



Maps by Christof Spieler

Freight Trains: Disappearing Soon from a Neighborhood Near You?

Top: These three maps show where Houston is in terms of its freight rail traffic, and where it might go. The map top left is of Houston's existing railroad system, which is centered on downtown. Downtown is where the rail yards are, and where tracks lead to Ship Channel industries. As a result, freight trains converge on inner-city neighborhoods.

The map top center shows Harris County's Regional Freight Rail Improvement Plan. It proposes a series of new grade-separated rail corridors (heavy lines) that would remove many or all freight trains from some existing rail lines (light lines).

The map top right shows a plan offered by the railroad companies. In this proposal existing rail lines (heavy lines) and rail yards would be upgraded, and overpasses and underpasses would be added to area roads to reduce train congestion and impact on Houston neighborhoods.

TRANSPORTATION PLANNERS have long believed in making no little plans. Even by those standards, the idea of rerouting all the freight trains that come into and go out of Houston onto new corridors is big. But so are the implications: no more tying up traffic at railroad crossings in the Heights or River Oaks or Sugar Land; no slow-moving freight trains splitting neighborhoods in the East End; more capacity for the Port of Houston; and miles of rail corridors vacated for reuse as bike paths, toll roads, or routes for passenger rail.

The most amazing thing is, it just might happen.

Houston has been dealing with the effects of freight trains for a long time. The line that today causes traffic jams on Westheimer and Richmond near 610 was built in 1914 to get trains away from Montrose neighborhoods. A 1953 study commissioned by the City of Houston recommended moving Union Station in order to reroute trains that might block the flow of traffic to the emerging downtown freeways. But changing the layout of the rail lines didn't happen. Houston's freight railroad system has remained static while the city exploded around it. Almost all the lines that existed in 1953 are still in use, and no new lines have been added.

The state of the rail network is a reflection of economic realities. Ever since the government began subsidizing transport by truck, the railroad business has been defined by the need to cut costs to meet the competition. Even with deregulation, growing rail traffic, and mega-mergers, the freight railroads have slim profit margins. They simply do not have the

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money to build new rail routes or dramatically upgrade existing ones.

If the rail system is to be transformed, one of two things must happen: the railroads must go out of business, or the government must get involved. And after waiting 50 years for the former, state and local governments are now considering the latter.

In Houston, the impetus for a new look at freight rail comes from several unrelated developments. The 1996 merger of the Union Pacific and Southern Pacific railroads went badly, causing severe rail congestion in Houston and alarming people in the petrochemical industries and at the port. A 2001 proposal to build a new rail line near Clear Lake gave residents of Houston's east side a chance to remind politicians of the effects of railroads on their communities. The 2003 METRO Solutions planning process led the county to study commuter rail, and those studies concluded that heavy freight traffic left no room for new passenger trains. And the Harris County Toll Road Authority, looking for the space to add more traffic lanes, eyed the rail corridors that radiate out of downtown Houston.

None of this would have resulted in anything, however, were it not for a dramatic shift in thinking on the state and national level. Unlike every other means of freight transport in the U.S., rail freight has remained completely in the hands of the private sector. Governments may build roads, airports, ports, and waterways, but it is the railroad companies that build, maintain, and operate the nation's train tracks. Having experienced intense gov-

ernment regulation from the Progressive Era into the 1980s, the railroads prefer it that way. And while state highway departments were rechristened "transportation" departments in the 1970s, their focus—and their funding—has remained centered on pavement, not tracks.

But in recent years, governments across the country have begun to realize that freight trains are an important part of the transportation picture. In Massachusetts, the state government spent money upgrading a cross-state freight line to make the port of Boston more competitive with the port of New York. In Lafayette, Indiana, the tracks of two railroads were relocated to get freight trains away from downtown streets. The nation's best known public rail infrastructure project, the Alameda Corridor in Los Angeles, is intended to let the busiest port on the West Coast handle an anticipated surge in container traffic. Most ambitiously, the City of Chicago brought together six national and two local freight railroads, the local commuter train authority, Amtrak, the federal Surface Transportation Board, and the Illinois Department of Transportation to hammer out a \$1.5 billion plan to increase freight rail capacity, improve commuter rail service, separate trains and roads, and remove an obtrusive elevated rail line near the Loop.

Freight rail relocation first made it onto the Texas Department of Transportation's radar in the Georgetown-Austin-San Antonio corridor, where heavy freight rail traffic cuts through a series of downtowns and complicates plans to start commuter rail service. TxDOT

is now asking the state legislature for \$100 million annually to help relocate freight rail routes in urban centers. That money won't go far; it's estimated that the Georgetown-Austin-San Antonio project will cost \$700 million just to maintain the current level of rail capacity. Still, TxDOT's funding request is a sign that rail has made it onto the state's agenda. TxDOT is also preparing to launch a statewide freight rail improvement study.

In August 2004, Harris County completed a grade crossing study aimed at separating rail tracks from the roads they cross. That study led the county to conclude that trying to rebuild all the existing rail lines to eliminate road crossings might not be the most desirable option. As a result, the county followed up with the the Regional Freight Rail Improvement Plan—a study funded jointly by Harris County, Union Pacific and BSNF (the two primary railroad companies in Houston), Fort Bend County, the Port of Houston, and the City of Houston. That study looked at concentrating rail traffic in fewer, higher capacity rail corridors. Besides the funding partners, the study involves TxDOT, the Houston-Galveston Area Council, and METRO. Perhaps most critically, it also has backing from the business community in the form of the Gulf Coast Mobility Partners, a Greater Houston Partnership committee.

Houston still has a huge amount of freight rail traffic in the city, due in large part to the petrochemical plants along the Ship Channel, and it moves in many corridors radiating in every direction. The seven proposed projects included in the Regional Freight Rail Improvement Plan reflect that. These projects vary greatly in scope, impact, and cost. The least expensive, priced at \$147 million, would improve existing freight lines in the East End, adding tracks and building new overpasses and underpasses to separate auto traffic from rail traffic. This would benefit Union Pacific and BNSF as well as the neighborhoods by keeping trains moving without blocking streets. Another scheme would relocate the facilities at which truck trailers and containers are loaded onto trains from current constrained sites, one near 610 northeast of downtown and another near Hobby Airport, to open land near Crosby, 30 miles from Houston. This would remove both trains and trucks from inner-city neighborhoods.

The most ambitious projects would create new rail corridors that would completely bypass Houston. One corridor would follow the alignment of the proposed Grand Parkway through Fort Bend County, removing 50 trains a day from Sugar Land, Missouri City, and Sienna Plantation. Another would follow an existing rail line through Montgomery County, letting trains from the north and northwest bypass the city and suburbs

such as Tomball and Spring. A third corridor would tunnel under the Ship Channel, connecting industries in Pasadena and Bayport directly to rail lines to the east and northeast. These corridors would be major undertakings, involving the construction of more than 150 miles of new double-track rail lines, some on entirely new alignments, at a cost of \$3 billion.

While they are related, each of the seven projects in the Regional Freight Rail Improvement Plan could be undertaken independently; some are in fact redundant. The plan contains no comprehensive analysis of how the different projects would fit together and how the revised freight rail system would function. Presumably, some existing rail lines could be abandoned. However, many of the lines serve industries located along their rights of way, and these industries would still require local trains to serve them, albeit a much reduced number.

The projects would be welcomed by many neighborhoods. But it's important to remember that neither the county nor the state is the final decision-maker here; the railroads are. The rail lines are, after all, private property, and the railroads are protected from local government control by the interstate commerce clause of the U.S. Constitution. If the railroads cannot be persuaded to go along with a relocation scheme, it will not happen.

For the railroads, two things matter: funding and impact on their operations. That's where some of the proposed projects could run into problems. Many of the trains headed into or out of Houston serve the port area; even trains passing through Houston often stop at the city's rail yards to pick up or drop off train cars. The Regional Freight Rail Improvement Plan admits that the Union Pacific is unwilling to relocate its major yards farther out, where they would be less convenient to the port. This means it's unlikely that trains will be able to bypass the city entirely. Even if the government picked up the cost of relocating the rail yards, the railroads could pay a penalty in time and money by shifting their operations. For example, the proposed rail bypass that would go through Fort Bend County might help Sugar Land and Missouri City, but it would also add 21 miles to the trips of most of the trains using it.

Union Pacific and BNSF themselves have come up with a more measured approach to change, one summed up in a proposal that would concentrate on improving existing freight lines and freight yards in the inner city. Under the railroads' plan, trains would move through the same neighborhoods they do now on many of the same routes, but additional tracks would be added to allow for more rail traffic and help prevent trains from having to stop in central Houston due to congestion. The

railroads' proposal also includes grade separations—overpasses and underpasses—and quiet zones to reduce the impact of rail traffic on the city's residents. Four existing rail yards and 36 miles of track could be abandoned and made available for new uses. The railroads' plan does not offer the radical relief that the Regional Freight Rail Improvement Plan does, but it would bring significant benefits at a much lower price tag, and would have the support of the railroad companies.

Either plan, though, faces considerable hurdles. Financing may be the biggest. Los Angeles' Alameda Corridor was paid for in large part by tolls collected from the railroads using it. That succeeded because the Alameda Corridor reduces travel times, saving the railroads money, and allows for the running of more trains.

Depending on the railroads to cover the cost of an updated system is less likely to work in Houston. Instead, local leaders are working with Congressman Tom Delay to secure federal funding. In any case, major transportation projects always benefit some areas while harming others, so any rail relocation project will undoubtedly face local opposition. A final hurdle could be the considerable cooperation between different levels of government, each with its own interests and motivations, that would be required to allow any plan to succeed.

The key to any workable scheme may be the re-use of existing rail corridors, which represent very valuable real estate, especially for transportation projects such as highways, rail transit, or bike paths. Who gets the land, and what use that land is put to, could be a contentious issue. Harris County, the City of Houston, and METRO might all want to stake a claim, and historically they have had difficulty working together due to lack of coordination and political rivalry.

One obvious use of rail corridors is commuter rail service. Public transit is generally METRO's responsibility, but the county became interested in commuter rail in June 2003, when County Commissioner Steve Radack, a critic of METRO's light rail plans, presented diesel-powered suburban commuter rail in the 290 corridor as an alternative. That evolved into a county-funded study of commuter rail in three corridors, which was released in December 2003. The county seemed poised to begin a broader study, but in June 2004 the commissioners voted to hold off.

That 2003 Harris County study indicated that the biggest hurdle to commuter rail was existing freight rail traffic. On most area rail lines, particularly those leading into downtown, there is too much freight train traffic to allow for the addition of passenger trains. With freight trains relocated, commuter rail would be relatively easy to implement. But financial and political challenges would remain.

Opening a commuter rail line on existing tracks costs upwards of \$3 million a mile for track improvements, stations, and trains. Then there are the operating costs to consider. No commuter train system in the United States operates without some form of public subsidy. Los Angeles' commuter rail system costs \$11 per passenger trip to operate, and fares cover slightly less than half of that.

METRO's service area doesn't even cover all of Harris County, and extends only barely into Fort Bend County. Any commuter lines outside that area would require an expansion of METRO and its sales tax, agreements with counties or cities to fund rail, or new transit agencies. When METRO released a revised rail expansion plan in June, it included two commuter rail lines to be opened by 2012: the US 290 line as far as Cypress and a line along US 90A from the southern end of the Main Street light rail line as far as Missouri City. An extension to Sugar Land and Rosenberg would have to be funded by those cities or by Fort Bend County. Currently, the US 90A line carries heavy freight traffic, and freight rail improvements could make adding passenger trains more feasible.

But the county may have another plan in mind for some of the rail corridors that might be used for commuter rail. At one time or another, the Harris County Toll Road Authority has expressed interest in toll roads in railroad right-of-ways paralleling US 290, SH 249, and I-10 inside 610. The Westpark Toll Road, the I-10 toll lanes, and the Hardy Toll Road downtown extension all use the right-of-ways of abandoned railroad lines. The Toll Road Authority has money, and because it uses no federal funding, it's free to build without public hearings or environmental impact studies.

Confronted with the idea of a toll road or commuter rail, neighborhoods may prefer a less intrusive alternative: bike paths. The city's bikeway plan already includes bike paths in three abandoned rail corridors, and County Judge Robert Eckels has also mentioned the prospect of more bike paths. But bike paths do not have the political constituency that highways or public transit do. The battle lines are drawn: the approval of any plan that would free up rail corridors would likely be followed by agencies and politicians fighting for their control.

Some grand schemes, like the Interstate Highways, succeed and change the world. Others, like high-speed passenger rail, seem perennially stuck in the future. Oftentimes, a grand scheme devolves into a series of less revolutionary but more practical smaller projects. It's impossible to tell which course the Houston freight rail study will take. But one of the most important steps has already happened: freight rail is on the agenda. ■