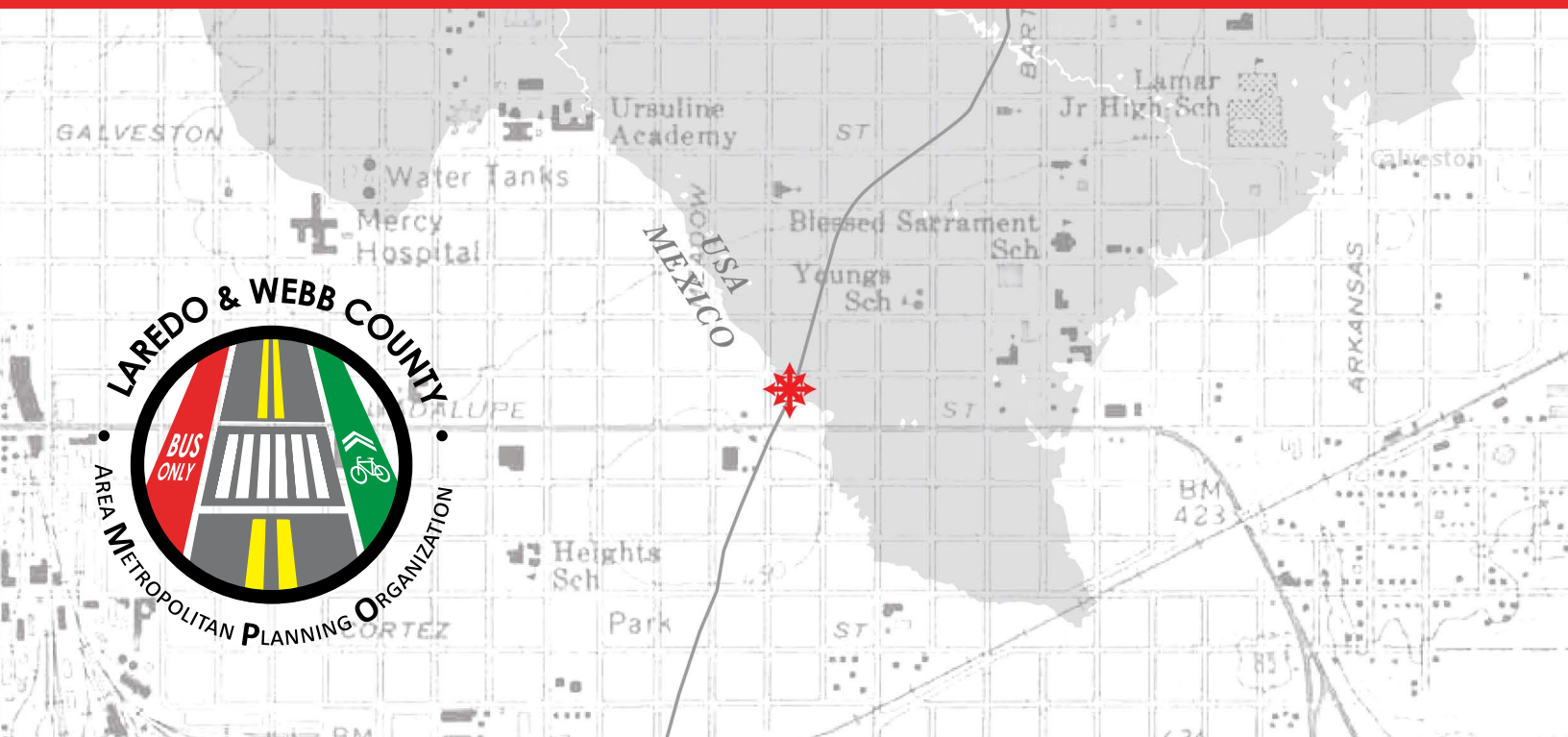
ACTIVE
TRANSPORTATION PLAN

LAREDO & WEBB COUNTY AREA METROPOLITAN PLANNING ORGANIZATION

DRAFT VERSON 3.1 12/30/2020



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LAREDO & WEBB COUNTY
AREA METROPOLITAN PLANNING ORGANIZATION

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LW-CAMPO ACTIVE TRANSPORTATION COMMITTEE

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IN PARTNERSHIP WITH:

Laredo Cycling Club

The Laredo Cycling Club holds weekday and weekend rides consisting of long-distance riding through north Laredo and rural Webb County. The Laredo Cycling Club currently has 300 members bringing together avid cyclists of various ages to ride for recreation and to compete in cycling races in Texas and northern Mexico. Members of the club often place in the top 5 at competitions.

Members of the Laredo Cycling Club would like to see more bicycle facilities in the region and would like safety issues to be addressed. The Laredo Cycling Club President stated, "I think active transportation, walking and biking, would definitely help decrease the health issues that we have in Laredo, like obesity and heart problems. This is more important now than ever."

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Marissa Benavides

Marissa Benavides is an enthusiastic cyclist, encouraging both her family and friends to ride around Laredo. She rides for exercise and also for recreation. She organizes evening and weekend rides for a group of women in her neighborhood.

When asked about her experience riding a bicycle in Laredo, Mrs. Benavides said, “I love riding with my daughter, and we often take rides in the park. I wish she could join me on the roads, but many of our roads don’t feel safe for children. Hopefully we can change that in the future.”

Executive Summary

E.1 Elements of the Plan

The Laredo & Webb County Active Transportation Plan (***Active Transportation Plan*** or the ***Plan***) is a collaborative effort undertaken by the Laredo-Webb County Area Metropolitan Organization (LW-CAMPO) to create and develop connectivity between bicycle, pedestrian, and transit networks.

A primary objective of the Plan is to enhance mobility in the region by providing safe, accessible, and alternate modes of transportation for the future of Laredo and Webb County citizens.

Goals & Themes

The goals of this Plan stem from previous planning efforts, specifically the 2017 Viva Laredo Comprehensive Plan and the 2020-2045 Metropolitan Transportation Plan, and are focused around four broad themes:

- Safety
- Connectivity
- Equity
- Accessibility

Goal 1: Create a connected network of Complete Streets that increase transit service and improve connectivity, walkability, bikeability, and economic benefits.

Goal 2: Enhance and connect the bike and pedestrian network so that it reduces service disparities and achieves equitable access to all types of facilities and transportation modes.

Goal 3: Expand bicycle facilities throughout Laredo to create a full network of connected, safe, and attractive bikeways and supporting facilities for both transportation and recreation.

Goal 4: Increase Metro Transit efficiency and provide high connectivity to other transportation modes to create the most utilized citywide transit system in the state and reduce service disparities.

Plan Layout

The Active Transportation Plan is organized into six chapters:

Chapter 1: Introduction

- Overview of active transportation and its benefits.
- Description of Plan's vision and goals.

Chapter 2: Existing Conditions

- Analysis of local geography, traffic patterns, economic characteristics, and socioeconomic indicators.
- Analysis and findings of existing bicycle, pedestrian, and transit network.

Chapter 3: Public Input

- Overview of previous planning efforts and community engagement and stakeholder collaboration activities.
- Findings from public input activities and survey results.

Chapter 4: Recommendations

- Recommended policies, programs, and projects.
- Maps showing proposed bike routes and proposed buildout network.

Chapter 5: Implementation Plan

- List and map of prioritized projects for 10-Year bicycle network.
- Recommended funding and implementation strategies.

Chapter 6: Complete Streets Policy

- Recommended Complete Streets Policy.

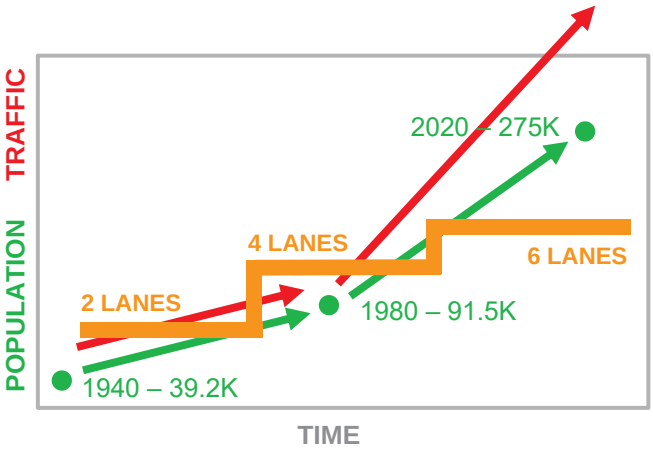
E.2 Why We Need Active Transportation

Why We Need Active Transportation

At a recent meeting in San Antonio, the Governor of Texas made a bold statement: "...the future of transportation lies in alternatives to traditional motor vehicle travel." The reason is simple, we cannot build our way out of congestion with more and bigger roads.

In 1940, the population of Laredo was 39.2 thousand people. Forty years later in 1980, Laredo's population roughly doubled to 91.5 thousand. After another forty years in 2020, the population of Laredo is estimated to have tripled to 275 thousand.

While Laredo's population growth over the last 80 years has been remarkable, its growth in vehicle traffic has



been exponential. One of the main reasons for this is that Laredoans, like most Americans, drive more today than ever. Over the years, significant public investments were made to build new roads and widen old ones. However, because of the cost and time involved, road construction has not kept up with demand. As a result, traffic congestion in Laredo has become a common occurrence.

But if the region had enough money and time to keep building more and bigger roads, could the traffic problems be solved? The experience of other cities in Texas demonstrates otherwise. The I-10 Katy Freeway in Houston has 26 lanes, and yet it remains among the most congested roadways in the State.

Historic Downtown Laredo Streets - 2 Lanes

McPhereson Road - 4 Lanes

I-10 in Houston - 26 Lanes

"The bottom line is this: The way people get around, the way people live is going to change. As a result, this generation of roads that [we're] in charge of building is probably the last major buildout of roads we'll have in the state of Texas, even considering the fact that Texas is the fastest-growing state in America ***...the future of transportation lies in alternatives to traditional motor vehicle travel.***"

Gov. Greg Abbott addresses the Rotary Club of San Antonio, January 8, 2020

E.2 Why We Need Active Transportation

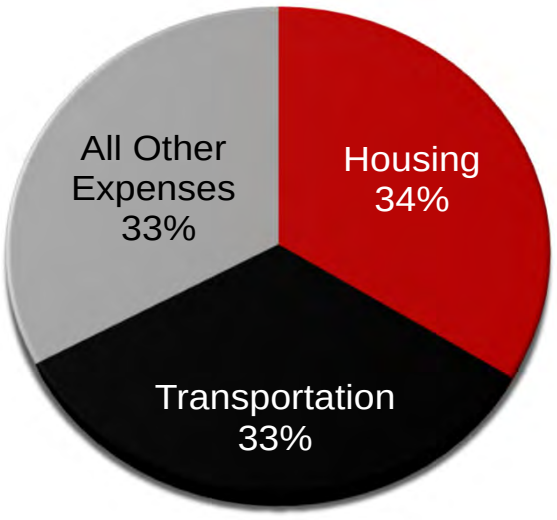
Economic Development

Active transportation systems support economic development by creating vibrant and connected communities with a high quality of life. Investments in active transportation can have significant benefits for businesses, commercial districts, homeowners, and customers. Walkability is associated with higher home values, bike share attracts customers to local businesses, trail users spend money on equipment, apparel, and food, and major employers are seeking to locate in walkable and bikeable cities.

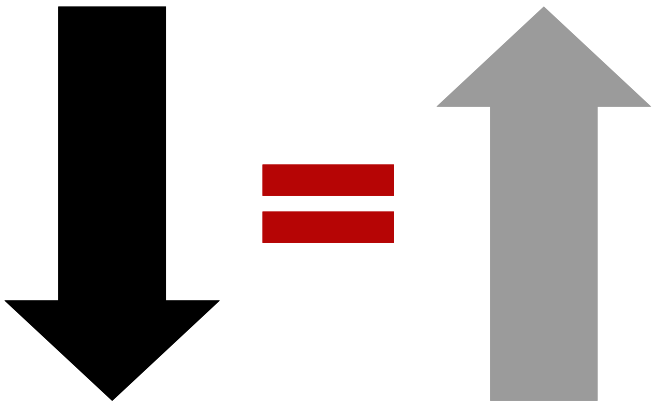
Walkable communities that more easily connect residents to jobs can help improve upward economic mobility. Improving conditions for walking and biking can also have positive effects on local economies by providing opportunities to reduce household transportation costs, increase access to jobs, and increase property values. According to a national survey, 60% of adults in the U.S. favor walkable mixed-use neighborhoods, and almost two thirds of adults between 18 and 35 years of age report a desire to drive less if alternative transportation options were available.[1] In addition, bicycle infrastructure investments produce positive outcomes for communities regardless of differences in geographic factors such as climate, topography, and size.

A 2017 analysis of consumer spending compared expenditure patterns between California, New York, and Texas; the analysis shows transportation expenditures in Texas account for 20% as a share of total household expenditures, which is higher than both California (15%) and New York (14%), and higher than the national average (16%).[2]

For low income households in Webb County, transportation expenses make up nearly a third of all household costs. If residents can work, shop, and get around the region without a vehicle, they may choose to own fewer vehicles (or none at all). These savings will translate directly into more disposable income, which will increase personal wealth and local spending.



Low Income Household Costs in Webb County



Lower Transportation Costs

Increase Disposable Income

E.2 Why We Need Active Transportation

Active Transportation Increases Property Values

Living near bikeways and trails is an attractive option for many people looking to purchase or rent a home.[3] Proximity to trails or other active transportation facilities directly correlates with an increase in property values.[4] Property values increased nearly 80% to $3.4 billion since the 2006 opening of the 3.5-mile Katy Trail in the Uptown neighborhood of Dallas, Texas.[5]

A study conducted in Bexar County, Texas, where San Antonio is located, found that homes near or abutting trails saw a 2% house price premium.[6] An increase in property values also produces additional property tax revenues for local governments that invest in active transportation improvements.

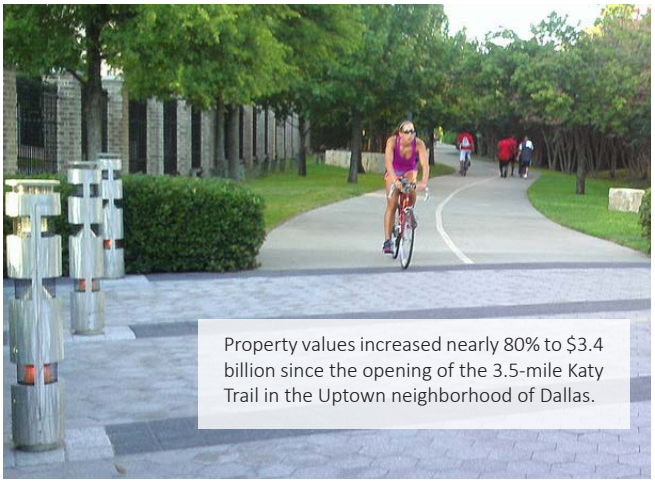
New Tourism Opportunities

Investment in active transportation facilities such as trails and on-street bike lanes can create new tourism opportunities. These facilities provide recreational activities for people already visiting Laredo such as shoppers form Mexico, truck drivers, and other visitors. A bike-friendly community with multiple recreational options for biking and walking can encourage return visits. Bicycle related events can be held with additional bicycle facilities, which can attract bicycle tourists.

TxDOT's Bicycle Tourism Study includes a summarized review of 11 existing studies on the daily expenditures of bicycle tourists. The results revealed that bicycle tourists on average spend $136 per day ranging from $78 to $275 per day in the cities they visit.[7]

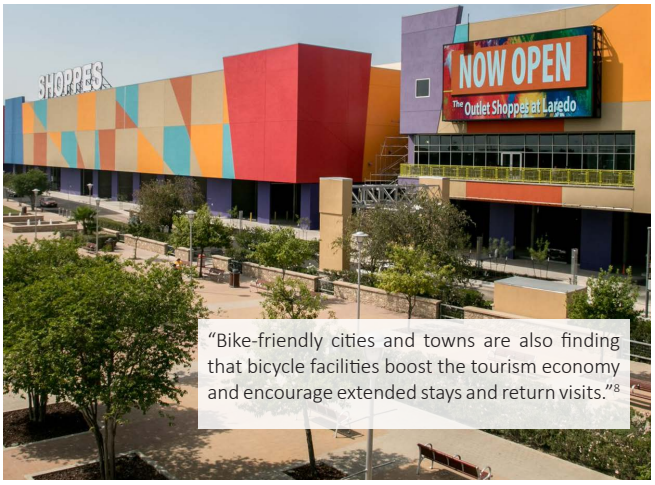
Talent Attraction

An efficient multi-modal transportation system that includes active transportation options with Complete Streets and bike lanes and trails for both recreation and daily transportation helps create a vibrant city that can attract worforce talent and new companies.



Property values increased nearly 80% to $3.4 billion since the opening of the 3.5-mile Katy Trail in the Uptown neighborhood of Dallas.

Katy Trail in Dallas, Texas



"Bike-friendly cities and towns are also finding that bicycle facilities boost the tourism economy and encourage extended stays and return visits."[8]

Outlet Shoppes (Source: Laredo Convention & Visitors Bureau)

"Towns of all sizes rely on active transportation as a contributor to quality of life and livability, both of which attract growing businesses—and educated talent to work for them."[9]

North Central Park

E.2 Why We Need Active Transportation

Quality of Life

"Creating a more balanced transportation system through cost-effective investments offers the promise of improving quality of life of our people and the places in which they live" - National Recreation and Park Association.[10]

Active transportation increases quality of life for people of all ages and abilities. Providing residents with active transportation options benefits individuals through improved health, cost savings, and an overall better quality of life.[11]

Health

Prevalant chronic health conditions in Webb County include **heart disease , obesity, diabetes, and cancer.** A high prevalance of chronic diseases along with the region's medical provider shortage, places Webb County residents in a vulnerable position.[12] Providing opportunities for physical activity and healthier lifestyle choices can improve overall health in the community. Developing active transportation systems and focusing on mobility solutions based on alternative modes of transport can significantly increase opportunities for physical activity resulting in a healthier community and enhanced quality of life - helping people live longer, happier lives.

The obesity rate in Webb County is currently 38%.[13] The lack of physical activity in the region has led to a high obesity rate and other chronic health issues. According to Rails to Trails Conservancy, the use of active transportation has a direct relationship with meeting physical activity guidelines set in the United States.

Active transportation increases physical activity, which helps decrease the risk of chronic disease and can help reduce both personal and national health care costs.[14] It is necessary for the region to invest in active transportation and to increase access to trails, parks, and transit as a means for improving the region's health and quality of life.

Playground at Independence Hills Park

E.3 Key Findings: Survey of 1,925 Laredoans

Responses from the public survey distributed as part of the planning process and feedback from community engagement activities resulted in the following key findings:

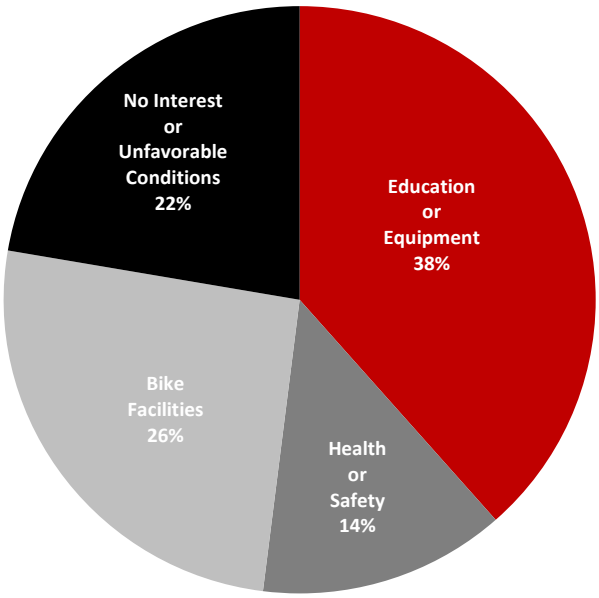
- Residents would ride more often with safe bike infrastructure such as protected bike lanes.
- Many residents do not own a bicycle; implementing a Bike Share program would make bicycles more available.
- Several residents indicated they do not know how to ride a bicycle; highlighting an opportunity to initiate educational programs.
- Most residents were not able to guess the number of bicycle amenities; existing bicycle lanes and trails need to be easier to find and access.

Gathering Input Across the City

Opportunities Exist to Encourage More Bike Riding

Residents who indicated they never ride bicycles were asked to elaborate as to the reasons why. This open-ended question generated a variety of responses, which were categorized into 4 themes with challenges and opportunities:

- **Education or Equipment**- *Challenge*: Many residents never learned to ride a bicycle or do not own a bicycle. *Opportunity*: Engage and educate residents and provide easy access to bicycles.
- **Bike Facilities**- *Challenge***:** Residents said there are not sufficient or adequate bike lanes available in the community. *Opportunity*: Enhance existing bicycle lanes and trails and expand availability.
- **Health or Safety**- *Challenge*: Residents expressed concerns about the safety of riding bicycles on local streets. *Opportunity*: Address safety concerns through the careful design of bike lanes and develop a connected off-street bike trail system.
- **No Interest or Unfavorabale Conditions**- *Challenge*: Some residents said they are currently not interested in riding a bicycle or cited factors such as weather as a reason for not riding. *Opportunity*: Promote bike riding and generate new community interest.



Reasons that Residents are Not Riding Bicycles

E.3 Key Findings: Survey of 1,925 Laredoans

Residents Want Well Connected Sidewalks

98% believe sidewalks should be required when connecting neighborhoods

Residents Support Bicycle Infrastructure

87% believe bicycle lanes should be required

Residents Want Safe Bike Infrastructure

82% indicated they would ride more often with protected bike lanes

What Residents Said About Bike Riding

Survey respondents who indicated they never ride a bicycle were asked to specify why not. Safety concerns, lack of bicycle lanes, and not owning a bike are primary reasons people do not currently ride bikes in the area.

- *"Not many sidewalks or 'safe' areas to ride. Would definitely ride my bike more often if there were safer ways to use it for grocery shopping, and visiting other locations. There are no 'safe' areas by main roads such as Mcpherson, Saunders, Clark, Arkansas, etc."*
- *"I never ride because it is dangerous and hot."*
- *"Cars drive too fast and carelessly in my area even with such a short commute to work."*
- *"Minimal bike lanes prohibit us from biking more often, particularly with my children's safety in mind."*
- *"I currently do not own a bicycle, but almost everyday I go for a walk with my family (5 or 6 in total), and we enjoy walking here in Laredo. Walking trails through the city would be awesome to have here. I live near to TAMIU, and I would probably sometimes walk to college if there was a walking trail to it."*
- *"I was never taught how to ride a bicycle, but I do wish to learn how to one day."*
- *"I would ride more if streets were safer."*

The public survey provided meaningful feedback from **1,925 residents.** The survey results show that residents are interested in bicycling more often and show a strong desire for the expansion of pedestrian and cycling infrastructure.

E.3 Key Findings: Network Analysis

Network Analysis Findings

The network analysis results found there is a strong demand for alternative modes of transport in the region. Additionally, the analysis resulted in these key takeaways:

- Three major sources for active transportation are international travelers who cross Bridge I on foot or bicycle, lower-income households without a vehicle, and residents who want more recreational amenities for fun and exercise
- The existing bicycle and pedestrian network is disconnected, not well advertised, and not very accessible
- There is an immediate need for safety enhancements and more inclusive street design that accommodates all users

Bikeways

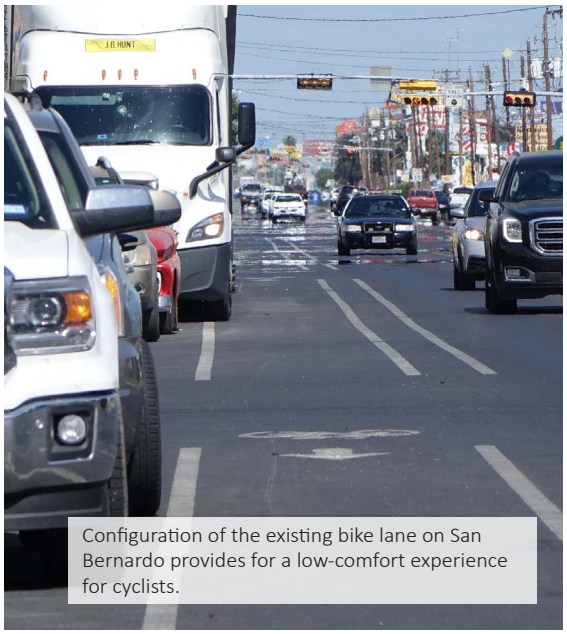
Currently, Laredo has 52 miles of bikeways throughout the City, with only 35 miles on a paved surface. The remaining miles consist of unpaved or un-dedicated facilities, mostly used for recreation (i.e. mountain biking). On-street bicycle lanes are sparse and unsafe. The existing bicycle network is highly disconnected—the longest connected route being only four miles long.

Sidewalks

Laredo's existing sidewalk network is inconsistent throughout the region and many sections are in disrepair or non-existent. Additionally, many sidewalks are not accessible due to obstructions such as cars, utility poles, signs, and poorly placed trees.

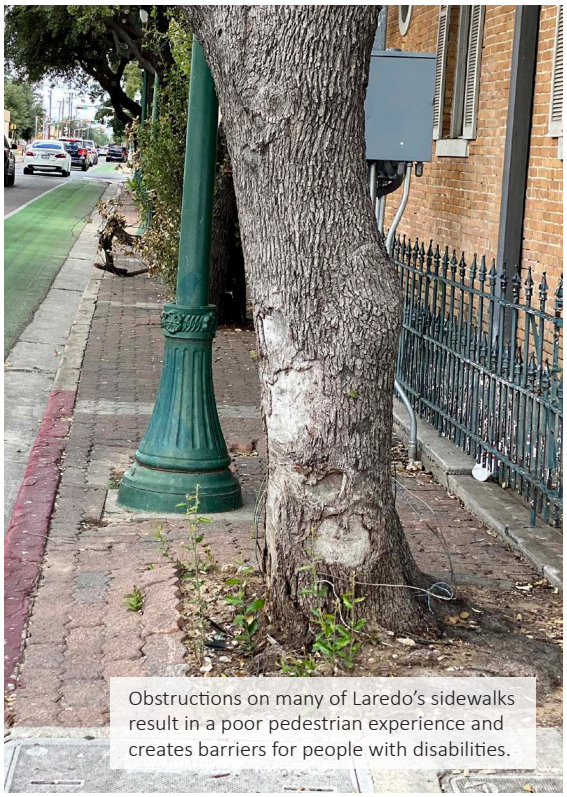
Transit & Micromobility

The bus systems in the region are well utilized, with a large share of the demand coming from workers and shoppers who cross into Laredo on Bridge I. But ridership from the resident population could increase significantly if "last-mile" connections were improved. This can be done with more connected routes, bicycle and scooter rentals, and enhanced wayfinding.



Configuration of the existing bike lane on San Bernardo provides for a low-comfort experience for cyclists.

Bike Lanes on San Bernardo Ave



Obstructions on many of Laredo's sidewalks result in a poor pedestrian experience and creates barriers for people with disabilities.

Sidewalk Obstructions on Convent Ave.

E.4 Priority Actions & Recommendations

Priority Actions & Recommendations

The Active Transportation Plan includes a total of 43 program and policy recommendations. Additionally, a total of 29 bicycle facility projects consisting of 40 connected miles are recommended to be built within the first 10 years. To ensure the Plan's implementation several strategies and actions are detailed in the Plan. The following set of priority actions are vitally important to ensure that the Plan's vision is realized and to build and sustain ongoing support for Active Transportation in the region.

Initiate a Bike Share Program

- Bike Share can help expand connections to transit, which is essential to developing an efficient and well-connected active transportation network.

Perform a Sidewalk Gap Analysis

- Perform a gap analysis of the existing sidewalk network and make strategic improvements based on an approved timeline and criteria. This is necessary to create a pedestrian-friendly environemnt throughout the region.

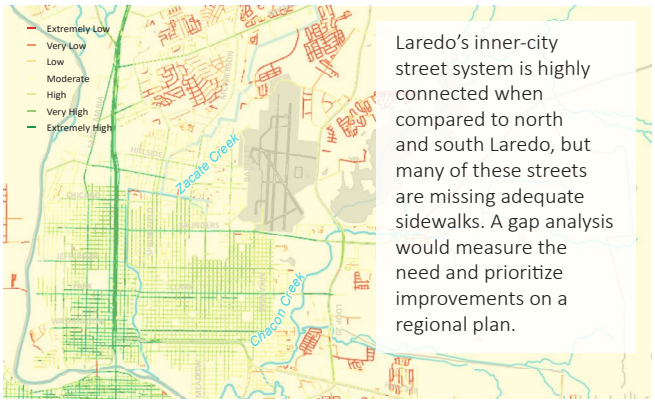
Enhance Wayfinding

- Create highly visible signage along the active transportation network to increase route awareness and familiarize users with the network.

Secure Funding for 10-Year Network

- The proposed 10-year bicycle network is estimated to cost between $15.9 million and $19.2 million. A secure funding source is needed to ensure that the projects are implemented within 10 years and that at least 4 miles of the network are constructed annually. This will ensure a highly connected bicycle network of over 70 connected miles in 10 years, providing safe transportation and access to important destinations.

The Region Needs Improved Bicycle Facilities



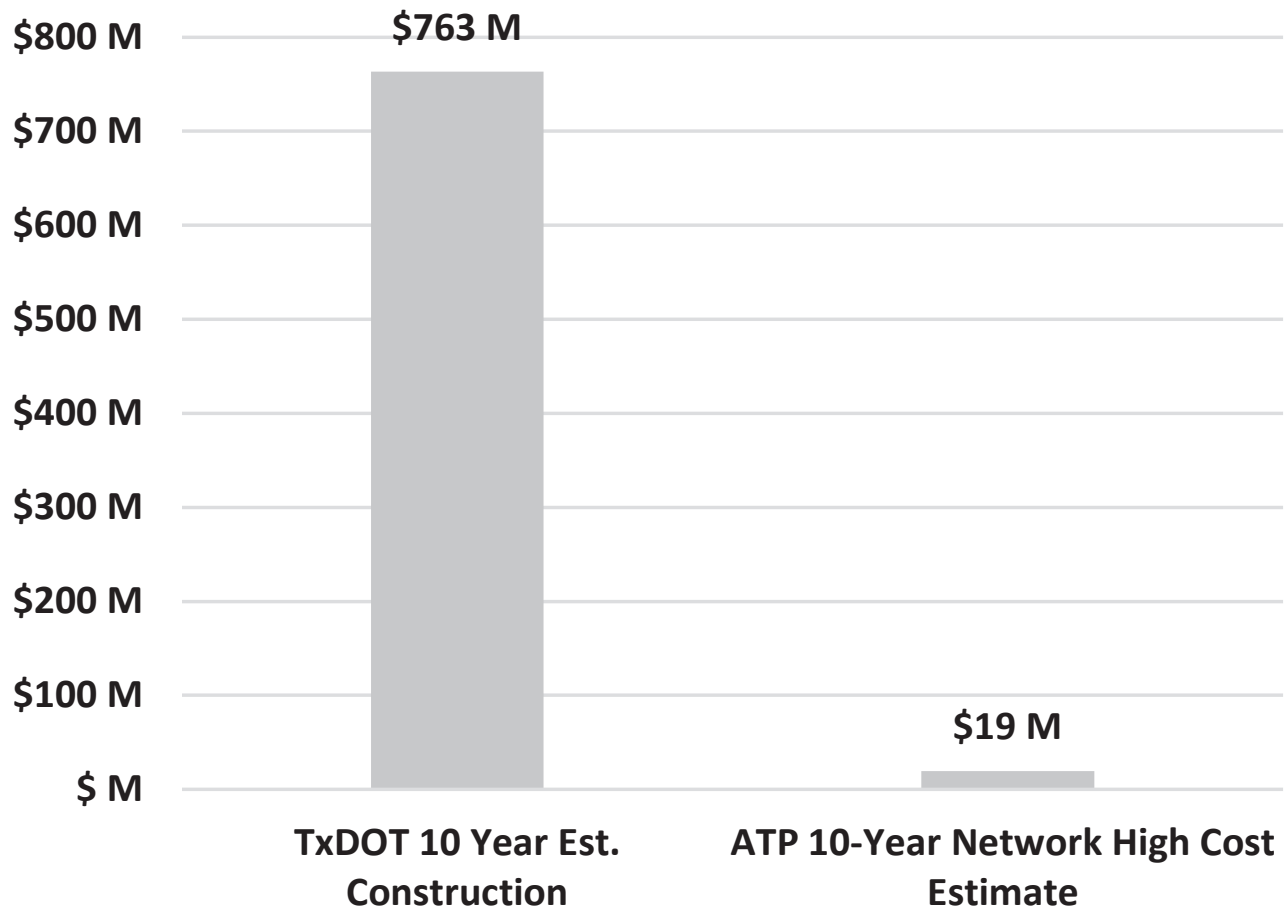
The Region Needs a Sidewalk Gap Analysis

The Region Needs Enhanced Wayfinding

E.4 Priority Actions & Recommendations

We Need to Fund Active Transportation Mobility Projects

- It is essential to reconsider how we think about funding transportation if we want to create an effective system that provides efficient, safe, and sustainable mobility options for residents of all ages and abilities.
- We can fund the proposed 10-year network, which will cost approximately **$19.2 million** (high estimate), with only **3%** of what TxDOT will spend in Webb County in the next 10 years.
- We can fund the complete proposed network (all phases over 20+ years), which will cost approximately **$70.4 million** (high estimate), with only **9%** of what TxDOT will spend in Webb County in the next 10 years.



Comparison Between TxDOT and ATP 10 Year Estimated Project Costs in Webb County
(Note: TxDOT data retrieved from Project Tracker)[15]

E.5 Priority Actions & Recommendations

Proposed Bicycle Network

The implementation of the Plan and proposed bicycle network is phased over more than 20 years. Implementation Phases include:

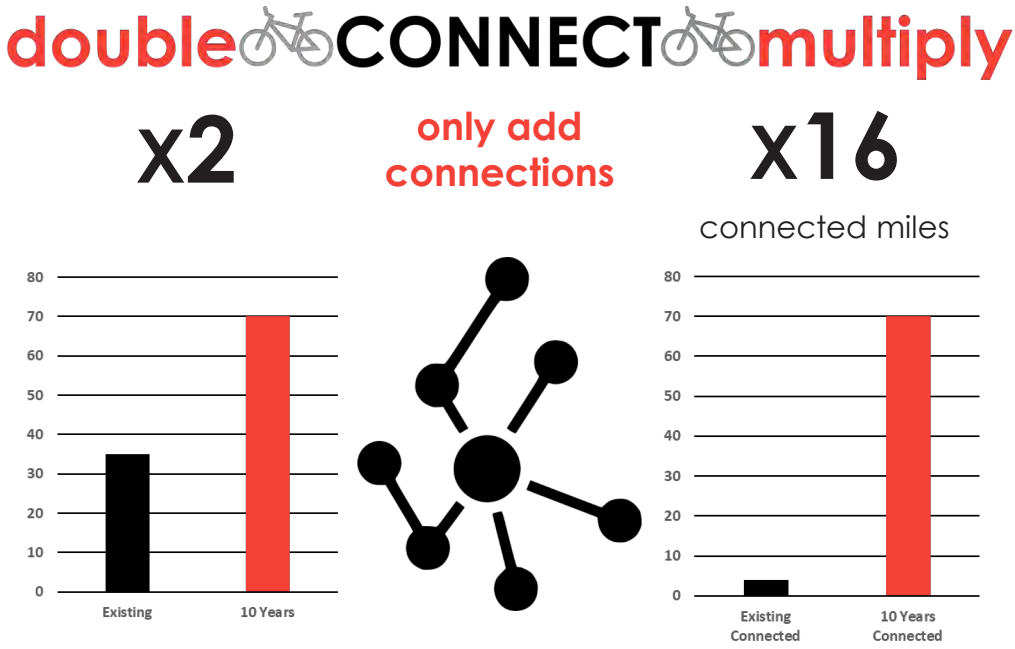
- Phase I: 10-Year Network (29 projects; 40 miles)
- Phase II: 20-Year Network (42 projects; 55 miles)
- Phase III: Buildout Network (43 projects; 89 miles)

Projects considered high priority are proposed to be developed within the first 10 years after Plan adoption. Implementing the Plan and proposed network will require multiple funding strategies and strategic collaboration between several entities and key stakeholders.

Achieving the Vision

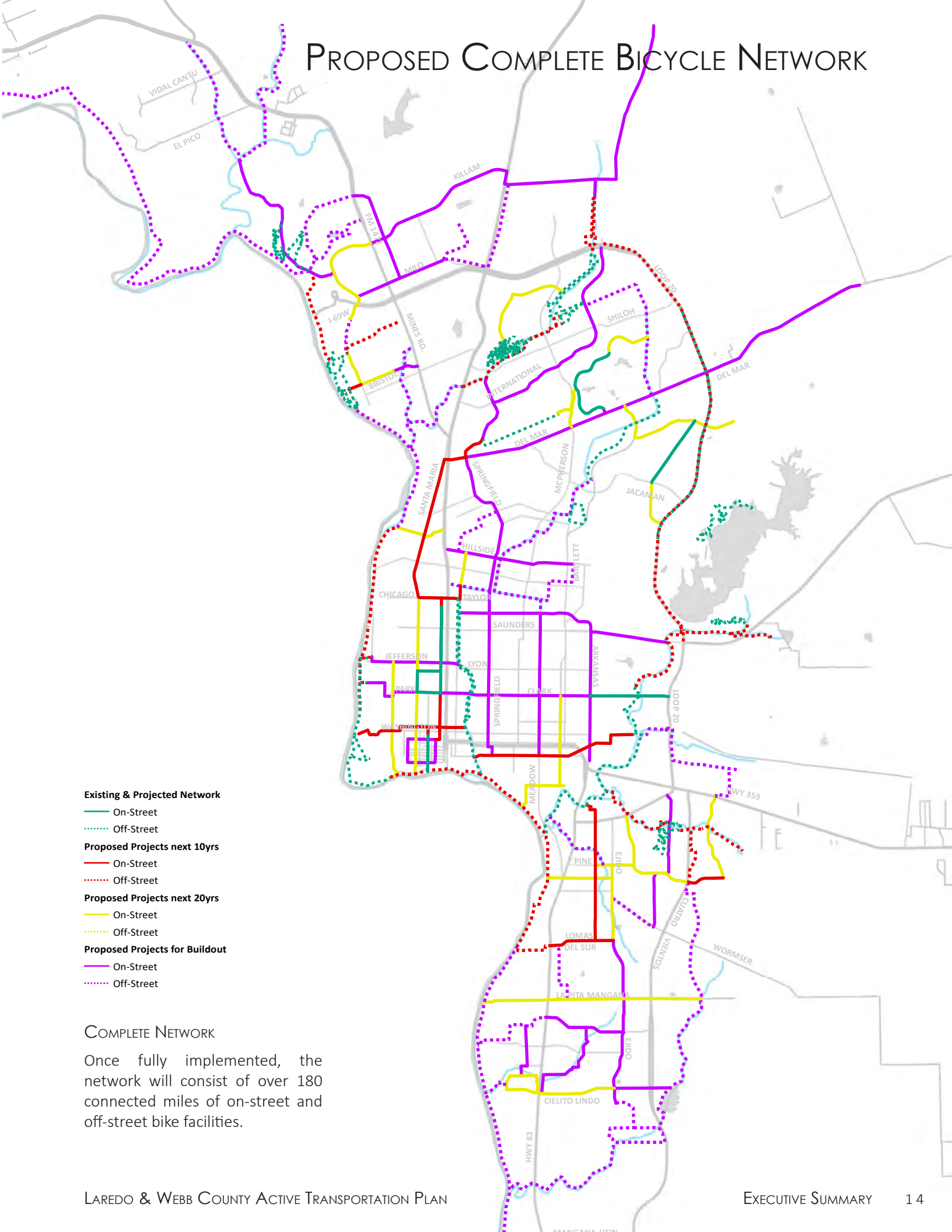
Achieving the Plan's Vision and effectively implementing the outlined recommendations and projects will depend on a series of strategies and actions consisting of the following:

- Construct at least 4 miles of bike paths per year
- Plan update every 3 to 5 years
- Utilize various funding strategies
- Create the Active Transportation Sub-Committee of the MPO
- Adopt a Complete Streets Policy
- Prepare an Annual Strategic Report
- Monitor performance measures



Currently Laredo has 35 miles of bike paths, but because they are all disconnected the longest you can ride on one path is only 4 miles. In 10 years if we double the total miles of bike paths from 35 to 70 miles, **but only with connections**, we will multiply our longest connected route 16 times. The longest connection will go from 4 miles to 70 miles. **Laredo does not need more disconnected bike paths, we need more CONNECTIONS.**

Proposed Complete Bicycle Network



Existing & Projected Network

- On-Street
- Off-Street

Proposed Projects next 10yrs

- On-Street
- Off-Street

Proposed Projects next 20yrs

- On-Street
- Off-Street

Proposed Projects for Buildout

- On-Street
- Off-Street

Complete Network

Once fully implemented, the network will consist of over 180 connected miles of on-street and off-street bike facilities.

Bernie Chapa

Bernie Chapa is a subcontractor and is a bike shop owner for the past 15 years. He has been biking for over 25 years and was the individual that built Shiloh Trails from the beginning. Mr. Chapa has been biking at Dryden Memorial Park for almost 20 years and has been a strong biking advocate for decades. He enjoys biking because it's natural for him, contains a lot of health benefits, and above all fun.

When asked about how his experience could be improved, Mr. Chapa stated, "One of the main things is driver education, to make cyclists more comfortable, more safe out there on the road."

Endnotes

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1

Introduction

1.1 What is Active Transportation?

More than half of all trips in the United States are within a 20-minute bike ride or less, and more than one in four trips are within a 20-minute walk or less, according to the 2017 National Household Travel Survey.[1] Even so, the majority of these short trips are taken by automobile.

Across rural, suburban and urban America, there are opportunities to shift short trips from driving to walking and biking by creating safe active transportation networks. In the process, this mode shift can create remarkable economic returns and improve the quality of lives.

Mode shift leads to fewer motor vehicles on clogged roads, as well as less air and climate pollution, while also creating a transportation environment that favors physical activity.

The Laredo & Webb County Area Metropolitan Planning Organization (LW-CAMPO) planning region includes all of Laredo City and a portion of unincorporated Webb County.

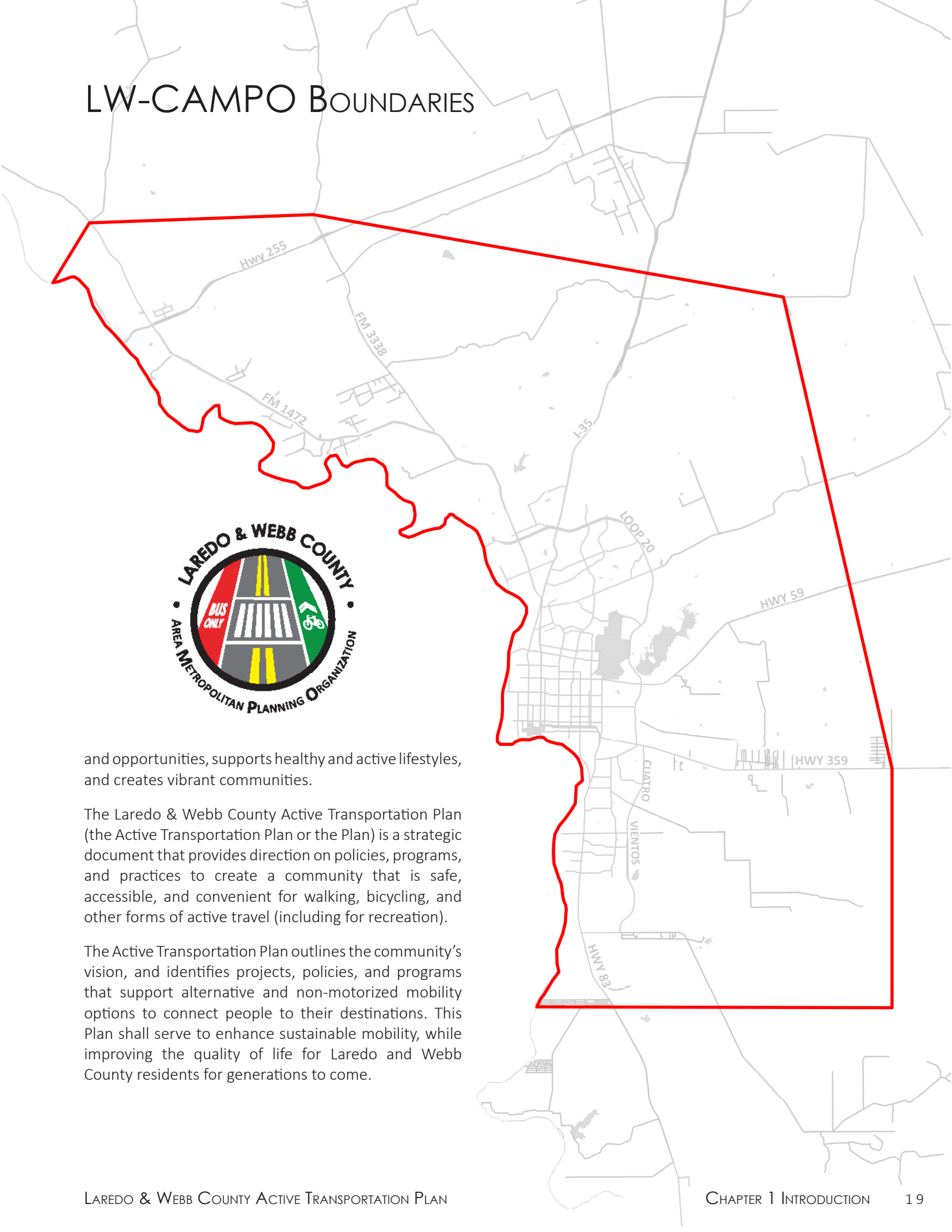
1.1 What is Active Transportation?

Active transportation is a means of getting around that is achieved through human-powered mobility. This includes walking, cycling and using transit, as well as the needs of wheelchair users and other types of non-motorized mobility devices.

Active transportation is an important element of Laredo's mobility network, since it not only increases transportation choices but also supports healthy, active living. Active transportation improves access to jobs

Street Transformation Proposed in the 2017 Viva Laredo Comprehensive Plan

LW-CAMPO Boundaries



and opportunities, supports healthy and active lifestyles, and creates vibrant communities.

The Laredo & Webb County Active Transportation Plan (the Active Transportation Plan or the Plan) is a strategic document that provides direction on policies, programs, and practices to create a community that is safe, accessible, and convenient for walking, bicycling, and other forms of active travel (including for recreation).

The Active Transportation Plan outlines the community's vision, and identifies projects, policies, and programs that support alternative and non-motorized mobility options to connect people to their destinations. This Plan shall serve to enhance sustainable mobility, while improving the quality of life for Laredo and Webb County residents for generations to come.

1.2 Benefits of Active Transportation

1.2 Benefits of Active Transportation

Active transportation has many benefits which can improve quality of life in a community. Increasingly, communities across the nation are recognizing these benefits and are taking important steps to promote walking and bicycling as a mode of travel.

A shift towards active lifestyles and increasing demands for sustainable modes of transportation presents a need for a useful and accessible walking and cycling network in the City. In support of a multi-modal transportation system, LW-CAMPO has generated the Active Transportation Plan. The Plan recognizes the need to design a transportation network that incorporates all modes of travel, ages, and abilities. LW-CAMPO is working to create a connected transportation network for pedestrians and bicyclists that will allow for additional means of connectivity.

The Active Transportation Plan focuses on opportunities for increased walking, bicycling, and other active modes of transport in short-trip opportunity areas. By fostering the development of safe, comfortable, connected, and accessible walking and biking networks, this plan directly supports ensuring mobility equity for older adults and people with disabilities. The Active Transportation Plan also supports the City of Laredo's economic development goals of increasing mixed-use development, improving the balance of jobs and housing, and attracting higher wage jobs.

Future plans laid out by the City, County, MPO, and others in the area call for an expansion of the transportation network for pedestrians and cyclists. Following these plans will benefit the region's health, equity, economy, and mobility in several ways:

- Connected, attractive sidewalks and well-defined bike routes support healthy and active lifestyles.

Affordability

Closer access to work, restaurants, and groceries can save you hundreds of dollars per month in gas money.

Accessibility

Grabbing a coffee or running an errand is just a short walk away. A shorter commute and proximity to all the neccessities also gives you more free time.

Health

Walking helps reduce obesity and blood pressure. Walking results!

Environment

Biking and walking helps lower gas emissions and pollution levels.

Social

Walkable communities provide opportunites to be social, including more bar and dining options and local, community events.

1.2 Benefits of Active Transportation

- Complete networks connect people to the places they need to go: jobs, schools, stores, parks, medical services, and more.
- Well-designed and inviting streets support a vibrant economy and help everyone thrive: residents, visitors, and businesses.

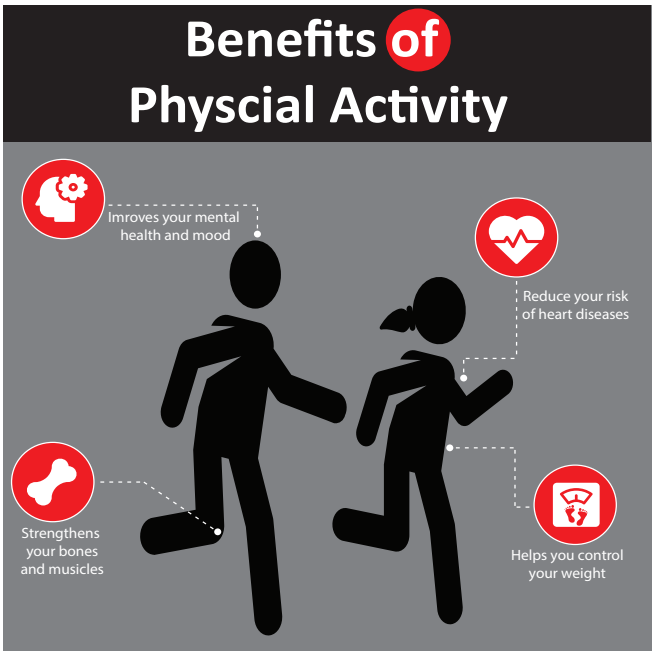
1.2.1 Health Benefits of Active Transportation

Active transportation offers various health benefits by providing residents an opportunity to be more active, less stressed, and more engaged with their neighbors. This not only leads to longer lives, but increases the quality of life for residents.

In Webb County, physical inactivity is a growing issue. In 2020, the rate of physical inactivity increased to 29%. Physical inactivity has led to an obesity rate of 38% in the region. Lack of physical activity is a major factor contributing to poor health. Providing opportunities for active transportation such as bicycling and walking allows residents to incorporate physical activity into daily trips, such as going to school, work, and running errands.[2] Walking and bicycling are associated with improved heart health and lower levels of obesity, diabetes, and cancer.[3]

Compared to rural residents, those who live in urban areas are 21% more likely to have anxiety disorders, 39% more likely to have mood disorders, and are also more likely to suffer from post-traumatic stress disorder and struggle with anger management.[4] Physical activity and spending time outdoors have been shown to reduce stress, lower anxiety, and decrease mental health issues. Benefits of physical activity include weight control, and a reduction of the risks for cardiovascular diseases, type 2 diabetes, osteoporosis and some cancers.

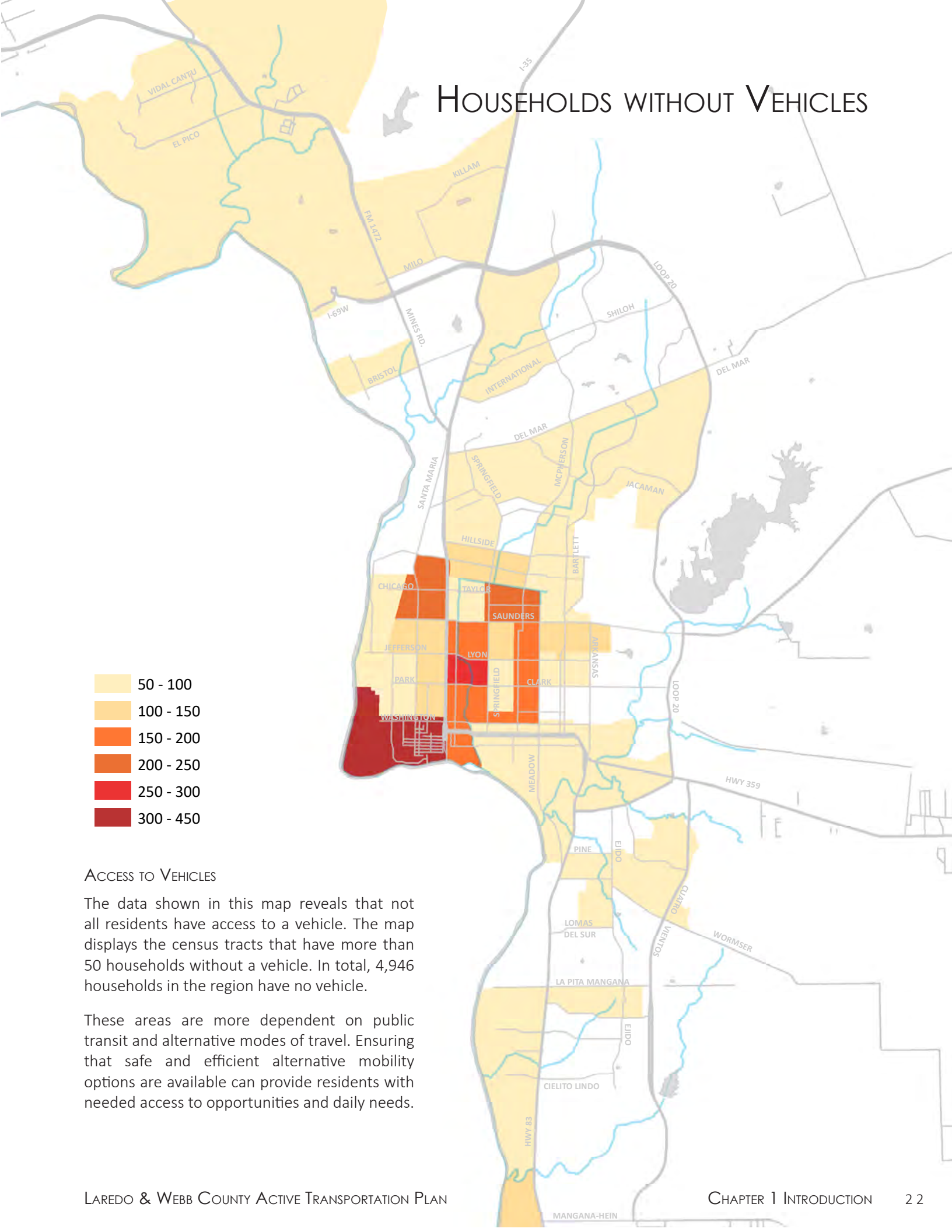
Physical activity also helps build muscle and strengthen bones, while mental benefits include an improvement in mental health and mood. Providing a safe, comfortable, accessible, and equitable active transportation network for residents will make walking, bicycling, and other outdoor activities easier, giving residents a healthy outlet for their stress and anxiety.



Using active transportation provides people with more opportunity to be immersed in green space, which has positive impacts for an individual's mental health. Green space most strongly protects against mood disorders, depression, neurotic behavior, and stress-related issues, signaling that psychological restoration may be the strongest protective mechanism that green space offers.[5] Individuals have less mental distress, less anxiety and depression, greater wellbeing and healthier cortisol profiles when living in urban areas with more green space compared with less green space.

In the digital age, people are more connected across the globe but often feel less connected in their own neighborhoods. Compared to driving alone in vehicles--walking, bicycling, and using transit provide residents more opportunities to engage with one another. This encourages more connected communities where residents are more involved and feel a stronger sense of belonging.

Households without Vehicles



Access to Vehicles

The data shown in this map reveals that not all residents have access to a vehicle. The map displays the census tracts that have more than 50 households without a vehicle. In total, 4,946 households in the region have no vehicle.

These areas are more dependent on public transit and alternative modes of travel. Ensuring that safe and efficient alternative mobility options are available can provide residents with needed access to opportunities and daily needs.

1.2 Benefits of Active Transportation

1.2.2 Equity & Access Benefits of Active Transportation

Transportation is an important part of meeting everyday needs, but inequities in our communities and transportation systems create barriers that make it time consuming, challenging, and dangerous for vulnerable populations to access basic needs.[6] Active transportation provides both individual and societal benefits.[7] It is essential to ensure that the region's active transportation network is socially and spatially equitable. The network should serve all people regardless of race, age, gender, ability, needs, or socioeconomic status. Additionally, the network needs to be spatially equitable and ensure access throughout the region, especially in underserved neighborhoods and high-poverty areas. Ensuring access to jobs, healthcare, schools, and other opportunities is a necessary element in facilitating upward socioeconomic mobility.

Access to goods, services, and opportunities is an integral part of a City's quality of life. Equality is about providing individuals with equal access to goods, services, and opportunities, regardless of needs or socioeconomic status. Equity goes a step further to ensure people who are vulnerable and disadvantaged are provided the adequate resources needed to benefit equally from active transportation improvements. Equity must be a priority throughout the planning process and an integral part of decision-making when it comes to investing in active transportation facilities.

In the U.S., one-third of all Americans cannot drive because they're too old, too young, too poor or have a disability.[8] Active transportation networks connect more people—particularly children, seniors, those with disabilities, and those without economic means—to destinations and opportunities in their communities. From elementary-age students to teens and preteens, the ability to walk or bike to school can provide a healthier means of transportation. For seniors, being able to walk or bike to a destination can help maintain a sense of independence and also keep them healthy through physical activity, while allowing them the opportunity to age in place.

In a car-dependent community, those with disabilities or from low-income households are at a disadvantage. Designing our community in a way that considers additional modes of transportation is more inclusive. For example, designing complete streets which allow residents to walk or bike to work, with sidewalks

Equitable Transportation Accomodates All Users

1.2 Benefits of Active Transportation

accessible to wheelchairs and the visually impaired, ensures fewer residents are left out. In short, active transportation provides a safe means of connectivity and independence for everyone to access destinations, regardless of their age, ability, or income.

According to a report by Safe Routes to Schools, people who walk and bike in low-income communities and communities of color experience higher injury and fatality rates when compared to the general population.[9] Laredo is no exception; a disproportionate share of pedestrian and bicycle crashes resulting in injuries or fatalities are located in lower income areas.

1.2.3 Economic Benefits of Active Transportation

Investments in active transportation can have significant benefits for businesses, commercial districts, homeowners, and customers. Walkability is associated with higher home values, bike share attracts customers to local businesses, trail users spend money on equipment, apparel, and food, and major employers are seeking to locate in walkable and bikeable cities. Requiring less car parking and increasing bike parking can help reduce parking costs for developers and individuals.[10]

Walkable communities that more easily connect residents to jobs can help improve upward economic mobility.[11] Improving conditions for walking and biking can also have positive effects on local economies by providing opportunities to reduce household transportation costs, increase access to jobs, and increase property values. According to a recent survey, 60% of adults in the U.S. favor walkable mixed-use neighborhoods, and almost two thirds of adults between 18 and 35 years of age report a desire to drive less if alternative transportation options were available.[12] In addition, bicycle infrastructure investments produce positive outcomes for communities regardless of differences in geographic factors such as climate, topography, and size.[13]

A study in New Jersey found that active transportation related activities contributed an estimated $497 million to the state's economy in a one-year period. [14] Expenditures on transportation account for 15.9% of annual average household expenditure in the United States. When combining housing and transportation costs, this makes up almost half (48.7%) of total household costs.[15] Walking and bicycling are inexpensive travel modes that help people save on transportation costs.

A 2017 analysis of consumer spending compared expenditure patterns between California, New York, and Texas; the analysis shows transportation expenditures in Texas account for 20% as a share of total household expenditures, which is higher than both California (15%) and New York (14%), and higher than the national expenditure share (16%).[16]

Additionally, increased walking and biking, for both travel and recreation, are among the most effective ways to address America's crisis of physical inactivity. This crisis is a major factor in high and rising rates of chronic diseases that cost the U.S. healthcare system trillions of dollars each year, with many of those costs falling to

Active Transportation is Good for Business

1.2 Benefits of Active Transportation

Convent Street Painted Bicycle Lane in Downtown Laredo

taxpayers. This indicates active transportation provides residents the option to reduce their transportation costs by utilizing walking, biking, and transit networks throughout the region.

1.2.4 Traffic Benefits of Active Transportation

Transit, bicycling, and walking can provide a healthy alternative to driving and reduce the number of vehicles on the road. However, safe and adequate facilities must be present for bicycling and walking to be a viable travel option. Such facilities include wide sidewalks, protected bicycle lanes, accessible bus stops, and visible signage. The development of a safe and accessible active transportation network can reduce pedestrian and cyclist accidents and fatalities. Off-street routes, buffered sidewalks, and protected bike lanes provide an alternative and safer commute for non-vehicular traffic and reduces conflict points with vehicles that pose a risk for pedestrians and cyclists.

Increased rates of bicycling and walking reduce traffic congestion, improve safety, calm traffic, and preserve road infrastructure. Travel characteristics indicate many trips are short and can be replaced with walking and bicycling. According to a recent study, 40% of trips are less than 2 miles.[17] Enhanced transportation choices improves mobility options for those who are not able to drive.

Planning for transportation infrastructure, such as bikeways and sidewalks, with all users in mind, can improve safety for pedestrians, bicyclists, and wheelchair users. Well-designed active transportation infrastructure and facilities also encourages more people to use active modes of transport. Better infrastructure and more people using active transportation can make traveling safer for everyone.

1.3 About the Plan

1.3 About the Plan

The Active Transportation Plan provides a shared vision for a future transportation network in Webb County that considers all modes of traffic. It identifies the priority infrastructure needed to create this future network, with an emphasis on linking neighborhoods and providing better access to transit. The Active Transportation Plan aims to improve mobility in the region by focusing on safety, equity, and accessibility.

Laredo's current and future active communities deserve a safe, connected, and substantive connected network that provides a balance of utilitarian and recreational facilities. The Plan will assist the City and County in decision making, resource allocation, design, implementation, and maintenance of the proposed multi-modal network.

This Plan recognizes bicycle and pedestrian infrastructure improvements contribute to healthy communities, and supports walking and biking as sustainable modes of travel. The Laredo & Webb County Area MPO encourages the development and enhancement of a well-connected and safe pedestrian and bicycle network. The planning team engaged the community and collaborated with multiple City and County organizations and agencies, both public and private, to develop the Active Transportation Plan.

1.3.1 Elements of a Successful Plan

A successful active transportation plan should support goals of the community it serves, determined by a thoughtful community input process and careful analysis. The following three fundamental elements are the foundation of a successful plan:

- Developing a high-quality network
- Fostering the culture and appeal of walking and bicycling
- Defining clear implementation tasks and responsibilities, including resources

The Active Transportation Plan incorporates these three fundamental elements to ensure the recommendations and strategies outlined by the Plan are genuinely supported by the community. Engaging residents and stakeholders throughout the development and implementation of this Plan helps achieve the community's vision and will facilitate the implementation process.

Receiving Community Input and Support is Essential

1.3 About The Plan

1.3.2 Planning Process

The development of the Active Transportation Plan occurred over a 10 month timeframe. The Plan was developed through extensive research, analysis of the existing network and conditions, public input, and a carefully designed methodology. Over 20 existing plans and studies were consulted in the development of the Plan. The public input collected in previous planning efforts such as the Viva Laredo Comprehensive Plan and the Metropolitan Transportation Plan helped build a framework for the Active Transportation Plan.

Public Input & Stakeholder Engagement

Involving the public in the planning process of the Active Transportation Plan encourages more people in the community to support and promote the Plan's recommendations. Ideas were generated by the public through six Planning Night events. Over 1,900 residents participated in a survey published in both English and Spanish. The survey demonstrated more people would ride a bicycle if safe and protected bikeways were available. During the process, stakeholders were engaged through a series of presentations and were asked to provide feedback regarding the proposed recommendations and bicycle network routes. Additional information about the public input process and a summary of survey results is detailed in Chapter 3 of the Plan.

Data Collection & Analysis

Data was gathered from various existing datasets and the public survey. Existing data on local geography, traffic patterns, economic indicators, and socioeconomic conditions were analyzed. Additionally, the current transportation network was carefully analyzed to better understand the existing conditions related to bikeways, sidewalks, transit, and micromobility. The detailed analysis informed the development of the proposed bicycle network and recommendations. The data analysis findings are detailed in Chapter 2.

Imagine Your City Engagement Activity

Feedback Gathered on Existing Conditions

1.4 Vision & Goals

1.4.1 Vision of the Plan

The purpose of the Active Transportation Plan is to create and develop connectivity between bicycle, pedestrian, and transit networks that will provide safe, accessible, and alternate modes of transportation for the future of Laredo and Webb County citizens.

Implementing the goals from both the Viva Laredo Comprehensive Plan (Viva Laredo) and the Metropolitan Transportation Plan (MTP) will provide the necessary tools to achieve the success of this Plan. Applying the goals of connectivity, health, access, safety, and equity will generate a better tomorrow for the region.

The Active Transportation Plan aims to create a regionally connected bicycle and pedestrian system that provides a safe, comfortable, accessible, and equitable network of trails, sidewalks, and on-street bicycle facilities for people of all ages and abilities that encourages a healthy lifestyle, economic development, and increases community awareness and funding for alternative modes of transportation.

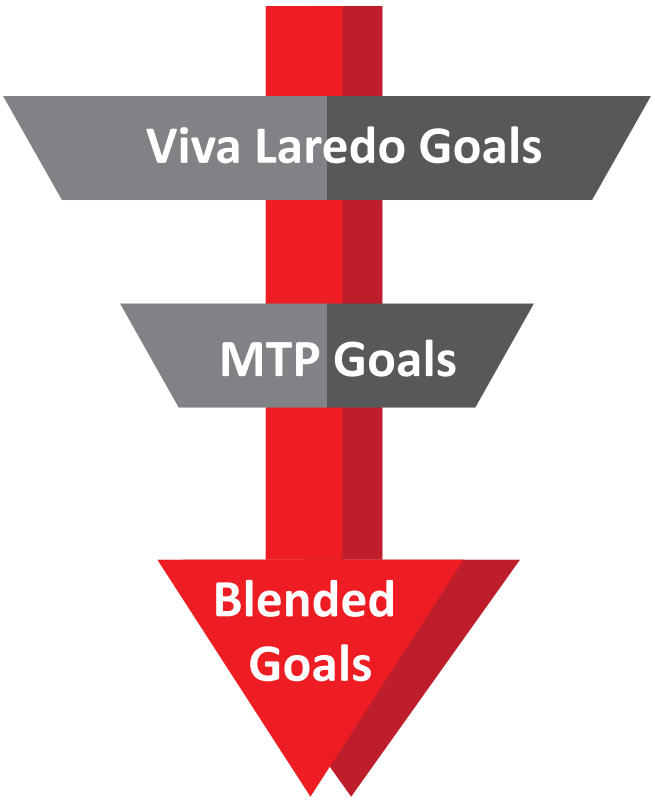
Developing a connected transportation system offers a seamless bikeway network for people of all ages and abilities. It is able to create eco-tourism routes that connect people to the local geography and historic-tourism routes that connect people to the roots of the City. Not only does it provide alternative routes, but it increases transit ridership and serves as a two-way communication forum between the community, the MPO, and its transportation partners. The Active Transportation Plan allows LW-CAMPO to develop principles and criteria for network alternatives, as well as an implementation and funding plan.

1.4.2 Goals of the Plan

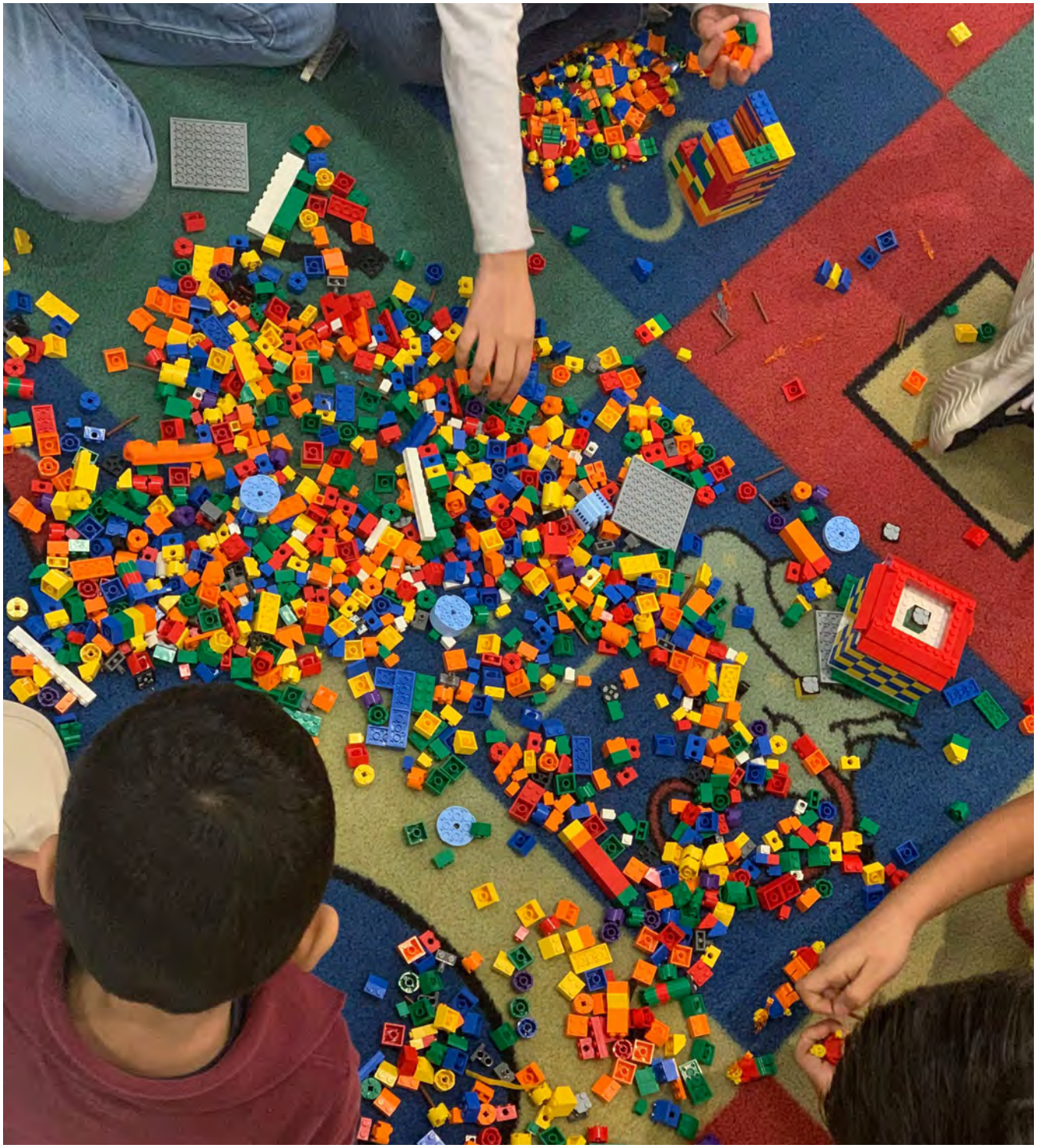
The Active Transportation Plan aligns with the Viva Laredo Comprehensive Master Plan and its directives to design for and encourage sustainable and active transportation, and will support other ongoing transportation and land use planning initiatives in Laredo.

The Plan reduces the need for individual auto use while providing a variety of travel choices for achieving a safe, accessible, and sustainable network that connects people with each other and where they want to go. The Active Transportation Plan will be safe, be equitable, be reliable, provide travel choices, provide support for clean air and climate commitment, as well as educate residents with overarching goals of making walking and biking a viable and enjoyable way to get around town and creating safer streets for everyone.

The following list of goals provides an in-depth detail from both the Viva Laredo and the MTP.



1.4 Vision & Goals



A Scene from One of the 2020 Planning Nights

1.4 Vision & Goals

Viva Laredo's Overall Goal:

- Create a multimodal transportation network throughout Laredo that provides access to opportunity, improves public health, reduces carbon emissions, and provides civic recreational opportunities while efficiently moving pedestrians, cyclists, transit, motor vehicles, cargo, and freight.

Detailed List of Viva Laredo's Goals:

- Goal 4.1: Create a coordinated, efficient, and more affordable multimodal transportation system that supports, complements, and meets the needs of different types of places throughout the City. Land use patterns and connections among different land uses are key elements defining the form and character of places. (Connectivity)
- Goal 4.2: Laredo's thoroughfares will form a well-connected network of complete streets that support driving, walking, bicycling, and public transit. (Safety/Complete Streets)
- Goal 4.3: The City will improve its thoroughfares over time as opportunities are found to increase transit service and improve connectivity, walkability, bike-ability, and economic benefits to surrounding areas. (Connectivity)
- Goal 4.4: Reduce service disparities and achieve equitable access to all types of facilities and transportation modes. (Equity & Accessibility)
- Goal 4.6: Enhance and connect the bike and pedestrian circulation system throughout Laredo. (Connectivity)
- Goal 4.7: Vigorously expand bicycle facilities throughout Laredo to create a full network of connected, safe, and attractive bikeways and supporting facilities for both transportation and recreation. (Connectivity)
- Goal 4.9: Ensure safety for users of all transportation modes, with attention to the most vulnerable users, including people with disabilities, those using mobility devices, the young, and the elderly. (Safety/Health)
- Goal 4.12: Improve the region's air quality through more sustainable and energy-efficient transportation and land use practices. (Health)
- Goal 4.14: Make a Metro Transit Master Plan and turn it into the most used Citywide transit system in Texas. (Connectivity)

Detailed List of MTP Goals:

- Goal 1: Provide a transportation network that is safe for all modes and users. (Connectivity)
- Goal 4: Foster continued economic vitality by providing an effective and efficient freight network and supporting access to jobs and major destinations in the region. (Equity)
- Goal 5: Develop an integrated and connected transportation network that encourages vibrant, affordable, and equitable communities (Connectivity)

Blended Goals between Viva Laredo & MTP:

- **Goal 1: The City will improve its thoroughfares using best practices to create a connected network of complete streets that increase transit service and improve connectivity, walkability, bike-ability, and economic benefits to surrounding areas. (Safety/Complete Streets)**
- **Goal 2: Enhance and connect the bike and pedestrian circulation system throughout Laredo to reduce service disparities and achieve equitable access to all types of facilities and transportation modes. (Equity & Accessibility)**
- **Goal 3: Expand bicycle facilities throughout Laredo to create a full network of connected, safe, and attractive bikeways and supporting facilities for both transportation and recreation. (Connectivity)**
- **Goal 4: Increase Metro Transit efficiency to create the most utilized Citywide transit system in the state and reduce service disparities, and provide clear connectivity to other transportation modes. (Equity, Accessibility, & Connectivity)**

Brandon Lopez & Isaia Zavala

Brandon Lopez and Isaia Zavala are both high school students. They used to bike recreationally, but recently switched to skateboarding. They enjoy skateboarding as a way to de-stress and have fun. They normally skate around their neighborhood, however, at times Mr. Lopez does skate at the McPherson Skatepark. They would prefer to have smoother roads to prevent falls.

When told about the plans to better connect the region with active transportation routes, Brandon stated, “This would be great for our area; we’re closed off because there’s so many busy roads. It’s really hard for people to walk and bike around here.”

Endnotes

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2

Existing Conditions

2.1 Community background

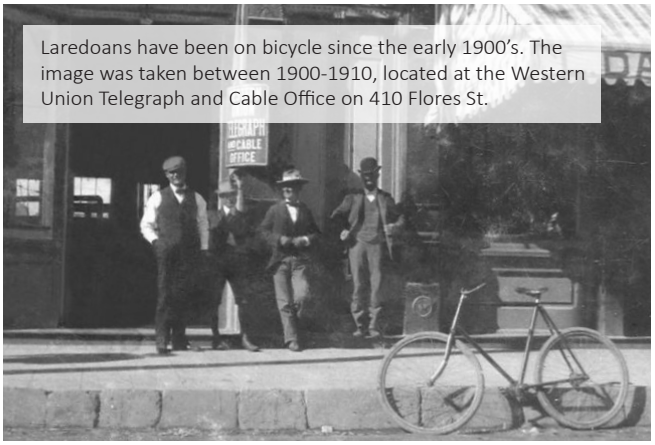
An existing conditions evaluation can bring to light constraints and opportunities for improvements. After identifying a viable candidate corridor for pedestrian or bicycle improvements and exploring existing opportunities, various concepts can be developed. These concepts can help both the public and stakeholders envision potential improvements and drive the decision-making process.

The current infrastructure does not connect the entire community. In the past decade, the City has seen tremendous growth to the east and south. In turn, the amount of park land and trails has not kept up with residential development.

Additionally, there are parts of Central Laredo that need to connect to existing infrastructure so the network can serve the area. Since Central Laredo streets follow a grid pattern, this provides numerous opportunities for walking and biking. Connecting Central Laredo with the rest of the existing active transportation network is necessary to improve accessibility.

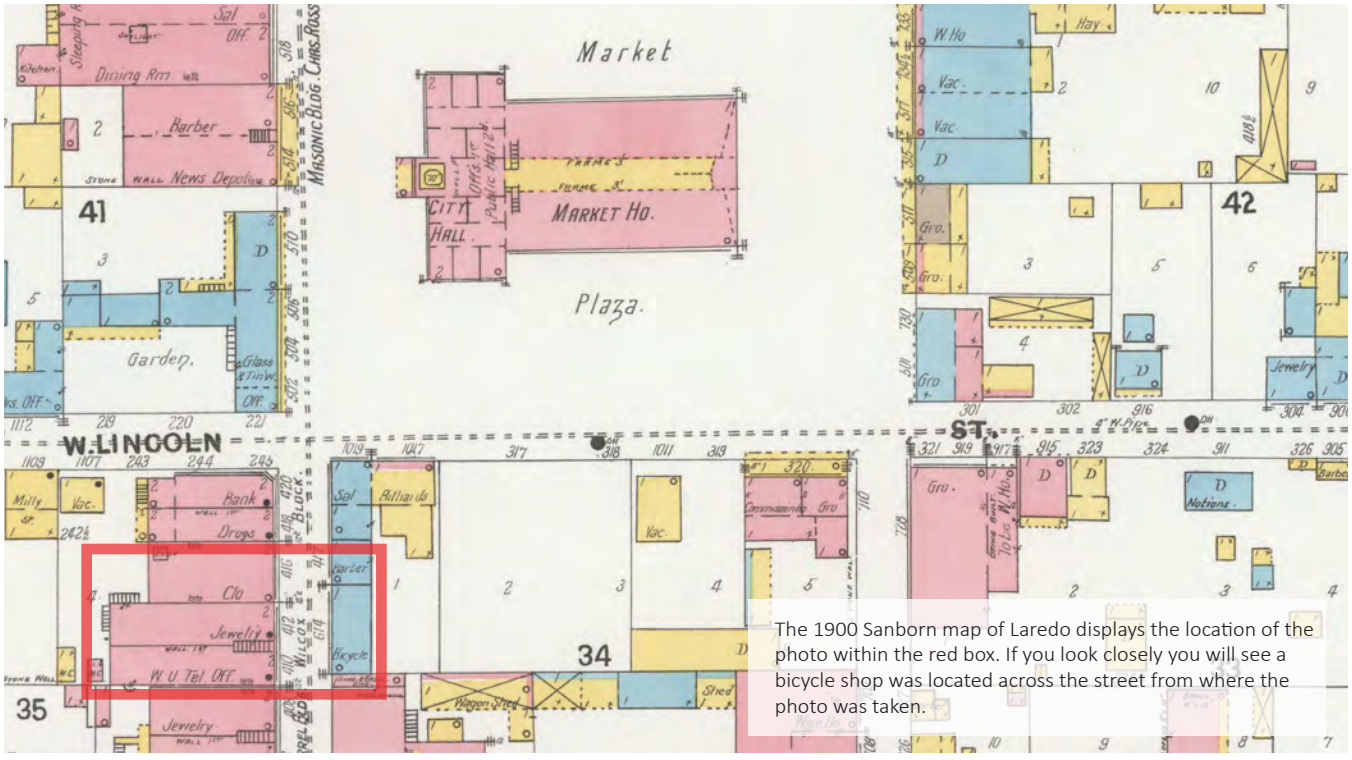
2.1 Community Background

Examining current and projected socioeconomic data in a region is an important step in determining current and future transportation needs. Socioeconomic characteristics, such as population, size and number of households, and employment, are key variables that aid in understanding the traveling habits of the region.



Laredoans have been on bicycle since the early 1900's. The image was taken between 1900-1910, located at the Western Union Telegraph and Cable Office on 410 Flores St.

Laredo Cyclists, Early 1900's



The 1900 Sanborn map of Laredo displays the location of the photo within the red box. If you look closely you will see a bicycle shop was located across the street from where the photo was taken.

Laredo 1900 Sanborn Map Dsiplaying Shops Downtown

2.1 Community background

2.1.1 Geography

The region is known as the Rio Grande Plains; nestled between the Sierra Madre Oriental Mountains and Chihuahuan desert to the west, and the Gulf of Mexico to the east. The region is sandy and rocky with a dry atmosphere as mountains block the moisture from the Pacific Ocean.

Laredo is located on the banks of the Rio Grande River in South Texas. This oasis hosts a Mediterranean climate, it consists of long hot summers, and short mild winters. The semi-arid region has mostly bright and clear skies, receiving 220 sunny days a year. If you enjoy the warm weather, Laredo is paradise city. Summer time sunshine lasts approximately one-third of the year, with temperatures above 90°F (32.2°C) and many reaching above 100°F (37.8°C). Winters are mild, with the average low night time temperatures of 46°F (7.8°C) and day time temperatures reach 66°F (18.9°C).

The air is dry as the hot air masses travel to Laredo from the desert lands. Laredo receives little rainfall, averaging 20" annually. The arid vegetation and dry soil are unable to hold even small, heavy bursts of rain which sometimes cause flash floods within a matter of minutes.

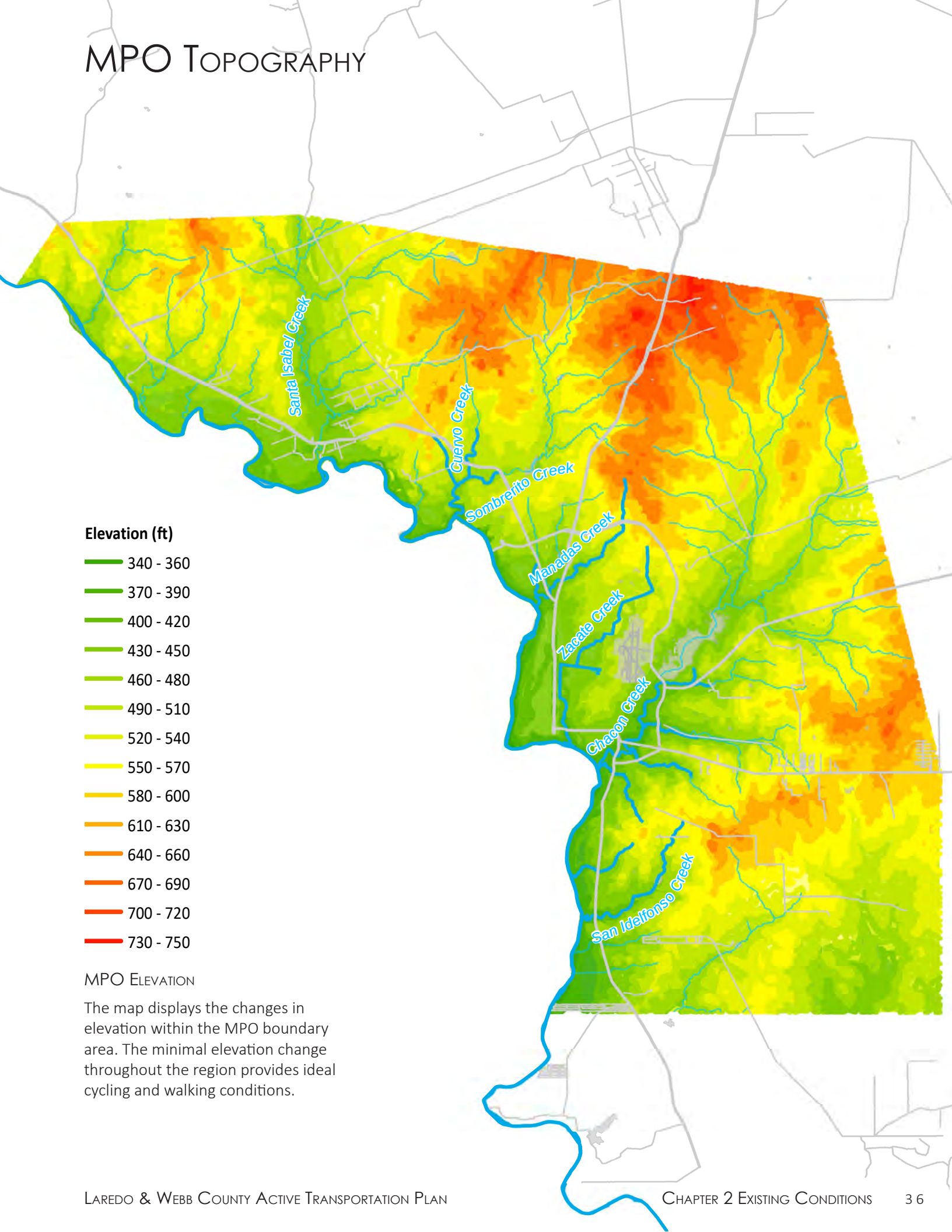
Laredo's average elevation is 450', the City naturally flows in a southwest direction towards the river. The highest peak reaches 682' on the northeastern part of the City and the lowest elevation is 334' at the river's most southern point of the City as it continues to flow to the Gulf of Mexico. The land has some variation with hills and flatlands, while the native vegetation consists of mesquite, oaks, arid plants, and grasses. Water is a precious resource and the area is blessed to have several creeks that flow through the City, a few lakes and ponds, but most importantly the Rio Grande River. These green spaces and streambanks provide great habitat for migratory birds, making Laredo a great location for bird watching as various species make their seasonal travels through the region.

Laredo's Position in Rio Grande Watershed

Banks of Rio Grande River

Laredo is Home to Many Bird Species

MPO Topography



MPO Elevation

The map displays the changes in elevation within the MPO boundary area. The minimal elevation change throughout the region provides ideal cycling and walking conditions.

2.1 Community background

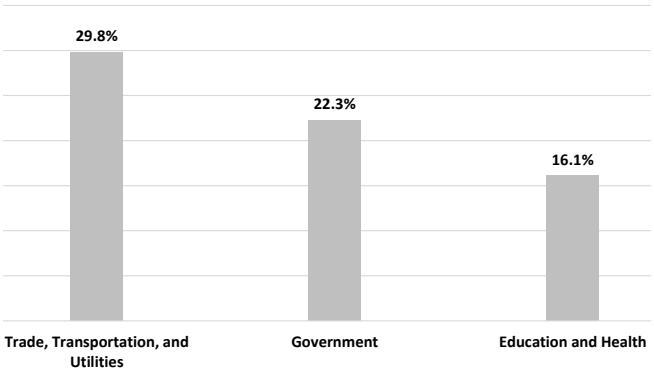
2.1.2 Economic Conditions

The border is the focal point of the regional economy, history, culture, and importance. As a gateway between the United States and Mexico, Laredo plays a major role in both the local/regional economy as well as in inter- and intra-state commerce. As a "gateway" to the United States and a dominant inland port along the United States- Mexico border, smart investments in transportation infrastructure are important in meeting today's needs and the future demands of the region.

Laredo handled 87% of trade between the United States and Mexico, annually over 2 million commercial trucks cross the U.S. Mexico border through Laredo. The Laredo region is served by two class 1 railroads, Union Pacific and Kansas City Southern and hosts over 40 million square feet of land occupied by over 900 companies in transportation and logistics. Compared to ports within the United States, Port Laredo is ranked second for imports and exports in 2018 in total trade by monetary value.

As the Laredo region looks forward to the future, enhancing our transportation network is critical. Reducing congestion, providing alternatives, and balancing our freight traffic and regional transportation needs will keep us atop the nation in international trade.

Top 3 Employment Sectors within Laredo MSA



World Trade Bridge

Top Employers within Laredo MSA

Number of Employees	Employer
Over 2,000	The Outlet Shoppes (55 stores)
	United Independent School District
	Laredo Independent School District
	City of Laredo
	Wal-Mart (4 locations)
1,500 to 1,999	US CBP- Customs Field Officers
	H-E-B (7 locations)
	McDonald's Restaurant
	Webb County
1,000 to 1,499	Laredo Medical Center
	Laredo Sector Border Patrol
	Texas A&M International University
500 to 999	Convergy's
	Laredo College
	Doctor's Hospital
	International Bank of Commerce (multiple locations)
200 to 499	Target Greatland (2 stores)
	Falcon International Bank (7 locations)
	Border Region Behavioral Health Center
	Gateway Community Health Clinic
	Sames Motor Company
125 to 200	BBVA Compass Bank (11 locations)
	Laredo Energy Arena
	Union Pacific Railroad
	U.S. Post Office
	Family Chevrolet
	FedEx Freight
	Sears & Roebuck and Co.

Laredo Economic Development Corporation, 2017

2.1 Community background

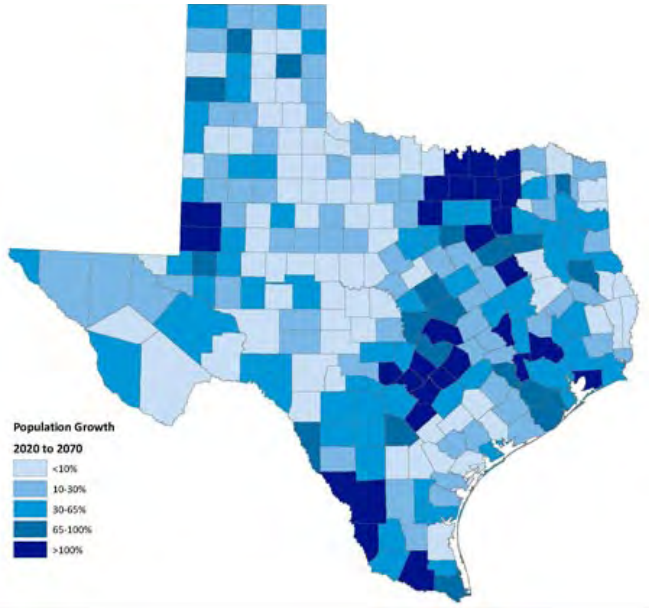
2.1.3 Socioeconomic Conditions

Population

The City of Laredo is the third most populated U.S. city on the border with Mexico. Laredo is estimated to have over 260,000 residents as of 2018. Along with Nuevo Laredo, the sister city to the south, the region known as Los Dos Laredos has a combined population that reaches well over half a million residents. The "Gateway City" will continue to grow as the border supply link in international trade.

Population Statistics and Projections

Year	Laredo	% Change	Webb Co.	% Change
1980	91,449	N/A	99,258	N/A
1990	122,899	34%	133,239	34%
2000	176,576	44%	193,117	45%
2010	236,091	34%	250,304	30%
2020	302,127	21%	318,028	21%
2030	373,620	19%	393,284	19%
2040	441,712	15%	464,960	15%
2050	503,814	12%	530,330	12%
2060	562,348	10%	591,945	10%
2070	615,061	10%	647,433	10%



TWDB: State Water Plan 2022

Household & Transportation Cost

Transportation costs are typically the second largest expenditure for a household, following the cost for housing. Transportation costs are largely a function of the characteristic of the neighborhood in which a household is located. Neighborhoods with a denser land development pattern, hosting a mix of land uses create an environment ripe for multimodal transportation options. These compact and dynamic neighborhoods host walkable streets, opportunities for transit, and access to jobs and destinations. Compact neighborhoods are more efficient, affordable, and sustainable; benefiting both households and businesses.

The Center for Neighborhood Technology (CNT) maintains the Housing and Transportation (H+T) Affordability Index to provide a comprehensive view of affordability that includes housing costs and transportation costs. According to the CNT H+T Affordability Index, transportation costs residents of the Laredo MPO area an average of 33% of total income, while housing costs account for 34% of total income.

Considering both housing and transportation costs provides a more comprehensive understanding of regional affordability. In areas with a more dispersed, suburban style of development, the population requires more vehicles to drive far distances which increases the cost of living.

Household Median Income	**$47, 593**
Housing Cost	**- $16, 182**
Transportation Cost	**- $15, 706**
Disposable Income	**$15, 705**

2.1 Community background

Households without Vehicles

Based on the 2018 Census data, there were a total of 4,946 households in Webb County without a vehicle. Of these, 2,816 households (56%) resided in central Laredo. The areas with higher number of households without vehicles correspond with areas that have higher concentrations of poverty.

Poverty

Laredo has a dramatically higher than average percentage of residents below the poverty line when compared to the rest of the state. The poverty rate in Texas is 15.5%, while Laredo's poverty rate is 26.7%.

Residents Boarding El Metro Transit Bus

Out of 74,789 households in Webb County, 29,918 households reported income levels below $35,000. Laredo's median household income is $47,593 compared to the state and national household median income of $61,874 and $62,843, respectively.[1] There are various factors that lead to poverty, including a lack of access to resources.

Health

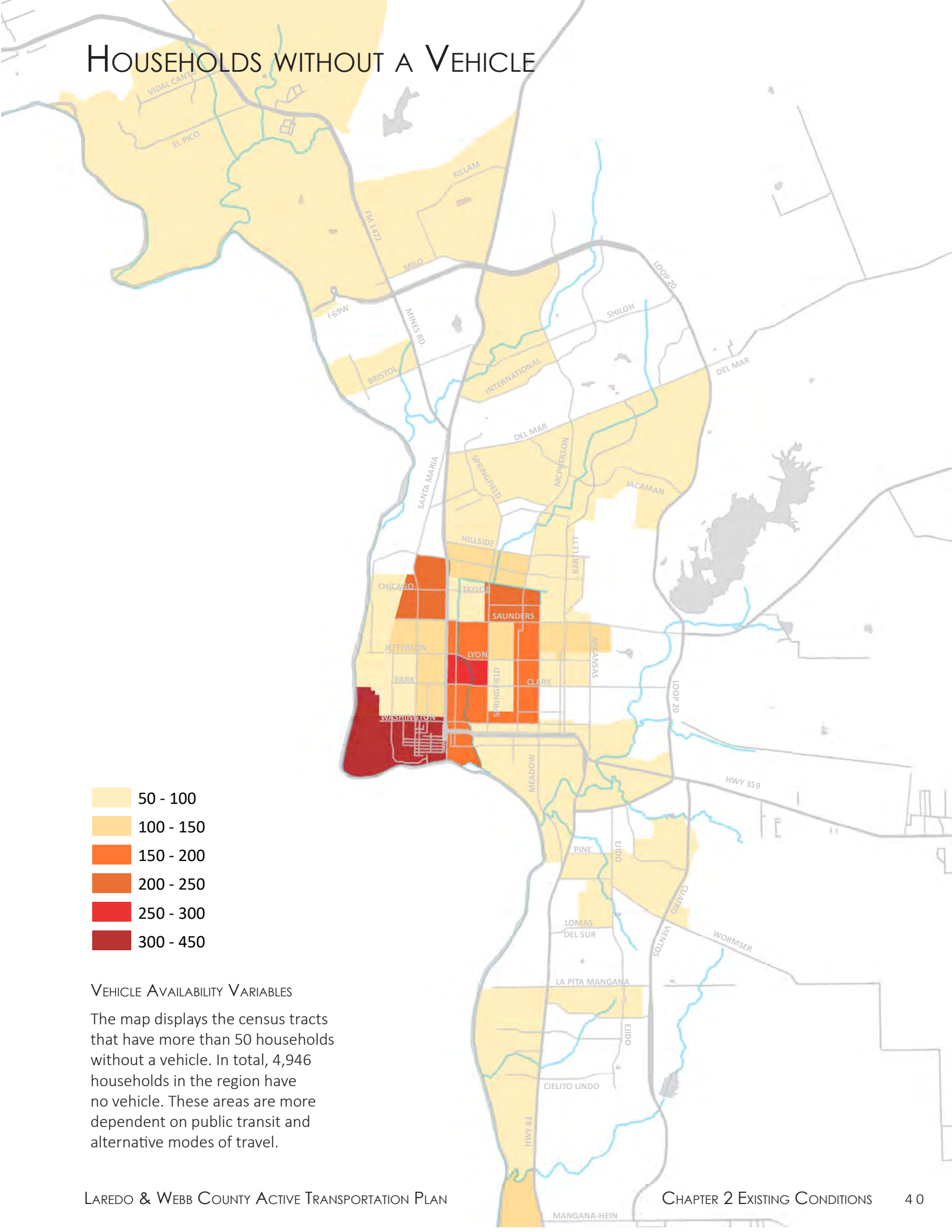
Understanding the health issues our community is confronting provides an opportunity to design solutions which promote active living. Lack of exercise, poor diet, and poverty are contributing factors to poor health.

In Webb County, physical inactivity continues to be an increasing issue. In 2020, the rate of physical inactivity was 29%, up 4% from 2019. The lack of physical activity in the region has led to a high obesity rate and other chronic health issues. In addition, 7% of Webb County residents have been diagnosed with diabetes.[2]

Webb County faces a number of challenges in terms of overall health status. The 2020 County Health Rankings identify 38% of Webb County residents as obese, 18% as smokers, 29% as physically inactive, with a total of 29% medically uninsured, and 35% of residents considered to have poor or fair health. All of these statistics are higher than state and nationwide averages.[3]

Health problems at the border include obesity, diabetes, heart disease, and asthma. These chronic and degenerative diseases are developed over time. Determinants of health include poverty, physical inactivity, poor diet, and lack of education.[4] Providing a transportation network that enables residents to utilize walking, bicycling, and transit can help offset these challenges.

Households without a Vehicle

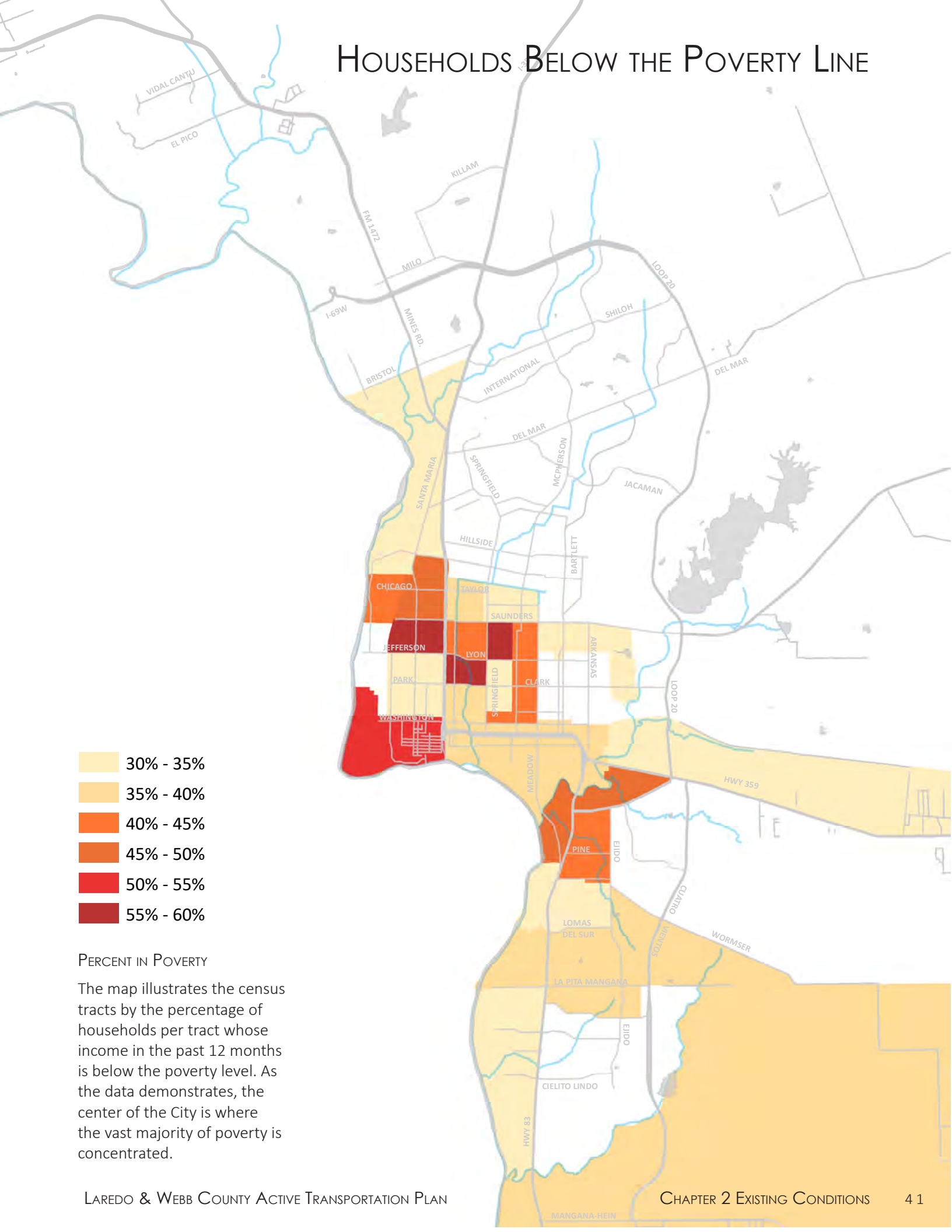


50 - 100
100 - 150
150 - 200
200 - 250
250 - 300
300 - 450

Vehicle Availability Variables

The map displays the census tracts that have more than 50 households without a vehicle. In total, 4,946 households in the region have no vehicle. These areas are more dependent on public transit and alternative modes of travel.

Households Below the Poverty Line



30% - 35%
35% - 40%
40% - 45%
45% - 50%
50% - 55%
55% - 60%

Percent in Poverty

The map illustrates the census tracts by the percentage of households per tract whose income in the past 12 months is below the poverty level. As the data demonstrates, the center of the City is where the vast majority of poverty is concentrated.

2.2 Network Analysis

2.2 Network Analysis

The existing network was reviewed taking an in-depth analysis of the existing bikeways, sidewalks, transit system, and micromobility options within the LW-CAMPO boundary. The network analysis helped guide the development of the proposed network and recommendations of this Plan.

2.2.1 Bikeways

Laredo's bicycle and shared use network includes a mix of on-street and off-street facilities. As of 2020, there are 29 miles of trails and 6 miles of on-street bicycle facilities; totaling 35 miles of improved trails across the City. In addition, there are other facilities such as mountain bike trails and trails within parks that were not included in the network total.

The existing bicycle network facilities are scattered and lack connectivity, limiting their function to the community. The on-street bicycle facilities are isolated and missing mode separation safety features. As for the off-street facilities gaining traction, linear parks which extended along local waterways and provide access to green space and connectivity away from traffic. Although we do have some facilities and potential to grow, there are still areas in portions of Central and South Laredo that lack any improved facility. Through the public input process, many local residents indicated they do not feel safe biking the streets of Laredo.

Existing Bikeways

Facility	Name	Type	Miles
On-Street	Convent St.	Bike Lane	0.53
	San Bernardo Ave.	Bike Lane	2.02
	Clark Blvd.	Bike Lane	1.17
	Country Club Dr.	Bike Lane	1.52
	Casa Verde Rd.	Bike Lane	1.11
	Park St.	Share Road	0.35
	Santa Maria Ave.	Share Road	0.31
	Garden St.	Share Road	0.35
	Total On-Street Miles		**6.35**
Off-Street	Zacate Creek	Path	4.93
	Alexander Bikeway	Path	1.88
	Chacon Creek	Path	4.25
	North-Central Park	Path	4.10
	Del Mar Bikeway	Path	1.29
	Independence Hills	Path/Trail	1.42
	Rio Grande Vega Lands	Trail	3.61
	Green Jay Trail	Trail	3.84
	Loop 20	Shared Use	3.73
	Shilo Trails	Mnt. Bike	7.20
	La Bota Ranch Trails	Mnt. Bike	3.99
	Lakeside HOA Bikeway	Private	2.67
	Bartlett Park	Park Trail	0.95
	Mesquite Bend Trail	Park Trail	1.41
	Total Off-Street Miles		**29.05**
Total = 35.4 miles			

2.2 Network Analysis

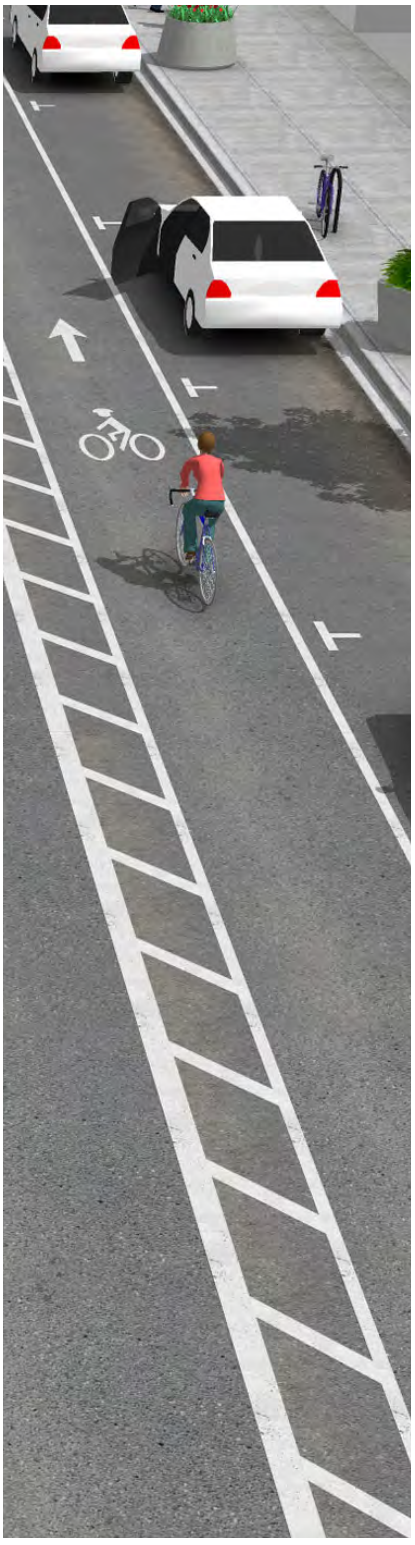
Types of Bicycle Facilities

Off-Street Facilities

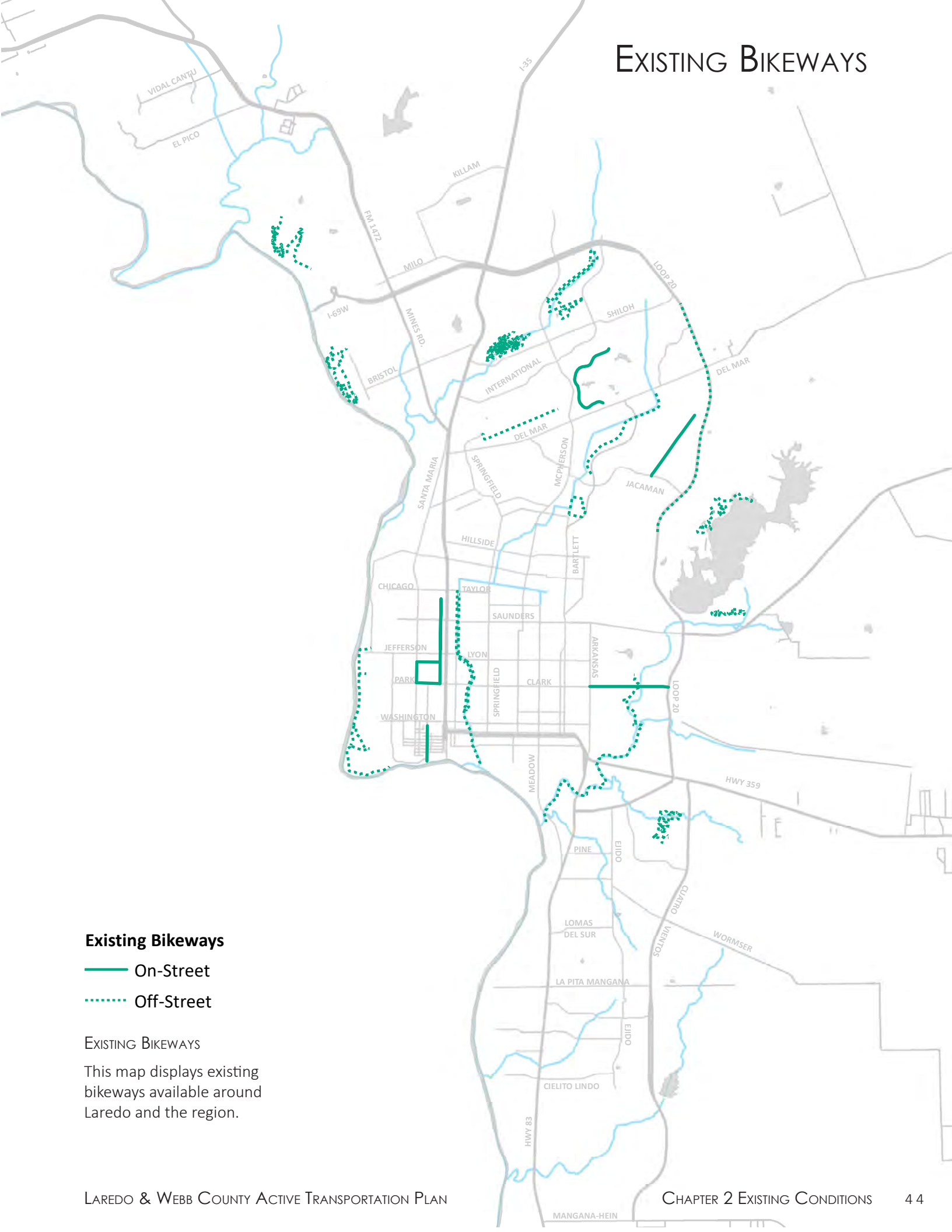
- Trails- these routes travel through greenspace
- Shared Use Path- 10ft sidewalks can be shared by cyclists & pedestrians and can facilitate passing when bikes are traveling in opposite directions. Flexible travel, option to incorporate into existing infrastructure.

On-Street Facilities

- Bike Lane- Designated lane for bicycles on the existing road network.
- Buffered Bike Lane- Designated lane for bicycles that run along the road or adjacent to on-street parking that offers protection from moving traffic with the use of buffer space between the vehicular and bicycle lane.
- Shared Road- Bicyclist able to use entire lane, sharing the road with vehicles. A “sharrow” marking indicates where a cyclist has the right to be while in transit.
- Protected Bike Lane- Protected bike lanes are like sidewalks for bikes. These facilities use physical dividers (such as bollards, medians, raised curbs, armadillos, and planters) to separate bike lanes from both cars and sidewalks. Protected lanes are essential to building a full network of bike-friendly routes.



Existing Bikeways



Existing Bikeways

On-Street

Off-Street

Existing Bikeways

This map displays existing bikeways available around Laredo and the region.

2.2 Network Analysis

Bicycle Demand

Laredo's bicycle demand varies for location and purpose, for some its recreation and others a mode of transportation. Available data on transit bicycle boardings and bicycle crossings at International Bridge # 1 was reviewed and analyzed. Based on the 2019 data, U.S. Customs and Border Protection processed a total of 89,403 bike crossings at International Bridge # 1. During that same year, El Metro recorded a total of 14,561 bicycle boardings.

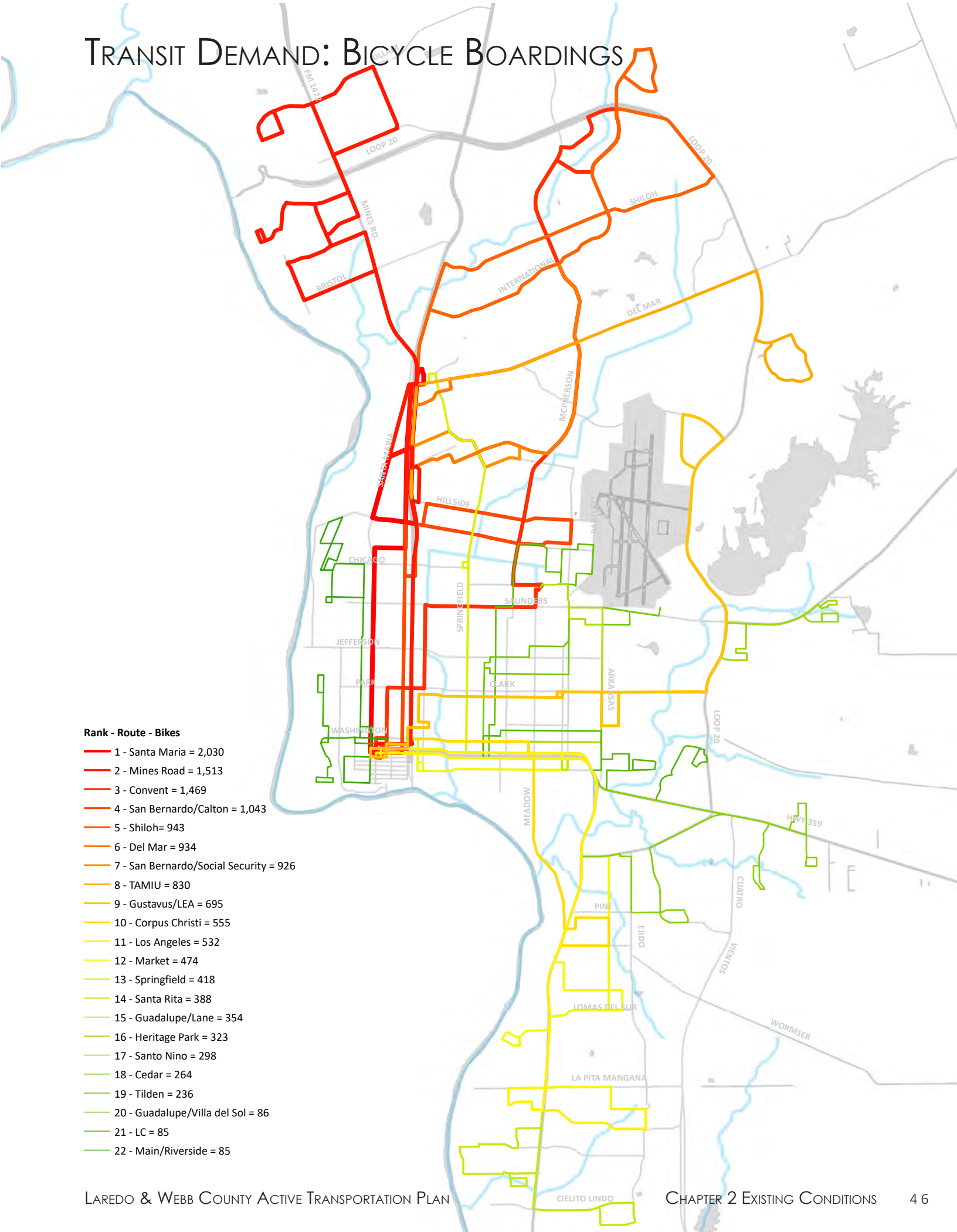
International Bridge #1 - 2019 Bicycle Crossings

Month	Total
January	12,605
February	10,684
March	10,069
April	8,007
May	8,985
June	7,252
July	8,267
August	5,906
September	5,546
October	6,089
November	3,998
December	1,995
Total = 89,403	

El Metro - 2019 Transit Bike Boardings

Bus Route	Total	Weekly Avg.
#1 Santa Maria	2,030	41
#17 Mines Road	1,513	31
#3 Convent	1,469	30
#2B San Bernardo Library	1,043	21
#12 Shiloh	943	19
#12 Las Brisas	934	19
#2A San Bernardo- SS	926	19
#16 Casa Verde/ Del Mar	830	17
#11 Same Auto Arena	695	14
#10 Corpus Christi	555	11
#20 Los Angeles	532	11
#9 Market	474	10
#4 Springfield	418	9
#14 Santa Rita	388	8
#8A Guadalupe Lane	354	7
#13 Heritage Park	323	7
#19 Santo Nino	298	6
#6 Cedar	264	5
#5 Tilden	236	5
#8B Guadalupe Villa Del Sol	86	2
#7 Laredo College	85	2
#15 Main Riverside	85	2
#C1 Mines Road	80	3
TOTAL = 14,561		

Transit Demand: Bicycle Boardings



2.2 Network Analysis

2.2.2 Sidewalks

Determining a community's walkability can be achieved in various ways. Walking trips are often shorter than other types of trips. Sidewalks provide a human scale mode of transit in our car-centric society. Walking has been the mode of transit for much longer than the automobile, but communities fail to plan for proper sidewalks because of the heavy focus placed on designing around cars. Pedestrian demand is dependent on the location of where people work and live. High pedestrian activity is common in places with high concentrations of dependent populations (i.e., children and senior citizens) and where there is a large concentration of residents without a car.

Laredo's existing sidewalk network is inconsistent Citywide. Newer neighborhoods have better sidewalk infrastructure. Some older neighborhoods lack sidewalks entirely, and those that exist are often in disrepair. While sidewalks in newer developments are consistent and in better conditions, many do not provide a good pedestrian experience as they lack adequate buffers from vehicular traffic and are unshaded.

A few characteristics of the City's existing sidewalk network include:

- The core of the City has a great grid pattern which supports higher walking habits.
- Inconsistent sidewalk design, many sections in disrepair or nonexistent, and missing sections.
- There are various intrusions that disrupt the ease of use like: cars, utility poles, and trees.

Sidewalks that are in poor repair or are poorly maintained are a trip and fall hazard for all residents. People with disabilities and people who are 65+ are mainly vulnerable. According to the Center for Disease Control and Prevention, one out of three adults age 65 and older falls each year.[5] For people of this age, it is easy to break hips during falls, where these severe injuries could be hard to overcome. Sidewalks that are in poor repair also pose a fall risk for pedestrians with disabilities. For instance, a person with a vision disability might trip on a crack or step into a hole and sustain a serious injury.

The absence of sidewalks leaves people to walk in roadways where they come into contact with vehicular traffic. This is particularly dangerous on high speed roadways. Many roads served by transit also do not have sidewalks or crosswalks.

Sidewalks provide a dedicated space for the use of pedestrians that is safe, comfortable, and accessible. They form a physical barrier from a roadway by a curb with an optional boulevard buffer space (paved or unpaved). Adding buffer spaces can provide a more comfortable place to walk since there is a further setback from the road. Implementing street furniture and tree zones can make the public space more attractive and accommodating for people to use.

Walkways provide safe places for people to walk and reduce crash rates by 65% - 89%. Paved shoulders reduce crash rates by 71%. Walkways and sidewalks greatly improve mobility options and safety for those in wheelchairs and other mobility assist devices.

All roadways along where pedestrians are not allowed should include an area where occasional pedestrians can safely walk. Just as vehicles need roads, pedestrians need walkways, and roadways and walkways should be designed in association with one another. Sidewalks benefit both pedestrians and motorists by creating separation between pedestrians and vehicular travel ways. In an area where sidewalks are not provided, there is a significantly increased risk of vehicle-pedestrian conflicts. When continuous sidewalks, walkways, crossings, and other pedestrian-related facilities are provided, pedestrian numbers will increase.

2.2 Network Analysis

Pedestrian Demand

Data from U.S. Customs and Border Protection shows there were a total of 3,703,941 pedestrian crossings at International Bridge # 1 in 2019, with Week 51 containing the highest number of crossings and Week 53 containing the least number of crossings.

Walk Score

Walk Score is an online platform that makes it easy for people to evaluate the walkability of neighborhoods in their respective city. Walk Score measures the walkability of a specific location using a score range from 0 to 100, with a higher score indicating better walkability. Laredo's Walk Score is 40 for the entire City.[6]

Providing a complete pedestrian network

Walking is our oldest form of transportation, where every trip begins and ends with walking. It has been found that when safe and comfortable pedestrian facilities are provided, people are more likely to walk often and walk further.

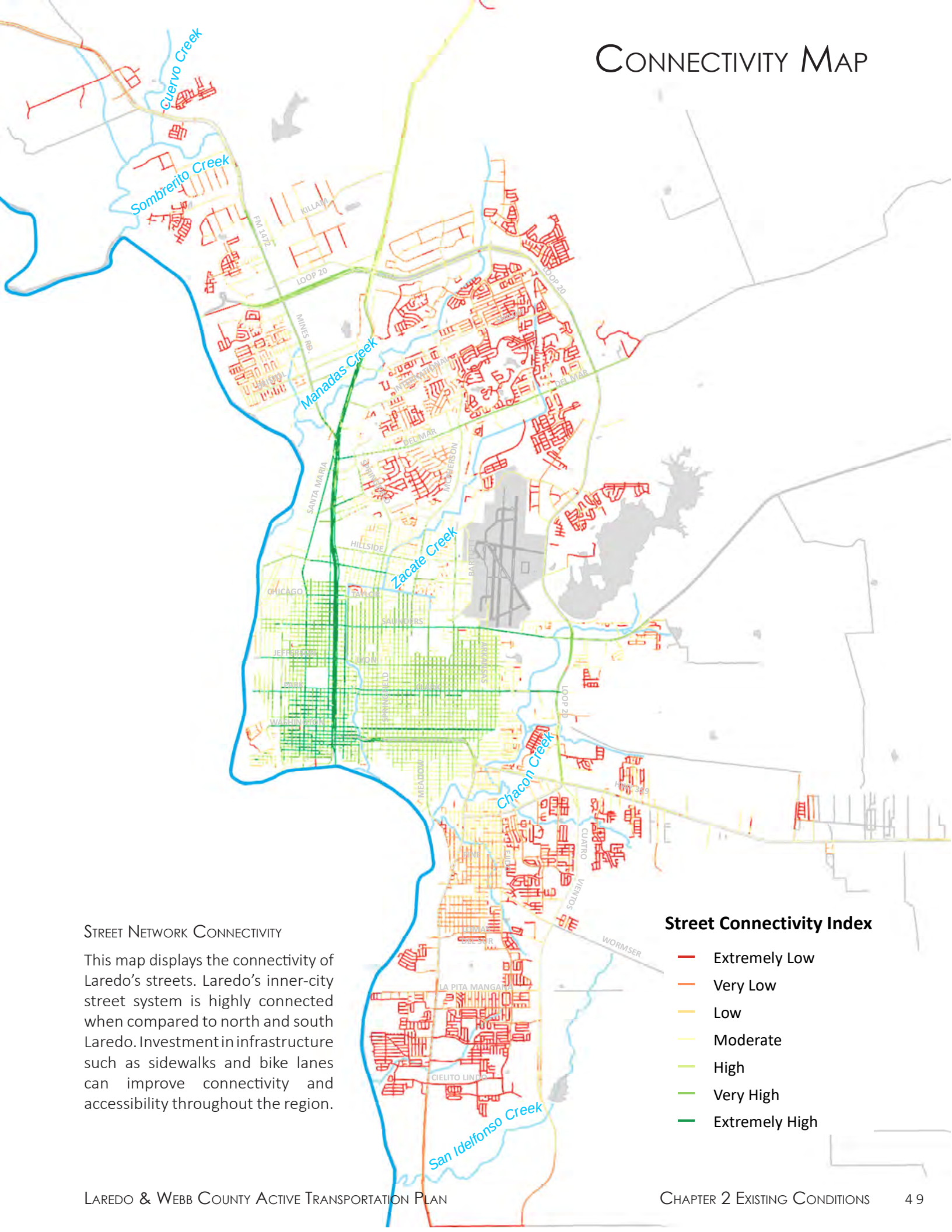
The term "pedestrian demand" refers to the level of pedestrian activity an area would expect if facilities were in place to provide a safe and comfortable pedestrian environment. In some cases, there may be a lack of people walking because of a lack of infrastructure, such as sidewalks or crosswalks. In other cases, there may be a lack of people walking because existing sidewalks are difficult to use or feel unsafe due to being too narrow, too close to a busy roadway, or in a state of disrepair.

Pedestrian Manuvering Through Sidewalk

Incomplete Infrastructure

Cars parked on Sidewalk

Connectivity Map



Street Network Connectivity

This map displays the connectivity of Laredo's streets. Laredo's inner-city street system is highly connected when compared to north and south Laredo. Investment in infrastructure such as sidewalks and bike lanes can improve connectivity and accessibility throughout the region.

Street Connectivity Index

- Extremely Low
- Very Low
- Low
- Moderate
- High
- Very High
- Extremely High

2.2 Network Analysis

2.2.3 Transit

Transit service has implications for pedestrian and bicycle safety. For example, people walk—and to a lesser extent bike—to transit stops and are therefore exposed to traffic when accessing transit. The Laredo region has two transit systems to serve the urban and rural communities. El Metro serves the City of Laredo and El Aguila serves rural Webb County.

The Laredo Transit Management Inc. (LTMI), also known as El Metro, is the sole provider of public transit service in Laredo, operating fixed route and paratransit operations under the current management contract with First Transit from Cincinnati, Ohio. The local fixed route system provides service every 30 to 60 minutes on 22 routes with 35 buses in all day service Monday through Friday, with 33 buses on Saturdays and 19 buses on Sundays.

There is a significant need for pedestrian and bicycle connections to transit. Because of this, connections and accessibility to bus stops and transit stations are a priority for the region. El Metro has made improvements to better serve the community, including the urban demand responsive paratransit service called "El Lift", which includes service to seniors and persons with disabilities and complementary paratransit service. El Metro has also made an effort to enhance bus shelters with shade. Additionally, El Metro developed the Bike and Ride Plazas initiative to help address the last mile issue. This initiative allows residents to bike to the bus stop and leave their bikes safely secured at the Bike and Ride Plaza.

Ridership Data

Annual ridership has increased significantly over El Metro's 30-year history, reaching a system-wide high of 3 million one-way trips in FY 2016-17. El Metro currently operates a fleet of 44 buses ranging in capacity from 30 to 55 passengers. Currently, El Metro carries approximately 8,500 passengers on a typical service day. (Boarding: Mon-Fri = 8,500, Saturday = 5,200 & Sunday = 2,700)

El Aguila is the designated rural public transit provider in Webb County and connects patrons living in the rural parts of Webb County to the City of Laredo's fixed route system at certain route stops and the transit center in downtown Laredo.

El Aguila's fleet of 12 vehicles operated 209,456 miles and 14,071 hours annually in 2017, and transported 70,581 passengers in the same year. El Aguila provides both fixed route and demand response services to the general public, including the elderly, persons with disabilities, students, and welfare-to-work participants. The six fixed routes serve the following areas: Rio Bravo, El Cenizo, Pueblo Nuevo, Aguilares, Mirando City, Oilton, and Bruni.

El Metro Transit Bus

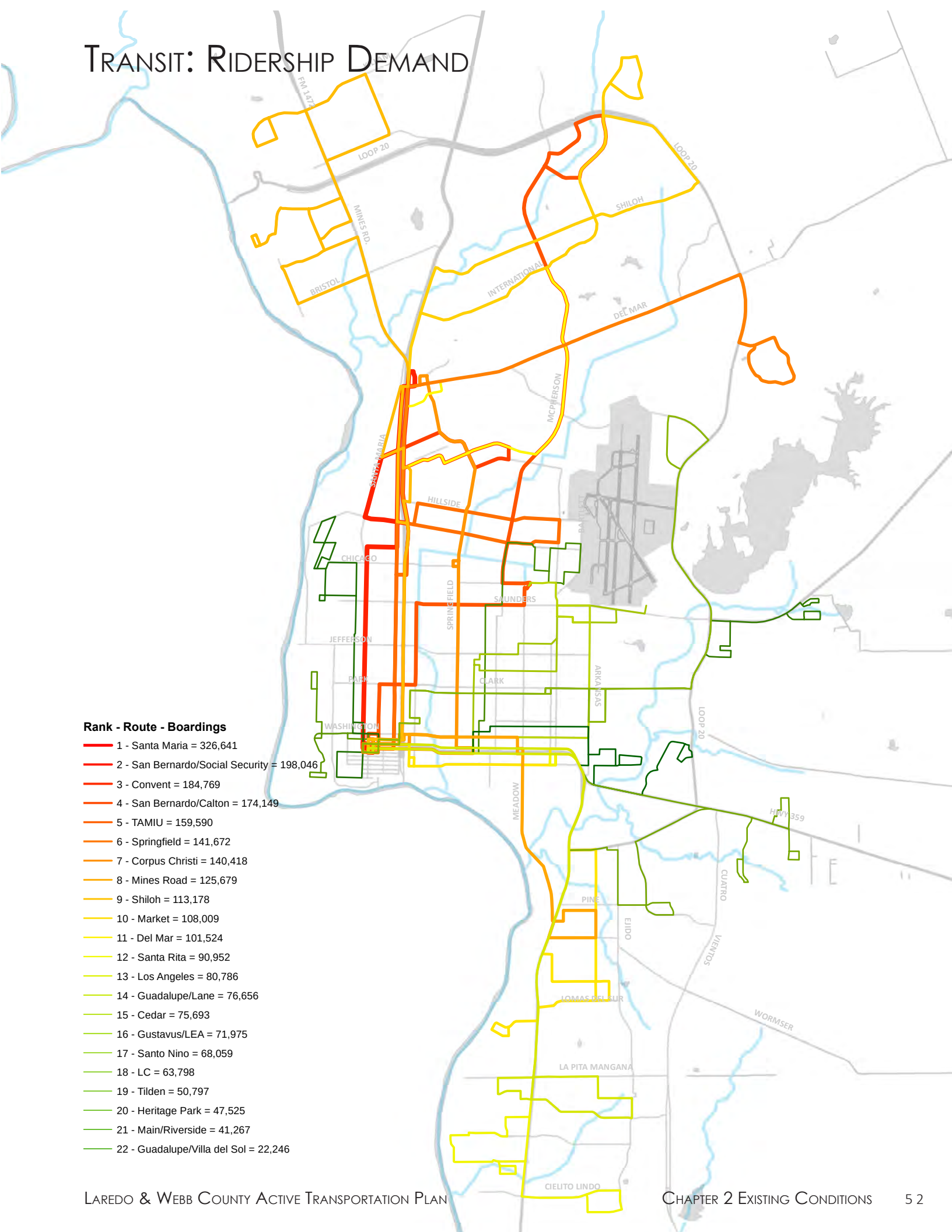
Shaded Bus Stop

2.2 Network Analysis

El Metro 2019 Transit Bus Boardings

Bus Route	Total Boardings
#1 Santa Maria	326,641
#2A San Bernardo- SS	198,046
#3 Convent	184,769
#2B San Bernardo- Library	174,149
#16 Casa Verde/ Del Mar	159,590
#4 Springfield	141,672
#10 Corpus Christi	140,418
#17 Mines Road	125,679
#12B Shiloh	113,178
#9 Market	108,009
#12A Las Brisas	101,524
#14 Santa Rita	90,952
#20 Los Angeles	80,786
#8A Guadalupe Lane	76,656
#6 Cedar	75,693
#11 Same Auto Arena	71,975
#19 Santo Nino	68,059
#7 Laredo College	63,798
#5 Tilden	50,797
#13 Heritage Park	47,525
#15 Main Riverside	41,267
#8B Guadalupe Villa Del Sol	22,246
#C1 Mines Road	4,391
Total = 2,467,820	

Transit: Ridership Demand



Rank - Route - Boardings

- 1 - Santa Maria = 326,641
- 2 - San Bernardo/Social Security = 198,046
- 3 - Convent = 184,769
- 4 - San Bernardo/Calton = 174,149
- 5 - TAMIU = 159,590
- 6 - Springfield = 141,672
- 7 - Corpus Christi = 140,418
- 8 - Mines Road = 125,679
- 9 - Shiloh = 113,178
- 10 - Market = 108,009
- 11 - Del Mar = 101,524
- 12 - Santa Rita = 90,952
- 13 - Los Angeles = 80,786
- 14 - Guadalupe/Lane = 76,656
- 15 - Cedar = 75,693
- 16 - Gustavus/LEA = 71,975
- 17 - Santo Nino = 68,059
- 18 - LC = 63,798
- 19 - Tilden = 50,797
- 20 - Heritage Park = 47,525
- 21 - Main/Riverside = 41,267
- 22 - Guadalupe/Villa del Sol = 22,246

2.2 Network Analysis

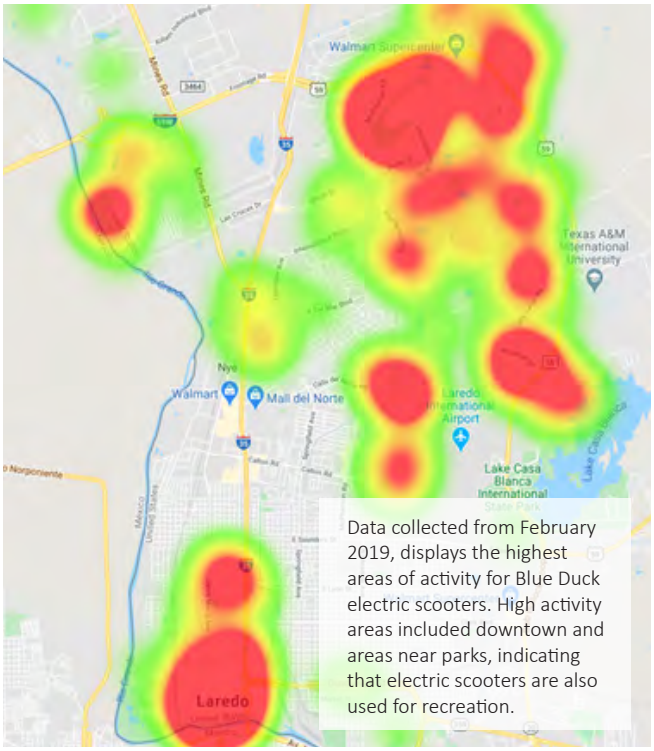
2.2.4 Micromobility

The use of micromobility devices for transportation has been rapidly evolving over the past few years. Micromobility devices are either human or electric power mode of transport such as shared bikes, electric bikes, and scooters.

The urban landscape in many cities across the country has been transformed by the introduction of micromobility transportation options. Shared micromobility programs (i.e. bike share) are now common in many cities, and micromobility options are often used as a solution to the last mile problem.

Bike Share in Madison, WI

Blue Duck Scooters



Electric Scooter Activity in Laredo

The future of micromobility in Laredo arrived and will continue to grow over the years. The first wave of electric scooters started in 2019 through a pilot program by Blue Duck, and was well received by the community. While a bike-share program could benefit local residents, such a program does not currently exist.

Along with the evolution of micromobility transportation comes new challenges requiring effective regulations and best practices to promote the safe and orderly use of micromobility options. Additionally, new procedures and guidelines for service providers, such as service provider agreements, will need to be developed. Addressing infrastructure needs for micromobility should also be a primary concern. This includes designating lanes and parking locations, identifying accessibility challenges, and ongoing maintenance of existing infrastructure.

2.3 Crash Statistics

2.3 Crash Statistics

Accidents occur from various factors, but the one constant is human life, for this reason, safety is paramount when designing a future for mobility and alternative transportation. The goal of Vision Zero is to have no fatalities for pedestrians, but as statistics show, we have not attained that milestone. Reducing crash incidents can be achieved through good design, proper lighting, and signage to name a few.

In addition to assessing the impact of traffic volumes on roadway facilities, crash data was reviewed to determine high crash locations as well as similar accident characteristics. Identifying patterns and hot spots of crash incidents highlight the areas and contributing factors that present the most conflict to the driving community.

Roadway Crash Data

The 2015-2019 crash data for Webb County was collected from the Texas Department of Transportation (TxDOT) Crash Records Inventory System (CRIS). Over the past 5 years, there were a total of 36,533 traffic-related accidents, 98% of those were in Laredo.

The top 20 intersections with crash occurrences in addition to fatal crash locations. The most crashes occurred at the junction of two of the busiest arterial roadways in Laredo, McPherson Road and Del Mar Boulevard, where 297 crashes were reported. The intersection of McPherson Road and Del Mar Road is a complicated four-way intersection with curved right turn only lanes on McPherson Road northbound and Del Mar Boulevard eastbound and westbound; the intersection is near many entrances and access points for nearby retail, and is geometrically irregular. This intersection is also near schools, nursing homes, and health care facilities serving populations that are especially vulnerable to crashes and traffic hazards.

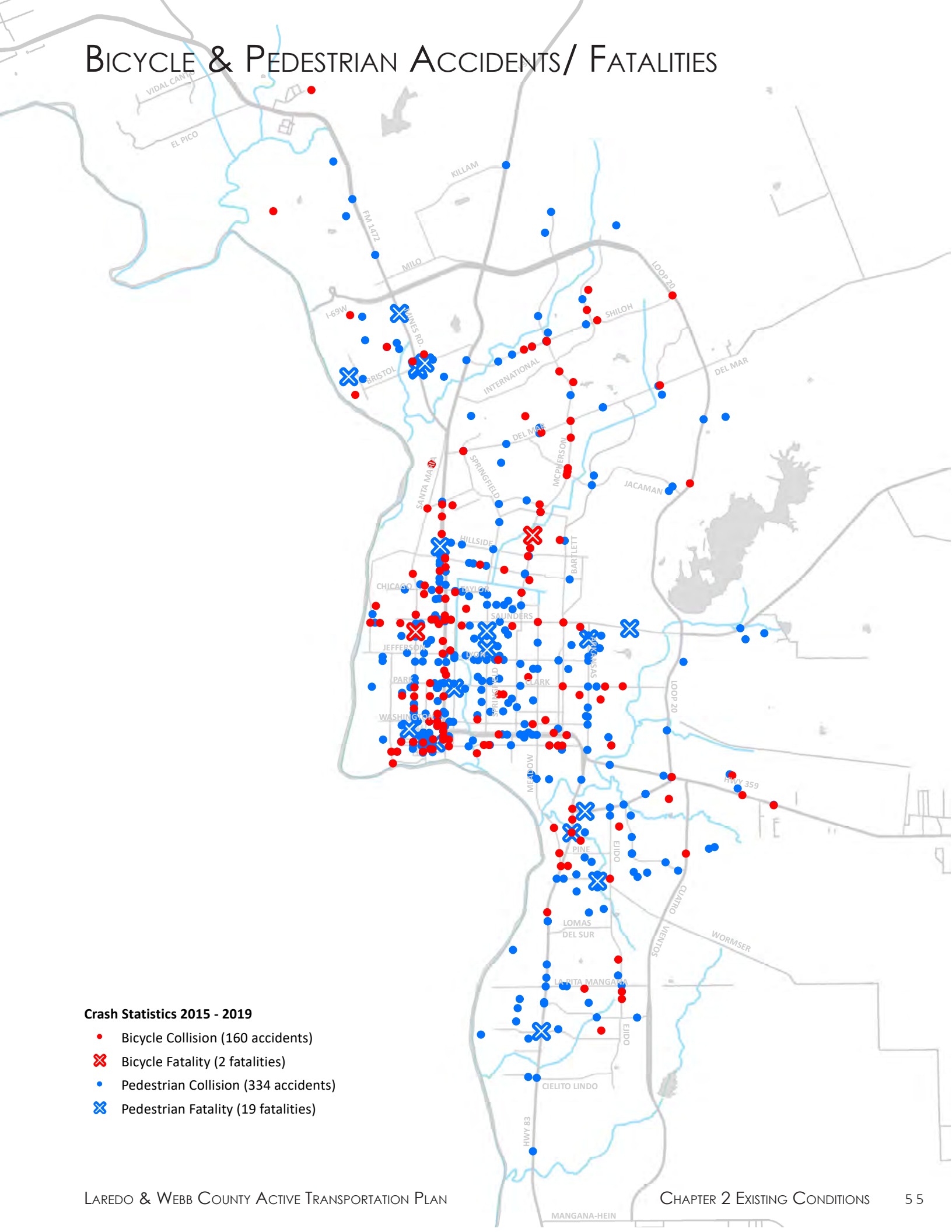
Another location where there were over 200 crashes reported occurred at the intersection of IH 35 and US 83 (Matamoros Street). The intersection of IH 35 and US 83 is near the Juarez Lincoln Bridge, carries a huge amount of freight traffic, and links two of the busiest roadways in the region.

As will be demonstrated in the Public Input chapter, feeling unsafe is the number one reason residents do not utilize active transportation. Designing safe pedestrian and bicycle facilities that adequately separate active modes of traffic from vehicle traffic will not only encourage alternative modes of transportation, but also decrease these types of incidents and fatalities in the future.

Most Accidents at Intersections (2016-2018)

Rank	Intersection	# of Crashes
1	McPherson Rd. & Del Mar Blvd.	297
2	I-35 & Hwy 83 (Matamoros St.)	296
3	Ross St. & Hwy 83	191
4	Loop 20 & Hwy 359	165
5	I-35 & Calton Rd.	164
6	I-35 & Mann Rd.	163
7	McPherson Rd. & Calton Rd.	151
8	San Bernardo Blvd. & Farragut St.	146
9	McPherson Rd. & Shiloh Dr.	144
10	I-35 and Farragut St.	143
11	Hwy 83 & Bartlett Ave.	124
12	I-35 & Lafayette St.	123
13	I-35 & Del Mar Blvd.	123
14	Hwy 83 & N. Meadow Ave.	120
15	I-35 & Victoria St.	107
16	Loop 20 & Clark Blvd.	104
17	Hwy 83 & S. Meadow Ave.	103
18	N. Bartlett Ave. & Jacaman Rd.	99
19	Springfield Ave. & Del Mar Blvd.	98
20	McPherson Rd. & International Blvd.	97

Bicycle & Pedestrian Accidents/ Fatalities



Crash Statistics 2015 - 2019

- Bicycle Collision (160 accidents)
- Bicycle Fatality (2 fatalities)
- Pedestrian Collision (334 accidents)
- Pedestrian Fatality (19 fatalities)

2.3 Crash Statistics

TXDOT CRIS - Crash Data for Webb County

Year	All Crash	Death	Pedestrian	Death	Bike	Death
2015	7,327	21	81	4	26	0
2016	7,518	48	72	4	32	0
2017	7,175	25	63	4	39	0
2018	6,972	36	72	6	31	1
2019	7,541	18	65	2	34	1
5 yr Total	36,533	148	353	20	162	2
LW-CAMPO	35,869	104	348	19	161	2
% in MPO	98%	70%	99%	95%	99%	100%

Pedestrian at Intersection of Del Mar and Loop 20

Edwin Islam

Edwin has lived in the Los Dos Laredos region for 22 years. He commutes to Laredo twice a week from Nuevo Laredo on his bike, averaging 25 minutes to arrive. Mr. Islam enjoys riding his bike because it provides him mobility, “Everybody can’t have a car, especially these days... not everyone is getting a regular check.”

Endnotes

1 U.S. Census Bureau. 2019 American Community Survey 5-Year Estimates. https://data.census.gov/cedsci/

2 County Health Rankings 2020. https://www.countyhealthrankings.org/app/texas/2020/rankings/webb/county/outcomes/overall/snapshot

3 County Health Rankings 2020. https://www.countyhealthrankings.org/app/texas/2020/rankings/webb/county/outcomes/overall/snapshot

4 U.S.- Mexico Border Health Commission. Healthy Border 2020. https://www.hhs.gov/sites/default/files/res_2805.pdf

5 Centers for Disease Control and Prevention. (2012). Falls Among Older Results: An Overview. http://www.cdc.gov/homeandrecreationalsafety/falls/adultfalls.html

6 Walk Score. https://www.walkscore.com/TX/Laredo

3

Public Input

3.1 Existing Plans & Relevant Documents

Public and stakeholder involvement was critical to the development of the Active Transportation Plan. The Plan received various contributions from the public through multiple avenues such as community engagement efforts, stakeholder collaboration, public surveys, and outreach.

Public input was sought to better understand the experience of people currently using active transportation in Laredo, as well as barriers that discourage or prevent people from using active transportation. Input from the public and stakeholders directly impacted the Active Transportation Plan's network routes, trail alignments, project prioritization, and recommended policies.

To inform the development of the Plan, the first round of public engagement ran during the initial stages of the project, between February 2020 to March 2020. A second engagement round sought stakeholder feedback on the draft recommendations of the plan from July 2020 to September 2020.

3.1 Existing Plans & Relevant Documents

The Active Transportation Plan builds on the City's existing planning documents and recent progress. Implementing walking, bicycling, and trail networks requires coordination with various agencies and stakeholders. The development of the Active Transportation Plan included coordination with several concurrent planning efforts and the document builds upon previous planning efforts. The following table shows the list of plans and studies that were consulted in development of the Active Transportation Plan.

Existing Plans, Studies, Projects, and Policies

Plan Name	Year
Bicycle & Pedestrian Master Plan	1994
Parks & Open Space Master Plan	2008
Rio Grande Vega Lands Master Plan	2008
El Metro Transit Development Plan	2016
Viva Laredo - Comprehensive Plan	2017
Future Throughfare Plan	2017
Future Land Use Plan	2017
Laredo Metropolitan Transportation Plan (MTP)	2020
Transportation Improvement Program (TIP)	2020
Project	Year
River Road	2006
Rio Grande Vega Trail - Zacate to Chacon	2018
Upper Zacate Creek - Hike & Bike Trail Extension	2018
Chacon Creek Hike & Bike Trail Extension	2019
Safe Routes to School - Projects	2019
WCDD - Trails in East Laredo	2019
East Chacon Creek Connection	2020
Policy	Year
Green Space Ordinance	2004
Park Dedication Ordinance	2008
Joey Muñoz Safe Passage Ordinance	2016
Vision Zero	2019
Study	Year
Bike Feasibility Study	1975
Laredo Downtown Circulation Study - Traffic Engineers	1997
Bus Rapid Transit - BRT Study	2011
MPO - Congestion & Delay Study	2015
Opportunity Map - Harvard-Bloomberg Partnership	2017
FM 1472 - Bike Lane	2017
Bicycle Friendly Community - Report Card	2018
Downtown Parking Study	2019
RMA - North Laredo Study	2020
Additional Resources	Year
Bicycle Safety Workshop	2017
Laredo Bike Plan - Map	2017
Bike Network Map	2017

3.1 Existing Plans & Relevant Documents

3.1.1 Viva Laredo - Comprehensive Plan (2017)

"Towns and cities throughout the country are in the process of restoring old neighborhoods and creating new neighborhoods that are both walkable and accessible. Strategies that make Laredo easier to navigate as a pedestrian (or cyclist) will also make the City more livable and attractive."- Viva Laredo Plan

Viva Laredo is the City of Laredo's Comprehensive Plan, which outlines goals and policies to guide the City's physical and economic development. Viva Laredo dedicates an entire chapter to mobility. The Mobility chapter of Viva Laredo presents an evaluation of the multi-modal transportation system's mobility, accessibility, and connectivity within the City of Laredo. Expanding active transportation opportunities and accessibility is a key strategy of the Viva Laredo's mobility element.

The Viva Laredo plan states, "Laredo has the potential to become a premier bicycling destination through strategic policy changes and infrastructure investments."

3.1.2 Metropolitan Transportation Plan (2020)

The Metropolitan Transportation Plan (MTP) is the comprehensive, multimodal, and coordinated transportation plan for the Laredo metropolitan area. As such, the MTP seeks to promote strategies for operating, maintaining, managing, building, and financing the transportation network in order to advance the region's long-term goals and overall quality of life. The MTP identifies policies, programs and projects for each mode of travel including roadways, public transit, bicycle, pedestrian facilities, aviation, rail, and freight movement that will be necessary to meet the region's transportation needs through the year 2045. Essentially, the MTP serves as a guide and blueprint for transportation improvements and investments in the Laredo region for the next 25 years.

Over the past 25 years our MTP has promoted and encouraged the development of a connected community. The creekways have been proposed as the main stems of our system:

- 1995- 2005 = Rio Grande & Zacate Creek
- 2005- 2015 = Chacon Creek & Manadas Creek
- 2015- 2020 = Extending/Completing the Network

3.1.3 Health & Human Service Transportation Plan (2017)

This plan outlines the highest populations in need of transportation based on various factors. It focuses on areas around the Webb County region to enhance alternative modes of transportation for seniors and persons with disabilities based on population and socioeconomic factors. This plan was produced in February 2017.

3.1.4 Laredo Bicycle Plan (1994)

The City's last bicycle specific plan was released in 1994. The plan supported providing safe, convenient, and adequate biking facilities.

Quote from the 1994 Laredo Bicycle Plan:

"It is the combined belief by the City of Laredo and TxDOT to provide safe, convenient, and adequate facilities to encourage non-motorized travel throughout the City of Laredo while reducing energy consumption and air pollution. It is also the combined philosophy of the City of Laredo and TxDOT that the result of proper planning is economic development. Therefore, we feel that a properly developed bicycle and pedestrian transportation master plan will not only provide a cleaner and healthier environment for its citizens and visitors, but also encourage economic development."

3.1.5 RMA North Laredo Transportation Study

The proposed plan outlines complete streets to be built in the industrial sector in North Laredo, providing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3.1 Existing Plans & Relevant Documents

access to both residents and visitors to the pedestrian and bikeway networks.

Quote from the RMA North Laredo Transportation Study:

"In some locations, protected bike lanes make sense, though in most cases, bikes can be accommodated using a shared-use path, which is essentially a 10-foot wide sidewalk that can be shared by a mix of cyclists and pedestrians and can facilitate passing when bikes are traveling in opposite directions. Pedestrian lightning should also be included as part of this improvement. Connectivity across the interstates need to be facilitated with any new interchanges."

3.1.6 Other Plans, Studies, and Policies

Bike Feasibility Study (1975)

According to the Bike Feasibility Study, "In the case of the bicycle, we reach back to a form of transportation which has been historically, in the United States, used as a means of recreation, as a way of travel for children to and from school, and in a few instances, as a necessary tool for earning one's livelihood. The intention here will be to look to the use of the "bicycle" as a means of transportation with an emphasis on safety and efficiency for whichever purpose used; however, a trend toward increasing the potential use of the bike as a means of transporting the working person from his home to his job and back would be deemed promising."

Safe Passage Ordinance - Joey Munoz (2016)

This ordinance regulates safe distances between vehicles and vulnerable road users by requiring motor and commercial vehicle operators to maintain a distance of 3 feet and 6 feet when passing vulnerable road users.

City Council Adoption of Vision Zero (2019)

Vision Zero is based on an underlying ethical principle that "it can never be ethically acceptable that people are killed or seriously injured when moving within the road transport system. In most road transport systems, road users bear complete responsibility for safety. Vision Zero changes this relationship by emphasizing that responsibility is shared by transportation system designers and road users"

Green Space Ordinance (2004)

The purpose of this ordinance is to establish minimal acceptable requirements for the design of buffers to protect the streams, wetlands and floodplains of Laredo. Additionally, the ordinance serves to protect the water courses, reservoirs, lakes, and other significant water resources in Laredo, and also protects Laredo's riparian and aquatic ecosystems. The intent of the ordinance is to provide for the environmentally sound use of Laredo's land.

Park Dedication Ordinance (2008)

The Park Dedication Ordinance was adopted to provide recreational areas in the form of neighborhood parks as a function of site development in Laredo. The ordinance provides a mechanism to add new parkland through the dedication of land for park space in new residential development.

3.2 Community Engagement

3.2 Community Engagment

The City of Laredo hosted public meetings at community centers across town. Six "planning nights" provided the opportunity to listen and present to the community. The planning nights were held at community parks and recreation centers throughout the City. The format of the planning nights consisted of different stations focused on a variety of planning themes. At each station, planning staff shared future plans with community members and listened to their concerns and demands. Activities for kids were also provided at each planning night, which allowed City staff to engage with local youth about planning related topics and Laredo's future. The goal was to visit all eight council districts within the City.

Public input received during the City's planning nights, identified trails and pedestrian linkages to community resources as a top priority. Thus, the Plan goals and objectives prioritize the development of an interconnected network of pedestrian and bicycle facilities and trails that link parks, schools, downtown Laredo, and other important community destinations.

Also, as part of the public input efforts, a series of resident profile interviews were conducted. Additional public input was collected through these semi-structured interviews held at multiple sites throughout the City. The residents interviewed each use at least one mode of active transportation for various reasons, whether it be biking to work, walking to the grocery store, riding transit to reach their destination, or biking for recreation. During the interviews, pictures and video footage were collected to help promote the Plan on social media and to include in the Plan document.

This Active Transportation Plan is informed by the community through public input and dialogue heard over several months. The feedback gathered through the public outreach activities helped develop the Plan's recommendations and proposed routes that will create Laredo's future active transportation system.

Planning Night at El Eden Recreation Center

Planning Night at North Central Park

3.3 Stakeholder Collaboration

3.3 Stakeholder Collaboration

Laredo is fortunate to have a broad coalition of stakeholders working together to make walking, cycling and transit options more accessible to all residents. Many stakeholder groups were identified early on in the project and targeted to share their ideas and insights on issues related to active transportation in Laredo.

Four presentations were provided to Walk.Bike.Ride Laredo, a key stakeholder group. Members of this stakeholder group were asked for feedback through a stakeholder survey. The survey asked members to rank the Plan's recommendations and allowed them the opportunity to provide additional input.

Presentations were also made to the MPO Technical Committee, MPO Policy Committee, and City of Laredo Planning & Zoning Commission. These stakeholders, including Walk.Bike.Ride Laredo, were asked to review and provide feedback on the Plan's recommendations and proposed network.

Stakeholder Groups

- Walk.Bike.Ride Laredo
- TxDOT
- Webb County
- El Metro Transit
- City Planning Department
- City Traffic Department
- City Engineering Department
- City Parks & Recreation Department
- City Environmental Services Department
- City Health Department
- Laredo Police Department
- Laredo Fire Department
- City of Laredo Planning & Zoning Commission
- MPO Policy Committee
- MPO Technical Committee

Walk.Bike.Ride Laredo Stakeholder Group

3.4 Public Survey

3.4 Public Survey

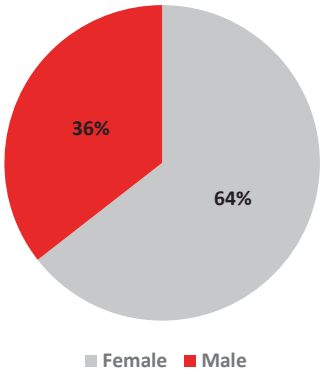
An online survey for the community at-large was conducted to gauge the public's interest, use, and demand for active transportation, as well as to guide the direction and recommendations of this Plan. A total of 1,925 residents responded to the survey.

The survey consisted of a total of 28 questions and was available in both English and Spanish. The responses show a strong desire for the expansion of walking and cycling infrastructure that can be used by all ages and abilities. Improving safety and lighting is another priority identified through the survey. The complete survey results are included in the Appendix.

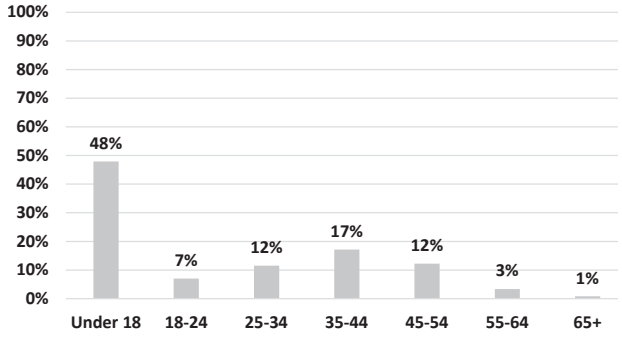
Public Survey Key Findings

- Even residents who do not currently ride bicycles want safe bike infrastructure.
- Safety is a primary reason residents do not bike in the community; if it was safer, the vast majority of Laredoans indicated they would ride more often.
- Most residents indicate Laredo winters are not too cold for bicycling; arguably three-fourths of the year has good, comfortable bicycling weather.
- Most residents were not able to guess the number of bike trails or lanes that exist in Laredo, indicating the need for wayfinding and marketing of bicycle amenities.

Respondents by Gender



Respondents by Age Group



Respondents Were Able to Provide Feedback on Street Improvement Options

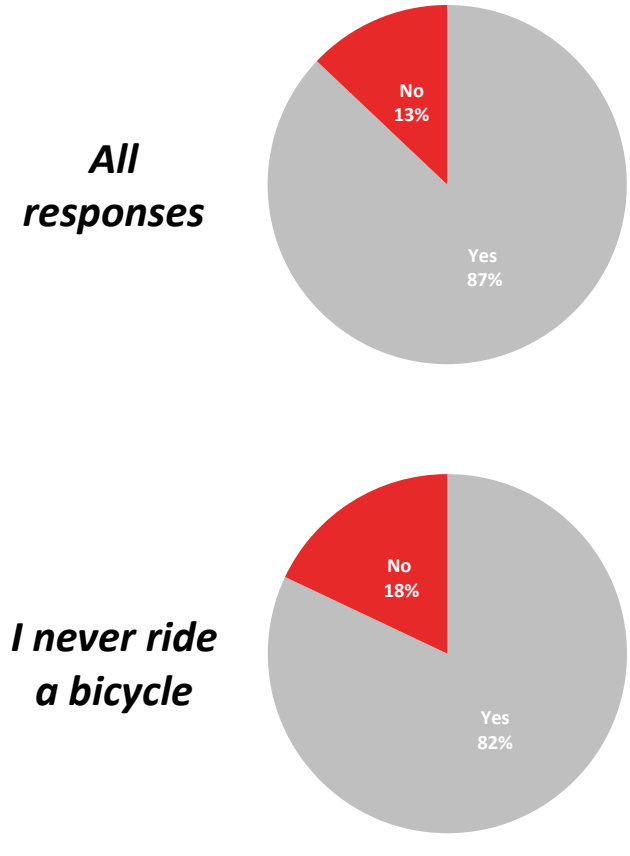
3.4 Public Survey

Bike Infrastructure Questions

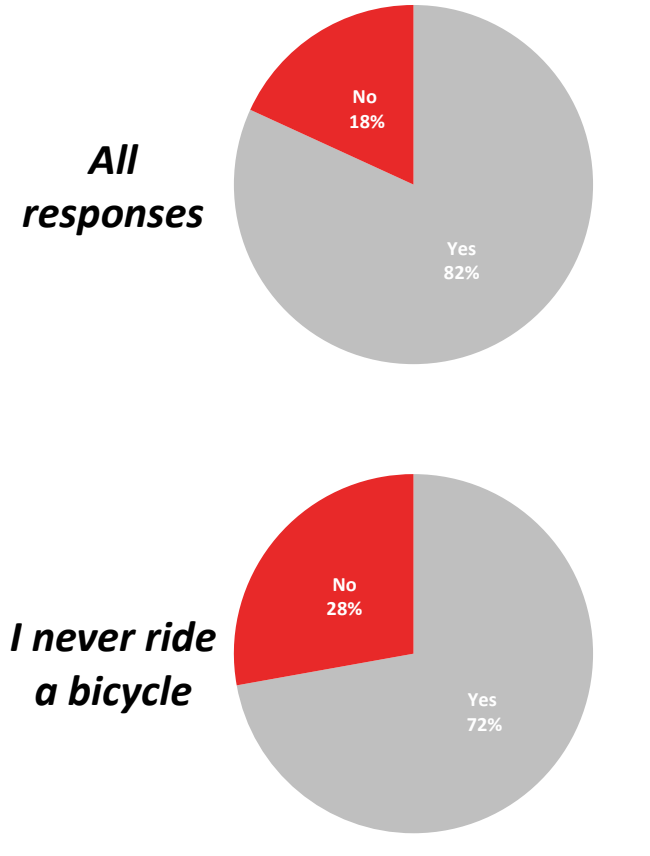
Question #22 of the survey asked respondents if bicycle lanes should be required in new developments. A total of 87% respondents indicated that bicycle lanes should be required. When this question was filtered for people who never ride a bicycle, the result remained relatively steady with 82% of respondents who do not ride a bicycle still agreeing that bike lanes should be required.

Question #28 of the survey asked respondents if they would ride more often with protected bike lanes. A total of 82% respondents indicated they would ride more often with protected bike lanes. Again, filtering for people who never ride a bicycle, 72% of respondents still indicated that they would ride more often with protected bike lanes.

Should Bike Lanes Be Required?



Would You Ride More Often With Protected Bike Lanes?



3.4 Public Survey

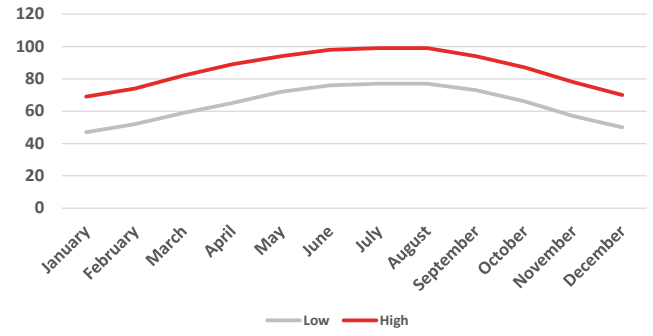
Is Laredo Too Hot for Biking?

Based on feedback gathered from the public survey, public engagement activities, and discussions with stakeholders, a common theme among the reasons people do not ride bicycles in Laredo is the hot weather. However, the extremely high temperatures that make bike riding uncomfortable in Laredo only occur three months out of the year. During those months, bike riding is still enjoyable in the mornings and late evenings.

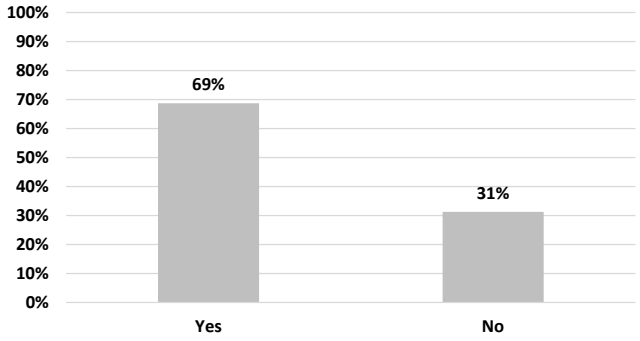
While a total of 69% of respondents agreed that it is "too hot" to ride a bicycle during the summer, 79% of respondents feel Laredo is not too cold to ride a bike during the winter months. Compared to northern climates where outdoor activity is nearly impossible from December to March, Laredo's winter weather is welcoming.

Although Laredo's climate presents a challenge for bicycling during the day in the summer, most months of the year Laredo has good, comfortable bicycling weather. The lack of snow in Laredo allows for good riding conditions during winter months, and the low precipitation year-round offers many good weather days to use a bicycle.

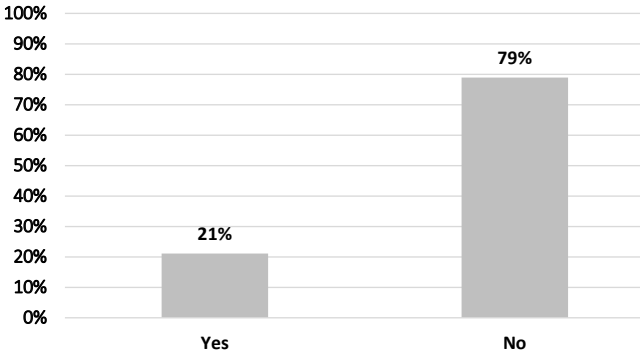
Average Monthly Temperature (F°)



Is it Too Hot in Laredo During the Summer to Ride a Bicycle?



Is it Too Cold in Laredo During the Winter to Ride a Bicycle?



3.4 Public Survey

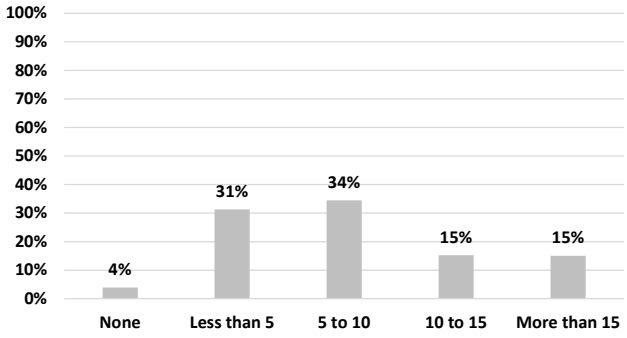
Wayfinding is Needed

Only 15% of survey respondents accurately estimated how many bicycle trails or lanes exist in Laredo. The City has more than 15 existing bicycle paths, yet more than two-thirds of respondents thought there were far fewer, with some even thinking there were none.

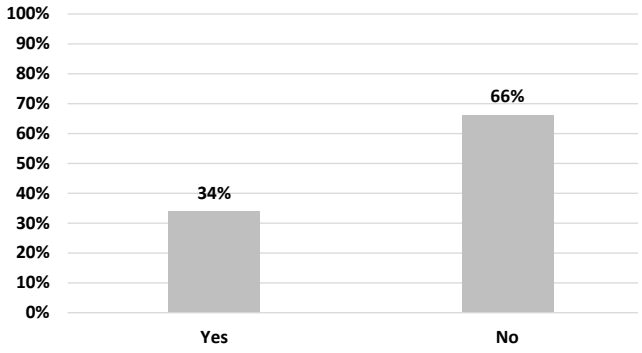
A total of 66% of respondents indicated that they never ride a bicycle using off-street trails. The use of off-street bicycle facilities is an important part of growing and encouraging active transportation in the region, especially among people who are less comfortable riding on the street and whose primary deterrence is the lack of safe bike infrastructure. A new interest in riding bicycles can be developed among people who rarely or never ride bicycles by providing safe and comfortable off-street facilities. Trails and other off-street facilities such as shared use paths alongside roads, can encourage newer cyclists to begin riding on these facilities whether for recreation or an alternative mode of transportation.

Considering this, it is important that off-street facilities be accessible as well as easy to find and navigate. This is why the need for wayfinding and branding is an integral part of developing a functional and well utilized active transportation network. Wayfinding and branding is necessary to familiarize users with the network and can help promote the use of active modes of transportation in the community.

How Many Bicycle Trails or Bicycle Lanes Exist in Laredo?



Do You Ever Ride a Bicycle on Off-Street Trails?



Jesse Lozano & Julie Rodriguez

Jesse Lozano and Julie Rodriguez are both teachers. They recently started biking, but have been jogging for some time. They both enjoy biking and jogging to release day to day stress and to keep fit. They usually ride and jog trails and parks such as North Central Park, Slaughter Park, and Independence Hills Park.

When told that the Active Transportation Plan is about creating connectivity throughout neighborhoods, Mr. Lozano stated “I think if it were to go into more of the neighborhoods, I think it’ll be cool. It’ll be easier for people to spend time outside, exercise, and get around.”

4

Recommendations

4.1 Future Bicycle Network

Laredo's current and future active communities deserve a safe, connected, and substantive active transportation network that provides a balance of utilitarian and recreational facilities. The Active Transportation Plan will assist the City and County in decision making, resource allocation, design, implementation, and maintenance of the proposed multi-modal network.

Laredo's active transportation network must include options that provide a variety of choices for users of varying ages and capabilities. This includes existing users in the area such as road cyclists that ride scenic routes to younger riders that ride recreationally, as well as pedestrians throughout the region. Bicycling and walking infrastructure are most effective when destinations are nearby, as is the case in mixed-use developments, and when multiple transportation options are available for residents near employment centers. A multi-use trail system is also an important element of the proposed active transportation network and can improve community wide mobility.

The Active Transportation Plan recommends carefully integrating pedestrian, bicycle, and transit planning to ensure an effective active transportation system. Connecting both walking and bicycling to transit increases the "catchment area" of transit stations and increases the total possible trip length for all users, which replaces longer car trips and can lead to reduced emissions.

This chapter provides recommendations for actions that go beyond engineering focused around five elements: Evaluation, Education, Encouragement, Enforcement, and Equity. These "Beyond Engineering" elements are important to keep in mind when planning and implementing active transportation projects and programs. Nearly all recommendations in this Plan require collaborative effort between public, private, non-profit organizations, and local businesses and residents. LW-CAMPO cannot implement the Plan's recommendations without support and leadership from a network of strong and willing partners.

4.1 Future Bicycle Network

Beyond Engineering Key Elements

Evaluation & Planning:

- Increase local capacity for pedestrian/bike project planning, implementation, and evaluation
- Create a "data dashboard" of key metrics and evaluate progress towards walk and bike mode goals

Education:

- Change how Laredo talks about traffic injuries & fatalities
- Design and launch a broad reaching bike skills training and bike lock/safety gear distribution initiative
- Launch a professional driver education program
- Improve the reach of Laredo's safety outreach campaigns to drivers
- Public Service Announcements- Visual Trainings to educate all ages on important safety topics

Encouragement:

- Expand the landscape of encouragement events to offer new, and more frequent programming
- Host targeted events and programs to engage underrepresented groups, such as women and seniors
- Grow awareness of and participation in existing Transportation Demand Management Programs

Enforcement:

- Revise crash reporting protocol to collect more robust data for crashes involving people walking or biking
- Increase collaboration between local law enforcement agencies, emergency service providers , City and County departments, and local organizations

Equity:

- Expand education efforts and access to low income and minority communities
- Consider location equity in distributing walk/bike improvements across Laredo's neighborhoods
- Safeguard against discriminatory enforcement
- Deepen understanding of the needs and priorities of populations underrepresented in Laredo's active transportation advocacy community.

4.1 Future Bicycle Network

Through extensive research, public input, and a carefully designed methodology, the recommendations included in this Chapter outline projects, programs, and policies that can be implemented over the next 20 years to create a safe and equitable active transportation network that is accessible and well-connected throughout the region.

The recommendations were built around the following considerations:

- Building a Functional Pedestrian/Bicycle Transportation Network
- Coordinating planning efforts
- End of trip Facilities
- Connecting bicycles and public transit
- Improving signage

The Active Transportation Plan's recommendations are broken down into six elements:

- Bicycle Network
- Pedestrian Network
- Transit
- Last Mile
- Wayfinding
- Other Recommendations

The recommendations were prioritized using stakeholder feedback and prioritization criteria focused on creating a connected, safe, and equitable active transportation network. The recommendations are prioritized individually for each element in alphabetical order with "A" being the highest priority. These recommendations represent the vision of the community and provide Laredo and Webb County area residents with a safe and accessible means to move around the region.

4.1 Future Bicycle Network

A primary objective of this Plan is to create a well-connected network through loops, spines, branches, and protected lanes. An additional objective of the Plan is to focus on investing and creating a connected network of active transportation facilities, not isolated facilities.

Many of the recommendations from the "1994 Bicycle Transportation Plan" are reiterated and complement the newer and expanded aspects of this update. Based on the assessment of bicycle transportation needs and practices in the region, action and funding commitments to the recommendations presented in this Plan are necessary to support the City's vision to attract more residents to use alternative modes of transportation.

4.1 Future Bicycle Network

Methods for creating a safe and desirable bicycle network include the process of making all significant destinations accessible. Traits of a proper bicycle network include the use of a combination of four types of bikeways: bicycle paths, bicycle lanes, separated bicycle facilities, and shared routes.

Bicycle networks should accommodate a wide range of bicyclists in the community. Common trends in bicycle networks across the United States are incorporating design features to accommodate for all ages and abilities. Designing an interconnected and accessible network for all ages and abilities provides the entire community a safe alternative mode of transport.

The proposed network is based on the notion that bike lanes address the desire for efficient bicycle transportation with more cyclist's comfort when compared to sharing the same travel lane with vehicular traffic. This would appeal to those who are not as comfortable to ride in traffic, but are frustrated by factors such as indirectness and frequent stops and starts. Creating a high-quality, connected network appeals to a broader range of residents.

The proposed bike facility projects could be implemented incrementally by building on Laredo's existing base of bikeways and paths over the next 20 years to achieve the long-term network.

Rendering of Protected Bike Lane (Source:NACTO)

Protected Bike Lane in Austin, TX

4.1.1 Network Methodology

The network design is focused on connecting people to places and uses a place-based approach. The proposed bicycle network was developed by documenting the existing infrastructure, reviewing proposed bicycle projects from previous plans and studies, and analyzing existing data. The network was carefully designed by developing routes that connect with regional destinations or other bicycle facilities, while ensuring routes were placed in the safest and most accessible locations. The proposed network routes were then refined through stakeholder feedback.

4.1 Future Bicycle Network

4.1.2 Bike Facility Types

This Plan recommends both off-street and on-street bicycle facilities. Considering the Plan's focus on safety, only three bicycle facility types are recommended for the proposed network:

- Buffered Bike Lanes
- Protected Bike Lanes (i.e. cycle tracks)
- Shared-Use Paths (i.e. paved trails)

Off-Street Facilities

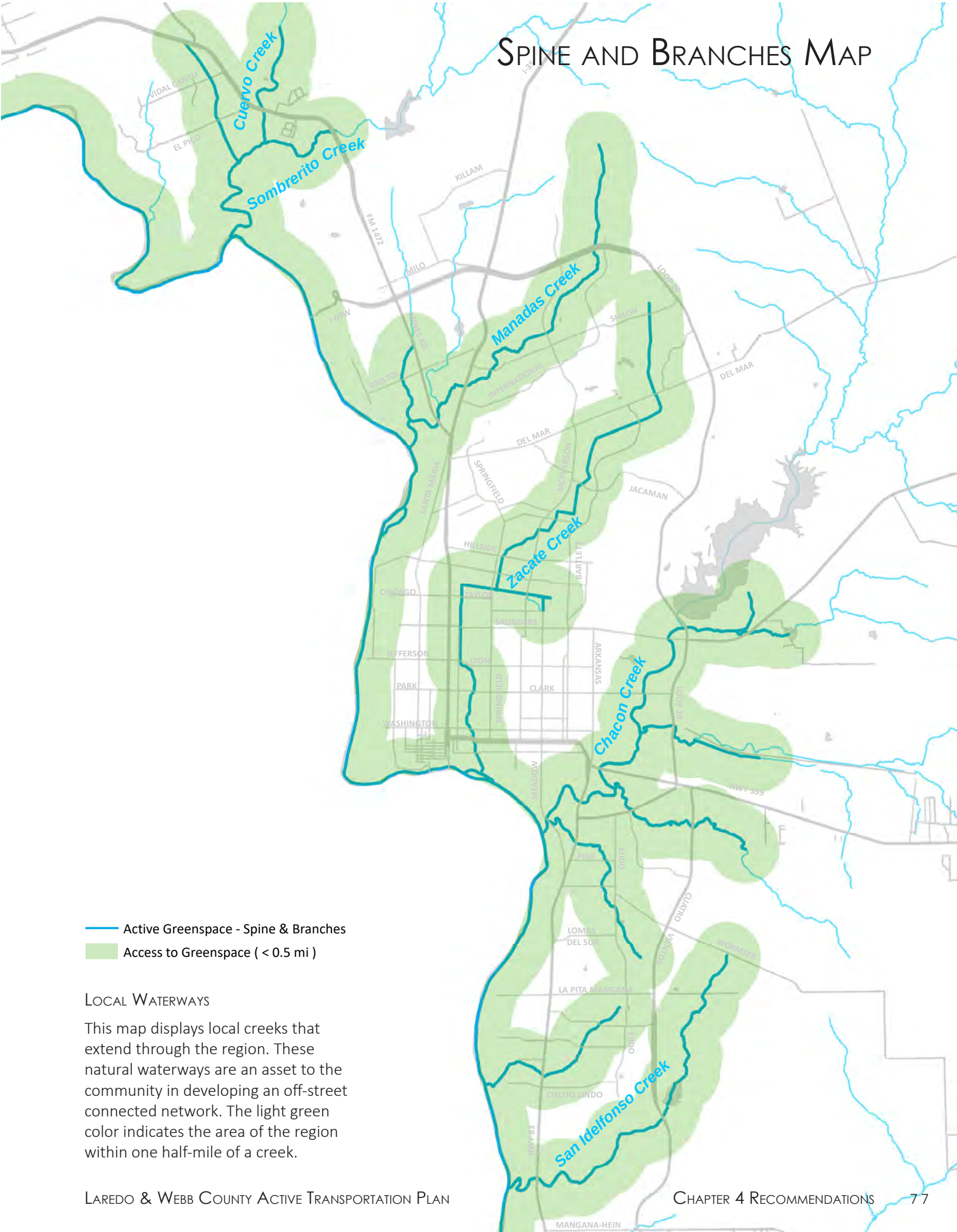
Existing and new trails will serve as the spines for the bicycle network. These were selected because they provide the highest level of safety considering they are not sharing a road. The Rio Grande flows continuously along the western most side of our City. The trail along the river is considered a spine. The local creeks will also serve as branches that connect from the river into the community. These include:

- Rio Grande River
- Main Stem of the off-street network, connects from La Bota to Laredo College South
- Sombrerito Creek & Cuervo Creek
- Manadas Creek
- Multi-Phase Project- From North Central Park to Rio Grande, route is lacking connection downstream
- Zacate Creek- Multi-Phase Project- has existing trails and needs missing middle section
- Chacon Creek- Multi-Phase Project- has existing trails and need to be completed
- Un-named Tributary - Connection to LC South campus
- San Idelfonso Creek- Southernmost section that provides connection to loop back up towards the City

Two-Way Protected Bike Lane in Columbus, OH

Buffered Bike Lane in Fairfax, CA (Source: NACTO)

Spine and Branches Map



Active Greenspace - Spine & Branches

Access to Greenspace (< 0.5 mi)

Local Waterways

This map displays local creeks that extend through the region. These natural waterways are an asset to the community in developing an off-street connected network. The light green color indicates the area of the region within one half-mile of a creek.

4.1 Future Bicycle Network

On-Street Facilities

Protected bike lanes are considered the most ideal infrastructure to incorporate into a developing network since they provide clear lanes and barriers that provide the most safety. They are essential in building a connected bike network. Ensuring protected bike lanes is a priority of this Active Transportation Plan.

Benefits of Protected Bike Lanes

- Increases number of people biking across all ages and levels
- Makes biking more comfortable
- Makes biking safer
- Makes driving less stressful
- Spurs economic growth
- Reduces sidewalk biking
- Makes it safer for pedestrians
- Reduces the risk of 'dooring'

Installing armadillos is an inexpensive method for protecting bike lanes.

Protected Lane with Armadillos in San Antonio,TX

Recommendations

1.A Improve connectivity and access to destinations by completing segments of existing trails and creating an interconnected network of trails to allow for regional mobility without obstructions.

1.B Amend Land Development Code to require bicycle lanes, bicycle amenities, and bicycle parking in future developments or subdivisions.

1.C Connect mobility projects related to active transportation that are currently in-progress to the overall network; connect existing and proposed on-street bike facilities to off-street facilities.

1.D Establish a network of on-street protected bike lanes that compliment and connect to the off-street trail network.

1.E Establish a network of an off-street trail network consisting of a main spine and branches that connect throughout the City along our waterways.

1.F Develop and adopt a local Complete Streets Policy focused on high activity corridors.

1.G Improve access to the off-street network by adding additional entry points along the route.

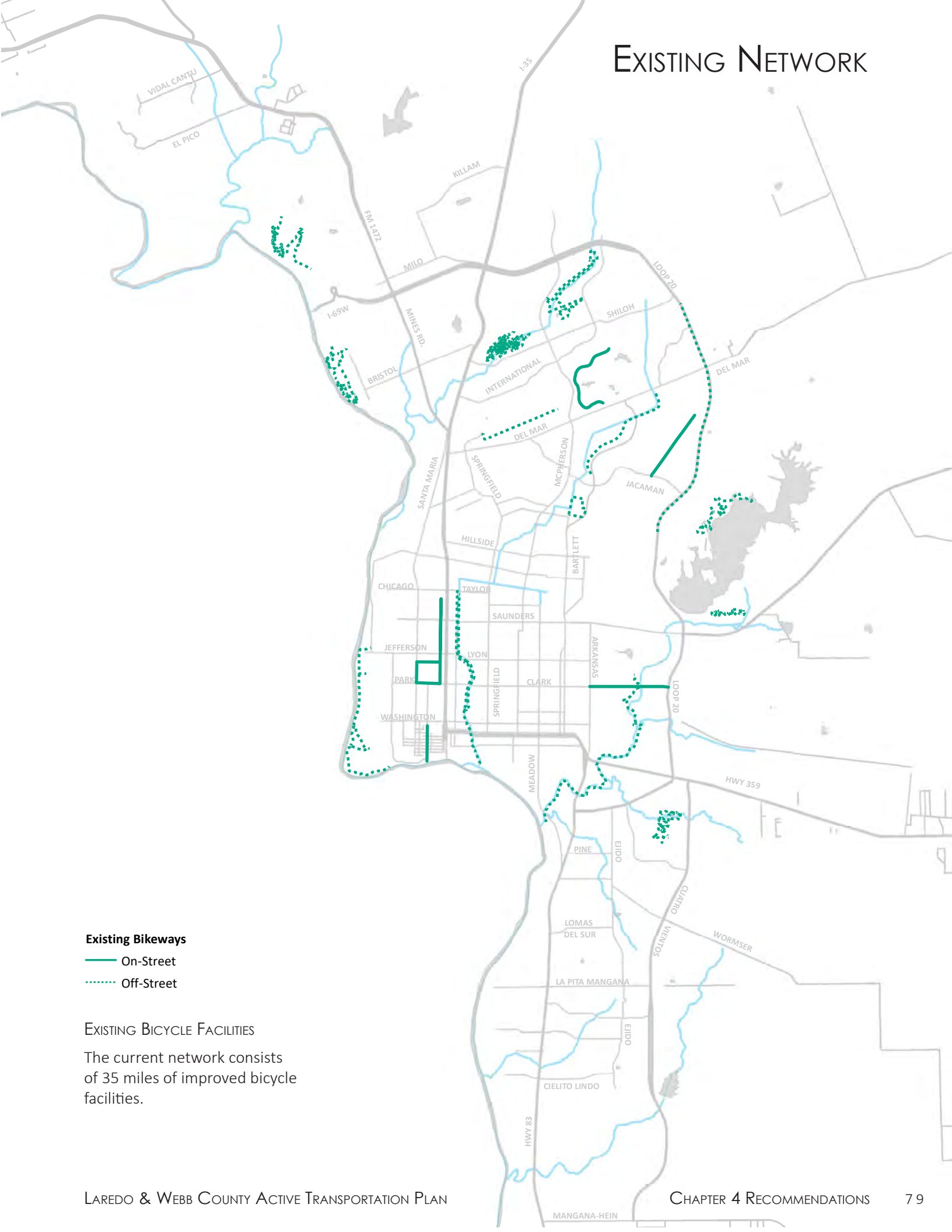
- Project: Improve access to trails at the neighborhood level by working with neighborhood organizations and stakeholders to identify access gaps along existing trails.

1.H Ensure trails provide safe access to regional destinations

- Project: Extend the Chacon Creek Hike and Bike Trail from Saunders (Hwy59) to L.I.F.E Downs/Casa Blanca Spillway.

1.I Create an Adopt-A-Trail program in partnership with key stakeholders such as Keep Laredo Beautiful, Parks and Recreation, local schools, and other local organizations to improve trail maintenance, beautification, and safety.

Existing Network



Existing Bikeways

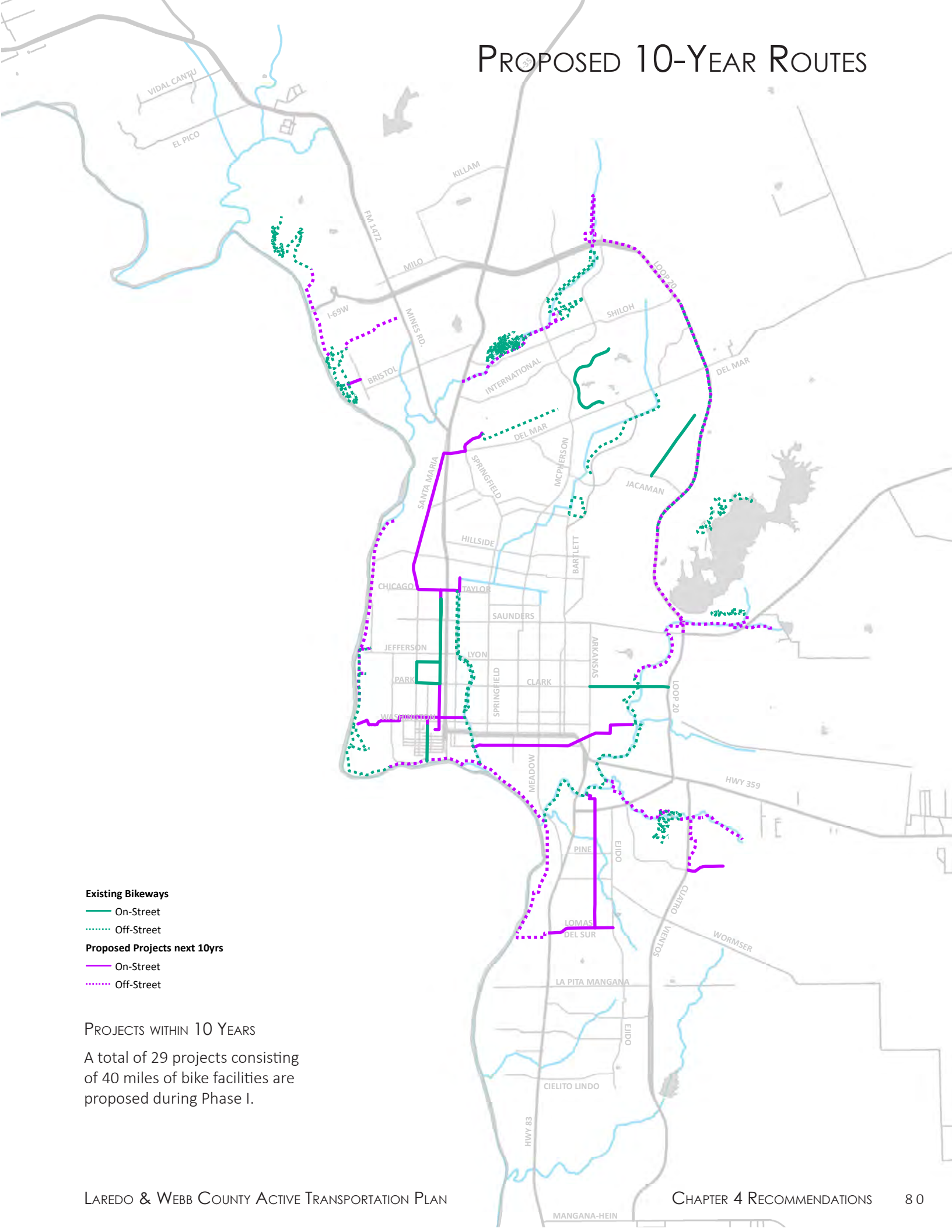
On-Street

Off-Street

Existing Bicycle Facilities

The current network consists of 35 miles of improved bicycle facilities.

Proposed 10-Year Routes



Existing Bikeways

- On-Street
- Off-Street

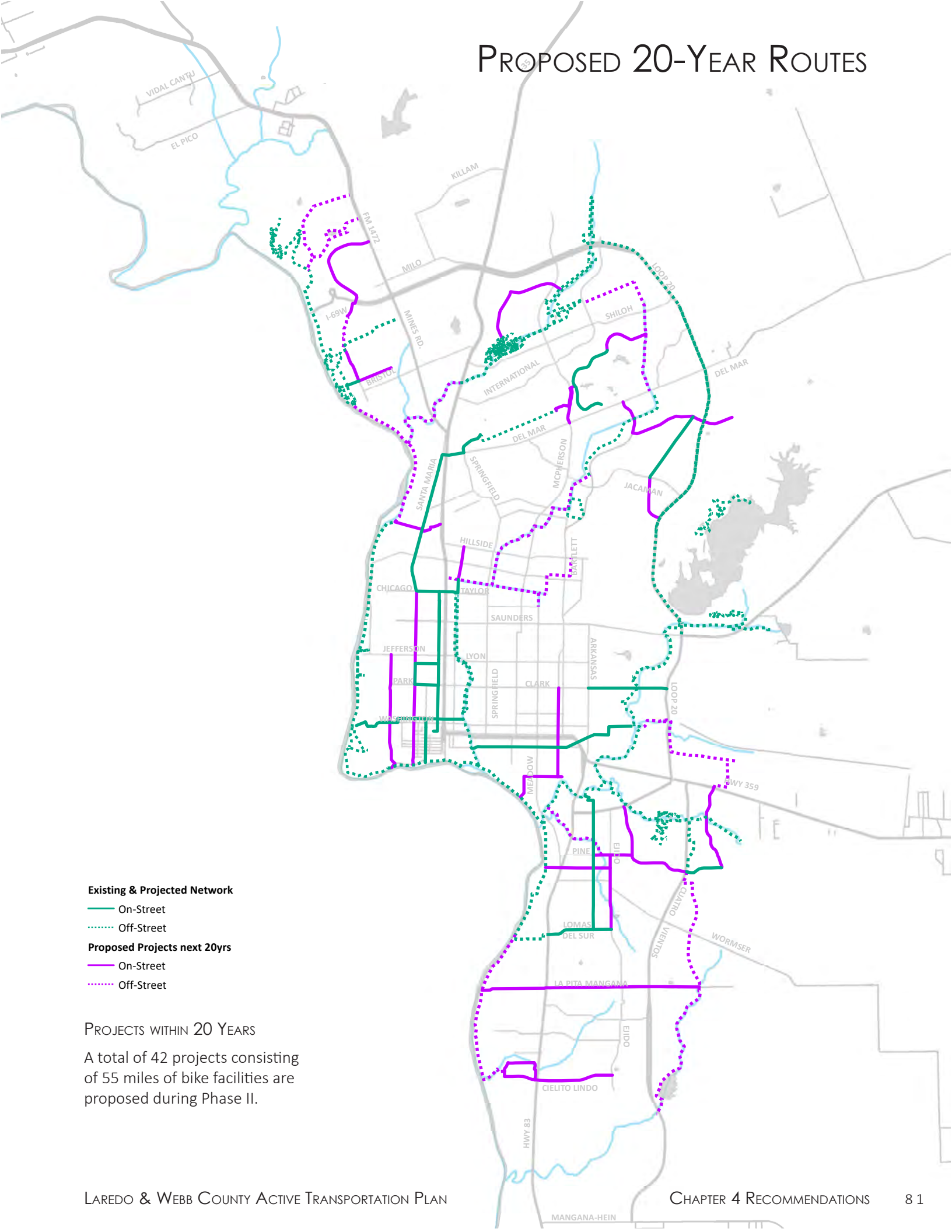
Proposed Projects next 10yrs

- On-Street
- Off-Street

Projects within 10 Years

A total of 29 projects consisting of 40 miles of bike facilities are proposed during Phase I.

Proposed 20-Year Routes



Existing & Projected Network

- On-Street
- Off-Street

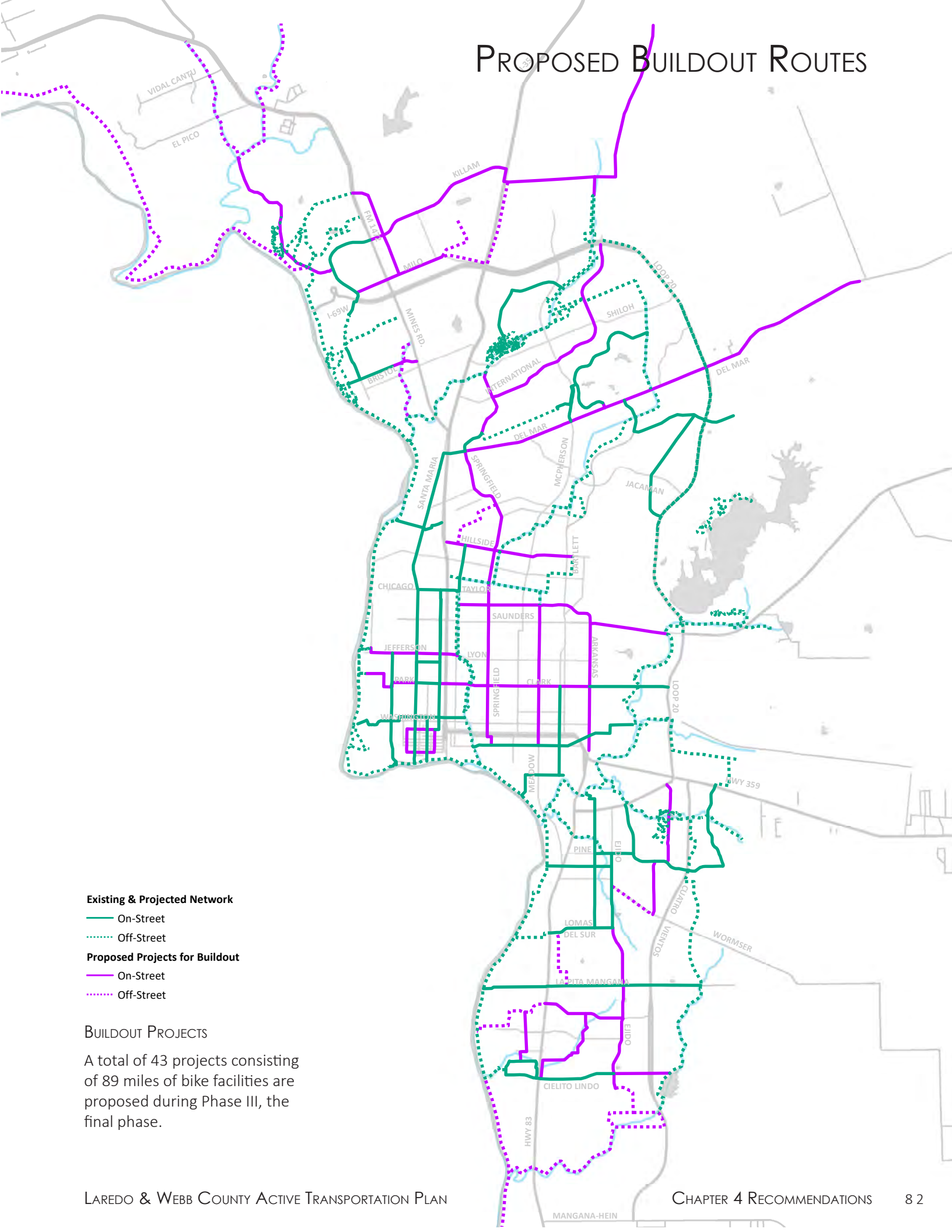
Proposed Projects next 20yrs

- On-Street
- Off-Street

Projects within 20 Years

A total of 42 projects consisting of 55 miles of bike facilities are proposed during Phase II.

Proposed Buildout Routes



Existing & Projected Network

- On-Street
- Off-Street

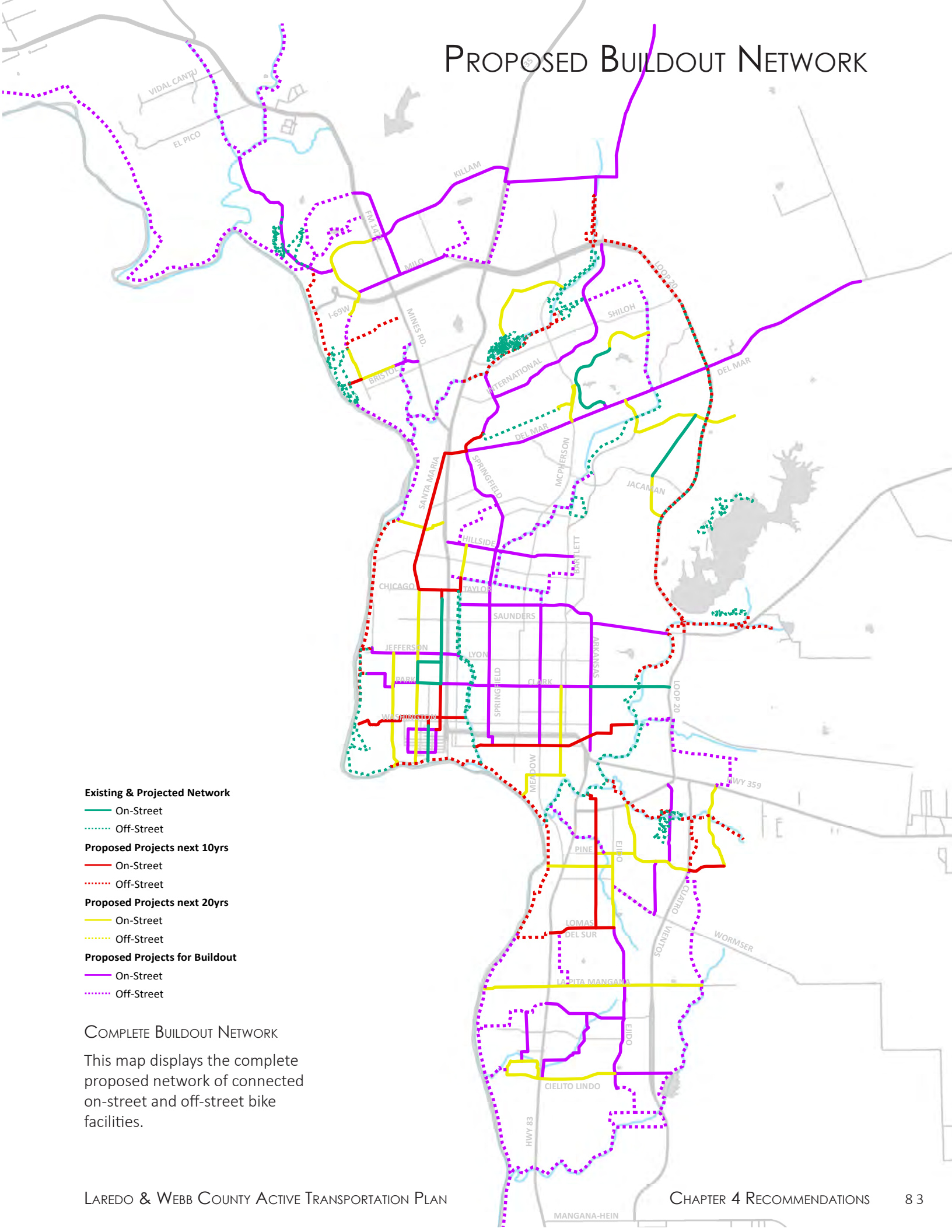
Proposed Projects for Buildout

- On-Street
- Off-Street

Buildout Projects

A total of 43 projects consisting of 89 miles of bike facilities are proposed during Phase III, the final phase.

Proposed Buildout Network



Existing & Projected Network
- On-Street
- Off-Street

Proposed Projects next 10yrs
- On-Street
- Off-Street

Proposed Projects next 20yrs
- On-Street
- Off-Street

Proposed Projects for Buildout
- On-Street
- Off-Street

Complete Buildout Network

This map displays the complete proposed network of connected on-street and off-street bike facilities.

4.2 Future Pedestrian Network

4.2 Future Pedestrian Network

A priority of this Plan is to ensure residents have secure, reliable, accessible, and connected sidewalks. Establishing a pedestrian network to include accessible sidewalk connections to all stops and transit stops equipped with shelters, signage, and education resources should be considered, as well as incorporating accessible boarding and alighting for those with mobility issues. Connecting various networks, while providing safe, accessible, and reliable sidewalks should encourage residents to walk more often to their destinations.

Recommendations

2.A Perform a gap analysis of the existing sidewalk network and make strategic improvements based on an approved timeline and criteria.

2.B Prioritize safety, crosswalk, and ADA improvement along corridors within a ¼ mile buffer of schools, bus stops, major health facilities, parks, and recreation centers.

2.C Establish a network of an off-street trail network consisting of a main spine and branches that connect throughout the City along our waterways.

2.D Develop and adopt a local Complete Streets Policy focused on high activity corridors.

2.E Identify pedestrian boulevards with expanded features and amenities along key retail and entertainment corridors in Downtown Laredo.

- Project Recommendation: Commission a study that identifies the best location and amenities to provide enhancement.
- The pedestrian boulevard will help enhance the history and beauty of Downtown Laredo, while providing a safe and comfortable way to move around Downtown.

2.F Prioritize Safety Features along trails, in particular "Emergency Beacons".

2.G Create a program for neighborhood-initiated traffic calming improvements and tactical urbanism in collaboration with various City departments including Planning, Parks and Recreation, Traffic, and Public Works.

- Neighborhood interventions can include installation of pilot bike lanes, tree planting, addition of shade facilities, and crosswalk beautifucation projects.

2.H Prioritize Redevelopment of San Bernardo Avenue into a Complete Street.

- The existing bike lane on San Bernardo does not provide the type of safety features and design criteria outlined in this Plan.
- Project Recommendation: Create a History and Culture Trail along San Bernardo. This would entail redeveloping the avenue by installing a shared use path to improve bicyle and pedestrian mobility, while providing space for parklets and parking.

Existing Crosswalk at North Central Park

4.3 Interconnected Transit Solutions

4.3 Interconnected Transit Solutions

To ensure a complete and effective active transportation network, it is important to include various transit operations that carefully integrate pedestrian, bicycle, and transit planning. Connecting both walking and bicycling to transit stops increases transit ridership and increases the total possible trip length for all users. This in turn replaces longer car trips and can lead to reduced emissions. Creating higher frequency and reliable, accessible, and affordable local and regional transit would make transit a more convenient option for residents.

Recommendations

3.A Create a policy requiring development to reserve space for bus stops and loading bay (bus turnouts).

3.B Enhance transit stops to provide secure bicycle parking.

3.C Study the potential for a partnership between El Metro and El Aguila to develop a transit hub in South Laredo to serve urban & rural routes.

3.D Improve transit user experience by integrating wayfinding and route awareness tools.

3.E Study the potential for a partnership between El Metro and a third-party micromobility provider allowing for a multi-pass program.

3.F Prioritize bus stop improvements to the highest demand routes.

4.4 Last Mile & Micromobility Solutions

4.4 Last Mile & Micromobility Solutions

To provide additional affordable transportation options for residents, new micromobility options and programs should be considered. This will involve developing new regulations and making infrastructure improvements to accommodate micromobility options in a safe and orderly manner.

Recommendations

4.A Collaborate with a third-party micromobility provider to establish a bike share program in Laredo.

4.B Study the potential for a partnership between El Metro and a third-party micromobility provider allowing for a multi-pass program.

4.C Encourage availability of e-scooters and extend the areas where they are utilized to include strategic locations Citywide.

- Expand service and place stations at strategic locations such as regional parks and local university and college campuses.

4.D Enhance transit stops to provide secure micromobility hubs.

4.E Classify micromobility types and designate standards of use.

Example of Micromobility Devices

Example of Enhanced Transit Stop

4.4 Last Mile & Micromobility Solutions

Bike Share Pilot Program

LW-CAMPO and El Metro Transit staff have discussed the possibility of partnering with a micromobility provider to initiate a pilot bike share program. Bike share programs provide a service where bicycles can be rented for a fee from an automated self-service station. Bike share is often used for first-and-last mile trips to help users connect with transit as the common bike share price structure encourages short distance trips.[1] Bike share users are able to access bicycles at various locations where stations are placed, which supports an on-demand and low emission mobility option.[2]

Initiating a bike share program requires a minimal investment while providing several benefits. Implementation costs of a bike share program in Laredo for 10 initial stations is estimated at $473,000. This is significantly less than one lane-mile of urban highway.[3]

To initiate the Laredo Bike Share Pilot Program, LW-CAMPO and El Metro will need to collaborate with various City departments. Initially, the program proposes five bike share stations located at local parks to ensure visibility and generate the community's interest. After starting the pilot program with a few stations at parks and studying the program's demand and success, stations can be expanded to strategic locations in other parts of the City such as downtown. Additionally, LW-CAMPO should look at the feasibility of partnering with Nuevo Laredo to provide an additional mobility option for people crossing the U.S.- Mexico border and encourage bike share use on both sides of the border.

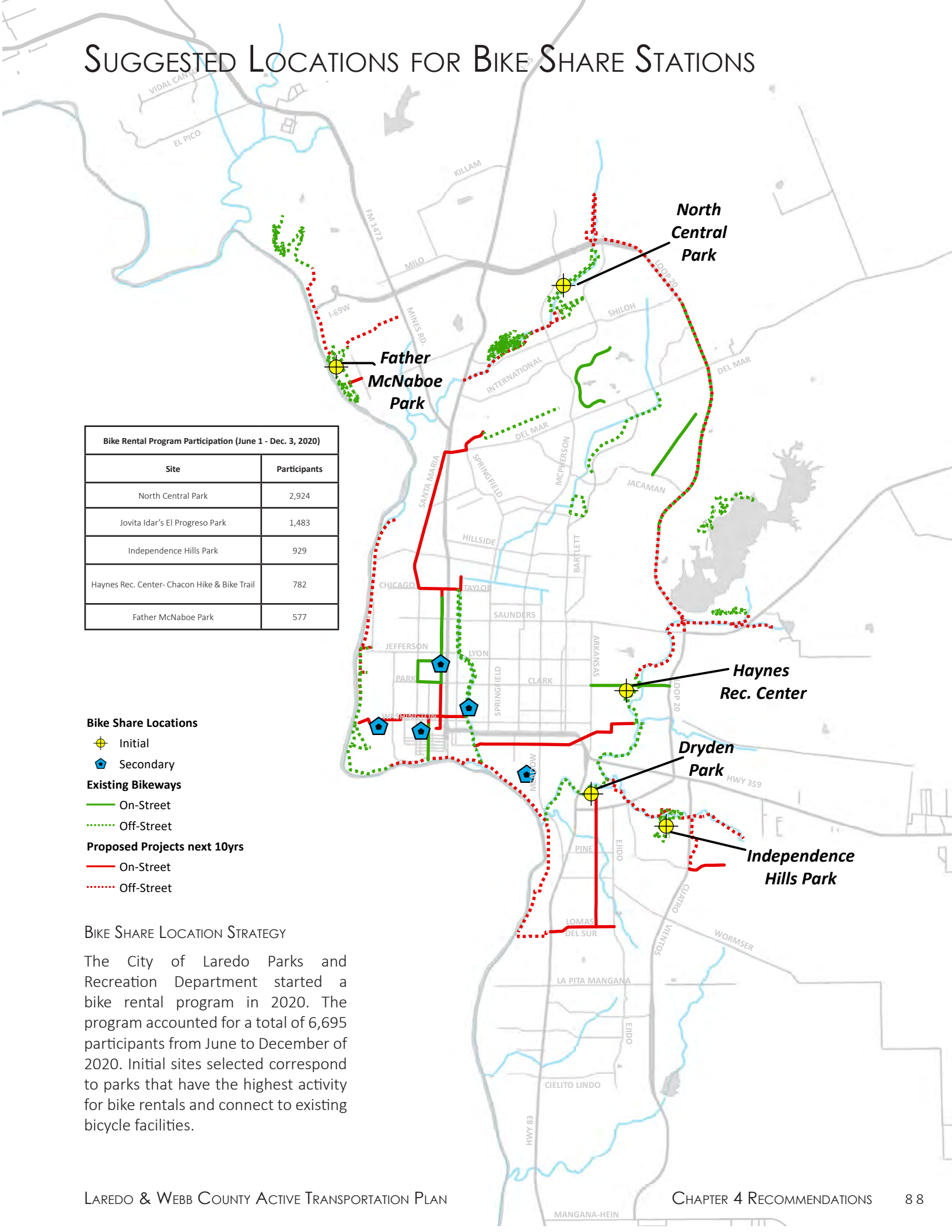
A private-public business model is recommended for the pilot program. This program would require the micromobility provider to provide equipment and technical assistance. The operations and maintenance can be managed publicly. El Metro Transit has shown interest in serving as the operations partner, which would require them to manage the program and perform equipment maintenance. This type of partnership would require that the City enter into a service agreement with the micromobility provider. The service provider agreement should outline program responsibilities, expected service levels, data sharing requirements, and maintenance standards. A collaborative public-private partnership and effective management can ensure the success of a pilot bike share program in Laredo.

Bike Share Program Highlights

- Minimal investment required to initiate program
- Improves mobility, connectivity, and accessibility
- Complements transit and walking; inexpensive way to strengthen transit network
- Bike share improves quality of life
- Economic and environmental benefits
- Bike share can improve community health
- Can increase local familiarity of existing trail system and connect parks
- Bike share helps promote a positive, forward-thinking community image
- Bike share is attractive to visitors and can encourage repeat visits

Bike Share in McAllen, Texas

Suggested Locations for Bike Share Stations



Bike Rental Program Participation (June 1 - Dec. 3, 2020)	
Site	**Participants**
North Central Park	2,924
Jovita Idar's El Progreso Park	1,483
Independence Hills Park	929
Haynes Rec. Center- Chacon Hike & Bike Trail	782
Father McNaboe Park	577

Bike Share Locations
- Initial
- Secondary

Existing Bikeways
- On-Street
- Off-Street

Proposed Projects next 10yrs
- On-Street
- Off-Street

Bike Share Location Strategy

The City of Laredo Parks and Recreation Department started a bike rental program in 2020. The program accounted for a total of 6,695 participants from June to December of 2020. Initial sites selected correspond to parks that have the highest activity for bike rentals and connect to existing bicycle facilities.

4.5 Wayfinding

4.5 Wayfinding

Wayfinding helps pedestrians and bicycle riders find their way around the City, and typically consists of signs, pavement markings, or materials such as maps. Route or destination signage can help bicyclists navigate throughout the City when the bicycle route deviates from one street to another.

Wayfinding can be enhanced through the use of gateway features and signs to make the bicycle and pedestrian network more visible. Wayfinding signs should also serve to "brand" the community's growing network of pathways and on-street bicycle facilities. Creating a design that provides an attractive and uniform system of signs and gateway markers throughout the City and at key access points would promote active transportation routes and can help increase the number of people using the network.

The Need for Wayfinding

Feedback from public engagement activities and the public survey indicates that many residents are not aware of the existing bike trails in the community. Survey participants were asked if they had to guess, how many bicycle trails or lanes exist in the region. The majority of respondents thought there were less than 10 trails and bicycle lanes in the community. Additionally, 66% of survey respondents indicated that they never ride a bicycle on existing trails. The lack of familiarity and use of the existing bicycle network among survey respondents demonstrates that there is a need to improve wayfinding. This presents an opportunity to brand the active transportation network, initiate marketing efforts, and implement system wide wayfinding signage to increase the community's familiarity with the existing and future network and promote active transportation in the region.

Directional Sign Indicating Trail Location

Examples of Bike Trail Signage at Intersections

4.5 Wayfinding

Existing Trailhead Signage at Chacon Trail Lacking Detail

Enhanced trailhead signage with map and route information helps improve user awareness.

Enhanced Trailhead Signage in San Antonio

4.5 Wayfinding

Recommendations

5.A Create highly visible signage indicating to vehicles where roads intersect or overpass hike and bike trails.

5.B Create highly visible signage along the active transportation network to increase route awareness and familiarize users with the network.

5.C Create web-based and mobile tools to facilitate wayfinding for users and promote points of interest.

5.D Develop a print pamphlet with the system map and important route information that can be disseminated to the community.

5.E Develop branded trailhead signage showing system-wide amenities.

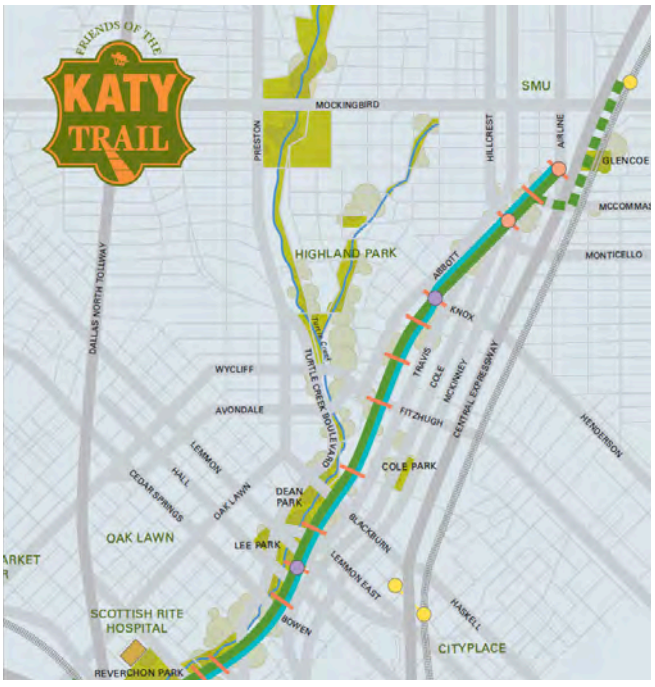
5.F Provide emergency call boxes in strategic locations, especially on off-street trails, to enhance safety and security of the active transportation network.

System information signs can include network maps, trail information, and safety guidelines.

Interpretive signs can include educational, cultural, and historic information. Interpretive signage helps create a sense of place.

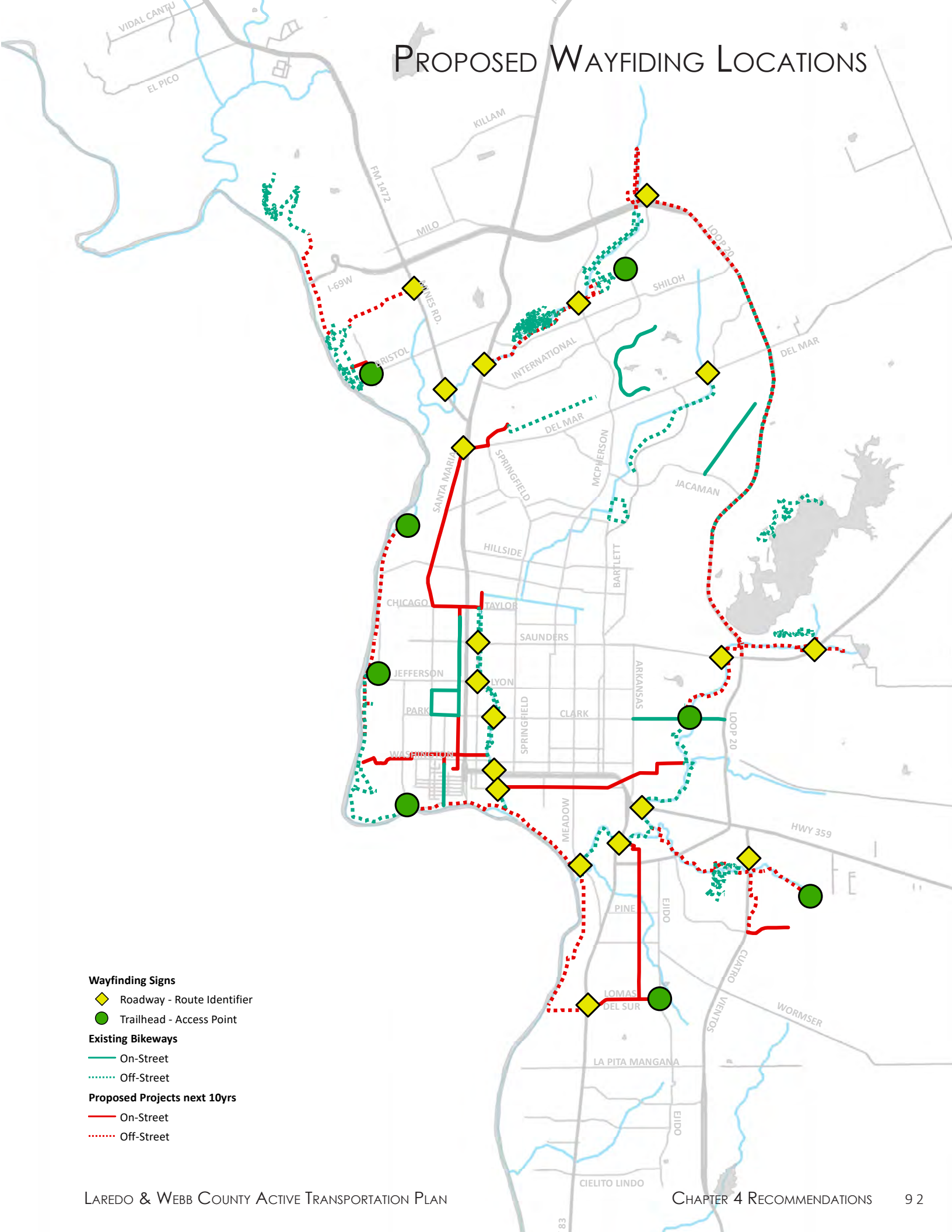
Directional signs show users how to access destinations and distance to different destinations.

Wayfinding Sign in Portland, Oregon



Example of Bike Route Map - Dallas, TX

Proposed Wayfiding Locations



4.6 Other Recommendations

4.6 Other Recommendations

To ensure a safe and highly utilized network, education and outreach programs will be essential. Education components should involve the following:

- Educate adults and school-age children to understand their rules, rights, and responsibilities. Target certain educational efforts to maintain a safe environment for users and motorists.
- Educate residents regarding the usage of sidewalks, bicycle lanes, transit, and assist in maintaining safe active transportation environments
- Continuation of BikeLaredo educational programs

To promote active transportation and educate the community, partnerships with the following entities should be considered:

- City of Laredo Health Department
- City of Laredo Parks and Recreation Department
- Keep Laredo Beautiful
- Law enforcement agencies
- School districts
- Walk.Bike.Ride Laredo
- Rio Grande International Study Center (RGISC)
- El Metro and El Agulia
- Texas A&M International University (TAMIU) and Laredo College (LC)
- Bicycle Friendly Business (BFB)
- Texas Parks and Wildlife
- Neighborhood groups
- Civic organizations
- Texas Department of Transportation

Recomendations

The following recommendations focus on promoting education, increasing data for better decision-making, and facilitating implementation.

6.A Collaborate with partners to launch the Bicycle 101 safety education campaign for cyclists and drivers.

6.B Improve data collection inventory to facilitate decision-making and prioritization and location of projects.

6.C Partner with schools to educate students about the benefits of active transportation and safety awareness.

6.D Promote Safe Routes to School activities in partnership with local schools.

6.E Initiate Bike to Work/School Day and secure funding for annual promotion.

6.F Organize an Active Transportation Sub-committee of the MPO to provide ongoing recommendations to the Policy Committee.

6.G Hold an annual Active Transportation summit bringing together MPO, City, and all relevant organizations to review progress on completion of this plan and discuss new opportunities.

6.H Develop a detailed funding and finance plan for priority projects listed in the recommendations of this plan.

6.I Provide resolutions for adoption to City of Laredo and the Laredo & Webb County Area MPO for recommended percentage of total budget to be spent on active transportation infrastructure (with separate allocations for each category) and incorporated into the Capital Improvement Plan (CIP) and Transportation Improvement Program (TIP).

Omar Ramirez

Omar Ramirez has two jobs and is a tutor at both. He uses the transit system since he does not have a car to get to work. Since Mr. Ramirez has two jobs, he has to use two different transit routes to get to his destinations. However, in order to arrive at the transit stops, he does have to walk to those destinations.

When asked how his experience could be improved, Mr. Ramirez stated, “Sheltered roof bus stops make a difference.”

Endnotes

1 Pedestrian and Bicycle Information Center. Bike Sharing in the United States: State of the Practice and Guide to Implementation. http://www.pedbikeinfo.org/pdf/Webinar_PBIC_LC_042612.pdf

2 U.S. Department of Transportation FHA. Shared Mobility: Current Practices and Guiding Principles. https://ops.fhwa.dot.gov/publications/fhwahop16022/fhwahop16022.pdf

3 City of Wilmington. Bike Share Feasibility Study. https://www.wilmingtonde.gov/government/city-departments/planning-and-development/bike-wilmington/bike-share-feasibility-study

5

Implementation Plan

5.1 Project Prioritization & Timeline

This chapter outlines a set of strategies to help implement the policy, program, and project recommendations described in Chapter 4. Successfully implementing the Plan's recommendations will help achieve the community's vision for a safe and accessible active transportation network. The implementation plan is a strategic framework which details strategies focused on project prioritization, funding, project management, performance management, and continued stakeholder and community involvement.

The Plan's implementation timeframe spans 20 years, with the goal of creating the long-term vision incrementally over this period.

5.1 Project Prioritization & Timeline

Creating a prioritization framework assists in directing design efforts and funding towards areas which are likely to see the highest increase in bicycling, walking, and using transit once facilities are installed or upgraded. These areas are prioritized based on factors such as proximity to schools, neighborhoods, jobs, and cultural institutions as well as areas where bicycling, walking, and using transit may be the predominant mode of travel for socioeconomic reasons. Given limited funding and resources, the prioritization process provides information on which projects should be funded and implemented first.

During the development of the Plan and proposed network, the team considered the following criteria in the prioritization of projects for implementation:

- ***Connectivity***: How well the project connects to the existing network
- ***Safety***: Existing speed limits; vehicle conflicts; facility type
- ***Comfort***: Level of stress; level of comfort
- ***Equity***: Accessibility to or located in underserved areas; existing ADA compliance
- ***Feasibility*** : Right-of-Way (ROW) needs; funding availability

The projects identified in this Plan can each be considered segments of the full proposed network. Creating the vision for the proposed full network is a multi-year process; implementation of the full proposed network will be phased over the next 20 years, with the goal of doubling the miles of improved and interconnected on-street and off-street bicycle routes in the network within 10 years.

Building the Long-Term Vision in 20 Years

- Phase I: 10-Year Network (29 projects; 40 miles)
- Phase II: 20-Year Network (42 projects; 55 miles)
- Phase III: Buildout Network (43 projects; 89 miles)

Projects considered high priority are proposed to be developed within the first 10 years after Plan adoption. It is highly recommended that at least two projects or 4 miles of facilities be completed each year. Projects in Phase II of the network development will build upon the connected network built within the first 10 years.

5.1 Project Prioritization & Timeline

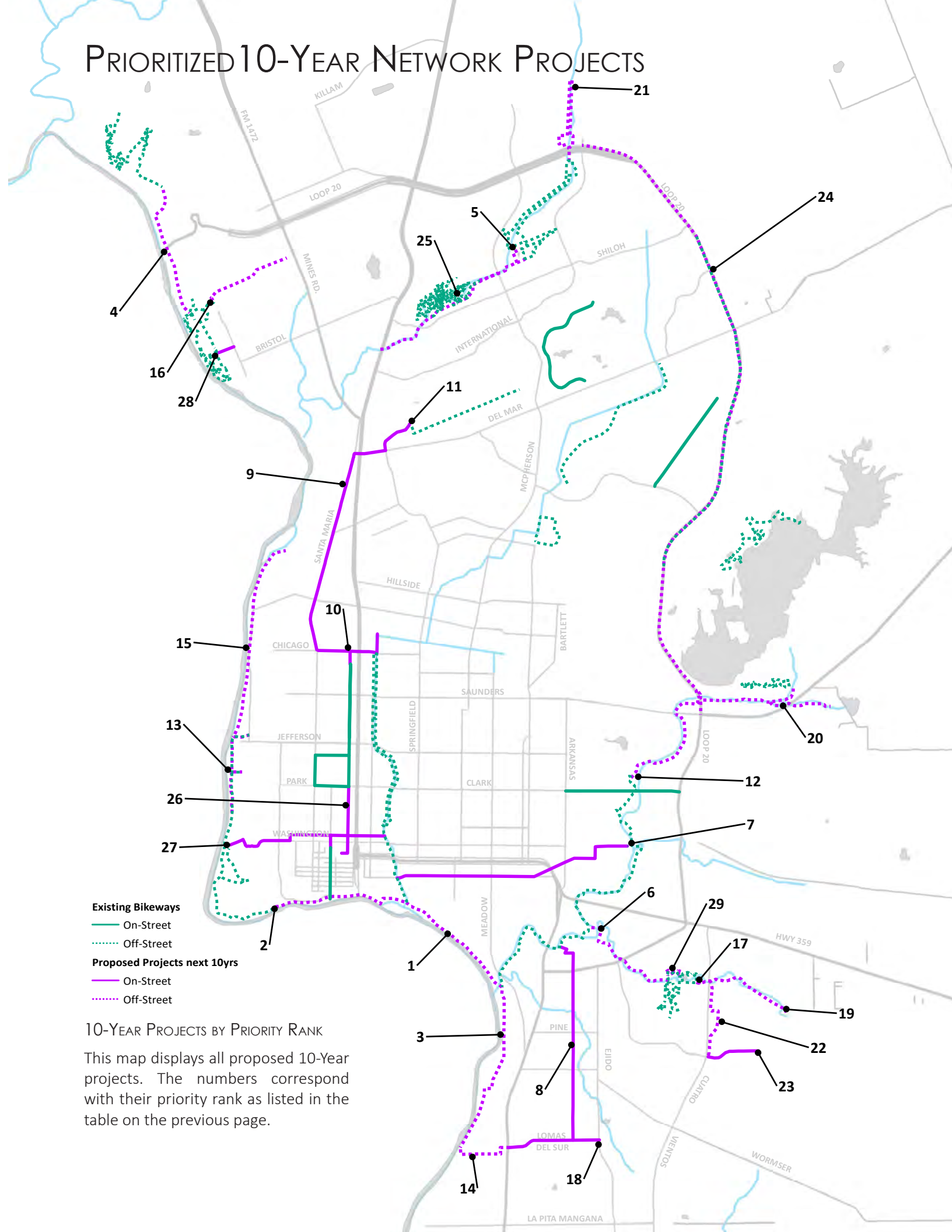
Prioritized Bicycle Projects for 10-Year Network

The following projects were selected to be constructed within the first 10 years considering the prioritization criteria.

Priority Rank	Name	Type	Miles	Low Estimate	High Estimate
1	Rio Vega Trail- Phase 1	Off-Street	1.35	$685,401	$813,913
2	Rio Vega Trail- Phase 2	Off-Street	1.44	$726,619	$862,860
3	Chacon Creek- Phase 8	Off-Street	1.83	$923,811	$1,097,025
4	World Trade Bike Trail	Off-Street	1.42	$720,089	$855,106
5	Manadas Creek Trail- IV	Off-Street	0.76	$385,882	$458,235
6	WCDD- East Chacon Creek	Off-Street	1.35	$373,668	$814,244
7	Corpus Christi- Connection	On-Street	1.79	$264,520	$302,308
8	S. New York St- Phase 1	On-Street	2.06	$304,845	$348,394
9	N. Santa Maria Trail	On-Street	2.20	$324,798	$371,197
10	Chicago St. Connection	On-Street	0.94	$138,128	$157,860
11	Del Mar/Springfield Route	On-Street	0.74	$108,527	$124,031
12	Chacon Creek Connection to Saunders	Off-Street	1.08	$546,713	$649,222
13	Rio Vega Trail- Phase 4	Off-Street	1.56	$791,238	$939,595
14	SoLa Trail	Off-Street	0.64	$326,395	$387,594
15	Rio Grande- Island St. to Ana Park	Off-Street	1.62	$819,148	$972,738
16	Drainage Creek Route to Mines Rd.	Off-Street	0.95	$481,393	$571,654
17	Summers Trail (WCDD)	Off-Street	0.34	$172,015	$204,267
18	Lomas del Sur - Phase I	On-Street	0.93	$137,800	$157,486
19	East 359 Hike and Bikeway	Off-Street	0.74	$374,228	$444,395
20	Chacon Creek- Spillway Trail	Off-Street	2.21	$1,118,381	$1,328,077
21	Manadas Creek- North Extension to United	Off-Street	1.78	$902,804	$1,072,080
22	Cuatro Vientos Trail	Off-Street	0.89	$452,436	$537,267
23	East Los Presidentes	On-Street	0.53	$78,182	$89,351
24	I-69 W- Shared Use Path	Off-Street	6.97	$3,526,528	$4,187,753
25	Manadas Creek Trail- V	Off-Street	1.53	$775,546	$920,961
26	San Bernardo Blvd- South	On-Street	0.75	$110,651	$126,458
27	Moctezuma Connection	On-Street	1.47	$216,305	$247,206
28	Lowry Rd. Trail- River	On-Street	0.19	$28,578	$32,660
29	Independence Hills- Access	Off-Street	0.23	$115,829	$137,547
10-Year Network Total Mileage & Estimated Cost			**40.30**	**$15,930,456**	**$19,211,487**

Note: Highlighted rows indicate funding is available or programmed.

Prioritized 10-Year Network Projects



10-Year Projects by Priority Rank

This map displays all proposed 10-Year projects. The numbers correspond with their priority rank as listed in the table on the previous page.

5.2 Project Management

Bicycle Project Cost Estimates

The estimated bicycle project costs are presented in 2020 dollars. The proposed bicycle network cost estimates were developed using TxDOT's 2017 Trail Study's construction cost estimates. TxDOT's study provides low-end and high-end per mile cost estimates for different bicycle facility types. For this Plan's purposes, proposed off-street bike lane cost estimates used TxDOT's low-end to high-end range for "Shared Use Paths" facility type. TxDOT's "Restripe Roadway for Buffered Bicycle Lane" facility type low cost estimate range was used for on-street projects. Using TxDOT's per mile cost estimate depending on the facility type, this figure was then multiplied by the length in miles of the proposed bicycle facility to determine a low to high range cost estimate for each proposed bicycle facility. The complete network with a total of 184 miles of off-street and on-street bike facilities is estimated to cost between $59,566,632 and $70,495,594.

5.2 Project Management

The process of planning, designing, and implementing the active transportation network involves identifying priority locations, selecting the appropriate facility-type, and following required standards for facility design. It is recommended that a Facility Selection Guide be developed during the implementation phase. The Facility Selection Guide will allow the project team to select the appropriate facility to provide the highest comfort possible for bicyclists while considering the existing road conditions. A similar diagram to the one shown in the image below should be included in the Facility Selection Guide to indicate the appropriate type of bike facilities for a desired comfort level.

Implementation of the Plan and management of projects will require continued collaboration and coordination between key City of Laredo departments including Planning & Zoning, Engineering, Parks and Recreation, El Metro Transit, and Traffic to name a few. Similarly, appointed local and regional committees or boards whose decisions can impact active transportation activities should collaborate and coordinate between each other. Examples of such committees and boards include:

- Parks and Recreation Advisory Committee
- Technical Review Board
- MPO Committees
- Traffic Committees

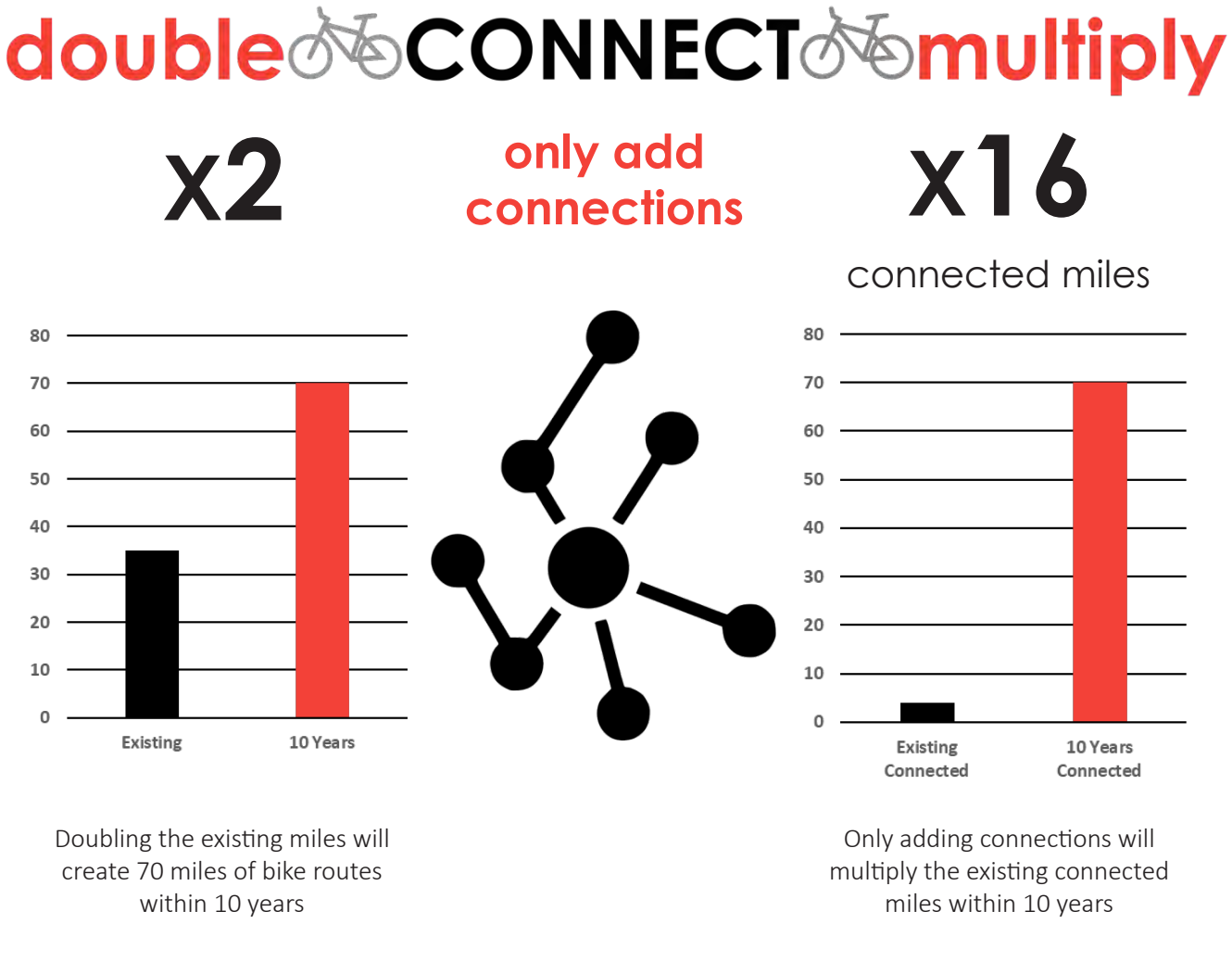
Additionally, training opportunities focused on active transportation topics should be pursued. Training opportunities can bring together staff from various key City departments and members of relevant committees and boards to generate a wide range of support for the Active Transportation Plan and its priorities.

Bike Lane Facilities by Comfort Level

5.2 Project Management

Bicycle Network Strategy

The Plan's primary strategy to implement the proposed bicycle network is called ***Double-Connect-Multiply***. Currently, the region has 35 miles of improved bicycle routes, but few are well connected. The Chacon Creek Hike and Bike Trail, which is approximately 4 miles long in one direction, is currently the longest, connected bicycle route in the region. The Plan does not simply recommend more bike routes, it recommends more connected bike routes. As shown in the image below, the strategy entails doubling the number of miles within 10 years. This will create approximately 70 miles of improved bicycle routes. If connectivity is prioritized and only connected bicycle routes are added to the network, this will multiply the number of connected bicycle routes by more than 16 times to create a total of 70 connected miles of bicycle routes.



Doubling the existing miles will create 70 miles of bike routes within 10 years

Only adding connections will multiply the existing connected miles within 10 years

5.3 Performance Management

5.3 Performance Management

The Laredo-Webb County Area MPO will monitor progress of the Plan during the implementation phase. Monitoring progress is essential to understanding whether the Plan's goals are being achieved and can provide a way to measure whether the needs of residents who use active transportation are being met. It is recommended the proposed Active Transportation Subcommittee be tasked with monitoring the progress of the Plan's implementation on a yearly basis. Performance measures should be used to evaluate the Plan's success and implementation progress. Performance measures related to active transportation help improve decision-making by facilitating evaluation and prioritization of bike and pedestrian projects based on measurable data.

The initial recommended performance measures are shown in the table below. As the active transporation network grows and data collection capacity is improved, the performance measures can be updated and expanded to include measures on additional goals related to health, infrastructure quality, sustainability, and economic development.

A strategic annual report should be created to help ensure accountability among parties responsible for implementing the Plan. The annual report should include an update on performance measures and progress toward implementation of the Plan's recommended projects, policies, and programs. The process of reporting on progress annually will facilitate implementation and help inform future Plan updates.

Goal	Measure	Target	Data Source
Connectivity	Number of bicycle projects constructed and connected to existing facilities	Two (2) projects per year	LWCAMPO
	Number of miles of connected bicycle miles constructed	Four (4) miles per year	LWCAMPO
	Number of bicycle boardings on transit	Sustained annual increase	El Metro Transit
Safety	Number of reported bicycle and pedestrian accidents	Sustained annual decrease	TxDOT
	Eliminate bicyclist and pedestrian fatalities on City and County roadways	Zero Fatalities by 2030	TxDOT
Equity	Number of bicycle and pedestrian projects constructed in disadvantaged areas	Two (2) projects per year	LWCAMPO
	Percentage of vulnerable (i.e. low-income) populations within 1/4 mile of bicycle facilities	Annual increase in % vulnerable population impacted	LWCAMPO
Accessibility	Number of bicyclists using active transportation network	Sustained increase annually	LWCAMPO; Bicycle counts
	Number of new trailheads constructed/added to network	Two (2) per year	Parks and Recreation Department
Education	Number of active transportation education programs implemented per year	Two (2) programs per year	LWCAMPO, TxDOT
	Number of active transportation related trainings attended by staff and decisionmakers	One (1) training per year	LWCAMPO
Investment	Amount of funds allocated to active transportation projects	$1.5 million annually	LWCAMPO
	Number of grants awarded for active transportation projects	Two (2) grants per year	LWCAMPO

5.4 Funding

5.4 Funding

Funding for proposed active transportation projects is a key obstacle to their implementation. Mobility improvements and active transportation projects are funded from a variety of sources. The available funding comes from an array of local, state, and federal sources, with federal transportation programs being a common source of funding for bicycle and pedestrian improvements. The Metropolitan Transportation Plan (MTP) programs funding for mobility projects in the region.

The potential funding source is dependent on the type of project or program. Several factors such as the project's location, type, and target user can impact the decision of which funding source or sources to pursue. Project phases can also be funded separately using different sources. For example, funding opportunities exist for design phases and construction. The adjacent table shows common funding sources for active transportation projects and programs.

Several funding resources need to be allocated through various entities and programs. The prioritization of projects helps determine which projects should be funded in the short-term. Some of the potential funding sources for the recommended projects are listed below.

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Several funding resources need to be allocated through various entities and programs. The prioritization of projects helps determine which projects should be funded in the short-term. Some of the potential funding sources for the recommended projects are listed below.

Potential Funding Sources:

- Transportation Enhancement Grant - TXDOT
- Federal Land Access Program- National Parks Service
- Transportation Alternatives Program Grant
- Private funding
- Safe Routes to School
- MPO Funds
- Capital Improvement Program Revenue Sources
- Federal Transit Administration Grant Programs

To make the Plan a reality, local officials will need to move quickly to get projects on the ground. Greater reliance on phased or "rapid implementation" approaches using less expensive materials can be effective and efficient, and provide for a more adaptable transportation network. This approach will not only bring substantial transportation benefits sooner, but it will also allow for flexibility as transportation patterns continue to shift in the coming decade.

Priority projects that can be easily completed should be programmed into the Capital Improvement Program (CIP) and the MPO's Transportation Improvement Program (TIP). The Active Transportation Plan project recommendations should be reviewed when developing the CIP and TIP.

5.4 Funding

Potential Funding Strategies & Policy Actions

The Active Transportation Plan supports a variety of strategies and actions to effectively fund and implement the recommended projects and programs.

- Establish dedicated budget funds/dedicated funding source for active transportation projects
- Consider creating developer incentives to encourage developers to provide Complete Streets
- Secure private funding and consider public-private partnerships
- Consider public financing tools such tax-increment financing and public improvement districts
- Utilize MPO planning process and Transportation Improvement Program (TIP) to program funds
- Collaborate with TxDOT, Webb County Drainage District, and Regional Mobility Authority
- Pursue state and federal grants
- Establish annual funding targets
- Market the Plan (i.e. Foldout map with advertisement space)
- Coordinate with school districts to create and implement Safe Routes to School plans
- Set aside dedicated funding annually for proper maintenance of bike facilities and sidewalks
- Set aside dedicated funding annually specifically for ADA and accessibility related projects

Investment in the region's active transportation system will require the use of a multitude of funding strategies to help achieve this Plan's vision and meet the mobility needs of the community. It is essential to consider all funding options, including bonds, reallocation of existing sales tax revenues, reallocation of general fund budget, grants, improvement districts, and the creation of new revenue sources.

To create an effective transportation system that provides efficient, safe, and sustainable mobility options for residents of all ages and abilities, it will be essential to rethink how transportation in the region is funded. According to TxDOT's Project Tracker online data, TxDOT's transportation projects in Webb County for the next 10 years, which includes reconstruction and new construction of roadways, is estimated to cost $763 million. Constructing the complete proposed bicycle network as recommended in this Plan would cost between $59.5 million and $70.4 million in 2020 dollars, only 7% to 9% of TxDOT's construction cost estimate for projects in Webb County over the next 10 years.

A dedicated funding source is recommended. To secure dedicated funding, the Plan recommends studying the feasibility of reallocating 1/8th of a cent from the local sales tax to create a dedicated source for active transportation related projects.

LW-CAMPO, the City, and the County should consider ways to utilize federal funds and other available sources either by directly applying for funds or by collaborating with organizations that utilize federal funds. This could be accomplished by combining improvements into other projects, such as longer connected routes or other infrastructure improvements. The leveraging of other grant funds and inter-departmental collaboration on grant applications should also be considered. For example, some projects could be partially funded through grants focused on expanding recreational opportunities or improving health outcomes.

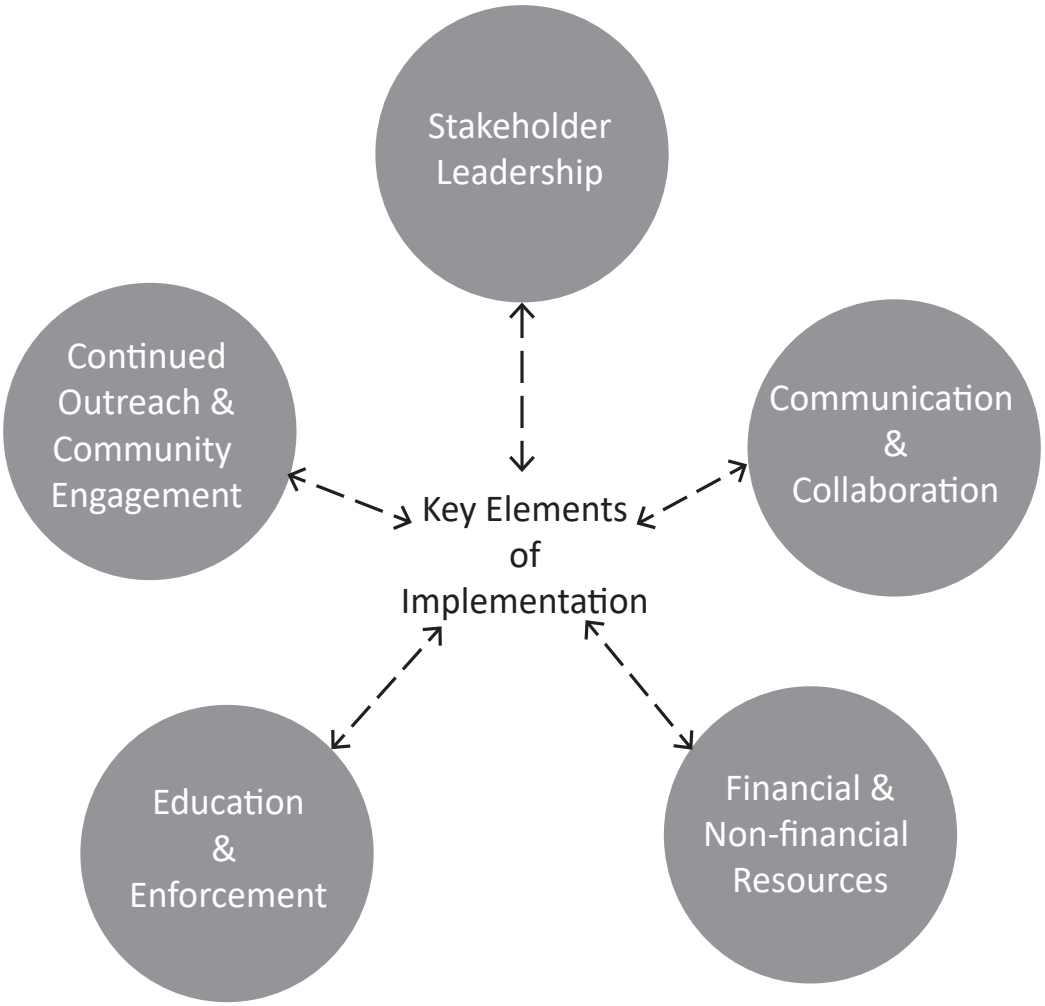
5.5 Updating the Plan

5.5 Updating the Plan

It is essential the implementation of the Active Transportation Plan be an ongoing, community-oriented effort. Implementing the Plan will require a collaborative and coordinated effort with community leaders, residents, stakeholders, and partner entities.

Effective and ongoing outreach and community engagement is vital to the Active Transportation Plan's success. Involving the public in the Plan's implementation can play a key role in ensuring successful outcomes. Thus, it is necessary to continually engage stakeholders and the public throughout the Plan's implementation phase through various channels such as neighborhood workshops, online tools, and events. Furthermore, additional partners should be pursued and engaged during the implementation phase. This Plan shall remain a top priority for residents and stakeholders.

Making the Plan accessible using an interactive online platform will enable implementation. This also ensures the public's continued involvement in the Plan's implementation and future update process.



5.5 Updating the Plan

The following set of strategies will help effectively implement the Active Transportation Plan:

Strategies to Facilitate Implementation

- Task proposed Active Transportation Sub-committee of the MPO with monitoring implementation progress
- Hold an annual Active Transportation summit bringing together MPO, City, and all relevant organizations to review progress on completion of this Plan and discuss new opportunities (see recommendation 6.G)
- Referencing of ATP on staff communications to City Council, MPO Technical and Policy Committees, and Planning Commission when applicable
- Produce an Annual Strategic Report
- Monitoring of performance measures
- Publish yearly list of projects on MPO website
- Continued engagement on social media; engagement at neighborhood level
- Ensuring future plans, developments, and code changes are aligned with Complete Street goals.
- Initiate pilot projects and tactical urbanism
- Create ATP Facility Selection Guide
- Utilize the Active Transportation Plan priorities when developing the CIP/TIP
- Strategically increase collaboration and shared responsibility between the Planning & Zoning Commission and Parks and Recreation Board in the review of development proposals and other planning activities to ensure provision of recommended bike facilities
- Partner with Parks Dept. to reach linear parks and greenways 2030 Target
- Collaboration on grant applications and leveraging of other grant funds

To facilitate implementation, an annual summit with responsible parties and key stakeholders is recommended. The summit can serve as an opportunity for stakeholder feedback and will allow the active transportation team to monitor the Plan's progress. Lastly, the implementation strategies should also be revisited regularly as part of the Plan's evaluation and update process. It is recommended that the Plan be updated every 3 to 5 years.

An implementation matrix was created to facilitate implementation and for easy reference. The matrix should be regularly consulted and will help guide implementation efforts. The implementation matrix can be found in the Appendix of this Plan. The matrix includes the following elements:

- **Recommendations**: Each Recommendation outlined in *Chapter 4 Recommendations* is listed and assigned an identification code.
- **Lead Entity**: The matrix clearly indicates which entity or entities should lead the implementation of a specific recommendation.
- **Timeframe**: A time-frame of short-term (within 10 years) and long-term (within 20 years) is assigned for each recommendation indicating the time by which the recommendation should be fully implemented.
- **Potential Partners**: Partners such as funders, stakeholders, other government entities, and local organizations that can assist in the implementation of recommendations are listed in the matrix.

Nicolas Gomez, Jr.

Nicolas Gomez, Jr. is a bike patrol police lieutenant. Mr. Gomez has been an avid cyclist for years. He commutes to work everyday on his bike and takes him about 22 minutes to arrive. He enjoys riding as a way to stay in shape. Not only does he commute to work, but he also rides to some of the trails around Laredo. Some trails Mr. Gomez enjoys riding are the Chacon Creek Hike & Bike Trails, Shiloh Trials, La Bota Trails, and Morales Ranch Trails.

When asked if he had any suggestions, Mr. Gomez stated “More bike stations like the one they have at Shiloh Trails.”

6

Complete Streets Policy

6.1 What are "Complete Streets"?

The intent of this chapter is to promote and create a policy to develop Complete Streets on roads identified in the bicycle, pedestrian, and transit networks, while also providing direction for how to consider what kind of improvements should be made to the street. Complete Streets policies validate a City's intent to plan, design, and maintain streets so they are safe for people of all ages and abilities. Policies guide planners, engineers, and other decision-makers to implement safe streets and reliable transportation networks for people walking, biking, driving, and using transit.

6.1 What are "Complete Streets"?

Incomplete streets mean many people lack opportunities to be active as part of daily life. Complete Streets are roadways designed to safely and comfortably provide for the needs of all users in the community, including, but not limited to motorists, cyclists, pedestrians, micromobility users, transit and school bus drivers, movers of commercial goods, emergency vehicle drivers, and persons of all ages and abilities. They encourage people to use physically active transportation, which promotes a healthy lifestyle and minimizes unintended chronic disease effects like cancer and heart disease. Complete Streets provide opportunities for increased physical activity by incorporating features that promote regular walking, cycling, and transit use. Additionally, they ensure that everyone's experience of moving through the City is safe, comfortable, convenient, and dignified.

As mentioned, Complete Streets are designed for users of many different modes of transport, improving access and safety for pedestrians, cyclists, transit users, and motorists, while balancing the needs of all users to ensure a safe and comfortable way to get around. Complete Streets are not a one-size fits all approach, and will vary in design based on the surrounding development context. Each roadway is unique and should be designed in response to its existing conditions including adjacent land uses, the function of the street within the overall transportation system, and the role of the corridor in creating connected networks and routes for different modes. A Complete Streets approach provides the flexibility to enable roadway designs to achieve policy priorities and goals. Investing in Complete Streets promotes active living and provides a better quality of life, economic and environmental benefits, and safer transportation networks for residents.

Gudalupe Street - Austin, Texas

6.2 Complete Streets Policy Recommendation

6.2 Policy Recommendation

The City of Laredo should adopt a Complete Streets policy that mandates all users and uses of road rights-of-way are factored into decision-making for road improvements. Adopting a Complete Streets policy and an accommodation design for all users would provide many benefits that include:

- People walking/using micromobility
- People using transit
- People driving a car
- Transportation of goods
- Economic benefits
- Social benefits
- Ecological benefits

Complete Streets legislation ensures transportation planners and engineers consistently design and operate the entire roadway with all users in mind including pedestrians, motorists, cyclists, mass transit riders, and those with disabilities.

When "streets are complete," alternative modes of transportation (walking, biking, etc.) are more attractive; physical activity is promoted; safety is improved for all users, and in the case of safe routes to school, safety is improved for children; and the unintended negative health outcomes of a less active lifestyle are minimized.

Complete Streets Policy Actions

Make Complete Streets a priority of the proposed Active Transportation Sub-Committee, which will provide the guidelines and regulations of completing the streets.
Create a Complete Streets handbook, which contains regulations, guidelines for completion of streets on the construction or reconstruction of the streets.
Adopt design standards for the completion of streets, such as a Complete Streets matrix that provides the necessary compliance for street areas.
Set minimal requirements for streets with compliance measures such as ADA measures, Texas Department of Transportation measures, etc. as well as sufficient use of multi-use purposes being accommodations of bicycles or pedestrian users.
Develop performance-based measures to monitor Complete Streets performance and support improved data collection and evaluation.
Adopt-a-street program such as initiating a group of volunteers to help maintain the greenery aspects of the streets and collaborate with local neighborhood groups.
Make Complete Streets practices a routine part of everyday operations and procedures.
Consideration of Complete Streets shall be integrated into capital improvement planning.
Promote safer street designs at high-crash intersections as a way to reduce accidents and fatalities; target and fund Complete Streets projects at or near these intersections.
Apply Complete Streets policy guidelines for new streets and major repairs of streets for projects that do not exceed a targeted cost; this includes reconstruction, retrofit, and resurfacing of existing streets.
Require new developments to implement complete streets on roads that that provide access to trails and parks.

Complete Streets Policy Recommendation

Complete Streets Policy

Definition of Complete Streets

Complete Streets are defined as streets that are designed and constructed for all ages and abilities. They are designed and operated to create safe access for everyone, including pedestrians, bicyclists, motorists, and transit riders for all users. Complete Streets make it easy for everyone to cross the street, walk to shops, and bicycle to work.

Purpose

The purpose of this Policy is to establish the City's intent to implement Complete Streets serving users of all ages and abilities through a uniformity of design, construction, operation, and maintenance of streets. Complete Streets ensure that local roads are safe, reliable, comfortable, and convenient for people walking, bicycling, riding public transportation, and operating motor vehicles. The City shall use Complete Streets to enhance mobility by ensuring all users have a safe, comfortable, accessible, and convenient way to travel throughout the City.

Complete Streets Policy

The City shall develop a safe, reliable, accessible, efficient, integrated, and connected multimodal transportation network that will promote mobility and health for all users of ages and abilities. Through a series of actions and guidelines the Complete Streets Policy shall allow the City to:

a. Establish a Complete Streets Program to promote an ongoing effort to ensure Complete Streets principles are incorporated into design, construction, and maintenance of the City's transportation system.

b. Create a Complete Streets handbook, which contains regulations, guidelines for completion of streets on the construction or reconstruction of the streets. Developers shall be able to refer to this with the construction or reconstruction of streets. This enables the streets to be safe and accessible to users of all ages and abilities;

c. Adopt design standards for the completion of streets, such as a Complete Streets matrix that provides the necessary compliance for street areas. This Complete Streets design matrix shall ensure the correct and necessary metrics for maintaining, constructing, or reconstructing streets;

d. Improve public rights-of-way in compliance with Americans with Disabilities Act (ADA) accessibility guidelines;

e. Set minimal requirements for streets with compliance metrics such as (ADA) measures and Texas Department of Transportation measures;

f. Develop performance-based measures to monitor Complete Streets performance and support improved data collection and evaluation. Not all streets will become a Complete Street, but applying certain performance measures will enhance the longevity and accessibility of the street;

g. Create an adopt-a-street program such as initiating a group of volunteers to help maintain the landscaping aspects of the streets and collaborate with local neighborhood groups. Incorporating an adopt-a-street program will ensure streets are properly maintained and collaborating with neighborhood groups can ensure neighborhood streets are safe and accessible;

h. Make Complete Streets practices a routine part of everyday operations and procedures. Including Complete Streets practices in operational functions such as street maintenance enhances the longevity of the streets for all users;

i. Integrate the Complete Streets Policy into capital improvement planning.

j. Promote safer street designs at high-crash intersections as a way to reduce accidents and fatalities; target and fund complete street projects at or near these intersections. Creating safer crosswalks, wider sidewalks, and having proper signage will assist with reducing the risk at these particular locations;

k. Apply Complete Streets Policy guidelines for new streets and major repairs of streets for projects that do not exceed a targeted cost; this includes reconstruction, retrofit, and resurfacing of existing streets;

l. Require new developments to implement Complete Streets on roads that provide access to trails and parks. Providing residents access to trails and parks from neighborhoods will create the connectivity for the City;

m. Approach every transportation improvement and project phase as an opportunity to create safer, more accessible streets for all users. These phases include, but are not limited to: planning, programming, design, right-of-way acquisition, construction, construction engineering, reconstruction, operation and maintenance.

Design Standards and Context Sensitivity

The City shall follow accepted or adopted design standards by utilizing the best and latest design standards. In acknowledgement of public input and the needs of many users, a flexible, creative, and equivalent approach that follows other necessary design standards may be considered, given that a commensurate level of safety for all users is present.

This Policy recognizes the diversity of the City's road network and various built environment contexts; Projects should be planned and designed to consider current and future planned adjacent land uses, local transportation needs, and to incorporate the latest and best practice design guidance. Each project must be considered both separately and as part of a connected network to determine the level and type of treatment necessary for all foreseeable users.

Implementation

In support of the Complete Streets Policy the City shall view the Policy as an integral part to everyday transportation decision-making processes. The City shall:

a. Incorporate Complete Streets principles into all existing plans, manuals, checklists, decision-trees, rules, regulations, and programs as appropriate;

b. Dedicate appropriate staff to ensure Complete Streets practices and guidelines are forthcoming in City plans;

c. Dedicate adequate resources to train appropriate staff on the content, guiding principles, and best practices to ensure the implementation of the Complete Streets Policy is successful;

d. Dedicate adequate resources to ensure the collection and analysis of data pertaining to high-risk streets such as crash data is available to guide and inform the decision-making process.

6.3 Complete Streets Policy Implementation

6.3 Complete Streets Policy Implementation

Implementing a Complete Streets policy will enhance and ensure that City infrastructure provides safer access to people of all ages and abilities. Not only will it provide safer access to residents, but it will also improve connectivity throughout the region.

Implementation of Complete Streets:

Delivering Basic Safety and Dignity

An attainable environment should be provided for residents to walk or ride with safety and dignity to attract all ages and abilities for an enjoyable walk or bike.

Examples

- Accessible Streets: installation of curb ramps & detectable warnings
- Filling Gaps: fill in missing sidewalks, crosswalks, and short-cut connections
- Safe Transit Station and Stops: bus stops should be accessible, safe, and convenient, as well as safe, marked, and controlled crosswalks, medians, and lighting

Connecting Residents and Communities

Connectivity and convenience are important aspects when developing safe and accessible networks to get residents where they need to go.

Examples

- Controlled Crossings: signalized crosswalks, protected turns for safe, accessible streets, as well as the proper height to reach all users and abilities
- Neighborhood Greenways: make connections and focus on creating safe crossings within neighborhoods, and provide better connectivity for pedestrians and bicyclists
- Separated Bike Infrastructure: protected or

Existing Street Design on San Bernardo Ave

Example of a Complete Street

Cycle Track in Missoula

6.4 Plan Conclusion

separated bike lanes and careful design of intersections that include safety features

Transformational Projects

Many risk factors exist due to roads not being designed for walking or cycling. Transformational projects would be able to correct these risk factors by incorporating well designed streets to provide residents to walk or cycle.

Examples

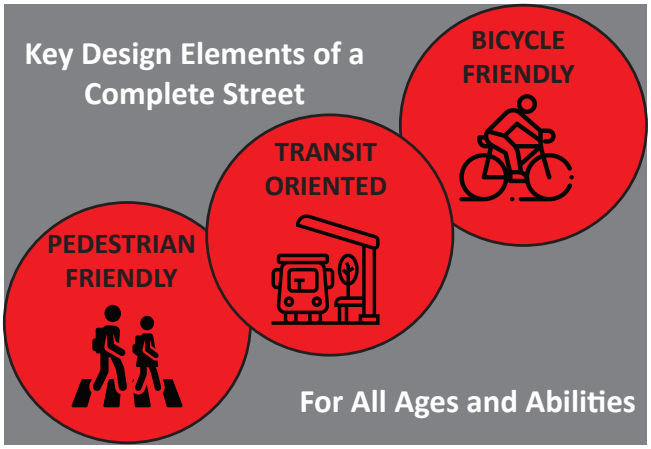
- Right-Sizing Roads: road diets that add separation and safe crossings for pedestrians and create safer turning maneuvers and improved flow for motorists
- Priority Transit Corridors: dedicated bus lanes and priority turns that can increase the overall capacity of a roadway
- Area-Wide Traffic Calming: lower vehicle speeds and area wide traffic calming programs

Achieving Long-Term Change

During the course of the next 20 years, the Laredo-Webb County region will undergo significant changes and rebuilding as the population grows. The decisions made today are important to ensure these changes result in safe, accessible, and connected networks.

Examples

- Changing Land Use Patterns: focus development in ways that encourage active transportation, transit and safe, connected communities
- Creating A Safety Culture: establishing a goal of zero fatalities and serious injuries (Vision Zero)
- Aligning development standards: align development standards in compliance with Complete Street goals.

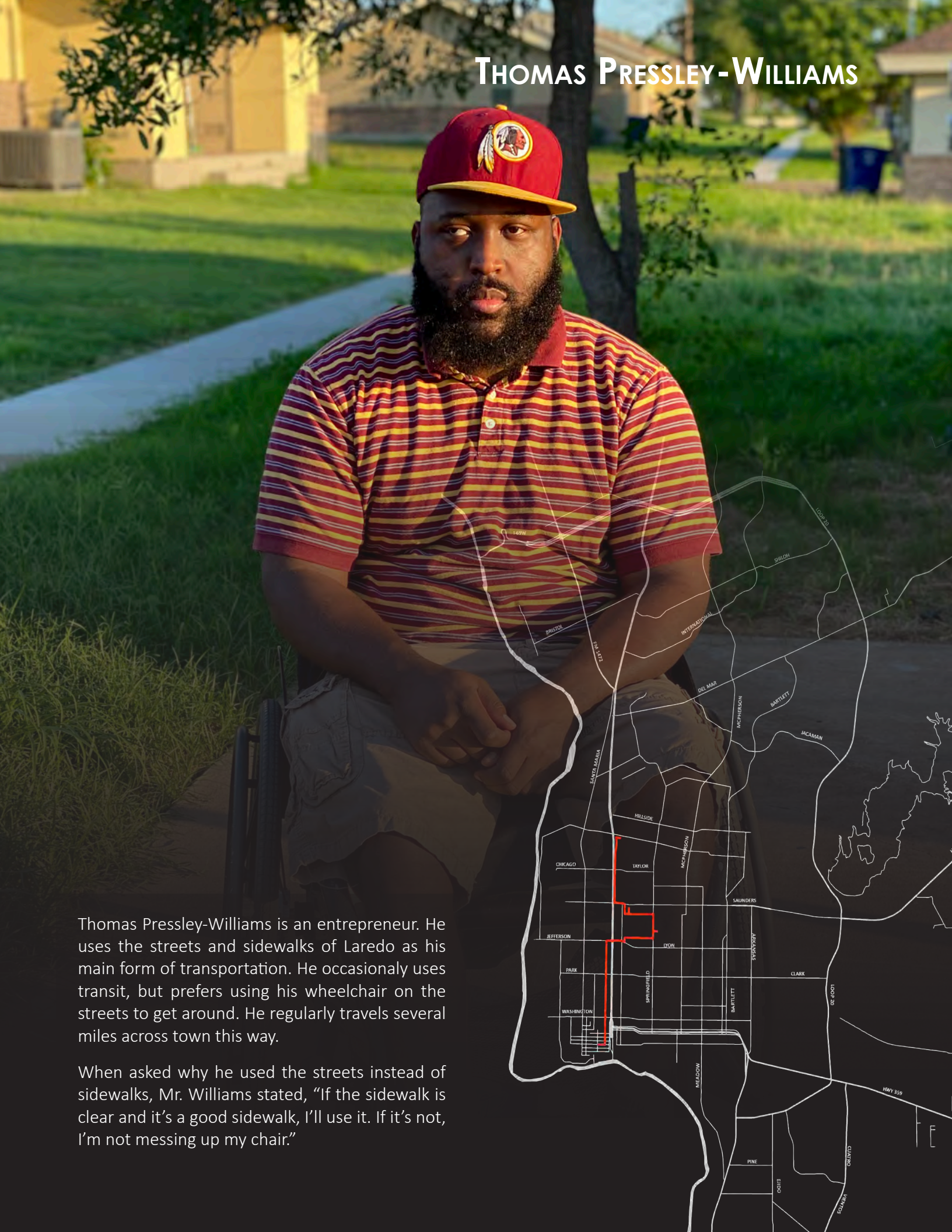


Plan Conclusion

The Active Transportation Plan is a living document that will need to be regularly revisited and updated considering the demands of a growing region and its mobility needs as well as rapid advancements in mobility technologies. The recommended projects, policies, and programs in this Plan will help guide the Laredo & Webb County Area MPO, City, and all relevant organizations to make strategic and informed decisions in the implementation and continued planning of the region's active transportation network.

Public and stakeholder engagement throughout the Plan's life will be fundamental in achieving the community's vision for a safe, comfortable, accessible, and equitable active transportation network for residents of all ages and abilities.

Thomas Pressley-Williams



Thomas Pressley-Williams is an entrepreneur. He uses the streets and sidewalks of Laredo as his main form of transportation. He occasionaly uses transit, but prefers using his wheelchair on the streets to get around. He regularly travels several miles across town this way.

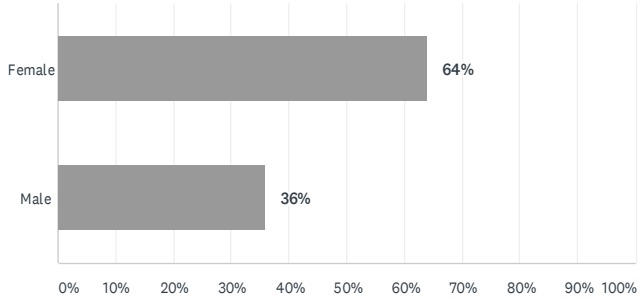
When asked why he used the streets instead of sidewalks, Mr. Williams stated, “If the sidewalk is clear and it’s a good sidewalk, I’ll use it. If it’s not, I’m not messing up my chair.”

Appendix

A.1 Public Survey Results

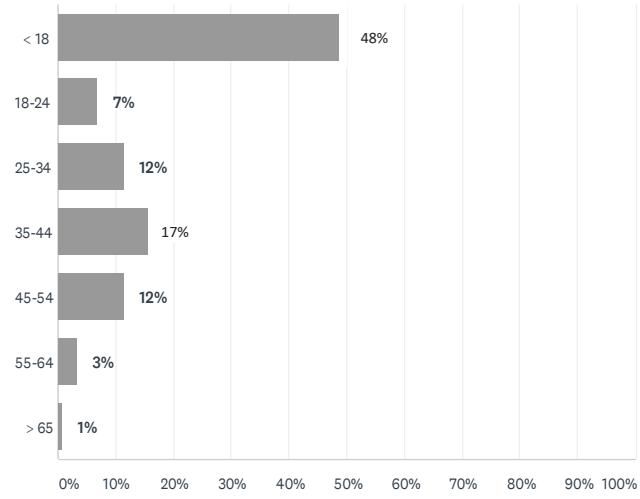
Closed-Ended Questions

Question 1: Gender



Answer Choices	Responses	
Female	1,241	64%
Male	684	36%
Total	**1925**	**100%**

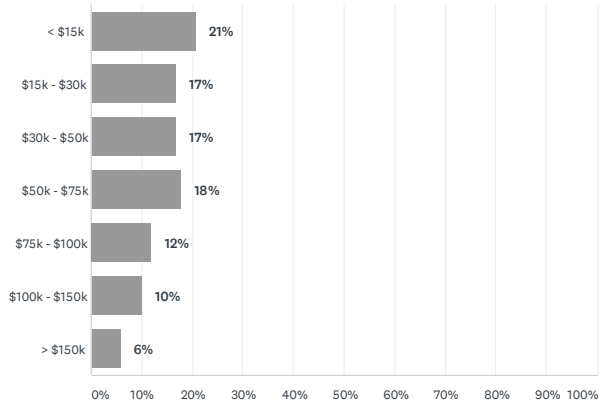
Question 2: Age Group



Answer Choices	Responses	
Under 18	922	48%
18-24	135	7%
25-34	222	12%
35-44	330	17%
45-54	235	12%
55-64	65	3%
65 or older	16	1%
Total	**1925**	**100%**

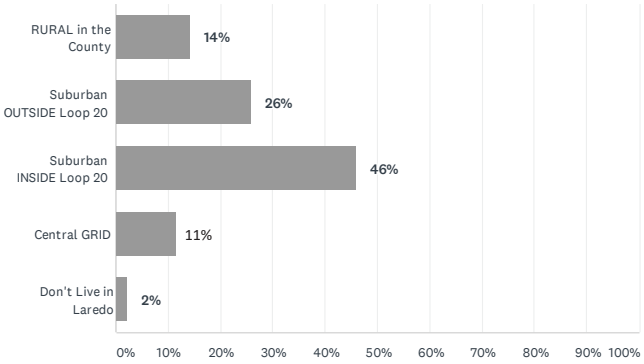
A.1 Public Survey Results

Question 3: Family Income



Answer Choices	Responses	
< $15k	403	21%
$15k-$30k	330	17%
$30k-$50k	331	17%
$50k-$75k	338	18%
$75k-$100k	228	12%
$100k-150k	186	10%
>$150k	109	6%
Total	**1925**	**100%**

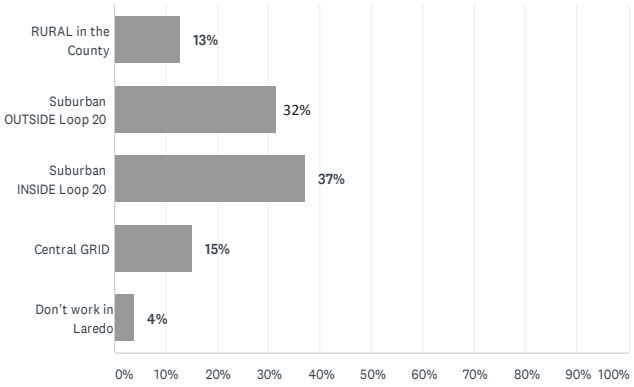
Question 4: Where in Laredo do You Live?



Answer Choices	Responses	
Rural in the County	268	14%
Suburban Outside Loop 20	510	26%
Suburban Inside Loop 20	887	46%
Central Grid	216	11%
Don't Live in Laredo	44	2%
Total	**1925**	**100%**

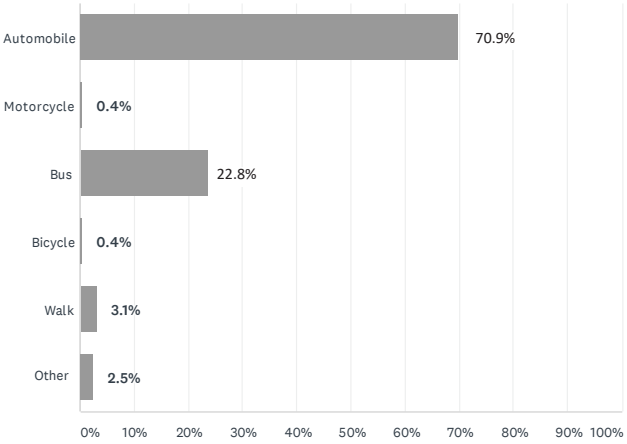
A.1 Public Survey Results

Question 5: Where in Laredo do You Work/Attend School?



Answer Choices	Responses	
Rural in the County	244	13%
Suburban Outside Loop 20	608	32%
Suburban Inside Loop 20	706	37%
Central Grid	286	15%
Don't Live in Laredo	81	4%
Total	**1925**	**100%**

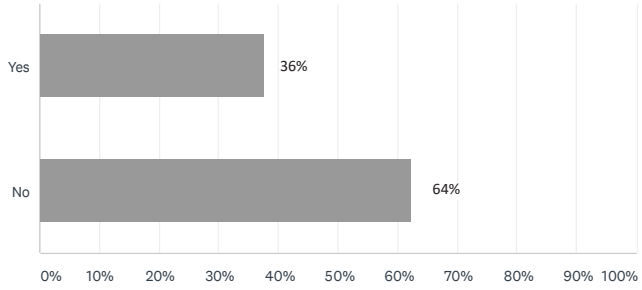
Question 7: How do You Normally Get to Work/School?



Answer Choices	Responses	
Automobile	1364	70.9%
Motorcycle	8	0.4%
Bus	438	22.8%
Bicycle	7	0.4%
Walk	59	3.1%
Other	49	2.5%
Total	**1925**	**100%**

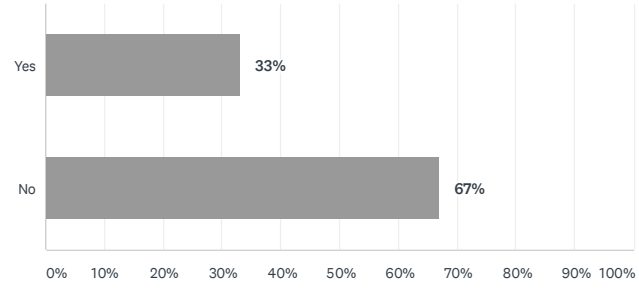
A.1 Public Survey Results

Question 8: Do You Ever Use the Bus?



Answer Choices	Responses	
Yes	702	36%
No	1223	64%
Total	**1925**	**100%**

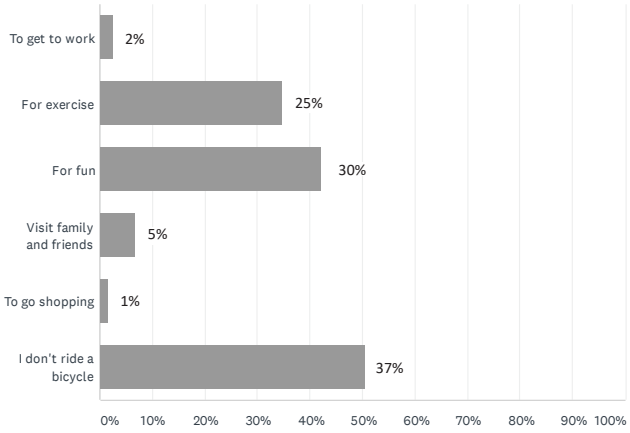
Question 9: Do You Ever Ride a Bicycle?



Answer Choices	Responses	
Yes	631	33%
No	1294	67%
Total	**1925**	**100%**

A.1 Public Survey Results

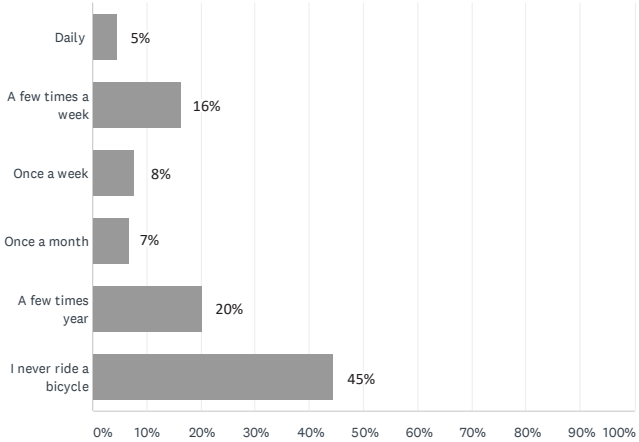
Question 10: Why do You Ride a Bicycle? (check all that apply)



Answer Choices	Responses	
To get to work	47	2%
For exercise	668	25%
For fun	796	30%
Visit family and friends	125	5%
To go shopping	32	1%
I don't ride a bicycle	985	37%
Total	***2653**	**100%**

*Total number is higher than total respondents due to quesiton alllowing multiple selections.

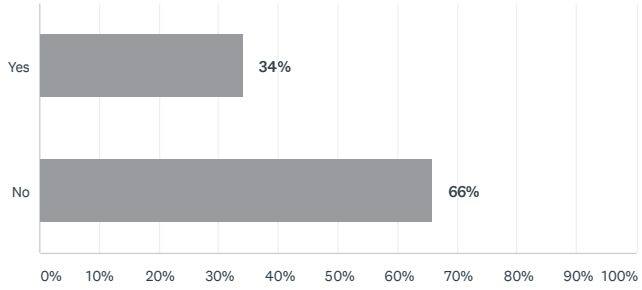
Question 11: How Often do You Ride a Bicycle?



Answer Choices	Responses	
Daily	87	5%
A few times a week	316	16%
Once a week	147	8%
Once a month	129	7%
A few times a year	387	20%
I never ride a bicycle	859	45%
Total	**1925**	**100%**

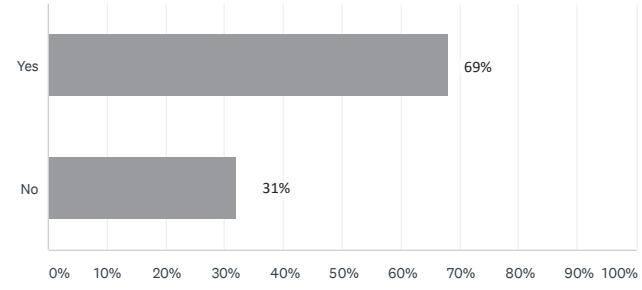
A.1 Public Survey Results

Question 13: Do You Ever Ride a Bicycle on Trails?



Answer Choices	Responses	
Yes	651	34%
No	1274	66%
Total	**1925**	**100%**

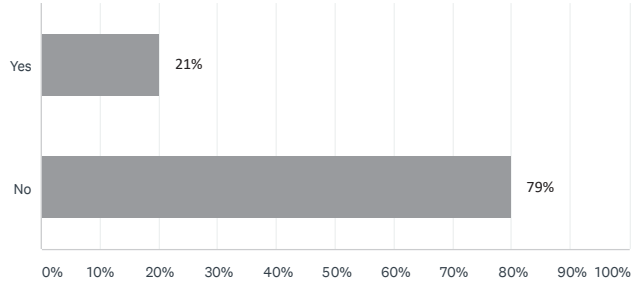
Question 14: Is it too Hot in Laredo During the Summer to Ride a Bicycle?



Answer Choices	Responses	
Yes	1323	69%
No	602	31%
Total	**1925**	**100%**

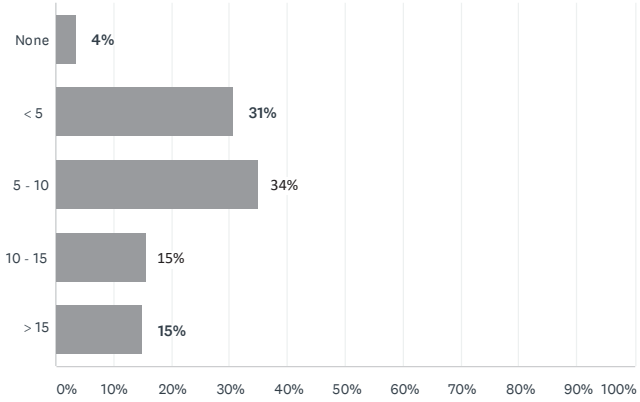
A.1 Public Survey Results

Question 15: Is it Too Cold in Laredo During the Winter to Ride a Bicycle?



Answer Choices	Responses	
Yes	406	79%
No	1519	21%
Total	**1925**	**100%**

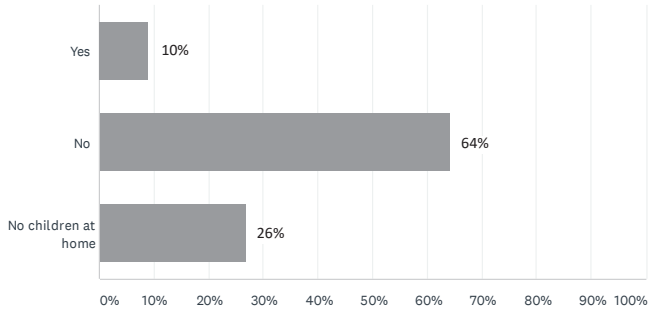
Question 16: How Many Bicycle Trails or Bicycle Lanes Exist in Laredo?



Answer Choices	Responses	
None	76	4%
Less than 5	603	31%
5 to 10	663	34%
10 to 15	293	15%
More than 15	290	15%
Total	**1925**	**100%**

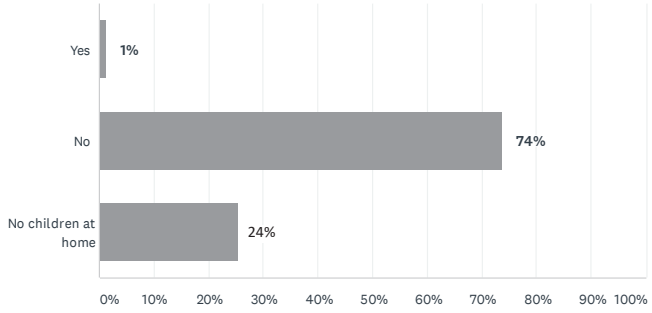
A.1 Public Survey Results

Question 17: Does Your Child Walk to School?



Answer Choices	Responses	
Yes	185	10%
No	1237	64%
No Children at Home	503	26%
Total	**1925**	**100%**

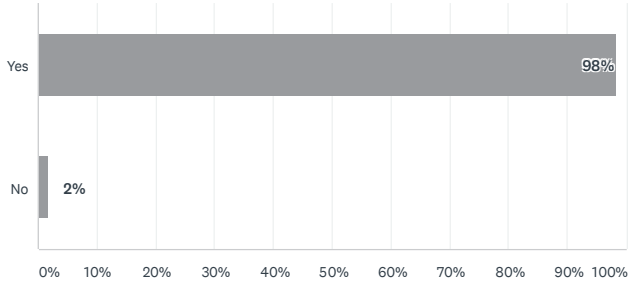
Question 19: Does Your Child Bicycle to School?



Answer Choices	Responses	
Yes	24	1%
No	1430	74%
No Children at Home	471	24%
Total	**1925**	**100%**

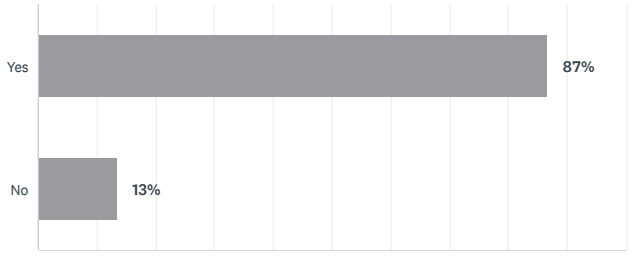
A.1 Public Survey Results

Question 21: When We Build Streets in Laredo that Connect Neighborhoods, Should Sidwalks be Required?



Answer Choices	Responses	
Yes	1889	98%
No	36	2%
Total	**1925**	**100%**

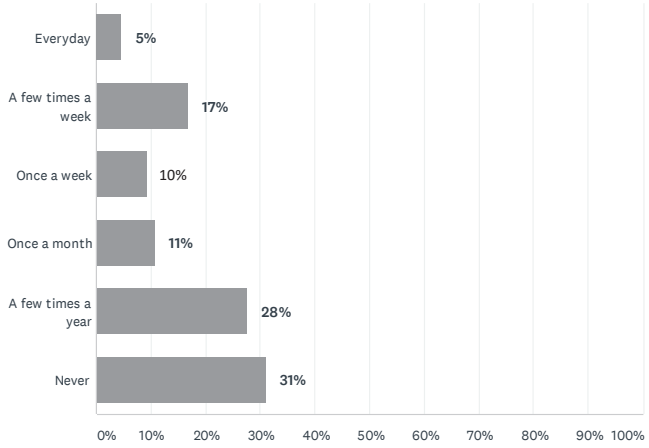
Question 22: When We Build Streets in Laredo that Connect Neighborhoods, Should Bicycle Lanes be Required?



Answer Choices	Responses	
Yes	1676	87%
No	249	13%
Total	**1925**	**100%**

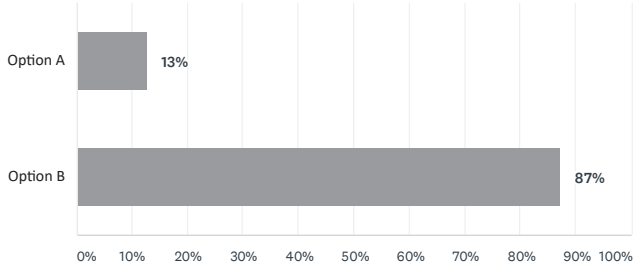
A.1 Public Survey Results

Question 23: If a Bike Share Service were Available in Laredo, How Often Would You Use this Service?



Answer Choices	Responses	
Everyday	91	5%
A few times a week	325	17%
Once a week	183	10%
Once a month	203	11%
A few times a year	531	28%
Never	592	31%
Total	**1925**	**100%**

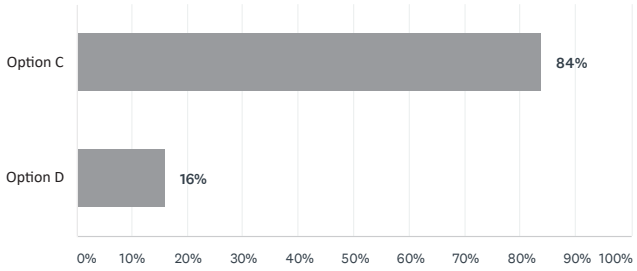
Question 24: Which Option do You Prefer?



Answer Choices	Responses	
Option- A	251	13%
Option- B	1674	87%
Total	**1925**	**100%**

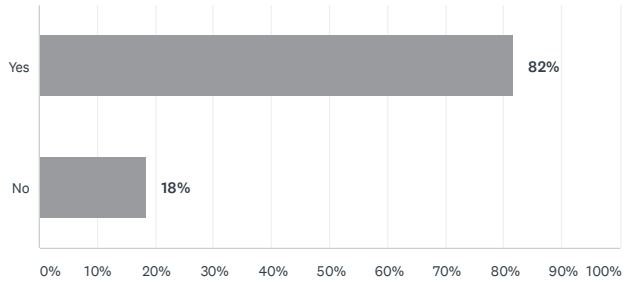
A.1 Public Survey Results

Question 26: Which Option do You Prefer?



Answer Choices	Responses	
Option- C	1613	84%
Option- D	312	16%
Total	**1925**	**100%**

Question 28: If We had Protected Bicycle Lanes in Laredo, would that Encourage You to Ride Your Bicycle More?



Answer Choices	Responses	
Yes	1579	82%
No	346	18%
Total	**1925**	**100%**

A.1 Public Survey Results

Open-Ended Questions

Question 6: How Long is Your Trip from Home to Work/School?

	Median	Mean	Maximum	Minimum
Distance (miles)	4.6	6.1	55	0.1
Time (minutes)	10	13	65	1

Question 12: If You Never Ride a Bicycle, Why Not?

Sample Responses
"The roads don't make biking an accessible form of transportation for me."
"My neighborhood is unsafe for riding bicycles on the street. There are little to no sidewalks or bicycle lanes."
"I do not ride because I have a scooter."
"Because I prefer traveling in a car."
"I never learned how to ride a bicycle. It's always been on my to-do list, but I've yet to get around to it."
"Never learned, and too many inconveniences that make getting to and from places difficult."
"There are not enough sidewalks or bicycle lanes in town."

A.1 Public Survey Results

Question 18: If Your Child Does Not Walk to School, Why Not?

Sample Responses
"I want my child to stay safe and I prefer just to drive her to school."
"Not safe and too far."
"Because the city isn't made for walking."
"Again, it is a safety issue! Sometimes there are no sidewalks for a child to walk to school. St Luke Blvd has no sidewalks until you get to the schools."
"Because it takes longer than the bus."
"Unsafe road crossings."
"Their school(s) are located in highly trafficked areas and traffic and parking enforcement is non-existing in Laredo, hence they do not walk to their respective schools."

Question 20: If Your Child Does Not Bicycle to School, Why Not?

Sample Responses
"Lack of safe bicycle lanes."
"She still doesn't know how to ride a bike."
"We don't have bicycles."
"Traffic is very heavy around the school I attend."
"No bike trails, neighborhood dogs."
"Does not know how to ride a bicycle and not safe for a child to ride a bicycle alone to school."
"No bike rack at school to store bike plus I am afraid my child may get hurt."

A.1 Public Survey Results

Question 25: Why Do You Prefer the Option You Selected? (See Question 24 for Image)

Sample Responses
"Option B appears to offer more safety to cyclist. The bike lane is more defined and noticeable for cars."
"B because it's safer"
"Option B- It looks a lot safer than the other picture."
"Option B seems safer for pedestrians to ride their bikes."
"It is more spacious than option B."
"I prefer Option B because it is safer to those who want to bike or walk."
"In option A the bike lane is to exposed to the main road and is not as clear as option B. I feel this can pose a danger to the cyclist"

Question 27: Why Do You Prefer the Option You Selected? (See Question 26 for Image)

Sample Responses
"Option C appears to offer more safety to cyclist. The bike lane is more defined and noticeable for cars."
"Safety issues; in option D, it is a lot easier for a car to drive over someone riding a bike."
"The lanes are clearly painted & designated as bike & car lanes."
"There is an obvious color difference between car lanes and bike lanes as well as an obvious barrier. There will be no excuse for drivers to interfere with the biking space, or for bikers to go into the driving lane/side walk."
"Option C is ideal for visibility of biking lane, BUT our Laredo streets are too narrow to accommodate, especially in the downtown area."
"Option C has clear physical markers and visible paint markings on the road."
"It seems safer than option D."

A.2 Implementation Matrix

ID #	Recommendation	Timeframe	Lead Entity	Potential Partners
Bicycle Network				
1.A	Improve connectivity and access to destinations by completing segments of existing trails and creating an interconnected network of trails to allow for regional mobility without obstructions.	Long-term	LW-CAMPO	Parks & Recreation
1.B	Amend Land Development Code to require bicycle lanes, bicycle amenities, and bicycle parking in future developments or subdivisions.	Short-term	City Planning Department	Traffic/ Engineering Departments
1.C	Connect mobility projects related to active transportation that are currently in-progress to the overall network; connect existing and proposed on-street bike facilities to off-street facilities.	Long-term	LW-CAMPO	Traffic/ Public Works/Engineering Departments
1.D	Establish a network of on-street protected bike lanes that compliment and connect to the off-street trail network.	Long-term	LW-CAMPO	Traffic/ Engineering/ Public Works Departments
1.E	Establish a network of an off-street trail network consisting of a main spine and branches that connect throughout the City along our waterways.	Long-term	LW-CAMPO	Parks & Recreation
1.F	Develop and adopt a local Complete Streets Policy focused on high activity corridors.	Short-term	City Planning Department	City Council/ Traffic Department
1.G	Improve access to the off-street network by adding additional entry points along the route.	Long-term	LW-CAMPO	Parks & Recreation
1.H	Ensure trails provide safe access to regional destinations.	Long-term	LW-CAMPO	Webb County/ Parks & Recreation/ Regional Mobility Authority
1.I	Create an Adopt-A-Trail program in partnership with key stakeholders and other local organizations to improve trail maintenance, beautification, and safety.	Short-term	Laredo Parks & Recreation	Keep Laredo Beautiful/ Non-Profits
Pedestrian Network				
2.A	Perform a gap analysis of the existing sidewalk network and make strategic improvements based on an approved timeline and criteria.	Short-term	LW-CAMPO	Traffic/Engineering Departments
2.B	Prioritize safety, crosswalk, and ADA improvement along corridors within a ¼ mile buffer of schools, bus stops, major health facilities, parks, and recreation centers.	Short-term	LW-CAMPO	Traffic/ Engineering/ Public Works Departments
2.C	Establish a network of an off-street trail network consisting of a main spine and branches that connect throughout the City along our waterways.	Long-term	LW-CAMPO	Parks & Recreation/ Environmental Services Department

A.2 Implementation Matrix

ID #	Recommendation	Timeframe	Lead Entity	Potential Partners
2.D	Develop and adopt a local Complete Streets Policy focused on high activity corridors.	Short-term	City Planning Department	City Council/ Traffic Department
2.E	Identify pedestrian boulevards with expanded features and amenities along key retail and entertainment corridors in Downtown Laredo.	Long-term	City Planning Department	CVB/ Laredo Main Street/Webb County Heritage Foundation/
2.F	Prioritize Safety Features along trails, in particular "Emergency Beacons".	Short-term	Laredo Parks & Recreation	Law Enforcement Agencies
2.G	Create a program for neighborhood-initiated traffic calming improvements and tactical urbanism in collaboration with various City departments including Planning, Parks and Recreation, Traffic, and Public Works.	Short-term	City Planning Department	Parks & Recreation/ Traffic/ Public Works/ Non-Profits
2.H	Prioritize Redevelopment of San Bernardo Avenue into a Complete Street.	Long-term	City Planning Department	Economic Dev./ Engineering/ Traffic Departments
Transit				
3.A	Create a policy requiring development to reserve space for bus stops and loading bay (bus turnouts).	Short-term	City Planning Department	El Metro
3.B	Enhance transit stops to provide secure bicycle parking.	Short-term	El Metro	LW-CAMPO/Traffic Department
3.C	Study the potential for a partnership between El Metro and El Aguila to develop a transit hub in South Laredo to serve urban & rural routes.	Short-term	El Metro	LW-CAMPO/El Aguila
3.D	Improve transit user experience by integrating wayfinding and route awareness tools.	Short-term	LW-CAMPO	El Metro
3.E	Study the potential for a partnership between El Metro and a third-party micromobility provider allowing for a multi-pass program.	Short-term	LW-CAMPO	LW-CAMPO/El Aguila
3.F	Prioritize bus stop improvements to the highest demand routes.	Short-term	El Metro	Engineering/Public Works Departments

A.2 Implementation Matrix

ID #	Recommendation	Timeframe	Lead Entity	Potential Partners
Micromobility				
4.A	Collaborate with a third-party micromobility provider to establish a bike share program in Laredo.	Short-term	LW-CAMPO	El Metro
4.B	Study the potential for a partnership between El Metro and a third-party micromobility provider allowing for a multi-pass program.	Short-term	El Metro	LW-CAMPO/El Aguila
4.C	Encourage availability of e-scooters and extend the areas where they are utilized to include strategic locations Citywide.	Short-term	LW-CAMPO	Traffic Dept./ TAMIU/ Laredo College
4.D	Enhance transit stops to provide secure micromobility hubs.	Long-term	El Metro	LW-CAMPO/Public Works
4.E	Classify micromobility types and designate standards of use.	Short-term	Traffic	LW-CAMPO/ Engineering
Wayfinding				
5.A	Create highly visible signage indicating to vehicles where roads intersect or overpass hike and bike trails.	Short-term	LW-CAMPO	Traffic Department/ Parks & Recreation
5.B	Create highly visible signage along the active transportation network to increase route awareness and familiarize users with the network.	Short-term	LW-CAMPO	Traffic Department/ Parks & Recreation
5.C	Create web-based and mobile tools to facilitate wayfinding for users and promote points of interest.	Short-term	LW-CAMPO	Traffic Department/ Parks & Recreation/ El Metro
5.D	Develop a print pamphlet with the system map and important route information that can be disseminated to the community.	Short-term	LW-CAMPO	Traffic Department/ Parks & Recreation/ El Metro
5.E	Develop branded trailhead signage showing system-wide amenities.	Short-term	Laredo Parks & Recreation	Environmental Services Department
5.F	Provide emergency call boxes in strategic locations, especially on off-street trails, to enhance safety and security of the active transportation network.	Short-term	Laredo Parks & Recreation	Law Enforcement Agencies

A.2 Implementation Matrix

ID #	Recommendation	Timeframe	Lead Entity	Potential Partners
Other Recommendations				
6.A	Collaborate with partners to launch the Bicycle 101 safety education campaign for cyclists and drivers.	Short-term	LW-CAMPO	TxDOT/ Traffic Department/ Law Enforcement Agencies
6.B	Improve data collection inventory to facilitate decision-making and prioritization and location of projects.	Short-term	LW-CAMPO	El Metro/ TxDOT/ TAMIU/ Laredo College
6.C	Partner with schools to educate students about the benefits of active transportation and safety awareness.	Short-term	LW-CAMPO	School Districts/ Private Schools/ Traffic Department
6.D	Promote Safe Routes to School activities in partnership with local schools.	Short-term	LW-CAMPO	School Districts/ TxDOT/ Traffic Department
6.E	Initiate Bike to Work/School Day and secure funding for annual promotion.	Short-term	LW-CAMPO	City of Laredo/Webb County/ El Metro/ Private Organizations
6.F	Organize an Active Transportation Sub-committee of the MPO to provide ongoing recommendations to the Policy Committee.	Short-term	LW-CAMPO	Local Government Entities/ Non-Profits/ Private Organizations
6.G	Hold an annual Active Transportation summit bringing together MPO, City, and all relevant organizations to review progress on completion of this plan and discuss new opportunities.	Short-term	LW-CAMPO	Local Government Entities/ Non-Profits/ Private Organizations
6.H	Develop a detailed funding and finance plan for priority projects listed in the recommendations of this plan.	Short-term	LW-CAMPO	Engineering/Traffic Departments
6.I	Provide resolutions for adoption to City of Laredo and the Laredo & Webb County Area MPO for recommended percentage of total budget to be spent on active transportation infrastructure (with separate allocations for each category) and incorporated into the Capital Improvement Plan (CIP) and Transportation Improvement Program (TIP).	Short-term	LW-CAMPO	City Council/ Engineering Department