

Feasibility Study of Expanded Passenger Rail Service in Kansas

Prepared by Amtrak & BNSF Railway for the Kansas Department of Transportation
Fact Sheet – March 11, 2010

In December 2008, the National Railroad Passenger Corporation (Amtrak) was enlisted to provide a feasibility study to the Kansas Department of Transportation (KDOT) on **costs and logistics of a potential expansion of passenger rail service in Kansas**. The study was completed in March 2010.

Four possible scenarios were identified and investigated. Two were nighttime extensions of the Heartland Flyer: 1) Oklahoma City to Newton, and 2) Oklahoma City to Kansas City. Two scenarios were stand-alone daytime passenger services operating independent of any other Amtrak routes: 1) Fort Worth to Kansas City, and 2) Oklahoma City to Kansas City.

The Amtrak analysis of the four alternatives included **operational route descriptions, necessary infrastructure improvements, proposed schedules, equipment and staffing needs, projected start-up costs, revenue and ridership forecasts, projected operating costs, estimated operational support from states** and comparisons to other transportation modes. A table compiling many of these factors is provided below.

Because most of the proposed expansion would operate on existing freight-hauling rail, Amtrak received infrastructure improvement cost estimates from the BNSF Railway. For the purpose of this study, the BNSF Railway compiled their estimates using 100% on-time performance of the passenger rail service.

Not a part of the study is how the estimated start-up and operational **costs might be shared between partners in the project**. It should also be noted that cost **estimates in the study are in 2009 dollars** and that those numbers would likely increase in the future. Other items that could drive up costs include required safety features such as positive train control and future federal guidelines for on-time performance.

Although the study identifies potential station locations in Kansas and Oklahoma, they are included primarily to present a realistic analysis of potential schedules and ridership forecasts. Costs and operational logistics associated with creating a rail station in a city not currently served by Amtrak are not included in the study.

The Feasibility Report of Proposed Amtrak Service is part of an ongoing information gathering process. The **next step is to select one of the four alternatives** and incorporate the study's data into a Service Development Plan. KDOT was awarded a \$250,000 American Recovery and Reinvestment Act grant to **create the Service Development Plan**, a comprehensive business and operations plan for implementing expanded passenger rail service in Kansas. The grant requires a 50% match of \$250,000. KDOT and the Oklahoma Department of Transportation have committed to share the cost of this match requirement.

Portions of the study were prepared by Amtrak and other portions, including infrastructure costs, were prepared by BNSF Railway. BNSF's main role was to determine what improvements need to be made to the infrastructure (capacity, track speed, crossings) to ensure on-time service to the passenger trains and to make sure that freight train transit times are not degraded.

A Look at Four Alternatives

Amtrak Feasibility Report for Expanded Passenger Rail Service in Kansas – Mar. 11, 2010

Four Alternatives	1	2	3	4
Route	Newton KS – Ft. Worth TX	Kansas City MO – Ft. Worth TX	Kansas City MO – Ft. Worth TX	Kansas City MO – Oklahoma City OK
Day/Night (in Kansas)	Night	Night	Day	Day
Description	Extends Heartland Flyer from Oklahoma City to Newton – 405 mi.	Extends Heartland Flyer from Oklahoma City to Kansas City – 606 mi.	New Service between Kansas City & Ft. Worth – 606 mi.	New Service between Kansas City & Oklahoma City – 400 mi.
Connections	Southwest Chief, Texas Eagle	Southwest Chief, Missouri River Runner, Texas Eagle	Stand Alone Service	Stand Alone Service
Potential Kansas Stops	Newton, Wichita, Ark City	Lawrence, Topeka, Emporia, Strong City, Newton, Wichita, Ark City	Lawrence, Topeka, Emporia, Strong City, Newton, Wichita, Ark City	Lawrence, Topeka, Emporia, Strong City, Newton, Wichita, Ark City
Estimated Start-up Costs				
New Main Track	26.6 miles, \$106M	66.7 miles, \$266M	92.2 miles, \$405M	60.8 miles, \$243M
Grade Crossing Improvements	\$8M	\$8M	\$8M	\$8M
Other Improvements	\$300,000 (layover facility in Newton)			
Total Track Costs	\$114.3M	\$274M	\$413M	\$251M
Rolling Stock	3 Locomotives, 5 Coach, 1 Food Service = 9 Total	3 Locomotives, 5 Coach, 1 Food Service = 9 Total	5 Locomotives, 7 Coach, 2 Food Service = 14 Total	6 Locomotives, 4 Coach, 2 Food Service = 12 Total
Rolling Stock Costs	\$40M	\$40M	\$63M	\$56M
Mobilization Costs	\$1.5M	\$3M	\$3.1M	\$2.1M
Total Start-up Costs	\$155.8M	\$317M	\$479.1M	\$309.1M
Operation Estimates				
Est. Annual Operating Expense	\$5.9M	\$10.4M	\$14.1M	\$8.5M
Est. Ridership	92,500	118,200	174,000	65,900
Est. Annual Operating Revenue	\$2.7M	\$5.2M	\$6.1M	\$2.1M
Est. Annual Operating Subsidy	\$3.2M	\$5.2M	\$8.1M	\$6.4M

Estimates are in 2009 dollars.

Does not reflect costs for station development or renovations.