



The mission of the State Smart Transportation Initiative is to promote practices that advance environmental sustainability and equitable economic development, while fostering government efficiency and transparency. This series of smart transportation snapshots is intended to highlight innovative practices at the state level that advance these goals.

Freight Rail Funding

Recognizing the importance of rail service to industries and communities dependent on moving heavy, lower-value goods, the federal government established the Local Rail Service Assistance (LRSA) Program in 1973. It provided financial support to states for the restoration of rail freight service on abandoned light-density lines in the Northeast. The program was extended to all states in 1976 and was further expanded in 1981 to provide funding for rehabilitation of rail lines threatened with abandonment. In 1989 the program was reauthorized and renamed the Local Rail Freight Assistance (LRFA) Program.

Although funding for the program has not been authorized since the early 1990s, a number of states, including Kansas, established state-funded programs to address their rail needs. Kansas' State Rail Service Improvement Fund, started in 1999, was originally conceived as an annual revolving loan program to provide low interest loans to short-line railroads to preserve and improve service, in order to support economic development and avoid additional highway maintenance costs. The SRSIF also provides significant air quality benefits by maintaining or increasing the share of freight moving by rail instead of truck. The program assists with the rehabilitation of track, bridges, yards, maintenance facilities, buildings, and sidings, and the purchase of rail cars. Loans cover 70 percent of project costs, with the remaining 30 percent paid by a railroad or port authority.

Although the program was intended to be self-sufficient through the repayment of principal and interest from loan recipients by 2007, at the end of its originally planned eight years of funding at \$3 million per year, this was not possible because \$11.5 million in program funding was granted between 2001 and 2006 to assist Watco Cos. acquire the Central Kansas Railway (CKR). CKR, now known as the Kansas & Oklahoma Railroad (K&O), was a short-line railroad operating 900 miles of track in west central and south central Kansas that would otherwise have been abandoned, to the detriment of the businesses and communities reliant upon it. With the grant, K&O was able to maintain service on 725 miles of the CKR system.

The program requires that rail lines receiving funding continue to be operated for 10 years following the rehabilitation project; otherwise loans must be repaid and a pro-rated share of any grants must be returned.

According to a 2005 study analyzing the efficacy of the State Rail Service Improvement Fund, the program has enabled higher train speeds on short line railroad track, reduced derailments, extended the service life of existing rail lines, and improved capacity in rail yards.

The operational benefits accruing to shippers from rail rehabilitation projects during the first six years of the program are shown in Table 1. Based on these operational benefits, the benefit-cost ratio of the program was found to be nearly 9 to 1. The benefit-cost ratios based on the KDOT application approval formula, which is based on the FRA's LRFA Program benefit-cost analysis guidelines, yields much higher B/C ratios because it assumes that without the individual project, the line would have been abandoned.

Table 1. Operational Benefits.

Railroad	Total Annual Operational Benefits	Total Operational Benefits - 10 Year Present Value	Project Capital Cost	Benefit/Cost Ratio (based on operational improvements)	KDOT Benefit/Cost Ratio (based on abandonment)
Boothill & Western	\$9,720	\$78,838	\$616,370	0.13	4.13
V&S Railway Inc.	\$192,000	\$1,557,292	\$332,753	4.68	2.11
Kansas Southwestern Railways, L.L.C.	\$182,674	\$1,481,652	\$566,556	2.62	23.67
Kansas & Oklahoma (K&O)	\$6,296,234	\$51,068,101	\$5,642,831	9.05	18.46
Kyle Railroad Company	\$6,447,877	\$52,298,058	\$3,383,873	15.45	36.44
Nebraska Kansas Colorado RailNet (NKC)	\$473,628	\$3,841,548	\$632,997	6.07	12.91
South Kansas & Oklahoma (SKO)	\$5,401,777	\$43,813,252	\$5,218,566	8.4	54.68
Johnson County Airport Commission/Johnson County Industrial Airport	\$94,200	\$764,046	\$1,043,064	0.73	10.1
Total	\$19,098,111	\$154,902,788	\$17,437,009	8.88	31.44

Source: *Review of the Kansas Railroad Rehabilitation Program*, Kansas Department of Transportation (2005).

The benefits accruing to shippers as a result of the grant provided to Watco for its purchase of the CKR, based on 2004 commodity volumes, are shown in table 2.

Table 2. Benefits Due to Maintenance of Rail Service.

Commodity	K&O Rail Cars by Commodity	K&O Rail Tons by Commodity	K&O Rail Ton-Miles by Commodity	Estimated Truck Ton-Mile Equivalents	Shipper Transport Costs - Rail (6 cents/ton-mile)	Shipper Transport Costs-Truck (12 cents/ton-mile)	Transportation (Shipper) Cost Savings
Wheat	24,896	2,489,600	349,744,088	349,744,088	20,984,645	\$41,969,291	\$20,984,645
Soy	1,211	121,100	7,144,900	8,219,897	428,694	\$986,388	\$557,694
Sorghum	4,180	418,000	24,662,000	28,372,561	1,479,720	\$3,404,707	\$1,924,987
Corn	1,836	183,600	10,832,400	12,462,206	649,944	\$1,495,465	\$845,521
Chemicals/Petrol Products	18,044	1,804,400	106,459,600	122,477,151	6,387,576	\$14,697,258	\$8,309,682
Rock/Ballast/Other Minerals	512	51,200	3,020,800	3,475,299	181,248	\$417,036	\$235,788
Timber/Lumber	743	74,300	4,383,700	5,043,257	263,022	\$605,191	\$342,169
Metals	1,404	140,400	8,283,600	9,529,922	497,016	\$1,143,591	\$646,575
Other	2,512	251,200	14,820,800	17,050,687	889,248	\$2,046,082	\$1,156,834
Total	55,338	5,533,800	529,351,888	556,375,069	31,761,113	\$66,765,008	\$35,003,895
10 Year Present Value of Benefits							\$283,912,944

Source: *Review of the Kansas Railroad Rehabilitation Program*, Kansas Department of Transportation (2005).

Private sector economic benefits resulting from the program were found to have amounted to more than \$1 billion in business earnings, of which about \$425 million was disbursed in the form of wages. Combined public sector benefits (consisting of state and local tax revenues and reduced highway maintenance expenditures) resulting from the program were estimated at about \$4 million annually, significantly exceeding the public expenditure on the grant portion of the program.

The program was extended through 2009 at \$3 million per year, and in 2010 Kansas decided to fund the State Rail Service Improvement Fund indefinitely at \$5 million annually starting in mid-2013. Between 2010 and early 2013, the program will be funded with a total of \$2 to \$5 million. Kansas has also expanded eligibility for funding through the program to include shippers and local units of government, in coordination with the serving railroad. In addition, the program will be able to fund major rehabilitation, capacity enhancement, and economic development projects that had not previously been eligible for funding. Newly eligible capacity enhancement projects include construction of new passing tracks and interchanges, while economic development projects may include the construction of new rail spurs or the improvement of grain elevators to increase the number of rail cars that can be loaded, to reduce shipping costs and the number of train trips required to move the grain. Along with the expanded applicant pool and project eligibility, new benefit-cost methodologies are being developed for each of the project types—rehabilitation, capacity enhancement, and economic development. The interest rate on loans through the program, which had previously been based on the Treasury Bill interest rate at the time of the loan application, will now be set at a maximum of 3 percent but may be less, depending on the going interest rates at the time of the loan.

More information:

Review of the Kansas Railroad Rehabilitation Program, Kansas Department of Transportation (2005): <http://www.ksdot.org/burRail/rail/publications/rehstudy2005.pdf>

Draft Final Kansas Statewide Rail Plan, Kansas Department of Transportation (2010): <http://www.ksdot.org/bureaus/burRail/rail/publications/KDOT-SRP-DRAFT-Final-Report-11210.pdf>