# Green Ribbon Project

**Houston District**

## Green Ribbon Project

1999 - present

Corridor Aesthetics and Landscape Master Plan

Design Guidelines for the Construction of Highways, Streets, & Bridges

<table>
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<th>Why</th>
<th>What</th>
<th>Withstand</th>
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<tbody>
<tr>
<td>Scope</td>
<td>Scale</td>
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Four Deliverables, Four Purposes
Green Ribbon Project for ALL state roads. Not limited to freeways.
Houston District

On-system bridges = 2856
Centerline miles = 3,223
Lane miles = 10,436

Population = 5.8 million
Vehicles = 4.9 million
Daily Vehicle Miles = 82.3 million

Construction expenditures = $1.3 billion (FY 2013)
Why Do It?

Public Demand… unfocused
  View to a road.

Business Community Demand… organized
  View to a city.

State/Local Legislative Demands… focused

To incorporate a higher level of Structural Aesthetics and Landscape Development into the State’s roadway facilities.
In years past, our cities seemed to be natural magnets for business growth and people simply adapted to the traffic, pollution and daily inconveniences that ineffective planning and development created.

Today, this paradigm has changed and every city must compete against others around the world for capital, business, and talent. But pressure is increasing to control pollution, improve quality of life and enhance aesthetics – all at the same time.
Four Key Events To Begin:

1. State Representative Garnet Coleman’s request.
2. Greater Houston Partnership (GHP)’s mission.
3. Upcoming reconstruction of several freeway corridors.
4. Expanded Representative’s request.
1. **State Representative Garnet Coleman**
   - requested TxDOT improve roadway landscapes, undesirable
   - TxDOT began to review landscape improvements

2. **Greater Houston Partnership (GHP)** mission: To make the Houston region the best place to live, work, and build a business.

**GHP’s Quality of Life Advisory Committee** was becoming very active to change national and international perception of the region.

“Ugly Houston” commercials in 2000 Presidential election fueled the effort.
   - corporations pay workers more to be in Houston vs. other cities such as Seattle, Austin, Atlanta, etc.
   - long-term economy of blue collar or white collar
   - tourism
   - green space
   - commercial signage
   - air quality

**Quality of Life Committee organized non-profits, cities, and counties. Approached TxDOT Houston District as one focused voice for change.**
3. Due to age of many freeway corridors, many were to be rebuilt.
   - public meetings consistently demanding something different
   - District Engineer tired of discussing ugly structures/landscape
   - multiple consultant teams on each corridor were struggling with
     ‘creating an image or theme’ in a place without natural character
   Lack of ‘shared meaning’ led to larger plan.
   Sense of Place discussion opportunity.
   Roadway corridor negative meaning  >  Any positive shared meaning.

4. District Engineer changed approach and expanded Representative’s landscape request.
   New goal: Improve all roadway structure and landscape elements to higher base line. Above base line to be funded by partners.
   GHP Quality of Life Advisory Committee organized all stakeholders to support the plan.
   Developed buy-in at all levels within Houston District staff.
   Developed trust and understanding with local partners.
   **Other TxDOT districts and headquarters never understood why/what.**
MISSION STATEMENT

Integrate Architecture, Landscape Architecture and Public Art with the Engineered functionality of the Highway Corridor
Four Deliverables, Four Purposes

1997

Green Ribbon Project
Corridor Aesthetics and Landscape Master Plan

1999

2001

2000

Guidelines for Aesthetic Design in Highway Corridors: Tools and Treatments for Texas Highways

Research Report 2113-3

Cooperative Research Program

Texas Department of Transportation

Houston District
Design Guidelines for the Construction of Highways, Streets, & Bridges

Footer Text
### Timeline – Houston District Efforts

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
<th>Consultant(s)</th>
<th>Purpose</th>
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</thead>
<tbody>
<tr>
<td>1997</td>
<td>Master Planning Development Guidelines—Houston District</td>
<td>The Texas Transportation Institute</td>
<td>“familiarize design professionals with design issues relevant to aesthetic goals” (TRANSLATION: Help LAs and Architects understand engineering functionality. Help engineers understand aesthetic opportunities.)</td>
</tr>
<tr>
<td>1999</td>
<td>Green Ribbon Project Corridor Aesthetics and Landscape Master Plan – Houston District</td>
<td>HNTB Architects Engineers Planners, SWA Group, Rey de la Reza Architects, Inc., Cultural Arts Council of Houston and Harris County</td>
<td>“conceptual guidelines to integrate environmental aesthetics with roadway functionality”</td>
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</table>
2000  Houston District Design Guidelines for the Construction of Highways, Streets, & Bridges

Author:  HNTB Architects Engineers Planners

Additional Contributors:  Green Ribbon Implementation Team

Purpose:
- “manual for preliminary engineering of highway elements”
- “overall guideline necessary to produce the preferred aesthetic form, function, and appearance of each new baseline highway element”
- three regional zones identified with specific design schemes
- “provides design guidance for upgrades of baseline elements with community involvement”
What's in a Name?

Houston District
Design Guidelines for the Construction of Highways, Streets, & Bridges

STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES

1993

December 2000
Timeline - Statewide Efforts

2001  Green Ribbon Project Expansion, Appropriations Rider 57

Author: State Legislature

Additional Contributors: Texas Transportation Commission

Purpose: - expand Green Ribbon to all areas of the state
- all districts develop master plans
- established percentage of construction costs in air quality nonattainment & near nonattainment counties be allocated for landscaping and other enhancements
- What is missing?

2001  Guidelines for Aesthetic Design in Highway Corridors: Tools and Treatments for Texas Highways

Author: The Texas Transportation Institute

Purpose: - develop cost-effective tools to add aesthetically pleasing features to transportation projects
Do the Plans Continue?

Houston District
Guidelines included structural elements and landscape.
Part of everyday business and updated as needed.
District bridge section is the caretaker of the detailed guidelines.
Details are available on the district website.
Most of the Implementation Team is no longer at TxDOT, the guidelines continue with new players.
GRP is the tool used by administration to efficiently manage public requests.

Statewide
Guidelines were limited to landscape, no structural component.
Not part of everyday business.
Public requests are managed individually. Challenge to get projects built.
Master Plan must endure various **design delivery methods**: 

1. Consultant design teams – district control 
2. In-house design teams – district control 
3. Comprehensive Development Agreements (CDAs) – HQ/SPO control 
4. Public Private Partnerships (PPPs) – HQ/SPO control 
5. Design-Build (DB) – HQ/SPO control 

Master Plan must endure various **management and funding methods**: 

1. Non-toll 
2. Toll 
3. Pass Through 
4. Managed 
5. CDAs 
6. PPPs
Benefits

Construction costs:
- monitored for several years
- standardized concrete forms
- installation efficiency (ex: rebar)

Public involvement process more efficient and less antagonistic.

Design development process more efficient.

Maintenance not increased (standardized).
A primary guideline for design principles:

No increased funding or maintenance is available to fulfill the Plan.
Introduce into the cluttered urban environment:

- Organized Complexity
- Visual Cues for sense of scale at high and low speed
Design Principle: Green First

Since 1998:
1,546,142 TREES
416,630 SHRUBS
585,252 VINES/GROUNDCOVER
Promoting biological processes in construction soils.

$1 tree in a $10 hole.
Can Landscape Impact Views To A Freeway?

Hurricane Rita evacuation
Houston District
Mowing Acreage
29,000 AC

Over 1,000 AC reforested
What Have We Done?

PUBLIC RELATIONS TOOL
• Education process
• Commitment by TxDOT
• Consensus Based design

LEGISLATIVE ACTION
• Commitment by the public
• Commitment by the State

PARTNERSHIPS
• Mutual understanding
• Opportunities to define identity
• Cash and In-kind contributions
• Long term commitments

DESIGN, CONSTRUCTION & MAINTENANCE
• Consistency through guidelines and standards (Design)
• Consistency in form and materials (Construction)
• Consistency in materials and methods (Maintenance)
THE BEAUTY OF AMERICA

"For over three centuries the beauty of America has sustained our spirit and enlarged our vision. We must act now to protect this heritage.

"In a fruitful new partnership with the states and cities the next decade should be a conservation milestone. We must make a massive effort to save the countryside and establish - as a green legacy for tomorrow - more large and small parks, more seashores and open spaces than have been created during any period in our history.

"A new and substantial effort must be made to landscape highways and provide places of relaxation and recreation wherever our roads run.

"Within our cities imaginative programs are needed to landscape streets and transform open areas into places of beauty and recreation.""

From President Johnson's State of the Union message to Congress, Jan 4, 1965
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