

Maglev rail line from Philadelphia to Pittsburgh pushed in legislature

by Philip Valenti

A bipartisan movement in the Pennsylvania state legislature is moving to reestablish a high-speed rail commission and revive the 1980s plan to construct a magnetically levitated (maglev) train system between Philadelphia and Pittsburgh.

As in the early-19th-century canal, turnpike, and railroad projects, a maglev system across Pennsylvania's Allegheny mountains is designed to connect the U.S. East Coast corridor to the Midwest heartland in a great continental network of high-speed transport, triggering an agro-industrial economic recovery in the process. Proponents also project a revival of the Pennsylvania steel industry, ravaged by the 1980s "post-industrial" and high-interest-rate policies of the Federal Reserve; a double-track maglev system requires 5,000 tons of steel per mile for the guideways plus 275 tons of magnetic steel per mile for the linear motors.

The Pennsylvania project, like similar infrastructure plans developed in other states, will instantly confront the stumbling block of financing—i.e., "Where's the money going to come from?"—particularly given the budget-cutting austerity mania now dominant in Congress. This debate has already forced the issue of the grave threat to the \$40 billion in state pension funds caused by the ongoing disintegration of global financial markets.

As one legislator commented off the record: "Why lose billions of dollars of pension money gambling in financial derivatives, when that money could be invested securely in building needed infrastructure and creating jobs?"

As the debate over infrastructure development intensifies, attention is being focused on Lyndon LaRouche's program to convert the private Federal Reserve System into a national bank of the United States, allowing the President and Congress to use the powers specified in Article I of the U.S. Constitution to issue low-cost government credit for projects like the Pennsylvania maglev system. It is clear that the maglev project is ready for construction right now.

In the 1960s, under the influence of Kennedy-era technological optimism and the Apollo program, the United States took the lead in research and development of high-speed ground transportation. Scientists Gordon Danby and James Powell at the Brookhaven National Labs advanced ground transport beyond the wheel, securing the first patents for maglev technology. Research was also motivated by the

growing crisis of transport bottlenecks and lost productivity due to congestion of highways and airports.

Soon afterward, the nation became infected with the virus of "post-industrial" ideology and "free market" financial greed, as popularized today by Rep. Newt Gingrich (R-Ga.) and Sen. Phil Gramm (R-Tex.), among others. So, in 1975, when the High-Speed Ground Transportation Act of 1965 expired, all maglev R&D was terminated in the United States, while work proceeded in Germany and Japan.

Today, the German Transrapid maglev design is ready for commercial application, while the United States confronts a transportation disaster, dramatically visible in mounting highway and airplane fatalities, along with the economic cost of delays. Federal government studies from the mid-1980s projected an annual 12 billion vehicle-hours of delays on the nation's highways by the year 2005, with the number of overcrowded airports increasing from 11 to 47. The resulting chronic delays will cost the economy about \$60 billion per year by 2005.

Maglev trains, operating at 250-300 miles per hour over distances of 100 to 600 miles and more, provide the best means of solving this crisis, as an intermediary between the car and airplane. And, like any well-designed government infrastructure program, maglev pays for itself many times over through increasing productivity in the economy. The \$60 billion potentially saved in one year alone is enough to build about 2,000 miles of a double-guideway maglev system.

Pennsylvania is the keystone

The Commonwealth's two major cities, Philadelphia and Pittsburgh, are about 350 miles apart, which can be covered in less than two hours by maglev, as opposed to a grueling 6-7 hours by car or conventional passenger train. The cities are separated by mountains, which the maglev train can traverse, with no need for expensive tunnelling or elaborate excavations. Connecting Philadelphia and Pittsburgh also connects Atlantic ports and East Coast population centers to the Midwest and beyond, for both passengers and freight.

A four-year, \$4 million study by the bipartisan High-Speed Intercity Rail Passenger Commission created by Act 144 of the Pennsylvania legislature in 1981, developed preliminary plans for such a cross-state system.

The commission's final report emphasized the economic impact of maglev, at a time in the 1980s when the Pennsylvania steel industry was being ravaged by the "post-industrial" looting policies of the Federal Reserve and the U.S. Steel Corp. (now USX). Under "Economic Development," the commission reported:

"High-speed rail would be a great catalyst for economic growth—growth that would help the state overcome years of declining investments, jobs, and population; and growth that would help reduce unemployment to a more desirable level, and provide substantial tax income for the Commonwealth.

"Construction benefits

"At least two-thirds of the expenditures for construction can be gained by Pennsylvania firms. Direct expenditures would stimulate further economic activity through the multiplier effect. . . . The maglev system, Option 1, produces \$22 billion in construction-period benefits in return for the \$10 billion capital cost estimate.

"New expenditures mean new construction jobs—as many as 25,000 annually for maglev, or Option 1. . . . This will raise personal income by at least \$1.39 billion during construction or \$5.34 billion total over the operating life, for the most modest system. Advanced technologies produce . . . \$9.4 billion [in personal income] for Option 1. State government revenues would increase by . . . \$882 million (Option 1) over the construction and operating life of the system. These revenues would be derived through increased income, sales and other tax receipts. . . .

"Operations benefits

"[The annual cost to operate and maintain a system would be] \$104 million for Option 1, maglev. Some 85% of these expenditures would benefit Pennsylvania firms and labor. The result, accounting for the multiplier effect, would be some \$460 million annually, under the best case, in new expenditures after operations begin.

"These expenditures translate into:

● A total, in direct and indirect employment, of 7,600 to 12,500 jobs.

● Annual personal income of \$160 million to \$205 million.

● State tax revenues of \$15 million to \$19 million annually. . . .

"Accessibility

"Historically, transportation is at the core of economic development, as can be seen in our highway system, ports and airports, along rapid transit lines and along rail freight corridors. High-speed rail also has the potential to be this kind of economic development catalyst."

A failure to act

Needless to say, not one aspect of the Pennsylvania commission report or its recommendations has been acted upon to this day. In fact, the publication of the commission's final report was delayed for three years until 1990, and was only

made possible as the result of a grant from Transrapid International in Munich, Germany.

Meanwhile, another maglev initiative began in Pittsburgh, where Carnegie Mellon University established a High-Speed Ground Transportation Center in January 1987.

When word got out that building a double-guideway maglev system would demand a rebirth of steel production in western Pennsylvania, support for maglev technology took on the character of a mass political movement, with enthusiastic support from labor, churches, and community groups. By 1990, the Carnegie Mellon Center had evolved into Maglev, Inc., a private corporation involving the university, local and state governments, manufacturers, engineering firms, and organized labor.

The company has already negotiated a "letter of agreement" with Transrapid, whereby: 1) Maglev, Inc. is allowed to use the Transrapid technology for its proposed regional system; 2) Transrapid will support Maglev, Inc. in the planning study effort, and provide manufacturing information; and 3) *the goal of the agreement is to provide for Maglev, Inc. to manufacture the system in the Pittsburgh area.*

Today, Maglev, Inc. has assembled the know-how, production capability, and local political support to immediately start construction of a demonstration project from downtown Pittsburgh to the Pittsburgh International Airport as soon as the funding is arranged.

Maglev, Inc.'s Mid-Atlantic Regional System Feasibility Study discusses the proposed regional system in detail: "The Mid-Atlantic Regional System consists of three groups of lines covering over 1,300 miles in four states and the District of Columbia. ● North Lines: Pittsburgh International Airport to Cleveland and Erie. ● East Lines: Pittsburgh to Philadelphia, Baltimore, and Washington, D.C. ● Southwest Lines: Pittsburgh International Airport to Columbus, Charleston, Morgantown, Huntington and Steubenville/Weirton."

The study makes clear that Pennsylvania is intended to become the manufacturing center for maglev technology in North America, based on adaptation and improvement of existing German technology.

Maglev, Inc.'s Feasibility Study for the Pittsburgh Demonstration Project examined four alternative routes for the 18-mile run to the airport. Estimated costs of construction range from \$494 to \$596 million, representing only 1.2-1.5% of the total reported value of Pennsylvania state and public school employee pension funds.

At the same time, close examination of the 1993 annual reports of the Pennsylvania School Employees and State Employees Retirement Systems reveals a potential derivatives exposure in the range of \$13 billion out of the total \$40 billion reported combined value. PNC Bank, the agent bank for one of the funds and "master trust custodian" for the other, has already reported a huge \$2 billion loss in 1994 from collapse of its derivatives holdings so far.