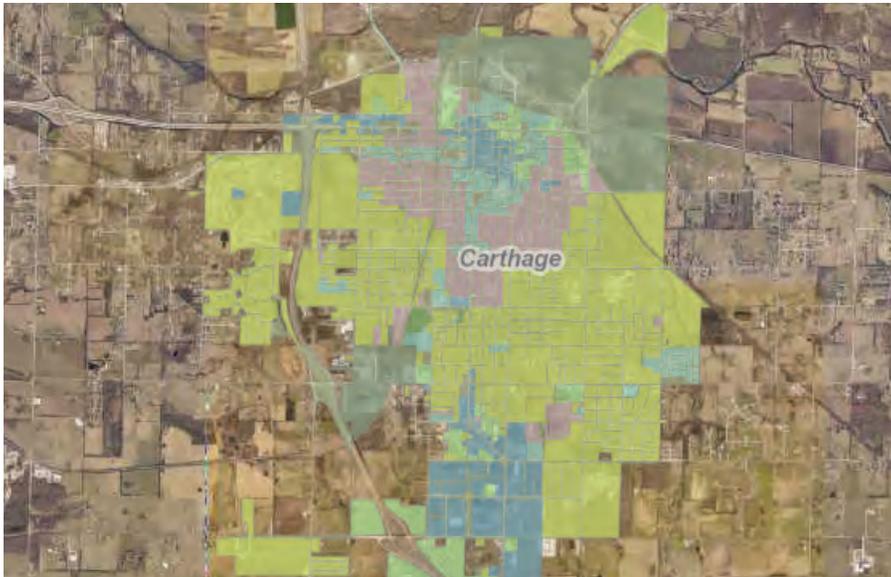
Fig. 1.24

As the natural landscape is destroyed, cities lose their "breathing lungs" that serve to cleanse the city.

This is the product of sprawl in communities. The community can lose a sense of identity if every house looks the same.



Fig. 1.25



Mixed Land Use

Smart Growth encourages the progressive idea of mixed land use. This pertains to certain parts of the city. Mixed land use encourages the interaction between commercial environments with the residential ones. When these different types of buildings exist together (ex. houses, grocery store, smaller businesses) in a neighborhood it starts to function as a smarter community. There is usually resistance to this idea at first however; the benefits of mixed land usage heavily outweigh urban sprawl. The further one has to travel to get to work or household goods the larger the environmental detriments.

One can see on the maps to the left the land usage by zoning of the city of Carthage and how it is separated. The goal of Carthage should be to integrate a better mix of zoning in the city like Portland has on the bottom map.

Zoning

The use of zoning in a community can be an extremely helpful tool when defining a city and how it can grow. Zoning areas of the city, to hold multiple categories of zones can be an easy way to start to form a smarter Carthage. Smart living as a community entails dictating that the city has multiple styles of living. It also says that the cities should have spaces for mixed uses. The city can control where these mixed uses take place in the community by regulating zoning laws and applying them to better grow the city in the manner that the city sees fit. This kind of growth can be seen on the map to the left of Portland, Oregon. The city has a variety of zoning types spread throughout the city. This helps promote the use of different forms of transportation throughout the city.

There are business on the bottom with housing on the upper floors.



Fig. 1.28



Fig. 1.29

There are multiple purposes in each building that allow a city to develop as a multimodal apparatus and seem more inviting to

pedestrians. Zoning for the city of Portland. One can see there are multiple zones in each area of the city that allow it to develop and best serve the citizens of each zone.

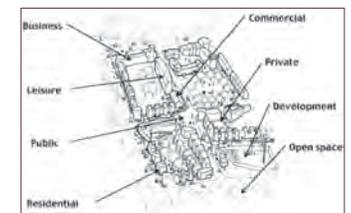


Fig. 1.30

Mixed Land usage can benefit the community by lowering the need for cars in the city. Mixed land usage can bring necessities for living closer to the residents.

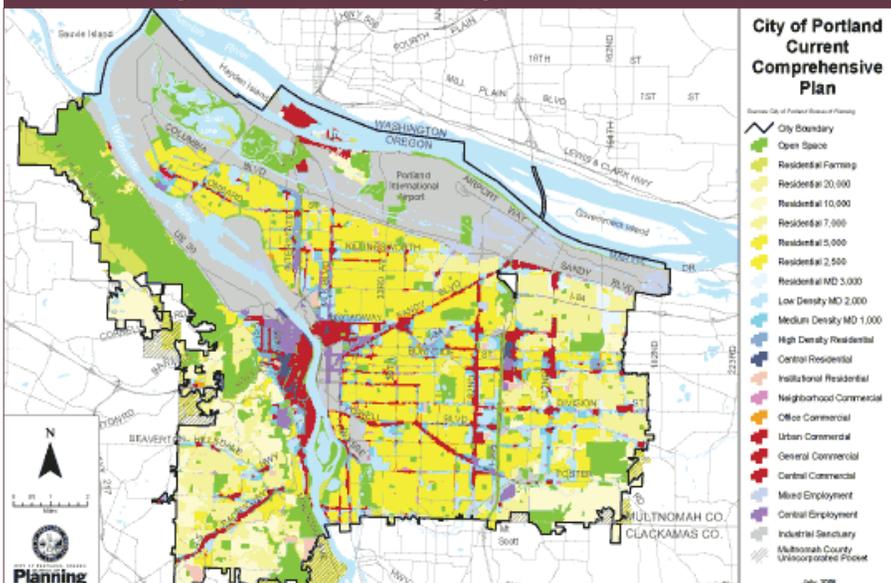


Fig. 1.26 | Fig. 1.27

The roles of the humans integration in the natural world.



Fig. 1.31



Fig. 1.32

These wooded areas are the key to the preservation of the land.

The preservation of the flood plain helps the natural processes.

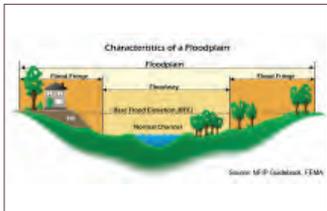


Fig. 1.33

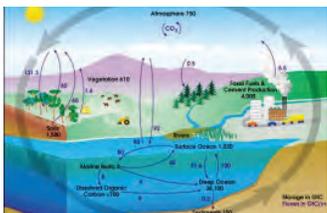


Fig. 1.34

Conservation

The preservation of the natural landscape is key in the development of Smart Growth in a community and can have large impacts on its wellbeing. Keeping the floodplain intact is crucial to natural processes. The preservation of this space also creates a connection to the entire community. It gives the city the opportunity to use it for nature based activities. The green space around the city can produce a more environmentally aware community. This community then has the ability to make more educated decisions about land use. The conservation of the land around the city can also help protect native plants and wildlife in the community. Conservation of the northern part of Carthage is something that will have to take place over time. Phasing of conservation is a key in its success.

Flood Plain

The floodplain of Carthage, as defined by FEMA, is primarily located in the northern part of the city. The floodplain also has two small channels extending down into the city's center. These are places of the city that could be capitalized on. Carthage has done a good job not expanding the city too far into the floodplain. However, the preservation of this floodplain is crucial to the ecosystem's natural processes.

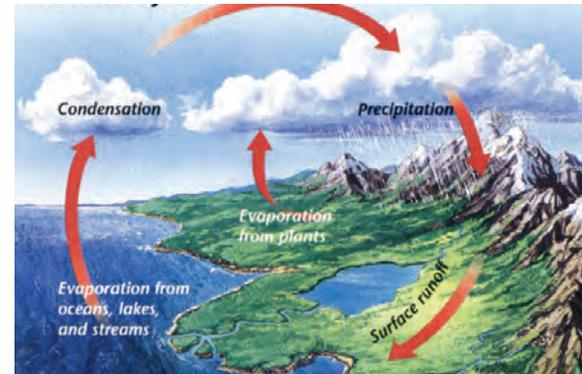


Fig. 1.35

This is the water cycle it is one of the few natural processes that the earth goes through to maintain its health.

Floodplain characteristics show an incredible potential for development of conservation on the peripherals of the city.



Fig. 1.36



Fig. 1.37



Fig. 1.38



Fig. 1.39

These are the three different ways that mosquitoes can be eliminated from a region. The eradication of standing water will absolve any place that mosquitoes can reproduce. The use of bats will also eliminate mosquitoes in the area, since bats feed on mosquitoes. Finally, the use of pesticides can rid the mosquitoes from this land.

Preparation of Land

The land to the north of the city between Kellogg Lake and the Ruby Jack Trailhead is home to numerous mosquitoes. These mosquitoes can be extremely problematic when trying to use this area for recreation and leisure activities. Therefore, the removal of these mosquitoes must occur before this area can be comfortably used for recreation.

- We recommend eliminating all sources of standing water in the area where the mosquitoes breed.
- We also recommend that bats be introduced into to this ecosystem as a means of controlling the mosquitoes, since the bats will feed on the mosquitoes.
- If after these natural processes of mosquito removal has been tried and the mosquitoes continue to be a problem, only then should the use of mosquito larvicides and adulticides be used in the area. The introduction of these sprays can help combat the mosquito population; however, the use of pesticides can be harmful to the ecosystem. Extreme care must be used when applying pesticides.

Clean up of land needs to be accomplished first.



Fig. 1.41



Fig. 1.42

Signage for the conservation area will help promote the preparation and usage of the land.

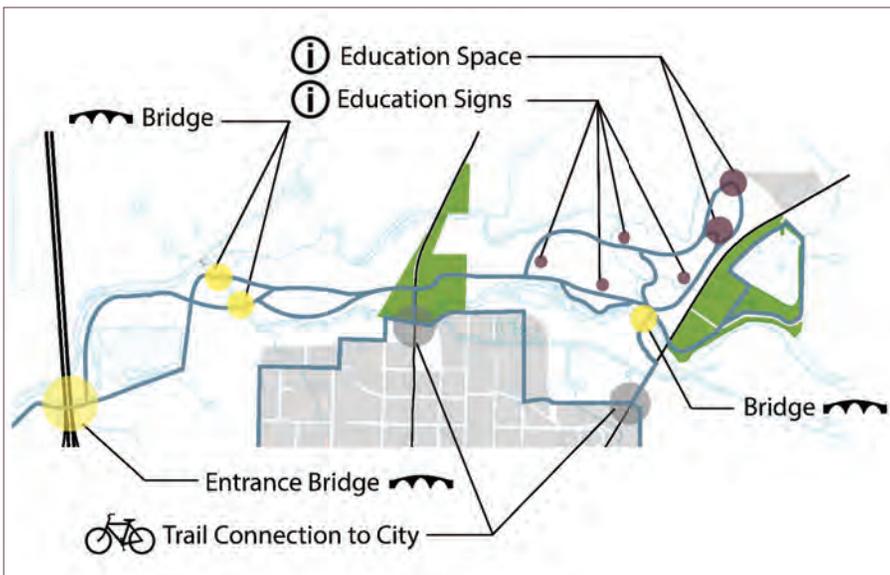


Fig. 1.40



Fig. 1.43

Trails are an exciting way of exploring nature while still allowing the natural landscape to coexist as one with the city.

Below is a diagram for the green ring surrounding the city.



Fig. 1.44



Fig. 1.45

Trees lining the street create a division between the street and sidewalk.

Integration of tree and humans are the factors behind the green ring.



Fig. 1.46



Fig. 1.47

Green Ring

We recommend that the city of Carthage following the Smart Growth principles outlined herein and avoid the continued planning practices that are promoting the city sprawl. In the city diagram below right, we propose that the city fill in the acreage between the current city limits and US Route 71 and that a vegetated buffer be developed between the incorporated city and outlying area. This Green Ring buffer would surround the city by linking together the park system, the floodplain conservation area to the north, and new linear greenbelt parks in between.

This Green Ring is envisioned as a natural filter of trees, grassland and shrubs to define the edge of the incorporated city beyond which it will not extend and a vegetated outer ring that contains a network of recreational trails that surrounds and interconnect the city. The Green Ring and the linear greenway trails that run throughout the city provide a combined network of recreation, cycling, and pedestrian paths that stitch the city together and promote and alternative means for circulation besides the car dominated streets.

The benefits of developing this long term vision for the Green Ring and corresponding linear greenway trail network throughout the community are:

- National research has indicated that the property value of the land and homes adjacent to such green buffers and trail networks increases by approximately 15%
- Communities that have introduced greenway trails have seen a significant increase in the number of citizens developing healthier Active Living lifestyles
- Communities that promote Active Living by Design principles such as greenway trail networks see a reduction in the community's mental and physical health

care costs

- The development of a Green Ring and linear park greenway trail network has a beneficial effect upon the air quality in the community
- This interconnected network of trails increase the community's mobility and social integration
- Such a Green Ring urban forest would establish a meaningful and powerful community image

A green buffer for a trail to connect people to nature is necessary for people to feel connected to nature.

The green ring surrounds the city to create a green barrier.

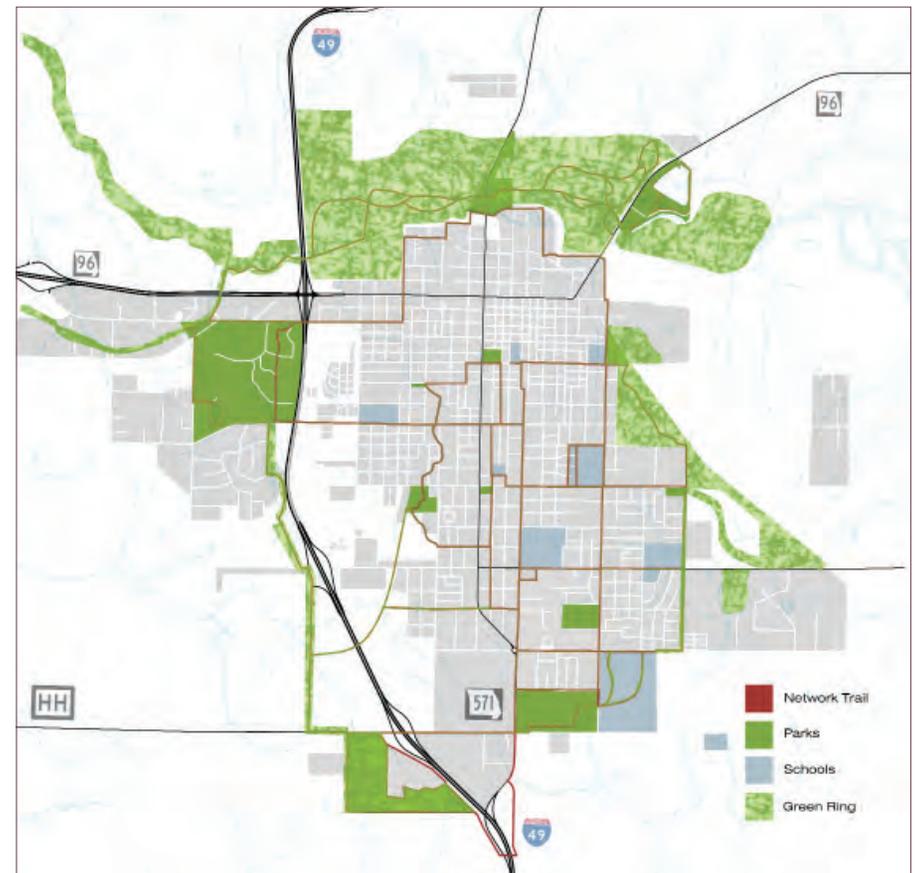


Fig. 1.49



The Powder Valley Conservation Nature Center is an extremely interactive center that aims at educating the public about nature and its benefits.

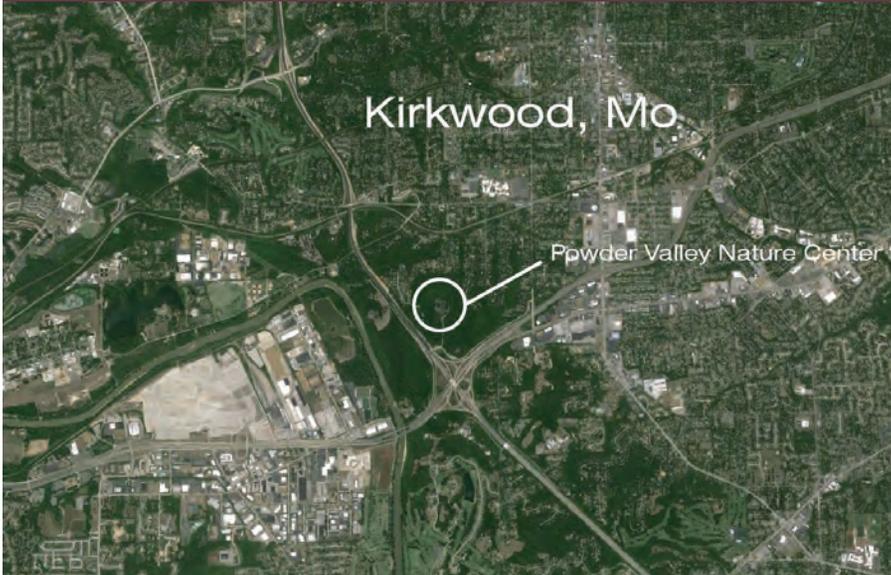


Fig. 1.50 Above | Fig. 1.51 Below

Powder Valley

The Powder Valley Conservation Nature Center is located in Kirkwood, Missouri, a suburb of St. Louis. The Nature Center is located on a 112 acre plot of land. The conservation area features different activities for both kids and adults. These activities include different kinds of interactive exhibits spread throughout the nature center, three handicap accessible trails, bird watching, and wild life viewing. The nature center itself features different exhibits appealing to a wide range of ages. In the nature center is the Discovery Room that appeals to children. This room offers different puzzles, games, and exhibits that help educate children about nature. The center also features a live reptile and amphibian exhibit that appeals to all ages. The beehive is another notable attraction at Powder Valley Conservation Nature Center. The exhibit is of an actual bee hive; next to which are educational diagrams explaining all the interworking of how the hive. The center also features a 250 seat auditorium that can be used for classes and presentations throughout the year. An additional two classrooms are available to support the educational purposes of the center.

We recommend that a similar conservation nature center with interactive programs be implemented in Carthage within the proposed Spring River floodplain conservation areas that lies between Kellogg Lake and the Ruby Jack Trailhead..

The trail system at Powder Valley is completely handicap accessible.



Fig. 1.52



Fig. 1.53

This is one of many kinds of interactive exhibits located at Powder Valley Conservation Nature Center.

Bird watching is one of the many different activities that can be done at Powder Valley. Powder Valley even rents out binoculars to visitor to be able to bird watch if they want.



Fig. 1.54

Integration of plants inside of the center can help people connect better.



Fig. 1.55



Fig. 1.56

Exhibits to promote preservation and education of the natural environment.

Incorporation of natural light in the center can create a better connection to nature.



Fig. 1.57

Nature Center

The intervention of a nature center supports the environmental conservation actions proposed by Smart Growth, we suggest that a Nature Center would help reinforce the ideals of the vision and help to extend those ideals throughout the community. Nature Centers bring people into contact with the natural environment to create experiences that can alter how one perceives nature, ecosystems, and land usage.

The proposed Nature Center is located at Kellogg Lake. This is an ideal place for such a center because of the connection to Spring River and the conservation area between Kellogg Lake and the Ruby Jack Trailhead.

This area of the Kellogg Park also provides a strong visual presence to the people passing by on Highway 96 (Old Route 66) on their way into Carthage. This provides an excellent opportunity for the Nature Center to become a gateway image or icon as they enter the city. Such a gateway icon would provide a lasting impression of Carthage's environmentally commitment.

When visiting the Nature Center one can participate in a variety of activities that will help to educate and broaden the community's conservation sensitivities. The exhibits inside of the center will not only target the conservation problems of Carthage, but also the nation and world.

The Nature Center is proposed to be located near the large floodplain spanning across the northern part of the city along the Spring River. This creates a wonderful opportunity to demonstrate building techniques and the use of materials that are acceptable in such conditions.



Fig. 1.58

The nature center can also help promote fishing in Kellogg Lake.

This is a map of Kellogg Lake. The nature center is located on the southwestern portion of the park.



Fig. 1.59

The phasing for the nature center should be divided into three different phases. The first is preparation, the second is formation, and the last is construction.

The nature center should have a strong emotive view from the Highway 96 (Old Route 66).

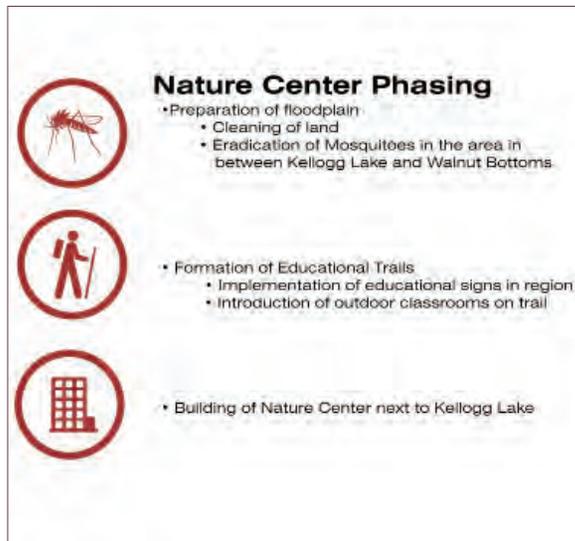


Fig. 1.60



Fig. 1.61

Nature Center Phasing

The nature center would be a great addition to the community of Carthage. The phasing of the nature center is much more than just the building of the nature center itself. Before the nature center can actually be built, the city will need work closely with the county to seek funding from state and federal sources for the acquisition of the floodplain land north of town. In addition, the city would need to determine if the floodplain acreage north of town should be annexed into the city or remain in the county and be cooperatively developed as a nature conservation area.

The beginning phase for the nature center is in the preparation of the floodplain land to the north of town. This would include the mosquito mitigation, clean up, restoration of habitat and initial development of trails. The development of the educational trail should be planned so that the natural environment is minimally harmed and shown off to its best potential. All of the trees in the conservation area should be surveyed to assess their health and variety. As the trails are being developed, outdoor classrooms and educational/informational signs should be developed as well.

Once the signage, trails and classroom areas have been developed in the conservation area and the schools and citizens begin using the new park, development of the nature center building and programs can begin.

The cleaning up the land should be the first priority for the conservation area.



Fig. 1.62



Fig. 1.63

The second phase is the introduction of trails and its supporting spaces like benches, outdoor classrooms, and informational signs.

The final phase is the introduction of the nature center at Kellogg Lake. This photo is of the Shelby Bottoms Nature Center in Nashville, Tennessee.



Fig. 1.64

People interacting with nature on the trail.



Fig. 1.65



Fig. 1.66

Trail head sign

Wet trail features and views.



Fig. 1.67



Fig. 1.68

Education Trails

The education trails are located throughout the conservation area between Kellogg Lake and the Ruby Jack Trailhead. These trails link to and support the functions of the nature center located at Kellogg Lake. These educational trails and their support features should be focused on the creation of individual self-guided and small guided group outdoor educational experiences.

The trails, outdoor classroom(s), signage, and bridges throughout the conservation area should be constructed with similar materials, techniques and craftsmanship to provide continuity and express the values of the conservation movement: respect of nature, sustainability, the seamless unification of man-made objects and nature, and timelessness. In the wetlands and flood prone areas of the conservation area, special care must be given to the protection of both the very sensitive ecosystem and the park infrastructure.

Wet Trails

The wet trails aim to create a different experience along the trail system. These trails run along the river's edge and provide framed views of the river and surrounding woods and a more intimate look at the riparian ecosystem.

Not only should these riparian trails be accessed from the land, we recommend that a water trail system be developed that can only be accessed by canoe or kayak. The water trail system would have the same educational/informational signage as the land trails to explain the objects along and ecology of the riparian corridor.



Fig. 1.69

Dry Trails

The dry land trails are located further from the river to prevent damage during flood events. These trails are more accommodating to the joggers and cyclists. Like with all the trails in the conservation area, it would have benches, interpretive signage, shelters, outdoor classrooms, bike storage locations, and trail head access points.

Informational sign for the Wallisch Environmental Education Trail.

Map of the education trails.

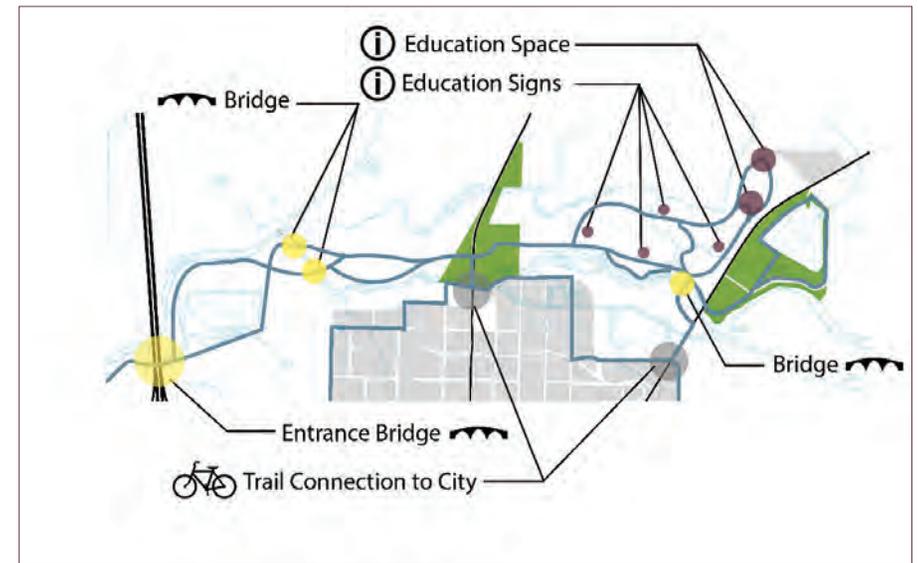


Fig. 1.70

Conservation Signs



These education systems are good ways of promoting the conservation area and its benefits.



Fig. 1.71 Above | Fig. 1.72 Below

The conservation area's trail system supports the nature center programs by serving as its living outdoor classroom. The trails and the nature center combined will provide a very strong and enjoyable means for promoting conservation education and sustainability in Carthage and throughout the region.

Supporting the conservation education program are the numerous interpretive, educational, and informational signs that would be placed throughout the conservation area, especially along the trail system. The signage system must provide accurate, concise and educational information appropriate to individuals of all ages and visual abilities.

The signs should at a minimum provide information about the floodplain and its importance to the city and regional ecosystem, describe how the conservation area was developed and how it is being maintained, and promote the need for additional conservation and sustainability efforts in ones daily life.

Outdoor Classrooms

Within the conservation area, two outdoor classrooms have been proposed. These classroom spaces can be used by the tour guides from the nature center, teachers from the local schools, organized groups, and individuals using the trails. These outdoor classrooms would provide seating, informational/educational displays, shelter from the sun and rain, and places for bike storage.

Informational sign
Augusta, GA.



Fig. 1.73



Fig. 1.74

Signage in St. Paul, MN.

A simple outdoor classroom like this one can serve as a resting space as well as an educational area.



Fig. 1.75

Section of trail shows that it would be elevated above the ground or located next to the drainage.



Fig. 1.76



Fig. 1.77

Existing drainage inside the city next to Carter Park.

Western drainage area in the residential area of Carthage.



Fig. 1.78



Fig. 1.79

Drainage Trails

The term “Drainage Trails” refers to the usage of the city’s drainage easement areas as linear greenway trails. This would allow pedestrian and cyclist trails to be developed along existing city easement areas. For example, extending south from the floodplain are north of the city are two floodplain drainage corridors. Converting those two floodplain drainage corridors into linear park systems would preserve their important function as a natural water drainage area and improve the use of the floodplain corridor by establishing park functions and trails within the drainage system. This would also be a good demonstration of city, park, and conservation collaboration.

These floodplain drainage areas are undevelopable areas of the city that needs to remain natural to absorb and channel water out of town. Any development on this land that has already occurred in these floodplain corridors should be purchased by the city and removed. However, instead of remaining unused and ill-kept, we recommend that park functions and trails be added where possible within these drainage corridors.

Trails placed in these drainage areas could be located over the drainage stream or channelized drainage basin as represented in the drawing and photograph. During flood events, the water could still flow out of its banks and even over the constructed trail. In such cases, the trail is elevated on piers above the uneven terrain and out of a portion of the seasonal floodplain hazard.

We propose that the two drainage corridors that extend south into the city from the floodplain along Spring River have trails developed within them. One of these trails would run north-south along the east side of the city. The other drainage trail is located in the west central residential area of the city’s center.



The drainage trails are multi-functional spaces that conserve space in the community. They utilize space in the city that would normally stay untouched.



Fig. 1.80 Above | Fig. 1.81 Below

Canoeing in Carthage

Canoeing is a relaxing and peaceful way to enjoy and learn about nature. As part of the nature conservation center at Kellogg Lake and as an example of our recommended water trail concept, we propose that canoeing, kayaking and tubing float trips on the Spring River begin at the nature center. Two organized float trips could be promoted:

- One that leaves from Kellogg Lake and travels to the park next to Purcell, MO; a trip of eleven miles by water and approximately 30-minutes by bus from the pickup spot.
- The other trip would leave from Kellogg Lake and take most of the day; it would be twenty miles by water. Its pickup spot would be conveniently located off the highway next to a bridge.

These water trail trips could also have educational and informational signage along the waterway to explain the riparian ecosystem, important landmarks, and history of the area.

Starting these water trail float excursions in the city center of Carthage at Kellogg Lake provides the community with another revenue source during the summer months and the opportunity to further promote the city of Carthage as a regional destination.

Family canoe trips along local streams and rivers strengthen bonds and promotes conservation awareness



Fig. 1.84



Fig. 1.85

Rafts attract larger groups of people



Canoeing can be a good way to get in touch with nature; creating a great opportunity for people to educate themselves of what nature offers.

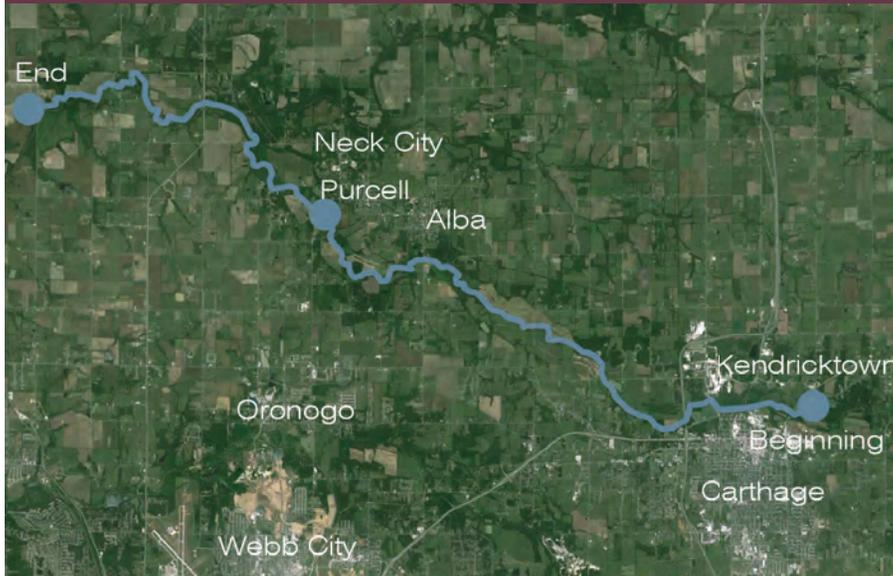


Fig. 1.82 | Fig. 1.83

The use of inner-tubes on the river can be a relaxing change of floating styles.



Fig. 1.86

National Park Service is one source of financial opportunity.



Fig. 1.87



Fig. 1.88

National Geographic is another funding source.

Awards are another way to improve financial opportunities.



Fig. 1.89



Fig. 1.90

Direct Fiscal Opportunities

Two of the ways to find support for the conservation and preservation of the land are by direct stimulation funding and awards programs. There are many places that direct stimulation can take place. The city can gain money for different kinds of projects from different places. For example, Carthage could gain money through efforts like conservation or city growth.

- Direct stimulation includes funding from donors or grants given by the state and national government. The Land and Water Conservation Fund ran by the National Park Service over the years has given \$3.6 billion in federal grant money to the 50 states as well as the district of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa and the Northern Marianas. This number has also been match by state and local contributors for a total of \$7.2 billion in grants money given by the Land and Water Conservation Fund. There are also grants that are given by third parties concerned with the preservation of the natural environment. For example, National Geographic offers what they call the Conservation Trust Grant; they ranges in size from \$15,000 to \$20,000.



Fig. 1.91

The preservation of Missouri is a strong concern in the state.

This graph shows the state's viewpoint on reinvesting in the natural environment.

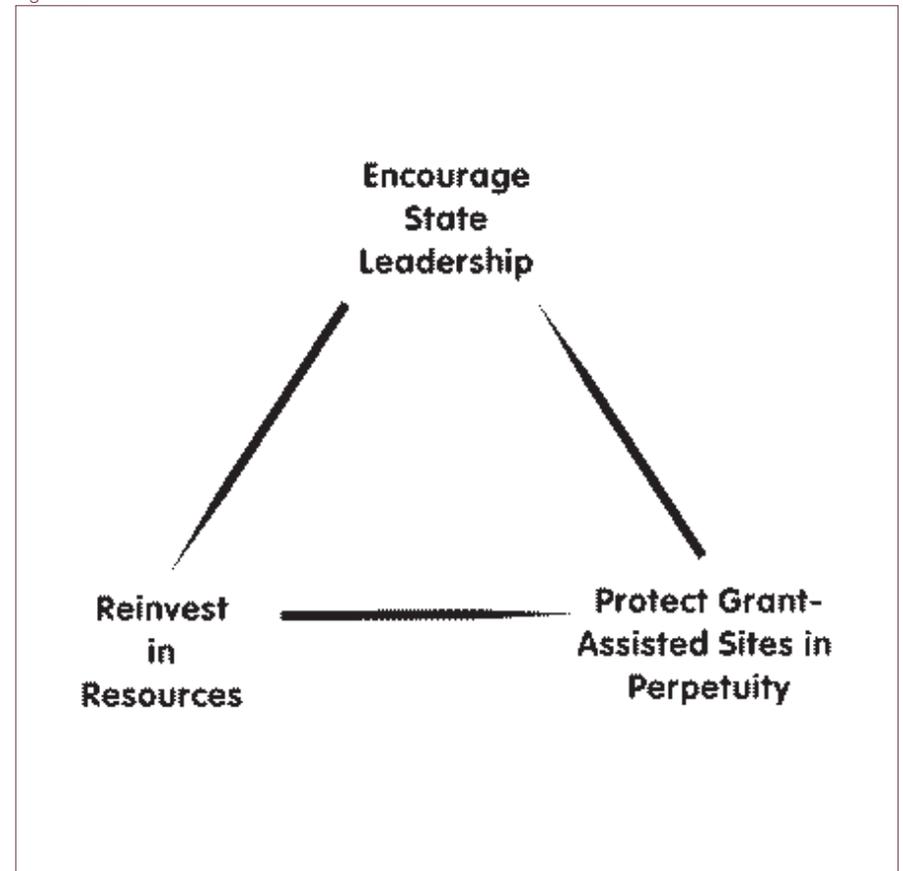


Fig. 1.92



Awards given to cities can greatly increase the image of the city



Fig. 1.93 | Fig. 1.94

Indirect Fiscal Opportunities

Aside from actual money being received by the city, there is an indirect way to influence the growth of the parks and conservation areas. There is a large variety of awards that are offered by many different organizations and governmental organizations.

- Awards for outstanding techniques of conservation of land and the natural environment can help the fiscal opportunities for the community as well. For example, the Statewide Preservations Honor Award given by the state of Missouri can be a strong way to put Carthage on the map within the state. State recognition for green practices can influence the grants that the city could receive as well. There is also The Preserve Missouri Award that recognizes outstanding efforts around the state. Suggested categories include Commercial Revitalization, Institutional/Civic Building Restoration, Neighborhood Revitalization, Residential Rehabilitation, Historic Landscape Preservation, Rural Preservation, and Preservationist-in-Action.

Awards can be given to cities for countless reasons: conservation, economic, and even smart growth.



Fig. 1.95



Fig. 1.96

Awards are even given at a national level to distinguish progressive cities in the United States.

There is a large variety of Green awards that cities can be awarded commending them on the efforts to lower greenhouse gas emissions and other environmentally conscience strides in conservation.



Fig. 1.97

Biking around town is a great way to make the city more accessible.



Fig. 1.98



Fig. 1.99

Carpooling to work can decrease greenhouse gas emissions.

Mass transit makes a city extremely accessible.



Fig. 1.100



Fig. 1.101

Accessibility in Carthage

To promote the physical and social connectivity within the community and to further stimulate economic growth, the city of Carthage should redouble its efforts to establish a totally accessible public realm. This means reassessing the physical, social, and perceptual accessibility of the community connections between schools, parks, churches, retail, entertainment, work, governmental, and residential areas of the city. Currently, Carthage only supports the linkage of these areas of the community through the use of the automobile. Very limited efforts have been made to promote and maintain the connection throughout the community by pedestrians and cyclist.

We recommend that the city follow Smart Growth principles and seek to promote a compact city footprint, more mixed-use work-live-entertainment options, multimodal system of transportation, and integrated greenway trail system throughout the community. The development of the proposed linear greenway trail network within the city would help to promote greater mobility within the community, improve the physical and social connectivity, and by complying with the national standards for barrier-free environments when implementing these trails will assure improved accessibility throughout the entire community.

If the city would implement such a greenway trail network we believe that the dependency upon the use of the automobile within the city will be lessened and, therefore, the susceptibility of personal and economic disruptions within the community, due to fluctuations in fuel prices in the years to come, can be also lessened.

The more community members that we can get out of their car and onto the greenway trails the better the community will be because:

- The less miles driven, the less non-renewable resources used, emissions generated, and environments damaged.
- The more the community uses the trail system, the more the community will embrace the Active Living lifestyle and, as research has shown, the lower the community's overall mental and physical health care costs.

The promotion of alternative forms of transportation will improve how people move around the city.

Below is the Inner and Outer Trails Network working together to create better accessibility throughout the city.



Fig. 1.102

Outer Trails Network

The outer trail network surrounds the city and established connections between the community members who live outside the network and those that live within. At various points along the outer trail network, interior greenway trails connect forming a lace work of trails around and throughout the community.

For example, the outer loop can be seen to be comprised of and link the following activity nodes and destinations around the city of Carthage: Ruby Jack Trail, Municipal Park, conservation area, nature center, Kellogg Lake, Carter Park, the eastern neighborhoods, Carthage High School, Fair Acres Park, and Mercy Hospital. These trail connections are made using trails next to or along roads and bridges, within the floodplain area, and along drainage and electrical easements.

The connection of the outer trail network to the Ruby Jack Trail is important because of the connection that the Ruby Jack Trail provides to the communities to the west of Carthage.

Ruby Jack Trail is a key component of the Outer Trails Network.



Fig. 1.105



Fig. 1.106

Ruby Jack Trail is a 16 mile trail in Carthage.



The network can help promote not only Smart Growth in the city but also Active Living by Design, Social Integration, and provide a strong identity for the city.



Fig. 1.103 | Fig. 1.104

Inner Trails Network

The inner trail network is comprised of a lace work of greenway trails, sidewalks, bike lanes, paths, and streets within the city of Carthage. These multimodal connections form the framework within which the community is stitched together. These connections are particularly important where they link schools, churches, parks, and neighborhoods together.

These trails must be conceived of as linear greenways or parks and be operated and maintained just like any other city park. As expressed previously, this multimodal network of linear greenways and streets should be seen as the city's attempt to promote more accessible, flexible, and healthier options for movement within the city and an effort to promote a healthier, Active Living lifestyle and culture within the community.

The number one factor in promoting Active Living lifestyles in a community is to "plan and design the city" so that it can accommodate such a lifestyle and culture. The city must provide the infrastructure to support the Active Living initiative. That is what the inner trail network is proposed to be; the Active Living infrastructure.

The network connects with the workout trail at Fair Acres Park.



Fig. 1.107



Fig. 1.108

Municipal Park is incorporated into the Outer Trails Network.

Kellogg Lake and Mercy Hospital are connected by the Outer Trails Network.



Fig. 1.109



Fig. 1.110

Outer Trails Network

The Outer Trail Network that surrounds the city functions as a connector into Carthage by citizens who live outside the city limits. This Outer Trails Network also connects to the communities to the west of Carthage through its integration with the Ruby Jack Trail. The Ruby Jack Trail is a 16 mile trail that extends from Carthage to the Kansas State Line, which traverses farmland, woodland, wetland, and numerous small towns along the way. This connection to the Ruby Jack Trail has the positive potential to bring cyclist into the Carthage community and conservation area to the north of town.

The Outer Trails Network's primary function is to connect the surrounding communities to Carthage. These connections are made by linking larger outlying parks and areas that appeal to the community as a whole, instead of focusing on inner city neighborhoods and parks. The Outer Trails Network offers its users an escape from the city environment and immerses them in the pastoral experience of the countryside.

Large Connections

The Outer Trails Network seeks to connect the larger parks and conservation areas in the city together to create a green buffer which defines the city's growth boundary and expresses the city's commitment to becoming a community built upon and practicing environmentally friendly principles. The Outer Trails Network seeks to connect all of the city's major amenities within its network of trails. The connection of the city as a whole to the conservations land to the north is a driving factor in this design proposal.



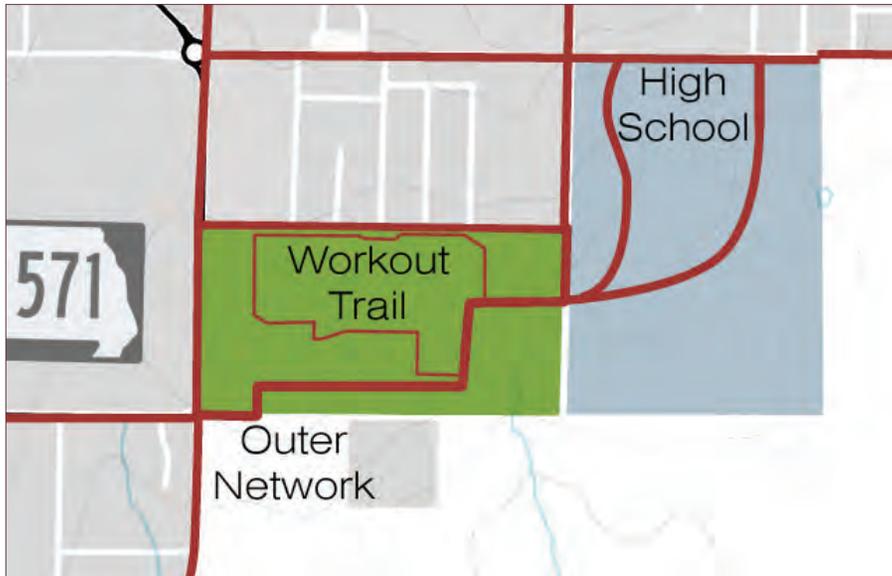
Fig. 1.111

Kellogg Lake is a key connection made by the network. Its connection to the conservation area is extremely important.

The red lining the exterior of the city is the Outer Trails Network that was designed to connect the city.



Fig. 1.112



The Outer Trails Network links many of the amenities within the city to enhance the citizen's accessibility to the resources.



Fig. 1.113 | Fig. 1.114

Large Connections

An important aspect of the Carthage Network System is its linkage to Municipal Park. By linking the combined inner and outer trail system to the park, the many large community events that occur here can be enhanced because the visitor will now have additional multimodal transportation options available to them. This should reduce the traffic and parking congestion caused by the park's location and its lack of safe and convenient pedestrian and cyclist access. Additionally, the integration of Municipal Park into the trail network helps to make its many community assets more readily available to the full population of Carthage. A wonderful asset of this park is its large extent of open park land that can be utilized by the user as they define it from trip to trip and moment to moment. Such open free space provides a great respite location along the trail network.

Another important connection along the Carthage Network System is the linkage at Mercy Hospital. The 80 acres adjacent to the hospital should be developed into a park that can be used by the public and patients and visitors from the hospital. Such a restful, healing environment with water features, gardens, and places for private reflection would become an important destination and rest stop along the trails.

The Carthage Network System should also link directly into Fair Acres Park. The existing exercise trail at the park would be a stopping off point along the trail. Similarly, the adjacent location of the YMCA provides a great trailhead for the Carthage Network System from which members of the YMCA can access the trail network.

The linkage of the Carthage Network System to the Carthage High School improves the accessibility of the school by making it easier for students to walk or bike to school.

A view of Fair Acre Park from the proposed trail network.



Fig. 1.115



Fig. 1.116

The linkage between the pool and the trail network is strong

The trail connection to Kellogg Lake has many benefits, for instance, the outdoor classroom



Fig. 1.117

New York City bike lane.



Fig. 1.118



Fig. 1.119

Walkable side walks are a key component to the Inner Trails Network.

Signage for the network is necessary for the education of the network.



Fig. 1.120



Fig. 1.121

Inner Trail Network

The Inner Trail Network is a physical and psychological intervention in the built environment; its purpose is to change the way people think about the way, and how, they move around the city. The Inner Trail Network consists of sidewalk, bike lanes, rest stops, wayfinding signage, and streets that seek to connect the people to the city at a physically, socially, and economically meaningful and personal level.

Currently in Carthage, vehicular traffic is the dominant form of transportation. The Inner Trail Network seeks to count act this through the addition of and improvements to the sidewalks and the introduction of bike lanes. The bike lanes provide a space for cyclist to safely and conveniently ride in the city with a sense of equability of public street use. The network is laid out so as to connect the churches, workplaces, shopping, governmental, schools, residences, conservation areas, and, most importantly, park system. The connection of these city areas and resources through the Carthage Network System further supports the ideas promoted by the Active Living initiative and Smart Growth principles.



Fig. 1.122

Bike lanes are an integral part of the Inner Trails Network.

The red represents the inner trail network in the city.

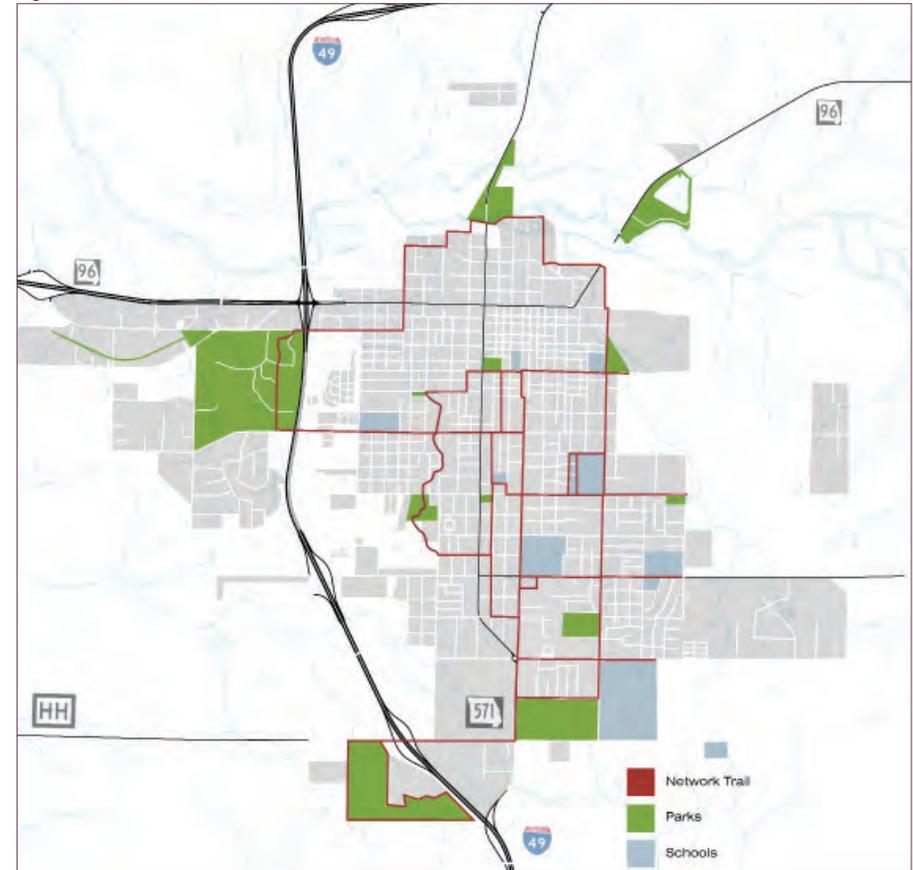


Fig. 1.123



Connections like the one between Carthage High School and Fair Acre Park are ideal.



Fig. 1.124 | Fig. 1.125

Inner City Connections

During the community research phase, connecting the parks within the city was a concern mentioned frequently by the citizen's of Carthage. Therefore, the design team recommends the development of the Carthage Network System, which is composed of the Outer Trails Network and the Inner Trails Network. The resulting Carthage Network System should be envisioned of as a multimodal lace work of trails, paths, lanes and sidewalks that stitch the community.

The Inner Trails Network connects to the Outer Trails Network at specific important nodal points around the city. These connecting nodes are generally located in or near residential areas to encourage the residents to use the full extent of the Carthage Network System. We believe that it is important for the trail network to be conveniently accessible, promoted by the city government and educational institutions, and accommodating to as many people, ages and needs as possible if they are to be successful.

The Inner Trails Network has been designed to connect the schools to the parks. This is very important because we wish to promote greater use of the park system by children and their families. Furthermore, we also believe that the schools would utilize the parks as part of their educational programs if they were more conveniently accessible.

It is our hope that in time, the citizens of Carthage would find this Network of Trails so convenient and safe that they would start using them for everyday excursions around the community. The Inner Trails Network would make it easy for people to commute to work. We believe that through a community wide initiative to promote a more Active Living lifestyle and the future pressures of fuel cost upon household budgets that the community, will in time, use these trails for short trips around town as a common occurrence.

The Griggs Park demonstrates good connections to its surroundings.



Fig. 1.126



Fig. 1.127

Municipal Park needs a better connection to the schools.

Kellogg Lake needs a better connection to the community of Carthage.



Fig. 1.128

On street parking in Rock Island, Illinois.



Fig. 1.129



Fig. 1.130

Parking at Concordia College in Minnesota.

Diagonal on street parking is a very common practice.



Fig. 1.131



Fig. 1.132

Benefits of Street Parking

Studies have shown that on-street parking, if designed, monitored and utilized properly, can be beneficial to cities. In Carthage we recommend integrating on-street parking with the proposed trail network. Such as integration of on-street parking along the streets in mixed-use activity districts would be advantageous for several reasons:

- Integrating the parking along the street minimizes the need for large paved lots spread throughout the district.
- On-street parking spaces in mixed-use activity districts have the highest rate of turnover.
- On-street parking spaces significantly lower the speed of drivers traveling through the area.
- On-street parking spaces act as a buffer between the pedestrian and the vehicular traffic and create a more pleasant experience for the pedestrians.
- The on-street parking, slower traffic, and buffer between pedestrians and motorist create a much safer environment for both the pedestrian and driver.



Fig. 1.133

Parking lots take up valuable space in the city that can be used for the built environment or landscaping.

Parking in Rochester, New York.



Fig. 1.134



Fig. 1.135



Fig. 1.136



Fig. 1.137

Three of the benefits of introducing bike lanes are a stronger local economy, a safer biking environment, and the amount of bikers increase with the introduction of bike lanes.



Fig. 1.138

Benefits of Bike Lanes

Adopting bike lanes is a hot topic in many communities. There are usually some tentative concerns when it comes to implementing bike lanes. People are concerned with the safety of the bikers on streets. Some think that it might be too distracting to driver. However, these concerns could not be further from the truth.

Bike lanes provide a safer environment for cyclists and motorist alike. Research has shown that the implementation of bike lanes in a city can reduce cyclist's injuries by 50%. Also, if the city has protected bike lanes with physical barriers to separate the cyclist from the motorist, the injury rate can drop by 90%. The application of bike lanes also creates a safer environment for drivers as well. When there is a clearly marked bike lane drivers are less likely to overcorrect in how much space to give the biker. This way the driver does not swerve into another lane to give the cyclist the space he/she needs. Overall bike lanes create a safer environment on the road for both the cyclist and motorist alike.

The practice of bike lanes can even help stimulate the local economy. The introduction of bike lanes in cities like New York and Portland has increased business by nearly 50%. The bike lanes also increase the number of people riding bicycles. When there are bike lanes in a city people tend to use them more. Some cities have seen biker increases of 57% on their streets.

The implementation of the inner trail network will greatly increase people moving around the city on bicycles and improve the economy.

Bike lanes in Washington D.C.



Fig. 1.139



Fig. 1.140

Bike lanes in San Francisco.

Bike lanes in Kansas City, Missouri.



Fig. 1.141

Part 2

Active Living

“Active Living is a way of life that integrates physical activity into daily routines. The goal of Active Living is to accumulate at least 30 minutes of activity each day. Individuals may achieve this by walking or bicycling for transportation, exercise or pleasure; playing in the park; working in the yard; taking the stairs; and using recreation facilities.”

- Active Living by Design

Bike networks have been successful in introducing an active lifestyle in cities.



Fig. 2.1



Fig. 2.2

Simple infrastructural improvements make for safer pedestrian ways.

Programs are initiated to educate and encourage people to live actively.



Fig. 2.3



Fig. 2.4

Active Living by Design

Active Living by Design (ALBD) is an initiative to create a healthier community through a number of programs and partnerships. Mostly revolving around exercise and nutrition, these programs are primarily led by the community and look to change the way people go about their daily lives in a more active and healthy way. Through a coalition of different groups and partnerships, a community is able to enact a variety of initiatives that all revolve around facilitating people to live more active lives. This can be accomplished through things like walking, biking or other physical activities.

Along with living actively, ALBD also focuses on nutrition and educating the community, specifically, the children in the community about healthy eating habits. Programs and initiatives range from data collection and community groups to city wide construction projects. Many communities starting an “Active Living initiative” begin with small programs that usually revolve around schools and build up until it is integrated throughout the entire community. It is upon the community itself to institute an Active Living program; it is not a “one size fits all” program. Rather, it is tailored to the community’s needs and resources.

Increase in percentage of children and youth ages 2 to 19 who are obese since the 1970s

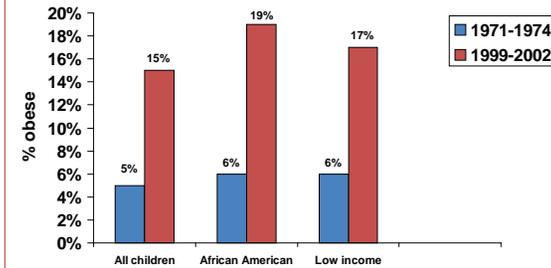


Fig. 2.5

Physical inactivity has led to major health problems amongst the younger generation.

The physical environment, designed for the automobile, has made physical activity inaccessible for many people.



Fig. 2.6



Active Living by Design Communities in the United States

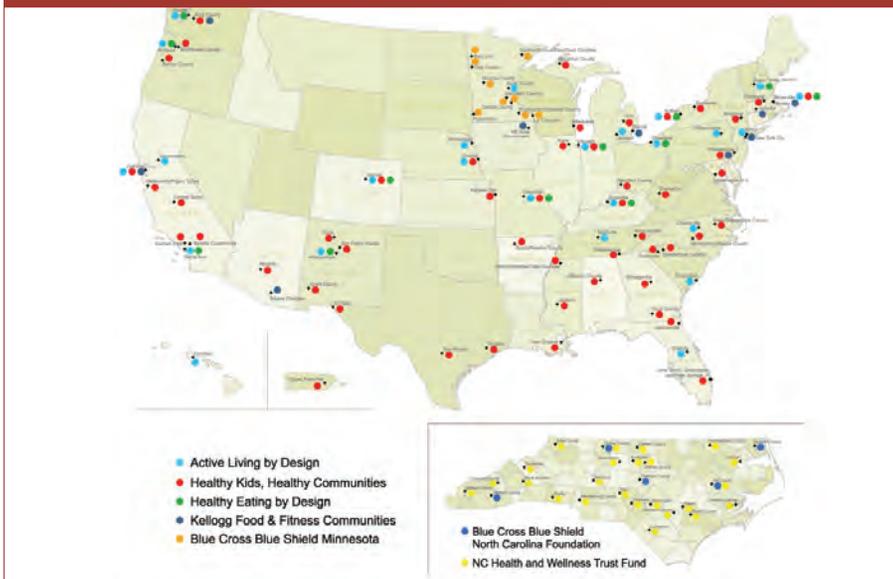


Fig. 2.7 | Fig. 2.8

Why Active Living?

Active Living by Design aims to change how healthy lifestyle is achieved. Because adolescent obesity has spread rapidly in the past years, people have researched the cause. Most of the findings were bad nutrition and inactivity. The environment people live in impacts the amount of physical activity the most. By simply having a safe and accessible infrastructure, the overall physical activity of a community increases. It has been shown that every \$1 spent on Active Living infrastructure saves \$4 in health care costs for a community, which clearly illustrates the impact access to simple physical activity has on a community.

The built environment has not been designed for physical activity, making an active lifestyle difficult or inaccessible to some. Also, as population density increases, so does the amount of vehicles on the road. By providing alternative routes for pedestrians and bikers, the roads will become less congested. Reducing traffic on the roads will also eliminate some of the pollution caused by day to day travel by car.

In order to make Active Living by Design successful, many different aspects of the town, such as the schools, parks and businesses must be accessible by bike or foot. It is also important to look at street development policies. By mandating the implementation of bike lanes and sidewalks, a much safer and approachable environment for pedestrians and bikers would develop. It is important that not only the town be accessible by foot or bike, but that an active lifestyle is inviting.

\$1 spent on Active Living infrastructure saves \$4 in health care costs.

Pedestrian traffic should be safe for everyone in the community.



Fig. 2.9



Fig. 2.10

Crosswalks are a inexpensive way of making traveling by foot safe.

Active Living by Design also focuses on educating kids on healthy nutrition.



Fig. 2.11

Meetings with council members or officials can kick start programs.



Fig. 2.13



Fig. 2.14

Once planning is completed, the funding process can begin.

Existing issues need to be addressed first before developing new projects.



Fig. 2.15



Fig. 2.16

Active Living Grants

Many communities look to outside sources to help fund the projects associated with Active Living by Design. Some programs, such as the Safe Routes to School Program, offer their own sources of grants on the local, private and federal levels. Some projects use Capital Improvement Project funds when undertaking developments related to new roads and sidewalks. Other organizations provide funding, such as the Robert Wood Johnson Foundation, which has generated \$127 Million for healthy community programs. Many communities look to local partnerships for assistance in developing an Active Living city. These partnerships can do more than provide funding, they can supply other resources that facilitate the development of Active Living programs or help sustain them.

Starting Programs

Starting Active Living by Design programs begins with bringing the right people together. These early partnerships can include city officials, local entities such as schools and churches, local business as well as concerned citizens. From there, meetings are held to discuss the problems in the community, such as the condition of park equipment or lack of accessibility by foot or bike around town. From these meetings, different community groups can be formed and research and analysis can be about the problems in order to develop possible solutions. After a plan or program is proposed, the city or coalition can begin to allocate funding to initiate the project. After a program or project is started, it should be seen as a foundation to keep developing and expanding throughout the community.



Fig. 2.17

Many communities create their own Active Living by Design coalitions that work with large foundations.

The Robert Wood Johnson Foundation, as well as local entities, help to create programs and develop projects.



Fig. 2.18

Active Living By Design Community Action Model

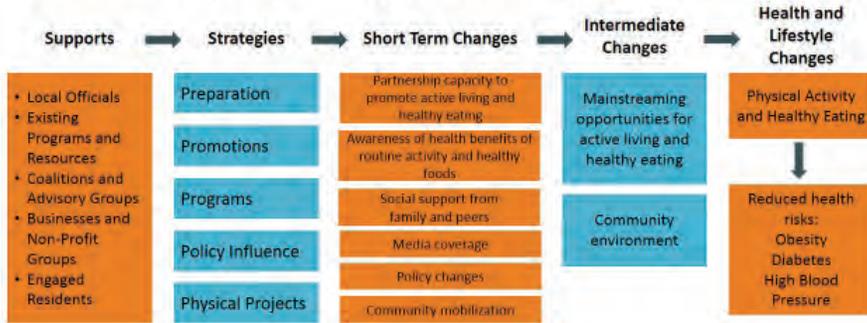


Fig. 2.19

Preparation

Before becoming an Active Living by Design community, there are some crucial planning steps that need to be addressed. In order to create successful programs or projects, different partnerships need to be developed, whether it is the city, park system, schools or churches. The first step may also include researching what projects or programs would benefit the community the most, their feasibility, and the allocation of capital or other resources necessary.

Promotion

Once the community has prepared their ideas on how to become an Active Living community, the program must be promoted and

communicated effectively to gain participation and support. The people in the community need to know how the project relates to them and how it will benefit the city as a whole. Different forms of promotion include community presentations, news releases and meetings to give the community a chance to hear the proposals and provide input.

Programs

Through Active Living by Design, different programs are initiated to encourage and facilitate members of the community to partake in a more active lifestyle. These programs could be as simple as organized walks to school or walking clubs to carefully

planned Active Living events. Other programs, such as bicycle recycling programs that aim to refurbish bikes and give them to people so they may have access to physical activity might be considered. Schools and businesses could start to offer incentive programs to further encourage people to live actively, such as Physical Education credits for those who walk to school.

Policy Influence

Different city policies can have a major impact on the physical activity of a city. Policies can affect how conducive the environment is to Active Living and whether it inhibits or facilitates it. New policies will determine what projects and programs will be initiated and whether or not they are successful. Different policies can also be implemented that do not directly relate to a specific project or program, but still make an active lifestyle more accessible. Policies such as mandatory sidewalk installation on new development projects can set a standard in creating a walkable community.

Physical Projects

Physical projects are strategies to directly impact built environments, removing barriers to physical activity and enhance safety. There is a wide variety of projects that can not only provide activity, but also facilitate an active lifestyle. These projects can include anything from a city scale pedestrian and bike network to providing crosswalks around schools and businesses. The park system will be a major factor in developing park specific activities and helping provide access.

The city council becomes a major decision maker in developing local projects.



Fig. 2.20



Fig. 2.21

The citizens take on the role of supporting and promoting the new programs in order to gain more local support.

After the initial planning stages, program development and capital allocation, physical projects can be implemented.



Fig. 2.22

Columbia had a strong desire to have a safe and walkable city.



Fig. 2.23



Fig. 2.24

Access for all people was an important aspect of the network development.

The PedNet Coalition is Columbia's representation of Active Living by Design.



Fig. 2.25



Fig. 2.26

Columbia, MO

The community of Columbia, MO developed a mission to create a healthy and active community in the presence of increased health and environmental concerns. Columbia wanted to decrease the focus of its vehicular infrastructure, and develop its pedestrian infrastructure, creating a network for walking and biking. By reducing the use of vehicles in Columbia and encouraging alternative forms of transportation, the city's environmental and physical health will see overall improvement. In addition to this pedestrian network, the city integrated its healthy lifestyle throughout the community through different programs and partnerships. They developed a system of advocacy of improved policies and programs in order to reinforce their mission and develop it further.

PedNet Coalition

The PedNet Coalition focuses on Columbia's pedestrian and bike network. They organize events, provide information, as well as develop the master plan of the network.

“The Mission of the PedNet Coalition of Columbia, MO is to encourage active travel such as walking, bicycling, and rolling a wheelchair, and to promote the creation of a safe and attractive network of paths, trails and multi-modal streets that provides health, environmental, quality-of-life, and economic benefits to the community.”

-PedNet Coalition



Fig. 2.27

The network developed from a transportation system to a recreational activity.

The Columbia Network is integrated into the existing infrastructure and expands into newly developed nature trails.

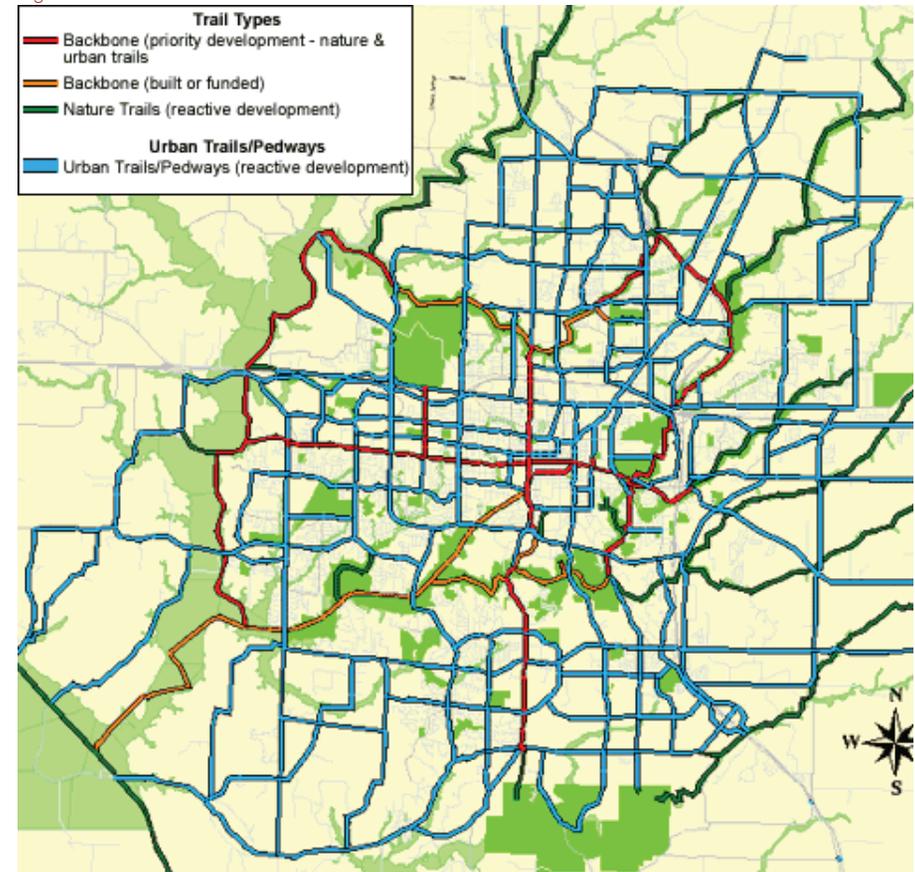


Fig. 2.28



Fig. 2.29

PedNet.org

The PedNet Coalition has its own website, which provides information about the network. It is an example of ALBD's goal to not only provide the infrastructure or amenities for an active lifestyle, but also information of the benefits, different programs to join as well as other information to encourage and facilitate healthy activity. It even provides information of where the local bike shops are in Columbia as well as comprehensive guides on how to properly use the network to get around town.

The website describes other aspects of Active



Fig. 2.30

Living by Design, such as proper nutrition. Advocacy of the programs developed is also described and how people can participate in the development of new policies and programs. It aims to provide encouragement to not only those looking to use the network in Columbia, but also provides supporting information for those wishing to develop their own network.



Fig. 2.30



Fig. 2.31

Advocacy of Active Living

The Columbia, MO pedestrian and bike network describes its success through its advocacy of developing programs. This balance of advocacy and programs helped Columbia secure a \$25 million grant in order to develop their network. They also have distributed hundreds of recycled bikes, hosted many Active Living events, developed new street regulations to facilitate bike and pedestrian access, and several walking to school programs. As programs begin to be implemented, the community is given a chance to see how successful and beneficial Active Living by Design can be. From this, more and more people will support and advocate new projects and programs.

Promotion of Active Living by Design becomes a very crucial part of its implementation. The need for Active Living programs may be over looked because of political, social or economical reasons. Columbia used different means to promote the various programs and projects. With a combination of media advocacy, keeping in contact with elected officials and creating personal awareness among the individuals of the city, they were able to gain support for their causes. If enough people support a cause, there is a better chance for more supporters to join in the future and the long term visions become much more obtainable.

PedNet Coalition provides information and training on proper use of the network.



Fig. 2.32



Fig. 2.33

Special events such as Walk to School day helps educate and encourage people on using the network on a daily basis.

Bike rentals and recycling programs can provide people with the means to try a new form of transportation using the network.



Fig. 2.34

Programs can be initiated in schools to promote healthy eating choices.



Fig. 2.35



Fig. 2.36

Schools become a major supporter of Active Living programs.

Events are a way of gaining a larger support group of new programs.



Fig. 2.37



Fig. 2.38

Programs

An Active Living by Design community maintains many programs that enable, facilitate and encourage the citizens to be more active. These programs can be simply an organized of individuals or a more complex organization of community partnerships with the city's involvement. These programs will grow as the idea of Active Living by Design grows within the city, attracting more people to be more active. The Active Living by Design program provides the following examples of programs:

- Organize walking, running, biking or other clubs to promote social support for physical activity
- Start Safe Routes to School programs to encourage children to bicycle or walk to school
- Target physical activity and fitness programs toward various segments of the community, such as youth, older adults, employees, women, people of color and people with disabilities
- Create bicycle maintenance, safety education and recycle programs
- Encourage more programs to take place at local parks, trails and greenways



Fig. 2.39

The city infrastructure becomes crucial to the success of Active Living programs.

Active Living programs can be sponsored by local organization such as the YMCA.

**WALK-
i N G
CLUB!**

You think group fitness is terrific?
You think Running Club is a blast?
We have a great SUNDAY MORNING plan for **you!**

Good morning, walkers!
Take a one-hour energetic walk,
every Sunday morning at 9:00.
Meet in lobby. Wear sturdy shoes.
Let's explore the west end on foot!

JOIN US!

The West End YMCA
BLUE ZONES group



Fig. 2.40

Walking School Bus

The Walking School Bus was developed in Columbia, MO through the Safe Routes to School program. The idea behind the walking school bus is that a designated chaperon walks to school and meet at designated locations to pick up other students. This group accumulates more students along the way, proving to be a safe and responsible way of getting to school. This program has been successful, with many kids joining the program and new routes being established.

The benefits of the Waking School Bus program are that it provides a safe and fun way for children to walk to school, it provides daily exercise, it prepares the children for school because they arrive energized that has been shown to improve school performance, and it instills habits of healthy living.

With the Carthage Network System, programs like this will be viable without extensive additional development. The Carthage Park and Recreation system should reach out to the schools in the community to encourage Active Living programs and help facilitate them. Incentives to participate in these walking programs, such as physical education credits, can encourage students to be more active.

“Safe Routes to School (SRTS) programs are sustained efforts by parents, schools, community leaders and local, state, and federal governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school.”

-Safe Routes to School

Educating kids about the Safe Routes is a major role of SRTS.



Fig. 2.43



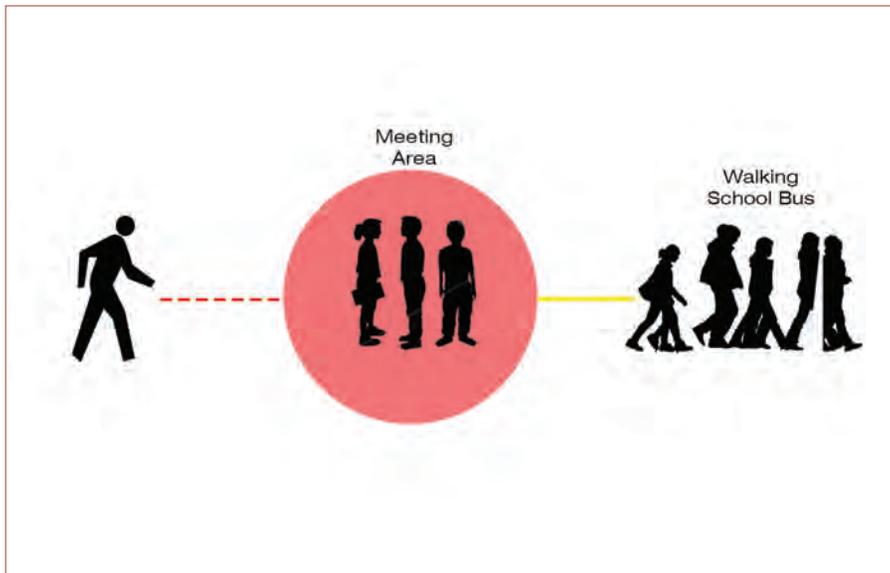
Fig. 2.44

Children are encouraged to participate in special walking and riding events in the hopes of more students participating in the daily programs.

Enforcing the new policies that make routes safe and accessible for students is also a very important aspect of making these programs feasible and sustainable.



Fig. 2.45



Walking to school has proven to have physical, social and educational benefits for young students

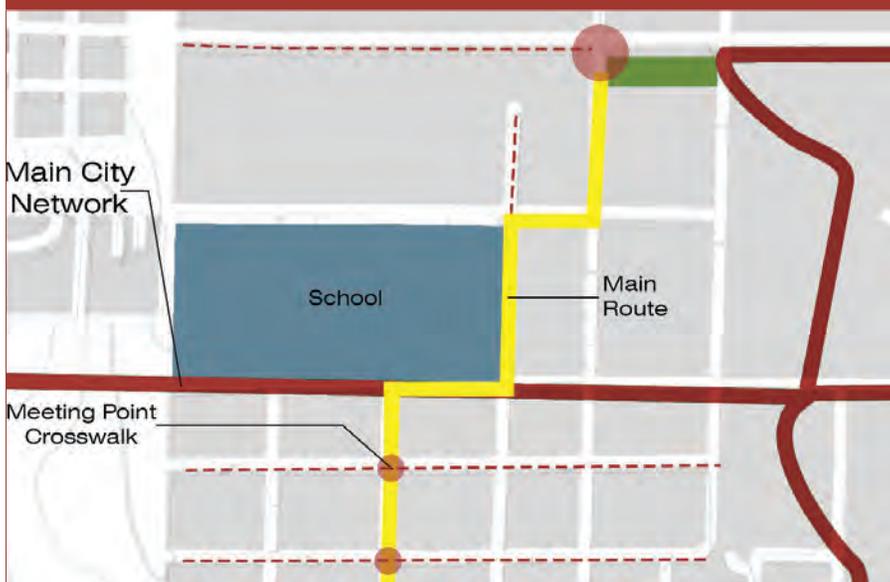


Fig. 2.41 | Fig. 2.42

Bike paths through parks are a safer alternative to riding on the streets.



Fig. 2.46



Fig. 2.47

The bike network will interconnect the schools to encourage student use.

Alleyways serve as a safe, low traffic route for bikers and pedestrians.



Fig. 2.48



Fig. 2.49

Network

Because the car has become the primary mode of transportation, cities have focused more on accommodating the car than on accommodating other modes of transport. The urban environment now is not only designed specifically for the car, but has become hazardous to bikers and pedestrians. Because the only safe and practical means of transportation is the car, many people do not get the recommended daily amount of exercise for a healthy lifestyle. With the development of the Carthage Connect network people would be provided with safe and enjoyable alternatives for moving around Carthage other than by car and, thus, would become more physically active.

Active Living

Having a bike and pedestrian network is a major benefit to the community. Such a network work go a long way to helping to improve the overall physical health of the community. Many of the nation's current health problems could be remedied by mild physical activity. Daily physical activity, such as walking or riding to school or work could reduce the risk of cardiovascular disease, help control weight, improving mood, and lowering stress. By creating the Carthage Connect network, daily exercise would become more widely accessible, whether it is used as a means of getting around town or simply as recreation. It would also serve as a major physical connection to the parks in town, further providing access to physical activities.



Fig. 2.50

Neighborhoods will become a key element in the network's success, as they provide safe access by foot or bike.

The Carthage Connect network will focus on providing access to the parks and schools through bike lanes, sidewalks and paths.

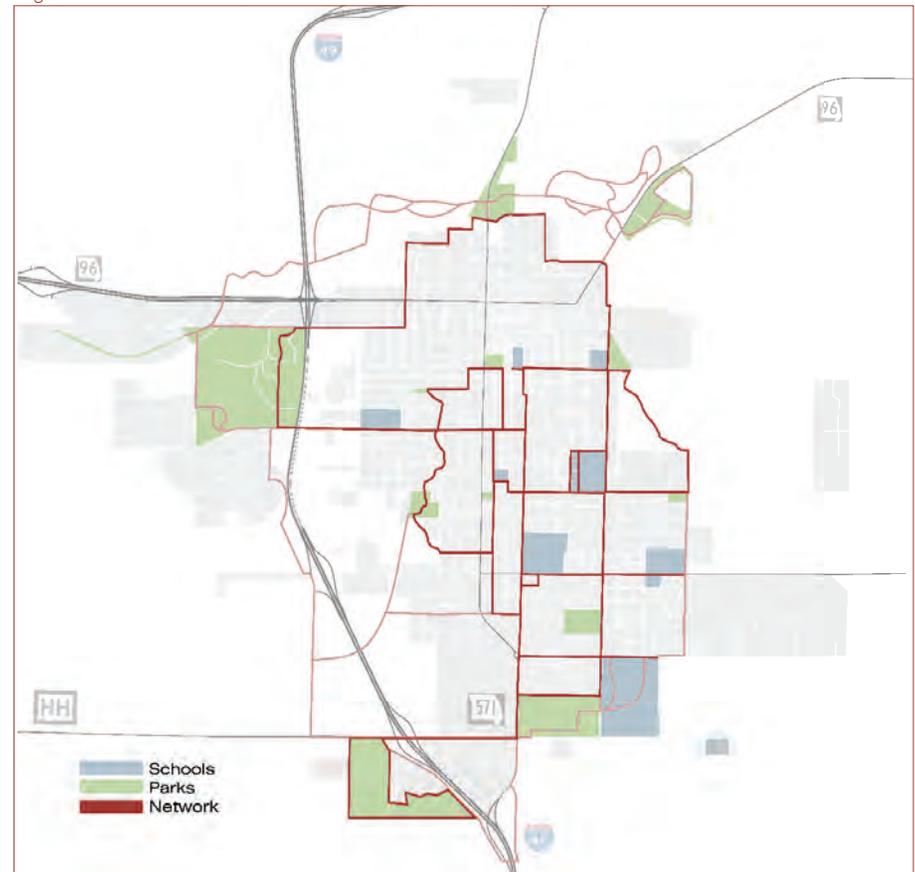
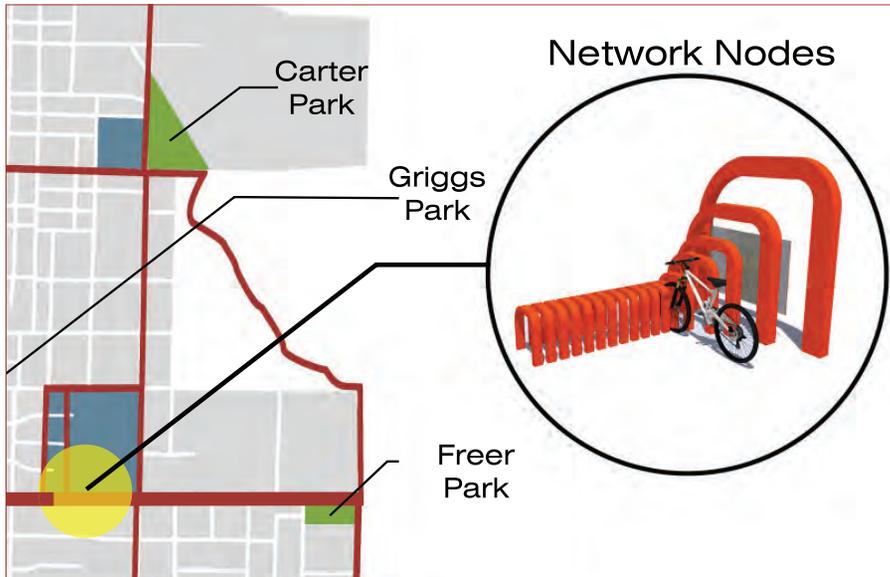


Fig. 2.51



Network nodes placed at important places can act as starting or stopping points for the network



Fig. 2.52 | Fig. 2.53

Network Identity

As the network develops, the park system will need to make accommodations for the additional pedestrians and bikers. This includes new signage, bike racks, and benches. This will not only need to be implemented in the parks themselves, but along this network throughout the town. Since the network is conceived of as an extension of the park system, it should be designed and have an identity that relates it back to the parks. There are many different ways to give the network its own identity, for example through the use of vegetation, artistic expression of the network nodes, wayfinding signage, special colored routes, use of surface materials, or lighting.

Network Nodes

Distinct nodes should be created along the Carthage Connect network at important intersections, key activity zones, rest areas, trailheads, and points of interest. These nodes could be as simple as a bike rack and bench at key locations to full rest stops with facilities. These nodes would connect the different routes of the network, whether they are on-street bike lanes, sidewalks or off-street bike paths and greenway trails. These nodes do not need to be exclusive to the parks, but should be placed near schools, business, shopping, and neighborhoods, as well as the parks.

Bike racks will become essential as the network develops.



Fig. 2.54



Fig. 2.55

Bike racks can become a unique feature in the park system, and can be incorporated into other functions such as a benches or signage.

Nodes can be simple benches or full rest stops with facilities. They can also act as meeting points along the network to create social interaction.



Fig. 2.56

The park system can develop relationships with local organized sports.



Fig. 2.57



Fig. 2.58

Both passive and active purpose amenities offer physical health benefits.

Playgrounds can become sculptural pieces for each park.



Fig. 2.59



Fig. 2.60

Activities

The Carthage Park System is very important for promoting an active lifestyle. A well maintained and well equipped park will encourage Active Living. Park activities should target the user from the surrounding context. If it is a residential or school park, it should focus on more children and family activity. Other residential areas can have new purposes, such as a dog park or community garden.

The park system as it is now does provide a wide range of activities including tennis courts, a golf course, basketball courts, playgrounds as well as a few open green spaces used for other activities. Some of the facilities in these parks, however, are in need of repair or restoration. The park system needs to become more inviting for people to use before new activities and facilities are added. As the park use increase, the accessibility issues of the parks needs to be addressed. By developing the network from the adjacent areas of the parks out into the city, more and more people will have access to park activities.

New Amenities

There are a wide variety of new activities that could be established in the parks that would have benefits beyond just more physical activity. Instead of typical playgrounds, different interactive sculptures can be introduced. New activities can be introduced such as rock climbing walls, and free run parks, Frisbee golf, as well as more park specific activities, such as kayak access at Kellogg Lake.

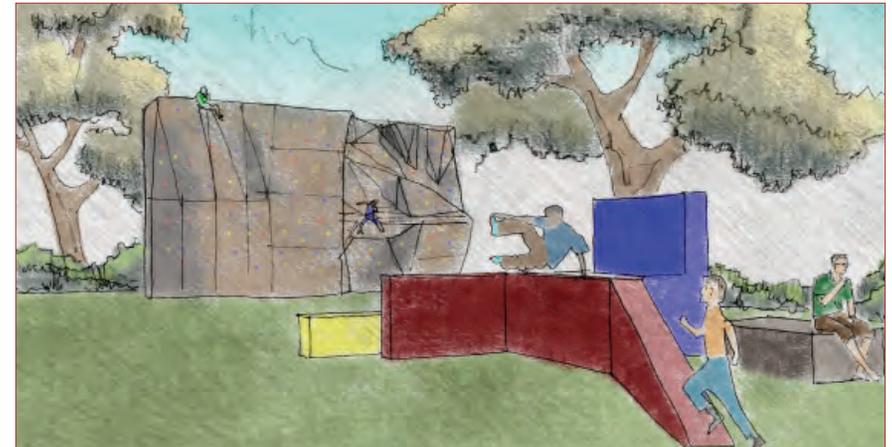


Fig. 2.61

Some sculptural features can become interactive and encourage physical activity.

Free Run Parks

Free running is an activity that involves running, jumping and climbing different obstacle courses. It is a cost effective activity that has become increasingly popular in the past few years. The design opportunities of these obstacles are nearly limitless and can become a unique feature in a park. These features could become sculptural in nature and help to define the identity and character of the park.

Rock Climbing

Rock climbing is another activity that has become popular. There are many different forms of artificial rock structures with different kind of climbing holds. These structures also differ in difficulty so that it is an activity that is accessible to many people. It is another cost effective Active Living activity that could attract more people to the park system .

A pool that is accessible by means other than car would become an essential aspect of Active Living in Carthage. Pools can offer activity that serves a wide range of people. An indoor pool could provide year round physical activity.

Municipal Park could serve as a hub of Active Living with renovations to the existing pool and network connection.



Fig. 2.62



Fig. 2.63

Current Pool Renovation

A major amenity of the current Carthage Park system is the pool in Municipal Park. This pool consists of a historic building which is in need of restoration. The pool in Municipal Park, once connected to the proposed trail network, could serve as a major source of activity. The pool should be modernized and become a point of pride in the park system and the city.

Developing the current pool into an indoor facility will serve as a important feature of the activities provided by the park system. It can later be expanded based on the city's needs to provide additional amenities and activities. The money raised by this aquatic center should go directly back into the park system.

Because of the capital required for such a pool renovation project, it may be years before it can be developed, therefore, the expansion of the YMCA pool may be more feasible for the beginning stages. We recommend that the city and YMCA discuss the development of a community partnership to share the cost of expansion and operation of a new, larger pool facility. The YMCA's location next to Fair Acre's Park and the proposed Outer Trails Network makes this site a good choice for the current and future growth of the city. Because of its proximity to the high school, it can be used by the local swim team. Many communities have had successful partnerships with local YMCAs to provide new facilities and activities to the community. A disadvantage of this partnership is that the city will have limited control over the YMCA's operations and the YMCA does not offer economic benefits to the Park System.

The pool leaks and must be the first thing that is fixed at the pool.



Fig. 2.64



Fig. 2.65

Second, the adjoining pool facilities need renovation.

The pool will need to be properly lit until the renovation of the pool into an indoor facility can be done.



Fig. 2.66

Expansion of the current YMCA facility could encourage more activity.



Fig. 2.67



Fig. 2.68

The current pool at Municipal Park is a historic landmark of Carthage, and should be preserved but renovated to encourage more public use.

In the future, a Carthage Community Center could be a feasible development to act as a center for not only physical activity, but a social and economical center as well.



Fig. 2.69

Blue Springs Community Center

Blue Springs is located nineteen miles east of downtown Kansas City, Missouri. As of the 2012 census, there were 53,014 people, 19,522 households, and 14,468 families residing in the city with a population density of approximately 2,372 inhabitants per square mile. Of those 53,014 people, the racial makeup of the city was 87.6% White, 6.2% African American, 5% Hispanic 0.5% Native American, 1.2% Asian, 0.2% Pacific Islander, 1.3% from other races, and 3.1% from two or more races. The city, with the help of SFS Architecture and Barker Rinker Seacat (BRS) Architecture, were asked to perform a feasibility study for a new community center. They conducted a thorough study of the city by hosting regular meetings with the community, engaging all aspect of the creative process as well as analytical processes, to come to a solution for the city of Blue Springs. The study included everything from how the building should look, to the most used aspects of a community center. The parameters for the community center were primarily derived from the community's input and what they would like to see in the building. The two architecture firms that conducted the study found six main features that are primarily used in community centers and these features can be seen in the smaller photos on these pages. This project was conducted at the beginning of 2013 with the latest revisions and considerations taking place in March. The project has been projected to start construction in 2015.

Carthage can learn a lot from the city of Blue Springs' study. As of 2012 Carthage had a population of 14,095 people, which is much smaller than the population of Blue Springs. However, with the city of Joplin and Webb City so close to Carthage their population influence must be considered. This process of a feasibility study



Fig. 2.70

The Blue Springs Community Center showing that it is a city owned entity.

The budget below lays out everything that should be considered in the price tag of Blue Springs' community center.

Blue Springs Community Center/ Natatorium
PROJECT BUDGET SUMMARY
SFS/ BRS Architecture
Date: September 19, 2012
Revision Date: March 12, 2013

Project Component	Quantity	Unit Cost	Cost
1. FACILITY CONSTRUCTION			\$23,122,896
Building Construction (No Site)	85,118 SF	\$272	\$23,122,000 See BRS Draft Facility Program
2. OFF-SITE CONSTRUCTION			\$0
Asphalt / Decal / Turn lanes	0 LF	\$138	\$0 15ft wide- none anticipated
Public streets through site	0 LF	\$350	\$0 None anticipated
Curb & Gutter replacement	0 LF	\$30	\$0 None anticipated
Traffic signal	0 EA	\$0	\$0 None anticipated
ROW sidewalk, landscape	0 LF	\$93	\$0 15 ft wide @ \$4-5/sf
Upgrade to ROW storm, water, waste	0 LF	\$138	\$0 6-8" water, 8-12" sewer
Street Lighting	0 EA	\$7,266	\$0
Off-site improvements	1 Allow	\$0	\$0 Improvements will be funded through land sale
Off-site signage	1 Allow	\$0	\$0 Gateway signage
Earthwork / Retaining Wall	0 LF	\$70	\$0 None anticipated
3. SITE CONSTRUCTION (8 acre site)			\$1,979,742
Wetlands Mitigation	1 LB	\$0	\$0
Demolition	28,999 SF	\$6	\$0
Overlot Grading & Prep	9,660 CY	\$5	\$50,153 Ave cutfill of 3-4ft outside bigg
Parking Lot & Internal Drives	323 cars	\$2,246	\$726,462 asphalt paving, curb & gutter
Access Drive	200 SF	\$8	\$1,600 24 ft w/ curb
Fire Lane	13,275 SF	\$4	\$53,100
Entry plazas and patios	10,861 SF	\$8	\$70,339 scored grey concrete
Sidewalks	400 LF	\$21	\$8,200 3ft wide
Water & Sewer extensions to Building	400 LF	\$57	\$22,797 total length & cost for both
Fire Loop & 4 hydrants	1,400 LF	\$71	\$99,735
Storm Collection, Drainage, Storage	1 LS	\$38,000	\$38,000 Piping, pond, structures
Parking & Pedestrian Lighting	14 EA	\$5,649	\$79,081 std cut-off parking, plaza bollards
Site Signage & Furniture	1 LS	\$85,876	\$85,876 Allowance
Landscaping & Irrigation	301,150 SF	\$2	\$602,310 \$2 00/sf ave
Park & Active Recreation Improvements	0 Allow	\$50,000	\$0 Misc. improvements on site
Pool Backwash structures	0 Allow	\$50,000	\$0 Allowance
Misc. Site Costs	1 LB	\$100,000	\$100,000 Allowance
4. OTHER PROJECT DEVELOPMENT COSTS			\$5,282,576
Land Purchase			\$0 None anticipated
Public Art Allocation			\$0 None anticipated
Sustainable Options			\$0 in building construction budget
Professional Fees			\$2,721,113 9.0% of Bldg, Off-Site, Site, Conting
FFE - Furniture, Fixtures & Equipment			Allowance for furniture, rec equip, misc
Exercise Equipment	5,500 SF	\$60	\$327,701 Allowance per s.f. of fitness
Kitchen Equipment	1,000 SF	\$200	\$200,000 Allowance per s.f. of kitchen
General FF&E	85,118 SF	\$8	\$661,502 Allowance per s.f. of building area
Computer Equipment	85,118 SF	\$12	\$992,253 Allowance per s.f. of building area
Other Special Equipment	1 Allow	\$50,000	\$50,000 Allowance
Plant Investment / Tap Fees			\$100,000 Allowance for water, sewer, other util. fees
Construction testing & Survey			\$100,000 Soils & Materials testing, land survey
Reimbursable Expenses			\$100,000 Document printing, deliveries, travel
Plan Review Fees			\$30,000
Sales Tax		0%	\$0 Assume none
5. SUB-TOTAL ALL PROJECT COSTS			\$30,384,312
6. CONTINGENCY (10% Owner + 5% Design)		15%	\$4,557,647
7. GRAND-TOTAL ALL PROJECT COSTS			\$34,941,959
B. Unit Cost (\$/SF) incl items 1.2.3.6			\$348
B. Unit Cost (\$/SF) incl items 1.6			\$326

Cost Items Not Included:
Import / Haulaway of of structural fill, Owner's Representative, Legal fees, Land acquisition, Sales tax

Fig. 2.71

The proposal for the Blue Springs Center included a large aquatic center that includes an entire water park with several amenities that serve all group ages as well as lap pool for organized events and leisure.

An opportunity of an outdoor classroom at the center can help promote the education of Active Living in the community.



Fig. 2.72



Fig. 2.73

would be very beneficial to the city of Carthage and would help determine the economic, social, and physical impacts that a community center would place on the community.

To the right, one can see the possible costs of a community center. This sheet lays out the specific costs of the feasibility study that was done in the city of Blue Springs, Mo. This number is based not only on factual information like material costs. It is also based on national averages for community centers across the nation. As Carthage moves forward they should consider all aspects of this study as it applies to the city. The main points that should be taken from this precedent study, are how the community can get involved with the process of the building of a community center, how the education of the community center can play into the city context, and how the social, economic, and physical elements can impact a building like this and the community.

Expansion of the current YMCA facility could encourage more activity.



Fig. 2.74



Fig. 2.75

The current pool at Municipal Park is a historic landmark of Carthage, and should be preserved and renovated to encourage more public use.

In the future, a Carthage Community Center could be a feasible development to act as a center for not only physical activity, but a social and economical center as well.



Fig. 2.76

The Gladstone Community Center in Gladstone, Missouri.



Fig. 2.77



Fig. 2.78

The Roy Blunt Community Center in Bolivar, Missouri.

The Republic and Ozark, Missouri Community Centers.



Fig. 2.79



Fig. 2.80

Community Center

The development of a community center in Carthage provides needed amenities, serving as another educational center for Active Living, conservation, and sustainability, and becoming a social destination within the parks system. This center could house such activities as classrooms, health and fitness activities, the Boy and Girl Scouts meeting facilities, organized sports groups headquarters, outdoor game courts, and the city pool.

We recommend that the site of the community center be in Municipal Park adjacent to the existing city pool. We further recommend that the community center seek to incorporate the existing pool and the surrounding historic structures into its design. If feasible, we recommend the restoration of the existing historic pool and the consideration of its enclosure for year-round utilization.

The integration of the historic park structures into this community building provides a strong reference to Carthage's commitment to the preservation of its heritage, conservation of its resources, and desire to unify the city's past with its present situations as it envisions its future. In doing this, the community center will become a symbol of Carthage's values.

This location within Municipal Park also places the community center at a major point of the Network Trail System; a junction between the Outer Trails Network and Inner Trails Network. This will provide the community center with multimodal access so that individuals of all ages can easily access it without being dependent upon the car.

To help defray the construction and operational costs of the center, users from outside the city limits should charge a fee to use the facilities. We would also recommend that a small rental fee be charged for the use of the classroom/meeting rooms.



Fig. 2.81

The entrance to the community center should be an experience that leaves an impact on its users.

We recommend that the community center be located in Municipal Park in the northwest of Carthage.

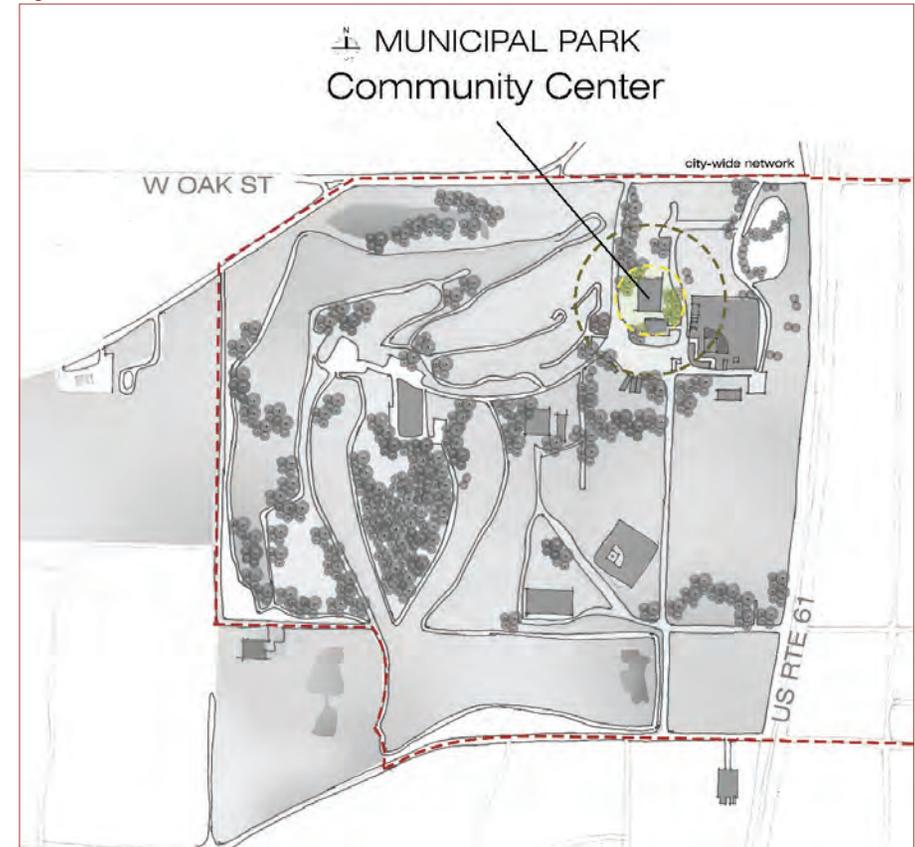


Fig. 2.82

The community center should be divided into three different phases to ensure its success. These three phases also coincide with the phasing of the entire vision.

The Restoration and expansion of the Carthage pool house can preserve part of Carthage's history as well as set the standard of its future development.



Fig. 2.83



Fig. 2.84

Community Center Phasing

The development of the community center will need to evolve over time and only after thorough and careful assessment of the project by the city. The scale and cost of this undertaking suggests that it occur at a later time in the visions development after other community needs are met.

In the interim we recommend that the city consider holding discussions with the YMCA about the development of additional facilities and services that could be collaboratively undertaken. See page 63, Current Pool Renovation for more details of the YMCA partnership concept.

If the feasibility study of the existing city pool indicates that it is practicable to save and restore, then the second phase of the development would be to renovate and expand the existing pool and pool support structures in Municipal Park. Development of some community center activity spaces in the adjacent historic structures should be considered at this time as well.

The final stage of the community center development would be the construction of the new portions of the center.

Expansion of the current YMCA facility could encourage more activity.



Fig. 2.85



Fig. 2.86

The current pool at Municipal Park is a historic landmark of Carthage, and should be preserved and renovated to encourage more public use.

In the future, a Carthage Community Center could be a feasible development to act as a center for not only physical activity, but a social and economical center as well.



Fig. 2.87

Part 3

Social Integration

“Diversity is not about how we differ. Diversity is about embracing one another’s uniqueness.”

- Ola Joseph

The importance of the integration of the human and natural world.



Fig. 3.1



Fig. 3.2

Education of diversity is crucial in the upbringing of children.

The appreciation of diversity in communities.



Fig. 3.3



Fig. 3.4

What is Social Integration?

Carthage is a city of great ethnic diversity. This community asset helps with the development of the city and is seen as one of the greatest points of potential growth in Carthage. The integration of the ethnic communities in Carthage needs to be broadened and enhance its potential. Social integration aims to create a diverse community where each ethnic group contributes equally to the city's physical and cultural growth.

To understand this integration, one must understand what social integration truly means. Social integration involves the dynamic process of unifying social groups to promote a stronger community. Social Integration seeks to define an individual's strengths by embracing and fostering the community's qualities of stability and complexity and welcoming all individuals to participate in the community dialogue through peaceful social relations.

Social integration creates a community that values inclusion, coexistence, collaboration and cohesion. The community's beliefs and values make up its collective consciousness and its citizens' behavior and identity in the world. This collective consciousness brings people together and facilitates social integration.

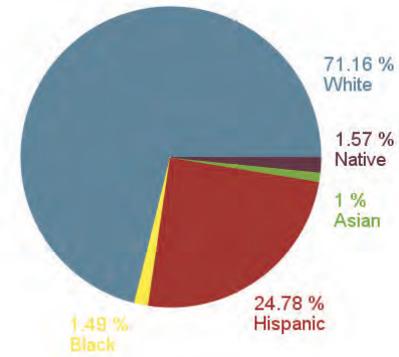


Fig. 3.5

By encouraging diversity in a community, you encourage the exchange of ideas.

The number of Latinos in Carthage, is estimated to be 25%, making them the largest minority group in the city.

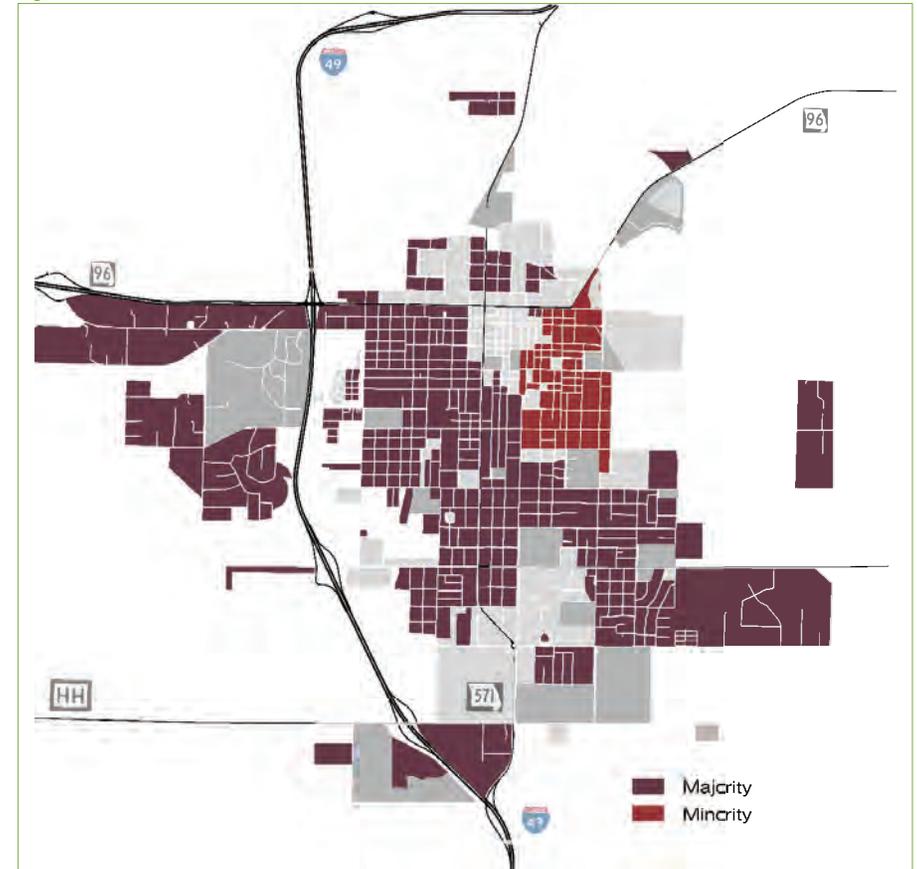


Fig. 3.6



Social integration can be seen as a dynamic and principled process where all members participate in the dialogue to achieve and create social relations.



Modern cities are built around the idea of combining individual differences, where the community acts as a system that unites all parts of the community to become a cohesive entity. It starts focusing on social support, discouraging self-interest, and creating a dependency of other individuals and the community. It begins to bind individuals into wider social relationships and offers them a sense of belonging and meaning while providing structure and social status.

Carthage should strive to use its parks and recreation system and other civic institution as a mechanism for social integration and change. The design of the parks and the organization of the recreation programs should explore strategies that seek to promote more deliberate opportunities for encouraging interaction among community members. These place and events for more communal interaction and civic unity might be foster through the physical design of the parks that promotes social interaction, the partnering of the city with churches, non-profit organizations and private sponsors, or encouraging the development of mixed-use retail next to parks and recreation facilities.

Diversity comes together to create a stronger community.



Fig. 3.9



Fig. 3.10

Carthage has a lot of potential in the integration of different races. These benefit from the idea of integration greatly.

Using the city parks as a space of mediation, while providing activities, to encourage and support the idea of social integration between the diverse groups in Carthage.



Fig. 3.11

Families should support and encourage diversification.



Fig. 3.12



Fig. 3.13

Activities become a way to bring people closer together.

Social integration promotes the idea of a holistic environment.



Fig. 3.14



Fig. 3.15

Why Social Integration?

The importance of social integration is simple. The Carthage community is made up of a variety of individuals that have a personal identity and diverse background. Carthage's diverse citizens increase its ability to utilize the characteristics of each individual and create a stronger more unified community.

Communities' ability to be accepting of everyone shows the potential of creating a diverse community that becomes a framework of support. This allows individuals of Carthage to familiarize themselves with each other and create an environment where the potential of each individual is utilized to spark a communal movement that unifies the community. This creates a holistic community which focuses on bettering and improving the city.

The parks start acting as a network that creates spaces which encourage the development of social behaviors by harboring activities that promote discussion and integration between social groups and individuals. This allows the parks to become key integration points throughout the city.

The most important part of social integration is the effect that it has on the individual and the community.

Individual Benefits

Research shows that social integration benefits two main aspects of the community, the individual and the community as a whole. Individual integration can create a sense of self-development, where meeting and learning about other people and cultures helps create a greater sense of personal development.



Fig. 3.16

Research shows that social integration benefits the individuals of the city, as well as the community.

One of Carthage's biggest assets is its many exciting parks. Integration should start at the park level first.



Fig. 3.17



Fig. 3.18



Fig. 3.21



Fig. 3.19

Social integration focuses less on the diverse background of the individuals and more on the well-being of the community. It makes the improvement of the community the number one mutual priority. This only strengthens the idea of social integration and how it can benefit the community as a whole.

Another individual benefit is social structure. Social integration starts defining a social structure in an individual's life. Also by meeting each other, people develop social skills. Dealing with new things and meeting new people creates not only the development of relationships but also opportunities for the future.

Communal Benefits

Although individual social integration is beneficial, social integration on the city-wide level is the key. Making connections and relationships only increases the chance of partnerships to be created between businesses and people, which in the long run could potentially create more revenue for each business and the city. Another benefit is the idea of creating a safe and secure community. By meeting new people, relationships are made where people start caring for and supporting each other.

Social integration as a whole creates a great communal strength, but also starts acting as a base for exchanging of ideas. People from all backgrounds can come together and join forces to solve a problem in the community. This creates a great sense of diversification, which leads to encouraging volunteering where everyone comes together to better the city.

Carthage needs to improve the community's connectivity and park system, which starts at the individual level and works outward to the community.

Social integration can start benefiting the individual at a young age.



Fig. 3.22



Fig. 3.23

Social integration also becomes important to encouraging physical activities in children. It focuses on the idea of the encouragement in groups.

Integration does not only focus on the idea of the encouragement of interaction between races, it also focuses on the idea of encouraging interaction between the age groups in Carthage.

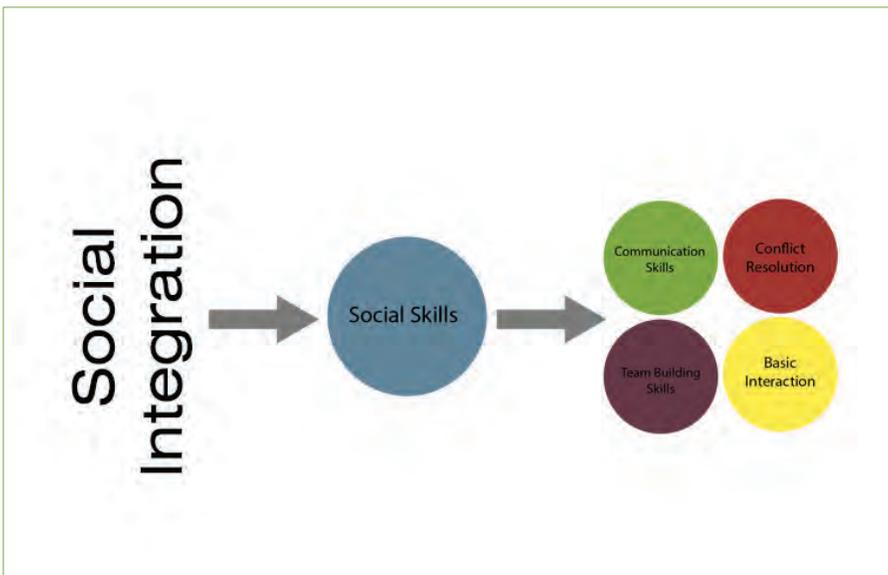


Fig. 3.20



Fig. 3.24

Children become essential when considering the benefits of integration.



Fig. 3.25



Fig. 3.26

Park amenities start to act as integration points in the city.

Interaction between races creates an overall better environment.



Fig. 3.27



Fig. 3.28

How to Socially Integrate?

After understanding the definition of social integration, and the reasoning behind why cities should educate people and encourage social integration, a question must be asked about how social integration can be implemented at a city scale.

The first step is analyzing the existing qualities and assets of the city. The city of Carthage has the means, support and diversity to implement the idea behind social integration. No one knows the needs and wants of the community more than the community member themselves. The second step is to define activities and programs that promote integration that is derived from the understanding of the city and its character. Doing this leads to creating a socially integrated atmosphere that is specialized for Carthage and its community.

We have proposed a strategy to promote social integration through a variety of programs.

- One is the promotion of volunteerism, which brings people together to physically give time and effort to the city as a group.
- Another approach is the idea of social programming, which creates activities in the parks that encourage social integration to fulfill physical, social and economic needs. Social programming responds to the contextual needs of the area in which the parks reside, which considers the people that use the park most often get a personalized experience on a daily basis.
- Another big part of encouraging social integration is creating partnerships between parks and organizations in the city, such as churches and schools who could adopt the park or have activities that are housed in these parks. New parks could also be created to harbor these groups.



Fig. 3.29

Activities that promote the education of children helps with the integration between age groups and different ethnicities.

Depending on the kind of activities, social integration can be more successful in some areas.



Fig. 3.30



“The best way to find yourself is to lose yourself in the service of others.” - Gandhi



Fig. 3.31 | Fig. 3.32

What is Volunteering?

Volunteering is generally considered to be an altruistic activity that promotes and improves quality of life. In return this activity aims to produce self-worth and respect, while providing a service to an organization or area without a personal gain in return. Volunteering is also renowned for the development of skills, fun and socialization which helps involve the community as a whole.

Volunteering is defined as any activity that involves spending unpaid time doing something that aims to benefit the environment or individuals and groups. It is something that an individual chooses to do freely. Creating new programs for volunteerism is important to the successful growth of Carthage.

Educating individuals about volunteering that promotes the growth and well being of their city should start at a young age. Creating programs that encourage volunteering will help the citizens of Carthage have a sense of ownership and belonging to each aspect of their city.

Volunteering increases integration between different social groups.



Fig. 3.33



Fig. 3.34

Volunteering groups come together with the mutual interest of bettering their city, which encourages, and is encouraged by, integration.

Planting the seed of volunteering now, directly helps the city's future.



Fig. 3.35



Fig. 3.42



Fig. 3.45



Fig. 3.43

Volunteers become a great resource and commodity in Carthage. Volunteering helps save money, which can then be used to improve and increase other facilities in the city. This becomes a cycle of saving resources and improving the city's current and future state.



Fig. 3.44

Volunteering is proven to help the individual and community, especially in smaller city settings. That being said, volunteering should be encouraged as part of the social integration movement in Carthage because it directly brings people together and creates a stronger community.

A strong community needs the support and input of the individuals. Volunteerism in Carthage will create a motivated, healthier and resourceful community. The input of the individual creates the sense of belonging and civic responsibility. The starting point of volunteering within Carthage should be within the educational environment. This will introduce the importance of volunteering and its impact on the community.

The parks should start to act as spaces where volunteering can easily be managed and promoted. Cleaning up and revitalizing the park system creates a more livable and appreciated environment for all. When citizens of Carthage volunteer their time and efforts to help their parks, the money that the city saves can be invested in more improvements.

This can create a cycle, bolstering social integration within the community as well as providing better amenities for citizens.

Cleaning up parks becomes a part of improving the parks.



Fig. 3.46



Fig. 3.47

The parks need volunteers to help improve their state. This makes everyone feel responsible for the parks and keep them constantly cleaning.

Volunteering can bring the individuals of the city closer and create a pattern of interdependence that works to make the city of Carthage stronger.



Fig. 3.48

Designating areas for physical activity increases integration.



Fig. 3.49



Fig. 3.50

Playing or watching sports starts acting as a social activity.

Physical activity encourages groups to integrate.



Fig. 3.51



Fig. 3.52

Social Programming

Social programming is a response to social integration. It uses the parks as a setting to create activities that encourage interaction between individuals. Activities that attract people to the parks become social settings for a range of people. Some of the activities that may promote social integration vary from the appreciation of art to the viewing of team sports. Effort should be put forth to discover which activities create the most integration between the individuals while using the parks as a mediating space. The ability to give parks the opportunity to be more accessible in more than one way increases the social integration potential. This means that parks and trails become a significant element in the promotion of social integration.

Activities that we consider to manifest social programming focus on the sparking conversation. An example of this is sports. Sport fields are initially programmed to provide spaces for athletics, but they also indirectly become spaces that bring people together to watch and converse about the sports occurring. Another type of social programming includes the introduction of picnic areas. These areas act as a different kind of social space, which could be a family oriented or multi-family oriented. Each of these examples provides spaces for social integration.



Fig. 3.53

Children are encouraged to socially integrate in group activities.

Programming to increase socialization is guaranteed to increase the integration of all ages.

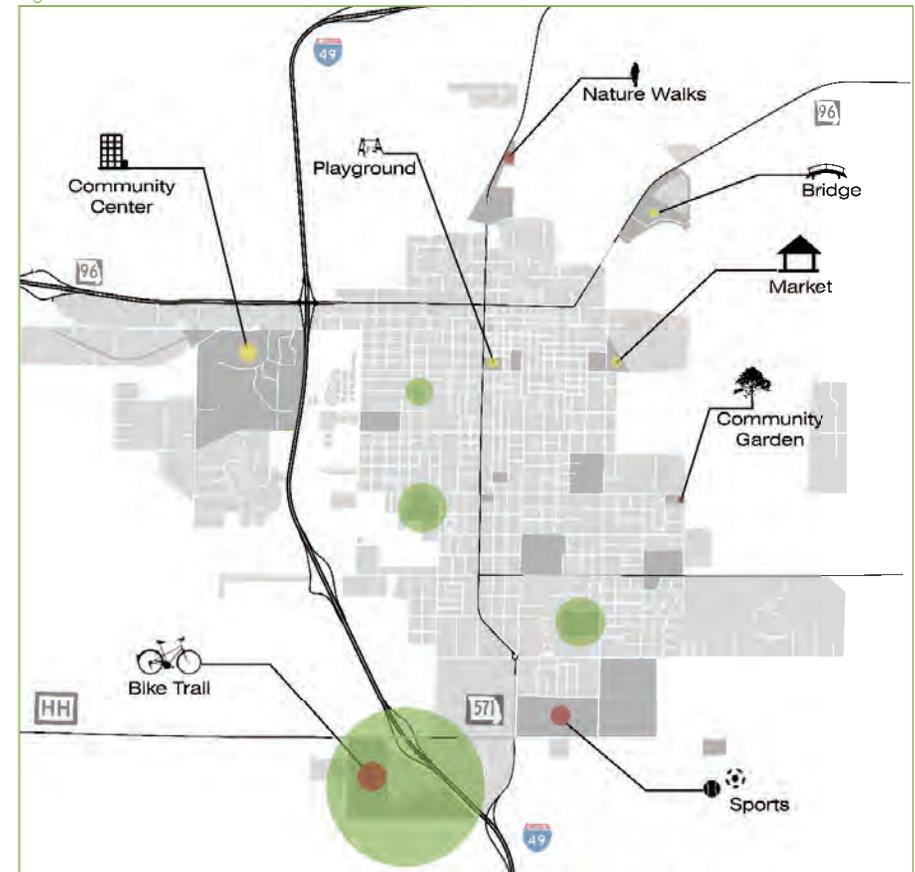


Fig. 3.54



The importance of contextual response, is as important as knowing who uses the parks.



Fig. 3.55 | Fig. 3.56

Social programs also focus on the idea of creating spaces that allow individuals to come together and share their interests. Examples of these would be community gardens, farmers markets and dog parks. Community gardens provide spaces for volunteering as well as are used to create a social interaction, which helps beautify the city.

Farmer markets create this relationship between business owners and customers while providing space for the community to buy healthier food options.

Dog parks act as spaces where pet owners can come together and meet new people and integrate with individuals that have the same interest.

Contextual Response

Relating the activities of each park to its surroundings is important to making sure each park serves the social groups more directly affected by its presence. Responding to the people and businesses can help create a sense of ownership for people neighboring the park. Relating each park to its context can help neighborhoods use parks as socialization and integration spaces.

The activities and amenities provided in parks create an identity which should be recognized by the residents around it and recognized by others that the park holds characteristics of its context.

Volunteering increases the integration between different social groups.



Fig. 3.57



Fig. 3.58

Volunteering groups come together with the mutual interest of bettering their city, which encourages integration.

Planting the seed of the importance of volunteering now, directly helps with the direction of the future.



Fig. 3.59

The parks start being used as outdoor activity spaces.



Fig. 3.60



Fig. 3.61

Partnerships act as the spark of encouragement.

Bonding activities can make a community closer.



Fig. 3.62



Fig. 3.63

Partnerships

An efficient ways of promoting social integration is through the community partnerships that Carthage’s park system can facilitate. Linkages between the park’s system and the community churches, schools, businesses, social organizations, garden clubs, and other special interest groups could be beneficial for the park system and the individuals in these partnerships.

Many city park systems have come to realize the importance of establishing partnerships with community groups. By doing so, the citizens who get involved develop a commitment to the parks; an ownership of their contributions. Whether it is through donations, volunteerism, or participation in events, these park partners help to strengthen the parks, the community’s commitment to “their” parks, and tend to socially identify with the other park partners. In the end, it is the intent of these various park/community partnerships to increase the community member’s sense of responsibility and obligation to not only help the parks, but the city of Carthage as a whole.

Church Partnership

The churches of Carthage are important support institutions for the promotion of social integration within the community. Through the shared beliefs of the congregations, to the gathering spaces that the churches have and share, to the many civic programs that they undertake the churches of Carthage serve a crucial role in integrating people into the community.

Furthermore, many of the congregations in Carthage have created smaller green spaces or gardens at their churches that we recommend could be considered neighborhood parks. By working in partnership with the many churches in Carthage, we believe the Parks Department



Fig. 3.64

Partnerships become another outlet of resources, that can help the parks reach their potential.

The schools and churches in Carthage, are located in proximity to the parks of Carthage.

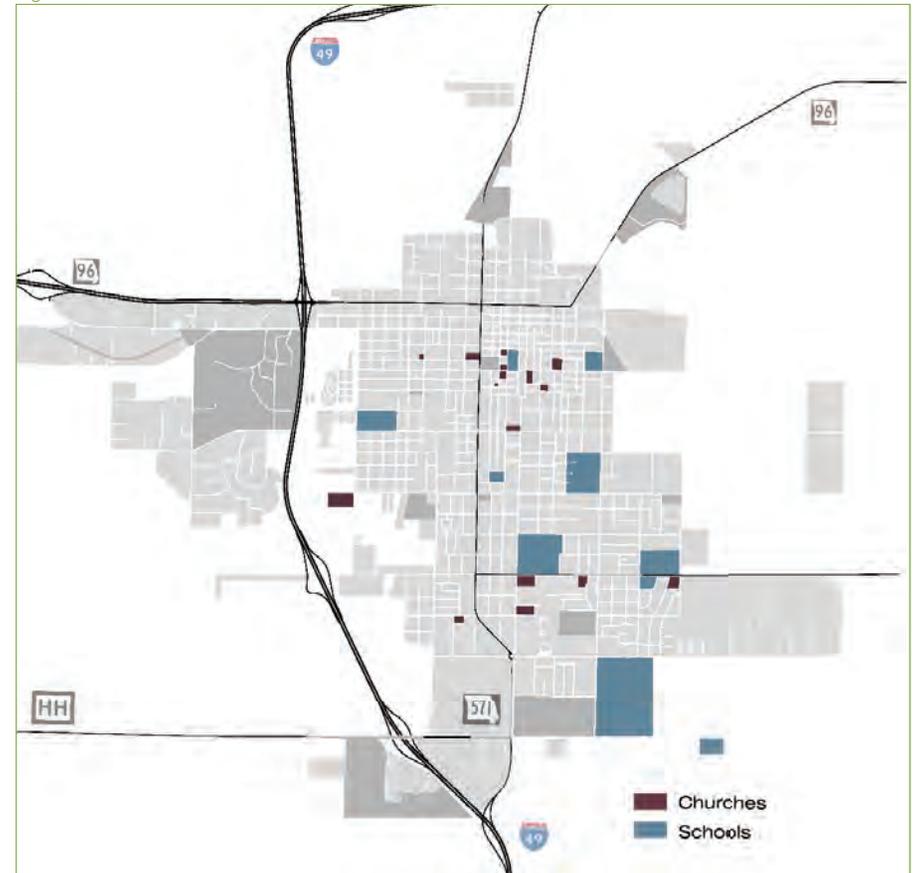


Fig. 3.65

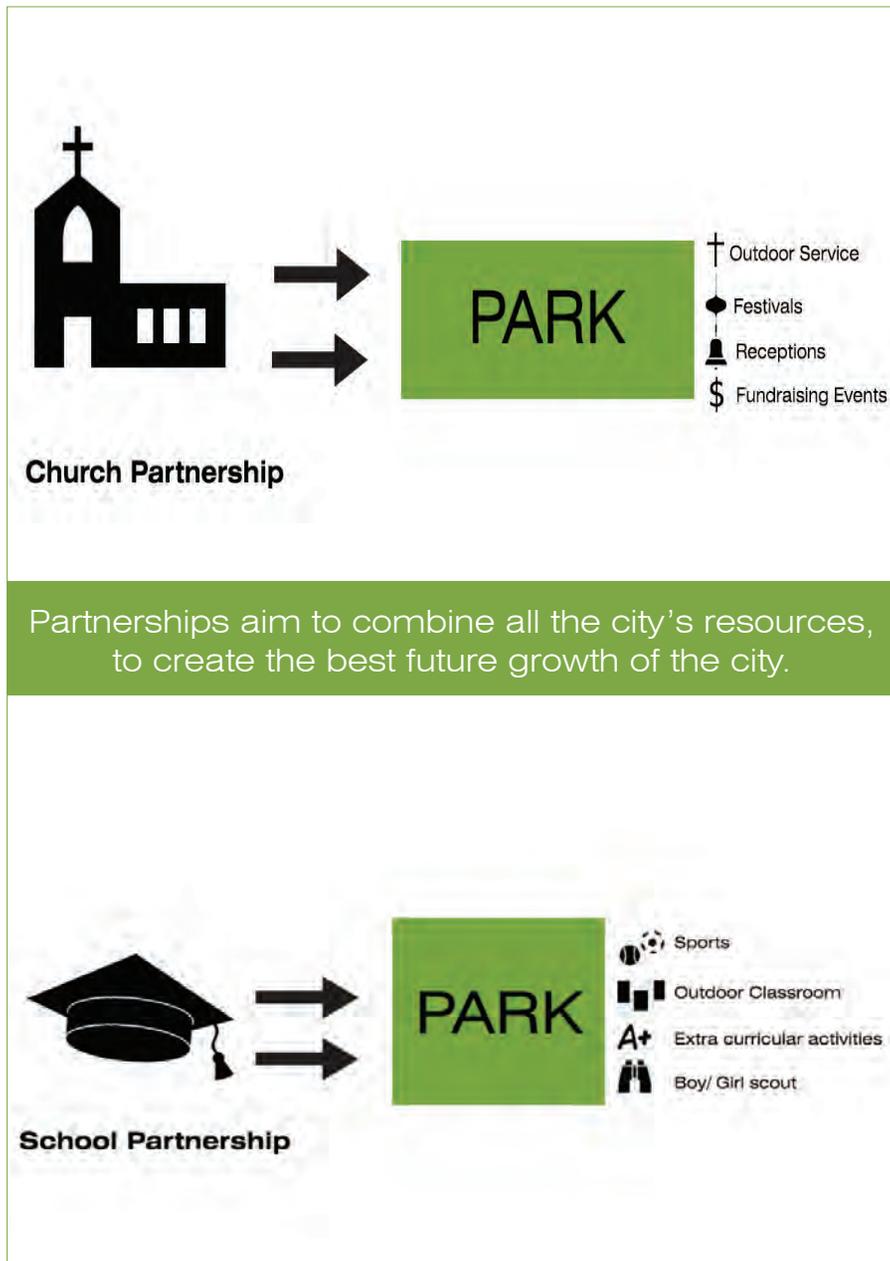


Fig. 3.66 | Fig. 3.67

should seek to promote the development of neighborhood parks at the churches for the betterment of the community.

School Partnership

We also recommend that the Parks Department seek to establish partnerships with the schools in the community so that the schools and the parks could mutually benefit from the development of community parks adjacent to school grounds. This collaborative sharing of park/playground areas would create a synergistic arrangement whereby the school district's and city's budgets could be leveraged to develop improved school and neighborhood recreational facilities.

Further, it could encourage the school's to establish a more formal association or partnership with the Parks Department, for example if the school took over responsibility to monitor; similar to an adopt-a-park program. This way the school students and staff would develop a sense of "ownership" for the park adjacent to their school.

Such a collaborative partnership between the school and the Parks Department could also in time evolve into the use of the park for educational programs and the promotion of civic responsibility among the students. In so doing, the students would learn a valuable lesson about giving back to their community and becoming active, engaged citizens within Carthage both now and in the future.

Churches start to act as educational and integration spaces.



Fig. 3.68



Fig. 3.69

Partnerships are created to maximize city resources and to maximize the potential exchange of services.

Schools partnerships start to educate students about the importance of socialization and volunteerism.



Fig. 3.70

New parks will improve the beautification of the city.



Fig. 3.71



Fig. 3.72

New parks start creating new places for integration in the community.

Social activities will be the main programming element in new parks.



Fig. 3.73



Fig. 3.74

New Parks

The current Carthage parks provide the community with a good infrastructure for accommodating the recreation programs offered. Deficiencies do exist in the upkeep of some of the facilities and issues of funding limit the Parks and Recreation Department's efforts. However, as the city grows and the maintenance issues keep being deferred the current parks will become inadequate.

Although it is not crucial at this time, the city could benefit from the addition of a few new parks. These new parks would be developed to provide a better distribution of park amenities and programs. However, as the community grows and the city's parks and recreation vision becomes articulated, it will be necessary to add additional city parks to the system.

We recommend the following:

- That the current parks within the city be enhanced and expanded before the addition of new parks
- That new parks be added to better distribute park amenities and programs geographically across the city
- That the improvements to existing parks and the addition of new parks carefully consider environmental conservation and social integration benefits when developing the parks and programs
- That public/private partnerships be established whenever possible with churches, schools, businesses, sport organizations, and special interest groups to help develop and maintain the parks and programs
- That a park use fee be charged to non-city residents
- That new parks be located as shown:
 - Throughout the floodplain area along Spring River north of town



Fig. 3.75

One of the missing social activities in Carthage, is a dog park. The new parks address the lack of that space.

New Parks start becoming a large part of the encouragement of social integration.



Fig. 3.76



New Parks become an essential component to the social integration of a city.



Fig. 3.77 | Fig. 3.78

- Along the floodplain corridors that extend into the city from the north
- Next to the hospital
- Dispersed evenly throughout the city

Hazel Street Park

The first new park proposed is on Hazel Street. The site is currently owned by the Mercy Health System. The site is surrounded by housing in a section of town where parks are scarce. The new park should provide activities appropriate to the surrounding context with spaces to activate social integration. (For more information, see part 5)

South River Street Park

Another park is proposed for South River Street. This site is currently privately owned. The proposed site is surrounded by undeveloped and residential property. We envision transforming this unused lot into a neighborhood park. (For more information, see part 5)

Cedar Street Park

Another park is proposed for Cedar Street. This site is located in a flood plain, through which runs a drainage ditch. We also envision this site as a neighborhood park. (For more information, see part 5)

McCune Brookes Park

The next park is located adjacent to the hospital. It is our understanding that this 80 acre parcel is owned by the city hospital. We envision that this park would be focused upon providing a quiet, meditative setting for the general public and, more specifically, the patients, visitors and staff of the hospital. (For more information, see part 5)

New parks aim to provide for the lack of accessibility to existing parks.



Fig. 3.79



Fig. 3.80

By creating new parks, the development around the park increase in physical, social and economical value.

The locations of the new parks were chosen taking into consideration the maximization of social and conservation elements.



Fig. 3.81

Part 4

The Carthage Image

“The city is what it is because our citizens are what they are.”
- Plato

Rich cultural events, such as the Civil War, helped to shape Carthage.



Fig. 4.1



Fig. 4.2

Carthage should always be a unique stop along Historic Route 66.

The parks of Carthage offer a wide range of activities for all ages.



Fig. 4.3



Fig. 4.4

Image Overview

The city of Carthage has both a rich past and present. Throughout the course of history, Carthage has held significance. The town was the site of the first battle of the Civil War west of the Mississippi River. Some of the battlefield is preserved to this day. The town resides at a major crossroads between historic Jefferson Highway and Route 66. The inviting people of Carthage make every experience positive and lasting in one's memory. The city offers plenty of activities for a wide variety of people. The diverse park system offers a wide range of outdoor activities for people of all ages. Also, a multitude of talented artists reside within the city, enriching many aspects of the community.

Implication of "The Carthage Image" should occur across every aspect of the city, both at the large and small scales, for example, at the important destinations, roadways and parks. This could be achieved through the use of sculptural signage, informational stops and means of advertisement of various activities.

Each of these features makes the town an ideal destination for a multitude of people. The cultivation of all these aspects can generate a cohesive, positive image for all to experience. Through increased signage, beautification of parks and amenities and further expression of the culture of Carthage, a positive, heightened experience is achieved.

"America's Maple Leaf City"



Fig. 4.5

The Civil War Museum of Carthage offers a unique look into a part of Carthage's and America's history.

The Carthage Image can be expressed across the town at a multitude of scales and forms.

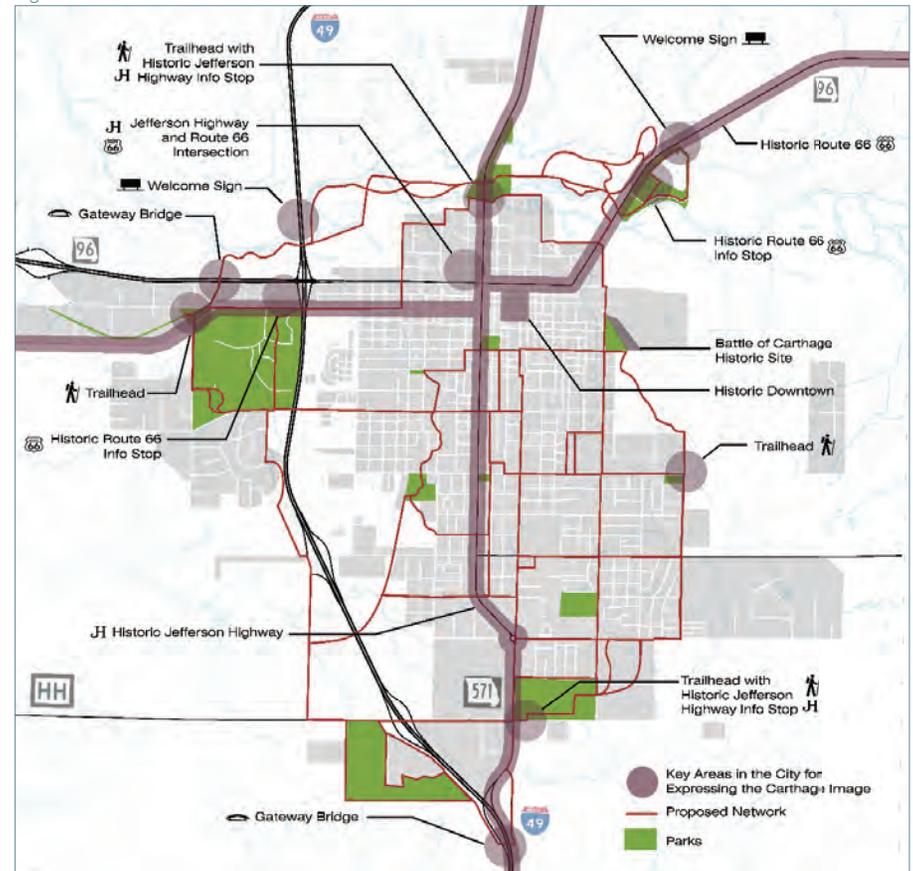


Fig. 4.6



Fig. 4.7



Fig. 4.8



Fig. 4.9

Some elements within the park system are ideal, such as the one below. Others need to be repaired, maintained and beautified.



Fig. 4.10

Four Aspects

POSITIVE – The image must have an overall good appearance to create good and lasting impressions. The condition of each component of the Carthage community must be in good order to ensure ideal interactions between them. This includes, but is not limited to, the cleanliness of amenities, their state of repair, and further beautification efforts.

INVITING – The image must draw people to experience the variety of the town’s qualities. Each destination, including the city as a whole when one approaches it, must be welcoming to everyone.

COHESIVE – The image, while having various parts, must create a unified experience. Each aspect of the Carthage Connect 2040 visioning effort should be unique and create individual characteristics, while still following a set series of thematic design guidelines in order to visually connect each of the individual parks.

REFLECTIVE – The image must display the attributes of the town’s character. It also must respond to the needs of the town as a whole, as well as needs on a more individual, case by case, basis.

The image of Carthage’s Park System must be cohesive, positive, reflective, and inviting. Through success in these areas, revitalization can be achieved.

Improving the city parks should be a community-wide responsibility.



Fig. 4.11



4.12

The parks need volunteers to help improve their conditions. This makes everyone feel responsible for the parks and their upkeep.

Volunteering can bring the individuals of the city closer and create a pattern of interdependency that only works to make the city of Carthage stronger.



Fig. 4.13

Carthage is a picturesque town that all should experience.



Fig. 4.14



Fig. 4.15

Downtown Carthage is a great place for all ages to visit.

Signs such as the ones below could be used to advertise parts of town.



Fig. 4.16



Fig. 4.17

Historic Downtown

The downtown area of Carthage offers a range of shops, restaurants and sightseeing. The historic courthouse is one of the top photo opportunities within the state. The downtown area also offers a range of activities, such as art walks, boutiques, and historic landmarks. These features should be made known to anyone passing through the Carthage area.

It is easy to bypass the downtown area while traveling via the major highways and routes running through the city. An effort should be made to advertise the downtown area through the use of wayfinding signs. Merely placing these along the thoroughfares about the city will help lead visitors to the city center attraction. Both Route 66 and Jefferson Highway run through the downtown area and drawing people to visit the square can be easily accomplished. Additional signs promoting the attractions of downtown can be placed at highway exits as well. Directional signs such as these should be similar in theme to those placed about the network, parks and other amenities around town to ensure consistency in the Carthage Image.

Civil War guerrillas, wild west outlaws, powerful capitalists, Ragtime music makers, and women's rights pioneers, have left their marks on Carthage history.



Fig. 4.18

Directional signs such as the one pictured to the left could easily draw people to the downtown area.

The downtown area is easily accessible from many routes running through the city.



Fig. 4.19



“To be ignorant of what occurred before you were born is to remain always a child. For what is the worth of human life, unless it is woven into the life of our ancestors by the records of history?” - Cicero



Fig. 4.20 | Fig. 4.21

Mining Culture

The mining industry played an important part in the development of Carthage. The marble from here is utilized throughout America. Some of the places it can be found include the White House, the Missouri State Capital, as well as Carthage's own courthouse building. Respect should be paid to this historical aspect through new, innovative developments within the city. Currently, many signs within the town, especially in the parks, take forms defined by the mined rocks of the area. The proposed signage theme for Carthage's vision utilizes forms inspired by the stone works of past times and uses them in a contemporary manner (see the sub-section on signage for more information).

The mining industry played a part in generating Carthage's wealth.



Fig. 4.22



Fig. 4.23

The events of Carthage's history should not be forgotten and should shine even today.

Civil War Battlefield

The first battle of the Civil War west of the Mississippi River started in Carthage, Missouri. Currently, a scenic park stands where this battle culminated. As the battlefield is located on the outer rim of town, out the way for most travelers, further effort should be made to direct visitors to this historic battlefield and educate them of the events that occurred here. This could be achieved through the use of directional signs along major thoroughfares, similar to those used to direct people to the downtown area. Small forms of advertisement located at other historical places around town, such as the library, downtown area and along the historic roadways can also be placed to draw people into and around the community. A thematic and visual connection should also be made between the Historic Battlefield and Civil War Museum as well as to other museums throughout the community.

The Civil War Battlefield and Museum could become a large attraction for Carthage and provide many activities for all ages.



Fig. 4.24

Route 66 should still shine today as a feature of Carthage.



Fig. 4.25



Fig. 4.26

Route 66 provides a scenic journey for many traveling westward.

Restoration of Historic Route 66 establishments gives Carthage character.



Fig. 4.27



Fig. 4.28

Route 66 and Jefferson Highway

Both of these historic roadways pass through the city of Carthage. In the past, Carthage was a place of destination on Route 66 and The Jefferson Highway. Now, with the intervention of the interstate highway system, fewer people are traveling these historic routes and are bypassing the opportunities to experience these destinations and reminisce about the old times along these historic byways.

Some businesses within town, such as the Boots Motel and Route 66 Drive-in Theatre, are working to bring back the historic character of the city of Carthage. Additional actions should be taken throughout the town, especially along the historic routes and throughout the downtown area to mark and revitalize this rich character of Carthage. This will help instill once more the rich driving culture that thrived within the city of Carthage from pre-1920 to 1940.

“If you ever plan to motor west, travel my way. Take the highway, that’s the best. Get your kicks on Route 66.”
- Bobby Troup



Fig. 4.29

Small stops, such as the one pictured to the left, can draw attention to Route 66, while educating visitors of Carthage’s history.

Route 66 and the Jefferson Highway run through the heart of Carthage. This is the only place in America where these two historic routes cross.



Fig. 4.30



Fig. 4.31



Fig. 4.32



Fig. 4.33

The historic Route 66 and Jefferson Highway could easily become a more prominent parts of the city through the use of informational stops, signage and attractions.

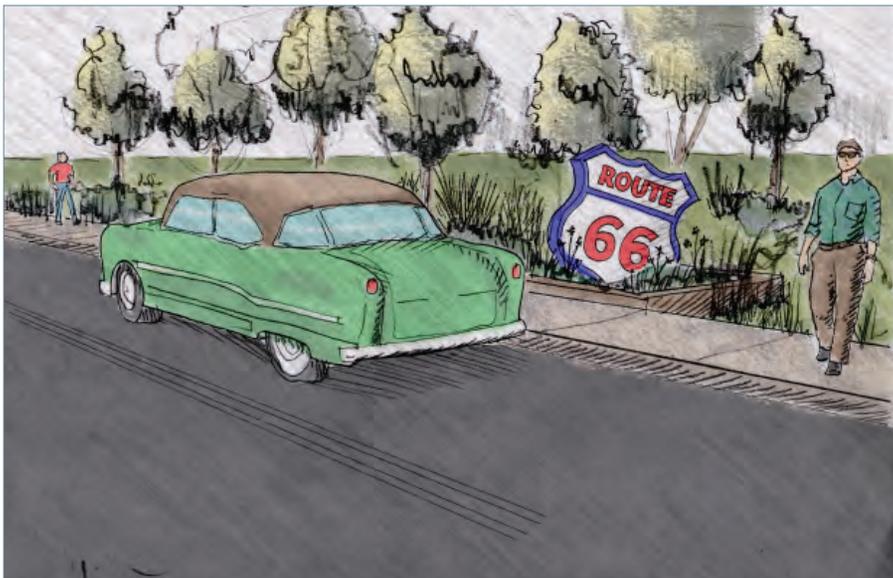


Fig. 4.34

Marking the Routes

While one is traveling through Carthage, they should know that they are venturing along important national historic roadways. Currently, the historic Route 66 or The Jefferson Highway routes are only minimally acknowledged by signage or architecturally appropriate contextual facilities.

Embodying the history of these nationally significant routes can come in the form of interpretive informational stops and wayfinding signage.

A key locations for an interpretive informational stop would be the intersection of Central Avenue and Garrison Avenue; the only place in the entire United States where the Jefferson Highway and Route 66 cross. Other locations might be at Kellogg Lake as one enters town from the east along Route 66 and Municipal Park as you enter the town from the west on Route 66.

Along these routes, smaller markers should be place to remind visitors of the historic community through which they are traveling. These markers could be in the form of locale's artwork, found artifacts or smaller signs. Each of these elements would help enhance one's journey throughout Carthage.

Road markers such as these could line the historic routes.



Fig. 4.35



Fig. 4.36

Signs could also attract people to travel on the Historic Route 66.

Small features such as the unique signage below could provide points of interest along one's journey through Carthage.



Fig. 4.37

The use of new signage like this should be expanded upon.



Fig. 4.38



Fig. 4.39

Advertising for events is key to attracting people.

Entrances such as these need character and grandeur.



Fig. 4.40



Fig. 4.41

Concept

Some efforts to promote the Carthage image have already been made, such as the new signs located at Memorial Hall and the roundabout on the south side of town. Expansion of this idea to other community locations should be pursued. The concept for the new signage should be a synthesis of the following four considerations of Carthage:

- The first consideration is derived from Carthage stone and creates a more substantial form for each sign; it is made primarily of concrete or stone.
- The second consideration is of the more modern side of Carthage and is created through planar elements attached to the massive forms; possibly made of metal.
- The third consideration is a single or series of wooden pillars, inspired by the existing signage and Carthage's natural environment.
- The fourth consideration is the Carthage maple leaf, which should be applied to signs to ensure direct representation of the city.

These four conceptual considerations placed together forms a dynamic composition. Local artists should be allowed to create these new signs, further bolstering the popularity of the signage system.

Implementation

Throughout Carthage, each key element, especially the parks, should have an easily identifiable sign greeting all who approach, either via car, bike or on foot. These signs should be unique and help represent the character of each park. While each should vary slightly from the next, they all should still follow the same thematic concept to ensure continuity and



Fig. 4.42

Signage can be applied to many different parts of Carthage at both a large and small scale.

A cohesive concept must be developed and applied to all areas of Carthage.

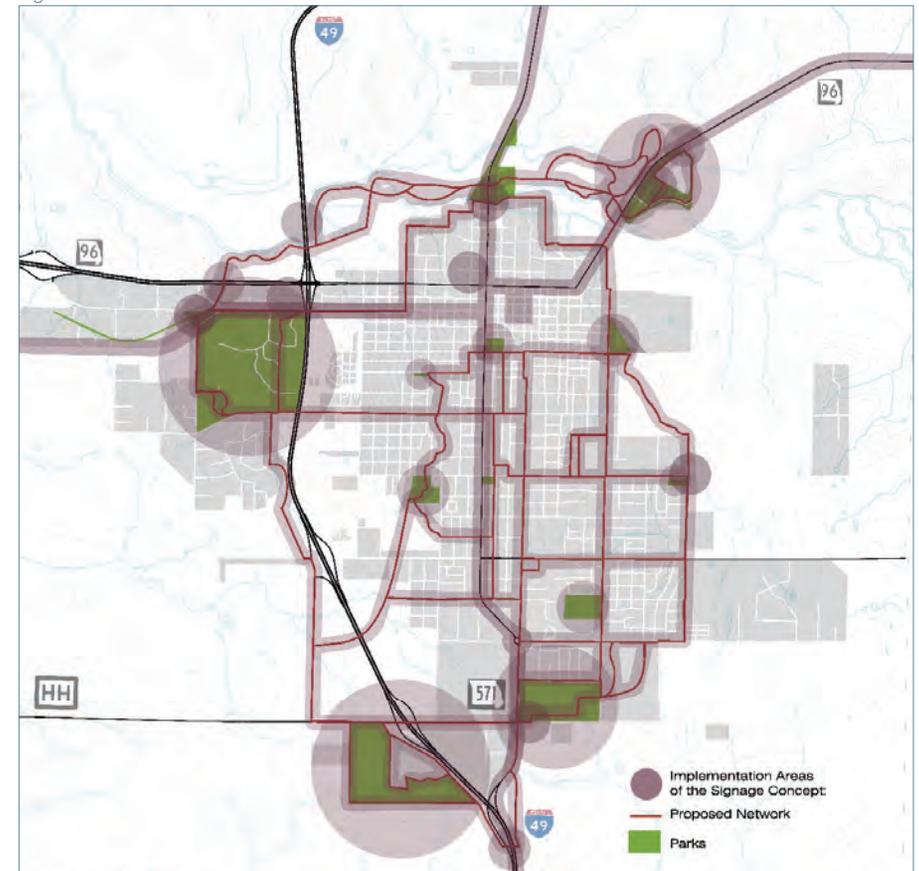


Fig. 4.43



Fig. 4.44



Fig. 4.45



Fig. 4.46

Using a series of themed signs throughout the city will allow for a heightened sense of destination while creating a visual connection to the broader Carthage Image.



Fig. 4.47

cohesion within the park system. Signs give a sense of destination and arrival to a place. They help distinguish a series of places along one's journey throughout the city, coloring it, making it a memorable experience. Some parks already have signage following a cohesive theme, such as Carter, Griggs and Kellogg Lake. Further effort should be created to do the same within every park. More contemporary signage should be used in the future to help the signs stand out. Informational boards can be placed within parks to educate visitors about the landscaping or activities that take place within. They could even promote healthy lifestyle choices to be implemented by the community.

Along the Trails

Along the network and trails about the city, other signs should be placed. At each trailhead, signs should be placed because they mark the start of one's journey along them. Key locations for these trailheads include the start of Ruby Jack Trail and at the entrance to the Outer Trails Network near Freer Park on the west side of town. Along these trails, information signs about the environment surrounding the city can help inform both citizens and visitors. Also, mile-markers can help people navigate through the newly proposed trails. The network running within the city should also have smaller markers about them, helping designate areas for created bike lanes.

Multiple elements in a single sign creates a contemporary design.



Fig. 4.48



Fig. 4.49

Each person traveling to a park in Carthage should be greeted with a stately sign such as the one pictured above.

Informational signs such as these can be used throughout the Carthage area to educate both citizens and visitors.



Fig. 4.50

Signs such as this represent the Carthage Image as a whole.



Fig. 4.51



Fig. 4.52

The current signage approach lacks character.

Signage projects such as these below should act as models for Carthage.



Fig. 4.53



Fig. 4.54

Regional Signage

Similar to the theory of arriving at the destination of each of the parks within Carthage, signage should be placed at each major entrance into the city. This will promote the concept that Carthage is a destination, not just a place one passes through.

Currently, as one approaches Carthage from the east along Highway 96, the Best Budget Inn has the most prominent sign that greets visitors. This situation needs to change. Kellogg Lake should become the main focal point and destination through the development of new city arrival signage.

As one approaches from the west, they are greeted with a standard, generic signage that one sees while traveling throughout the region. Further character should be given to this signage.

These larger destination signs can come in two forms, either a much larger single sign or as lettering along the sides of a pedestrian bridge spanning across the highway. Where the vehicular, bike and pedestrian trail networks crosses the main highways on the west, north and south, welcoming signs should be placed on the sides of the bridge overpasses. These bridges are similar to that of Golden, Colorado's bridge spanning over streets in their downtown. Larger signs representing the Carthage image can be placed at Kellogg Lake to greet people coming from the east along Route 66 on Highway 96 and on the north side of town along Interstate 49.



Fig. 4.55

A pedestrian bridge spanning across the highway can act as both a gateway and connect major parts of the Outer Trails Network.

Signs should be located at each major entrance into the city to promote the feeling that you have arrived at a destination

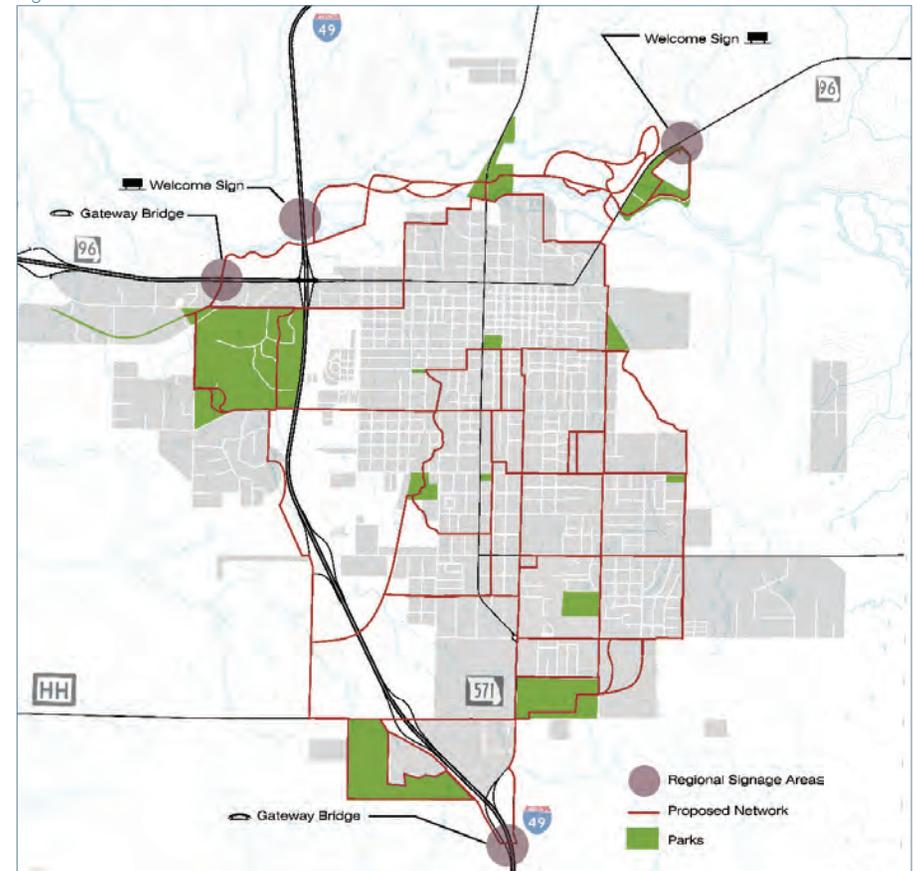


Fig. 4.56

Positive Imagery

Regional image does not solely come through signage. All who travel through Carthage must be greeted with positive imagery along the way. This includes maintaining the quality of each of the parks throughout the town, as well as other attractions and amenities. Maintaining this image will create a lasting impression that will cause people to have a desire to return. Poor quality and lack of maintenance will cause people to be not wish to return.

The current condition of the pool in Municipal Park is a detriment to the overall parks image. Although expensive to achieve, the old pool needs to be restored so that it can be enjoyed by the next generation of Carthage citizens.

Citizens of the community are currently traveling to other cities in order to find the pool amenities they need for organized competitions. When visitors come to the Municipal Park pool for swim meets or other reasons, they have a less than ideal experience and take away a sub-par impression of Carthage.

Smaller scale interventions also need to be made. From bathrooms to pavilions, the conditions must be improved. Monitoring these entities and clean-up efforts through civilian volunteerism could exist.

Continuous monitoring and maintenance is key to success.



Fig. 4.59



Fig. 4.60

Repairing and repainting things such as these amenities will immensely improve the image of the parks.

The Carthage city pool in now in disrepair. Revitalization of such historic community amenities is key to promoting a positive image.



Fig. 4.61



“For those who are lost, there will always be cities that feel like home.”
- Simon Van Booy



Fig. 4.57 | Fig. 4.58

New signage can freshen the look of the city.



Fig. 4.62



Fig. 4.63

Planting around signs can enhance them and cause them to stand out.

Planting efforts such as the ones below can easily beautify the city.



Fig. 4.64



Fig. 4.65

Beautification

The current amenities within Carthage offer many different services. The state of some of these amenities is subpar and creates a less than desirable experience. The overall image and impression of each park and destination within Carthage should be positive. Not only will improved amenities allow visitors to have a memorable, positive experience, but it will also help the city's citizens take pride in the parks. This can easily be achieved through the volunteerism of town members. Planting flowers could greatly enhance the quality of the park's image. Fixing and cleaning the current amenities might be taken on by volunteers.

The current signage within the parks should be enhanced or replaced. Planter flowers about each sign, as well as cleaning the surfaces of the current stone signs would help them stand out within the park and be more easily recognized from the street.

The bike and pedestrian network could be enhanced by the use of similar beautification efforts, especially at the intersections of the trail network with the street routes. This will help to further define them and make them more appealing to the general public, inviting them to switch from their automobiles to other more eco-friendly forms of transportation.

The work of local artists should be featured in the parks and about town. These works will help create a more memorable and unique experience for those traveling throughout Carthage. When various pieces are placed within different parks, more definition and character is given to each park, further strengthening their image and making them more recognizable.

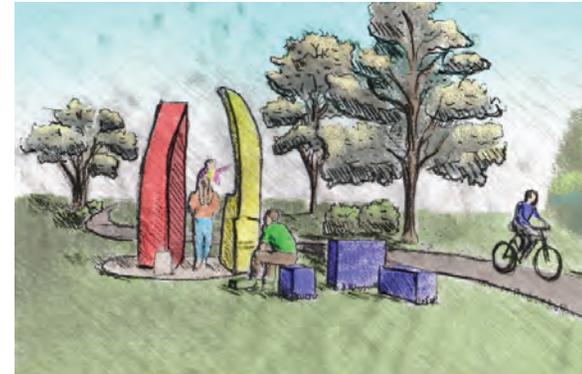


Fig. 4.66

Local artists' sculptures can provide points of interest within the parks as well as beautify them.

Beautification of Carthage should occur on a city-wide level, enhancing every aspect and benefiting all.

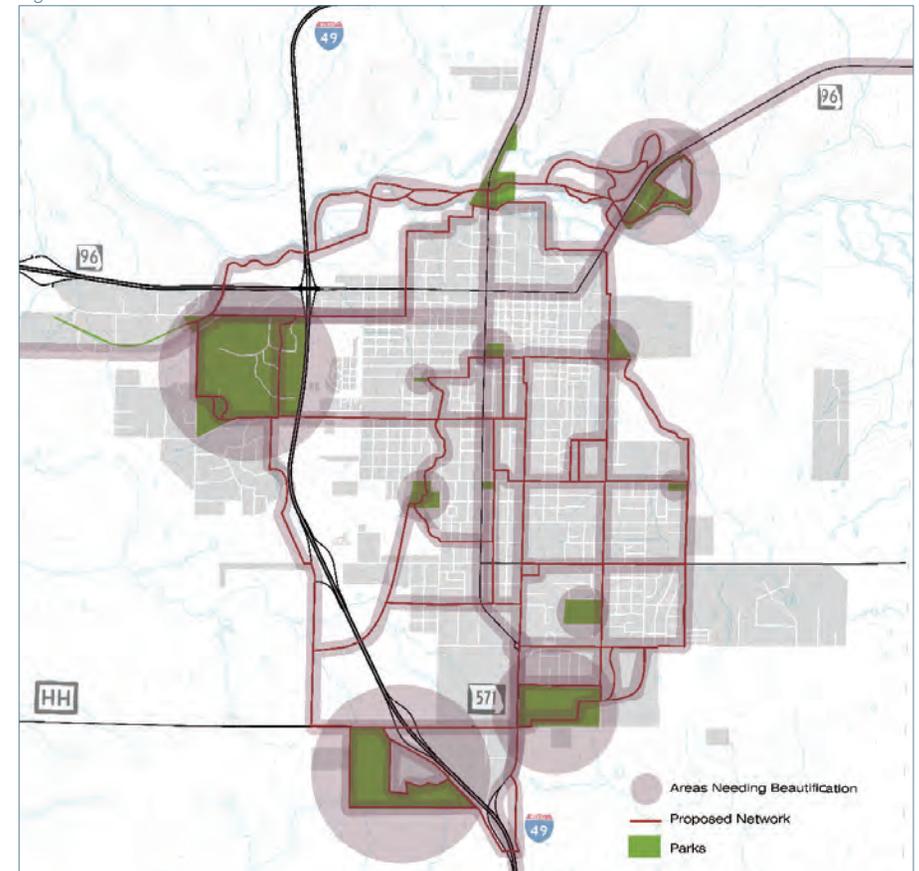


Fig. 4.67



Fig. 4.68



Fig. 4.69



Fig. 4.70

Communication is key to accomplishing any task. Making sure every voice is heard ensures equal improvements across each area of town, so that no part of town is neglected.



Fig. 4.71

Community Feedback

As seen within other park systems, such as the St. Louis County Parks, community polling and communication to representatives is an easy way for the parks amenities to be maintained.

On a regular basis, community members could be surveyed to share their feedback on the parks they typically use. This would allow for officials to more readily know what aspects of the city needs improvement, both within the park system and other parts of the city of well. City officials could then organize repair or clean-up efforts in order to address some of the issues at hand.

For future expansion and construction efforts, polling could be done at a city wide and neighborhood level. Polling allows for people's opinions to be directly conveyed and taken into consideration. Similar methods were used for the Carthage Connect 2040 visioning group in order to address the situations at hand and act accordingly.

“Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.”
-Jane Jacobs

Volunteerism is an inexpensive way to brighten the park's image.



Fig. 4.72



Fig. 4.73

Organized community cleanup and planting events can go a long way to beautifying the city.

Through teamwork between city officials and citizens, pristine parks could be created for all to experience.



Fig. 4.74

Variations of the signs are used to call out many different park features.



Fig. 4.75



Fig. 4.76

Monitoring of the parks allows for pristine settings to be achieved.

County park signs take a range of forms all following a single theme.



Fig. 4.77



Fig. 4.78

St. Louis County Signage

A majority of the parks within St. Louis County use similar text and materials to compose the signage within the parks. This creates continuity throughout the county and park system as a whole. Much like the way buildings have a single theme or concept, park systems too can have this quality and create a more unified network. The typical signs for the St. Louis County Park System involve either wood or stone as a base with a single planar element for the text. A similar scheme is used for the proposed new signs of Carthage, connecting the parks and other aspects of town with a single thematic scheme. These recurring elemental strategies can be applied to many different facets of the park, such as the paths and structures, not just the signage. Applying this concept will easily create a contemporary visual connection between the parks of Carthage, similar to that of the St. Louis County Parks.

Marking the entrances to parks in general will help give it a street presence. As one approaches a St. Louis County Park, a stately form greets you. Not only does it help denote the entrance to the park, it gives it a sense of status and priority. A location is more easily defined as a place when given a proper, displayed title. As seen with all of St. Louis's County Parks, any visitor knows they are approaching a designated area and know they are entering a different, yet connected, part of a maintained network.



Fig. 4.79

Signs placed at the entrance of the St. Louis County Parks give a sense of destination.

The St. Louis County Park System has many parks throughout the county



Fig. 4.80

Community Involvement

The St. Louis County Park system promotes community involvement in helping maintain their parks. Events are created and promoted to help host these activities. A community survey is also conducted yearly to ensure the public's satisfaction level with the parks in their communities. This helps the county's planning staff decide which areas of the parks they need to address and improve upon, as well as what are successful elements. Long-term monitoring systems are created as well for certain parks in need.

Community involvement within Carthage through surveying or helping to care for the parks will promote a sense of park ownership. Interaction between city members can be obtained through park maintenance activities. It will also help improve the conditions of the parks and give people a better image of the visited parks. Surveying the work done to the parks can also help aid future planning processes.

Gardening crews can help develop the image of the town.



Fig. 4.83



Fig. 4.84

Service groups, such as the Boy Scouts, can easily be organized to help maintain the parks and keep them clean.



“Excellence in design is created by the close partnership between client and designer.” - Unknown

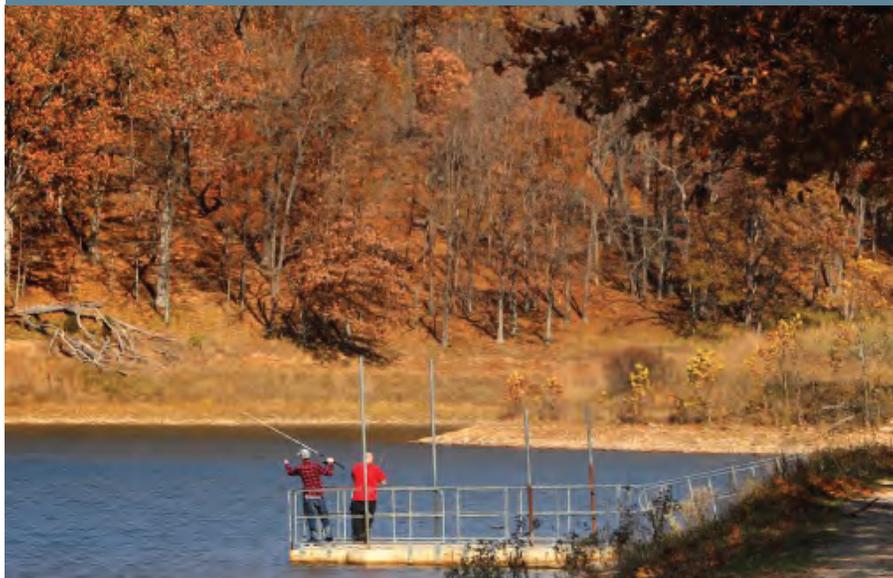


Fig. 4.81 | Fig. 4.82

Sufficient Activities

Each park within the St. Louis County Park System ensures that multiple age groups have activities they can do. From large scale parks, such as Lone Elk, to smaller neighborhood parks, like Ohlendorf, each offers a range of activities. The activities vary from park to park, based on what type of park it is, nature, recreational, etc. But each still provides for a variety of ages and interests. This concept allows for a more diverse range of people to use the parks and mingle, strengthening the social aspects of the park system; this is something that is needed within the parks and recreation system of Carthage.

Some activities, like fishing, allow parks to serve a range of citizens. Age specific activities can target users on a more individualized level, directly catering to the surrounding needs.



Fig. 4.85

The pavilion's form vary, yet follow a single design theme and program.



Fig 4.86



Fig 4.87

The Red Ribbon sculpture can easily be interacted with and allow for a range of activities to take place around it.

The Red Ribbon runs throughout the entirety of the park, connecting both existing and newly designed elements.



Fig 4.88

Red Ribbon Park

Red Ribbon Park of Qinhuangdao, China harbors the implementation of two multifaceted design elements. The first is a large serpentine path, defined by a winding, red, sculptural element. Throughout the park, the function of this sculpture varies from just an art piece with planters and lights to simply a seating element. As it winds through the park, maintaining its simple theme, it connects each of the points of interest. The second is a series of smaller pavilions scattered throughout the park. They offer areas for gathering and provide focal points to look out into the surroundings. The goals of this project were to create a series of opportunities for both education and recreation.

Implication in Carthage

The concepts behind Red Ribbon Park's elements can also be applied to the city of Carthage. Larger winding entities, such as the networks running about the city, should connect each area of town with a single theme, much like the Red Ribbon does. The pavilions within the park also can offer inspiration for different aspects of Carthage. While the pavilions each have different forms, they all follow a single theme and construction method, something that can be applied to the signage and other new construction efforts within the city of Carthage.



"True ornament is not a matter of prettifying externals. It is organic with the structure it adorns, whether a person, a building or a park." - Frank Lloyd Wright



Fig 4.89 | Fig 4.90

The follies offer a range of forms that attract many people to the park.

Each of the forms within the Park De La Villette were generated from a kit of pieces, composed in a variety of ways



Fig 4.91

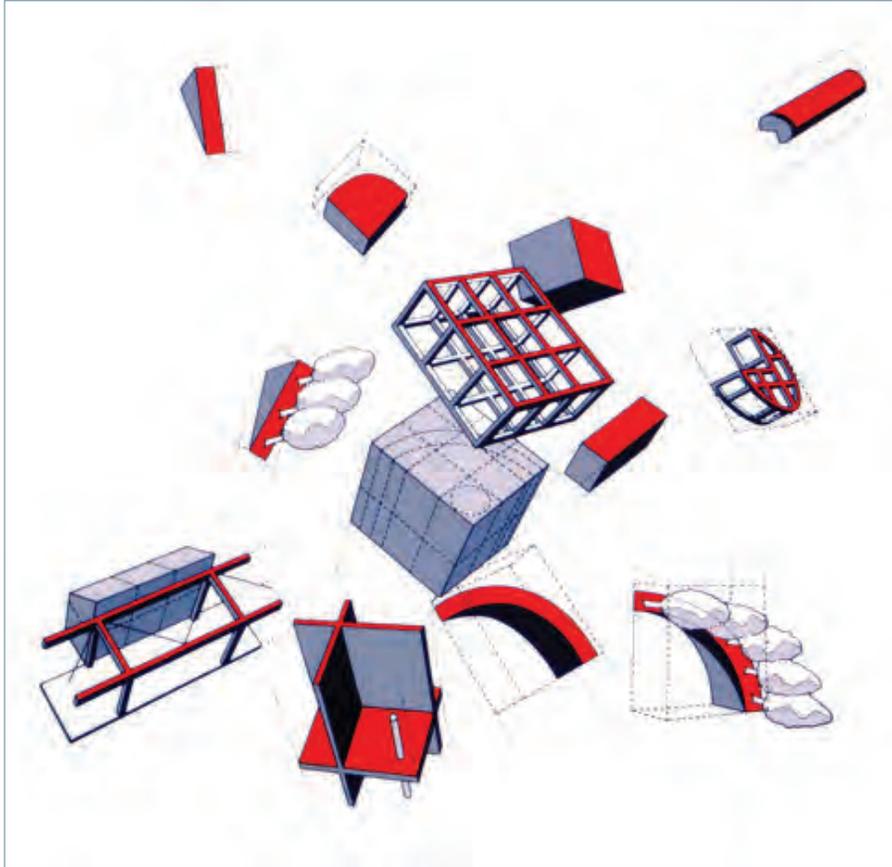


Fig 4.92

Tschumi's Follies

The Park De La Villette is a large scale project located in Paris, France. The inspiration for this park came from various aspects of culture, as opposed to nature like many park projects. Throughout the park, a series of large sculptural pieces, entitled "The Follies" are placed along a defined grid. These Follies, while not having predetermined program attributes, can accommodate many different users and their interests. The users then define the spaces, fulfilling a sense of freedom. The scale of these sculptural pieces promoted wandering through the park to arrive at a series of destinations. The forms were designed with three principles in mind (points, lines and surfaces) apparent in each.

Implication in Carthage

Similar, yet smaller implication of follies can occur at Carthage's places of destination. Each of these will cause a visual remembrance throughout the city and attract people. Local artists should be employed to create these features. While sculptures do not necessarily have set programs, they can promote activities happening around them.

"The repetitive nature of each folly, even though each one is unique and different, allow for the visitors to retain a sense of place through the large park."

- Andrew Kroll

The sculptural pieces were applied to a standard grid system.



Fig 4.93



Fig 4.94

The follies have a variety of related forms.

These forms double as artwork and places of happening.



Fig 4.95



Fig 4.96

The follies in Park De La Villette enhance the landscape through their sculptural forms.



Fig 4.97



Fig 4.98

The formal theme can even be applied to existing structures to enhance them and draw them into the park's language.

The follies are repeated throughout the park, creating a unified network of imagery.



Fig 4.99

Tschumi's Scheme

Bernard Tschumi's grid (pictured right) captures the essence of a variety of compositions used within the Park De La Villette. Each one of these combinations follows a single consistent theme. His formal toolkit requirements of points, lines and surfaces were used to compose the park and to generate the forms of the follies. Tschumi's gestures are inspired by an abstraction of the culture surrounding the park. Similarly the Tschumi's scheme, we have proposed for Carthage a kit of parts that relies more on the formal qualities of form; the derived compositions of which can generate more contemporary expression inspired from the culture and context of Carthage.

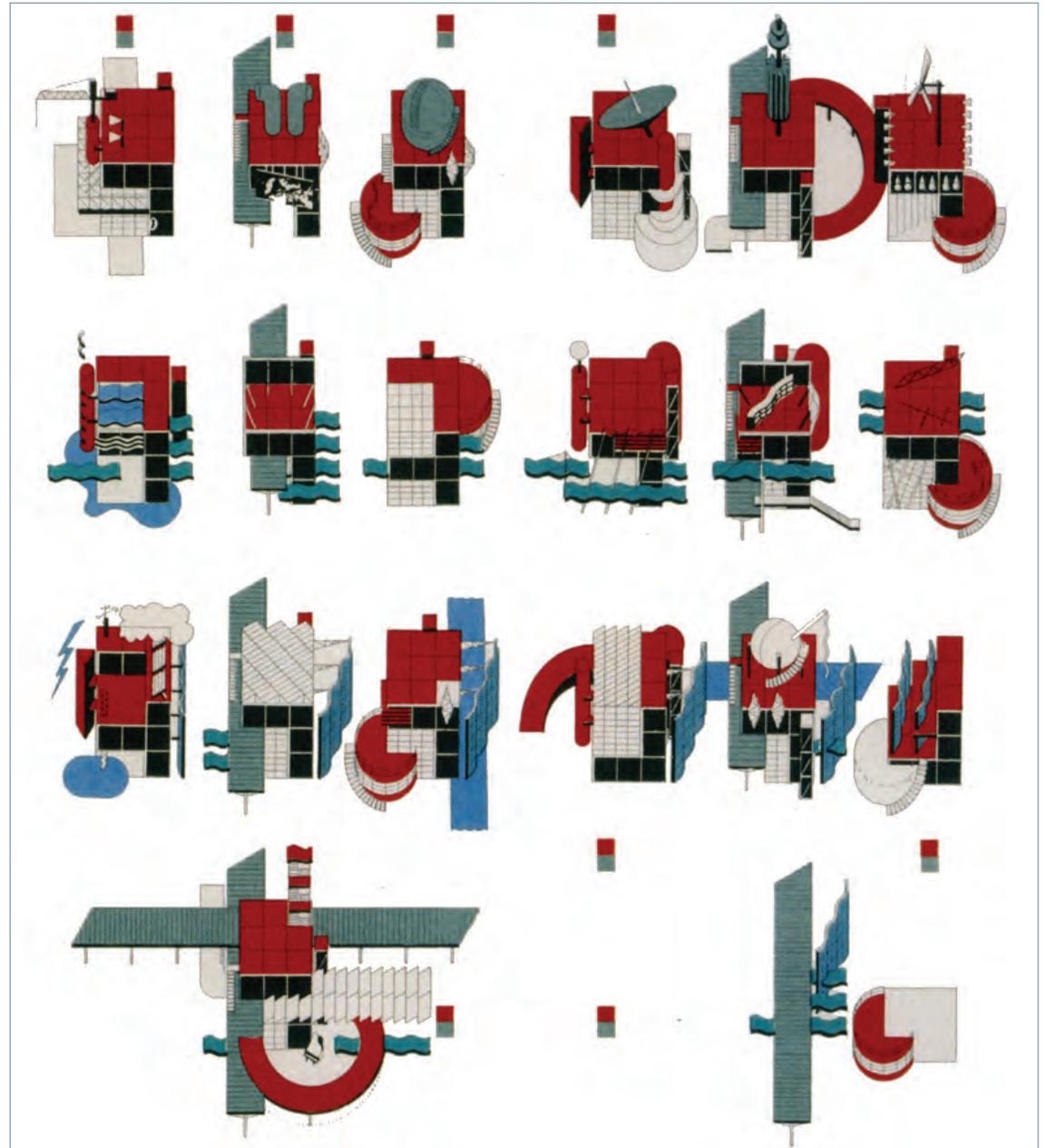


Fig 4.100

Carthage's Scheme

Similar to how the Follies of Park De La Villette use a series of set elements to compose the structures, the new signs of Carthage that we recommend can also be generated from a palette of forms. As defined earlier in this section, wooden pillars, maple leaves, stone masses and metal plates can be combined in many different ways. This allows a great deal of versatility. Using these simple formal elements, anything from park entrance signs, benches, trail markers, and interactive sculptures can be made. Creating this variety of forms ensures that any aspect of Carthage, whether it is a destination or trail, can be marked by creative signage pieces generated by this new theme.

As seen in these pillars, stone can be used to inspire new sign forms.



Fig 4.102



Fig 4.103

Existing signs already provide a basic design concept that can be expanded upon when creating the new wayfinding signage scheme.

The versatility of the sign's composition allows for the forms to be rearranged to accommodate many situations, from benches to informational signs or a combination thereof.



Fig 4.104

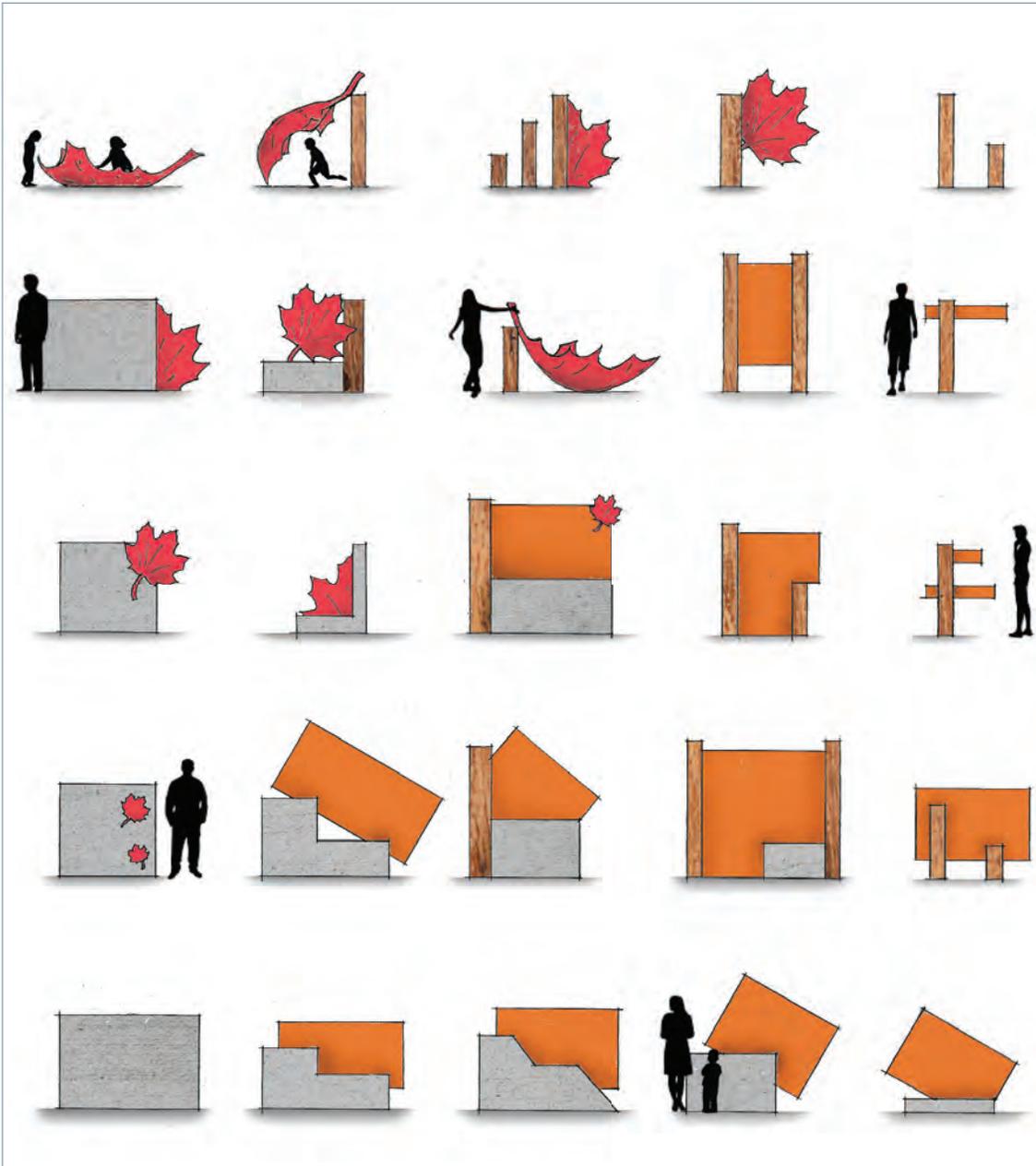


Fig 4.101

Part 5

Synthesis

“The people of cities understand the symbolic, ceremonial, social and political role of streets, not just those of movement and access. Regularly they protest widening. They object to high volumes of fast traffic on their streets. On the other hand, proposals to improve existing streets, to make them special, great places are common and regularly approved by voters who tax themselves to achieve this end.”

- Allan B. Jacobs

Promoting Active Living is a large positive aspect of Kellogg Lake.



Fig. 5.1



Fig. 5.2

Nature centers provide learning opportunities for all ages and interests.

Outdoor classrooms provide places to educate about conservation.



Fig. 5.3



Fig. 5.4

Kellogg Lake Park

Kellogg Lake Park needs to be upgraded to become an even greater asset to the community than it is at this time. Currently, it does provide an array of outdoor activities, such as fishing, picnicking, Frisbee golf, an outdoor classroom, and a pleasant landscape entry into Carthage along Highway 96. Enhancing and expanding these qualities and amenities is required to attract more users.

Kellogg Lake Park is ideally located at the northeastern entry into Carthage along Historic Route 66. This location makes the park an ideal as a welcoming entrance or gateway into

the community. We recommend that this opportunity be developed to its fullest. Specifically, we recommend that the community consider creating Historic Route 66 commemorative center, display, and wayside rest area at this location. This center could be located on the old alignment of Route 66 as it entered Carthage, tell the story of the development of the route's first segment between Springfield and Tulsa, and be advertised in all the Route 66 publications and along the route. Such a center would attract many Route 66 enthusiasts to the city and for a day or two.

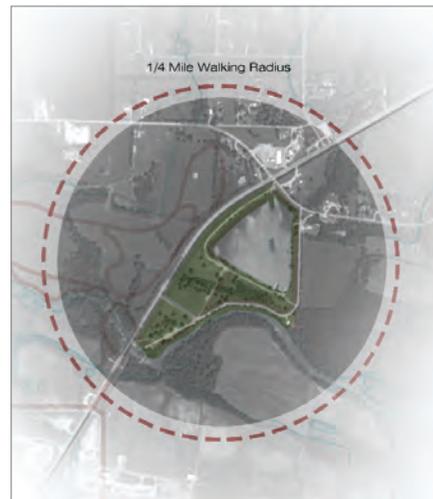


Fig. 5.5

Kellogg Lake Park should greet all who enter Carthage with a positive image and an inviting, pleasant destination.



Fig. 5.6

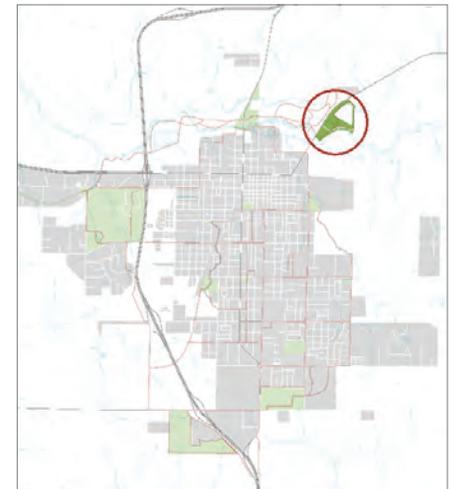


Fig. 5.7



“The human spirit needs places where nature has not been rearranged by the hand of man.”

Another important new feature that we recommend added into the park is the Conservation Nature Center. The proposed development of the Spring River floodplain area between Kellogg Lake and the Ruby Jack Trailhead into a conservation area and park will need an interpretive center to manage it and provide educational programs about the conservation area. Such a nature center would be an attraction for many regional residents and tourist. This could become an invaluable field trip location and outdoor classroom for the area schools. Recreational and educational programs could be developed by the center to teach people about conservation and sustainability practices.

Kellogg Lake Park and the conservation nature center could serve as a trailhead for the proposed network of trails that would ring the city. With the Ruby Jack trailhead on the west end of the conservation area and Kellogg Lake Park on the east, access to the trail network that is proposed to run through the Spring River Conservation Area’s floodplain would be easily served with parking and restroom facilities.

With the visibility of Kellogg Lake Park from the Highway 96 and the vista of the courthouse spire as you round the corner near the park, this location is ideal for placing a major gateway entry sign into the city of Carthage. A prominent and artistic sign should be developed to welcome everyone to Carthage who enters along the Historic Route 66 corridor from the northeast.

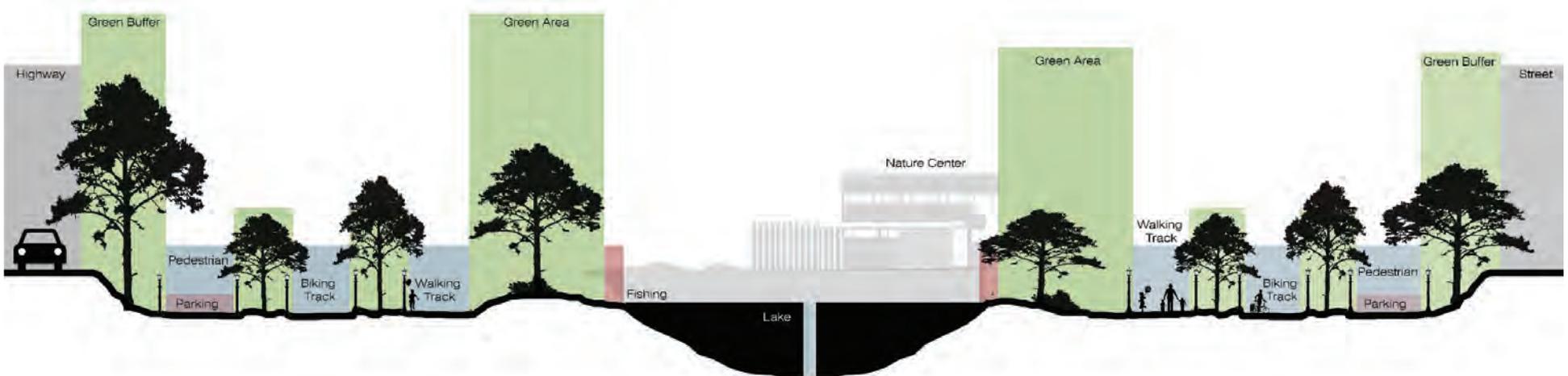


Fig. 5.8 | Fig. 5.9

Trails provide a great place for exercise and daily activities.



Fig. 5.12



Fig. 5.13

Walnut Bottoms is a great place for rural trails since it is a heavily forested area.

It also provides scenic getaway on the outskirts of the city.



Fig. 5.14



Fig. 5.15

Walnut Bottoms

Walnut Bottoms Park can become another trailhead for the trail network running through the conservation area to the north of the city of Carthage. The development of trails throughout the current Walnut Bottoms Park and proposed floodplain conservation area that connects Kellogg Lake Park to the Ruby Jack trailhead will help to create the Outer Loop Trail Network that would ultimately encircle the community. These trails will open up a very interesting and beautiful section of the community's natural resources. The sensitive riparian, wetland, and floodplain ecosystems within this area will provide valuable

educational lessons for the community about the importance of these ecosystems and how to manage and protect them for the improved health of the community.

The Walnut Bottoms Park area would be expanded as other portions of the floodplain are acquired. As each is acquired, cleaned, trails developed, trail support areas added and educational signs installed, these areas would be opened to the public. These areas would be used for educational programs, walking, jogging, and cycling, reflective leisure, bird watching, and similar pursuits. Depending on how the

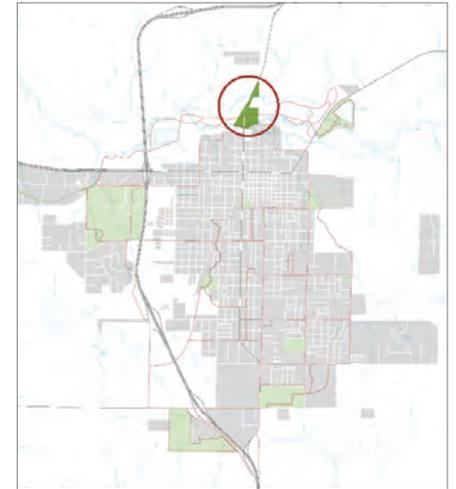


Fig. 5.18

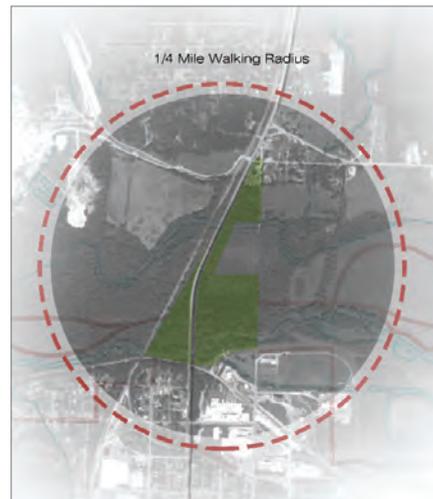


Fig. 5.16

Walnut Bottom's location on the northern edge of the city allows it to tie into the Outer Trail Network and to become an important nature retreat area



Fig. 5.17



“Solitary trees, if they grow at all, grow strong.”
- Winston Churchill

conservation area is laid out, sections of the park could be for passive pursuits and others for more active pursuits.

Additionally, the Historic Jefferson Highway runs through this conservation area. We envision that where the Jefferson Highway and the conservation trails cross that a trailhead would be constructed. At or near this trailhead we suggest that the story of the Jefferson Highway be told.

Currently, the Walnut Bottoms Park and conservation area land is infested with mosquitoes. This infestation needs to be eradicated or significantly reduced before the area can become viable; refer to Part 1, page 31, Land Preparation for a more detailed discussion of this issue.

Eradicating the mosquitoes will be a key factor in making this park successful.



Fig. 5.21



Fig. 5.22

Walnut Bottoms offers an entrance to a large trail network north of the city.

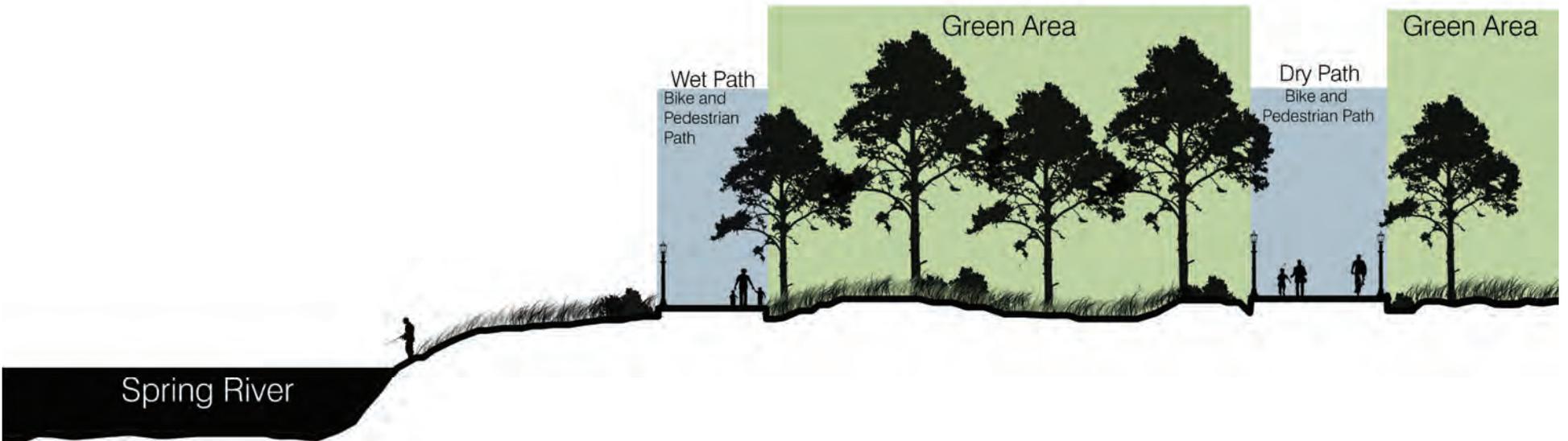


Fig 5.19 | Fig. 5.20

Municipal Park does a great job at integrating activities.



Fig. 5.23



Fig. 5.24

The network goes through the park, increasing complete access.

Municipal Park is the most community friendly park.



Fig. 5.25



Fig. 5.26

Municipal Park

Municipal Park serves the entire community of Carthage and has amenities that appeal to all age groups in the community. The park contains the city's golf course, historic baseball field, rodeo arena, the site for the County Fair, Kiwanis Kiddies Land, picnic areas and shelters, historic public pool, and open play fields which serves a wide range of ages and interest groups.

We recommend that these facilities be modernized and refreshed to serve the community better. Specifically, we recommend that the historic WPA city pool be saved and restored to function

as the city pool once again. We also believe that in time that a community center should be developed adjacent to the historic pool site that includes the offices of the Parks and Recreation Department, classrooms/meeting rooms, technology center, fitness center, the offices for the park system partners that are developed, and Master Gardeners Center. We further suggest that in time that the restored city pool is enclosed.

We also recommend that the Municipal Park become a major trailhead and junction point between

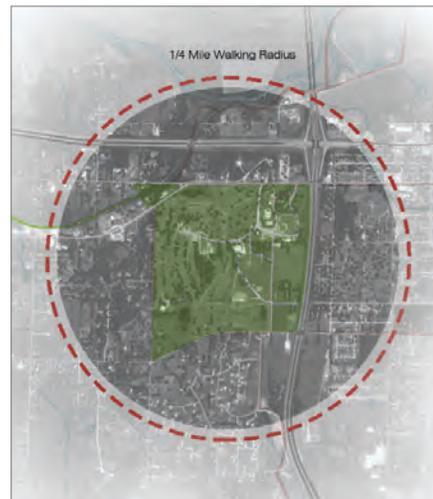


Fig. 5.27

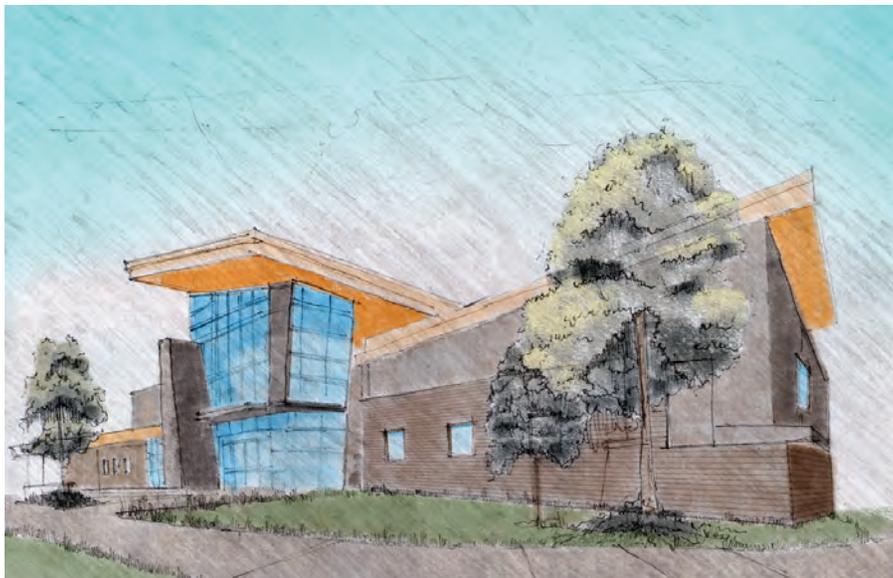
The size and location of Municipal Park makes it a great regional asset to the Carthage community.



Fig. 5.28



Fig. 5.29



“ Sometimes you gotta create what you want to be part of.” - Geri Weitzman

the Outer Trail Network and the Inner Trail Network. With its adjacency to the Ruby Jack trailhead, we also foresee that the park will see an increase in cyclist users in the future and their needs and accommodations need to be factored in as well.

Ridding the area of mosquitoes is key to its popularity.



Fig. 5.32



Fig. 5.33

Walnut Bottoms offers an entrance to a large trail network north of the city.



Fig. 5.30 | Fig. 5.31

Pavilions offer a great place for reunions and recreational activities.



Fig. 5.34



Fig. 5.35

Bazaars and farmer markets bring people together.

Carter Park offers great areas for kids to play soccer.



Fig. 5.36



Fig. 5.37

Carter Park

Carter Park's location is convenient for the surrounding neighborhood. The park's pavilions and open play space are used frequently throughout the week. As a neighborhood park, the park should offer a balance of active and passive activities to meet the needs of the diverse age group in the neighborhood. As this park is improved, this balance must be carefully maintained and enhanced by the park improvements provided.

Currently, the neighborhood youth have adapted the small open field space into a soccer field. This soccer field is by far the most actively utilized

portion of Carter Park. Until recently, there were soccer goals at Carter Park, but they were recently moved to another city location. Now the neighborhood youth are playing soccer on the field without the soccer goals.

We recommend that a clearly defined ball field be developed with proper soccer goals and lighting. This is very important. Currently, the neighborhood soccer teams have to travel to other areas of town to find proper soccer field to practice on. This costs the community money for travel and rental fees; which they have in limited supply. We also suggest

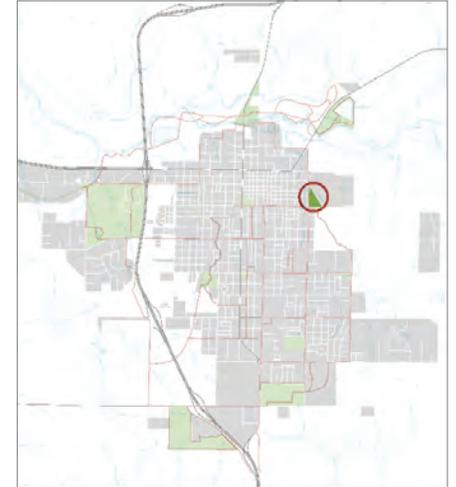


Fig. 5.40

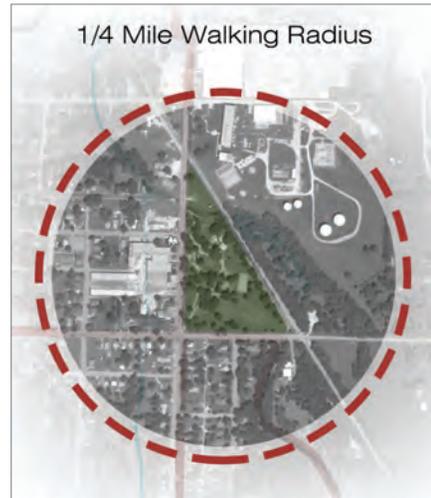


Fig. 5.38

Carter Park additions and reparations will greatly benefit the families neighboring the park.



Fig. 5.39



converting the tennis court for multi-use activities, possibly hard court soccer.

We suggest that the pavilions within the park need upgrading to improve their appearance and functionality. These pavilions have an interesting character that helps to unify the park, however they appear neglected. We can envision that with a facelift that these pavilions could serve as a good location for periodic farmers markets, bazaars or neighborhood festivals. This would help to facilitate even greater social activity within the community and between communities within this section of the community.

We believe that Carter Park can once more become an important city location for social interaction, community exchange, and cultural expression because of its heritage, location in the community, and its adjacency to the Battle of Carthage Historic Site.

Beautifying Carter Park will create a positive image and renewed pride to the neighborhood in general and, possibly, be a catalyst for additional community improvements. We believe that through the instigation of a community and parks partnership that a collaborative city/neighborhood work plan and team could be developed to implement a planting program to beautify the park, a fix up and paint up program for pavilions and structures improvements, a program for refurbishing the tennis court into a hard into a multipurpose play area, and a program to establish a soccer field with night lighting. Further, we believe that by involving the neighborhood in the process of improving their neighborhood park, that they will take “ownership” of the park and monitor how it is used and by whom.

We recommend the exploration of strategies whereby Carter Park and the Battle of Carthage Site could be unified more spatially and functionally to create the feel of more spacious open parkland without compromising the sacredness and importance of the Civil War site.

Finally, we believe that toilet facilities should be added to Carter Park.

“... city areas with flourishing diversity sprout strange and unpredictable uses and peculiar scenes. But this is not a drawback of diversity.”



Fig. 5.41 | Fig. 5.42

Picnic areas create scenic destinations for families.



Fig. 5.45



Fig. 5.46

Expanding the playgrounds will benefit the youth of the area.

Parkour and free running can be an occurring activity in Central Park.



Fig. 5.47



Fig. 5.48

Central Park

Central Park is the site of many of the community's memorials and historic statues. Over the years this park has undergone numerous transitions, from a more passive and sacred public green to a mixed use activity area with kiddies' pool and playground. The park is adjacent to the city library and the major north-south traffic arterial in Carthage and just a few blocks away from the Courthouse Square and downtown junior high school. Because of its very prominent location in the city numerous motorist pass the park everyday and many school children walk through and linger in the park on their way to and

from school.

The park occupies a complete city block in downtown Carthage and can be characterized by its many large mature trees, sculptures, memorials and centralized structure as somewhat formal when viewed from the main traffic ways. From the other two minor streets the park's dominant features tend to relate to the children's playground and pool spaces.

We recommend that the exposure along the two main arterials retain the more passive, calming character of the large trees, memorials, landscaped lawn and paths, and seating areas for

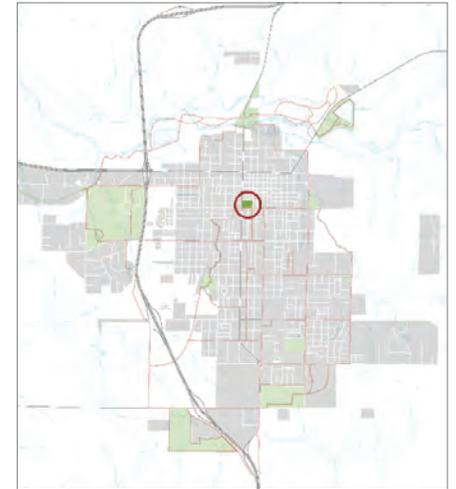


Fig. 5.51

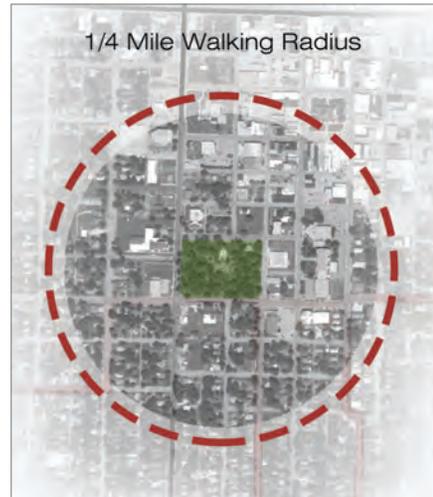


Fig. 5.49

Central Park's location near the library and schools, while being on a major thoroughfare in Carthage, makes it extremely valuable.

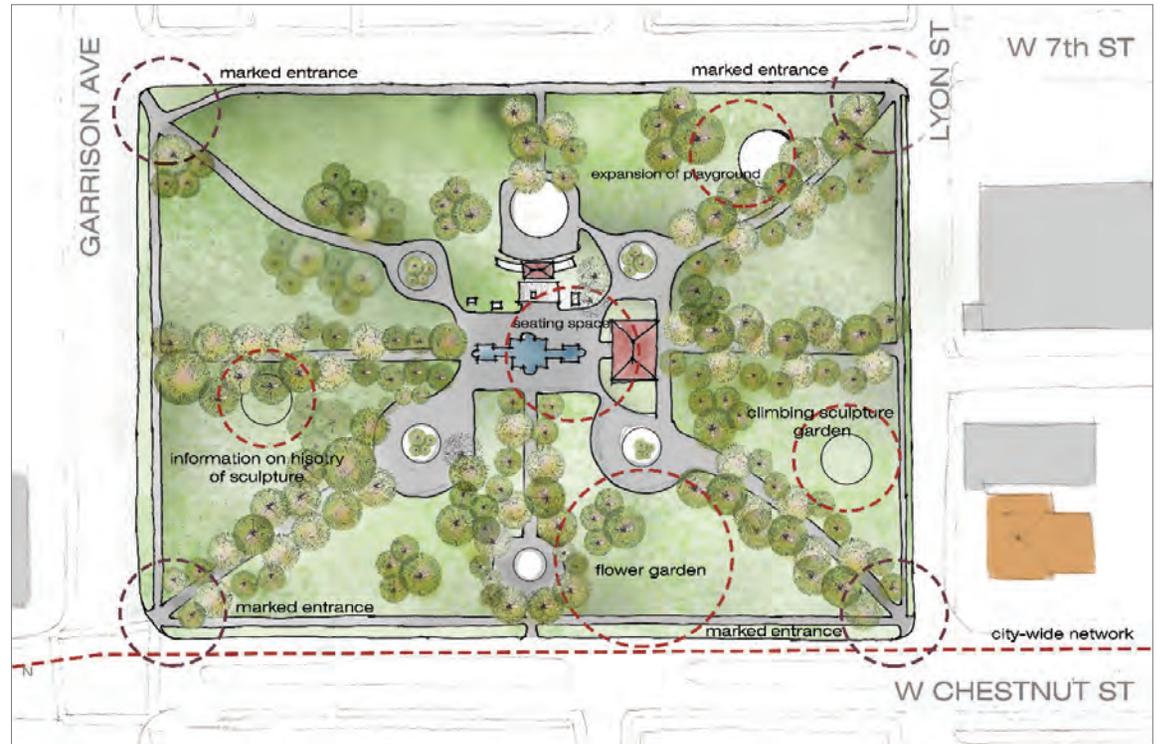


Fig. 5.50



reflection. The northeast quadrant of the block may be developed further as an active use area for the children who live and pass through the area. Furthermore, we recommend that efforts be made to unify the Carter Park and Carnegie Library site so that they may be used as one space for outdoor reading areas, outdoor classrooms, strolling story gardens, and a civic sculpture garden.

Within the northeast quadrant of Carter Park, we suggest that children's activity area remain and be expanded to attract other age groups. The playground equipment should stay and near them more benches and sheltered resting areas should be provided. The children's wading pool could be modified to become a spray plaza for people to run through. Also in this quadrant we believe that a "parkour" and free running area should be developed for the youth. Within this active children's area, we believe that a pavilion geared towards the youth should be constructed to provide them with a youth hangout location, rather than having them just loiter around the more formal center park pavilion.

We strongly believe that public sculpture should be placed throughout Carter Park and the adjacent library site to enhance the beauty and interest within the area. These sculpture could be done by regional artist or be donated and dedicated pieces from the public. These sculptures should be placed within a complementary landscape with strolling paths and viewing spots among the seasonal flowers.

"Vision without action is a daydream. Action without vision is a nightmare." - Japanese Proverb

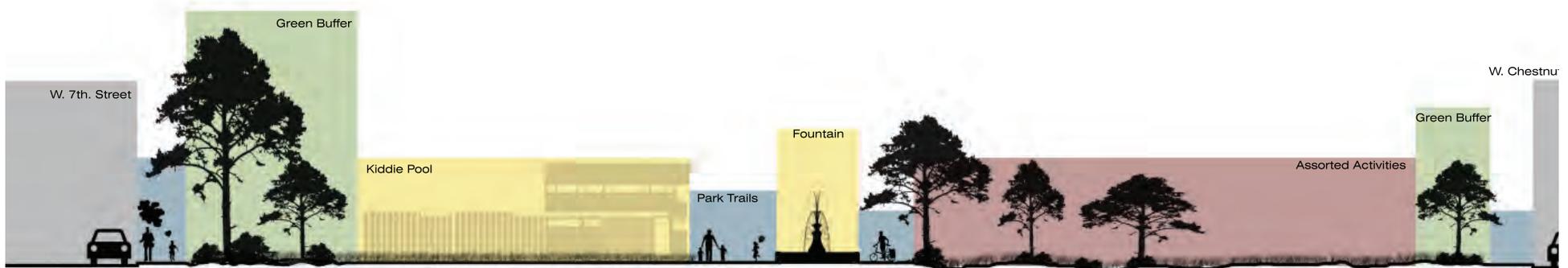


Fig. 5.52 | Fig. 5.53

Freer Park is a blank slate with endless possibilities.



Fig. 5.56



Fig. 5.57

Xeriscaping is a sustainable method of beautification.

Drainage ditches can be transformed into bike paths.



Fig. 5.58



Fig. 5.59

Freer Park

Freer Park is an undeveloped residential block in eastern Carthage. We recommend that this park be developed as a neighborhood park and trailhead of the Network Trail System. There are no historic, architectural, or geographic features in this area of Carthage that could be highlighted or used to give the park meaning.

Therefore, we suggest that the park be developed as an expression of Carthage's values of collaboration, health and socialization. We foresee the following activities combining to support these values: a neighborhood park with

sheltered picnic areas, a playground, an open free-play area, a walking and jogging track, and a Network Trail System's trailhead with public toilets and water fountain, small parking lot, bike rack, trail informational kiosk, and xeriscape plantings.

The trailhead would be located at the eastern end of the park. The trailhead would include a shelter pavilion with toilet facilities and water fountain, an informational kiosk, a bike rack, and five parking spaces. The remainder of the park would contain the walking and jogging trail that encloses the open



Fig. 5.62

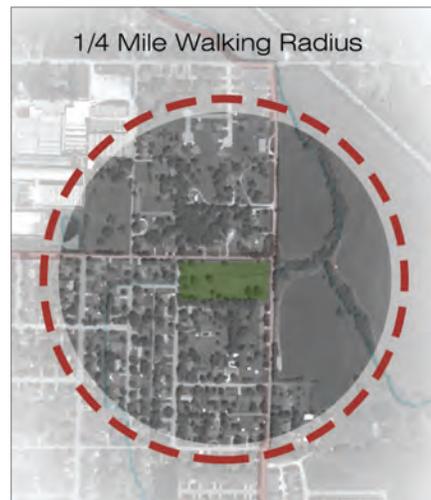


Fig. 5.60

Freer Park is easily accessible by both people walking from the nearby neighborhoods, as well as those traveling via the city's trail networks.

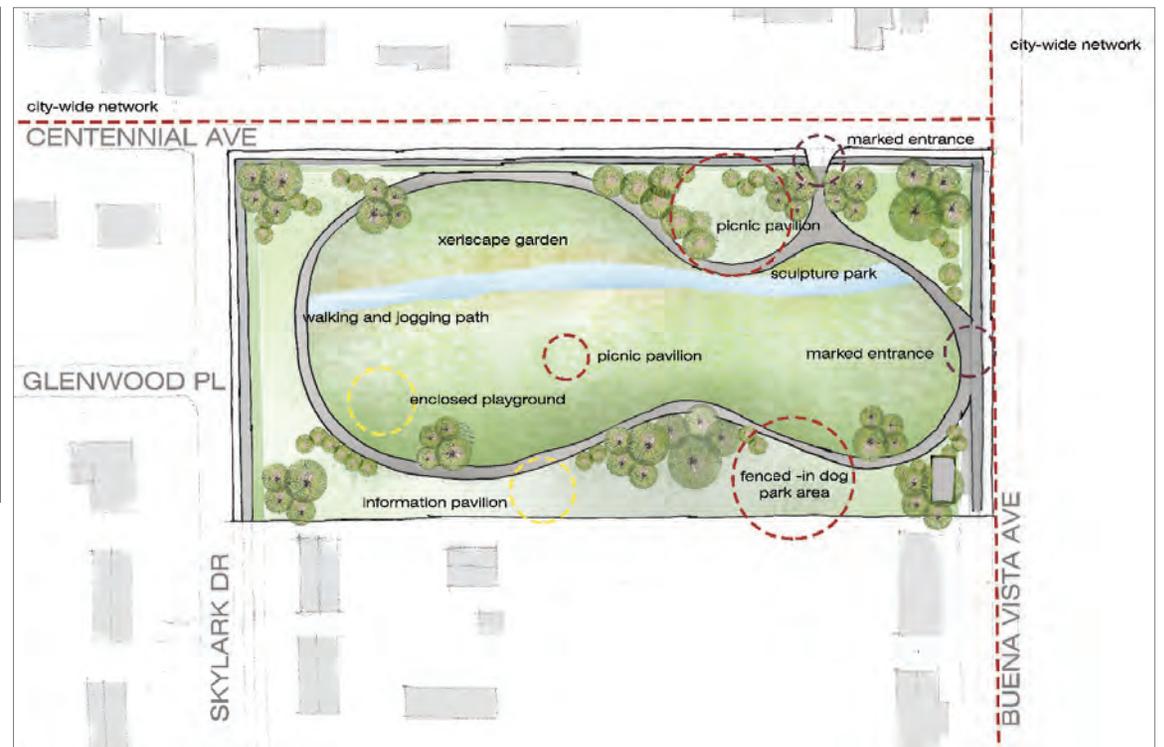


Fig. 5.61



“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.” - Margaret Mead

free-play field, picnic pavilions, and a playground. The drainage area that flows through the site would be retained and enhanced by a terraced and bermed transitional landscape that allows the water to overflow its banks in a controlled manner. A xeriscaped landscape of native plants should be used to slow and purify the water in the drainage basin and as accent planters throughout the park.

The layout of the trailhead and the neighborhood park amenities has been carefully considered to provide spatial arrangements that encourage social interaction among the various user groups: trail users, park users, youth and elderly populations. The park should also be spatially arranged to allow neighborhood residents the option of planting special gardens in collaboration with the Parks and Recreation Department.

And finally, the design and management of the drainage basin/corridor that runs through Freer Park should be developed as a prototype example of how to use water management areas as community recreation spaces.

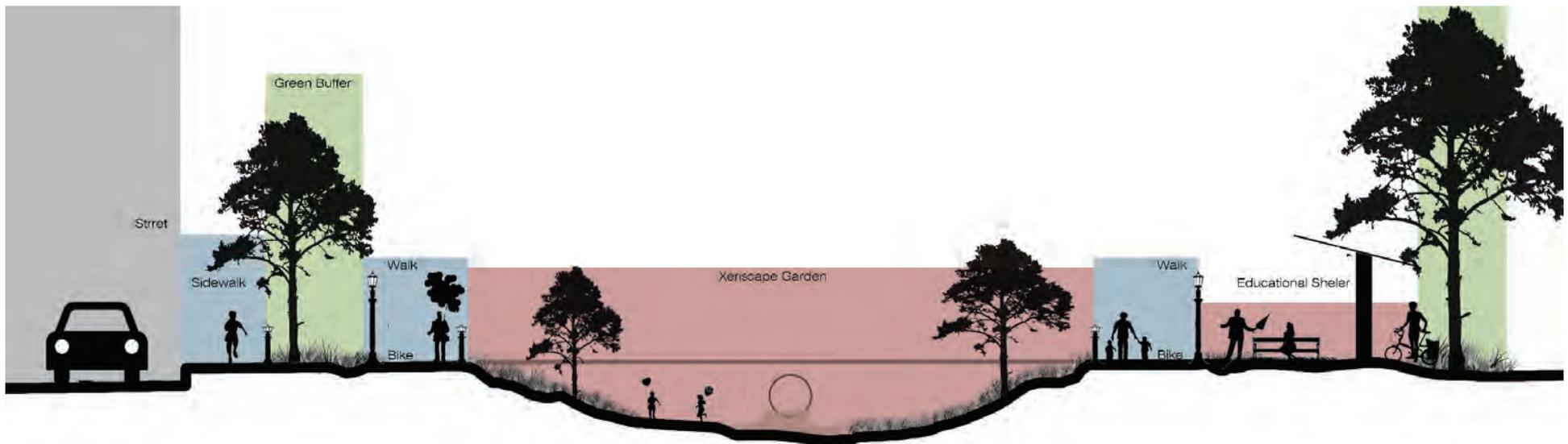


Fig. 5.63 | Fig. 5.64

Griggs Park is one of the parks that focuses on the youth.



Fig. 5.67



Fig. 5.68

Passive activities are being introduced into Griggs Park.

Green buffers start to address the idea of approachability.



Fig. 5.69



Fig. 5.70

Griggs Park

Griggs is a city park that functions primarily as a neighborhood park. The youth oriented recreational equipment attracts children to young adults to the park. The busy surrounding streets make it difficult for children to access and use the park without adult supervision and require the use of fencing around the park.

We recommend that the chain-link fencing that is currently used to enclose the park be upgraded to provide a more visually appealing street presence. We suggest that a hedge row be planted beside the fence to provide a green

buffered edge between the street and the park. Particular attention should be given to the playground area that requires the greatest separation from the streets. We would also suggest that entry points into the park be created along each street. At these entry points we suggest the construction of stone columns to mark the importance of the entry and support the gate.

The skate park should be expanded and enhanced to provide more challenges and skill levels. Currently, this is the most popular apparatus within the park for the youths and young adults.

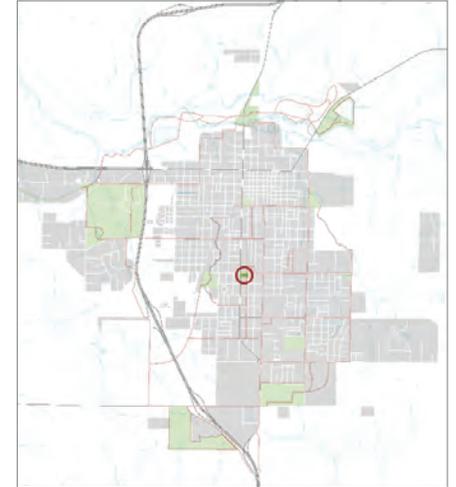


Fig. 5.73

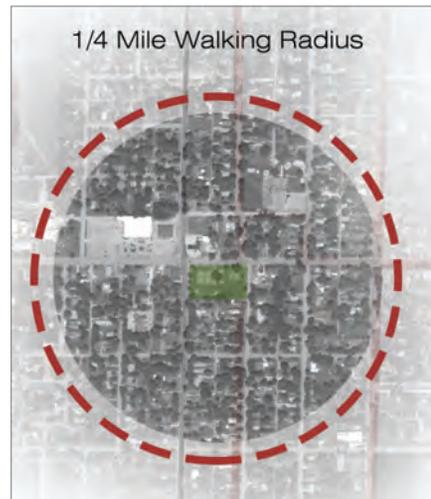


Fig. 5.71

Griggs Park is conveniently accessible via streets and sidewalks in the center of the community. However, it does require crossing several busy streets of being dropped off by parents.

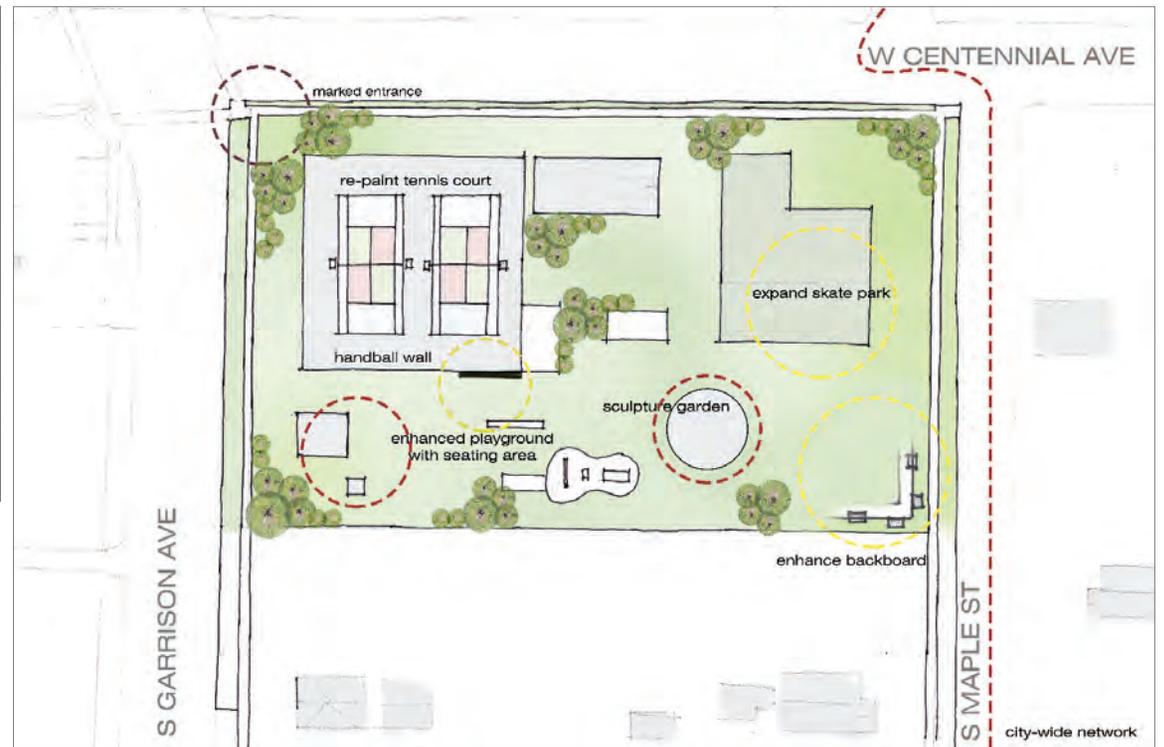


Fig. 5.72



“The greatest shortcoming of the human race is our inability to understand the exponential function.”
 - Albert Bartlett

The tennis courts should be reconsidered and probably repurposed as a location for hard court soccer, handball courts, a rock climbing wall area, a parkour area, or full court basketball area.

The baseball area should be reconsidered as well and the area converted to a open free play area.

Additional passive areas should be created and the limited spaces enhanced to accommodate more people, to accommodate leisure activities like reading, chess, and checkers, and to provide shelter from the elements. These sheltered resting areas should be positioned to provide prominent views of all the recreational areas and entrances.

We suggest that it would be beneficial to designate on-street parking spaces around the park or the inclusion of a few on-site parking spaces since many of the users of this park will be driving to utilize its specialized amenities.

The signage for Griggs Park is limited. We recommend that new parking that follows the guidelines for signage within the park system be installed at Centennial Avenue and Garrison Street and at Centennial Avenue and Maple Street. Like the entry points around the park, we suggest that the sign also incorporate native limestone. We would encourage the use of xeriscaping to accent and beautify these signs as well.

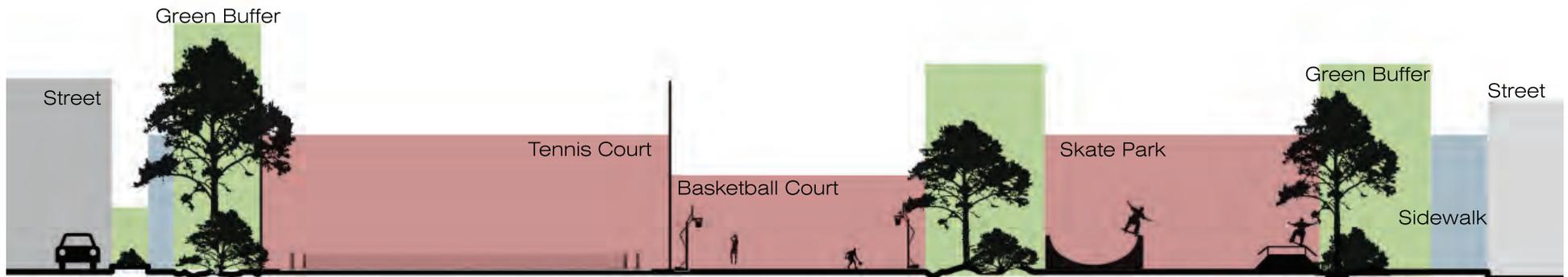


Fig. 5.74 | Fig. 5.75

Physical activities generate socialization opportunities.



Fig. 5.78



Fig. 5.79

Sports allow people to be physically and socially active.

Sports are part of Carthage's city identity.



Fig. 5.80



Fig. 5.81

Fair Acres Park

Fair Acres Park is a community park that provides facilities for large numbers of people. It has multiple softball, baseball and soccer fields that serve the entire community of Carthage.

Because of the numerous sports fields located at Fair Acres Park it is one of the most used parks in the community. And, it is the park that is most used by out of town visitors during sports competitions. Because of these factors, it can be stated that Fair Acres Park represents the image of the Carthage Parks and Recreation system. Therefore, the park needs to be well maintained, remain modern and

up to date, and visually attractive so that all users have a wonderful experience and will want to return to Carthage throughout the years.

The exercise walk and jogging trail that is located at Fair Acres Park offers a healthy work out area for people in the community or attending the sporting events. This exercise trail needs to be enlarged and enhanced to keep it up to date and challenging to the long term users. The signs at each of the exercise areas need to be replaced with informational signs that are understandable by people with limited visual abilities and presented in both

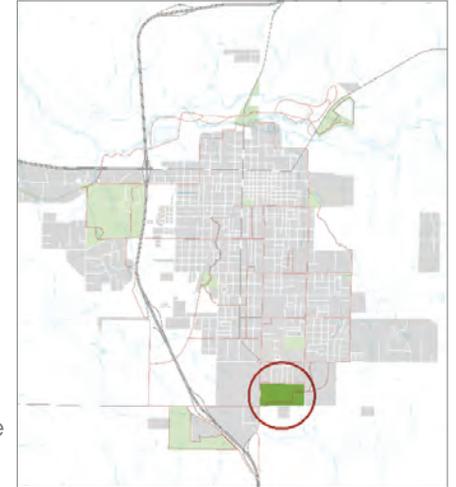


Fig. 5.84

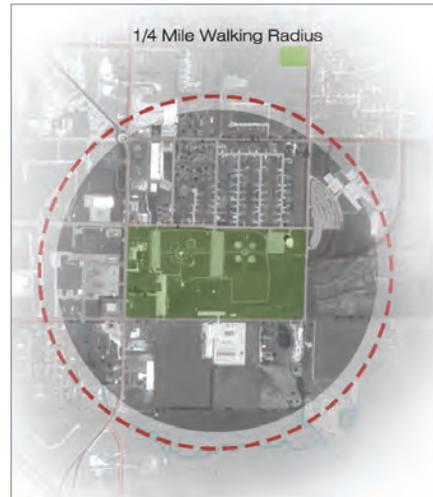


Fig. 5.82

The Outer Trail Network of Carthage runs through Fair Acres Park and connects to the Inner Trail Network, making the park both a destination, and transition between networks and city neighborhoods.



Fig. 5.83



English and Spanish.

We recommend that the City's Network Trail System run through Fair Acres Park. The park should be a major trailhead that connects the Outer Trail Network to the Inner Trail Network. This trail network will draw more people to this park from around the city. This will bring more pedestrians and cyclist to the park and require the addition of accommodations for these users: rest shelters, bike racks, open toilet facilities, and water fountains.

We also recommend that the city open discussions with the YMCA about establishing a public/private partnership to create a competition pool in an expanded YMCA facility. If this new competition pool partnership is not developed at the YMCA facility, then the proposal to restore the old city pool in Municipal Park should be explored.

Since Fair Acres Park is the premiere sports complex for the city of Carthage and many people from within and outside the community will use it throughout the year, it is important that the park's appearance and entrances be prestigious. Currently, the entrances and park lack grandeur. We recommend that numerous entries and trailheads follow the signage guidelines of outline herein. We also recommend that xeriscaping be used to enhance the overall appearance of the park.

We encourage the Parks Department to seek the establish volunteer associations with the various sports groups that regularly use the Fair Acres Park facilities for the purpose of assisting with the upkeep and enhancement of the park.

We recommend that the Parks and Recreation Department establish a use fee structure that the organizations who use the park must pay for the up keep and enhancement needs of these facilities: maintenance, lighting, trash removal, etc.

“Physical fitness is not only one of the most important keys to a healthy body. It is the basis of dynamic and creative intellectual activity.” - John F. Kennedy

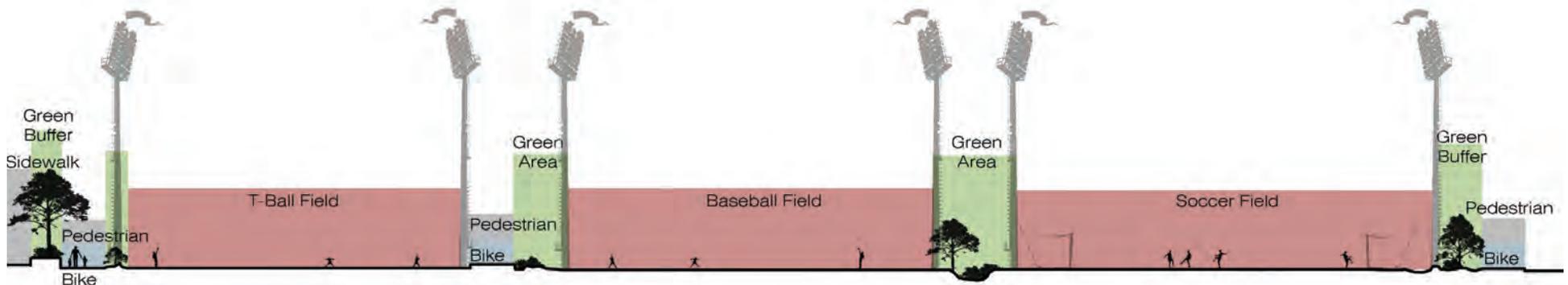


Fig. 5.85 | Fig. 5.86

Drainage ditches can be transformed into bike paths.



Fig. 5.89



Fig. 5.90

Pavilions start defining spaces for open programming.

New parks will be needed as the city grows.



Fig. 5.91



Fig. 5.92

Floodplains and Parks

The city of Carthage has a large floodplain area located north of town along the Spring River basin. Two additional floodplain drainage basins flow into the Spring River floodplain from the south. These two floodplains extend through the city, one to the east and west of the city center. We recommend that all of the floodplain areas remain undeveloped as natural areas or parks to accommodate water drainage through the community as the city grows. Furthermore, we recommend that all of the floodplain land be purchased by the city or county or land trust to prevent any development in these important water drainage basins

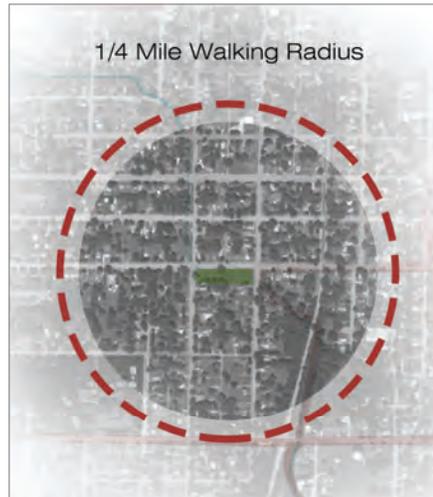


Fig. 5.93

Cedar Street Park's program provides new amenities to the Carthage community, such as a dog park and community gardens.

Cedar Street Park

and ecosystems. We also suggest that any buildings that have been constructed in the floodplains be removed and the floodplain returned to its natural state.

The new Cedar Street Park is located in the floodplain basin located to the west of the city center. Running through this property is a drainage ditch. We suggest that this site should be developed into a neighborhood park with an open park shelter, picnic areas, playground, enclosed dog park and community gardens. Furthermore, we suggest that the Inner Trail System of pedestrian and cyclist paths connect to this park. In our suggested park design we have located



Fig. 5.95

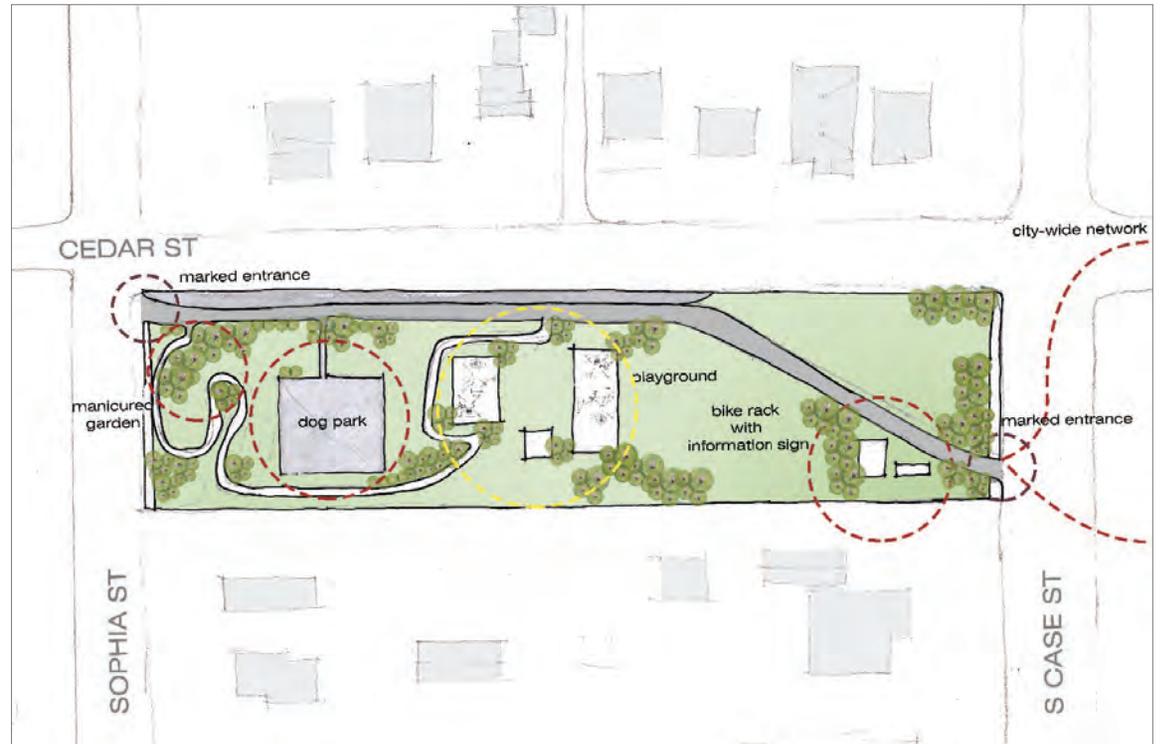


Fig. 5.94



the greenway trail in the existing drainage “ditch”. However, we envision the “ditch” being modified to become a series of terraced and landscaped drainage corridor that allows the water to flow at varying depths while still having the hard surfaced greenway trail adjacent or over the corridor.

The proposed park amenities would be designed so that any flooding events would not damage the park structures or equipment. The shelter and picnic tables would be built from materials that can survive wet conditions. The other uses proposed for the park would not be affected by flooding events.

We foresee Cedar Street Park as primarily an open landscape park with a few set park amenities provided. It would be ultimately up to the residents of the neighborhood to “define” the park’s character and uses.

“Life can only be understood backwards; but it must be lived forwards.” - Soren Kierkegaard

Neighborhood parks address small scale social activities.



Fig. 5.98



Fig. 5.99

Green buffers are used to separate the parks and streets for safety reasons.

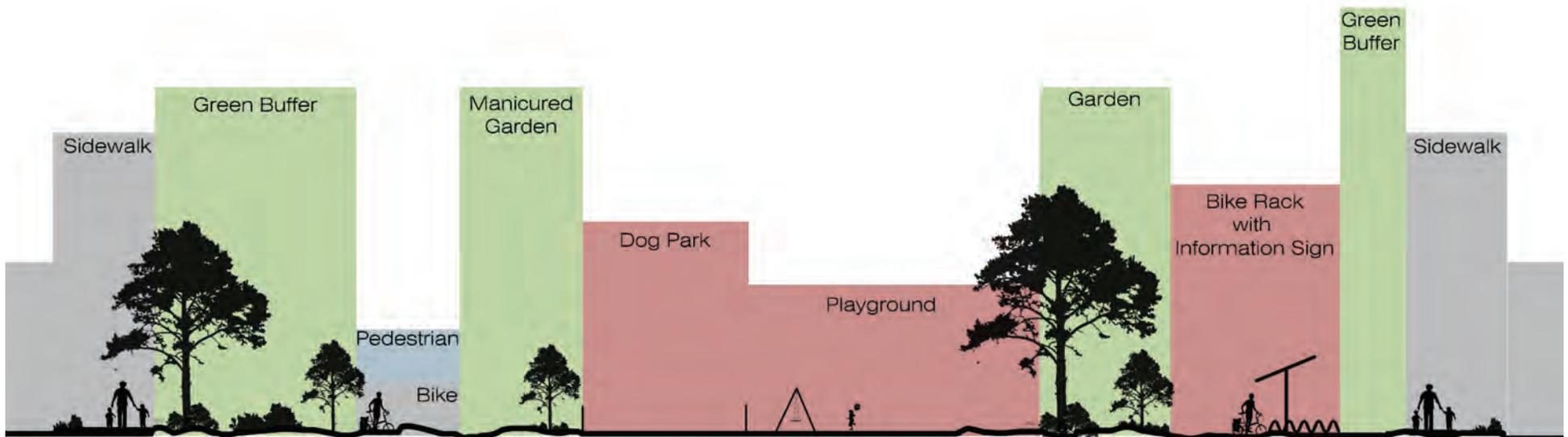


Fig. 5.96 | Fig. 5.97

Hazel Street Park is a new city park.



Fig. 5.100



Fig. 5.101

This park could be a partnership between the city and Mercy Hospital.

New parks are all about the reutilization of existing resources.



Fig. 5.102



Fig. 5.103

Hazel Street Park

The new Hazel Street Park is partially located in a floodplain, within convenient walking and biking distance of several residential neighborhoods, and behind the St. John's Clinic and across the street from the Mercy Family Clinic. This large open parcel of land extends south from W. Centennial Avenue alongside the railroad tracks to a large stand of trees. The Hazel Street Park could extend southward to the tree line or beyond the tree line to the industrial building on W. Fairview Avenue depending on ownership and availability of the land.

Hazel Street Park has the potential of being a city park because of its acreage. The type of recreation assets that could be developed on this site could draw people from across the community, not just from the surrounding neighborhoods. As a new city park, it would be important to run the city's Inner Trail Network to this park so that it can be reached easily by walkers, joggers, and cyclist using the greenway.

We would recommend including a large dog park within the Hazel Street Park. The dog park enclosure should run

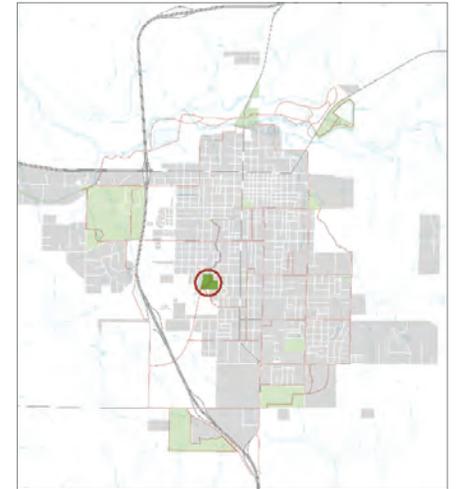


Fig. 5.106

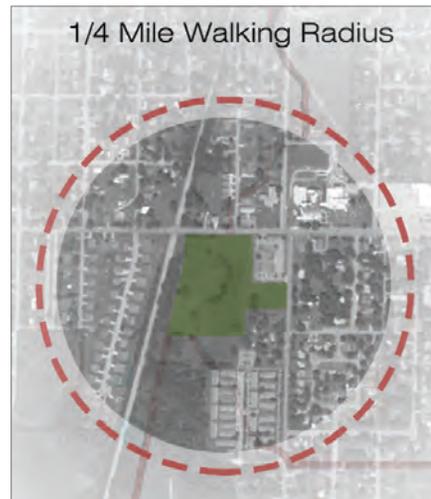


Fig. 5.104

Hazel Street Park provides vast green spaces for the youth of Carthage to play in, as well as range of activities for adults.



Fig. 5.105



adjacent to the railroad line down the full length of the park to provide the dogs and their owners a large, free run area. Within the dog park enclosure should be different environmental settings from open fields to shaded tree areas with cleared underbrush to water features. Several shelter areas should be constructed within the dog park with seating areas for both the owners and dogs. Water should be provided at each shelter.

The Hazel Street Park should be planted with native trees and plants using the xeriscaping approach to create a park setting that in time will resemble the landscape of Carthage before the settlers arrived. These trees and plants will be a great education outdoor classroom for all the citizens of Carthage, especially the school children. Promoting the concept of xeriscaping is also important to further the city's vision stated herein of conservation and sustainability best practices.

Amongst the xeriscaped landscape should be located picnic shelters and multipurpose park pavilions, play sculptures that invite people of all ages to interact with, flower and demonstration gardens, and strolling paths and places for solitude.

“Design is not making beauty, beauty emerges from selection, affinities, integration, love.”
- Louis Khan

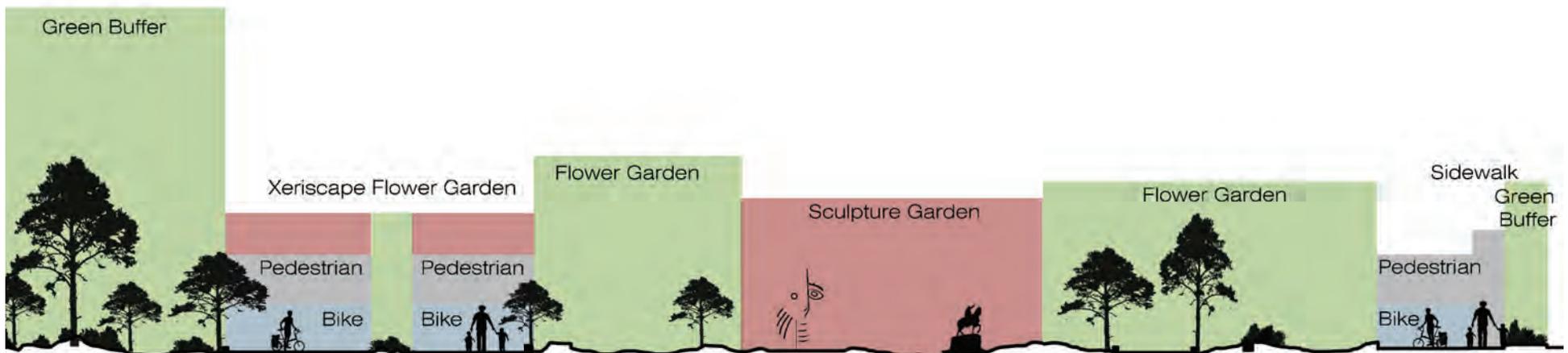


Fig. 5.107| Fig. 5.108

Parks need to provide activities that accommodate all ages.



Fig. 5.111



Fig. 5.112

Art aims to create an interactive and integrated environment.

Parks streamline the process of development and growth.



Fig. 5.113



Fig. 5.114

South River Street Park

South River Street Park is located in southeast Carthage adjacent to a residential neighborhood to the east and undeveloped land to the west. We recommend that this park be developed as a neighborhood park for the existing and future neighborhoods that will develop in this area of Carthage.

As with all the neighborhood parks, we recommend that the residents from the surrounding area have optimum input into the design and character of their park. We foresee the development of informal partnerships between the Parks Department and the

neighborhoods in creating, overseeing and maintaining these parks.

The South River Street Neighborhood Park should satisfy the needs of the local residents and reflect the character of the surrounding area. Without fully understanding the demographics and wishes of this neighborhood, we speculate that this park might be developed for as follows:

- The park should include a park shelter that can be used as a multipurpose event area. These events could include individual and community picnics,

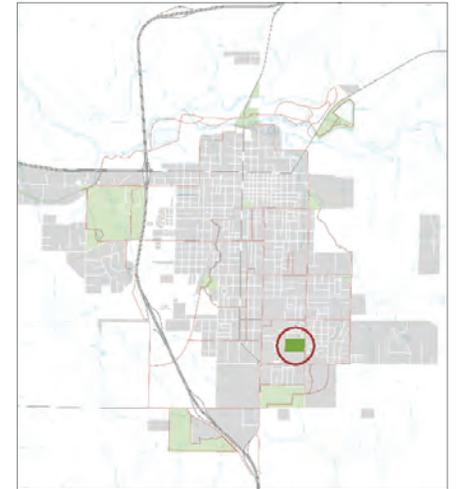


Fig. 5.117

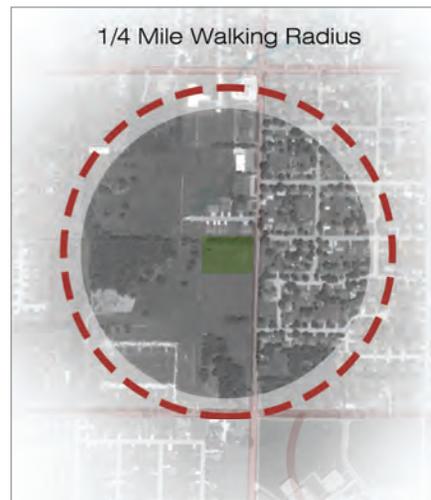


Fig. 5.115

South River Park can develop into a place of expression and beauty for Carthage, offering opportunities for sculpture gardens.



Fig. 5.116



“The aim of art is to represent not the outward appearance of things, but their inward significance.”
- Aristotle

- reunions, farmers markets, multi family garage sales, or rest shelter.
- Picnic tables and grills should be placed throughout the park as well.
- Interactive playground sculpture appropriate for people of all ages should be included in the park so that the children and adults can simultaneously play together.
- The city’s greenway trail system should link into this park to provide pedestrian, joggers, and cyclist access to the full city network of trails.
- Xeriscaping should be utilized in the park to minimize the maintenance upkeep of the park’s landscaping. Xeriscapes utilize native plants that require less water, pesticides, fertilizers, and maintenance.
- The people in the neighborhood should be encouraged to add plantings and gardens to their neighborhood park within a set of Parks Department guidelines.
- The ultimate focus for the park should be to promote socialization, collaboration, and healthy exercise.

People gravitate to new and interesting places and objects.



Fig. 5.120



Fig. 5.121

Art can help define the identity of a park or community place.

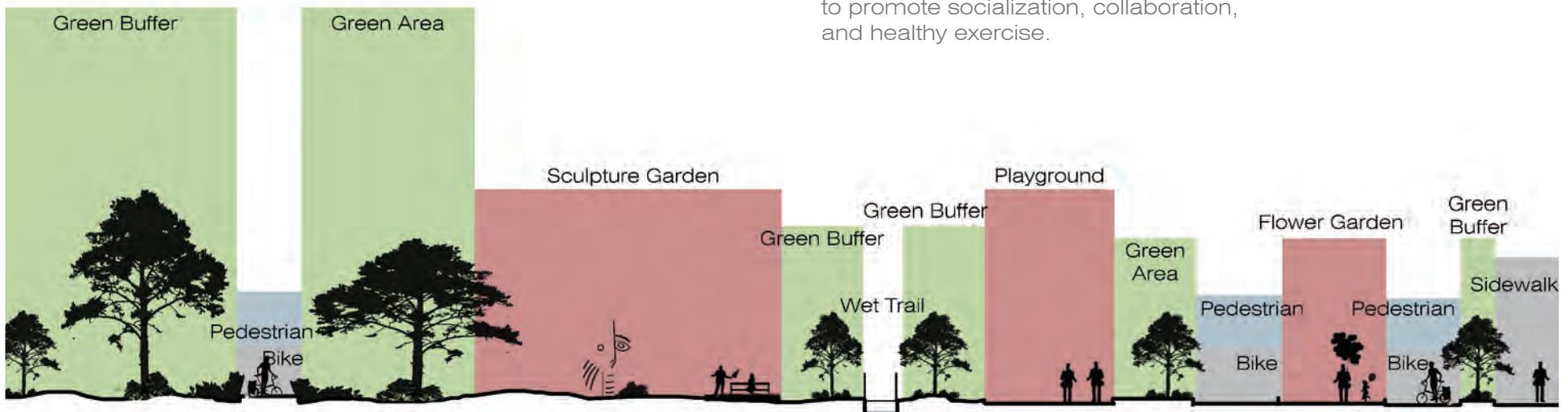


Fig. 5.118 | Fig. 5.119

McCune Brooks Park is designed to be recreational and therapeutic.



Fig. 5.122



Fig. 5.123

Transformation of the site into a hospital park.

Xeriscape creates a sustainable environment.



Fig. 5.124



Fig. 5.125

McCune Brooks Park

Carthage's Mercy McCune Brooks Hospital is located on 80 areas of city owned land at the southwest edge of the community. The city and hospital have discussed the development of a park adjacent to the hospital that would be used by the patients, visitors and staff, as well as, members of the community. We concur that the property adjacent to the hospital should be developed as a "place for healing and reflection".

Although associated with the hospital, we consider the McCune Brooks Park a community park with a

special focus. This park would provide numerous spaces for scenic viewing and solitude. Its setting should be uplifting and inspirational and its seating areas conducive for private thoughts and socialization. The park must be accessible from the hospital so that patients can easily move between the indoor and outdoor care areas. Visitors to the hospital and staff members should be encouraged to use the park for breaks. And, the public encouraged to use the park as a place to escape the stresses of daily life.

The park should have strolling paths

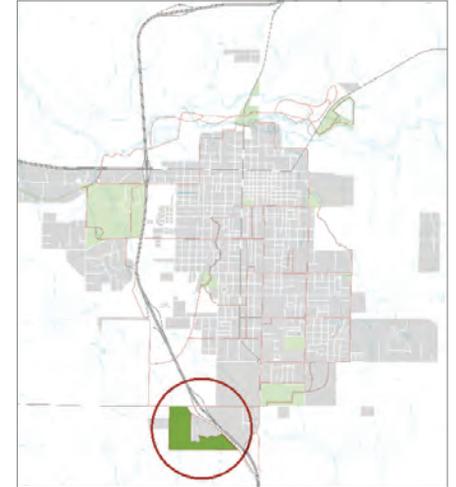


Fig. 5.128



Fig. 5.126

McCune Brooks Park can act as both an active outlet with its vast trails, and as a place of rest with a developed picnic area.

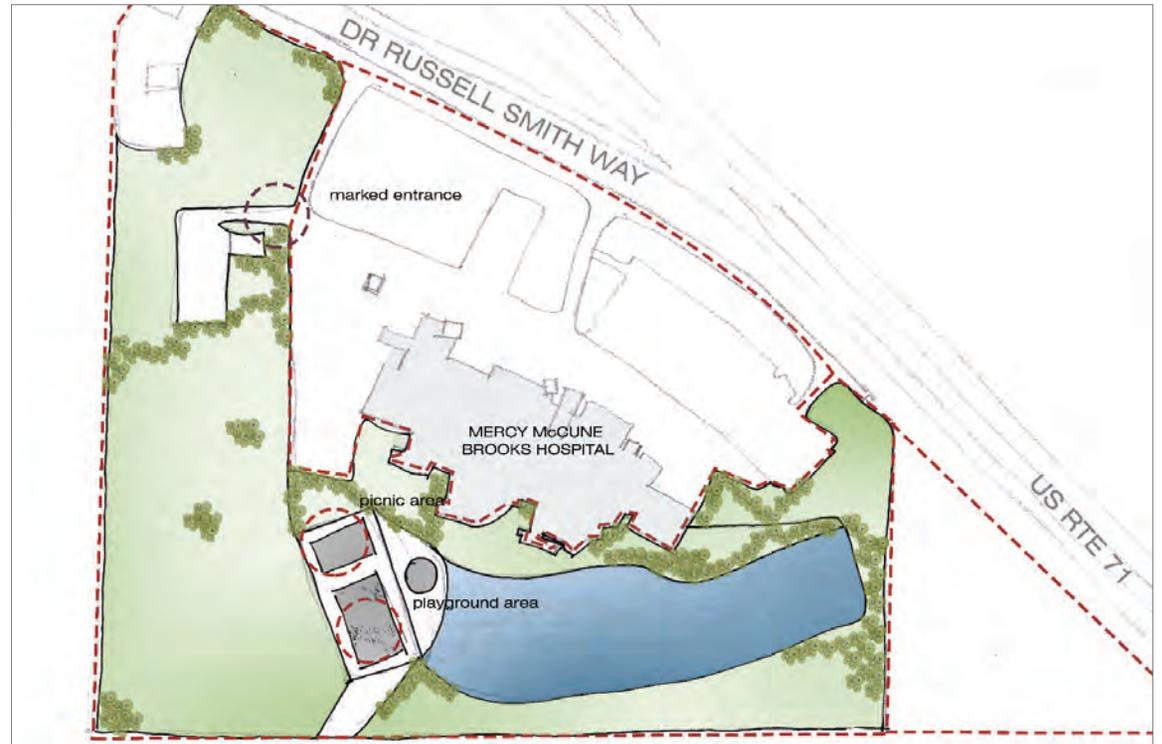


Fig. 5.127



“Coming together is the beginning. Keeping together is progress. Working together is success.”
- Henry Ford

that wind through a landscaped garden of seasonal flowers, shrubs, and trees. A water feature should be formally included to bring dignity and grandeur to the spaces. Secluded shelters should be provided throughout the park to protect the users from the elements. And, both foreground scenes and long vistas should be developed to add interest and variety to the various sheltered seating areas.

We recommend that sculptures be placed within the park to serve as points of interest and inspiration. We also could envision dedicated settings, shelters, sculptures, flower gardens, and fountains being installed by families and patrons.

We also recommend that the park be zoned into areas that are more public and open to the elements, to areas that are more private, quiet and focused on solitude. Any active or noisy areas should be separated from the quiet private zones visually and acoustically.

This park should be a place for healing the body and mind and reflecting upon the past and envisioning the future.

Patients, visitors, and staff can use this park, as well as the entire community.



Fig. 5.131



Fig. 5.132

This park focuses on creating a calming and healing environment.



Fig. 5.129| Fig. 5.130

Pedestrian and bike networks can activate urban spaces.



Fig. 5.133



Fig. 5.134

Existing sidewalks can be adapted to the expanding pedestrian network.

Green buffers give a physical and visual separation from traffic.



Fig. 5.135



Fig. 5.136

Carthage Network System

Carthage's Network System is comprised of two interconnected trail systems: the Inner Trail Network and Outer Trail Network. Each will have to address the different challenges of their respective contexts. The complete network will be comprised of on-street and off-street bike lanes, improved city sidewalks, greenway pedestrian and cyclist trails, and linear parks. This lace work of pedestrian and cycling trails within the city will allow the residents of Carthage to have a safe, convenient multimodal transportation system that is not car dependent. This lace work of sidewalks, trails, and linear greenways

will link the city's parks, schools, churches, hospital, governmental center, and residential neighborhoods. The Inner and Outer Trail Networks will serve as both recreational and utilitarian purpose for the city of Carthage and effectively extend the city's park system throughout the city's incorporated infrastructure.

The Outer Trail Network will become a major recreational and conservative feature of the Carthage community. This Outer Trail Network establishes a green buffer around the entire community to serve as the limit to incorporated city growth and serves as "lungs for the community" to purify the air and water.



Fig. 5.138



Fig. 5.137



Fig. 5.139



Greenway along Spring River

The network will integrate the urban and natural environment.



Grant Street Example

Fig. 5.140 | Above Fig. 5.141

This Outer Trail Network incorporates the Spring River Conservation area and Conservation Nature Center at Kellogg Lake Park to create a strong community educational program of preservation, conservation and sustainability. This network will connect to the trailhead at the Ruby Jack Trail and allow cyclist to move into and around the community with ease, making Carthage a key starting or stopping point for recreational bikers in southwestern Missouri. With the addition trail such amenities as trailheads with informational signage and toilet facilities, bike racks, designated way stops and points of interest both avid and occasional cyclist will be drawn to this trail network.

Connecting to the Outer Trail Network is the lace work of trails that stitch the community together via the Inner Trail Network. This lace work of trails utilizes designated street bike lanes and bike lanes that run through alleyways and along greenway trails. This network provides the residents of Carthage with safe, convenient and accessible pedestrian, jogging and cycling routes throughout the community. The goal of the inner network is to reduce the focus of vehicular travel within Carthage and promote the social, environmental, physical and economical benefits of walking and riding.

It must be remember that research has shown that the property value, of homes adjacent to pedestrian and biking trails, increases approximately 15% after the trails are constructed.

A trail network through the conservation areas could be an educational asset.



Fig. 5.142



Fig.. 5.143

Connecting to a large scale bike trail will attract new bikers to use the trail network.

Green buffers can make both the parks and streets more inviting.



Fig. 5.144



Fig. 5.145

Part 6

Phasing

Phasing means the relationship between the timing of two or more events, or the adjustment of this relationship.

Phasing Overview

In order for Carthage's parks and recreation system to reach the fulfillment of the community vision statement described herein, it will require time and investment from not only the city, but also its citizens. We conceive of the phased implementation of this vision as a three step process: enhancing, expanding, and connecting.

Enhancing: The enhancing phase focuses on resolving the issues that were identified within Carthage's existing parks and recreation system. This will require addressing such topics as the city's parks and recreation budget, priorities, governmental policies, insufficient support from park users, etc.

Expanding: After the current parks and recreation issues have been addressed, the city should then turn its attention to

an expansion of the parks and recreation system amenities that help to support and promote a more physically active, socially integrated and economically viable community.

Connecting: As the issues are resolved and the parks and recreation programs enhanced, the city must work to connect the various community assets, neighborhoods, regional communities and peoples together both through a physical network of trails and the communal initiatives of Active Living, Healthy Lifestyle Initiatives, and Smart Growth.

These three phases complement one another and provides a clear framework for resolving current issues, envisioning a healthier and more self-reliant future, and unifying the public and private sectors of the community in a synergistic process of growth.

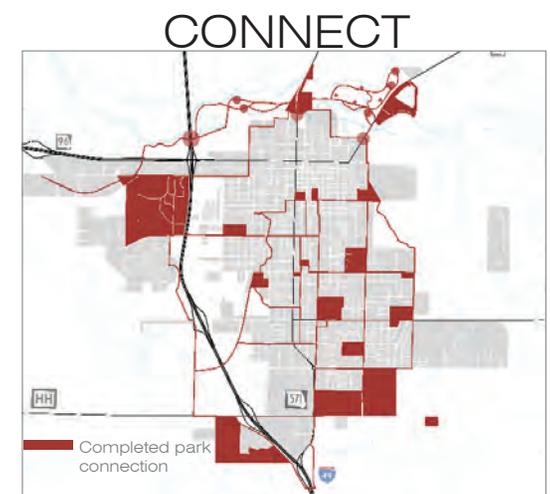
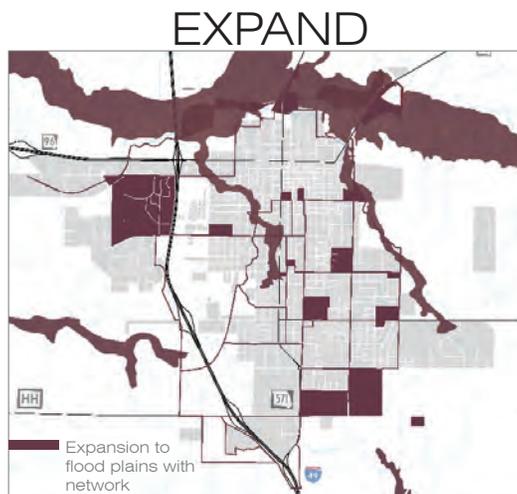
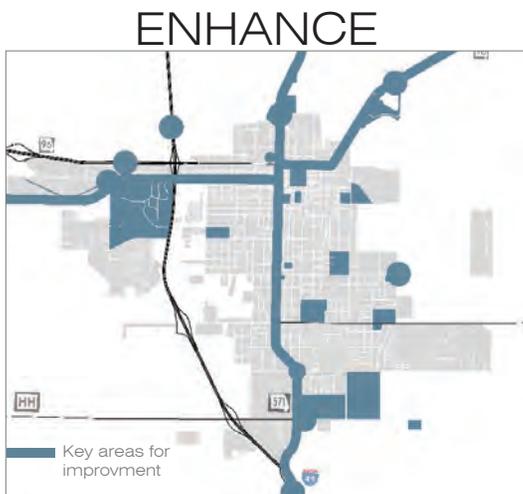


Fig. 6.6 Top Left | Fig. 6.7 Below

Fig. 6.8

Fig. 6.9

Education of the various strategy in gaining support from the community.



Fig. 6.10



Fig. 6.11

Simple programs such as walking clubs are an inexpensive way of gaining support.

City policy changes will facilitate further vision development.



Fig. 6.12



Fig. 6.13

Phase One

Phase One is the enhancement of Carthage's amenities and current infrastructure. This enhancement phase will address the physical features of the parks and recreation programs as well as the city's social, economic and political issues. During this phase the parks and recreation program and the city need to remove any potential governmental or policy roadblocks that will hinder project and program development.

The parks and recreation program and city should focus upon improvements to the infrastructure of the parks and the sidewalks used to access the parks. Improvements within the parks should also be undertaken at this time to improve the parks physically and visually. Park equipment and facilities should be repaired or new equipment and facilities installed.

At the same time the budgeting for the parks and recreation programs within the city must be reconsidered and expanded. This budget expansion could be from new allocations, new park and recreation program fees, the development of public/private partnerships for parks and recreation operations and maintenance, and new efforts in parks and recreation volunteerism. The long established policy that the city provides the facilities and the private organization sponsor and implement the programs within the parks at no charge must be reconsidered.

During the enhancement phase, we recommend that Parks and Recreation Department and the city consider the vital role that the Carthage's parks and recreation system has in the health and well-being of the citizens of the community. Further, discussions should be undertaken to consider adopting a new city

PHASE 1 Enhancing

- **IMPROVING EXISTING AMENITIES**
 - Sidewalk Repair
 - Playground Equipment
 - Park Beautification
- **EDUCATION OF STRATEGIES**
 - Active Living Education
 - Education of Environmental Preservation
 - Education of the benefits of Volunteerism
- **POLICY CHANGE**
 - Building regulations
 - Environmental Zoning Regulations
 - Acquisition of Development rights in Green Zone
- **NEW PROJECT DEVELOPMENTS**
 - Volunteering programs through local entities
 - Walking to School programs
 - Introduction of new signage

Fig. 6.14

initiative whereby the city of Carthage would seek to become an Active Living by Design community and the city government would adopt Smart Growth planning principles. Cities that have undertaken these initiatives have seen a reduction in their community's mental and physical health care cost, improvements to their economic growth, and the creation of a more active and vibrant community culture.

Early in this phase, the city government should begin discussions with the county, state, and federal governments about the acquisition of the floodplain basin along Spring River to the north of the community. These discussions should focus upon the setting aside of the entire floodplain basin just outside the city limits and within the city limits for a conservation district. Further, simultaneously discussions should begin regarding the creation of a nature conservation center at Kellogg Lake Park that would tie into the floodplain conservation district.

A crucial first step to this vision will be to educate the community about the strategies proposed, how they will help the community, and how they will be implemented. Educating

ENHANCE

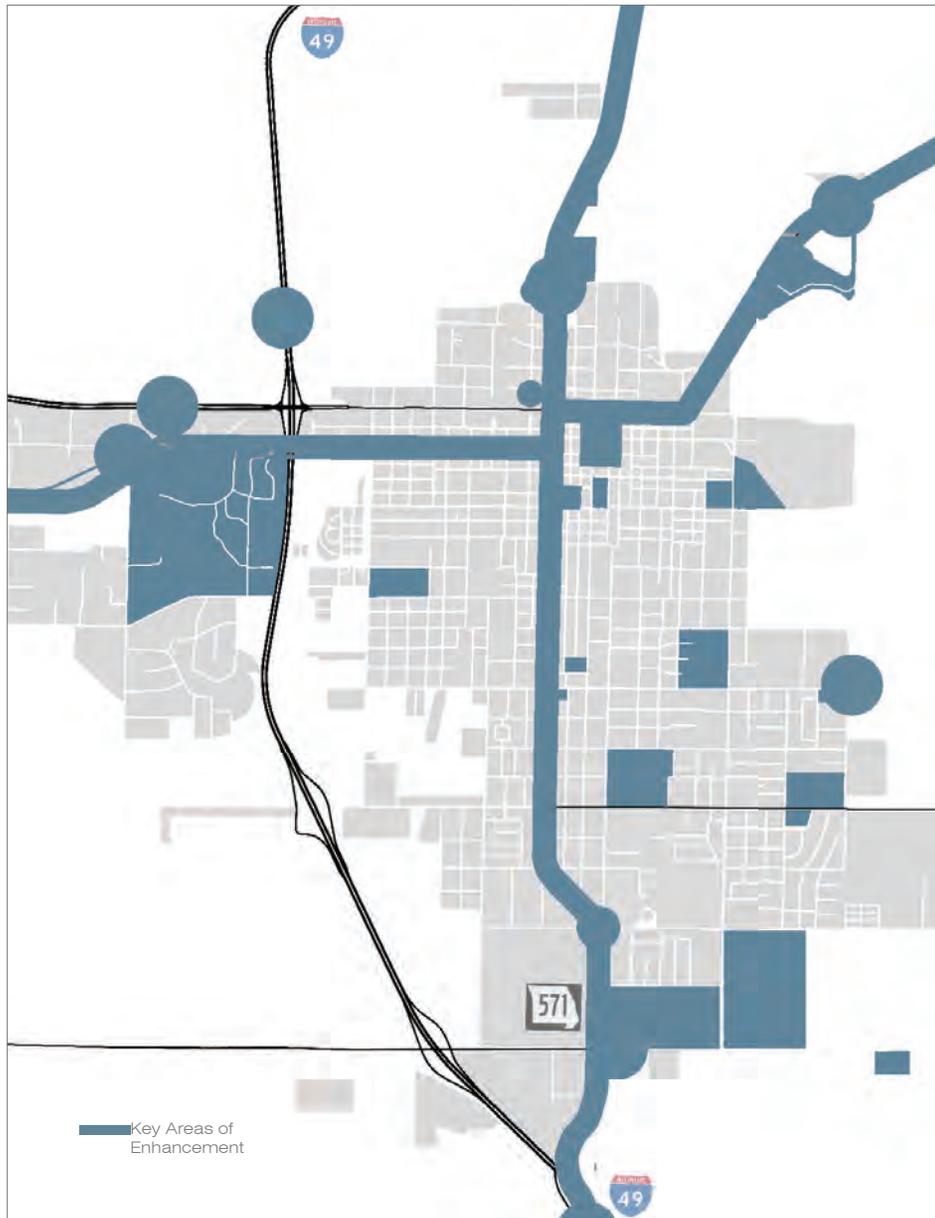


Fig. 6.16

the public about the benefits of these projects and programs can help gain support from the community and potential local and national benefactors. Every strategy will need community support and participation to make it successful. As the park system's image is improved, more community members will begin to participate in the process physically and socially. Holding open, public forums with the community is not only an effective way of receiving direct input from the citizens, but also their participation in the implementation of the communal vision.

In addition to the improvements to the existing parks and recreation programs, a number of other initiatives should begin within the community to enhance the city's overall health and well-being: bike lanes can begin to be added within the city, the Safe Routes to School and the Walking School Bus initiatives could be started, the Parks and Recreation Department and the city could begin to establish formal public/private partnerships and volunteerism programs.

Community forums will provide the people with a chance to voice concerns.



Fig. 6.17



Fig. 6.18

Encouraging children to participate in these various programs and projects will help the community's continued development in the future.

Organizing volunteers will be an important factor in phase one of enhancing the current Carthage Park System and infrastructure as well as raising awareness of the vision.



Fig. 6.19

Social Integration can be implemented through community gardens.



Fig. 6.20



Fig. 6.21

Simple infrastructural improvements can make the environment safer for pedestrians.

Programs are initiated to educate and encourage people to live actively.



Fig. 6.22



Fig. 6.23

Phase Two

Phase Two focuses upon the expansion of the community's amenities and services. This in no way implies or supports the idea of an expansion of the city's incorporated boundary. Phase two's expansion is focused upon the city's parks and recreations programs and the city's infrastructure that support those programs.

We hope that after the discussions of Smart Growth planning principles during the previous enhancement phase, that the city is now ready to adopt and implement these planning strategies of compact growth, multimodal transportation options, live-work-play mixed use community development, active living, and conservation of the natural environment. Following these principles will promote a community that no longer grows outward, but rather grows closer together. In so doing, the community will save money on infrastructure development and city service operations. Less new parks will be required, since the population is not sprawling outward in a dispersed manner that would require many more new parks to be built. Instead, the existing city parks could be enhanced and expanded and fewer resources would be required to accommodate the increased population.

During this expansion phase, the Network Trail System would be started. Simultaneously the Outer and Inner Trail Networks would be constructed. The slow acquisition of the property for the outer trail system should begin at all locations where property in the envisioned outer loop becomes available. The goal is to eventually surround the incorporated city with a green buffer zone through which a trails and park network can be developed.

A major portion of the Outer Trail Network



PHASE 2 Expand

- EXPANSION OF THE CITIES AMENITIES
- IMPLEMENTATION OF NETWORK
 - Bicycle sharing system in the city
 - Introduction of Bike Lanes
 - Framing of Outer Network
 - Formation of info signs
 - Implementation of large signage
- EDUCATION OF SOCIAL INTEGRATION
 - Volunteering programs
 - Beautification efforts
- PROMOTION OF HISTORIC SITES IN CARTHAGE
 - Introduction of wayfinding signs to historic sites
 - Improved identification of historical sites
 - Development of each parks identity

Fig. 6.24

is the Spring River floodplain basin that has been suggested as a conservation nature area. This floodplain conservation area would extend from the trailhead of the Ruby Jack Trail across the northern portion of the city to Kellogg Lake Park. This addition of the outer network would provide a means by which to extend the Ruby Jack Trail to the northeast section of the city and then down into the city center. This floodplain conservation area would preserve and upgrade a large and important drainage basin along the Spring River. This area would provide the community with a wonderful natural outdoor classroom for education related to the conservation of floodplains and riparian corridors, flora and fauna, and watershed preservation.

The Inner Trail Network would also be started at this time. This inner lace work of bike lanes, sidewalks and trails would start to connect the parks, schools, churches, and neighborhoods together for the purpose of increasing walking, jogging and biking within the community, encouraging the establishment of a more active lifestyle among the residents of Carthage, and to create a multimodal transportation system that was not dependent upon the car. Cities that have established such active lifestyle opportunities have seen increases in the economic health of

EXPAND

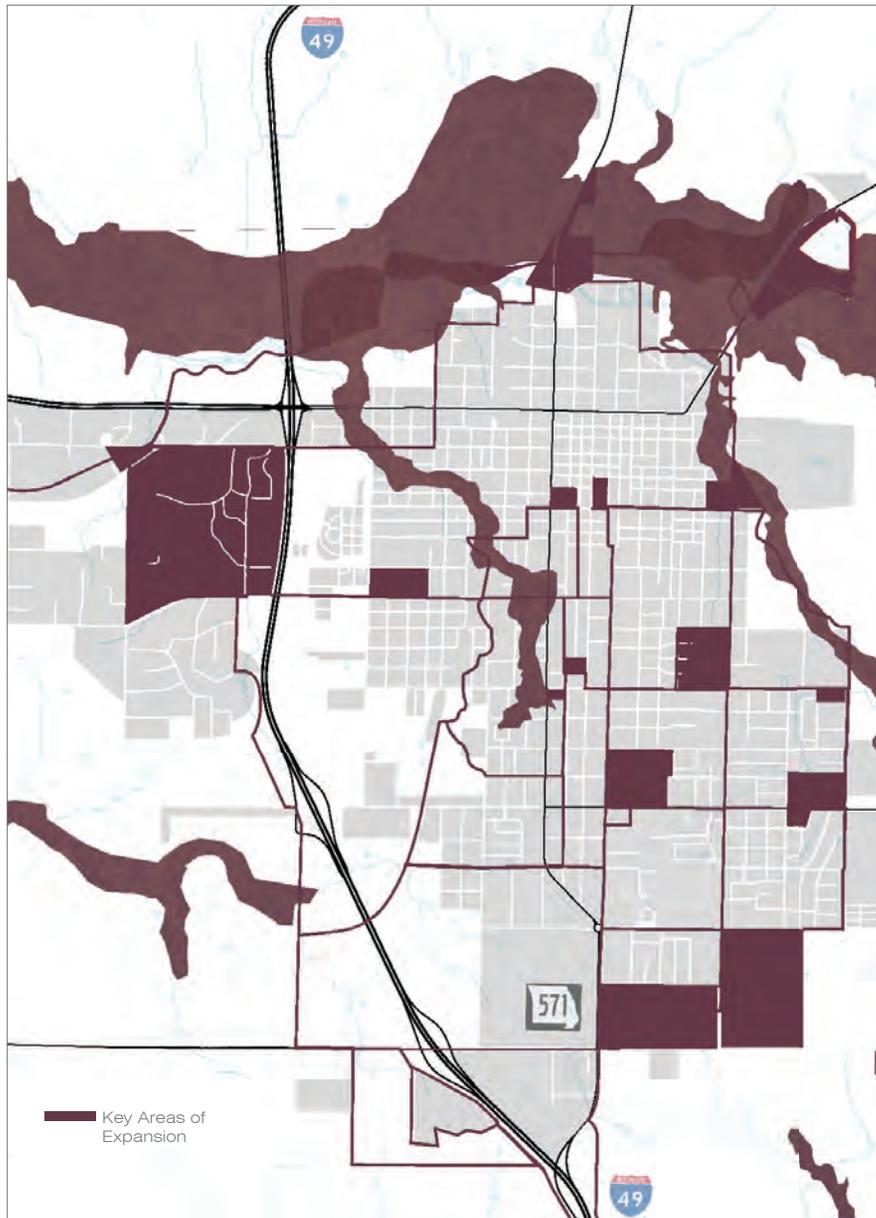


Fig. 6.26

the community and a decrease in the mental and physical health care cost in the community.

During this phase, the community also needs to develop and implement a comprehensive and coordinated wayfinding signage system for the city. The new wayfinding system should be easily understandable, informative, attractive, and consistent. These signs should be placed along all the entries into the community, on the Network Trail System, within the city parks, and at all historic and important points of interest. Quite often the first impression that a visitor will have of a community is of its wayfinding signs: their attractiveness, clarity, and informativeness.

It is important during the expansion phase, that the initiatives begun in the enhancement phase be continued. Of particular importance to the Parks and Recreation Department will be the ongoing development of the public/private partnerships and the volunteer programs. In the future we believe that the parks and recreation system will have to leverage its limited budget through the development of the partnerships and volunteer programs.

Education of preservation is a key concept to Conservation.



Fig. 6.27



Fig. 6.28

Carthage was a stop on the path of historic Route 66 throughout the nation. Route 66 should also be utilized in the identity of Carthage.

The Battle of Carthage ended next to Carter Park in the Northeastern section of the city. This area should be capitalized and built upon to foster a image of Carthage.



Fig. 6.29

Bike rest stops will help encourage daily network usage in Carthage



Fig. 6.30



Fig. 6.31

The bike and pedestrian network can become part of Carthage's Identity

The park system will provide new opportunities for social integration



Fig. 6.32



Fig. 6.33

Phase Three

Phase Three is the connecting phase. This phase seeks to integrate and unify the vision into a holistic expression Carthage. During the expansion and connecting phases, the larger and more costly projects would be undertaken. The ongoing development of the Network Trail System that surrounds, defines and stitches the community together spans these two phases; as does the development of the conservation area and the nature center north of town. Besides these physical ongoing projects and connections, the city will also be undergoing a social connection as well. As these centers for social interaction develop and as the mobility within the community becomes easier for the young and the economically challenged the city of Carthage will see an increase in the level of social integration among the diverse groups and ages in town.

During these phases the suggested Community Center in Municipal Park should be developed along with the restoration of the old city pool. The four new city parks will be added and new park amenities such as the dog park, community gardens, and local artist sculptures will broaden the city's offerings and activities for promoting social integration. As will the Conservation Nature Center at Kellogg Lake Park and the conservation area's educational and recreational amenities on the north side of town. And, adding to this social integration within the city of Carthage would be the new influx of avid cyclist that will now be drawn into the community because of the Network Trail System and its linkage to the Ruby Jack Trail.

By this phase, the connections that have been made through the public/private partnerships and the volunteer programs should be maturing and this parks and recreation plan should be close to completion.



PHASE 3 Connect

- NEW DEVELOPMENTS
 - New Nature Center
 - New Community Center
 - New Canoeing Center
 - Add sculptures to new and existing parks
- CONNECT ALL BIKE AND PEDESTRIAN ROUTES
 - Ruby Jack trail connection
 - Creation of bike rest stops along the network
 - Create identity for each park
 - Implementation of large city signage
 - Bridge at entrance of City
- DEVELOPMENT OF NEW PARKS
 - Connect to existing parks
 - New Park activities



The community should develop a vision for what Carthage's future should be and go make it happen.



Fig. 6.34 | Fig. 6.35

CONNECT

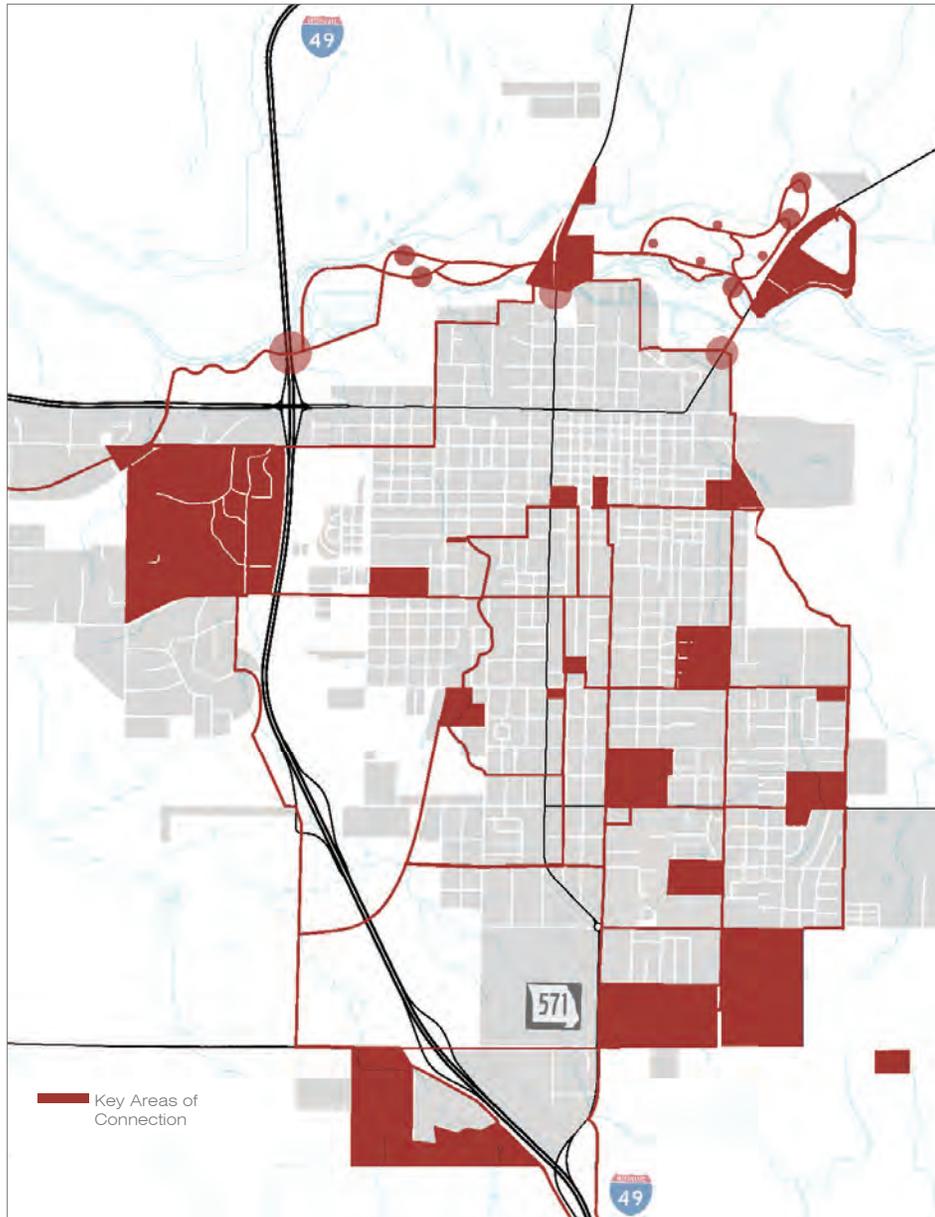


Fig. 6.36

The Phases Never End

This process of community visioning and strategic planning is an never ending process. It is always evolving. The important lesson to learn is that strategic planning cannot occur without an overarching and guiding long term vision of what the community wishes to achieve. Strategic planning without a vision of ones long term desires or aspirations is futile exercises that will never move the community to a higher and better place or purpose.

The vision set out in this document by the Drury student team is merely one vision of what might be possible in Carthage. This is not the community of Carthage's vision, it is yet to be formulated. This document is the "visioning toolkit" that outlines the research that the team has done, the studies that were generated for the community by the team, and a listing of issues and priorities as best as the team could determine from the community input.

The Drury student team was encouraged to think outside the box, to think big, and to anticipate the future. They have done that and provided the Parks Advisory Committee with a very far reaching and avant-garde design.

It is now time for the Parks Advisory Committee, the Parks and Recreation Department, and the city government of Carthage to be as open-minded, forward thinking, daring, and avant-garde as the Drury student team was challenged to be by the community. It is time for the city to think outside the box and to envision what the Carthage of the future should be.

Large projects activate Carthage socially, physically and economically.



Fig. 6.37



Fig. 6.38

A completed bike and pedestrian network will not only encourage daily physical activity, but also promote a more environmentally friendly Carthage.

The development of a Nature Center in Carthage will educate the citizens about the importance of environmental conservation and facilitate environmental preservation.



Fig. 6.39

DOCUMENT ARCHIVE

DOCUMENT ARCHIVE

MEETING ONE

WHAT DOES FUEL REALLY COST?

Fuel cost has been a topic of American politics as of recently, Americans hate having to pay continuously increasing prices for fuel. This analysis encompasses the gasoline prices and tendencies in America. As well as oil prices on a global scale. We know that oil has a shelf life and we are on the prefaces of a global problem. So the question that should be asked is how do we survive without oil. So there are a few proposed solutions to the future of the automobile and travel.

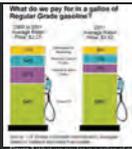
Gas Prices in America Gas prices as indicated in the graph to the right have been rising steadily. Since 2004 the price of gas has increased by nearly 300%. As one might expect with the principles of supply and demand, it has fluctuated quite a bit over the years. For the most part, Missouri's gas prices have held below the national average, except for a brief period this year. The main points of this graph are that gas prices are slowly rising and will continue to rise due to limited supply and there is a close correlation of gas price swings between America and Canada. As gas prices keep rising we will start to see a shift in how people get to where they need to go. However, some people will pay the price but the majority will find alternative forms of transportation.



Oil Consumption The graph to the right is an analysis of the world's oil consumption. Immediately, you notice that the two largest consumers of oil in the world are the United States and China. Currently, the United States uses nearly nineteen million barrels of oil per day and China's ten million barrels will explode as it fully transitions to an car culture like the United States.



What is the cost of a Gallon of Gasoline? Oil is a key ingredient in the creation of gasoline. The chart below illustrates everything that we pay for in a gallon of gasoline. The cost of crude oil has always been the main expenditure and this graph indicates that price is rising. But, it also shows that taxes on oil have been lowered to bring down the overall cost to the consumer. Yet these reduced taxes inhibit our ability to maintain the highway and bridge infrastructure in America.

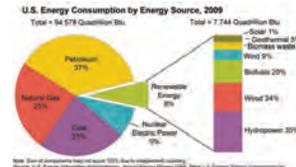


Alternatives Renewable energy is a growing concern for the United States as the known reserves for crude oil continues to decline. In 2009, only 8% of the United States energy consumption was from renewable energy sources and this percentage continues to grow each year.

Another simple way that communities can make a difference in their oil consumption and help the country wean itself off its dependence on fossil fuels is by switching to more bicycle-oriented culture. There are many good examples of bicycle-friendly communities and bicycle sharing programs that have been developed that promote the use of bicycles.

The electric cars below are an alternative to the gasoline powered car we know today. The car to the left is a Tesla Model S. It has the battery life that allows the driver to travel at least 300 miles between charges.

The development of a more efficient and reliable public transportation system is another approach being studied to solve the oil consumption crisis for both short and long distant travel.



Trend Analysis

ECONOMIC BENEFITS

"For a fraction of the cost of the world's most expensive health care system, we could all enjoy the world's best bicycling and walking infrastructure — and with it much better health than we enjoy now."

Health and Health Care It is a fact that biking increases the health of the community and its members, because it is a more transformative way to increase obesity, lower blood pressure, increase strength and mobility and overall increase the well-being of people. Not only are the health effects extensive, the effect of biking on the economy's health care cost is extensive as well. Studies show that biking increases health and decreases healthcare costs dramatically. For example, an average person spends \$5,700 a year on health care for treating preventable chronic disease, while it is said that with every dollar we invest in developing the biking infrastructure, five dollars are saved in health care cost.



Another economic benefit is that people who bike to work tend to arrive at their communities more, where others who drive to work are stressed and come into work already frustrated, thus decreasing productivity. On the other hand people who commute to work are energized and refreshed and ready to start work; thus, these people tend to produce more and faster work.

Consumption of Fuel As fuel costs continue to increase, there will be significant pressure upon the public to change their driving habits and lifestyles. When people work, shop and/or entertain themselves will need to be reconsidered. Alternative fuels and modes of transportation will become more prevalent as the economic pressure builds. Cities will become more densely populated. People will live closer to work and shopping areas. More people will bike to work and around town on short errands. This will create a community and environment that is healthier; people will be more physically and mentally fit and the environment cleaner. Bicycling travel will be more regional and community amenities will be more utilized.



Local Business Riding through a town, bicycles will stop and spend money. It is where people who ride takes spend more time in towns increasing the business of communities as well as increasing the biking industry. Consequently, all this spending means among businesses, more jobs and tax revenue for communities that are biking friendly. The development of more safe housing and retail infrastructure around bicycle trails also makes it a more attractive place to live, which leads to an increase in property values.



Another aspect to the well-being of the economy and the businesses is that by developing such recreation, bike-friendly infrastructure, more people that it attracts as more to work, which selectively increases jobs, tourism and overall economic health. By supporting entrepreneurs to develop businesses that cater to the bike mobile population. People who are committed to biking are always looking for a sustainable bicycle. This translates directly to their work and home life as well. Small businesses are limited or what they can do, but the encouragement of biking to work of all their employees to give them to maintain, advocate and attract even more employees that intend on making the business work and community overall more sustainable.

Not only does the usage of businesses change when they are more eco friendly, but the employees that tend to work increase productivity because of the healthier and better health care costs, bringing their work-life balance that leads to a more sustainable and effective work team.



Tourism Tourism is one of the U.S.'s largest industries—this has led to the creation of millions of jobs and billions of dollars each year. Building more biking infrastructure in a community makes it not only more convenient for the community members, but it also makes it more appealing for tourists. Many people in the US ride bikes recreationally, which is causing the biking tourism industry to expand. It is relatively inexpensive to go on a biking trip, which is becoming more and more popular because you can tour places you have always wanted to on a limited budget.

Promoting Bicycle Friendly Communities



DOCUMENT ARCHIVE

MEETING ONE

SMART GROWTH

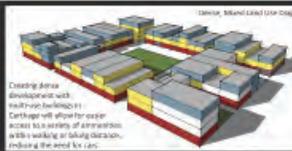
Through planning and education, Smart Growth initiatives help communities make educated decisions in developing their community. A vast number of benefits make the concept worthwhile to all those participating. Communities can become more efficient and lead to harboring a better lifestyle.

General Overview Development decisions impact many, different aspects of our lives, from personal health to the housing market. Community growth can allow for progress to be made and problems to be addressed. Smart Growth provides a comprehensive approach to the way we live, as well as how we interact with our neighbors.

Smart Growth also includes people, about safety, traffic, transit, and "slow" construction methods. Through the education, people can make better decisions in the future, not only on a personal level, but also on a community level as well. Citizens can generate a vision of how their community should grow and can apply a series of standards in which to plan for. These standards make communities in general more livable in the future.

Dense, Mixed Land Use Density becomes a driving factor for Smart Growth. When communities, social housing, harbor more, citizens get a greater benefit. As traffic is reduced and people are more likely to walk or bike to school or their jobs, the environmental stress and air pollution is decreased. Limiting the amount of sprawl also helps preserve the local surrounding, trees, green spaces, and other natural areas.

Mixed land use has become a key aspect. As land units diversity, citizens have an easier access to a variety of things, reducing the need to travel longer distances. Property values rise because of this accessibility, both for businesses and residential. Public transportation is also encouraged as this can reduce congestion, improve air quality, and offer a wider range of services.



Life Benefits By simply increasing the amount of walking citizens do on a regular basis, a wide range of health issues are addressed, such as obesity. Only about 25% of Americans get the recommended amount of exercise daily, so building cities that encourage healthy living is key. People living in these areas, with greenery, have had less a greater sense of security due to the streets being more inhabited by people. As far costs continue to rise, driving more will also benefit us. Decreasing car use, from the environmental perspective of fewer vehicles on the road, to the economic perspective of less wear and tear on the quality of roads, water resources, and surrounding the city, it's a win-win. Investment in green infrastructure, such as green roofs, can also help reduce the amount of runoff and improve the quality of the water. Smart Growth initiatives, however, are a series of ideas that can help communities become more livable and sustainable.



TEN PRINCIPLES OF SMART GROWTH

1. Purge the phrase "Not in my back yard" from your language and your thinking, for it reduces development for the Greater Good.
2. Respect community planning.
3. Integrate with the surrounding community.
4. In transit oriented developments (TODs), transit orientation should exceed auto orientation.
5. Respect neighborhood character & identity.
6. Increase density incrementally.
7. Conform to existing "smart" retail corridors and centers.
8. Look for opportunities to narrow (verb) streets and vanquish parking lots.
9. Prioritize non-auto transportation by creating unique or exclusive pedestrian and bicycle amenities.
10. Design for human nature rather than efficiencies and logic.



HEALTHY COMMUNITY

Health is defined in its broader sense as a state of complete physical, mental, and social well-being. This does not merely signify the absence of disease or infirmity. A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

If we don't have the energy, the costs to society are going to be crippling. Everyone talks about achieving it, but most people have plenty of excuses as to why they can't, won't, or just aren't going to change their current status. The most common excuse people make for not trying to live a healthy lifestyle is "a lack of time." Have you ever said to yourself, "Oh, I'm tired, I don't have time to exercise?" Or "I don't feel like cooking dinner tonight, let's just get some fast food." The problem with this lifestyle is that you cannot live like this. —Matthew Reeves

Time and health always seem to be at odds with each other. We have to work, have to commute, have to go to school, have to take care of our families, but very little time to spend on ourselves, people we love, or even random people who deserve our attention. There always seems to be something that gets in the way of an afternoon jog, Saturday walk to the park or biking around town on a weekend.

There are several ways we can promote healthy lifestyle initiatives throughout communities. The first that everyone probably has already encountered is promoting healthy activities to take place in schools, such as promoting pedestrian friendly sidewalks, sharing the road with bikes, and encouraging the youth to go out and exercise themselves. We can encourage communities to develop a more active lifestyle. Eating healthy is also a big part of this new lifestyle. Through all aspects of one's life these aspects of a healthy and active lifestyle should be applied and encouraged within the home, school and community.

Such community initiatives as Active Living by Design and the Community Health Lifestyle Initiative are great programs for promoting physically and mentally healthy communities. Such simple design initiatives as requiring all new development to include wider sidewalks in their plans, led to let kids public green space for community gardens can help promote a more active



living environments. Creating greenway walking and biking trails throughout the new development and community not only gets people out and actively participating in outdoors, it has been shown to also raise the property value along the greenway trail.

Such community initiatives as Active Living by Design and the Community Health Lifestyle Initiative are great programs for promoting physically and mentally healthy communities. Such simple design initiatives as requiring all new development to include wider sidewalks in their plans, and to set aside public green space for community gardens can help promote a more active living environment. Establishing greenway walking and biking trails throughout the new development and community not only gets people out and actively participating in outdoors, it has been shown to also raise the property value along the greenway trail. These initiatives can promote interaction among residents from diverse neighborhoods by allowing them easy access to one another. It can foster a more healthy lifestyle within the community, especially in the children. It can increase access to and use of the city park system by encouraging walking, biking, and jogging to and in the park.



Trend Analysis

Healthy Lifestyle

DOCUMENT ARCHIVE

MEETING ONE

ACTIVE LIVING BY DESIGN

"Active Living By Design" creates community-led change by working with local and national partners to "build a culture of active living and healthy eating."

"All communities are healthy communities where routine physical activity and healthy eating are accessible, easy and affordable to everyone."

Active Living By Design is a national health promotion strategy through the number of programs and partnerships. Mostly reaching around exercise and nutrition, these programs, primarily led by the community, look to change the way people go about their daily lives in a more active and healthy way. Through a coalition of different groups and partnerships, a community is able to enact a variety of initiatives that all revolve around helping people to live more active lives through things like walking, biking or other physical activities.

Along with being actively involved, also focus on nutrition, and educating the community, particularly the children in the community about healthy eating habits. Programs and initiatives range from data collection and community audits to city wide construction projects. Many communities starting on "active living initiatives" start through simple programs, local walking around schools, and building and trail is integrated throughout the community. Boulder is unique the community had to create an Active Living program, it is not a "one size fits all" program. Rather, it is tailored to the community's needs and resources.

TRANSPORTATION

- Bicycling
- Walking
- Public Transit
- Alternative modes of Transportation

DEVELOPMENT

- Planning
- Architecture
- Design
- New Development
- Land Usage

ENVIRONMENT

- Landscape Architecture
- Parks and Recreation
- Other Environmental Sectors

HEALTH

- General Public Health
- Childhood Obesity
- Disabilities
- Access To Healthy Foods

Active Living by Design Priorities

ALBD Programs

Safe Routes To School

- Provide safe and accessible routes to school for students, who are accompanied by parents and which is well supported by the community.

Girls on the Run

- Helps young girls learn fun, sport, and teaches them how to live an active and healthy life.
- Takes place in already established community centers, such as the YMCA.

Interconnected Pedestrian and Bicycle Networks

- The Active Living by Design program has helped many communities establish new routes and programs for pedestrians to use safely and comfortably.



ALBD's strategy to starting a program is called "The 5 P's". The first is **PREPARATION**, in which the community begins to form collaborative partnerships and collect relevant data about their community. The **PROMOTION** phase includes the creation of the program and its communication as well as an "active" community to benefit on multiple levels. **PROGRAMS** are the ongoing activities for the community to participate in. The **PHYSICAL** programs include anything from safety audits to programs for people that participate in an active lifestyle. **POLICIES** are developed to help both endorse and encourage the various programs. These policies will affect everything from public contracts to different committees in the area. The final step consists of the actual **PHYSICAL PROJECTS**, which are designed to be in the community to make an active lifestyle both easily accessible and enjoyable. These projects can be anything from walking trails to different signage and the creation of crosswalks.



BIKE TRAIL - BOULDER, CO

Many Cities in America have realized the potential and benefits of turning their city into a bike-friendly city. Not only does it improve the health, economy and the overall wellbeing of the community, but it improves on the health and sustainability of the earth.

The city of Boulder, Colorado is one of America's most bike-friendly cities. Boulder has a thriving local business community and a successful public bike sharing network that encourages bike use. Boulder was not always a bike-friendly city, so how did they do it? The first step that Boulder took was to identify the problem. Boulder as a community identified that biking was a healthier alternative in all aspects and secondly they decided to create a community that was bike-friendly which resulted in the creation of Boulder's bike community.



Safety One of the biggest issues in any city trying to become more bike-friendly is the issue of safety. For people to consider biking to school, they need to feel that they are going to be safe. In Boulder they solve the issue of safety by creating lanes specifically for bikes on the side of roads. That is known to be one of the most efficient way to keep bikers safe, but Boulder takes it a step further by figuring out routes that are not directly connected to the street by creating paved multi-use pathways and underpasses that are used by bikers and pedestrians.



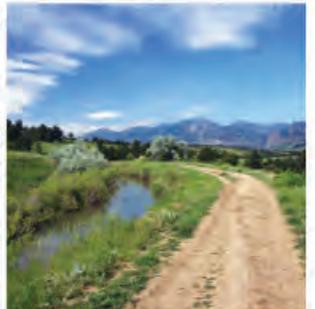
B-Cycle Sharing Network B-Cycle is a bike sharing program that allows people to rent out bicycles that track and measure the actual distance traveled and shows tracks of the calories burnt and the carbon emissions that has been prevented. It is a way that allows transportation around town, even if you do not own a bike.



Community Boulder has a strong bicycle community, but the real reason it keeps growing and evolving is the support that the community has for one and other. The community organizes events throughout the area which focus on the importance of biking and the importance of the participation of all community businesses and people. One example of community support is a group called Community Cycle (CC), CC is a non-profit organization that is made up of friends and families that want to make sure that the use of the safe use of bikes is a sustainable and enjoyable method of transportation that actually helps the community. The CC organizes activities, organizes events and provide people with bikes and tools, thus increasing the community involvement and support of the decision to be a more bike-friendly community.

"Bike sharing is a new way of getting around your city or campus. It's affordable, clean, and simple. It's good for your health, your pocket, and our environment."

-The B-Cycle Team



Trend Analysis

Precedent Study

DOCUMENT ARCHIVE

MEETING ONE

Precedent Study

ST. LOUIS COUNTY PARK SYSTEM

The Park System of St. Louis County does an excellent job at serving the community. It offers a wide range of activities for all ages across the entire county. It's success is not only due to a strong administrative board, but also involvement from the Community. Through this partnership, the parks flourish and the community has parks that benefit all who visit.

Park Theme A vast majority of the parks within St. Louis County are similar in theme and materials to complete the signage within the parks. This creates continuity throughout the county and the park system as a whole. Much like the way building facades in a city or school park system, you can have the quality of a unified network. Repeating features can be applied to many different types of parks, such as the paths and overlooks, not just the signage. Applying this concept will create a cohesive visual connection between the parks of Carthage.

Marking the entrance to parks in general helps to create a sense of arrival. As one approaches a St. Louis County Park, a quality form greets them. Not only does it help denote the entrance to the park, it gives it a sense of status and priority. A location is more easily defined as a place and not just a space, when given quality, high quality. As seen with St. Louis County's Bee Tree Park, any visitor knows they are approaching a designated park area. When they visit any County Park, they know they are entering a different part of a maintained resource.

Community Maintenance The St. Louis County Park system promotes community involvement in helping maintain their parks. Events are created and promoted to help foster these initiatives.

A community survey is also conducted yearly to gauge the public's perception level with the parks in their neighborhoods. This helps the county's planning staff determine which areas of the parks they need to address and improve upon, as well as what are successful elements, complete programming systems are adopted as well for certain parks in need.

Community involvement within Carthage to care for the parks will promote a sense of park ownership. Interaction between city members can be obtained through park maintenance activities. It will also help improve the conditions of the parks and give visitors a better image of the parks. Surveying the work done to the parks can also help aid future planning processes.



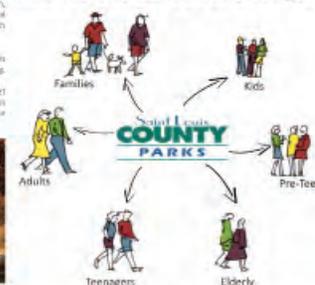
Community Maintenance The Park System offers a wide range of activities, many of which span across the age spectrum, which allows for different groups to interact. Games, movie nights, annual events, and fundraisers are just some of the many diverse activities in which anyone can participate.

Advertisement for these events is easily available on multiple websites. This allows for the general public to stay up to date on what each park has offering.

These two strategies would greatly help members of Carthage's community get involved. While there is a Carthage events calendar available, further action will help. Also, making summer park care sessions open to age groups like the St. Louis County Park System does would greatly benefit the community.



Multi-Faceted Parks Service All Ages



WALKABLE NEIGHBORHOOD

The goal of the Walkable Neighborhood Project is to help build thriving neighborhoods where people are active and healthy, and businesses and families grow. The project will address a key piece of neighborhood vitality: That is, how easy, safe, and pleasant it is to get out of the house, meet neighbors, and walk to various destinations.

This program is tailored in Springfield, MO as a way to build citywide attention to the value and urgency of walkable neighborhoods and to attract public and private investments for improvements that residents identify as needed. Walkable communities are thriving now. Carthage's walkability has created neighborhoods, communities, towns and cities based on pedestrian access. This program assesses neighborhoods and towns to determine their walkability. There were three main practices when assessing a town:

The Active Neighborhood Checklist: College students and volunteers will assess neighborhoods block-by-block to determine baseline information regarding environment. They will observe characteristics such as: sidewalk, traffic, benches, and other indicators of safety and walkability.

Resident Input: College students and volunteers will assess neighborhoods block-by-block to determine baseline information regarding the environment. They will observe characteristics such as: sidewalk, traffic, and other indicators of safety and walkability.

Photovoice Missouri: Middle and high school students will be encouraged to participate in Photovoice Missouri, a statewide program that engages students in their communities. Students will take pictures in their neighborhoods and then write captions for each photo with a focus on healthy living.

Walkability is a strong indicator of low crime, affordable, and healthy neighborhoods. Walkable neighborhoods encourage healthy lifestyles, strengthen communities, and attract investors. Walkability offers lasting benefits to our health, the environment, our lives, and our community.



This program could easily be related to Carthage. It strives to create communities in which walking as a means of transportation is possible and widely accepted, in 20 to 30 years the need to walk and bike to places in town is going to increasingly become more apparent and important. There is a 50 percent assessment that could take place in Carthage to determine the walkability of the town and present some sort of tools to increase awareness.

- **A Center:** Walkable neighborhoods have a center, whether it's a main street or a public space.
- **People:** Enough people for businesses to flourish and for public transit to run frequently.
- **Mixed Income, Mixed Use:** Affordable housing located near businesses.
- **Parks and Public Space:** Plenty of public places to gather and play.
- **Pedestrian Design:** Buildings are close to the street, parking lots are relegated to the back.
- **Schools and Workplaces:** Close enough that most residents can walk from their homes.
- **Complete Streets:** Streets designed for bicycles, pedestrians, and transit.

After this assessment has been undertaken in Carthage we can determine how walkable the community is and develop plans that could help the city improve. They are also well met by the active involvement of the population. Their central role in development also helps develop the community's healthy lifestyle and overall quality of life for the people who live in Carthage.



Springfield, MO



DOCUMENT ARCHIVE

MEETING ONE

SAFE ROUTES TO SCHOOL

"The mission of the Safe Routes to School National Partnership is to serve a diverse national community of organizations that advocate for and promote the practice of safe bicycling and walking to and from schools throughout the United States."

Safe Routes to School

Safe Routes to School is a program that encourages students to walk or ride their bikes to school through engineering safer sidewalks, creating accessible, scenic and developing pedestrian bike routes. The program is encouraged in schools, as well as the community. There are many policies created with community as well as the schools and several programs come together to help make the program successful. Data is collected based on what students live where and they determine the safest and most efficient routes. The riders now indicated on the use of these Safe Routes and the schools provide important information on how to use the routes from the house to the school. Then the program is enhanced with more policies centered along such hours to promote safer driving. A town in Virginia implemented this program and saw a rate of 80-95% of students walking or riding to school.



School Program, Columbia has also developed other programs affiliated with Active Living by Design. Programs like the Canteen Recipe have introduced breakfasts and provided them to parents and students in the same way the program has been introduced with Healthy Snacking by Design. The program helped South MO about 1000 young adults. The program members created the community and posted on the web and continue to expand through special events called "Healthy and Safe" Columbia activities. "Bike, Walk and Wheel Week" in which 5,000 people participate. The community in Columbia has taken a strong initiative into being a more active and healthy one. Starting from the simple idea of the Walking School Bus, the community eventually became involved in making a more active Columbia.

Walking School Bus

The Walking School Bus is a small group of school kids, who walk together to school. They are accompanied by "buses," who walk through neighborhoods, pick up kids at their "bus stop," along the way. Students who walk to their designated bus stop, or the students better outside of the district, are dropped off at a designated stop.

The students of one elementary school collected data and created a map showing who was walking to school, being driven to school and riding the bus to school. From there they started to determine where the best locations were to create a walking "hot spot."

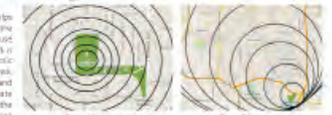
Participants in the walking school bus hot spots, with nearly 2,000 students at their South-East Elementary School walking to school. The program covered its area, and now includes a elementary school in Columbia. Close to 400 students now participate and the city of Columbia now has 150 volunteers for the Walking School Bus.



SPRINGFIELD, MISSOURI PARK SYSTEM

This analysis encompasses why the parks of southeastern Springfield are successful. The first section of the analysis deals with how the parks appeal to and why people are attracted to using them. The second analysis encompasses why users of destination parks are attracted to the park. The final analysis has to deal with the built environment and how it affects the surroundings.

Parks Appeal to Communities



The parks in southeastern Springfield are successful because of its proximity, frequent beauty and user activities. Included in the park is a walking path, eight tennis courts, a basketball field, athletic gardens, picnic tables with grills, horseshoe pits, children's play equipment, open play area, open shelter, and 7.50 mile walking and fitness trail. The mature trees and flowering shrubs complement the walking paths within the park and create a picturesque setting that people come from all over to see. Ending the area has a stone entry gate and a natural stone ornamental stone bridge system that enters the water appearance of the park into the surrounding neighborhood.

Destination

The Gateway Trail is a 6.5 mile greenway trail in southeast Springfield, MO that starts at Pershing Middle School and travels south past Sequoia Park and terminates at the James River near the Springfield Nature Center. Along this trail are numerous destinations and stops of interest for the walker, jogger, and biker.



Sequoia Park is a principal destination along the greenway trail. The lake within Sequoia Park and its Rock of Responder are a major attraction for children and people enjoying the park. Located around the Sequoia Lake are children and adolescent play equipment, open fields, picnic tables, grills, basketball area, 3 mile walking and fitness trail, restroom and drinking fountain, and the prominent rock bluff, cave and spring.

Sequoia Park is successful because it has multiple activities that attract people to the park and its lake. Accessible scenic viewpoints which offer the park. The 6.5 mile greenway trail will be done that cover the park and lake and the Sequoia lake and green, and the stone of Gateway Village.



Built Environment

McDaniel Park is a small park along a busy arterial and the trailhead for the South Creek Greenway Trail. The park contains several recreational amenities. The red line in the diagram to the right shows the park improvements to the park, a fence, an athletic field, trailhead structure and playground equipment. The park is an open space for a variety of free play activities, such as for soccer practice.



The parking on the south end of the site is for the users of the South Creek Greenway Trail. The South Creek Trail is an 8 mile long paved greenway that travels through scenic residential neighborhoods, crosses over James Expressway, travels through the McDaniel Memorial Park, past Lake Greenwood and across South Golf Course. The Close Memorial Park serves as another important trailhead for the greenway.

These park and greenway trail improvements add safety to the surrounding neighborhoods as well as significantly help to increase the property value of the homes and property adjacent. Furthermore, the increase in walkers, joggers and bikers along the greenway trail adds to the economy of the area shops along the trail.



Precedent Study

Precedent Study

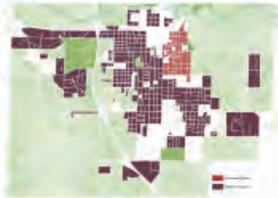
DOCUMENT ARCHIVE

MEETING ONE

LOCAL AND REGIONAL

"Many people are good at talking about what they are doing, but in fact do little. Others do a lot, but don't talk about it; they are the ones who make a community live."
 — Alan Watts, Community and Growth

Connectors between the local members of our parks that make a community strong. For a community to be strong the people of the community need to be involved and part of the effort to maintain its future. Carthage, specifically, seems to have a lot of strengths that work for the advantage of the community, but also has aspects that are holding back the community from progression. Carthage needs to progress in two focused ways. The first way is locally. Carthage does a great job at being locally connected, however there is an apparent gap between different education and age groups.



Carthage has an apparent distinction between the younger and the older population. The integration, or lack of, especially in the park system, is very clear. The understanding of why it's important to integrate all the ethnics that make up the community is the idea of a whole new bond. Having strong bonds with all the community members creates an overall strengthening of the community as a whole. This community benefits from the connecting of ethnics because of all the different aspects of view that can be given from a more diverse group which ultimately contributes to the future of the community's progression. A study of how this can be achieved is the idea of inclusion. Activities and organizations in the parks can become the meeting space of the integration of the different ethnic and economic groups.



The other apparent gap in the community is the gap present between the generations. In Carthage the younger generation seems to be disconnected from the older one. The reason for the importance of this connection is the education that the younger generation can get from being around older people.



Figure 1: Diverse young children smiling.



Figure 2: Active children jumping in a park.

They get the firsthand experience of learning about how history from people that would have better or worse knowledge from the older generation. This could be done by involving many different programs in activities that allow the older generation to come over and educate the younger generation about their past connections to their expertise.



Observation shows that Carthage is growing into a substantial town on the direction of growth is focused on the South and Southwest parts of Carthage. When the development of Carthage is looked at from a broader perspective it is apparent that the growth of Carthage is heading towards Apple and Webb City. One has to believe that the possibility of these cities growing together and achieving a strong regional connection is very likely in the next 20-30 years, which would be beneficial from an economic standpoint. This potential connection could be reinforced by studying what other cities have that could complement one another and appreciate the integration of these communities in a way that stresses a stronger socially and economically bonded community.



Figure 3: A person riding a bicycle.



Figure 4: A group of people holding hands in a circle.

Connectivity



CARTHAGE PARK SYSTEM

Using consistent themes for each park of Carthage, Missouri will create a cohesive identity for the city. Each park can belong to a unified network, servicing every member of the community through a multitude of events and amenities.

Thematic Park Design

Similar to the St. Louis County Park system, the parks of Carthage, Missouri can also have a universal theme. Around some of the parks use a language of signage that can easily be applied to other parks or other areas of town. Mainway and Carter Park both have signage that is out of Carthage Stone, and Millage Lane uses wooden signs with text. Carthage Stone, when it's over time, is easily an icon for the people of the town. This can be applied to mark the entrance that are not currently distinguished, such as in Park Area or Kings Park. Creating sturdy stone markers throughout the city will give the parks a less organic feeling. Wooden signs as seen at other parks around Carthage can also be used in a more subtle dialog.



The Maple field has also become an identifying symbol for Carthage. Seen on their signs and literature, this symbol could easily be incorporated into any additional signage that is created.



Figure 5: Three small images showing different park assets.

As the city grows, the parks system should be expanded across all of the parks and amenities in the town. The park system will then have a more cohesive theme, stronger identity and overall more welcoming nature. Actions similar to the ones already started to be implemented, such as the new stone welcoming sign to be placed along historic Route 66.

Asset Analysis



Figure 6: Tennis court in a park.



Figure 7: Paved area in a park.

Park Activities

Ensuring that each of the parks services their surrounding is key to their success. This allows for easy accessibility for community members through reducing travel distance and increasing walkability. Currently, the larger parks facilitate trail arrangements, offering a multitude of activities. But some of the local parks, only address certain age groups. Not necessarily the right ones for the area. Kings Park has a variety of amenities for kids, but lacks activities for adults and elderly residents. Central Park has lots of walking and sitting spaces, creating a more passive park. However, they also lack some things associated with a public school, after closing the park fills with belongings. Carter Park, which had a playground and a large soccer field, did not have children playing in a structured way. Studying the age demographics of the park's surroundings and applying this information to the programming of spaces can help create a more constructively active or passive setting for all who enter the park.



Figure 8: Large field with people sitting on a bench.



Figure 9: A row of images showing various park amenities.



DOCUMENT ARCHIVE

MEETING ONE

Health and Physical World

COMMUNITY INVOLVEMENT

Health is defined in its broader sense as a state of complete physical, mental, and social well-being. This does not merely signify the absence of disease or infirmity. A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.

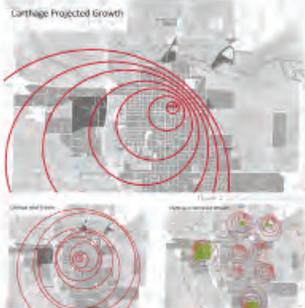
The city of Carthage is growing to the south and southwest. Outside of a number of boxes, including the recent construction of the high school and the attraction of 144 and 148. This growth tendency should be carefully planned to optimize city services and amenities and to minimize city costs.

The diagram at the right illustrates the current expansion of the city of Carthage away from its historic civic and governmental center. This decentralized growth will increase the operational cost of the city, create a less efficient system, be expensive for residents as fuel costs continue to rise, and make it more difficult to promote a walking and biking culture within the community.

The smaller diagrams below right show alternative growth patterns that could enhance the community assets by prohibiting the population sprawl to the south and southwest, centering growth around the historic civic and governmental center or parts, increasing mixed-use activities within the city center, shortening the travel distance for city services and between city services, and allowing for the development of efficient non-vehicular connections between neighborhoods.

Physical activity is vital to good health because it reduces the risk of heart disease, high blood pressure, colon and breast cancer, osteoporosis, diabetes, and obesity.

To keep the body in good health is a duty... otherwise we shall not be good for much long and close. There are more ways to maintain a healthy lifestyle.



There are several programs that connect residents to walking and walking. It is important for communities to take in consideration the generation of activities in their parts, especially in Carthage where there is a clear drive to make the community more interested in physical activities and parks. Why not utilize the parks that are already in your town to make your life healthier and more active. By walking, biking, jogging, or running to your nearest park.

The encouragement of the community to utilize the parks is also a way for the community to come together as a whole. Encouraging the community from expanding more than what it actually needs. It is also safer to access the parks if the distance between the residences and the parks is minimal.

Daily activities could be developed with the existing parks or new neighborhood parks could be developed in rural locations and may be used to lead to youth centers, community gardens, and neighborhood clubs and centers for local groups (clubs, church gardens, neighborhood playgrounds, neighborhood soccer and walking trails, to name but a few). Such centers provide the residents with a community venue to educate their children in a fun and healthy way. Besides the health food that is grown, people are socializing and exercising together.



good health:
how can we
make a difference?

PEDESTRIAN ACCESSIBILITY

An analysis of how people move through the city of Carthage, and the opportunities and challenges regarding how to better connect the park system for those using transportation other than vehicles.

In order to connect the parks of Carthage more successfully, first the overall circulation of the town must be analyzed. This includes vehicular, pedestrian and bike traffic. By looking at the various destinations and how the community accesses them, along with the challenges and solutions will arise as to how they can be more accessible for a greater variety of people. It can also help determine what assets should be in what parks and if the necessary assets are available to the majority of the community.

The map on the right shows a half mile radius around each of the parks. A majority of the parks are within accessible walking and riding distance. However, not all of the neighborhoods surrounding each park contain sidewalks or easy pedestrian access. Central Park, such as Central Park are located along busy roads, which make it more difficult to access by foot or bike. These radiations may also give a better idea to the people who will be using each specific park, taking that into account, a more custom solution can be developed for particular uses and uses.

One challenge of the Carthage park system is to provide accessibility by car, bike and foot. Carthage with high traffic roads and the lack of sidewalks may impede and discourage those attempting to access the parks by means other than a vehicle. An analysis of the current road system may lead to the creation of specific pedestrian and bike routes. These routes will use some of the existing roads, but may also seek to create new pedestrian and bike routes that will make for a safer commute. If people begin to use these alternative routes, particularly if used during higher traffic hours, the number of cars on the road may decrease over time, not only making it safer for pedestrians and bikers, but also cleaner.



Asset Analysis



Simply adding bike lanes or sidewalks to a majority of the roads in Carthage may not provide the accessibility that is desired. The act of riding or walking along a busy road may still seem intimidating to many. By looking at the current traffic layout and avoiding higher traffic roads, a more accessible, efficient and successful pedestrian route may be created. The best situation is not to use a busy road, but to create one that is both safe and enjoyable, which will encourage more people to look toward options other than a car.

The drainage system that runs through Carthage could provide an interesting and efficient alternative to the roads for bikers or pedestrians. Because these drainage areas will better develop, it will not be a restriction to further development from drainage areas as bike routes in Carthage. By analyzing the system itself, along with other assets, a network could be defined which would not only be a safer alternative to riding on the busy streets, but also more cost effective than adding bike lanes and sidewalks to a majority of the roads. The drainage bike route may also become a recreational base path, one that people would use regularly for more than just getting to a specific destination. This system may become the foundation to a network that can connect the residents of Carthage to the parks and schools.



DOCUMENT ARCHIVE

MEETING ONE

PARK SYSTEM OF CARTHAGE

The park system in Carthage (include six parks, a lake, a trail, and a system of dirt bike/four-wheeler trails). The graphs below indicate where the parks/green are in the city. As well as where they are located in relation to the residential areas (yellow).

Municipal Park includes a shared sink, swimming pool, tennis courts, playgrounds, Kiwanis Middle Land, soccer picnic shelters, and an 18-hole golf course. The swimming pool hosts various swimming meets. Kiwanis Middle Land hosts a carnival, small trials, 4th of July and family activities. Municipal Park also has a big grounds, outdoor arena, and baseball/softball fields. Mickey Mantle started his gay flag career by playing minor league baseball at the stone stadium here in municipal park. Next to the park is also a big track. The trail has a huge potential to be able to connect Carthage to other communities in the region. The trail is a 35-mile trail connecting Carthage with Oronogo, and Carl Junction. This is the largest park in the community and has huge potential for growth for the community of Carthage.

Carter Park includes areas for parking, grill areas, playground, basketball courts across the street tennis courts, and two soccer goals. There is no parking area in the park next to Carter Park is where the site of the carriage of the bank of Carthage took place. There is a small drive leading to a parking space beyond that is a very nice view. The park could hold a large historical sign for the community with the historical battle of Carthage taking place here.

Freer Park is a park on the western part of the city. It services the neighborhood that surrounds it. The park services the surrounding community as a place for open recreation. The open space allows for a large number of programs of the park to fit their needs.

Memorial Park is located in the middle of the city. This park has a historical site of the battle of Carthage. The memorial site is the site of the park for a long time. The park also plays a role to the surrounding community and well-kept good swimming pool with a bathroom attached to it. In the park there is also a well-light gazebo. This park also has four lots next to surrounding buildings. This parking is used for parking for the park.



Asset Analysis



Central Park is a small park located in the middle of a large residential area. It features a basketball court, a baseball field, a tennis court, an assortment of playground equipment, and one baseball. This park's primary user is the neighborhood surrounding the park. The state park is actively used by adolescents. The parking at the park is minimal with only street parking accessible to the people that use the park. This is a good neighborhood park for the community.

Fair Acre features four baseball fields, one for ball field, four softball fields, five soccer fields, tennis fields and a one-mile walking trail with workout stations. All fields have adequate seating for games. As well as batting cages for some of the fields. Each set of fields has its own concession stand and restroom area. There are also covered picnic tables. The parking for the park is adequate. However, the parking on the far west lot needs to be improved. The high school are the primary users of this park during the day and other times there are organized sports that happen at these fields. All of the sports receive strong sponsorship from various companies in the community. Also the YMCA in Carthage is a strong supporter of organized sports.

Walnut Bottoms is a heavily wooded area with trails throughout. There is also a small parking for use to the entrance to Walnut Bottoms. In this heavily wooded area there are streams, various kinds of wild life, and native plants. This area is used for other things like hunting grounds. One can find deer stands throughout the area. The trails throughout the area are primarily used by dirt bikes and four-wheelers. This area also is located in a large flood plain. This area has strong potential in the community since it is currently undeveloped.



Maple Leaf Festival is an annual festival held in Carthage, Missouri. It is organized as a matching fund corporation in the 2000s and has an average of 80,000 visitors to the Carthage area. The festival now holds a variety of activities for all ages including beauty pageants and concerts. The festival is a strong source of revenue for the community that helps provide a positive atmosphere in the community. It helps fund recreation not only beloved residents of the community but people from outside the community as well. This makes the festival a crucial point of the year for the Carthage community.

Kellogg Lake contains two well kept swimming pools with picnic tables, an outdoor clinic, such as a fishing golf course. On the lake people are allowed to seasonally fish with licenses. The lake is located right next to spring creek. Part of the map is the park is old historic square 00. However, the road here leads into the lake. As people do not know the road is a dead-end what is now road 50 which feed into a cul-de-sac into the park.



CARTHAGE PARK SYSTEM

The current condition of many aspects of the Carthage Park system offers areas for growth and improvement. Developing the park further, will allow for a more complete and activated community.

Connectivity Currently, the parks in Carthage are physically separated, which makes each park more disconnected. The separation makes it difficult for the public and visitors to access these parks. There are no physical or geographic connections developed to unify these parks.

Accessibility The only pedestrian access to the parks is from the adjacent neighborhoods. If a park on the other side of town has an event or facility a person wishes to use their transportation to take a car or take a bike, may likely on higher traffic roads. The lack of sidewalks throughout the town makes it difficult and unsafe to get across town by foot.

Designated Entrances The parks, lack appropriate entrances that could not only enhance the appearance of the parks and clarify circulation, but could also help identify the park better within the town.

Historical Many of the parks do not relate to or strengthen Carthage's historic connections, such as Route 66 and the battle of Carthage, both of which are historically important to Carthage and can be better integrated into the park system.

Thematic Consistency Currently, the park system of Carthage lacks a unifying theme or identity. Some of the parks do not have sufficient, if any, signage that clearly identifies the structure and definition.



Challenges



Contextual Park Assets In order to ensure the effective use of each park, the surrounding area and assets of each park should be taken into account for the "look" of the park. Parks may be designed to provide multiple functions for multiple types of people or a specific function related to a certain area or user or a combination of both.

Appropriate Parking Parks with assets that attract people from all over Carthage, such as sports fields, may have a higher demand for parking than a park in the middle of a neighborhood. District or neighborhood parks with facilities that attract non-driving users should have sufficient parking for ADA and proper accessible walk paths leading to the parks.

Lighting All Carthage parks need adequate lighting. Without the lighting it may make the park uncomfortable or unsafe at night. Not all parks have to be used at night, but it may improve the overall image of Carthage to have well-lit parks in the more populated areas, particularly if the parks become part of a pedestrian network.

Seating Some parks, such as Fair Acre, have plentiful seating but they are used for the sports fields only at particular times and days. Other parks, such as Orange Park, do not have any "recreational seating" areas for people to sit on.



DOCUMENT ARCHIVE

MEETING TWO

Integration of potential



Industrial Parks:
Possible agreement with industries to use their land for parks:

- Create partnership with Carriage Industrial to use land for parks
- Creates a greater integration with the community by providing spaces used for the community.
- Allows Community to create a connection with the people involved with the industry.
- Purification of Air surrounding the industries.



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Synthesis



Interaction

Integration of Potential



Tree Park

Simple Park

General Park

Integration of Potential

Creating an overall system that connects the social, cognitive and physical aspects of the parks, while implementing a secondary system responding to the potential contextual integration, to achieve a holistic discovery of potential among the community.



Integration of potential



Community at the Parks and Streets



Ecology Land Park



Coastline, Meditation Space



Hospital Park

Hospital - Study
Possible Creation of Park at the Hospital:

- Provides a space for the patients to experience "Meditative" healing.
- Provides possible space of interaction between patients and the community.

Senior Citizens - Study
Possible Creation of Park for Senior Citizens:

- Provides an opportunity for senior citizens to have a park in less than half a mile radius.
- Provides a space of interaction by integrating the community with in.



Senior Citizens Park

Integration of Potential

Creating an overall system that connects the social, cognitive and physical aspects of the parks, while implementing a secondary system responding to the potential contextual integration, to achieve a holistic discovery of potential among the community.



DOCUMENT ARCHIVE

MEETING TWO

Integration of potential



Integration of Potential

Creating an overall system that connects the social, cognitive and physical aspects of the parks, while implementing a secondary system responding to the potential contextual integration, to achieve a holistic discovery of potentials among the community.



The Carthage Image



Concept Statement:

The Image of Carthage's Park System must be cohesive, positive, reflective, and inviting. Through success in these areas, revitalization can be achieved.



DOCUMENT ARCHIVE

MEETING TWO

The Carthage Image



Figure 1. Carthage Park System Concept



Figure 4. Conceptual Proposal at Hurlig Lake and Highway 96



Figure 4. Conceptual Section at Hurlig Lake and Highway 96



Figure 2. Proposed Trail System at Northeast Corner of Town



Figure 2. Proposed Trail System at Northeast Corner of Town

Concept Statement:
The Image of Carthage's Park System must be cohesive, positive, reflective, and inviting. Through success in these areas, revitalization can be achieved.



The Carthage Image



Figure 1. Bike Path Through Neighborhood



Figure 2. Proposed Bike Paths to First Park



Figure 3. Bike Path and Children's Section



Figure 4. Proposed Conceptual Design of First Park, Including with Park Network



Figure 5. Section Through First Park

Concept Statement:
The Image of Carthage's Park System must be cohesive, positive, reflective, and inviting. Through success in these areas, revitalization can be achieved.



DOCUMENT ARCHIVE

MEETING TWO

Carthage Connect

PLAN

ENHANCE

EXPAND

CONNECT

CARTHAGE CONNECT

Concept Statement:
Through the integration of basic urban elements the essence of the parks will be enhanced and reduce the need for urban sprawl. This will advocate the creation of new neighborhood parks with compartmentalized activities that serve the needs of their contextual users.

ISA DRURY UNIVERSITY UNIVERSITY OF MISSOURI Extension

Carthage Connect

Freer Park Future Invisions
Freer Park will become a neighborhood park with a Xeriscape streambed gardening. This features zero maintenance while helping the ground replenish since it is located in a flood plane.

Concept Statement:
Through the integration of basic urban elements, the essence of the parks will be enhanced and reduce the need for urban sprawl. This will advocate the creation of new neighborhood parks with compartmentalized activities that serve the needs of their contextual users.

ISA DRURY UNIVERSITY UNIVERSITY OF MISSOURI Extension

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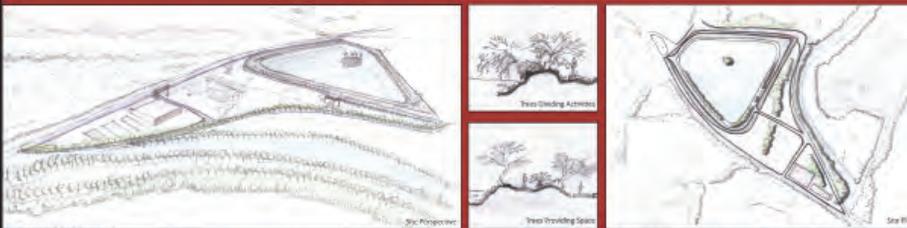
MEETING TWO

Carthage Connect



Kellogg Lake Future Invisions

Kellogg Lake is envisioned as a community park with a walking/biking track around it. Enhanced Landscape with zero maintenance and the possibility for a community driven garden.

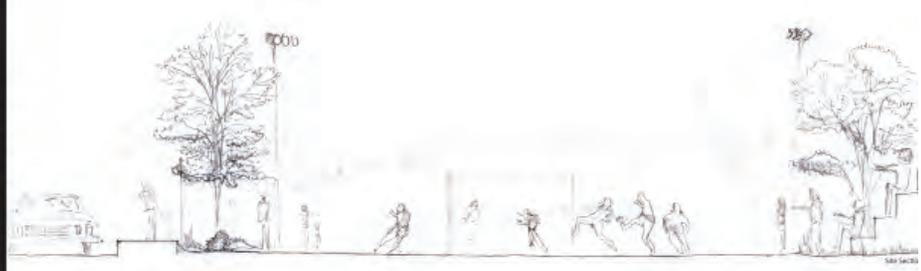


Concept Statement:

Through the integration of basic urban elements, the essence of the parks will be enhanced and reduce the need for urban sprawl. This will advocate the creation of new neighborhood parks with compartmentalized activities that serve the needs of their contextual users.

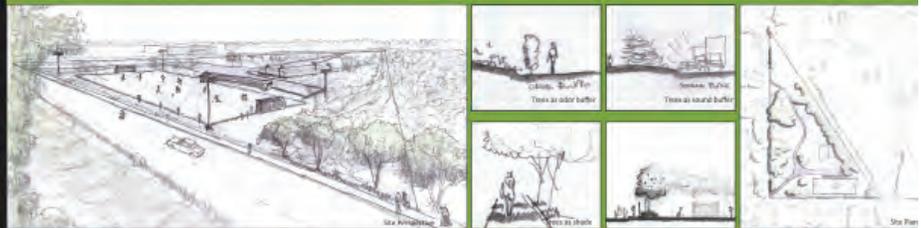


Carthage Connect



Carter Park Future Invisions

Carter Park is to be refurbished as a sports park that provides amenities for its contextual users to practice and hold events relevant to culture. It will also be part of a network of trails.



Concept Statement:

Through the integration of basic urban elements, the essence of the parks will be enhanced and reduce the need for urban sprawl. This will advocate the creation of new neighborhood parks with compartmentalized activities that serve the needs of their contextual users.

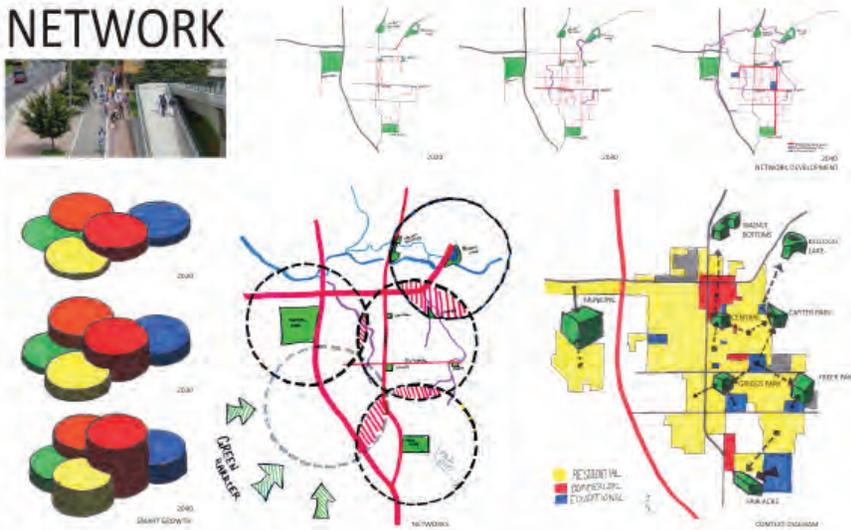


DOCUMENT ARCHIVE

MEETING TWO

Shaping Carthage

NETWORK

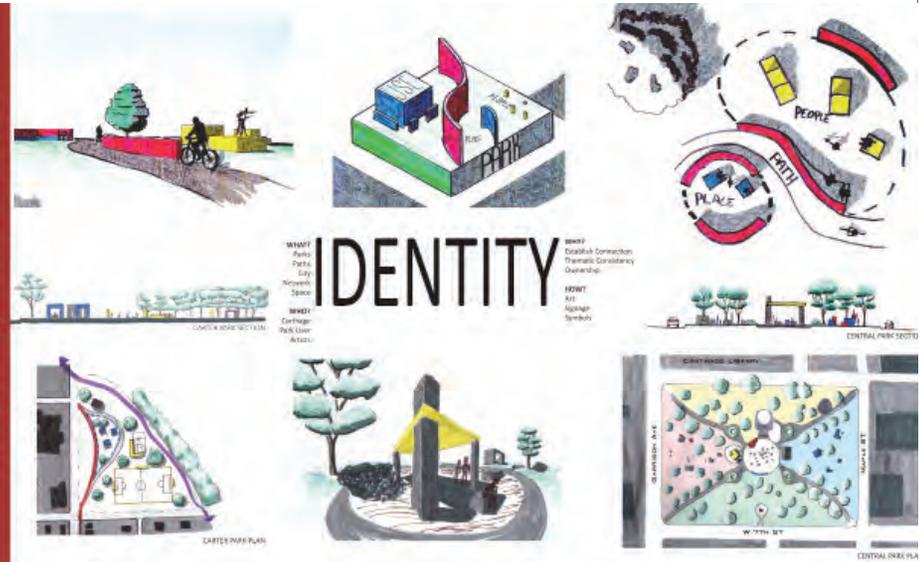


Shaping Carthage
By making the Carthage Park System an integral network, and by giving the parks a more defined identity within the community, the city will become stronger physically, socially and economically.



Shaping Carthage

IDENTITY



Shaping Carthage
By making the Carthage Park System an integral network, and by giving the parks a more defined identity within the community, the city will become stronger physically, socially and economically.



DOCUMENT ARCHIVE

MEETING TWO

Shaping Carthage

NETWORK NODES

Shaping Carthage
By making the Carthage Park System an integral network, and by giving the parks a more defined identity within the community, the city will become stronger physically, socially and economically.

Carthage Circuit

Active Living → **Community Involvement** → **Growth**

Rank	Category	Value
1	1.01	1
1	1.02	1
1	1.03	1
1	1.04	1
1	1.05	1
1	1.06	1
1	1.07	1
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DOCUMENT ARCHIVE

MEETING TWO

Carthage Circuit

Proposed Corner Park Plan

Carthage Park Renovation

Possible War Monument in the extension of Corner Park

Proposed Corner Park Plan

Corner Park Section

Swimming Pool Section

Concept Statement:
Continuity of the Park System through the ranking and organization of amenities with regards to active living.

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Carthage Circuit

Master Plan of Carthage

Proposed Central Park Plan

Photos of the general idea of this stage in Carthage Park

Central Park Section of Main Central Plaza with Stage

Concept Statement:
Continuity of the Park System through the ranking and organization of amenities with regards to active living.

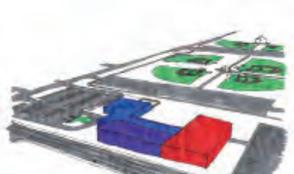
USA DRURY UNIVERSITY UNIVERSITY OF HOUSTON Extension

DOCUMENT ARCHIVE

MEETING TWO



Blue Springs Community Center Building
 Proposed Building Building
 440-883-4444
 www.blspringsmo.gov
 Revised: 04/11/2015
 Meeting Two, April 13, 2015



Full Area Park YMCA Expansion Perspective



Municipal Park Community Perspective

Benefits of YMCA Expansion

- Close to residential area
- Better location for the future expansion of the city in the southeast direction as it will be more centrally located
- It has a great location next to the High school for Carriage since the YMCA is a great and organization
- Many cities have partnered with local YMCA very successfully
- Provides a better living and healthy lifestyle
- Long history in the community of Carriage since 1890
- Only requires a small expansion to the YMCA

Disadvantages of the Expansion of the YMCA

- Potential losses of how it is operated since it is a non-profit city owned
- Its direct monetary benefits to the city of Carriage since the YMCA is a great and organization

Benefits of a Community Center at Municipal Park

- It is easy to become the focal of Carriage as many people have walked on the road will interact with it more than major thorough of the city
- Creates jobs for the local community
- Money can directly go into the economy and benefiting all Carriage
- One can leave room for more possible options in the future as the community continues to grow
- Good as a starting point for the people passing by Carriage on the freeway next to the park

Disadvantages of a Community Center at Municipal Park

- Could act as a strong point for the people passing by Carriage on the freeway next to the park
- Disadvantages of the Community Center at Municipal Park
- These starts to become a large overview of activities taking place at Municipal Park
- This is limited in the future content
- The monetary resources for construction is quite high

Category	Item	Quantity	Unit Price	Total Price
Construction	Site Preparation	1000	100	100,000
	Foundation	500	200	100,000
	Structural Steel	1000	100	100,000
	Roofing	1000	100	100,000
	Interior Finishes	1000	100	100,000
	Exterior Finishes	1000	100	100,000
	MEP (Mechanical, Electrical, Plumbing)	1000	100	100,000
	Landscaping	1000	100	100,000
	Permits	1000	100	100,000
	Contingency	1000	100	100,000
Furniture & Equipment	Seating	1000	100	100,000
	Tables	1000	100	100,000
	Lighting	1000	100	100,000
	Storage	1000	100	100,000
	Decorative Elements	1000	100	100,000
	IT Infrastructure	1000	100	100,000
	Security	1000	100	100,000
	Accessibility	1000	100	100,000
	Signage	1000	100	100,000
	Professional Fees	1000	100	100,000
Total:				\$34,941,939

Blue Springs, Missouri is a city located in Missouri and within Jackson County. Blue Springs is located nineteen miles south of downtown Kansas City, Missouri. As of the census of 2012, there were 53,034 people, 19,122 households, and 14,468 families residing in the city. The population density is approximately 2,372 inhabitants per square mile. Of the 53,034 people the racial makeup of the city was 97.5% White, 0.2% African American, 0% Hispanic, 0% Native American, 1.2% Asian, 0.2% Pacific Islander, 1.3% from other races, and 3.1% from two or more races. The city with the help of SFS Architecture and Barker Rinker Seawall (BRS) Architecture were asked to perform a feasibility study for a new community center and materials for the community. They conducted a thorough study of the city by hosting regular meetings with the community engaging all aspect of the creative process as well as analytical processes to come to a solution for the city of Blue Springs. This project was conducted the beginning of 2015 with the initial reviews and considerations taking place in March. The project has been projected to start construction sometime in 2015.

Carriage can relate to the city of Blue Springs, as they move forward in time. Carriage has a population of 14,095 people as recorded by the 2012 United States Census. Which is much smaller than the population of Blue Springs. However, one has to consider the scale of Carriage compared to the scale of Blue Springs. Per square mile, Carriage has a population of 1,206 and with further expansion the city has the potential of reaching a scale like the city of Blue Springs. Which per square mile has a population density of 2,372 people. Also with the city of Joplin so close to Carriage this also creates more opportunities for growth.

To the left one can see the possible costs of a community center. This sheet lays out the specific costs of the feasibility study that was done in the city of Blue Springs, Mo. This number is based not only based factual information like material costs. It is also based on national averages for community centers across the nation. The average cost of building a community center usually lies between 30,000,000 and 50,000,000 depending on the design and programs of the building.

Concept Statement:

Continuity of the Park System through the ranking and organization of amenities with regards to active living.



DOCUMENT ARCHIVE

MEETING THREE



Active Living by Design

Programs

One of the first steps to becoming an active living community is the development of robust programs. These programs can be targeted, such as youth sports, or broad-based, such as walking and biking programs. Active living also focuses on nutrition. Different healthy eating programs can be implemented in various ways within the community to promote overall health.

Community Center

A community center in Carthage could offer additional activities such as swimming, aerobics, as well as a weight room. The community center could also serve as a venue for organized sporting events and activities for the entire community. It could further encourage an active living lifestyle by being tied with the local school system.

Network

The Carthage Park system has been developed to provide a network of trails throughout the city. This network would consist of various trails throughout the city on the streets, sidewalks and parks. The trail system is still in the planning phase and will be more complete once the City of Carthage has a final plan for the city. The network will be a valuable asset to the city of Carthage and will help to reduce the need for parking.

Activities

The Carthage Park system has been developed to provide a network of trails throughout the city. This network would consist of various trails throughout the city on the streets, sidewalks and parks. The trail system is still in the planning phase and will be more complete once the City of Carthage has a final plan for the city. The network will be a valuable asset to the city of Carthage and will help to reduce the need for parking.

Community Center

The construction of a community center will encourage a healthy lifestyle within the city of Carthage. Multiple activities can occur within the structure. However, the most needed would be the support of the existing pool facility.

A community center in Carthage could offer additional activities such as swimming, aerobics, as well as a weight room. The community center could also serve as a venue for organized sporting events and activities for the entire community. It could further encourage an active living lifestyle by being tied with the local school system.

PHASE 1 Partnerships

- YMCA Partnership for a competition pool
- Expansion of YMCA pool facilities
- Integration of local community groups
- Implementation of Project Cornerstone

PHASE 2 Development

- Renovation of current Municipal Pool
- Development of indoor pool at Municipal Park
- Contract with YMCA for pool use

PHASE 3 Community Center

- Construction of Community Center at Municipal Park
- Possible Partnership with YMCA for operations

DOCUMENT ARCHIVE

MEETING THREE

Network Nodes

Throughout the network nodes will develop at city locations that are strategic, existing and meeting points. These nodes will become expressive faces of the identity of the city. The network nodes are located on the north-south and east-west. These nodes are located in strategic areas that are useful for walking on the route.

Network

Walking School Bus

Why the creation of a walking school bus? Active Living programs could be initiated by creating walking neighborhoods with separate corridors and their streets. It can be much safer to have alternative means of transportation to public or school.

The Safe Routes to School program provides students with many choices to avoid through safer sidewalks, crossing crossings, as well as developing pedestrian "bicycle islands". The program is in schools, as well as the community. The students are on the use of these safe routes. The school provides a walking school bus on their route to use the route from their house to the school. Then the program is, with more choice pedestrian program on their route to provide better driving. It was in Virginia implemented this program and saw a rise of students walking or riding to school.

Main City Network

Meeting Point

Walking School Bus

Smart Growth

Conservation is key in the idea of Smart Growth in a city. The development of the area can have large implications on the ecosystem. The conservation of the area will help improve the natural processes of the water cycle. This is where the city of the green and smart growth can be achieved. The green field creates a buffer between the city and the surrounding. It was designed to help conserve the area as well as help to promote the growth of green space and wild life. The nature center along with the education center designed to help to increase the quality of the land and the quality of the city.

Conservation

The land (green space) and resources about green development people start to do much more environmental issues and all these things are local decisions. Bringing the people of the city out to the conservation area to start to engage the community in nature based recreation is another great way to have the better quality knowledge about the benefits of conserving areas. The nature center also starts to act as signage for the city as well promoting the city as a healthy, environmentally friendly city.

Network

The network refers to the use of trails and bike paths and includes the city to start to connect the city in a more physical manner. The network helps to smart growth by providing a more physical alternative form of transportation for train and cars. It will help to help the city of the city to help to reduce greenhouse gas emissions. The network is the city able to support the transportation of people and the environment of people to help promote connections between schools and parks in the city and in the suburbs of the city.

City Growth

The concept of smart growth is centered around growing the city denser instead of spreading out towards the surrounding areas. Which can have huge implications on the population. The city can be accomplished through smart living rules like smart growth. Smart living centers that can provide alternative means of transportation can provide the city with the means of growing denser.

DOCUMENT ARCHIVE

MEETING THREE



Social Integration



What Is Social Integration?

Social integration is the process of the utilization of different social groups that result in the creation of a stronger communal cohesion. It aims to create a cohesive, inclusive, and vibrant community by breaking down the barriers of social, economic, and cultural differences within the Carthage limits to create a stronger focus on the well-being of the community and the individuals.

Why Social Integration?

The importance of social integration is simple. The Carthage community is made up of individuals that have a shared identity and shared background. The importance of the Carthage community lies in the ability to utilize the individuals to create a stronger, more unified community.

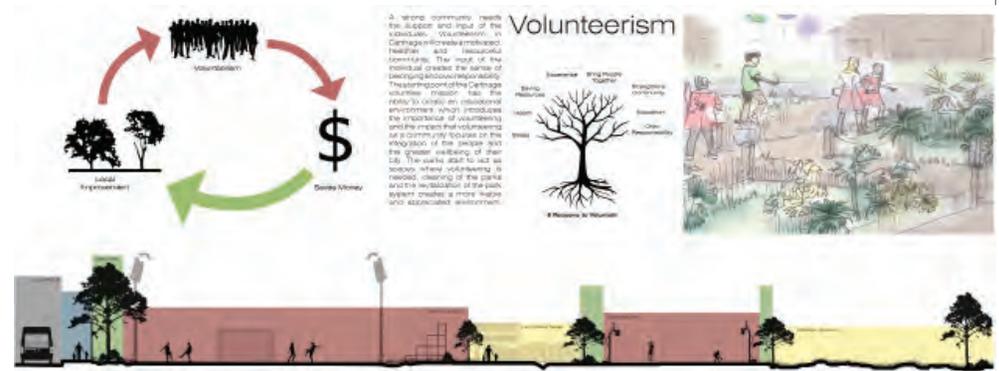
SECURITY Community Strength
Diversification Forum of Idea
Personal SAFETY Exchange
Development Social Structure
Volunteering Encouragement



The ability for the community to be accepting of all the individual people, while the cultural of creating a cohesive community that creates a framework of support that allows the individuals of Carthage to integrate and flourish. Encouraging each other to create an environment where the potential of each individual is utilized to create a vibrant community that allows the individuals to create a positive community which focuses on the well-being and the involvement of the city as a whole.

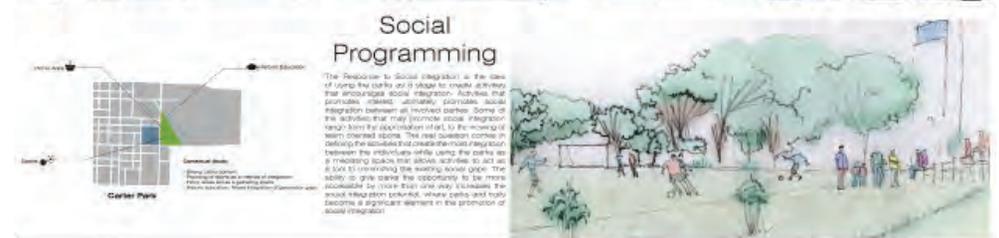


The Carthage community is a vibrant one that creates an environment that encourages the development of individuals and the community. Encouraging activities that promote social and economic development between individuals and individuals that create the encouragement of community and individual growth. This allows the people to share resources, ideas, and experiences and promote social integration among the community.



Volunteerism

A strong community needs the support and input of the individuals. Volunteerism in Carthage provides a strong foundation and resources for the community. The most of the individuals create the Carthage volunteerism. The support of the Carthage volunteerism creates an environment which provides the importance of volunteerism and the impact that volunteerism has on the community. The Carthage volunteerism is the greater well-being of the city. The Carthage volunteerism is the greater well-being of the city. The Carthage volunteerism is the greater well-being of the city.



Social Programming

The response to social programming is the idea of using the Carthage as a whole to create activities that encourage social integration. Activities that promote social, economic, and cultural development between individuals and individuals. Some of the activities that may promote social integration include the development of art, the creation of community gardens, the creation of community centers, and the creation of community parks. The Carthage community is a vibrant one that creates an environment that encourages the development of individuals and the community. Encouraging activities that promote social and economic development between individuals and individuals that create the encouragement of community and individual growth. This allows the people to share resources, ideas, and experiences and promote social integration among the community.



DOCUMENT ARCHIVE

MEETING THREE

Partnerships

Every successful city realizes the importance of partnerships and the creation of partnerships to encourage the integration of the community. Partnerships are used as a way to connect the visitor, contribute to the park, go, and so on, using the park as an anchor space when you provide activities that might not be available. The experience of partnerships can be in the form of encouraging citizenship, the more personal form of partnerships in the neighborhood making the well-being of a park the responsibility of the community as a whole, where you plan to act as a significant component to the management of access integration.

Contextual Response

The importance of defining the context of the space is related to the context and surrounding of the park. The response to plan according to the context is to take into account the needs of the park, increase due to the needs of the surrounding area, and a sense of ownership that encourages the community and neighborhoods to take part in decision and integration spaces. The activities provided create an identity of the park and the people formed by the residents around which people, with the location of the park and strengthen the overall impact that parks create in a city.

New Parks

The existing parks in Carthage are the perfect starting point to creating a more integrated community, the opening of the park as a starting point to improve social integration. Another 11 residents, the integration of the community, (with the help of the University of Missouri Extension) is needed to create a more integrated community. The location of these parks would be a response to the preferred demographic that tend to create an ideal opportunity to increase integration, with a response in the cultural, economic and social integration. Here you can aim to create access spaces to allow for the use in substantial growth in the next 30 to 40 years.

CARTHAGE PARKS AND RECREATION SHOULD PROVIDE THE COMMUNITY WITH AMENITIES THAT PROMOTE PHYSICAL, SOCIAL AND ECONOMIC DEVELOPMENT.

UNIVERSITY OF MISSOURI Extension

Carthage

DRURY UNIVERSITY

Phase 1

- Renovation of existing Amenities
- Encouragement of volunteerism
- Cleaning up of existing parks
- Education of community health
- Creation of partnerships
- Introduction of signage
- Introduction of partnership of YMCA

Phase 2

- Introduction of bike systems - Network
- Cleaning up of existing parks
- Rest stops introduction
- Introduction of sub structures
- Planting for beautification
- Introduction of framing network of the city - outer green ring v
- Conservation of flood plains by acquisition and conditioning of lands
- Introducing fees for park usage and amenities

Phase 3

- Introduction of bike systems - Network
- Cleaning up of existing parks
- Rest stops introduction
- Introduction of sub structures
- Planting for beautification
- Introduction of framing network of the city - outer green ring
- Conservation of flood plains by acquisition and conditioning of lands
- Introducing fees for park usage and amenities

Enhance + Expand + Connect

CARTHAGE PARKS AND RECREATION SHOULD PROVIDE THE COMMUNITY WITH AMENITIES THAT PROMOTE PHYSICAL, SOCIAL AND ECONOMIC DEVELOPMENT.

UNIVERSITY OF MISSOURI Extension

Carthage

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- Fig. 6.7- Created by CCS Team
- Fig. 6.8- Created by CCS Team
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