

# MEMO



DATE: March 6, 2012

TO: House Appropriations Committee

FROM: Kansas Department of Transportation

RE: KDOT response to questions posed following budget presentation

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On February 29, 2012, the Kansas Department of Transportation (KDOT) presented information regarding KDOT's budget. Following the presentations, committee members posed several questions. Several of the questions that were posed involved similar themes. Questions that address the topics of the concerns that were expressed during the meetings are shown below with KDOT's response.

**Q: The committee requested information regarding current and prior Fiscal Year ending balances for the State Highway Fund (SHF).**

**A:** KDOT estimates the FY 2012 ending balance for the SHF to be approximately \$145 million. KDOT currently has more than 880 open construction contracts in various phases of completion/payout. The total amount of encumbrances under those contracts exceeds \$2.6 billion with \$700 million in remaining balances payable. For the remaining months of FY 2012, the agency has planned lettings estimated at \$42 million. Without the available SHF ending balance at the end of FY 2012, there will be a cashflow problem for the agency as construction projects payout. A starting balance of at least \$95 million is the minimum necessary for KDOT to pay beginning year transfers out, debt service and bill payment. Additionally, an estimated \$97 million will be needed for construction payouts. Without adequate beginning balances, KDOT's ability to pay transfers to other agencies and regular operating expenses in FY 2013 will be severely compromised. In the absence of issuing additional debt, KDOT would be forced to delay lettings of any new projects or halt work on existing projects until its outstanding encumbrances could be paid down to the point where its cash flows could meet its obligations. A history of prior year ending balances can be found on Attachment A.

**Q: Is KDOT required to maintain a minimum ending balance in the SHF?**

**A:** By internal policy, KDOT retains a minimum ending balance requirement of an amount equal to two months' of debt service and \$25 million for orderly bill payment of contracts and operating expenses. The FY 2012 minimum ending balance requirement is \$53 million for the SHF. An additional estimated \$42 million would need to be available for transfers out on July 1. (NOTE: This transfer amount assumes changes in timing for the KHP transfer to

semi-annual transfers.) There are no required ending balances included in our bond covenants.

KDOT also has funds in numerous restricted accounts that are not part of the SHF. A list of these funds is included as Attachment B. The funds in each of these accounts are specifically restricted pursuant to the authority under which the account was created and cannot be utilized for the SHF or for any other purpose. In an 'all funds' view, these funds are included in addition to the SHF.

**Q: Are there any bond covenants or other policies that affect revenues to or transfers from the SHF?**

**A:** KDOT's bond covenants require state revenues into the SHF of three times (3X) the amount of KDOT's annual debt service. KDOT has an internal policy to maintain four times (4X) coverage. The 4X coverage is relied upon by the rating agencies as a source of additional strength of the bonds, which results in a higher credit rating. Currently, KDOT must maintain \$740 million in state revenues to maintain the 4X coverage, excluding federal and local reimbursements. A drop below 4X coverage would be viewed by the rating agencies as further instability in the revenues backing the SHF debt and could result in a rating downgrade.

Following the authorization last May of the transfer of \$205 million during FY 2012 from the SHF to the SGF, on June 1, 2011, Moody's Investors Services revised the outlook for bonds issued by KDOT from stable to negative, citing the state's history of making such transfers to close budget deficits. Moody's stated KDOT's bond rating would move down if there was further use of SHF resources by the State for general operating purposes.

If revenue coverage falls below 3X indebtedness, bond covenants require the establishment and funding of a debt service reserve account, which would remove funds from the SHF to a separate restricted fund to be used solely for debt service.

Attachment C is a comparison of KDOT's weighted average cost of debt as compared to other state highway bond indebtedness.

**Q: The committee has requested information regarding KDOT bonds. The committee has inquired about the agency's ability to pay off the bonds early and what percentage can be paid off in addition to an overview of KDOT's current bonding authority and how much more the agency can bond.**

**A:** The Agency may retire up to \$921.9 million (55%) of State Highway Fund (SHF) debt as early as April 1, 2012 at a cost of approximately \$995.3 million. The added cost (above par value) is associated with prepayment penalties estimated to be \$70 million. Retirement of

these bonds would eliminate future interest payments which carry a present value of \$236 million. The option of redeeming just a portion of these bonds does exist.

In addition, the Agency may “legally defease” or retire another \$751.5 million (45%) of SHF debt immediately by funding escrow accounts to cover payment of interest until such bonds are eligible to be called or mature. These escrow accounts may have a life as long as 8 years. In order to determine the amount required to fund the accounts a more selective and detailed analysis would need to be performed. The option of redeeming just a portion of these bonds does exist as well.

The Transportation Works for Kansas Program (T-WORKS) authorized the Secretary of Transportation to issue additional bonds to the extent that the combined debt service on all existing bonds and proposed new bonds does not exceed 18 percent of SHF revenue in any fiscal year. Projections at the time of T-WORKS passage suggested that \$1.7 billion of additional bonds could be issued. In September, 2010 the Agency issued \$325 million of Build America Bonds to finance a portion of the T-WORKS program.

**Q: The committee requested information regarding transfers from the State Highway Fund (SHF) to the State General Fund (SGF) and which transfers have been deemed a loan.**

**A:** The total of State Highway Fund losses from FY 2000- FY 2012 amount to 1.5 Billion. For a detailed break-out of all losses to the SHF please see attachment D. Of this amount, \$125 million was considered a loan. To date \$63 million was repaid and the remaining \$62 million repayment was cancelled.

**Q: The committee requested additional information regarding Passenger Rail and the cost-benefit analysis provided to the Federal Rail Administration (FRA) and the KDOT cost-benefit analysis. In addition, the committee requested information regarding the current Amtrak service and the federal and state subsidies.**

**A:** A history of passenger rail projects in Kansas is provided in Attachment E and cost estimates of passenger rail improvements can be found on Attachment F. The complete cost-benefit analysis of this project can be found in attachment G.

The State of Kansas does not currently subsidize passenger rail including the Southwest Chief Amtrak service. The annual federal subsidy for the national Amtrak service is estimated to be \$59.6 million for FY 12. The amount of these federal funds dedicated for the Southwest Chief through Kansas are not known to KDOT at this time.

## **Attachments**

**Ending Balance History**

|   | <u>FY2002</u>  | <u>FY2003</u>  | <u>FY2004</u>  | <u>FY2005</u>  | <u>FY2006</u>  | <u>FY2007</u>  | <u>FY2008</u>  | <u>FY2009</u>  | <u>FY2010</u>  | <u>FY2011</u>  |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| State Highway Fund (SHF)                    | 734,166        | 624,734        | 528,670        | 598,535        | 513,661        | 399,888        | 486,480        | 429,740        | 204,389        | 270,067        |
| Bond Proceeds                               | -              | -              | -              | -              | -              | -              | -              | -              | -              | 262,190        |
| Debt Service (set by bond covenants)        | 46,965         | 50,214         | 60,044         | 72,165         | 78,573         | 74,938         | 62,620         | 104,566        | 106,105        | 113,439        |
| Transportation Revolving Fund (TRF)         | -              | -              | 24,578         | 9,486          | 21,699         | 9,581          | 3,899          | 4,152          | 110            | 30,384         |
| Communications System Revolving Fund (CSRF) | -              | -              | -              | -              | 970            | 366            | 997            | 11,104         | 10,860         | 8,932          |
| Aviation                                    | 2,031          | 1,892          | 1,831          | 1,541          | 1,210          | 731            | 570            | 1,212          | 1,361          | 147            |
| Public Transit                              | 5,488          | 4,948          | 6,027          | 6,553          | 5,561          | 4,889          | 4,474          | 3,543          | 2,168          | 2,189          |
| Rail  | 1,921          | 288            | 1,214          | 951            | 1,137          | 1,124          | 5,476          | 8,150          | 4,223          | 2,011          |
| Special City County Highway Fund            | 36,307         | 36,105         | 23,003         | 24,833         | 24,390         | 25,300         | 35,067         | 34,476         | 34,674         | 34,318         |
|   | <u>826,878</u> | <u>718,181</u> | <u>645,367</u> | <u>714,064</u> | <u>647,201</u> | <u>516,817</u> | <u>599,583</u> | <u>596,943</u> | <u>363,890</u> | <u>723,677</u> |

Kansas Department of Transportation Funds

| <u>Fund No.</u> | <u>Fund Name</u>  |
|-----------------|---|
| 2008            | Rail Services Improvement Fund                            |
| 2298            | Interagency Motor Vehicle Fuel Sales Fund (Clearing Fund) |
| 2356            | Traffic Records Enhancement Fund                          |
| 2382            | North Central Kansas Air Passenger Service Support Fund   |
| 2572            | Coordinated Public Transportation Assistance Fund         |
| 2576            | Highway Special Permits Fund (Clearing Fund)              |
| 3122            | Other Federal Grants Fund                                 |
| 4109            | Highway Bond Proceeds Fund                                |
| 4140            | Public Use General Aviation Fund                          |
| 4210            | County Equalization and Adjustment Fund                   |
| 4220            | Special City and County Highway Fund                      |
| 4707            | Highway Bond Debt Service Fund                            |
| 7502            | Rail Service Assistance Program Loan Guarantee Fund       |
| 7503            | Rail Rehabilitation Loan Guarantee Fund                   |
| 7511            | Transportation Revolving Fund - Program Fund              |
| 7524            | Communication System Revolving Fund                       |
| 7548            | Transportation Revolving fund - Equity Fund               |
| 7552            | Kansas Intermodal Transportation Revolving Fund           |

2011 - State DOT Debt Survey

| State                      | Allocation |          |           | Aggregate Debt | Weighted Average Cost |          |           |           | Weighted Average Life |          |           |           | Credit Ratings |           |          | State                      |
|----------------------------|------------|----------|-----------|----------------|-----------------------|----------|-----------|-----------|-----------------------|----------|-----------|-----------|----------------|-----------|----------|----------------------------|
|                            | Fixed      | Variable | Syn Fixed |                | Fixed                 | Variable | Syn Fixed | Aggregate | Fixed                 | Variable | Syn Fixed | Aggregate | Moody          | S&P       | Fitch    |                            |
| California                 | 100.00%    | 0.00%    | 0.00%     | 340,525,000    | 4.42%                 | 0.00%    | 0.00%     | 4.42%     | 2.80                  | -        | -         | 2.80      | Aa3            | AA        | AA-      | California                 |
| North Dakota               | 100.00%    | 0.00%    | 0.00%     | 38,210,000     | 4.25%                 | 0.00%    | 0.00%     | 4.25%     | 5.12                  | -        | -         | 5.12      | Aa1            | N/A       | AA       | North Dakota               |
| West Virginia <sup>6</sup> | 100.00%    | 0.00%    | 0.00%     | 428,255,000    | 4.10%                 | 0.00%    | 0.00%     | 4.10%     | 5.55                  | -        | -         | 5.55      | Aa1 - Aa2      | AA - AA-  | AA+      | West Virginia <sup>6</sup> |
| Montana                    | 100.00%    | 0.00%    | 0.00%     | 121,850,000    | 4.41%                 | 0.00%    | 0.00%     | 4.41%     | 5.59                  | -        | -         | 5.59      | Aa2            | AA        | N/A      | Montana                    |
| Maryland                   | 100.00%    | 0.00%    | 0.00%     | 1,561,840,000  | 3.85%                 | 0.00%    | 0.00%     | 3.85%     | 6.23                  | -        | -         | 6.23      | Aa1            | AAA       | AA+      | Maryland                   |
| Oklahoma <sup>12</sup>     | 100.00%    | 0.00%    | 0.00%     | 632,010,000    | 3.38%                 | 0.00%    | 0.00%     | 3.38%     | 6.44                  | -        | -         | 6.44      | Aa3            | AA        | AA - A+  | Oklahoma <sup>12</sup>     |
| Nevada                     | 100.00%    | 0.00%    | 0.00%     | 611,975,000    | 4.30%                 | 0.00%    | 0.00%     | 4.30%     | 6.51                  | -        | -         | 6.51      | Aa3            | AA        | AA       | Nevada                     |
| Utah                       | 100.00%    | 0.00%    | 0.00%     | 3,367,800,000  | 2.68%                 | 0.00%    | 0.00%     | 2.68%     | 6.83                  | -        | -         | 6.83      | Aaa            | AAA       | AAA      | Utah                       |
| Delaware <sup>7</sup>      | 100.00%    | 0.00%    | 0.00%     | 1,110,140,000  | 4.23%                 | 0.00%    | 0.00%     | 4.23%     | 6.97                  | -        | -         | 6.97      | Aa2            | AA+ - AA  | N/A      | Delaware <sup>7</sup>      |
| Hawaii                     | 100.00%    | 0.00%    | 0.00%     | 337,420,000    | 4.94%                 | 0.00%    | 0.00%     | 4.94%     | 7.08                  | -        | -         | 7.08      | Aa             | AA        | AA       | Hawaii                     |
| Georgia                    | 82.80%     | 17.20%   | 0.00%     | 1,588,028,258  | 4.12%                 | 0.18%    | 0.00%     | 3.21%     | 6.68                  | 9.70     | -         | 7.20      | Aaa            | AAA       | AAA      | Georgia                    |
| Alaska                     | 100.00%    | 0.00%    | 0.00%     | 262,330,000    | 4.32%                 | 0.00%    | 0.00%     | 4.32%     | 7.45                  | -        | -         | 7.45      | Aaa            | AA+       | AA+      | Alaska                     |
| Michigan <sup>10</sup>     | 100.00%    | 0.00%    | 0.00%     | 2,294,812,945  | 4.75%                 | 0.00%    | 0.00%     | 4.75%     | 8.34                  | -        | -         | 8.34      | Aa2            | AA+       | AA       | Michigan <sup>10</sup>     |
| Kentucky <sup>8</sup>      | 100.00%    | 0.00%    | 0.00%     | 1,663,030,000  | 4.18%                 | 0.00%    | 0.00%     | 4.18%     | 8.50                  | -        | -         | 8.50      | Aa2            | AA+ - AA  | AA-      | Kentucky <sup>8</sup>      |
| Wisconsin                  | 91.79%     | 8.21%    | 0.00%     | 1,784,938,000  | 4.18%                 | 0.46%    | 0.00%     | 3.94%     | 8.69                  | 6.54     | -         | 8.51      | Aa2            | Aa+       | AA+      | Wisconsin                  |
| Illinois <sup>5</sup>      | 100.00%    | 0.00%    | 0.00%     | 3,143,070,563  | 4.78%                 | 0.00%    | 0.00%     | 4.78%     | 8.69                  | -        | -         | 8.69      | A1             | A         | A+       | Illinois <sup>5</sup>      |
| Arizona <sup>1</sup>       | 100.00%    | 0.00%    | 0.00%     | 2,871,195,000  | 4.43%                 | 0.00%    | 0.00%     | 4.43%     | 8.73                  | -        | -         | 8.73      | Aaa - Aa2      | AAA - AA  | AA       | Arizona <sup>1</sup>       |
| Missouri <sup>3</sup>      | 98.16%     | 1.84%    | 0.00%     | 3,204,715,000  | 4.00%                 | 0.35%    | 0.00%     | 3.97%     | 9.50                  | 3.84     | -         | 9.39      | Aaa            | AAA       | AAA      | Missouri <sup>3</sup>      |
| Kansas *                   | 64.02%     | 0.03%    | 35.95%    | 1,697,235,000  | 3.60%                 | 0.60%    | 3.95%     | 3.68%     | 11.77                 | 2.67     | 5.57      | 9.50      | Aa1            | AAA       | AA+      | Kansas                     |
| Indiana <sup>13</sup>      | 100.00%    | 0.00%    | 0.00%     | 1,166,791,298  | 4.48%                 | 0.00%    | 0.00%     | 4.48%     | 10.56                 | -        | -         | 10.56     | Aaa - Aa1      | AAA - AA+ | AA+ - AA | Indiana <sup>13</sup>      |
| Florida <sup>2</sup>       | 100.00%    | 0.00%    | 0.00%     | 4,820,525,000  | 4.63%                 | 0.00%    | 0.00%     | 4.63%     | 12.44                 | -        | -         | 12.44     | Aa1 - A1       | AAA - A+  | AAA - A+ | Florida <sup>2</sup>       |
| Washington                 | 100.00%    | 0.00%    | 0.00%     | 6,004,454,495  | 4.05%                 | 0.00%    | 0.00%     | 4.05%     | 12.91                 | -        | -         | 12.91     | Aa1            | AA+       | AA+      | Washington                 |
| Pennsylvania <sup>4</sup>  | 100.00%    | 0.00%    | 0.00%     | 517,500,000    | 3.74%                 | 0.00%    | 0.00%     | 3.74%     | 13.02                 | -        | -         | 13.02     | Aa1            | AA        | AA+      | Pennsylvania <sup>4</sup>  |
| Mississippi                | 100.00%    | 0.00%    | 0.00%     | 589,805,000    | 4.36%                 | 0.00%    | 0.00%     | 4.36%     | 13.47                 | -        | -         | 13.47     | A1             | AA-       | N/A      | Mississippi                |
| Oregon                     | 88.24%     | 11.76%   | 0.00%     | 2,255,055,000  | 5.07%                 | 1.81%    | 0.00%     | 4.75%     | 14.30                 | 11.95    | -         | 14.02     | Aa1            | AAA       | AA+      | Oregon                     |
| Colorado <sup>9</sup>      | 100.00%    | 0.00%    | 0.00%     | 678,005,000    | 4.01%                 | 0.00%    | 0.00%     | 4.01%     | 14.45                 | -        | -         | 14.45     | AA3            | AA        | AA       | Colorado <sup>9</sup>      |
| Texas <sup>11</sup>        | 97.01%     | 2.99%    | 0.00%     | 11,113,935,000 | 4.11%                 | 0.57%    | 0.00%     | 3.99%     | 16.17                 | 18.13    | -         | 16.23     | Aaa            | AAA - AA+ | AAA      | Texas <sup>11</sup>        |
| Average                    | 97.11%     | 1.56%    | 1.33%     | 2,007,609,280  | 4.20%                 | 0.15%    | 0.15%     | 4.14%     | 9.07                  | 1.96     | 0.21      | 8.98      |                |           |          |                            |
| Total                      |            |          |           | 54,205,450,558 |                       |          |           |           |                       |          |           |           |                |           |          |                            |

Iowa, Nebraska, South Dakota, Tennessee, and Wyoming have no bond debt.

\* Kansas information as December 31, 2011.

<sup>1</sup> AZ DOT credit ratings: Hwy User Tax based \$1.601 billion Moody's Aaa/S&P AAA/Fitch N/A and GARVEE \$878 million Moody's Aa2/S&P AA/Fitch AA

<sup>2</sup> FL DOT credit ratings: Turnpike: \$3.095 billion Moody's Aa3/S&P AA-/Fitch AA- and Right of Way: \$1.587 billion Moody's Aa1/S&P AAA/Fitch AAA

<sup>3</sup> MO DOT credit ratings: listed credit ratings are from senior debt obligations

<sup>4</sup> PA DOT: A limited amount of "old debt" is excluded from calculation. It goes back a several decades and remains active due to refinancing.

<sup>5</sup> IL DOT has \$86,507,970 of zero-coupon (capital appreciation) bonds outstanding that will be retired by August 1, 2024 which are excluded in this calculation

<sup>6</sup> WV DOT credit ratings: GO \$305 million Moody's Aa1/S&P AA/Fitch AA+ and GARVEE \$123 million Moody's Aa2/S&P AA-/Fitch N/A

<sup>7</sup> DE DOT credit ratings: Revenue bonds \$1.062 billion Moody's Aa2/S&P AA+/Fitch N/A and GARVEE \$47 million Moody's Aa2/S&P AA/Fitch N/A

<sup>8</sup> KY Transportation Cabinet Credit ratings: ALCO \$407 million Moody's Aa2/S&P AA/Fitch AA- and TAK \$1.256 billion Moody's Aa2/S&P AA+/Fitch AA-

<sup>9</sup> CO DOT One bond series is excluded from this survey because of information not readily available. This issuance will be paid off soon.

<sup>10</sup> MI DOT bonds Credit ratings: Comprehensive Transportation Fund Moody's Aa2/S&P AA+/Fitch AA and State Trunkline Fund Moody's Aa2/S&P AA+/Fitch N/A

<sup>11</sup> TX DOT bonds Credit ratings: State Highway Fund First Tier Revenue Bonds \$4.078 billion Moody's Aaa/S&P AAA/Fitch N/A and TX Mobility Fund GO Bonds & State of TX Highway Improvement GO Bonds \$7.035 billion Moody's Aaa/S&P AA+/Fitch AAA

<sup>12</sup> OK DOT bonds Credit ratings: DOT Issued \$228 million Moody's Aa3/S&P N/A/Fitch A+ and State Issued \$404 million Moody's N/A/S&P AA/Fitch AA

<sup>13</sup> IN DOT bonds Credit ratings: \$868 million Moody's Aa1/S&P AA+/Fitch AA+ and \$143 million Moody's Aa1/S&P AA+/Fitch WD

N/A - Not applicable or not rated

WD - Withdrawn

**State Highway Fund losses during the CTP  
2000 - 2009**

|  | (\$ millions)<br>2000-2009 |
|--|----------------------------|
| <b>Sales Tax</b>   |                            |
| Reduction in the Sales Tax Transfer 2000-2009, transfer eliminated | \$ (1,438)                 |
| Increase in Sales Tax direct deposit                               | \$ 421                     |
| <b>Loan to the State General Fund</b>                              | \$ (125)                   |
| Repayments on Loans to the State General Fund                      | \$ 63                      |
| <b>Motor Fuel Taxes</b>  |                            |
| Increase in the Motor Fuel Tax by 2002 Legislature                 | \$ 207                     |
| <b>Transfers</b>   |                            |
| State General Fund to fund the KHP                                 | \$ (174)                   |
| Affordable Airfare   | \$ (15)                    |
| Offset in SGF transfer for Affordable Airfare                      | \$ 10                      |
| <b>Bond Proceeds backed by the State General Fund</b>              |                            |
| 2004 Issue   | \$ 210                     |
| <b>Total FY 2000 to FY 2009</b>                                    | <b>\$ (841)</b>            |

**State Highway Fund losses in FY 2010**

|  | 2010            |
|--|-----------------|
| <b>Transfers</b>   |                 |
| State General Fund to fund the KHP                         | \$ (36)         |
| Affordable Airfare   | \$ (5)          |
| Transfers to the State General Fund                        | \$ (118)        |
| To Special City and County Highway Fund                    | \$ (5)          |
| <b>Bond Proceeds backed by the State General Fund</b>      |                 |
| Transfer to the SGF to pay the debt service on above bonds | \$ (25)         |
| <b>Total FY 2010</b>                                       | <b>\$ (189)</b> |

**State Highway Fund losses in FY 2011**

|  | 2011            |
|--|-----------------|
| <b>Transfers</b>   |                 |
| State General Fund to fund the KHP                         | \$ (36)         |
| Affordable Airfare   | \$ (5)          |
| Transfers to the State General Fund                        | \$ (124)        |
| <b>Bond Proceeds backed by the State General Fund</b>      |                 |
| Transfer to the SGF to pay the debt service on above bonds | \$ (25)         |
| <b>Total FY 2011</b>                                       | <b>\$ (190)</b> |

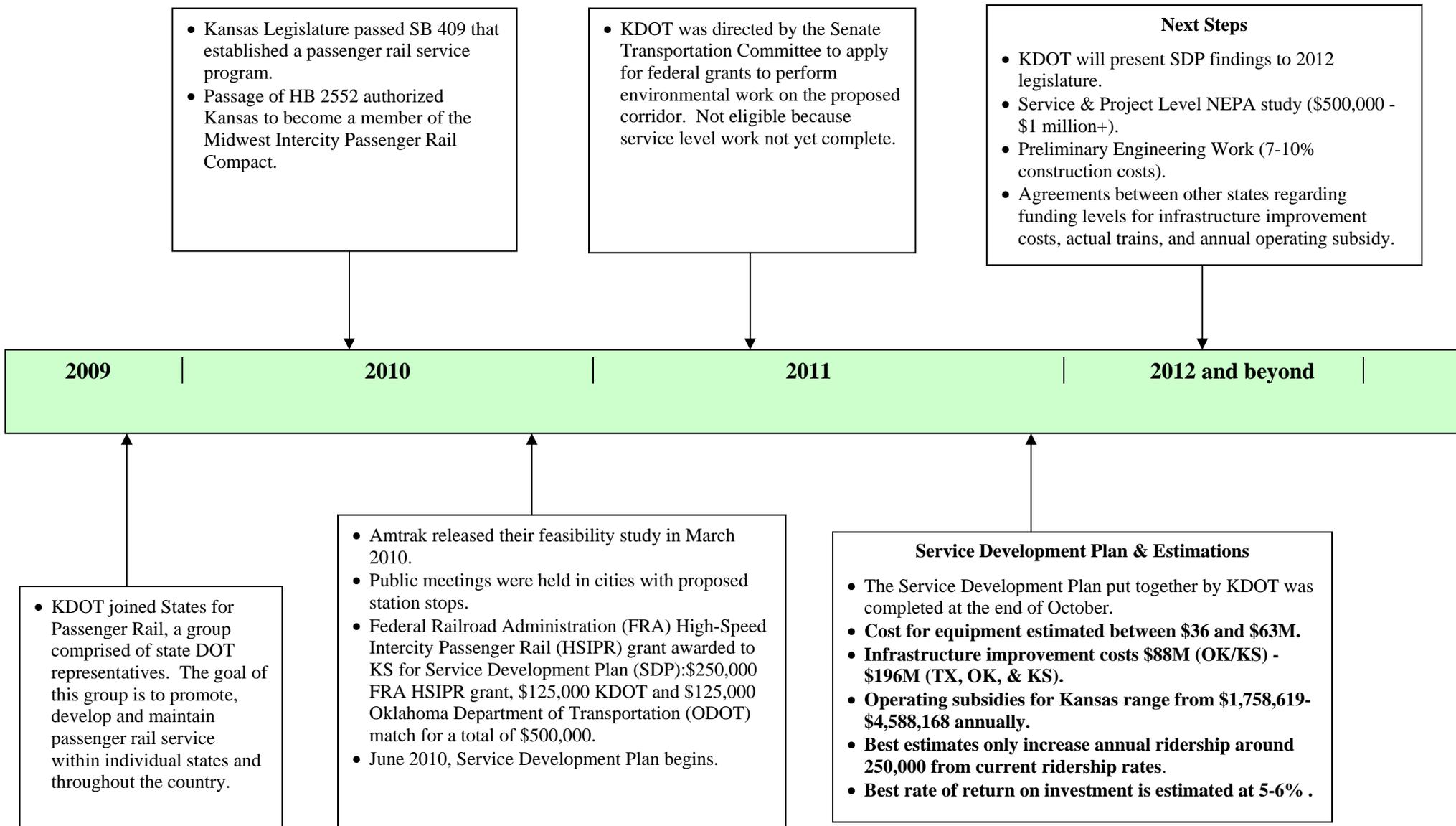
**State Highway Fund losses in FY 2012**

|                                     | 2012            |
|-------------------------------------|-----------------|
| <b>Transfers</b>                    |                 |
| State General Fund to fund the KHP  | \$ (33)         |
| Transfers to the State General Fund | \$ (205)        |
| <b>Total FY 2012</b>                | <b>\$ (238)</b> |

**Total SHF Losses FY 2000 through 2012 - \$1.458 Billion**

# Passenger Rail Timeline

## 2009-2012 & Beyond



# Kansas Expanded Passenger Rail Cost Estimates

Estimated Costs (\$M - 2011 Dollars)

Based on estimates in Service Development Plan (SDP)

\*No infrastructure improvements are expected in Missouri

**TOTAL COSTS** - Includes track improvements, grade crossing improvements, Newton layover facility (HFE and CSO only), PE and NEPA (soft costs), contingencies and equipment (trainsets)

## 100% non federal funds (FULLY state supported)

|                           | Kansas | Oklahoma | Texas  | Total |
|---------------------------|--------|----------|--------|-------|
| Heartland Flyer Extension | 75.64  | 60.86    | 0.00   | 136.5 |
| KC-OKC-FW Daytime Service | 139.16 | 178.70   | 118.34 | 436.2 |
| Combined Services         | 175.10 | 181.51   | 118.34 | 475.0 |

## With 80% Federal Funds - if federal funds are available and application is approved for full 80%

|                           | Kansas - 20% | Federal - 80% | Oklahoma - 20% | Federal - 80% | Texas - 20% | Federal - 80% | Total |
|---------------------------|--------------|---------------|----------------|---------------|-------------|---------------|-------|
| Heartland Flyer Extension | 15.13        | 60.51         | 12.17          | 48.69         | 0.00        | 0.00          | 136.5 |
| KC-OKC-FW Daytime Service | 27.83        | 111.33        | 35.74          | 142.96        | 23.67       | 94.67         | 436.2 |
| Combined Services         | 35.02        | 140.08        | 36.30          | 145.21        | 23.67       | 94.67         | 475.0 |

## Estimated Annual Operating Subsidy

\$Millions - 2011 Dollars

(Federal Funding is not available for operating expenses) - based on percentage of track miles in each state

|                           | Kansas | Oklahoma | Texas | Total |
|---------------------------|--------|----------|-------|-------|
| Heartland Flyer Extension | 1.80   | 2.60     | 0.00  | 4.40  |
| Track miles %             | 41%    | 59%      | 0%    |       |
| KC-OKC-FW Daytime Service | 4.70   | 4.10     | 1.20  | 10.00 |
| Track miles %             | 47%    | 41%      | 12%   |       |
| Combined Services         | 6.44   | 5.62     | 1.64  | 13.70 |

**Passenger Rail Benefit Cost Analysis Summary  
Assuming 15% Contingency**

| <b>Scenario</b>                        | <b>Net Present Value (NPV)</b> | <b>Economic Rate of Return (ERR)</b> | <b>Benefit Cost Ratio (B/C)</b> |
|--|--------------------------------|--------------------------------------|---------------------------------|
| <i>Heartland Flyer Extension</i>       | -\$15.3 million                | 3.14%                                | 0.93                            |
| <i>KC-OKC-FW Daylight Service Only</i> | -\$222.8 million               | N.A.                                 | 0.64                            |
| <i>Combined Services</i>               | -\$96.2 million                | 2.29%                                | 0.87                            |

*Source: Parsons Brinckerhoff*

**Benefit Cost Analysis Summary  
Assuming 30% Contingency**

| <b>Scenario</b>                        | <b>Net Present Value (NPV)</b> | <b>Economic Rate of Return (ERR)</b> | <b>Benefit Cost Ratio (B/C)</b> |
|--|--------------------------------|--------------------------------------|---------------------------------|
| <i>Heartland Flyer Extension Only</i>  | -\$27.1 million                | 2.57%                                | 0.88                            |
| <i>KC-OKC-FW Daylight Service Only</i> | -\$261.1 million               | N.A.                                 | 0.61                            |
| <i>Combined Services</i>               | -\$137.6 million               | 1.71%                                | 0.83                            |

*Source: Parsons Brinckerhoff*

## Appendix B (From Service Development Plan)

| <b>HSR PUBLIC BENEFITS ANALYSIS - BENEFIT CATEGORIES</b>   |  |   |  |  |
|--|--|---|--|--|
| FRA Guidelines Source Citations: 1) Federal Register Vol 75, No. 126, July 1, 2010 Notices, Appendix 2, 2.10; 2) Federal Register Vol. 74, No. 119 June 23, 2009, Section 5) |  |   |  |  |
|  | <b>Representative Measures</b>                                   | <b>Should be included in Benefit Cost Analysis?</b> | <b>Quantifiable for Benefit Cost Analysis?</b> | <b>Comments</b>  |
| <b>General Description of Public Benefits Analysis from FRA Federal Register Guidelines</b>  | should include operational, transportation and output benefits   |   |  | calls for "particular focus on job creation and retention, green environmental outcomes, potential energy savings, and community livability" (2010 FRA notice) |
| <b>User Benefits</b>   |  |   |  |  |
|  | travel time savings for "existing" rail passengers               | yes   | yes  | from rail travel demand and operational modeling   |
|  | travel reliability improvements for existing rail passengers     | yes   | yes  | from rail travel demand and operational modeling   |
|  | travel time savings, diverted from other modes                   | yes   | yes  | depends on availability and quality of information about travel times of competing modes   |
|  | travel reliability and other benefits, diverted from other modes | yes   | yes  | depends on availability and quality of information about travel reliability of competing modes   |
|  | vehicle operating cost savings for diverted auto users           | yes   | yes  | estimated based on highway VMT reductions  |
|  | travel productivity benefits                                     | not specifically mentioned in FRA guidelines        | yes  | benefits from amenities such as internet access and comfortable working environment; applicable to business travel market segment only                         |
|  | newly induced trips  | not specifically mentioned in FRA guidelines        | yes (if estimated by Travel Demand Modeling)   | trips that are not made in the absence of the rail service (e.g., for transit dependents or where other modes are excessively costly and time consuming)       |

|                            |  |  |                                    |   |
|----------------------------|--|--|------------------------------------|---|
| <b>Non User Benefits</b>   |  |  |                                    |   |
|                            | emissions reductions   | yes  | yes (TIGER guidelines applicable)  | would include local emissions for AQ attainment (e.g., NOX, particulates) and also carbon emissions (GHG or CO2)  |
|                            | other environmental benefits: noise, water pollution and runoff, etc.  | yes  | yes                                | would result mainly from auto to rail shifts  |
|                            | community development  | mentioned in 2010 FRA guidance, but probably best related to Livability Benefits |                                    |   |
|                            | safety - crash reductions  | not specifically mentioned in FRA guidelines                                     | yes - TIGER guidelines applicable) | standard in BC analysis, and could be estimated based on reduced VMT and crash data   |
|                            | reduced oil imports  | cited in 2009 FRA guidance,  | yes, from research                 | cost of fuel saved would already be included in vehicle operating cost savings, but an additional social benefit could be assigned and monetized  |
| <b>Livability Benefits</b> |  |  |                                    |   |
|                            | metrics mentioned in FRA guidelines are illustrative, and include "integration with existing high density livable development (e.g., central business districts with public transportation, pedestrian and bicycle distribution networks, and incorporation of transit oriented development)" (2009 FRA guidelines, 5.1.1.3, p. 29918) | would need strong justification  | monetizing benefits very difficult | primarily qualitative, although some research has been done to monetize some impacts, such as improved mode choice and increased use of non-motorized transportation, more compact forms of development, aesthetic enhancements of downtown areas, and possibly benefits to low income or non auto owners |

|  |  |                                 |    |  |
|--|--|---------------------------------|----|--|
| <b>Long Term Economic Development Impacts</b>  |  |                                 |    |  |
| FRA guidelines do not specifically mention these, but can be inferred as possible for inclusion: examples could include: |  |                                 |    |  |
|  | additional tourism or other spending by visitors (out of state for a state impact analysis)                    | no                              | no | OK for a regional or state BC analysis, but spending may just be shifted from other locations (e.g., from Oklahoma to Kansas, or from Texas to Oklahoma) |
|  | increased commercial development and real estate value around new stations                                     | would need strong justification |    |  |
| <b>Agglomeration Benefits</b>  |  |                                 |    |  |
|  | increased labor/business productivity, increased worker wages, increased output, possible increased employment |                                 |    |  |

|   |   |  |   |  |
|---|---|--|---|--|
| <b>Economic Recovery Benefits</b>                             |   |  |   |  |
|   | construction and O&M related jobs and income            | no, although cited as important evaluation criteria in 2009 FRA guidance, but no longer present in 2010 announcement' FRA    |   |  |
|   | permanent economic development benefits                 | yes, but very difficult to quantify, and only benefits due to improvement productivity, and not shifted from other locations |   |  |
|   |   |  |   | only applicable if jointly operated rail freight services see operational improvements; cost savings to freight RRs themselves would not be considered public benefits unless passed on to consumers or producers  |
| <b>Freight Related Benefits</b>                               |   |  |   |  |
|   | freight rail travel time savings                        | partly (public portion only)   |   |  |
|   | shifts from truck to rail                               | partly (public portion only)   |   |  |
| <b>OTHER IMPORTANT INPUTS NOT ADDRESSED IN FRA GUIDELINES</b> |   |  |   |  |
|   |   |  |   | Can vary depending on public vs. private considerations, interest rate expectations, cost of capital, and preference for long term vs. short term benefits. TIGER guidelines prescribe 7% but permit 3% as an alternative, especially for benefits; OMB establishes discount rates for federally funded projects which differ and are currently in the 3-4% range. |
|   | Real Discount Rate                                      | essential and critical to result   | variable  |  |
|   | Period of analysis (years) for discounted present value |  | variable but no less than 20 years for infrastructure |  |
| <b>PROJECT COSTS</b>  |   |  |   |  |
|   | initial capital costs                                   |  |   |  |
|   | ongoing operations and maintenance                      |  |   |  |
|   | periodic major rehab or replace costs                   |  |   |  |