

TRANSPORTATION FUNDING

JAMES E. MOORE II

Let's Derail U.S. Maglev Plans

Want to take a fast multi-billion-dollar ride to a dead end? Taxpayers soon will if the Federal Railroad Administration continues to railroad through plans for the nation's first commercial train operated with magnetic levitation. Seven authorities in six states shared a first-round allocation of \$12.2 million in maglev planning awards. Last month in one of its last acts, the Clinton administration promised up to \$55 million in second-round funds to both the Pittsburgh and Washington-Baltimore areas to refine plans for a maglev pilot project. Whichever area succeeds may receive another \$950 million under the 1998 Transportation Equity Act for the 21st Century.

But we ought to apply the brakes. The U.S. Dept. of Transportation will find, if it is skeptical enough, that neither Pittsburgh nor Washington-Baltimore can comply with a key TEA-21 provision: Federal funds must not exceed two-thirds of the total capital cost. But if construction begins on either of the two proposals, the federal and local partners undoubtedly will have to decide whether to finance large cost overruns or derail the project.

MERE PROMISES. Let's not be carried away by the mystique of maglev. There are no design standards, no manufacturers of maglev components or spare parts, and no way to estimate system reliability. Sure, maglev holds out the promise of travel at 240 mph compared to the 90 mph of today's

high-speed trains, but this advantage is eroding. The same precision construction needed to build a maglev guideway can make steel-wheel trains travel as fast as 225 mph.



Maglev requires some mind-blowing science, but the best choice for the core technology remain unclear. California's Lawrence Livermore National Laboratory advocates using repulsive Halback arrays, levitated by inductive currents. The Japanese prefer super-cooled superconductors. German proposals, the best advertised so far, rely on magnetic attraction to achieve levitation but therefore require, as in the most exotic state-of-the-art aircraft, active feedback to overcome instability.

Still impressed by all the hype? Then consider this: The fastest maglev train would be less than half as fast as mass-production commercial aircraft, unless allowed to operate in a vacuum, which would not be the case. Either maglev service would have to be less expensive than an airline ticket to compete, or else the access times at train stations would have to be much less than at airports, which would be unlikely for large volumes of maglev travelers. Even so, maglev proponents have swayed the federal government so far. Never mind that TEA-21 requires that private enterprise must be able to run the maglev pilot project in a self-sustaining manner.

If you think the operat-

ing costs would be sky-high, consider the deceptive claims about the capital costs. For \$4 billion to \$6 billion in mostly federal dollars, California proposes building an 83-mile maglev line between the international airports in Los Angeles and Ontario, Calif. That sounds much too cheap. Opened in 1990, the 22-mile Blue Line between downtown Los Angeles and Long Beach cost more than \$1 billion—for conventional light rail. Certainly, urban maglev would cost substantially more per mile. **TRADE-OFF.** Let's get real. The cheapest way to expand access to intercity travel would be to expand airports, particularly hubs. This would be much cheaper than incorporating new technologies into precision guideways extending a minimum of several hundred miles. In some cases, though, expanding airports and building new ones will be impossible. Opposition from adversely affected groups will be too strong. But ultimately, urban residents in the U.S. will have to

ing an impending crisis in airport capacity. But airport congestion provides no rationale for building maglev trains. As long as airfares are allowed to adjust to equilibrate supply and demand for air travel, there will be not be an airport-capacity crisis. Deregulated domestic fares will begin to increase as airport capacity is saturated.

For now, U.S. air fares remain less than in Europe, where airline deregulation proceeded much less aggressively. Compared to their European counterparts, U.S. carriers still capture a much larger share of the short-haul market. Gasoline prices in Europe are about twice those in the U.S.; as a result, U.S. automobile travel accounts for a larger share of long trips. That has not left much room for high-speed rail in the U.S. But even if U.S. air fares were to increase substantially as airport capacity is depleted, maglev still could not compete. Its costs still would be too high.

True, the federal government would absorb two-thirds of the cost of a maglev pilot project, and subsidize its fares.

But as taxpayers, do we really want to subsidize what most certainly would be a very expensive, high-tech monument to failure?

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decide whether they want cheap air travel or smaller airports and fewer flights. Maglev cannot shield us from this trade-off.

The International Civil Aviation Organization predicts annual growth in passenger miles of air travel of nearly 5% annually worldwide until at least the year 2010, and growth in air cargo shipments of more than 7% annually. Many U.S. airport authorities are predict-

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