



Back on Tracks

A NINETEENTH-CENTURY TECHNOLOGY COULD BE THE SOLUTION TO OUR TWENTY-FIRST-CENTURY PROBLEMS.

By Phillip Longman

Six days before Thanksgiving, a truck driver heading south on Interstate 81 through Shenandoah County, Virginia, ploughed his tractor trailer into a knot of cars that had slowed on the rain-slicked highway. The collision killed an eighty-year-old woman and her one- and four-year-old grandchildren, and brought traffic to a standstill along a ten-mile stretch of road for the better part of the afternoon.

It was a tragedy, but not an unusual one. Semis account for roughly one out of every four vehicles that travel through Virginia on I-81's four lanes, the highest percentage of any interstate in the country. They're there for a reason: I-81 traces a mostly rural route all the way from the Canadian border to Tennessee, and the cities in its path—Syracuse, Scranton, Harrisburg, Hagerstown, and Roanoke among them—are midsized and slow growing. This makes the highway a tempting alternative to I-95, the interstate that connects the eastern seaboard's major metropolises, which is so beset with tolls and congestion that truckers will drive hundreds of extra miles to avoid it.

This is bad news for just about everyone. Even truckers have to deal with an increasingly overcrowded, dangerous I-81, and for motorists it's a white-knuckle terror. Because

much of the road is hilly, they find themselves repeatedly having to pass slow-moving trucks going uphill, only to see them looming large in the rearview mirror on the down grade. For years, state transportation officials have watched I-81 get pounded to pieces by tractor trailers, which are responsible for almost all non-weather-related highway wear and tear. To make matters worse, traffic is projected to rise by 67 percent in just the next ten years.

The conventional response to this problem would be simply to build more lanes. That's what highway departments do. But at a cost of \$11 billion, or \$32 million per mile, Virginia cannot afford to do that without installing tolls, which might have to be set as high as 17 cents per mile for automobiles. When Virginia's Department of Transportation proposed doing this early last year, truckers and ordinary Virginians alike set off a firestorm of protest. At the same time, just making I-81 wider without adding tolls would make its truck traffic problems worse, as still more trucks diverted from I-95 and other routes.

Looking for a way out of this dilemma, Virginia transportation officials have settled on an innovative solution: use state money to get freight off the highway and onto rails. As it hap-

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pens, running parallel to I-81 through the Shenandoah Valley and across the Piedmont are two mostly single-track rail lines belonging to the Norfolk Southern Railroad. Known as the Crescent Corridor, these lines have seen a resurgence of trains carrying containers, just like most of the trucks on I-81 do. The problem is that the track needs upgrading and there are various choke points, so the Norfolk Southern cannot run trains fast enough to be time competitive with most of the trucks hurtling down I-81. Even before the recent financial meltdown, the railroad couldn't generate enough interest from Wall Street investors to improve the line.

The railroad has long been reluctant to accept government investment in its infrastructure out of fear of public meddling, such as being compelled to run money-losing passenger trains. But now, like most of the industry, it has changed its mind, and it happily accepted Virginia's offer last year to fund a small portion—\$40 million—of the investment needed to get more freight traffic off I-81 and onto the Crescent Corridor. The railroad estimates that with an additional \$2 billion in infrastructure investment, it could divert a million trucks off the road, which is currently carrying just under five million. State officials are thinking even bigger: a study sponsored by the Virginia DOT finds that a cumulative investment over ten to twelve years of less than \$8 billion would divert 30 percent of the growing truck traffic on I-81 to rail. That would be far more bang for the state's buck than the \$11 billion it would take to add more lanes to the highway, especially since it would bring many other public benefits, from reduced highway accidents and lower repair costs to enormous improvements in fuel efficiency and pollution reduction. Today, a single train can move as many containers as 280 trucks while using one-third as much energy—and that's before any improvements to rail infrastructure.

For now, Virginia lacks the resources to build its "steel wheel interstate," but that could change quickly. Thanks to the collapsing economy, a powerful new consensus has developed in Washington behind a once-in-a-generation investment in infrastructure. The incoming administration is talking of spending as much as \$1 trillion to jump-start growth and make up for past neglect, an outlay that Obama himself characterizes as "the single largest new investment in our national infrastructure since the creation of the federal highway system in the 1950s." We'll soon be moving earth again like it's 1959.

By all rights, America's dilapidated rail lines ought to be a prime candidate for some of that spending. All over the country there are opportunities like the I-81/Crescent Corridor deal, in which relatively modest amounts of capital could unclog massive traffic bottlenecks, revving up the economy while saving energy and lives. Many of these projects have already begun, like Virginia's, or are sitting on planners' shelves and could be up and running quickly. And if we're willing to think bigger and more long term—and we should be—the potential of a twenty-first-century rail system is truly astonishing. In a study recently presented to the National Academy of Engineering, the Millennium Institute, a nonprofit known for its expertise in energy and environmental modeling, calculated

the likely benefits of an expenditure of \$250 billion to \$500 billion on improved rail infrastructure. It found that such an investment would get 85 percent of all long-haul trucks off the nation's highways by 2030, while also delivering ample capacity for high-speed passenger rail. If high-traffic rail lines were also electrified and powered in part by renewable energy sources, that investment would reduce the nation's greenhouse gas emission by 38 percent and oil consumption by 22 percent. By moderating the growing cost of logistics, it would also leave the nation's economy 13 percent larger by 2030 than it would otherwise be.

Yet despite this astounding potential, virtually no one in Washington is talking about investing any of that \$1 trillion in freight rail capacity. Instead, almost all the talk out of the Obama camp and Congress has been about spending for roads and highway bridges, projects made necessary in large measure by America's overreliance on pavement-smashing, traffic-snarling, fossil-fuel-guzzling trucks for the bulk of its domestic freight transport. This could be an epic mistake. Just as the Interstate Highway System changed, for better and for worse,

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the economy and the landscape of America, so too will the investment decisions Washington is about to make. The choice of infrastructure projects is de facto industrial policy; it's also de facto energy, land use, housing, and environmental policy, with implications for nearly every aspect of American life going far into the future. On the doorstep of an era of infrastructure spending unparalleled in the past half century, we need to conceive of a transportation future in which each mode of transport is put to its most sensible use, deployed collaboratively instead of competitively. To see what that future could look like, however, we need to look first at the past.

The Lost Vision

At the beginning of the twentieth century, a "Good Roads" movement emerged, calling for more paved highways. It was led by farmers and bicyclists, but railroads were strong sup-

porters; they reasoned, logically enough, that with more paved roads, more people and goods could travel from greater distances to reach their lines. Farmers wouldn't get stuck in the mud trying to move their crops to market, but could use newly available trucks traveling on all-weather macadam highways to reach railheads. The Pennsylvania, Southern, and Illinois Central Railroads, among others, ran "object-lesson trains" to small towns along their routes, carrying the men and materials needed to pave a short stretch of local roadway so the locals could see the possibilities. U.S. Senator J. W. Daniel, on hand to welcome one such train's visit to Lynchburg, Virginia, in 1901, described it enthusiastically as "an itinerant college on wheels."

The vision of intermodal transport the railroads were seeking to promote made perfect sense. Rail transport lacks the flexibility of the rubber wheel kind, but it has other advantages that make it far superior when the circumstances allow. The biggest is a unique quality of the technology itself. Steel wheels on steel rails meet with very little rolling resistance. They don't compress and absorb energy from the surface the way a tire does, and the rail itself is much smoother than any road, so trains have only about one-tenth the rolling resistance of trucks. And because of the way rails absorb and spread the weight of a vehicle over long distances, this advantage increases as freight is added. The more you load up a train, the more efficient it becomes compared to a fleet of trucks carrying the same cargo.

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The Environmental Protection Agency calculates that for distances of more than 1,000 miles, a system in which trucks haul containers only as far as the nearest railhead and then transfer them to a train produces a 65 percent reduction in both fuel use and greenhouse gas emissions. As the volume of freight is expected to increase by 57 percent between 2000 and 2020, the potential economic and environmental benefits of such an intermodal system will go higher and higher. Railroads are also potentially very labor efficient. Even in the days of the object-lesson train, when brakes had to be set manu-

ally and firemen were needed to stoke steam engines, a five-man crew could easily handle a fifty-car freight train, doing the work of ten times as many modern long-haul truckers.

In the first half of the last century, railroads used these and other advantages of steel wheel technology to provide services we tend to think of as modern, or in some cases even futuristic. The Pacific Fruit Growers Express delivered fresh California fruits and vegetables to the East Coast using far less energy and labor than today's truck fleets. The rhythmically named Chicago, Milwaukee, St. Paul, and Pacific (a.k.a. the Milwaukee Road) hauled hundred-car freight trains over the Cascade and Rocky Mountains using electric engines drawing on the region's abundant hydropower. The Railway Express Agency, which attached special cars to passenger trains, provided Americans with a level of express freight service that cannot be had for any price today, offering door-to-door delivery of everything from canoes to bowls of tropical fish to, in at least one instance, a giraffe. Into the 1950s, it was not uncommon for a family to ship its refrigerator to and from a lakeside cabin for the summer via the REA; thanks to the physics of steel-on-steel conveyance, appliance-sized items could be moved for trivially larger amounts of money than smaller goods (think about that the next time you shell out an extra \$50 to check a suitcase of dirty clothes on a domestic flight).

High-speed Railway Post Office trains also offered efficient mail service to even the smallest towns which is not matched today. In his book *Train Time*, Harvard historian and rail expert John R. Stilgoe describes the Pennsylvania Railroad's Fast Mail train No. 11, which, because of its speed and on-board crew of fast sorting mail clerks, ensured next-day delivery on a letter mailed with a standard two-cent stamp in New York to points as far west as Chicago. Today, that same letter is likely to travel by air first to FedEx's Memphis hub, then be unloaded, sorted, and reloaded onto another plane, a process that demands far greater expenditures of money, carbon, fuel, and, in many instances, time than the one used eighty years ago.

The glory days of American railroads are now beyond the memory of most Americans. Rail service was already in decline during the Depression, and the gas rationing and logistical strains of World War II made train travel a standing-room-only horror. In large part because of that generational experience, most Americans came to believe that the decline of railroads was an inevitable part of the march of progress. But the reality is close to the opposite. Especially for long-haul freight, steel wheel on steel rail is a far superior technology, and its eclipse by rubber wheels is mostly the result of special interest politics, ill-considered public policies, and other factors that have nothing to do with efficiency.

Manipulated by Wall Street and often badly managed, railroads were ultimately no match for the growing combination of interests—Standard Oil, General Motors, tire and asphalt makers—that grew into the auto-highway complex. For decades, railroads were also slowly crippled by state and federal laws that forced them to run money-losing passenger trains and to keep on featherbedding employees rendered obsolete

by new technology. Rail companies, as private-sector entities, remained responsible for maintaining their own infrastructure and for paying increasingly high property taxes on it, even as public money poured into highway and airport construction. And when railroads improved their efficiency, as they did substantially after World War II, they were often prevented by the now-defunct Interstate Commerce Commission from passing the savings on to shippers, which resulted in further loss of market share to trucks.

Many railroads died in the 1970s. At the beginning of the decade, the Erie Lackawanna Railroad had moved very fast trains loaded with United Parcel Service vans on flat cars along its two-track, wide-clearance mainline stretching from Jersey City to Chicago—a model of intermodal transportation. But the railroad did not live to see the 1980s, and now most of the line is abandoned. On the eve of the 1973 oil crisis, the proprietors of the Milwaukee Road ripped out its once state-of-the-art electrical wiring to raise cash. Much of the line is now a bike trail. By the start of the '80s, the government had eased some of the policy constraints on the railroads, giving them relief from running passenger trains without compensation and a substantial measure of price deregulation. But by then the damage was done. Thinking their industry was in terminal decline, many railroad managements continued to tear up tracks and use what little capital they had to diversify into new businesses, like theme parks, and, in one instance, even mutual funds.

But then, starting in the late '80s, something unexpected happened. As fuel and labor costs rose, and highway congestion worsened, more and more shippers started looking for an alternative to trucking. Once reduced to transporting mostly heavy, low-value commodities such as coal, railroads started gaining business in the transport of more time-sensitive, high-value items—everything from Japanese computers to California wine—typically using containers double stacked on flat cars. On routes where they still have adequate infrastructure, railroads have won back fantastic amounts of business from trucks, especially on long hauls such as Los Angeles to New York, where railroads now have a 72 percent market share in container traffic and could have more. Railroads have gone from having too much track to having not enough. Today, the nation's rail network is just 94,942 miles, less than half of what it was in 1970, yet it is hauling 137 percent more freight, making for extreme congestion and longer shipping times.

The half-conscious decision by Washington, Wall Street, and the last generation of rail management to abandon much of the rail system thus prevents railroads from getting more trucks off the road. For example, UPS desperately wants to use fast trains like the ones Erie Lackawanna once had to reduce the cost of moving parcels coast to coast in less than four days, a feat currently requiring a tag team of truck drivers at enormous cost in fuel and labor. For a brief time in 2004, UPS did persuade two railroads to run a train fast enough to handle this business. But due to insufficient track to allow slower trains to get out of its way, the UPS bullet train caused massive congestion, freezing up the Union Pacific system for months

until the railroad at last canceled the service. Big trucking companies like J. B. Hunt, meanwhile, have become the railroad's biggest intermodal customers, sending as many of their containers as they can by rail.

Why don't the railroads just build the new tracks, tunnels, switchyards, and other infrastructure they need? America's major railroad companies are publicly traded companies answerable to often mindless, or predatory, financial Goliaths. While Wall Street was pouring the world's savings into underwriting credit cards and sub-prime mortgages on over-

Railroads' current capacity is limited by choke points such as the low-slung Howard Street Tunnel in Baltimore, so old it appears on the National Register of Historic Places. When a fire closed the tunnel in 2001, trains were diverted as far west as Cincinnati.

valued tract houses, America's railroads were pleading for the financing they needed to increase their capacity. And for the most part, the answer that came back from Wall Street was no, or worse. CSX, one of the nation's largest railroads, spent much of last year trying to fight off two hedge funds intent on gaining enough control of the company to cut its spending on new track and equipment in order to maximize short-term profits.

So the industry, though gaining in market share and profitability after decades of decline, is starved for capital. While its return on investment improved to a respectable 8 percent by the beginning of this decade, its cost of capital outpaced it at around 10 percent—and that was before the credit crunch arrived. This is no small problem, since railroads are capital intensive, spending about five times more just to maintain remaining rail lines and equipment than the average U.S. manufacturing industry does on plant and equipment. Increased investment in railroad infrastructure would produce many public goods, including fewer fatalities from truck crashes, which kill some 5,000 Americans a year. But public goods do not impress Wall Street. Nor does the long-term potential for increased earnings that improved rail infrastructure would bring, except in the eyes of Warren Buffett—who is bullish on railroads—and a few other smart, patient investors.

The alternative is for the public to help pay for rail infrastructure. Actually, it's not much of a choice. Unlike private investors, the government must either invest in shoring up the railroads' overwhelmed infrastructure or pay in other ways. Failing to rebuild rail infrastructure will simply further move the burden of ever-increasing shipping demands onto the highways, the expansion and maintenance of which does not come free. The American Association of State Highway and Transporta-



tation Officials (hardly a shill for the rail industry) estimates that without public investment in rail capacity 450 million tons of freight will shift to highways, costing shippers \$162 billion and highway users \$238 billion (in travel time, operating, and accident costs), and adding \$10 billion to highway costs over the next twenty years. "Inclusion of costs for bridges, interchanges, etc., could double this estimate," their report adds.

Choke Points

Let's start with the small-scale stuff that needs doing. There are many examples around the country where a relatively

tiny amount of public investment in rail infrastructure would bring enormous social and economic returns. Why is I-95 so congested with truck traffic that drivers divert to I-81 and overwhelm that interstate as well? One big reason is that railroads can capture only 2 percent of the container traffic traveling up and down the eastern seaboard because of obscure choke points, such as the Howard Street Tunnel in downtown Baltimore. The tunnel is too small to allow double-stack container trains through, and so antiquated it's been listed on the National Register of Historic Places since 1973. When it shut down in 2001 due to a fire, trains had to divert as far as Cincinnati to get around it. Owner CSX has big plans for capturing more truck traffic from I-95, and for creating room for more passenger trains as well, but can't do any of this until it finds the financing to fix or bypass this tunnel and make other infrastructure improvements down the line. In 2007, it submitted a detailed plan to the U.S. Department of Transportation to build a steel wheel interstate from Washington to Miami, but no federal funding has been forthcoming.

The Howard Street Tunnel is the worst of some seventy rail choke points in the mid-Atlantic region alone. According to a study commissioned by the I-95 Corridor Coalition, a group of transportation officials along the highway's route, fixing these choke points would cost \$6.2 billion and return twice that amount in benefits. The returns would include \$2.9 billion in reduced freight transportation costs, \$6.3 billion in direct savings due to reduced highway congestion for vehicles still on the road, and \$3.7 billion in indirect economic benefits generated throughout the economy by these transportation savings. Importantly, rail capacity can often be improved substantially by relatively low-cost measures such as adding signals, occasional switches, and new, computerized train control devices, whereas with rubber wheel interstates the only way to add capacity is to add lanes. This is another reason why the social rate of return on rail investment is much higher than on most highway projects.

Another notorious set of choke points is in Chicago, America's rail capital, which is visited by some 1,200 trains a day. Built in the nineteenth century by noncooperating private companies, lines coming from the East still have no or insufficient connections with those coming from the West. Consequently, thousands of containers on their way elsewhere must be unloaded each day, "rubber-wheeled" across the city's crowded streets by truck, and reloaded onto other trains. It takes forty-eight hours for a container to travel five miles across Chicago, longer than it does to get there from New York. This entire problem could be fixed for just \$1.5 billion, with benefits including not just faster shipping times and attendant economic development, but drastically reduced road traffic, energy use, and pollution.

Wind Trains

Once kinks like these have been ironed out of the system, we can focus on the big picture—most importantly the electrifi-

cation of America's major rail lines. Today, most other industrial countries make extensive use of electric locomotives, and for good reason. They are two and a half to three times more efficient than diesels, more powerful, and cheaper to maintain. They also last longer, accelerate faster, and have much higher top speeds. Trains carrying containers at 100 miles per hour are more than possible. Powered by an overhead wire or third rail, electric locomotives don't have to lug the weight of their own fuel around with them. Another remarkable feature is that when electric locomotives brake, they generate electricity, which is fed back into the grid and used to power other trains. An electric locomotive braking down one side of a mountain, for example, sends energy to trains struggling up the other side. With all these advantages, electric railroads are fully twenty times more fuel efficient than trucks.

Rail electrification also offers significant opportunities for zero-emission freight and passenger transportation. Heirs to the Milwaukee Road's hydropowered line could traverse the Great Plains, powered by the region's wind farms. In fact, there is probably no more practical use for wind than using it to power "wind trains" running across the heartland. Most wind farms are and will be concentrated near rail lines in any event, because the large size of windmills makes them difficult and expensive to move by truck. There is also no loss of energy in transmission when windmills power passing trains—a big problem in other applications. Some companies are already exploring the possibilities: BNSF Railway, which traverses many wind zones, is investigating a deal by which it would lease space for power lines along its rights-of-way to utilities in exchange for access to discounted wind power for its trains.

Much of the electrification could start almost immediately. In the 1970s, the National Academy of Science and many others concerned about that decade's energy crisis did extensive work in mapping out the specific lines most suitable to electrification. In 1977, at one of the many technical conferences on the subject, Milton J. Shapp, then governor of Pennsylvania, spoke for many of the visionaries involved when he observed that "particularly in view of the energy crisis, it is essential to the well-being of our nation that our major railroads electrify." A temporary fall in oil prices and an abundance of short-term thinking killed almost every last project, but we still have the benefit of all the studies sitting on shelves.

The work involved in constructing overhead wires, or catenary, requires unique skills, but one can imagine laid-off construction workers taking to it far better than, say, to nursing, and with less retraining. Current studies indicate that labor and construction costs would come to about \$2 million per mile—and maybe less, if steel prices continue to sink. Wiring the 36,000 miles of mainline track on the nation's high-density routes would thus come in at a cost of around \$72 billion. According to John Schumann, professional engineer at the rail transportation consulting firm LTK Engineering, completing such a project could take as little as six years.

Additional funds would be needed, of course, for new locomotives and generating capacity. But building or retrofit-

ing locomotives to operate under the new grid could put lots of laid-off autoworkers back to work. General Motors, until it sold off its Electro-Motive Division in 2005 to private investors, was long the nation's dominant diesel-electric locomotive maker. The spinoff company is still headquartered in LaGrange, Illinois, though most production has shifted to London, Ontario. General Electric, which remains a world leader in locomotive building, with a big plant in hard-pressed Erie, Pennsylvania, could also use the business and would bring much expertise to it.

The Back on Tracks Project

To say the federal government should invest in railroads is not to say it should own them. It's true that countries with nationalized railroad systems can take a broader view of the social value of railroad investment, which is why the Swiss, having voted to put all trucks crossing their country onto trains, are busy carving rail tunnels—one thirty-five miles long—through the Alps. But nationalizing U.S. railroads would bring with it all the problems attendant to government bureaucracies, and buying out current shareholders would cost taxpayers a bundle. What the government should do instead is make

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creative use of public/private partnerships—like the deal Virginia cut with Norfolk Southern—to fund more rail infrastructure and better integration of trucks and trains.

There are many ways this could be done. During the Great Depression, for example, the Reconstruction Finance Corporation offered loan guarantees to the Pennsylvania Railroad to electrify its lines between New York, Washington, and Harrisburg, which brought such efficiency to the railroad that it was one of the few to avoid bankruptcy during the 1930s. Today, a national infrastructure bank—which many, including Barack Obama, have proposed—could play the same role. Reduced capital gains taxes for investors in rail infrastructure could also help direct capital to where it is needed. Flat-out grants, akin to federal highway money,

would also be appropriate, since they would directly reduce the amount of money needed for highway construction and maintenance, not to mention all the other economic and environmental benefits.

If the public helps railroads make these investments in electrification and other infrastructure improvements, it will, of course, earn important quid pro quos. Railroads, for example, could be required to apportion a certain amount of their increased capacity to public use, such as for commuter trains, which the railroads might or might not operate themselves. (Some have shown interest.) It should also be possible to negotiate open access to publicly financed rail infrastructure. This would allow outside companies to rent the rails and run their own freight, package express, fast mail, or passenger trains on them. It would also be a good check on any tendency toward monopoly pricing and provide for many other synergies as well.

In Great Britain, a subsidiary of Virgin Airlines called Virgin Trains operates passenger trains on publicly financed infrastructure, as do other private passenger and freight companies. Following this example would create something very much like the current interstate highway system: publicly financed transportation infrastructure maintained for the benefit of private operators. America's major railroads are wary of the full, open-access model and want to retain ownership of their track. But with the promise of enough public capital and the threat of re-regulation, deals can be struck that will bring profound benefits across the economy.

*A hydropowered rail line
once ran across Montana.
But on the eve of the 1973
oil crisis, its owners ripped
out its once state-of-the-
art wiring to raise cash.*


For example, there is no reason we cannot again have fast, efficient express freight service of the kind the Railway Express Agency once provided. For cities as far apart as New York and Chicago, trains can beat planes on next-day mail service. As consulting engineer Alan Drake points out, when passengers and express freight or mail are borne by the same train, the economics of passenger rail improve dramatically, making possible far wider service. We also have the chance to reduce drastically the cost and huge carbon footprint of using trucks and planes almost exclusively to ship perishables across the country. Until the 1970s, railroads handled nearly all fresh food movement from California and Florida, and could again,

making healthy winter fruits and vegetables cheaper, and less hard on the planet.

Another potential use of steel wheel interstates would be auto trains. Today, Amtrak offers a service that allows motorists to drive their cars onto special auto racks that are attached to the back of a passenger train. The train runs daily between northern Virginia and central Florida, saving users 855 miles of driving down I-95. The service is particularly popular among northern "snowbirds" who spend the winter in Florida and want to have their cars with them. For now, this is a specialty market, and it is not cheap because of the energy required to haul the weight of the automobiles. But with the potential energy efficiency of an electrified steel wheel interstate system, auto trains could make sense in many markets, whether run by Amtrak or private firms.

A similar service might also appeal to remaining independent long-haul truckers. (We'd still need some for transport of time-sensitive cargo to and from remote locations.) In Europe, a company called HUPAC offers a service known as "the rolling highway." By attaching a coach to the end of its container trains, it allows drivers to rest as they and their rigs traverse the Alps. Truckers in this country, before exceeding their daily legal maximum of eleven hours behind the wheel, could load their rigs onto a rolling highway and get some 900 miles down the road while they took their mandatory ten hours rest.

Is all this politically feasible? Certainly more so than a year ago, before the consensus formed that we must invest massively in infrastructure of some kind. Importantly, too, we're not talking about bailing out a failing industry, but about helping an expanding, more energy-efficient one to grow fast enough to meet pressing public needs. Nor would we be making big bets on unproven technology. Also, it's important to remember that big trucking companies, facing acute driver shortages and mounting highway congestion, are increasingly shifting their containers to rail and so have an interest in improved rail infrastructure. With trucking companies morphing into logistics companies, it's a new day in the special interest politics of freight.

Finally, the proposal has an additional political advantage: it doesn't involve pricing or guilt-tripping people out of their automobiles. Electrifying and otherwise improving rail infrastructure would indeed facilitate the coming of true high-speed rail passenger service to the United States, a goal Obama committed to as a candidate. But its success wouldn't depend on persuading a single American to take the train instead flying or driving. Indeed, with its promise of making driving more enjoyable and less dangerous, the proposal bridges the divide between auto-hating, Euroland-loving enviros and those who see access to the open road as an American birthright. What could be more post-1960s? Mr. President, this is change we can believe in. 

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