Rapid City Area Metropolitan Planning Organization

2020 UNIFIED PLANNING WORK PROGRAM



Prepared by the City of Rapid City, City of Box Elder, City of Summerset, City of Piedmont, Pennington County, Meade County, South Dakota Department of Transportation

> In cooperation with the U.S. Department of Transportation Federal Highway Administration Federal Transit Administration

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General Acronyms

ADA	Americans with Disabilities Act of 1990. Mandates changes in building codes, transportation, and hiring practices to prevent discrimination
	against persons with disabilities. This act affects all existing and new public places, conveyances, and employers. The significance of ADA in transportation will be most apparent in transit operations, capital improvements, and hiring practices.

- CAC Citizens' Advisory Committee of the Metropolitan Planning Organization
- CIP Capital Improvement Program
- **EPC** Executive Policy Committee of the Metropolitan Planning Organization
- **FAST Act** Fixing America's Surface Transportation Act
- **FHWA** Federal Highway Administration
- FTA Federal Transit Administration
- **GIS** Geographic Information Systems
- LRTP Long Range Transportation Plan
- MPO Metropolitan Planning Organization
- **MTP** Metropolitan Transportation Plan, formerly known as the Long Range Transportation Plan
- PL Metropolitan Planning Funds that have been set aside for transportation planning activities in Urbanized Areas. Funding is on an 81.95% 18.05% federal/local basis.
- **SDDOT** South Dakota Department of Transportation
- **SECTION 5307** Federal Program for capital improvements, i.e. terminals, shelters, mechanical equipment other than buses, computers, office equipment, etc. These funds, formerly known as Section 9 funds, have been available since FY 1984 through the Urban Mass Transportation Act of 1964 as amended by the Federal Transit Act of 1991. They provide resources for planning, capital and operating assistance. The match on planning and capital is 80% federal and 20% local; while the operating subsidy is 50% federal and 50% local.

- **SECTION 5310** These funds, formerly known as Section 16 funds, are available through the Urban Mass Transportation Act of 1964 as amended. This authorizes capital grants to non-profit organizations to assist in providing transportation for the elderly and the handicapped. FTA provides 80% of the costs for equipment, and the 20% match must come from other than federal funds.
- **SECTION 5339** A formula program that provides funding for capital projects to replace, rehabilitate, and purchase buses and bus-related equipment, and to construct bus-related facilities. This program was established under Moving Ahead for Progress in the 21st Century (MAP-21), replacing the previous Section 5309 discretionary program established under the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).
- TAZ Traffic Analysis Zone
- TCC Technical Coordinating Committee of the Metropolitan Planning Organization
- **TIP** Transportation Improvement Program
- **UPWP** Unified Planning Work Program

Introduction

The purpose of the Unified Planning Work Program (UPWP) is to describe the annual activities, planning studies, and products to be developed by the Metropolitan Planning Organization (MPO) over a one-year period. The UPWP identifies who will be involved with the work tasks and the anticipated product or outcome. The UPWP also identifies funding for these tasks which includes total programmed expenditures for each one. The MPO and its coordinating agencies work together to define work activities which will be performed over the year. The City of Rapid City oversees this work program in accordance with the agreements among the City of Rapid City, the City of Box Elder, the City of Summerset, the City of Piedmont, Pennington County and Meade County. The South Dakota Department of Transportation (SDDOT), Ellsworth Air Force Base, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) and the local school districts also participate in the development of the UPWP as members of the Technical Coordinating Committee.

Input from local entities is pursued during the development of the UPWP to ensure all transportation issues within the Rapid City MPO boundary are considered. A boundary map is included for reference. It is important to obtain input from the FHWA, FTA, the SDDOT, the City of Rapid City, the City of Box Elder, the City of Summerset, Pennington County, Meade County and Rapid Transit to ensure the work program covers all aspects of transportation.

Once the state allotments have been established by the FHWA and the FTA, the MPO funding allocation is developed by the SDDOT in conjunction with the South Dakota MPOs. The FHWA and FTA approve the allocation amount and a contract is entered between the MPOs and the SDDOT to conduct the work tasks found in the UPWP.

Metropolitan Planning Organization Structure

Effective transportation planning requires coordination and integration of all modes of travel. Good planning also involves input from the community to ensure common goals and community interests are addressed. The MPO process includes citizens, technical experts and elected officials in adopting planning documents. The organizational structure consists of the Citizens' Advisory Committee (CAC), the Technical Coordinating Committee (TCC), and the Executive Policy Committee (EPC). This structure allows input from all three groups for transportation decisions.

The CAC is composed of private citizens whose involvement concerning transportation issues provides valuable input into the planning process. This committee ensures that the public is included in the transportation planning process and that public interests are considered in regional transportation decisions. Membership of the CAC consists of nine voting members representing various sections of the Rapid City Area MPO community. The current membership of this committee is as follows:

Citizens' Advisory Committee Members					
Dave Kallemeyn, Rapid City	Bob Burns, Piedmont	Jen Red Bear, Underserved			
Matt Kammerer, Meade County	Luke Corwin, Bicycling	John Boylan, Meade County			
Kathy McDaniel, Bicycling	Vacant, Elderly	Dr. Bret Lingwall, Rapid City			
Wes Rick, Box Elder	Tom Raymond, Minority				

The TCC consists of planners, engineers, safety officials, airport officials, school officials and representatives from federal and state agencies who all provide technical review and guidance to the MPO. This group makes recommendations to the EPC concerning the adoption and approval of all transportation plans and programs such as the Long Range Transportation Plan, the Transportation Improvement Program, and various reports, studies and plans developed for the MPO. The current active membership of the TCC is as follows:

Technical Coordinating Committee Members			
Rapid City Community Development Department, Long Range Planning;			
Rapid City Public Works Department, Engineering Division;			
Rapid City Public Works Department, Traffic Engineer;			
Rapid City Public Works Department, Street Division;			
Rapid City Public Works Department, Project Engineer;			
Rapid City Public Works Department, Rapid Transit Manager;			
Rapid City Regional Airport Administration;			
Rapid City Police Department, Traffic Division;			
Rapid City Community Development Department, Current Planning;			
Rapid City School District;			
Pennington County Planning Department;			
Pennington County Drainage Coordinator;			
Pennington County Highway Department;			
Pennington County Sheriff's Office;			
Meade County Director of Equalization and Planning;			
Meade County Sheriff's Department;			
Meade County Highway Department;			
Meade County Transportation Committee;			
Meade School District 46-1;			
City of Box Elder Planning Department;			
City of Box Elder Public Works Department;			
City of Box Elder Police Department;			
City of Piedmont Mayor;			
City of Summerset Mayor;			
Douglas School District;			
Ellsworth Air Force Base;			
SDDOT, Division of Planning and Engineering;			
SDDOT, Office of Air, Rail and Transit;			
SDDOT, Division of Operations, Regional Engineer;			
*FHWA			

* Denotes non-voting membership

The EPC is the decision making body of the MPO and comprises locally elected officials, representatives from federal and state agencies, and other agencies interested in transportation planning for the region. The primary function of this group is to ensure federal guidelines are followed and that the development of the regional transportation system follows a coordinated, continuing, cooperative and comprehensive process. The current EPC membership includes the following:

* Denotes non-voting membership

The three committees operate under the Federal regulations established by the Fixing America's Surface Transportation Act (FAST Act). These regulations define the procedures and organization of the MPO process.

Federal Guidelines – FAST Act Considerations

Included with FAST Act are ten (10) factors required for consideration in the planning process. The UPWP includes work tasks to be accomplished over the fiscal year which will address these requirements. These ten (10) factors include:

The FAST Act Planning Factors include:

- 1. Support the economic vitality of the metropolitan area by enabling global competitiveness, productivity, and efficiency;
- 2. Increase the safety of the transportation system for motorized and non-motorized users;
- 3. Increase the security of the transportation system for motorized and non-motorized users;
- 4. Increase the accessibility and mobility of people and freight;
- 5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- 6. Enhance the integration and connectivity of the transportation system, across and between modes throughout the metropolitan region, for people and freight;
- 7. Promote efficient system management and operation;
- 8. Emphasize the preservation of the existing transportation system;
- 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts on surface transportation; and
- 10. Enhance travel and tourism.

Federal Fiscal Year 2020 Planning Emphasis Areas

FAST Act Implementation

Transition to Performance Based Planning and Programming. The development and implementation of a performance management approach to transportation planning and programming that supports the achievement of transportation system performance outcomes.

Models of Regional Planning Cooperation

Promote cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning. This is particularly important where more than one MPO or State serves an urbanized area or adjacent urbanized areas. This cooperation could occur through the metropolitan planning agreements that identify how the planning process and planning products will be coordinated, through the development of joint planning products, and/or by other locally determined means. Coordination across MPO and across State boundaries includes the coordination of transportation plans and programs, corridor studies, and projects across adjacent MPO and State boundaries. It also includes collaboration among State DOT(s), MPOs, and operators of public transportation on activities such as: data collection, data storage and analysis, analytical tools, and performance based planning.

Ladders of Opportunity

Access to essential services - as part of the transportation planning process, identify transportation connectivity gaps in access to essential services. Essential services include housing, employment, health care, schools/education, and recreation. This emphasis area could include MPO and State identification of performance measures and analytical methods to measure the transportation system's connectivity to essential services and the use of this information to identify gaps in transportation system connectivity that preclude access of the public, including traditionally underserved populations, to essential services. It could also involve the identification of solutions to address those gaps.

Funding

Each section of the UPWP indicates the entities responsible for participating in the transportation planning activities, or work activities, to be completed. FHWA Title 23 U.S.C. Section 104, subsection d(2) and FTA Title 49 U.S.C Section 5303 authorize grant funds to be appropriated for public transportation planning activities. SDDOT requested and received permission from FTA to transfer FTA planning funds to FHWA planning funds as part of the consolidated planning grant program. Planning (PL) funds budgeted in the UPWP are provided through an agreement between SDDOT and the City of Rapid City acting as the fiscal agent for the MPO. Funding amounts are based on the estimated 2016 allocation and distribution formula as agreed upon by the MPOs and SDDOT; and are matched by the entity utilizing the funds. The current matching ratios are as follows:

Federal planning (PL) funds:	81.95%
Local match:	18.05%

A comprehensive budget is contained at the back of this document. The budget sheet identifies individual tasks, programmed funds for each task and the funding source. All UPWP activities may allow contracts with outside parties upon receipt of approval of the SDDOT and the EPC.

As part of the budgeting process, there are times when Meade County and Pennington County initiate countywide transportation related studies. To ensure that those agencies can utilize PL funds for that portion within the Metropolitan Planning Area, the proportion that is eligible shall be determined by the percentage of County vehicle miles traveled (VMT), (the number of miles vehicles travel over a given time period), within the Metropolitan Planning Area, based on the most current data. Based on the 2018 data, 32% of a proposed Meade County transportation activity within the MPO is eligible for PL funding and 63% of a proposed Pennington County transportation planning related activity within the MPO is eligible for PL funding.

SD Road Miles – 2018 Data				
	VMT	%		
Meade				
Within MPO	12,235,820	32%		
Outside MPO	25,709,127	68%		
Total	37,944,947	100%		
Pennington				
Within MPO	53,057,203	63%		
Outside MPO	31,248,216	37%		
Total	84,305,419	100%		

An Annual Report, prepared within 90 days after the end of each calendar year, will contain the financial statements of the Rapid City MPO's UPWP. The report will include a summary of staff activities accomplished over the previous year.

2020 UPWP Work Activities

Personnel Services

These UPWP activities directly relate to a comprehensive, cooperative and continuing planning process emphasized within FAST Act, one that promotes, preserves and produces an efficient intermodal transportation system, supporting economic development while improving security and safety.

2020 Work Activities:

1. Staff will participate in the 2020 Rapid City Area MPO Transportation Planning Certification Process. The SDDOT will conduct a certification review with the MPO on an as-needed basis. The EPC will self-certify the local transportation planning

process. Environmental justice compliance will be addressed as part of the certification review.

- 2. Staff will coordinate the execution of the annual planning agreements among the SDDOT, City of Rapid City, City of Box Elder, City of Summerset, City of Piedmont, Meade County and Pennington County.
- 3. Staff will coordinate and develop the 2020 Rapid City Area MPO UPWP. The cost of staff time, public notices, and printing costs will be included in this activity.
- 4. Staff will coordinate with the SDDOT to consolidate all consultant contracts and unobligated funding into the current UPWP.
- 5. Staff will prepare yearly demographic profiles based on best available information (2010 US Census Bureau and local building permit data) to enhance the environmental justice requirements.
- 6. Staff will continue updating and revising MPO planning documents as needed including, but not limited to, the Participation Plan, the Operations Plan, the Bikeway/Walkway Plan, the Coordinated Public Transit Human Services Transportation Plan, the Functional Classification Map, the Transportation Improvement Program, including amendments, and the Metropolitan Transportation Plan.
- 7. Staff will maintain the MPO's accounting and vouchering system, whereby participants in the local transportation planning process are reimbursed for eligible transportation planning work activities.
- 8. Staff will monitor work activities outlined in the 2020 UPWP and submit vouchers either monthly or quarterly for reimbursement of eligible transportation planning work activities.
- 9. Staff will monitor the implementation of grant activities and present UPWP budget amendments as necessary.
- 10. Staff will attend committee meetings, transportation planning meetings, and public meetings throughout the planning year. Staff will discuss and distribute information regarding the transportation planning process and transportation improvements.
- 11. Staff will continue to participate in regular meetings with non-profit transportation providers to assist with the development, implementation and monitoring of the Coordinated Public Transit-Human Services Transportation Plan.
- 12. Staff will undertake supporting activities of the MPO committees and the planning process including, but not limited to, coordinating and staffing meetings, open houses and public hearings, developing committee agendas and taking meeting minutes, assembling and distributing meeting packets, posting and publishing public

notices, developing reports and documents, managing committee membership, maintaining the Transportation Planning website, and distributing information.

- 13. Staff will attend/participate in various training courses, conferences, seminars, workshops and other activities related to professional development. The cost of training, travel and lodging, including staff time will be included in this activity. Instate and out-of-state travel must be approved by the SDDOT via written travel request and justification in advance of the event. E-mail correspondence is an acceptable form of transmittal.
- 14. Staff will participate in FHWA, FTA, and/or SDDOT training opportunities and events which pertain to the operations and planning process of the Rapid City Area MPO.
- 15. Staff, when requested, will assist member agencies of the MPO with the development of their Comprehensive Plans. Assistance provided under the UPWP will be limited to land use assessments, street plan updates, tasks associated with the development of the travel demand model and the preparation of GIS generated maps.
- 16. Staff will assist communities within the MPO in the preparation of GIS maps for land use data on an as-needed basis.
- 17. Staff will develop, monitor and maintain the GIS database and TAZ data for the MPO area.
- 18. Staff will participate in agency professional memberships and subscriptions related to transportation planning.
- 19. Staff will review USDOT regulations, guidance, and circulars, and review best practices information, from other sources, to ensure compliance with regulations.
- 20. Staff will maintain inventories of transportation information required for transportation planning. Specific inventories include traffic counts and turning movement counts. New data will be gathered and existing inventories will be updated and shall be available for MPO functions.
- 21. MPO member agencies may maintain inventories of data necessary for transportation planning. Inventories may include traffic counts, turning movement counts and crash statistics. This data will be collected and updated for MPO use.
- 22. Traffic information, inventories and data gathering efforts will be coordinated with staff and transportation specialists from the SDDOT.
- 23. Staff will cooperate with SDDOT efforts to expand the Global Positioning System (GPS) control for South Dakota. As GPS data becomes available, it will continue to be used to establish accurate GIS position data.

- 24. Staff will maintain and update geographic information systems base inventory maps of the natural and man-made resources, features, and environmentally sensitive areas that could be adversely affected by changes in the region's transportation system. GIS staff will continue to expand the use of coordinate geometry to input plat information.
- 25. Staff will continue to add land use and socio-economic data to the GIS database.
- 26. City and County staff will review proposed land use changes and developmental proposals to determine their anticipated effects on the existing and future transportation system.
- 27. Staff will update socio-economic data, prepare socio-economic forecasts, and prepare the residential land use reports.
- 28. Staff will collect data needed to conduct transportation planning tasks identified in the UPWP.
- 29. Staff will conduct public involvement activities as identified in the Participation Plan.
- 30. Staff will maintain the travel demand forecasting model and use the updated model to review transportation decisions.
- 31. Staff will analyze impacts related to land use and transportation system coordination on a corridor/study area basis.
- 32. Staff will prepare the public transportation portion of the CIP and the 2021-2024 TIP. The TIP shall include the four-year plan for proposed capital and operating expenditures for public transportation and will identify potential funding sources. The TIP will be developed, adopted, and distributed in compliance with all federal, state, and local requirements. The TIP shall include all transportation improvements planned by the member agencies within the Rapid City Metropolitan Planning Area for 2021-2024, including both federal and non-federal funded projects.
- 33. Staff will evaluate all transportation improvement projects for consistency with the MTP. All transportation improvement projects will be reviewed for their impacts on intermodal facilities and routes within the urbanized area and the region and for consistency with the MTP.
- 34. Staff will account for life-cycle costs when comparing project estimates with projected financial resources.
- 35. Staff will continue the collecting and entering data into the pavement management system. The Rapid City Engineering Services Division staff will take the lead on collecting, entering and maintaining the pavement management system.
- 36. Staff will continue to analyze crash statistics city-wide. A critical rate analysis method to identify high crash locations and program safety improvements is employed by

the Rapid City Engineering Services Division. This process will be continued and the Crash Statistics and Analysis Report will be produced.

- 37. Staff will evaluate potential and existing safety issues for pedestrians and vehicles.
- 38. Staff will evaluate and monitor the transit system's operational characteristics in order to identify necessary changes. Staff will identify short-range improvements to the public transportation system and will continue to analyze the feasibility of various transit and paratransit service options.
- 39. Staff will coordinate with agencies with an interest in the areas of land use management, environmental resources, environmental protection, conservation, and historic preservation.
- 40. Staff will provide for consideration and implementation of projects, strategies, and services to increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized and non-motorized users.
- 41. A year-end summary of work and financial activities will be provided to the SDDOT via the Annual Report.
- 42. Staff will prepare an annual listing of obligated projects in accordance with the FAST Act.
- 43. Staff may participate in activities associated with the transportation planning process which are not described in this UPWP only with prior agreement of the SDDOT. These activities will need to meet the comprehensive, cooperative, and continuing transportation planning process.
- 44. Staff will undertake the required activities necessary to administer, manage and complete the projects and studies identified in the 2019 Work Activities under Professional Services/Consultants contained herein.
- 45. Staff will implement the MTP.
- 46. Staff will verify that the public transportation implications of the Americans with Disabilities Act (ADA) are being pursued through the ADA Transition Plan. The Transition Plan will also include transit stops.
- 47. Staff will implement all requirements of the FAST Act.
- 48. Staff will work with the MPO agencies to continue the transition into Performance Based Planning and Programming.
- 49. Staff will work with the MPO agencies to promote cooperation and coordination across MPO boundaries and across State boundaries where appropriate to ensure a regional approach to transportation planning.

- 50. Staff will work with the MPO agencies to implement Ladders of Opportunity in order to access essential services as part of the transportation planning process, identify transportation connectivity gaps in access to essential services.
- 51. Staff will continue monitoring and updating the critical data components related to the following: TAZ update, travel demand modeling, network development, model validation, development of socio-economic data and development and update of inputs into the travel demand model.
- 52. Staff will conduct and coordinate the development and approval of transportationrelated comprehensive planning, to include land use and major street plans for developing areas within the Metropolitan Planning Area.
- 53. Staff may complete other transit-related planning activities and special studies as approved by the transportation planning committees.
- 54. Staff will review applications for Section 5310 Transit Funding and make recommendations regarding the awarding of grant funds to the SDDOT Office of Air, Rail and Transit.

Professional Services/Consultants

These activities address both identified and unanticipated problems and needs that occur during the course of the work program year. Contractual services with consultants or other professionals to conduct studies and other UPWP activities shall be identified by a corresponding program year.

2020 Work Activities:

- 1. Staff will complete preliminary work on Request for Proposals and other necessary documentation. Request for Proposals will be distributed, consultant selection procedures will be followed, and contracts will be prepared and executed. Staff will be responsible for contract preparation, contract execution, and project management.
- 2. Staff will request approval from the MPO committees of the implementation of special studies as identified in the UPWP. Work under this task may include coordination of meetings, budget preparation, and special analysis.
- 3. Staff will undertake required activities necessary to administer, manage and complete the following projects and studies to the extent of budgeted funding:
 - a. Complete the Meade County corridor study between Erickson Ranch Road and 143rd Avenue
 - b. Complete the North Elk Vale Road Corridor Study

- c. Complete the SD44/Omaha and 6th Street Pedestrian Crossing Study.
- d. Complete the Metropolitan Transportation Plan (previously referred to as the Long Range Transportation Plan)
- e. Complete an update to the Metropolitan Transportation Plan Travel Demand Forecast Model
- f. Complete an update to the Bicycle and Pedestrian Master Plan
- g. Complete the I-90 Exit 63 Interchange Study
- h. Complete an update to the Transit Development Plan

Capital Resources

These activities include the capital investments necessary to carry out the transportation planning process.

- 1. The following will be acquired, as needed, to support the transportation planning process: computer hardware, software (including the Travel Demand Model software and all software upgrades) and peripheral devices; printing and plotting devices; recording equipment; traffic counters; public notices; reference materials; and commercial printing and printing supplies.*
- 2. Acquire aerial photography and building footprint data for the Metropolitan Planning Area.

*Note: All capital purchases will be reviewed by SDDOT prior to acquisition. A letter (or e-mail) of justification for the requested purchase and the cost of the requested purchase must be submitted to SDDOT. A minimum of three quotes must be provided if the requested item is not going to be purchased in accordance with the State Purchasing Contract. FHWA approval is required for any item over \$5,000.

	City of Box Elder	City of Rapid City	Pennington County	Meade County	SDDOT	Total
Personnel Services		\$457,232				\$457,232
Professional Services/ Consultants		\$189,000			\$930,000	\$1,119,000
Capital Resources		\$5,000				\$5,000
Total Cost		\$651,232			\$930,000	\$1,581,232
Federal Amount 81.95%		\$533,685			\$762,135	\$1,295,820
Local Match 18.05%		\$117,547				\$117,547
SDDOT Local Match 18.05%					\$167,865	\$167,865
Total Cost		\$651,232			\$930,000	\$1,581,232

2020 UPWP BUDGET

