REPORT ON PROPOSED OPERATION OF PASSENGER TRAIN SERVICE

BETWEEN ST. LOUIS AND SOUTHWEST MISSOURI

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BACKGROUND

Currently Amtrak operates two daily round trips between St. Louis and Kansas City, Missouri under a contract with the State of Missouri, Department of Transportation. The State's annual subsidy for FY07 is $7.0 million. The service suffers from poor on-time performance and inconsistency due, in large part, to the extremely heavy freight traffic on this Union Pacific corridor. Over the past several years, the corridor has seen a sharp increase in the number of coal trains from the Powder River Basin and it is also a key UP route for intermodal and general merchandise trains, with the total number of trains around 60 per day. Union Pacific indicates that train volumes will continue to rise over the next several years. The congestion problem, and thus Amtrak's operating performance, is further aggravated by the fact that Union Pacific has been performing extensive and lengthy capital maintenance activities on this route for each of the past several years. For example, in 2006, the work encompassed a seven-month time period and included heavy undercutting on 84 miles, crosstie replacement, surfacing and rail renewal. Because of the nature of the physical plant and ever-increasing impacts from growing train volumes, it is anticipated that heavy maintenance of way (MofW) activity will continue in each of the future years, thus continuing to disrupt traffic flow.

In response to the continuing service issues affecting the current UP route and, as part of an effort to provide passenger train service to both a broader geographical area and a larger portion of Missouri's citizens, MoDOT officials have contemplated the idea of initiating daily train service between St. Louis and Springfield, MO over a BNSF route. Accordingly, in connection with this initiative, MoDOT officials requested that Mr. Michael Franke, Senior Director of Corridor Planning for Amtrak accompany them on an inspection train over the BNSF between St. Louis and Springfield on May 22, 2006. What follows in this section is a summary of the notes, observations and recommendations based upon the inspection trip and from discussions with MoDOT officials**.**

GENERAL OBSERVATIONS FROM INSPECTION TRIP

Much of the BNSF (ex-Frisco) main line between St. Louis and Springfield is located in the foothills of the Ozark Mountains and traverses a generally rural area, roughly paralleling Interstate 44. The countryside is quite scenic and nearly half the trackage on the route is on curves. The profile is undulating. There are currently twelve (12) daily regularly scheduled freight trains on the line consisting primarily of general commodities. In an effort to increase train length, BNSF recently began utilizing distributed power (radio-controlled locomotives) on the rear of several trains that operate over this route.

With the exception of a short segment near the BNSF's St. Louis Lindenwood Yard, the main line is a single track railway with centralized traffic control (CTC) and appropriately-spaced sidings (19 total) to accommodate train meets. The line consists of both welded and jointed rail, with approximately 90 miles of jointed rail remaining. Regular capital rail replacement programs will eventually eliminate all jointed rail but based on recent annual MofW program levels, it will be a significant number of years until this is accomplished. This is not a high speed route. In fact, much of the route has maximum authorized speed for freight trains of 40 and 45 mph, with the breakdown of various speeds detailed below. A discussion of two potential routing alternatives is provided on page 6.

Via TRRA/BNSF		**Via TRRA/UP/BNSF**	
Maximum Authorized Speed (MPH)	**Amount of Trackage**	**Maximum Authorized Speed (MPH)**	**Amount of Trackage**
10	5.0 miles	30	3.1 miles
20	2.1 " (TRRA)	35	5.4 "
35	3.4 "	40	68.3 "
40	74.0 "	45	23.5 "
45	31.6 "	50	120.6 "
50	118.9 "	60	4.5 "
		65	1.4 "
		70	6.1 "
		75	1.4 miles

The FRA track standards permit a differential for maximum authorized speeds between passenger and freight operations by FRA speed class. While it may be possible to operate passenger trains on some segments at the incrementally higher speeds based on track conditions, an analysis has not yet been conducted as to whether the spacing of block signals and the approach circuitry of grade crossing warning device starts is adequate to permit such a speed differential. The BNSF personnel accompanying us on this trip were unable to shed any light on this and a detailed analysis would be required to ascertain what might be possible in reducing total travel time between St. Louis and Springfield.

The physical plant, as mentioned above, consists of a mixture of welded and jointed rail. Rail weights, while primarily in the 132/136# class, range from 112# to 136#. All rail lubrication is performed from hy-rail vehicles as there are no wayside lubricators. There are 9 trackside detectors on the route. Ride quality is generally excellent. The line has numerous highway grade crossings, some of which have flashing lights and gates. A large number of public crossings have only crossbucks.

PROPOSED STATION STOPS

Representatives of the State of Missouri's DOT have recommended a number of station stops should this route be funded for a passenger train. These cities and their corresponding populations are as follows:

St. Louis	348,000	plus Metropolitan area
Kirkwood	27,300	plus suburban area
Sullivan	6,400	
Rolla	16,500	(plus approx. 15,000 campus of Univ. of MO)
Lebanon	12,200	
Springfield	151,600	
(Branson)	6,100	(30 miles away from Springfield via highway)

Note: Branson is a national and international destination city for weekend and vacation travel, with major shows and other entertainment activities providing the attraction. Our investigation has revealed that there are numerous tour buses that operate to this destination and shuttle buses that operate from the Springfield Airport to this resort.

There are no station shelters or platforms in place along this BNSF route. The State is proposing that these be erected by the communities. There is a potential problem at Springfield. Before reaching downtown Springfield, this line joins the BNSF's Thayer Sub (Memphis-Kansas City route) which has very heavy traffic. This is BNSF's primary coal route from the Powder River Basin to the southeast and traffic volumes are currently at 70 Million Gross Tons (MGT) annually and expected to continue to rise. There is a major freight yard nearby. From a practical perspective it is not recommended that the proposed passenger train be operated over this segment to downtown Springfield since we would undoubtedly be subject to delay and inconsistent performance. While the State has not yet given us a preference for a station location in Springfield, it may wish to consider a new facility just east of downtown, near US Route 65, which provides easy access to I-44 as well as being the direct route to the Branson resort area used by shuttle buses.

OTHER PUBLIC TRANSPORTATION

Previously, two one-hour daily flights, using regional jets, were operated in each direction between St. Louis and Springfield by American Airlines. Those flights are no longer operating. In addition, Greyhound provides three round trips daily, with several intermediate cities also served, with a one-way travel time of approximately 4 hours. The trip by automobile takes approximately 3 hours via I-44.

ROUTE ALTERNATIVES NEAR ST. LOUIS

The State has asked Amtrak to look at two possible routings between St. Louis and Pacific, approximately 29 miles west, where the UP's St. Louis-Kansas City trackage and the BNSF's Springfield line are adjacent to each other. In both cases, trains would depart the Amtrak Station in St. Louis, travel approximately 2 miles westward to Grand Ave. interlocking, at which point either the UP or BNSF routing can be accessed. The following discusses the pros and cons of each:

1. Routing via the UP would permit service at the very popular Kirkwood, MO, station which currently serves the St. Louis-Kansas City trains. However, the downside is that it would inject a third Amtrak daily round trip frequency on this portion of an already-congested corridor. Also, there presently is no straightaway connection between UP and BNSF (i.e., correctly facing connection track) at Eureka. If Kirkwood is to be served, such a connection would have to be constructed. Although no formal detailed cost estimate has been prepared, it is estimated that the "ballpark" cost would be in the range of $3.5-$4 million. There are no known significant physical constraints that would impede this construction.

2. Routing the proposed train via BNSF the entire distance would bypass the present Kirkwood Amtrak Station and require operation over approximately five miles of 10 mph trackage immediately west of St. Louis. This trackage is also utilized for staging of freight trains awaiting entry to BNSF's Lindenwood Yard located 7 miles west of Amtrak's St. Louis station. However, use of this segment would be undesirable from an operational standpoint and not recommended for the proposed passenger train without the infusion of significant capital funding for infrastructure improvement and the enhancement of existing capacity.

PROPOSED SCHEDULE/RUNNING TIMES

The State DOT officials would like the proposed train to connect at St. Louis with Amtrak to and from Chicago. A draft schedule, which permits these connections, while at the same time allowing for attractive arrival and departure times at Springfield is attached.

Since there are no mechanical facilities for Amtrak equipment at Springfield, further analysis will be required to determine how rolling stock used in the operation of the proposed Springfield – St. Louis service would be cleaned, serviced and rotated within the Midwest fleet.

We have performed an analysis of operating times across the St. Louis-Springfield corridor via both the UP/BNSF and BNSF-only routes, using the maximum permissible speeds on these lines today, and giving consideration to station dwells and acceleration/deceleration, and adding 8% makeup time, as is the standard process. It appears that travel time over the UP/BNSF routing would be approximately 5 hours and 54 minutes and via the all-BNSF route approximately 6 hours and 18 minutes. In view of

this, it is unlikely that this corridor can be operated with a single engineer under our six-hour labor provision. Due to the slow speeds and congestion near St. Louis, we do not recommend that consideration be given to the use of the TRRA/BNSF routing alternative.

TURNING OF TRAIN AT SPRINGFIELD

As mentioned earlier in this report, the segment of track through downtown Springfield (Thayer Subdivision) has heavy traffic volumes but would need to be accessed to reach a wye for turning the train. This movement is not recommended due to congestion-related delays that would undoubtedly occur. Unless some other solution is developed, it appears that the most feasible approach would be to equip the train for "push-pull" operation thereby requiring the use of either a non-powered control unit (NPCU) or a second locomotive.

SUMMARY AND RECOMMENDED STEPS GOING FORWARD

1. Given the potential for the proposed Springfield to St. Louis route to provide connecting passenger rail service to the State's largest and third-largest cities, consideration of the route has strategic merit. However, due to: (1) the significant capital investment that would be required for the initiation of rail passenger service, (2) the lack of a competitive trip time versus that of automobile, and (3) the projected lack of a significant ridership base, operation of the proposed Springfield to St. Louis route does not appear viable at this time.

2. The BNSF route west of their St. Louis Lindenwood Yard is a relatively medium density line (15 MGT's annually, 12 freight trains daily) on which it appears possible to operate a reasonably reliable service over the BNSF portion at currently authorized speeds. Should it be desired that the service operate at speeds faster than those currently authorized, significant expenditures for capital improvements may be required for: (1) track geometry changes, (2) capacity enhancements due to speed differentials resulting in freight "overtake" issues and (3) the modification of grade crossing circuits.

3. Of the two routing alternatives near St. Louis, only the UP/BNSF combination appears to be practical, albeit with concern about adding another passenger frequency on the UP segment and the potential impact on the on-time performance of the proposed train service.

4. Total travel time between Springfield and St. Louis of approximately 6 hours is a concern, as it is nearly twice as long as travel via automobile. The longer rail trip time is due primarily to the substantial curvature on the route and relatively slow maximum authorized train speeds.

5. It is recommended that the train be operated with an NPCU or 2 locomotives due to congestion-related impediments in turning the train on a wye at Springfield.

SUMMARY AND RECOMMENDED STEPS GOING FORWARD - Continued

6. It appears this operation would require a second engineer due to running times close to six hours.

7. Significant capital will be required to construct platforms, shelters, or station buildings along the route, as well as parking lots. In addition, the UP/BNSF routing will require construction of a control point and crossover some 27 miles west of St. Louis. No source of such capital has been identified by the State, although the DOT representatives recommend that the cities to be served should erect station facilities at the cities' expense. At the present time Amtrak is not aware of any existing commitments on the part of the communities for the funding or the construction of station facilities.

8. Further analysis will be required in the formulation of equipment rotation and maintenance plans in order to provide for optimal levels of equipment utilization.

9. A ridership & revenue analysis for the proposed Springfield to St. Louis service has been developed and previously furnished to MoDOT officials. A copy of that analysis is also enclosed herein. In addition, MoDOT officials have previously indicated an interest in having the State conduct a separate and independent ridership and revenue analysis for the proposed new service, as a supplement to the information furnished by Amtrak. In order to ensure the full and complete consideration of all factors pertaining to the proposed Springfield – St. Louis service, Amtrak endorses MoDOT's conduct of such a study and would welcome receiving any information such a study would provide.

10. Condensed revenue and expense information for the proposed operation of one daily roundtrip between Springfield to St. Louis has been prepared by Amtrak and is presented on page 12. This information is intended solely to provide MoDOT with a general estimate of the projected annual revenues and operating expenses that would be expected to result from the operation of the proposed service. It should be noted however, that this information reflects projected results only and is subject to change based upon actual operating practices and conditions. In addition, it should also be noted that the condensed financial information excludes any mobilization, equipment refurbishment and/or other start-up costs that may be required for the commencement of the proposed service.

11. It is recommended that a diagnostic study of all grade crossings not currently equipped with train-activated warning devices be jointly conducted by BNSF and the Missouri DOT, with a goal of equipping more crossings with such warning devices. This will be especially important if capital improvement projects are undertaken to reduce travel times by increasing maximum authorized speeds on the route.

DRAFT SCHEDULE

PROPOSED OPERATION OF RAIL PASSENGER SERVICE BETWEEN ST. LOUIS AND SPRINGFIELD, MISSOURI

	Northbound						Southbound
	Daily			Station			Daily
	8:05 AM	↓	**Dp**	Springfield, MO* **CT**	**Ar**	↑	8:39 PM
	9:12 AM	↓	**Dp**	Lebanon, MO	**Dp**	↑	7:14 PM
	10:59 AM	↓	**Dp**	Rolla, MO	**Dp**	↑	5:25 PM
	11:52 AM	↓	**Dp**	Sullivan, MO	**Dp**	↑	4:30 PM
	1:27 PM	↓	**Dp**	Kirkwood, MO	**Dp**	↑	3:17 PM
	1:59 PM	↓	**Ar**	St. Louis, MO **CT**	**Dp**	↑	2:45 PM

*** Calculated from possible new station location, near the intersection of Interstate Highway 44 and U.S. Highway 65, due to significant train operations challenges reaching a downtown Springfield station.**

RIDERSHIP AND REVENUE

BACKGROUND

In response to a request made by the Missouri Department of Transportation for the evaluation of potential rail passenger service between St. Louis and Springfield MO, Amtrak commissioned the development of a projected annual ridership and revenue forecast for the proposed service. This forecast, developed at Amtrak's request by AECOM Consult, Inc. a national firm which provides extensive forecasting services for Amtrak, was based upon the national model used in the analysis of Amtrak schedules throughout the United States. The model includes key demand sensitivities for travel time, fare, and departure and arrival time of day, and was used in concert with current baseline forecast for existing Missouri state-supported rail passenger services. The forecast is intended to provide an estimate of the projected new or "incremental" ridership and ticket revenue that would result from commencement of the proposed new service.

Among the key attributes used by the model for forecasting purposes are the following items:

- Service frequency, i.e., the level of service and/or travel options that would be provided to the potential customer base. As currently envisioned the proposed Springfield to St. Louis service would initially provide only a limited level of service, comprised of one round trip per day
- Proposed Amtrak scheduling for the service including the departure and arrival times of day at each station in each direction
- The population and income within new station areas to be served at Sullivan, Rolla, Lebanon and Springfield, Missouri
- The proposed fare structure for the proposed service to/from new stations based upon the extrapolation of existing per mile fares in effect on the current Missouri state-supported Ann Rutledge and Mule Services
- Projected trip time of the proposed rail service versus that of automobile and other competing travel modes
- Connectivity of the proposed new rail passenger service with other Amtrak trains

Based upon these factors it has been projected that the proposed new Springfield to St. Louis service would generate initial annual ridership of 34,000 trips and $671,000 in ticket revenue. A copy of the complete ridership and revenue forecast is enclosed herein and outlines the components of the projected new ridership and revenue that the service is expected to generate initially.

PROJECTED RIDERSHIP AND TICKET REVENUE

Forecast Results for Proposed New Springfield, MO Service

(prepared 8/28/06)

Route	FY07 Baseline * Annual Totals		Proposed New Schedules** Annual Totals		Annual Increment	
	Ridership	Ticket Revenue	Ridership	Ticket Revenue	Ridership	Ticket Revenue
Kansas City-St. Louis						
Ann Rutledge	82,300	2,236,000	87,300	2,372,000	5,000	136,000
Kansas City Mule	57,900	1,259,000	57,900	1,259,000	-	-
New Service	-	-	29,000	535,000	29,000	535,000
TOTAL	**140,200**	**3,495,000**	**174,200**	**4,166,000**	**34,000**	**671,000**

Notes:

* FY07 Budget Estimates (submitted 8/18/06)

** Proposed new service (schedule provided by Amtrak on 8/17/06) between Springfield, MO and St. Louis, providing connection in St. Louis with other Amtrak intercity trains.

(As of 8/28/06)

SUMMARY
PROPOSED RAIL PASSENGER SERVICE
BETWEEN ST. LOUIS AND SOUTHWEST MISSOURI

Route:	**UP/BNSF**
Length of Route	**234.3 miles**
Proposed Scheduled Running Time (hr:min)	**5 hrs 54 minutes**
Estimated Annual Ridership	**34,000**
Estimated Annual Revenue ($ millions)	**$0.7**
Estimated Annual Direct Operating Costs ($ millions) (1)	**$4.1**
Estimated Annual Direct Operating Loss ($ millions) (1)	**$3.4**

(1) Excludes mobilization, equipment refurbishment and various other start-up costs that may be required for the commencement of service.