



A National Rail Plan

Comments for the USDOT Federal Railroad Administration

(Docket No. FRA 2010-0020)

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About ITI

The Intermodal Transportation Institute at the University of Denver is an interdisciplinary unit whose vision is to be recognized internationally as the leading academic institute on intermodal transportation systems. ITI promotes the development of a seamless, efficient, and ethical North American transportation system for both passengers and freight through its education, research, and outreach programs. ITI offers an Executive Masters Program that awards a Master of Science in Intermodal Transportation Management from the University of Denver. This graduate degree is for working professionals in the transportation industry. ITI combines the administrative support of the University of Denver with a strong and effective Board of Directors that consists of the leaders and pioneers in the intermodal transportation industry, passenger and freight. For additional information, visit www.du.edu/transportation.

About NCIT

The National Center for Intermodal Transportation (NCIT) is a partnership between the University of Denver and Mississippi State University. NCIT builds upon the activities of the Intermodal Transportation Institute (ITI) at the University of Denver and the activities of the centers with transportation focuses at Mississippi State University. NCIT is a part of the USDOT University Transportation Centers Program and was reauthorized under SAFETEA-LU. For further information, visit www.ncit.misstate.edu.

Introductory Statement

The US Department of Transportation Federal Railroad Administration (FRA) has requested feedback and comments on its proposed National Rail Plan (NRP) from industry and organizations. The Intermodal Transportation Institute (ITI) and the National Center for Intermodal Transportation (NCIT) are pleased to provide the following comments and recommendations to the FRA.

It is the recommendation of ITI/NCIT that a new NRP must be an integral part of a new, visionary, *21st Century National Transportation Policy* that integrates all modes of transportation into a seamless, intermodal, transportation system for both passenger and freight; must break with the past era of cheap fossil fuel, inadequate modal connectivity, and insufficient infrastructure funding; must call for new funding approaches to maintain and develop transportation infrastructure, which will require vast but necessary structural, organizational, and governmental reorganization; and must address the economic demands of the movement of people and goods in a dynamic global economy.

A new NRP must be developed within the context of this overall, national transportation policy that addresses numerous, complex issues, such as a growing and increasingly mobile population and the requirements of moving goods through the supply chain in an increasingly competitive international marketplace. The infrastructure that such a policy requires should be based upon the inherent advantages offered by rail transport. A seamless, *intermodal* infrastructure with rail at its foundation could mitigate energy and environmental problems and congestion and mobility issues.

Issue 1. Funding a National Rail Plan

- The current, mode-based funding approach is no longer working; it should be replaced with sustainable sources of funding that will fund not only the cost of the initial infrastructure but also the full life-cycle costs of the continued development, maintenance, and operations of passenger rail systems.
- Funding a system that includes national, regional, state, local, and private entities presents a set of extremely complex issues. Freight railroads own their rights-of-way and are self-funded; taxpayers finance other transportation modes (such as passenger rail), based upon user fees and taxes. Funding a new NRP for its full life cycle must be addressed before the plan is implemented. The funding mechanism must enable a NRP to pay its own way, while maintaining capacity, safety, and efficiency assurances. A successful and sustainable financial support mechanism will likely involve user fees and a “trust fund or funds” similar to the Highway Trust Fund as well as additional financial sources.
- A funding system will be most effective if it includes both public and private parties, collaborating to develop sustainable sources that ensure continued and consistent revenue streams for private entities and public concerns.

- Separating the USDOT into two separate offices, one for freight and another for passenger, could be a practical solution to funding a new NRP. Two, new, trust funds, one freight and one passenger, could replace the existing Highway Trust Fund. The Highway Trust Fund's continued reliance on the gasoline tax, as currently structured, is not sustainable for current or future transportation needs. Several alternative funding mechanisms, such as a vehicle miles traveled (VMT) tax, a passenger miles traveled tax, a freight tonnage tax, and/or a restructured gasoline tax should be considered as a part of a radical shift in how transportation infrastructure is funded.

Issue 2. Infrastructure Access and Liability

- To the greatest possible extent, it would be desirable to have separate tracks for freight and passenger rail operations. Nevertheless, it is likely that freight rail and passenger rail services will be required to coexist in many places. This will require the creation of joint passenger/freight management teams to monitor the interaction of rail movements, while reporting to the appropriate agencies to ensure that they are not unduly influenced by the conflicting interests of either party. ITI/NCIT recommends that the federal government create a mechanism for indemnifying coexisting freight and passenger programs to ensure that freight capacity is not impeded in any way and that the entities charged with the operation of passenger rail are not burdened with impossibly unrealistic liability, which could prevent further and future development.
- Passengers involved in accidents on freight rail lines currently represent a serious issue for the freight railroads; the solution will require certain reforms to the current tort system, including a cap on rail liability, and the establishment of a national set of standards.
- A new NRP should place a priority on creating a sufficient number of high-quality, grade-separated tracks, much like the Interstate Highway System, with shared use for the private freight rail and the public passenger rail wherever necessary. This may not be feasible without a strong set of incentives and assurances for the privately owned freight railroads, which possess the existing rail rights-of-way, as they may be required to expand their rail networks to establish a truly interconnected, intermodal transportation system.

Issue 3. Issues of Governance

- A new *21st Century National Transportation Policy* will require a new understanding and new levels of governance to mitigate the occurrence of federal, regional, state, and local jurisdiction and regulation conflicts. While there will be various entities that will have governance over certain transportation networks, these entities must, of necessity, be subordinate to federal governance when it is in the best interests of the nation.

- A new NRP will require a new approach to governance. Proposed high-speed passenger rail systems would most likely be controlled by statewide or multi-state regional entities. Commuter rail and rail transit systems are typically controlled by metropolitan-area regional or local transit agencies. Freight rail systems are controlled by private operators, subject to regional interface issues. While regional, state, local, or private management structures should continue to address the daily business decisions concerning these movements, when broader transportation or national decision-making issues apply, these structures must be superseded by federal governance. Federal regulations are necessary and should be developed collaboratively with the private sector, the regions and corridors, and the federal, state, and local governments to not only provide the least restrictive type of governance but also to ensure the prioritization of national needs affecting the entire system.
- Most key intercity intermodal connectors are strategic and related to national defense with respect to long haul corridors. However, because these systems impact cities and/or regions disproportionately, it is difficult to obtain agreement on funding and governance for these connectors. It is not feasible to let local or regional decisions drive national defense considerations, however. These national intermodal connectors—with the exception of the freight rail networks that are private, long haul systems—should be funded and governed by the federal government.

Issue 4. Network Design and Development

- Historically, the various networks of transportation in the United States—rail, water, air, and highway—have developed separately. This has created tension among the four modes and has limited their opportunities and decision-making capabilities for developing a truly intermodal transportation system that would take advantage of the respective strengths of each mode. The design and the development of a national transportation system must be driven by a strategic national transportation policy that is founded in the concept of an integrated, cohesive, national intermodal network, which also ensures that local entities and the private sector have as much control as is practically feasible.
- Intercity high-speed passenger rail networks should be designed and developed to facilitate intermodal connections at airports, other intercity rail and local rail transit stations, intercity bus and local bus transit stations, and other high-density, major activity nodes.

Issue 5. Transportation Safety and Operation

- The US should support a policy that will design accidents out of the rail system, rather than develop vehicles to survive the accidents. Such a sensible policy, which other nations already support, would significantly reduce the number of injuries and

deaths. Implementing this policy will be more costly but will be worth the effort in the long term.

- Today's new technologies offer opportunities to reduce accidents and to improve operations and should be implemented. Intelligent transportation technologies, such as positive train control, pneumatic brakes, GPS, and sealed or fully protected rail crossings, should be the status quo on a national rail network. The number of grade crossings should be significantly reduced and the ultimate goal should be their elimination wherever possible.
- The safety of passengers is fundamental to a new NRP. Federal standards for safety must be established and the role that human factors, such as human fatigue, cognitive workload, and psychological stress factors, may play in the origin of accidents and incidents must be recognized and addressed.

Issue 6. National Defense, Emergency, and Security Issues

- These issues need to be identified and addressed on a local, regional, and national basis, respectively, with federal oversight and appropriate governance guidelines agreed upon.
- The private railroad industry currently addresses these issues effectively through the Association of American Railroads (AAR) and its collaboration with federal, state, and local security agencies.
- As new issues are identified, it is suggested that they need to be integrated into the existing rail network with national standards and national funding.

Issue 7. Issues of Land Use and Transportation Infrastructure Investments

- In many instances the current rail networks have developed as a result of historical needs that have evolved from the growth of population centers. The existing rail infrastructure may not be in the best location to accommodate the anticipated growth in the movement of both people and goods. In many cases, local transportation systems will have to be redesigned and inconvenient dislocations will take place.
- A new NRP is encouraged to make use of and expand existing (and paid for) rail rights-of-way without further disrupting the natural environment. The issues of rights-of-way, eminent domain, safety, environment, capacity, and vastly expanded high-speed rail linkages to local transit stations and airports must be assessed and addressed. A new NRP will impact metropolitan land-use planning, will affect the current urban sprawl model, and will contribute to more high-density, in-fill, and transit-

oriented development paradigms in urban centers. This can reduce automobile dependency, air pollution, and consumption of petroleum.

Issue 8. Improving Energy Use and Addressing Environmental Concerns

- With a significant investment in the national transportation network, efficient energy use and environmental benefits can be best achieved by the nation's railroads – the steel wheel on the steel rail – as rail is one of the most fuel-efficient and least-polluting modes of land transportation. It is desirable to further develop the nation's freight and passenger rail network, as this development could help alleviate the national dependence on mostly finite fossil fuels.
- A new, rational infrastructure plan must address and reduce the nation's dependence on fossil fuel, reduce carbon emissions from the transportation sector, and improve air quality through a reduction in the amount of air, truck, and passenger-vehicle usage. Improved and increased intermodal connectivity to passenger transit and airports will decrease passenger highway travel and contribute to greater and healthier livability standards.
- A new NRP must discuss the utilization of the most energy efficient technologies, such as electrification and other renewable energy sources, for the rail network. Passenger rail systems should be electrified, and electrification of the freight rail system should be considered where feasible. Energy efficiency standards and certification for sustainability can be good models on which to base a goal of utilizing renewable energy sources and reducing the dependence on finite fossil fuels.
- A new NRP must address the mitigation of all environmental concerns as this new national plan is moved forward. These issues must be addressed prior to awarding contracts for building any intermodal or rail projects. In addition to the environmental concerns mentioned above, issues, such as air quality, noise control, dust, and construction congestion, that can negatively impact local communities should also be addressed and regulated.

Issue 9. Labor Challenges for Capacity Building of a National Rail Policy

- The development of an intermodal transportation workforce must be addressed in a new NRP. The current workforce is largely ignorant of, and limited in, the ability to design, build, and operate systems that are not concrete and asphalt highway-based. Innovative and sustained investments in education and training programs, which will provide the skills and competencies to operate and manage new and complex technologies, are essential.

- These new transportation sector and related jobs would greatly enhance the state, regional, and national economies with new labor positions that cannot be outsourced and will provide a much needed competitive advantage to the US economically. Capacity building will require some prioritization, but market forces, in combination with universities, educational institutions, and the manufacturing industry, will drive the necessary job training efforts to accomplish what is needed. Other countries are already investing in the development of workforce capacity, and, to be competitive, the US must invest in workforce development as well.

Issue 10. Infrastructure Investments, Expedited Project Delivery, and Cost Control

- Wherever possible, the development guidelines, funding responsibilities, delivery dates, operation, and maintenance of the NRP projects should be a joint venture between the private and public sectors, with clear delineations for performance standards, responsibilities, and accountability. Public-private partnerships have a good track record of delivering transportation projects on time and under budget. Positive results should be rewarded and negative results punished.
- All environmental and intermodal impact issues must be carefully researched, identified, prioritized, and addressed via federal guidelines prior to project implementation so that these issues do not become subsequent problems that result in design changes, delays, and budget overruns. In addition, the federal government must streamline these processes to reduce the unreasonably long wait times that impact the implementation of new projects, which will then affect the construction and implementation of succeeding projects.

Contributors

Gilbert E. Carmichael
Founding Chairman
ITI Board of Directors

Thomas L. Finkbiner
Senior Chairman
ITI Board of Directors

Andrew R. Goetz, PhD
Professor, Department of Geography
ITI Faculty Team
University of Denver

Lawrence H Kaufman
Member
ITI Board of Directors

Patrick Sherry, PhD
NCIT Director
ITI Faculty Team
University of Denver

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