

Amendment A

**Rapid City Area
2030 Long Range
Transportation Plan**

TABLE OF CONTENTS

Introduction	1
Coordinated Public Transit – Human Services Transportation Plan	2
New Consultations	2
Transportation System Security	3
Participation Plan	5
Environmental	6
Conclusion	14

INTRODUCTION

The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) transportation funding authorization bill was signed into law in August of 2005. This federal legislation provides funding for transportation improvements for six years and details what all levels of government must achieve in their transportation planning processes. ISTEA and TEA-21, predecessors to SAFETEA-LU, affirmed the tenets established for transportation planning at the regional level in the 1960s. Metropolitan Planning Organizations (MPOs) such as the Rapid City Area Metropolitan Planning Organization have maintained compliance with these mandates by completing documents such as the Long Range Transportation Plan, Transportation Improvement Program, Unified Planning Work Program, and the Participation Plan. With every reauthorization bill, however, new rules and practices are promoted which require Metropolitan Planning Organizations and other government agencies to review their existing documents and make changes that renew compliance.

The purpose of this document is to amend the *Rapid City Area 2030 Long Range Transportation Plan* which was approved in September of 2005. The Rapid City Area Metropolitan Planning Organization creates the Long Range Transportation Plan document on a five-year cycle, with the next one being due in 2010. To be in compliance with SAFETEA-LU, however, some aspects of the Long Range Transportation Plan must be revisited and revised by July 1, 2007. The 2030 Long Range Transportation Plan as it was approved in 2005 will remain the principal long range transportation planning document for the Rapid City Area Metropolitan Planning Organization; this document is intended to serve as an amendment to the 2030 Long Range Transportation Plan rather than act as a replacement for it. The Rapid City Area Metropolitan Planning Organization staff researched the SAFETEA-LU legislation and related documents distributed by agencies such as the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) to determine which elements are insufficiently covered in the 2030 Long Range Transportation Plan according to the new regulations. A gap analysis was prepared and identified five topics that require further elaboration:

- Coordinated Public Transit – Human Services Transportation Plan
- New Consultation
- Transportation System Security
- Participation Plan
- Environmental

This update will devote one section to each of these five topics.

COORDINATED PUBLIC TRANSIT-HUMAN SERVICES TRANSPORTATION PLAN

As a condition for receiving formula funding under the following 3 FTA programs, proposed projects must be derived from a locally developed public transit-human services transportation plan: (1) Special Needs of Elderly Individuals and Individuals with Disabilities [49 U.S.C. 5310(d)(2)(B)(i) and (ii)]; (2) Job Access and Reverse Commute [49 U.S.C. 5316(g)(3)(A) and (B)]; and (3) New Freedom [49 U.S.C. 5317(f)(3)(A) and (B)].

The Rapid City Area Metropolitan Planning Organization's staff is working with all public transit-human services providers that provide services within the boundaries of the Metropolitan Planning Organization's area to develop a Coordinated Public Transit-Human Services Plan. Meetings with the providers have been held in July and August and an additional meeting will be held in September to develop the plan. A draft plan will be presented to the public and the Metropolitan Planning Organization committees in September with the final plan anticipated to be approved by the Metropolitan Planning Organization in November.

NEW CONSULTATIONS

450.322(g) The Metropolitan Planning Organization shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan.

The Rapid City Area Metropolitan Planning Organization's Participation list has been expanded to include agencies with an interest in the areas of land use management, environmental resources, environmental protection, conservation, and historic preservation. As a result the list now includes nearly 200 agencies and individuals. Contacts are notified and given the opportunity to comment on any transportation program that requires action by the Rapid City Area Metropolitan Planning Organization Executive Policy Committee such as the Long Range Transportation Plan and the Transportation Improvement Program.

When developing the Rapid City Area 2030 Long Range Transportation Plan, Rapid City Area Metropolitan Planning Organization staff met with the majority of local jurisdictions in the Region to discuss and identify areas where development and redevelopment is likely to occur. Consistency with land-use plans and economic development impact is a consideration during project selection

In May 2007, Metropolitan Planning Organization staff sent a copy of the Long Range Transportation Plan to the following resource agencies for their review and information. On June 12, 2007, staff met with the resource agencies to discuss any potential impacts or issues that may be caused by the development of the transportation plan. Due to the planning level of detail available on the projects in the Long Range Transportation Plan, the resource agencies were not

able to provide comments on specific projects. The US Fish & Wildlife Service did provide some avoidance/minimization/mitigation recommendations that have been included in the environmental section of this report. Metropolitan Planning Organization staff will continue to communicate with the resource agencies to ensure compliance with SAFETEA-LU.

- South Dakota State Historic Preservation Office
- US Fish & Wildlife Service
- Department of Game, Fish and Parks
- Department of Environment and Natural Resources
- Corps of Engineers

Since a portion of the Black Hills National Forest is within the boundaries of the Rapid City Area Metropolitan Planning Organization, staff contacted and sent a copy of the Long Range Transportation Plan and the Transportation Improvement Program to the USDA Forest Service in June 2007. At this time there are no proposed projects in the Long Range Transportation Plan that impact the Black Hills National Forest, but Metropolitan Planning Organization staff will continue to communicate with the USDA Forest Service.

TRANSPORTATION SYSTEM SECURITY

450.306 (a) (3) Increase the security of the transportation system for motorized and non-motorized users.

450.306 (h) The metropolitan transportation planning process should be consistent with the Strategic Highway Safety Plan, as specified in 23 U.S.C. 148, and other transit safety and security planning and review processes, plans, and programs, as appropriate.

The Rapid City Area 2030 Long Range Transportation Plan is consistent with the South Dakota Strategic Highway Safety Plan. The goals listed in the South Dakota Strategic Highway Safety Plan are to reduce the fatality rate, reduce the number of fatalities and reduce the number of crashes. This is consistent with the objective in Goal I of the Rapid City Area 2030 Long Range Transportation Plan to reduce accidents, injuries and fatalities.

SAFETEA-LU states that the metropolitan transportation planning process shall 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. As stipulated by SAFETEA-LU, Rapid City Area Metropolitan Planning Organization is required to consider transportation security as a stand alone planning factor that must be incorporated into the metropolitan planning process. The Rapid City Area Metropolitan Planning Organization is taking steps to incorporate security into the transportation planning process by making a change

in the Long Range Transportation Plan Goals to reflect the importance of security in the planning process. Goal 1 of the Long Range Transportation Plan shall be revised as follows:

To develop and maintain a transportation system that will be coordinated with land use patterns and will incorporate all available modes of transportation into a safe, **secure**, efficient and effective system of moving goods and people within and through the community.

- Increase the ability of the transportation system to support homeland security and to safeguard the personal security of motorized and non-motorized users
- Develop active coordination and effective working relationships for safety and security improvements and solutions among the Metropolitan Planning Organization, agency partners at the federal, state and local levels, private sector and general public.

While security is currently not addressed as a stand-alone element in the 2030 LRTP, the following plans, programs and coordination mechanisms of the Metropolitan Planning Organization and its community planning partners are supportive of the SAFETEA-LU security requirements:

ITS Master Plan for integration strategies

The countywide ITS Architecture and Concept of Transportation Operations strengthens the application of operational and management strategies by increasing the compatibility of systems for inter-agency and intermodal operations and management. For emergency evacuation routes, dynamic message signs (ITS), and Highway Advisory Radio are used to transmit information in emergencies.

Pennington County Emergency Operations Plan

The Rapid City-Pennington County Emergency Management Office operates under a Joint Rapid City-Pennington County Agreement. The Multi-Hazard Emergency Operations Plan is written as guidance for emergency/disaster operations in Rapid City, Wall, New Underwood, Box Elder, Hill City, Keystone, and the remainder of Pennington County.

Pennington County has a history of disasters, such as forest fires, structural fires, flash floods, tornadoes, blizzards and drought. These disasters have caused millions of dollars in property damage and the loss of several hundred lives. Pennington County is also vulnerable to many types of technological disasters. The transportation systems in the County (highways, air, pipelines, utilities, and rail) could have serious emergencies escalate into major

disasters if improperly handled. Hazardous materials (HazMat) spills, terrorist activities, military accidents, or dam failure may also cause emergencies.

The Multi-Hazard Emergency Operations Plan is on file in the Emergency Management Office at the Pennington County Courthouse.

Meade County Emergency Operations Plan

The Meade County Office of Emergency Management advocates an all hazards approach to security in their Emergency Operation Plan. The Basic Plan establishes a framework within which department directors, emergency response personnel and external entities can work together to develop and maintain a coordinated response and effective use of resources during a major emergency or disaster event. A copy of the Meade County Emergency Management Plan is on file with the Emergency Management Office at the Meade County Courthouse.

PARTICIPATION PLAN

450.316 (a) The Metropolitan Planning Organization shall develop and use a documented participation plan that defines a process for providing citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation,.....with reasonable opportunities to be involved in the metropolitan transportation planning process.

The Rapid City Area Metropolitan Planning Organization is in the process of updating its Participation Plan. It is anticipated that the updated plan will be adopted by the Metropolitan Planning Organization Board on August 16, 2007 and will be fully compliant with SAFETEA-LU. The policy's key items include an expanded public participation notification list, use of technology to enhance communication with the public (website applications), and efforts to reach environmental justice populations.

The complete draft Participation Plan is available on the Rapid City Area Metropolitan Planning Organization's website at <http://www.rcgov.org/planning/transportation/mpodocs.htm>. Letters were sent to our expanded public participation notification list on May 25, 2007 inviting them to attend the June 14, 2007 Metropolitan Planning Organization Executive Policy Committee Meeting to provide any comments they may have on the draft Participation Plan. A short survey was also sent with the letter to try to determine the most effective way to keep the public informed on ongoing transportation projects in the Metropolitan Planning Organization. An additional public meeting was held on July 17, 2007. All comments provided were addressed and the final Participation Plan is anticipated to be approved at the August 16, 2007 Metropolitan Planning Organization meeting.

ENVIRONMENTAL

450.322 (f) (7): Plan shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the Long Range Transportation Plan. Discussion may focus on policies, programs, or strategies. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies.

Process Overview

Identification of possible projects with impacts to environmental resources began with identifying all Long Range Transportation Plan projects (from Rapid City Area Metropolitan Planning Organization's current 2030 Long Range Transportation Plan). A separate map was created historic, wetlands, rivers and streams and parklands. It is important to note here that this evaluation represents a rather broad level of analysis based on a brief description of each project in the Long Range Transportation Plan. Exact alignments and other details are not determined for projects at this stage; as a result, it is not possible to determine detailed project-specific impacts. It is the Rapid City Area Metropolitan Planning Organization's policy that all federally funded projects comply with applicable environmental statutes as a condition to receiving funding.

In May 2007, Metropolitan Planning Organization staff sent a copy of the Long Range Transportation Plan to the following resource agencies for their review and information. On June 12, 2007, staff met with the resource agencies to discuss any potential impacts or issues that may be caused by the development of the transportation plan. Metropolitan Planning Organization staff will continue to communicate with the resource agencies to ensure compliance with SAFETEA-LU

- South Dakota State Historic Preservation Office
- US Fish & Wildlife Service
- Department of Game, Fish and Parks
- Department of Environment and Natural Resources
- Corps of Engineers

The resource agencies have also been added to Rapid City Area Metropolitan Planning Organization's public participation list and will receive notice of any updates to planning documents.

Wetlands, Rivers and Streams

The South Dakota Department of Transportation requires avoidance of all wetland impacts or, where avoidance is not practicable, minimization to the greatest extent practicable. Special emphasis is placed on avoiding impacts to

high-quality wetlands; including those wetlands with known or potential endanger species support functions. When the objectives of a transportation project cannot be met without adverse impacts to wetlands, wetland mitigation involves the preparation of a wetland mitigation plan detailing how lost wetland functions will be compensated. Subsequently, wetland mitigation plans are submitted to one or more regulatory agencies, typically the US Corps of Engineers, Omaha District, USFWS Pierre Ecological Field Services Office, SD Game, Fish & Parks, and SD Department of Environment and Natural Resources, for their review and permit approval. Even when the impacts are so small as to fall below regulatory thresholds, the department follows a "no-net-loss" directive requiring compensatory mitigation for any wetland loss. Figure 1 shows an overlay of the wetlands, rivers and streams and the Rapid City Area Metropolitan Planning Organization's long range transportation projects.

Possible Mitigation Activities

- Avoid transportation improvements that cross or otherwise affect wetlands
- Take steps to minimize harm and compensate for impacts
- Retain open spaces, vegetated natural buffers, and riparian areas around wetlands
- Reduce and/or prevent highway stormwater runoff from entering wetlands
- Employ low-impact development and construction activities.

Possible Mitigation Activities for project that may impact a known fishery

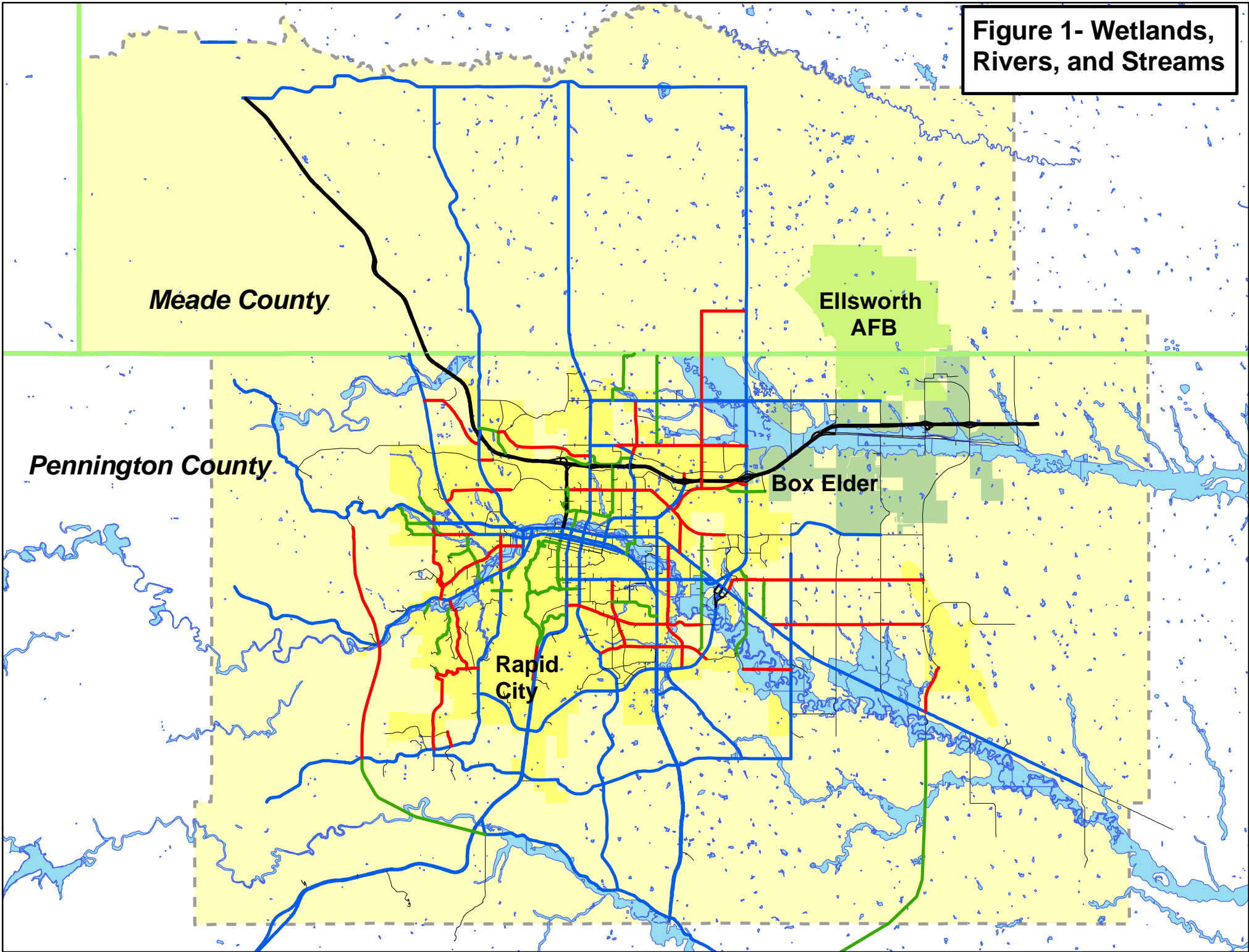
- Instream work should not be undertaken during fish spawning periods.
- Stream bottoms and wetlands impacted by construction activities should be restored to pre-project elevations.
- Removal of vegetation and soil should be accomplished in a manner to reduce soil erosion and to disturb as little vegetation as possible.
- Grading operations and reseedling of native species should begin immediately following construction.
- If trees or brush will be impacted by the project, a ratio of at least 2:1 planted vs. impacted should be incorporated into mitigation plans for the project."

Threatened and Endangered Species/Fish and Wildlife

Endangered Species Act

Section 7(a) of the Endangered Species Act (ESA) of 1973 as amended requires Federal agencies to evaluate the impact of their actions on threatened or endangered species, and ensure such actions are "not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of (its) habitat". Furthermore, actions resulting in the "take" of an endangered species are required to minimize the impact of that take thru the implementation of

Figure 1- Wetlands, Rivers, and Streams



reasonable and prudent measures. Because many transportation projects are partially funded by the Federal Highway Administration (FHWA) and require the obtainment of a federal 404 permit for dredge and fill activities within waterways of the United States, compliance with Section of the ESA is required. Programmatic Biological Opinion was issued to the FHWA and SDDOT by the United State Fish and Wildlife Service in 2004. This document provides guidance for the construction activities impacting endangered species, also mandatory Terms and Conditions are given which are to be implemented at stream crossing projects impacting the Topeka shiner.

The Endangered Species found in South Dakota are the Topeka shiner, the bald eagle and the American burying beetle. The Topeka shiner and the American burying beetle are not found within the Rapid City Area Metropolitan Planning Organization. Bald eagles are in Meade County; however there are no known nests within the Metropolitan Planning Organization Area.

Possible Mitigation Activities

- Avoid new construction in and around these areas
- Take steps to minimize harm and compensate for impacts
- Provide proper maintenance of wildlife fencing
- Keep the roadway free of trash
- Use minimal amounts of deicing agents (salts)
- Alert drivers to possible presence of wildlife
- Provide buffer strips along streams and rivers
- Maintain natural lighting to the extent possible along the roadway
- Under road passages

Historic, Cultural or Archaeological Resources

Consultation with various entities, including the Federal Highway Administration, the State Historic Preservation Office, the Advisory Council on Historic Preservation, City Historic Preservation Offices, local public officials, local organizations, and the public, is required during the project development process. Figure 2 shows an overlay of the historic districts and the Rapid City Area Metropolitan Planning Organization's long range transportation projects. As more information is received from the resource agencies this map will be updated.

Possible Mitigation Activities

- Avoid new construction around these areas
- Take steps to minimize harm and compensate for impacts
- Develop Memorandum of Agreement with State Historic Preservation Office and possibly Advisory Council on Historic Preservation documenting steps to be taken to minimize harm and compensate for impacts
- Include buffers and/or berms in project plans
- Conduct archeological surveys if unable to avoid the area

Figure 2- Historic Districts, Properties, and Structures

Inset Legend

- Historic Structures
- Historic Properties
- Historic District Boundary

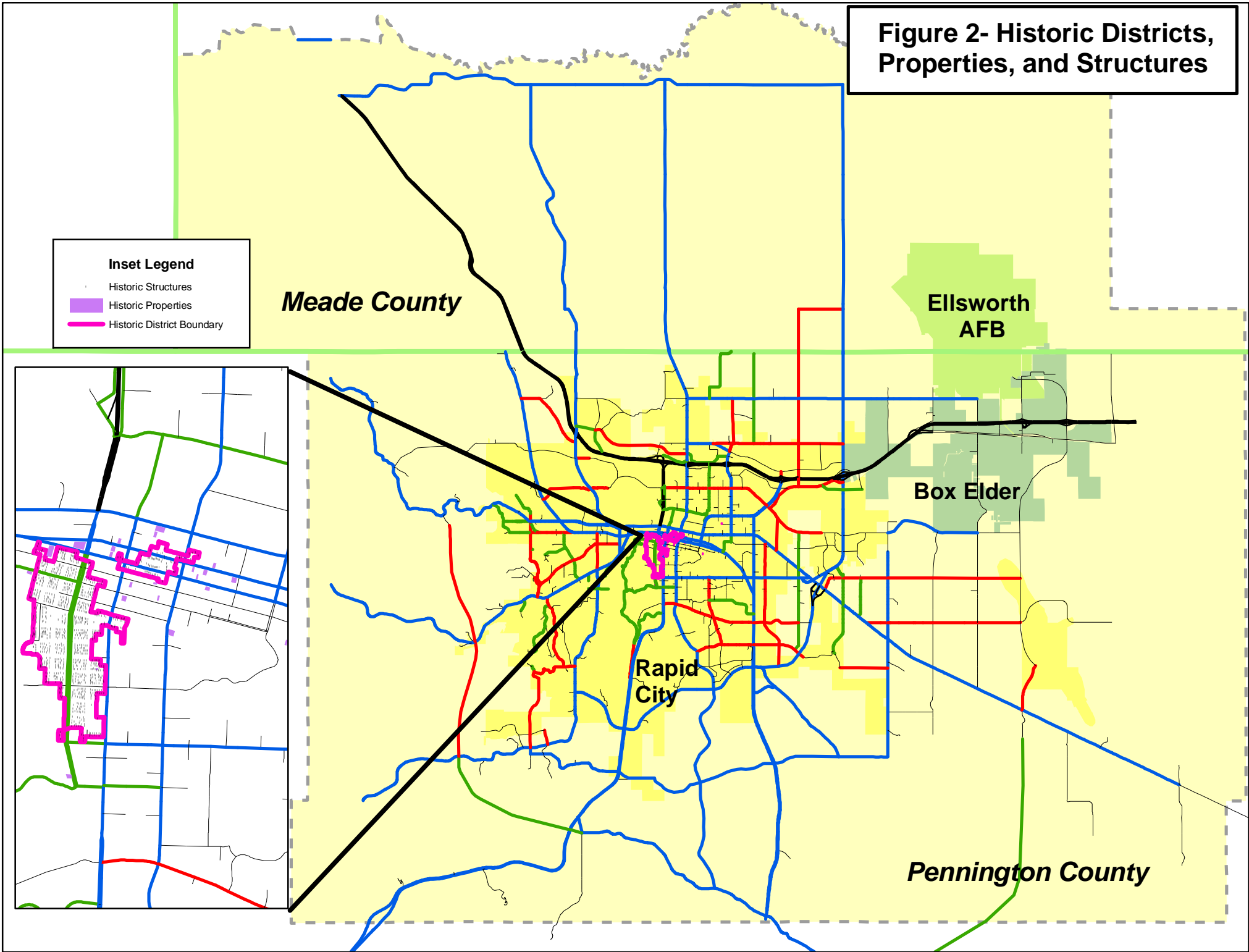
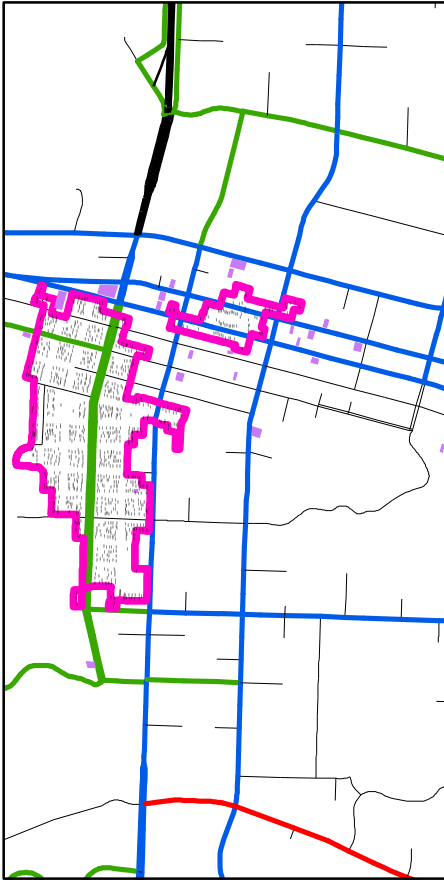
Meade County

Ellsworth AFB

Box Elder

Rapid City

Pennington County



Parklands

Section 4(f) of the Department of Transportation Act requires that special effort be made to preserve public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) specifies that federally-funded transportation projects requiring the use of land from a public park, recreation area, wildlife and waterfowl refuge or land of significant historic site can only occur if there is no feasible and prudent alternative. Using Section 4(f) land requires all possible planning to minimize harm.

Often times, transportation officials are aware of and account for Section 4(f) resources that are important for preservation and community cohesion. Other resources may not be as well known but are afforded the same protection under Section 4(f). Long range planning should account for well known Section 4(f) resources throughout the area that would pose a significant loss if impacted. It is however, premature to analyze individual projects' Section 4(f) impacts this early in the process.

Figure 3 shows an overlay of the parks and the Rapid City Area Metropolitan Planning Organization's long range transportation projects.

Possible Mitigation Measures

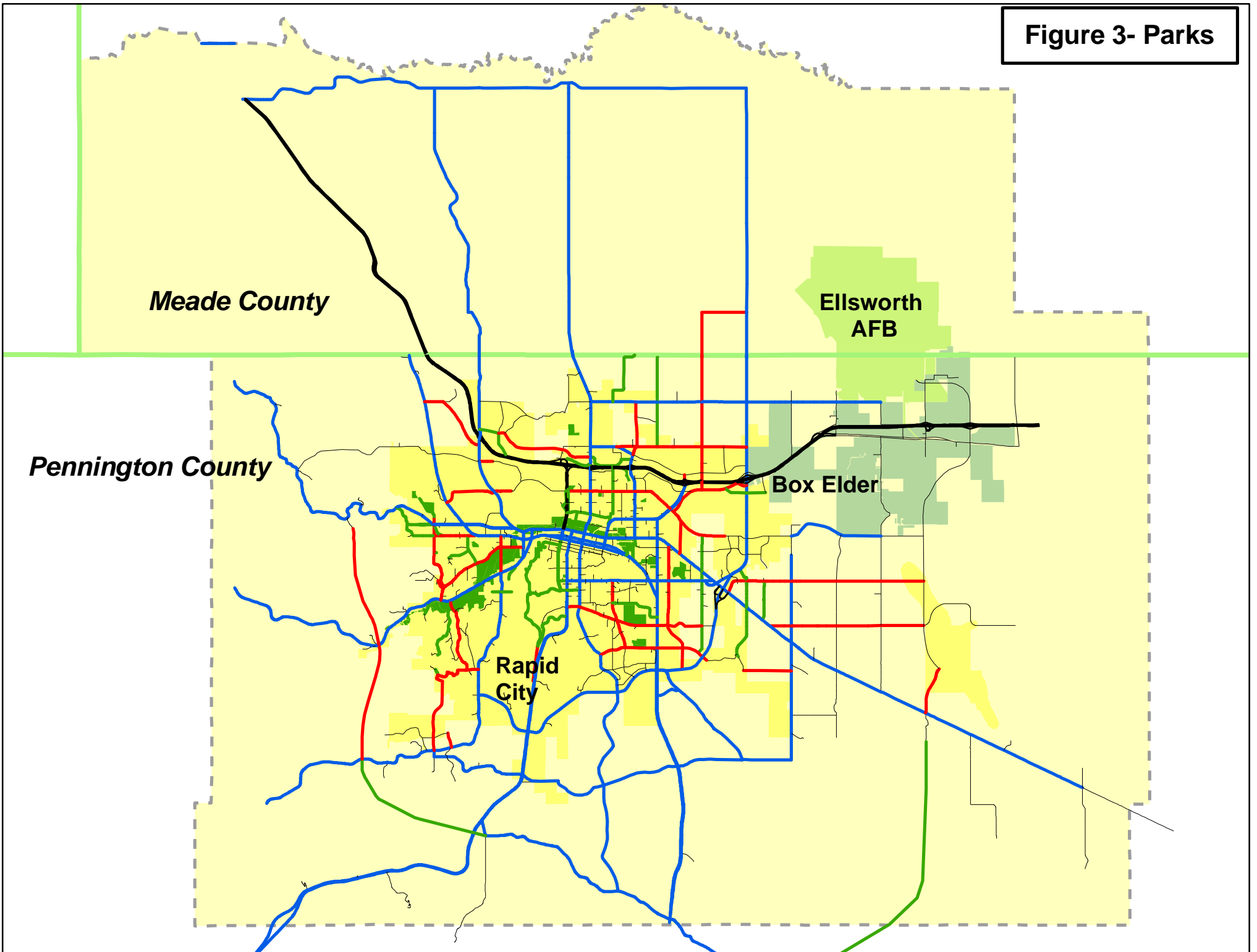
- Avoid new construction around these areas
- Take steps to minimize harm and compensate for impacts
- Provide enhancements to the properties including possible enhancements to the pedestrian/bicycle networks around these areas
- Reduce vehicle speeds and volumes near parks and recreational areas
- Replace park/open space acreage taken

Hazardous Materials

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed in 1980. It established national policy and procedures for identifying and cleaning up sites that are found to be contaminated with hazardous substances. CERCLA was amended and expanded by the Superfund Amendments and Reauthorization Act (SARA) of 1986. CERCLA established a hazard ranking system. Sites with the highest ranking have been placed on the National Priorities List (NPL) and are eligible for money from the substantial fund established for the environmental cleanup under CERCLA.

The National Priorities List (NPL) is the list of hazardous waste sites eligible for long-term remedial action financed under the federal Superfund program. Environmental Protection Agency (EPA) regulations outline a formal process for assessing hazardous waste sites and placing them on the NPL. At non-NPL sites, EPA can also take shorter-term cleanup actions under the emergency removal program.

Figure 3- Parks



CERCLA is important to the highway planning process primarily in the acquisition of right-of-way. Accepting financial liability for contaminated property may adversely affect the economic analysis of the project and therefore its financial feasibility. In addition, if significant cleanup must take place before highway construction can begin, substantial delays to the project can be anticipated. Careful evaluation of the nature and extent of the contamination as well as the cleanup alternatives, costs, schedule, and ongoing liability is warranted on all

Ellsworth Air Force Base in Meade County is the only site in the Rapid City Area Metropolitan Planning Organization on the NPL. Construction of cleanup systems is complete and the systems are being monitored.

Ellsworth Air Force Base, Meade County

Stage of Clean-up: **Construction Complete**

The Air Force installed cleanup systems to address possible future health risks. Construction of cleanup systems is complete at all contaminated areas. The cleanup includes ground-water pump-and-treat systems, bio-dechlorination, landfill covers, soil treatment systems, excavation activities and natural attenuation (lessening). The systems are functioning properly.

Ground-water contamination has impacted the drinking water wells of some homes adjacent to the east and south of EAFB. The Air Force has provided potable water to these homes via water main extensions from the EAFB water-supply system. Eventually, the mains will be transferred to the City of Box Elder for operation and maintenance.

The Air Force capped landfills and has enforced institutional controls to prevent unauthorized access to those landfills and to prevent the caps from being disturbed.

Contaminated ground water is pumped out of the ground and cleaned up to drinking water standards. The treated water is then either discharged to a local drainage, to EAFB wastewater treatment plant, or re-injected into the aquifer. A contaminated ground-water plume extends offsite to the east. However, the plume has been stopped at the site boundary and a gap in the plume is now evident. Natural attenuation of the remaining contamination will continue to be monitored.

These ground-water cleanup systems will be in operation for 20 to 30 years to complete the cleanup. However, treatability studies are being implemented to enhance and possibly replace current pump and treatment technologies. The relatively low levels of contamination in off-Base areas are expected to lessen within the same time frame.

Cleanup of the entire EAFB, including 20 years of ground-water treatment, is expected to cost approximately \$30 million. All cleanup activities are being

performed by the Air Force. EPA and the State of South Dakota provide regulatory oversight.

Five-Year Review

In September 2005, the Air Force conducted a five-year review of all remedies constructed on EAFB. EPA and the State of South Dakota reviewed and commented on the results. The primary recommendations from the 2005 five-year review are: 1) Consolidate all groundwater management into one Operable Unit, OU11, base-wide groundwater, 2) Continue pursuit of alternative clean-up technologies for groundwater, and 3) Pursue partial deletion of portions of the base from the National Priorities List (NPL). All three actions are underway or completed.

All existing remedial systems require monitoring and sometimes minor modifications. The EAFB Environmental Flight staff continues to conduct these efforts and ensure that the remedies remain protective of human health and the environment.

CONCLUSION

The approval of this amendment to the Rapid City Area 2030 Long Range Transportation Plan will bring the Rapid City Area 2030 Long Range Transportation Plan into SAFETEA-LU compliance until the Rapid City Area 2035 Long Range Transportation Plan is completed in 2010. Each of the issues addressed above will be fully incorporated and addressed in more detail in the Rapid City Area 2035 Long Range Transportation Plan.