CHAPTER 5

TRANSPORTATION

Vision Elements Related to Transportation

Goals

Objectives

In 2050

Harlingen aspires to foster a resilient community that supports its people through inclusivity, safety and robust support systems.

- Strengthen public safety and emergency preparedness for natural disasters and community challenges.

In 2050

Harlingen will offer diverse housing options to accommodate all income levels, life stages and family types.

- Align housing strategies with transit-oriented development to enhance connectivity.

In 2050

Harlingen will focus on creating opportunities for economic growth that benefit all residents and future generations.

- Expand infrastructure for industrial and tech-focused industries.
- Encourage investment in underutilized areas such as downtown and vacant properties.
- Expand access to public transportation to connect people to job centers.

In 2050

Harlingen will develop a thriving local economy that attracts businesses, jobs and investment while supporting small businesses.

- Invest in infrastructure improvements to attract new businesses and retain existing ones.

In 2050

Harlingen will embrace eco-tourism by enhancing its natural assets and promoting sustainable tourism opportunities.

- Expand and enhance the Arroyo Colorado trail system for recreational activities and active transportation.



Transportation Policies

As Harlingen grows and changes, transportation facilities will be carefully designed and coordinated to achieve the goals of this plan. That means creating new streets and redeveloping existing streets using well-proven best practice design standards and guidelines that enhance the safety, affordability, and comfort for all users. By expanding transportation options, Harlingen is investing in its quality of life, cost-of-living, local economy, and long-term resilience.



Enhance Transportation Systems for Safety and Community Health

Promote a safe, connected, and pedestrian-friendly street network by designing streets that calm traffic, separate vehicles from non-automotive users, and reduce conflicts through thoughtful layout and access management. Emphasize a finer-grained network of streets over excessive roadway widening to enhance safety, mobility, and community character.



Support Multimodal Transportation

Promote an accessible and connected multimodal transportation network that integrates walking, bicycling, and transit options. Expand and enhance infrastructure to link neighborhoods with key destinations, support regional mobility, and leverage funding opportunities to maximize investment impact and community benefit.



Promote Network Connectivity that Makes it Easy to Get Around

Harlingen has a strong street grid and like most cities, development within the past half century has been less connected. Moving forward, the City will refocus its transportation work to enhance connectivity, limit block sizes and expand the route options available to all modes of transportation.



Invest in Transit for Wider Access and Usability

Prioritize transit investments to ensure all residents in Harlingen are able to get around in an affordable and timely manner.



Invest in Well-Planned Freight Corridors

Promote a safe and efficient freight transportation system that supports economic activity while minimizing conflicts with residential and retail areas. Coordinate with regional partners to identify appropriate freight corridors, enhance connectivity to industrial areas, and reduce safety and environmental impacts on surrounding communities.

What We've Heard So Far...

"Better infrastructure, like roads and streetlights, is essential for safety and future development."

"Ramsey sidewalk trail is a good example — need connectivity to Ramsey."

"Public transportation options are lacking, making it hard for people without cars to get to work or school."

"Sidewalks and bike lanes are critical for ensuring pedestrian safety and promoting alternative modes of transportation."

"Activate alleys throughout the city."

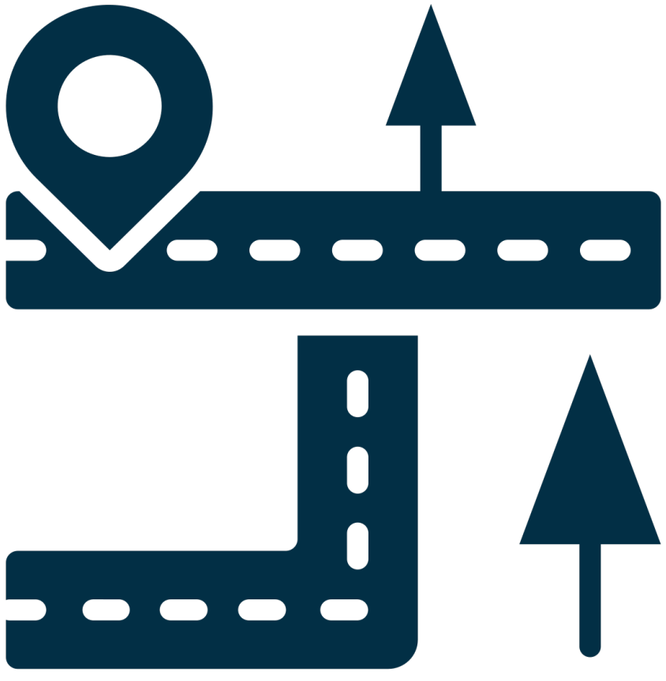
"Lots of intersections need pedestrian-friendly improvements."

Key Takeaways:

- Residents want more options for how they get around the City.
- Reducing traffic accidents and creating great streets are top community goals.
- Transit, sidewalks and multi-use paths are seen as the most important investments for the future.
- Transportation safety is the most critical issue facing Harlingen.
- Expanding transportation choices is essential to meet current and future needs.

Transportation & Resilience Connection

The incorporation of resilience into transportation planning involves thoughtfully integrating City street construction, transit investments, and capital improvements in a way that incorporates long term resilience.



Transportation Resilience

Stormwater Management

Managing stormwater throughout the public right-of-way is a key opportunity. By prioritizing these considerations, the City can continue to advance environmental resiliency.

High Quality Design

Preserving historic sites enhances cultural resilience by supporting community pride and fostering economic diversification through thoughtful development initiatives that harness existing assets.

Connected Street Networks

Fostering a compact network of streets helps to support land use goals of an integrated community fabric with a variety of uses.

Green Infrastructure

Integrating green infrastructure into transportation planning incorporates design elements that support sustainability and climate resilience.

Neighborhood Streets

Planning great neighborhood streets that enhance safety and slow traffic boosts social resilience, promotes stability, equitable access and community well-being.

Extending a Sustainable Street Pattern

Implementing smart growth principles in transportation planning enhances resilience by optimizing resources, improving transportation efficiency, reducing environmental impacts and ensuring that growth occurs in a resilient manner.

Existing Transportation Conditions

Introduction

Crucial to developing a socially and economically vibrant Harlingen is the quality of its transportation system. This chapter highlights opportunities to meet the transportation needs of Harlingen's residents and visitors by expanding transportation options, enhancing access throughout the region, and creating a healthy, safe, and fiscally-sound transportation network for people and industry.

Getting Around in Harlingen

Transportation networks have always been an important component of life in Harlingen. As in most cities, approximately one third of all the city's land use consists of street rights-of-way. Harlingen flourished from its early access to the railroad. Increasingly, Harlingen residents, visitors, and industries have access to local and regional roadway systems, transit service, air travel, and bikeway opportunities.

The city's location at the intersection of I-2 and I-69E creates a strategic central location for the distribution of services throughout the Rio Grand Valley. The Port of Harlingen and Valley International Airport provide key aviation and shipping options. With the Los Indios International Free Trade Bridge, Harlingen also has a border crossing with transit. Mexico's Trans-Pacific Highway provides gateway routes for shipping.

Nationwide market trends indicate that residents across the U.S. increasingly want to live where they can reach places using their preferred choice of travel, whether on a bike, walking, driving, or taking transit. People are demanding more freedom and choice in how they get around Harlingen. Demands are increasing for transportation infrastructure that add additional safe and affordable mobility options throughout the community.

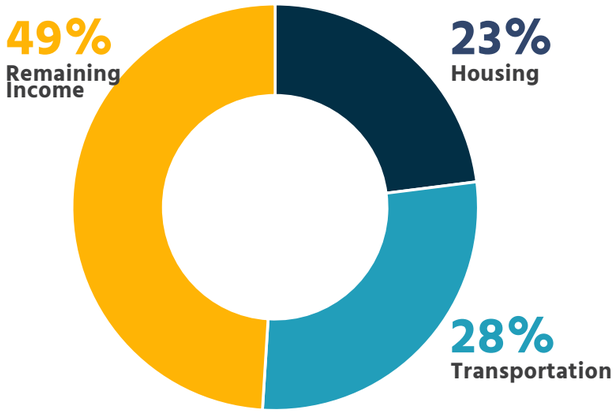
17.3 minutes
Average daily commute time for Harlingen workers

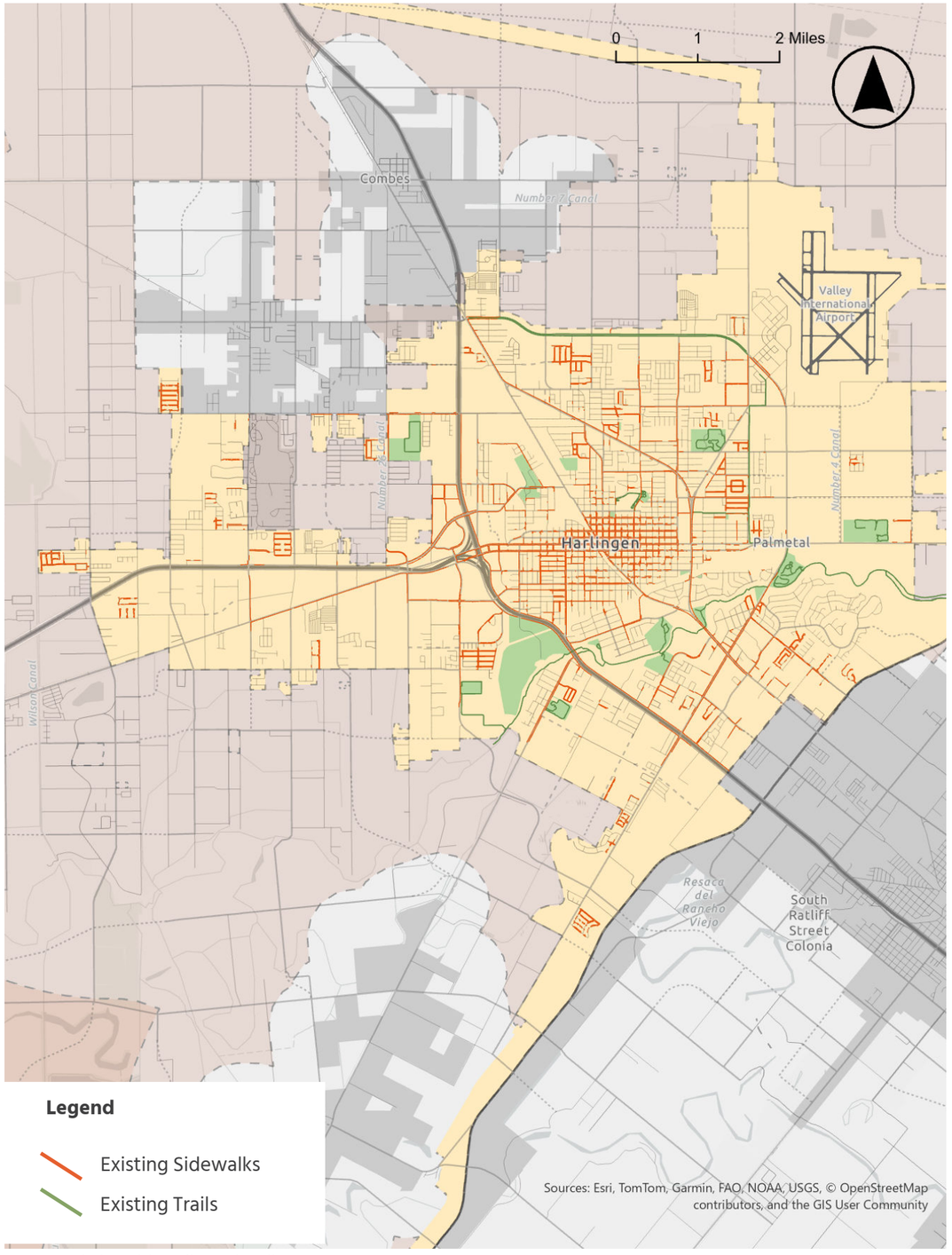
1.8
Average number of cars per Harlingen household

17,686
Average miles driven each year by Harlingen households

$13,444
Amount Harlingen households spend on transportation each year

Average Expenditures as % of Income for Harlingen Households





Map 12. Existing Sidewalks and Trails

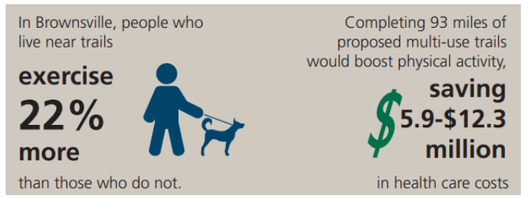


Transportation and Public Health

Health, transportation, and exercise are strongly correlated. Many communities along the U.S. - Mexico Border suffer from chronic diseases like heart disease and diabetes. The County's population has higher rates of physical inactivity (45%) and obesity (47%) compared to the State of Texas (36% and 35%, respectively). These risk factors increase the likelihood of developing health problems, such as heart disease and stroke.

Studies shows that better integrating pedestrian, bicycle, and mass transit facilities into roadway design helps address public health in the community. Roadways with easily accessible and low stress pedestrian and bicycle facilities provide residents with options for safe utilitarian exercise that, along with other actions, can improve public health outcomes. Traffic collisions represent a common cause of death and injury in Harlingen, with 37 people dying on the city's streets in 2023.

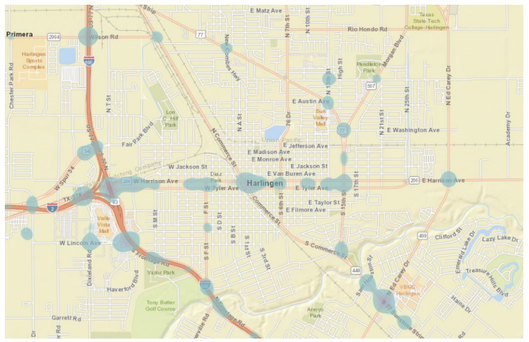
Roadway design standards that reduce vehicular speeds, provide buffers between vehicles and nonmotorized users. Separate pedestrian and bicycle facilities from travel lanes can promote a safe and comfortable environment for active transportation.



Information from the Lower Rio Grande Valley Active Transportation and Active Tourism Plan

37

Number of people who died in car crashes in Harlingen in 2023 (35 people were killed in 2022)



Traffic collision hot spots from Rio Grand Valley MPO

Complete Streets

Complete Streets design makes roadways safer and more functional for all travelers, including drivers, pedestrians, bicyclists, and transit users. For Harlingen, this approach provides a framework for upgrading corridors that carry both local and regional traffic while also connecting homes, schools, shopping areas, and community destinations. Typical features include continuous sidewalks, protected or designated bicycle space, clearly marked crosswalks, pedestrian-scale lighting, and shade from street trees. Together, these elements make streets easier to navigate for people of all ages and abilities, improve safety, and create a more inviting environment that supports health and local commerce.

One corridor that shows the need for this approach is the segment of Dixieland Road extending from the I-2 frontage road south to Lincoln Avenue. This stretch is a busy connector that links neighborhoods with retail and services but does not provide consistent pedestrian and bicycle accommodations. Targeted improvements should focus on closing sidewalk gaps, introducing high-visibility crossings at key intersections, and adding lighting and shade to make walking more comfortable during the day and evening. By applying Complete Streets principles here, the City can strengthen everyday access for residents, demonstrate the value of context-sensitive design, and establish a practical example to guide similar upgrades on other corridors across Harlingen.

Transit

The Lower Rio Grande Valley Development Council provides public transportation in Harlingen and the Rio Grande Valley through its transit department, Valley Metro, which connects Cameron County, Brownsville, Harlingen, La Feria, La Paloma, Olmito, Port Isabel, Primera, San Benito, and Santa Rosa. Within the city, the Harlingen Medical and Harlingen Retail routes serve local travel needs, while other routes connect residents to surrounding communities.

To extend access, Valley Metro also offers a flex service that allows riders to schedule pick-ups within a designated zone or request short deviations from the fixed route. This option helps reach areas not directly served by fixed stops and adds flexibility for residents who might otherwise find transit difficult to use.

Because fixed-route service is limited to two lines, large portions of Harlingen are not directly served, especially along north–south corridors and in Downtown, where civic destinations such as City Hall are farther from existing stops. The 2021 Regional Public Transportation Coordination Plan documented this concern, with residents specifically asking for more bus stops in central Harlingen to improve access to key destinations. While the





Harlingen Area Bus Map



regional function of Valley Metro is a significant strength, additional intra-city connections could complement this system and provide more convenient local options.

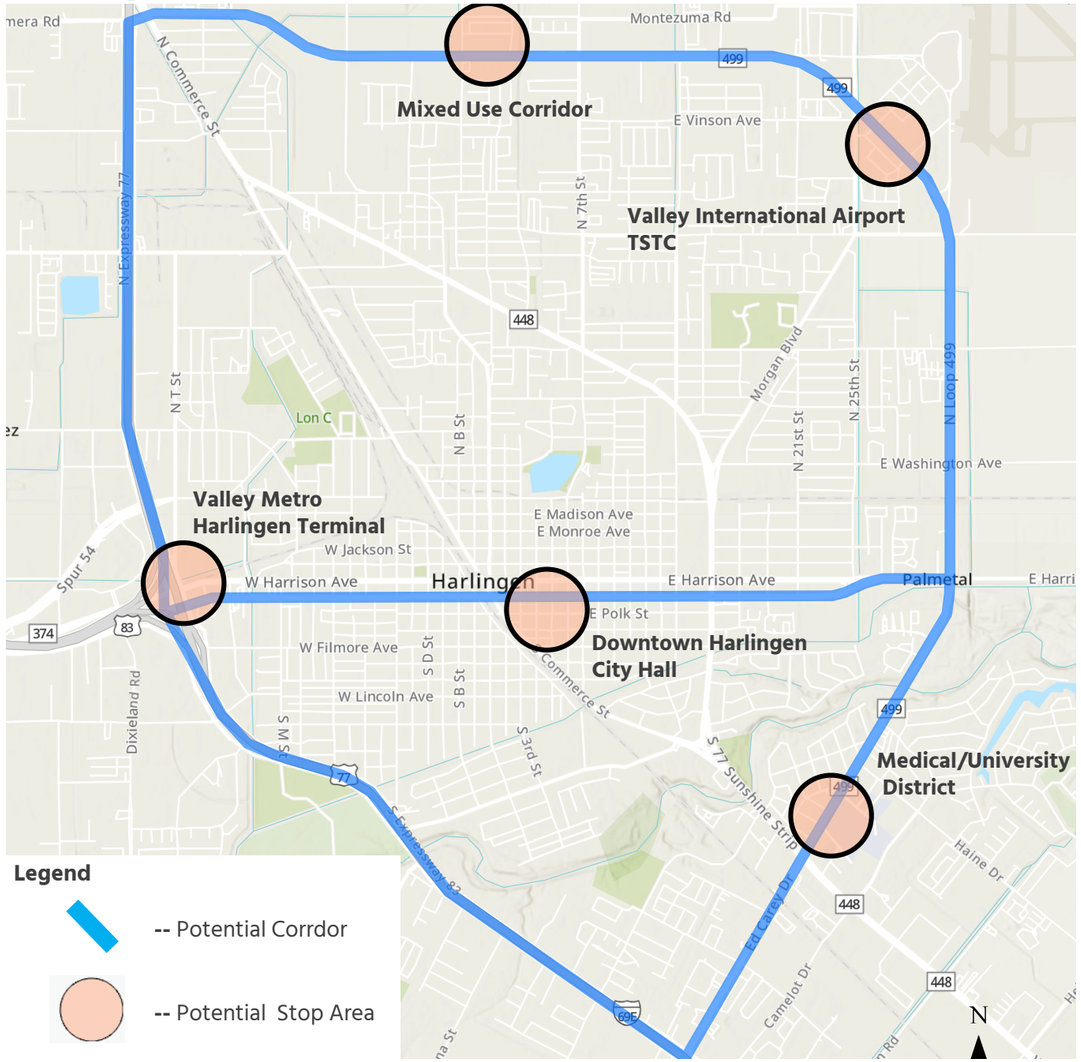
Expanding fixed-route service within the city would not only improve day-to-day mobility for residents but also strengthen transit as an economic development tool. Reliable routes that connect key corridors and destinations make it easier for people to access jobs, education, healthcare, and shopping, while also supporting local businesses by increasing foot traffic and customer access.

One opportunity to expand transit is by establishing bus rapid transit (BRT) routes, including dedicated bus-only lanes, within Harlingen (north-south) and interjurisdictionally (east-west).

Also important are the sidewalks and streets that connect residents to transit stops. Sidewalk and pedestrian improvements present an opportunity to enhance neighborhood walkability while also supporting transit use. Improved crosswalks, lighting, and shade along transit corridors would make it easier for people of all ages and abilities including older adults, individuals with limited mobility, and families with children to reach bus stops comfortably and safely. These kinds of improvements not only create more inviting streetscapes on their own but also expand the effective reach of the transit system by making it more accessible to a wider range of residents.

Enhancing Harlingen's transit and walkability strengthens its regional role while improving daily life. Reliable routes, safe sidewalks, and better connections make transit a smart choice for residents and future growth.

Bus Rapid Transit (BRT) Potential Corridors



Map 13. Existing Sidewalks and Trails

The above conceptual network illustrates how Bus Rapid Transit could link Harlingen's key destinations, including the Valley Metro Harlingen Terminal, Downtown near City Hall, Valley InternationalAirport and Texas State Technical College, the proposed medical/ university district, and a northern mixed-use corridor. These locations support regional connectivity, access to civic and commercial areas, links to education and air travel, service to growing employment centers, and future higher-density development. The map presents these potential corridors and station areas as a starting point for future analysis. Exact stop locations will require further study to ensure adequate right-of-way and operational feasibility, and additional stops may be identified as the city and regional transit network continue to expand.

Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) apply technology to improve the safety and efficiency of transportation networks without requiring major new roadway construction. By linking signals, monitoring traffic in real time, and providing better information to travelers, ITS helps cities make more effective use of their existing infrastructure. The result is reduced congestion, improved travel reliability, and safer conditions for drivers, pedestrians, and transit users.

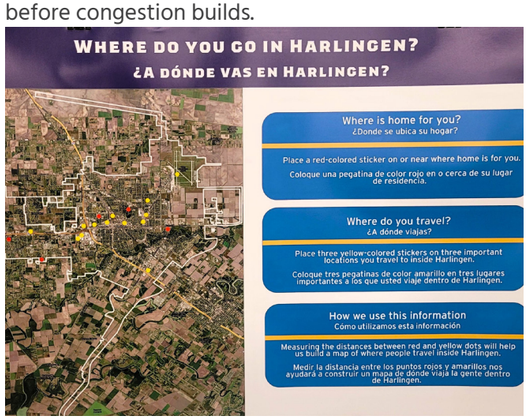
Harlingen already manages nearly 90 traffic signals and a similar number of school zone flashers, giving the City a solid base for future ITS improvements. Modernizing signal controllers would allow intersections to be connected and managed as coordinated systems rather than as isolated units. Fiber-optic communications are a critical element, providing the backbone that enables signals to "talk" to each other and to centralized software. With these upgrades, the City could implement timing plans that reflect daily traffic patterns, seasonal variations, and special events, improving flow on major corridors while still prioritizing safety.

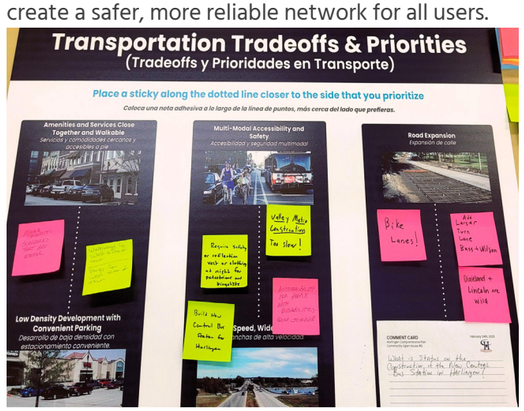
Monitoring and detection systems represent another important component. Closed-circuit cameras at key intersections can help staff quickly identify crashes, stalled vehicles, or flooding, reducing response times. Vehicle detection technologies such as radar or video sensors provide real-time data on traffic volumes and turning movements, allowing adjustments to be made before congestion builds.

At school zones and high-use pedestrian areas, upgraded flashers, countdown timers, and accessible push buttons enhance visibility and safety while supporting compliance with state and federal standards.

Traveler information is a further dimension of ITS that can directly benefit Harlingen residents. Dynamic message signs along arterial approaches can provide updates on construction, detours, or emergency conditions. These tools are especially useful during weather events or regional incidents when timely information helps drivers choose safer routes. Over time, data from ITS devices can also feed into online platforms, giving the public greater access to information about travel times and system performance.

Because Harlingen's streets are part of a larger regional network, coordination is central to any ITS strategy. The Texas Department of Transportation manages the state highways that carry much of the city's through-traffic, the Rio Grande Valley MPO allocates funding and sets regional priorities, and the Cameron County Regional Mobility Authority (CCRMA) advances projects that cross city boundaries. Aligning ITS investments with these agencies ensures compatibility, opens access to funding, and strengthens connections to the broader Valley transportation system. With targeted upgrades in signals, communications, monitoring, and traveler information, Harlingen can position itself to capture the benefits of ITS and create a safer, more reliable network for all users.





Public input on transportation at February 24th 2025 Community Open House

Interjurisdictional Planning

Harlingen must plan closely with its local and regional partners. The Rio Grande Valley MPO is a federally funded program that addresses the mobility goals of the communities within the urbanized area of the Rio Grande Valley. The Rio Grande Valley MPO works with cities within the region, transit providers, and the Texas Department of Transportation to plan for the future transportation needs of this metropolitan area. The Cameron County Regional Mobility Authority is an independent government agency created in 2004 to finance, acquire, design, construct, operate, maintain, expand or extend transportation projects in the region. Continuing to coordinate with the Rio Grande Valley MPO, adjacent and nearby municipalities, and Hidalgo and the surrounding counties is key to building a successful transportation system in Harlingen and the region.

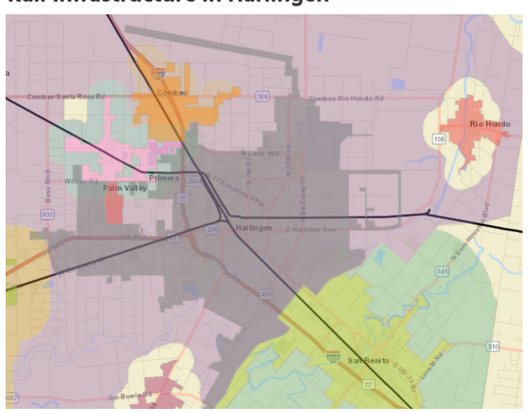
Congestion

With continued growth in the Rio Grande Valley, traffic congestion continues to increase on arterial roadways, particularly along commercial corridors or near commercial centers. Recent improvement projects have been constructed by the Texas Department of Transportation to address congestion on I-2. Strategies to address traffic congestion should include a multimodal approach with continued improvements to arterial roadways that include pedestrian, bicycle, and mass transit enhancements that promote additional options for travel.

Rail Infrastructure

Harlingen is served by two Class I railroads: Union Pacific Railroad (UPRR) and the Rio Valley Switching Company (RVSC). The UPRR's Harlingen Subdivision runs north-south through downtown, while the Brownsville Subdivision extends east-west, serving the Port of Harlingen and industrial parks. Historically, the presence of multiple at-grade crossings, particularly near the downtown switching yard, has caused traffic delays and safety concerns. To address these issues, the Cameron County Regional Mobility Authority is implementing the Harlingen Rail Improvements Project, which involves relocating and realigning approximately 1.7 miles of track, eliminating seven at-grade crossings, and constructing one new crossing. This project aims to streamline rail operations, reduce congestion, and improve safety by connecting the Harlingen and Brownsville subdivisions and straightening two curves. Additionally, the relocation of the switching yard to Olmito has already alleviated some downtown congestion by moving switching operations out of the city center. These initiatives are part of a broader effort to modernize Harlingen's rail infrastructure and support the region's growing trade and transportation needs.

Rail Infrastructure in Harlingen





Harlingen Rail Improvements Project

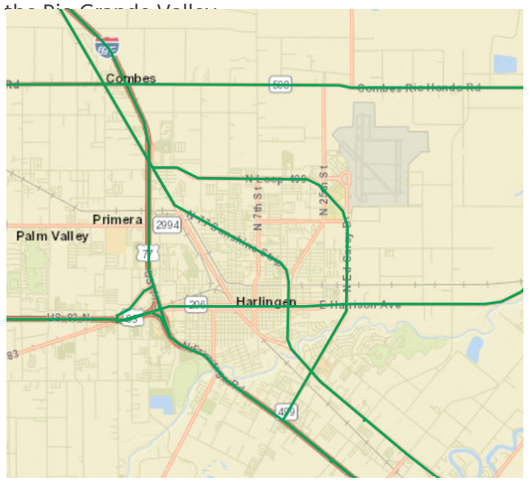
Freight

Freight transportation is an essential part of urban transportation networks. The Rio Grande Valley's multimodal freight network supported more than $22 billion in exports and $31 billion in imports in 2019, as well, as $37.4 billion in gross regional product (GRP). Approximately 1,000,000 trucks and 100,000 railcars entered the Rio Grande Valley from Mexico, representing a 23% increase of inbound trucks and a 10% increase of inbound trains since 2010. The Rio Grande Valley Freight and Trade Transportation Plan identifies freight and trade activity, opportunities, challenges, and strategies for the region. It identifies how freight and trade needs and opportunities impact the local, regional, and statewide transportation network and economic competitiveness. It identifies strategies for enhancing freight mobility, safety, connectivity, and other factors within the region.

Since 2017, the Port of Harlingen has experienced a 235% increase in tonnage, growing from 990,000 tons to consistently handling 3.2 million tons annually. Over the same period, commercial traffic surged by 671%. The port now generates approximately $1.79 billion in economic activity each year.

Municipalities around the US are exploring innovative ways of providing adequate freight transportation without jeopardizing street safety and air quality, including providing suitable infrastructure along freight truck routes, ensuring that truck routes avoid neighborhoods and sensitive areas, and providing access to major roadway systems. The Rio Grande Valley is the only location in Texas with truck, rail, maritime, air, pipeline, and space activity.

The Texas Department of Transportation conducted a Regional Freight and Trade Transportation Plan in 2020. The plan addresses the binational and multimodal freight challenges and opportunities in the Rio Grande Valley.



Rio Grande Valley Freight Corridors

Free Trade Bridge

Cameron County owns and operates three international bridges that span the Mexico–United States border.

The Free Trade Bridge at Los Indios is an international border crossing located eight miles south of Harlingen and San Benito. Cameron County owns and operates the bridge; however the cities of Harlingen and San Benito each receive 25% of the net revenues. The bridge facilities are located on a 127 acre tract of land. The Autopista provides direct access to the highly industrial area of Monterrey, Mexico.



Air Travel

The City of Harlingen owns the Valley International Airport, the largest airport in the Rio Grande Valley serving 1,200,000 passengers annually as of 2024. It is operated by a nine-member airport board appointed by the Mayor. Valley International Airport in Harlingen, Texas, is undergoing significant upgrades to enhance its capacity and operational efficiency. The airport recently completed a $32 million runway extension, lengthening Runway 17R/35L from 8,301 feet to 9,400 feet, making it the longest runway south of Austin. This expansion allows cargo jets to operate at 75% of their maximum takeoff weight, up from 48%, thereby accommodating larger aircraft and increasing cargo capacity. Additionally, the airport has implemented advanced Category II instrument landing systems to improve safety and reduce flight delays during inclement weather. A new air traffic control tower, funded by a $4.5 million FAA grant, is under construction to replace the outdated 65-foot tower built in 1971. This 120-foot tower is expected to be completed within two years. Other enhancements include the installation of a $3 million fiber optic circuit for improved data transmission and the addition of covered parking, increasing capacity to about 800 spaces. These developments position Valley International Airport as a modern and efficient hub for both passenger and cargo services in the Rio Grande Valley.



Paying for Infrastructure

Harlingen should continue collaborating with regional communities, stakeholders, and the Texas Department of Transportation on capital plan strategies, including development and maintenance of a well connected network of sidewalks, bicycle lanes, and shared-use paths and trails that are accessible for all ages and abilities.

Development exactions and impact fees are among a variety of key strategies for construction of roadways that include pedestrian and bicycle options.

Additionally, the City of Harlingen should collaborate with the Rio Grande Valley MPO and the Texas Department of Transportation in a strategic approach to leveraging federal funding for roadway enhancements, bicycle lane construction, and trail development.

Multimodal Infrastructure

Multimodal infrastructure includes the infrastructure for transit, pedestrians, and bicyclists, in addition to automobiles. This infrastructure includes storefront space, public sidewalks, street trees, utility space, and areas for seating, bike lanes, curb and gutter, on-street parking. The dimensions and design of streets have a major impact on the comfort and safety of traveling along Harlingen's streets using multiple modes.

Harlingen has several arterials and local streets with sidewalks. Still, most streets lack this basic amenity, making it difficult and sometimes dangerous for residents to walk places. The existence of physical barriers between people and vehicles significantly increases the safety and usability of streets.

Street trees are a vital element of city infrastructure. They clean the air, filter stormwater, improve human physical and mental health, reduce impacts of heat island effect, and promote walkability by providing shade to pedestrians. Furthermore, when planted between the curb and the sidewalk, they provide a barrier between people and moving vehicles. Many studies measuring the net financial impact of trees show that despite maintenance costs, they can be fiscally and economically positive investments.

When planted appropriately, street trees reduce long term road maintenance infrastructure costs by providing shade that prolongs the life of the pavement. Shaded streets can save up to 60 percent of repaving costs.

The Cara Cara Trails network highlights how these principles can be put into practice at a regional scale. In Harlingen, the Arroyo Colorado segment is envisioned as a continuous corridor for walking and biking that connects neighborhoods, parks, and commercial areas.

To maximize its value as part of the city's multimodal system, this trail should be directly linked with Harlingen's sidewalks and transit stops. Such integration would create a safe, separated route that supports walking, biking, and transit access, expanding travel options for residents.

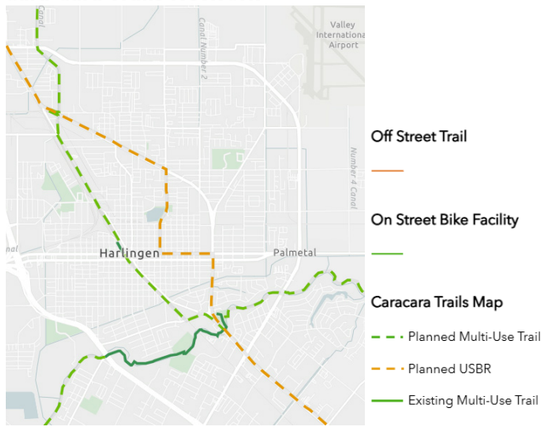
As the Arroyo Colorado trail segment develops, it also provides a model for integrating natural features into the city's transportation system. Much like street trees, trails along waterways improve health outcomes, promote recreation, and create safer spaces for nonmotorized travel. When tied to the street grid, they become part of a larger network that reduces barriers between modes, supports economic activity in nearby corridors, and makes Harlingen's multimodal system more cohesive and resilient.

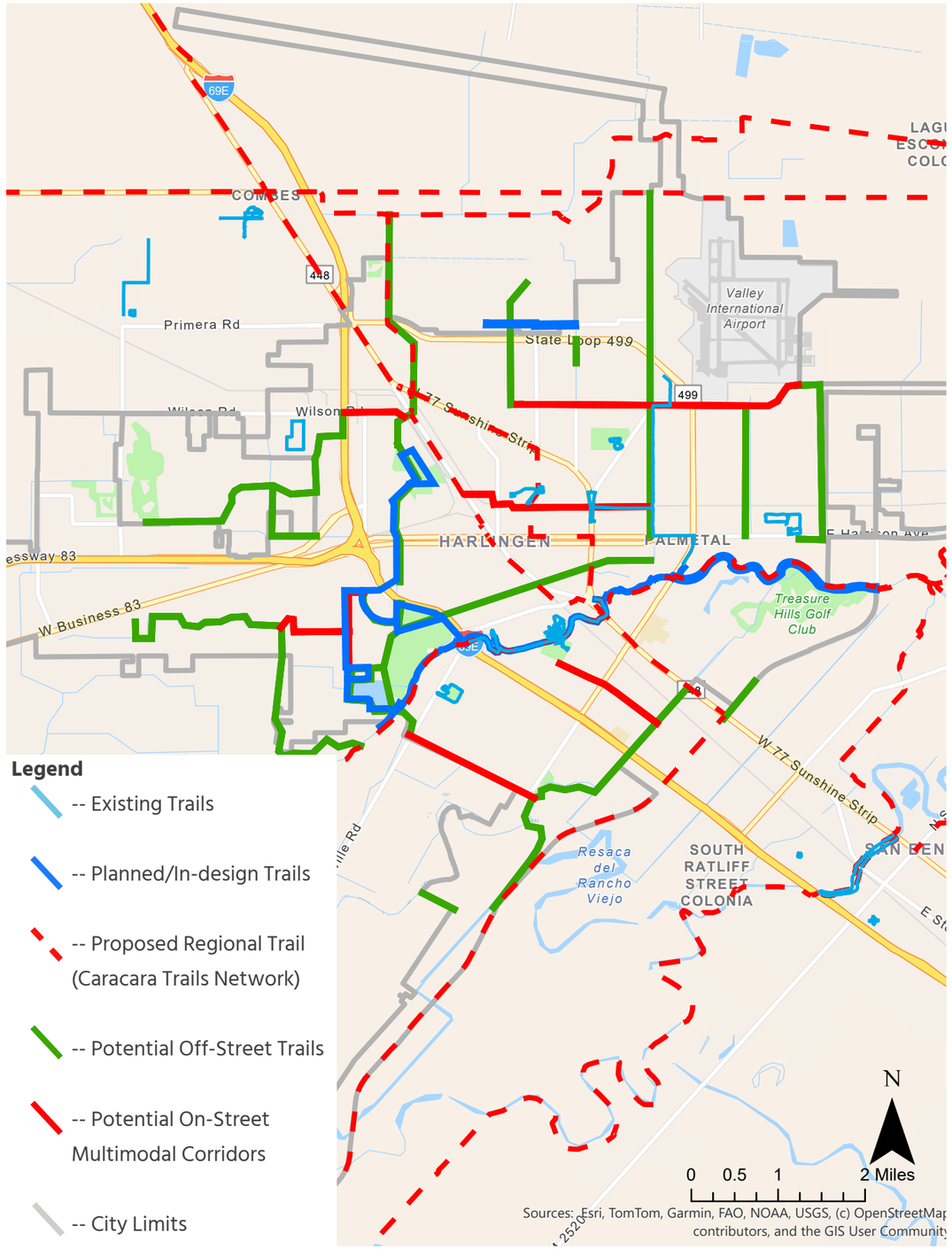
Investments in sidewalks, street trees, and regional trail connections like the Cara Cara network show how multimodal infrastructure enhances daily mobility and long-term quality of life. These elements support each other by improving safety, expanding access, encouraging healthier travel choices, and reinforcing Harlingen's role in a larger regional system, resulting in a more complete and resilient transportation network that benefits residents, visitors, and businesses.



Information from the Lower Rio Grande Valley Active Transportation and Active Tourism Plan

Cara Cara Trails Network





Map 14. Trail Network Map

Future Thoroughfare Plan

Harlingen is part of the Rio Grande Valley Metropolitan Planning Organization, a federally funded program that works with Rio Grande Valley communities and the Texas Department of Transportation to plan for the region's transportation needs. The Rio Grande Valley MPO also serves as a structure of committees and organizations that creates collaborative partnerships.

The Harlingen Future Thoroughfare Plan depicts where roadway extensions or new roadways are needed to accommodate the City's anticipated growth. The Plan represents the thoroughfare network for the City of Harlingen. The City should work with the Rio Grande Valley MPO to update the region's thoroughfare Plan for consistency with the City's street design principles.

Street Design Principles

The Future Thoroughfare Plan should follow four key principles:

- Design elements encourage safe multimodal transportation options within the functional classification roadway hierarchy scheme.
- Street Context Areas enhance the vital connection between land use and transportation.
- Interconnectivity accommodates vehicular traffic, slow traffic in appropriate places to enhance safety, provide more travel routes, and promote more safe and comfortable travel options. Local streets and alleys are another critical element of connectivity.
- A balanced ratio of street right-of-way components, including vehicular movement space (travel lanes, turning lanes, etc.) and roadside space (sidewalks, street trees, bicycle lanes, etc.)
- New infrastructure designs, amenities, and proportions seek to meaningfully and realistically expand safe and comfortable travel choices.

Using the Future Thoroughfare Plan

The placement of proposed thoroughfares on the Plan represents the general location of existing and proposed arterials. As growth continues, new development may warrant the identification and development of thoroughfares that are not depicted on the Future Thoroughfare Plan.

While the Plan guides the general location of future roads, the spacing of thoroughfares is dictated through the spacing described in the Street Design Guidelines below. Where proposed as a thoroughfare, future development may need additional roadways not indicated in the map in accordance with the desired spacing.

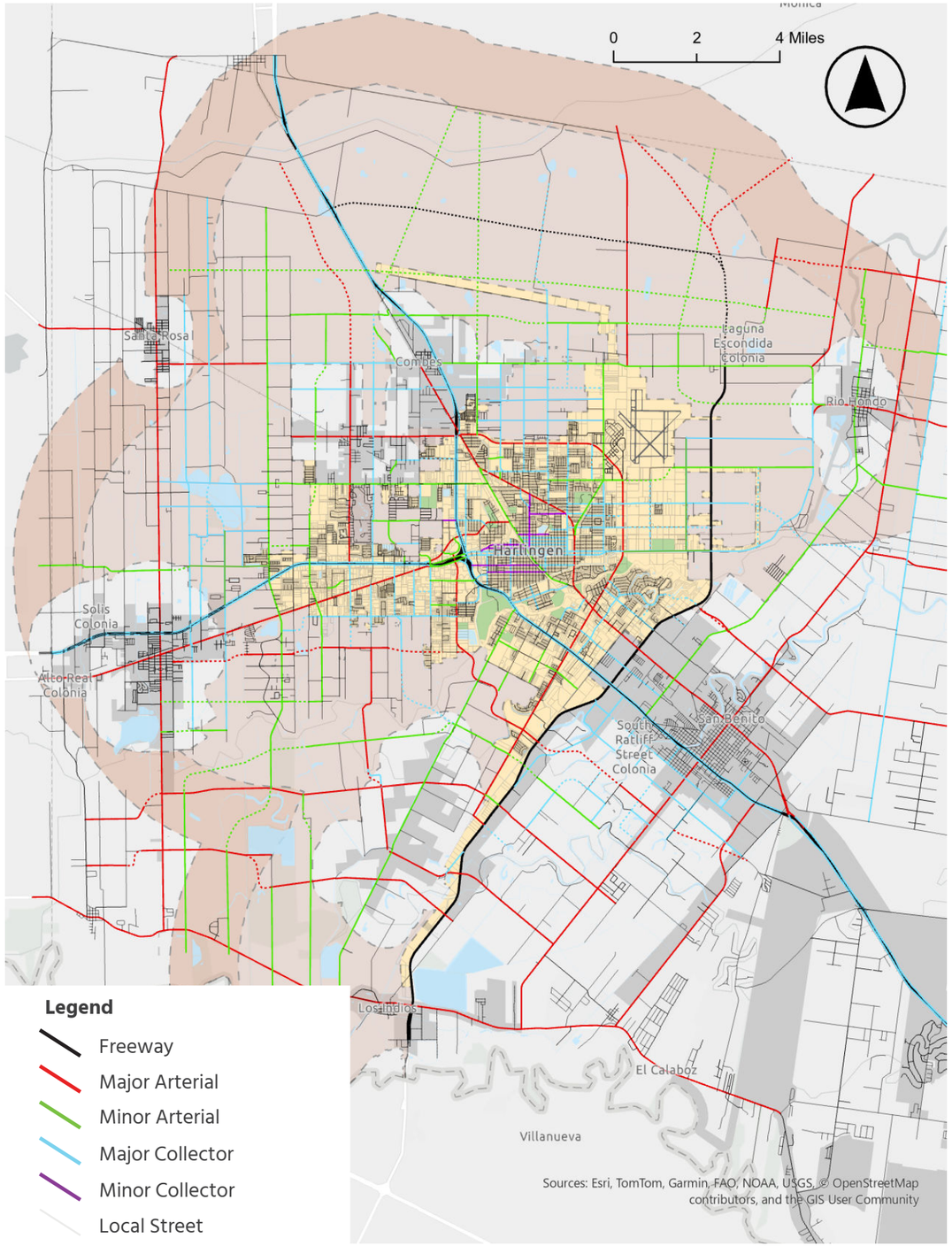
Future local streets are not shown on the Future Thoroughfare Plan. In addition to the Street Types tables, the City requires new local streets and street improvements in accordance with its zoning and subdivision regulations, plans, and any other standards and agreements.

Relationship with other Transportation Plans

When the City of Harlingen enacts updates and changes to its Thoroughfare Plan, those updates are shared with the Rio Grande Valley MPO.

Changing and amending the Plan

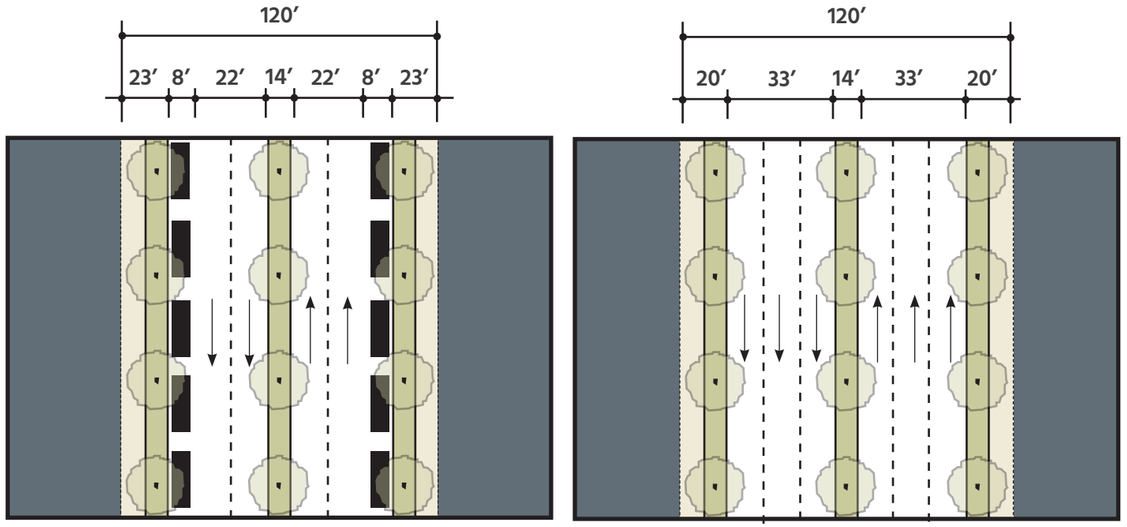
As circumstances change and development and redevelopment occurs, there may be instances where the City seeks to make an amendment to the Future Thoroughfare Plan. Similar to amendments to the Future Land Use Map, proposed map amendments to the Future Thoroughfare Plan should be approved by City Council subject to coordination with the Rio Grande Valley MPO.



Map 15. Future Thoroughfare Plan

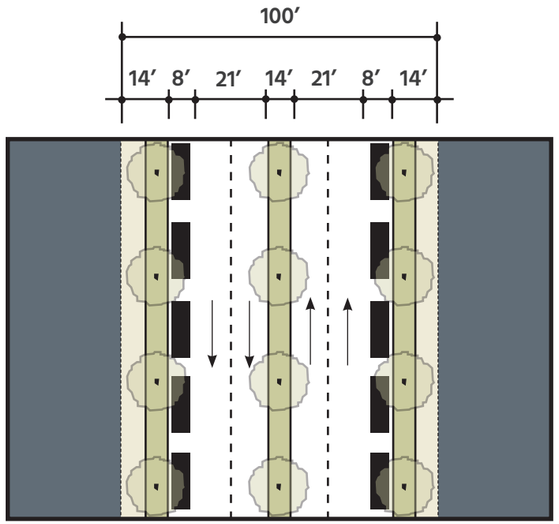
Street Cross-Sections

Major Arterial 120′



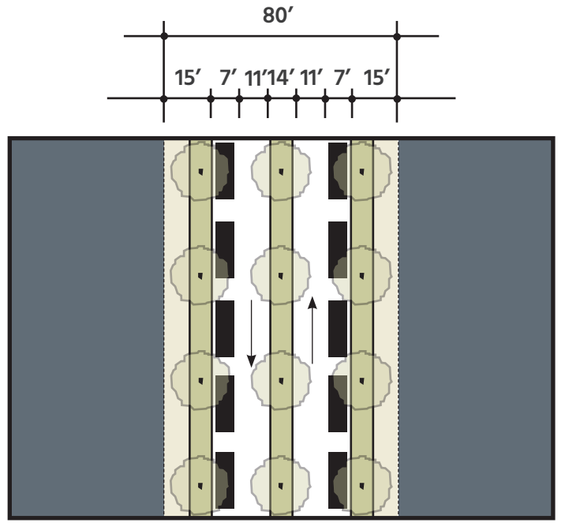
Road Type	Major Arterial 1	Major Arterial 2
Right-of-Way Width	120 feet	120 feet
Design Speed	35 MPH	35 MPH
Traffic Lanes	4 lanes	6 lanes
Lane Width	10.5-11 feet	10.5-11 feet
Parking Lanes	Parallel	None
Median / Turn lane	8-14 feet	8-14 feet
Curb Radius	15-25 feet	15-30 feet
Walkway Type	6-20 foot Sidewalk/Multi-use Path	6-15 foot Sidewalk/Multi-use Path
Planter Type	5-7 foot continuous Planter	5-7 foot continuous Planter
Curb & Gutter	Yes	Yes
Bike Facility	Physically protected / above curb	Physically protected / above curb
Street Trees	Tree well or parkway	Tree well or parkway

Minor Arterial 100′



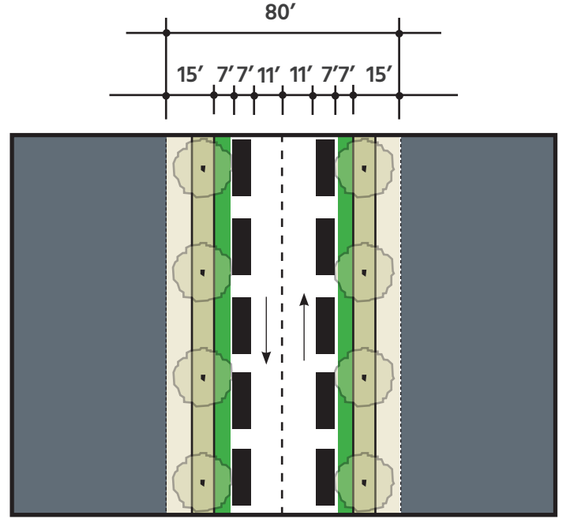
Right-of-Way Width	100 feet
Design Speed	35 MPH
Traffic Lanes	4 lanes
Lane Width	10-11 feet
Parking Lanes	Parallel
Median / Turn lane	8-14 feet
Curb Radius	10-20 feet
Walkway Type	6-14 foot Sidewalk
Planter Type	5-7 foot continuous Planter
Curb & Gutter	Yes
Bike Facility	Physically protected / above curb
Street Trees	Tree well or parkway

Major Collector 80’



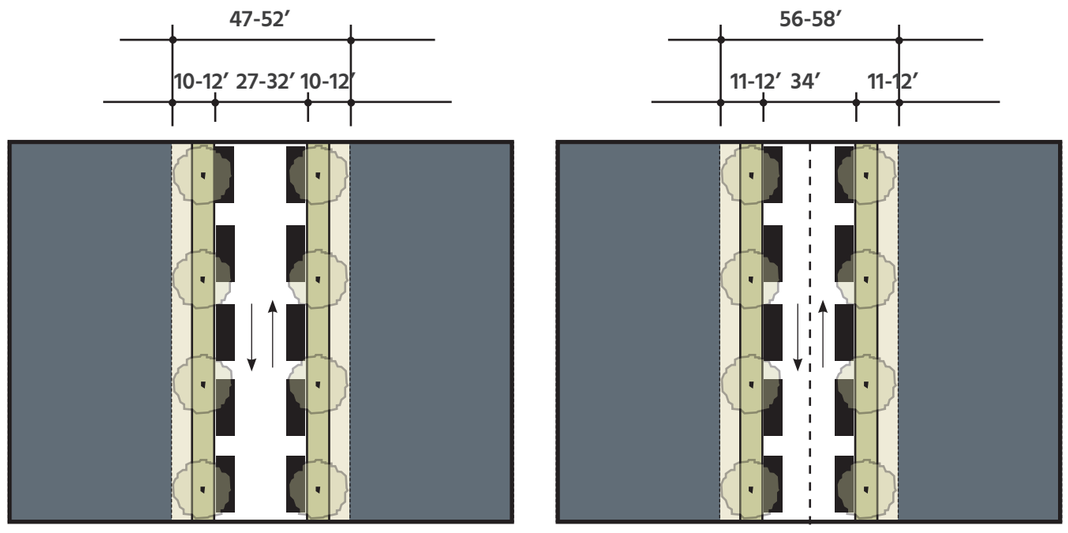
Right-of-Way Width	80 feet
Design Speed	30-35 MPH
Traffic Lanes	2 lanes
Lane Width	10-11 feet
Parking Lanes	Parallel
Median / Turn lane	8-14 feet
Curb Radius	10-20 feet
Walkway Type	6-15 foot Sidewalk
Planter Type	5-7 foot continuous Planter
Curb & Gutter	Yes
Bike Facility	Physically protected / above curb
Street Trees	Tree well or parkway

Minor Collector 80’



Right-of-Way Width	80 feet
Design Speed	35 MPH
Traffic Lanes	2 lanes
Lane Width	10-11 feet
Parking Lanes	Parallel
Median / Turn lane	8-15 feet
Curb Radius	10-20 feet
Walkway Type	6-15 foot Sidewalk
Planter Type	5-7 foot continuous Planter
Curb & Gutter	Yes
Bike Facility	Physically protected / above curb
Street Trees	Tree well or parkway

Local 40’-56’



	Residential Local	Commercial Local
Right-of-Way Width	47-52 feet	56 feet
Design Speed	15 MPH	15 MPH
Traffic Lanes	n/a	n/a
Lane Width	n/a	n/a
Parking Lanes	Parallel	Parallel
Median / Turn lane	None	None
Curb Radius	5-15 feet	5-15 feet
Walkway Type	5-7 foot Sidewalk	6-8 foot Sidewalk
Planter Type	5-7 foot continuous Planter	4-5 foot continuous Planter
Curb & Gutter	Yes	Yes
Bike Facility	Shared	Shared
Street Trees	Parkway	Tree well or parkway

Street Design Guidelines

These Guidelines are intended to be used on existing thoroughfares that due to existing conditions, right-of-way widths, or other factors require more design flexibility than that provided in the cross-sections.

Harlingen’s Thoroughfare Plan determines the location and character of future thoroughfares. It also considers improvements or expansions to existing streets and the location of future roadways based on anticipated and planned growth patterns.

Traditionally, Thoroughfare Plans in many communities have classified different types of roadways based solely on function. The Harlingen Future Thoroughfare Plan emphasizes the design of streets based on the context of the intended surrounding built environment. Thus, this Plan emphasizes the integral connection between the public and private realms, improving the link between buildings and streets.

Street Context Areas

Street Context Areas distinguish different street designs applied based upon existing or planned transition to an intended development pattern. The Street Context Areas include:

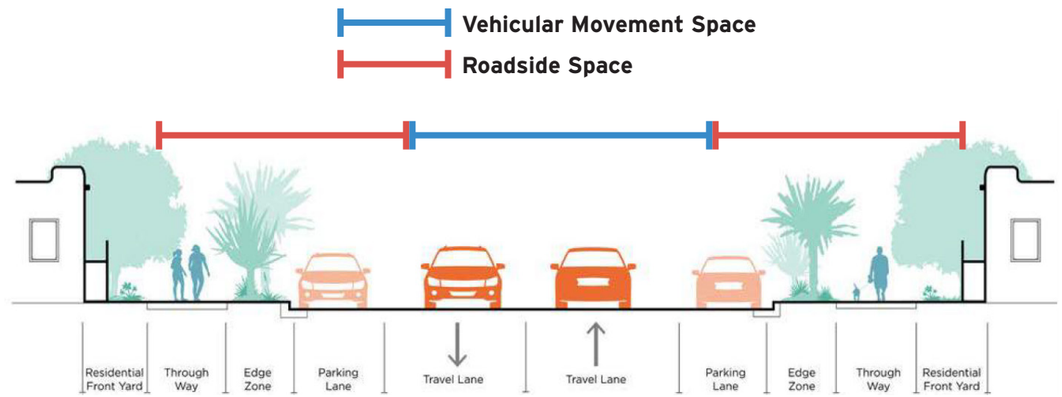
Context Area 1 - Urban

Context Area 2 - Suburban

Context Area 3 - Rural

Street Right-of-way Ratios

This plan considers a balanced ratio of Street Right-of-Way Components, including vehicular movement space (travel lanes, turning lanes, etc.) and roadside space (sidewalks, street trees, bicycle lanes, etc.) is a key principle of Harlingen’s Future Thoroughfare Plan.



Context Area 1 Urban

Streets in Context Area 1 should be designed to provide safe and comfortable transportation options to pedestrians, bicyclists, and transit-riders. The proportion of the public street rights-of-way width dedicated to non-vehicular transportation infrastructure should equal a minimum 50 percent of the total width.

Future Land Use Categories

- Downtown
- Local Commercial
- Single Family Residential (near downtown)







Context Area 1 - Street Design Guidelines

Street Component	Arterial	Collector	Local
Street Characteristics			
Desired Spacing	0.5 - 1 mile	660 - 2,000 feet	Up to 660 feet
Community Relationship	Defines neighborhood and district edges	Provides access across neighborhoods	Defines neighborhood experience
Design Speed	35 MPH	25-35 MPH	15-25 MPH
Traffic Volumes	7,000 - 27,000	1,100 - 6,300	80 - 700
Street Design Elements			
Number of Travel Lanes	4	2	1 - 2
Lane width	10.5 ft (11 ft outer lane)	10.5 - 11 ft	9 ft
Medians	Where widths permit	Limited	Limited
On-Street Parking	Parallel	Parallel	Parallel
Curb & Gutter	Yes	Yes	Yes
Sidewalk	10 - 20 ft	8 - 15 ft	6 ft
Bike Facility	Physically protected	Protected or separated	On-street
Street Trees	Tree well	Parkway or tree well	Parkway
Medians	Optional	Minimally used	Discouraged
Rear alleys	Encouraged	Encouraged	Encouraged

Context Area 1 Street Retrofit Opportunities

- Widen existing sidewalks, fill gaps, and add sidewalks in priority locations
- Add shade trees abutting the curb every 30 ft
- Street right-of-way widths should be divided equally between roadside space and vehicular movement space with 50% of the width allocated for roadside space
- Consider space within the public right-of-way for public gathering and dining space in and around activity areas
- Frame walkable streets with buildings; first floors should have transparent windows and multiple entrances
- Convert diagonal parking to parallel parking
- Move solid waste and utilities underground and to rear alleys
- Consider above-curb improvements like bike lanes, restaurant seating, bicycle parking, and public art
- Enhance street connectivity with small block sizes
- Locate off-street parking behind buildings
- Make intersections safer for pedestrians

Context Area 2 Suburban

Streets in Context Area 2 are generally designed primarily for automobile use within existing automobile-oriented land use contexts. There are opportunities for short and long-term retrofits to enhance safety along these corridors and at intersections.

The proportion of the right-of-way width dedicated to non-vehicular transportation infrastructure should equal a minimum 30 percent of the total width.

Future Land Use Categories

- Regional Commercial
- Multi-Family Residential
- Single-Family Residential (outside downtown)
- Heavy Industrial
- Light Industrial







Context Area 2 - Street Design Guidelines

Street Component	Arterial	Collector	Local
Street Characteristics			
Desired Spacing	One mile	800 - 3,000 feet	Up to 800 feet
Community Relationship	Defines neighborhood and district edges	Provides access across neighborhoods	Defines neighborhood experience
Design Speed	35 MPH	25-35 MPH	15-25 MPH
Traffic Volumes	10,000 - 50,000	1,000 - 15,000	80 - 700
Street Design Elements			
Number of Travel Lanes	4	2	1 - 2
Lane width	11 ft (12 ft outer lane)	11.5 ft	9 - 10 ft
Medians	Encouraged, With trees	Where widths permit	Limited
On-Street Parking	Parallel in retrofit	Parallel	Parallel
Curb & Gutter	Yes	Yes	Yes
Sidewalk	5 - 12 ft	5 - 12 ft	5 - 6 ft
Bike Facility	Multi-use path	Multi-use path	On-street, shared
Street Trees	Parkway or tree well	Parkway or tree well	Parkway
Medians	Optional	Minimally used	Discouraged
Rear alleys	Consider in retrofits	Consider in retrofits	Where feasible

Context Area 2 Street Retrofit Opportunities

- Enhance intersection designs and street crossings to improve bike, pedestrian, and driver safety
- Slow traffic, narrow lanes and street widths, and enhance non-auto infrastructure around schools and other activity centers
- Street right-of-way widths should provide at least 30% of the width allocated for non-automobile space
- Incorporate hike-bike trails where feasible
- Plant street trees adjacent to the curb in priority areas
- Enhance street and trail connectivity
- Intersection curb radii of 5 - 15%

Context Area 3 Agricultural

Streets in Context Area 3 are located in rural areas with existing open space, farmland, and rural neighborhoods. Roads generally do not have curb and gutter. These represent areas that may eventually transition in the future, however minimal roadway improvements are expected in these areas. Where feasible, there may be opportunities for trails or road shoulders that can accommodate cyclists and joggers. Where future development pressures encroach on these areas, use the street cross-sections or design guidelines for Context Area 1.

Future Land Use Categories

- Agricultural
- Open Space







Context Area 3 - Street Design Guidelines

Street Component	Arterial	Collector	Local
Street Characteristics			
Desired Spacing	One mile	660 - 2,000 feet	Up to 660 feet
Community Relationship	Defines edge of large land tracts	Defines edge of large land tracts	Provides residential access
Design Speed	35 - 55 MPH	25 - 45 MPH	15 - 25 MPH
Traffic Volumes	300 - 3,000	300 - 3,000	15 - 400
Street Design Elements			
Number of Travel Lanes	2	2	1 - 2
Lane width	12 ft	12 ft	9 - 11 ft
Medians	Where widths permit	Limited	Limited
On-Street Parking	None	None	Allowed
Curb & Gutter	None	None	None
Sidewalk	5 - 8 ft	5 - 8 ft	6 ft
Bike Facility	Trail, shoulder	Trail, shoulder	On-street
Street Trees	Gateways	Gateways	Where desired
Medians	None	None	None
Rear alleys	None	None	None

Type 3 Street Retrofit Opportunities

- Street rights of way should include shoulders and/or adjacent trails to accommodate multiple modes of travel
- Include stormwater swales where appropriate
- Plant trees and other types of landscaping in targeted locations and at key gateways