APPENDIX E

SUMMARY OF DALLAS-FORT WORTH REGIONAL CONGESTION MANAGEMENT PROCESS

Congestion management is an integral element of the region’s transportation planning and programming process. It serves as a guide for implementing both near-term and long-term regional transportation improvements. The Congestion Management Process (CMP) in the Dallas-Fort Worth Metropolitan Area was adopted by the Regional Transportation Council in April 2007.

The Regional Transportation Council and its technical committee, the Surface Transportation Technical Committee, have representatives from Dallas Area Rapid Transit, the Denton County Transportation Authority, the Fort Worth Transportation Authority, TxDOT Dallas District, TxDOT Fort Worth District, North Texas Tollway Authority, Dallas/Fort Worth International Airport, and local governments. Through the implementation of the CMP, transportation decision makers in the region continue to receive information on system performance, the evaluation of regional and corridor-specific projects and programs, and the effectiveness of implemented strategies.

On August 10, 2005, the President signed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) into law. This act approves funding for surface transportation projects and represents the largest surface transportation investment in the country to date. While SAFETEA-LU authorizes funding for many transportation funding categories and specific projects, it also continues the concepts identified in ISTEA and TEA-21 regarding the cooperative, continuing, and comprehensive regional planning process. SAFETEA-LU establishes requirements that MPOs must follow in the development of their congestion management process.

SAFETEA-LU establishes seven elements that must be considered in the CMP. It is important that the planning process is continuous, cooperative, and comprehensive. These elements are outlined in Exhibit 1, Congestion Management Process and Products.

As shown in the Exhibit 1 diagram, below, the CMP is fully integrated into the region’s transportation planning and programming processes. The diagram illustrates the seven components of the CMP and the role of the Metropolitan Transportation Plan, Transportation Improvement Program, Unified Planning Work Program, and the State of the Region report in this process.

The first process in the CMP, system identification, is obtained from the Metropolitan Transportation Plan. The MTP is the long range transportation plan for the Dallas-Fort Worth region. The State of the Region report, outlined in purple, is the outcome of the performance measures developed during the second process of the CMP. The third process is to monitor and evaluate performance. System performance is measured by the location and extent of congestion through the following criteria:

- Percent lane-miles congested
- Annual cost of congestion
- Passengers per vehicle
- Passengers per vehicle-mile
- Weekday vehicle miles of travel
- Daily vehicle traffic volume
- Freeway level of service
- Percent time spent in delay
The fourth process that is part of the CMP, strategy identification, identifies strategies that become part of the Unified Planning Work Program (outlined in red) and the MTP. The UPWP describes the transportation and air quality planning efforts in the North Central Texas region. The fifth and sixth processes, strategy selection and project implementation, are integrated into the Transportation Improvement Program and are outlined in green in the flow chart. The TIP is a staged, multiyear program of projects approved for funding by federal, State, and local sources within the Dallas-Fort Worth area. The final process in the CMP, project performance evaluation, provides an assessment of the mobility and air quality benefits of projects to better evaluate them in the future. Performance measures supporting the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies are documented in the MTP, CMP, and include:

- Reduction of daily vehicle trips
- Reduction of peak period vehicle trips
- Reduction of vehicle miles of travel
- Reduction of vehicle hours of travel
- Reduction in congestion delay
- Reduction in person hours of travel
- Increase in average speed
- Enhanced accessibility
- Reduction in traffic collisions

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Measurement of effectiveness studies are performed on selected projects after implementation. These before-and-after studies seek to quantify the benefits of various congestion mitigation and air quality projects, and provide decision-makers with valuable information for future project selection and development. To date, effectiveness studies have been undertaken to assess the bicycle, HOV, traffic signals, truck lanes, freeway bottleneck, and light rail projects. Future studies are planned as implementation of projects continues. The results of the project performance evaluation provides feedback into the identification of effective strategies in the MTP and the selection of strategies in the TIP.

During system planning, implementation responsibilities and potential funding are identified in the Metropolitan Transportation Plan. Implementation schedules and responsibilities, and funding sources are identified in corridor studies and the Transportation Improvement Program.