SPRAWL

Houston Center for Contemporary Craft

Infrastructure of Expansion

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Infrastructure:

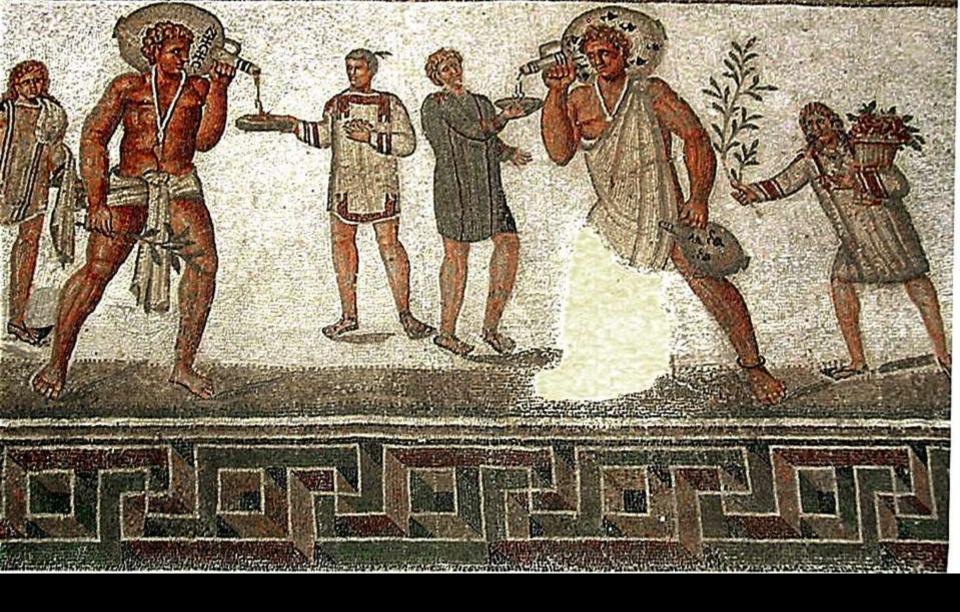
The development of cities required the construction of efficient roadway networks, water, and sewer systems. These networks brought people together, creating urban density, civic life, and culture. Infrastructure was celebrated for performing all of these services as well as for its efficiency. More recently, infrastructure has come to serve other purposes and express narrower values.

"The term infrastructure refers to the roads, bridges, rail lines, and similar public works that are required for an industrial economy to function." From the Free Dictionary.

Since WWII, these public projects have largely been used to scatter people across the landscape as broadly as possible. In the development of America's vast new infrastructural networks aesthetic, cultural, social, and ecological considerations have not been entertained.

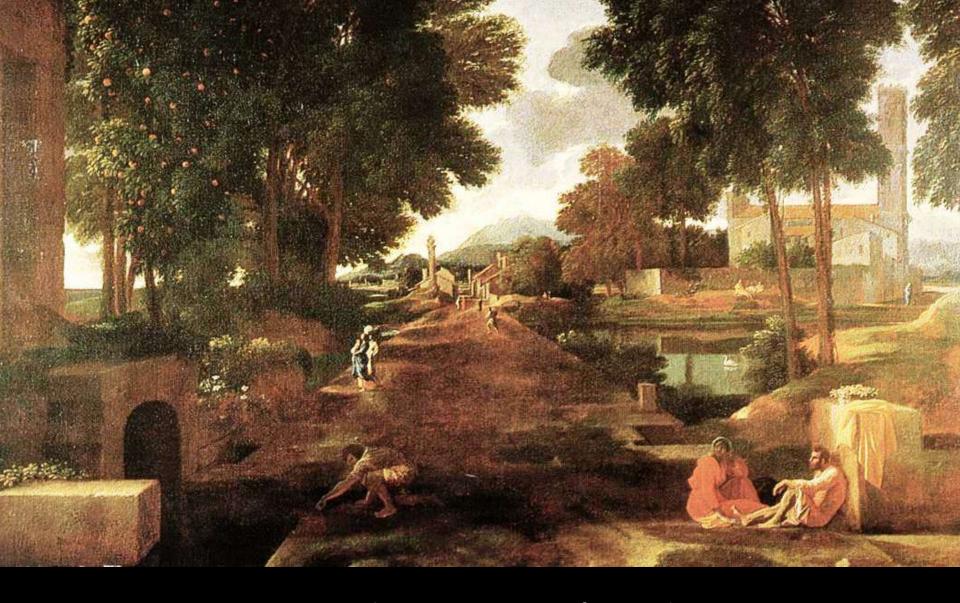


Infrastructure Enabled the Development of Cities



Infrastructure Lead To Civic Life

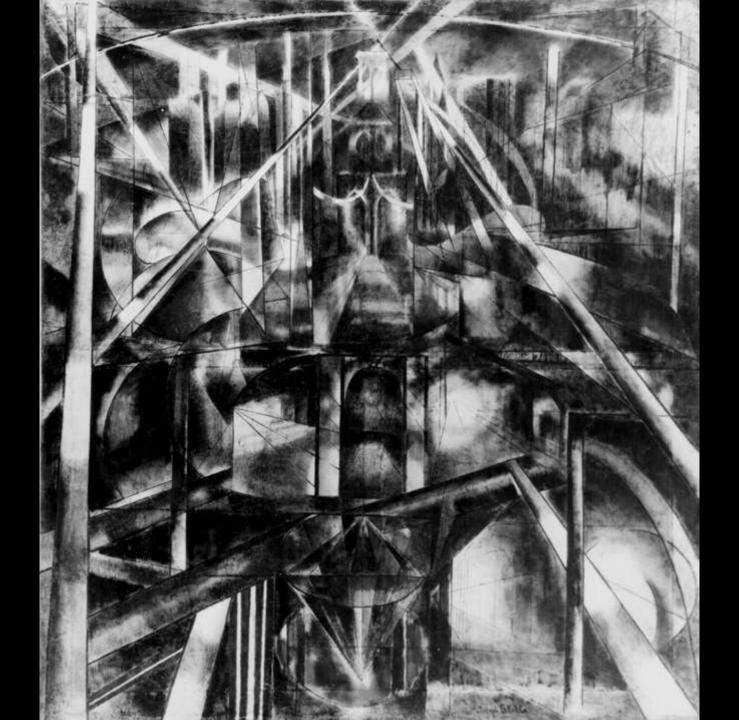




It Was Built As An Expression of Civic Values

It Was Celebrated In Arts and Crafts





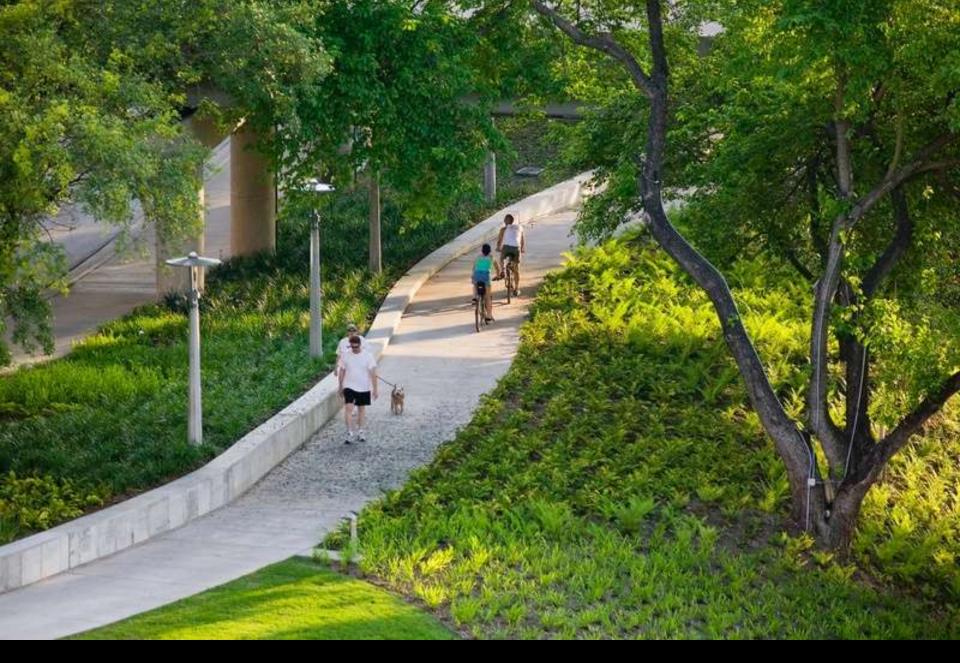




Today's Values Are different

Infrastructure Is Built To Express Uni-Functionality and Cheapness





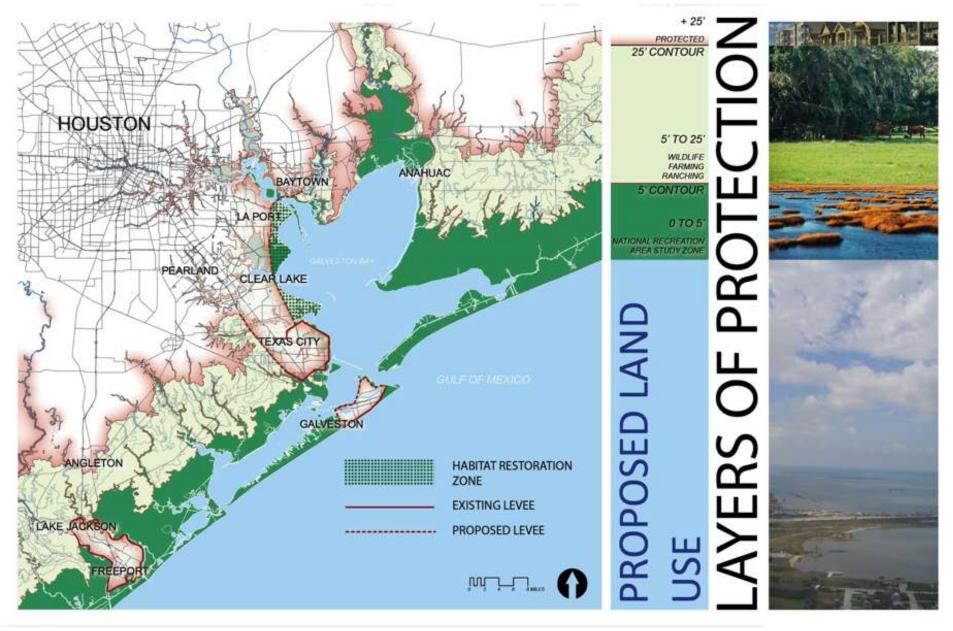
Even Drainage Systems Can Elevate Civic Life



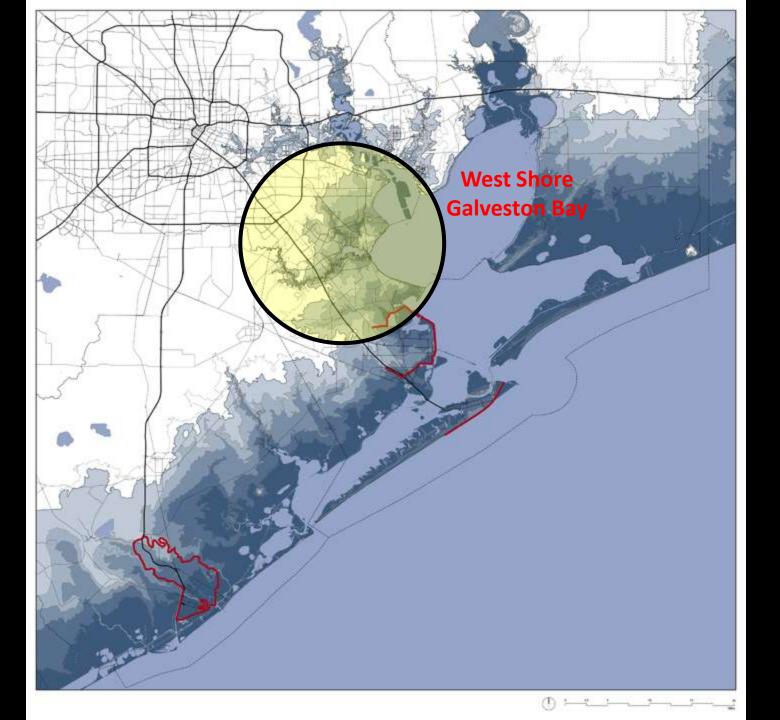
Infrastructure Can Bring People Together And Serve Many Purposes

A Few Recent Multi-Functional Infrastructure Projects

Local Levee Systems To Protect The Houston-Galveston Region



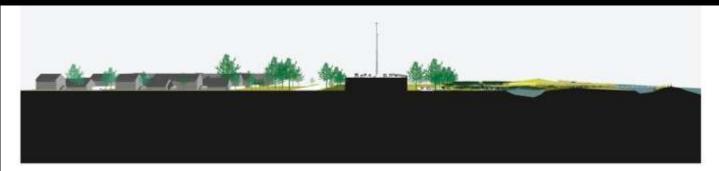
SSPEED Center Proposals For The Upper Texas Coastline







Responding To Local Conditions And Local Ecologies





6 State Highway 146 | Restored Coastal Marsh / Parkland

This elevated highway levee lifts the road base 25 feet above sea level. This solution is most appropriate in urbanized areas where rights-of-way are constrained. On the protected side of the levee, existing development needs no modification. On the bay-side of the levee existing saltwater wetlands are preserved. New wetlands can be constructed to replace those already lost to development. The tall grasses found in wetlands reduce the scouring effect of storm surge while they provide essential habitats for hatchling fish and migratory birds. These marshes are essential to reduce coastal erosion and act as biological filters for Galveston Bay. They also provide an opportunity for bird watching, fishing, and hiking in a uniquely Texas landscape.











Earthen Levee | Restored Coastal Marsh / Parkland

This earthen berm levee rises to 25 feet above sea level with a 1 to 5 slope. On the protected side of the berm, existing residences need no modification. As shown, the back slope has been planted with native trees to provide public green-space. On the bay-side of the levee existing saltwater wetlands are preserved. New wetlands can be constructed to replace those already lost to development. The tall grasses found in wetlands reduce the scouring effect of storm surge while providing essential habitats for hatchling fish and migratory birds. Marshes are essential to reduce coastal erosion and act as biological filters in Galveston Bay. These marshes also provide an opportunity for bird watching, fishing, and hiking in a uniquely Texas landscape.









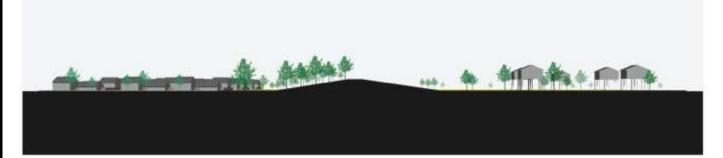














2 Earthen Berm | Raised Houses

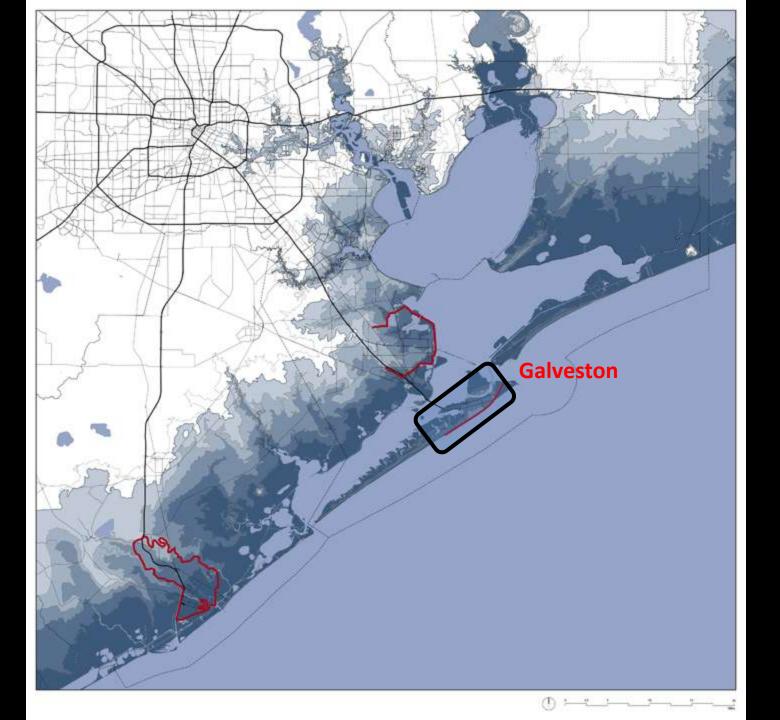
This earthen berm levee rises to 25 feet above sea level with a 1 to 5 slope. On the protected side of the berm, existing residences need no modification. As shown, the back slope has been planted with native trees to provide public green-space. On the bay-side of the levee all new construction must be elevated to twenty five feet above sea level. Infrastructure must be protected by hardening against damage by flooding. The prospect of elevated structures on the bay-side of the levee suggests new typologies of housing, neighborhoods, and commercial buildings.

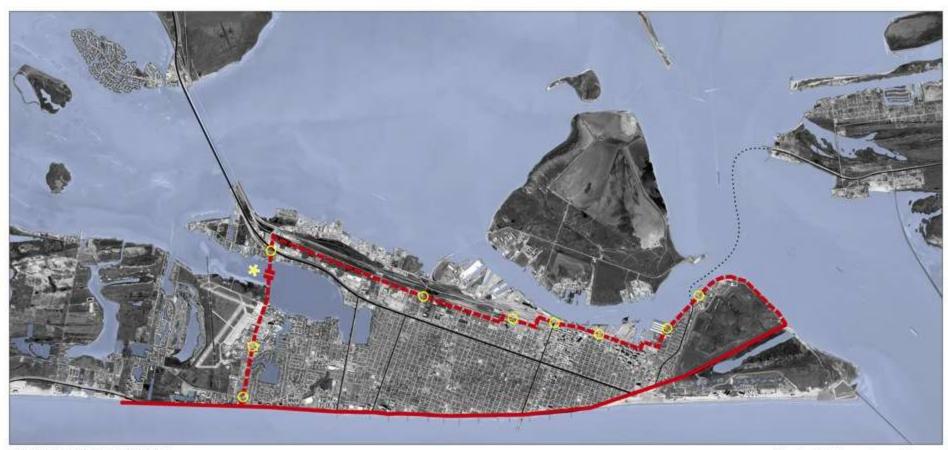












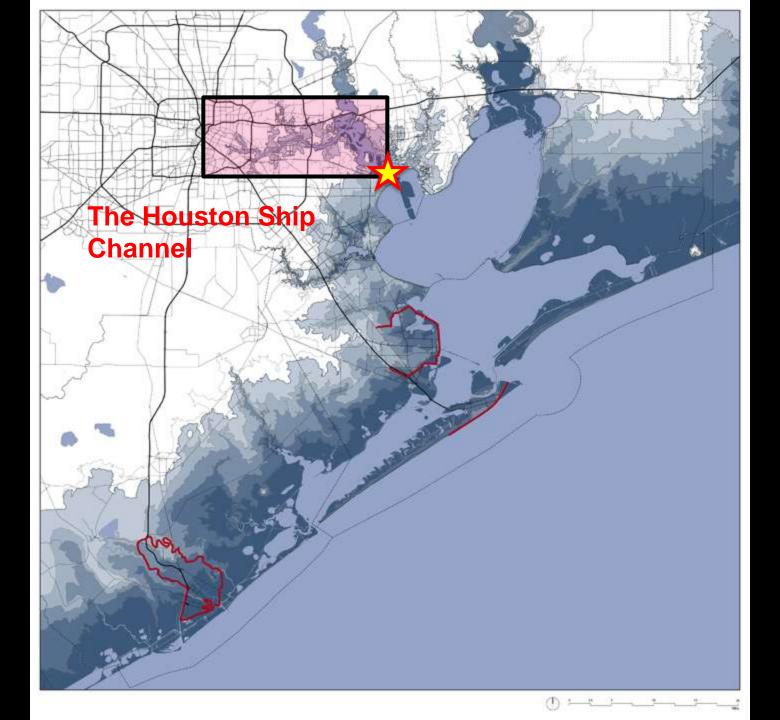
Galveston Island Levee - Option A, Population Alignment







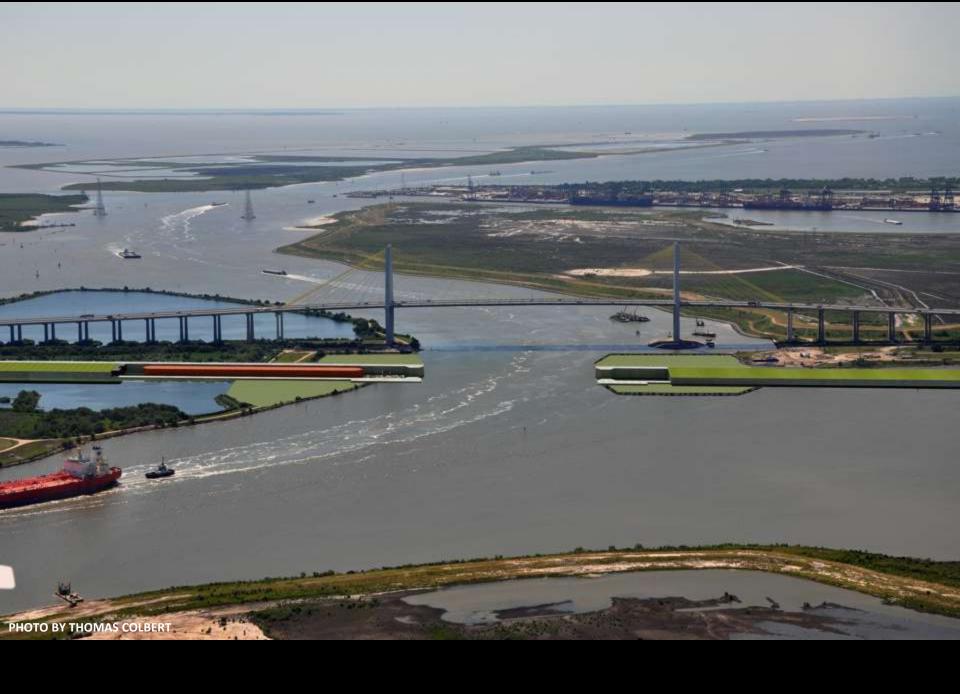






A GATE AT THE HARTMAN BRIDGE TO BE DEVELOPED AS A TOURIST DESTINATION AND INTEGRATED INTO ADJACENT PARK SYSTEMS











VIEW OF GATE AT BARBOURS CUT



VIEW OF GATE AT BARBOURS CUT





















A DESTINATION

AT THE INTERSECTION OF ONE OF THE WORLD'S GREAT MIGRATORY BIRD ROUTES AND ONE OF THE WORLD'S GREAT SHIPPING LANES.



