

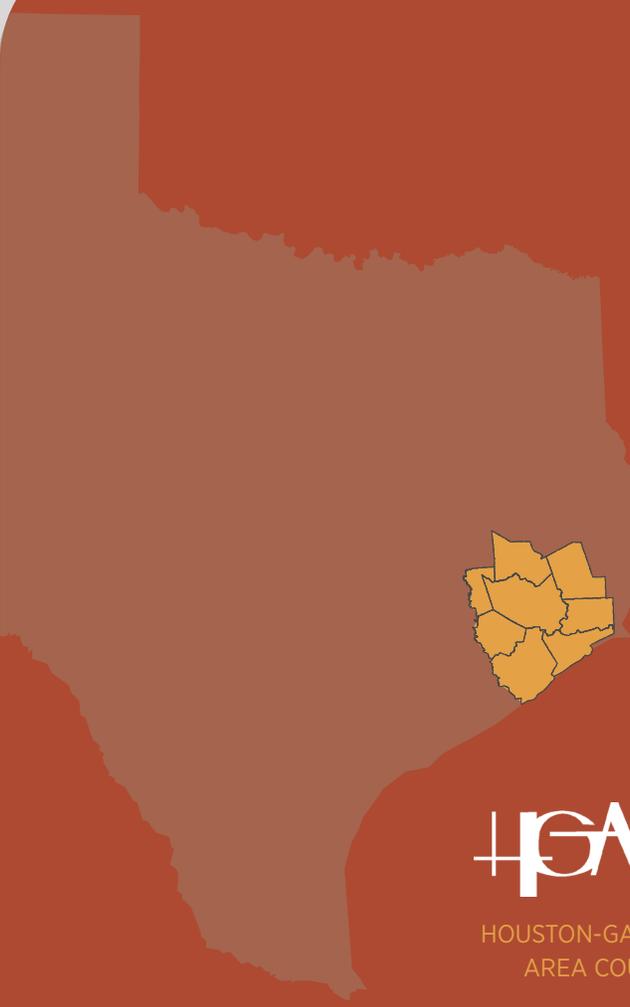
H-GAC 2040 REGIONAL
PEDESTRIAN & BICYCLE PLAN







Table of Contents
IntroductionPage 4
Creating a VisionPage 6
Existing ConditionsPage 7
Regional NeedsPage 10
Building a Regional NetworkPage 11
Programs and StrategiesPage 16
Measuring SuccessPage 18



The map shows the state of Texas in a dark red color. The Houston-Galveston area is highlighted in a lighter red color, and the eight counties within this area are outlined in yellow.



H-GAC

HOUSTON-GALVESTON
AREA COUNCIL

H-GAC serves as the Metropolitan Planning Organization (MPO) for the eight-county Houston-Galveston area. As the MPO, H-GAC is responsible for developing and maintaining the Regional Pedestrian-Bicycle Plan, an action plan to guide investments and encourage mobility through active transportation means.

What is the Regional Pedestrian and Bicycle Plan?

The Regional Pedestrian and Bicycle Plan is a long-range planning document that describes our region’s vision for enhancing pedestrian and bicycle infrastructure within the eight-county Transportation Management Area (TMA). It supports the 2040 Regional Transportation Plan (RTP), a long-range, multi-modal transportation plan that guides investment in all types of transportation infrastructure throughout the Houston-Galveston area.

Why do we need the Regional Pedestrian and Bicycle Plan?

Our region is home to more than six million people, who live in rural towns, suburban communities, and dense urban centers. By 2040, our region is expected to have 3.2 million more residents.¹ As our region grows, greater demand will be placed on our transportation system. Enhancing our region’s pedestrian and bicycle network will provide greater transportation options for people of all ages and abilities, while improving public health and creating new economic development opportunities.

As a regional planning document, it is intended to:

- **Guide Public Investment**
Establish a framework the Transportation Policy Council (TPC) can use when investing in pedestrian and bicycle infrastructure and supportive policies and programs.
- **Promote Interjurisdictional Coordination**
Create an overall vision of how the regional pedestrian and bicycle network should function.
- **Identify Best Practices**
Identify tools public and private entities can utilize to improve the safety, comfort and convenience of walking and biking throughout our region.

Growing Interest in Active Transportation

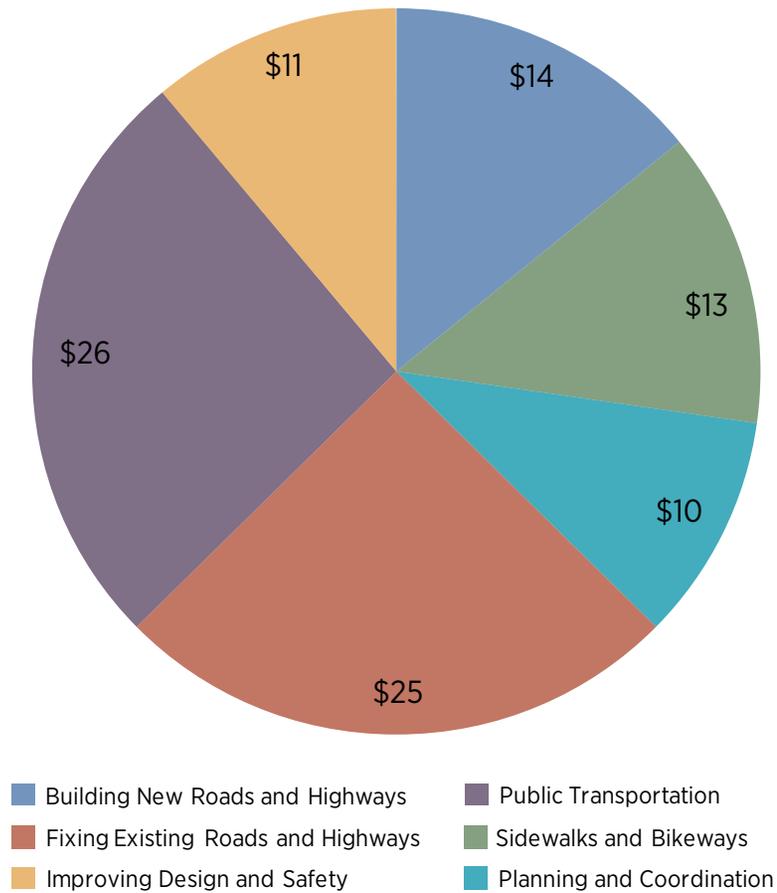
For a variety of reasons, people nationwide are walking and biking more frequently:

- An increasing number of Americans are interested in living in a walkable community, where they can access shopping, dining, and other amenities without having to use a car.²
- Young Americans are waiting longer to obtain driver’s licenses and are utilizing transportation alternatives more frequently.³
- Concern for the environment has inspired many people to choose walking and bicycling as a clean and “green” transportation option.⁴
- Increasing costs associated with buying and maintaining an automobile have made walking and biking an attractive, economical alternative.⁵

Our region’s residents have indicated support for investing in pedestrian and bicycle infrastructure. In 2012, Houstonians approved a major bond referendum providing \$100 million to support Bayou Greenways 2020, an initiative to create a network of open space and shared-use paths along local waterways.⁶ Businesses and communities throughout our region (including Houston and The Woodlands) have received recognition from the League of American Cyclists for being “bicycle friendly.”



**Figure 1:
How Our Region’s Residents Would Spend \$100
Improving Our Transportation Network**



Source: H-GAC THINK 2040 Survey (2012)

Benefits of Active Transportation

Improving our region’s pedestrian and bicycle network can yield a variety of social, economic, and environmental benefits:

- Provide more transportation options
- Reduce air pollution
- Improve public health
- Increase property values
- Create recreational opportunities
- Support economic development

Plan Development

The Regional Pedestrian and Bicycle Plan was created after extensive research and consultation with stakeholders throughout our region. It builds off of previous regional planning efforts, including the *2035 Regional Bikeway Plan* and *Our Great Region 2040*.

Table 1: Elements of the Planning Process	
Inventory	H-GAC worked with the Pedestrian and Bicyclist Subcommittee and local stakeholders to: <ul style="list-style-type: none"> • Map existing bicycle infrastructure; and • Identify existing programs and policies intended to make walking and biking safer and more convenient.
Needs Assessment	Stakeholders throughout our region helped identify areas where new or improved bicycle and pedestrian facilities are needed.
Regional Vision	The Pedestrian and Bicyclist Subcommittee developed the plan’s vision, goals and objectives.
Concept Development	Stakeholders helped develop the plan’s content, providing feedback at group meetings and workshops.



Creating a Vision

Members of H-GAC’s Pedestrian and Bicyclist Subcommittee worked together to create a unified vision of what our pedestrian and bicycle network should look like in 2040, based on input from local governments, citizens and other stakeholders. Goals that will help achieve that vision were identified.

The Vision

Pedestrians and bicyclists of all abilities can travel safely, conveniently and comfortably throughout our region using an interconnected, well-maintained network of pedestrian pathways and on- and off-street bicycle facilities.



REGIONAL NETWORK

Goal 1: Provide a comprehensive regional bikeway and pedestrian network that creates clear connections to destinations and other modes.



POLICIES

Goal 3: Help local entities access the tools needed to implement policies and projects that provide high-quality options for pedestrians and bicyclists.



SAFETY

Goal 2: Ensure our region’s pedestrian and bicyclist infrastructure is safe, accessible and comfortable for all users.



HEALTHY LIVABLE COMMUNITIES

Goal 4: Use our region’s bikeway and pedestrian network to help create healthier and more livable communities.

Existing Pedestrian and Bicycle Network

The types of pedestrian and bicycle facilities available differ from community to community, and their conditions vary:

- In *urban areas*, there are shared-use paths, bicycle lanes, and signed bicycle routes, with a few signed shared roadways. The presence of sidewalks varies, depending on the density of the surrounding area and when it was developed (or redeveloped).
- In *suburban areas*, shared-use paths are the most common type of bicycle infrastructure. Extensive networks of off-road bicycle facilities exist within The Woodlands, Sugar Land, Cinco Ranch, and Kingwood. Some suburban areas have sidewalks and/or walking trails, but others do not.
- In *rural areas*, signed shoulder bicycle routes and share-the-road signs can be found along some roadways (particularly in Montgomery County). There are a few areas, such as rural downtowns, with sidewalks or other pedestrian facilities.

Additional facilities are proposed in the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP), and local plans.



Shared-use paths have been built along some of our region's baysou.

**Our region's roadway network
included 68,899 lane miles in 2012.**

H-GAC 2013 Mobility Report

Facility Type	Miles
Bicycle Lane	149
Shared Use Path/Trail	688
Signed Shared Roadway	127
Signed Shoulder Bike Route	251
Total	1,215

Source: H-GAC (February 2014)

Current Plans, Programs, and Policies

Communities throughout our region are improving their pedestrian and bicycle networks. In many places, public entities, non-profits, and developers are working to build new pedestrian and bicycle infrastructure, improve existing facilities, and promote active transportation options. These efforts not only involve physical changes to our region’s infrastructure, but educational programs and policies intended to improve the safety, convenience, and attractiveness of walking and biking.

FEDERAL EFFORTS

Per federal law, the needs of pedestrians and bicyclists must be considered when planning new transportation facilities or reconstructing existing ones (unless walking and biking are prohibited). Metropolitan planning organizations must include accommodations for pedestrians and bicyclists within their transportation plans (including the RTP and the TIP).⁸

STATE EFFORTS

In accordance with federal law, the Texas Department of Transportation (TxDOT) has a state bicycle coordinator, who works with other state agencies and local governments to ensure the needs of pedestrians and bicyclists are considered as part of transportation projects. The agency’s Bicycle Advisory Committee has a similar role, encouraging policymakers and engineers to consider bicyclists’ preferences when developing projects and policies.⁹

REGIONAL EFFORTS

H-GAC oversees several programs and initiatives aimed at making our region more walkable and bikeable:

- Special Districts Program
- Livable Centers Program
- Subregional Planning Initiative (SPI)
- Regional Pedestrian and Bicycle Plan
- Commute Solutions Program
- Regional Bikeway Viewer
- Pedestrian and Bicyclist Counts

LOCAL EFFORTS

Communities throughout our region are developing plans, policies, and infrastructure intended to make walking and biking an attractive transportation option:

- **Local Plans**
Several communities have articulated a vision for their pedestrian and bicycle networks in long-range planning documents.
- **Building Shared-Use Paths**
Many communities are planning and constructing shared-use paths, which are able to accommodate both bicyclists and pedestrians. The largest of these efforts is the Bayou Greenways Initiative.
- **Multi-Modal Accommodations**
Several organizations are promoting the concept of complete streets, which are transportation corridors that include safe, comfortable accommodations for pedestrians, bicyclists, transit users, and motorists. The City of Houston signed an [executive order](#) that called for the incorporation of complete street principles into municipal planning efforts and transportation projects, and other communities promote this concept within their major thoroughfare plans.
- **Intermodal Connectivity**
Walking and bicycling trips can link with other modes of transportation. METRO, our region’s largest transit provider, allows cyclists to bring bicycles on buses (and, at certain times, on its trains).
- **Active Transportation and Health**
Recognizing the health benefits of walking and biking, communities are working to improve pedestrian and bicycle connections between schools and surrounding neighborhoods. Other health-related initiatives aim to make walking and biking a safer, more attractive mode of transportation.
- **Safety**
Public and private entities are working together to improve the safety of pedestrians and bicyclists through educational programs, law enforcement activities, and other initiatives.



Challenges and Opportunities

Building a well-connected pedestrian and bicycle network provides many benefits, but it also presents significant challenges. Our region can work together to overcome these challenges, while taking advantage of unique opportunities created by our natural, cultural, and economic resources.

Challenges	Opportunities
<ul style="list-style-type: none"> Funding Federal initiatives that support active transportation, such as the Transportation Alternatives Program (which includes many projects eligible under the former Transportation Enhancements Program), have limited funding and the project selection process is highly competitive. Automobile-Oriented Culture Separated land uses, vast parking lots, wide streets and limited connectivity sometimes make automobiles the only practical way to get around. Many residents believe walking and biking are dangerous and do not know basic bicycle safety techniques. Development Standards Regulatory tools influence the character and quality of pedestrian and bicycle facilities. Many infrastructure design manuals and subdivision ordinances encourage and/or require road networks to facilitate high-speed automobile movement at the expense of pedestrian and bicyclist comfort and safety. Accommodations for walking and biking are not always required, and street interconnectivity may be discouraged, forcing pedestrians and bicyclists to travel longer distances to reach relatively-close destinations. Coordination Creating a continuous pedestrian and bicycle network with a consistent high-quality design can be difficult in areas where multiple agencies have jurisdiction. Private developers constructing adjacent projects do not always coordinate with one another, creating a disjointed system. Heat and Humidity Heat and humidity can make walking and biking uncomfortable in the warmer months. 	<ul style="list-style-type: none"> Recent Investments in Pedestrian/Bicycle Infrastructure Despite funding challenges, public and private entities are making significant investments in pedestrian and bicycle infrastructure. Localities are increasingly interested in accommodating pedestrian and bicycle infrastructure as part of construction and reconstruction projects, with some pursuing Complete Street policies. Developers are incorporating sidewalks, shared-use paths and other pedestrian and bicycle facilities into their projects. Our region can build off this momentum to continue developing an interconnected pedestrian and bicycle network. Changing Demographics As interest in urban living grows, the core of our region's cities will continue to redevelop. Communities can take advantage of redevelopment opportunities to create mixed-use activity centers where walking and biking are safe and convenient. Natural Features Our region's gentle topography makes walking and biking easy for people of all ages and abilities. Capitalizing on Tourism A well-developed active transportation network linking cultural sites and natural areas could attract recreational users from within our region and beyond. Temperate Cooler Months Mild winters, along with comfortable spring and fall temperatures, make walking and biking attractive for several months of the year.



Regional Needs

H-GAC worked with local stakeholders to identify policies, programs, and investments needed to make walking and biking an attractive transportation option. Goals, objectives, and policy recommendations reflect these needs.

Regional Network	Safety
<ul style="list-style-type: none"> Gap Elimination Investments are needed to eliminate major gaps in the regional pedestrian and bicycle network, such as freeways, tollways, railroads, and waterways. Improved Connectivity Better connectivity is needed between localized networks. Data Collection Data on the number of pedestrians and bicyclists using existing facilities is needed to help communities determine demand for active transportation infrastructure. 	<ul style="list-style-type: none"> Improved Awareness Programs are needed to encourage motorists to watch for pedestrians and bicyclists on our region's roadways. Safety Education Efforts promoting safe travel techniques for pedestrians and bicyclists need to be accessible to all communities.
Policies	Healthy Livable Communities
<ul style="list-style-type: none"> Multi-Modal Transportation Planning Local and regional policies should be reviewed to ensure they allow and encourage the provision of pedestrian and bicycle facilities when roadways are constructed or improved. Additional Funding Sources New, innovative funding sources are needed to build and maintain our region's active transportation network. Interjurisdictional and Intermodal Coordination To maximize the impact of public investment on regional mobility, governmental entities need to work together during the planning, design and construction of pedestrian, bicycle and other regionally significant transportation projects. Capacity Building Many communities need assistance developing policies, programs, and projects supportive of walking and biking. 	<ul style="list-style-type: none"> Improved Access While our region has made significant investments in pedestrian and bicycle infrastructure, some residents still do not have access to these facilities. Safe and convenient pedestrian and bicycle infrastructure is needed in many parts of our region, especially in areas where the automobile is the only viable means of transportation. Connections to Cultural and Natural Assets To create new recreational and economic development opportunities, better connections are needed between communities and our region's cultural sites and natural areas

Building a Regional Network

Parts of our region have well-developed pedestrian and bicycle networks, but there are few routes between these localized systems. Working together, representatives from different communities helped identify where bikeways could link major destinations and activity centers.

Creating a regional bikeway network will take time, but will provide new opportunities for residents, businesses, and visitors. Through incremental

investment, inter-jurisdictional coordination, and creative partnerships, our region can build a world-class active transportation system in a fiscally responsible way.

Priority Actions

As regional entities create new policies and invest in infrastructure improvements, they can **accelerate**, **facilitate** and **coordinate** development of our region’s pedestrian and bicycle network.

Table 8: Priority Actions Supportive of Building a Regional Pedestrian and Bicycle Network

	Action	Description
Facilitate	Create a System Vision	Work with stakeholders to create a long-term vision for what our region’s pedestrian and bicycle network should be like, and review that vision regularly (updating as necessary).
	Build Capacity	<ul style="list-style-type: none"> • Provide communities with tools they can use to become more pedestrian- and bicycle-friendly, such as model policies and information on best practices. • Help communities develop pedestrian and bicycle projects of regional interest that can successfully compete for funding from federal, state, and local sources, and can be delivered on time
	Collect Data	<p>Collect data that will help communities:</p> <ul style="list-style-type: none"> • Determine the need for new and/or improved pedestrian and bicycle infrastructure (e.g. Pedestrian/Bicycle Counts, Infrastructure Inventory, etc.). • Evaluate the impact investments in pedestrian and bicycle infrastructure have on mobility.
	Improve Cultural Awareness	<ul style="list-style-type: none"> • Assist regional and local entities in developing and maintaining programs that raise public awareness of the benefits of walking and biking. • Promote safe travel techniques for pedestrians and bicyclists. • Encourage motorists to be aware of pedestrians and bicyclists traveling throughout the region.
Accelerate	Reward Local Planning and Investment	<p>Prioritize investment within jurisdictions that have:</p> <ul style="list-style-type: none"> • Developed a local pedestrian and/or bicycle plan; • Implemented pedestrian- and bicycle-friendly policies and programs; and/or • Used non-federal funding sources to complete local pedestrian and bicycle projects.
	Invest in Pilot Projects	Provide financial and technical support to innovative pedestrian and bicycle projects that will spur local investment in underserved communities and/or serve as demonstration projects.



Table 8: Priority Actions Supportive of Building a Regional Pedestrian and Bicycle Network

	Action	Description
Coordinate	Promote Interjurisdictional and Intermodal Coordination	<ul style="list-style-type: none"> • Help communities and agencies work together during the planning, design, and construction of interjurisdictional pedestrian and bicycle projects. • Continue to integrate pedestrian and bicycle improvements into subregional plans, access management studies, and other regional planning efforts.
	Connect Facilities	Prioritize investment in projects that eliminate major gaps in the regional pedestrian and bicycle network and/or connect localized networks.
	Institutionalize Active Transportation Planning	<ul style="list-style-type: none"> • Establish a framework that promotes collaboration amongst federal, state, regional, and local entities during the planning, design, and construction of all transportation projects. • Develop regional policy describing how the needs of pedestrians, bicyclists, motorists, and transit users should be integrated into the planning and design of different types of transportation projects. • Work with federal and state agencies to reduce the regulatory burdens associated with utilizing federal funds to complete pedestrian and bicycle projects of regional interest.

To maximize the impact of public dollars, our region should direct federal transportation funding to pedestrian and bicycle construction projects that will have the greatest impact on regional mobility. Table 9 describes characteristics of pedestrian and bicycle projects that are of regional interest.

Table 9: Defining Pedestrian and Bicycle Investments of Regional Interest

Pedestrian and bicycle construction projects seeking inclusion within the Transportation Improvement Program (TIP) should achieve at least two (2) of the following goals:	
<i>Eliminate a Major Barrier</i>	Provide safe and convenient routes across barriers, such as freeways, tollways, railroads, and waterways. Close gaps in the existing bicycle network that align with regional bikeways shown on the <i>Regional Bikeway Concept Map</i> .
<i>Connect to Transit</i>	Provide connections to regional and local transit systems.
<i>Connect to Activity Centers</i>	Provide connections to, or within, activity centers.*
<i>Realize Recommendations in Regional and Local Plans/Studies</i>	Implement recommendations described within an H-GAC Special Districts Study, an H-GAC Livable Centers Study, or other multi-jurisdictional or local plan.
<i>Accommodate Multiple Modes of Transportation</i>	Support construction or rehabilitation projects along major thoroughfares that include safe accommodations for pedestrians, bicyclists, motorists, and transit users (within existing or planned service areas).

*Density thresholds for different types of activity centers are defined within the Livable Centers Benefits Calculator, which is available online at www.h-gac.com/community/livablecenters/tools.aspx.



Regional Bikeway Concept Map

The Regional Bikeway Concept Map establishes an overarching vision of how our region’s active transportation network could develop over the next 20 to 30 years. It shows major destinations and activity centers and how they could be connected with bicycle infrastructure.

Table 10: Components of the Regional Bikeway Concept Map

<i>Regional Bikeways</i>	<i>Regional Bikeways</i> are the “freeways” of the regional bicycle network, facilitating long-distance biking between activity centers and areas with significant cultural and/or natural resources. Regional bikeways do not follow a specific route, but show general linkages that could be made between destinations. Exact routing would be based on local support and feasibility.
<i>Local Pedestrian/Bicycle Networks (Existing/Potential)</i>	<i>Local Pedestrian/Bicycle Networks</i> are hubs of the regional bikeway network, serving as the origin or destination for many bicycle trips. These places are population, employment, and cultural centers with an existing or planned interconnected pedestrian/bicycle network (or the potential to create one).
<i>National & State Bikeways (Existing/Proposed)</i>	National and state organizations have identified inter-regional bicycle routes that could connect our region with the rest of the country.
<i>Major Federal/State Parkland</i>	Thousands of acres of land in the region are managed by federal and state agencies for public use, providing residents and visitors with numerous recreational opportunities.

69 regional bikeways are delineated on the Regional Bikeway Concept Map, stretching almost 1,000 miles throughout the region. Constructing these proposed corridors would require an investment of approximately \$414 million (Table 11).

Table 11: Summary of Proposed Regional Bikeways

<i>Total Number</i>	69
<i>Total Distance (Miles)</i>	986.0
<i>Total Estimated Cost</i>	\$414,212,941



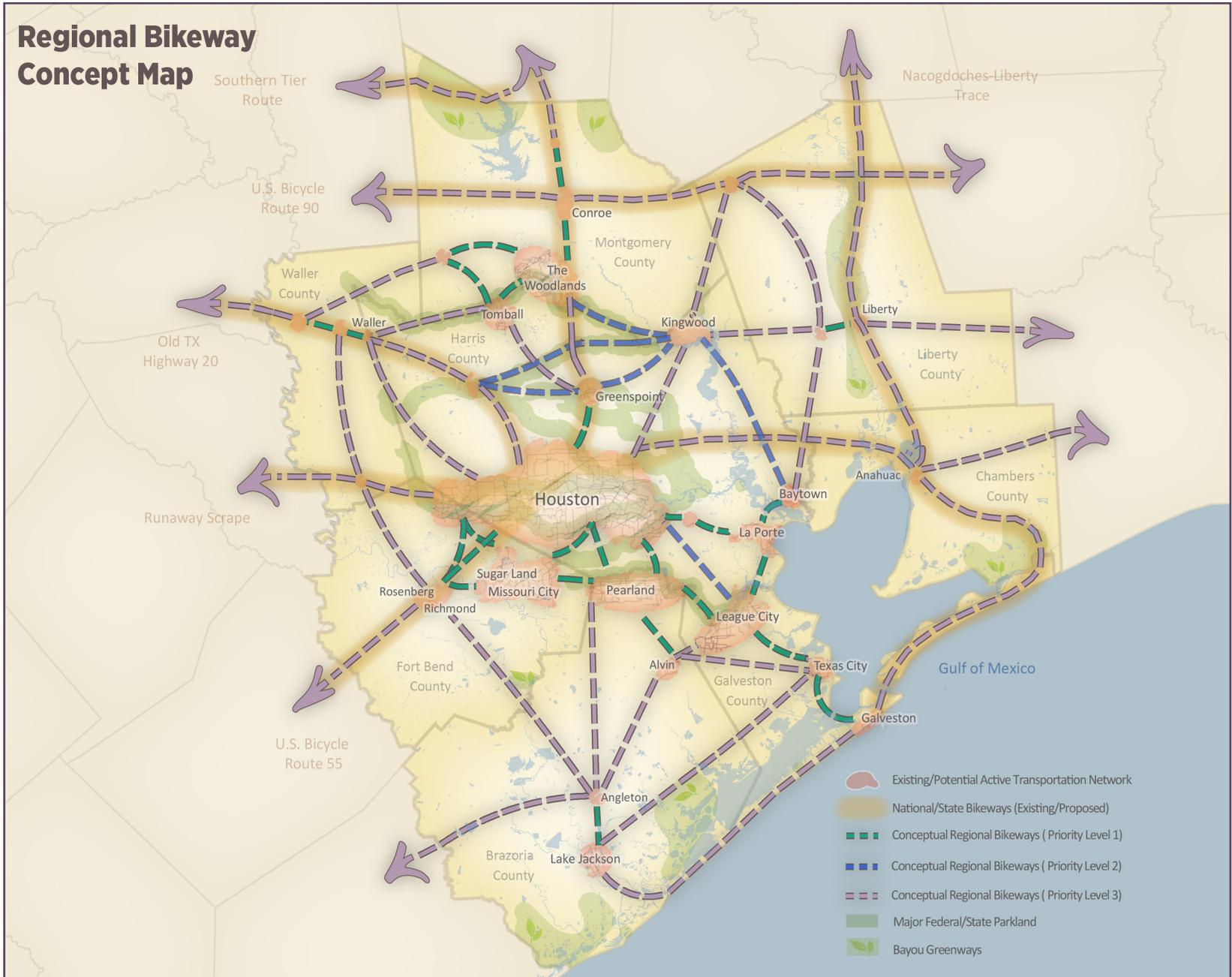


Table 12: Prioritizing Investment in Regional Bikeways

The conceptual regional bikeways will develop over time, as funding becomes available. To maximize the impact on regional mobility, investment in regional bikeways should be prioritized as follows:

Priority	Rationale	Number of Segments	Length (miles)	Estimated Cost
<i>Level 1:</i> Complete Shorter Segments (≤ 10 miles) between Localized Networks	Completion of these facilities could have the greatest impact on regional mobility; they will connect two or more localized pedestrian/bicycle networks at a relatively low cost, allowing residents to bike longer distances. Most of these bikeways are located in developed parts of the region, providing benefits to existing rural, suburban, and urban communities.	28	162.41	\$68,228,818
<i>Level 2:</i> Complete Longer Segments (>10 miles) where Local Investment is Planned or Underway	Some of the proposed regional bikeways align with existing or planned on- and off-road bicycle facilities. Completed or planned investments along these routes demonstrate a local commitment to improving the area’s active transportation network.	5	92.20	\$38,731,678
<i>Level 3:</i> Complete Longer Segments (>10 miles) with Limited Local Investment Planned or Underway	These bikeways not only connect distant localized networks, but improve access to federal/state parkland and accommodate inter-regional travel. These proposed bikeways would not only serve a transportation function, but could create new economic development opportunities for surrounding communities.	36	731.38	\$307,252,445

Developing a well-connected regional pedestrian and bicycle network will require significant investment. Many communities are already dedicating funds to build new sidewalks and bicycle facilities and improve existing infrastructure. If cities throughout the region continue to invest in pedestrian and bicycle infrastructure at current levels, they are projected to spend approximately **\$1.36 billion** over the next 25 years (2015 – 2040).



Program and Strategies

Different policies, programs, and design techniques can be used to maximize the impact public and private investments have on long-term pedestrian and bicyclist mobility. These strategies can be implemented on a regional scale through partnerships, or locally by public and private entities.

Table 12: Pedestrian- and Bicycle-Friendly Policies, Programs, and Initiatives

Policies	Programs
<ul style="list-style-type: none"> • Development Regulations/Incentives • Complete Streets • Siting of Public Buildings • Full Cost/Benefits Analysis 	<ul style="list-style-type: none"> • Safe Routes to School Programs • Bike-to-Work Days • Employee Incentives for Walking/Biking • Bikeshare Programs • Scenic Bikeways Programs
Maintenance/Operations	Safety
<ul style="list-style-type: none"> • Pedestrian/Bicyclist Counts • Facility Inventory • Maintenance Plans • Adopt-a-Path Programs 	<ul style="list-style-type: none"> • Safety Education Courses • Walking Buses • Safe Passing Ordinances • Strengthening Enforcement

Table 13: Types of Pedestrian and Bicycle Infrastructure

Bicycle Facility Types	Pedestrian Facility Types/Improvements	End-of-Trip Facilities
Bicycle Lanes	Sidewalks	Bicycle Parking (Bike Racks, Bike Lids, Enclosed Bike Shelters)
Bicycle Routes	Shared-Use Paths	Showers/Changing Rooms
Bicycle Boulevards	Paved Shoulders	Bicycle Repair Stations
Cycletracks/Sidepaths	Curb Ramps	
Shared-Use Paths	Crosswalks (Striped, Raised, In-Roadway Lighted)	
Shared Lanes/Sharrows	Curb Extensions	
Bike Boxes at Intersections	Median Refuge Islands	
Signed Shoulders	Countdown and Audible Pedestrian Signals	
	Grade-Separated Crossings (Overpasses/Underpasses)	
	Benches/Other Seating	
	Pedestrian Lighting	

Addressing Infrastructure Needs

Public and private entities can address the region’s need for new pedestrian and bicycle facilities as they invest in transportation infrastructure.

Table 14: How Public and Private Entities can Address Infrastructure Needs

Entity	Possible Actions
Metropolitan Planning Organization (MPO)	<ul style="list-style-type: none"> • Prioritize investment in projects that eliminate major gaps in the regional pedestrian and bicycle network and/or connect localized networks. • Prioritize investment within jurisdictions that have: <ul style="list-style-type: none"> » Developed a local pedestrian and/or bicycle plan; » Implemented pedestrian- and bicycle-friendly policies and programs; and/or » Used non-federal funding sources to complete local pedestrian and bicycle projects. • Provide financial and technical support to innovative pedestrian and bicycle projects that will spur local investment in underserved communities and/or serve as demonstration projects. • Help communities develop regionally-significant pedestrian and bicycle projects that can successfully compete for funding from federal, state, and local sources, and can be delivered on time.
TxDOT	<ul style="list-style-type: none"> • Provide adequate pedestrian and bicycle facilities when constructing or improving roadways. • Provide pedestrian and bicycle facilities along roadways and bridges that intersect existing or proposed active transportation infrastructure. • Maintain existing pedestrian and bicycle facilities that are within the agency’s jurisdiction.
Counties	<ul style="list-style-type: none"> • Address the needs of pedestrians and bicyclists within county thoroughfare plans. • Provide adequate pedestrian and bicycle accommodations when constructing or improving roadways. • Develop shared-use paths bayous, utility easements, and railway corridors to connect major destinations. • Create partnerships to help build and maintain active transportation infrastructure.
Cities	<ul style="list-style-type: none"> • Address the needs of pedestrians and bicyclists within local thoroughfare plans. • Connect regional bikeways with local pedestrian and bicycle facilities. • Create partnerships to help build and maintain active transportation infrastructure.
Developers	<ul style="list-style-type: none"> • Connect neighborhood trail systems to the regional bikeway network. • Include pedestrian and bicyclist accommodations along streets that connect to regional bikeways. • Provide bicycle parking, pedestrian lighting, street trees, and other features that make walking and biking a safe, convenient transportation alternative.



Measuring Success

Achieving the vision and goals described in this plan will take time. Several metrics can be used to track our progress towards making our region more walkable and bikeable.

Goal	Metric	Benchmark (Current Status)	
Regional Network	Daily Vehicle Miles Traveled (VMT) Per Capita*	26.7 VMT Per Capita [†]	
	Mileage of Bicycle Facilities* (Shared-Use Paths/Trails, Bicycle Lanes, Signed Shoulder Bicycle Routes, and Signed Shared Roadways)	Bicycle Lane	149
		Shared-Use Path/Trail	688
		Signed Shared Roadway	127
		Signed Shoulder Bicycle Route	251
		Total	1215
	Mode Share*	Drove Alone	78.5%
		Carpooled	12.3%
		Public Transportation	2.5%
		Bicycle	0.3%
Walked		1.5%	
Other Means		1.6%	
Safety	Crashes Involving Bicyclists per 1,000 Residents (Annual)	0.106	
	Crashes Involving Pedestrians per 1,000 Residents (Annual)	0.206	
Policies	Number of Jurisdictions in the Region with a Complete Streets Policy*	1	
Healthy Livable Communities	Number of Bicycles on Buses Annually*	184,983	
	Number of People Participating in H-GAC's NuRide Program*	25,828	
	Number of Pedestrian and Bicycle Trips Recorded in H-GAC's NuRide Program Annually*	Pedestrian Trips	43,040
		Bicycle Trips	71,596
	Number of Housing Units within ¼-Mile of a Designated Bicycle Facility	1,074,000	

*Consistent with metrics used in *Our Great Region 2040*, a high-level regional plan aimed at enhancing our region's quality of life. The plan, developed by H-GAC and local partners, was completed in February 2014.

[†]Average Non-Summer Weekday



End Notes

1. Houston-Galveston Area Council (2014). H-GAC 2040 Regional Forecast. Houston, TX.
2. National Association of Realtors. Realtors Report Americans Prefer to Live in Mixed-Use, Walkable Communities. NAR 2013 Community Preference Survey. National Association of Realtors, 1 Nov. 2013. Web. 10 Jan. 2014.
3. Davis, Benjamin, Tony Dutzik, and Phineas Baxandall. Transportation and the New Generation: Why Young People Are Driving Less and What It Means for Transportation Policy. Rep. Santa Barbara, CA: Frontier Group, 2012 (p. 1 – 2).
4. Houston-Galveston Area Council. Building Better Bikeways: A Planning Guide for the Houston-Galveston Region. Houston, TX: Houston-Galveston Area Council, 2009 (p. 5).
5. Hunter, Heather. "Cost of Owning and Operating a Vehicle in U.S. Increases Nearly Two Percent According to AAA's 2013 'Your Driving Costs' Study." AAA Newsroom. AAA, 16 Apr. 2013. Web. 10 Jan. 2014.
6. Begley, Dug. "Texas Falls Further Back on National Bike-Friendliness List." Houston Chronicle. Houston Chronicle, 1 May 2014. Web. 30 July 2014.
7. United States Census Bureau (2010). American Community Survey: 2006 – 2010. Retrieved January 21, 2014 from <http://www.census.gov/acs/www/>.
8. See 23 U.S. Code §134 – Metropolitan Transportation Planning and 23 U.S. Code §135 – State and Non-Metropolitan Transportation Planning.
9. 2013 Educational Series: Bicycle and Pedestrian Program. Publication. Austin, TX: Texas Department of Transportation: State Legislative Affairs Division, 2013 (p. 2).





Approved by the Transportation Policy Council
January 22, 2015