



**BUILDING ACTIVE TRANSPORTATION**

*in*

**HOT SPRINGS, SOUTH DAKOTA**

*presented by the*

South Dakota State University  
Landscape Architecture Program

*in cooperation with the*

South Dakota Department of Health

**26 APRIL 2024**

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## Acknowledgments

South Dakota Department of Health

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## Introduction

The built environment affects public and personal health. In addition to physical metrics of health such as obesity rates, dietary habits, and steps walked in a day, there are less-tangible indicators of a community's health. These include perceived friendliness, sense of community, and livability. The built environment impacts all of these indicators.

In 2012, the South Dakota Department of Health initiated the Active Transportation Advisory Team (ATAT) to facilitate change in the built environment of South Dakota. In particular, an effort has been made to help communities encourage using alternative means of transportation (such as walking or cycling) for completing daily routines. An outgrowth of the ATAT is the Active Transportation Collaboration project. This project provides resources and expertise to South Dakota communities in developing strategies to improve active transportation.

Recommendations are developed during the last half of a 16-week semester by students and faculty from South Dakota State University's Landscape Architecture program. In the case of the present study, representatives from SDSU traveled to Hot Springs, South Dakota, in late March 2024 to conduct interviews with key stakeholders within the community. They also conducted an analysis of transportation infrastructure, parks and recreation facilities, and neighborhood composition in the area.

Following this data-gathering process, students developed a series of recommendations touching all aspects of active transportation issues, including the further development of active transportation infrastructure, improvement and expansion of neighborhoods and recreation facilities, placemaking and community identity, and reconnecting Hot Springs to its unique natural and cultural resources. By approaching active transportation in this holistic way, a balanced, comprehensive plan for improving public and personal health can be achieved.

These recommendations represent a global shift in how some people think of their community. Some recommendations will entail a major investment. By shifting community priorities and identifying existing resources within the community, Hot Springs can be an example for other communities throughout the region of how to grow and thrive while protecting and celebrating its most precious resource: the people who make up this incredible community.

## **RECOMMENDATION 1. FURTHER DEVELOP ICONIC DESTINATIONS**

There are beautiful places to visit in Hot Springs, but they do not have everything they need to be the most successful. The Freedom Trail is widely used in the city, but residents want more from it. Expanding the trail along Fall River and placing more benches and other pedestrian amenities would bring more foot traffic to the area.



*Figure 1: Freedom Trail in Hot Springs*

Community activities like movie nights should rotate locations between Butler Park, the downtown area, and Chautauqua Park. Areas adjacent to the Centennial Trail should also be developed more to draw people in to stop for a picnic or just a small break in their walk, hike, or ride. The city should also consider ways to advertise the various parks and other amenities available in Hot Springs, including a printed brochure and updated website.



*Figure 2: Movie night in the park*

## **RECOMMENDATION 2. ENHANCE PLACEMAKING THROUGH MURALS AND LOCAL ART**

One effective strategy to enhance the aesthetic appeal and unique charm of Hot Springs is through the implementation of local public art and murals across various areas of the city, particularly in downtown areas, plazas, streets, and on business exteriors. By incorporating public art and murals, Hot Springs can effectively showcase local storytelling, expression, and community engagement, adding to the city's distinctive allure.

Public art and murals provide a platform for local artists to showcase their talent and creativity, reflecting the city's identity, history, and values through visual representation. These creative expressions act as a means to engage residents and visitors alike, creating a sense of community pride and fostering a deeper connection to the city. The integration of public art and murals will activate underutilized or neglected spaces within the city, transforming them into vibrant focal points of interest and gathering spots for individuals to enjoy. Revitalization of the urban landscape



Figure 3: Public art under the main bridge near the theatre

enhances the overall aesthetics and contributes to a greater sense of place and community pride.

By embracing creativity and cultural expression through public art, Hot Springs can create a more visually stimulating and engaging environment for all to appreciate and enjoy, ultimately contributing to the city's vibrancy and cultural richness.

The Dakota Mart grocery store is an important place to incorporate public art. In this case, a mural should be installed on the north side of the building facing Canton Avenue, with the Black Hills in the background. By transforming this space into a visually captivating and engaging area, the



Figure 4: Dakota Mart mural enlivens the streetscape

grocery store will become a prominent community destination, enhancing its visual appeal and contributing to the sense of place and identity for the store. The incorporation of visual art will serve as a focal point for the area, attracting attention and sparking conversations among visitors and residents. This initiative fosters a sense of connection and community engagement, ultimately strengthening ties within the neighborhood.

By integrating public art, Dakota Mart can elevate its surroundings and create a more welcoming and inclusive atmosphere for its customers and the community at large. The visual enhancement brought about by the incorporation of a mural or other forms of artistic expression will not only beautify the space but also add cultural richness and vibrancy to the area, further reinforcing Hot Springs' unique charm and character.

### **RECOMMENDATION 3. CONDUCT COMMUNITY BEAUTIFICATION WORKSHOPS**

Community beautification workshops offer residents and volunteers the chance to learn valuable techniques to enhance and maintain both private and public spaces, including homes, yards, parks, trails, and neighborhood greens. These workshops should be conducted at a variety of community venues such as parks, community centers, businesses, churches and schools, encouraging broad and active participation and contributing to the overall improvement of the city's aesthetic appeal. They should be open to all residents of Hot Springs, as well as volunteers and visitors who are passionate about improving the city's visual appeal. Participants in these workshops should include all ages and backgrounds, from families looking to spend quality time together while giving back to their community to students seeking to fulfill service requirements or learn new skills. Additionally, local businesses and organizations may also be interested in attending these workshops as a way to engage with the community and contribute to the beautification efforts.



Figure 5: A community placemaking event creates a mural

By having a diverse range of attendees, community beautification workshops have the potential to bring together people from different walks of life who share a common goal of enhancing the city's public spaces. This fosters a sense of unity and collaboration among residents, creating a strong sense of community pride and ownership.

**RECOMMENDATION 4. ADD MORE SITE AMENITIES TO THE PEDESTRIAN ENVIRONMENT**

Hot Springs is home to several excellent public spaces, trails and parks that allow the public to enjoy the city. Many facilities, like the Freedom and Centennial Trails, have benches and other amenities that make the walking environment more pleasant. The addition of more such amenities, including trash cans, benches and drinking fountains will make Hot Springs more beautiful and user-friendly.

Amenities should be strategically placed throughout the city to ensure that pedestrians have ample opportunities to rest or to dispose of waste. This is particularly important in downtown Hot Springs where there is the greatest desire for foot traffic. Benches provide places for pedestrians to rest, socialize, and observe their surroundings, especially in the middle of a long afternoon of shopping. Without benches, visitors are less likely to spend more time in the downtown, leading in turn to decreased revenues and sense of vibrancy.

In addition, placing amenities in parks, gardens, and recreation areas such as Butler Park and Centennial Park will increase use and enjoyment of those facilities. Benches should be sited to capture views of Hot Springs’ natural landscapes and scenery, allowing visitors and residents alike to fully



Figure 6: Rendering showing the impact of site amenities on the pedestrian environment

enjoy and appreciate the beautiful Southern Black Hills. Waste receptacles should be proximate to seating. During community events in parks and at other key times, the city should bring in food trucks or other forms of pop-up vending. These will create anchor points of activity within the parks, enhancing the experience for all. When food trucks are brought in, they should be sited near the entry points for activities, and seating and trash management should be sited to be convenient to the activities and the food.



Figure 7: Food trucks bring energy to a place

These amenities (benches, trash cans, drinking fountains, and street vendors) are an integral part of urban design, adding visual interest and functionality to public spaces. Well-placed site amenities can enhance the overall aesthetics of a street or park, creating inviting and attractive environments for residents and visitors alike. They also have a positive impact on community and mental health. They provide a place for people to rest, relax, and socialize outdoors, which contribute to a sense of community and connection with others. This social interaction and sense of belonging help reduce feelings of loneliness and isolation, important factors in mental well-being.

Additionally, public site amenities encourage people to spend time outdoors and enjoy the benefits of nature. Being in nature has been shown to reduce stress, anxiety, and depression, and can improve mood and overall mental health. Having a comfortable place to sit and unwind in a peaceful outdoor setting can provide a much-needed escape from the stresses of daily life.

**RECOMMENDATION 5. INTRODUCE PEDESTRIAN LIGHTING THROUGHOUT THE CITY**

Introducing pedestrian-oriented lighting throughout Hot Springs is a vital step towards creating a safer and more inviting environment for pedestrians. Currently, there’s a noticeable deficiency in lighting along sidewalks and the river trail, posing safety concerns particularly during evening and nighttime hours. Strategically installing pedestrian-oriented lighting will significantly improve visibility, making it safer for pedestrians to navigate streets, sidewalks, and crosswalks even after dark. Well-lit areas not only deter crime but also enhance the sense of security for pedestrians, encouraging more people to walk and engage in active transportation. Moreover, improved lighting at crosswalks increases driver awareness and reduces the risk of pedestrian/vehicle accidents,



Figure 8: Riverfront park enhanced with pedestrian lighting and other amenities

particularly in areas with high foot traffic. Along the river trail, enhanced lighting not only extends the usability of this popular recreational area into the evening hours but also promotes a sense of safety and security for those enjoying outdoor activities. Overall, investing in pedestrian-oriented lighting is a crucial component of Hot Springs' efforts to create a pedestrian-friendly city, fostering a safer, more accessible, and vibrant community for residents and visitors alike. Schools and routes to schools are another key consideration for additional lighting. This will provide safety particularly during the winter when children and youth are often at school before it gets light.

**RECOMMENDATION 6. ADD STREET TREES AND OTHER BUFFERS**

Hot Springs has an impressive historic downtown. Increasing the number of street trees in the city presents a compelling opportunity to enhance the town's urban environment and overall quality of life. This is particularly important along Chicago Street and River Street in Hot Springs' downtown, though most of the streets in Hot Springs lack street trees or other forms of shade.

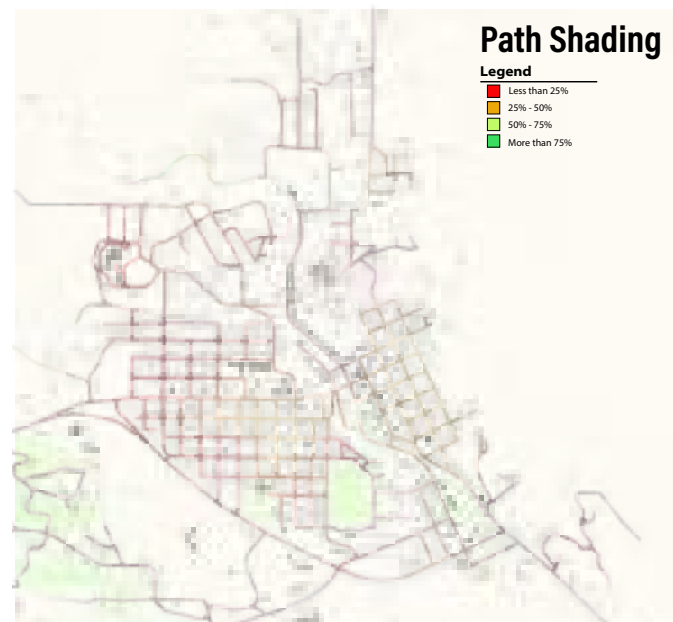


Figure 9: Percent of path shaded by trees in Hot Springs

Street trees are an integral element of any urban landscape. They, along with other planted buffers like shrubs, help to vastly increase the quality of life in urban and downtown areas. As buffers they help mitigate the effects of the road on pedestrians by acting as natural sound barriers, dampening noise from vehicular traffic and creating a quieter, more peaceful urban environment. They also provide a separation between vehicles and pedestrians, contributing to safety and minimizing conflicts.

Street trees also provide a vast array of physiological, ecological and health benefits. Studies have shown that street trees have a direct effect on improving the health of a city through improving air quality, reducing stress, moderating temperature, and incentivising physical activity. (Donovan et al.) This not only improves the pedestrian experience but also reduces the demand for energy-intensive air conditioning, thereby contributing to energy conservation efforts. Street trees help to foster social cohesion and many studies have found a correlation between the number of trees in an area and lower crime rates. They improve the attractiveness, character, and appeal of a downtown. People are more likely to walk from shop to shop in shaded streetscapes. (Mullanery et al.)



Figure 10: Street trees at work elsewhere in the Black Hills

The South Dakota Department of Transportation (SDDOT) is perceived as a barrier to the integration of street trees in downtown areas. Concerns may stem from maintenance costs, potential infrastructure damage, or utility conflicts. It is important to recognize that the long-term advantages

of street trees far outweigh these challenges. Even if the DOT does not initially approve of the idea, pursuing the addition of street trees is worthwhile. Community-driven initiatives and partnerships with local businesses and organizations can help fund and maintain tree planting efforts. The benefits of a greener, more vibrant streetscape in Hot Springs make the endeavor of increasing street trees not only desirable but essential for the city's well-being and future sustainability.

**RECOMMENDATION 7. PAINT OR REPAINT CROSSWALKS THROUGHOUT TOWN**

Painting or repainting the crosswalks in Hot Springs is a straightforward yet impactful way to enhance the town's infrastructure and promote pedestrian safety. Many intersections in Hot Springs feature painted crosswalks, but most of these are in need of repainting. Several other intersections would benefit from having crosswalks added to them. These are particularly important on intersections within a five-minute walk of schools and parks.

By painting these crosswalks, Hot Springs would immediately gain increased visibility, making it easier for drivers to spot and yield to pedestrians. Additionally, well-marked crosswalks serve as a form of traffic calming, prompting drivers to slow down and be more cautious in areas with high foot traffic. This not only improves pedestrian safety but also creates a more pedestrian-friendly environment, encouraging walking and active transportation. Furthermore, clearly marked crosswalks send a message to both residents and visitors that Hot Springs prioritizes pedestrian safety and accessibility. As a result, repainting the crosswalks is a low-cost measure that yields significant benefits in terms of safety, walkability, and overall quality of life for the community. For high-impact intersections, a ramped speed table (as shown in Figure 11) with painted crosswalk is an option to both slow traffic and increase pedestrian visibility.



Figure 11: Example of a painted crosswalk on a speed table

**RECOMMENDATION 8. ADD CURB CUTS AT INTERSECTIONS**

Expanding the number of curb cuts throughout Hot Springs is an essential initiative with numerous benefits for the community. A curb cut is a ramp that slopes from the sidewalk to the road surface. They assist pedestrians of all abilities to navigate the built environment, removing

barriers to crossing the street. Currently, many intersections and crosswalks lack curb cuts, posing significant challenges for people with mobility impairments, parents with strollers, and individuals using wheeled devices. By adding curb cuts, Hot Springs can greatly enhance accessibility, allowing everyone to move more freely and independently throughout the city. This not only benefits residents and visitors with disabilities but also promotes a safer environment for all pedestrians. Curb cuts facilitate smoother transitions between sidewalks and streets, reducing the risk of trips and falls. Moreover, increasing accessibility fosters inclusivity and demonstrates a commitment to creating a community where everyone can participate fully. Beyond accessibility, curb cuts also provide convenience, making it easier for people to navigate the city and access businesses and services. By prioritizing the installation of curb cuts, Hot Springs can create a more welcoming, safer, and inclusive environment for all its residents and visitors.

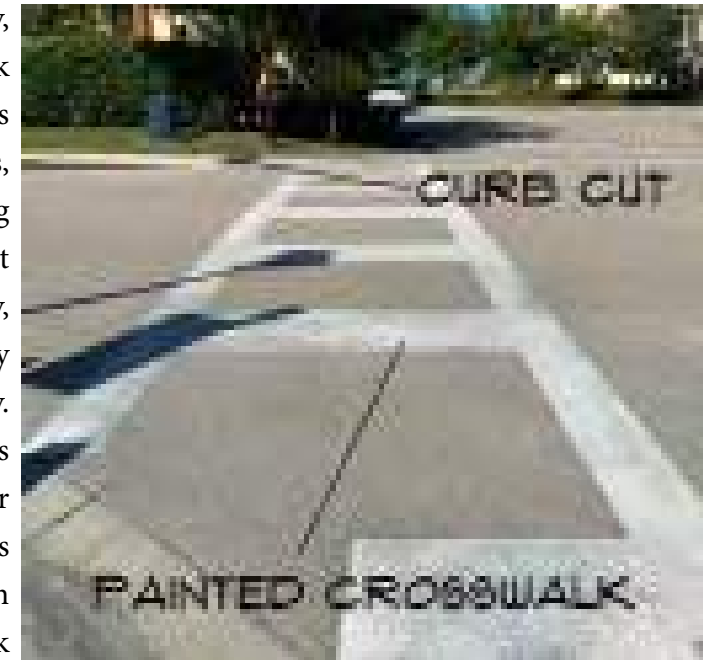


Figure 12: Curb cuts work with crosswalks to improve street safety

**RECOMMENDATION 9. ADDRESS DEFERRED ROAD MAINTENANCE ISSUES**

Road maintenance and upkeep is an element of the city that can lead to aesthetic appeal and a smoothly functioning commute. While many roads, specifically those south of University Avenue, have well-maintained streets, there are other streets within the city that can provide hazards to drivers and pedestrians alike. Road maintenance and upkeep are important for maintaining efficient transportation and the movement of emergency services, and limiting the damage sustained by heavy trucks.

In addition to surficial maintenance, existing curbs and curb cuts should be repaired. The improvement of curbs improves safety by providing a physical barrier between pedestrians and vehicles. Curbs also enhance community aesthetics. Curbs also improve stormwater management on roads. When maintained, curbs direct stormwater runoff into storm drains, minimizing flooding in yards, intersections and other low points in the road.



Figure 13: Current road condition in Hot Springs

**RECOMMENDATION 10. CONDUCT A STORMWATER DRAINAGE ASSESSMENT SURVEY**

Road drainage is essential in expanding the lifespan and safety of a roadway. Poor drainage can cause roadway flooding, rendering roads impassable for pedestrians, increasing the risk of hydroplaning and ice formation, and significantly decreasing the lifespan and quality of the road through erosion, deformation, and freeze/thaw cycles. Better road drainage is achieved through the assessment of drainage patterns and implementation of infrastructure to capture stormwater and channel it away from the road for detention until it can be infiltrated into the ground. These stormwater infrastructure elements include gutters and catch basins to catch water, swales, pipes, and culverts, to channel it away and a detention basin for it to be collected and absorbed.

These collection basins take many forms from ditches to ponds, and can actually provide a lot of aesthetic and ecological benefits in the form of a rain garden. Rain gardens are basins of water-resilient native plants on a permeable surface that filters the water of pollutants before it is absorbed



Figure 14: Example of a rain garden

into the ground and utilized by the plants. Often the first inch of water from a storm is treated and infiltrated directly into the rain garden, while the remaining flow from heavier storms is then directed to other surface or subsurface drainage facilities.

We recommend a stormwater and drainage assessment be conducted after a suitable storm (25-year storm or greater) to find areas where Hot Springs’ current stormwater infrastructure can be added on and improved. This should be done on all roads - paved and unpaved - in the community. In particular, during the our assessment of the built environment, we witnessed areas on Doran Road and Hickory Street where the melting snow had pooled onto the road, creating a quagmire.

**RECOMMENDATION 11. IMPROVE WAYFINDING AT KEY DESTINATIONS**

Wayfinding encompasses all the ways in which people orient themselves to their environment and navigate from place to place. Improving the wayfinding system in Hot Springs involves installing signage and markers along existing trails, streets, and roads to assist users in navigating and locating key destinations effortlessly. With a well-designed wayfinding system in place along trail networks, points of interest, and areas with significant pedestrian traffic, both visitors and residents can explore the city confidently and enhance their overall experience.

Enhancing the wayfinding system in Hot Springs is essential for several reasons. Firstly, it prioritizes safety by providing clear and accurate directions to users, improving efficient circulation around the city. This can be particularly important for visitors who may be unfamiliar with the area. Secondly, an improved wayfinding system enhances convenience by making it easier for residents and visitors to locate key destinations such as parks, landmarks, businesses, and public facilities.

Local businesses and community organizations can provide support through funding, sponsorship, or volunteer efforts to help enhance the wayfinding system. Residents and visitors benefit directly from the improved system, as they can navigate the city more easily, discover new destinations, and feel more connected to the community. By involving a diverse group of stakeholders, the city can ensure that the wayfinding system meets the needs and preferences of all those who interact with the city’s streets, trails, and points of interest.

By enhancing the wayfinding system in Hot Springs, SD, safety, and convenience are prioritized, while also enhancing the enjoyment of outdoor activities and sightseeing. Investing in a comprehensive wayfinding system not only promotes a positive experience for visitors and residents but also boosts the city’s appeal as a user-friendly destination. This encourages exploration and contributes to a welcoming environment for all who visit or live in the area.



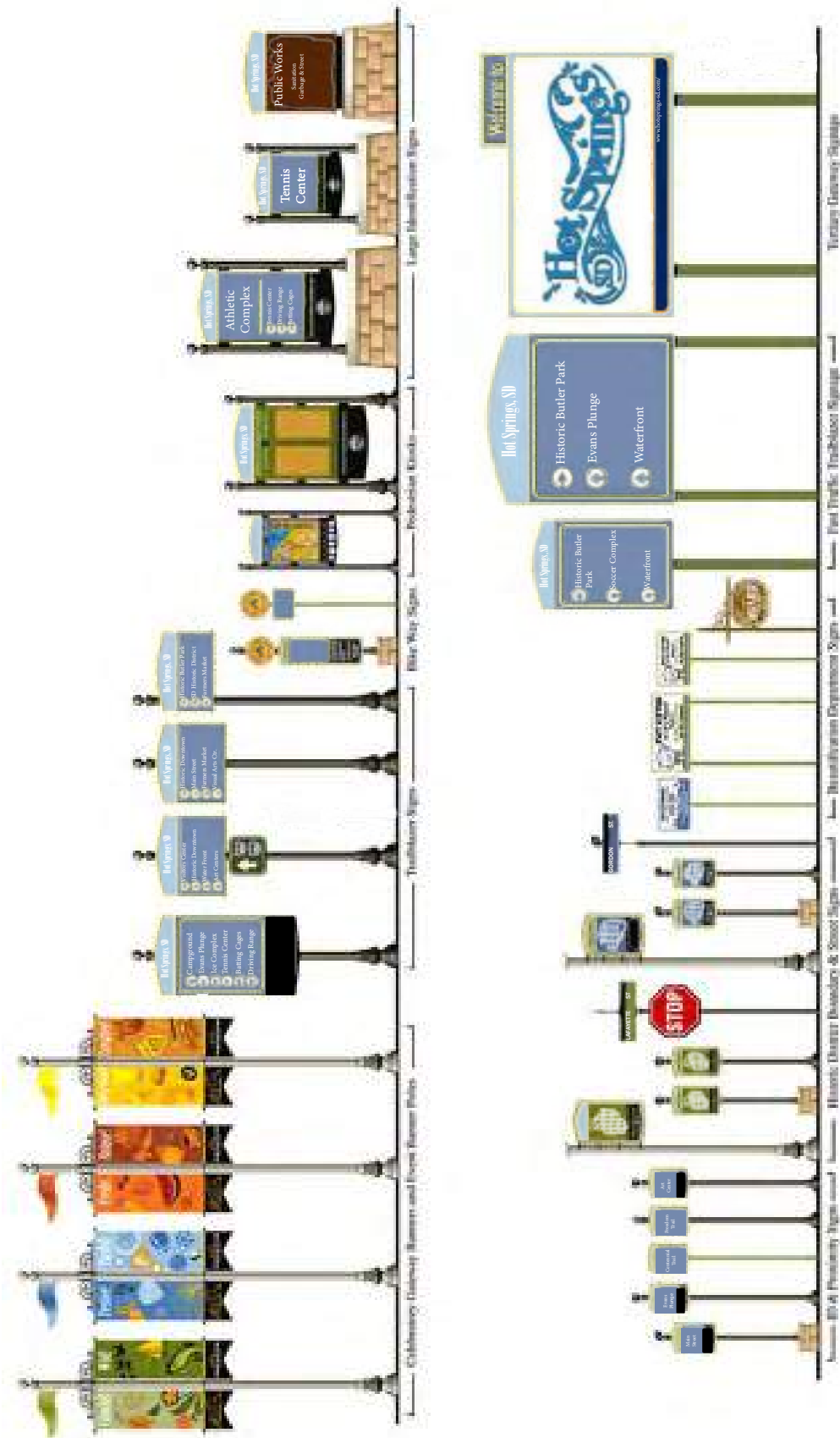


Figure 15: Examples of wayfinding strategies for Hot Springs

**RECOMMENDATION 12. INSTALL PEDESTRIAN CROSSING SIGNS LEADING UP TO BLIND INTERSECTIONS**

Installing clear pedestrian crossing signs increases driver awareness of designated crossing points, making improving pedestrian safety. Other interventions like mirrors, trimmed vegetation, and signs warning of upcoming crosswalks, will increase visibility and reduce risk of accidents.

By focusing on pedestrian safety near schools, the community in Hot Springs will create a safer and friendlier environment for students and residents. When pedestrians feel secure while walking in their neighborhood, they are more likely to choose active transportation options like walking or cycling, which not only promotes physical activity but also reduces traffic congestion and pollution. These interventions will improve residents' overall well-being and quality of life.



Figure 16: Proposed signage and safe crosswalks for pedestrians.

**RECOMMENDATION 13. INSTALL STOP SIGNS AT KEY INTERSECTIONS**

While most of the key intersections in Hot Springs have street signage by way of stop signs or traffic lights to direct traffic, there are parts of the community, specifically in the northern residential area of the community, that do not. Where key arterial roads meet local roads there should be an indicator for traffic to stop. This will increase the safety of vehicles turning out of the intersection, and paired with street crossing indicators, will also provide safety for pedestrians looking to cross the street. They help prevent accidents by establishing a clear right-of-way hierarchy, guiding the orderly movement of vehicles through busy junctions. Moreover, stop signs enhance overall traffic efficiency over stop lights by minimizing conflicts and facilitating smoother transitions between intersecting roads and keeping traffic flow going with the arterial road.



Figure 17: Proposed locations for stop sign-controlled intersections

**RECOMMENDATION 14. CONNECT TRAILS TO OUT-OF-TOWN NEIGHBORHOODS AND OTHER DESTINATIONS**

Hot Springs is a vibrant city with many important destinations spread throughout its boundaries, including the grocery store, VA hospital, parks, schools, and more. However, these key locations are not easily accessible to all residents, especially those without access to a vehicle. By extending the existing trail systems to connect these important areas, we can ensure that everyone in Hot Springs has access to the resources and amenities they need. Based on feedback from Hot Springs residents, we recommend connecting existing trails to community destinations and outlying neighborhoods. By linking popular trails like the Freedom Trail to essential places, residents and visitors will be able to easily walk or bike to important locations.

These trail connections will not only provide convenient access to everyday amenities but also actively promote physical activity and outdoor recreation. By encouraging the use of alternative transportation modes, such as walking and biking, the city will reduce traffic congestion, lower emissions, and improve overall air quality. Furthermore, connecting trails to local businesses will promote foot traffic and significantly support the economic vitality of the community.

Improving walking trails in Hot Springs will make it easier for people to walk or bike to important places like stores or parks. This will encourage more physical activity, which improves weight and cardiovascular and muscular health. Walking in nature can also help reduce stress and increase feelings of happiness and contentment. By using trails instead of cars, we can reduce air pollution, which is better for everyone’s health.

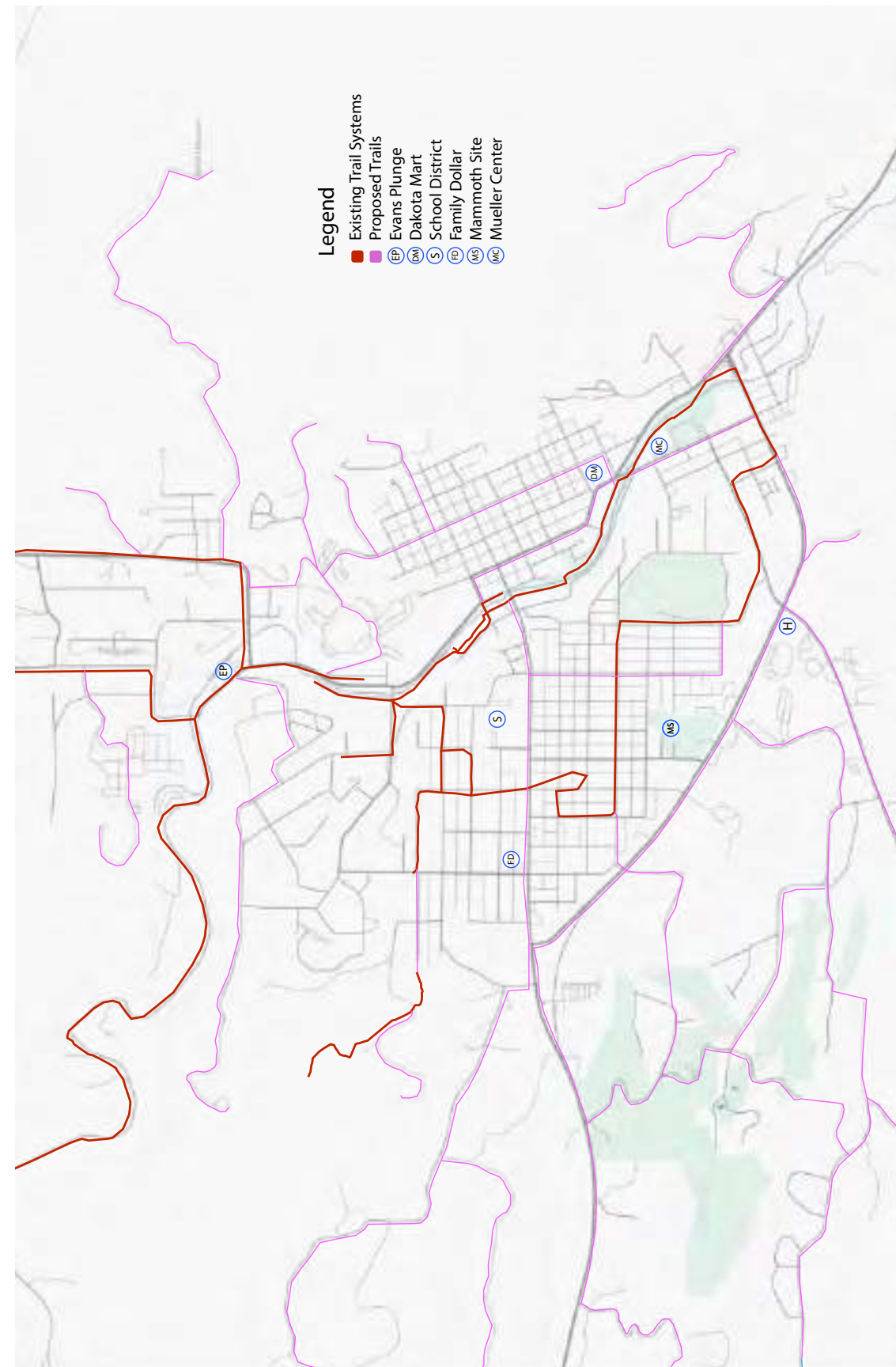


Figure 18: Proposed connections between existing Hot Springs trail system and key destinations

Overall, making it easier to walk or bike in Hot Springs would help people stay healthy and happy, improve air quality, and make the community a better place to live. Furthermore, enhancing the connectivity of trails within Hot Springs, SD by establishing linkages to out-of-town neighborhoods and neighboring communities will create a more accessible network for residents and visitors. Extending trail connections beyond city limits will allow residents to easily access the city's amenities and recreational opportunities, promoting active living and exploration without the use of a car.

### **RECOMMENDATION 15. INCREASE ACCESS TO THE RIVER**

Hot Springs is a part of the Black Hills, which is well known for its beautiful landscapes that provide many opportunities for walking, hiking, and biking throughout the community. Expanding access to the river in Hot Springs is a multifaceted initiative that holds immense potential for the town's residents and visitors alike. By implementing comprehensive infrastructure improvements and creating more trails and paths along the river, Hot Springs will significantly enhance accessibility to this natural resource. These enhancements will allow everyone to better experience the springs' unique qualities, such as its mineral content and thermal stability.

As Hot Springs refocuses on making its water a central aspect of the town, increasing access to the river becomes crucial. More accessible riverfront areas will foster community engagement, providing spaces for recreation, relaxation, and social interaction. Additionally, improved access will promote health and wellness, allowing residents and visitors to take advantage of the river's therapeutic benefits for both body and mind. With expanded access, Hot Springs can revitalize its



Figure 19: Increasing access to the river will help the community grow

identity as a water-centric destination, drawing people from near and far to experience the beauty and rejuvenating properties of its natural springs.

This is especially important on the north side of the city where with access to the river, there should also be parking lots provided within these access points. This will help provide the community with the opportunity to hold events such as community hikes, outdoor concerts or vendor opportunities on the river that would require more parking space. There should also be additional parking next to Evan's Plunge, More parking and access to the river will provide an attractive destination for many different demographics, therefore providing some economic benefit for the community.

### **RECOMMENDATION 16. ADD AND FINISH SIDEWALKS**

Pedestrian circulation is facilitated throughout all of the neighborhoods in town, providing a strong foundation for the addition of more usable sidewalks. Most of the areas in need of sidewalks are on the outer portions of the city. These include the "Old Town", north of Battle Mountain Sanitarium, the west side of Centennial Park (around Butler Park), and most of the west and northwest zones of the city.

The community needs updated infrastructure. Since there aren't many sidewalks in these neighborhoods the individuals and families that live there have to be more car dependent or take the risk of walking on the road with traffic speeding by. If families don't have enough or a vehicle at all, they will become less willing to go out and enjoy the events, amenities, and culture that Hot Springs holds. The city should partner with local residents in a cost-sharing program to implement sidewalks in neighborhoods.

The main areas that should be attended to first include the neighborhoods around the VA Hospital, Merry Park, and Butler Park. These areas were chosen because of their proximity to recreation areas and the school. This will help students and younger individuals to travel safely while giving parents peace of mind.

Implementing sidewalks within a quarter-mile zone from schools in Hot Springs will provide a multitude of benefits for students and their families. Safety is a top priority for the city, and well-designed pedestrian infrastructure will reduce the risk of accidents involving students or families walking or biking to school. By creating designated walking and biking paths with better safety features like crosswalks, bike lanes, and traffic calming measures, the community will ensure that students can travel to school in a safe and secure environment.



Figure 20: Sidewalks make getting to school safer and more attractive



Figure 21: Sidewalks help ensure equitable access throughout the community



Figure 22: Inventory of Hot Springs streets with and without sidewalks

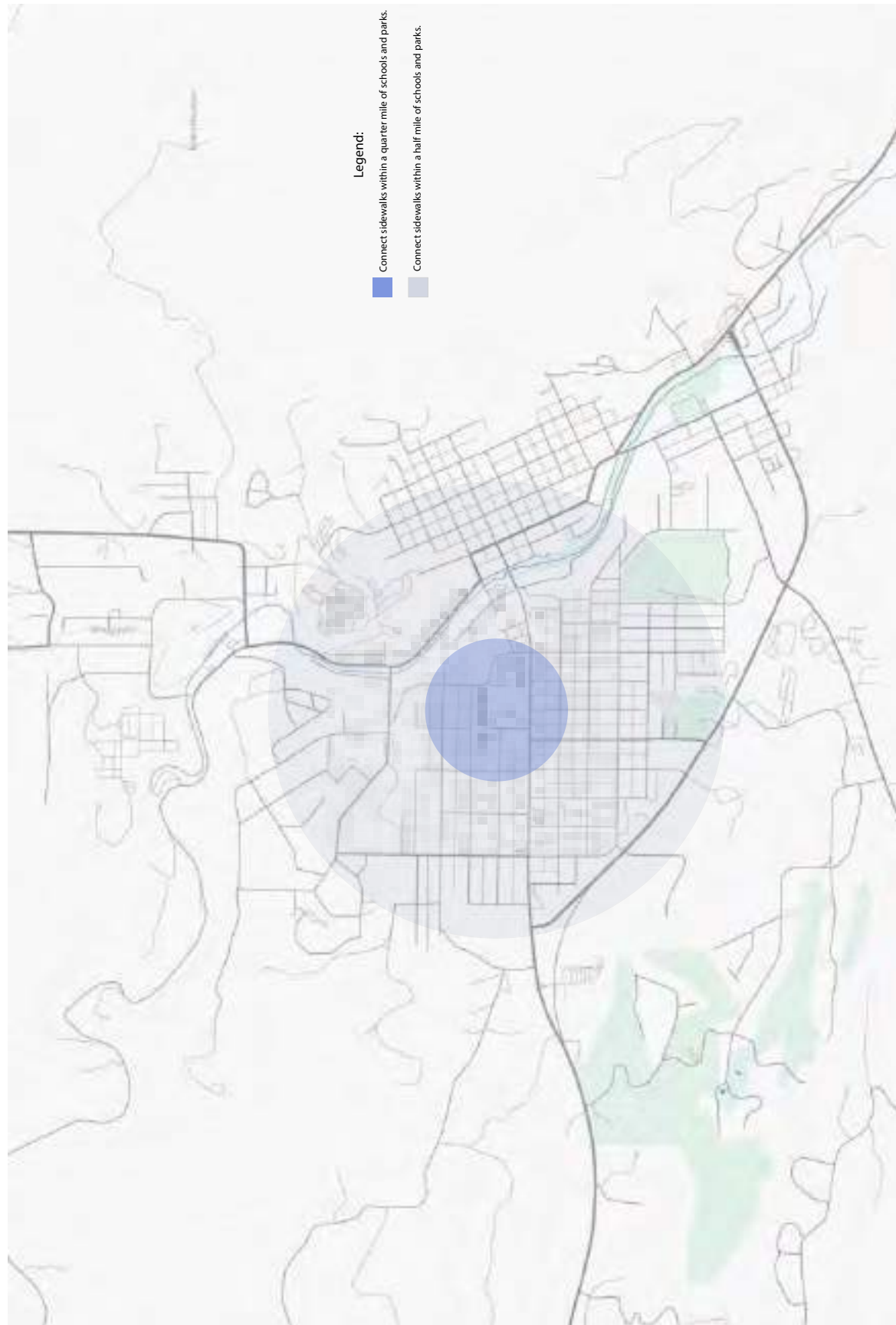


Figure 23: Proposed distances of connected sidewalks and pedestrian crosswalks with implemented signage located near schools and parks.

**RECOMMENDATION 17. PERFORM A ROAD DIET TO CREATE PAINTED WALKING LANES**

Hot Springs is well known for its beautiful scenery and popular trails that encourage many of its residents to engage in active recreation on a daily basis. These sidewalks and trails don't extend everywhere throughout the city which can make the idea of engaging in active transportation for their daily commutes and errands quite a daunting and unsafe idea. Sidewalks are a critical piece of city infrastructure and are crucial in promoting active transportation and creating a pedestrian friendly environment. Sidewalks provide a layer of separation between pedestrian and vehicular traffic and when there are stretches of road where sidewalks are missing or incomplete, it significantly increases the risk of accidents between the two as pedestrians are forced to share the road with the motorist. Having completed sidewalks throughout the town also ensures accessibility to all residents, especially even those with mobility challenges. Sidewalks can be a significant

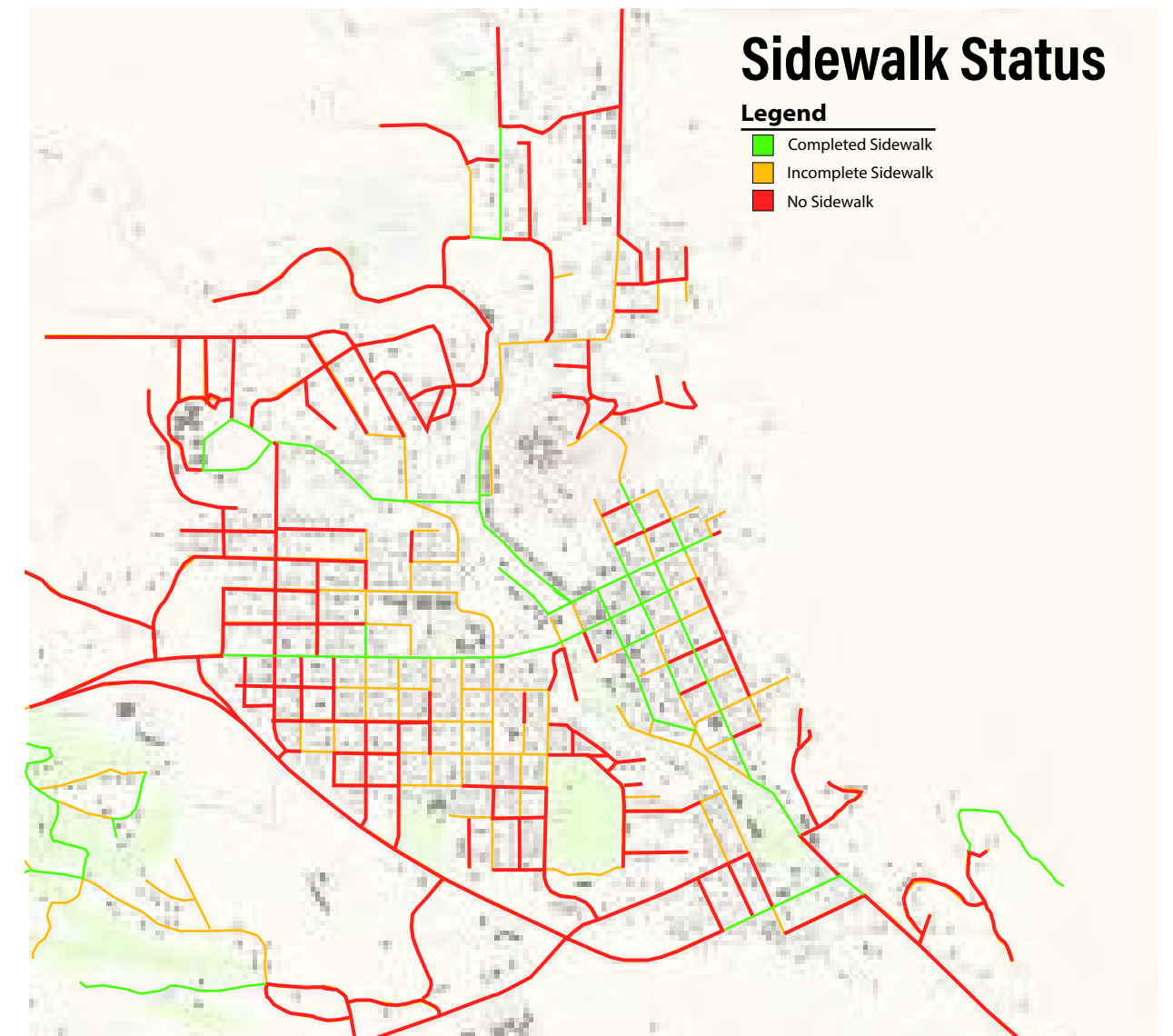


Figure 24: Current sidewalk condition in Hot Springs

financial investment, so a road diet is an excellent short-term solution to walkability while funding is secured for a phased sidewalk implementation.

A road diet is a low-cost strategy of reconfiguring a multi lane or undivided roadway to have fewer or narrower lanes for vehicular traffic permitting the inclusion of other facilities; such as bicycle lanes, sidewalks, pedestrian refuge islands, transit uses, and on-street parking. The road diet improves the quality of life and mobility for all road users while also calming traffic and improving road safety with the reduction or narrowing of the vehicular lanes. (FHWA, 3.20)

To provide for safer pedestrian traffic on roads with no or incomplete sidewalks, we recommend performing a road diet to include a painted walking lane on the shoulder. These include the east-west streets between Chicago Street and 4th Street, local roads branching off of University Avenue and 16th Street on the west side of Fall River, and local residential roads on the edges of town. Many of these streets are unmarked and are 40 to 45 feet wide. While many of them use their shoulders as places for parallel street parking, rarely did a street have enough street parked cars to take up even one side of the road. With our recommendation, examples of the road diet include designating two 12-foot lanes for opposing traffic, an 8-foot-wide section designated for parallel street parking, and an 8-foot designated walking path with 5-foot buffer. On 45-foot-wide roads, the 13-foot pedestrian zone can be split into a 6-foot bike path between the lanes of vehicular traffic, and a 7-foot walking path.



Figure 25: Visualization of a road diet with painted sidewalk

The average cost of a sidewalk varies, but most estimates, with the cost of materials and labor, averages out to around \$10 every square foot. This means to build a 5-foot sidewalk down one side of a 355-foot city block will on average cost around \$17,000 total with around \$5,000 of the cost being materials alone. Though a little harder to calculate, in contrast, to paint a 4 inch line to separate a painted pedestrian or bike lane with proper markings and signage could cost as little as \$700 to \$2000 total for the same 355-foot stretch of road.

**RECOMMENDATION 18. CONNECT PATHS TO BUTLER PARK AND THE PUBLIC LIBRARY**

The library south of Butler Park needs to be celebrated. It is a beautiful building and located in a great area but there isn't any walking access as the sidewalk in front of the library stops abruptly on both of its sides. It is also connected by a single path that crosses the road. The library needs a grand and accessible entrance by means of pedestrian circulation.

This should be done by connecting the existing sidewalk in front of the library to the rest of the neighborhoods that surround it. This will give safe access by foot to grab a book or have a study session. As of right now the community is hindered by the absence of sidewalk connections. The experience that someone would have walking through Butler Park and ending at the library's door is lacking. To combat this there should be additional connections as well to create a grand promenade towards the library's grand entrance. The relationship between the park and the library will become stronger and again would bring in more communities that don't have access to a car to drive to the library.

**RECOMMENDATION 19. CONNECT THE VA CAMPUS WITH MORE WALKING TRAILS**

The Battle Mountain Sanitarium, on the northeast bluff overlooking downtown Hot Springs, is beautiful and has established sidewalks throughout the center of the campus. These are currently nestled against the buildings. There is access to the facilities and amenities that are offered on the campus, but there are other places beyond the sanitarium that should be expanded to by paved walking trails, so residents and community members don't walk on the road. These places include a green space to the northeast, the national cemetery on the hilltop, and other various green spaces on the southern end of the campus.

To the northeast of the sanitarium there are green spaces, the greenhouse, and the national cemetery, but no easy or safe access to them. The aim is to connect these spaces to Battle Mountain and to the nearby downtown. Having these in place will give the residents and veterans the chance to stay active and healthy. There is also an opportunity to extend these trails to Centennial Park. These



Figure 26: Proposed and existing walking trails on the Battle Mountain Sanitarium campus.

individuals will be able to become involved with community events as well, instead of being without access to them. But these trails will have the inverse effect, allowing and encouraging community members on the outside to come into the sanatorium property. The Battle Mountain Sanitarium should be experienced, not just by the individuals that call it home, but all of Hot Springs.

**RECOMMENDATION 20. FINISH DEVELOPMENTS AND CONNECT DEAD-ENDS WITH TRAILS**

In and around the golf course there is an opportunity to create trailheads for the surrounding neighborhoods to the rest of Hot Springs. The new neighborhoods' development has paused, creating areas for garbage to accumulate on vacant lots. While development is paused, these lots should be developed into the start of multiple trail systems that will connect the southwest side of the city to the rest of the existing park system. Once lots are filled with homes and families these trails will become even more important for connecting new families to their community and its destinations. These include the golf course, Centennial Park, downtown, the school and other recreational areas.

These trails can be implemented using a variety of materials, but an easy start is with crushed gravel surfaces. Most trails will be used for walking as residents enjoy the views of the surrounding hills but they can be used for competitions such as trail races. Trail-building workshops should be used to get the community involved with this project. The city will be able to educate the community about what Hot Springs offers and also a section of a trail will be constructed. Participants would learn many skills including teamwork, leadership, and construction. This will create unity within the city, and everyone will have a sense of pride when it is finished.

**RECOMMENDATION 21. DEVELOP MORE BALANCED RECREATIONAL OFFERINGS**

Hot Springs is surrounded by natural landscapes that offer endless opportunities to connect with the great outdoors. From hiking and biking to fishing and boating on nearby lakes and rivers, there is something for everyone to enjoy. However, the town needs a boost on a variety of outdoor recreational facilities such as playgrounds, sports fields, and green spaces near schools and resident's homes to ensure everyone has equal access to recreational opportunities. These amenities not only promote physical activity, but also have a sense of community as residents of all ages can come together to enjoy the beauty of the outdoors.

Although Hot Springs has several parks, they lack variation and equal public access to them. Through the redesign of Butler Park, residents will have more opportunities to enjoy walking trails,

seating areas, dog friendly areas, basketball, pickleball, and tennis courts, baseball fields, outdoor restrooms, outdoor stage area, and public parking. These improved amenities will serve as a blueprint for upgrades to be later implemented into other existing parks throughout the area. Including more green spaces, parks, and recreation areas spread throughout the city and implemented with extended trail systems, Hot Springs will become a more livable and enjoyable place to live.



Figure 27: Visualizations of a redesigned Butler Park



**RECOMMENDATION 22. INTRODUCE BIKE LANES**

Hot Springs is a scenic town with dramatic topography. Given the city’s proximity to the Mickelson Trail and its varied scenery, it has the potential to be a very bikable community. To begin to accomplish this, the city should designate bike lanes on main connector routes.

A majority of Hot Springs features wide road right-of-ways to accommodate parallel parking, but this space is underutilized. This extra width in the street is the perfect opportunity to give cyclists a lane. Residents’ health can also be greatly improved by providing another mode of transportation. Cities can also save on road maintenance, as cyclists do little to damage roads. Bike lanes can be more than just a means of transportation. Having safe lanes means encouraging people to be outdoors and increase social interaction with each other. An initiative to create bike lanes prioritizes people over machines.

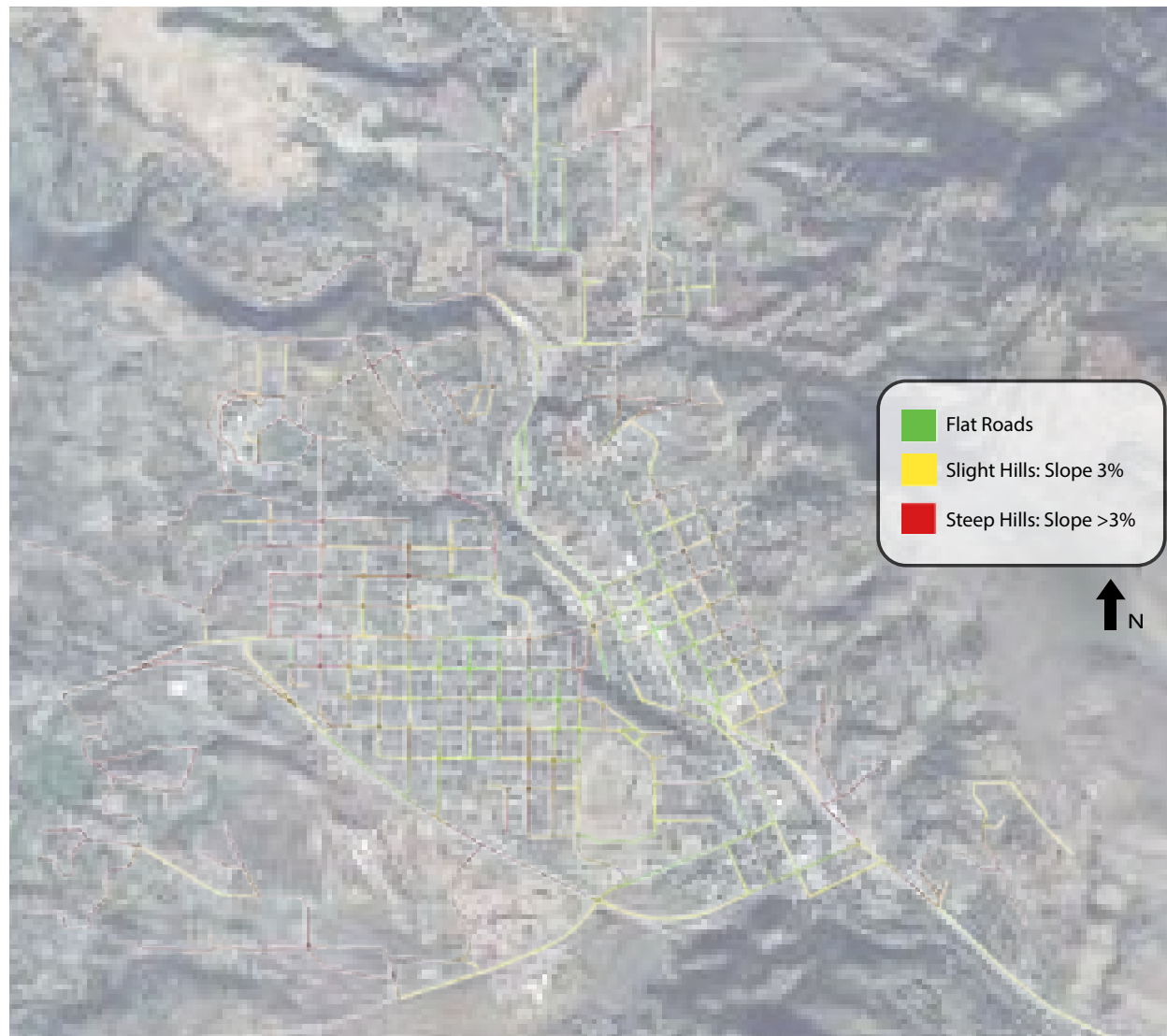


Figure 28: Road slopes in Hot Springs

Safety is a big factor to consider when implementing bike routes. Bike lanes can be painted on the road side, with alerting signage for motorists. On low-traffic roads a simple painted line for separation may be adequate. The lane should still have bike lane indicators painted to alert motorists to the lane.

Medium-traffic roads will need a more substantial buffer zone. Creating a larger edge provides safety for cyclists.

High-traffic roads will need both a larger edge and a physical barrier to provide protection. Reflective bollards can be placed along the lane edge. A study done by the University of Columbia found that protected bike lanes reduce the risk of injury to bikers by 90%.

Downtown Hot Springs can be even busier, so more protection and a visible barrier will be needed. One option is the WeClaim “eye” tire barrier. This low-cost option is made of recycled materials with a reflective strip on the side for added visibility and self-contained planters. These barriers add protection for cyclists while beautifying the streetscape with low-growing plants.

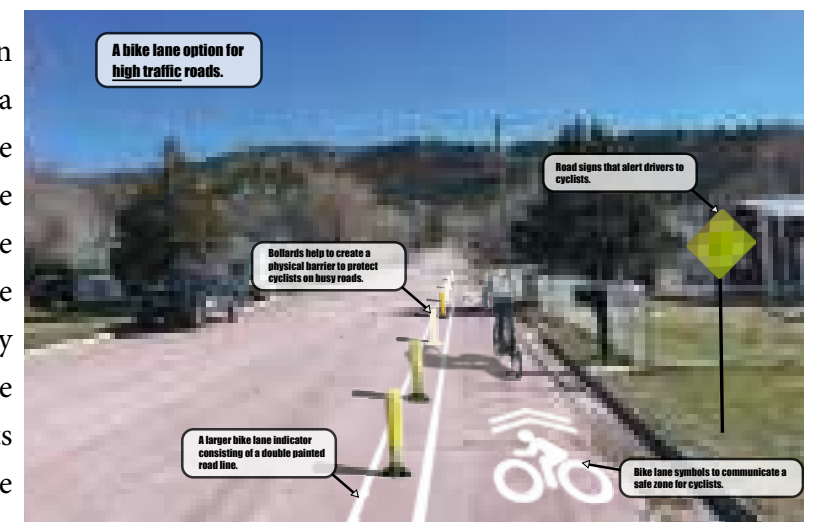
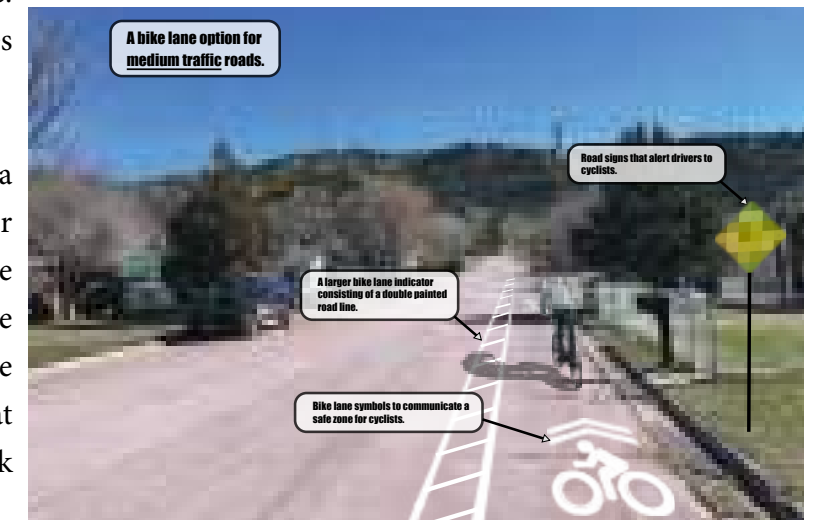
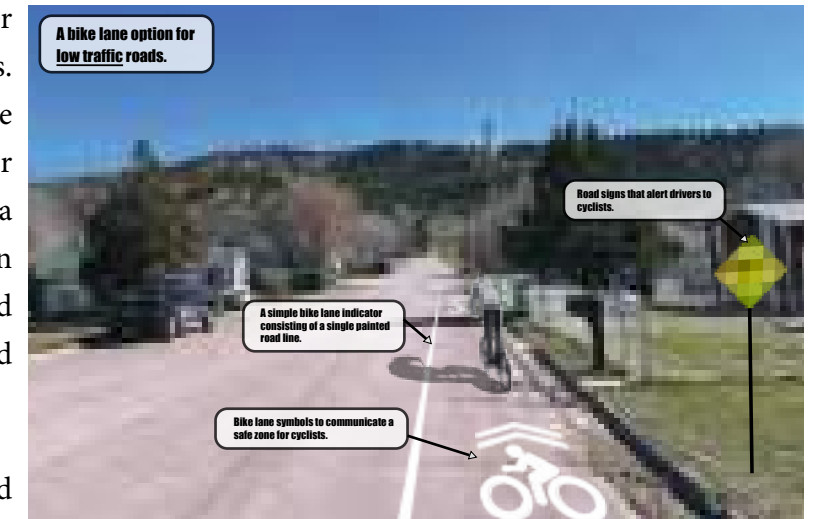


Figure 29: Examples of bike lanes on low-traffic (top), medium-traffic (middle), and high-traffic roads (bottom)



Figure 30: The WeClaim “eye” bike lane barrier is one potential safety solution on busy urban streets

**RECOMMENDATION 23. INSTALL BIKE PARKING FACILITIES**

Provide bike parking racks. Bike racks can be placed at areas of interest along bike paths and trails. Installing bike racks help people feel a sense of security when leaving their bikes unattended to engage in other activities. Hot Springs does have some infrastructure for cyclists, there are several bike racks in the city of Hot Springs. This is a great start, as it shows people do want to provide services for cyclists. Providing bike racks consistently around the city is the next step to encouraging use of your bicycle lanes.

To start, we recommend focusing on installing bike racks near schools, trails, and businesses downtown.

The bike racks can be placed out of the way on sidewalks, with easy visibility for cyclists, and anyone who may want to park to shop, or even get to work. Figure 32 is a map of Hot Springs with suggested bike lane routes. These routes are listed in different levels of priority. The highest priority route is along the Centennial Trail, connecting the school with key destinations downtown. The second priority routes connect other parks, the library, and the Veterans’ hospital to the



Figure 31: An example of typical bike parking

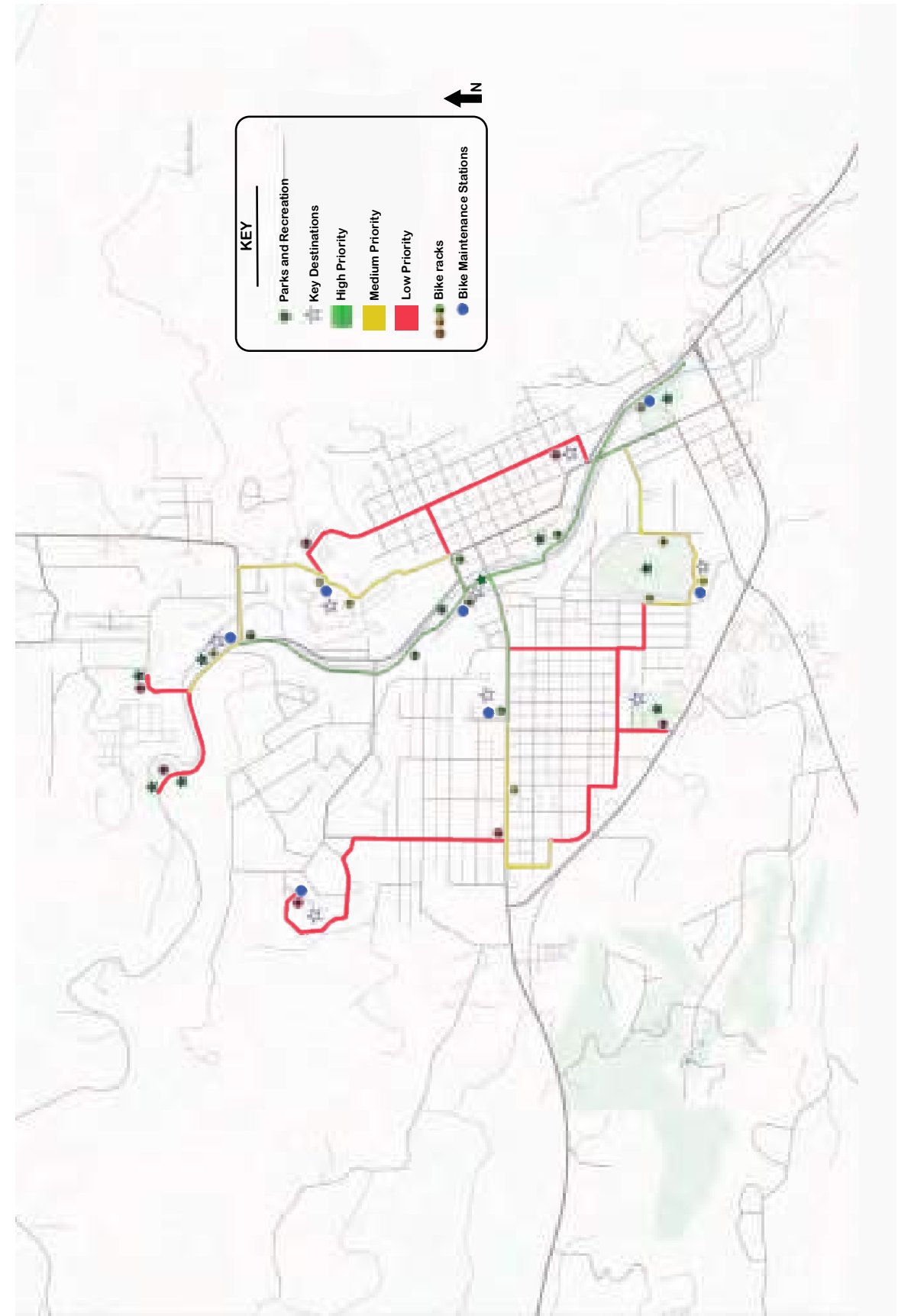


Figure 32: Proposed Hot Springs bike routes and other facilities

bike routes. The lower priority sections connect the routes together, resulting in a full bike lane trail system. Studies have shown that if cyclists have a place to safely store bikes, they are more likely to stay in town to shop and work.

**RECOMMENDATION 24. INSTALL BIKE MAINTENANCE STATIONS**

Hot Springs has the ability to be a haven for cyclists, but unfortunately there is no bike shop located in town. To compensate for this, the city should install bike maintenance stations along Centennial Trail. These stations should include a seat-post clamp to hold a bike, an air pump with pressure gauge, and basic tools like wrenches and allen keys. These will encourage cyclists to use the trails, and provide a free option for those who may not be able to afford basic maintenance tools for their bikes.

By providing free maintenance stations, the city will show that it really cares about cyclists in town. Providing a station for light-duty repairs is very important. Similar to bike racks, which can be integrated into a bike maintenance station, location of the stations is key.



Figure 33: An example of a bike repair station

**RECOMMENDATION 25. INFILL DOWNTOWN WITH PUBLIC PLAZAS, PARKLETS AND STREETSCAPING**

Infill development is building on unused and underutilized land. Infill projects have the ability to breathe new life into empty buildings or unused lots. By implementing infill projects in downtown areas of hot springs to create public parklets, plazas and street-scapes, they will significantly enhance the urban environment and revitalize under used spaces. By infilling these areas with valuable amenities such as green spaces, seating areas, and gathering spaces, we can create a more vibrant pedestrian friendly environment that promotes foot traffic.



Figure 34: Visualization of urban infill, before and after

City officials and urban planners play a key role in identifying underutilized spaces and guiding the development process to enhance the urban environment. Developers and architects are responsible for designing and constructing the infill projects, ensuring that they align with the city's vision and goals. Local businesses can support these projects by providing input, resources, and partnership opportunities to help activate the downtown area. Residents and community stakeholders are

essential in providing feedback, advocating for the preservation of historic sites, and contributing to the overall success of the infill projects.

Public parklets offer opportunities for residents and visitors to enjoy outdoor spaces. Plazas serve as communal gathering spots of outdoor events such as the hot rods and Harley’s swap meet, holiday events, and large weddings and concerts. By prioritizing pedestrians and cyclists, we can overall enhance the walkability and livability of the downtown area. Building up areas that are already developed can help protect land, reduce pollution, and make it easier for people to get around without cars.

The implementation of infill projects in downtown Hot Springs is vital for several reasons. Firstly, these projects have the potential to activate underused spaces, improve the aesthetic appeal of the city, and foster a sense of community pride and ownership by preserving historic sites. Secondly, infill projects can enhance the walkability and livability of the downtown area, making it more attractive to residents, visitors, and businesses. By creating dynamic and welcoming environments through infill development, Hot Springs can support local businesses, promote sustainable growth, and create a more vibrant and livable urban center. Ultimately, infill projects help to revitalize underutilized spaces, enhance community connections, and contribute to the overall economic and cultural vitality of downtown Hot Springs.

**RECOMMENDATION 26. FORMALIZE BUS STOPS AT KEY LOCATIONS**

It is great to see that the city of Hot Springs has public transportation going throughout the city. Community members were getting picked up and dropped off at their doorstep and even outside a shop on Chicago Street by the Prairie Hills Transit system. There are some things that can bring your public transit operations to the next level. Installing formal bus stops in high traffic and concentrated areas will allow the community to get to point A and B quicker and safer in a structured manner.

Some locations for potential bus stops should include places by parks, schools, grocery stores, hospitals, downtown venues, and low-income neighborhoods. Within these areas the bus stops also should be at least within ½-mile walking distance from these points of interest. This is a 10-minute walking distance, which is ideal spacing for a bus stop. This is the limit for most Americans’ willingness to walk.

We propose 15 bus stops at Hot Springs High School, Merry, Brookside, and Centennial Parks, and downtown along Chicago Street. These make up three to four preliminary bus routes which



Figure 35: Proposed bus routes with 1/2-mile and 1-mile service areas

should be finalized as the city conducts further study on the proposed system.

The community can use these during a set operating schedule determined by the city. Having these routes will help residents and visitors get around easier, especially for those that have limited access to a car or have other mobility disadvantages.

Siting the bus stop is also important. The easiest to implement are the far-side pull out, mid-block, and near-side boarding types of stops. These bus stops should have amenities as well such as a shelter, bus stop signs, benches, and trash cans. An additional stop will be needed in higher traffic areas. This will be a great addition to Hot Springs, giving its community another option for transportation to the key destinations that it offers.



Figure 36: Near-side pull-out bus stop



Figure 37: Mid-block boarding bus stop



Figure 38: Far-side pull-out bus stop

**RECOMMENDATION 27. IMPLEMENT TRAFFIC CALMING STRATEGIES DOWNTOWN**

Hot Springs is home to beautiful historic downtown that is the heart of the community with many shops, restaurants, and places to gather. One way to significantly improve the attractiveness of downtown for pedestrians is to increase pedestrian safety by implementing various traffic calming elements. Traffic calming refers to an urban planning strategy that aims to create a more pedestrian-friendly environment through the use of narrowing lanes, median islands, speed tables, raised crosswalks, and chicane curves. These elements slow traffic down without significantly impacting traffic flow and create shorter distances for pedestrian crossings.

Chicane curves are a system of three or more curb-extensions that form alternating curves or lane shifts that force motorists to gently steer back and forth rather than traveling in a straight line. This has the goal of slowing motorists down to navigate the curve where they might accelerate on a straight road. Chicanes work best on medium to low volume residential roads and may affect traffic flow when used on high volume roads. It is not recommended to place crosswalks within the chicane itself as drivers should be focused on navigating the curve. To make it temporary, or when the accessibility of large trucks and emergency vehicles is a concern, curb-extensions can be painted or constructed of drive-over plastic or rubber panels rather than constructing a concrete curb. (FHWA, 3.5)

In the same vein as chicane curves, are lateral shifts. Lateral shifts serve the same purpose but consist of only two curb-extensions and often a small island to direct traffic. Due to their limited nature, unlike chicanes, lateral shifts can be placed on higher volume roads with less impact on traffic flow. (FHWA, 3.4)

We recommend creating chicane curves at first as a temporary experiment with

**Chicane Curve**

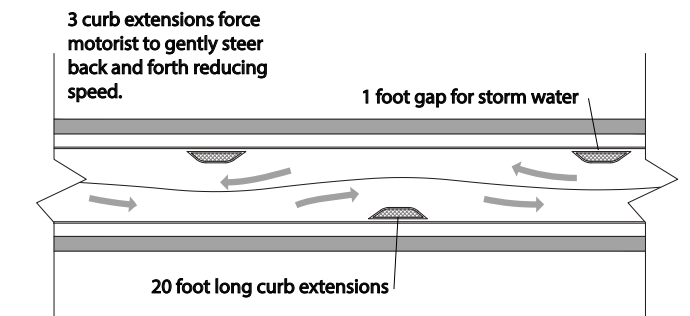


Figure 39: Chicane curve

**Lateral Shift**

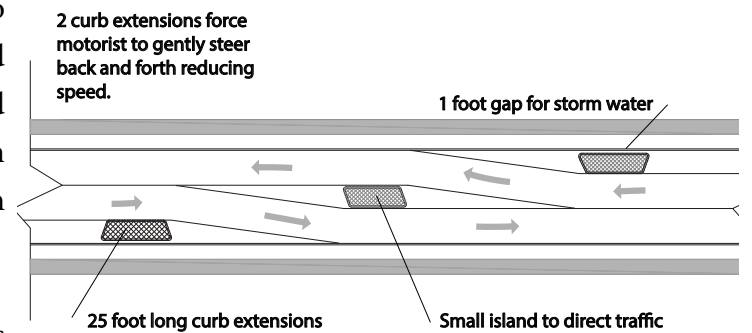


Figure 40: Lateral shift

the aforementioned plastic and rubber panels along 5th Street. If the chicanes prove successful at keeping motorists at a safe pace, permanent extensions can be built. For Lateral shifts, we recommend adding one every 330 to 650 feet along the main stretches of Jensen Highway, River Street, Battle Mountain Avenue, and Sherman Street (until Dexter Road). Like the chicane curves, they too can start with temporary plastic or rubber panels.

Median islands are (often raised) areas along a street's centerline that narrow the lanes of travel encouraging motorists to slow down. Along with calming traffic, median islands also provide opportunities for a multitude of other benefits. This includes the ability to be a refuge for a pedestrian crossing when 6 feet or wider, an opportunity for landscaping to enhance a roadway visually, and provide separation between opposing lanes of traffic. Median islands have little negative effect on traffic flow and can be placed on roads of any volume. Median islands can be placed effectively anywhere along the road segment whether at a road, entrance, the midblock and even along the entire segment. While they can be made by painting the area or using a different paver, they are most effective when defined by a raised curb and landscaped. It is important to note that when built with off street parking, islands may lose their traffic calming effect if parking is unoccupied. Median islands also must include a MUTCD compliant sign to alert motorists of the incoming median island.(FHWA, 3.18)

## Median Island

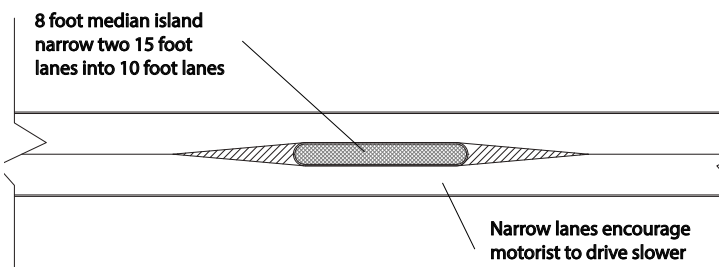


Figure 41: Median island

We recommend creating an array of median islands along the main stretch of Chicago Street between Jennings Avenue and Waterfront Street. These median islands should be 16 feet wide narrowing 12 foot lanes into 10-foot lanes. The islands should extend from intersection to intersection and should form into 150-foot turning lanes on either side of University Avenue. The downtown's pre-existing intersection bump outs will allow for the median island to keep some of its traffic calming effect even if the off street parking is unoccupied.

Next we have speed tables, raised intersections and raised crosswalks. A speed table is a flat topped raised area that extends across the roadway. It's designed to physically limit the speed at which a vehicle can traverse it. The flat top portion is typically raised to a height of 3 to 3.5 inches high and extends 10 feet long. This flat top is flanked on either side by two 6-foot approaches, making the

most common length for speed tables being around 22 feet. While similar in function to a speed hump, the long flat top is able to accommodate the entire wheelbase of most cars. Thanks to this depth, it can be traversed safely at higher speeds than a speed hump, making it more practical on higher volume roads. These speed tables can be made out of more permanent materials like asphalt and concrete, or more temporary materials like rubber or plastic panels. Though it's 22 foot configuration is most common, it can be constructed with longer 10 foot ramps and a 20 foot top to better accommodate larger vehicles.(FHWA, 3.12)

Raised crosswalks are a variation of speed tables with crosswalks causing motorists to decrease their speed at pedestrian crossings. There is additional benefit in crosswalks height as it increases the visibility of crossing pedestrians who are crossing while also improving their own line of sight. Raised crosswalks are most often constructed with the common 22-foot speed table configuration, but often rise beyond the 3 inch rise to meet the curb at 6 inches. Raised crosswalks can either be constructed flush against the curb with a trench drain or inlet upstream to deal with stormwater along the curb, or with a curb cut slope down and small slope up creating a gap between the crosswalk table and the curb. The crosswalk should be clearly marked as such and visible to motorists at night. (FHWA, 3.14)

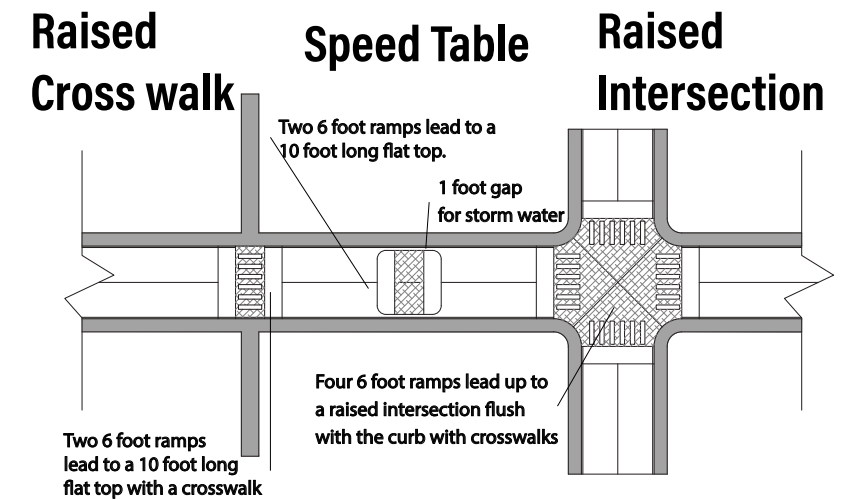


Figure 42: Median island

Raised intersections are raised areas that span an entire intersection and crosswalks to slow vehicle traffic through the intersection. Raised intersections usually rise to sidewalk level at around 6 inches for crosswalks with ramps at all approaches. The slope of the raised intersection must not go below 1% to facilitate drainage and previous stormwater infrastructure will have to be altered with drainage inlets relocated.(FHWA, 3.15)

We recommend constructing a raised intersection at the intersection of University Avenue and Chicago Street due to the high volume of both roads. We also recommend the implementation of speed tables along every other mid-block of 5th Street and on the portion leading up to the VA. We

also recommend implementing them along the borders of the school zone. As for raised crosswalks, we recommend their construction throughout the main portion of US Highway 385 that runs through town. Starting with the first existing crosswalk along Jensen Highway at the intersection of Joplin Avenue and continuing north with each subsequent intersection until the road transitions to Chicago Street around the intersection of 6th Street. This system of raised crosswalks will pick up again along Battle Mountain Avenue and Sherman Street until the intersection of Pacific Avenue. These raised crosswalks should be 3 inches high using the gap method of stormwater management along the curb. Along Chicago Street, a system of raised crosswalks should be constructed in conjunction with the curb bump outs and median islands around each intersection apart from the raised intersection at University Avenue. This should be continued down Jennings Avenue to North River Street. Down North River Street there should be raised crosswalks at key points connecting the cantilever sidewalk along the river, and at every intersection until Battle Mountain Avenue. These raised crosswalks should be built flush with the curb 6 inches high with a trench drain for stormwater. Speed tables of the 3-inch configuration should also be placed along University Avenue in conjunction with the Hot Springs Elementary and High School.

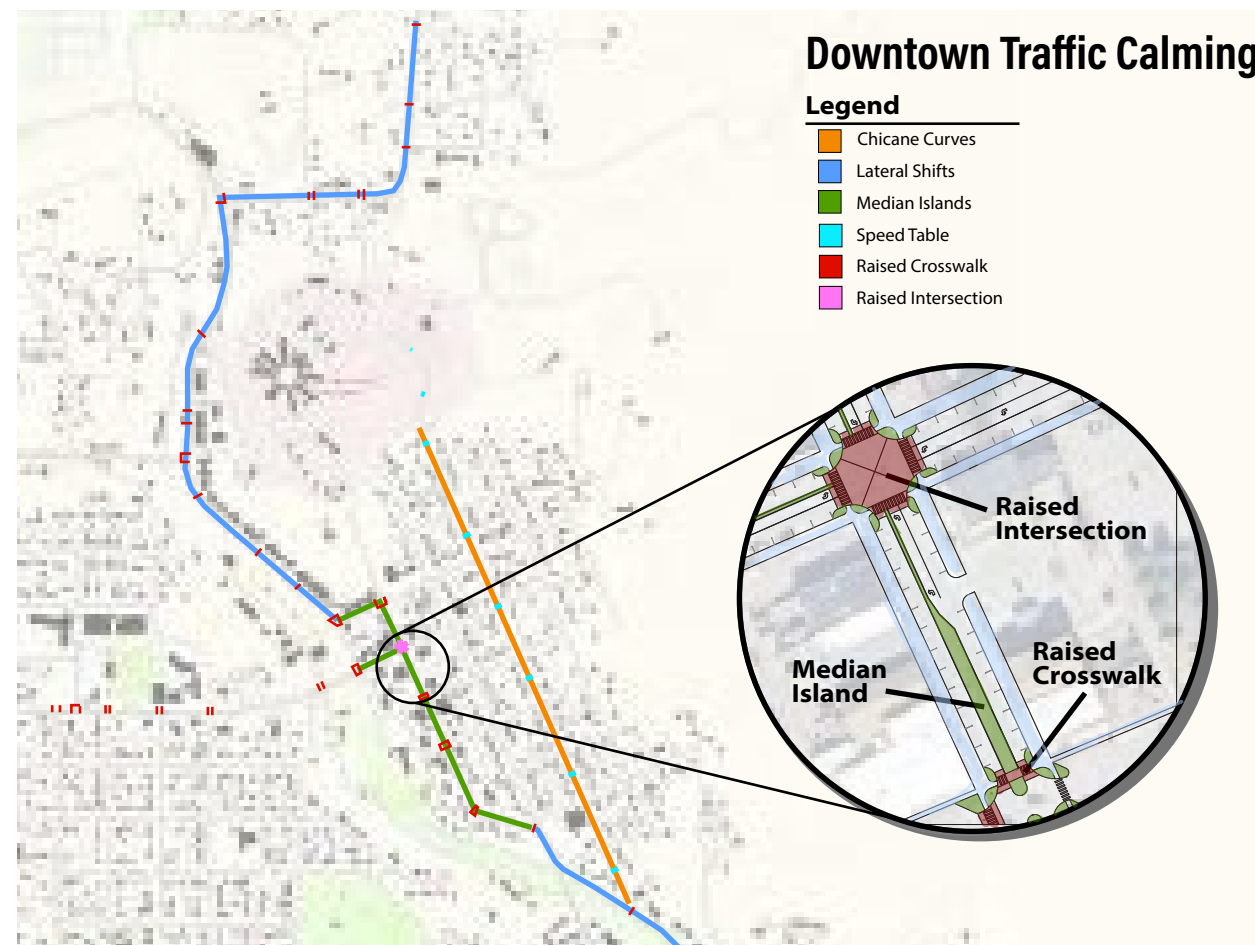


Figure 43: Proposed Hot Springs traffic-calming plan

**RECOMMENDATION 28. DIVERSIFY THE LOCAL ECONOMY**

There is an age gap in Hot Springs. With the turnover in teachers at the High school and elementary, the city needs more places for younger people to go to and enjoy. Establish more shops in the area such as boutiques, gift shops, and bars/restaurants. Shops should trickle from the downtown center to the outskirts of the city. More businesses would give both residents and visitors a place to go and mingle together, creating places with more opportunities for social interaction. An earlier recommendation touched on infill projects in downtown Hot Springs. One of these projects could include an infill mini golf course, an activity loved by kids and adults alike.

Although road construction is not optimal for the city, it provides an opportunity to hold workshops for new businesses/first-time business owners and create a plan for when the construction is over and downtown is in full operation. These workshops would help provide new job opportunities and build back a resilient economy for Hot Springs. These workshops could be held during the Southern Hills Job Fair, or as part of a membership with the Chamber of Commerce.



Figure 44: Benefits of small business workshops

### RECOMMENDATION 29. FURTHER IMPLEMENT THE “SOAK IN” COMMUNITY IDENTITY

Hot Springs holds many hidden treasures from its sandstone buildings, to its parks and trails, to Fall River and the iconic Hot Springs that flow from it. It is the Black Hills’ best-kept secret, but should it be kept a secret for much longer? Some positives that would come from branching out include growth opportunities for the local economy, and more attention brought to the city through a higher flow of visitors. Hot Springs prides itself on its “small town” feel. More visitors could blur the line between “small town” feel and a tourist destination, but a balance between the two can be created by the city and the community working together to make sure the city’s identity stays connected to its roots, the healing waters. Ways to lean into the “Soak In” slogan and channel the healing waters aspect of Hot Springs include implementing the slogan into a new logo, creating stickers, or painting a new mural, such as “Reflections” showcased on Evans Plunge.



Figure 45: A revised Hot Springs logo featuring “Soak In” slogan



Figure 46: A new logo featuring Fall River topography and the Seven Sisters mountain range

### RECOMMENDATION 30. STRENGTHEN HOT SPRINGS’ EXTERNAL MEDIA PRESENCE

Another way to get Hot Springs recognized across the state and the nation is to hire a Public Relations team or firm to establish a solid online presence via Google and other major search engines. These firms can help to add visibility to the City and make it more attractive to younger people and families as a place to live long-term. They can also increase communication within the community. Regionally-local firms include the communications and fundraising NUMAD Group out of Rapid City and TDG | Marketing and Public Relations in Deadwood. The latter firm focuses on marketing planning and strategy, media planning and placement, branding, and public and media relations. Other firms exist as well; these are two that stood out due to their proximity to Hot Springs and their business focus.

### References

Cox, Mark. “The Benefits of Adding Park Benches in Your Community.” Cox Urban Furniture, 1 July 2022, [coxurbanfurniture.com.au/the-benefits-of-adding-park-benches-in-your-community/](https://www.coxurbanfurniture.com.au/the-benefits-of-adding-park-benches-in-your-community/).

Donovan Geoffrey H., Butry David T., Michael Yvonne L., Prestemon Jeffrey P., Liebhold Andrew M., Gatzolis Demetrios, Mao Megan Y., The Relationship Between Trees and Human Health: Evidence from the Spread of the Emerald Ash Borer, *American Journal of Preventive Medicine*, Volume 44, Issue 2, 2013, Pages 139-145, ISSN 0749-3797, <https://doi.org/10.1016/j.amepre.2012.09.066>. (<https://www.sciencedirect.com/science/article/pii/S0749379712008045>)

EPA, [www.epa.gov/sites/default/files/2014-06/documents/developer-infill-paper-508b.pdf](https://www.epa.gov/sites/default/files/2014-06/documents/developer-infill-paper-508b.pdf). Accessed 22 Apr. 2024.

“Hot Springs, SD.” Data USA, [datausa.io/profile/geo/hot-springs-sd?growthOccupations=growth](https://datausa.io/profile/geo/hot-springs-sd?growthOccupations=growth). Accessed 21 Apr. 2024.

Ink, Social. “Stop Placement & Intersection Configuration.” National Association of City Transportation Officials, 2 May 2016, [nacto.org/publication/transit-street-design-guide/stations-stops/stop-design-factors/stop-placement-intersection-configuration/](https://nacto.org/publication/transit-street-design-guide/stations-stops/stop-design-factors/stop-placement-intersection-configuration/).

Lorentzen, Michelle. “When Trails Connect Everyone, Everywhere.” Rails to Trails Conservancy, 25 Feb. 2024, [www.railstotrails.org/trailblog/2020/december/01/when-trails-connect-everyone-everywhere/](https://www.railstotrails.org/trailblog/2020/december/01/when-trails-connect-everyone-everywhere/).

Luke, Nikita, and David Pérez-Barbosa. “4 Ways to Design Safe Streets for Cyclists.” World Resources Institute, 10 Nov.2021,[www.wri.org/insights/ways-cities-design-safer-roads-cyclists](https://www.wri.org/insights/ways-cities-design-safer-roads-cyclists).

Mantle, Suzie. “Containerized Trash and the Benefits for Local Communities.” metroSTOR US, 7 Dec. 2023, [metrostor.us/containerized-trash-and-the-benefits-for-local-communities/](https://metrostor.us/containerized-trash-and-the-benefits-for-local-communities/).



Maryland Transit Administration. "Bus Stop Design Guide." Baltimore Link, edition 2019, Maryland Department of Transportation, pg. 23-30, [https://s3.amazonaws.com/mta-website-staging/mta-website-staging/files/Service%20Development/MDOT\\_MTA\\_Bus\\_Stop\\_Design\\_Guide\\_2019\\_Edition.pdf](https://s3.amazonaws.com/mta-website-staging/mta-website-staging/files/Service%20Development/MDOT_MTA_Bus_Stop_Design_Guide_2019_Edition.pdf)

McDermott, Dania. "How Small Businesses Aid Economic Recovery: Ruby." Ruby Receptionists and Live Chat, 28 Nov. 2023, [www.ruby.com/blog/how-small-businesses-aid-economic-recovery/](http://www.ruby.com/blog/how-small-businesses-aid-economic-recovery/).

Mullanery Jennifer, Lucke Terry, Trueman Stephen J., A review of benefits and challenges in growing street trees in paved urban environments, Landscape and Urban Planning, Volume 134, 2015, Pages 157-166, ISSN 0169-2046, <https://doi.org/10.1016/j.landurbplan.2014.10.013>. (<https://www.sciencedirect.com/science/article/pii/S016920461400245X>)

"Protected Bike Lanes That Any City Can Afford - Streetsblog USA." - Streetsblog USA, 26 July 2023, [usa.streetsblog.org/2020/07/29/meet-the-protected-bike-lane-that-any-city-can-afford-to-build](http://usa.streetsblog.org/2020/07/29/meet-the-protected-bike-lane-that-any-city-can-afford-to-build).

Reynolds, Pete. "How to (Actually) Get Bike Lanes in Your City: 10 Actionable Tips." Discerning Cyclist, 26 Feb. 2024, [discerningcyclist.com/how-to-get-bike-lanes-in-your-town/](http://discerningcyclist.com/how-to-get-bike-lanes-in-your-town/).

Swanstrom, John. "Why Bike Lanes Are Important: Promoting Safety, Sustainability, and Community Well-Being - Cyclists Authority." The Masters Cycling Blog, 5 Apr. 2024, [cyclistsauthority.com/why-bike-lanes-are-important-promoting-safety-sustainability-and-community-well-being/](http://cyclistsauthority.com/why-bike-lanes-are-important-promoting-safety-sustainability-and-community-well-being/).

U.S. Department of Transportation Federal Highway Administration. "Traffic Calming ePrimer", 4/15/2024, (<https://highways.dot.gov/safety/speed-management/traffic-calming-eprimer>)

"What Is Infill Development? The Sustainable Practice Transforming America." What Is Infill Development? The Sustainable Practice Transforming, [railyards.com/blog/what-is-infill-development-the-sustainable-practice-transforming-america#:~:text=Infill%20development%20is%20often%20seen,conservation%2C%20and%20strengthens%20local%20economies](http://railyards.com/blog/what-is-infill-development-the-sustainable-practice-transforming-america#:~:text=Infill%20development%20is%20often%20seen,conservation%2C%20and%20strengthens%20local%20economies). Accessed 22 Apr. 2024.