

FREEWAY CORRIDOR ENHANCEMENTS IN THE HOUSTON REGION

EXECUTIVE SUMMARY

Houston's freeway corridors – particularly those from the airports – are the first experiences that shape a visitor's impression of Houston. Travelers first see how green the city appears from above. Later, while traveling along the freeways, they may see landscaped corridors in certain areas, but also long segments with minimal or no landscaping and trash on the shoulders. This gives visitors a mixed first impression of Houston and tends to reinforce the same impression with Houstonians. It may also send the message that parts of the region are more attractive than others and that the governing entities lack pride of place and are unwilling to allocate resources for enhancement and maintenance of public spaces.

In reality, much progress has been made over the last 20 years. In the last decade alone, suburban cities and management districts scattered across the Houston region have added attractive landscaping on freeway rights of way and along frontage roads within their areas of jurisdiction, while also providing supplemental, ongoing maintenance of those assets. Today the Houston region has a tremendous foundation to build upon. We have an opportunity to move from a patchwork pattern of enhancing and maintaining freeway corridors to a more strategic and systematic approach that creates a consistently positive impression with the public and helps Houston First achieve its vision of making Houston one of the world's premier destinations by 2025. But implementing such an initiative will require multiple organizations to work together for mutual long-term benefit to the region.

THE OPPORTUNITY

Many observers see a significant improvement in the visual condition of Houston's freeway corridors over the last 20 years, primarily because of the Texas Department of Transportation's Green Ribbon landscape enhancement project (which has resulted in the planting of about 1.5 million trees along Houston highways since launching in 1999), the reconstruction of several freeways in the region and billboard restrictions enacted in the 1980s by the Houston City Council. In addition, various management districts and smaller suburban cities within the region supplement improvements to, and maintenance of, segments of the freeway corridors. These efforts entail the planting of shrubs, trees and flowers within the freeway corridors and providing additional maintenance such as cleaning, de-littering, landscape care, graffiti removal, etc.

Overall, however, certain segments of the freeway corridors remain unsightly. The majority of the segments lack landscaping and other attractive enhancements that could make a better impression, and exhibit signs of poor maintenance including deteriorating assets, litter and unkempt green spaces.

With the impetus to improve its image and quality of life and increase visitation, Houston has an opportunity to enhance the freeway corridors aesthetically, and install and implement improved maintenance standards. This need will only grow in the coming years as awareness increases of Houston as a destination for leisure tourism and convention business, and as the region's population continues to rise.

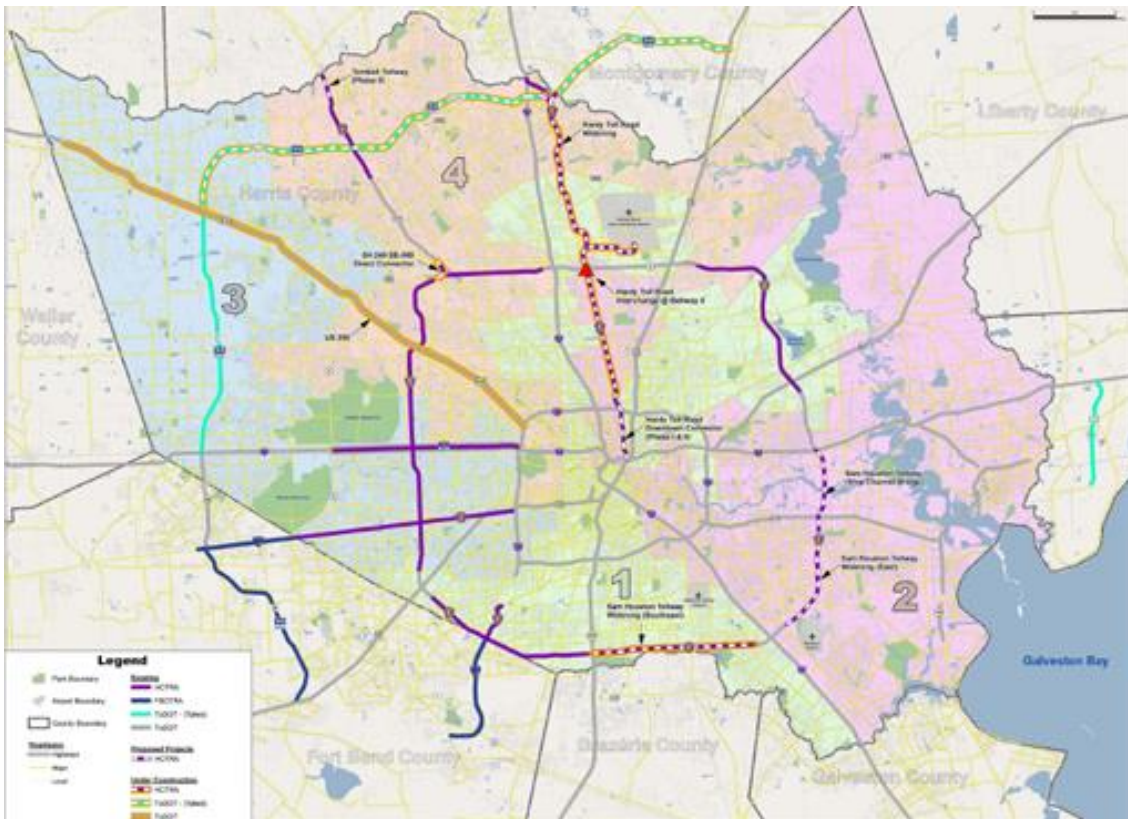
Houston's freeways are already busy with more than 200,000 vehicles traveling most segments daily. And the region already has seen tremendous growth of about 160,000 people between July 2014 and July 2015. This is the largest growth of any metropolitan region in the country. The U.S. Census Bureau estimates the current population of the nine-county Houston-The Woodlands-Sugar Land MSA at 6.6 million.

THE HISTORY

Most freeways in the Houston region are owned and managed by the Texas Department of Transportation (TxDOT), with the balance owned and managed by the Harris County Toll Road Authority (HCTRA).

TxDOT traces its roots to 1917 when the Texas Legislature created the Texas Highway Department as part of a nationwide effort in the early 20th century to build, maintain and improve major roads. The agency merged into the State Department of Highways and Public Transportation in 1975 and into the Texas Department of Transportation in 1991.

The first freeway in the Houston region was the Gulf Freeway in 1948, which today is part of Interstate 45. By the mid-1950s, plans had moved forward to build what became Loop 610 and the Southwest Freeway (Interstate Highway 69/U.S. Highway 59). Other freeway systems opened and existing freeways were improved in the following decades. Over time, right-of-way enhancements and maintenance such as de-littering, mowing and planting of vegetation became infrequent and/or inconsistent due to budget challenges and modifications to management of maintenance contracts.



Major freeways in the Houston region

HCTRA was created in 1983 by Harris County after County voters approved a referendum to release \$900 million in bonds to build toll roads in the fast growing Houston metro area. As an enterprise fund of Harris County, the Authority funds operations, debt service and future projects through toll revenue. Its website states that the Authority “improves mobility in the Greater Houston Metropolitan area through excellence in the operation of urban toll highway systems, while upholding a commitment to leadership, public service and quality of life.”

The first two components of the toll road system were the Hardy Toll Road and the Sam Houston Tollway-West, completed in 1987 and 1990, respectively. The toll road system over the years has expanded to include, among others, the Jesse H. Jones Memorial Bridge (renamed the Sam Houston Ship Channel Bridge), the Westpark Tollway and the Sam Houston Tollway Northeast section. Today the authority manages 127 center line miles of toll roads in the county.

With the expansion of roadways and freeways came an increase in littering across the state. By 1985, Texas was spending about \$20 million annually to pick up highway litter. The following year, TxDOT shifted its anti-litter focus to litter prevention with the highly successful “Don’t Mess with Texas” campaign. Bumper stickers and TV commercials featuring Texas celebrities appealed to Texans’ pride in their state. Today the campaign partners with TxDOT’s Sponsor-a-Highway project to supplement TxDOT’s litter prevention programs. In addition, the “Don’t Mess with Texas” campaign and Keep Texas Beautiful co-host the state’s single largest one-day cleanup event, the annual Trash-Off traditionally held every April. The campaign celebrated its 30th anniversary in 2016.

Beautification efforts have spread across Texas cities since the 1980s. In the 1980s and 1990s, TxDOT’s Houston region and Scenic Houston exhibited leadership in beautification efforts along Houston’s freeway corridors. TxDOT’s Houston region, in partnership with many other public and private entities, created its award-winning “Green Ribbon” Project. The Green Ribbon Project Corridor Aesthetics and Landscape Master Plan integrates landscape architecture, public art and architecture into the engineered aspects of Texas highways in the Houston area. The Green Ribbon Project (GRP) was developed by TxDOT-Houston in response to the desires of the political, civic and “green” leaders of Houston to change the city’s image. Elected and community leaders had been complaining that visitors to Houston remembered the city’s horrific traffic woes and miles of hot highway pavement. Today the success of the GRP can be measured in miles – 80 miles of freeways in four separate corridors inside Beltway 8 are targeted for inclusion in the GRP. This includes the highly traveled portions of I-10, Loop 610, I-45 and I-69/US 59. The GRP is funded by 0.5 % of the letting value of freeway construction projects.

On the private, non-profit side, Scenic Houston and community leaders focused efforts on reducing the proliferation of billboards along local freeways. Its advocacy efforts led to a municipal sign code that eventually decreased and downsized the number of Houston billboards. Fewer than 1,600 billboards exist in Houston today, with most along major freeways where federal law protects them from conformance with the sign code.

Freeway corridors in the Houston region also were improved when suburban cities, such as Bellaire, and management districts began supplementing, through annual appropriations, ongoing maintenance such as de-littering and new landscaping along corridors within their jurisdictions.

Ongoing maintenance along all freeway corridors, however, still remains a challenge due to inadequate funding and less-than-rigorous standards and implementation.

MODEL PROGRAMS – ONGOING MAINTENANCE

As noted, all the major freeways and toll roads in the Houston region are within the jurisdiction of TxDOT or HCTRA. Each entity follows its own maintenance standards such as mowing, sweeping and de-littering.

For example, TxDOT standards call for removal of litter and debris such that no more than 30 pieces of litter in rural areas and 50 pieces of litter in metro areas per roadside miles are visible when traveling the roadway at the posted speed. Sweeping occurs twice a month. Grass and vegetation are mowed to between 5 and 7 inches in height in metro and urban areas. Mowing occurs in four cycles – May, July, September and November – under a new contract let in June 2016. The new contract will be managed out

of the Houston office, rather than in Austin as had been the practice to date. TxDOT Houston office spends approximately \$8 million per year on its ongoing maintenance contracts. TxDOT oversees 949 lane miles (97 center miles) in the Houston- Harris County area.

HCTRA specifications for roadway and facility maintenance call for eight full-time debris/litter crews (with two persons per team) and four sign crews for sign installation and maintenance. Specifications outline the exact number of miles for sweeping (monthly, but twice a month from March to September between I-45 North and I-69/U.S. 59 South), a maximum of 12 mowing cycles for each road and standards for mowing (2 to 3 inches of primary lawns, edging, fertilizing three times a year, etc.). Sweeping is considered part of HCTRA's safety program. Standards also require 12 cycles of litter pickup (in addition to debris pickup) before mowing. In addition, HCTRA contracts with Harris County constables to report major debris in roadways such as ladders or mattresses. HCTRA spends approximately \$17.4 million/year on ongoing maintenance with contract labor forces. HCTRA oversees 743 lane miles (127 center miles) in Harris County.

Supplemental efforts by suburban cities and local management districts have enhanced freeway corridors along certain parts of the Houston area. The cities include Houston (on Will Clayton Parkways and Allen Parkway), Bellaire, Sugar Land, Baytown, Shenandoah, Pasadena, LaPorte, Stafford, Texas City, Galveston and League City. Management districts include Uptown Houston, Midtown, Westchase, Greater East End, Downtown, Memorial City, Energy Corridor, Upper Kirby, North Houston, East Downtown, Greater Southeast, The Woodlands, Kingwood Service Association and the FM 1960 Chamber of Commerce.

Here are examples of how such supplemental programs work in the Houston area.

City of Bellaire

The City of Bellaire provides approximately \$130,000 in additional funds to de-litter, mow grass and plant and trim vegetation along Loop 610 rights of way in its city limits, covering approximately three miles. Small trees and native shrubs line the frontage road corridors on the loop from Fournace to Beechnut.



Trees and shrubs decorate the corridors along the West Loop.

Uptown Houston Management District

Since its formation in 1987, the Uptown Houston Management District has worked to, as its website describes, “leverage public funds with coordinated private resources to improve facilities and services as well as accelerate area improvements.” The district focuses on traffic operations and public safety, public

maintenance and beautification, infrastructure improvements, economic development, and marketing and communications.

Midtown Houston Management District

The Midtown Management District has a field service team that provides maintenance services along the Texas Highway 288 frontage road in Midtown (on Hamilton Street from Gray to Holman streets). Services are provided weekly and include mowing, edging, weeding, blowing, minor tree trimming, and de-littering, including large trash removal.

Westchase Management District

Enhancement projects by the Westchase District in the western part of Houston have included upgrades to esplanades, gateways and signage; colorful plantings and stonework; and its 12-foot Westchase District markers at its main entrances. The district's website boasts that these efforts "enhance the area's natural beauty, complement private property landscaping and add value for all Westchase District stakeholders."

Greater East End Management District (GEEMD)

GEEMD supplements maintenance efforts along I-45 from Lockwood to Loop 610. The District holds a contract with Yellowstone Landscape to provide supplemental maintenance services. Specifically, the District pays for 9 monthly cycles of mowing and litter removal to supplement the 3 cycles that are paid by TXDOT in order to provide year round maintenance. The program includes maintaining the shrubs and trees in the right-of-way as well as the mowing of 26 acres of grassy areas and keeping 5 acres of concrete free of weeds and debris. The crews also trim the weeds around the concrete jersey barriers, posts, signs, and other obstacle where herbicide is not approved. In addition an herbicide application is applied 4 times per year in designated areas to control weeds along cracks and crevices. The total annual cost of the program is \$38, 670.

Elsewhere in the nation

In other parts of the nation, state and local initiatives have enhanced freeway corridors and highways with extensive landscaping and modest art projects that make a strong impact.

In Chicago, the **Chicago Gateway Green** is a non-profit organization dedicated to greening and beautifying that city's expressways, gateways and neighborhoods. Formed in 1986, the organization has brought sustainable landscaping, litter removal and native plantings to hundreds of acres along transportation corridors in Chicago.

Its Expressway Partnership Program "turns dreary embankments into ribbons of green parkways weaving through the city," according to the Chicago Gateway Green website. The program consists of more than 100 gardens covering nearly 150 acres of roadside landscapes on all major expressways leading into and out of Chicago. Each garden features native shrubs, trees and perennials that require lower maintenance and are well suited to harsh roadside growing conditions such as poor soil quality, extreme temperatures and high carbon emissions. Professional landscape crews care for plants, control weeds, mow and pick up litter biweekly from April through October.



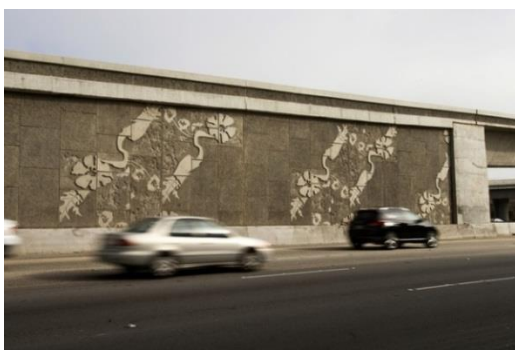
Chicago Gateway Green has a comprehensive approach to beautification.

The project is funded through partnerships by socially responsible businesses and community organizations whose financial contributions go toward the maintenance. Partners “showcase their pride for Chicago, support a high-profile greening initiative and provide beautiful views” to thousands of motorists daily, its website states. Sponsors do not maintain the areas themselves; professional landscapers hired by Chicago Gateway Green tend to the sites. Each site displays the sponsor’s logo. Sponsorship costs depend on the site location, its traffic and size of the garden – ranging from \$10,000 to \$30,000 annually. Sponsors may ask to sponsor a roadway segment of their choosing.

Various types of art adorn an increasing number of American highway and freeways, particularly along its intersections. Paintings, bas relief sculptures and variations on color have given drivers something interesting to look at and made a positive impression on visitors. In many cases, the art celebrates local heritage or community attractions and mirrors the colors of its environment.

For example:

In California, artistic patterns, accents and sculpted scenes of local geography now decorate new freeway walls. Artful egrets and San Francisco Bay marsh scenes line walls along Highway 101. Delta wetlands are depicted on Highway 4 near Antioch, California. Livermore drivers see grapes and vines on a Highway 84 overpass. Bas relief sculptures of sailboats decorate a retaining wall near Vallejo. Near Riverside, images of steam engines, military jets, gems and citrus are proliferating freeway walls. In Sacramento, a mural was painted on the underside of a freeway overpass.



Hwy. 101 near San Francisco Bay depicts marsh scenes.



The Gilbert-Recker Road Bridge near Tempe, Arizona.

In Arizona, the City of Tempe hired local artists to create a 545-foot mural along Highway 202 facing Tempe Town Lake. A nearby freeway intersection features engravings that celebrate the area’s railroad heritage. A freeway in Phoenix features murals of large cactus plants with red tile squares.

In Nevada, bridges on the Las Vegas beltway feature replicas of Paiute petroglyphs painted to blend with the browns and reds of the surrounding desert.

A SOLUTION: THE FREEWAY ENHANCEMENT INITIATIVE FOR THE HOUSTON REGION

A three-pronged effort for the initiative may consist of the following:

1. Improve maintenance along Houston's freeway corridors.
 - Establish enhanced maintenance standards acceptable to all stakeholders and identify the cost associated with the higher standards.
 - Identify partners who currently participate and those who may also consider participating in improved maintenance of the freeway corridors and agree on a common process through which they can become engaged.
 - Starting with the airport corridors, seek designation of strategic freeway corridors as "Scenic Districts" to enable/encourage better enforcement of existing and new regulations (i.e. illegal dumping, abandoned properties, graffiti, unkempt landscaping, etc.).
2. Beautify Houston's freeway corridors.
 - Update the Green Ribbon Project Master Plan guidelines to confirm and reinforce beautification guidelines that are acceptable to all jurisdictional entities and that may include additional landscaping, art, signage, lighting and other enhancements.
 - Identify partners who currently participate and those who may also consider participating in beautification of the freeway corridors and agree on a common process through which they can implement the beautification projects.
 - Identify segments for improvements and an implementation plan for the projects.
3. Develop a funding source to support improved maintenance and new beautification projects.
 - Establish a plan to increase public funding for ongoing maintenance of freeway corridors.
 - Pursue local establishment or ownership of sponsorship efforts such as the Texas Sponsor-a-Highway program in the Houston area (<http://texassponsorahighway.com/>)

ACTION ITEMS

While Houston First Corporation (HFC) is ready and poised to take on a leadership role in this effort, a successful outcome can only be obtained with buy-in and strong partnerships at many levels with all stakeholders and jurisdictional entities. The partnerships will include cities in the region, TxDOT, HCTRA, Metro, non-profit organizations, citizens' organizations, management districts, and elected and appointed officials.

Recommended next steps may include:

1. Review with Mayor and City Leadership.
2. Review with TxDOT and HCTRA leadership.
3. Form a working group including representatives from TxDOT, HCTRA, METRO, City of Houston (Public Works & Engineering and Planning Departments), HFC, Scenic Houston, Trees for Houston, management districts and civic groups. The working group would set priorities and a working timetable for the initiative components.

WHY SHOULD WE DO THIS?

These efforts will maximize the amount of landscaping on freeways throughout the Houston region, add other beautification elements, reduce trash and increase general upkeep standards. Ultimately this will create a more positive impression of Houston to visitors as they arrive in the region, change the perception of Houstonians, and enhance our pride of place and quality of life. A strong first scenic impression is a key ingredient to attracting and retaining convention and tourism business for Houston, which will facilitate regional economic development.

About Houston First Corporation

Houston First Corporation has two key purposes: to operate the city's finest convention and arts facilities and to promote Houston as a world-class destination for tourism and conventions. The City of Houston created Houston First in 2011 as a local government corporation to act as an economic generator for tourism and the performing arts. In 2014, Houston First and Visit Houston (the Greater Houston Convention & Visitors Bureau) aligned operations to create a single clear voice representing the city. Houston First owns the Hilton Americas-Houston hotel and manages more than 10 city-owned buildings, plazas and parking facilities. Properties include the George R. Brown Convention Center, Miller Outdoor Theatre, Wortham Center and Jones Hall for the Performing Arts. For more information, visit HoustonFirst.com and VisitHouston.com.
