

1) Why is a structural measure needed to protect a water highway?

Harvey flood brought millions ton of sediments into the shipping channel. Clay soils are no match for flooding water. In order to keep most waterways green and natural, several water highways will be needed, in which one would be a major exit channel for the two reservoirs. Assume Brays Bayou is selected as the South Canal in the Army Corps 1940 plan, stones or reinforced concrete structures (e.g., concrete liner) are needed to protect banks. In addition to bank protection, RCC can triple conveyance capacity that is needed to drain water from its own watersheds and two reservoirs.

2) Is BRT or LRT safe inside a super bayou?

In existing bayous, water rises quickly during storms since bayou profiles are more or less like a V. On the contrary, RCC can transform this V into U. A full water level in a V is less than a half water level in a smoothened U with a depth of 30ft or more. Rapid transit uses the upper 15 ft space while water flows below. The days without transit service in a super bayou are limited only to the days with water overflowing banks in an existing bayou that is less than 10 days per year. During this time, no service is needed anyway as people are advised to stay home. Several measures can ensure passenger safety: weather forecast (earlier warning to cancel certain days' service), water level gauge (real-time readings for a safe trip), and staying at stations on the top of banks (guaranteed safety),

3) How is public transit in a bayou accessed?

Rapid transit is applicable only to less curved segments of a bayou. Take Brays Bayou as an example. Park&Ride (P&R) can be built at detention basins near the bayou, for example, at Beltway 8. Stations can be located at P&R (including the existing West Loop P&R), apartment complex (e.g., Nob Hill Apartments), Medical Center, Houston Zoo, transit centers, etc. Braswood Blvd along the bank provides car access while residents can also walk or bike to a nearby station. Rapid transit in a super bayou is more convenient and accessible than a BRT along a freeway.