



# 2019 Bicycle Plan



Rio Grande Valley  
Metropolitan Planning  
Organization



# Table of Contents

Page #

<b>Vision &amp; Introduction</b>	<b>1</b>
<b>Plan Importance &amp; Achievements</b>	<b>2</b>
<b>Public Outreach Process</b>	<b>4</b>
<b>Cyclists</b>	<b>17</b>
<b>Rio Grande Valley MPO Bicycle Pedestrian Advisory Committee</b>	<b>19</b>
<b>Bicycle Destinations in the Rio Grande Valley</b>	<b>20</b>
<b>Bicycle Facility Types</b>	<b>28</b>
<b>STRAVA</b>	<b>31</b>
<b>TX-DOT Query Tool</b>	<b>32</b>
<b>Design Guidance</b>	<b>34</b>
<b>Safety</b>	<b>36</b>
<b>Funding</b>	<b>40</b>
<b>Planning Recommendations</b>	<b>48</b>
<b>Appendix A</b>	<b>53</b>
<b>Appendix B</b>	<b>56</b>



## Vision

The Rio Grande Valley Metropolitan Planning Organization (RGVMPO) continually strives to create plans for a viable transportation system where people of all ages bicycle safely and comfortably. All cyclists should feel safe, whether they are commuting, exercising or just riding for leisure. Our goal is to continue improving our transportation system by educating the public and planning for future infrastructure, ultimately increasing connectivity in our metropolitan area.

## Introduction

The Rio Grande Valley Metropolitan Planning Organization (RGVMPO) is federally funded, and in partnership with the communities of the urbanized area of the Lower Rio Grande Valley, is responsible for planning multimodal mobility. Implementation of Bike trails, bike lanes, and construction of bike facilities are included in the planning process. This document will focus on the essential, safe, and comprehensive bicycle network required of an all-inclusive transportation network. The existing street and highway systems can provide most of the avenues needed for bicycle travel.

Upgrading many of the existing roadways would only require minor improvements, such as placing signage for informational and safety purposes. Some roadways would require striping and signage to be retrofitted and become part of the bicycle network. If existing pavement widths can accommodate this improvement, it may result in low-cost enhancement. Priority should be given to establishing bike lanes or shoulders whenever an opportunity presents itself through project development.

Incorporating a bicycle plan broadens travel alternatives and increases the roadway network's overall capacity & longevity. Additionally, bicycling promotes a healthier lifestyle and environmental awareness by lowering carbon emissions. Fewer vehicles traveling on roadways results in cleaner air, which benefits humans, animals, and vegetation. The increased physical activity by riders reduces the chance of health conditions such as obesity and diabetes.

The RGVMPO continually works with public transportation providers in their efforts to plan for a complete transportation network. Valley Metro, Metro McAllen, Brownsville Metro and South Padre Island Metro, are the four major public transportation service providers in the region. Respectively, throughout the region, all transit provider buses are equipped with bicycle racks which can accommodate at least two bicycles at any given time. These bicycle racks provide an additional alternative to those planning longer trips who may not own or have access to a vehicle.

The RGVMPO has examined various national/state guidelines and planning documents, researching best practices that could be implemented in this region. A plan to improve the environment for bicycling by creating a cohesive and seamless bikeway network requires coordination across political jurisdictions.

## Plan Importance

The purpose of the Bicycle Plan compliments the existing Pedestrian Plan as part of an overall Multimodal Plan for the region. The Bicycle Plan promotes an efficient, continuous, safe, and rideable Bicyclist network required of a comprehensive multimodal transportation network. Furthermore, the focus of the plan will involve finding solutions to issues involving gaps within the sidewalk network, identifying safer approaches to street crossings and paths, and encouraging a Bicycle-friendly environment. Recommendations were developed based on analysis of existing facilities, policies, and plans as well as suggestions from the RGVMPPO's Bicycle and Pedestrian Advisory Committee (BPAC), Technical Advisory Committee (TAC), and comments from the public through a series of public meetings & workshops. Findings from the Bicycle Plan will be available to local planners and transportation agencies seeking improvements to identified needs. The recommendations will also include information on important corridors that could affect the likelihood of projects receiving the necessary funding.

## Achievements

### **Hidalgo County Area**

- In addition to the extensive miles of bike lanes added to our network, two new bike share companies have been introduced in Hidalgo County. The first company to introduce Valley residents to the bike share world was B-Cycle. B-cycle also provides services in Dallas, Houston, San Antonio and Austin. In 2015, the City of McAllen launched a total of eight stations with 80 bikes. This project was funded in part by a Federal Transit Administration grant. Four of these stations are in downtown McAllen, which includes the downtown park and ride, the Broadway park and ride at Bicentennial Avenue, Archer Park and La Placita Heritage Center located at Main Street and Chicago Avenue. The remaining four stations are located at 2<sup>nd</sup> Street Hike and Bike Trail, Fireman's Park, Palms Crossing and McAllen Convention Center. B-Cycle offers different types of memberships that fit most needs.
- Zagster is the second bike share company to be introduced in Hidalgo County. The City of Edinburg through the Economic Development Corporation partnered with the University of Texas Rio Grande Valley to offer four new bike stations that will positively impact the daily commute of students and Edinburg residents who prefer an eco-friendly transportation alternative. These four stations are located at Bicentennial Park, Gonzalez Memorial Park, South Middle School and the fourth station could be found at 212 W. McIntyre Street near the Hidalgo County Courthouse.
- During the 2017-2018 Transportation Alternatives Program (TAP) Call for Projects, two projects were awarded planning funds: the McAllen Vision Zero Planning Study and the City of Pharr Comprehensive Pedestrian Safety and Wellness Program. A total of three projects were awarded construction funding as well. The 2019-2020 TAP Call awarded funding for continuing projects in the Pharr - San Juan - Alamo areas, as well as Edinburg & McAllen's Hike and Bike Trail project. The city of Elsa received funds for their

Community Trail Park project and the Lower Rio Grande Valley Development Council (LRGVDC) will begin a region-wide bike share initiative as well. Additionally, the LRGVDC earned planning funds for their Hidalgo County Active Mobility Plan.

- In July 2015 plans to expand the hike and bike trail on 2<sup>nd</sup> Street in McAllen were announced. The trail will now run from McAllen, South of Expressway 83 connecting to the hike and bike trail on 2<sup>nd</sup> Street, ultimately connecting to the existing Hike & Bike trail in Edinburg. This trail will also connect in San Juan, starting on South San Antonio Avenue, running west along the PSJA Bears Trail, ending on West Moore Road intersecting with a proposed hike and bike trail on Cage Boulevard in Pharr. There is a second phase to this project which will go from Ridge Road to Hall Acres Road, followed by an extension from Hall Acres Road to 2<sup>nd</sup> Street in McAllen.
- The Vision Zero Initiative approach started in Sweden and has been adopted around the world and across the United States. Vision Zero states no deaths or serious injuries are acceptable on our transportation system. The City of McAllen expects to use education, engineering, evaluation, enforcement and policy to eliminate deaths and serious accidents. The Vision Zero Planning Study will seek to share data from different platforms including EMS, Police and hospitals to analyze high accident areas and make improvements. This plan is aimed at changing the decision-making process, by putting user safety into account vs. the cost of a project. The McAllen Vision Zero Planning Study is anticipated to begin this year.
- The Pharr Comprehensive Pedestrian Safety and Wellness Plan was created to help identify the new construction of walkways that will connect several neighborhoods to schools, businesses, shopping plazas and recreational activities. This project will create a safe haven for pedestrians and cyclists, and it is anticipated to begin this year as well.
- The PSJA Tri-City Pedestrian Safety Improvements Project will fund the construction of approximately 27,784 square yards of concrete sidewalk within the tri-city district to make linkages and connections to surrounding cities, schools, neighborhoods, public parks and commercial businesses by extending sidewalks and closing gaps in service. This project is expected to break ground by 2021.
- Another great accomplishment for the cyclist community has been the continued cooperation of Valley Metro to improve their services by offering bicycle racks on all their buses in circulation as of 2018. Valley Metro plans to partner with the City of Weslaco to have bike amenities such as bike racks, air pumps and fix stations, added to the bus stops around the city within next year.

### **Cameron County Area**

- Through its continuous planning efforts, the city of Brownsville has promoted the development of parks, hike & bike trails, and walkable pedestrian-friendly streets while preserving open spaces. The funding of improvements to the transit system and overall alternative transportation network has enhanced the multi-modal infrastructure.

- The Brownsville Historic Battlefield Trail Connection Plan was developed by the City of Brownsville and the National Park Service Palo Alto Battlefield National Historical Park. The plan focuses on the extension of the Historic Battlefield Trail, connecting three significant locations - Palo Alto battlefield, Resaca de la Palma battlefield and the Fort Brown site. Alongside the joining of three key destinations in Brownsville, the initiative provides connection to neighborhoods, parks, schools, the downtown area, and destinations such as museums and Gladys Porter Zoo.
- The city of Harlingen, in collaboration with the city of Brownsville, joined UTRGV and the city of Edinburg in contract with Zagster bike-share. With the edition of Edinburg, over 100 bikes and 21 stations were activated throughout the lower Rio Grande Valley.
- Viva Streets Harlingen is a 5K Adventure Run/Walk, followed by an open-street safe route to explore cycling, skateboarding, rollerblading, walking, and running on city streets. Activity booths with fun for the whole family are also part of the celebration.
- The city of Brownsville also entertains the public with an open-street event of its own. CycloBia closes miles of streets in the downtown area, creating a safe atmosphere for biking, walking, jogging, dancing, and general socialization. The city's Department of Public Health is joined by city police, traffic departments, local businesses, and volunteers who assist with road closures and security, before and during the event.

## Public Outreach Process

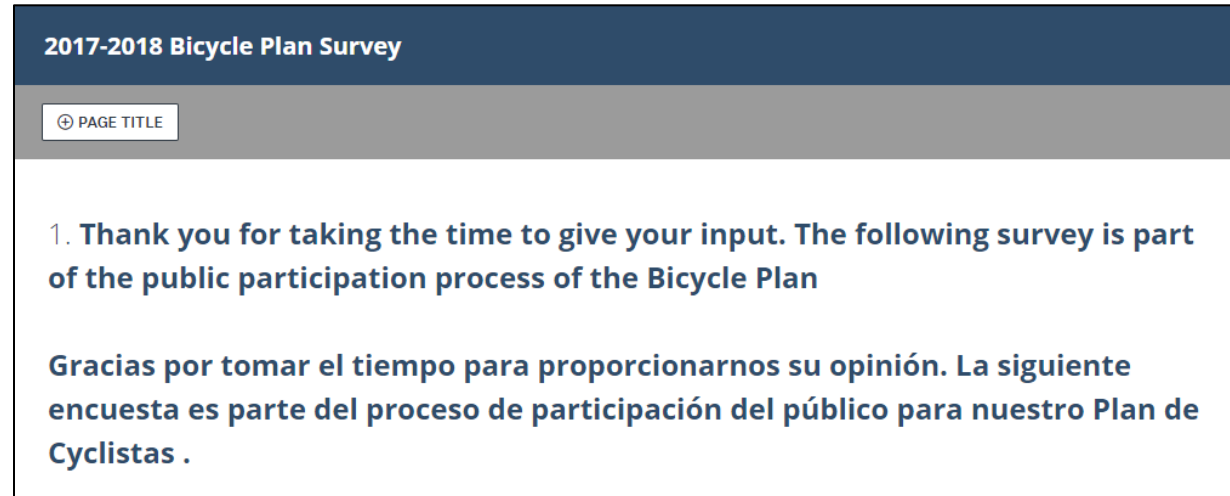
The Rio Grande Valley Metropolitan Planning Organization's public outreach process is designed to follow the MPO's current Public Participation Plan's goals, objectives, techniques, and evaluation guidelines. Using this process, the RGV MPO aims to engage a variety of community stakeholders, including transportation planners, engineers, law enforcement officers, elected officials, and residents in general, toward addressing the cycling issues at hand. The major goal is prevention of cyclist injuries and deaths while continuing project development and improving bicycle/pedestrian activity.

### Social Media: Facebook, Twitter, & Webpage

Social media, such as Twitter, Facebook, LinkedIn, and YouTube are effective communication tools utilized by RGV MPO staff. Links to the Bicycle Plan are made available for viewing and sharing purposes, providing modern forms of outreach to interested citizens. Comments made on these pages are incorporated into our plan and are often related to potential bicycle improvements throughout the region. Social Media is also utilized to assist bicycle related programming, support our Bike Friendly Business Program, provide surveys, and announce workshops. Announcements are also made via postings on our webpage, through emails, and hard copy flyers available at our office and partnering organizations

## Bicycle Plan Survey & Open House

A survey involving the Hidalgo County planning area was developed in July 2017, to provide additional feedback regarding the needs, attitudes, and habits of the Bicyclist community. SurveyMonkey was utilized by Hidalgo County MPO (HCMPO) staff in the creation of a Bilingual (English/Spanish) survey, made available through online and hard copy formats. The survey, although not statistically accurate due to voluntary response rather than random sampling, generated wide responses from diverse communities within the region. The survey was closed in December 2017, with over 115 responses.



The image shows a screenshot of a survey introduction slide. At the top, there is a dark blue header with the text "2017-2018 Bicycle Plan Survey". Below the header is a grey bar with a white button that says "PAGE TITLE". The main content area is white and contains the following text:

**1. Thank you for taking the time to give your input. The following survey is part of the public participation process of the Bicycle Plan**

**Gracias por tomar el tiempo para proporcionarnos su opinión. La siguiente encuesta es parte del proceso de participación del público para nuestro Plan de Ciclistas .**

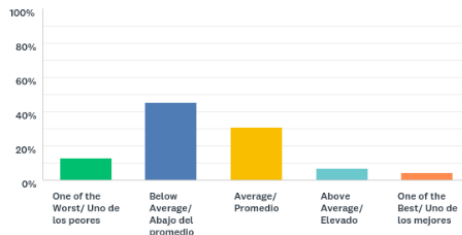
## Summarized Survey Results

The survey presented itself as an opportunity for the public to bring attention to certain needs within their region. The results are highlighted below.

A few demographic questions were placed within the survey asking the age of our respondents and the municipality they reside in.

The initial question asked to respondents was to have them rate their cities bicycle facilities. What we found is that there is a bell curve with a small lean towards facilities being below average.

Q1 Thank you for taking the time to give your input. The following survey is part of the public participation process of the Bicycle Plan. Gracias por tomar el tiempo para proporcionarnos su opinión. La siguiente encuesta es parte del proceso de participación del público para nuestro Plan de Ciclistas. How would you rate your city's cycling facilities for biking or other activities? (Cycling facilities include sidewalks, trails, bicycle crossings, etc.) Check the bubble that applies. Cómo clasificaría las instalaciones en su ciudad para cyclar o para otras actividades? (instalaciones cyclistas incluyen banquetas, caminos o cruces cyclistas, etc.) Marque la casilla que aplica.



The following comments were shared by participants in reference to their city's bicycle facilities:

*“Strongly encourage the development of protected bike lanes”*

*“Need more protected bike lanes and/ or off-road bicycle paths! I would commute to work during cooler seasons if I had a direct route that had protected bicycle lanes or off-road bicycle paths”*

*“I would love more connections between parks. Safety issues keep me from biking more often”*

*“More protected bike lanes and connecting bike routes”*

*“Biking agreements with local nature centers”*

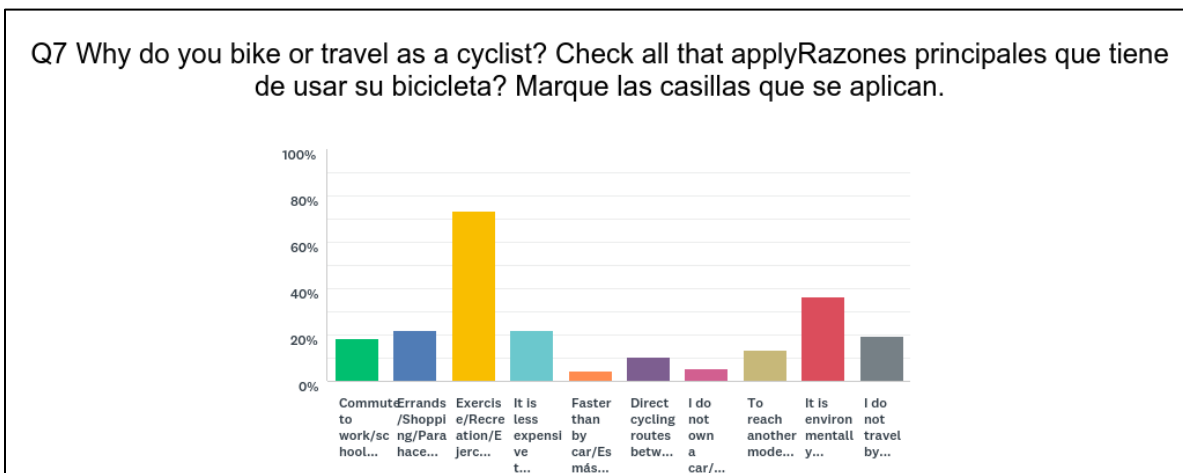
*“Can the cities connect the trails we currently have would be awesome.”*

The goal of Bicycle facility planning that resonated with most participants was the need to “Create a safe and secure cycling system,” with over 57% of participants citing it as “extremely important.” However, all goals were considered significant and the following order of goals are ranked by importance.

1. Create a safe and secure cycling system.
2. Enhance Regional cooperation and coordination between cities for improving multimodal transportation.
3. Increase connectivity between communities & destinations such as schools, parks, employment centers, etc.
4. Create direct cycling routes between destinations
5. Improve cycling connections to existing and future transit

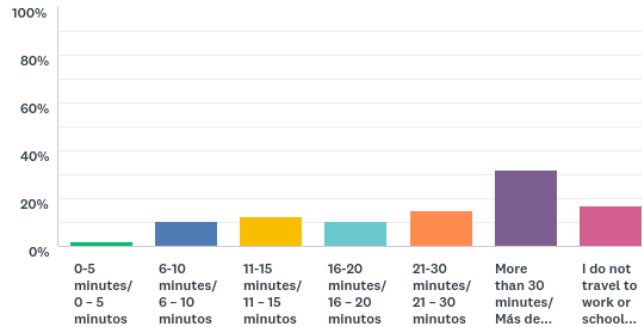
We asked participants to identify their main reason for traveling as a cyclist. The five most popular answers provided by participants are ranked below by importance.

1. Exercise/Recreation
2. It is environmentally friendly
3. Errands/Shopping
4. It is less expensive than using a car
5. Commute to work/School



In addition to questioning participants on cycling as a means of transportation, we also asked how long they were willing to bike to a destination. 32% of participants selected they would be willing to bike more than 30 minutes to their destination, 15% selected 21-30 minutes and 12% of respondents selected 11-15 minutes.

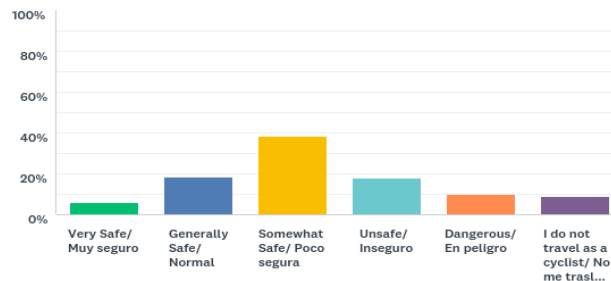
Q10 How long are you willing to bike to your destination? Check the bubble that applies. Qué tan seguido usa su bicicleta para hacer ejercicio o por diversión? Marque la casilla que aplica.



Our participants were asked to rate their perceived level of safety when traveling on a bicycle. The following answers are listed below and ranked:

1. 38% of respondents selected “Somewhat safe”
2. 18% of respondents selected “Generally safe”
3. 17% of respondents selected “Unsafe”
4. 9% of respondents selected “Dangerous”

Q11 What is your perceived level of safety when biking or traveling as a cyclist? Check the bubble that applies. Cual es el nivel de seguridad que siente cuando usa su bicicleta? Marque la casilla que aplica.



The following are comments from respondents regarding their perspective on safety:

*“Security is concerning, but you learn to prevent accidents”*

*“Texting and driving. Motorists assume bike don't belong on street”*

*“Lack of sidewalks and unsafe drivers”*

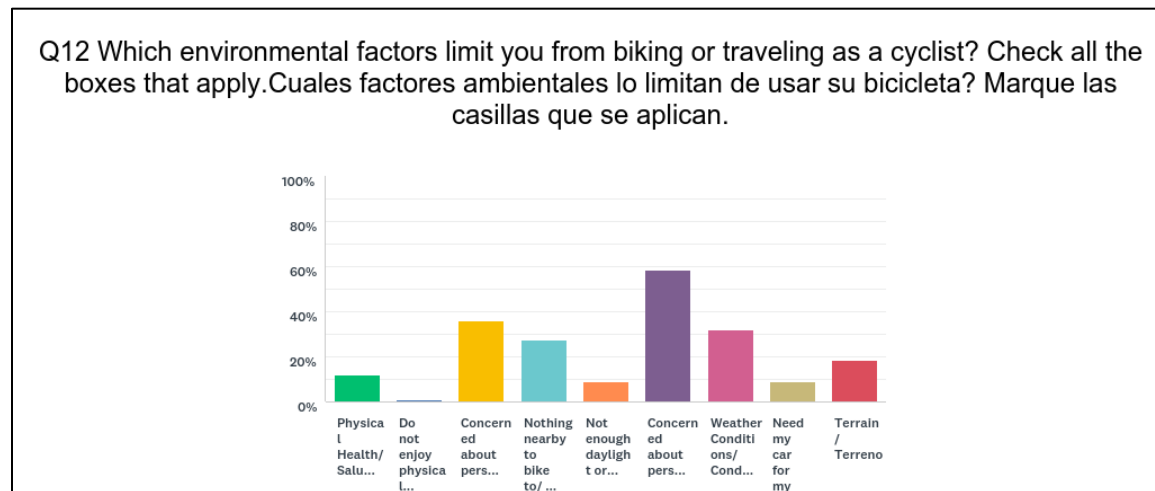
*“Most valley cities don't have protected bike lanes. We have bike lanes, but everyone uses them as parking, an extended turning lane, and they are extremely dirty”*

*“Traffic can be misinformed”*

Participants were asked to select which environmental factors limit them from biking or traveling as a cyclist.

The following are the top three environmentally related factors:

1. Concerned about personal safety (injuries, crashes, etc.)
2. Concerned about personal security (personal assault, crime etc.)
3. Weather Conditions.



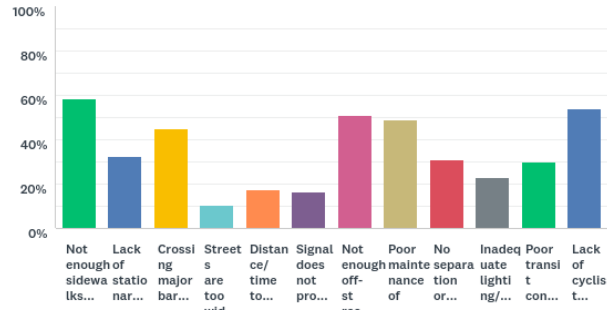
Participants were also asked to select which transportation related factors limit people from biking or traveling as a cyclist.

The following are the top three transportation related factors:

1. Not enough sidewalks
2. Lack of stationary equipment for bikes (bike rails, bike rack, bike stands)

3. Crossing major barriers (freeways, rivers, etc.)

Q13 Which transportation-related factors limit you from biking or traveling as a cyclist more often? Check the boxes that apply. Cuales factores relacionados a la transportación lo limitan para usar su bicicleta más seguido? Marque las casillas que se aplican.

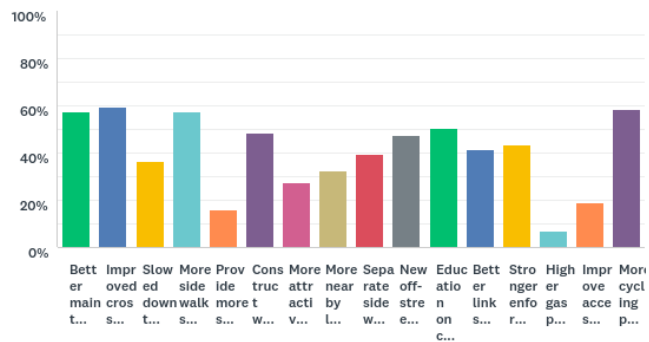


Lastly, participants were asked which overall factors would encourage them to bike or travel more as a cyclist.

The following are the top 5 answers ranked by respondents:

1. Better Maintenance of the sidewalk system
2. Improved crossing of busy streets
3. Slowed down traffic
4. More sidewalks along busy streets
5. Provide more showers and lockers at work

Q14 Which factors would encourage you to bike or travel as a cyclist more often? Check all the boxes that apply. Cuales factores lo animarian a usar su bicicleta más seguido? Marque las casillas que se aplican.



Open House Comments

The following are comments from a public open house held as part of the public outreach effort in the Harlingen-San Benito area:

**Question 1** on public comment card: Where do you currently bike or walk? For what purpose (commuting, fitness, recreation)? Which destination(s) in your community would you bike or walk to if suitable pedestrian or bicycle facilities were available?

**Answers:**

- Transportation and Recreation
- Rio Hondo - Harlingen commute/fitness, Harlingen CC, Harlingen to Kingsville
- Fitness & recreation, Around Harlingen Country Club, From Palm Valley to Raymondville, From Palm Valley to Los Indios. I'd walk/bike to many places, stores, restaurants etc, if road & paths were suitable.
- McKelvy Park - Harlingen TX - Recreation, South Padre Island TX - Recreation, From Combes TX to the TSTC & Airport to McKelvy Park
- Bike on street & use parts of bike lanes - fitness /rec.
- Would bike to Walmart & movies & mall & stefanos restaurant on old 83 business. Bike: Fitness, 25th trail to Raymondville, 25th trail to Los Indios Stripes, 25th trail to Raymondville, 25th trail to outlet mall Mercedes, 25th trail to Downtown.
- For fitness, I cycle on Loop 499 to Harrison, then out past soccer complex to Paso Real and then south to Los Indios. I would cycle to downtown or stadium if there were bike path/lanes and intersections that were safe to get from Stuart Place through to downtown.
- Bike for fun & fitness. ride to Los Indios Bridge & back to palm valley. 50 miles parks, if they were safely linked together
- On Loop 499 because of bike lane and McKelvy Trail. For fitness. I would bike/run all over if the suitable facilities were available.
- 25th St. Trail, need wide sidewalks on Harrison & Tyler all the way through town.
- All over RGV (Cameron, Willacy, Hidalgo) & All facilities
- Exercise on Arroyo trail and 25th trail because they are both close to my house in Parkwood.

**Question 2** on public comment card: What type of physical barriers (i.e. intersections, drainage ditches, lack of trails/bike lanes, etc.) keep you from walking or biking to the destination(s) you listed above? Where are these barriers located?

**Answers:**

- Lack of protected bikeways is the biggest barrier
- Worst intersection in Ed Carey/Harrison - Dangerous, recommend bike activated stop of all directions for free crossing
- All of the above. They are located just about everywhere! the roads have been repaved with chip/seal, which is awful.

- There is no bike lane on the I69E Frontage roads that connect Combes to Harlingen TX to the rest of Cameron County. There is no bike lane on FM 107, that goes through Combes TX
- Downtown Harlingen
- No bike racks movies, mall, Walmart, Target downtown, no shoulder to Stefanos. No sidewalks under expressway 83 to walk from Harrison Tyler to mall. Chip & seal.
- Dangerous intersections & no shoulders
- Intersections not pedestrian friendly, lack of trails/bike lanes. Barriers are located most everywhere in Harlingen.
- Bike lanes divided from auto lanes, panic button, lighting
- Sidewalk do not go all the way
- Need more dedicated bike lanes. Roads need to be maintained & cleaned, no more chip & seal!

**Question 3** on public comment card: What type of bicycle and pedestrian facilities would you like **to see constructed in your community?**

**Answers:**

- Protected bike lanes on the street
- Trail along Arroyo from Mercedes to Dolph Thome Park, Trail on old RR from San Benito to Rio Hondo
- Veloroute, 3-mile loop for bikes & rollerbladers only
- Bike lanes on FM 107 through to I69E to the North & South sides of I69E. Safe routes to school on FM 107, Yellow road lights to indicate school crossings.
- Protected lanes connect to parks - shopping mountain bike trails for recreation.
- Bike racks, no more chip & seal separate bike lanes, more sidewalks. sidewalks separated w/ a barrier from street and traffic.
- More bike lanes through town on main corridors
- Smooth, trails to link all parks, schools & downtown. Safely separated from motorists.
- Move bike lanes, more runner friendly trails, more water stations.
- Full circle of city w/ side trail to downtown & housing, parts. Bike share downtown & other w/ access to trails.
- Wide multi-use; bike lanes
- A network of connected trails around or across the city.

**Question 4** on public comment card: What type of bicycle and pedestrian facilities would you be less likely to use if constructed in your community?

**Answers:**

- Standard bike lanes on arterials

- Not sure - well - not narrow paths
- Walking trails on the drainage - Canal Banks
- Build it, I'll use it! If separate from traffic, even chip seal & dirt
- Water stations, shade structures, restroom facilities
- Ones with potholes? honestly, I would use all of them that were athlete friendly and safe.
- All

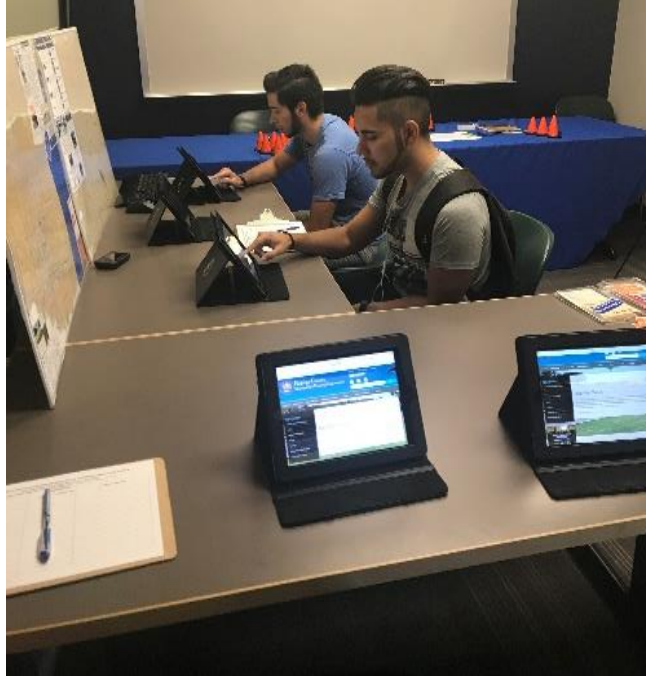
**Question 5** on public comment card: Any other Comments?

**Answers:**

- Eliminate chip & seal on shoulders, coordinate with recreation canoe/kayak on arroyo.
- Good plan! Great job! We appreciate all the efforts. Marco Sanchez, Mayor - Town of Combes, TX.
- Walls like to have city connected by safe routes that are lit after dark & before dawn
- Please no more chip & seal on our roads!
- More bike lanes in downtown, please look to communities like Brownsville for good examples. Connect all communities in RGV.
- Corner of Harrison and Ed Carey on demand diagonal cross light to connect the walk/bike paths

### Public Bicycle Plan Workshop

A Bicycle Plan Public workshop was previously held and utilized throughout the planning process. Workshops create a forum for public input and education, ultimately generating useful data incorporated into the Bicycle Plan. The purpose of the workshop helps prioritize transportation project funding, distinguish areas in need of improvement, and allows participants to discuss preferences related to bicycle activity. These meetings provide an informal opportunity for community members to discuss issues and aspirations with RGVMPO staff. Comments and concerns were discussed, documented, and incorporated into the Bicycle plan.



### Activity 1: Prioritization Goals & Visions

The first activity consisted of public opinion, with regard to vision and goal setting toward a Bicycle Plan. By placing a colored sticker over their top four choices from a list, the top three goals of the plan were selected. Overall results are as followed:

- Safety-All cyclist will be able to travel safely and with a sense of security, regardless of which mode of travel they choose to use. Improve cyclist safety through well-designed facilities along and across roadways, and by promoting safe driving, walking and bicycling behaviors
- Accessibility- Bicycle facilities that are complete, free of obstacles, and have a high capacity for cyclist
- Health- Describes the community's access to facilities that promote health or the ability to use pedestrian facilities to exercise properly (Safe/complete sidewalks or trails)

### Activity 2: Intersections and street improvements

In our second activity, participants of the workshop were asked to identify locations within the Hidalgo County Urbanized area needing improvement, as it pertained to their cyclist needs. (see Appendix C)



### Activity 3: Current Cycling Use/ Ideal Cycling

Much like activity 2, participants were asked to draw/write on maps with markers: (1) indicating where they normally cycle or (2) where within the Hidalgo County Urbanized area did they feel was an ideal location to set up future cycling facilities.



### Activity 4: Educate on the Bike Friendly Business Initiative

Our final activity consisted of a short educational presentation by MPO Staff, raising awareness & support for the MPO’s Bike Friendly Business initiative. Participants were enlightened on where to find these businesses, as well as what each of these businesses offered to the cyclist community. Participants were encouraged to look for a decal displayed on the front door of each business. This helps identify members of the Bike Friendly Business Initiative and excites inquiry relating to perks of cycling through areas of commerce.



BFB decal displayed at the door of *Tortilleria Progreso* located at 1901 West Business 83, Weslaco, Texas

### Public Meeting/Forum

On March 14th, 2018 a public meeting was held at the Dustin Michael Sekula Memorial Library with the intent to collect comments, corrections and suggestions for the 2018 Bicycle Map. The meeting took place in a centralized location, to promote input from various cycling enthusiasts of the Hidalgo County area. This meeting had the essence of a town-hall meeting, which stimulated rich dialogue between MPO staff and attendees. More than 20 people were in attendance. Copies of a draft version for the 2018 Bicycle Plan were distributed and attendees were asked to review and make notations. Attendees were asked to return copies with comments included. Some attendees departed with drafts to review them at their own leisure. All attendees were informed of retrieving a digital copy of the draft via the MPO's website.



In addition to distributing the 2018 Bicycle Plan draft, MPO staff encouraged attendees to recognize areas of concern when riding. Dialogue between MPO staff and attendees flowed organically, capturing newly expressed concerns. The main concern addressed involved the increasing number of fatalities. The dialogue was heavily focused on solutions toward diminishing the fatality count. MPO staff also informed attendees of different outlets available for voicing their concerns and collaborating efforts.

*Mind Mixer* is an online forum providing an opportunity for public input regarding the planning process. This online interactive feature was previously utilized in the Brownsville area. Public opinion expressed the need for water fountains, signage, mapping of trails, shaded rest areas and racks for bicycles. Direct pathways to specific destinations such as Boca Chica Beach, the Sports Park, downtown area, amenities in the southmost region of the city, and the University of Texas Brownsville were of great interest to the public, as well. One highlighted point was recognized, regarding the use of existing bicycle lanes as turning lanes for drivers of motor vehicles. Cyclists would prefer a separate, distinguished and safer bike lane incorporated into the system.

## Cyclists

It is necessary for government officials and planners to consider the issues and concerns that bicyclists experience. Cycling enthusiasts possess a clear understanding of the ideal environment that integrates bicycles into the transportation network. By including the cycling community in the

planning process, the MPO can gather vital information that will help effectively manage a multi-modal transportation system

## Types of Cyclists

The Federal Highway Administration uses an ABC scale to classify types of cyclists.

Advanced or experienced riders generally use their bicycles as they would a motor vehicle and are typically comfortable riding with motor vehicles. They ride for speed and prefer direct routes to their destination.

Basic or casual adult riders prefer to avoid roads with fast and busy motor vehicle traffic unless there is ample roadway width. Basic riders are comfortable on neighborhood streets and bicycle paths and prefer designated facilities or wide shoulders on busier streets.

Children, alone or with parents, do not travel as fast as adults, but still require access to key destinations like schools and parks. Residential streets linked with bicycle paths are essential to accommodate children without encouraging them to ride on major roadways.

## Cycling groups from the Rio Grande Valley

Many cycling groups of varying skill levels exist in Hidalgo County and across the region. Established weekly rides are planned and these groups assist in the organization of promotional events throughout the year. These organized cycling groups encourage the use of helmets on their rides and educate cyclists to follow all the rules of the road.

Bike Edinburg - promotes cycling as transportation for everyday activities as well as recreation and exercise. They provide a voice for cyclists in Edinburg.

Ciclistas Urbanos - advocates for livable communities and the development of a bicycle network that provides alternative transportation options. This cycling group emphasizes family rides with varying route lengths and speeds.

McAllen Police Cycling Team - promotes the growth of the sport of amateur cycling. The team participates and organizes cycling events benefiting the community and promotes cycling for riders of all levels.

Harlingen Social Bike Ride - advocates for livable communities and the development of a bicycle network that provides alternative transportation options. This cycling group emphasizes family rides with varying route lengths and speeds.

5AM Wake Up Ride – provides cyclists the opportunity to complete an early-morning ride on weekdays and endurance training on the weekends. Special emphasis is placed on group riding.

Team McAllen Cycling – This group was founded in 1982 and their mission is to better their community through the sport of cycling. The purpose of this organization is to provide opportunities, promotion and education of recreational and competitive cycling.

RGV Cycling Team - Founded in 2013, this group encourages good health, wellness, friendship skill and personal accomplishment.

Bike Master's Ride - This group was formed in late 2007 by enthusiasts from Reynosa and the McAllen area who decided to become a public group to introduce cycling to the community. Their purpose is to educate cyclists on the rules of the road. This group has rides Monday through Friday and Saturday.

Bicycle World RGV - This group rides on Cycling group t r 22 to 35 miles evening 6.30 //Saturday ride starts at 6 am from 60-100 miles

Team Hidalgo Cycling - Their purpose is to unify, motivate and educate families from Hidalgo and neighboring communities about the importance of promoting cycling to maintain good health. Their rides range from 5 up to 50 miles.

Mission Police Department – This special unit assists in patrolling local businesses, assists in community events and patrols the hike and bike trail. Thanks to a grant obtained in 2017, this unit has been more active.

Team Turbo – This team consists of a multisport racing team established in the Rio Grande Valley. Their mission is to promote and support the sports of swimming and cycling.

## RGVMPO Bicycle Pedestrian Advisory Committee (BPAC)

The Hidalgo County MPO Bicycle Pedestrian Advisory Committee (BPAC), formerly known as the Bicycle /Pedestrian Task Force, was initially formed due to the continued cooperation fostered during the planning phases of the annual Walk-N-Rolla event. Eventually, the BPAC became an advisory committee to the Technical Advisory Committee (TAC). The BPAC serves as the public link to assist MPO staff in developing, revising, and amending multi-modal plans. Concerned citizens, avid cyclists and cycling groups regularly attend the monthly meetings. The involvement of such a large and diverse group has been extremely beneficial as they provide information and data to staff that may not be readily available through other means. Engaging cyclists for partnership provides a unique insight into the demands or needs of the cycling community.

### Bike Friendly Business Initiative

The Bicycle Pedestrian Advisory Committee and HCMPO staff are currently working in coordination with local business in the designation of Bike Friendly Businesses. Businesses along populated bike routes can become a Bicycle Friendly Business by providing local cyclist amenities such as restrooms, water, bicycle maintenance tools and bike racks.

Through coordination between BPAC and the Texas A&M University Health Science Center, businesses who apply and are designated as a Bike Friendly Business are eligible to receive a

bicycle rack, free of cost as an incentive for joining the (BFB). This initiative is a great approach in promoting cycling and exercise throughout the Valley. The Bicycle racks are funded by the Centers for Disease Control and Prevention (CDC).

Bike Friendly Businesses will also receive a window sticker that indicates their support to the cyclist community. The sticker provided is also used to identify members of the Bike Friendly Business Initiative. The HCMPO Staff created the First Edition of the Hidalgo County Bike Map (APPENDIX A) which identifies the first 48 businesses who signed up to the Bike Friendly Business Initiative, in addition to bike trails, speed limits, and bike lanes. Thanks to the continued support from TxDOT, the first 2,500 samples were printed in December of 2017.

### Partnership with Texas A&M University

Evelia Castillo joined the Bicycle and Pedestrian Committee in 2016 to serve as university representative. Evelia is the program manager for Working on Wellness. Thanks to a grant obtained by a said program, the MPO in partnership with Texas A&M Health Science Center School of Public Health, was able to offer bicycle racks to businesses interested in joining the Bike Friendly Business initiative. Recruitment efforts for this initiative began in June 2017. Evelia Castillo and MPO staff visited several businesses located in proximity to existing bike lanes and high traffic areas for cyclists. The support from local businesses was overwhelming, with a total of 48 establishments signed up before the proposed deadline. A list of Bicycle Friendly Businesses can be found in APPENDIX A. Business patrons are promoting a healthier lifestyle by placing bike racks in front of their businesses and offering incentives to circulating cyclists.



### Bicycling Destinations in the Rio Grande Valley

Bicycling destinations for children and basic riders include nearby commercial areas, parks, schools, libraries, recreation centers, and residential areas. In some cases, the bicyclist will travel to his/her place of work, shopping destinations, or social events. Some bicyclists ride for leisure with no particular destination in mind. The average cyclist travels three to five miles during a 20 to 30-

minute period. Bicyclists riding for exercise or long-distance training may cover over 20 miles in one outing.

## Existing Bikeway/Cycling Routes

The Hidalgo County Metropolitan area is home to several bikeways/cycling routes that are popular amongst most cycling groups. The Bikeways included in this list are comprised of several rideable routes and bikeways suitable for experienced & non-experienced riders. In addition to these major destinations, RGVMPPO staff encourages the public to visit the numerous Bike Friendly Businesses located in our expansive region.

### McAllen Area

The city McAllen has a wide variety of bicycle lanes/paths/routes and have a broad Bikeway network within their city. Some of these routes include:

- La Vista Park Trail & Fitness System
- Las Palmas Park Trail
- Los Encinos Park Trail & Fitness System
- McAllen Hike & Bike Trails
  - Second Street/Bicentennial (two separate trails)
- Retama Village Park Trail
- Schupp Park Trail & Fitness System
- Westside Park Trail

As previously indicated on the Achievements section of this plan, the City of McAllen offers a total of eight B-Cycle Stations. Therefore, you can enjoy a nice meal at any restaurant from Palms Crossing Shopping Center then check out a bicycle and ride around McAllen's Oval Park and Performing Arts Center.

### Edinburg Area

The city of Edinburg has previously formulated a Bicycle and Pedestrian Master Plan and all current bicycle routes/lanes/paths can be found within its contents. Edinburg has also collaborated with UTRGV to build and facilitate a broad bikeway network suitable for all users.

The Jackson Hike and Bike Trail was finished in 2017 and connects Edinburg to Pharr and McAllen. This facility is the largest of the various trails in Edinburg, connecting the University of Texas-Rio Grande Valley, Hidalgo County Courthouse, Dustin Michael Sekula Library, and downtown Edinburg.

### Mission Area

The Mission Hike and Bike Trail travels from S. Conway (FM 1016) to the World Birding Center. The trail is 5 miles long, and includes parking, a group pavilion, and both dirt & asphalt covered trails. The dirt trails consist of narrow paths with dense woodland, necessitating riders to equip themselves with proper safety gear, in order to avoid accidents & injuries. Reviews posted online define these trails as safe havens for cycling, eliminating the worries of motor vehicle exposure.



Mission Hike and Bike Trail

Another great location to visit in Mission is the Bentsen-Rio Grande Valley State Park. This park is part of the World Birding Center, which classifies it as a world-class destination for bird-watching. We are proud to have the Bentsen-Rio Grande Valley State Park as a member of our Bike Friendly Business Initiative. In addition to welcoming cyclists, this Park also offers rental bicycles and trikes for children with prices ranging from \$5.00 to \$12.00 per day.



Bicycle rack acquired through BFB Initiative at Bentsen-Rio Grande Valley State Park

For cyclists who notice their tires running low on air or experiencing other minor issues, a great bicycle repair station and air pump are available at the Mission Economic Development Corporation, located at 801 North Bryan Road in Mission. At this location, cyclists can comfortably park their bicycles at any of the four bicycle racks available. Additionally, from this destination cyclists can visit 4 Bike Friendly Businesses within a few paces apart. Some of the amenities offered by Teach for America, Mission Economic Development Corporation, Jitterz Coffee Bar and Valley Technical Academy are free use of their restroom facilities, drinking water, first aid and continued support for local cycling teams and events.



Bicycle Racks and repair station located at Mission Economic Development Corporation, 801 N. Bryan Rd, Mission, TX.

## Pharr Area

The City of Pharr is in the process of developing its bicycle facilities that connect with trails from other cities. Some bicycle facilities already exist in the city, but two major bicycle and pedestrian projects aim to address gaps in the system. The Pharr Pedestrian Improvement Projects and the PSJA Tri-City Project aim to connect Pharr to the McAllen and Edinburg bicycle trails while improving safety conditions for multimodal travelers.

## Harlingen-San Benito

The following material was retracted from a recently created bicycle and pedestrian plan for the Harlingen-San Benito area:

Bicycle and shared-use facility types that can be found in the Harlingen-San Benito area include traditional bike lanes, side paths, and shared-use paths. In addition, the City of Rio Hondo recently designed to a two-way cycle track from a lane of on-street parking. This created a potential shared-use loop for transport throughout the city. Sidewalks can be found all through Harlingen, San Benito, Palm Valley, and La Feria, with additional trails and paths within neighboring communities. Sidewalks exist within commercial/downtown areas and intermittently in residential neighborhoods. Additional sidewalks have been constructed to accommodate new development, over recent years.

**1 Arroyo Park Trail**

An 8' asphalt trail, this trail is located in Arroyo Park. This trail connects residential neighborhoods on the south side of the Arroyo Colorado to the Arroyo Trail.



**2 Arroyo Trail**

The Arroyo Trail is a 2.2-mile long trail running east-west along the Arroyo Colorado. The trail is accessible to several residential areas, and provides connectivity to a number of other cultural and recreational opportunities. The Arroyo Trail provides access across the Arroyo Colorado as well as 77 Sunshine Strip, overcoming these barriers and providing the beginnings of excellent pedestrian and bicycle mobility across the city.



**3 CB Wood Park Trail**

CB Wood Park has a 0.1-mile asphalt trail that connects to the Arroyo Trail. While a short distance, the trail connects to the Arroyo Trail on the south end of the park.



**6 Harlingen Sports Complex Trail**

Like the Soccer Complex, the Sports Complex has a 1.0-mile crushed rock trail that loops around the park. Nearby residential neighborhoods provide access to the park, but there is a significant amount of vacant land around the park. Design of future developments should strive to connect to the Sports Complex and trail.



**7 Hugh Ramsey Nature Trail**

The nature trails in Hugh Ramsey Nature Park allow visitors to hike in the 54-acre wooded nature area. Trails lead to overlooks of the Arroyo Colorado and serve as a recreational and cultural amenity in Harlingen. There are approximately 1.5 miles of nature trails in this nature park. Because of the park's proximity to the Arroyo Colorado, there is potential to connect to the Arroyo Trail when it is expanded to the east.



**8 Liberty Gardens Trail**

Liberty Gardens is a meditation garden in central Harlingen with 0.25 miles of asphalt trails. The park and trails are a cultural amenity for Harlingen.



**4 City Lake Park Trail**

City Lake Park Trail is a 0.7-mile asphalt trail within City Lake Park, circling City Lake. The park and trail are located in a residential neighborhood and about 2 blocks north of the Historic Downtown District, providing a recreational opportunity to nearby residents and visitors to downtown. It is also surrounded by other cultural amenities including the Cultural Arts Center and Harlingen Library.



**5 Harlingen Soccer Complex Trail**

The Harlingen Soccer Complex has a 1.5-mile trail that loops throughout the park. The soccer complex is located in an undeveloped area of the City, therefore, users of this trail are probably limited to users of the Soccer Complex. However, as the area develops, it is expected that the trail will be used by future residents. Design of future developments around this park should strive to connect to the Soccer Complex and trail.



**9 Rangerville Park Trail**

Rangerville Park has a 0.9-mile asphalt loop. It is accessible to the surrounding residential areas and is adjacent to Milam Elementary School.



**10 Thicket Nature Trail**

The Harlingen Thicket has approximately 0.75 miles of nature and crushed rock trails through the 40-acre natural area. The park and trail is accessible to the residential areas on the north side of the Arroyo Colorado as well as by users of the Arroyo Trail that connects to this area on the south side of the nature area.



## Existing Bicycle and Pedestrian Facilities

There is a limited inventory of existing bicycle and share-use facilities in the HSBMPO study area. The existing facilities are identified in **Figure 2.6, Bicycle Lanes and Shared-use Paths**. The figure indicates that HSBMPO study area communities have constructed a cumulative total of just over 10 miles of designated bicycle and/or shared use facilities. (The figure does not include recreational trails providing circuitous routes within a singular destination or property. These facilities are developed with the intent of a purely recreational facility and while they contribute to the improvement of community health, they are not integrated into the existing transportation network.) The City of Harlingen has made the most significant work towards bicycle infrastructure, with most of this being done in the past few years. The City's effort provides a relatively contiguous route of bicycle improvements along the north and east extents of the City.

FIGURE 2.6, BICYCLE LANES AND SHARED-USE PATHS

Facility Location <sup>1</sup>	Facility Type	Direction	Length (Miles)	Jurisdiction
<b>25th Street</b>	Side Path	both	2.9	Harlingen
<b>Loop 499 West</b>	Bike Lane	both	3.1	Harlingen
<b>Treasures Hills Blvd</b>	Bike Lane (east)	east	0.1	Harlingen
<b>Arroyo Hike &amp; Bike Trail</b>	Shared-use Path	both	2.0	Harlingen
<b>N. Reynolds Street</b>	Cycle Track*	both	0.4	Rio Hondo
<b>S. Sam Houston South</b>	Bike Lane	both	0.4	San Benito
<b>Heavin Resaca Trail</b>	Shared-use Path	both	1.3	San Benito

<sup>1</sup>. Excludes recreational trails within parks or other similar facilities and not intended to link two (2) or more destinations.

\*Currently lacks a physical separation/buffer from motor vehicle travel lanes.

### Brownsville Area

This 9-mile Historic Battlefield Trail runs through the middle of Brownsville, allowing users to travel from Linear Park to Palo Alto Battlefield National Historical Park. The trail connects pedestrians and cyclists to several significant historical and cultural resources. Amenities along the trail include rest areas, water fountains, informational kiosks, and a public repair station at Linear Park. The Historic Battlefield Trail was designated as a National Recreation Trail in 2013.



The one-mile long Belden Trail was converted from an old rail corridor in 2013. The Belden Trail connects users to Riverside Park, Skinner Elementary School, Sam's Stadium, Prax Orive Jr. /Sunrise Park, and commercial areas such as the Palm Village Shopping Center. Amenities along the trail include benches, trash receptacles, pergolas, bike racks, and a public repair station near the Prax Orive Jr. /Sunrise Park. A Belden Trail Extension is also in the works to connect the existing trail to the bike lane on E. 6<sup>th</sup> St.



The Paseo de la Resaca trail system consists of 7 miles of paved hike and bike trails comprised of several sections: Central Parkway, Texas Trail of Trees Park, North Park & Tennis Center, and the Brownsville Events Center. In 2006, the trails were connected to the 9-mile Historic Battlefield Trail. Destinations include Margaret M. Clark Aquatic Center, Paredes Elementary School, Hudson Elementary School, IDEA Brownsville, and various commercial areas along E. Ruben M. Torres Sr. Blvd.



Monte Bella Park Trail is located at 2555 W. Alton Gloor Blvd. and extends over 6 miles. This is a single-track dirt trail with several small climbs, twists, and tight turns. This trail does not connect to other destinations but is surrounded by wildlife and exposes riders to the natural environment.



## Bicycle Facility Types

With or without delineation through signage and striping, a bicycle is legally recognized as a vehicle in the State of Texas. Bicyclists share the same rights and responsibilities of motorists on all roadways except those specifically delineated such as limited access highways. While they are permitted on most roadways, bicyclists will favor those roads that are more attractive to their riding type (Advanced, Basic, Children).

### Bike Lanes/ Shoulder Striping

Striping a roadway is the most cost-effective way to create a bike lane within existing roadway pavement. New or refurbished roads can easily be striped to include a bike lane or shoulder. For safety reasons, bike lanes should not be considered for roadways with speed limits greater than 50 mph. Additionally, greater shoulder width is recommended if heavy trucks, buses or large recreational vehicles make use of the roadway. When pavement width is limited, it is recommended to provide paved shoulders on both sides of a two-way road. Many shoulders are already utilized by bicyclists and can be transformed by adding proper signage and additional

stripping. The addition of bicycle markings and signage heightens motorists' awareness and identifies alternate use of the shoulder area.

Bike lanes should be considered and incorporated where gaps create an increased demand. Bike lanes promote predictable movements by bicyclists establish designated areas right-of-way. Based on the American Association of State Highway and Transportation Official's (AASHTO) standards of the cyclist's profile, a minimum of four feet is required for an exclusive bicycle lane. When motor vehicle traffic increases and speeds are lifted, a more comfortable operating space may equal up to five feet. These minimums also depend on the type of cyclist that is being accommodated on the roadway.

Benefits:

- Provides separation between cyclist and pedestrians
- Increases the perception of safety for bicyclist
- Low cost treatment for establishing a bicycle facility.



The estimated cost for a bicycle lane generally totals around \$55,000 per mile, including signage and marking on any existing street surface. To create or add a new roadway for use as a bicycle lane, the cost for marking, signage, and new paving may add up to \$635,000 per mile.



## Shared Lanes/ Bike Routes

Bicycles and motor vehicles may share all roadways except when prohibited by statute or regulation. There are no bicycle-specific designs or dimensions for shared lanes, but all modes of transportation share the same need for good pavement quality, appropriate signal timing and safe rail road crossings. Any roadway with a minimum of 30 feet of pavement, low speeds and relatively low traffic volume can be signed as a shared roadway or bike route. Ultimately, the creation of these pathways increases connectivity and expands the capacity of bicycle networks.

A bike route is a roadway that is signed for shared use between motorists and bicyclists without a specific lane for each. In order for vehicles to safely pass bicyclists, without switching lanes, a lane width of 14 to 15 feet should be provided. On roadways with slower speeds, a bike route may be considered. Cross sections of shared lanes and bike routes are based on the AASHTO Guide for Development of Bicycle Facilities.

### Benefits:

- Relatively low cost to implement
- Provides cyclist guidance and contributes to way finding within the street cross section.
- Motorist are made aware of the presence of bicycles within the travel lane.

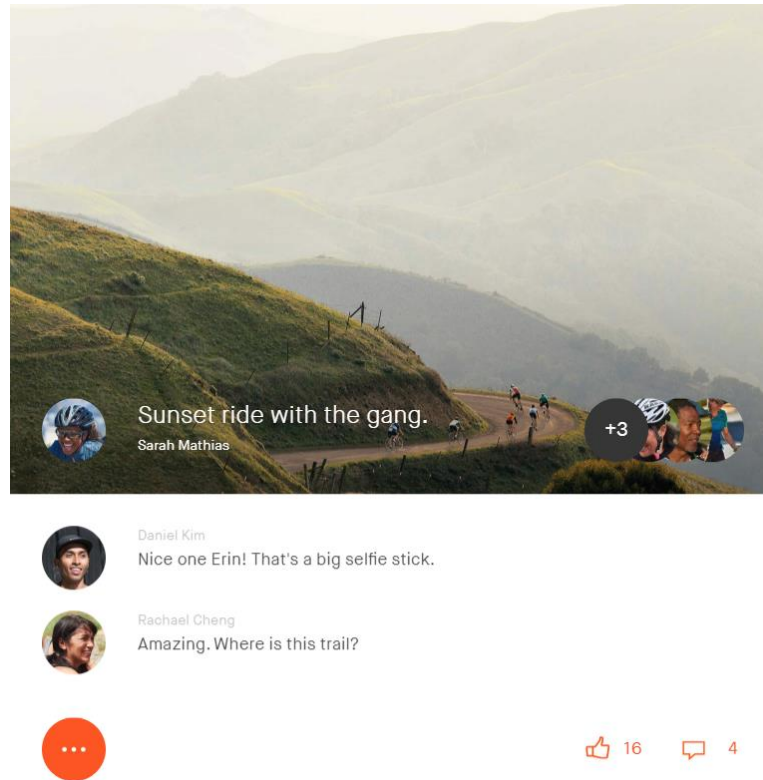
The cost for a Shared Bike Lane generally cost \$55,000 per mile for markings and signage on an existing street surface.



CicloBia in Brownsville, TX

## STRAVA

Strava is a website and mobile app used to track running and cycling via satellite navigation. The information from each user is uploaded and can be shared with others within the Strava network. Friends and followers can comment, “like,” share routes, and present challenges. This app is compatible with iPhone, Android, GPS watches and head units. Before proceeding with their route, cyclists activate their app in preparation for keeping track of their performance. All data obtained is simultaneously stored by Strava.



### TxDOT Partnership

In September 2017, TxDOT acquired two to four years of crowd-sourced bicyclist and pedestrian data from Strava, Inc. Strava compiles geolocated data from bicyclists and pedestrians using the mobile application. Strava anonymizes the data and sells it to planning agencies with intent to enhance infrastructure planning. The data from Strava will help TxDOT and local entities analyze existing and proposed bicycle-pedestrian networks across Texas. Because Strava users represent a subset of the bicycling/walking population, the data only provides relative usage of the non-motorized network. Before this acquisition, entities within Texas obtained limited data regarding non-motorized usage.

Through TxDOT's contract, the data acquired from Strava is sub-licensed to MPOs, cities and other planners, benefitting communities statewide. The data retrieved by the MPO consists of activity counts for cyclists and pedestrians, as well as the location of their activities. These activities can be filtered in different ways including time of day, activity purpose, by month, day, or minute. This data helps the MPO comprehend where people are walking and riding, while allowing comparison between facilities. This serves as a planning tool, supporting data for future multi-modal projects throughout the region. Strava data provides input to members of our Bicycle-friendly Business program, presenting useful figures in preparation for future occasions.

## TXDOT Query Tool

The MPO uses CRIS (Crash Record Information Systems) Data to analyze where crashes occur in the region. This data is mainly derived from police reports and can be categorized in a variety of ways. With this data, we can extract pedestrian and cyclist accidents, analyze various crash "hotspots," and identify the factors causing these crashes. Annual reports generated from CRIS help us monitor crash trends in our region. This information is utilized when planning & designing safe multimodal facilities for the future. CRIS data is also available for public use.



### Shared Use Paths/ Trails

Shared use paths are separate, improved facilities designed to avoid conflict with motor vehicle traffic. These paths, also called Hike and Bike Trails, are meant to accommodate both bicyclists and pedestrians. The separation of these paths from roadways prevents conflict with two-way motor vehicle traffic. The recommended minimum separation roadway and shared use path is 5 feet. The width of the path itself is generally a minimum of 10 feet, depending on the intensity and

mixture of use. As with striping of bike lanes, the crossing of roadways, railroad tracks and other natural features should be given special consideration when designing shared use paths.

Benefits:

- Attractive for both recreational riders and cyclist commuters
- Created for a wide variety of users.
- Highest level of comfort and safety for bicyclist and pedestrians

The Cost for a Shared Use Path/Trail ranges from \$575,000 per mile for decomposed granite surface to \$750,000 per mile for an asphalt surface.

### Separated Bike Lanes

A separated bike lane is an exclusive facility for bicyclists, located within or directly adjacent to a roadway. The lane is physically separated from motor vehicle traffic with a vertical element. Separated bike lanes are differentiated from standard and buffered bike lanes by the vertical element. They are differentiated from shared use paths / trails by their more proximate relationship to the adjacent roadway and the fact that they are bike-only facilities.

Separated bike lanes are also sometimes called “cycle tracks” or “protected bike lanes” and can operate as one-way or two-way facilities. Shared use paths are separate, improved facilities that have minimal conflicts with motor vehicle traffic. Separated bike lanes potentially improve traffic safety for all transportation modes by relieving congestion and assigning bicycle users their own protected lane.

Benefits:

- “Separated bike lanes have reduced cycle crashes by 90%” (American Journal of Public Health, 2012).
- Public input expresses cyclists are more likely to ride on separated bike lanes, rather than sidewalks



## Design Guidance

The Bicycle Plan heavily focuses on community input with addition of data gathered by MPO staff and local governments. Facilities need development and improvement where hazards and obstacles currently exist, while distinguishing feasibility for both individual and joint projects. The purpose of the following chapter is to identify current design standards for pedestrian facilities and compare them with state and federal standards.

When designing and constructing bicycle facilities within the Rio Grande Valley region, cities are encouraged to first reference and utilize, at a minimum, the most recent version of the following design manuals (as applicable):

- AASHTO, Guide for the Development of Bicycle Facilities, Fourth Edition (2012)
- FHWA, Manual on Uniform Traffic Control Devices for Streets and Highways (2009)
- ITE, Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (2010)
- NACTO, Urban Bikeway Design Guide, Second Edition (2014)
- NACTO, Urban Street Design Guide (2013)
- TxDOT, Texas Manual on Uniform Traffic Control Devices (2011)

These design manuals compose a set of nationally recognized guidelines that exist as “best practices” on the design and construction of future bicycle facilities.

### Buffers, Streetscaping, & Lighting

In some cases, buffers are placed between the roadway and the sidewalk to ensure separation between vehicle and cyclist traffic. At times, developers use a few feet of landscaping or streetscaping as means of separating each mode of transportation. Most cities within the RGV MPO

study area do not require buffers between roadways and sidewalks, due to lack of available right-of-way (ROW).

However, for example, the cities of Edinburg and Weslaco do require at least 3 feet between sidewalk and roadway. The city of Donna requires sidewalk placements of at least 1 foot from the ROW line. While streetscaping is not common in the RGV, every city requires essential lighting for new developments. The required distances vary between 240-600 feet, depending on the type of street. These lighting requirements are generalized to subdivision regulations; however, some cities include sidewalks and lighting as part of street improvement projects. Solar-powered light fixtures are also implemented, serving as both safety measures and environmental-friendly initiatives.

### Complete Streets

According to the National Complete Streets Coalition (NCSC), Complete Streets are designed to accommodate all users, including bicyclists, pedestrians, transit riders, and motorists. Additionally, a Complete Street caters to the needs of all ages and abilities, establishing a safe and convenient transportation network.

A Complete Street, as defined by NCSC, “may include: sidewalks, bike lanes (or wide paved shoulders), special bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.” Every community and its environment are different; therefore, a Complete Street in one city may not be appropriate for another city. Furthermore, each city may encourage such development in various ways, such as through a Complete Streets Policy, Resolutions, Complete Streets Ordinances, or by changing their city’s design requirements.<sup>1</sup>

Several cities in the RGV have adopted Complete Streets policies to guide transportation facility development. These Complete Street policies are a step in the right direction, but more can be done to ensure proper project development and solid implementation of complete streets ideals. The RGVMPPO suggests revisiting the Complete Streets policy of each municipality to strengthen their policies when planning transportation development.

Smart Growth America developed a scoring system for Complete Street Policies to determine how well these policies commit to reaching their goals of multimodal transportation. The criteria used to score the Complete Streets Policy include the following:

- Vision and Intent
- Users and Modes
- Projects and Phases
- Clear, accountable exceptions

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<sup>1</sup> National Complete Streets Coalition (2010). *What are Complete Streets? | Smart Growth America*. Retrieved October 2013, from <http://www.smartgrowthamerica.org/complete-streets/complete-streetsfundamentals/complete-streets-faq>

- Network
- Jurisdiction
- Design
- Context Sensitivity
- Performance Measures
- Implementation Steps

These elements are integral to a Complete Streets policy that truly implements the intended goals laid out. Staff recommends reviewing the Complete Streets policy in every municipality, giving more credence to multimodal transportation and reinvigorating the goals of the policy. Workshops should be held to promote better standards in the complete streets initiative and ensuring sustainable transportation project development across the region.

The RGVMPPO can act as an administrative agency, facilitating the implementation of much needed policies and execution of multimodal projects throughout the area. Staff is responsible for organizing events and will utilize the criteria recommended by Smart Growth America, in effort to adjust existing policies.

### Safe Passing Ordinance

Through encouragement by the RGVMPPO, many cities have passed Safe Passing Ordinances to increase the safety of pedestrians and bicyclists. The ordinance protects “vulnerable road users” - pedestrians, runners, physically disabled persons, children, skaters, construction and maintenance workers, tow truck operators, stranded motorists, equestrians, and persons operating a bicycle, motorcycle, or unprotected farm equipment - by requiring a safe passing distance of 3 feet by motor vehicles (or 6 feet for commercial vehicles) when road conditions allow.

### Safety

Safety is the highest priority for the the RGVMPPO’s Bicycle Plan. . The following excerpts are in the Texas Code, and should be followed by all users of the Texas transportation system.

## Rules of the Road

### Sec. 545.107. Method of Giving Hand and Arm Signals

An operator who is permitted to give a hand and arm signal shall give the signal from the left side of the vehicle as follows:

- To make a left turn signal, extend hand and arm horizontally;

- To make a right turn signal, extend hand and arm upward, except that a bicycle operator may signal from the right side of the vehicle with the hand and arm extended horizontally; and
- To stop or decrease speed, extend hand and arm downward.

#### Sec. 551.101. Rights and Duties

- A person operating a bicycle has the rights and duties applicable to a driver operating a vehicle under this subtitle, unless:
- A provision of this chapter alters a right or duty; or
- A right or duty applicable to a driver operating a vehicle cannot by its nature apply to a person operating a bicycle
- A parent of a child or a guardian of a ward may not knowingly permit the child or ward to violate this subtitle.

#### Sec. 551.102. General Operation

- A person operating a bicycle shall ride only on or astride a permanent and regular seat attached to the bicycle.
- A person may not use a bicycle to carry more persons than the bicycle is designed or equipped to carry
- A person operating a bicycle may not use the bicycle to carry an object that prevents the person from operating the bicycle with at least one hand on the handlebars of the bicycle.

- A person operating a bicycle, coaster, sled, or toy vehicle or using roller skates may not attach either the person or the bicycle, coaster, sled, toy vehicle or roller skates to a streetcar or vehicle on a roadway.

### Sec. 551.103. Operation on Roadway

- Except as provided by Subsection (b), a person operating a bicycle on a roadway who is moving slower than the other traffic on the roadway shall ride as near as practicable to the right curb or edge of the roadway, unless:
  - The person is passing another vehicle moving in the same direction
  - The person is preparing to turn left at an intersection or onto a private road or driveway;
  - A condition on or of the roadway, including a fixed or moving object, parked or moving vehicle, pedestrian, animal, or surface hazard prevents the person from safely riding next to the right curb or edge of the roadway; or
  - The person is operating a bicycle in an outside lane that is: Less than 14 feet in width and does not have a designated bicycle lane adjacent to that lane; or Too narrow for a bicycle and a motor vehicle to safely travel side by side
- A person operating a bicycle on a one-way roadway with two or more marked traffic lanes may ride as near as practicable to the left curb or edge of the roadway.
- Persons operating bicycles on a roadway may ride two abreast. Persons riding two abreast on a laned roadway shall ride in a single lane. Persons riding two abreast may not impede the normal and reasonable flow of traffic on the roadway. Persons may not ride more than two abreast unless they are riding on a part of a roadway set aside for the exclusive operation of bicycles.
- Repeated by Acts 2001, 77th Leg., ch. 1085, §13, eff. Sept. 1, 2001. Acts 1995, 74th Leg., ch. 165, § 1, eff. Sept. 1, 1995. Amended by Acts 2001, 77th Leg., ch. 1085, §§10, 13, eff. Sept. 1, 2001.

#### Sec. 551.104. Safety Equipment

- A person may not operate a bicycle unless the bicycle is equipped with a brake capable of making a braked wheel skid on dry, level, clean pavement.
- A person may not operate a bicycle at nighttime unless the bicycle is equipped with:
- A lamp on the front of the bicycle that emits a white light visible from a distance of at least 500 feet in front of the bicycle; and
- On the rear of the bicycle:
- A red reflector that is: Of a type approved by the department; and
- Visible when directly in front of lawful upper beams of motor vehicle headlamps from all distances from 50 to 300 feet to the rear of the bicycle; or
- Lamp that emits a red light visible from a distance of 500 feet to the rear of the bicycle
- In addition to the reflector required by Subsection (b), a person operating a bicycle at nighttime may use a lamp on the rear of the bicycle that emits a red light visible from a distance of 500 feet to the rear of the bicycle.

#### Sec. 551.105. Competitive Racing

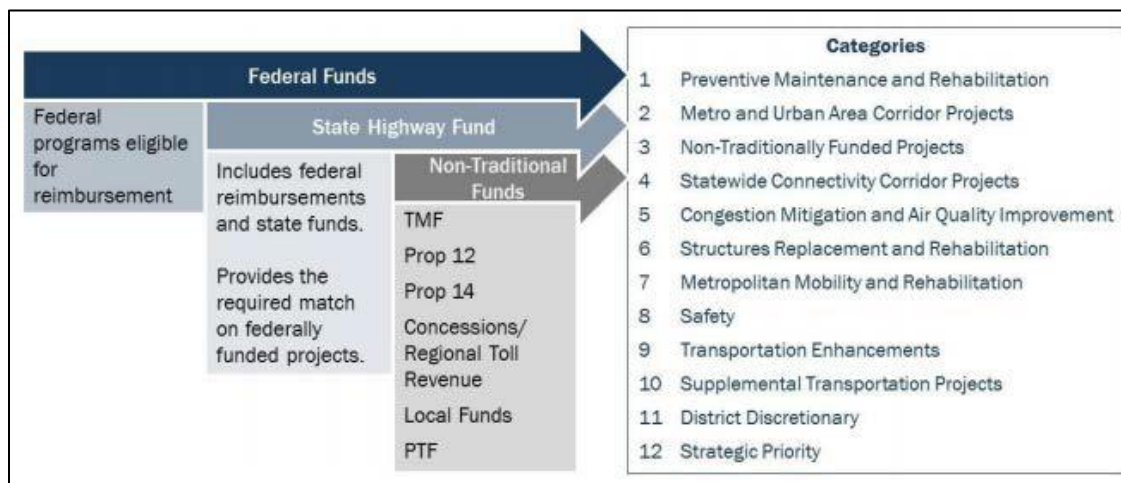
- In this section, “bicycle” means a non-motorized vehicle propelled by human power.
- A sponsoring organization may hold a competitive bicycle race on a public road only with the approval of the appropriate local law enforcement agencies.
- The local law enforcement agencies and the sponsoring organization may agree on safety regulations governing the movement of bicycles during a competitive race or during

training for a competitive race, including the permission for bicycle operators to ride abreast.

The “Rules of The Road” are based upon Texas Transportation code statutes. These laws were designed and implemented to help improve the safety of all roadway users.

## Funding

The Texas Department of Transportation (TxDOT) provides 12 Categories of state and federal funding summarized in the Unified Transportation Program, a 10-year plan to guide transportation project development and construction. Federal dollars generate from the Federal Highway Trust Fund, a pool of money generated by federal fuel taxes and other related fees from all 50 states. Money from the Federal Highway Trust Fund is allocated to TxDOT based on formulas established by federal transportation legislation. State funds are generated by state motor fuel taxes, vehicle registration fees and a few other sources such as sales taxes on automobile grease and lubricants<sup>2</sup>.



(Source: Texas Department of Transportation, 2014 UTP Figure 1-5 funding Categories)

## Metropolitan Transportation Plan (MTP) & Transportation Improvement Plan (TIP)

The RGVMPO receives federal and state funding for many of the projects located within the MTP which are administered through TxDOT, such as categories 3 and 7. Additionally, funds are included to the MTP when projects within the plan receive funding from other categories such as category 9 enhancement funds or discretionary funds from TxDOT. Bicycle and Pedestrian facilities

<sup>2</sup> Texas Department of Transportation (2013). Unified Transportation Funding/Transportation Enhancement Program. Retrieved October 2017 from <http://www.txdot.gov/government/programs/enhancement.html>

may be funded from these sources through existing projects listed on the MTP, such as added capacity and rehabilitation projects.

On occasion, category 9 funds are administered to the RGVMPO, in which a program call is opened for local jurisdictions. The project call creates opportunities for non-traditional transportation related activities. Projects submitted incorporate transportation activities that impact the livelihood of communities, promote the quality of the environment, and enhance the aesthetics of our roadways. Projects submitted, but not selected, are then sent back for an opportunity to receive category 9 funding directly from the State. The following criteria are used for project selection based on the 12 categories on the next page:

- Category 1: Provision of facilities for Pedestrians and Bicycles
- Category 2: Provision of Safety and Education Activities for Pedestrians and Bicycles
- Category 3: Acquisition of Scenic Easements and Scenic or Historic Properties
- Category 4: Scenic or Historic Highway Programs (including the provision of tourist and welcome center facilities)
- Category 5: Landscaping or Other Beautification
- Category 6: Historic Preservation
- Category 7: Rehabilitation and Operation of Historic Transportation Buildings, Structures, or Facilities, including Historic Railroad Facilities and Canals
- Category 8: Preservation of Abandoned Railway Corridors, including Conversion and Use for Pedestrians and Bicycle Trails
- Category 9: Control and Removal of Outdoor Advertising
- Category 10: Archaeological Planning and Research
- Category 11: Environmental mitigation to address water pollution due to highway runoff and to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- Category 12: Establishment of Transportation Museums

## Transportation Alternatives

The Transportation Alternatives Program (TAP) is administered through the RGVMPO every two years. The funding is provided through FHWA and is used to improve bicycle and pedestrian facilities, while also providing funds for multimodal planning. Transportation Alternatives funds have been used for several projects that will vastly improve the pedestrian and bicycle facility network.

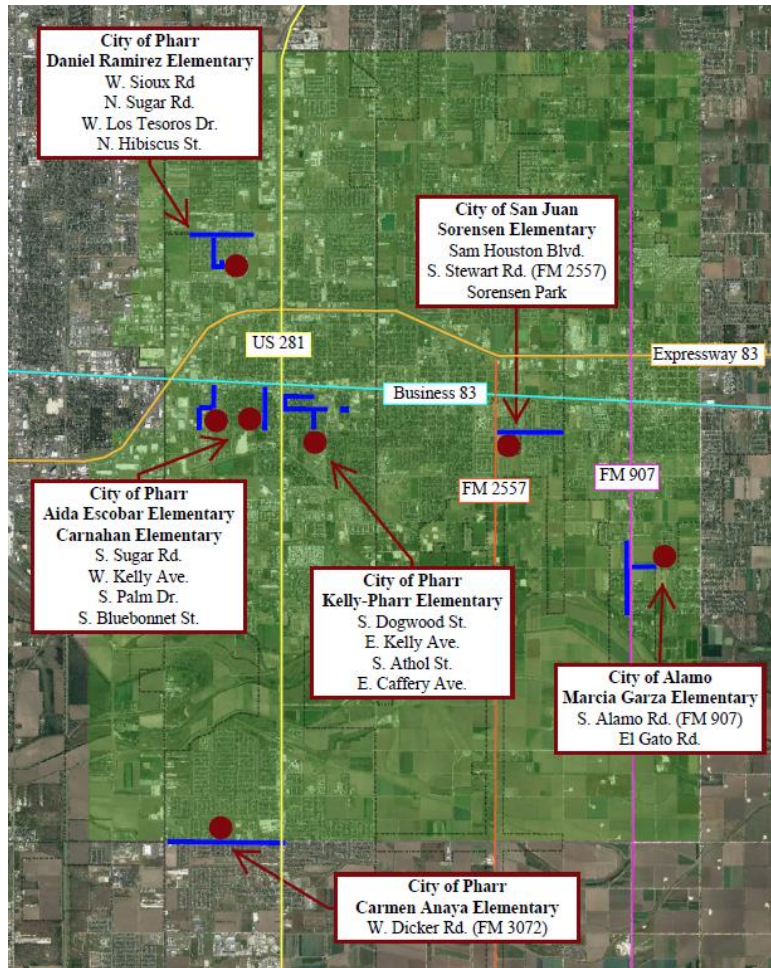
### Hidalgo County Area

During the 2015 TAP Project Call, the HCMPO voted to issue \$4.5 million to the Regional Hike and Bike Trail Project submitted by Hidalgo County's Precinct 2. This was a joint project between the cities of Pharr, San Juan, and McAllen. This Regional Hike and Bike Trail connects with the already existing McAllen 2<sup>nd</sup> St. hike and bike trail, extending the trail across the county.



**Visualization of Precinct 2's Regional Hike and Bike Trail**

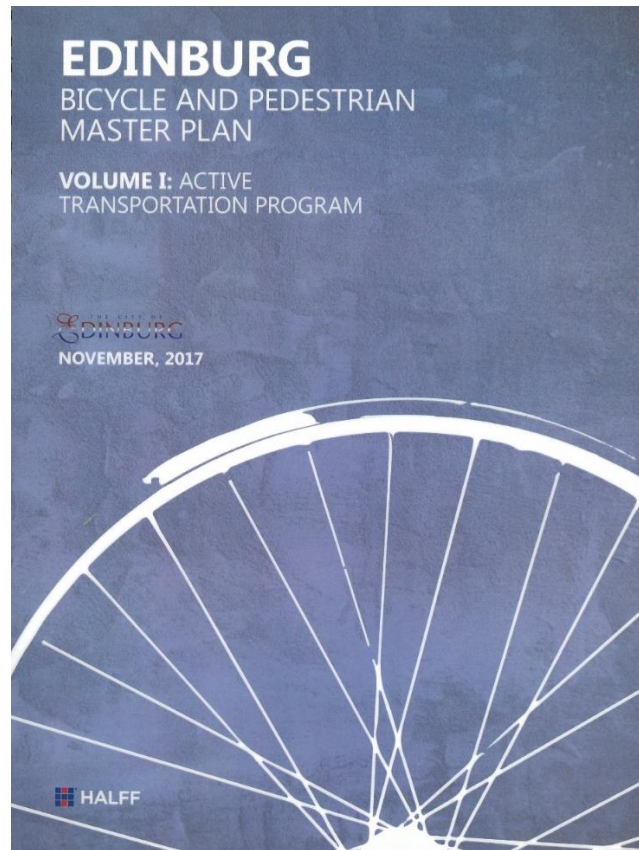
Projects that improve the overall bicycle network are routinely selected by the RGVMPO, create an inter-connected transportation system. The 2017 TAP Project Call recipients included the Pharr-San Juan-Alamo Tri-City Pedestrian Safety Improvements Project. The project plans to improve pedestrian and bicycle gaps that currently exist in the cities of Pharr, San Juan, and Alamo.



Map of PSJA Tri-City Pedestrian Safety Improvements Scope

The City of Donna and the City of Edinburg also received TAP funding for bicycle and pedestrian facilities during the 2017 TAP Project Call. The City of Edinburg received \$422,400 from the RGVMPPO to build the Cano Hike & Bike Trail Lighting Project. The City of Donna received \$272,593 to address gaps in their pedestrian and bicycle facilities. Groundbreaking for the Regional Hike & Bike Trail, PSJA Tri-City Pedestrian Safety Improvements, and Cano Hike & Bike Trail projects have taken place. The facilities for all projects should be complete by the end of 2019.

TAP funds have also been used to aid in the planning process for cities across the region. The 2015 TAP project call placed \$120,000 into the City of Edinburg's Master Plan. Edinburg utilized funding to hire consultants and develop a bicycle plan for the city. In 2017, the Edinburg Bicycle Master Plan was complete, and will be used to guide multimodal infrastructure development for the city.



The 2017 TAP funding call provided \$120,000 to the City of McAllen for a Vision Zero Planning Study, and \$134,000 to the City of Pharr for a Comprehensive Pedestrian Safety & Wellness Program. The City of McAllen’s Vision Zero Planning Study aims to develop a safer multimodal transportation system for the city and eliminate transportation-related casualties. Pharr’s Pedestrian Safety and Wellness Program aims to identify gaps in the system and help construct safer infrastructure while promoting healthier living.

The 2019-2020 TAP Project Call awarded 4 Construction projects for the Hidalgo County area, totaling \$2,389,667: City of Elsa Community Trail Park Project, PSJA Pedestrian Improvement Project Phase II, LRGVDC/Valley Metro RGV B-Cycle Program, and the City of McAllen Jackson Rd. Hike & Bike Trail. The LRGVDC/Valley Metro Hidalgo County Active Mobility Plan received \$264,000 in Planning funds.

#### Cameron County Area

The city of Brownsville submitted 3 Construction projects in 2019, totaling \$699,610.36: International Blvd. (SH4), and construction of sidewalks along East 19<sup>th</sup> St., East 20<sup>th</sup>, East 21<sup>st</sup>, Johnson, Lincoln, Santa Elena, San Rafael, San Bernando, French, English, and San Lorenzo Streets. A Conceptual Sidewalk Master Plan requested \$3,000,000 for analysis and identification of areas where sidewalks are needed. The Harlingen-San Benito area has programmed and authorized a total of \$1,097,431 for its FY 2019-2022 Category 9 (Transportation Enhancements) funding.

## Traffic Safety Grant

TxDOT requests project proposals that support the goals and strategies of its traffic safety program. The program aims to reduce the number of motor vehicle related crashes, injuries, and fatalities in Texas. These goals and strategies form the basis for the Federal Fiscal Year 2019 Texas Highway Safety Plan (HSP). The request for projects targets state and local governments, educational institutions, and non-profit organizations. Projects that address the following goals are eligible to apply: Planning and Administration, Motorcycle safety, Pedestrian and Bicycle Safety, Driver Education and Behavior.

## Safe Routes to School (SRTS) and Federal Funds

Safe routes to school educational programs help inform both students and the general public on safety issues that may occur when traveling to and from schools. Many federal agencies offer funding through special programs which aim to increase safety, improve overall health, or reduce environmental issues like air quality. Program funding for safe routes to school supports infrastructure development and non-infrastructure projects that promote community health and traffic congestion reduction. Information can be found on Texas Department of Transportation's Safe Routes Texas website: <http://txsaferoutes.org/index.php>, and the National Center for Safe Routes to School: <http://www.saferoutesinfo.org/>.

## Federal Transit Administration

The Federal Transit Administration allocates funds to transit providers, which are administered by the RGVMPO for operational and capital improvement projects. Funds may be utilized by transit agencies for improvement of connectivity and construction of pedestrian facilities. Through partnerships between transit providers and local municipalities, the rehabilitation of existing infrastructure and rolling stock, along with purchasing and construction of new equipment/facilities, can be assisted through the following categories of funding:

**FTA Section 5307-** Mass transit apportionment to urbanized areas based on population of less than 200,000, population density, and operating performance.

**FTA Section 5309-** Mass Transit discretionary funds for capital projects only.

**FTA Section 5310-** Provides federal funds to public and private non-profit entities for the transportation of elderly and individuals with disabilities. These grant funds are for capital equipment, preventive maintenance, and purchase of service only.

**FTA Section 5311-** Provides funds for Rural Transit Programs. Thirty-nine entities blanketing the state provide service in the non-urbanized areas.

**FTA Section 5339-** Provides funds for projects related to replace, rehabilitated, and purchase buses and related equipment; construct bus-related facilities.

The FTA Section 5310 program is facilitated by the RGVMPPO and is responsible for the project call and project selection. These funds will be utilized for further development of facilities that will help improve transportation for the elderly and people with disabilities.

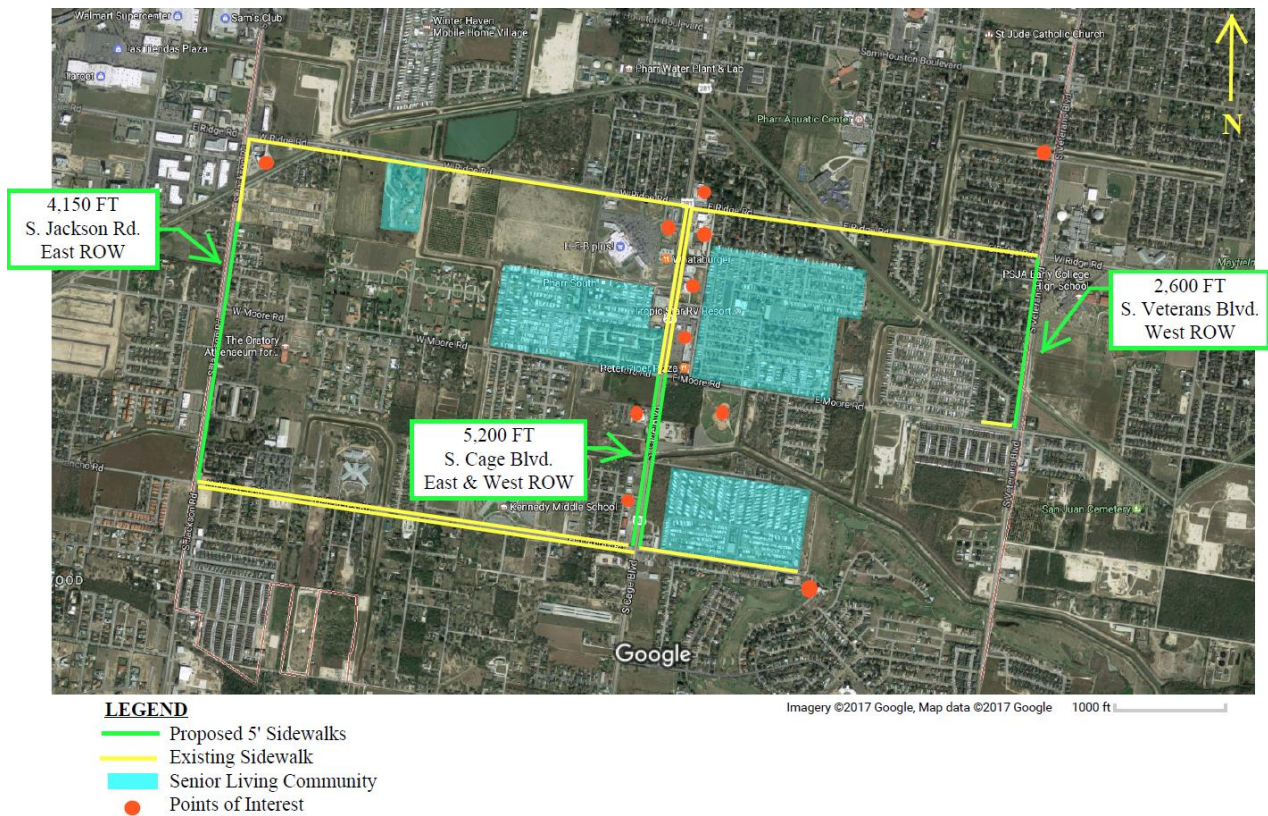
Traditional projects consist of:

- Buses and vans
- Wheelchair lifts, ramps, and securement devices
- Transit-related information technology systems, including scheduling/routing/one-call systems
- Mobility management programs
- Acquisition of transportation services under a contract, lease, or other arrangement

Non-traditional projects consist of:

- Travel training
- Volunteer driver programs
- Building an accessible path to a bus stop, including curb cuts, sidewalks, accessible pedestrian signals or other accessible features
- Improving signage, or way-finding technology
- Incremental cost of providing same day service or door-to-door service
- Purchasing vehicles to support new accessible taxi, ride sharing and/or van-pooling programs
- Mobility management programs

The 2017 Section 5310 Project Call contributed \$ 509,564 to the City of Pharr for their “**Pharr Pedestrians Connections**” Project. This project will help the City of Pharr develop pedestrian facilities near a commercial district that is also located close to several senior living communities. Projects such as the Pharr Pedestrian Connections should lead to safer pedestrian and bicyclist traveling through Pharr’s major corridors. The Section 5310 Funding for the 2019 Fiscal Year is currently underway. The McAllen Urbanized Area has \$1,588,248.60 in federal funding available for either traditional or non-traditional projects.



**Pharr Pedestrians Connections Project Map**

### TIGER Grants

The Transportation Investment Generating Economic Recovery program or TIGER Discretionary Grant allows for the U.S. Department of Transportation to invest in road, rail, transit and port projects that are in line with critical regional, metropolitan, and national objectives. This program was first created in the 2009 Recovery Act, and since that time has provided nearly \$4.6 billion dollars of investment to support 381 projects. Five hundred million dollars in TIGER funding was recently secured for the 2016 fiscal year through the 2020 fiscal year. The program utilizes a rigorous selection process, funding projects that save on construction cost and ultimately create a more sustainable infrastructure.

### Federal Highway Administration

The Federal Highway Administration provides an assistance program titled Recreational Trails Program (RTP). These funds are used to develop and maintain recreational trails and trail-related facilities. The RTP was reauthorized under the FAST Act and is now set-aside funds from the TAP. The RTP is administered by the Texas Parks and Wildlife Department, who also receives the grant applications. Eligible projects include maintenance and restoration of existing facilities, construction of new trails, acquisition of easements or property for trails, and the development and rehabilitation of trailside/trailhead facilities and trail linkages.

## FASTLANE Grants

The Fixing America's Surface Transportation Act (FAST Act) was established by the Nationally Significant Freight and Highway Project (NSFHP) program to provide federal financial assistance to projects of national or regional significance and authorized the program at \$4.5 Billion for FY 2016-2020. The DOT will refer to NSFHP grants as Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE) grants.

## Planning Recommendations

This Bicycle plan, in conjunction with the RGV MPO Pedestrian Plan, is intended to serve as a comprehensive planning tool for the Texas Department of Transportation (TXDOT), the RGV MPO, and local jurisdictions within the MPO's boundaries. The goal is to develop a connective network for safe and comfortable commuting, with an increased standard for cycling communities. Coordination and collaboration with the region's local governments is essential to improving regional connectivity on cooperative projects. While some municipalities in the Rio Grande Valley region have begun incorporating cyclist policies, programs, and infrastructure into their planning process, the RGV MPO recommends conformity by all localities. All developmental project submittals and future transportation plans should be reviewed for compliance with the MPO's Bicycle Plan and federal guidelines. The following recommendations are intended as first steps toward realizing the goals of this plan:

### The 5 E's

The recommendations of this plan can be divided into five main sections, typically referred to as the "5E's".

**Engineering** refers to any physical improvement intended to enhance the safety of cyclist. Design standards and policies that require the consideration and due care of pedestrian facilities also fall into this category.

**Education** encompasses all efforts to teach, train, and facilitates discussions regarding safe pedestrian skills and techniques and constitutes an important role in raising the awareness of multiple road users.

**Enforcement** identifies the needed cooperation of law enforcement officials, legislative bodies, and judicial systems to insure equitable application of the law, respecting the rights and responsibilities of motorist, cyclist, and pedestrians alike.

**Encouragement** activities are those that motivate people to choose cycling to make trips rather than driving a car. Often, these activities are coordinated for broad impacts across municipal boundaries.

**Evaluation** refers to the data collection and methods of analysis used to identify proper use and provide justification for future developments and programs.

## Engineering

The most visible, and perhaps most tangible evidence of a commitment to cyclists is the presence of infrastructure that supports cycling. The RGVMPO's survey results indicate that the physical environment is a key determinant in whether people choose to bike to a destination. Most respondents voiced "not enough sidewalks" as a significant factor limiting them from cycling, followed by "Lack of stationary equipment for bikes", "Crossing major barriers", and "Distance/Time to bike to destinations".

These types of physical factors can be addressed by implementing a Complete Streets Policy. Complete Streets consist of policies that encourage active and livable streets for all road users including pedestrians, cyclists, transit users, people with disabilities, youth, and older adults through better connected networks of infrastructure designed to accommodate the strengths, needs, and character of the community and its users. These policies not only serve to further acknowledge cycling as a legitimate form of transportation, but also set a design standard for city streets. For these policies to be effective, use of the best available design standards and maintenance practices must be addressed equally.

As mentioned before, several cities have noted consideration of a Complete Streets Policy in their planning efforts. Cities should also consider the following elements when identifying and engineering current or future infrastructure projects:

- Consider all types of road users for transportation projects listed on RGVMPO's MTP, as required by the FAST Act
- Create bicycle facilities to suit the strengths and special needs of potential users regardless of age, gender, or physical ability, as required by AASHTO<sup>3</sup> and ADA compliance
- Improve the coordination between government officials, developers, and utility providers during the planning and construction phases of all new projects to ensure that the right-of way width, roadway design, and site design are conducive to cyclist travel
- Increase the amount of way finding signage around the city
- Increase the number of end of trip facilities throughout the community including restrooms, water fountains, benches, bus shelters, trash receptacles, lighting, buffers, trees and shrubs
- Schedule periodic street and sidewalk sweeping to remove glass, gravel and other debris

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<sup>3</sup> American Association of State Highway & Transportation Officials (AASHTO is a standard setting body which publishes specification, test protocols and guidelines which are used in highway design and construction throughout the United States.

## **Education**

Because engineering alone cannot produce a safer environment for cycling, education must be implemented. There was a self-admitted lack of knowledge regarding local ordinances and laws, according to a public survey. 40% of survey participants classified their knowledge of local ordinances as “poor or very poor.” Furthermore, the public comment period revealed that citizens were not only aware of, but concerned about the lack of bicycle safety education in our area. Education, especially cyclist safety, is most effective when it comes from schools, parents, elected officials, public health educators, businesses, neighbors, police officers, and fire departments. Safety campaigns must target all citizens and materials should be distributed accordingly. Professional operators such as taxi drivers, transit operators, freight movers, and school bus handlers benefit from extensive training and should advocate safer driving while interacting with cyclists.

Many forms of media can be used to distribute educational materials. Some successful ways to spread bicycle education messages are:

- Bus wraps
- Defense driving educational courses
- Federal and Local Government websites
- Newspaper and Newsletter columns, community newsletters
- Public Service Announcement on TV, radio, billboards etc.
- Walking workshops to evaluate current cycling facilities.

## **Enforcement**

Enforcing traffic laws and regulating cyclists, pedestrians, motorists, and other roadway users is a key element for ensuring a safe and healthy transportation network. It is important for agencies and communities to develop strong partnerships with law enforcement groups and other community members to meet three important goals:

- Protecting the rights of cyclists to operate legally on walkways
- Protecting cyclists against careless, reckless, or dangerous driving
- Ensuring cyclists obey laws and operate safely

To reach these goals, we encourage law enforcement officers to understand and protect cyclist laws to the same extent as other constitutional laws. An understanding of these laws can be met through participation on RGVMPPO’s bicycle and pedestrian advisory committee. By participating, law enforcement and community members can gain an understanding of local cyclist issues. By doing so, residents of the RGV can generate a more effective promotion of cyclist and public safety.

Recommendations:

- Make stronger connections between cycling community and law enforcement

- Ensure that police officers are educated on the “Share the Road” message and have general knowledge regarding traffic law, as it applies to cyclists.
- Implement regular training for officers on bicycle related issues.
- Create laws requiring cyclists to wear bright or reflective clothing when cycling during early morning and evening hours.
- Improve and expand the training offered to police officers regarding traffic law, as it applies to cyclists.

## **Encouragement**

Events known as CicloBia, Sunday Parkways, or OpenStreets, where a loop of streets are opened exclusively for biking, running, walking, and other forms of physical activity, are dramatically effective tools of encouragement. These methods enable the public to both enjoy themselves and envision a positive future for alternative transportation. RGVMPPO asks its planning partners to consider hosting events to encourage our citizens’ movement toward healthier lifestyles. Encouragement can also be made through financial incentives. Few strategies change behavior and commuter choice more than monetary incentives and/or rewards. We encourage local business to consider offering discounts to those who bike to their establishment or donate bicycle safety gear.

Information sharing is a great form of encouragement as well. People are intrigued as to where they can cycle safely. They need information on safe routes to work, enjoyable recreational opportunities, and locations with access to bike trails. Programs that provide this information on hard copy/online maps, guides, route signage, smartphone applications, and mentoring help eliminate alternative travel barriers. RGVMPPO currently creates maps and other printed material to encourage a safe cycling environment. We ask our planning partners to create their own material or share the MPO’s policies with their citizens.

Additional recommendations to jurisdictions include:

- Encourage local businesses to promote cycling to workplaces
- Inspire active involvement of cycling community in planning efforts
- Consider passing an ordinance or local code that would require larger employers or civic buildings to provide end of trip facilities, like showers or food/drink stations
- Consider offering a “Ciclovía” or “Summer Streets” type event, closing off major corridor auto traffic and offering the space to cyclists, pedestrians and group exercise events

## **Evaluation**

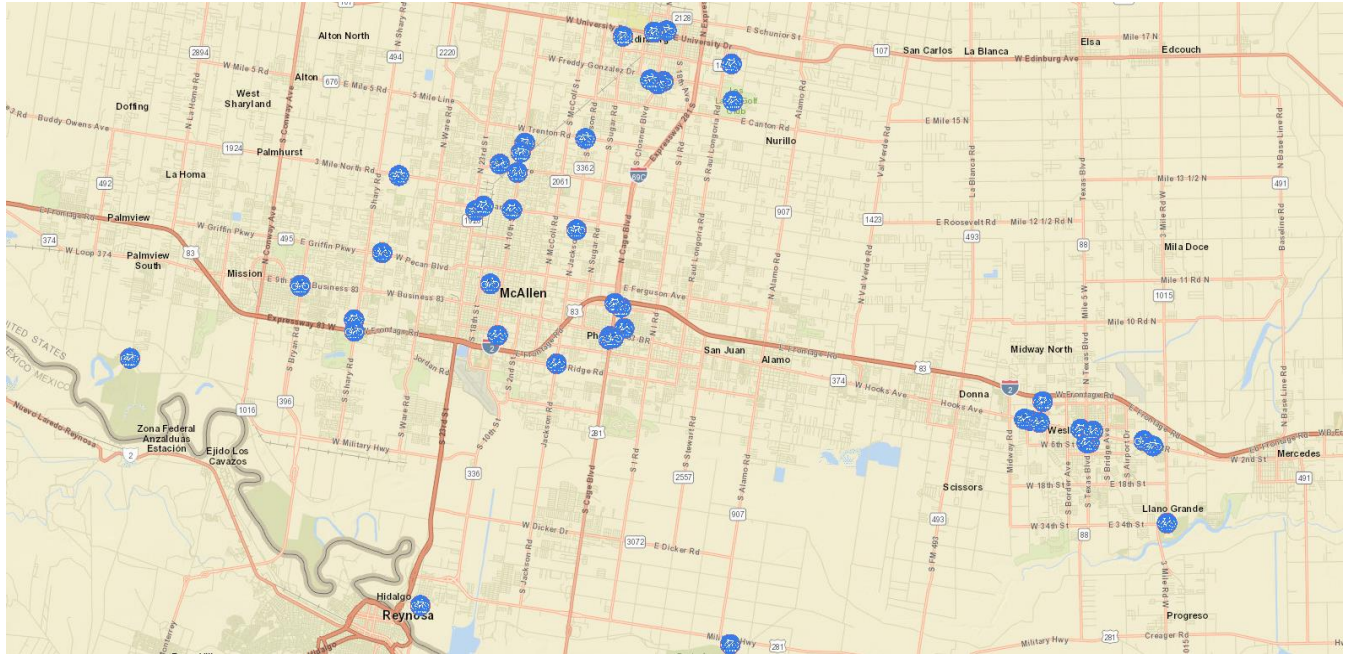
A long-term Bicycle plan should always incorporate an evaluation method. Evaluation involves monitoring outcomes and documenting trends through data collection. Data should be retrieved before and after activities associated with the previous four “E’s” are conducted. Evaluation is necessary to assess advancements in implementing the plan, recognize progress toward the completion of each element, and identify successes in achieving plan goals and objectives.

Resources for bicyclist projects can be scarce and having readily available data can help a community prioritize and demonstrate the need and purpose of projects. Acquiring localized data allows planners to properly recommend courses of action, rather than relying on national data. Local information and attitudes can be collected through various forms, but surveys are effective, uncomplicated, and may be conducted anonymously. Surveys help reveal why people travel by motor vehicle, rather than cycling. The survey method also provides insight on what changes might encourage a shift in behavior. This information can help paint a snapshot of citizens' perception and concerns as well as aid policy makers and planners in updating our bicycle plan.

Additional recommendations to jurisdictions:

- Set an ambitious, attainable target to increase the percentage of trips taken by cyclists (within separate municipal boundaries)
- Expand efforts to evaluate bicycle usage and crash statistics, developing a specific plan that reduces the number of crashes within a community
- Collaborate with neighboring communities to integrate bicycle networks and execute refined land usage techniques

## Appendix A: Bicycle Friendly Business Map & List



Hidalgo County Area

[http://www.hcmpto.org/gisapps/GIS\\_HCMPO/](http://www.hcmpto.org/gisapps/GIS_HCMPO/)

### Bicycle Friendly Businesses

The following business have signed up for the Bicycle Friendly Business initiative and have received a bike rack to place outside their area of work:

**Santa Ana Wildlife Refuge**  
3325 Green Jay Rd.  
Alamo, TX 78516

**Edinburg Scenic Wetlands  
and World Birding Center**  
714 S Raul Longoria Rd.  
Edinburg, TX 78542

**Museum of South Texas  
History**  
200 N Closser Rd.  
Edinburg, TX 78541

**Edinburg City Hall**  
415 W University Dr  
Edinburg, TX 78541

**Los Lagos Golf Club**  
1720 Raul Longoria Rd.  
Edinburg, TX 78541

**Edinburg Boys & Girls  
Club**  
702 Cullen St.  
Edinburg, TX 78541

**Edinburg Sports & Wellness Center**  
315 E Palm St.  
Edinburg, TX 78539

**Ebony Hills Public Golf Course**  
300 W Palm Dr.  
Edinburg, TX 78539

**Dustin Michael Sekula Memorial Library**  
1906 S. Closner Rd.  
Edinburg, TX 78541

**Vitamin Shack + Shakes**  
2216 W Trenton Rd.  
Edinburg, TX 78539

**Vitamin Shack + Shakes**  
319 S Sugar Rd.  
Edinburg, TX

**Grindstone Coworking**  
506 W University Dr.  
Edinburg, TX 78539

**Rock & Roll Sushi**  
902 S 2<sup>nd</sup> St.  
Hidalgo, TX 78577

**Old Hidalgo Pumphouse Museum and World Birding Center**  
902 S. 2<sup>nd</sup> St  
Hidalgo, TX 78557

**Earth Born Market**  
4508 N Taylor Rd.  
McAllen, TX 78504

**Xquinkles Snack Land**  
3616 N 23<sup>rd</sup> St.  
McAllen, TX 78504

**Bike Masters**  
6201 N 10<sup>th</sup> St.  
McAllen, TX 78504

**Neighbors Emergency Center**  
6700 N 10<sup>th</sup> St.  
McAllen, TX 78504

**Majors Health Food**  
1001 S 10<sup>th</sup> St. #A  
McAllen, TX 78501

**MoonBeans Coffee**  
5401 N 10<sup>th</sup> St. 102  
McAllen, TX 78504

**Vitamin Shack + Shakes**  
1700 W Dove Ave. Ste. 40  
McAllen, TX 78504

**Bicycle World RGV McAllen**  
2025 W Nolana Ave.  
McAllen, TX 78504

**La Costa Business Center**  
214 N 16<sup>th</sup> St.  
McAllen, TX 78501

**Bentsen – Rio Grande Valley State Park**  
2800 S Bentsen Palm Dr.  
Mission, TX 78572

**Raising Cane's Chicken Fingers**  
125 S Shary Rd.  
Mission, TX 78572

**Bike Masters**  
2801 E Griffin Pkwy.  
Mission, TX 78572

**Mission Economic Development Council**  
801 N Bryan Rd.  
Mission, TX 78572

**28. Teach for America**  
801 N Bryan Rd.  
Mission, TX 78572

**Valley Technical Academy**  
801 N Bryan Rd.  
Mission, TX 78572

**Jitterz Coffee Bar**  
801 N Bryan Rd.  
Mission, TX 78572

**Edward Jones**  
122 Shary Rd. St. E  
Mission, TX 78572

**City of Pharr Parks & Recreation**  
413 E Clark Ave.  
Pharr, TX 78577

**Vitamin Shack + Shakes**  
1201 S Jackson Rd. Ste. 2  
Pharr, TX 78577

**M. Rivas Food Store**  
836 N Cage Blvd.  
Pharr, TX 78577

**MoonBeans Coffee**  
114 W Cherokee Ave.  
Pharr, TX 78577

**Pharr City Hall**  
118 S Cage Blvd.  
Pharr, TX 78577

**Vitamin Shack + Shakes**  
1101 N Cage Blvd. Ste. B-4  
Pharr, TX 78577

**Pharr Memorial Library**  
121 E Cherokee Ave.  
Pharr, TX 78577

**Estero Llano Grande State Park**  
154A Lakeview Dr.  
Weslaco, TX 78596

**Planet Fitness**  
1901 W Expressway 83  
Weslaco, TX 78596

**Hidalgo County MPO**  
510 S Pleasantview Dr.  
Weslaco, TX 78596

**Tortilleria Progreso**  
1901 W Business 83  
Weslaco, TX 78596

**Weslaco Mid Valley Fam  
Produce**  
2701 W Business 83  
Weslaco, TX 78596

**Mireles Mid Valley Fam  
Produce**  
2701 W Business 83  
Weslaco, TX 78596

**Weslaco Farmers Market**  
2319 W Business 83  
Weslaco, TX 78596

**Lower Rio Grande Valley  
Development Council**  
301 W Railroad St.  
Weslaco, TX 78596

**Weslaco Inn**  
2716 E Business 83  
Weslaco, TX 78596

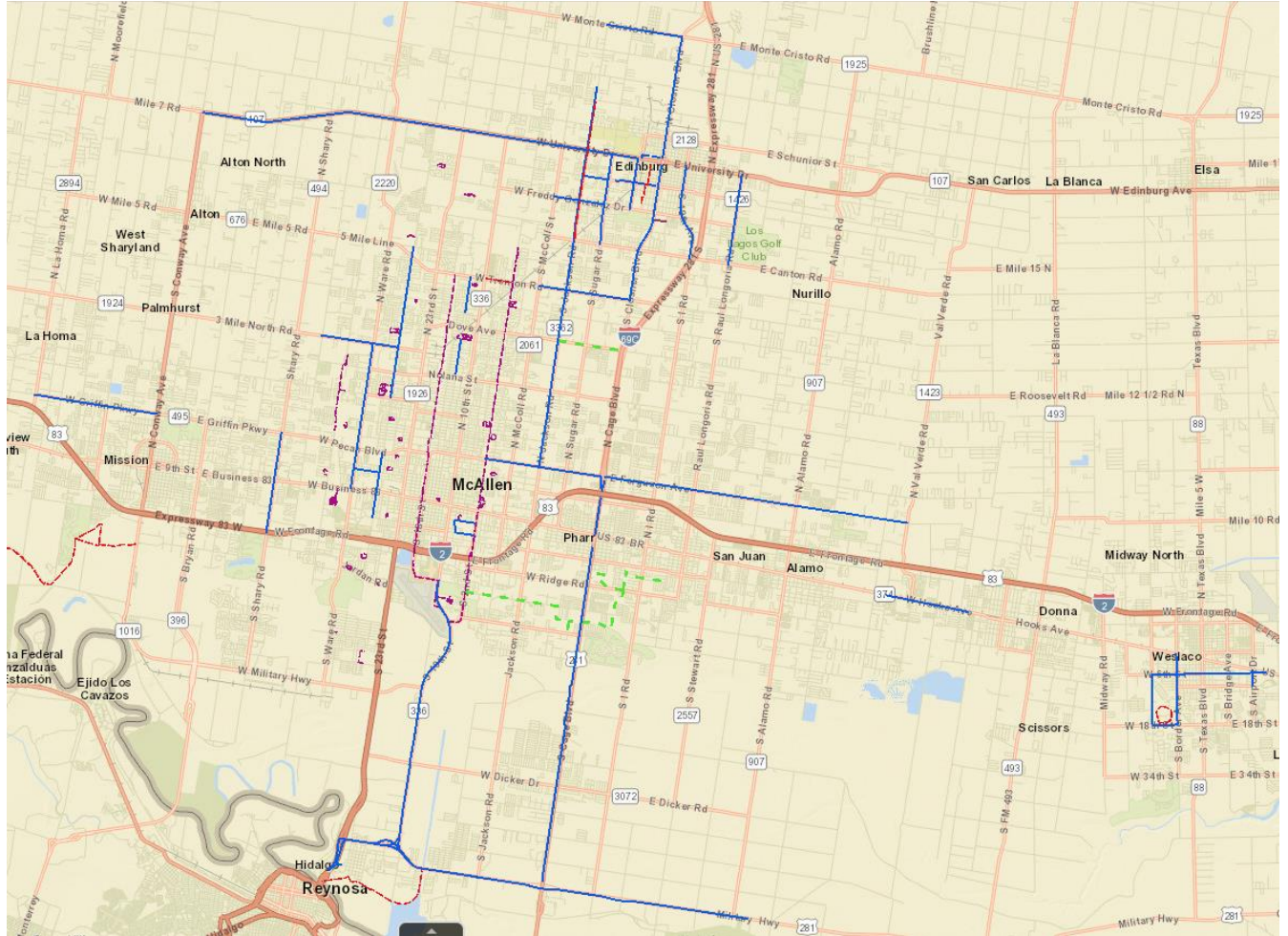
**Extreme Nutrition**  
539 S Texas Blvd.  
Weslaco, TX 78596

**Weslaco City Hall**  
255 S Kansas Ave.  
Weslaco, TX 78596

**Economic Development  
Corporation of Weslaco**  
275 S Kansas Ave. St. A  
Weslaco, TX 78596

# APPENDIX B: Existing Bike Lanes/Trails

## Hidalgo County Area



[http://www.hcmpo.org/gisapps/GIS\\_HCMPO/](http://www.hcmpo.org/gisapps/GIS_HCMPO/)


## Cameron County Area

(Harlingen-San Benito)



<http://users.neo.registeredsite.com/0/6/5/21985560/assets/Harlingen-San Benito MPO Bicycle and Pedestrian Master Plan - Final Version.pdf>

(Brownsville)



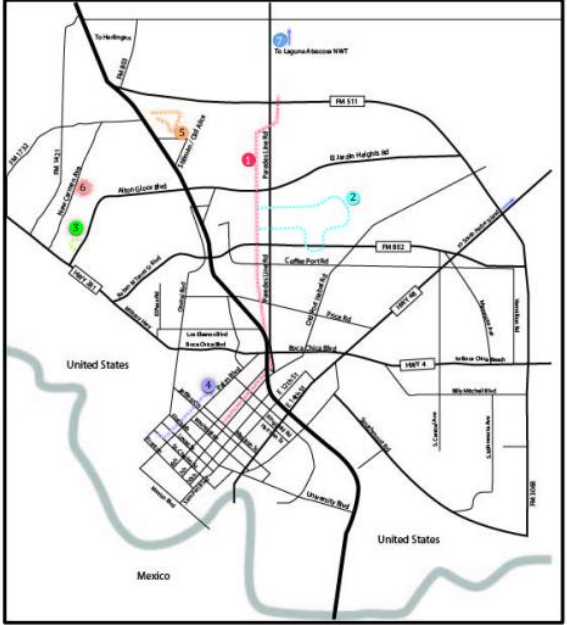
## Brownsville Hike & Bike Trail Map

### Trails & On-Street


**Total Distance:**  
64 miles

- 1 **Brownsville Historic Battlefield Trail – Nationally Recognized**  
Start: Linear Park  
Finish: Palo Alto Battlefield  
9 Miles
- 2 **Paseo de la Resaca Trails**  
Start/Finish: Brownsville Events Center  
7 Miles
- 3 **Monte Bella Mountain Bike Trail**  
Start/Finish: Monte Bella Trails Park  
6.3 Miles
- 4 **Belden Trail**  
Start: Skinner Elementary  
Finish: Praxedis Orive Jr. (Sunrise) Park  
1 Mile
- 5 **Brownsville Sports Park Hike & Bike Trails**  
Start/Finish: Brownsville Sports Park  
2.2 Miles
- 6 **Resaca de la Palma State Park Trails**  
Start/Finish: Resaca de la Palma State Park  
8 Miles
- 7 **Laguna Atascosa**  
Start/Finish: Resaca de la Palma State Park  
4.2 Miles





For more information on trails and attractions please contact:

Brownsville Convention & Visitors Bureau 650 Ruben M. Torres Sr. Blvd. (956) 546-3721	Scale House Visitors Center 1700 E 6th St. (956) 546-3898	Cyclobia Brownsville: <a href="http://cyclobiabrownsville.com">cyclobiabrownsville.com</a> The Challenge: <a href="https://facebook.com/bblchallenge">facebook.com/bblchallenge</a> Friends of Belden Trail: <a href="https://facebook.com/BeldenTrail">facebook.com/BeldenTrail</a>
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Keep an active lifestyle with these events:

[www.brownsville.org](http://www.brownsville.org) | #TourBrownsville

<https://brownsville.org/wp-content/uploads/2015/06/Main-Map.pdf>



# Bicycle Plan 2019

Rio Grande Valley

Metropolitan Planning Organization

Adopted by RGVMPPO

Transportation Policy Committee

On: