ARE WE SETTING UP COMMUTER RAIL TO FAIL? by Christof Spieler

HOUSTON already has two fixed guideway transit networks. Park-and-ride buses run from the suburbs to Downtown on 100 miles of HOV lanes and light rail traverses 7.5 miles of track due to be expanded to 38. Is commuter rail—a third technology—needed or would Houston be better served by expansion of its existing systems?
RAIL HAS TRADITIONALLY STIRRED controversy in Houston. But one thing is clear. There’s a broad political consensus in favor of commuter rail. The clarity ends there. A dozen different corridors are under consideration; out of several possible central station locations, none connects easily to any of those corridors; at least three different agencies are vying to design and operate the system, but nobody knows how to fund it; and it’s not clear how commuter rail will connect to the existing transit system.

Perhaps the most important question, though, is the simplest: what exactly do we mean by “commuter rail”? The answer to that question will play a large role in determining the shape of Houston’s future.

The technical definition of commuter rail is “a mode of mass transit that operates on the national railroad network.” It differs from Amtrak in that it serves trips within a metro area, not between cities. It differs from light rail (like Houston’s Main Street line) and heavy rail (like the New York subway or Washington, D.C.’s Metro) because it can share tracks with freight trains.

The 21 U.S. systems that fit the definition of commuter rail offer dramatically different levels of service. Some offer over 100 trains a day; others, only six. Some stop directly in the middle of huge central business districts; others drop riders 30 minutes and two transfers away from downtown. Some suburban stations are in the middle of walkable neighborhoods; others are just parking lots off a highway. Those differences are reflected in ridership: the busiest system, the Long Island Railroad, accommodates 331,600 riders a day, while Nashville’s Music City Star carries only 800.

So the question is not whether Houston needs commuter rail. The question is what places need to be provided between those places, and how commuter rail will connect to other transit.

Unfortunately, a lot of the discussion of commuter rail shares a widespread misconception of Houston as a city where most people work Downtown and live in the suburbs, and where most traffic is commuter traffic. In reality Houston is a multicentric city. The Texas Medical Center, Greenway Plaza, Uptown, Westchase, Energy Corridor, and Greenspoint each has as many jobs as other cities’ downtowns. (This is not a new thought—“Edge Cities” have been discussed since the 1980s—but it does not seem to have affected a lot of transit planning.) The densest concentration of Houston’s resident population is within and just west of the 610 Loop; even with current low gas prices and sprawling development patterns, the area inside the Loop is projected to add nearly twice as many people by 2035 as any other comparably sized area in the region. Only about a quarter of the trips on Houston’s freeways are work trips, and many work trips occur outside of rush hour.

Serving a multicentric city requires frequent two-way service that connects not just to Downtown but to other activity centers as well. Unfortunately, that’s not what has been proposed. In 2008 the Houston-Galveston Area Council (HGAC) completed a study for a five-line regional system proposing rush hour service every 20 minutes and a handful of midday trains.

The initial set of alternatives, explored in a study currently being conducted by the City of Galveston, proposes a Galveston-to-Houston line with trains that would operate only three hours in the morning and three hours in the afternoon, with no midday or weekend service. Both proposals would rely on transfers to get riders Downtown from a station a mile away. Reaching other employment centers would be even less convenient: one proposed central station is three miles from Downtown, a 20-minute light rail trip to the Medical Center or Greenway Plaza, and essentially inaccessible to the University of Houston. Neither study considered alternate Downtown terminals or a better integration with the light rail system for connections to places like UH.

An infrequently available, rush-hour only, Downtown-focused system will not be very effective. The entire 250-mile HGAC-proposed line would carry only 36,000 people a day—fewer than the 7.5-mile Main Street light rail line. And it would cost a lot of money—$3 billion in construction costs (compared to a tenth of that spent on the Main Street line) and
Houston, in fact, already has very successful commuter transit system. METRO, Trek, and Woodlands Express buses leave suburban park-and-ride lots every morning, running as often as every three minutes, and provide nonstop trips on free-flowing high-occupancy vehicle (HOV) lanes right onto downtown streets, a short walk away from 140,000 jobs. A 2009 Central Houston study found that over half of Downtown employees who live 20 to 70 miles from Downtown use the HOV lane buses. These 35,000 daily transit trips are in addition to 179,000 trips in locals bus, vanpools, and carpools that also use the HOV lanes. If those vehicles ran on tracks rather than rubber tires, this would rank among the top ten U.S. commuter rail systems. The current service is more frequent, more convenient, and faster than the most commuter rail systems and equally reliable. Therefore, adding commuter rail will only make sense if it serves other sorts of trips. Those could be trips to employment centers other than Downtown—now poorly served by the HOV buses, which have to use congested general traffic lanes to get there—or trips to outlying centers like Galveston or College Station.

A good political as well as financial case can be made for improving transit. Hundreds of thousands of commuters must contend with freeway traffic while paying $3 a gallon for gas.
How to Evaluate Proposed Commuter Rail Routes

Five different agencies are developing plans for commuter rail.

Will the route duplicate services?
Park-and-ride buses extend to near the outer limits of suburban growth in most directions with the exception of Pearland and a few other areas.

Will the line go where people live?
Commuter rail studies have focused on existing freight rail lines radiating out from Houston. Where the proposed commuter rail corridors extend beyond the HOV lanes, it is often into largely unpopulated areas. There are exceptions: the Gulf Freeway corridor is populated all the way to Galveston, but the HOV lane goes less than half way. Commuter rail could also connect Prairie View or College Station (the latter has not been proposed).

Will the line go where people work?
Downtown is the biggest employment center in Houston, but it’s not the only one. Uptown, Greenway, and the Texas Medical Center are all downtowns in their own right. Concentrations of jobs are also in Galveston, The Woodlands, and the Energy Corridor. The more jobs a line serves, the more useful it will be.

Will the line connect well to light rail?
Light rail connects major activity centers inside Loop 610; it would bring most commuter rail riders to their final destinations. Most existing railroad lines inside the Loop are already congested with freight trains, so transfers between commuter rail and light rail as far out as Northwest Mall have been proposed. The further the transfer is from a rider’s final destination, the less convenient it is.