

2005-30 Sherman-Denison Metropolitan Transportation Plan January 30, 2008 Appendix Revision

Use Of “Year-Of-Expenditure” Cost Estimates

The Federal Transportation bill, the Safe Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU), contained a number of requirements that MPO’s have addressed over the past months. SAFETEA-LU set federal funding amounts for 2004-2009, required consideration for the effects of inflation in developing project cost estimates, and provided for new funding sources. The new legislation required revisions to several MPO documents and plans, most specifically the Sherman-Denison 2005-2030 Metropolitan Transportation Plan (MTP). As part of these revisions, the MPO has updated the MTP Financial Plan by offering additional changes to the fiscally constrained project list.

When the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) released their Statewide and Metropolitan Planning Rule, it included a new requirement for long-range transportation plans. Under the new rule, financial constraint of the plan must be demonstrated in “Year of Expenditure” dollars, or YOE dollars. The rationale for this rule is that long-range estimates of transportation costs have understated the deficit between costs and revenues. Therefore, converting all costs and revenues to YOE dollars would theoretically present a more accurate picture of costs, revenues, and deficits associated with a long-range transportation plan.

In December 2004, the Sherman-Denison MPO Transportation Policy Board adopted the Sherman-Denison 2005-2030 Metropolitan Transportation Plan. This Plan introduced a 25-year program of transportation projects for the Sherman-Denison Urban Transportation Study Area. Project estimates reflected in the MTP, at the time of adoption, did not include many long-term inflationary factors that might change the project costs. Legislation at the time of Plan adoption, as well as today, provides for many alternative methods for funding transportation in the region. A variety of these sources of funding revenue were considered when the MTP was developed. A current re-examination of the funding forecast and cost estimates was necessary to properly analyze potential shortfalls (gaps) between funds and costs over the 25-year period of the Plan. There were several reasons for this change.

First, federal funding levels from ISTEA to TEA-21 and through SAFETEA-LU increased at a greater pace than originally anticipated. Total federal transportation funding grew 40 percent in the six-year intervals of ISTEA and TEA-21 (\$155.3 billion vs. \$217.9 billion). Using a conservative estimate of \$42.4 billion in transportation funds spent in 2004, the six-year funding total increase between SAFETEA-LU (\$286.5 billion including the 2004 estimate) and TEA-21 was 32 percent.

Another reason was to keep up with inflation, which has been at three percent annually from 1993 to 2006 in the Bureau of Labor Statistics Consumer Price Index (CPI).

During the past several months, we have experienced a series of nationwide funding rescissions from FHWA. These reductions in federal funds only exacerbate the rising inflationary costs for project development and construction brought on by rising steel, concrete, fuel, and labor prices. As this trend continues, states, localities, and participating agencies will all endure funding shortages for transportation needs. As a result, a three percent annual inflation rate throughout the life of the Plan was selected to approach funding in a conservative manner.

In the adopted Plan, the costs for each project were estimated in 2006 dollars. To change to year-of-expenditure dollars, as mandated by SAFETEA-LU, estimates were increased based on the time period for

project implementation. This was based on a long-term view of the annual Consumer Price Index (CPI) which increased three percent annually from 1993 to 2005. Therefore, a three percent per annum annual average inflation rate was used as the basis for placing project estimates into a YOE cost format.

The attached **Funding Summary** reflects the results of all revisions made to the Sherman-Denison 2005-2030 Metropolitan Transportation Plan. The financial data reflects the 'Year of Expenditure (YOE)' cost for each project. The tables (11.3 & 11.4) in the updated MTP reflect these changes. The total cost for each project has been increased to include inflation for the time period in which the project is to be implemented. All projects in the first ten years of the MTP (2005-2015) were placed into YOE estimates based on anticipated 2015 project costs. Outside of the first ten years of the MTP, most projects do not have a specific implementation date and are grouped into the 2016-2030-time period.

After placing project costs into YOE dollars, a \$12.3 million funding surplus was identified. Unfortunately, this surplus is only projected when revenue predictions equal forecasted costs. Anytime the inflation factor exceeds the assumed three percent, a funding shortfall exists.

Federal funding for transportation is authorized through the SAFETEA-LU transportation bill setting upper limits on funding for highways and transit facilities. Funding in the transportation bill comes from federal taxes on fuel, heavy-duty trucks, and, to a lesser extent, general funds. New federal legislation, as well as actions by the state legislature and local government in the last few years, provide for new transportation funding resources. Innovative thinking will allow new resources to improve our transportation system. Bond transportation funding is a valuable tool enabling needed facilities to be built sooner than the traditional pay-as-you-go method. As such, bonds can be backed and transportation projects funded from a variety of anticipated revenue sources including state motor fuel funds, federal transportation funds, toll revenue, or any combination of these sources. Local transportation expenditures from general funds and special assessments will play an ever-increasing role in transportation funding. All such measures, including optional toll lanes, pass-through toll financing, regional mobility authorities, safety bonds, and incorporating private sector participation in financing transportation projects, are viable means to continue the maintenance and aid development of our transportation assets.

The Sherman-Denison Metropolitan Transportation Plan 2005-2030 includes approximately \$ 577.6 million in road projects and \$39.8 million in transit through 2030 in year of expenditure (YOE) dollars. Given the fluid economy at this time, our best estimates indicate that adequate resources will be available to implement the projects identified in the MTP. The MTP is also balanced by planning period (2008-2011, 2012- 2015, and 2016-2030).

Funding Summary

- Revenues are forecasted to grow at 3% per year
- Total Revenue at an annual 3% inflation rate = \$629,817,741
- Costs are forecasted to grow at 3% per year
- Total Costs at an annual 3% inflation rate = \$617,475,666
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Funding Surplus = \$ 12,342,075

Potential Gaps (\$ in millions) in funding assuming revenues increase at an annual rate of 3% and costs increase at varying annual inflation rates.

Annual Growth in Costs	3.0%	4.0%	4.8%	5.0%	5.2%	6.0%	5.0%	8.0%	5.0%	4.0%	5.0%
Annual Growth in Revenue	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Costs	\$1,500.00	\$1,560.00	\$1,634.88	\$1,716.62	\$1,805.89	\$1,914.24	\$2,009.95	\$2,170.75	\$2,279.29	\$2,370.46	\$2,488.98
Revenue	\$1,500.00	\$1,545.00	\$1,591.35	\$1,639.09	\$1,688.26	\$1,738.91	\$1,791.08	\$1,844.81	\$1,900.16	\$1,957.16	\$2,015.87
Gap	\$0.00	\$(15.00)	\$(43.53)	\$(77.53)	\$(117.63)	\$(175.33)	\$(218.88)	\$(325.94)	\$(379.13)	\$(413.30)	\$(473.11)