

way that the transcontinental railroads were linked up a century ago.

As the speed of the "flying" train increases, so does the aerodynamic drag. For distances of thousands of miles, such as long stretches across the United States, it would be worthwhile to put the trains inside underground evacuated tunnels, to eliminate the drag and limits on speed. In that case, the only limit to the speed, would be the amount of time the train has to accelerate at a comfortable rate. The more distance and time there is to travel, the faster the train could go.

The technology is ready. According to Transit America, if a U.S. entity ordered a maglev system today, the West German consortia would have the equipment ready for export by the time the road bed were ready, in four or five years.

But over the past decade, U.S. policymakers have acted

from the standpoint that the once-industrialized United States did not any longer need public transport. The trucking and airline industries were deregulated, with disastrous results. The railroad system was allowed to fall into disrepair and contraction, with funding for development of advanced technologies eliminated.

This decline could still be reversed; all it would take would be a return to the American System of economics, which recognized that for a nation to be a great economic power, it must have infrastructure, including transportation. The United States is too far behind Japan and Germany to develop maglev technologies from scratch as rapidly as required; but it can import from those nations that recognized the importance of developing 21st-century transport technology.

## The collapse of the U.S. railroads

Not only has the United States terminated all research programs to develop a magnetically levitated train system—even its conventional railroads are now threatened with drastic cuts, if not shut-down.

On Dec. 23, the federal government-supported passenger railroad system, Amtrak, announced plans to reduce rail service to seven American cities, and temporarily cut routes in three regions, because of a 10.5% budget reduction. Amtrak spokesman John Jacobsen blamed the cuts on the just-signed Gramm-Rudman balanced budget law.

The reductions took effect on Jan. 12, and involve lines between Philadelphia and Harrisburg, Pennsylvania; Albany and Niagara Falls, New York; Chicago and Champaign-Urbana, Illinois; Chicago and Detroit; St. Louis and Chicago; Valparaiso and Chicago, Illinois; and Portland and Seattle.

Amtrak also announced that it plans to reduce overhead costs and slash its capital budget to zero. Tens of thousands of former train passengers will likely have to resort to their automobiles.

For the past two years, the Reagan administration has threatened to totally eliminate the more than \$600 million per year federal Amtrak subsidy. The continuing resolution passed by the Congress before its Christmas recess, cut Amtrak's funding 10%, from \$684 million to \$616 million.

Amtrak spokesman Jacobsen said in an interview that another cut, between 4-5% is expected, in this year's funding, due to Gramm-Rudman. For fiscal year 1987,

Jacobsen fears that the reductions "could be four to five times this year's cut" or about 25% over the two years.

He stated that last year when Congress queried an Amtrak witness at budget hearings, on the impact of a proposed 25% cut in federal funding, the witness said that this would force the nation's only passenger rail system to "close its doors and go into Chapter 11 bankruptcy."

These cut-backs merely continue a trend that began with the bankruptcy of the Penn Central Railroad in the mid-1970s. Since 1976, the miles of track owned by the nation's railroads have declined every year. That year, there were over 300,000 miles of Class 1 trackage. By 1984, this had dropped to 255,748 miles. This drop is catastrophic, when it is compared to the fact that in 1929, the nation had over 100,000 more miles of rail than it does today! In 1929, there were over 61,000 cars just for passenger service on the rails. In 1984, this number had fallen to less than 4,000.

The picture is not any better for freight. In 1953, this nation had over 80,000 rail cars hauling freight. This had declined to just over 12,000 by a year ago. Although the amount of freight carried by each car has increased, it has only doubled, meaning a drastic decline in rail freight transport.

### Costs of constructing various rail systems

Type	Speed (miles/hr)	Examples	Cost/mile (million \$)
Conventional	125 +	Amtrak	3-5
High-speed rail	160 +	French TGV Japanese Shinkansen	8-12
Maglev	250	German, Japanese	9-13

Source: High Speed Rail Compact Background Report, May 1984.