

The City of Lake Charles

Bicycle and Pedestrian Master Plan Draft

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Executive Summary



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Executive Summary

This plan is being developed in accordance with the Louisiana Statewide Pedestrian and Bicycle Master Plan. It is meant to serve as a guide for local decision-makers and the public in how best to plan for alternative modes of transportation in the future. It accomplishes this with a comprehensive inventory and analysis of existing bicycle and pedestrian facilities in the City of Lake Charles; complete with a prioritized list of improvements. Suggested improvements will incorporate sidewalks, bike routes, bike lanes, and multi-use recreational trails into a comprehensive network with the goal of increasing access and mobility for non-motorized modes of travel.

The priorities listed in this document are based on predefined criteria and are for illustrative purposes only. This is a key set of data that is necessary, but not wholly sufficient for implementation. The recommended projects are intended to be a guide for staff and City Council. The plan is a continuous work in progress and will be tracked and updated each year.

Chapter 1: Introduction

Vision of the Plan:

"To promote Lake Charles as a bicycle and pedestrian-friendly environment by providing a variety of convenient, safe, and attractive transportation choices."

Chapter 2: Plan Development Process/Outreach

Stakeholders such as governmental agencies, private individuals, and cycling and running organizations were contacted and invited to attend a public input session. A public notice was printed in the newspaper and local news broadcast for anyone who might have an interest in improving pedestrian and bicycle travel within the Lake Charles metro area to attend the meeting. The purpose of the meeting was to receive information from the public regarding which areas were in most need of bicycle and pedestrian improvements. A questionnaire was developed to solicit specific input on key issues and concerns regarding the pedestrian and bicycle facilities system, and to generate input regarding the most important issues to be addressed and potential priority order for types of projects and system improvement.

Many people shared their experiences traveling throughout the City without and automobile and gave detailed opinions about what could be improved. The following quote is a good representation of the general sentiment of respondents when it came to Lake Charles' lack of pedestrian and bicycle support.

"I think that the roads that have the heaviest motor vehicle traffic should have bicycle lanes. These are the roads people need to use to get to jobs, schools, shopping, etc. Roads that would be great are Ryan, Common, McNeese, Prien Lake, and Sale. McNeese students who want to ride to class also have a lot of trouble. I also think there needs to be education for motor vehicle drivers. Most drivers do not understand that they must share the road with bicycles."





Stakeholders were then asked to make a list of potential improvements and then draw them out on maps provided at each table. This activity facilitated interaction and new idea creation. Many people took the time to share their comments or concerns with us and also give us their opinion about what was most important to them. These comments or concerns were categorized into a few “themes” and quantified if more than two people mentioned them. Some people mentioned more than one theme in their comments; each comment was counted separately. Two meetings followed the next year to gain the public’s input on the plan.

Concerns and Comments Categories	
Comment Category	Number of Comments
Safety Concerns	14
Driver Education	6
Increase Quality of Life	5
Multi-Use Paths	4
Bridge over Contraband Bayou	3
Curbs and Ramps	2
Clean Shoulders on Roadway	2
Bicycles Can't Trigger Traffic Signals	2
Total Stories or Comments	33

Chapter 3: Existing Conditions

The City of Lake Charles Metro Area has wonderful weather and climate patterns. Southwest Louisiana has a high percentage of sunny days and the temperatures during the spring and fall seasons have a very comfortable range. These welcoming conditions make it pleasant for residents to enjoy the natural setting that the Lake Charles region offers.

Constraints and Opportunities in the City of Lake Charles

Constraints

- Limited Public Transit System – Existing bus service only runs once per hour and does not cover the entire City.
- Waterways, Highways, and Railways – These present barriers must be crossed with costly bridges.
- Heavy Vehicle Traffic and Rate of Travel Speed – This creates dangerous conditions.
- Open Ditches – There is no safety zone for bicyclists or pedestrians to utilize.
- Little Bicycle Parking – There are few places to store a bicycle at common destinations.



Opportunities

- Health Promotions – Exercise improves overall health of the general public.
- Growing and Aging Population – This population will need new support for pedestrian infrastructure.
- Environmental Stewardship – Decreasing automobile use will reduce pollution.
- Cost and Infrastructure Savings – Bicycle and pedestrian infrastructure is cheaper to build and maintain than roadways for automobiles.

Summary of Existing Pedestrian Infrastructure

The City of Lake Charles has 881 individual segments of sidewalks totaling 323.5 miles. The area with the most complete sidewalk coverage is in the downtown area and in the numbered streets and boulevards between Broad Street and I-210. The areas which are lacking in a complete sidewalk network are located north of I-10, south of I-210, as well as east of I-210. The areas with the least sidewalk coverage are located south of I-210 and west of Lake Street. The local roads in this area offer little to no sidewalks and the major roads in this area often have open ditches without any sort of bicycle or pedestrian support. Please refer to Figure 7 for a map of existing sidewalks.

Summary of Conditions

Width

The average width of sidewalks in the City of Lake Charles is 4 ft. While the current national standard is 5 ft., many of the sidewalks built in the City were constructed during a time when 4 ft. was acceptable. The new sidewalks do comply with the 5 ft. standard. The width of the sidewalks located around schools and parks should have been between 6-8 ft., to allow for higher pedestrian traffic, but were not noticeably wider than those of the surrounding area. The Central Business District (CBD) area of the City does have 8ft. sidewalks, but several are obstructed by telephone poles.

Buffer

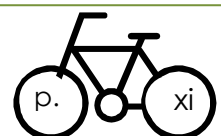
Many sidewalks in residential areas have large buffers that are well over the 6 ft. national standard. While many sidewalks located on local streets provide ample buffer width, the busier streets and those located in commercial districts such as Ryan Street, Common Street, and those in the CBD offer no buffer or landscaping. These sidewalks are adjacent to the roadway curb, making them uncomfortable when walking next to heavy traffic.

Speed Limit

Most of the speed limits observed were 25 mph. Only a few sidewalks were located on roadways with speed limits of 30 mph or above. These low speed limits make it attractive for pedestrians to traverse the City without worrying about speeding cars.

Pavement

On a 1-5 scale, with 1 being the worst and 5 being the best, all existing sidewalks were surveyed for pavement condition. Only a few sidewalks were observed with the ranking of 5 and none received the mark of 1. The sidewalks that obtained the ranking of either 4 or 2 seemed to be



clustered within the same area, suggesting the age of the neighborhood has a direct effect on the quality of pavement. Refer to Table 8 (p. 30) for a list of sidewalks in need of pavement improvements.

Landscaping

On a 1-5 scale, with 1 being the worst and 5 being the best, all existing sidewalks were surveyed for landscaping condition. There were many neighborhoods throughout Lake Charles that had very well maintained landscaping on sidewalks and received a mark of 4. On the other hand, the majority of homes needed edging and trimming around their sidewalks and received the mark of 3. The places that received a mark of 2 were primarily located around abandoned lots or in areas where development was sparse. Only a few places received a mark of 1 and were completely overgrown. No sidewalks were observed that provided street trees or bushes, therefore no sidewalk in the City received a mark of 5 for landscaping. Refer to Table 9 (p. 31) for a list of sidewalks in need of landscaping improvements.

Summary of Existing Bicycle Infrastructure

Bicycle Routes

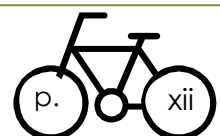
The City of Lake Charles currently has a bicycle route system comprised of 10 roadway segments. The location of the network is mostly located around the downtown area, but also reaches south down to I-210. According to AASHTO, shared lanes should be located on roads with vehicle volumes of fewer than 10,000 vehicles per day and travel speeds of 30 mph or less. Following these standards, six out of the ten current bicycle network segments are not appropriate to be classified as bicycle routes. The high roadway traffic volumes or travel speeds mean that only the most advanced riders should attempt riding on streets such as Lake St. The route designed previously by the City was well thought out and most of the roads in the current bicycle route network are included in the new recommendations for a bicycle network, although improvements are suggested. These include additions of bicycle lanes and corresponding roadway redesign or widening. Refer to Table 10 (p. 34) for a list of improvements needed to the existing bicycle route network.

Bicycle Lanes

There are no official bicycle lanes within the city limits of Lake Charles, though there is one south of the City on Gauthier Rd. This bike lane is 6 ft. wide and runs east-west for 2.75 miles between Big Lake Rd. and Lake St. While the length and width of this bicycle lane is impressive, there are no other bike lanes or bike routes connecting to this segment. This could serve as a vital east-west connection for the southern portion of Lake Charles if connections to a supporting bicycle network are made.

Regional Connections with Existing Shoulder Available

There are a few state highways running through Calcasieu Parish that have shoulders that are at least 4 feet wide, which is the minimum adequate space for a bike rider. While these roadway shoulders are not marked for bicyclists specifically, they do provide sufficient space for advanced and, in some cases, basic skill-level riders. These existing roadways can be used to



build connections between communities in the Lake Charles Metropolitan Area. Table 11 (p. 34) and Figure 9 (p. 35) showcase available regional connections.

Chapter 4: Goals and Policy Recommendations

The Louisiana Bicycle and Pedestrian Master Plan recommends that each municipality or jurisdiction prepare, adopt, and implement a comprehensive bicycle and pedestrian plan. Through these goals, policies, and action items, the Bicycle and Pedestrian Master Plan places a greater emphasis on bicycles and pedestrians in the Parish's ongoing work of shaping streets and managing traffic. This emphasis on bicyclist and pedestrian considerations parallels new policies within the USDOT. In early 2010, the U.S. Secretary of Transportation Ray LaHood commented on the importance of including bicycling and other alternative modes in the planning process. "Today I want to announce a sea change, this is the end of favoring motorized transportation at the expense of non-motorized...Walking and biking should not be an afterthought in roadway design."

The characteristics that make up a pedestrian and bicycle friendly environment have been grouped into five main categories: connectivity, travelway character, context character, education, and safety. These categories are the basis of the goals and policies that are detailed in Chapter 4.

Connectivity

Connectivity refers to the bicycle and pedestrian network. A well-connected network of streets and pedestrian ways means that it is easy for bikes and pedestrians to get around. Connectivity includes support for safe, convenient street crossings. Walking and transit go hand in hand – transit riders typically supplement their trip with some form of pedestrian travel at both ends.

Travelway Character

Travelway character refers to the bikeway space between automobile travel lanes and curbs, as well as sidewalk space. Roadway space can be designed to serve traffic while still providing a high-quality bicycle and pedestrian environment. The design of the sidewalks and bike lanes and the elements within it are key parts of creating a bicycle and pedestrian-friendly environment. This requires more than just minimum width requirements. Sidewalks are multi-functional, and their design should reflect the need to provide walking space as well as accommodating small children riding their bikes.



Context Character

Context character refers to the way the adjacent land uses interact with the pedestrian or bicyclist. A pedestrian friendly environment should have a positive relationship to an area's land use, such as food services and places to stop and rest.



Education

Part of the success of making a place where walking and bicycling are commonplace will come from educating walkers, bikers, and automobile drivers about state and local laws. The goals for education should seek to inform citizens of the City about creating a role for walking and bicycling to contribute positively into the social cohesion of the community. The grassroots advocacy organization, Pedestrians and Cyclists of Calcasieu, will play a major role in education.

Safety

Safety goals address the need to create safe, visible, and convenient bicycle and sidewalk conditions. Factors such as roadway crossings, internal site circulation, seamless access to transit, and truly multimodal streets go into account for the quality of safety for both pedestrians and cyclists.

Chapter 5: Methodology for Prioritizing Projects

Limited resources such as time, land, and money, necessitate the need to create a prioritized and phased list of potential projects. This is a requirement of the Metropolitan Transportation Plan; which places potential transportation infrastructure in a timeline for funding. Many computer programs, such as GIS and aerial photography, were used to collect and analyze data with the goal of ranking the most beneficial and affordable projects. Four overarching factors were considered when creating a prioritized list of projects.

1. Generator Score – This score is related to the propensity of a particular area to generate pedestrians or bicyclists. Census Block Groups (CBGs) were given generator values based on density, household income, and number of persons under 18 and over 60. Scores were placed on a 1 (worst) to 9 (best) scale.

2. Attractor Score – The attractor score is related to the propensity of a particular destination to be attractive for pedestrians or bicyclists. Some places are more likely to for people to walk or bike to than to drive. Examples of these destinations include schools, civic buildings, and parks. Each attractor was given a value and then a ¼ mile buffer was placed around it. The areas with the highest amount of attractors had the highest value scores. Scores were placed on a 1 (worst) to 10 (best) scale. This category has an added weighted factor of 2.

3. Connectivity – The connectivity score is the number of existing sidewalks or bike lanes the project would connect to. This is important in order to promote sidewalk continuity. There is no added weighted factor added to this category.

4. Affordability and Ease – Some projects are bound to be more costly and difficult to implement than others. This goal of this category is to try and identify the “lowest hanging fruit” of potential projects. The estimated cost of the project is based on factors such as cost of materials and construction, filling in of ditches, and overcoming barriers such as bridges. Set on a scale of 1 (worst) to 5 (best). This category has an added weighted factor of 2.



Chapter 6: Recommended Pedestrian Facilities & Bicycle Network

A list of potential projects was compiled by following recommendations and suggestions from the public and analysis of gaps in the existing network. The projects were then ranked utilizing the four scores explained in Chapter 5, the methodology section. The projects with the highest cumulative scores were ranked the highest. The recommended facility and route network was divided into three categories: pedestrian facilities, bicycle network, and trails/connectors network. Each category is described in greater detail, with a table of the recommended improvement projects and an accompanying map supplied on the following pages.

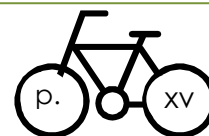
Pedestrian Facilities

Sidewalks serve as the backbone of the non-motorized transportation network. They need to be placed close to the origin (homes) of users and continue uninterrupted to their likely destination (school, job, etc.). Sidewalk accessibility and continuity should be held in high esteem. Almost 150 new sidewalk recommendations were made. Because of this large number, only the ones which were ranked in the “high” category are listed in the table below.

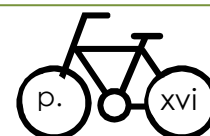
Pedestrian Improvement Projects

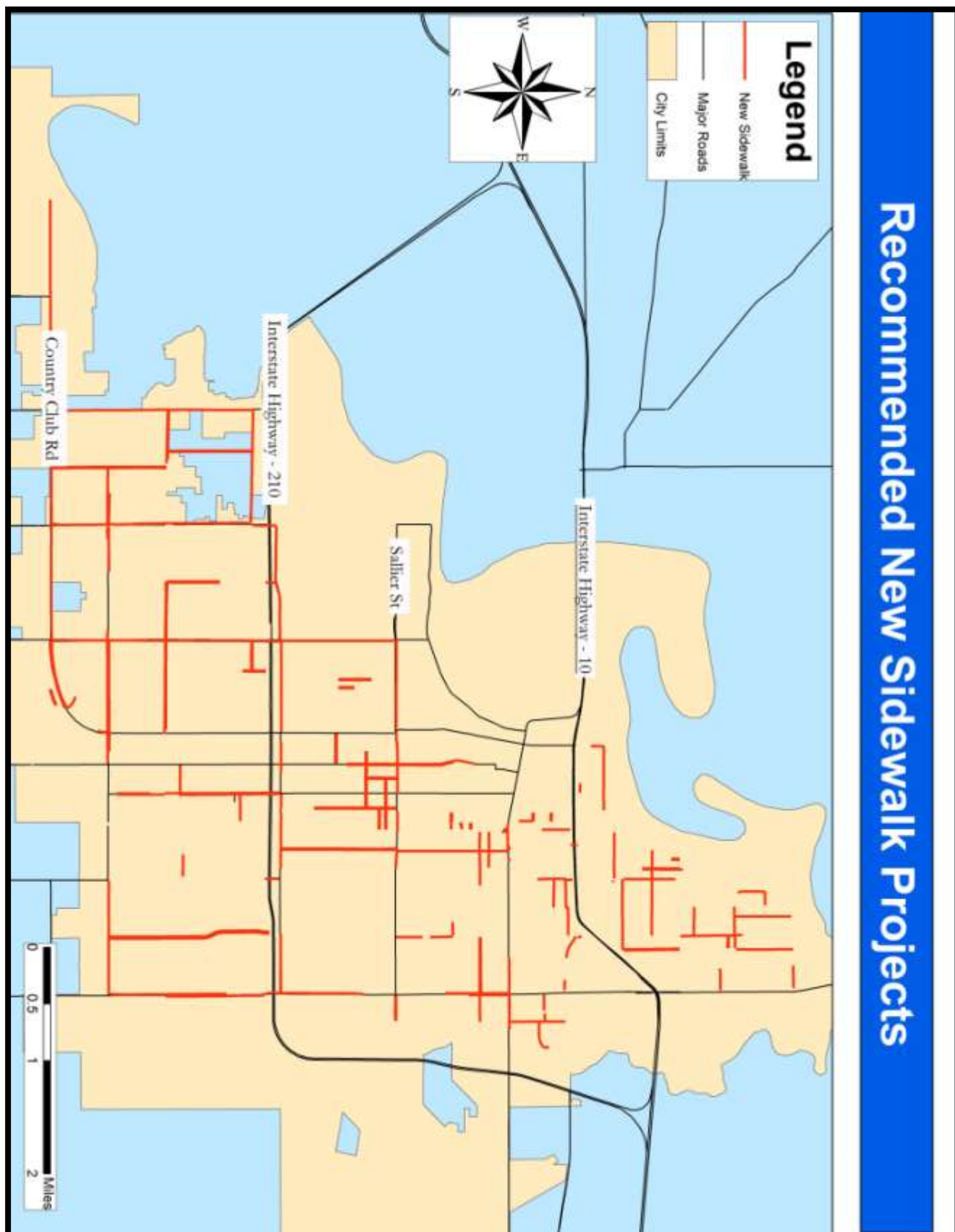
(These are highest ranked priorities within each section of the City, but not necessarily in rank order.)

Sidewalk Name	Segment Extents	Section of City
Pear St. East Side	Medora St. to Fitzenreiter Rd.	North
N. Simmons St. East Side 2	Medora St. to Fitzenreiter Rd.	North
N. Booker St. East Side	Moeling St. to Knapp St.	North
Medora St. North Side	N. Prater St. to N. Booker St.	North
Medora St. South Side	N Booker St to N Simmons St	North
Woodring St North Side	N Booker St to N Simmons St	North
Woodring St South Side	N Booker St to N Simmons St	North
Griffin St South Side	N MLK Hwy to Sally Mae St	North
Katherine St South Side	N Prater St to N Booker St	North
N. Blake St. West Side	Moeling St. to Geiffers St.	North
N. Blake St. East Side	Moeling St. to Geiffers St.	North
N. Shattuck St. East Side	Moeling St. to Opelousas St.	North
N. Simmons St. West Side	Moeling St. to Opelousas St.	North
N. Simmons St. East Side	Moeling St. to Opelousas St.	North
Cessford St. North Side	N. Prater St. to N. 1st Ave.	North
Opelousas St. South Side	N. Shattuck St. to N. Simmons St.	North
Connecting Pedestrian Path	Connecting N. Shattuck w/ Fournet St.	North
N. Ryan St East Side	S Railroad Ave to Jackson St	North
Enterprise Blvd. West Side	Mill St. to Belden St.	Central
S Shattuck St East Side	Belden St to Carter St	Central
Pine St. North Side	Bank St to Louisiana Ave	Central
Pine St. South Side	Bank St to Louisiana Ave	Central
Evans St South Side	S Shattuck St to Prater St	Central
Division St North Side	Bank St to Louisiana Ave	Central
Division St South Side	Bank St to Louisiana Ave	Central
Louisiana Ave West Side	Division St to Clements St	Central
Broad St. North Side	VE Washington Ave to 1st Ave	Central
Enterprise Blvd. West Side 2	Broad St to Existing Sidewalk	Central
Enterprise Blvd. East	Broad St to Existing Sidewalk	Central



Sidewalk Name	Segment Extents	Section of City
5th St. North Side	Louisiana Ave to Enterprise Blvd	Central
5th St. South Side	Louisiana Ave to Existing Sidewalk	Central
1st Ave. East Side 2	Broad St to 12th St	Central
Common St. West Side	Clarence St to 17th St	Central
12th St. North Side 2	Gerstner Memorial Dr. to Russell St	South-Central
12th St. South Side	Gerstner Memorial Dr. to Russell St	South-Central
Moss St. East Side	12th St. to 15th St.	South-Central
Bank St. West Side	Gulf St. to 12th St.	South-Central
Bank St. East Side	Gulf St. to 12th St.	South-Central
1st Ave. West Side	12th St to E Prien Lake Rd	South-Central
1st Ave. East Side	12th St to E Prien Lake Rd	South-Central
18th St. South Side	Ryan St. to Common St.	South-Central
E Prien Lake Rd North Side 2	Kirkman St to Existing Sidewalk	South-Central
E Prien Lake Rd North Side 3	Burton St to 2nd Ave.	South-Central
Kirkman St West Side	Prien Lake Rd to Walters St	South-Central
Kirkman St East Side	Prien Lake Rd to Madeline St	South-Central
Madeline St South Side	Common St to Kirkman St	South-Central
Cypress St West Side	Louie St to W 18th St	South
Cypress St East Side	Louie St to W 18th St	South
Hazel St West Side	W 18th St to Penn St	South
Hazel St East Side	W 18th St to Penn St	South
Overhill Dr. North Side	Central Pkwy to Existing Sidewalk	South
Overhill Dr. South Side	Central Pkwy to Existing Sidewalk	South





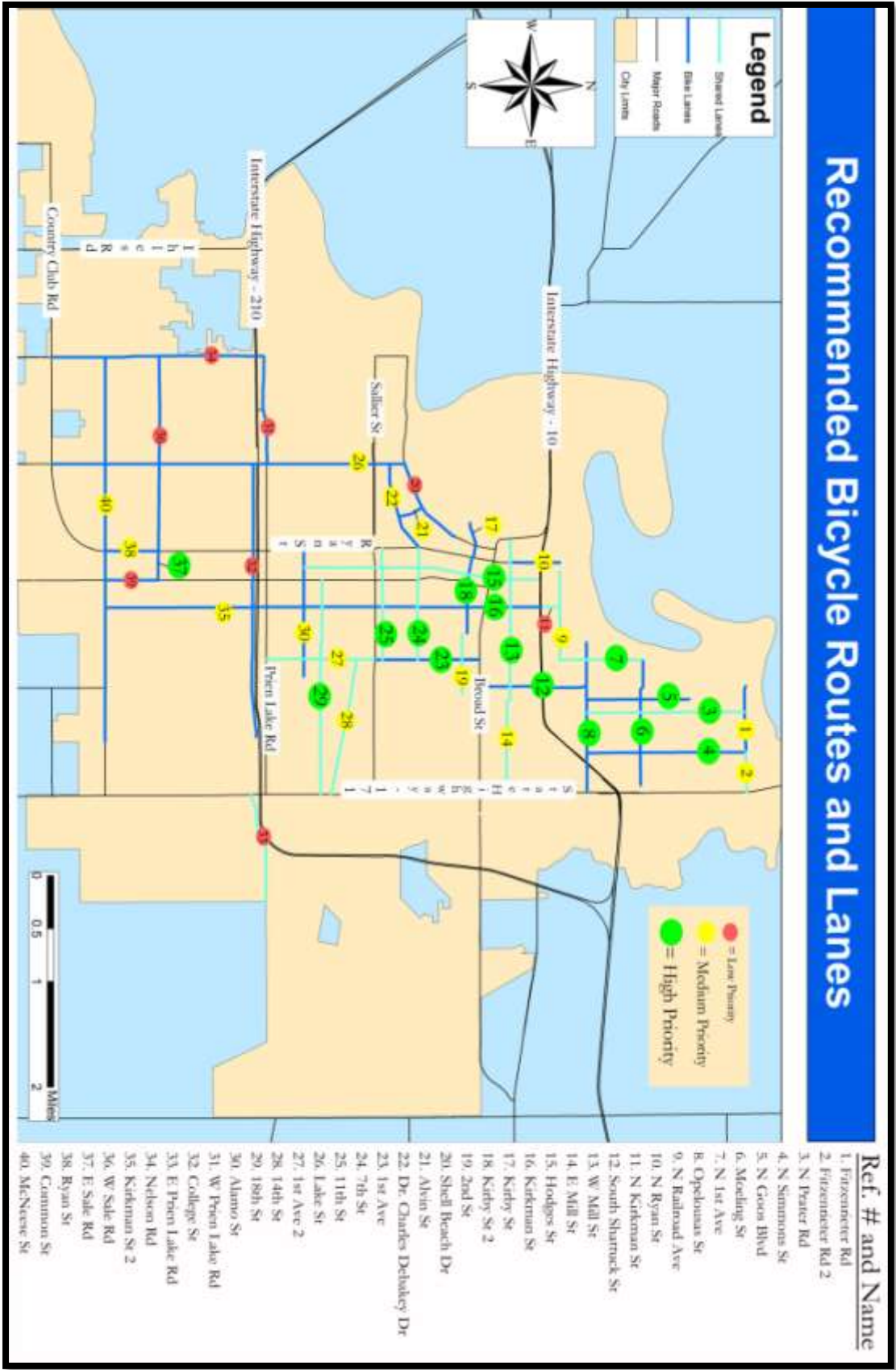
Bicycle Network

Bicyclists can travel further distances at faster speeds than pedestrians so the bicycle network can be larger in scale than the sidewalk network. There are three factors to consider when planning for bikeways: speed of traffic, volume of traffic, and width of roadway. These three factors were paramount to the selection, proposed improvements, and overall ranking of each project. The projects chosen are intended to connect schools, parks, businesses and neighborhoods within the City.

Recommended Bicycle Network

Map #	Road Name	Segment Extents	Priority	Bicycle Facility Recommended
1	Fitzenreiter Rd.	N. Prater to N. Simmons	Moderate	Shared Lane
2	Fitzenreiter Rd. 2	N. Simmons St. to Hwy 171.	Moderate	Bike Lane
3	N. Prater St.	Opelousas St. to Fitzenreiter Rd.	High	Shared Lane
4	N Simmons St.	Fitzenreiter Rd. to Opelousas St.	High	Bike Lane
5	N. Goos Blvd.	Opelousas St. to Theriot Rd	High	Bike Lane
6	Moeling St.	N. 1st Ave. to Hwy 171	High	Bike Lane
7	N. 1st Ave.	Moeling St. to N. Railroad Ave.	High	Shared Lane
8	Opelousas St.	N. Enterprise Blvd. to Hwy. 171	High	Bike Lane
9	N. Railroad Ave	N. Bilbo St. to N. 1st Ave.	Moderate	Shared Lane
10	N. Ryan St	Jackson St to W Mill St	Moderate	Bike Lane
11	N. Kirkman St	N Railroad Ave to I-10 Svc Rd	Low	Shared Lane
12	South Shattuck	Broad St. to Opelousas St.	High	Bike Lane
13	W Mill St	Veterans Memorial Dr. to Goos St	High	Shared Lane
14	E Mill St	Goos St to Hwy 171	Moderate	Shared Lane
15	Hodges St.	Alamo St. to Belden St.	High	Shared Lane
16	Kirkman St.	N. Railroad Ave to College St	High	Bike Lane
17	Kirby St.	Lakeshore Dr. to Bord Du Lac	Moderate	Bike Lane
18	Kirby St 2	Ryan St to Louisiana Ave	High	Bike Lane
19	2nd St.	Louisiana Ave. to 3rd Ave.	Moderate	Shared Lane
20	Shell Beach Dr.	Clarence St. to Lake St.	Low	Bike Lane
21	Alvin St.	Shell Beach Dr. to Dr. Debakey Rd.	Moderate	Bike Lane
22	Dr. Debakey Dr.	Lake St. to Ryan St.	Moderate	Bike Lane
23	1st Ave	Broad St to 12th St	High	Bike Lane
24	7th St.	Ryan St. to 4th Ave.	High	Shared Lane
25	11th St.	Ryan St. to 4th Ave.	High	Shared Lane
26	Lake St.	Shell Beach Dr. to Country Club Rd.	Moderate	Bike Lane
27	1st Ave 2	12th St to E Prien Lake Rd	Moderate	Shared Lane
28	14th St.	Enterprise Blvd. to Gerstner Memorial Hwy	Moderate	Shared Lane
29	18th St.	Common St. to Gerstner Memorial Dr.	Low	Shared Lane
30	Alamo St.	Ryan St. to Enterprise Blvd.	Moderate	Bike Lane
31	W Prien Lake Rd.	Lake St. to Nelson Rd.	Low	Bike Lane
32	College St.	Lake St. to 5th Ave.	Low	Bike Lane
33	E Prien Lake Rd	Gerstner Memorial Hwy to Corbina Rd Ext	Low	Shared Lane
34	Nelson Rd.	W. Prien Lake Rd. to Country Club Rd.	Low	Bike Lane
35	Kirkman St. 2	College St to E McNeese St	Moderate	Bike Lane
36	W. Sale Rd.	Ihles Rd. to Ryan St.	Low	Bike Lane
37	E. Sale Rd	Ryan St. to Common St.	High	Bike Lane
38	Ryan St.	W. Sale Rd. to W. McNeese St.	Moderate	Bike Lane
39	Common St.	E Sale Rd to McNeese St	Low	Bike Lane
40	McNeese St.	Nelson Rd. to 5th Ave.	Moderate	Bike Lane



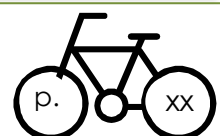


Path/Trail Network

Sidewalks and bikeways are necessary components for a complete transportation network, but they do not serve the needs of all residents. Paths and trails can serve as short-cuts through neighborhoods or connect communities. They also serve to improve safety for less experienced riders because they are completely separated from automobile traffic. A total of five potential city-wide trails and five local paths/shortcuts were identified. If constructed, these trails would provide an almost unbroken pathway for non-motorized users traveling between north and south Lake Charles. This could serve to improve the health and well-being of all Lake Charles residents.

Recommended Path/Trail Network

Name of Trail/Connector	Extents	Length (Miles)
Perkins Ferry Trail	N. Railroad Ave to Perkins Ferry Park	2
1st Ave Trail	Railroad Tracks to 12th St	1.75
Pithon Coulee Trail	Lakeshore Dr. to Common St	0.6
Railroad Connector Trail	1st Ave to 5th Ave	0.75
5th Ave Trail	12th St to McNeese St	2.5
N. Railroad Ave Connector	N Railroad Ave to N Ryan St	0.1
13th Ave Connector	13th Ave to Gerstner Mem Dr.	0.1
5th Ave Circuit Connector	5th Ave to 5th Ave	1
5th Ave Connector	5th Ave Circuit to Gerstner Mem Dr.	0.25
Parkway St Connector	McNeese St to Common St	0.5





Chapter 7: Implementation and Funding

Plans must be implemented in order to make a difference. The following steps are suggested to take place after a project has been identified for improvement.

- Program List by Council District: Create a short, medium, and long-term program list by council district to feed into the Capital Improvement Program.
- Field Verification: Field verification should include a review of existing conditions (such as available right-of-way, adjacent land uses, and pedestrian volumes) and identifying potential design constraints (such as locations of utilities).
- Design Improvements: Appropriate sidewalk improvements should be designed after projects have gone through the field verification process.
- Deliver Project: The final step of the implementation program process will be to construct the new improvement project.

Funding Sources

- Safe Routes to School – Funding source for improvements made within walking distances of schools.
- SAFETEA-LU – Federal roadway improvement program, which gives 90% funding for improvement programs that incorporate planning for pedestrians or bicycles.
- Recreation & Trails Program – State program which gives grants annually for a recreational trail program.
- Local Road Safety Improvement Program – State program which gives small grants for projects which improve bicycle or pedestrian safety.
- Rails to Trails – Private organization which helps to guide funding for development of converted abandoned railroad tracks into trails.





Chapter 1:

Introduction



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Chapter 1: Introduction

Nationwide, people are recognizing the energy efficiency, cost effectiveness, health benefits and environmental advantages of leaving the car behind. Walking and biking are forms of transportation that are enjoyable, energizing, environmentally friendly, and free. Nationally, interest in alternate modes of transportation was first emphasized in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, and has been gaining traction ever since. In 2010, Secretary of Transportation Secretary Ray LaHood wrote, "... I want to announce a sea change, this is the end of favoring motorized transportation at the expense of non-motorized." Local, state and federal agencies are responding to this call for an improved process of planning for pedestrian and bicycle travel by implementing a multimodal approach to roadway design. The emphasis now being placed on alternative forms of transportation requires an understanding of bicycles, pedestrians and their subsequent facilities.

This plan takes a look at the existing City of Lake Charles roadway network, builds upon the previous planning foundations, offers recommendations to enhance and expand the existing on-street bicycle network, and connects gaps in sidewalks. The plan addresses constrained areas, provides for greater local and regional connectivity, and encourages more residents to use non-motorized modes of transportation. In order to encourage more people to bike or walk, policies that promote a bicycle and pedestrian-friendly development need to be put in place. This plan will recommend a variety of policies to allow for safe, efficient, and convenient pedestrian and bicycle travel in and between the communities of Lake Charles.

Vision and Purpose of the Plan

Vision of the Plan:

"To promote Lake Charles as a bicycle and pedestrian-friendly environment by providing a variety of convenient, safe, and attractive transportation choices."

Purpose

This plan is being developed in accordance with the Louisiana Statewide Pedestrian and Bicycle Master Plan. This plan is meant to serve as a guide for local decision-makers and the public to plan for alternative modes of transportation in future development. The plan includes a comprehensive inventory and analysis of existing bicycle and pedestrian facilities within Lake Charles and provides a prioritized list of potential improvements. Suggested improvements will incorporate sidewalks, bike routes, bike lanes, and multi-use recreational trails into a comprehensive network with the goal of increasing access and mobility for non-motorized modes of travel.



Why Develop a Bicycle and Pedestrian Master Plan?

Below is a list of five overarching justifications for creating The City of Lake Charles Bicycle and Pedestrian Master Plan. They are explained in detail below.

Expand the Network and Support Facilities for All Residents

Implementing a pedestrian and bicycle network that links a variety of destinations – employment, shopping, school, and recreation – is key to supporting all segments of the population, especially children, the disabled, and the elderly. In addition to expanding and connecting key routes, providing support facilities such as clear directional signage and secure bicycle parking will enhance the functionality of the network and encourage more people to recreate.

Enhance the Quality of Life in Lake Charles

The development of bicycle and pedestrian facilities creates people-friendly streets, paths, trails, and activity centers that are accessible and available to everyone and supports sustainable community development. Non-motorized travel reduces traffic congestion, vehicle exhaust emissions, noise, and energy consumption. It is a healthy and active form of travel. It is an affordable means of transportation and recreation. Safe and efficient walking and cycling opportunities will attract residents and tourists to scenic areas or surrounding businesses.

Improve Safety and Encourage Alternative Modes

The design standards and guidelines, education, and enforcement recommendations outlined in this plan are meant to serve as tools to enhance safety for bicyclists and pedestrians. This plan provides recommendations for route improvements intended to make movement safer for bicyclists and pedestrians of all ability levels. Encouragement programs are also suggested to motivate residents to ride or walk to work, school, or recreational facilities.

Traffic and Growth Management

Developing a multimodal transportation system will address traffic congestion, air and water pollution, energy consumption, problems with near-exclusive use of automobiles, use of non-renewable fuels to supply transportation, and increased pressure on infrastructure budgets to build and maintain roads.

Maximize Funding Sources for Implementation

With the identification and prioritization of specific facility and programmatic improvements found in this plan, the City and other local jurisdictions can apply for appropriate funding to support bicycling and walking infrastructure.



Why Bike and Walk?

Walking and bicycling are the lowest-cost and most effective means of transportation. Furthermore they are non-polluting, energy-efficient, versatile, healthy, and fun. They also offer low-cost mobility to the non-driving public, such as those under 18 or those over 65. Bicycling as a means of transportation has been growing in popularity and many communities are working to create a more balanced transportation system, by giving bicyclists a greater share of use in roadway networks. In addition, recent national surveys find that more people are willing to cycle more frequently if bicycle facilities are provided.

The City of Lake Charles and the surrounding metro area is expected to grow at a moderate rate in the future. Traffic congestion is not yet a problem in some parts of the City, but it can be seen in certain areas such as Lake Street and Prien Lake Road. Managing traffic by offering alternative modes is a key strategy to reducing automobile congestion and to ensure communities maintain their existing character. This plan is one step toward providing alternative modes and addressing future traffic congestion in the City.

Another reason for encouraging and promoting bicycling and walking is the enjoyment and quality of life it brings to the residents of our City and the ability for them to take advantage of the natural beauty and scenic quality of the region. Bicycling and walking are among the most popular forms of recreational activity in the United States, with almost 80 million people walking and 36 million people bicycling for recreation or exercise nationally, and 27.3 percent of the population over 18 are bicycling at least once over the summer. Because of their popularity, bicycling and walking have a major impact on community health. This is especially true for the older segment of the population who benefit most from such low-impact forms of exercise.

Figure 1: Cycling in Lake Charles



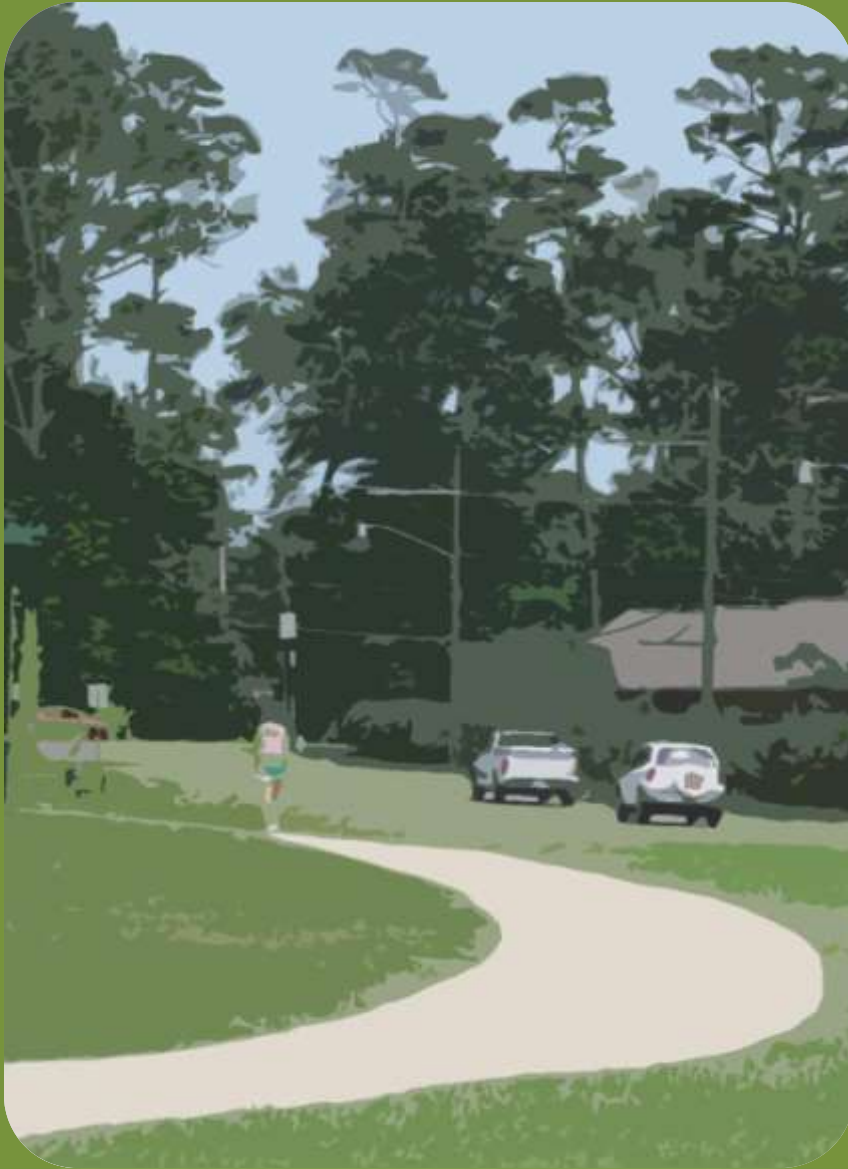
Jolly Roger Cycling

Bicycle and pedestrian network enhancements are expected to generate more non-motorized trips in the future. This growth is expected to improve air quality by further reducing the number of vehicle trips, vehicle miles traveled and associated vehicle emissions. This plan seeks to develop a bicycle and pedestrian friendly network to encourage non-motorized modes to be a practical alternative to driving for Lake Charles area residents.



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Chapter 2:

Plan Development Process/Outreach



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Chapter 2: Plan Development Process/Outreach

Public Input Meetings

Three public meetings were held at the Central Public Library and Martin Luther King Community Center in Lake Charles. These meetings were publicly advertised and open to all residents in Calcasieu Parish and the Lake Charles Metro Area. Stakeholders such as public and private individuals and organizations that regularly use pedestrian and bicycle facilities within Lake Charles were directly contacted and invited to attend the meeting. The purpose was to gain input from the public regarding which areas were in most need of bicycle and pedestrian improvements.

August 16th, 2010 Meeting

The meeting was well attended. 42 people joined the discussion and 36 people filled out the questionnaires. The questionnaire was developed to solicit specific input on key issues and concerns regarding the pedestrian and bicycle facilities system, and to generate input regarding the most important issues to be addressed and potential priority order for types of projects and system improvement. A copy of the questionnaire can be found in **Appendix G**. A map was also provided which allowed them to mark and draw out the areas they thought were in the most need of improvement projects. A summary of this data has been compiled into an easy to understand format below.

Figure 2: Stakeholder Map Drawing Exercise



Summary of Questionnaire Responses

Improvements

Residents were asked to rank, from 1 (low) to 5 (high), which of the following categories in Table 1 are most needed. The results were added up into point totals and averages and then subsequently analyzed for trends. The purpose of this is to help prioritize which improvements are most important in the public's point of view.

All of the "improvement" categories were added up and the scores were close in their point totals. The values of their averages appeared to cluster around each other. This result shows that the community desires a varied array of alternative transportation options. The highest total and average is bike lanes. Many participants commented that bike lanes could also be used by pedestrians, on some of the more rural roads. This suggestion is consistent with respect to AASHTO standards that state providing a shoulder on rural roads could substitute for a sidewalk.



Table 1: Stakeholder Improvement Prioritization

Category	Improvements				
	Sidewalk Continuity	Intersection Safety	Bike Lanes	Multi-Use Trails	Bicycle Routes
Total	109	112	148	111	124
Average	3.03	3.11	4.11	3.08	3.44

Attractors

With the goal of identifying which attractors are most important or likely destinations for bicyclists and pedestrians, stakeholders were asked to rank attractors on a scale of 1 (lowest) to 5 (best). These categories were added up and their point totals and averages were analyzed. The following bullets are a summary of the results.

- A few attractors stood out as favorites for the public. "Parks" scored the highest, followed by "Recreation/Community centers", and then "Schools". These three had significantly higher point totals than the next three; "Libraries", "Post Office/Civic Buildings", and finally "Public Transportation Stops."
- These results show that this community would rather have bicycle and pedestrian access to recreational and park facilities. Children's abilities to walk and bike to school were also very important. The need get to post offices or civic buildings was less important.
- Public transit scored the lowest which was not expected, but could be explained by low ridership rate. According to the 2000 Census, only 0.6% of commuters took public transit to get to work. This low commute rate may be a result of poor access to public transit stops.

Table 2: Stakeholder Attractor Values

Category	Attractors					
	Schools	Parks	Recreation/Community	Post Office/Civic Buildings	Public Transit Stops	Libraries
Total	133	153	137	86	69	102
Average	3.69	4.25	3.81	2.39	1.92	2.83

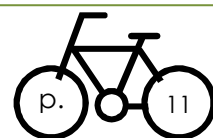
Network Expansion and Improvement Suggestions

During the Public Input Session many suggestions came forward on which roads were in most need of improvement projects. A list of the top suggested improvements made by the public is shown in Table 3.



Table 3: Stakeholder Suggested Improvements

Lake Charles Public Suggested Improvements	
Road Name	# Times Suggested
Sale Rd.	13
McNeese St.	12
Prien Lake Rd.	9
Lake St.	8
Shell Beach Dr.	7
Ryan St.	7
Common St.	5
Gauthier Rd.	4
Sallier St. Between Ryan & Lake St.	3
Enterprise Blvd	3
Country Club Rd.	3
Ihles Rd.	2
Elliot Rd.	2
Big Lake Rd.	2
All Roads throughout downtown	2
Weaver Rd.	2
Kirkman St.	2
All around McNeese	2
Gulf Highway	2
Nelson Rd.	1
I-10 Bridge	1
College St.	1
Lincoln	1
Burton Ln.	1
6th	1
Kirby St.	1
Lakeshore Dr.	1
Louisiana	1
Warren St.	1
5th Ave.	1
1st Ave.	1
Broad St.	1
Haymark Rd.	1



Personal Experience/Stories

Respondents were asked to provide a personal experience they have had navigating the roadways of Lake Charles without an automobile. Sharing any stories that their friends or family members have told to them were also highly encouraged. The following are quotes from stakeholders who attended the public input session meeting.

"...Start with existing sidewalks - clean up, widen, remove debris, make sure transition ramp from sidewalk to road is well done."

"Sidewalks in the downtown LC area have very high curbs. Trees cause broken sidewalks and I tripped and fell. When I walk on the road it is just as rough. I walk at an angle; cars do not want to move over."

"I think that the roads that have the heaviest motor vehicle traffic should have ped & bicycle lanes. These are the roads people need to use to get to jobs, schools, shopping, etc. Roads that would be great are Ryan, Common, McNeese, Prien Lake, and Sale. McNeese students want to ride to class also have a lot of trouble. I also think there needs to be education for motor vehicle drivers. Most drivers do not understand that they must share the road with bicycles."

"...I had a Sheriff's car yell at me over his PA system to move off of the road. He obviously did not know the law and this is not the only time it happened. This is why I feel that not only the public should be educated about biking, but law enforcement as well."

"I run daily in the downtown area and I never get on the sidewalks because they are in poor shape. "

"Safety should be a primary concern...bikers are generally not able to ride on the shoulder of roads because of all of the trash on them, broken glass, tree limbs, torn up truck tires, large clumps of mud, etc...You have to either swerve to miss it or possible go down and fall in front of a car."

"The open ditches that exist on Prien Lake Rd. (south of Lake St.), Sale Rd., Weaver Rd, and Burton Ln. are extremely hazardous. If these ditches were closed...ideal multi-purpose (walking, biking) paths could be created...students could actually ride bikes to schools, parks, and churches."

"...I work at the local bike shop in town, Capitol Cyclery of Lake Charles, and talk to people every day about why they want a bike but can't ride. People want to ride bikes but feel that it is too risky because of the fear of being hit. They even are scared of riding in their own neighborhood. If they had a multi-purpose path that connected to the heart of the city and had many outlets then the city would be more active.

"I have for many years wanted to 'Walk Lake Charles' and feel that adding paths that connect the parish would bring the communities together and be a tourist attraction."

"I have had many "close calls" with vehicles while biking in the downtown area (of Lake Charles) and south of town near Gauthier, Lincoln, Lake, Tom Hebert. I believe structured bike paths, trails, and parking facilities will dramatically increase the safety of bikers and runners."



Comments and Concerns

Many people took the time to share their comments or concerns and gave their opinion about what was most important to them. These comments or concerns were categorized into a few “themes” and quantified if more than two people mentioned them.

Table 4: Comment Categories

Concerns and Comments Categories	
Comment Category	Number of Comments
Safety Concerns	14
Driver Education	6
Increase Quality of Life	5
Multi-Use Paths	4
Bridge over Contraband Bayou	3
Curbs and Ramps	2
Clean Shoulders on Roadway	2
Bicycles Can't Trigger Traffic Signals	2
Total Stories or Comments	33

Safety appeared to be the primary concern of stakeholders who gave either a comment or concern. People mentioned safety concerns more than twice as often as any other concern. The concern with the next highest number of comments was “driver education.” This category is related to safety, as uneducated drivers can present situations that are unsafe to walkers and bicyclists. The following are a few quotes taken from the Comments and Concerns section of the questionnaire.

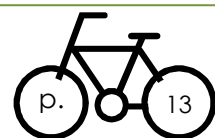
“Sale Rd. between Lake and Nelson is horrible and very dangerous, especially over the bridge. It needs to be taken into consideration. It is not safe and the people in Lake Charles deserve better than this. Please do something!!”

“95% of roads have no shoulders. Those with existing shoulders have rare periodic maintenance (i.e. street sweeping). There exists no interconnectivity of the few lanes that exist.”

“Turn Sallier Rd. into 1/2 bike and 1/2 traffic lanes between Ryan all the way to the port. - Slow traffic on Shell Beach Dr. so pedestrians and bikers can enjoy our lake. -Improve Deathtraps on Contraband Bayou Crossings. - Add pedestrian bridge on new I-10 Bridge. - Clean shoulders”

“Need bike racks on buses. Education is very important! Make 1st Ave. idea part of rails to trails. Path on new I-10 bridge.”

“If we only ask for bike specific lanes then it will put a lot of people off. If we include all activities then much more people will participate.”



June 6th and June 8th, 2011 Meetings

After a draft of the plan was completed, two public meetings were held at different locations to encourage as many residents as possible to attend. There were 50 attendees for the June 6th Meeting (Central Public Library) and June 8th Meeting (Martin Luther King Community Center) combined. Their recommendations are below along with whether the suggestions are on the priority list in the plan.

Table 5: Comments from the Public

Recommendations from the Public		
Road	Type of Improvement	On Priority List (Yes/No)
Sallier – Lake St. to the port	Sidewalks and Bike Lane	No
V.E. Washington Ave.	Sidewalk	Yes (partial)
Winterhalter St.	Sidewalk	Yes
Evans St.	Sidewalk	Yes
Sallier St.	Sidewalk, Bike Lane(narrow Sallier into 1 lane with curb divider)	Yes (Sidewalk), No (Bike lane)
Enterprise Blvd. from I-10 to 210	Sidewalks and bike lane	Yes (Sidewalk from Mill St. to Belden St.)
(4) Sale Rd. from Ryan to Prien Lake	Bike Lane	Yes
Lake St. at Baker St.	Crossing	No
(2) Lake St.	Crosswalks, Sidewalks, Bike lane or shoulder	Yes (Sidewalks from Sallier to Country Club Rd. on east side)
Prien Lake/Ernest St.	Sidewalk crossing and bike lane crossing	No
University Place streets		
<ul style="list-style-type: none"> • Ashland St. • Bonvue • Laurel • Westmoreland • Wedgewood • Waverly 	Sidewalks	No
(2) Weaver Rd.	Sidewalk	Yes
McNeese St. – SJ Welsh Middle School area	Sidewalk	Yes
Nelson/Prien Lake Intersection	Crossing	No
Common Street	Bike paths/lanes	Yes
Hodges Street	Bike paths/lanes	Yes
W. Oak Lane	Sidewalk	No
Gordon Street	Sidewalk	No
Ernest Street (between W. Oak and Claude)	Cleaned up sidewalk so it is wide enough near College Oaks Elementary (overgrown)	No
1st Ave.	Multi-use path	Yes



Recommendations from the Public		
Ryan St. south of Prien Lake	Buffer to protect sidewalk	No
(2) 6th Ave. (Between Broad St. and 6th St.)	Sidewalk repairs, Bike lane, crossing	No
Dewald Lane	Sidewalk (Some have sidewalks and some do not, this creates a patchwork)	No
Shell Beach Dr. bridge over Pithon Coulee	Wheelchair/Bike access	Yes (Bike path)
Sallier St. (between Port of LC and Ryan St.)	Sidewalk or bike path	Yes (Lake St. to Ryan St.)
McNeese St. (Kirkman to S. Park)	Bike lane	Yes
S. Park Drive	Bike lane	No
Kirkman St. (Prien to McNeese)	Bike lane	Yes
Gauthier Rd.	Finish bike lane from Lake - Ward Line Rd.	No (Not in City)
W. Sale Rd.	Bridge replacement, road widening, ditches closed, sidewalks, bike lanes	Yes (Sidewalks)
New Riverside Parkway	Bike trail on both sides	No
Country Club Rd.	Sidewalk, Bike lane or shoulder	Yes (sidewalk)

Comments and Concerns

- Great plan that works in conjunction with other development plans for downtown Lake Charles.
- Experience in London, Barcelona, Austin, and the Woodlands are my primary reference to bike paths and walk paths. I was wondering where you were modeling your plan.
- Set speed limits on multi-use paths.
- Paint sharrows on bike lanes.
- Use dividers where practical instead of just a painted lane.
- LA 3ft law provides funding for education.
- Multi-use paths with play areas between streets would appear risky in terms of pedestrian vs. motor vehicle accidents.
- Filling in the turtle ditches is a great idea.
- Are we collaborating with the Police Jury for funding/planning/etc.?
- Have you thought about involving children and teens and their parents in parts of construction of some of these projects (like you did with Millennium Park)?
- If children and parents contribute (hopefully) they will take care of it. (Ex. They can help plant, paint, whatever is needed).
- Did you look at the number of homeowners in each area when you prioritized the needs?
- I do appreciate improving bike paths to ease transportation for those who have cars.
- Cycling on Sale Rd to get out to Prien Lake is hard with the narrow road between Lake and Nelson.
- The goal of most cyclists is to get out of town so identify main roads to lead out of the City.
- Lake St. – crosswalks are non-existent, traffic travels too fast, no sidewalks on the bayou side, buffers are too narrow (8-9"), no trees to shade the sidewalk.
 - Elderly on bayou side can't leave their neighborhood.
- There is a need to address getting across the Contraband Bayou from areas south of McNeese.
- It is dangerous to travel from University Place to the Racquet Club.
 - The 2 dangerous intersections are Ryan St. and McNeese St. and Prien Lake and Ernest.
 - Pedestrian safety needs to be improved at these intersections.
- Like the idea of "sharrows" (many cycling friendly cities have these all over in Austin, San Francisco)



- Consider bicycle rental stations along a major cycling/multi-use route (San Antonio has these).
 - Other cities have bike rental stations that would promote "green" living.
- Interested in Lake Charles being an attractive, up-to-date place for people to relocate to.
- We have new people coming in with things like Mojito Pointe Resort and we need to make sure we keep them by making the City competitive with not only places like Biloxi, Austin, San Antonio, but also Lafayette and Baton Rouge, both of which are more cycling friendly than Lake Charles.
- Sale Road between Holly Hill and Lake St. is very dangerous. People walk on the road.
- Please consider crossing issues. I've been in cities where all traffic stops approximately 2 minutes to allow pedestrians/bikes to cross or go diagonally through an intersection.
 - Pedestrian signs that show a number of seconds remaining until light changes.
- Focus more on exercise enjoyment rather than reaching destinations.
- Include in presentation the statement that we are doing this for children and citizens in the future.
- Hodges St. and Common St. are very narrow, but paths would be helpful because people are riding bikes on the streets and it is very dangerous.
 - Common St. near McNeese State University is very wide – having bike paths for community and students at McNeese that only travel by bike to K-Mart, or Albertson's near the university is a must. Many international students don't drive.
- The designated bike path route has not been publicized and this would be helpful to visit on the Lake Charles website.
- There are certain bike/pedestrian needs for McNeese State University students.
- Blacksburg, VA has done an excellent job on "Rails to Trails" and this is a great resource.
- Along 6th Ave. and Broad St., it is difficult for motorized scooters to travel on.
 - Street repairs and drainage repairs are needed to fix the broken concrete and overgrown grass to accommodate motorized scooters.
 - Slim trash cans, cart stops, tire air stops, scooter rentals, and coupons for cash for trash are some suggestions.
 - Utility poles need to be moved over.
- Speed bumps (elevations) are worth considering for purposes of delineating bicycle paths.
- Narrowing the automobile areas by introducing bicycle paths will force motor vehicle drivers to reduce their speeds and promote overall safety.
- "I currently ride about 80-100 miles a week and would love to be able to ride downtown and to work. I live in S. Lake Charles (Ham Reid) and only ride south because I fear for my life riding north."
- Pedestrian traffic on Contraband Bayou Bridge over Prien Lake Rd. is very dangerous.
- There is a horrible situation on Lake St. between Circle K fast stop and housing project.
 - Pedestrians are crossing 4 lanes of 40mph traffic.
- It is good that the plan focuses on making sidewalks better for kids to ride on and keep them safer.
- Sidewalks are not feasible for recreational bike rides. Bike lanes are needed.
- There have been many close calls when riding our group rides with cars passing too close and not slowing down, honking horns and throwing items and negative comments.
 - Many cyclists have been hit by vehicles within last month.
- The plan is great because it connects all of the paths together.
- The 1st Ave. plan is great (repeatedly stated).
- We need to educate bike riders to go in the same direction as automobiles.
- "When I tried to ride my bike from Bayou Wood subdivision to McNeese, I was constantly intimidated by cars on Sale and felt I put my life in jeopardy. I was actually hit on Ryan and at that point gave up."
- "After attending this meeting I realize the necessity for sidewalks for individuals that have no transportation."
- Consideration should be given for a biking/jogging trail along the railroad that runs to the port from East Lake Charles.





Chapter 3:

Existing Conditions



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Chapter 3: Existing Conditions

Topography and Environment

Southwest Louisiana is fortunate to have numerous natural resources and environmental treasures. Its relatively flat topography has few grades of more than 3%, which is optimal for bicycle and pedestrian travel. Making up most of the landscape outside of the urban centers, much of the area surrounding Lake Charles is covered with forests, streams, marshes, and farms. Rural sports such as hunting and fishing are commonplace and are draws for locals and tourists alike.

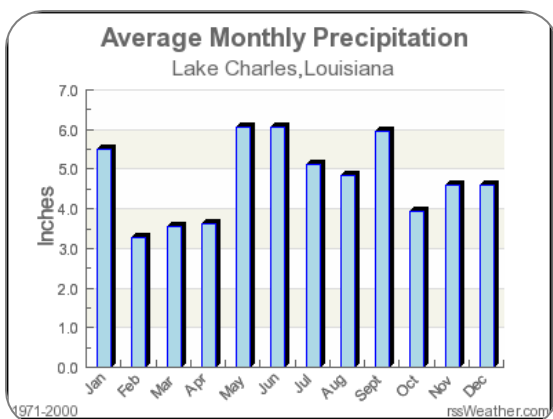
The Calcasieu River is the prominent natural feature in the area. It is responsible for the lake that gives the City of Lake Charles its name and a port industry that ranks in the top 10 in the nation. The Calcasieu and Sabine Rivers that run through Calcasieu Parish have created extensive waterways that afford its citizens opportunities to recreate in wonderfully natural settings.

Figure 3: Southwest Louisiana



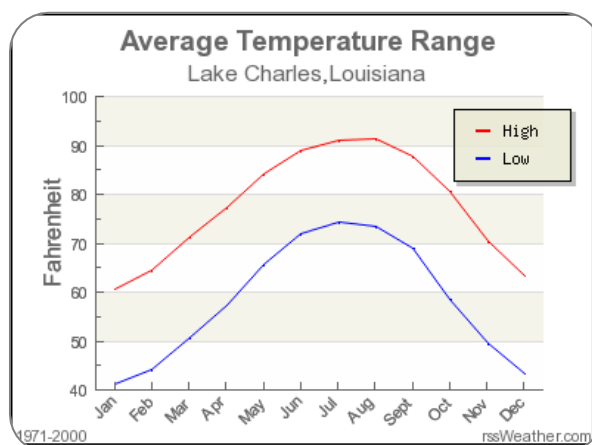
Mary Beth Conner Photography

Figure 4: Average Monthly Precipitation



The average annual rainfall for Lake Charles is 55 inches, with all months receiving roughly the same amount, as shown in Figure 4. The months with the most rain showers are January, May, June, July, and September. The Gulf Coast weather pattern tends to bring scattered rain showers that gather and dissipate quickly making bicycle and pedestrian travel possible.

Figure 5: Average Temperature Range

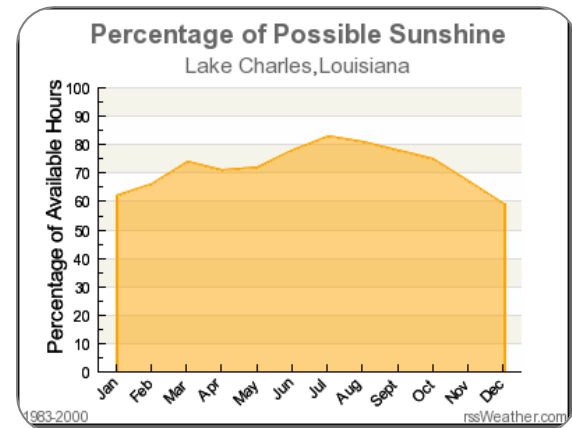


The temperature most of the year in Lake Charles is pleasant. While summer temperatures can sometimes approach levels that make outdoor activities uncomfortable, most of the year the highs do not rise above 90 degrees. Figure 5 shows monthly high and low averages throughout the year.



Temperature and rain are important, but sunshine is another important factor when planning a recreational trip. "Sunshine hours" refers to the amount of sunshine during daylight hours. The higher percentage means there is more sunshine throughout the day and a lower percentage will indicate cloudy skies. Figure 6 shows that sunshine probability ranges from 60% to 85%. This sub-tropical climate of pleasant temperatures for most of the year, regular and predictable cycles of rain, and large amounts of sunshine make recreation outdoors very appealing for much of the year.

Figure 6: Percentage of Possible Sunshine



Needs and Demands Analysis

Constraints and Opportunities in Calcasieu Parish

It is important to identify the potential problems and possible benefits to the community before planning for the future. A list has been compiled of potential constraints and opportunities in the City of Lake Charles.

Constraints

Limited Public Transit System

The current bus system that operates in the City is limited to only five routes and only runs about once per hour. While it fills a need it does not fulfill the transportation needs of all the residents who do not own a car. This fact gives credence to the need for an improved bicycle and pedestrian support network.

Waterways, Highways, and Railways

The many canals and waterways located throughout the City are beautiful, but pose a problem because of the need to build bridges to cross them. The interstate highways and railways that run through the City also create barriers to travel through that must be overcome with bridges or underpasses. While many bridges already exist on roadways, there are few which offer bicycle or pedestrian support. The I-10 and I-210 bridges expressly forbid pedestrian travel and the Hwy 171 Bridge towards Moss Bluff is narrow and vehicle traffic travels at a high rate of speed.

Heavy Vehicle Traffic and Rate of Travel Speed

The prevalence of heavy vehicle traffic and a high rate of travel speed (>35 mph) creates safety concerns for bicyclists sharing a roadway. Roads with large travel volumes and high rates of speed should be avoided if possible. Because parts of Lake Charles are industrially intensive areas, special attention should be paid to which areas have high rates of heavy vehicle traffic and should subsequently be avoided by bicyclists as well.



Open Ditches

Open ditches, which flank most roads in the southern section of the City, cause problems for cars, bicyclists, and pedestrians. Bicyclists who are riding on the roadway cannot get off the road whenever a car is coming. Pedestrians cannot walk along the roadway because there is no shoulder and ditches are often wet. Those who do not own an automobile have no path to get to their destination. Covering ditches along main roadways, which connect communities, can allow for pedestrians to walk from one destination to another without worrying about speeding vehicles in the road.

Bicycle Parking

Parking for both bicycles at destinations and cars at staging areas is minimal. The designation and location of these facilities is not available to the public and is therefore difficult to recognize. A survey of bicycle parking facilities is suggested in order to better gauge which areas of the City are in need of improvements. Signage and designation of staging areas which can be used for people wishing to use bicycle facilities is also suggested.

Opportunities

Growing and Aging Population

Population growth will require expansion of roadways to accommodate new travelers. This is a perfect opportunity to add in bicycle or pedestrian support. Also, in the coming years, the aging baby boomer population will be retiring and will be looking for alternatives to driving and increased opportunities for physical activity.

Environmental Stewardship

Climate change, rising energy costs, and the effects of pollution have raised concerns about what type of transportation we use. The growing awareness of environmental impacts of transportation has led to a high level of public support for increased accommodation for walking and bicycling.

Cost and Infrastructure Savings

Compared with building roadways, there is recognition of the cost effectiveness of providing pedestrian and bicycle improvements in lieu of continued automobile accommodation. It is also recognized that simply adding pedestrian and bicycle improvements as integral parts of larger projects can be done with minimal cost increase.

Health Promotions

Louisiana has been identified among those states with a high percentage of its population being overweight. This fact has led to the formation of new coalitions and health groups to fight obesity. It would be beneficial to build on and support these efforts along with public health agencies and local groups which promote walking and bicycling. These physical activities have been shown to reduce the risk of diabetes, heart disease and other chronic diseases. It would make for a healthier city and could reduce costs to the health care system in the long run.



Types of Cyclists

This section addresses the differing needs and priorities of different types and levels of ability of cyclists. The purpose of reviewing the needs of bicyclists is twofold: (a) it is instrumental when planning a system to serve different skill levels and different trip types; and (b) it is useful when attempting to quantify future usage and benefits to justify expenditures of resources. According to the US Department of Transportation, 57 million people, or almost 30 percent of the population 18 years or older rode a bicycle at least once during the summer of 2002. This large number of infrequent riders suggests that there is a large reservoir of potential bicyclists who do not ride (or ride more often). A major reason for this is because infrequent or non-riders do not feel comfortable using the existing street system and/or do not have appropriate bicycle facilities at their destination.

While the majority of Americans own bicycles, most of these people are recreational riders who ride relatively infrequently. School children between the ages of 6-14 typically make up a large percentage of bicycle riders, often riding to school, parks, or other local destinations. Adult road cyclists comprise a small, but enthusiastic, segment of regular bikeway users, along with serious off-road mountain bicyclists, who enjoy riding on trails and dirt roads.

There are three categories of cyclists that make up the large majority of the population. Each category requires a different level of support infrastructure and protection. Remembering each category is as easy as A-B-C:

Advanced - include long-distance road cyclists, racers, commuters and utilitarian cyclists; these are defined as those who use their bicycle as a primary means of transportation. These cyclists generally feel comfortable riding on roads and sharing the roads with automobile traffic. Rather than be directed to side streets, most cyclists making utilitarian trips would prefer to be given bike lanes or wider curb lanes on direct routes.

Basic - include youth and adults who are intermittent riders and may be nervous about riding in a street with cars, preferring quiet streets with less traffic and lower traveling speeds. These riders can be directed to side streets where traffic is less of an issue.

Children & Senior Citizens - covers the youngest, oldest or least experienced in the general population. Many of the trips made by this level are recreational; such as a family outing. With this in consideration, protection from hazards and grade separation are recommended wherever possible. Many younger children (ages 7 to 11) use sidewalks for riding to schools or parks, which is acceptable in areas where pedestrian volumes are low and driveway visibility is high. Intersections along routes that are expected to contain these riders should have proper road markings and signaling. Sidewalk riding also increases conflicts with pedestrians. Children riding the wrong way on-street are common, pointing to the need for safety education.



Existing Sidewalk and Bike Lane Inventory and Survey

Transportation infrastructure can consist of existing streets, roadways, multi-use trails, rails, and bridges; these will be the main focus of this inventory. Other types of transportation infrastructure that will be considered in the larger scope of this project are parking, safety devices, signage, and crossings. Existing street networks provide the most direct route to and from desired locations and population centers. Suitability for pedestrian use will depend on factors such as the network continuity, safety provisions, and quality of sidewalks. The suitability for bicycle use will depend on roadway width, speed, and traffic flows.

Utilizing Google Earth's up-to-date aerial photographs and its easy user interface, a database was created of existing sidewalks and bike lanes and later verified by on the ground inspection. These files were subsequently all transferred to GIS for analysis. Every section of sidewalk and bike lane was labeled and categorized by street name, on which side of the street it was located, and if it was not contiguous, the segment number. Once the database of existing sidewalk and bike lane network was complete, sections of sidewalk that were missing were easy to identify. Where sidewalks did not exist; worn paths through vegetation were visible due to the high resolution of the photographs.

This method also allowed the ability to identify other potential opportunities for improvement. Intersections could be viewed and analyzed to see if they were sufficient for the existing and proposed pedestrian network. A few intersections were identified that are in need of treatments such as signage and striping. It was also possible to roughly measure the width of roadways and their shoulders. This allowed the chance to preliminarily identify which roads were suitable for bicycle shared use or exclusive bike lanes. Multi-use trails, which can be created from either existing trail networks on private land or by abandoned railways, could also be identified.

Pedestrian Facilities

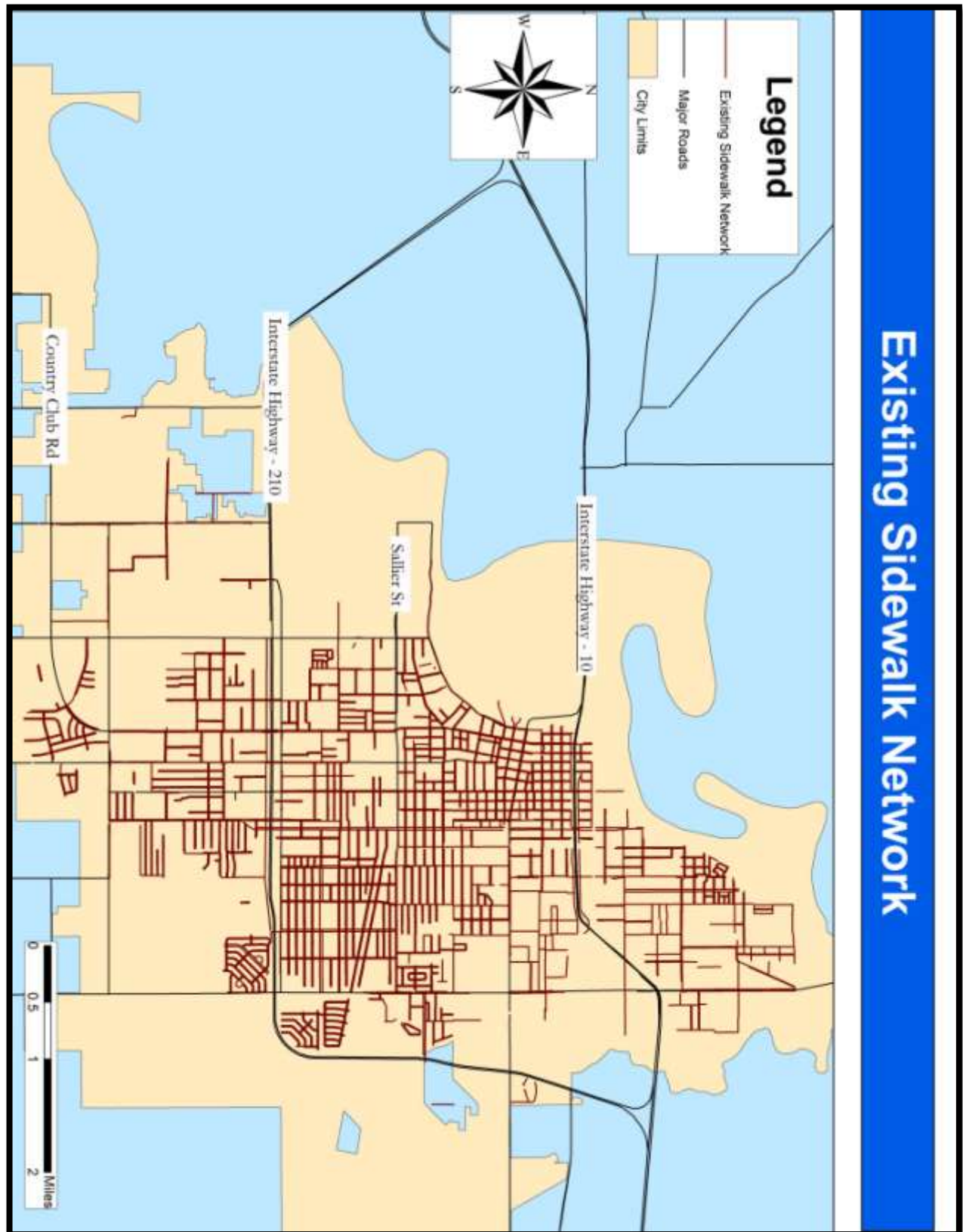
The ability for a pedestrian to make it safely from one destination to another depends on the continuity of the sidewalk network. When the concrete suddenly ends, a pedestrian must make the decision of walking in the dirt or grass or walking in the street. Neither of these choices is desirable. The absence of sidewalks creates a sometimes insurmountable barrier that prevents people from walking in their own neighborhood.

Inventory

The City of Lake Charles has 881 individual segments of sidewalks totaling 323.5 miles. The area with the most complete sidewalk coverage is in the downtown area and in the numbered streets and boulevards between Broad Street and I-210. The areas that showed neighborhoods that were lacking in a complete sidewalk network are located north of I-10, south of I-10, as well as east of I-210. The areas with the least sidewalk coverage are the areas located south of I-210 and west of Lake Street. Not only are the local roads in most of these areas without sidewalks, but the major roads in this area also lack any sort of bicycle or pedestrian support. Please refer to Figure 7 on following page for map of existing sidewalks.



Figure 7: Existing Sidewalk Network



Survey

Obtaining a summary of existing infrastructure conditions is necessary in order to accurately gauge the ease and ability for pedestrians to move across the City of Lake Charles. This summary was produced by conducting a comprehensive survey of existing sidewalks located throughout the City. The goal of this survey was to find out information regarding the width of the sidewalk, the width of the buffer, the speed limit of the adjacent roadway, quality of the pavement, and quality of the landscaping on the sidewalk. All of these factors present a picture of conditions that will help the Public Works Department decide which places are in most need of maintenance or repair.

Sidewalk Width

The width of a sidewalk is very important when considering location and pedestrian use density. While the national minimum standard for sidewalks used to be 4 ft., many cities today use 5 ft. as their minimum in order for people to comfortably pass each other. The table below shows recommended sidewalk widths depending on location.

Table 6: Recommended Sidewalk Widths

Local or collector streets	1.5 m (5 ft.)
Arterial or major streets	1.8 to 2.4 m (6 to 8 ft.)
CBD areas	2.4 to 3.7 m (8 to 12 ft.)
Along parks, schools, and other major generators	2.4 to 3.0 m (8 to 10 ft.)

Most of the sidewalks in Lake Charles, with a few exceptions, are 4 feet in width. Many sidewalks that are located near schools do not meet the national standard of 8 feet in width and may be inadequate to accommodate comfortable pedestrian travel. Sidewalks located in the Central Business District (CBD) of Lake Charles are 8 feet wide and do meet the minimum standards set forth by the U.S. Dept. of Transportation.

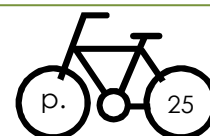
Sidewalk Buffer Width

Buffers between sidewalks and roadways are important to provide a level of comfort, security, and safety to pedestrians. Landscaped buffers provide a space for poles, signs, and other obstructions, serve as places for stormwater infusion, and protect pedestrians from vehicle splashing. The table below showcases recommendations set forth by AASHTO for appropriate buffer widths.

Table 7: Recommended Buffer Widths

Local or collector streets	0.6 to 1.2 m (2 to 4 ft.)
Arterial or major streets	1.2 to 1.8 m (4 to 6 ft.)

The buffers located in the City of Lake Charles range from large and lush swaths of 13 ft. to non-existent buffers with sidewalks coming all the way to the curb. This variation is a warning to planners and policy makers that the City should have a development ordinance that requires a designated buffer width for all new sidewalk construction.



Adjacent Roadway Speed Limit

Motor vehicle traffic is the number one concern for pedestrian and bicycle safety when traveling adjacent to a roadway. The two biggest factors that affect motor vehicle traffic and safety are volume and speed. When a roadway is rarely traveled, the noise from traffic and likelihood of potential unwanted interactions between pedestrians and automobiles is minimal. As the number of vehicles increases so does the potential for accidents. These accidents and the resulting severity of injuries have a direct relationship to vehicular speed. Roadways with speed limits of 30 mph or below are much more attractive to pedestrian and bicycle travel than streets with high rates of speed.

Speed limits of the adjacent roadways to sidewalks were observed in order to better judge which sidewalks are in need of safety treatments such as improved crossings, increased buffer widths, or street trees. These speed limits will also help in determining which roads are most appropriate for bicycle routes or bicycle lanes.

Condition of Pavement

Smooth and even sidewalks are not only visually inviting to pedestrians but also serve to allow people of all ability levels and transportation modes to traverse the City without worrying about tripping on cracks or running into obstacles. The condition of the pavement of existing sidewalks was ranked on a five point scale; with 5 being new sidewalks and 1 being completely degraded. Descriptions and pictures of the ranking system are showcased below.

5 – New Pavement: Newly constructed sidewalks that are smooth, bright, and have no cracks.



4 – Like New Pavement: Slightly older than new sidewalks. These sidewalks have little to no cracks, are smooth, and generally have a bright and attractive color.



3 – Average Pavement: Some cracks are apparent, but the number is minimal and the nature of them is not severe. The color of these sidewalks is dull and the overall surface will be rougher than those ranked 4.



2 – Below Average Pavement: Cracks are either prevalent in number or severe in nature. These sidewalks are generally uneven, difficult to traverse, and are in need of repair. They might not allow for hard-wheeled modes of transportation such as skateboards, scooters, or roller skates.



1 – Completely Degraded Pavement: No possibility of traversing this sidewalk. Severe cracks are prevalent throughout the sidewalk segment. These sidewalks are in need of immediate repair and cannot be considered when attempting to provide a network for sidewalk continuity.



Condition of Landscaping

The quality and condition of landscaping is important for aesthetic purposes and the ease of use for pedestrians. If grass or bushes are overgrown they can present barriers to people pushing a stroller or walking their dogs. Vegetation can block the path of sidewalks or create bumps in the sidewalk that are similar to cracks. Proper maintenance of sidewalk landscaping is imperative to give the impression of clean and tidy neighborhoods; where all modes of transportation can easily traverse through the City. The condition of the landscaping was ranked on a five point scale; with 5 being lined with bushes or trees and 1 being completely overgrown. Descriptions and pictures of the ranking system are showcased below.

5 - Bush or Tree-Lined Sidewalks: These sidewalks were planted with safety and aesthetics in mind. They are lined with bushes or trees that protect pedestrians from automobile traffic and provide beautiful scenery to observe.



4 – Clean and Edged Landscaping: These sidewalks are clear of obstructions and do not have any overgrown grass encroaching onto the sidewalk. No grass is growing in between the cracks and they are free of obstructions like bushes or tree limbs.



3 – Average Landscaping: While not perfect, these sidewalks are generally well maintained and are free of obstructions. There is some overgrowth, but not to a point where it would affect a person's ability to traverse the City.



2 – Partly Overgrown or Obstructed Landscaping: This category pertains to sidewalks that have severe grass overgrowth in sections or are obstructed by either bushes or tree limbs. These sidewalks need maintenance immediately or they will continue to degrade to a point where they are unusable for pedestrians and other alternative modes of transportation.



1 – Completely Overgrown or Obstructed Landscaping: These sidewalks have been neglected to the point where they are completely covered with vegetation or are obstructed to a point where the sidewalk is no longer usable. These sidewalks are in immediate need of maintenance and they cannot be considered viable when attempting to provide a network for sidewalk continuity.



Summary of Conditions

Width

The average sidewalk width in the City of Lake Charles is 4 ft. While the current national standard is 5 ft., many of the sidewalks built in the City were constructed during a time when 4 ft. was acceptable. The new sidewalks that were observed do comply with the 5 ft. standard. Sidewalks located around schools and parks are not noticeably wider than those of the surrounding area. The CBD area of the City has 8 ft. sidewalks, but these are sometimes obstructed by telephone poles.

Buffer

Many sidewalks in residential areas have large buffers that are well over the 6 ft. national standard. While many sidewalks located on local streets provide an ample buffer width, the busier streets such as Ryan Street, Common Street, and those in the CBD have sidewalks that are adjacent to the roadway curb.

Speed Limit

Of the roadways observed with sidewalks, most of the speed limits were 25mph. Only a few sidewalks were located on roadways with speed limits of 30mph or above. Low speed limits for automobiles on roadways make it attractive for pedestrians to traverse the City without worrying about safety.



Pavement

On a 1-5 scale, with 1 being the worst and 5 being the best all existing sidewalks were surveyed for pavement condition. Most of the sidewalks were ranked 3. A few sidewalks with the ranking of 5 were observed and none received the mark of 1. The sidewalks that obtained the ranking of either 4 or 2 seemed to be clustered within the same area. This clustering suggests that the age of the neighborhood has a direct effect on the quality of pavement.

Table 8: Sidewalks In Need of Pavement Improvements

Sidewalk Segment Name	Segment Extents	Sidewalk Width (Feet)	Buffer Width (Feet)	Posted Speed Limit	Pavement Condition	Landscaping Condition	Length (Feet)
Dietz St. East	18th St to Penn St	4	6	35	2	2	758
Alvin St. East	South of Shell Beach Dr. to Ernest St	4	6	25	2	3	2,366
Channel St. North	N 1st Ave to N Shattuck St	4	4	25	2	2	919
Channel St. South 2	N Shattuck St to N Prater St	4	4	25	2	2	1,242
Dietz St. Wes	18th St to Penn St	4	6	35	2	2	755
East St. North	Dr. Michael Debakey Dr. to Common St	5	6	25	2	2	2,341
Gieffers St. South	N Enterprise Blvd to N Shattuck St	5	5	25	2	2	2,228
Griffith St. East	Park Ave to Wilson St	4	7	25	2	4	358
Louisiana Ave. East 2	18th St to Mitchell St	4	2	25	2	3	4,343
Louisiana Ave. West 2	Oak Park Blvd to E McNeese St	4	2	25	2	3	9,852
Medora St South 3	End of road to N Booker St	4	4	25	2	3	2,593
N. MLK Hwy/171 East	Fitzenreiter Rd to Moeling St	6	0	40	2	2	5,311
N. MLK Hwy/171 West	Fitzenreiter Rd to Moeling St	6	0	40	2	2	5,265
Ryan St. West 4	I-10 Onramp to Rail Road Tracks	5	0	35	2	3	354
S. Railroad Ave. South	Hodges St to N. Enterprise Blvd	5	0	25	2	2	3,043
W. Lawrence St. North	Ann St to S Franklin St	5	1	25	2	4	5,224
Weincke St. East	Dr. Michael Debakey Dr. to East St	4	5	25	2	2	362



Landscaping

On a 1-5 scale, with 1 being the worst and 5 being the best all existing sidewalks were surveyed for pavement condition. There were many neighborhoods throughout Lake Charles that had very well maintained landscaping on sidewalks and received a mark of 4. On the other hand, the majority of homes have overgrown bushes and trees around their sidewalks and received the mark of 3. Grass growing in between cracks was common. The places that received a mark of 2 were mainly located around abandoned lots or in areas where development was sparse. Only a few places received a mark of 1 and were completely overgrown. No sidewalks were observed that provided street trees or bushes, therefore no sidewalk in the City received a mark of 5 for landscaping.

Table 9: Sidewalk in Need of Landscape Maintenance

Sidewalk Segment Name	Segment Extents	Sidewalk Width (Feet)	Buffer Width (Feet)	Posted Speed Limit	Pavement Condition	Landscaping Condition	Length (Feet)
Craft St South	Louisiana Ave to Warren Ave	4	15	25	3	1	788
Dietz St East	18th St to Penn St	4	6	35	2	2	758
Channel St North	N 1st Ave to N Shattuck St	4	4	25	2	2	919
Channel St South 2	N Shattuck St to N Prater St	4	4	25	2	2	1,242
Dietz St West	18th St to Penn St	4	6	35	2	2	755
East St North	Dr. Michael Debakey Dr. to Common St	5	6	25	2	2	2,341
Gieffers St South	N Enterprise Blvd to N Shattuck St	5	5	25	2	2	2,228
N MLK Hwy/ 171 East	Fitzenreiter Rd to Moeling St	6	0	40	2	2	5,311
N MLK Hwy/ 171 West	Fitzenreiter Rd to Moeling St	6	0	40	2	2	5,265
S Railroad Ave South	Hodges St to N. Enterprise Blvd	5	0	25	2	2	3,043
Weincke St East	Dr. Michael Debakey Dr. to East St	4	5	25	2	2	362
1st Ave West	Pujo St to 12th St	4	8	35	3	2	5,170
2nd St South	Louisiana Ave to Enterprise Blvd	4	4	25	3	2	322
4th St South	Enterprise Blvd to 1st Ave	4	6	25	3	2	799
Brooks St North	N Booker St to Pear St	4	2	25	3	2	987
Carl St West	See St to Katherine St	4	3	25	3	2	681
Cessford St North	N Lincoln St to N Malcolm St	4	2	25	3	2	1,921
Cessford St South 2	N Prater St to N Booker St	4	0	25	3	2	1,328
Church St North	Ryan St to Hodges St	5	5	25	3	2	813
Church St North 2	Moss St to Ford St	5	5	25	3	2	420
Craft St North	Louisiana Ave to Warren Ave	4	15	25	3	2	802
E School St	Common St to	4	7	25	3	2	2,619



Sidewalk Segment Name	Segment Extents	Sidewalk Width (Feet)	Buffer Width (Feet)	Posted Speed Limit	Pavement Condition	Landscaping Condition	Length (Feet)
North 2	Louisiana Ave						
E School St South 2	Common St to Louisiana Ave	4	7	25	3	2	2,620
Ford St East	S Railroad Ave to Church St	4	4	25	3	2	500
Ford St West	S Railroad Ave to Church St	4	4	25	3	2	495
Foster St East	Shell Beach Dr. to Dr. Michael Debakey Dr.	4	8	25	3	2	1,093
Foster St East 2	Dr. Michael Debakey Dr. to Woodruff St	4	8	25	3	2	717
Graham St East	Mary St to Fitzenreiter Rd	4	2	25	3	2	2,409
I-10 Service Rd North	Haskell St to Church St	4	4	35	3	2	3,145
I-10 Service Rd North 2	1st Ave to Albert St	4	4	35	3	2	4,116
Leaman St North	Louisiana Ave to Warren Ave	4	8	25	3	2	767
Legion St North 4	Gerstner Memorial Dr. to Siebarth Dr.	4	4	40	3	2	3,196
Legion St South 3	Gerstner Memorial Dr. to Siebarth Dr.	4	4	40	3	2	2,851
Louisiana Ave East 3	Oregon St to E McNeese	4	2	25	3	2	5,986
N 1st Ave West	Moeling St to Fournet St	5	5	35	3	2	3,208
N 1st Ave East 2	N Channel St to End of Road	4	2	35	3	2	369
N Enterprise Blvd West	Gieffers St to empty lot	5	5	35	3	2	1,473
N Kirkman St West	Opelousas St to N Railroad Ave	5	0	25	3	2	1,298
Pine St North	Louisiana Ave to Enterprise Blvd	4	5	25	3	2	363
S Lyons St East	Mill St to Broad St	4	3	25	3	2	1,477
S Lyons St West	Mill St to Broad St	4	3	25	3	2	1,479
W Lawrence St South	Ann St to S Franklin St	5	1	25	3	2	5,174
Warren Ave West	18th St to E Prien Lake Rd	4	12	25	3	2	2,938
Woodring St South 2	N. Shattuck Dr. to N Goos Blvd	4	8	25	3	2	570
Broad St North 4	East of S Lyons St to 8th Ave	5	0	35	4	2	4,499
Evans St South	Prater St to Albert St	4	0	25	4	2	1,284
Griffith St West	Park Ave to Wilson St	5	7	25	4	2	365
Hagan St North	N Lincoln St to Graham St	4	1	25	4	2	616
Helen St South	Lake St to Westwood St	4	10	25	4	2	1,609



Bicycle Facilities

Bicycle Routes

The City of Lake Charles currently has a bicycle route system comprised of 10 roadway segments. They were chosen because of their proximity to schools and parks. The location of the network is mostly located around the downtown area, but does also reach south down to I-210.

According to AASHTO, shared lanes should be located on roads with vehicle volumes of fewer than 10,000 vehicles per day and travel speeds of 30 mph or less. Following these standards, six out of the ten current bicycle network roadways are not appropriate to be classified as bicycle routes. The high roadway traffic volumes or travel speeds mean that only the most advanced riders should attempt riding on streets such as Shell Beach Dr. or Lake St. The route designed previously by the City was well thought out and most of the roads in the current bicycle route network are included in the new recommendations for a bicycle network, although improvements are suggested. These include bicycle lanes and corresponding roadway redesign or widening. Refer to Table 10 for a list of improvements needed to the existing bicycle route network.

Figure 8: Existing Bicycle Route Network



Table 10: Existing Bicycle Route Network

Road Name	Segment	Avg. Daily Volume	Speed Limit	Existing Travel Lane	New Travel Lane	New Classification	Improvements Needed
Shell Beach Dr.	Clarence St. to Lake St.	Above 10,000	45	11	12	Bike Lane	Road Widening
W Mill St	Veterans Memorial Dr. to Goos St	Under 3000	25	11	11	Shared Lane	Signage
E Mill St	Goos St to Hwy 171	Under 3000	25	15	15	Shared Lane	Signage
N. Kirkman St	N Railroad Ave to I-10 Svc Rd	Under 3000	25	12	12	Shared Lane	Signage
Kirkman St.	N. Railroad Ave to College St	Between 3,000 & 10,000	35	16	11	Bike Lane	Striping & Signage
Kirkman St. 2	College St to E McNeese St	Between 3,000 & 10,000	35	12	12	Bike Lane	Road Widening
Lake St.	Shell Beach Dr. to Country Club Rd.	Above 15,000	35	12	12	Bike Lane	Road Widening
Jackson St	N. Ryan St to Kirkman St	Under 3000	25	12	12	Eliminate	Eliminate
South Shattuck	Broad St. to Opelousas St.	Between 3,000 & 10,000	35	16	11	Bike Lane	Striping & Signage
Broad St	S. Shattuck St to 2nd Ave	Above 15,000	35	10	12	Eliminate	Eliminate

Bicycle Lanes

There are no official bike lanes within the city limits of Lake Charles, though there is one south of the City on Gauthier Rd. This bike lane is 6 ft. wide and runs east-west for 2.75 miles. While the length and width of this bike lane is impressive, there are no other bike lanes or bike routes connecting to this segment. This could serve as a vital and much used east-west connection for the southern portion of Lake Charles if connections to a supporting bicycle network were made.

Regional Connections with Existing Shoulder Available

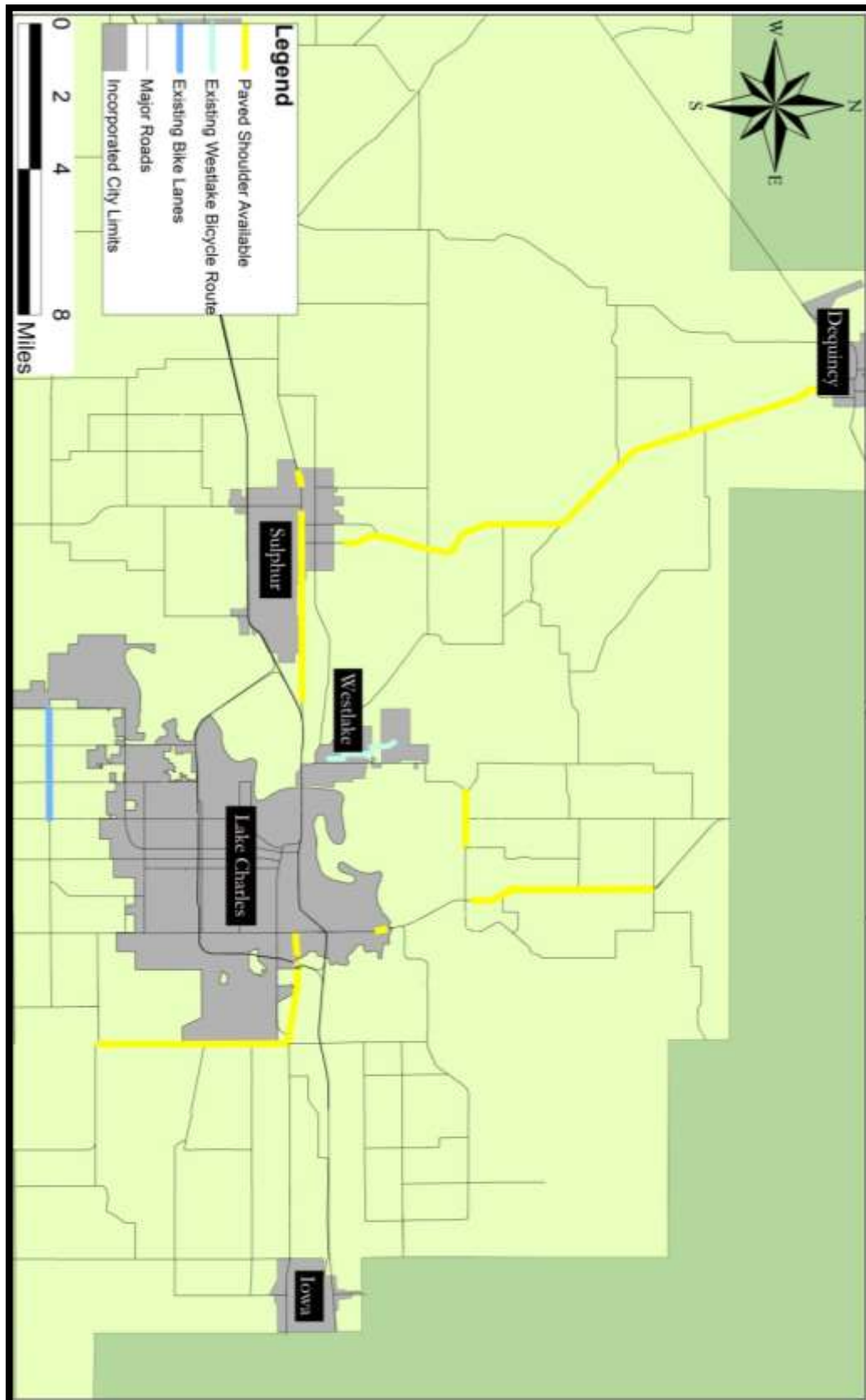
There are a few state highways running through Calcasieu Parish that have shoulders that are at least 4 feet wide, which is the minimum adequate space for a bike rider. While these roadway shoulders are not marked for bicyclists specifically, they do provide sufficient space for advanced and, in some cases, basic skill-level riders. These existing roadways can be used to build connections between communities in the Lake Charles Metropolitan Area. Table 11 and Figure 9 on the following page showcase available regional connections.

Table 11: Existing Regional Bicycle Network with Shoulder Available for Bicycles

Location	Street Name	Extents	Length (Miles)
Dequincy to Sulphur	Hwy. 27	Barney Hoffpauir Rd to Orchard St	14.3
Sulphur to Westlake	Hwy 90	Creek crossing to Picard Rd	1.0
Sulphur to Westlake	Hwy 90 - 2	Prater Rd to Trousdale Rd	5.3
Westlake to Moss Bluff	Hwy 378	River Mist to Park Rd	1.6
Moss Bluff to Topsy	Hwy 171	Hwy 378 to Topsy Rd	5.0
Moss Bluff to Lake Charles	Hwy 171	Conoco St to Wal-Mart	0.3
Lake Charles to Iowa	Hwy 90 - 3	Hwy 171 to Bridge w/o shoulder	1.3
Lake Charles to Iowa	Hwy 90 - 4	Bunker Rd to State Route 397	2.3
South Lake Charles	State Route 397	Gerstner Memorial Dr. to Fruge St	5.1



Figure 9: Existing Regional Bicycle Network



Current or Ongoing Bicycle or Pedestrian Support Expansion Projects

Lakefront Promenade and Multi-Use Path

The lakefront around the Civic Center is in the process of a major redesign, including a harbor, children's park, amphitheater, and improvements to pedestrian accessibility. A much heralded and anticipated promenade and multi-use path has already been completed. Running along Bord Du Lac, this promenade features elaborate inlays and tastefully designed lighting schemes.

Figure 10: Lakefront Promenade



Corbina Roadway Extension and Multi-Use Path

Set to be complete by June 2013, the Corbina Rd. extension project will extend the roadway from its current terminus at Highway 14 all the way to E. Prien Lake Rd. The roadway is planned to be 60 feet wide with four travel lanes and eight foot wide paved shoulders. The project is also slated to incorporate a 10 foot wide, two-way, bike path on one side of the road, separated from automobile traffic by an open ditch buffer. The multi-use path will run 2.75 miles and is designed to accommodate various types of non-motorized users such as pedestrians and other wheeled modes. This path will serve as the first true bike/multi-use path in all of Calcasieu Parish. When completed, this project will also serve as an important north/south spine for a new network of non-motorized support infrastructure.

1st Ave Multi-Use Path

Still in its preliminary planning stages, this path is expected to be approximately a 10-12 ft. wide multi-use path that will run from the railroad tracks north of I-10 to 12th St. Broken up into two phases the northern section would run from the railroad tracks north of I-10 to Broad St; the southern section would run from Broad St to 12th St. The southern section has a 50 ft. wide median that could serve as ample room for a path.



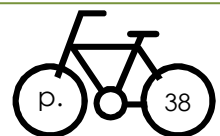


Chapter 4:

Goals and Policy Recommendations



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Chapter 4: Goals and Policy Recommendations

The Louisiana Bicycle and Pedestrian Master Plan recommends that each municipality or jurisdiction prepare, adopt, and implement a comprehensive bicycle and pedestrian plan.

Through the statement and adoptions of these goals and policy recommendations the City of Lake Charles Bicycle and Pedestrian Master Plan places a greater emphasis on planning for bicycles and pedestrians in the ongoing work of shaping streets and managing traffic.

The characteristics that make up a pedestrian and bicycle friendly environment have been grouped into five main categories: connectivity, travelway character, context character, education, and safety. Each one is described below, followed by a set of goals and related policy recommendations that can be used in conjunction with subsequent action items to implement the goals.

Connectivity

Connectivity refers to the bikeway, pedestrian, and transit network. A well-connected network of streets and pedestrian ways means that it is easy for bikes and pedestrians to get around. Connectivity includes support for safe, convenient street crossings. Walking and transit go hand in hand – transit riders typically supplement their trip with some form of pedestrian travel at both ends.

Connectivity Goals

- Goal 1: Develop a *cohesive* non-motorized network of sidewalks, bikeways, and street crossings that make alternative transportation a realistic way to get around.
- Goal 2: Provide a *continuous* bicycle and pedestrian network that connects sites within blocks, and connects buildings to each other, to streets, and to transit facilities.
- Goal 3: Provide crossings that are *convenient* and *comfortable* for pedestrians and bicyclists to use.

Connectivity Policies for Consideration

- New developments should connect to neighboring developments.
- Commercial areas should create a vehicular and/or pedestrian connection to adjacent residential communities and provide a future connection option for future developments.
- New residential communities should connect to existing residential and commercial developments, as well as provide connection possibilities to future adjacent developments.
- Provide direct connections or shortcuts from residential areas to neighborhood commercial destinations, parks, gathering places, and trails, especially in new or infill development by connecting dead-end streets or cul-de-sacs to adjacent streets or trails.
- Provide connections over barriers such as railroads, waterways, and freeways.
- Reduce, eliminate, or provide access around obstructions, such as utility poles, that are barriers to non-motorized travel.



Travelway Character

Travelway character refers to the roadway space between travel lanes and curbs as well as sidewalk space. Roadway space can be designed to serve traffic while still providing a high-quality bicycle and pedestrian environment. The design of the sidewalks and bike lanes and the elements within it are key parts of creating a bicycle and pedestrian-friendly environment. This requires more than just minimum width requirements. Sidewalks are multi-functional, and their design should reflect the need to provide walking space as well as accommodating small children riding their bikes.

Travelway Character Goals

- Goal 4: Create a street design sensitive to its context.
- Goal 5: Design sidewalks that are enjoyable to walk along and that acknowledge their multi-functional purposes.
- Goal 6: Preserve the health of the natural environment, improve air and water quality and reduce energy consumption by increasing the rates of walking and bicycling.

Travelway Character Policies for Consideration

- Provide landscaped sidewalk buffers and urban design features, especially in areas of high pedestrian activity, in order to encourage walking.
- Improve the street-level experience for pedestrians, by promoting the inclusion of landscaping and street trees to provide shade and enhance streetscape appearance.
- Encourage wider sidewalks in areas with high levels of pedestrian activity. The width of a sidewalk should be proportional to the demand for pedestrian activity.

Context Character

Context character refers to the way the adjacent land uses interact with the pedestrian or bicyclist. A pedestrian friendly environment should have a positive relationship to an area's land use.

Context Character Goals

- Goal 7: Provide adequate bicycle parking at desired locations.
- Goal 8: Design buildings such that their architecture enhances and encourages pedestrian activities.
- Goal 9: Provide pedestrian friendly automobile parking layouts to prevent isolating pedestrians from their destinations.

Context Character Policies for Consideration

- Require bicycle parking rack standards for commercial developments.
- Provide clear, direct, and attractive internal pedestrian networks that connect buildings, neighborhoods, and commercial centers to the adjacent sidewalk.
- New commercial development should be oriented to the pedestrian and include pedestrian walkways.



Education

Part of the success of making a place where walking and bicycling are commonplace will come from educating walkers, bikers, and automobile drivers about state and local laws. The goals for education should seek to inform citizens of the City about creating a role for walking and bicycling to contribute positively into the social cohesion of the community. A grassroots advocacy organization, called Pedestrians and Cyclists of Calcasieu has been formed with the mission to “actively build the community of Calcasieu Parish by promoting alternative transportation through government advocacy and public awareness campaigns” by increasing awareness and improving infrastructure.

Education Goals

- Goal 10: Promote pedestrian and bicyclist awareness in the City of Lake Charles such that it becomes the commonplace.
- Goal 11: Coordinate with other transportation agencies to develop a more seamless multimodal transportation system.

Education Policies for Consideration

- Provide at least one event annually that promotes pedestrian and bicycle safety such as “Walk to School Day.”
- Develop partnerships with local schools, driving clubs, and biking or walking organizations to develop educational materials and promote bicycling and pedestrian awareness.
- Promote safe and courteous walking, biking, and driving through targeted outreach programs.

Safety

Safety goals address the need to create safe, visible, and convenient bikeway and sidewalk conditions. Factors such as roadway crossings, internal site circulation, seamless access to transit, and truly multimodal streets go into account for the quality of safety for both pedestrians and cyclists.

Safety Goals

- Goal 12: Increase the safety of the walking and bicycling environment and reduce injuries and fatalities by providing a high level of care and consideration for these modes.
- Goal 13: Develop and implement speed management policies that support safe driving speeds on all City roads.

Safety Policies for Consideration

- All new sidewalks shall provide buffering from auto traffic and off-street parking lots, and provide trees that will shade sidewalks.
- Consider special treatments such as pedestrian refuge islands, countdown signals, and others as described in Appendix B: Design Guidelines.
- Explore opportunities to eliminate lanes and reduce roadway widths where appropriate to accommodate bicycle traffic. Lane elimination strategies are typically called “road diets” and they improve multimodal travel conditions and manage vehicle speeds.



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Chapter 5:

Methodology for Prioritizing Projects



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Chapter 5: Methodology for Prioritizing Projects

The methodology utilized for identifying highest priority improvements included the following steps:

1. Identify all street segments lacking sidewalks
2. Rank all segments based on four factors: Generator Score, Attractor Score, Connectivity, and Affordability & Ease
3. Identify clusters of the highest-scoring street segments to develop candidate project areas
4. Rank the top projects based on a weighted average of improvement need for all street segments in candidate project areas

As mentioned in “Chapter 3: Existing Conditions,” a survey was conducted in which the existing pedestrian and bicycle networks were identified. Four factors were considered when prioritizing improvements to address gaps in the pedestrian or bicycling network. These four factors are:

1. Generator Score – This score is related to the propensity of a particular area to generate pedestrians or bicyclists. Census Block Groups (CBGs) were given generator values based on density, household income, and number of persons under 18 and over 60. Scores were placed on a 1 (worst) to 9 (best) scale.

2. Attractor Score – The attractor score is related to the propensity of a particular destination to be attractive for pedestrians and/or bicyclists. Examples of these likely destinations include schools, civic buildings, and parks. Each attractor was given a value and then a ¼ mile buffer was placed around it. The areas with the highest amount of attractors had the highest value scores. Scores were placed on a 1 (worst) to 10 (best) scale. This category has an added weighted factor of 2.

3. Connectivity – This is the number of existing sidewalks or bike lanes the project would connect to. This is important in order to promote sidewalk and bikeway continuity. There is no added weighted factor added to this category.

4. Affordability and Ease – Some projects are bound to be more costly and difficult to implement than others. The goal of this category is to try and identify the “lowest hanging fruit” of potential projects. The estimated cost of the project is based on factors such as cost of materials and construction, filling in of ditches, and overcoming barriers such as bridges. Scores were placed on a scale of 1 (worst) to 10 (best). This category has an added weighted factor of 2.

These four categories are explained in greater detail on the following pages.



Generators

Certain population segments are likely to produce people with higher propensities to bike and/or walk. While certain segments of the population might have the ability to drive to their destination, others do not have access to an automobile. These people must be supported by pedestrian infrastructure from their home all the way to their destination. Four spatial categories were considered by Census Block Group to determine a generator score.

1. Population Density - Census Block Groups with a higher density of residences are more likely to have a need for pedestrian support as more people will be demanding facilities. In order to classify those areas with the highest population density, Census 2010 data and existing GIS data were utilized. Population density was then multiplied by the percentage of households with persons under 18 and over 60.

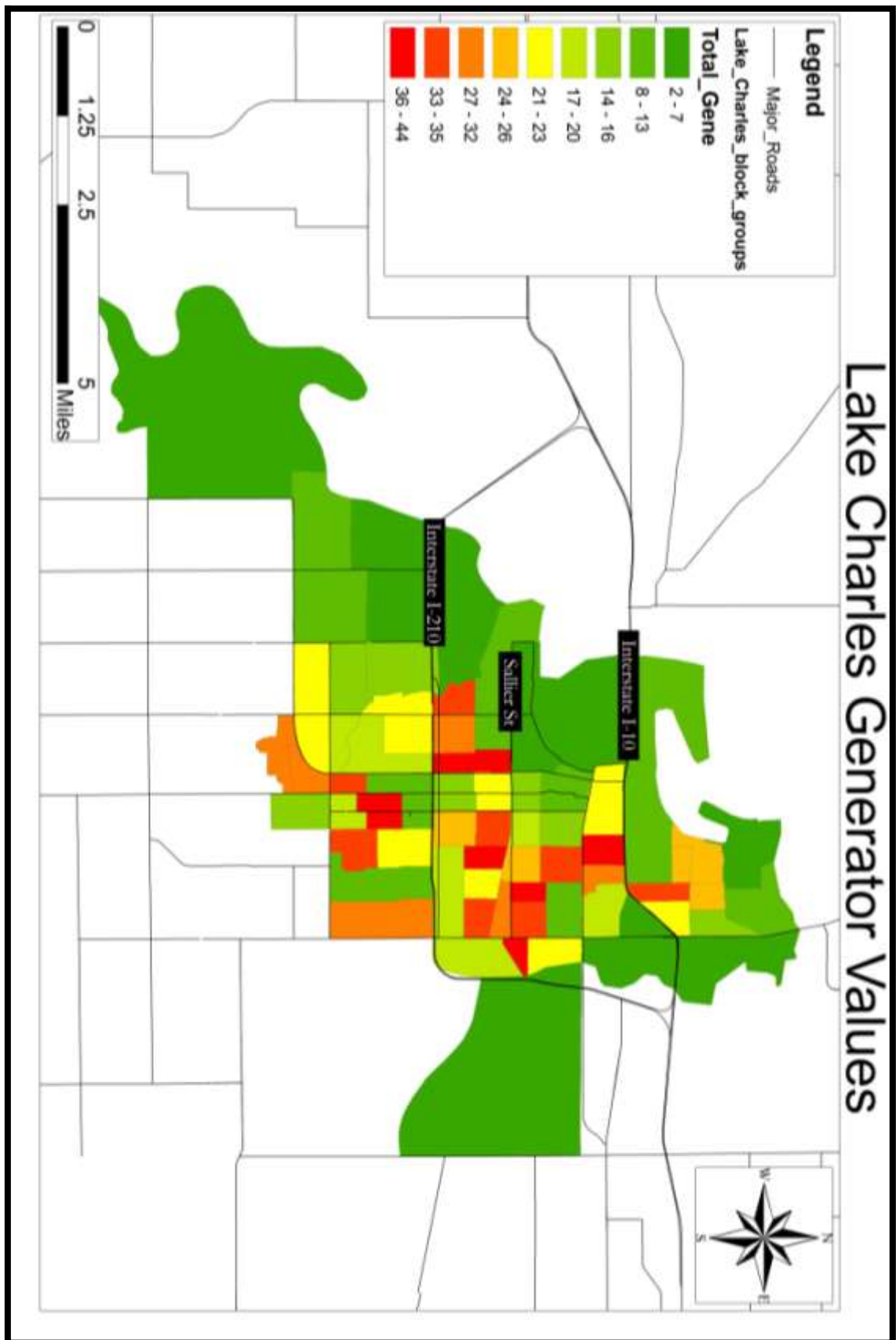
2. Percentage of Households with Persons under the Age of 18 - Other than public transportation, walking and biking are usually the only modes of transportation available to children since many children are not old enough to operate a motor vehicle. Furthermore, many children do not have the maturity to safely navigate a street network that was designed and built exclusively for automobile travel. Residential density values were multiplied by the percentage of households with persons under the age of 18 to receive a score.

3. Percentage of Households with Persons over the Age of 60 - Persons over the age of 60 are less likely to drive automobiles and are more likely to be mobility-impaired. Mobility-impaired residents require greater accessibility measures, especially within their immediate residential neighborhoods. Residential density values were multiplied by the percentage of households with persons over the age of 60 to receive a score.

4. Household Income - Lower income families are much more likely to rely on walking, biking, and public transportation for their travel needs, and also require greater accessibility measures within their neighborhoods. People in low income households are nearly twice as likely to walk as people in other income groups (Murakami and Young, 1997). Some residents may be dependent on these modes for travel to work and for achieving financial independence. The household income in each Census Block Group was listed and ranked from 1 (higher incomes) to 6 (lowest incomes) according to the area median household income (AMI). The lowest earning households will produce higher generator scores.



Figure 11: Pedestrian Attractor Map



Attractors

The primary reason people travel is to get to a destination. Certain destinations are more likely than others to attract people who would walk or bike. 11 categories of attractors have been selected and a brief description of why they were chosen is given. Each category has a corresponding value associated with it that ranks its propensity to attract bicycle and/or pedestrian travel; schools and public transit stops were ranked the highest. A “buffer” of ¼ mile, which is standard in walkability, was placed around each of the attractors. See Table 12 on the next page for a list of attractors and their corresponding value. An additional weighting of 2 was multiplied to the values. Figures 12 and 13 show the attractor locations and attractor values according to the scores within ¼ mile buffers of each attractor.

Schools

Many students walk or ride bicycles on the sidewalks to school. Students, particularly younger children, are among the most vulnerable pedestrians. Areas around schools, where student pedestrians congregate, require special attention in the form of pedestrian facilities and safety measures.

Parks

Parks attract recreational users of all ages. Pedestrian access and safety facilities are essential to park accessibility.

Recreation and Halls

These are buildings such as a community centers, pools, or assembly halls. These places are destinations for children and the elderly.

Libraries

The places of learning are top destinations for all age groups. Many low-income and elderly individuals use the library for internet access.

Recreational Facilities

These include community baseball, soccer, and football fields. Children use these frequently and games can be big draws for people of all ages.

Civic Buildings

Access to public buildings is a critical component to the ADA Title II. Administrative buildings, court houses and other public buildings provide a wide-range of services to children, senior adults, and mobility-impaired residents.

Hospitals

People recovering from illness or injury often have to get exercise to stimulate healing. Family members also like to take walks during times of distress. Offering sidewalks or trails around a hospital is important to promote safe walking.



Police Stations

Many people are issued tickets, and must go to the police station to resolve them or conduct community service. Also repeat offenders are less likely to own an automobile and are prone to needing access to alternative modes of transportation.

Post Office

These civic buildings are used by all segments of the adult population. Access from all modes of transportation should be promoted around these buildings.

Stadiums

These are destinations for large events for people of all ages and parking and traffic tends to be a challenge. Providing sidewalks and bike lanes would ease congestion and allow people without cars to have access to these events.

Fire Stations

These are usually located around places with residential development. While not many people would need to walk or bike to these destinations, the proximity to housing makes them a popular spot for new sidewalk construction.

Table 12: Attractor Values

Attractor	Score
Schools	5
Parks	4
Recreation & Halls	4
Libraries	4
Recreational Facilities	4
Civic Buildings	3
Hospitals	3
Police Stations	2
Post Office	2
Stadiums	2
Fire Stations	1

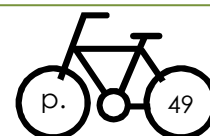


Figure 12: Lake Charles Attractor Locations

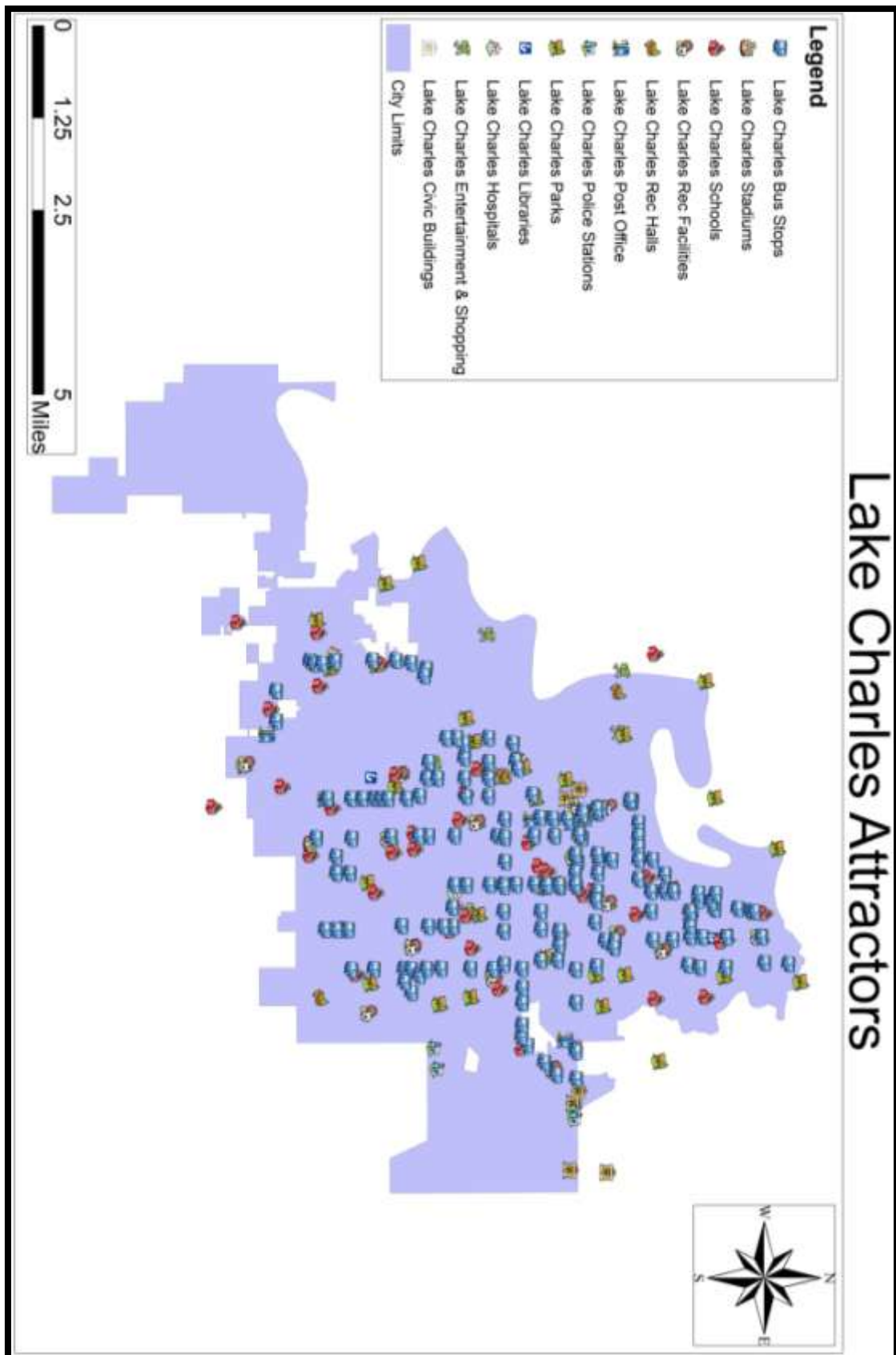
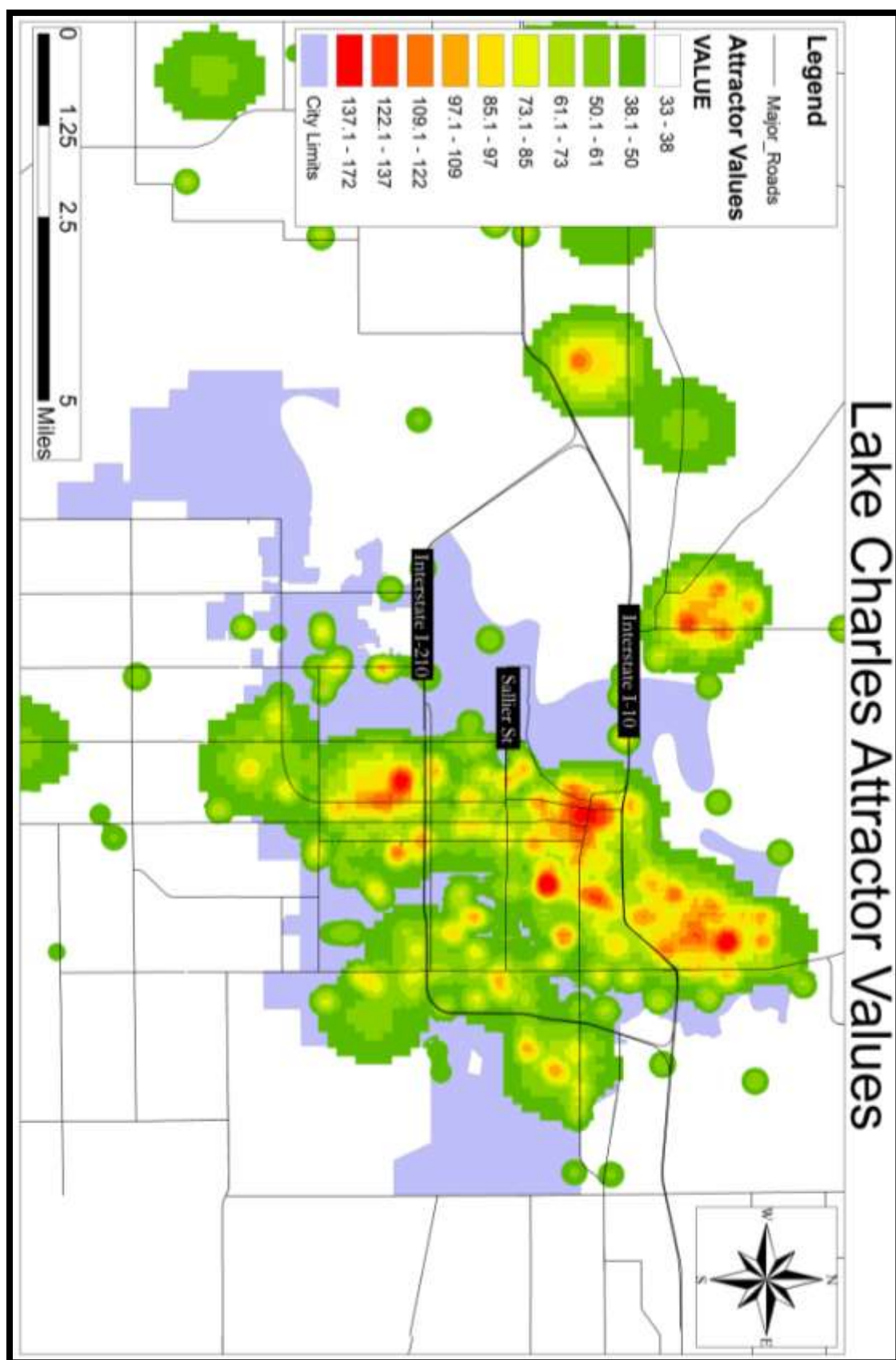


Figure 13: City of Lake Charles Attractor Map



Connectivity

The connectivity score is important to promote sidewalk and bicycle network continuity. Interruptions may require pedestrians to cross a busy arterial street midblock or require a bike to travel on a busy road while unprotected from traffic. The idea is to allow pedestrians and bicyclists the chance to get from their origin all the way to their destination safely.

For every existing sidewalk the proposed project would connect to, the project will receive a point. There is no limit on the amount of points a proposed sidewalk can receive for connectivity.

Figure 14: Sidewalk Ending Abruptly



Affordability

Pedestrian Infrastructure Improvements

Sidewalk construction costs can be defined on a general basis (cost per square foot). While this helps to estimate the cost of a project, things such as constructing new curbs and gutters or filling in open ditches can raise the cost significantly. In light of this, all recommended sidewalk projects were scored 1 (least affordable) to 10 (most affordable) based on a linear foot cost. The estimated cost of curb and gutter or closing open ditches was not incorporated into the affordability scores.



Bicycle Infrastructure Improvements

While some roads have sufficient width to accommodate bike lanes, many roads in Lake Charles are not suitable for those facilities at this time due to narrow lane widths and high traffic volumes or speeds. In many cases, a total redesign may be necessary to reduce the number of lanes, implement traffic calming measures, or widen the road sufficiently to provide adequate width to separate bicyclists from vehicle traffic.

Because governmental agencies work within a defined budget, costs are always an important factor to consider when choosing which projects to fund. To take this into account, the costs of each project have been estimated by considering certain factors which can affect the overall price. Examples of factors considered are cost of construction, filling in of existing ditches, and overcoming barriers such as bridges. Each project was ranked on a 1 (highest price) to 5 (lowest price) scale. In the final calculation, this category has an added weighted factor of 2.

The following construction cost assumptions are generalized and are based on national averages. They do not take into account right of way acquisition, administration costs, or local labor costs.

Highest Cost: Roadway widening, building bridges, and/or covering ditches

Redesigning the road will require a high level of preparation, including engineering analysis, design, and public involvement. In order to meet LADOTD standards, additional treatments may be necessary, such as installing a median or controlling driveway access. Construction costs could be high, due to new bridge construction or if open ditches flank the road and must be covered. Depending on these factors the general construction cost could be between \$800,000 to over \$1,000,000 per mile.

High Cost: Roadway widening and reconstructing sidewalks

Some roadways have sidewalks or parking lots built right up to the roadway. If the roadway is widened, all development flanking the proposed expansion will have to be reconstructed. The cost for these projects ranges from \$400,000 to \$800,000 per mile.

Moderate Cost: Widening roadway to provide sufficient width for bicycle lane

This may require major redesign. In addition, costs may increase if it is determined there is a need for drainage improvements prior to widening. Sometimes these projects can be conducted as part of routine resurfacing. The cost range for these projects range from \$200,000 to \$400,000 per mile.

Low Cost: Roadway redesign with signage and striping of a bicycle lane

Minor roadway/lane redesign may be required, but should be minimal. Most of the cost comes from planning and logistics with the cost of materials being very low (e.g., less than \$10,000 per linear mile for thermoplastic striping). Construction costs are much less than those for shoulder widening; from \$50,000 to \$100,000 per mile. This may be included as part of a routine resurfacing.



Lowest Cost: Installing bicycle route signage

Costs will include some design to determine signage locations, installation, and sign costs. Most signs are approximately \$150 and installation costs approximately \$100, for a total of \$250 per sign. Costs are generally under \$10,000 per mile.

Table 13: Affordability Index

Sidewalk Affordability Index		
Cost Estimate Range (Total Cost)	Cost Category	Cost Score
Under \$10,000	Very Low	10
\$10,000 - \$20,000	Very Low	9
\$20,000 - \$35,000	Low	8
\$35,000 - \$50,000	Low	7
\$50,000 - \$80,000	Moderate	6
\$80,000 - \$100,000	Moderate	5
\$100,000 - \$125,000	High	4
\$125,000 - \$150,000	High	3
\$150,000 - \$200,000	Very High	2
Above \$200,000	Very High	1
Bikeway Affordability Index		
Cost Estimate Range (Per Mile)	Cost Category	Cost Score
Under 50k	Very Low	5
Between 50k-100k	Low	4
Between 200k to 400k	Moderate	3
Between 400k to 800k	High	2
800k to over 1 million	Very High	1





Chapter 6:

Recommended Route Network



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Chapter 6: Recommended Route Network

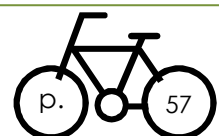
The City of Portland, Oregon recently conducted a study regarding the levels of walking in areas around the city. The study found that the provision of sidewalks could be used as an indicator for the likelihood of pedestrian activity. It is almost certain that a city that designs its roadways to accommodate bicycles and pedestrians will have higher levels of non-motorized transportation than a city that is designed solely for automobiles. This fact gives credence to the famous adage from the movie *Field of Dreams*, "If you build it, they will come."

Recommended improvement projects were identified by using three steps: aerial analysis, fieldwork surveys, and stakeholder input meetings. Projects include the filling in of gaps in the existing infrastructure network or new project areas identified as categories of concern. Projects are ranked by the four factors discussed in Chapter 5; generator, attractor, connectivity, and affordability scores.

While all projects have been ranked, ranking does not dictate the recommended order of construction or programming schedule. The programming schedule should take place on a year to year basis and should focus on projects that are related to the connectivity or completion of an area-wide system, fixes to safety concerns, and availability of funding. It is recommended that programming be a planning/public/political experience where all sides get a say in what areas are of the most concern to them.

In order to annually update the plan and adjust the prioritization, projects will be incorporated into the City of Lake Charles Capital Improvement Program. This will be the primary implementation method to keep track of completed and future projects. Recommended sidewalks, bicycle facilities, and trails will be separated by Council District (A through G) to be reviewed and to assist with the public planning process. At this time, City Council Representatives may add their own input into the prioritization list.

The recommendations and definitions in this chapter are intended to identify facilities that can be applied to the Lake Charles Metro Area to better accommodate non-motorized transportation modes. Bicycle facilities share roadways with automobiles, whereas pedestrian facilities and trails/paths often require grade separation from automobile traffic. In order to cover all of the specifics associated with various types of support systems; this chapter is split into three sections **Pedestrian Facilities**, **Bicycle Network**, and **Multi-Use Trails**.



Pedestrian Facilities

Sidewalks serve as the backbone of the non-motorized transportation network. They need to be placed close to the origin (homes) of users and continue uninterrupted to their likely destination (school, job, etc.). The ability for a pedestrian to make it safely from one destination to another depends on the continuity of the sidewalk network.

When the concrete suddenly ends, a pedestrian must make the decision of walking in the mud or walking in the street. Neither of these choices is desirable. Even worse, someone with disability has no choice at all. The absence of sidewalks creates a sometimes insurmountable barrier that prevents people from walking in their own neighborhood. Sidewalk accessibility and continuity should be a high priority.

The City of Lake Charles has many gaps in its existing sidewalk network; 147 new sidewalk segments are recommended. This list of recommended new projects includes gaps in existing networks and also suggests new sidewalks on major roads. The list does not include sidewalk recommendations in existing subdivisions/neighborhoods without any existing sidewalk network. The recommended solution is to enforce the sidewalk requirement for new subdivision development within the City of Lake Charles and work with Calcasieu Parish to have a “sphere of influence” clause in the development code that requires new residential or commercial developments to include sidewalks.

The recommended new projects list was broken up into four locations/areas throughout the City; North Lake Charles, Central Lake Charles, South-Central Lake Charles, and South Lake Charles. While some of the projects run through more than one location, they are only represented once on each area map. **The recommended new projects list is also divided up by Council District (See Chapter 7).**

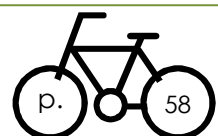
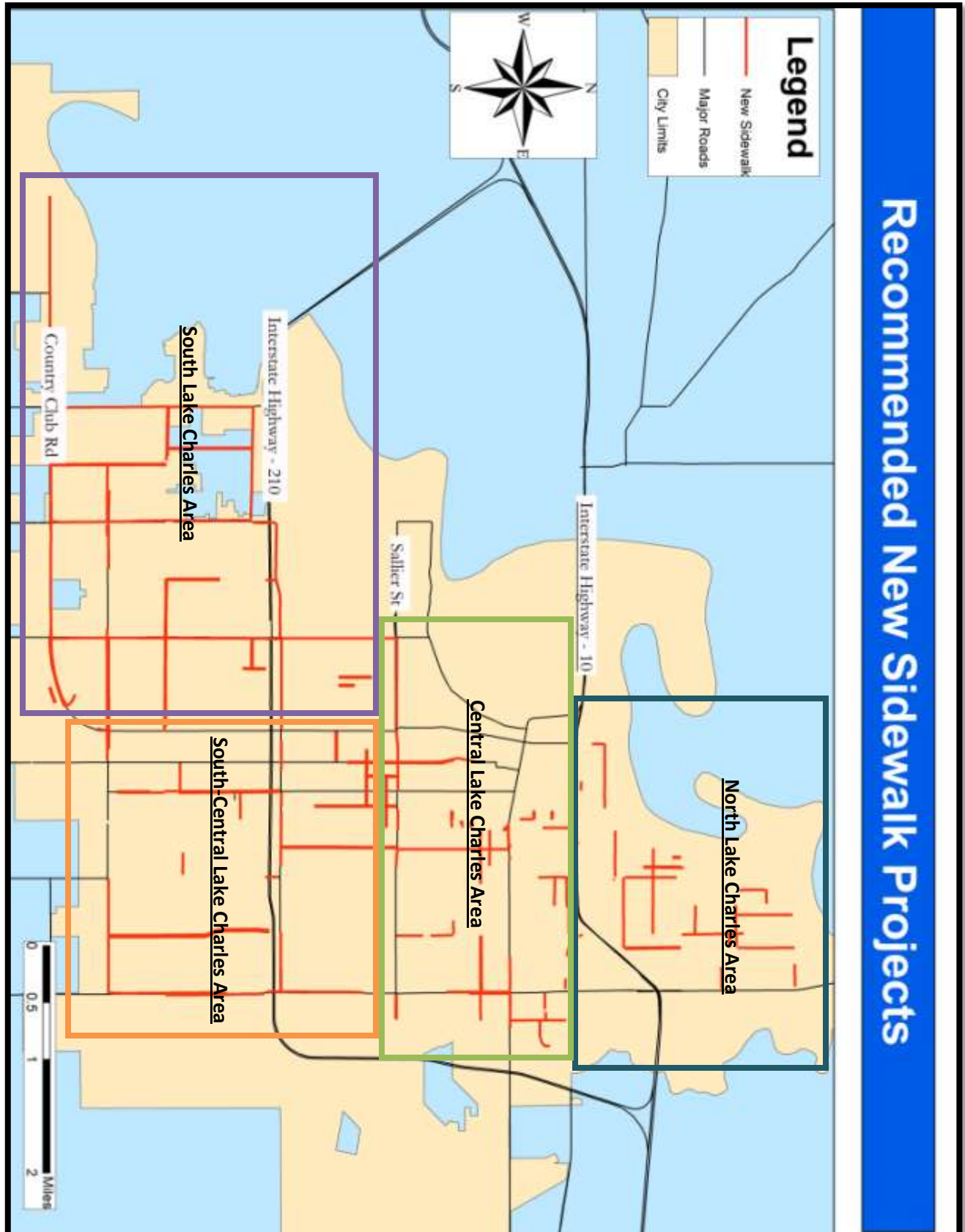


Figure 15: City-wide Proposed Sidewalk Network



North Lake Charles

This area of the City is very residential in nature. Some of the highest ranking projects are located here. It has numerous schools and community recreational facilities. Overall, it has a household income range on the lower end of the area median income (AMI), which could mean that many of its residents are without the use of a car and must bicycle, walk, or use public transit as their primary form of transportation. The sparse and non-contiguous nature of the sidewalk network in this area makes it a prime candidate for sidewalk expansion projects.

Table 14: North Lake Charles Recommended Sidewalks

Map Ref#	Sidewalk Name	Segment Extents	Priority Range	Length (Feet)
1	Fitzenreiter Rd South	N Lincoln St to Hwy 171	Moderate	1,049
2	Pear St. East	Medora St. to Fitzenreiter Rd.	High	2,650
3	N. Simmons St. East 2	Medora St. to Fitzenreiter Rd.	High	2,652
4	Courtney St. South	N Goos Blvd to N Prater St	Moderate	633
5	N. Goos Blvd. East	Courtney St to Existing Sidewalk	Moderate	1,288
6	N. Booker St. East	Moeling St. to Knapp St.	High	2,800
7	Medora St. North	N. Prater St. to N. Booker St.	High	1,295
8	Medora St. South	N Booker St to N Simmons St	High	605
9	Woodring St North	N Booker St to N Simmons St	High	595
10	Woodring St South	N Booker St to N Simmons St	High	595
11	Griffin St South	N MLK Hwy to Sally Mae St	High	1,030
12	Katherine St South	N Prater St to N Booker St	High	1,317
13	N. Lyon St. West	Commercial St. to Moeling St.	Moderate	410
14	N. Lyon St. East	Commercial St. to Moeling St.	Moderate	404
15	N. Blake St. West	Moeling St. to Geiffers St.	High	1,745
16	N. Blake St. East	Moeling St. to Geiffers St.	High	1,895
17	N. Shattuck St. East	Moeling St. to Opelousas St.	High	2,421
18	N. Simmons St. West	Moeling St. to Opelousas St.	High	2,607
19	N. Simmons St. East	Moeling St. to Opelousas St.	High	2,610
20	Cessford St. North	N. Prater St. to N. 1st Ave.	High	3,977
21	Opelousas St. South	N. Shattuck St. to N. Simmons St.	High	3,288
22	Fournet St North	N Enterprise Blvd to N Shattuck St	Moderate	2,137
23	Connecting Pedestrian Path	N. Shattuck to Fournet St.	High	83
24	Jackson St South	N Bank St to N Ryan St	Moderate	2,991
25	N. Ryan St East	S Railroad Ave to Jackson St	High	594
26	Church St. North	Ford St to Kirkman St	Moderate	429

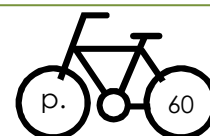
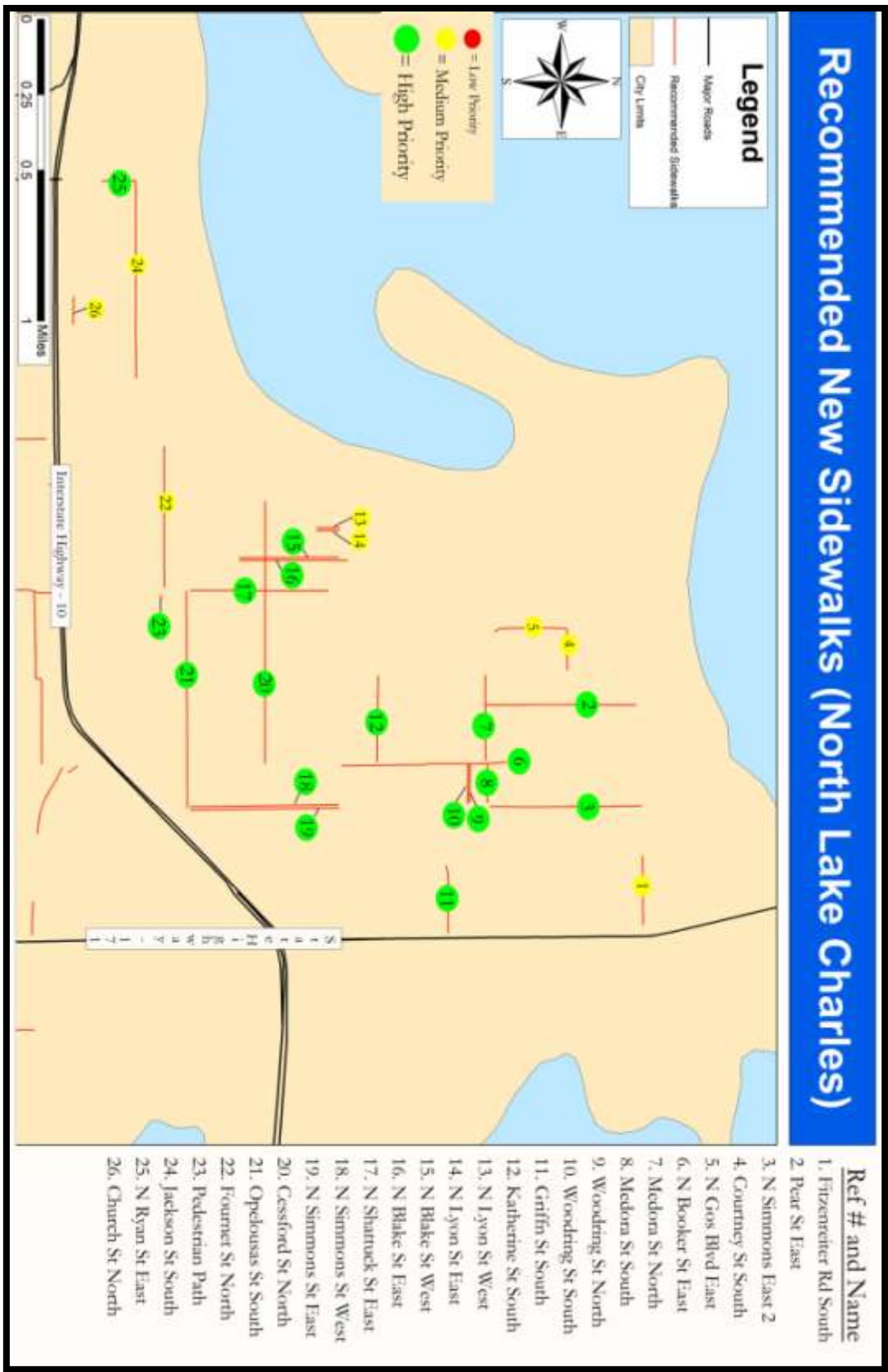


Figure 16: North Lake Charles Recommended Sidewalks



The following table is intended to be used as a quick reference for each suggested segment of the recommended sidewalk network.

(Map Reference #) Street Name: Segment	
Recommended Sidewalk Width:	Ranges between five to eight feet
Recommended Buffer Width:	Ranges between two to six feet
Priority Index Ranking:	Ranking based upon attractor, generator, connectivity, and affordability scores added together (lower the value, higher the priority)

Reason Selected

Discusses the importance and need for the project.

Cost

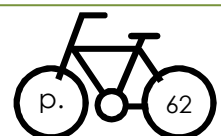
Estimates costs for recommended facility type.

Length

Estimates length of segment.

Funding Source

Identifies potential sources for funding the recommended improvements.



Map Ref #1:

Fitzenreiter Rd South: N Lincoln St to Hwy 171

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	89 (Moderate)

Reason Selected: Located within 1/4 mile to a school, will connect to other sidewalks

Cost: \$26,234/ **Length:** 1,049 feet

Funding Source: Safe Routes to School, General Fund

Map ref #2:

Pear St East: Medora St to Fitzenreiter Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	21 (High)

Reason Selected: Located within 1/4 mile to a school, will connect to other sidewalks

Cost: \$66,261/ **Length:** 2,650 feet

Funding Source: Safe Routes to School, General Fund

Map ref #3:

N Simmons St East 2: Medora St to Fitzenreiter Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	4 (High)

Reason Selected: Located next to a community center and within 1/4 mile a school

Cost: \$66,306/ **Length:** 2,652 feet

Funding Source: Safe Routes to School, General Fund

Map ref #4:

Courtney St South: N Goos Blvd to N Prater St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Located within 1/4 mile to a school, will connect to other sidewalks

Cost: \$15,814/ **Length:** 633 feet

Funding Source: General Fund

Map ref #5:

Goos Blvd East: Courtney St to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Extends a current sidewalk and connects to existing network

Cost: \$32,198/ **Length:** 1,288 feet

Funding Source: General Fund



Map Ref #6:

N Booker St East: Moeling St to Knapp St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Fills gap in existing sidewalk network

Cost: \$70,000/ **Length:** 2,800 feet

Funding Source: General Fund

Map ref #7:

Medora St North: N Prater St to N Booker St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 9 (High)

Reason Selected: Located within 1/4 mile to a school and connects two vital parts of existing network

Cost: \$32,371/ **Length:** 1,295 feet

Funding Source: Safe Routes to School, General Fund

Map ref #8:

Medora St South: N Booker St to n Simmons St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 2 (High)

Reason Selected: Located within 1/4 mile to a school and connects two vital parts of existing network

Cost: \$15,137/ **Length:** 605 feet

Funding Source: Safe Routes to School, General Fund

Map ref #9:

Woodring St North: N Booker St to N Simmons St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 6 (High)

Reason Selected: Will connect parts of existing network

Cost: \$14,875/ **Length:** 595 feet

Funding Source: General Fund

Map ref #10:

Woodring St South: N Booker St to N Simmons St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 6 (High)

Reason Selected: Will connect parts of existing network

Cost: \$14,875/ **Length:** 595 feet

Funding Source: General Fund



Map Ref #11:

Griffin St South: N MLK Hwy to Sally Mae St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 31 (High)

Reason Selected: Fill in gaps of existing network

Cost: \$25,750/ **Length:** 1,030 feet

Funding Source: General Fund

Map ref #12:

Katherine St South: N Prater St to N Booker St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Will connect to vital parts of existing sidewalk network

Cost: \$32,925/ **Length:** 1,317 feet

Funding Source: General Fund

Map ref #13:

N Lyon St West: Commercial St to Moeling St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 53 (Moderate)

Reason Selected: Located within 1/4 mile of an elementary school

Cost: \$10,242/ **Length:** 410 feet

Funding Source: Safe Routes to School, General Fund

Map ref #14:

N Lyon St East: Commercial St to Moeling St

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 63 (Moderate)

Reason Selected: Located within 1/4 mile of an elementary school

Cost: \$10,099/ **Length:** 404 feet

Funding Source: Safe Routes to School, General Fund

Map ref #15:

N Blake St West: Moeling St to Geiffers St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 45 (High)

Reason Selected: Located within 1/4 mile of a school

Cost: \$43,634/ **Length:** 1,745 feet

Funding Source: Safe Routes to School, General Fund



Map Ref #16:

N Blake St East: Moeling St to Geiffers St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 12 (High)

Reason Selected: Located within 1/4 mile of a school

Cost: \$47,364/ **Length:** 1,895 feet

Funding Source: Safe Routes to School, General Fund

Map ref #17:

N Shattuck St East: Moeling St to Opelousas St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Adjacent to an elementary school; will connect to existing sidewalk

Cost: \$60,517/ **Length:** 2,421 feet

Funding Source: Safe Routes to School, General Fund

Map ref #18:

N Simmons St West: Moeling St to Opelousas St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Will connect with numerous sidewalks

Cost: \$65,176/ **Length:** 2,607 feet

Funding Source: General Fund

Map ref #19:

N Simmons St East: Moeling St to Opelousas St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Will connect with numerous sidewalks

Cost: \$65,259/ **Length:** 2,610 feet

Funding Source: General Fund

Map ref #20:

Cessford St North: N Prater St to N 1st Ave

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 12 (High)

Reason Selected: Will connect with numerous sidewalks

Cost: \$99,424/ **Length:** 3,977 feet

Funding Source: General Fund



Map Ref #21:

Opelousas St South: N Shattuck St to N Simmons

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 15 (High)

Reason Selected: Located within 1/4 mile to a school, important collector road

Cost: \$82,194/ **Length:** 3,288 feet

Funding Source: Safe Routes to School, General Fund

Map ref #22:

Fournet St North: N Enterprise Blvd to N Shattuck

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 95 (Moderate)

Reason Selected: Connects with existing sidewalk network

Cost: \$53,425/ **Length:** 2,137 feet

Funding Source: General Fund

Map ref #23:

Pedestrian Connector: N Shattuck St to Fournet St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 42 (High)

Reason Selected: Located within 1/4 mile of a school, will serve as a shortcut between two main roads

Cost: \$2,076/ **Length:** 83 feet

Funding Source: Safe Routes to School, General Fund

Map ref #24:

Jackson St South: N Bank St to N Ryan St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 95 (Moderate)

Reason Selected: Connects with existing sidewalk network

Cost: \$74,775/ **Length:** 2,991 feet

Funding Source: General Fund

Map ref #25:

N Ryan St East: S Railroad Ave to Jackson St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 42 (High)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$14,850/ **Length:** 594 feet

Funding Source: General Fund



Map Ref #26:

Church St North: Ford St to Kirkman St

**Recommended
Sidewalk Width:** 5 feet

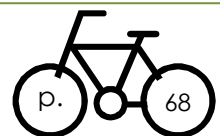
**Recommended
Buffer Width:** 2-4 feet

**Priority Index
Ranking:** 53 (Moderate)

Reason Selected: Will connect to an existing sidewalk network

Cost: \$10,725/ **Length:** 429 feet

Funding Source: General Fund



Central Lake Charles

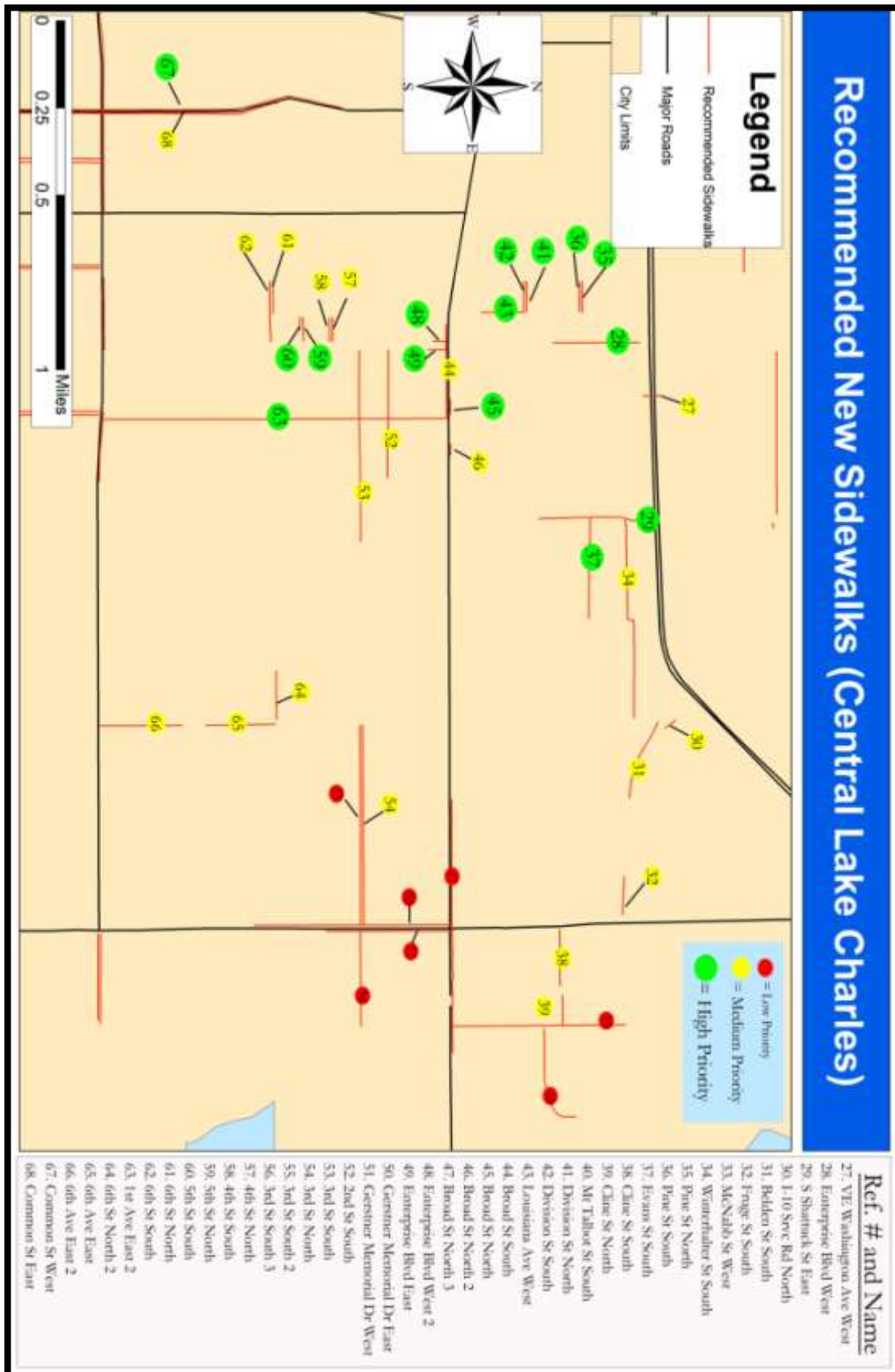
This area of the City includes the downtown and lakeshore and is a destination for commuters as well as people wanting to recreate by the lakeshore. The intensive commercial land uses makes this area a high priority for a complete sidewalk network.

Table 15: Central Lake Charles Recommended Sidewalks

Map Ref#	Sidewalk Name	Segment Extents	Priority Range	Length (Feet)
27	VE Washington Ave West Side	I-10 Service Rd to Belden St	Moderate	302
28	Enterprise Blvd. West Side	Mill St. to Belden St.	High	1,313
29	S Shattuck St East Side	Belden St to Carter St	High	1,652
30	I-10 Service. Rd North	Belden St to Albert St	Moderate	201
31	Belden St. South Side	Albert St to Existing Sidewalk	Moderate	1,112
32	Frugé St. South Side	Malcolm St to Hwy 14	Moderate	510
33	McNabb St West Side	Frugé St to Broad St	Low	2601
34	Winterhalter St. South Side	S Shattuck St to Albert St	Moderate	2,700
35	Pine St. North Side	Bank St to Louisiana Ave	High	418
36	Pine St. South Side	Bank St to Louisiana Ave	High	395
37	Evans St South Side	S Shattuck St to Prater St	High	1,340
38	Cline St South Side	Holmes St to S MLK Hwy	Moderate	746
39	Cline St North Side	Holmes St to S MLK Hwy	Moderate	391
40	Mt Talbot St South Side	McNabb St to Ball Fields	Low	1451
41	Division St North Side	Bank St to Louisiana Ave	High	420
42	Division St South Side	Bank St to Louisiana Ave	High	420
43	Louisiana Ave West Side	Division St to Clements St	High	644
44	Broad St. South Side	1st Ave and Louisiana Ave	Moderate	1,232
45	Broad St. North Side	VE Washington Ave to 1st Ave	High	204
46	Broad St. North Side 2	S Lyon St to Existing Sidewalk	Moderate	157
47	Broad St. North Side 3	8th Ave to McNabb St	Low	3,333
48	Enterprise Blvd. West Side 2	Broad St to Existing Sidewalk	High	191
49	Enterprise Blvd. East	Broad St to Existing Sidewalk	High	280
50	Gerstner Memorial Dr. East Side	Broad St to 4th St	Low	1,924
51	Gerstner Memorial Dr. West Side	Broad St to Existing Sidewalk	Low	2,996
52	2nd St South Side	Enterprise Blvd to 2nd Ave	Moderate	1,680
53	3rd St. South Side	Enterprise Blvd to 3rd Ave	Moderate	2,513
54	3rd St. North Side	6th Ave to Gerstner Memorial Dr.	Moderate	2,619
55	3rd St. South Side 2	6th Ave to Gerstner Memorial Dr.	Low	2,624
56	3rd St South Side 3	Gerstner Memorial Dr. to McNabb St	Low	1,246
57	4th St. North Side	Louisiana Ave to Enterprise Blvd	Moderate	316
58	4th St. South Side	Louisiana Ave to Enterprise Blvd	Moderate	323
59	5th St. North Side	Louisiana Ave to Enterprise Blvd	High	317
60	5th St. South Side	Louisiana Ave to Existing Sidewalk	High	185
61	6th St North Side	Bank St to Louisiana Ave	Moderate	429
62	6th St South Side	Bank St to Enterprise Blvd	Moderate	798
63	1st Ave. East Side 2	Broad St to 12th St	High	5,280
64	6th St. North Side 2	5th Ave to 6th Ave	Moderate	647
65	6th Ave. East Side	6th St to 9th St	Moderate	1,058
66	6th Ave. East Side 2	Legion St to 12th St	Moderate	1,250
67	Common St. West Side	Clarence St to 17th St	High	5,943
68	Common St. East Side	6th St to 17th St	Moderate	5,038



Figure 17: Central Lake Charles Recommended Sidewalks



Map Ref #27:

VE Washington Ave West: I-10 Service to Belden

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$7,543/ **Length:** 302 feet

Funding Source: General Fund

Map ref #28:

Enterprise Blvd West: Mill St to Belden St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	15 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$39,375/ **Length:** 1,313 feet

Funding Source: General Fund

Map ref #29:

S Shattuck St East: Belden St to Carter St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	9 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$49,560/ **Length:** 1,652 feet

Funding Source: General Fund

Map ref #30:

I-10 Service Rd North: Belden St to Albert St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$5,016/ **Length:** 201 feet

Funding Source: General Fund

Map ref #31:

Belden St South: Albert St to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$27,810/ **Length:** 1,112 feet

Funding Source: General Fund



Map Ref #32:

Fruge St South: Malcolm St to Hwy 14

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	109 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$12,749/ **Length:** 510 feet

Funding Source: General Fund

Map ref #33:

McNabb St West: Fruge St to Broad St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Will connect to existing sidewalk network

Cost: \$65,025/ **Length:** 2,601 feet

Funding Source: General Fund

Map ref #34:

Winterhalter St South: S Shattuck St to Albert St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$67,500/ **Length:** 2,700 feet

Funding Source: General Fund

Map ref #35:

Pine St North: Bank St to Louisiana Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	31 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$10,453/ **Length:** 418 feet

Funding Source: General Fund

Map ref #36:

Pine St South: Bank St to Louisiana Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	31 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$9,871/ **Length:** 395 feet

Funding Source: General Fund



Map Ref #37:

Evans St South: S Shattuck St to Prater St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	42 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$33,500/ **Length:** 1,340 feet

Funding Source: General Fund

Map ref #38:

Cline St South: Holmes St to S MLK Hwy

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$18,650/ **Length:** 746 feet

Funding Source: General Fund

Map ref #39:

Cline St North: Holmes St to S MLK Hwy

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Will connect to existing sidewalk network facility

Cost: \$9,775/ **Length:** 391 feet

Funding Source: General Fund

Map ref #40:

Mt Talbot St: McNabb St to Baseball Fields

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	127 (Low)

Reason Selected: Will connect to existing sidewalk network

Cost: \$36,275/ **Length:** 1,451 feet

Funding Source: General Fund

Map ref #41:

Division St North: Bank St to Louisiana Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	4 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$10,500/ **Length:** 420 feet

Funding Source: General Fund



Map Ref #42:

Division St South: Bank St to Louisiana Ave

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 6 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$10,500/ **Length:** 420 feet

Funding Source: General Fund

Map ref #43:

Louisiana Ave West: Division St to Clements St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 3 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$16,100/ **Length:** 644 feet

Funding Source: General Fund

Map ref #44:

Broad St South: 1st Ave to Louisiana Ave

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 63 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$39,376/ **Length:** 1,232 feet

Funding Source: General Fund

Map ref #45:

Broad St North: VE Washington Ave to 1st Ave

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 42 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$6,121/ **Length:** 204 feet

Funding Source: General Fund

Map ref #46:

Broad St North 2: S Lyon St to Existing Sidewalk

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 53 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$4,714/ **Length:** 157 feet

Funding Source: General Fund



Map Ref #47:

Broad St North 3: 8th Ave to McNabb St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$99,975/ **Length:** 3,333 feet

Funding Source: General Fund

Map ref #48:

Enterprise Blvd West: Broad to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	42 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$5,734/ **Length:** 191 feet

Funding Source: General Fund

Map ref #49:

Enterprise Blvd East: Broad St to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	31 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$8,406/ **Length:** 280 feet

Funding Source: General Fund

Map ref #50:

Gerstner Memorial Dr. East: Broad St to 4th St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	124 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$57,733/ **Length:** 1,924 feet

Funding Source: General Fund

Map ref #51:

Gerstner Mem. West: Broad to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	124 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$89,873/ **Length:** 2,996 feet

Funding Source: General Fund



Map Ref #52:2nd St South: Enterprise Blvd to 2nd Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community

Cost: \$42,000/ **Length:** 1,680 feet

Funding Source: General Fund

Map ref #53:3rd St South: Enterprise Blvd to 3rd Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Within 1/4 mile to a school; will connect to an existing sidewalk; will connect different parts of community together

Cost: \$62,834/ **Length:** 2,513 feet

Funding Source: Safe Routes to School, General Fund

Map ref #54:3rd St North: 6th Ave to Gerstner Memorial Dr.

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	113 (Moderate)

Reason Selected: Within 1/4 mile to a school; will connect to an existing sidewalk; will connect different parts of community together

Cost: \$65,471/ **Length:** 2,619 feet

Funding Source: Safe Routes to School, General Fund

Map ref #55:3rd St South 2: 6th Ave to Gerstner Memorial Dr.

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Within 1/4 mile to a school; will connect different parts of community together

Cost: \$65,597/ **Length:** 2,624 feet

Funding Source: Safe Routes to School, General Fund

Map ref #56:3rd St South 3: Gerstner Mem Dr. to McNabb St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$31,150/ **Length:** 1,246 feet

Funding Source: General Fund



Map Ref #57:4th St North: Louisiana Ave to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Within 1/4 mile to a school; will connect different parts of community together

Cost: \$7,909/ **Length:** 316 feet

Funding Source: Safe Routes to School, General Fund

Map ref #58:4th St South: Louisiana Ave to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Within 1/4 mile to a school; will connect different parts of community together

Cost: \$8,069/ **Length:** 323 feet

Funding Source: Safe Routes to School, General Fund

Map ref #59:5th St North: Louisiana Ave to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Within 1/4 mile to a school; will connect different parts of community together

Cost: \$7,931/ **Length:** 317 feet

Funding Source: Safe Routes to School, General Fund

Map ref #60:5th St South: Louisiana Ave to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Within 1/4 mile to a school; will connect different parts of community together

Cost: \$4,626/ **Length:** 185 feet

Funding Source: Safe Routes to School, General Fund

Map ref #61:6th St North: Bank St to Louisiana Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Within 1/4 mile to a school; will connect to an existing sidewalk

Cost: \$10,730/ **Length:** 429 feet

Funding Source: Safe Routes to School, General Fund



Map Ref #62:

6th St South: Bank St to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$19,945/ **Length:** 798 feet

Funding Source: General Fund

Map ref #63:

1st Ave East 2: Broad St to 12th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	1 (High)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$132,000/ **Length:** 5,280 feet

Funding Source: General Fund

Map ref #64:

6th St North 2: 5th Ave to 6th Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	104 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$16,168/ **Length:** 647 feet

Funding Source: General Fund

Map ref #65:

6th Ave East: 6th St to 9th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$26,454/ **Length:** 1,058 feet

Funding Source: General Fund

Map ref #66:

6th Ave East 2: Legion St to 12th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$31,245/ **Length:** 1,250 feet

Funding Source: General Fund



Map Ref #67:

Common St West: Clarence St to 17th St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 15 (High)

Reason Selected: Important Arterial/Collector roadway

Cost: \$148,578/ **Length:** 5,943 feet

Funding Source: General Fund

Map ref #68:

Common St. East Side: 6th St. to 17th St.

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 63 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$125,942/ **Length:** 5,038 feet

Funding Source: General Fund



South-Central Lake Charles

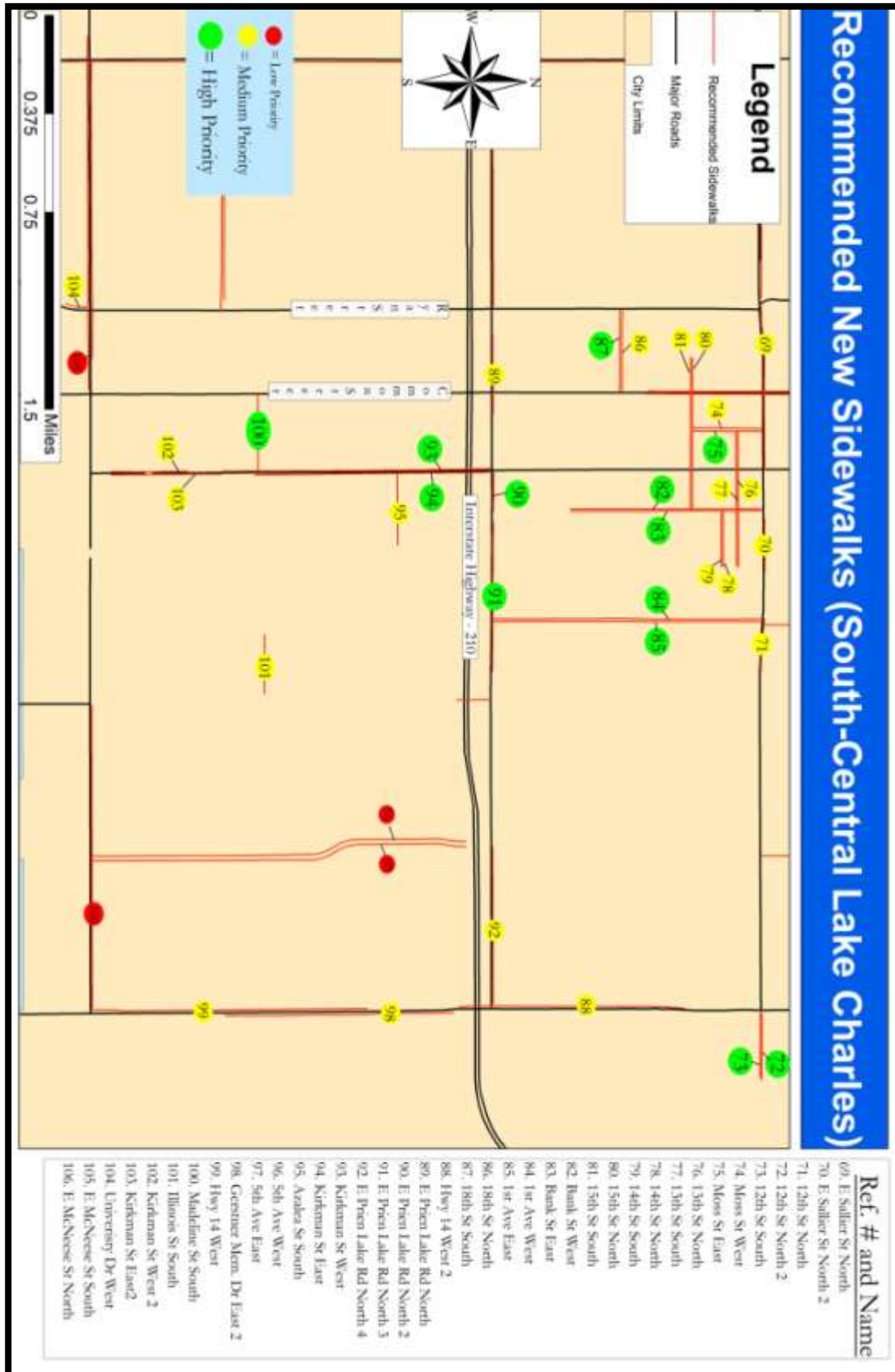
This area of the City is primarily residential in nature, but does include some commercial and industrial uses. It has numerous schools and many main roads that have gaps in their network. Overall, it has a household income range at the center of the AML, which could mean that many of its residents have automobiles. This area of the City has the potential of having a few multi-use paths to create a non-motorized network.

Table 16: South-Central Lake Charles Recommended Sidewalks

Map Ref#	Sidewalk Name	Segment Extents	Priority Range	Length (Feet)
69	E. Sallier St. North Side	Ryan St to Kirkman St	Moderate	2,868
70	E. Sallier St. North Side 2	Bank St to Enterprise Blvd	Moderate	953
71	12th St. North Side	1st Ave to 2nd Ave	Moderate	929
72	12th St. North Side 2	Gerstner Memorial Dr. to Russell St	High	1,181
73	12th St. South Side	Gerstner Memorial Dr. to Russell St	High	1,140
74	Moss St. West Side	12th St. to 15th St.	Moderate	1,386
75	Moss St. East Side	12th St. to 15th St.	High	1,384
76	13th St. North Side	Enterprise Blvd. to Moss St.	Moderate	2,365
77	13th St South Side	Moss St. to Enterprise Blvd.	Moderate	2,363
78	14th St North Side	Bank St. to Enterprise Blvd.	Moderate	977
79	14th St South Side	Bank St. to Enterprise Blvd.	Moderate	973
80	15th St. North Side	Hodges St to Bank St	Moderate	2,637
81	15th St. South Side	Hodges St to Bank St	Moderate	2,641
82	Bank St. West Side	Gulf St. to 12th St.	High	3,840
83	Bank St. East Side	Gulf St. to 12th St.	High	3,830
84	1st Ave. West Side	12th St to E Prien Lake Rd	High	5,369
85	1st Ave. East Side	12th St to E Prien Lake Rd	High	5,362
86	18th St. North Side	Ryan St. to Common St.	Moderate	1,406
87	18th St. South Side	Ryan St. to Common St.	High	1,409
88	Hwy 14 West Side 2	Rail Road Tracks to Taylor St.	Moderate	4,509
89	E Prien Lake Rd North Side	Existing Sidewalk to Existing Sidewalk	Moderate	1,393
90	E Prien Lake Rd North Side 2	Kirkman St to Existing Sidewalk	High	695
91	E Prien Lake Rd North Side 3	Burton St to 2nd Ave.	High	2,587
92	E Prien Lake Rd North Side 4	5th Ave to Hwy 14	Moderate	2,754
93	Kirkman St West Side	Prien Lake Rd to Walters St	High	5,358
94	Kirkman St East Side	Prien Lake Rd to Madeline St	High	4,698
95	Azalea St South	Kirkman St to Louisiana Ave	Moderate	1,300
96	5th Ave West Side	College St to E. McNeese St	Low	7,537
97	5th Ave. East Side	College St to E. McNeese St	Low	7,542
98	Gerstner Memorial Dr. East	E Prien Lake Rd to McNeese Farm Rd	Moderate	4,580
99	Hwy 14 West Side	Coolidge St to McNeese St	Moderate	3,868
100	Madeline St South Side	Common St to Kirkman St	High	1,310
101	Illinois St. South Side	Brentwood St. to E. Walton St.	Moderate	1,038
102	Kirkman St West Side 2	Gayle St to McCall St	Moderate	1,547
103	Kirkman St East Side 2	Walters St to McCall St	Moderate	1,213
104	University Dr. West Side	McNeese St to Existing Sidewalk	Moderate	453
105	E. McNeese St South Side	Ryan St to Common St	Low	1,363
106	E McNeese St. North Side	Gerstner Memorial Dr. to Existing	Low	5,297



Figure 18: South-Central Lake Charles Recommended Sidewalks



Map Ref #69:

E Sallier St North: Ryan St to Kirkman St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Located within 1/4 mile to a high school

Cost: \$71,709/ **Length:** 2,868 feet

Funding Source: Safe Routes to School, General Fund

Map ref #70:

E Sallier St North 2: Bank St to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$23,823/ **Length:** 953 feet

Funding Source: General Fund

Map ref #71:

12th St North: 1st Ave to 2nd Ave

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to existing sidewalk network

Cost: \$23,229/ **Length:** 929 feet

Funding Source: General Fund

Map ref #72:

12th St North 2: Gerstner Mem. Dr. to Russell St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Located within 1/4 mile of a school

Cost: \$29,528/ **Length:** 1,181 feet

Funding Source: Safe Routes to School, General Fund

Map ref #73:

12th St South: Gerstner Mem. Dr. to Russell St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Located within 1/4 mile of elementary school; will connect to existing sidewalk network

Cost: \$28,509/ **Length:** 1,140 feet

Funding Source: Safe Routes to School, General Fund



Map Ref #74:Moss St West: 12th St to 15th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to existing sidewalk network**Cost:** \$34,649/ **Length:** 1,386 feet**Funding Source:** General Fund**Map ref #75:**Moss St East: 12th St to 15th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Will connect to existing sidewalk network**Cost:** \$34,595/ **Length:** 1,384 feet**Funding Source:** General Fund**Map ref #76:**13th St North: Enterprise Blvd to Moss St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to existing sidewalk network**Cost:** \$59,124/ **Length:** 2,365 feet**Funding Source:** General Fund**Map ref #77:**13th St South: Moss St to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to existing sidewalk network**Cost:** \$59,068/ **Length:** 2,363 feet**Funding Source:** General Fund**Map ref #78:**14th St North: Bank St to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Will connect to existing sidewalk network**Cost:** \$24,434/ **Length:** 977 feet**Funding Source:** General Fund

Map Ref #79:14th St South: Bank St to Enterprise Blvd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Will connect communities that are currently without a pedestrian connection

Cost: \$24,326/ **Length:** 973 feet

Funding Source: General Fund

Map ref #80:15th St North: Hodges St to Bank St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Will connect existing sidewalk network

Cost: \$65,936/ **Length:** 2,637 feet

Funding Source: General Fund

Map ref #81:15th St South: Hodges St to Bank St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Will connect existing sidewalk network

Cost: \$66,034/ **Length:** 2,641 feet

Funding Source: General Fund

Map ref #82:Bank St West: Gulf St to 12th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	9 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$96,012/ **Length:** 3,840 feet

Funding Source: General Fund

Map ref #83:Bank St East: Gulf St to 12th St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	15 (High)

Reason Selected: Will connect to existing sidewalk network

Cost: \$95,745/ **Length:** 3,830 feet

Funding Source: General Fund



Map Ref #84:1st Ave West: 12th St to E Prien Lake Rd**Recommended Sidewalk Width:** 5 feet**Recommended Buffer Width:** 2-4 feet**Priority Index Ranking:** 31 (High)**Reason Selected:** Part of a loop that will connect many parts of the Oak Park community; adjacent to post office**Cost:** \$134,237/ **Length:** 5,369 feet**Funding Source:** General Fund**Map ref #85:**1st Ave East: 12th St to E Prien Lake Rd**Recommended Sidewalk Width:** 5 feet**Recommended Buffer Width:** 2-4 feet**Priority Index Ranking:** 42 (High)**Reason Selected:** Will connect to an existing sidewalk**Cost:** \$134,043/ **Length:** 5,362 feet**Funding Source:** General Fund**Map ref #86:**18th St North: Ryan St to Common St**Recommended Sidewalk Width:** 5 feet**Recommended Buffer Width:** 2-4 feet**Priority Index Ranking:** 53 (Moderate)**Reason Selected:** Within ¼ mile of an elementary school; will connect numerous local roads**Cost:** \$35,154/ **Length:** 1,406 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #87:**18th St South: Ryan St to Common St**Recommended Sidewalk Width:** 5 feet**Recommended Buffer Width:** 2-4 feet**Priority Index Ranking:** 31 (High)**Reason Selected:** Within ¼ mile of an elementary school; will connect to existing sidewalk**Cost:** \$35,235/ **Length:** 1,409 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #88:**

Hwy 14 West 2: Rail Road Tracks to Taylor St

Recommended Sidewalk Width: 6 feet**Recommended Buffer Width:** 4-6 feet**Priority Index Ranking:** 89 (Moderate)**Reason Selected:** Important Collector/Arterial roadway**Cost:** \$135,270/ **Length:** 4,509 feet**Funding Source:** General Fund

Map Ref #89:

E Prien Lake Rd North: Connecting sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$41,790/ **Length:** 1,393 feet

Funding Source: General Fund

Map ref #90:

E Prien Lake Rd North 2:Kirkman to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	31 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$20,850/ **Length:** 695 feet

Funding Source: General Fund

Map ref #91:

E Prien Lake Rd North 3: Burton St to 2nd Ave

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	42 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$77,610/ **Length:** 2,587 feet

Funding Source: General Fund

Map ref #92:

E Prien Lake Rd North 4: 5th Ave to Hwy 14

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	104 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$82,620/ **Length:** 2,754 feet

Funding Source: General Fund

Map ref #93:

Kirkman St West: Prien Lake Rd to Walters St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	31 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$160,740/ **Length:** 5,358 feet

Funding Source: General Fund



Map Ref #94:

Kirkman St East: Prien Lake Rd to Madeline St

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 15 (High)

Reason Selected: Important Collector/Arterial roadway

Cost: \$140,940/ **Length:** 4,698 feet

Funding Source: General Fund, SAFETEA-LU

Map ref #95:

Azalea St South: Kirkman St to Louisiana Ave

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 63 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$32,500/ **Length:** 1,300 feet

Funding Source: General Fund

Map ref #96:

5th Ave West: College St to E McNeese St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 132 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$188,418/ **Length:** 7,537 feet

Funding Source: General Fund, SAFETEA-LU

Map ref #97:

5th Ave East: College St to E McNeese St

Recommended Sidewalk Width: 5 feet

Recommended Buffer Width: 2-4 feet

Priority Index Ranking: 132 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$188,500/ **Length:** 7,542 feet

Funding Source: General Fund, SAFETEA-LU

Map ref #98:

Gerstner Memorial Dr. East 2: E Prien Lake Rd to McNeese Farm Rd

Recommended Sidewalk Width: 6 feet

Recommended Buffer Width: 4-6 feet

Priority Index Ranking: 89 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$137,400/ **Length:** 4,580 feet

Funding Source: General Fund



Map Ref #99:

Hwy 14 West: Coolidge St to McNeese St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	109 (Moderate)

Reason Selected: Located adjacent to a school; will connect different parts of community**Cost:** \$116,038/ **Length:** 3,868 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #100:**

Madeline St South: Common S to Kirkman St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	12 (High)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$32,750/ **Length:** 1,310 feet**Funding Source:** General Fund**Map ref #101:**

Illinois St South: Brentwood St to E Walton St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$25,951/ **Length:** 1,038 feet**Funding Source:** General Fund**Map ref #102:**

Kirkman St West 2: Gayle St to McCall St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	104 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$46,410/ **Length:** 1,547 feet**Funding Source:** General Fund**Map ref #103:**

Kirkman St East 2: Walters St to McCall St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$36,390/ **Length:** 1,213 feet**Funding Source:** General Fund

Map Ref #104:

University Dr. West: McNeese St to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	89 (Moderate)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$11,327/ **Length:** 453 feet

Funding Source: General Fund

Map ref #105:

E McNeese St South: Ryan St to Common St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$40,787/ **Length:** 1,363 feet

Funding Source: General Fund

Map ref #106:

E McNeese St North: Gerstner Memorial Dr. to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	136 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community together

Cost: \$158,924/ **Length:** 5,297 feet

Funding Source: General Fund



South Lake Charles

This area of the City is the most sparsely populated and has the least number of attractors and the least amount of sidewalks. This creates a great opportunity for the City to build a sidewalk and bicycle network that fits in with the surrounding neighborhood. While some of the projects suggested in this area are important and would connect this area with the rest of the City, the long distances necessary to complete a reasonable network make affordability a concern.

Table 17: South Lake Charles Recommended Sidewalks

Map Ref#	Sidewalk Name	Segment Extents	Priority Range	Length (Feet)
107	W. Sallier St. North Side	Lake St to Ryan St	Moderate	4,148
108	Lake St. East Side	W Sallier St to Country Club Rd	Moderate	16,074
109	Cypress St West Side	Louie St to W 18th St	High	1,547
110	Cypress St East Side	Louie St to W 18th St	High	1,547
111	Hazel St West Side	W 18th St to Penn St	High	755
112	Hazel St East Side	W 18th St to Penn St	High	755
113	W. Prien Lake Rd. South Side 2	Lake St to Nelson Rd	Low	5,289
114	Holly Hill Rd East Side 2	W Prien Lake Rd to Existing	Low	477
115	Prien Lake Rd. North Side	Lake St to Ryan St	Moderate	4,249
116	Nelson Rd. East Side	W Prien Lake Rd to W Prien Lake	Low	1,101
117	W. Prien Lake Rd South Side	Nelson Rd to W Prien Lake Rd	Low	5,226
118	W. Prien Lake Rd. East Side	W Prien Lake Rd to W Sale Rd	Low	3,929
119	Burton Ln. West Side	W Prien Lake Rd to W Sale Rd	Low	3,933
120	Burton Ln. East Side	W Prien Lake Rd to W Sale Rd	Low	3,938
121	Nelson Rd. West Side	W Prien Lake Rd to Country	Moderate	9,271
122	W. LaGrange St. North Side	Lake St to Creole St	Moderate	1,384
123	W. LaGrange St. South Side	Lake St to Creole St	Moderate	1,379
124	Creole St. West Side	W College St to Julius St	Moderate	1,094
125	Creole St. East Side	W College St to Julius St	Moderate	1,088
126	Holly Hill Rd. West Side	Dumbarton Rd to W Sale Rd	Low	2,481
127	Holly Hill Rd. East Side	Dumbarton Rd to W Sale Rd	Low	2,472
128	W. Sale Rd North Side	W Prien Lake Rd to Existing	Low	2,281
129	W. Sale Rd South Side	W Prien Lake Rd to Existing	Low	2,483
130	W. Sale Rd. North Side 2	Holly Hill Rd to Ryan St	Moderate	6,913
131	W. Sale Rd. South Side 2	Holly Hill Rd to Ryan St	Moderate	7,114
132	Ihles Rd. East Side	W Sale Rd to Country Club Rd	Low	5,442
133	Weaver Rd. West Side	W Sale Rd to Country Club Rd	Low	5,369
134	Weaver Rd. East Side	W Sale Rd to Country Club Rd	Low	5,374
135	W. McNeese St. South Side	Weaver Rd to Nelson Rd	Low	2,612
136	W. McNeese St. North Side	Existing Sidewalk to Nelson Rd	Low	1,441
137	W. McNeese St. North 2	Eileen St to Nelson St	Moderate	2,108
138	W. McNeese St. South Side 2	Nelson St to Existing Sidewalk	Moderate	527
139	W. McNeese St. South Side 3	Lake St to Young Ln	Moderate	406
140	W. McNeese St. North Side 3	Lake St to Ryan St	Low	5,202
141	W. McNeese St South Side 4	Lake St to Ryan St	Low	4,263
142	Jefferson Dr. North Side	Existing Sidewalk to University Dr.	Moderate	685
143	University Dr. South Side	Lake St to Jefferson Dr.	Moderate	3,229
144	Overhill Dr. North Side	Central Pkwy to Existing	High	789
145	Overhill Dr. South Side	Central Pkwy to Existing	High	789
146	Lisle Peters Rd. North Side	Big Lake Rd to Riverview Ln	Low	4,512
147	Country Club Rd. North Side	Jefferson Dr. to Big Lake Rd	Low	19,260

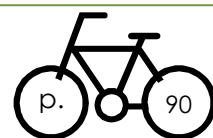
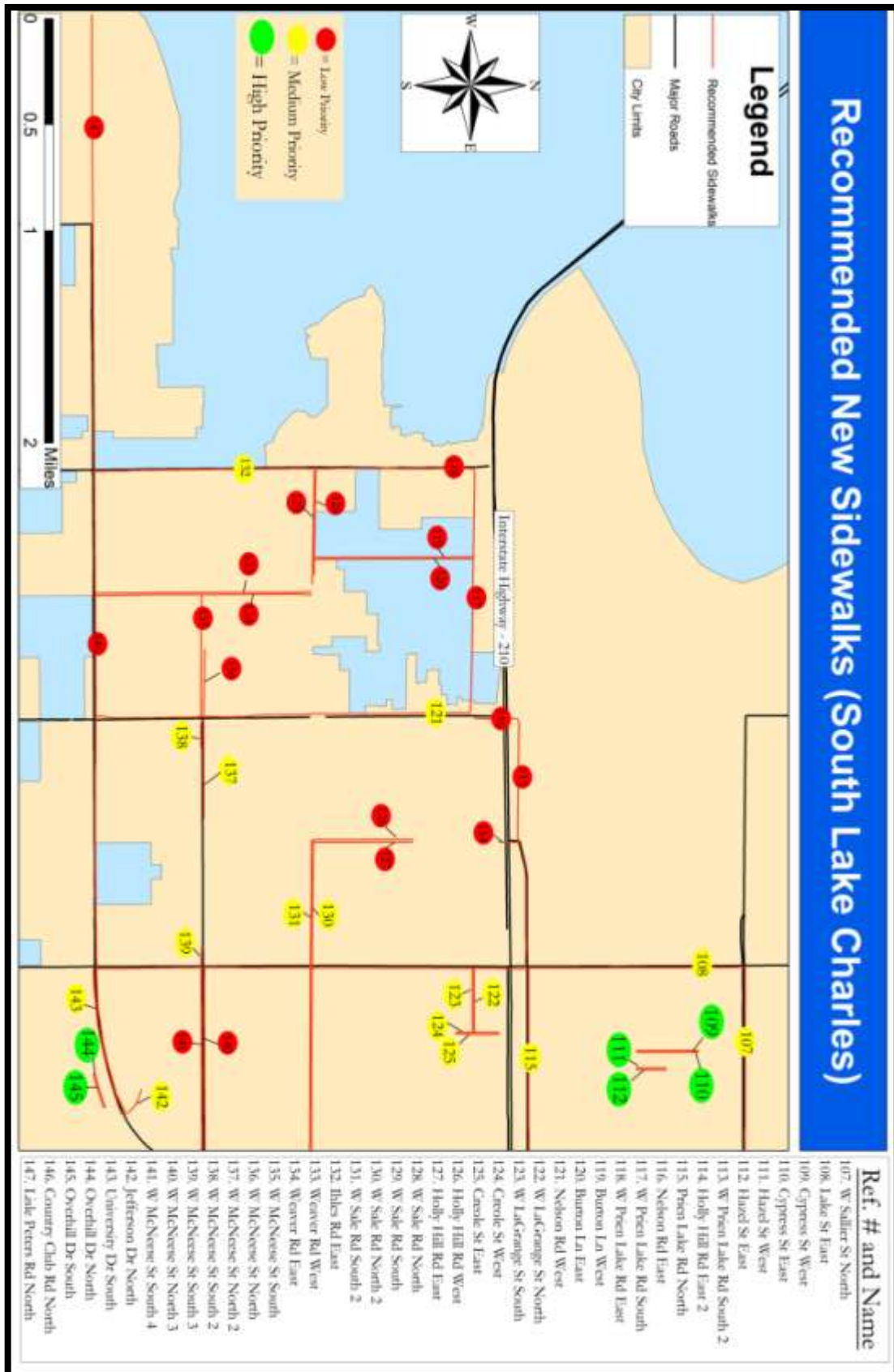


Figure 19: South Lake Charles Recommended Sidewalks



Map Ref #107:

W Sallier St North: Lake St to Ryan St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$103,693/ **Length:** 4,148 feet

Funding Source: General Fund

Map ref #108:

Lake St East: W Sallier St to Country Club Rd

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	89 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$482,208/ **Length:** 16,074 feet

Funding Source: General Fund

Map ref #109:

Cypress St West: Louie St to W 18th St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	31 (High)

Reason Selected: Located within ¼ mile of a school; will connect center of community

Cost: \$46,410/ **Length:** 1,547 feet

Funding Source: Safe Routes to School, General Fund

Map ref #110:

Cypress St East: Louie St to W 18th St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	31 (High)

Reason Selected: Within ¼ mile of a school

Cost: \$46,410/ **Length:** 1,547 feet

Funding Source: Safe Routes to School, General Fund

Map ref #111:

Hazel St West: W 18th St to Penn St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	42 (High)

Reason Selected: Located within 1/4 mile an elementary school; would connect two housing communities

Cost: \$22,650/ **Length:** 755 feet

Funding Source: Safe Routes to School, General Fund



Map Ref #112:

Hazel St East: W 18th St to Penn St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	42 (High)

Reason Selected Located within 1/4 mile an elementary school; would connect two housing communities

Cost: \$22,650/ **Length:** 755 feet

Funding Source: Safe Routes to School, General Fund

Map ref #113:

W Prien Lake Rd South 2: Lake St to Nelson Rd

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	132 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$158,670/ **Length:** 5,289 feet

Funding Source: General Fund

Map ref #114:

Holly Hill East 2: W Prien Lake to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	124 (Low)

Reason Selected: Will connect communities without current pedestrian access

Cost: \$11,918/ **Length:** 477 feet

Funding Source: General Fund

Map ref #115:

Prien Lake Rd North: Lake St to Ryan St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	63 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$127,470/ **Length:** 4,249 feet

Funding Source: General Fund

Map ref #116:

Nelson Rd East: W Prien Lake to W Prien Lake

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$33,025/ **Length:** 1,101 feet

Funding Source: General Fund



Map Ref #117:

W Prien Lake Rd South: Nelson Rd to W Prien Lake

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	147 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$156,779/ **Length:** 5,226 feet

Funding Source: General Fund

Map ref #118:

W Prien Lake Rd East: W Prien Lake to W Sale

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	139 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$117,877/ **Length:** 3,929 feet

Funding Source: General Fund

Map ref #119:

Burton Ln West: W Prien Lake Rd to W Sale Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	142 (Low)

Reason Selected: Will connect existing sidewalk network

Cost: \$98,315/ **Length:** 3,933 feet

Funding Source: General Fund

Map ref #120:

Burton Ln East: W Prien Lake Rd to W Sale Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	142 (Low)

Reason Selected: Will connect existing sidewalk network

Cost: \$98,435/ **Length:** 3,938 feet

Funding Source: General Fund

Map ref #121:

Nelson Rd West: W Prien Lake to Country Club Rd

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	113 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$278,125/ **Length:** 9,271 feet

Funding Source: General Fund



Map Ref #122:

W La Grange St North: Lake St to Creole St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	109 (Moderate)

Reason Selected: Located within ¼ mile of a school; will connect to a community without any sidewalk access

Cost: \$34,597/ **Length:** 1,384 feet

Funding Source: Safe Routes to School, General Fund

Map ref #123:

W LaGrange St South: Lake St to Creole St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	109 (Moderate)

Reason Selected: Located within ¼ mile of a school; will connect to existing sidewalk

Cost: \$34,478/ **Length:** 1,379 feet

Funding Source: Safe Routes to School, General Fund

Map ref #124:

Creole St West: W College St to Julius St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	95 (Moderate)

Reason Selected: Located within ¼ mile of a school

Cost: \$27,340/ **Length:** 1,094 feet

Funding Source: Safe Routes to School, General Fund

Map ref #125:

Creole St East: W College St to Julius St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	89 (Moderate)

Reason Selected: Located within ¼ mile of a school

Cost: \$27,196/ **Length:** 1,088 feet

Funding Source: Safe Routes to School, General Fund

Map ref #126:

Holly Hill Rd West: Dumbarton Rd to W Sale Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	128 (Low)

Reason Selected: Will connect to existing sidewalk

Cost: \$62,030/ **Length:** 2,481 feet

Funding Source: General Fund



Map Ref #127:

Holly Hill Rd East: Dumbarton Rd to W Sale Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	128 (Low)

Reason Selected: Will connect to existing sidewalk

Cost: \$61,799/ **Length:** 2,472 feet

Funding Source: General Fund

Map ref #128:

W Sale Rd North: W Prien Lake to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	139 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$57,022/ **Length:** 2,281 feet

Funding Source: General Fund

Map ref #129:

W Sale Rd South: W Prien Lake to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	139 (Low)

Reason Selected: Important Collector/Arterial roadway

Cost: \$62,083/ **Length:** 2,483 feet

Funding Source: General Fund

Map ref #130:

W Sale Rd North 2: Holly Hill Rd to Ryan St

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	75 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$172,818/ **Length:** 6,913 feet

Funding Source: General Fund

Map ref #131:

W Sale Rd South 2: Holly Hill Rd to Ryan St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	113 (Moderate)

Reason Selected: Important Collector/Arterial roadway

Cost: \$177,852/ **Length:** 7,114 feet

Funding Source: General Fund



Map Ref #132:

Ihles Rd East: W Sale Rd to Country Club Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	142 (Low)

Reason Selected: Important Collector/Arterial roadway**Cost:** \$136,061/ **Length:** 5,442 feet**Funding Source:** General Fund**Map ref #133:**

Weaver Rd West: W Sale Rd to Country Club Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	136 (Low)

Reason Selected: Located within ¼ mile of a school**Cost:** \$134,232/ **Length:** 5,369 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #134:**

Weaver Rd East: W Sale Rd to Country Club Rd

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	136 (Low)

Reason Selected: Located within ¼ mile of a school**Cost:** \$134,349/ **Length:** 5,374 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #135:**

W McNeese St South: Weaver Rd to Nelson Rd

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	128 (Low)

Reason Selected: Located within ¼ mile of a school; will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$78,360/ **Length:** 2,612 feet**Funding Source:** Safe Routes to School, General Fund**Map ref #136:**

W McNeese St North: Existing Sidewalk to Nelson

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	117 (Low)

Reason Selected: Located within ¼ mile of a school; will connect to an existing sidewalk; will connect different parts of community together**Cost:** \$43,241/ **Length:** 1,441 feet**Funding Source:** Safe Routes to School, General Fund

Map Ref #137:

W McNeese St North 2: Eileen St to Nelson Rd

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	104 (Moderate)

Reason Selected: Located within ¼ mile of a school; will connect to an existing sidewalk; will connect different parts of community together

Cost: \$63,230/ **Length:** 2,108 feet

Funding Source: Safe Routes to School, General Fund

Map ref #138:

W McNeese South 2: Nelson to Existing Sidewalk

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	82 (Moderate)

Reason Selected: Located within ¼ mile of a school; will connect to an existing sidewalk; Important Artery/Collector roadway

Cost: \$15,797/ **Length:** 527 feet

Funding Source: Safe Routes to School, General Fund

Map ref #139:

W McNeese St South 3: Lake St to Young Ln

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	113 (Moderate)

Reason Selected: Will connect to an existing sidewalk; Important Artery/Collector roadway

Cost: \$12,171/ **Length:** 406 feet

Funding Source: General Fund

Map ref #140:

W McNeese St North 3: Lake St to Ryan St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	127 (Low)

Reason Selected: Located adjacent to a school, Important Artery/Collector roadway

Cost: \$156,063/ **Length:** 5,202 feet

Funding Source: Safe Routes to School, General Fund

Map ref #141:

W McNeese St South 4: Lake St to Ryan St

Recommended Sidewalk Width:	6 feet
Recommended Buffer Width:	4-6 feet
Priority Index Ranking:	131 (Low)

Reason Selected: Important Collector/Arterial roadway; will connect different parts of community

Cost: \$127,902/ **Length:** 4,263 feet

Funding Source: General Fund



Map Ref #142:

Jefferson Dr North: Existing Sidewalk to University Dr

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	53 (Moderate)

Reason Selected: Located within 1/4 mile of a school; will connect to an existing sidewalk

Cost: \$17,125/ **Length:** 685 feet

Funding Source: Safe Routes to School, General Fund

Map ref #143:

University Dr. South: Lake St to Jefferson Dr.

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	104 (Moderate)

Reason Selected: Located within 1/4 mile of a school; will connect to an existing sidewalk

Cost: \$80,733/ **Length:** 3,229 feet

Funding Source: Safe Routes to School, General Fund

Map ref #144:

Overhill Dr North: Central Pkwy to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	42 (High)

Reason Selected: Located within 1/4 mile of a school; will connect to an existing sidewalk; will connect different parts of community together

Cost: \$19,725/ **Length:** 789 feet

Funding Source: Safe Routes to School, General Fund

Map ref #145:

Overhill Dr South: Central Pkwy to Existing Sidewalk

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	42 (High)

Reason Selected: Located within 1/4 mile of a school; will connect to an existing sidewalk; will connect different parts of community together

Cost: \$19,725/ **Length:** 789 feet

Funding Source: Safe Routes to School, General Fund

Map ref #146:

Lisle Peters Rd North: Big Lake Rd to Riverview Ln

Recommended Sidewalk Width:	5 feet
Recommended Buffer Width:	2-4 feet
Priority Index Ranking:	142 (Low)

Reason Selected: Will connect to an existing sidewalk; will connect different parts of community

Cost: \$112,798/ **Length:** 4,512 feet

Funding Source: General Fund



Map Ref #147:

Country Club Rd North: Jefferson Dr to Big Lake Rd

**Recommended
Sidewalk Width:** 6 feet

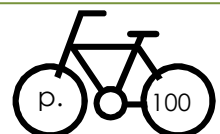
**Recommended
Buffer Width:** 4-6 feet

**Priority Index
Ranking:** 132 (Low)

Reason Selected: Located within 1/4 mile a school; will connect different parts of community; important Artery/Collector roadway

Cost: \$577,791 / **Length:** 19,260 feet

Funding Source: Safe Routes to School, General Fund



Bicycle Network

Bicyclists can travel further distances at faster speeds than pedestrians so the bikeway network can be larger in scale than the sidewalk network. This new network is meant to serve all levels of riders and connect neighborhoods and businesses between the various areas of the City. The projects chosen were a combination of previous planning documents, public input, and existing traffic analysis.

According to the Federal Highway Administration manual "Selecting Roadway Design Treatments to Accommodate Bicycles," there are three primary factors which influence bicycle travel on streets. The three factors are lane widths, traffic speeds, and traffic volumes. Each of these was taken into account when choosing the optimal bicycle network for the City of Lake Charles.

Lane Widths

Lane widths are critical for allowing enough room for the combined movement of bicycles and automobiles. National standards require a minimum right-hand curb lane width of 14 feet to safely accommodate shared usage. There are a few roadways within Lake Charles that already have roadway widths necessary for sharing bicycles. There are also some roadways that have sufficient width to allow for the four feet minimum required width of bicycle lanes if striping and signage were provided.

Numerous collectors and arterials throughout Lake Charles have lane widths of 12 feet or more. In the past, concerns about safety and congestion may have prevented engineers from selecting narrower travel lane widths, especially on higher speed and higher volume arterials. Comprehensive new research, however, indicates that the use of travel lanes between 10 feet and 12 feet on urban, suburban and rural arterials and collectors does not negatively impact overall motor vehicle safety or operations. This fact allows for narrowing of lanes on certain roadways in order to accommodate bicycle lanes.

Roadway Speed Limit

In order to be considered safe for shared roadway use, traffic speeds of 35 mph or less are required. Bicycle lanes can be substituted for shared roadway use if speed conditions exist that are greater than 35 mph. Although the minimum bicycle lane width is 4 feet, a sliding scale should be developed that takes into account the added buffer needed with increased automobile speed. While some collector roads located within existing communities have low speed limits, some of the main roadways connecting parts of Lake Charles have speed limits of 35 mph or higher.

Average Daily Traffic Volume

An annual average daily traffic volume of less than 10,000 vehicles is recommended by the FHWA for shared roadway use. Most of the principal arterials in Lake Charles have an annual daily traffic volume of more than 10,000 vehicles and are not recommended for shared use. Collector and local roads are more conducive to shared use because of their lower traffic volumes and lower traveling speeds and should be considered preferable for a designation of a



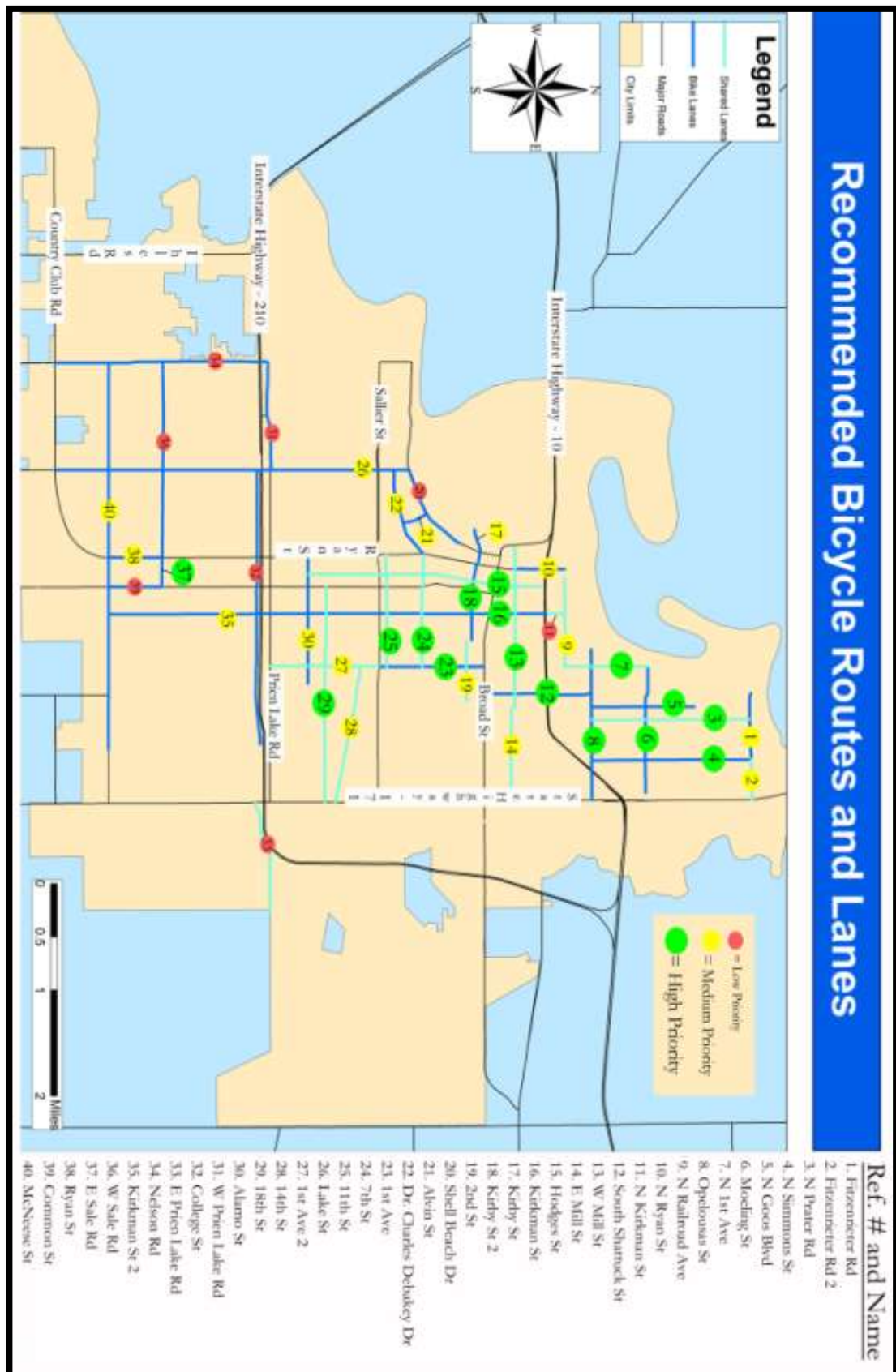
bicycle route network. Because houses and jobs throughout Lake Charles are often separated by well-traveled roads with high rate of speeds, these connections should be made with marked bike lanes on roadways where practical.

Table 18: Lake Charles Recommended Bicycle Network

Map Ref #	Road Name	Segment Extents	Priority Category	Type of Facility Recommended
1	Fitzenreiter Rd.	N Prater Rd to N Simmons St	Moderate	Shared Lane
2	Fitzenreiter Rd. 2	N Simmons St to Hwy 171	Moderate	Bike Lane
3	N. Prater St.	Opelousas St to Fitzenreiter Rd	High	Shared
4	N. Simmons St.	Fitzenreiter Rd to Opelousas St	High	Bike Lane
5	N. Goos Blvd.	Opelousas St to Theriot Rd	High	Bike Lane
6	Moeling St.	N 1st Ave to Hwy 171	High	Bike Lane
7	N. 1st Ave.	Moeling St to N Railroad Ave	High	Shared Lane
8	Opelousas St.	N Enterprise Blvd to Hwy 171	High	Bike Lane
9	N. Railroad Ave	N Bilbo St to N 1st Ave	Moderate	Shared Lane
10	N. Ryan St	N Railroad Ave to W Mill St	Moderate	Bike Lane
11	N. Kirkman St	N Railroad Ave to I-10 Svc Rd	Low	Shared Lane
12	South Shattuck	Broad St to Opelousas St	High	Bike Lane
13	W. Mill St	Veterans Memorial Dr. to Goos St	High	Shared Lane
14	E. Mill St	Goos St to Hwy 171	Moderate	Shared Lane
15	Hodges St.	Alamo St to Belden St	High	Shared Lane
16	Kirkman St.	N Railroad Ave to College St	High	Bike Lane
17	Kirby St.	Lakeshore Dr. to Bord Du Lac	Moderate	Bike Lane
18	Kirby St 2	Ryan St to Louisiana Ave	High	Bike Lane
19	2nd St.	Louisiana Ave to 3rd Ave	Moderate	Shared Lane
20	Shell Beach Dr.	Clarence St to Lake St	Low	Bike Lane
21	Alvin St.	Shell Beach Dr. to Dr. Debakey Rd	Moderate	Bike Lane
22	Dr. Debakey Dr.	Lake St to Ryan St	Moderate	Bike Lane
23	1st Ave	Broad St to 12th St	High	Bike Lane
24	7th St.	Ryan St to 4th Ave	High	Shared Lane
25	11th St.	Ryan St to 4th Ave	High	Shared Lane
26	Lake St.	Shell Beach Dr. to Country Club Rd	Moderate	Bike Lane
27	1st Ave 2	12th St to E Prien Lake Rd	Moderate	Shared Lane
28	14th St.	Enterprise Blvd to Gerstner Mem Hwy	Moderate	Shared Lane
29	18th St.	Common St to Gerstner Memorial Dr.	High	Shared Lane
30	Alamo St.	Ryan St to Enterprise Blvd	Moderate	Bike Lane
31	W Prien Lake Rd.	Lake St to Nelson Rd	Low	Bike Lane
32	College St.	Lake St to 5th Ave	Low	Bike Lane
33	E Prien Lake Rd.	Gerstner Memorial Hwy to Corbina Rd Ext	Low	Shared Lane
34	Nelson Rd.	W Prien Lake Rd to Country Club Rd	Low	Bike Lane
35	Kirkman St. 2	College St to E McNeese St	Moderate	Bike Lane
36	W. Sale Rd.	Ihles Rd to Ryan St	Low	Bike Lane
37	E. Sale Rd.	Ryan St to Common St	High	Bike Lane
38	Ryan St.	W Sale Rd to W McNeese St	Moderate	Bike Lane
39	Common St.	E Sale Rd to McNeese St	Low	Bike Lane
40	McNeese St.	Nelson Rd to 5th Ave	Moderate	Bike Lane



Figure 20: Recommended Bicycle Network



The following table is intended to be used as a quick reference for each suggested segment of the recommended bicycle network.

(Map Reference #): Street Name: Street Segment	
Traffic Volume: <i>AADT (annual average daily traffic)</i>	Under 3,000 AADT 3,000-10,000 AADT 10,000-15,000 AADT Over 15,000 AADT
Speed Limit: <i>(average motor operating speed)</i>	30 mph or less 30-40 mph 40-50 mph Over 50 mph
Recommended Facilities:	Which type of bicycle facility is most appropriate for existing conditions
Priority Index Ranking:	Ranking based upon scores derived from attractor and generator scores, connectivity, and affordability added together (lower the value, higher the priority)

Improvements Recommended

Discusses the recommended improvements needed, including construction concerns.

Cost

Estimates costs for recommended facility type.

Funding Source

Identifies potential sources for funding the recommended improvements.

Ex) SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users)



Map Ref #1:

Fitzenreiter Rd: Perkins Ferry Park to N Simmons St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	24 (Moderate)

Improvements Recommended: Signs Installed**Cost:** Under \$5,000**Funding Source:** SAFETEA-LU**Map Ref #2:**

Fitzenreiter Rd 2: N Simmons St to Hwy 171

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 – 40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	20 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 15 to 10 feet and stripe bike lanes along with signage**Cost:** \$10,000 – \$20,000**Funding Source:** SAFETEA-LU**Map Ref #3:**

N Prater Rd: Fitzenreiter Rd to Opelousas St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	9 (High)

Improvements Recommended: Signs Installed**Cost:** Under \$10,000**Funding Source:** SAFETEA-LU**Map Ref #4:**

N Simmons St: Fitzenreiter Rd to Opelousas St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	5 (High)

Improvements Recommended: Narrow existing travel lanes from 15 to 10 feet and stripe bike lanes along with signage**Cost:** \$30,000**Funding Source:** SAFETEA-LU**Map Ref #5:**

N Goos Blvd: Opelousas St to Theriot Rd

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	7 (High)

Improvements Recommended: Narrow existing travel lanes from 20 feet to 15 feet and stripe bike lanes along with signage**Cost:** \$30,000**Funding Source:** SAFETEA-LU

Map Ref #6:Moeling St: N 1st Ave to Hwy 171

Traffic Volume:	3,000 to 10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	5 (High)

Improvements Recommended: Narrow existing travel lanes to 16 to 11 feet and stripe bike lanes along with signage

Cost: Under \$35,000

Funding Source: SAFETEA-LU

Map Ref #7:N 1st Ave: Moeling St to N Railroad Ave

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	13 (High)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU

Map Ref #8:

Opelousas St: N Enterprise Blvd to Hwy 171

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	9 (High)

Improvements Recommended: Narrow existing travel lanes to 15 to 10 feet and stripe bike lanes along with signage

Cost: \$30,000

Funding Source: SAFETEA-LU

Map Ref #9:N Railroad Ave: N Bilbo St to N 1st Ave

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	27 (Moderate)

Improvements Recommended: Signs Installed

Cost: \$5,000-\$10,000

Funding Source: SAFETEA-LU

Map Ref #10:

N Ryan St: Jackson St to W Mill St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	24 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 16 feet to 11 feet and stripe bike lanes along with signage

Cost: \$20,000

Funding Source: SAFETEA-LU



Map Ref #11:

N Kirkman St: N Railroad Ave to W Mill St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	37 (Low)

Improvements Recommended: Signs Installed**Cost:** Under \$5,000**Funding Source:** SAFETEA-LU**Map Ref #12:**

S Shattuck: Opelousas St to Broad St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	13 (High)

Improvements Recommended: Narrow existing travel lanes from 16 to 11 feet and stripe bike lanes along with signage**Cost:** \$30,000**Funding Source:** SAFETEA-LU**Map Ref #13:**

W Mill St: Veterans Memorial Dr. to Goos St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	13 (High)

Improvements Recommended: Signs Installed**Cost:** Under \$5,000**Funding Source:** SAFETEA-LU**Map Ref #14:**

E Mill St: Goos St to Hwy 171

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	1 (High)

Improvements Recommended: Signs Installed**Cost:** Under \$5,000**Funding Source:** SAFETEA-LU**Map Ref #15:**

Hodges St: Alamo St to Belden St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	3 (High)

Improvements Recommended: Signs Installed**Cost:** Under \$5,000**Funding Source:** SAFETEA-LU

Map Ref #16:

Kirkman St: N Railroad Ave to College St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	3 (High)

Improvements Recommended: Narrow existing travel lanes from 16 to 11 feet and stripe bike lanes along with signage

Cost: \$50,000

Funding Source: SAFETEA-LU

Map Ref #17:

Kirby St: Lakeshore Dr. to Bord Du Lac

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	5 foot paved shoulder
Priority Index Ranking:	27 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 17 to 12 feet and stripe bike lanes along with signage

Cost: \$10,000

Funding Source: SAFETEA-LU

Map Ref #18:

Kirby St 2: Ryan St to Louisiana Ave

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	12 (High)

Improvements Recommended: Take away one of three travel lanes and redesign roadway for inclusion of bike lanes

Cost: \$50,000

Funding Source: SAFETEA-LU

Map Ref #19:2nd St: Louisiana Ave to 3rd Ave

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	20 (Moderate)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU

Map Ref #20:

Shell Beach Dr.: Clarence St to Lake St

Traffic Volume:	10,000-15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	39 (Low)

Improvements Recommended: Roadway widening of 5 feet on each side

Cost: \$500,000

Funding Source: SAFETEA-LU



Map Ref #21:

Alvin St: Shell Beach Dr. to Dr. Michael Debaquey Dr.

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	29 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 16 to 11 feet and stripe bike lanes along with signage

Cost: \$20,000

Funding Source: SAFETEA-LU

Map Ref #22:

Dr. Michael Debaquey Dr.: Lake St to Ryan St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	29 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 16 to 11 feet and stripe bike lanes along with signage

Cost: \$20,000

Funding Source: SAFETEA-LU

Map Ref #23:1st Ave: Broad St to 12th St

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	7 (High)

Improvements Recommended: Narrow existing travel lanes from 20 feet to 15 feet and stripe bike lanes along with signage

Cost: \$30,000

Funding Source: SAFETEA-LU

Map Ref #24:7th St: Ryan St to 1st Ave

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike Lane
Priority Index Ranking:	9 (High)

Improvements Recommended: Widen roadway to accommodate bike lanes

Cost: \$300,000

Funding Source: SAFETEA-LU

Map Ref #25:11th St: Ryan St to 1st Ave

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	13 (High)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU



Map Ref #26:

Lake St: Shell Beach Dr. to Country Club Rd

Traffic Volume:	Over 15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	6 foot bike lane
Priority Index Ranking:	29 (Moderate)

Improvements Recommended: Widen roadway by 12 feet to accommodate bike lanes

Cost: Above \$1,000,000

Funding Source: SAFETEA-LU

Map Ref #27:1st Ave 2: 12th St to E Prien Lake Rd

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	27 (Moderate)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU

Map Ref #28:14th St: Enterprise Blvd to Gerstner Memorial Dr.

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	20 (Moderate)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU

Map Ref #29:18th St: Common St to Gerstner Memorial Dr.

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30 mph or less
Recommended Facilities:	Shared Lane
Priority Index Ranking:	13 (High)

Improvements Recommended: Signs Installed

Cost: Under \$10,000

Funding Source: SAFETEA-LU

Map Ref #30:

Alamo St: Ryan St to Enterprise Blvd

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	30 (Moderate)

Improvements Recommended: Narrow existing travel lanes from 15 feet to 10 feet and stripe bike lanes along with signage

Cost: \$10,000 - \$20,000

Funding Source: SAFETEA-LU



Map Ref #31:

W Prien Lake Rd: Lake St to Nelson St

Traffic Volume:	10,000-15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	40 (Low)

Improvements Recommended: Widen roadway by 8 feet to accommodate bike lanes

Cost: \$500,000

Funding Source: SAFETEA-LU

Map Ref #32:College St: Lake St to 5th Ave

Traffic Volume:	10,000-15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	38 (Low)

Improvements Recommended: Widen roadway by 12 feet to accommodate bike lanes

Cost: Over \$1,000,000

Funding Source: SAFETEA-LU

Map Ref #33:

E Prien Lake Rd: Gerstner Mem Dr. to Corbina Rd Extension

Traffic Volume:	Under 3,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	Shared Lane
Priority Index Ranking:	40 (Low)

Improvements Recommended: Signs Installed

Cost: Under \$5,000

Funding Source: SAFETEA-LU

Map Ref #34:

Nelson Rd: W Prien Lake Rd to Country Club Rd

Traffic Volume:	Above 15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	6 foot bike lane
Priority Index Ranking:	31 (Moderate)

Improvements Recommended: Widen roadway by 12 feet to accommodate bike lanes

Cost: Over \$2,000,000

Funding Source: SAFETEA-LU

Map Ref #35:

Kirkman St 2: College St to E McNeese St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	20 (Moderate)

Improvements Recommended: Widen roadway 10 feet to accommodate bike lanes

Cost: \$500,000

Funding Source: SAFETEA-LU



Map Ref #36:

W Sale Rd: Ihles Rd to Ryan St

Traffic Volume:	3,000-10,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	37 (Low)

Improvements Recommended: Widen roadway 14 feet to accommodate wider travel lanes and bike lanes

Cost: Over \$1,000,000

Funding Source: SAFETEA-LU

Map Ref #37:

E Sale Rd: Ryan St to Common St

Traffic Volume:	10,000-15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	9 (High)

Improvements Recommended: Narrow existing travel lanes from 15 to 10 feet and stripe bike lanes along with signage

Cost: \$10,000

Funding Source: SAFETEA-LU

Map Ref #38:

Ryan St: W Sale Rd to W McNeese St

Traffic Volume:	Over 15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	6 foot bike lane
Priority Index Ranking:	27 (Moderate)

Improvements Recommended: Roadway widening of 12 feet to accommodate bike lanes

Cost: Over \$500,000

Funding Source: SAFETEA-LU

Map Ref #39:

Common St: E Sale Rd to McNeese St

Traffic Volume:	10,000-15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	5 foot bike lane
Priority Index Ranking:	35 (Low)

Improvements Recommended: Roadway widening of 10 feet to accommodate bike lanes

Cost: Over \$500,000

Funding Source: SAFETEA-LU

Map Ref #40:McNeese St: Nelson Rd to 5th Ave

Traffic Volume:	Over 15,000 AADT
Speed Limit:	30-40 mph
Recommended Facilities:	6 foot bike lane
Priority Index Ranking:	18 (Moderate)

Improvements Recommended: Roadway widening of 12 feet to accommodate bike lanes

Cost: Over \$2,000,000

Funding Source: SAFETEA-LU



Multi-Use Trails, Connectors, and Staging Areas

Multi-Use Trails

For decades, the City of Lake Charles has designed its transportation infrastructure around the automobile, leaving little or no space for bicycles or pedestrians. This can become a problem for those who wish to recreate, or need to travel long distances, while fighting for space on a shared roadway. With that in mind, the creation of grade-separated paths/trails should be developed to serve as connections for non-motorized modes of transportation.

These trails/paths can serve multiple purposes ranging from recreation to commuting to school or work. A total of 5 multi-use paths, which can be used on a citywide level have been identified utilizing aerial photography. The paths chosen are already clear of development, but are located either in roadway medians, next to waterways, or next to railroad tracks. While these obstacles may require special precautions to be taken when choosing how to design and develop the trail, it does not exclude development of recreational uses.

Connectors/Short-Cuts

There are a few places throughout the City in which roadways or neighborhoods do not connect to one another. This can create obstacles for bicycles and pedestrians or the need for them to travel unnecessarily long distances to reach their destination. 5 connectors/short-cuts have been identified utilizing aerial photography. These connectors will make it easier for children to walk to school, people to visit friends, or citizens to recreate in their community.

Staging Areas

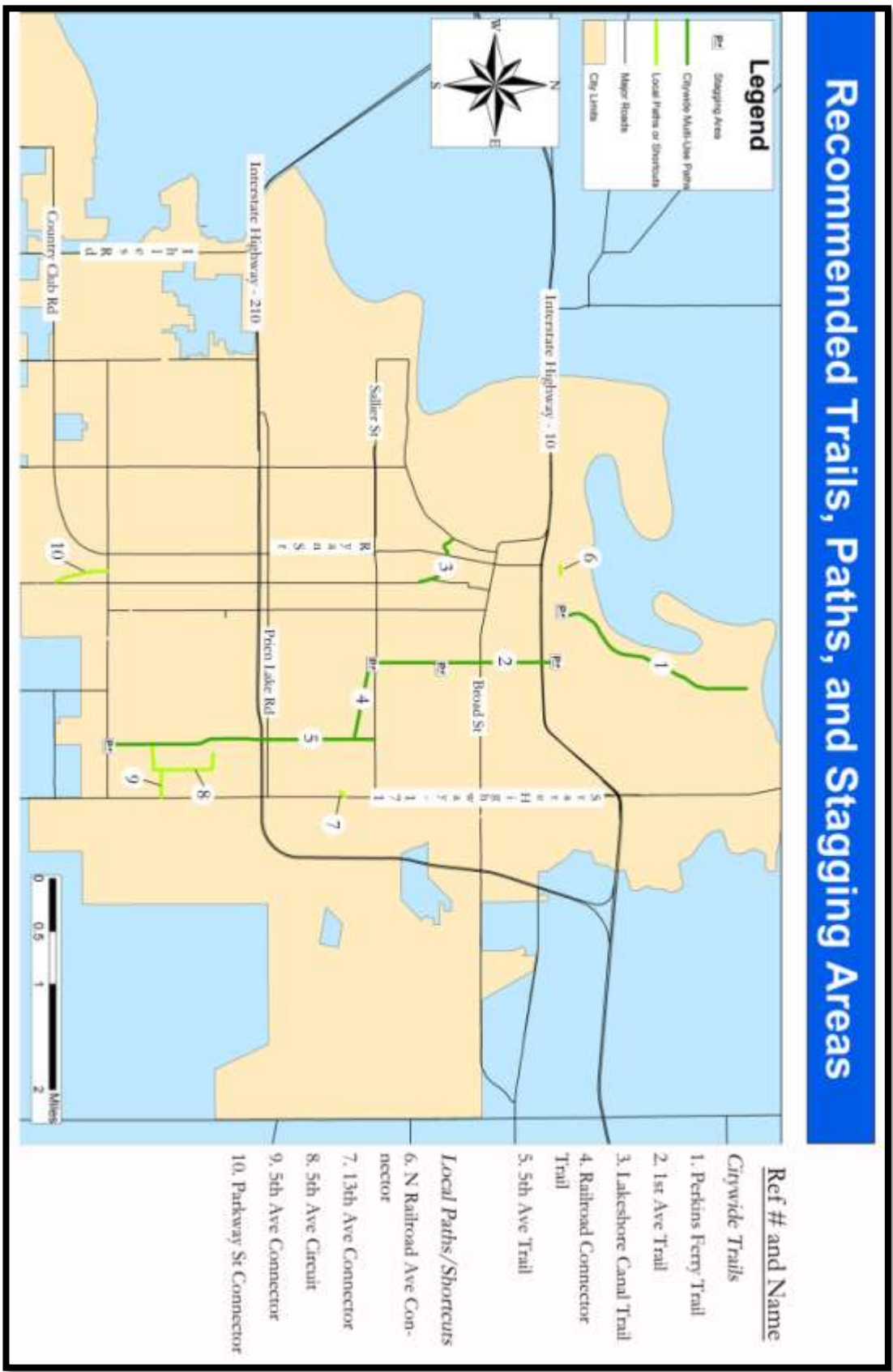
People who use the citywide multi-use trails will sometimes have the need to park their cars. Staging areas are necessary in order to provide multi-modal access to the recreational opportunities afforded to them by multi-use trails. These staging areas can be as simple as dirt parking lots or can be elaborate with shade trees, picnic areas, and restrooms. The appropriate level of development should be made dependent on estimated usage and availability of funds.

Table 19: Trails/Connector Recommendations

Map Ref #	Name of Trail/Connector	Extents	Length (Miles)
1	Perkins Ferry Trail	N. Railroad Ave to Perkins Ferry Park	2
2	1st Ave Trail	Railroad Tracks to 12th St	1.75
3	Pithon Coulee Trail	Lakeshore Dr. to Common St	0.6
4	Railroad Connector Trail	1st Ave to 5th Ave	0.75
5	5th Ave Trail	12th St to McNeese St	2.5
6	N. Railroad Ave Connector	N Railroad Ave to N Ryan St	0.1
7	13th Ave Connector	13th Ave to Gerstner Mem Dr.	0.1
8	5th Ave Circuit Connector	5th Ave to 5th Ave	1
9	5th Ave Connector	5th Ave Circuit to Gerstner Mem Dr.	0.25
10	Parkway St Connector	McNeese St to Common St	0.5



Figure 21: Proposed Path/Trail Network



Perkins Ferry Trail

Located in North Lake Charles, this trail parallels the Calcasieu River. It runs north-south for two miles, connecting the downtown area to recently completed Riverside Park. The trail's function would be recreational in nature, allowing people to stroll along the shoreline and make their way to the park. Riverside Park recently finished Phase I which includes improvements such as a picnic pavilion, fishing nodes, restrooms, a boat launch, a trail along the waterfront, and gabions.

The right-of-way suggested for this trail is an old abandoned rail line that once was used to serve the industrial businesses along the shoreline. Because railways tend to have generous buffers on each side, the space available for the trail is ample. The area today is slightly run-down, but inclusion of a beautiful recreation trail could help in its revitalization. Any undesirable views of abandoned buildings or security concerns from local businesses could be addressed with fencing or landscaping. One potential concern that must be overcome is a small canal that must be bridged. Potential funding sources include Rails-to-Trails and the Louisiana's Recreational Trails Program.

An extension of Enterprise Blvd along this right-of-way is included in a redevelopment plan for the North Lake Charles shoreline. The plan calls for a "linear park trail" in the center of the roadway, much the same as has been described here. While the plan has been adopted by the City, no significant steps have been made towards completion of this project because of lack of funding.

Figure 22: Perkins Ferry Trail Aerial Photograph

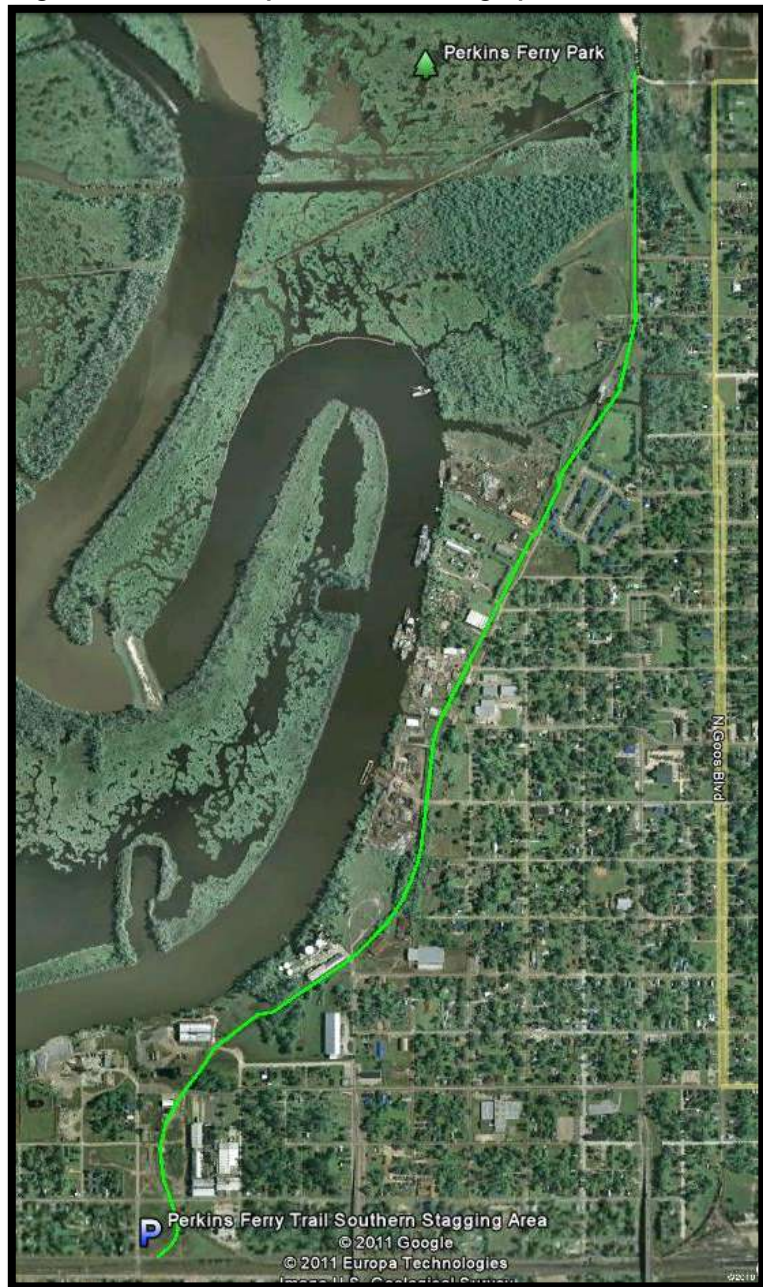
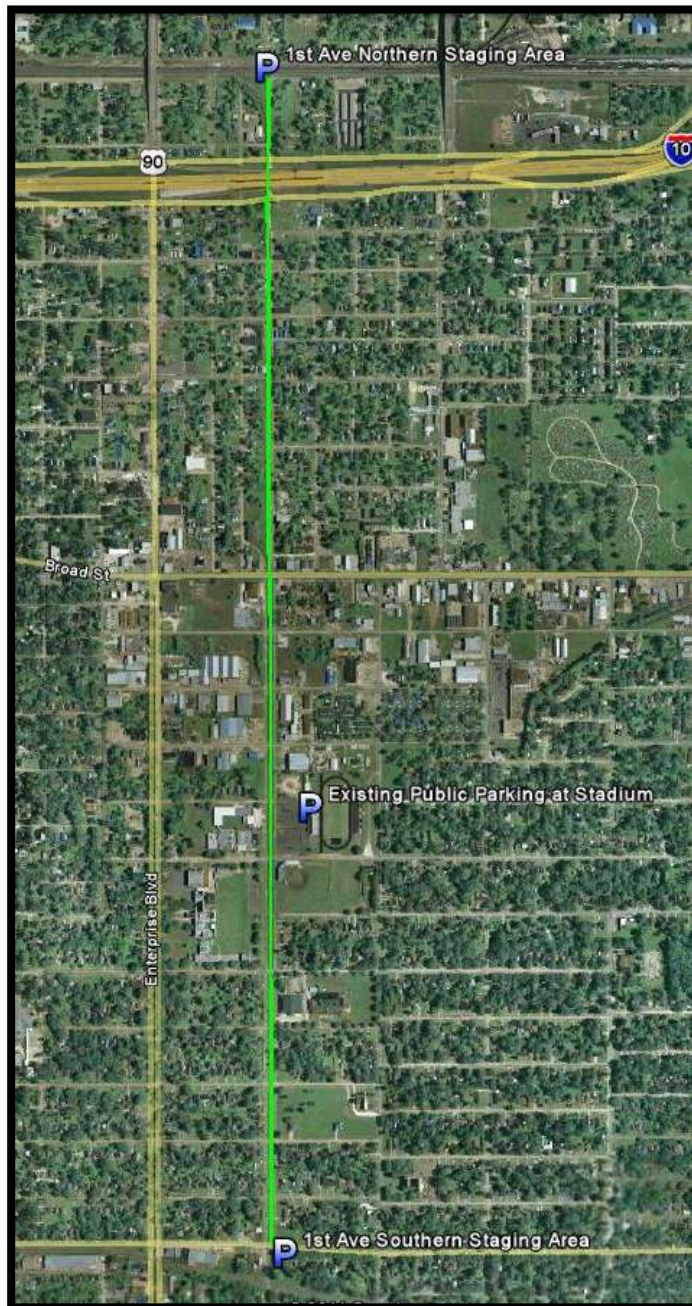


Figure 23: 1st Ave Trail Aerial Photograph



1st Ave Trail

Serving as the backbone of the proposed trail network in Lake Charles, and already in the initial planning stages, the 1st Ave trail would run north-south for 1.75 miles from the railroad tracks all the way down to 12th St. The project could potentially be broken up into two sections or phases.

The northern section would include the area north of Broad St and the southern section would include the area south of Broad St. The northern section part of the trail would run on the west side of 1st Ave in a right-of-way that is currently in the process of being acquired. Because the City must purchase this land, the trail is more likely to take a straight path with few curves or amenities. The southern section would run within the 50 foot median available between each part of the one-way traffic flow that is 1st Ave. This large available right-of-way allows the opportunity to have a “linear park” setting, with amenities such as community gardens, dog runs, children's play structure(s), and/or physical fitness stations.

The northern section is mostly residential in nature, while the southern section is a mix of warehouses, schools, and residences. Inclusion of a multi-use trail

in this area could serve to increase property values by offering more multi-modal access and recreational opportunities. The area is ripe for development of recreational trails due to its proximity to schools and lack of existing pedestrian and bicycle infrastructure. Potential funding sources for this project include Rails-to-Trails and the Louisiana's Recreational Trails Program. Currently there are two DOTD Transportation Enhancement Project grants to fund the right-of-way acquisition and construction of a segment of the trail.



Pithon Coulee Trail

Located near downtown and connecting the Lakefront Promenade with a proposed bicycle route along 7th Ave, the Pithon Coulee Trail will serve as a vital non-motorized link for the City. It will run east-west for approximately 6/10 of a mile along the northern section of the coulee. The right-of-way for this proposed trail has yet to be acquired and is located near businesses. However, the land is only minimally developed in the portion suggested for actual trail use.

The recently completed Lakefront Promenade is a local gem and tourist draw. The Lakefront is making several improvements and allowing for maximum access to this area. It is desirable for new businesses and residents alike. This trail will help link the heart of the City with its newly developed lakefront. A potential funding source for this project is the Louisiana Recreational Trail Program.

Figure 24: Pithon Coulee Trail Aerial Photograph



Railroad Connector Trail

Serving to connect two important north-south trails, the 1st Ave trail and the 5th Ave trail, the railroad connector trail will run east-west for approximately $\frac{3}{4}$ of a mile and parallel an existing and functioning rail line. The right-of-way between the rail line and the property lines of existing houses needs to be researched in more detail.

The right-of-way for constructing this trail will have to be negotiated with the railroad company that is in charge of the current rail line, but numerous examples can be found of this being done. In most cases, the railroad will require fencing or some sort of barrier to be installed by the City in order to prevent pedestrians from coming in contact with oncoming trains. A pedestrian bridge may have to be constructed to cross the tracks, which could be expensive, but funding for such a project may be available on a state and national level. The inclusion of this connector trail is not vital, but would serve to give a continuous north-south connection for non-motorized modes of transportation from North Lake Charles all the way down to McNeese St.

Figure 25: Railroad Connector Trail Aerial Photograph



5th Ave Trail

Linking the center of the City to portions of the south, the 5th Ave trail will run north-south for approximately two miles from 12th Ave to McNeese St. Like the southern section of the 1st Ave trail, the alignment of the 5th Ave trail will be located in the 25 foot wide median located between the one-way traffic-flow of the two roadways that make up 5th Ave. The northern section of this trail will require meandering around the existing oak trees, while the southern section has ample room for a straight trail.

This proposed trail would run close to a park and two schools, which would allow it to serve both as a commuter trail for children and recreational trail as well. If funding and public support is available, the opportunity to add the same amenities that are recommended on the southern section of the 1st Ave trail can be added to this trail as well. That means that the City can add valuable park space in an area that is currently underutilized.

Figure 26: 5th Ave Trail Aerial Photograph



N. Railroad Ave Connector

This connector will bridge the gap between N. Railroad Ave and N. Ryan St. It will serve as an important piece of the overall network of trail and bikeways. It will run approximately 1/10 of a mile and can be made up of cheaper materials such as crushed rock or cinder.

Figure 27: N. Railroad Ave Connector Aerial Photograph



13th Ave Connector

This connector is needed as a result of a neighborhood development that lacks connectivity to the adjacent major roadway. Currently, people would have to walk or ride an extra ½ mile or so if they travel on 13th St. and their destination is on or close to Gerstner Memorial Dr. This distance is a huge barrier for many citizens. This short-cut would run only 1/10 of a mile, but would save significant time.

Figure 28: 13th Ave Connector Aerial Photograph



5th Ave Circuit Connector

This connector is needed as a result of a neighborhood development that lacks pedestrian connectivity to the adjacent major roadway. A housing development is very close to an elementary school, but there is not direct access for children to walk and they must be driven by way of roadways; this turns a trip on foot from a few thousand feet into several miles in a car. This connector would run approximately one mile and could serve as a link between five housing developments and would also allow local residents to have a place to recreate.

Figure 29: 5th Ave Circuit Connector Aerial Photograph



Figure 30: 5th Ave Connector

5th Ave Connector

This connector would be constructed as an addition to the 5th Ave Circuit Connector and would allow people to make their way to Gerstner Memorial Dr. directly and for children to walk safely to Fairview Elementary. This short path of only ¼ mile could add significantly to the amount of children who walk to school. The materials used for this could be very inexpensive and could range from crushed rock to cinder.



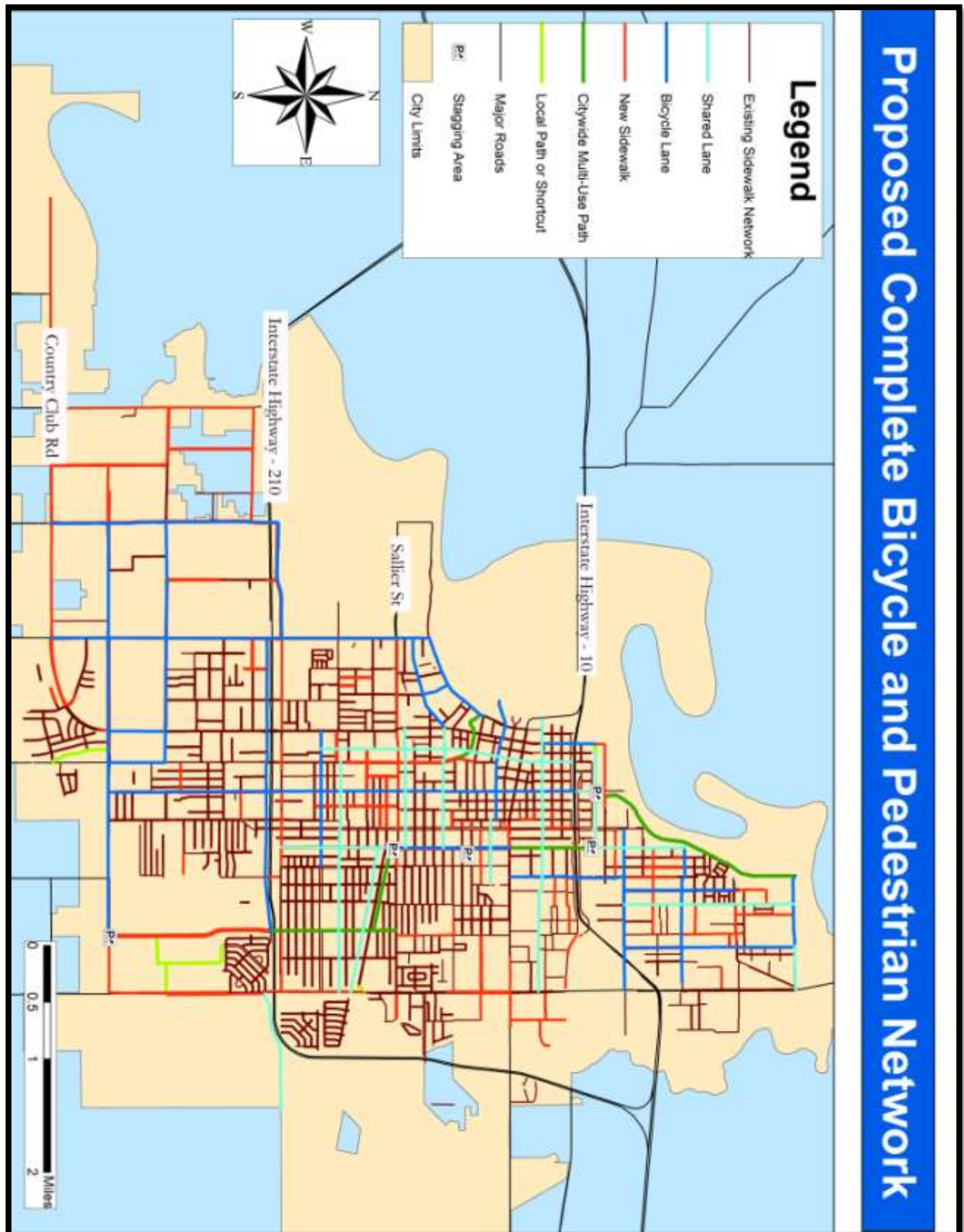
Parkway St. Connector

This local connector is as much of a recreational trail as a short-cut. It would cut the distance that people have to walk or bike between McNeese St and portions of south Common St. It would run parallel and alongside a canal for approximately ½ mile. There are currently no sidewalks on Parkway St and this connector could substitute as a much more inexpensive option than building sidewalks.

Figure 31: Parkway St Connector Aerial Photograph



Figure 32: Proposed Complete Bicycle and Pedestrian Route Network



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Chapter 7:

Implementation Plan



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Chapter 7: Implementation Plan

Steps for Implementing Projects

After sidewalk projects are identified and ranked, the following steps are proposed to design and implement projects:

- Program List by Council District: Create a short, medium, and long-term program list by Council District with each council member. Designate the funding sources for each project.
- Dedicate a percentage of the Capital Improvement Program to bicycle and pedestrian infrastructure improvements.
- Field Verification: Field verification should include a review of existing conditions (such as available right-of-way, adjacent land uses, and pedestrian volumes) and identifying potential design constraints (such as locations of utilities). Defining the extent of a particular project should be made by considering the requests of citizens for sidewalks on specific streets connecting to the project area. It may also be appropriate to combine sidewalk projects with street crossing improvement projects.
- Design Improvements: Appropriate sidewalk improvements should be designed after projects have gone through the field verification process. This includes developing engineering plans and detailed estimates of the cost to construct. The level of improvement should be consistent with the level of pedestrian or bicycle activity.
- Deliver Project: The final step of the implementation program process will be to construct the new improvement project.

Program Lists by Council Districts

During the Capital Improvement Program process, a priority list for each council district will be completed by Planning staff and presented to City Council. The prioritization will incorporate the four elements (attractors, generators, connectivity, and affordability), but will allow the opportunity for citizen and council representative input. Annually, each council representative can view completed projects and decide which projects are priorities for the following years. This process will help guide an equitable division of projects throughout the City of Lake Charles. It is to be expected that some districts will include more projects than others and some may be more feasible to complete in the short term due to funding capabilities. The projects within each council district are on the following pages.



Figure 33: Council District A Recommendations

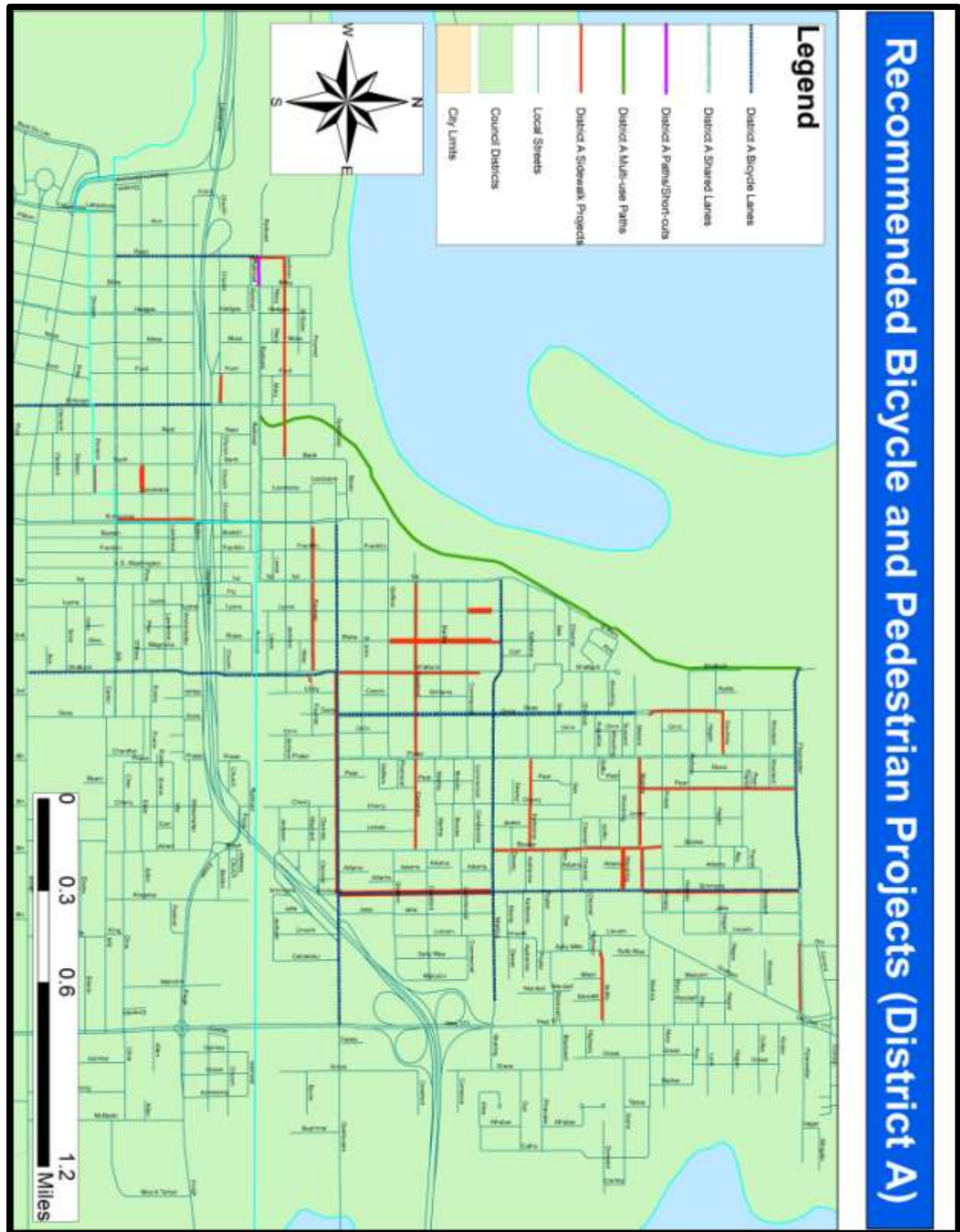


Table 20 : Council District A Recommendations
Bicycle and Pedestrian Projects for Council District A
New Sidewalk Suggestions

Project Name	Extents	District	Map Category	Length (Feet)	Estimated Cost
Fitzenreiter Rd South	N Lincoln St to Hwy 171	A	Medium-Term	1,049	\$26,234
Pear St. East	Medora St. to Fitzenreiter Rd.	A	Short-Term	2,650	\$66,261
N. Simmons St. East 2	Medora St. to Fitzenreiter Rd.	A	Short-Term	2,652	\$66,306
Courtney St. South	N Goos Blvd to N Prater St	A	Medium-Term	633	\$15,814
N. Goos Blvd. East	Courtney St to Existing Sidewalk	A	Medium-Term	1,288	\$32,198
N. Booker St. East	Moeling St. to Knapp St.	A	Short-Term	2,800	\$70,000
Medora St. North	N. Prater St. to N. Booker St.	A	Short-Term	1,295	\$32,371
Medora St. South	N Booker St to N Simmons St	A	Short-Term	605	\$15,137
Woodring St North	N Booker St to N Simmons St	A	Short-Term	595	\$14,875
Woodring St South	N Booker St to N Simmons St	A	Short-Term	595	\$14,875
Griffin St South	N MLK Hwy to Sally Mae St	A	Short-Term	1,030	\$25,750
Katherine St South	N Prater St to N Booker St	A	Short-Term	1,317	\$32,925
N. Lyon St. West	Commercial St. to Moeling St.	A	Medium-Term	410	\$10,242
N. Lyon St. East	Commercial St. to Moeling St.	A	Medium-Term	404	\$10,099
N. Blake St. West	Moeling St. to Geiffers St.	A	Short-Term	1,745	\$43,634
N. Blake St. East	Moeling St. to Geiffers St.	A	Short-Term	1,895	\$47,364
N. Shattuck St. East	Moeling St. to Opelousas St.	A	Short-Term	2,421	\$60,517
N. Simmons St. West	Moeling St. to Opelousas St.	A	Short-Term	2,607	\$65,176
N. Simmons St. East	Moeling St. to Opelousas St.	A	Short-Term	2,610	\$65,259
Cessford St. North	N. Prater St. to N. 1st Ave.	A	Short-Term	3,977	\$99,424
Opelousas St. South	N. Shattuck St. to N. Simmons St.	A	Short-Term	3,288	\$82,194
Fournet St North	N Enterprise Blvd to N Shattuck St	A	Medium-Term	2,137	\$53,425
Connecting Path	N. Shattuck to Fournet St.	A	Short-Term	83	\$2,076
Jackson St South	N Bank St to N Ryan St	A	Medium-Term	2,991	\$74,775
N. Ryan St East	S Railroad Ave to Jackson St	A	Short-Term	594	\$14,850
Church St. North	Ford St to Kirkman St	A	Medium-Term	429	\$10,725
Pine St. North	Bank St to Louisiana Ave	A	Short-Term	418	\$10,453
Pine St. South	Bank St to Louisiana Ave	A	Short-Term	395	\$9,871

Bicycle Network Improvements

Project Name	Extents	District	Map Category	Length (Miles)	Cost Category	Type of Facility Required
N Simmons St.	Fitzenreiter Rd. to Opelousas St.	A	Short-Term	1.49	Low	Bike Lane
Moeling St.	N. 1st Ave. to Hwy 171	A	Short-Term	1.20	Low	Bike Lane
N. Goos Blvd.	Opelousas St. to Theriot Rd	A	Short-Term	0.97	Low	Bike Lane
N. Prater St.	Opelousas St. to Fitzenreiter Rd.	A	Short-Term	1.48	Lowest	Wide Curb Lane
Opelousas St.	N. Enterprise Blvd. to Hwy. 171	A	Short-Term	1.41	Low	Bike Lane
N. Ryan St	Jackson St to W Mill St	A	Medium-Term	0.46	Low	Bike Lane
Fitzenreiter Rd. 2	N. Simmons St. to Hwy 171.	A	Medium-Term	0.38	Low	Bike Lane
N. 1st Ave.	Moeling St. to N. Railroad Ave.	A	Medium-Term	0.79	Low	Shared Lane/Sharrows
Fitzenreiter Rd.	N. Prater to N. Simmons	A	Medium-Term	0.62	Low	Shared Lane/Sharrows
N. Railroad Ave	N. Bilbo St. to N. 1st Ave.	A	Medium-Term	0.84	Low	Shared Lane/Sharrows
N. Kirkman St	N Railroad Ave to I-10 Svc Rd	A	Long-Term	0.16	Low	Shared Lane/Sharrows
W Mill St	Veterans Memorial Dr. to Goos St	A & B	Short-Term	1.51	Low	Shared Lane/Sharrows
South Shattuck	Broad St. to Opelousas St.	A & B	Medium-Term	1.00	Low	Bike Lane

Multi-use Paths and Connectors/Short-Cuts

Project Name	Extents	District	Length (Miles)
N Railroad Ave Connector	N Railroad Ave to N Ryan St	A	0.1
Perkins Ferry Trail	N. Railroad Ave to Perkins Ferry Park	A	2

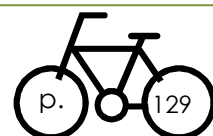


Figure 34: Council District B Recommendations

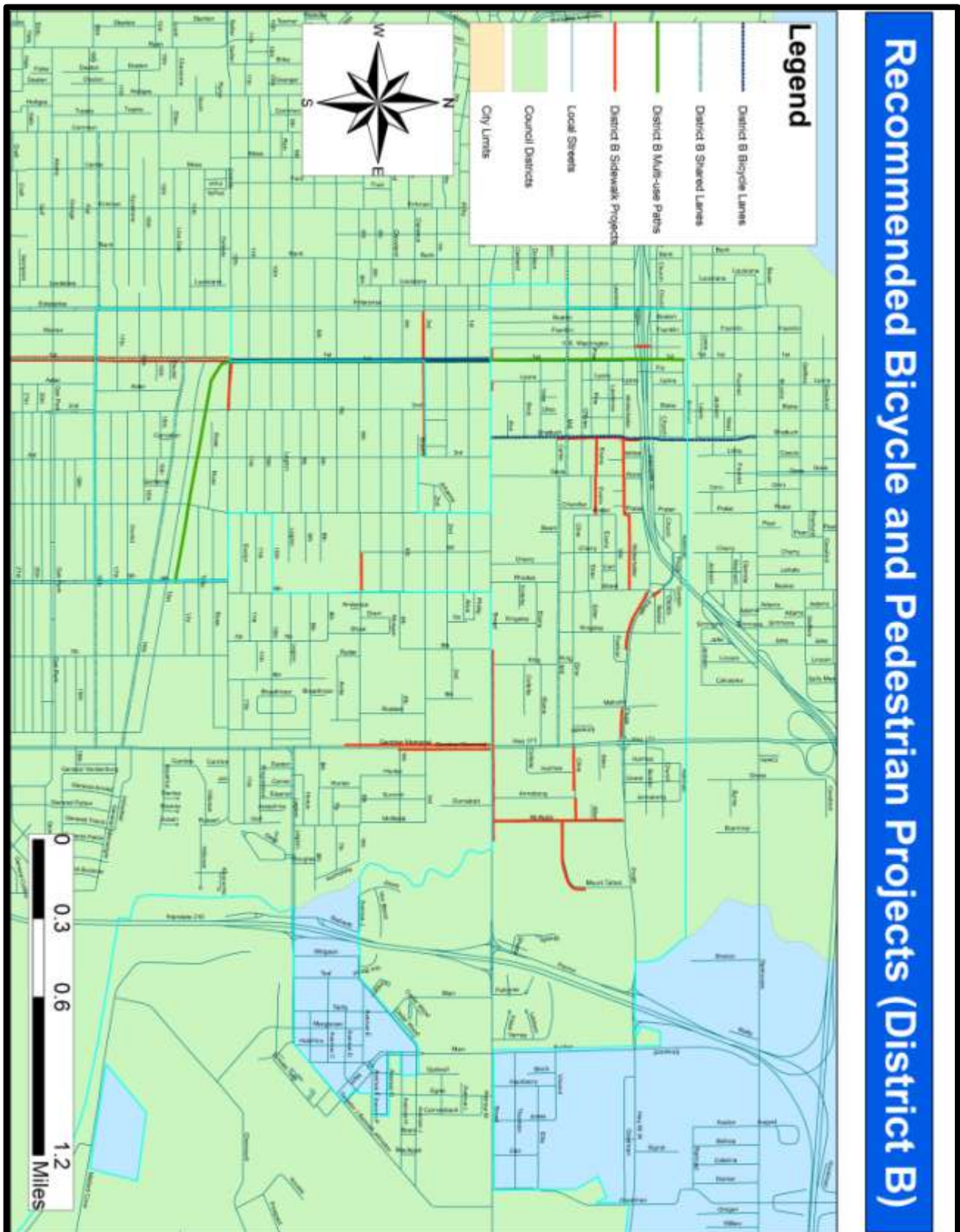


Table 21: Council District B Recommendations

Bicycle and Pedestrian Projects for Council District B					
New Sidewalk Suggestions					
Project Name	Extents	District	Map Category	Length (Feet)	Estimated Cost
VE Washington Ave West Side	I-10 Service Rd to Belden St	B	Medium-Term	302	\$7,543
Enterprise Blvd. West Side	Mill St. to Belden St.	B	Short-Term	1,313	\$39,375
S Shattuck St East Side	Belden St to Carter St	B	Short-Term	1,652	\$49,560
I-10 Service Rd North	Belden St to Albert St	B	Medium-Term	201	\$5,016
Belden St. South Side	Albert St to Existing Sidewalk	B	Medium-Term	1,112	\$27,810
Frugé St. South Side	Malcolm St to Hwy 14	B	Medium-Term	510	\$12,749
McNabb St West Side	Frugé St to Broad St	B	Long-Term	2601	\$65,025
Winterhalter St. South Side	S Shattuck St to Albert St	B	Medium-Term	2,700	\$67,500
Evans St South Side	S Shattuck St to Prater St	B	Short-Term	1,340	\$33,500
Cline St South Side	Holmes St to S MLK Hwy	B	Medium-Term	746	\$18,650
Cline St North Side	Holmes St to S MLK Hwy	B	Medium-Term	391	\$9,775
Mt Talbot St South Side	McNabb St to Ball Fields	B	Long-Term	1451	\$36,275
Broad St. North Side	VE Washington Ave to 1st Ave	B	Short-Term	204	\$6,121
Broad St. North Side 2	S Lyon St to Existing Sidewalk	B	Medium-Term	157	\$4,714
Broad St. North Side 3	8th Ave to McNabb St	B	Long-Term	3,333	\$99,975
1st Ave. East Side 2	Broad St to 12th St	B	Short-Term	5,280	\$132,000
6th St. North Side 2	5th Ave to 6th Ave	B	Medium-Term	647	\$16,168
12th St. North Side	1st Ave to 2nd Ave	B	Medium-Term	929	\$23,229
1st Ave. West Side	12th St to E Prien Lake Rd	B & F	Short-Term	5,369	\$134,237
1st Ave. East Side	12th St to E Prien Lake Rd	B & F	Short-Term	5,362	\$134,043

Bicycle Network Improvements						
Project Name	Extents	District	Map Category	Length (Miles)	Cost Category	Type of Facility Required
W Mill St	Veterans Memorial Dr. to Goos St	A & B	Short-Term	5.00	Low	Bike Lane
South Shattuck	Broad St. to Opelousas St.	A & B	Medium-Term	5.00	Low	Bike Lane
E Mill St	Goos St to Hwy 171	B	Medium-Term	4.00	Lowest	Wide Curb Lane
14th St.	Enterprise Blvd. to Gerstner Memorial Hwy	B & C	Medium-Term	2.00	Low	Shared Lane/Sharrows
1st Ave	Broad St to 12th St	B & D	Short-Term	1.97	Low	Bike Lane
7th St.	Ryan St. to 4th Ave.	B & D	Short-Term	1.10	Low	Shared Lane/Sharrows
11th St.	Ryan St. to 4th Ave.	B & D	Medium-Term	1.10	Low	Shared Lane/Sharrows
2nd St.	Louisiana Ave. to 3rd Ave.	B & D	Medium-Term	0.56	Low	Shared Lane/Sharrows
1st Ave 2	12th St to E Prien Lake Rd	B & F	Medium-Term	1.00	Lowest	Wide Curb Lane

Multi-use Paths and Connectors/Short-Cuts			
Project Name	Extents	District	Length (Miles)
Railroad Connector Trail	1st Ave to 5th Ave	B	0.75
1st Ave Trail	Railroad Tracks to 12th St	B & D	1.75

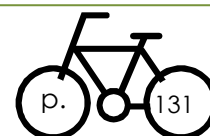


Figure 35: Council District C Recommendations

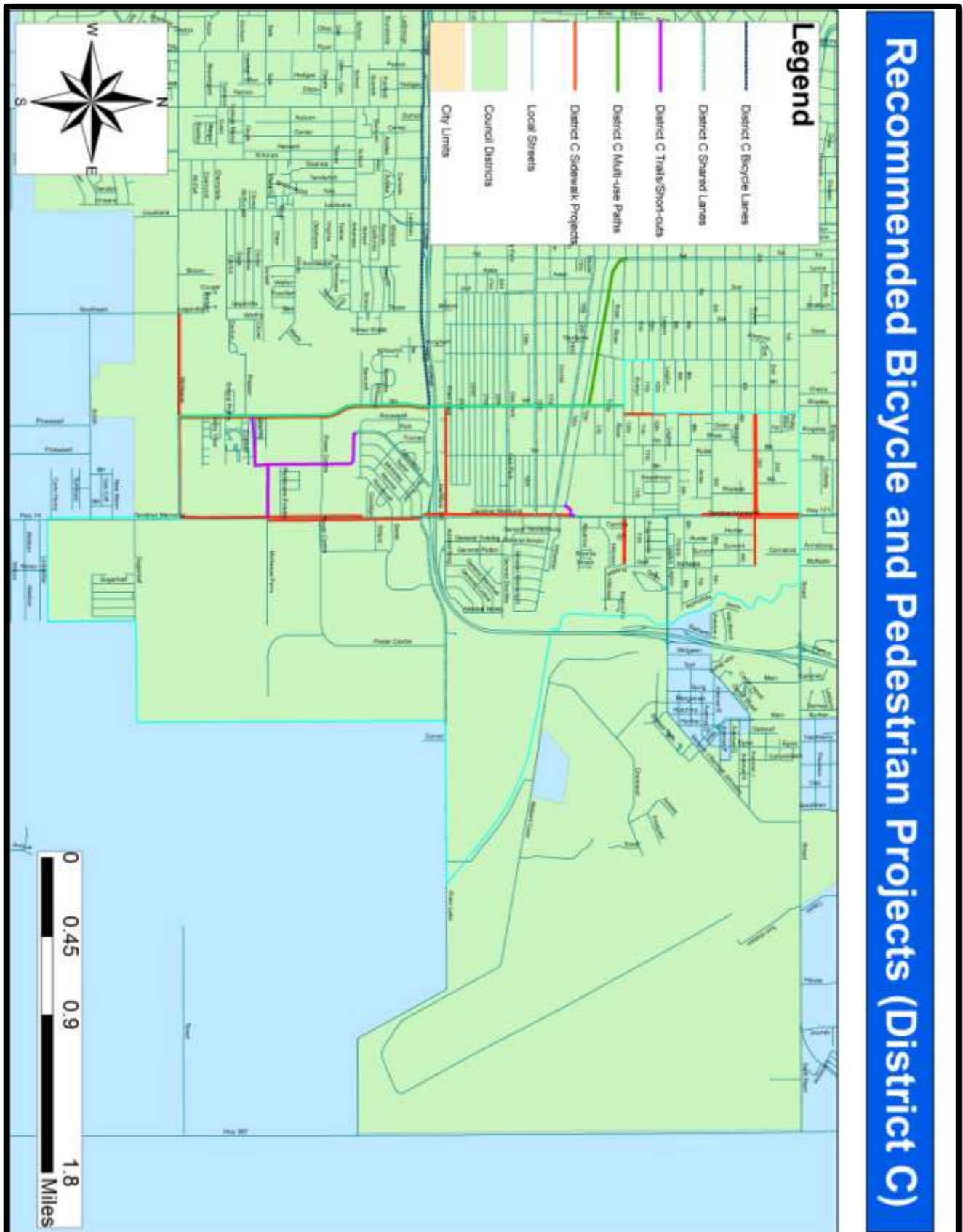


Table 22: Council District C Recommendations

Bicycle and Pedestrian Projects for Council District C					
New Sidewalk Suggestions					
Project Name	Extents	District	Map Category	Length (Feet)	Estimated Cost
Gerstner Memorial Dr. East Side	Broad St to 4th St	C	Long-Term	1,924	\$57,733
Gerstner Memorial Dr. West Side	Broad St to Existing Sidewalk	C	Long-Term	2,996	\$89,873
3rd St. North Side	6th Ave to Gerstner Memorial Dr.	C	Medium-Term	2,619	\$65,471
3rd St. South Side 2	6th Ave to Gerstner Memorial Dr.	C	Long-Term	2,624	\$65,597
3rd St South Side 3	Gerstner Memorial Dr. to McNabb St	C	Long-Term	1,246	\$31,150
6th Ave. East Side	6th St to 9th St	C	Medium-Term	1,058	\$26,454
6th Ave. East Side 2	Legion St to 12th St	C	Medium-Term	1,250	\$31,245
12th St. North Side 2	Gerstner Memorial Dr. to Russell St	C	Short-Term	1,181	\$29,528
12th St. South Side	Gerstner Memorial Dr. to Russell St	C	Short-Term	1,140	\$28,509
Hwy 14 West Side 2	Rail Road Tracks to Taylor St.	C	Medium-Term	4,509	\$135,270
E Prien Lake Rd North Side 4	5th Ave to Hwy 14	C	Medium-Term	2,754	\$82,620
5th Ave West Side	College St to E. McNeese St	C	Long-Term	7,537	\$188,418
5th Ave. East Side	College St to E. McNeese St	C	Long-Term	7,542	\$188,551
Gerstner Memorial Dr. East Side 2	E Prien Lake Rd to McNeese Farm Rd	C	Medium-Term	4,580	\$137,400
Hwy 14 West Side	Coolidge St to McNeese St	C	Medium-Term	3,868	\$116,038
E McNeese St. North Side	Gerstner Mem Dr. to Existing Sidewalk	C	Long-Term	5,297	\$158,924

Bicycle Network Improvements						
Project Name	Extents	District	Map Category	Length (Miles)	Cost Category	Type of Facility Required
14th St.	Enterprise Blvd. to Gerstner Memorial Hwy	B & C	Medium-Term	1.31	Low	Shared Lane/Sharrows
E Prien Lake Rd	Gerstner Memorial Hwy to Corbina Rd Extension	C	Long-Term	1.00	Low	Shared Lane/Sharrows
18th St.	Common St. to Gerstner Memorial Dr.	C, E & F	Medium-Term	2.00	Low	Shared Lane/Sharrows
College St.	Lake St. to 5th Ave.	C, E & F	Long-Term	2.58	High	Bike Lane
McNeese St.	Nelson Rd. to 5th Ave.	C, E, F & G	Medium-Term	3.63	High	Bike Lane

Multi-use Paths and Connectors/Short-Cuts			
Project Name	Extents	District	Length (Miles)
13th Ave Connector	13th Ave to Gerstner Mem Dr.	C	0.1
5th Ave Circuit Connector	5th Ave to 5th Ave	C	1
5th Ave Connector	5th Ave Circuit to Gerstner Mem Dr.	C	0.25
5th Ave Trail	12th St to McNeese St	F, C & B	2.5



Figure 36: Council District D Recommendations

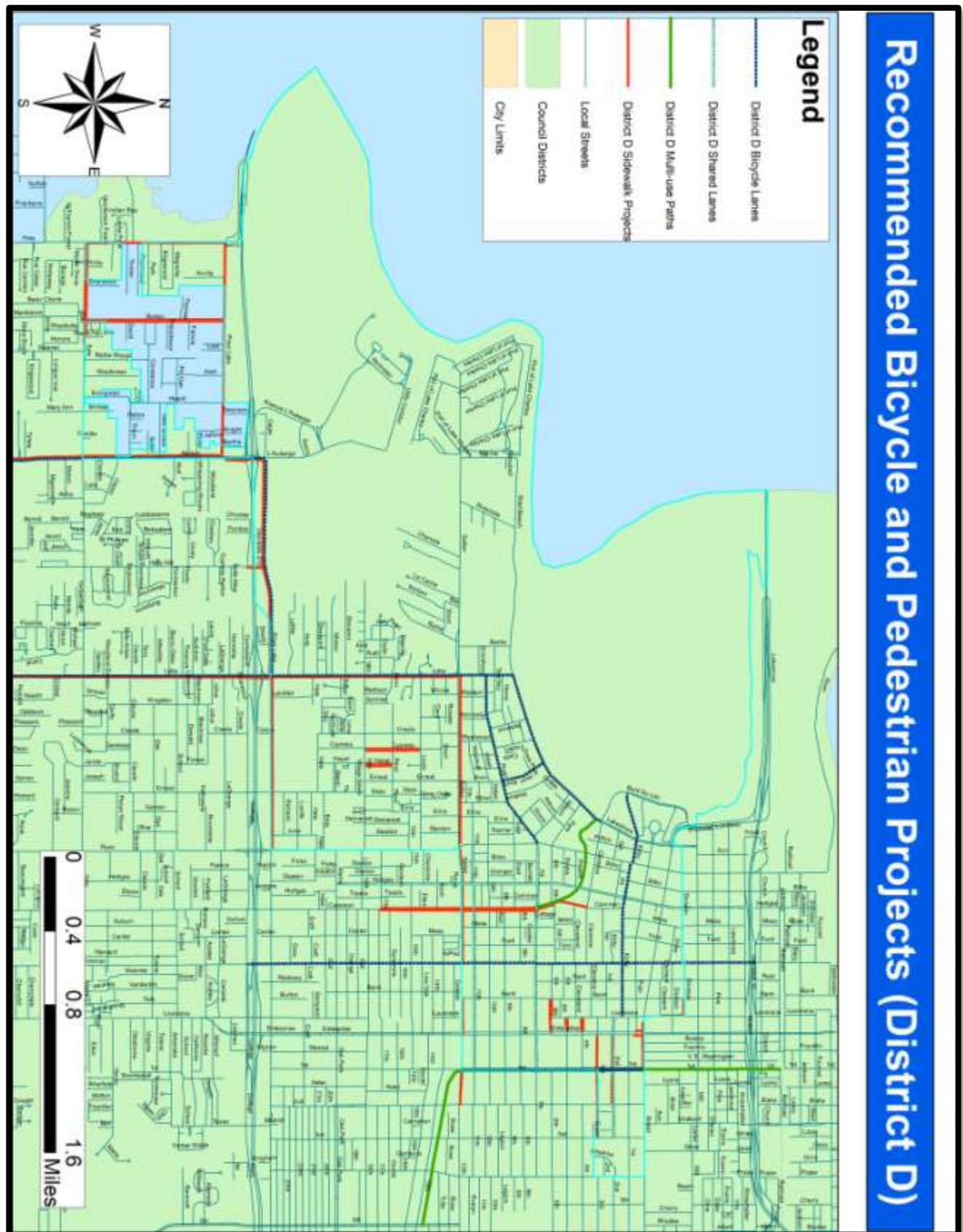


Table 23: Council District D Recommendations
Bicycle and Pedestrian Projects for Council District D
New Sidewalk Suggestions

Project Name	Extents	Council District	Timeline	Length (Feet)	Estimated Cost
Division St North	Bank St to Louisiana Ave	D	Long-Term	420	\$10,500
Division St South	Bank St to Louisiana Ave	D	Long-Term	420	\$10,500
Louisiana Ave West	Division St to Clements St	D	Long-Term	644	\$16,100
Broad St. South	1st Ave and Louisiana Ave	D	Medium-Term	1,232	\$36,967
Enterprise Blvd. West 2	Broad St to Existing Sidewalk	D	Long-Term	191	\$5,734
Enterprise Blvd. East	Broad St to Existing Sidewalk	D	Long-Term	280	\$8,406
2nd St South	Enterprise Blvd to 2nd Ave	D	Medium-Term	1,680	\$42,000
3rd St. South	Enterprise Blvd to 3rd Ave	D	Medium-Term	2,513	\$62,834
4th St. North	Louisiana Ave to Enterprise Blvd	D	Medium-Term	316	\$7,909
4th St. South	Louisiana Ave to Enterprise Blvd	D	Medium-Term	323	\$8,069
5th St. North	Louisiana Ave to Enterprise Blvd	D	Long-Term	317	\$7,931
5th St. South	Louisiana Ave to Existing Sidewalk	D	Long-Term	185	\$4,626
6th St North	Bank St to Louisiana Ave	D	Medium-Term	429	\$10,730
6th St South	Bank St to Enterprise Blvd	D	Medium-Term	798	\$19,945
Common St. West	Clarence St to 17th St	D	Long-Term	5,943	\$148,578
Common St. East	6th St to 17th St	D	Medium-Term	5,038	\$125,942
E. Sallier St. North	Ryan St to Kirkman St	D	Medium-Term	2,868	\$71,709
E. Sallier St. North 2	Bank St to Enterprise Blvd	D	Medium-Term	953	\$23,823
W. Sallier St. North	Lake St to Ryan St	D	Medium-Term	4,148	\$103,693
Cypress St West	Louie St to W 18th St	D	Long-Term	1,547	\$46,410
Cypress St East	Louie St to W 18th St	D	Long-Term	1,547	\$46,410
Hazel St West	W 18th St to Penn St	D	Long-Term	755	\$22,650
Hazel St East	W 18th St to Penn St	D	Long-Term	755	\$22,650
W. Prien Lake Rd. South 2	Lake St to Nelson Rd	D	Short-Term	5,289	\$158,670
Holly Hill Rd East 2	W Prien Lake Rd to Existing Sidewalk	D	Short-Term	477	\$11,918
Prien Lake Rd. North	Lake St to Ryan St	D	Medium-Term	4,249	\$127,470
W. Prien Lake Rd South	Nelson Rd to W Prien Lake Rd	D	Short-Term	5,226	\$156,779
W. Prien Lake Rd. East	W Prien Lake Rd to W Sale Rd	D	Short-Term	3,929	\$117,877
Burton Ln. West	W Prien Lake Rd to W Sale Rd	D	Short-Term	3,933	\$98,315
Burton Ln. East	W Prien Lake Rd to W Sale Rd	D	Short-Term	3,938	\$98,439
Lake St. East	W Sallier St to Country Club Rd	D, E & G	Medium-Term	16,074	\$482,208
Nelson Rd. East	W Prien Lake Rd to W Prien Lake Rd	D, E & G	Short-Term	1,101	\$33,025
Nelson Rd. West	W Prien Lake Rd to Country Club Rd	D, E & G	Medium-Term	9,271	\$278,125

Bicycle Network Improvements

Project Name	Extents	Council District	Timeline	Length (Miles)	Cost Category	Type of Facility Required
1st Ave	Broad St to 12th St	B & D	Long-Term	1.97	Low	Bike Lane
7th St.	Ryan St. to 4th Ave.	B & D	Long-Term	1.10	Low	Shared Lane/Sharrows
11th St.	Ryan St. to 4th Ave.	B & D	Medium-Term	1.10	Low	Shared Lane/Sharrows
2nd St.	Louisiana Ave. to 3rd Ave.	B & D	Medium-Term	0.56	Low	Shared Lane/Sharrows
Kirby St 2	Ryan St to Louisiana Ave	D	Long-Term	0.72	Low	Bike Lane
Kirby St.	Lakeshore Dr. to Bord Du Lac	D	Medium-Term	0.33	Low	Bike Lane
Alvin St.	Shell Beach Dr. to Dr. Debakey Rd.	D	Medium-Term	0.24	Low	Bike Lane
Dr. Debakey Dr.	Lake St. to Ryan St.	D	Medium-Term	0.86	Low	Bike Lane
Shell Beach Dr.	Clarence St. to Lake St.	D	Short-Term	0.86	High	Bike Lane
Hodges St.	Alamo St. to Belden St.	D & E	Long-Term	2.21	Lowest	Wide Curb Lane
Kirkman St.	N. Railroad Ave to College St	D & E	Long-Term	2.74	Low	Bike Lane
W Prien Lake Rd.	Lake St. to Nelson Rd.	D & E	Short-Term	1.00	Moderate	Bike Lane
Lake St.	Shell Beach Dr. to Country Club Rd.	D, E & G	Medium-Term	3.33	High	Bike Lane

Multi-use Paths and Connectors/Short-Cuts

Project Name	Extents	Council District	Length (Miles)
1st Ave Trail	Railroad Tracks to 12th St	B & D	1.75
Lakeshore Connector Trail	Lakeshore Dr. to Common St	D	0.6

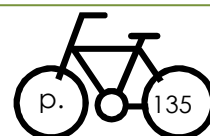


Figure 37: Council District E Recommendations

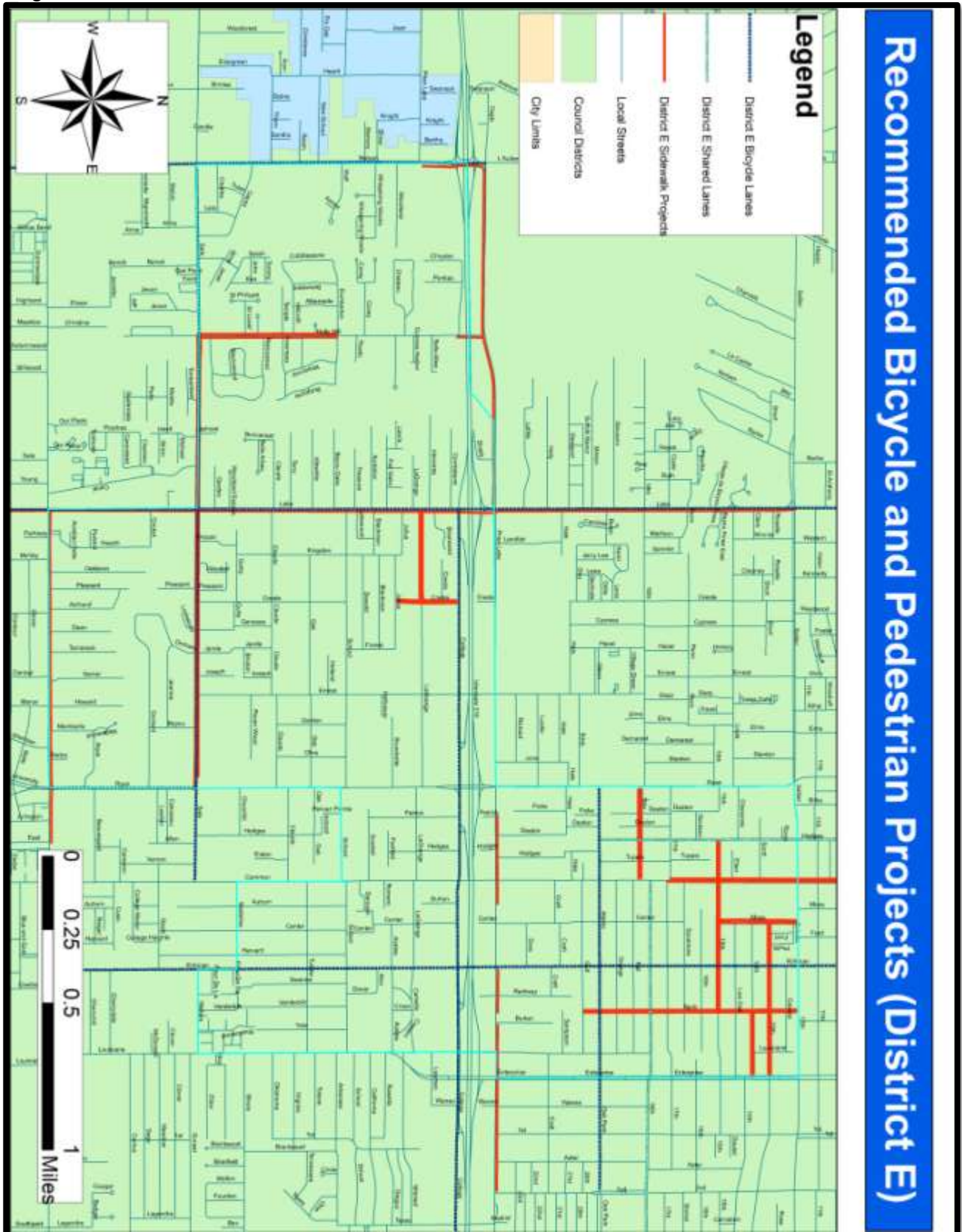


Table 24: Council District E Recommendations**Pedestrian and Bicycle Improvements for Council District E**

New Sidewalk Suggestions						
Project Name	Extents	District	Timeline	Length (Feet)	Estimated Cost	
Lake St. East	W Sallier St to Country Club Rd	D, E & G	Medium-Term	16,074	\$482,208	
Nelson Rd. East	W Prien Lake Rd to W Prien Lake Rd	D, E & G	Long-Term	1,101	\$33,025	
Nelson Rd. West	W Prien Lake Rd to Country Club Rd	D, E & G	Medium-Term	9,271	\$278,125	
Moss St. West	12th St. to 15th St.	E	Medium-Term	1,386	\$34,649	
Moss St. East	12th St. to 15th St.	E	Short-Term	1,384	\$34,595	
13th St. North	Enterprise Blvd. to Moss St.	E	Medium-Term	2,365	\$59,124	
13th St South	Moss St. to Enterprise Blvd.	E	Medium-Term	2,363	\$59,068	
14th St North	Bank St. to Enterprise Blvd.	E	Medium-Term	977	\$24,434	
14th St South	Bank St. to Enterprise Blvd.	E	Medium-Term	973	\$24,326	
15th St. North	Hodges St to Bank St	E	Medium-Term	2,637	\$65,936	
15th St. South	Hodges St to Bank St	E	Medium-Term	2,641	\$66,034	
Bank St. West	Gulf St. to 12th St.	E	Short-Term	3,840	\$96,012	
Bank St. East	Gulf St. to 12th St.	E	Short-Term	3,830	\$95,745	
18th St. North	Ryan St. to Common St.	E	Medium-Term	1,406	\$35,154	
18th St. South	Ryan St. to Common St.	E	Short-Term	1,409	\$35,235	
E Prien Lake Rd North	Existing Sidewalk to Existing Sidewalk	E	Medium-Term	1,393	\$41,790	
E Prien Lake Rd North 2	Kirkman St to Existing Sidewalk	E	Short-Term	695	\$20,850	
Kirkman St West	Prien Lake Rd to Walters St	E	Short-Term	5,358	\$160,740	
Kirkman St East	Prien Lake Rd to Madeline St	E	Short-Term	4,698	\$140,940	
W. LaGrange St. North	Lake St to Creole St	E	Medium-Term	1,384	\$34,597	
W. LaGrange St. South	Lake St to Creole St	E	Medium-Term	1,379	\$34,478	
Creole St. West	W College St to Julius St	E	Medium-Term	1,094	\$27,340	
Creole St. East	W College St to Julius St	E	Medium-Term	1,088	\$27,196	
Holly Hill Rd. West	Dumbarton Rd to W Sale Rd	E	Long-Term	2,481	\$62,030	
Holly Hill Rd. East	Dumbarton Rd to W Sale Rd	E	Long-Term	2,472	\$61,799	
W. Sale Rd. North 2	Holly Hill Rd to Ryan St	E	Medium-Term	6,913	\$172,818	
W. Sale Rd. South 2	Holly Hill Rd to Ryan St	E	Medium-Term	7,114	\$177,853	
Azalea St South	Kirkman St to Louisiana Ave	E	Medium-Term	1,300	\$32,500	

Bicycle Network Improvements

Project Name	Extents	District	Timeline	Length (Miles)	Cost Category	Type of Facility Required
18th St.	Common St. to Gerstner Memorial Dr.	C, E & F	Medium-Term	2.00	Low	Shared Lane/Sharrows
College St.	Lake St. to 5th Ave.	C, E & F	Long-Term	2.58	High	Bike Lane
McNeese St.	Nelson Rd. to 5th Ave.	C, E, F & G	Medium-Term	3.63	High	Bike Lane
Hodges St.	Alamo St. to Belden St.	D & E	Short-Term	2.21	Lowest	Wide Curb Lane
Kirkman St.	N. Railroad Ave to College St	D & E	Short-Term	2.74	Low	Bike Lane
W Prien Lake Rd.	Lake St. to Nelson Rd.	D & E	Long-Term	1.00	Medium	Bike Lane
Lake St.	Shell Beach Dr. to Country Club Rd.	D, E & G	Medium-Term	3.33	High	Bike Lane
E. Sale Rd	Ryan St. to Common St.	E	Short-Term	0.45	Low	Bike Lane
Alamo St.	Ryan St. to Enterprise Blvd.	E	Medium-Term	1.18	Low	Bike Lane
Kirkman St. 2	College St to E McNeese St	E & F	Medium-Term	1.38	Medium	Bike Lane
Ryan St.	W. Sale Rd. to W. McNeese St.	E & F	Medium-Term	0.50	Highest	Bike Lane
Nelson Rd.	W. Prien Lake Rd. to Country Club Rd.	E & G	Long-Term	2.00	High	Bike Lane
W. Sale Rd.	Ihles Rd. to Ryan St.	E & G	Long-Term	1.66	Highest	Bike Lane

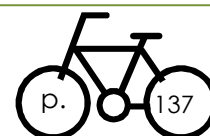


Figure 38: Council District F Recommendations

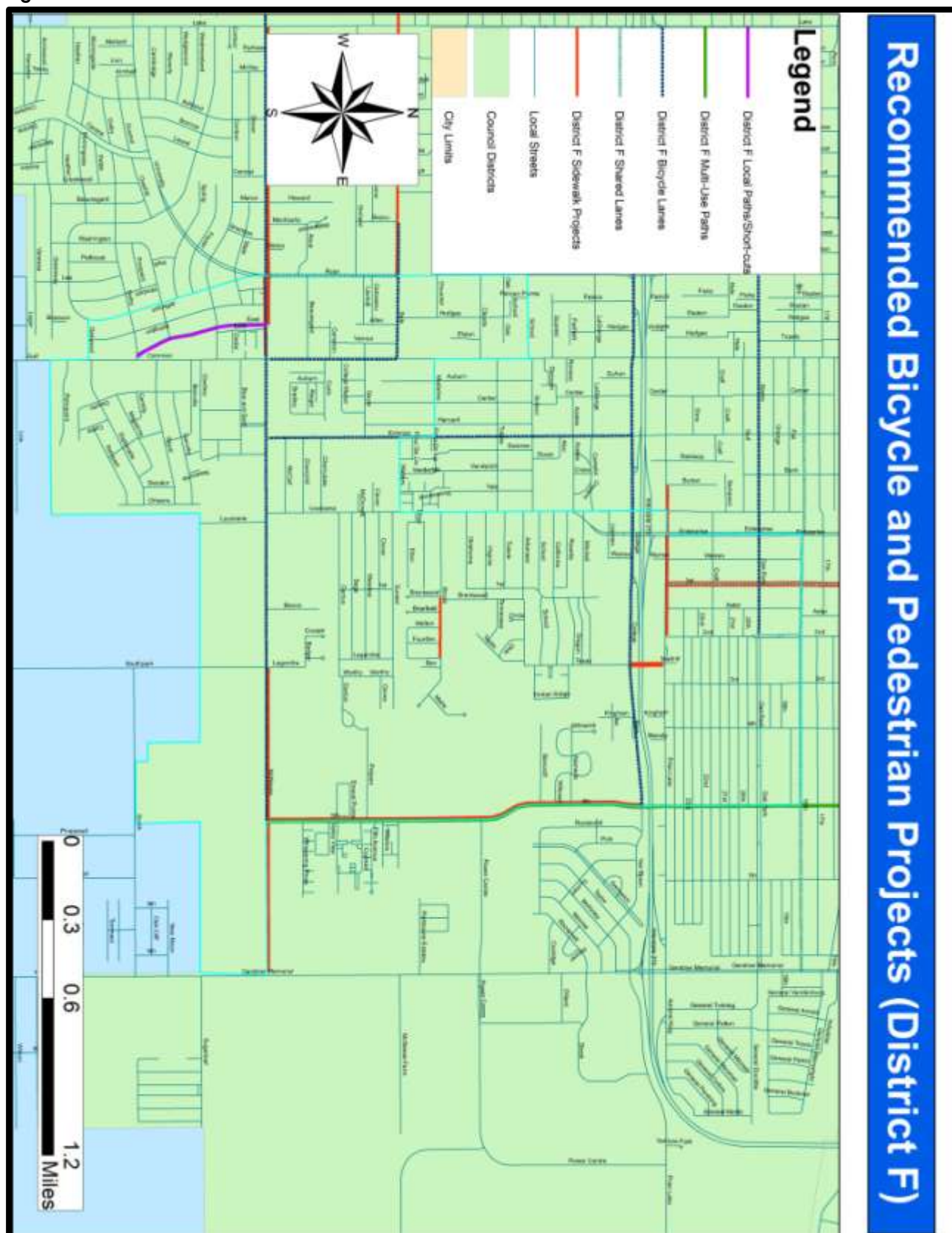


Table 25: Council District F Recommendations

Bicycle and Pedestrian Projects for Council District F					
New Sidewalk Suggestions					
Project Name	Extents	Council District	Map Category	Length (Feet)	Estimated Cost
1st Ave. West Side	12th St to E Prien Lake Rd	B & F	Short-Term	5,369	\$134,237
1st Ave. East Side	12th St to E Prien Lake Rd	B & F	Short-Term	5,362	\$134,043
E Prien Lake Rd North Side 3	Burton St to 2nd Ave.	F	Short-Term	2,587	\$77,610
Texas St	Prien Lake Rd to College St	F	Medium-Term	654	\$19,620
Madeline St South Side	Common St to Kirkman St	F	Short-Term	1,310	\$32,750
Illinois St. South Side	Brentwood St. to E. Walton St.	F	Medium-Term	1,038	\$25,951
Kirkman St West Side 2	Gayle St to McCall St	F	Medium-Term	1,547	\$46,410
Kirkman St East Side 2	Walters St to McCall St	F	Medium-Term	1,213	\$36,390
E. McNeese St South Side	Ryan St to Common St	F	Long-Term	1,363	\$40,878
W. McNeese St. North Side 3	Lake St to Ryan St	F & G	Long-Term	5,202	\$156,063
W. McNeese St South Side 4	Lake St to Ryan St	F & G	Long-Term	4,263	\$127,902

Bicycle Network Improvements						
Project Name	Extents	Council District	Map Category	Length (Miles)	Cost Category	Type of Facility Required
1st Ave 2	12th St to E Prien Lake Rd	B & F	Medium-Term	1.00	Lowest	Wide Curb Lane
18th St.	Common St. to Gerstner Memorial Dr.	C, E & F	Medium-Term	2.00	Low	Shared Lane/Sharrows
College St.	Lake St. to 5th Ave.	C, E & F	Long-Term	2.58	High	Bike Lane
McNeese St.	Nelson Rd. to 5th Ave.	C, E, F & G	Medium-Term	3.63	High	Bike Lane
Kirkman St. 2	College St to E McNeese St	E & F	Medium-Term	2.74	Medium	Bike Lane
Ryan St.	W. Sale Rd. to W. McNeese St.	E & F	Medium-Term	0.50	Highest	Bike Lane
Common St.	E Sale Rd to McNeese St	F	Long-Term	0.50	Highest	Bike Lane

Multi-use Paths and Connectors/Short-Cuts			
Project Name	Extents	Council District	Length (Miles)
Parkway St Connector	McNeese St to Common St	F	0.5
5th Ave Trail	12th St to McNeese St	F, C & B	2.5



Figure 39: Council District G Recommendations

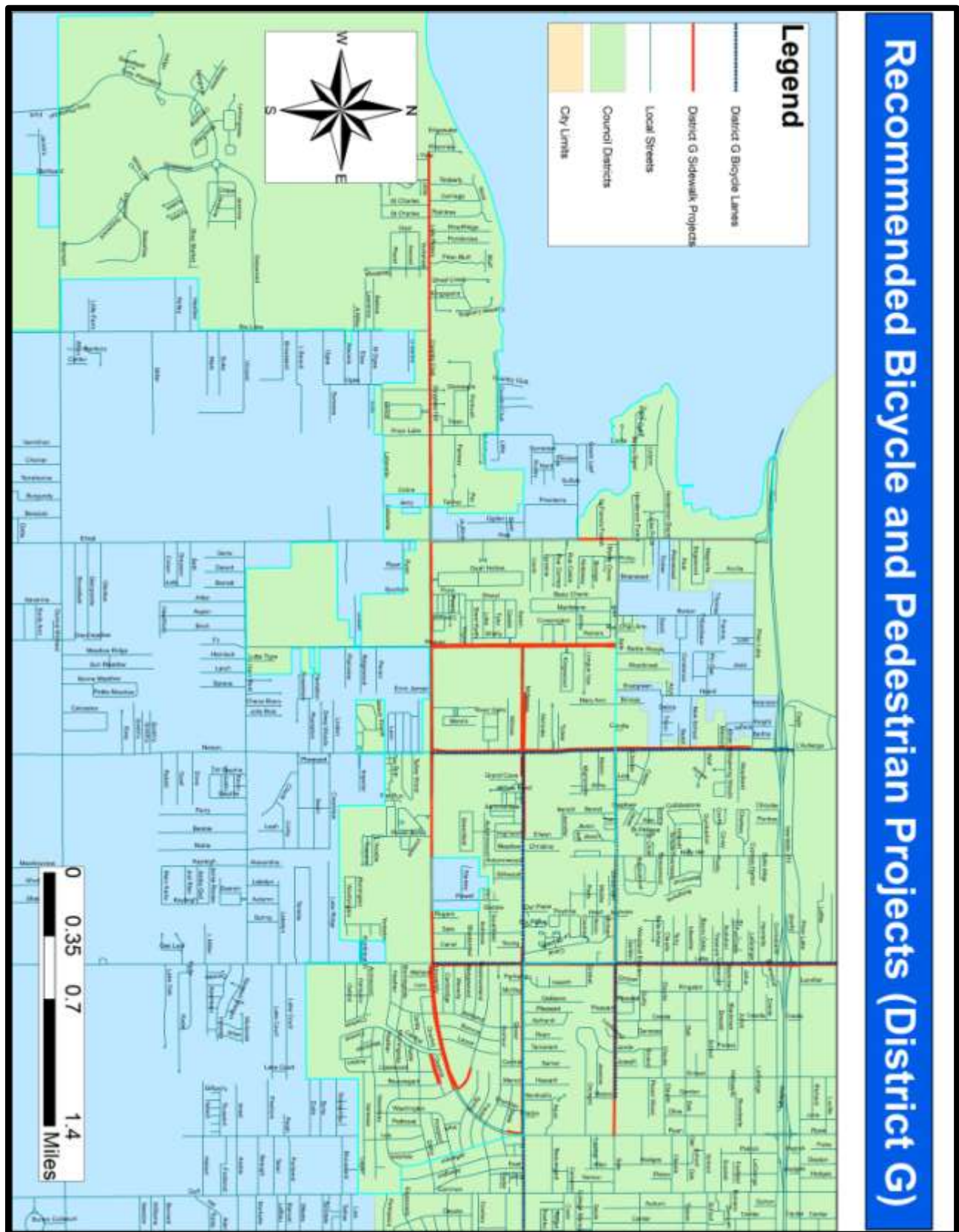


Table 26: Council District G Recommendations

Bicycle and Pedestrian Projects for Council District G					
New Sidewalk Suggestions					
Sidewalk Name	Extents	Council District	Timeline	Length (Feet)	Estimated Cost
Lake St. East Side	W Sallier St to Country Club Rd	D, E & G	Medium-Term	16,074	\$482,208
Nelson Rd. East Side	W Prien Lake Rd to W Prien Lake Rd	D, E & G	Long-Term	1,101	\$33,025
Nelson Rd. West Side	W Prien Lake Rd to Country Club Rd	D, E & G	Medium-Term	9,271	\$278,125
W. McNeese St. North Side 3	Lake St to Ryan St	F & G	Long-Term	5,202	\$156,063
W. McNeese St South Side 4	Lake St to Ryan St	F & G	Long-Term	4,263	\$127,902
University Dr. West Side	McNeese St to Existing Sidewalk	G	Medium-Term	453	\$11,327
W. Sale Rd North Side	W Prien Lake Rd to Existing Sidewalk	G	Long-Term	2,281	\$57,022
W. Sale Rd South Side	W Prien Lake Rd to Existing Sidewalk	G	Long-Term	2,483	\$62,083
Ihles Rd. East Side	W Sale Rd to Country Club Rd	G	Long-Term	5,442	\$136,061
Weaver Rd. West Side	W Sale Rd to Country Club Rd	G	Long-Term	5,369	\$134,232
Weaver Rd. East Side	W Sale Rd to Country Club Rd	G	Long-Term	5,374	\$134,349
W. McNeese St. South Side	Weaver Rd to Nelson Rd	G	Long-Term	2,612	\$78,360
W. McNeese St. North Side	Existing Sidewalk to Nelson Rd	G	Long-Term	1,441	\$43,241
W. McNeese St. North 2	Eileen St to Nelson St	G	Medium-Term	2,108	\$63,230
W. McNeese St. South Side 2	Nelson St to Existing Sidewalk	G	Medium-Term	527	\$15,797
W. McNeese St. South Side 3	Lake St to Young Ln	G	Medium-Term	406	\$12,171
Jefferson Dr. North Side	Existing Sidewalk to University Dr.	G	Medium-Term	685	\$17,125
University Dr. South Side	Lake St to Jefferson Dr.	G	Medium-Term	3,229	\$80,733
Overhill Dr. North Side	Central Pkwy to Existing Sidewalk	G	Short-Term	789	\$19,725
Overhill Dr. South Side	Central Pkwy to Existing Sidewalk	G	Short-Term	789	\$19,725
Lisle Peters Rd. North Side	Big Lake Rd to Riverview Ln	G	Long-Term	4,512	\$112,798
Country Club Rd. North Side	Jefferson Dr. to Big Lake Rd	G	Long-Term	19,260	\$577,791

Bicycle Network Improvements						
Road Name	Extents	Council District	Timeline	Length (Miles)	Cost Category	Type of Facility Required
McNeese St.	Nelson Rd. to 5th Ave.	C & E & F & G	Medium-Term	3.63	High	Bike Lane
Lake St.	Shell Beach Dr. to Country Club Rd.	D & E & G	Medium-Term	3.33	High	Bike Lane
Nelson Rd.	W. Prien Lake Rd. to Country Club Rd.	E & G	Long-Term	2.00	High	Bike Lane
W. Sale Rd.	Ihles Rd. to Ryan St.	E & G	Long-Term	1.66	Highest	Bike Lane



Funding

Improvement projects will be funded either as stand-alone projects that specifically target pedestrian or bicyclist improvements or as part of a larger capital improvement project. In addition to stand-alone alternate mode projects in the City of Lake Charles, as a matter of practice, standard capital improvement projects should incorporate alternate mode elements. Examples of projects where bicycles and pedestrian support should be included are roadway reconstruction, widening, and extensions; bridge rehabilitation and replacement; streetscape improvements; neighborhood traffic calming projects; and intersection improvements. Alternate mode elements that should be considered include street lighting; sidewalk construction and repair; curb ramps; crosswalks; signalized crossings; and on-street bike lanes.

Sources

There are a few reliable resources which can be accessed to help fund bicycle and pedestrian improvements. Which funding source is best depends on the type of project proposed. The source of funding generally consists of local, state, and federal funds as outlined below.

Safe Routes to School

Safe Routes to School is the most well-known and most well-funded funding source for sidewalk expansion. This program was created during the past decade with the goal of increasing safety and accessibility for children walking or biking to school. This program has been very successful in many cases and has been used by other local cities and Calcasieu Parish.

Local Road Safety Improvement Program

The Local Road Safety Improvement Program is conducted through the state that offers small amounts of money usually around \$10,000 for improvements to intersections and signage. While this program will not be responsible for funding infrastructure, it can be included into a mix of funding opportunities that increases the safety and visibility of pedestrian crossings.

The Recreational Trails Program

The Recreational Trails Program (RTP) is a program of the FHWA administered through the state of Louisiana's Department of Culture Recreation and Tourism. In 2010 there was over 1.3 million dollars available for trail grants. Lafayette Parish has been awarded this grant on numerous occasions as part of their Acadiana Trails network. This program will be useful in planning and development of multi-use recreational trails throughout the City of Lake Charles.

Rails to Trails

"Rails to Trails" offers funding and support opportunities for acquisition and conversion of abandoned rail lines into recreational trails. There are multiple abandoned rail lines that run through the City that would be prime candidates for this type of funding support.

Federal Programs (SAFETEA-LU)

The federal government also has programs through TEA-21 in which roadway expansion or redesign projects can get funding if they include support for bicycle or pedestrian consideration.





Chapter 8:

Recommendations for Updates



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Chapter 8: Recommendations for Updates

This is the first attempt at creating a bicycle and pedestrian plan for Lake Charles. While many factors were considered in its development, the list of things that can be reviewed is not yet exhausted. The following list gives examples of what can be done in order to update and make this plan more complete in the future.

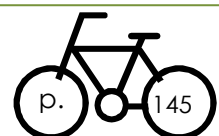
Missing Pieces

The most glaring omissions of the recommendations are the connections between Westlake to Lake Charles and Moss Bluff to Lake Charles. The reason these were omitted was because of their grand scale. The I-10 bridge will hopefully be replaced in the next decade, but the City will have very little to do with the overall design. Also the Hwy 171 Bridge that connects Lake Charles to Moss Bluff is not in need of repair and would probably have to cantilever a bike bridge on the side of the existing one. The cost would be high and the scope of this report does not fall into that sort of planning.

Safety Countermeasures

Development of countermeasures for high collision locations is a focus area with high short-term returns, so it is important to consider these when updating this plan. Some of the most progressive jurisdictions prepare annual reports on pedestrian-related collisions. If resources permit, this represents a best practice as it allows tracking of the efficacy of countermeasures and continual improvement of pedestrian safety. Development of countermeasures is usually accomplished through the following process:

1. Conduct collision analysis to determine the locations where pedestrian-related collisions are occurring most frequently. This is usually completed with statewide collision database information.
2. Once sites with high numbers of collisions are identified, prepare collision diagrams for the subject intersections, and, as necessary, review detail collision records.
3. Visit the site. While this step can be accomplished by a well-trained individual, it is often advantageous to involve a larger group of people. This group can include representatives from traffic engineering, maintenance, police and planning. It is also beneficial to invite policy-makers and advocates and make them aware of the City's efforts to improve pedestrian safety. For assistance in deriving pedestrian countermeasures, see the Federal Highway Administrations' PEDSAFE tool.
4. Summarize steps 1 to 3 in a report. This report demonstrates that the City is proactively addressing pedestrian safety and can shield the agency from liability. According to AASHTO, "If you know you have a safety problem and you fail to address it, you have more legal exposure than if you address the problem, even if you employ non-standard solutions."



Intersection Safety Improvements

The City of Lake Charles should undertake an effort to identify and improve intersections that are without or are lacking pedestrian safety devices. These safety devices include marked intersection crossings, lighting, and pedestrian signals. These improvements will make it more desirable and safe for pedestrians and bicycles alike to travel throughout the City without having to dash across the roadway when traffic permits.

This project could be undertaken by a student intern or possibly as a senior project for a McNeese student. It is recommended that the City of Lake Charles work with McNeese State University to address this problem, and find a reasonable and inexpensive solution to identifying which intersections are in the greatest need of safety improvements.

Bicycle Parking Inventory

The locations and amount of bicycle parking should be identified in the future to assure that bicyclists have a proper place to store their bicycles once they reach their destination. As with intersection safety improvements, the bicycle parking inventory can be undertaken by a McNeese State University student as their senior or independent study project.





Appendix



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Appendix A: Plan and Policy Review

Related Plans

Various planning documents have relation to this project. The studies, surveys, public input, suggestions, and recommendations made will help guide the format and information presented in the City of Lake Charles Bicycle and Pedestrian Plan.

Louisiana Statewide Bicycle and Pedestrian Master Plan

Possibly the most useful and relevant plan, the Louisiana Statewide Bicycle and Pedestrian Master Plan, was completed recently and was meant to serve as a guide to other municipalities who wish to develop their own plans. The plan started by stating results from literature review and public input sessions.

A review of existing programs and policies revealed the following findings:

- There were a disproportionately high number of fatalities (107, 10.8% of all fatalities) on state highways in 2007 when compared to the pedestrian mode split (2% of all trips).
- Historically, the number of walking and bicycling trips in Louisiana is well below the national average.
- LDOTD's current design standards and guidelines result in the construction of roadways that are often not compatible with bicycling and walking.
- There is limited and occasionally conflicting guidance on designing roadways that provide for the needs of people walking and bicycling.
- LDOTD's current sidewalk policy discourages their construction.
- Financial constraints make it difficult to fund transportation projects, causing bicycle and pedestrian accommodations to be seen as "extras," rather than an integral part of roadway design.
- Bicycling and walking facilities and accommodations are often perceived as unfunded amenities outside the scope of roadway projects.

At a series of public meetings held throughout the State in the summer and fall of 2008, the following concerns were voiced:

Challenges

- There are few designated places to bicycle or walk safely and comfortably.
- When present, sidewalks are often narrow and provide no buffer from faster moving traffic.
- Intersections are often difficult to cross safely on foot and bike, and they often have no pedestrian accommodations such as pedestrian signals, marked crosswalks or sufficient crossing time.
- There are few designated bike lanes and bicycle facilities.
- Some roads and sidewalks are poorly maintained making walking and bicycling difficult.
- Motorists are often not aware of their responsibility to share the road with pedestrians and bicyclists.
- Land use and development patterns are often not conducive to comfortable and convenient walking and bicycling.



Opportunities

- More people in Louisiana are walking and biking than ever before (2.2% of the population walk to work, and 0.4% bicycle to work).
- The aging baby boomer population is looking for alternatives to driving and increased opportunities for physical activity.
- The growing awareness of environmental impacts of transportation has led to a high level of public support for increased accommodation for walking and bicycling.
- There is recognition of the cost effectiveness of making pedestrian and bicycle improvements integral parts of larger projects.
- New resources on design strategies are available, and can help increase safety for pedestrians and bicyclists.
- Staff of LDOTD is supportive of these new measures.
- Build on and support the efforts of public health agencies which promote walking and bicycling as physical activities which reduce the risk of diabetes, heart disease and other chronic diseases.

A section of the Louisiana Statewide Plan offered existing policies of the Federal Government. The statewide plan shows that federal policies clearly state that the needs of bicyclists and pedestrians should be considered in every transportation project. The section goes on to mention the most recent transportation law (SAFETEA-LU) and the policies issued by the United States Department of Transportation (USDOT). The bicycle and pedestrian provisions of SAFETEA-LU include the following policies:

- "Bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction and transportation facilities, except where bicycle and pedestrian use are not permitted." (23 U.S.C. Section 217(g) (1))
- "In any case where a highway bridge deck is being replaced or rehabilitated with Federal financial participation, and bicyclists are permitted on facilities at or near each end of such bridge, and the safe accommodation of bicyclists can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations." (23 U.S.C. Section 217(e))

The Louisiana Statewide Plan also mentions the USDOT policy on bicycling and walking. The document states that "bicycling and walking facilities will be incorporated into all transportation projects unless exceptional circumstances exist." It also states that in all urbanized areas bicycle and pedestrian ways "shall be established" with exception for situations where bicycles and pedestrians are prohibited, where the cost of accommodation exceeds 20% of the total project cost or where there is an absence of need. The policy also states that any exceptions to the policy should be approved at a senior level.

The fact that the federal government's policies on transportation are highlighted in this plan shows that the State of Louisiana wants to catch-up to the rest of the nation with its planning for bicycles and pedestrians. The report goes on to mention statistics that show Louisiana has lower rates of walking and biking than the national average and also has higher rates of accidents involving bikes and pedestrians than the rest of the nation. These two statistics show that attention paid to planning and infrastructure support for pedestrians and bicyclists is not up to national standards.



The Louisiana Statewide Plan further goes on to give guidelines for project development that is meant to ensure that pedestrian and bicycle improvements are cost effective and necessary. Following this list of guidelines, the policies and objectives are evidence of how serious the state is in planning for and implementing improvements. It gives examples of design policies and also gives a list of documents that can be used as a reference for types of designs.

City of Lake Charles Master Plan

The City of Lake Charles Master Plan was prepared by US Army Corps of Engineers and CDM in November, 2008. It was created in response to the threats posed by Hurricanes Rita and Katrina; this plan had the purpose to set out a vision of how Lake Charles intends to grow as a community. It states a vision and gives three development goals. It also gives recommendations on how that development should occur and what steps can be taken in order to develop within the vision set forth by the City.

Section 6.2.2.5 discusses metropolitan transportation and also talks about alternative modes of transportation, stating:

“As the cost of gasoline continues to rise, demand for alternative modes of transportation will as well. In as much as the city can lay the groundwork for a non-automobile transportation system, it will see its usage increase...”

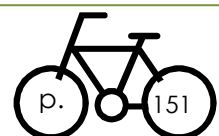
The plan states that transportation is the second largest expenditure of a household and suggests human powered transport could be viable if Lake Charles provides options. The plan goes further to say, “cyclists and pedestrians desire similar environments: calm traffic conditions, appealing streetscapes, and a convenient mix of uses.” It promotes increasing public awareness and publication of the Non-motorized Study for the Lake Charles Metropolitan Area, which showcases potential improvements to the system.

If the city provides these conditions, it will see an increasing demand for use of its trails and bike lanes. Suggestions are offered to increase cycling and pedestrian activity within a community:

- Establishment of separate cycling facilities along heavily traveled roads and at intersections.
- Traffic-calming in most residential neighborhoods. Many cities have introduced alterations such as road narrowing, raised intersections and crosswalks, traffic circles, extra curves and zigzag routes, speed humps, and artificial dead ends created by mid-block street closures. Traffic calming is usually area-wide and not for isolated streets.
- Ample bike parking. Local governments and public transit systems provide many bike parking facilities. Private developers and building owners are required by local ordinances to provide specified minimum levels of bike parking both within and adjacent to their buildings.
- Full integration of cycling with public transportation; particularly by equipping Lake Charles buses with racks to carry bicycles.

2034 Lake Charles Metropolitan Transportation Plan

The 2034 Lake Charles Metropolitan Transportation Plan (MTP) is the primary reason behind the development of this report. This plan was released in 2009 and gives a 25 year vision of what transportation in the Lake Charles Metro Region will be like. In order to receive state and federal



funding on projects, they must be included in the MTP. On pp. 3-26, in the pedestrian and bicycle section of the plan, the authors directly state:

"There are currently no local jurisdictional bike or pedestrian plans. Calcasieu Parish and the City of Lake Charles have provided wide shoulders in various locations for bike use, but few routes are designated and no inventory exists. Many neighborhoods have sidewalks, but a sidewalk inventory of the region is not available. A systematic inventory of ADA sidewalk compliance is also not available for the study area."

The plan goes further to state in its Pedestrian Facilities Analysis sections on page 3-30:

"There was no current inventory of existing facilities to use as a baseline, but information gathered through the public visioning and consultation processes provided sufficient information to develop the following list of deficiencies.

- Lack of inventory of existing non-motorized facilities to use as a baseline for developing and continuous analysis.
- No plan for the development of a connected transportation network that meets the needs of people who want or need to use non-motorized modes.
- Lack of sidewalks in some of Lake Charles commercial areas.
- Insufficient network of sidewalks and bikeways to schools."

These quotes are a glaring revelation of the lack of planning for pedestrians and bicycles in the area. Surveys, suggestions, and quotes obtained from citizens at a public meeting shed light on the desire for the region to focus on pedestrian infrastructure and program improvements. This plan states the need for increased planning for pedestrian and bicycle facilities while offering evidence of public support. The Lake Charles 2034 MTP will be an integral part of the Calcasieu Parish Pedestrian and Bicycle Master Plan.

Lake Charles Metropolitan Area Non-Motorized Transportation Study

Although the first of its kind in size and scope, this is not the first attempt to conduct an inventory and analysis of bicycle and pedestrian support in Calcasieu Parish or Lake Charles. In 1996, Aaron Iverson published the "Lake Charles Metropolitan Area Non-Motorized Transportation Study." This study was completed as a thesis for the University of Illinois at Urbana-Champaign and was presented to IMCAL. It was compiled in response to the 1995 Lake Charles Metropolitan Transit Plan. It focused on two main elements: the existing conditions of bicycle facilities and pedestrian support and recommendations on how to improve deficiencies.

The term "bicycle facilities" refers to bicycle routes, trails or lanes, and parking. For pedestrian support, this study utilized parameters to measure pedestrian friendliness of the Lake Charles Metro Area using indicators such as: ease of street crossing, sidewalk continuity, street patterns, and topography and environment. The report concluded that there were minimal facilities for bicycling parking, with no plan for bike routes or trails and that pedestrian support was scattered and poorly maintained. The study subsequently found that the weather in Southwest Louisiana was optimal for pedestrian and bike travel, but the lack of infrastructure did not allow for these activities.



While not creating a complete inventory of sidewalks within the region, this study does provide a good survey of intersections that provide pedestrian signals. This will be useful in deciding which intersections should be targeted for improvements. The study further goes on to suggest 29 bike routes. The suggested routes are put in the format of the Federal Highway Administration's evaluation method. This method shows necessary information such as traffic volume and speed, the reason selected, and cost. While this information is necessary to include for the suggestions, other supplemental information such as photographs, cross-sections, road redesign schematics, and a prioritization schedule was not included. While not a complete plan, The Lake Charles Metropolitan Area Non-Motorized Transportation Study of 1996 will be used as a valuable reference and guide for the completion of the Calcasieu Parish Bicycle and Pedestrian Plan.

Current Louisiana Bicycling Laws

The inclusion of these laws is meant to serve as a reference to the public and decision-makers. Possibly the most important of all laws is RS32:194, which grants the same rights to a person riding a bicycle on a state highway to a person driving an automobile.

RS 32:106 Methods of Giving Hand and Arm Signals

All signals herein required to be given from the left side of the vehicle in the following manner and such signals shall indicate as follows:

- Left Turn: Hand and arm extended horizontally with the hand open and the back of the hand to the rear
- Right Turn: Hand and arm extended upward at the angle of forty-five degrees from shoulder or elbow, with the hand open and back of the hand to the rear
- Stop or Decrease Speed: Start hand and arm extended downward at an angle of forty-five degrees from shoulder or elbow, with the hand open and the back of the hand to the rear

RS 32:193 Operation of Bicycles; General Provision

The regulations applicable to bicyclists shall apply whenever a bicycle is operated upon a highway or upon any path set aside for the exclusive use of bicycles.

RS 32:194 Traffic Laws Apply to Persons Riding Bicycles

Every person riding a bicycle upon a highway of this state shall be granted all the rights and shall be subject to all the duties applicable to the driver of a vehicle.

RS 32:195 Riding on Bicycles

- A person propelling a bicycle shall not ride other than upon or astride a permanent or regular seat attached thereto.
- No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped.
- A person operating a bicycle shall at all times keep at least one hand upon the handle bars thereof.

RS 32:196 Clinging to Vehicles



No person riding upon any bicycle shall attach himself or the bicycle to any vehicle upon a highway.

RS 32:197 Riding on Roadways and Bicycle Paths

- Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.
- Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles.
- Whenever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such path and shall not use the roadway.

RS 32:199 Bicycle Helmets; Restraining Seats

With regard to any bicycle used on a public roadway, public bicycle path, or other public right-of-way, no parent, guardian, or person with legal responsibility for the safety and welfare of a child shall knowingly allow any of the following:

- Such child under the age of twelve to operate or ride as a passenger on a bicycle without wearing an approved helmet of good fit fastened securely upon the head with the straps of the helmet.
- Such child who weighs less than forty pounds or is less than forty inches in height to be a passenger on a bicycle without being properly seated in and adequately secured to a restraining seat.

Notice shall be provided in accordance with the following provisions:

- A person regularly engaged in the business of selling or renting bicycles shall post a sign stating the following: "Louisiana law requires a bicycle operator or passenger under the age of twelve years to wear a bicycle helmet when riding a bicycle. Louisiana law also requires a passenger who weighs less than forty pounds or is less than forty inches in height to be properly seated in and adequately secured to a restraining seat."

RS 32:329 Bicycles; Front Lamps; Side and Rear Reflectors

Every bicycle when in use at nighttime shall be equipped with a lamp on the front which shall emit a white light visible from a distance of at least five (5) hundred feet to the front and with a red reflector on the rear and a reflector on each side facing outward at the right angle to the bicycle frame, all of a type approved by the department which shall be visible from all distances within six (6) hundred feet to one hundred feet to the rear when directly in front of lawful lower beams of headlamps on a motor vehicle. A lamp emitting a red light visible from a distance of five (5) hundred feet to the rear may be used in addition to the red reflector.

RS 32:346 Brakes on Bicycles

Every bicycle shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level, clean pavement.



Appendix B: Design Guidelines

These guidelines are based on The Road Design Manual for the Louisiana DOTD and have suggestions borrowed from two AASHTO books, A Policy on Geometric Design of Highways and Streets and Bike Book 1999 along with The City of San Luis Obispo's Bicycle Master Plan. Certain policies should be considered when planning any new roadway improvement.

A Policy on Geometric Design of Highways and Streets, AASHTO

- At certain locations or in certain corridors, it is appropriate to further supplement the existing highway system by providing specifically designated bikeways (for either exclusive or nonexclusive bicycle use). (Page 101)
- Provisions for bicycle facilities should be in accordance with the AASHTO Guide for the Development of Bicycle Facilities. (Page 367)
- Even if specific bicycle facilities are not provided, consideration should be given to other practical measures for enhancing bicycle travel on the highway. (Page 367)

The Road Design Manual and the AASHTO Bike Book also both state that increasing accommodations for pedestrians and bicyclists may require a reduction in space for motor vehicles, often in the form of narrower travel lanes and smaller intersections. The Parish therefore must consider bicycles and pedestrians whether or not specially designated facilities are provided. Narrower travel lanes can provide increased space for paved shoulders or bicycle lanes and reduce the distance that pedestrians must travel to cross the road. In regards to legal responsibility, the Parish may be liable when it can be shown that it should have been aware of deficiencies that have been shown to contribute to crashes, such as wide expansion joints, sudden pavement drop-offs, unsafe drain grates, etc.

Pedestrian Facilities

Within the past few decades pedestrian travel planning in the area has received, at best, only secondary attention, with much of the emphasis being placed on the access and mobility of automobiles. Many American cities are combating this deficit by undertaking significant efforts to revise their existing plans, policies, and design standards in order to create more walkable communities and a more multi-modal and balanced transportation network.

Each day, nearly everyone in Lake Charles is a pedestrian, for at least some part of every trip. Pedestrian infrastructure availability and safety issues are garnering the attention of many Parish residents who are demanding more consideration when it comes to transportation planning. There are many opportunities to improve pedestrian conditions and in doing so, make Lake Charles communities more attractive and livable.

This chapter was developed utilizing a various array of references, but the bulk of the suggestions come from two sources, The American with Disabilities Act Access Guidelines (ADAAG) and the FHWA produced book Designing Sidewalks and Trails for Access. The main references are showcased below.



ADAAG Regulations:

Clearances (Sections 403.5) – Clear Width of walking shall be a minimum of 3 feet (36 inches), except as provided at turns or passing spaces.

Passing Spaces – An accessible route with a clear width less than 5 feet (60 inches) shall provide passing spaces at intervals of 200 feet minimum. Passing spaces shall be either: (a) a space 5 feet (60 inches) minimum by 5 feet (60 inches) minimum; or, (b) an intersection of two walking surfaces providing a t-shaped space where the base and arms of the t-shaped space extend 4 feet (48 inches) minimum beyond the intersection.

FHWA Design Sidewalks and Trails for Access

Width – The pedestrian “zone” (sidewalk) should be at least 5 feet (60 inches) wide for two pedestrians to travel side by side without passing other pedestrians, or for two people going in opposite directions to pass one another. The pedestrian zone should never be less than 3 feet (36 inches). This minimum width is only acceptable when: (1) A wider width is impossible; (2) The narrow width continues for as short a distance as possible; and (3) Passing spaces are provided at intervals of no more than 200 feet.

Sidewalk Width

The width of a sidewalk depends primarily on the number of pedestrians who are expected to use the sidewalk at a given time: high-use sidewalks should be wider than low-use sidewalks.

Table 27: Sidewalk Width Guidelines

Type of Roadway	Suggested Width
Local or collector streets	(5 ft.)
Arterial or major streets	(6 to 8 ft.)
CBD areas	(8 to 12 ft.)
Along parks, schools, and other major pedestrian generators	(8 to 10 ft.)

Source: AASHTO

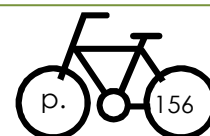
Sidewalk Buffer Width

Buffers between pedestrians and motor vehicle traffic are important to provide greater levels of comfort, security, and safety to pedestrians. Landscaped buffers provide a space for poles, signs, and other obstructions and they protect pedestrians from splash. The ideal width of a planting strip is 1.8 m (6 ft.).

Table 28: Sidewalk Buffer Guidelines

Type of Roadway	Suggested Width
Local or collector streets	(2 to 4 ft.)
Arterial or major streets	(4 to 6 ft.)

Source: AASHTO



Bicycle Facilities

Bicycle facilities can cover a wide range of possibilities. Facility types range from a shared lane with motorized traffic with no accommodation to a separate designated bicycle path. In selecting which type of facility to use, it is important to consider the type of cyclists and the roadway characteristics. According to the Federal Highway Administration manual "Selecting Roadway Design Treatments to Accommodate Bicycles," there are three primary factors which influence bicycle travel on streets. The three factors are lane widths, traffic speeds, and traffic volumes.

Lane Width - Lane widths are critical for allowing enough room for the combined movement of bicycles and automobiles. There are a few highways and roadways within Lake Charles that already have shoulders of at least 4 feet and could be used as bicycle lanes if striping and signage were provided. National standards require a minimum right-hand curb lane width of 14 feet to safely accommodate shared use. There are many roads in Lake Charles that have lane widths of at least 14 feet, but roadway speed will have to be considered on these roads.

Traffic Speeds - In order to be considered safe for shared roadway use, traffic speeds of 35 mph are required. Bicycle lanes can be substituted for shared roadway use if speed conditions exist that are greater than 35 mph. Although the minimum bicycle lane width is 4 feet, a sliding scale should be developed that takes into account the added buffer needed with increased automobile speed. While some collector roads located within existing communities have low speed limits, most of the roads connecting communities within Calcasieu Parish have speed limits above 35 mph and should not be considered suitable for shared use.

Traffic Volumes - An annual average daily traffic volume of less than 10,000 vehicles is recommended by the FHWA for shared roadway use. Most of the principal arterials in Lake Charles have an annual daily traffic volume of more than 10,000 vehicles and are not recommended for shared use. Collector and local roads are more conducive to shared use because of their lower traffic volumes and lower traveling speeds and should be considered preferable for a designation of a bicycle route network. Because population centers within the City are separated by well-traveled roads with high rates of speeds, these connections should be made with exclusive bike lanes where practical.

Table 29: Bicycle Facility Design Standards

Bicycle Facilities Design Standards			
Type of Bicycle Facility	Average Daily Traffic	Posted Speed Limit	Travel Lane
Shared Lanes	< 3,000	≤ 30mph	12 ft.
Wide Curb Lanes	< 10,000	≤ 30 mph	14 ft.
Bicycle Lanes	≥ 10,000	≥ 35 mph	4-6 ft. Striped Lane



Redesigning Roadways to Accommodate Bicycles (Road Diets)

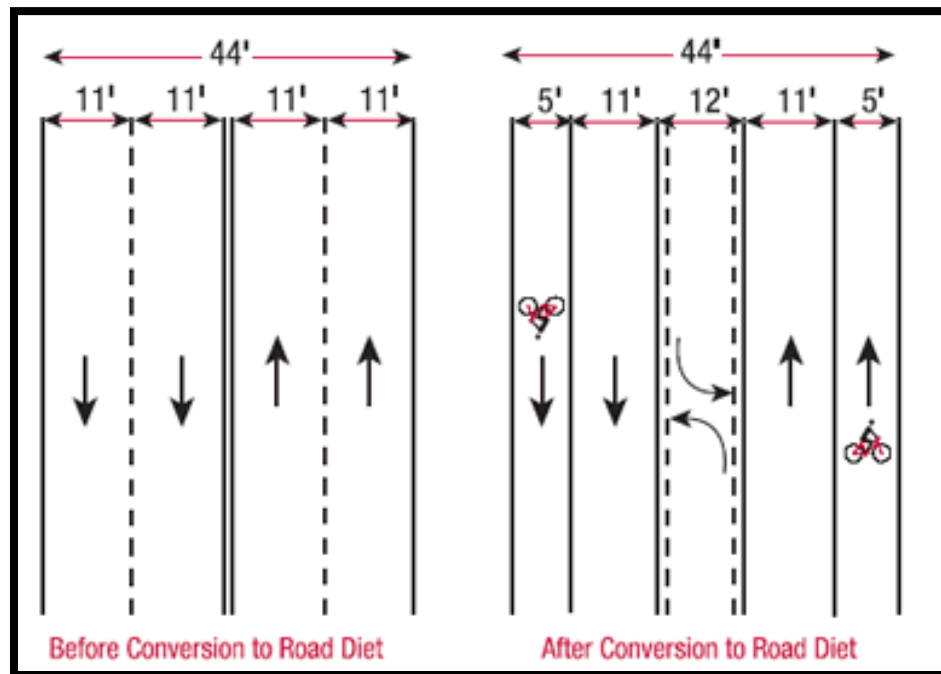
"ROAD DIETS" are often conversions of four lanes into three lanes (two through lanes and a center turn lane). The fourth lane may be converted to bicycle lanes, sidewalks, and/or on-street parking. In other words, existing space is reallocated; the overall area remains the same.

Under most average daily traffic (ADT) conditions tested, road diets have minimal effects on vehicle capacity, because left-turning vehicles are moved into a common two-way left-turn lane. However, for road diets with ADTs above approximately 20,000 vehicles, there is a greater likelihood that traffic congestion will increase to the point of diverting traffic to alternate routes.

Road diets can offer potential benefits to both vehicles and pedestrians. On a four-lane street, drivers change lanes to pass slower vehicles (such as vehicles stopped in the left lane waiting to make a left turn). In contrast, drivers' speeds on two-lane streets are limited by the speed of the lead vehicle. Thus, road diets may reduce vehicle speeds and vehicle interactions during lane changes, which potentially could reduce the number and severity of vehicle-to-vehicle crashes. Pedestrians may benefit because they have fewer lanes of traffic to cross, and because motor vehicles are likely to be moving more slowly. The Federal Highway Administration (FHWA) report *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations* found that pedestrian crash risk was reduced when pedestrians crossed two- and three-lane roads, compared to roads with four or more lanes.

The road diet formula can be used on many roads throughout the City of Lake Charles, such as Broad St. It is recommended that all four lane roads be considered for conversion to three lanes, plus inclusion of bicycle lanes.

Figure 40: Road Diet Example



Shared Lanes

On streets with average daily traffic (ADT) of less than 3,000 vehicles per day or average travel speeds of less than 30 mph, a standard 12-foot travel lane is sufficient to accommodate both motorist and cyclist. Unless the roadway is part of a designated bicycle route or is heavily used by cyclists, perhaps as an access route to a school or playground, no special signage is necessary. If the road is used regularly by bicyclists, then a marked "sharrow" is recommended for the roadway.

Bicycle Routes

A bicycle route is a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational route markers. Bicycle routes share roadways with automobiles. Signing of shared roadways indicates to cyclists that there are particular advantages to using these routes compared to alternate routes. Bike routes should establish a continuous routing, but may be a combination of any and all types of bikeways. There are several reasons for designating signed bike routes:

- a. The route provides continuity to other bicycle facilities such as bike lanes and shared use paths.
- b. The road is a common route for bicyclists through a high demand corridor.
- c. In rural areas, the route is preferred for bicycling due to low motor vehicle traffic volume or paved shoulder availability.
- d. The route extends along local neighborhood streets and collectors that lead to an internal neighborhood destination such as a park, school or commercial district.

Wide Curb Lanes

In urban areas, wide curb lanes are recommended for use on roadways with posted speed limits of 30 mph or less and where ADT volumes are less than 10,000. In general, 4.2 m (14 feet) of usable lane width is the recommended width for shared use in a wide curb lane. Usable width normally would be from edge stripe to lane stripe or from the longitudinal joint of the gutter pan to lane stripe. Wide curb lanes can also be used in rural areas; however, under high-volume or high-speed conditions a paved shoulder is preferred. No special signage is required.

Bicycle Lanes

Bike lanes are incorporated when it is desirable to delineate available road space for preferential use by bicyclists and motorists, and to provide for more predictable movements by each. Bike lane markings can increase a bicyclist's confidence in motorists not straying into their path of travel. Bicycle lanes are best suited for use in urban areas on arterial roadways with ADT volumes greater than 10,000 vehicles per day and average travel speeds of over 30 mph.

Bike lanes should be one-way facilities and carry bike traffic in the same direction as adjacent motor vehicle traffic. Two-way bike lanes on one side of the roadway are not recommended

Figure 41: Sharrow Example



when they result in bicycles riding against the flow of motor vehicle traffic. In rural areas, designated bike lanes may be preferred over an undesignated paved shoulder where heavy bicycle traffic is expected; such as, a bicycle trip generator such as a park or school or on a designated bicycle route. Pavement markings and signage are used to designate the lane for bicycle use.

Table 30: Bike Lane Design Guidelines

Bike Lane Design Standards			
Min. Width (ft.)	Average Daily Traffic	Posted Speed Limit	Striping
4	$\geq 10,000$	≤ 35	6 inches
5	$\geq 10,000$	≥ 40	6 inches
6	$\geq 15,000$	≥ 45	6 inches

Design Considerations

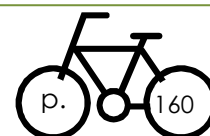
Bicycles have special design considerations that must be paid attention to. The following two suggestions are based on the AASHTO Bike Book.

Pavement Surface Quality

The smoothness of the riding surface affects the comfort, safety and speed of bicyclists. Pavement surface irregularities can do more than cause an unpleasant ride. Pavement surfaces should be smooth, and the pavement should be uniform in width. Wide cracks, joints or drop-offs at the edge of traveled ways parallel to the direction of travel can trap a bicycle wheel and cause loss of control; holes and bumps can cause bicyclists to swerve into the path of motor vehicle traffic. In addition, a reduction in the operating speed of the bicyclist below a comfortable level results in less stability of the bicycle. As pavements age it may be necessary to fill joints or cracks, adjust utility covers or even overlay the pavement in some cases to make it suitable for bicycling.

Drainage Inlet Grates

Drainage inlet grates and utility covers are potential obstructions to bicyclists. Therefore, bicycle-safe grates should be used, and grates and covers should be located in a manner which will minimize severe and/or frequent maneuvering by the bicyclist. When new highway facilities are constructed, curb opening inlets should be considered to minimize the number of potential obstructions. Drainage inlet grates and utility covers should be placed or adjusted to be flush with the adjacent pavement surface. Drainage inlet grates with slots parallel to the roadway, or a gap between the frame and the grate, can trap the front wheel of a bicycle, causing loss of steering control. If the slot spacing is wide enough, narrow bicycle wheels can drop into the grates. Conflicts with grates may result in serious damage to the bicycle wheel and frame and/or injury to the bicyclist. These grates should be replaced with bicycle-safe, hydraulically efficient versions. When this is not immediately possible, a temporary correction is to weld steel cross straps or bars perpendicular to the parallel bars at 100-mm (4-inch) center-to-center.



Grade Separated and Shared Use Paths

Multi-Use Paths

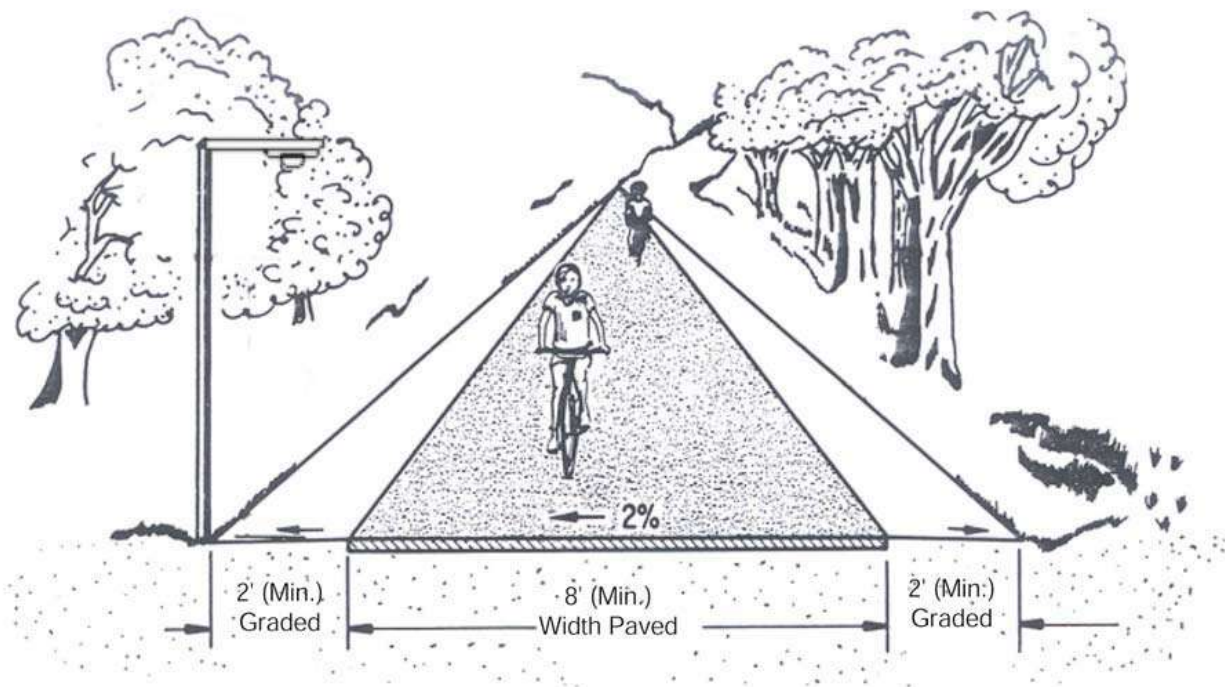
Multi-use and bicycle paths, are separate special use facilities providing both physical and visual separation from motorized traffic. They should be considered as a supplement to the roadway network providing access to otherwise inaccessible areas. Bicycle paths can also be used as spur connectors from the street network to provide non-motorized access points to facilities such as schools, parks and playgrounds.

Standards for the development of multi-use paths are as follows:

- Width between 8-12 feet (depending on expected traffic flow)
- Grades should not exceed 8.3 percent
- Cross slopes on paved surfaces should not exceed 2 percent and cross slopes on non-paved surfaces should not exceed 5 percent
- A firm and stable surface

The following picture, courtesy of the Federal Highway Administration, showcases recommended widths in a visual setting.

Figure 42: Rendering of Example Paved Path



Mountain Bike and Walking Trails

Mountain bike and walking trails are for those who wish to recreate on a more naturalistic setting. These trails are generally unpaved, but may have a surface like crushed rock or cinder. These trails are separated from automobile traffic and can offer opportunities that range from a “short-cut” through neighborhoods or a chance to walk your dog. These trails offer less accommodation for all users than multi-use paths. East Baton Rouge Parish currently offers two mountain bike trails built by the Baton Rouge Area Mountain Bike Association (BRAMBA).

Figure 43: Sam Houston Jones Park Trail

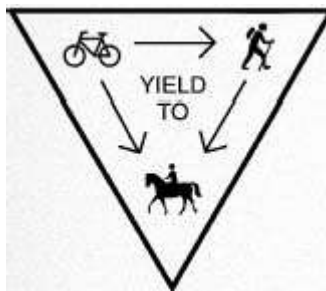


Conflict Concerns

Multi-use paths attract a variety of user groups wheeled and non-wheeled, who often have conflicting needs. All of these modes are affected by sudden changes in the environment and by other trail users, such as bicyclists, who travel at high speeds. To improve the shared-use path experience for all users, including people with disabilities, designers and planners should be aware of potential conflicts and employ innovative solutions whenever possible. Basic conflicts can be reduced by:

- Providing information, including signage, in multiple formats that clearly indicates permitted users and rules of conduct;
- Ensuring that the shared-use path provides sufficient width and an appropriate surface for everyone, or providing alternate paths for different types of users;
- Providing sufficient separation for users traveling at different speeds. For example, if volume and space permits, bicyclists and pedestrians should have different lanes or pathways;
- Providing the necessary amenities for all users. For example, bicyclists require bike racks or lockers;
- Considering the needs of people with disabilities within all of the user groups permitted on the path. For example, many individuals with disabilities may use a longer hand cycle or wider tricycle design that may not be compatible with bike racks, bathroom stalls, or lockers of limited width. Longer and wider equipment may need additional maneuvering space in restrooms and to transfer from the chair to benches.

Figure 44: Example Precautionary Trail Sign



Appendix C: Maintenance Guidelines

Preventive Maintenance Policy: Preventive maintenance, such as filling in cracks, is critical to keeping both on-street and off-street bike routes safe and comfortable to ride on while prolonging the life of infrastructure.

Sweeping

Trails and on-street bikeways need to be swept on a regular basis. Many facilities regularly fill up with sand, trash, glass, and other debris that needs to be removed to keep the bikeway safe. Many bicyclists avoid routes with debris to reduce the chance of getting a flat tire.

Paths Sweeping Policy: Each Bikeway and Multi-use path shall be completely swept three times per year.

Trash and Debris Pick-Up

Trails should have trash receptacles placed at access points. The use of volunteers and community service crews to clean up trail corridors is strongly encouraged.

Trail Trash and Debris Pick-Up Policy: Once per week, litter and debris will be cleared from the corridor and trash bins will be emptied on off-street trails.

On-Street Bikeways Accident Debris Cleanup Policy: If a tow truck that is under a City contract assists in removing damaged vehicles, the towing company is responsible for removing all accident debris, including broken glass. If no tow truck is involved, then PW street maintenance crews will remove the debris upon notification.

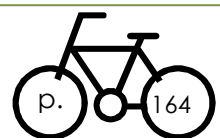
Figure 45: Debris on Paved Shoulder Bikeway



Appendix D: FHWA Crosswalk Guidelines

The following list is a summary of the guidelines for designing crosswalks by the Federal Highway Administration:

- Before installing new marked crosswalks, an engineering study is needed to show whether the location is suitable for a marked crosswalk.
- It is recommended that a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) exist at a location before placing a high priority on the installation of a marked crosswalk alone.
- Where speed limit exceeds 40 mph, marked crosswalks alone should not be used at unsignalized locations.
- A possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements. Whether marked crosswalks are installed, it is important to consider other pedestrian facility enhancements, as needed, to improve the safety of the crossing (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic calming measures, curb extensions).
- Crosswalks should not be installed at locations which could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, substantial volumes of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices.
- The raised median or crossing island must be at least 4 ft. wide and 6 ft. long to adequately serve as a refuge area for pedestrians in accordance with MUTCD and AASHTO guidelines.

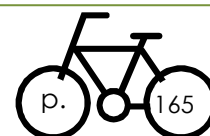


Appendix E: Cost Estimate Guidelines

In order to estimate the cost of various improvements, a generic estimator worksheet was created. Each estimate is cited by either a municipality or state transportation department. These costs take into account the basic cost of engineering and construction, but do not consider costs of right-of-way acquisition or administrative costs.

Table 31: Cost Estimate Assumptions

Type of Improvement	Per Mile	Per Sq. Ft.	Per Linear Ft.	Source
Culvert and Cover Ditch (Per Side)	\$800,000	n/a	\$151.52	Calcasieu Parish Engineering
5 ft. Paved Shoulder (Both Sides)	\$160,000	\$3.03	\$30.30	Florida DOT (2009)
5 ft. Sidewalk (One Side)	\$132,000	\$5.00	\$25.00	City of Lake Charles (2010)
Curb & Gutter (One Side)	\$79,000	n/a	\$15.00	City of Albemarle (2008)
Signage	\$2,000	n/a	\$0.38	City of Albemarle (2008)
Striping	\$15,000	n/a	\$2.84	City of Albemarle (2008)
12 ft. Multi-Use Path	\$175,000	\$2.76	\$33.14	Florida DOT (2009)
10 ft. Crushed Rock walkway	\$80,000	\$1.52	\$15.15	City of Albemarle (2008)
Bike Lane	\$50,000	n/a	\$9.47	USDOT (2010)
Narrowing Lanes	\$2,000	n/a	\$0.38	USDOT (2010)



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Appendix G: Stakeholder Questionnaire – Aug. 16, 2010

Calcasieu Parish and the City of Lake Charles Bicycle and Pedestrian Support Public Input Session

Personal Experience is key to having “on the ground” knowledge of bicycle and pedestrian infrastructure conditions.

Finding Out About You

Optional

*Name: _____

*Email or Phone: _____

City or Community of Residence: _____

Giving Your Opinion

Which of these improvements is most important to you? [highest (5) to lowest (1)]

Sidewalk continuity _____

Intersection safety _____

Bicycle lanes _____

Multi-use trails _____

Bicycle routes _____

Suggestions? _____

Which of these attractors is most important to you? [highest (5) to lowest (1)]

Schools _____

Parks _____

Recreation/Community facilities _____ Post Office/Civic Buildings _____

Public Transit Stops _____

Libraries _____



Suggestions? _____

Making The List

Please take a minute to think about your experience and personal knowledge of local roads. Consider situations in which you saw someone having difficulty walking or biking along a roadway or trying to cross an intersection. Please make a list of these roadways that you believe are in need of bicycle and pedestrian improvements. We will consider these in our list of potential projects.

City or Community	Name of Road
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Making The Map

Located on the table in front of you are two maps, one of Lake Charles and one of Calcasieu Parish. Please highlight along roads that you feel are in need of improved bicycle or pedestrian support (i.e. bike lanes or sidewalks). Also please mark any roads or intersections that you feel are dangerous for non-motorized travel.



Please use blue for bikes, pink for pedestrian, and red for dangerous conditions.

Telling Your Story

If you have a personal experience you would like to share please write it below. These stories will be used as first-hand accounts of conditions, as they exist today, and will be compared with future goals.

Personal Experience: _____

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Questions, Comments, or Concerns:



Vision, Goals, and Policies Dot Activity

Located around the room are poster boards with titles such as “Potential Goals” and “Potential Policies.” These boards have numerous examples of types of goals and policies that we could adopt. We would like to see which ones are most important to you. Please place the “dots” on the left side of the vision, goal, or policy that you like the most.

Please Use Two Dots for Each Board



Appendix H: Stakeholder Questionnaire – June 6th & 8th, 2011

The City of Lake Charles Bicycle and Pedestrian Master Plan Public Feedback Session

Finding Out About You

Optional

*Name: _____

*Email or Phone: _____

*Location of Residence: _____

Did We Miss Anything?

Please take a minute to look at the list of recommended projects for bicycle and pedestrian improvements. Please share your opinion about any projects you think might have been overlooked. We will consider any new recommendations seriously in any updates to the plan.

Name of Road	Type of Improvement (Sidewalk, Bike Lane, Crossing, etc.)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Continued on Back ----->



What Did We Get Right?

This is the part of the form where you can tell us what you like about the plan.
What part of the plan or projects are you happy we included?

Questions, Comments, or Concerns: _____

Telling Your Story

If you have a personal experience you would like to share please write it below.
These stories will be used as first-hand accounts of conditions, as they exist today,
and will be compared with future goals.

Personal Experience: _____

