



Project Summary Report O-5022-S
Project O-5022: Issues Related to Public Support of Passenger Rail Services on
Existing Freight Rail Lines and/or Rights-of-Way
Authors: Jolanda Prozzi
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Passenger Rail Sharing Freight Infrastructure: Creating Win-Win Agreements

PROJECT SUMMARY REPORT

The role of the Texas Department of Transportation (TxDOT) in supporting the development of passenger rail services in the state relates to the need for improved mobility. Given the forecasted growth of the Texas population and freight movements, it is clear that substantial demands will be placed on the already heavily-used transportation infrastructure of the state. Railroads are viewed as a key element of a greater intermodal solution to supply increased travel demand and improve mobility. It is widely hypothesized that rail service (particularly commuter rail on existing tracks) can be less costly than highway expansions when used for personal travel. However, it is foreseen that TxDOT will face many challenges, and in some cases opposition, when the agency proposes to accommodate both passenger and freight trains on the same track or the same right-of-way (ROW). In 2004, TxDOT contracted with the Center for Transportation Research (CTR) at The University of Texas at Austin to outline and explain the environments in which public agencies and private railroads operate and to highlight the negotiation issues and concerns regarding passenger rail sharing freight infrastructure from both parties' perspectives.

What We Did...

- The research team:
- Conducted an extensive review of the literature on issues and concerns associated with shared rail infrastructure and ROW use by passenger and freight trains.
- Conducted interviews with various transit agencies and freight railroads regarding specific lessons learned and best practices.



Five cases in which passenger rail agencies share infrastructure with freight railroads in metropolitan areas outside Texas were documented in greater detail. The selected case studies were: Capitol Corridor (California), Metra (Illinois), Metrolink (California), Sounder (Washington), and Tri-Rail (Florida). All five cases demonstrated successful relationships between the freight railroads and the passenger transit agencies.

- Outlined and discussed the environments in which public agencies and private railroads operate, with specific emphasis on their respective mandates, operating environments, and challenges faced, specifically the challenges faced by the freight sector since deregulation.
- Highlighted different types of shared use agreements as described by the Federal Railroad Administration.
- Delineated and explained many of the potential issues and concerns that TxDOT and other public sector agencies should understand and consider when contemplating various rail sharing arrangements.

What We Found...

Private Railroad Perspective

Texas' proximity to the Gulf Coast and Mexico, coupled with the state's economic growth of the 1990s—growth that resulted in higher agricultural and manufacturing production levels—and the state's growing population, have contributed to significant freight movements to, from, and through Texas. The state's rail freight system is a critical element of the intermodal freight transportation system, facilitating these higher volumes of freight movements. With rail shipments forecast to grow over the next 25 years, it is obvious that the system will become increasingly important, especially because the number of vehicles and trucks are starting to overwhelm key elements of the highway infrastructure, resulting in concerns about congestion, air quality, and safety in Texas. Rail is therefore seen as an option for reducing road congestion by reducing the number of trucks and vehicles on Texas highways. All of these factors place increasing pressure on the performance and capacity of Texas' rail freight system.

At the same time, deregulation



and the railroads' restructuring efforts since deregulation have resulted in reduced excess capacity—capacity now largely unavailable for passenger rail use. It is thus anticipated that the overall capacity of the rail system in Texas will not be able to accommodate future growth in freight demand—not to mention passenger rail. Under these circumstances, freight railroads are very hesitant to accommodate passenger rail on their infrastructure. On busy corridors, public agencies will have to fund capacity expansions to ensure that the freight railroads' current and future operations are not compromised. On less busy corridors, it may be possible to purchase the track outright, with the freight carrier retaining an easement to serve remaining shippers.

Public Agency Perspective

Currently, passenger rail systems are generally planned and operated by public entities. These entities differ significantly from freight railroads in the way they are structured and in the objectives they wish to achieve. Public agencies tend to support passenger rail to encourage a modal shift away from the private automobile, thereby improving mobility, safety, air quality, and easing congestion. Because commuter rail is relatively efficient (i.e., lower operating costs per passenger mile) at moving passengers over relatively short and medium distances and has proved that it attracts choice riders (i.e., higher income, suburban, single-occupant vehicle users unlikely to ride the bus), it is often seen as a means to manage congestion without constructing additional highway capacity. With costs of highway construction rising, developing a rail service can be very cost-effective, especially when existing ROW or track can be used. On the other hand, commuter rail operations usually require subsidies because revenues typically fail to meet operating costs. Also, achieving a modal shift to rail requires, among other factors, that commuter rail serve those areas where potential riders live and work, offer short headways during peak hours, and maintain a reliable schedule. In most cases, passenger rail needs to have priority during peak travel hours. This can be problematic in a busy freight corridor.

Rail Sharing Issues

Given the constrained capacity situation faced by the freight railroads and the possibly conflicting goals of the two parties (public agency and private freight operator), it is important that rail sharing proposals be designed to achieve synergy. Various issues may arise when a public agency approaches a private railroad with a rail sharing proposal.

Subsequently, a number of these issues are briefly highlighted.

There Is No Single Best Shared Use Agreement

The first and foremost point to be noted about shared use agreements is that there is no single best agreement that will serve all situations. Shared use agreements are generally complex and involve subagreements. If a commuter rail operator must execute a shared use agreement with freight railroads, the agreements should clearly specify the criteria for capacity improvements and service expansion. In addition, operational issues must be considered during negotiations. Issues such as signal design and spacing, which impose operational limitations on specific segments of track; speed limits, and other operational limitations should be recognized. Recognized bottlenecks may need to be targeted for capital improvements.

A Freight Railroad's Business Is to Earn Profits by Moving Freight

The freight railroads want to provide their customers with a high quality and reliable service and want to make the most profitable use of the ROW and track they own. Thus, as profit-making private corporations, railroads will only allow the use of their rail track for passenger rail services under the following conditions:

- the freight railroads are assured that it is safe;
- the freight railroads are not expected to cross-subsidize passenger rail services (In other words, the freight railroads are fully reimbursed for all costs incurred, plus a profit);
- there is no negative impact on the quality of their freight service; and,
- liability issues can be resolved in good faith and legal liability can be held to a manageable level.

The freight railroads *must be* assured that they will be able to run as efficiently after allowing passenger services as before. In many cases, this assurance will require capital investments.

Public Agencies Need to Gain Some Negotiation Power

Typically the public agency cannot realistically provide passenger rail services without using an existing ROW. Because most rail corridors are private property and because railroad property used for transportation purposes cannot be condemned through use of state eminent domain powers, freight railroads typically start off in a position where they have tremendous leverage in

negotiations. Given this situation, it is critical that the public agency attempt to optimize its bargaining position and avoid a situation in which its bargaining position is diminished. The latter is manifested, for example, when the transit agency creates high public expectations that cannot be achieved. Regarding the former situation, the public agency can use political support to argue its position. A high-level legislator or elected official can be invaluable in facilitating agreements and securing public support.

Establishing a Trusting Relationship

The collaborative process works best when a level of trust can be established between the transit agency and the freight railroad. The first step in building a trusting relationship is often establishing an open dialogue and good communication early in the planning process and cultivating it throughout negotiations. Good communication can be facilitated by:

- bringing interested stakeholders together in a stakeholder meeting;
- establishing consistent contact between the freight railroad and the public agency in the form of regularly scheduled meetings;
- preparing progress and follow-up reports to ensure that information is communicated often; and,
- securing high-level participation and accountability.

Clearly Defined Goals and Objectives

Having clearly defined goals and objectives is critical to the successful implementation of mutually beneficial shared use agreements and in allowing both parties to leverage their respective strengths toward reaching common goals. Examples of common goals include:

- increasing capacity;
- increasing train speed, reducing travel time;
- improving reliability, ensuring on-time performance;
- optimizing maintenance costs; and
- improving ROW conditions.

Philosophical and Operational Perspectives

Ultimately, the most crucial factor to successful negotiations is the ability of the public agency and freight railroad to understand each other's philosophical and operational perspectives. The public agency should recognize that freight railroads are not obliged to consider public interests but are concerned primarily with the interests of their shareholders and customers. As private



corporations, freight railroads do have interests in expanding capacity, improving safety, and in obtaining additional revenue.

In terms of operational concerns, there are significant differences between the freight railroad's operational needs and those of a transit service with regard to track quality and wear and tear costs. Typically, passenger train operation requires higher track maintenance standards. Therefore, the public agency must either provide the funding required for the incremental maintenance costs or has to negotiate agreements that will bring the track quality up to the desired level, which will translate into significant upfront capital costs and continuing higher maintenance costs.

Experienced and Knowledgeable Negotiators

Experienced and knowledgeable negotiators can help address the many issues involved in complex shared-use agreements. It is very important that the negotiators are people with the power to make decisions and implement change to ensure that negotiations move forward. Also, the public agency's negotiators should have rail industry experience. Specifically, someone with freight railroad engineering experience is needed. These railroad experts can speak the freight railroad's language and respect the railroad's concerns. This ability can help limit delays and also help prevent unanticipated problems resulting from agreement structures.

Long-Term Arrangements

With so much invested in an operating commuter rail service, it is in the interest of the transit agency to negotiate long-term arrangements—preferably in perpetuity. Short-term arrangements might be susceptible to adjustment or cancellation at a later date. Also, the transit agency runs the risk of losing some negotiating power when renegotiating.

On the other hand, freight railroads have pointed out that the further into the future the agreements are negotiated, the more uncertainty exists and the higher the associated risks and ultimately the funding required to offset the higher risks. Agreements in perpetuity require funding in perpetuity, and public agencies rarely have access to that type of funding security.

Dispatching Control, Maintenance Scheduling and On-time Performance

A significant issue for the transit agencies is on-time performance and reliability because it impacts ridership levels. At the same time, the freight railroads are in-

creasingly facing demands for just-in-time service. Higher-value intermodal freight shipments tend to be time-sensitive, so freight railroads risk losing customers if they are not on time. On-time performance and reliability are intrinsically linked to the corridor capacity, control over dispatching, scheduling of maintenance work, and, in the case of commuter services, a commitment from the freight railroad to ensure that passenger trains run on time.

Costs

Much of the controversy surrounding rail sharing centers on determining a payment that is considered fair compensation for the use of the railroad track or ROW and, where applicable, for the additional costs imposed by passenger trains. Fundamental questions persist in determining fair compensation: which costs should be considered and how the costs should be shared. Regarding the former, there are obvious categories of solely related costs on any shared freight-passenger rail line. Yard and industry tracks used for local freight service are certainly wholly assignable to freight service. Equally obvious are station costs, which are wholly assignable to passenger trains. Less obvious are how costs associated with signaling, communications, and general administrative expenses should be shared. Railroad cost analysis is a specialized and arcane field. Ultimately, it is recommended that prospective proponents of commuter rail service seek assistance from a qualified consultant or other railroad industry expert in this area.

Safety and Liability

In many instances, safety concerns drive decisions about shared operations. When passenger and freight trains share tracks, there is always a risk of a collision, derailment, or damage caused by a shifted load. Also, grade crossing safety becomes more of a concern if rail traffic and train speeds are increased along a corridor with the implementation of commuter or high-speed rail passenger services.

In 1997, Congress passed the Amtrak Reform and Accountability Act (ARAA), which limited the aggregate overall damage liability to all passengers from a single incident to \$200 million. The latter also applies to commuter rail operations. However, it should be noted that the \$200 million limit does not limit damages to non-passengers. Also, while current contracts between Amtrak and the freight railroads do not hold railroads liable for damage to Amtrak trains and injuries to passengers in accidents, courts have held that this provision does not apply in cases of gross negligence. Be-

cause railroads cannot insure against gross negligence, the cost of a serious accident could conceivably threaten the financial health of a large Class I railroad. In general, the freight railroads thus want full faith and credit indemnification.

The Researchers Recommend...

The capacity constraint situation faced by freight railroads in many dense urban corridors, where public agencies often wish to add passenger services, will require a clear understanding and appreciation of the philosophical and operational perspectives and, ultimately, the often conflicting goals and objectives of the public agency and the private freight railroad. Also, given the tremendous leverage that freight railroads (as the owners of the rail infrastructure) have at the outset of negotiations, public agencies should make every effort to enhance their bargaining position by securing substantial funding, political support, and experienced and knowledgeable negotiators. Establishing a trusting relationship and identifying common goals and objectives will be critical in finding a compatible solution to concerns surrounding access rights, the length of shared use agreements, dispatching control, capital investments, maintenance, cost compensation, liability, and safety. The key is to develop win-win situations for both freight railroads and public agencies, requiring the negotiation of a unique shared use agreement that suits the specific situation.

Until recently, TxDOT played an insignificant role in the planning and funding of passenger rail services for several reasons: funding available for passenger rail projects was mainly limited to federal sources, TxDOT was not able to use state transportation funds for rail programs, and most of the existing rail system is privately owned. Recent legislative changes have increased the role of TxDOT in state transit (including rail) planning and funding. These changes provide opportunities for the active involvement of TxDOT in encouraging passenger rail projects. The research team thus recommends that TxDOT be pro-active in planning, facilitating, and funding rail investments to ensure that shared track and joint use of rail corridors can be successfully implemented in Texas.



For More Details...

Research Supervisor: Chandra Bhat, Ph.D., P.E. (512) 471-4535
email: bhat@mail.utexas.edu

TxDOT Project Director: Wilda Won, Transportation Planning and Programming Division, (512) 486-5108
email: wwon@dot.state.tx.us

TxDOT Research Engineer: Duncan Stewart, Ph.D, P.E., (512) 465-7403
email: dstewart@dot.state.tx.us

The research is documented in the following report:

0-5022-1 *Public Support of Passenger Rail Sharing Freight Infrastructure*

To obtain copies of a report: CTR Library, Center for Transportation Research,
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Disclaimer

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