


## GOALS

## Safety

Connectivity

Trucks

System Preservation

Intergovernmental
Coordination

## Aviation

Public Transportation

## CORRIDOR CHARACTERISTICS

Interstate connection to Montana and South Dakota

Medium to high traffic volumes with significant and increasing truck traffic

Diverse geography ranges from mountains and canyons to grasslands

Sheridan, an arts, culture, and tourism city and Gillette, an energy development center

## PRIMARY INVESTMENT TYPE: MOBILITY

Needs on this corridor include all types - mobility, safety, and system preservation. Safety conditions, roadway geometries, shoulders, sight distances, auxiliary lanes, and pavement conditions should be further analyzed to determine where and what investments are appropriate. Other mobility improvements, including ITS applications and public transportation or TDM strategies could help improve the corridor Plans should include the rehabilitation and replacement of deficient bridges.

## CORRIDOR CHARACTERISTICS

## Corridor Description

State Significant Corridor (SSC) 13 includes Interstate 90 (I-90) from the eastern South Dakota/Wyoming border east of Sundance to the Montana/Wyoming border, north of Sheridan. It is 207 miles long and used for both inter- and intrastate travel. It passes through two major urban areas, Sheridan and Gillette, and three smaller towns, Buffalo, Moorcroft, and Sundance. It is a high speed, multilane transportation facility and part of the interstate system critical to the delivery of goods and services. Near the urbanized areas, it is also critical to the regional and local transportation system.

SSC 13 passes through Campbell County, which is considered the energy capital of the world and contains mining operations for coal, oil, natural gas, and methane. Further, it has wind turbine fields and several coal power plants. Northeastern Wyoming is within the Powder River Basin, an area rich with energy resources that supplies a significant percent of the nation's coal. East of Gillette and I-90 is the WYODAC coal power plant. I-90 is a critical transportation route for ever increasing energy companies that rely on Campbell County for supplies. Overweight and overheight loads associated with the coalbed methane compressors (sometime double or more standard limits) stress the pavement. Further stress is created by the movement of heavy wind turbines throughout the corridor, impacting mobility, safety, and system condition.

The city of Sheridan has a population of approximately 17,000 and attracts thousands of tourists, particularly in the summer. Sheridan and surrounding communities are growing at significant rates. The other major city along SSC 13 is Gillette. Its nearby mines, power stations, and other activities associated with energy contribute to traffic on I-90 and connecting regional and local routes. These roadways are critical to the energy business, one of the most important economic generators in the state. Buffalo is a small town along SSC 13 in Johnson County. SSC 13 intersects five other state significant corridors including SSC 6, SSC 9, SSC 12, SSC 14 and SSC 15. The segment from Gillette to Moorcroft is designated as part of the Northern Tier East-West Bicycle Route.

## Environmental Context

Located on the historic Bozeman Trail, Sheridan was a center of western expansion history. Visitors can relive those days at the forts, battle sites, museums and interpretive walking trails. Ten places in and around Sheridan are on the National Register of Historic Places.

According to the Environmental Protection Agency's (EPA) Green Book, as of January 6, 2010, the City of Sheridan in Sheridan County is listed as "moderate" for $\mathrm{PM}_{10}$ (particulate matter with a diameter of 10 micrometers or less). The Wyoming Department of Environmental Quality (WDEQ) in Sheridan continues to monitor their $\mathrm{PM}_{10}$ levels on a daily basis and has seen a decrease in violations over the past few years.

The Powder River Basin, as a region, has also exceeded the national $\mathrm{PM}_{10}$ standard. Under EPA guidance, this area has not been designated as nonattainment. The WDEQ also monitors this area closely and classifies these $\mathrm{PM}_{10}$ contraventions as "high-wind events," (wind event
over 20 mph ) and therefore does not count as a violation of national air quality standards.

Southeast of Sheridan is Lake DeSmet, which was the largest natural body of water in northern Wyoming. Today the lake's capacity has been enlarged as a reservoir; however, the shores of the lake remain virtually undeveloped.

Johnson County is a major recreation destination, especially in the summer, with access to the Big Horn Mountains and many recreational venues.

Thunder Basin National Grassland is north and south of Gillette along WYO 59 in Campbell County. Located in the Powder River Basin between the Big Horn Mountains and the Black Hills, the Grassland provides opportunities for recreation, including hiking, sightseeing, hunting, and fishing. This land consists of intermingled federal, state, and private lands.

Crook County attracts tourists and recreational users, particularly in

## Corridor Interests:

- Cultural and Historic Resources
- Visual
- Recreation Management
- Travel Management
- Wildlife Connectivity, Habitat Fragmentation, \& Fish Passage
- Wetlands, Fens
- Invasive Species

Source: U.S. Forest Service
the summer. US 14 enters the Bear Lodge Mountains and Keyhole State Park and Reservoir, which are located in the Black Hills National Forest. North of Sundance is the famed Devils Tower National Monument, an iconic symbol of Wyoming. Devils Tower rises 1,267 feet above the Belle Fourche River. President Theodore Roosevelt proclaimed Devils Tower the first national monument in 1906. Access to this area is via US 14.

ENVIRONMENTAL CONTEXT


The above map identifies issues and environmental constraints that form the basis for environmental review. Future projects in the corridor will take these and other issues under consideration prior to final design.

## Key Issues and Emerging Trends

## Major Traffic Generators

- Energy industry - Gillette
- Power plants; gas/oil/coal
fields - Powder River Basin
- Tourism destinations Sheridan, Buffalo
- Dispersed recreational traffic - Big Horn Mountains, Thunder Basin National Grassland, Bear Lodge
- Mountains, Keyhole State Park and Reservoir
$8-$ The safety issues along I- 90 are indicative of roadway conditions that need to be improved, especially between the Montana border and Gillette, and west of Sundance.
$8-$ To support the function of I-90 as both an intra- and interstate facility, the needs of increasing truck traffic must be addressed to ensure the efficient operation of the route.
$\Omega$ Q The poor roadway surface and deteriorating bridge conditions need to be addressed in order to preserve the transportation function of I-90.
$8 \backsim$ The resources available to reconstruct, preserve, and improve I-90 are insufficient.
${ }^{8}$ There is increased passenger air service demand to Sheridan and Gillette. To meet this increasing demand, airport facilities will require significant upgrades.
$8-$ Adding public transportation options between and within the larger cities could help meet increasing travel demand.
$8 \backsim$ Wygen II, a new coal plant under construction, is an example of continued energy sector growth in this area.


## Goals \& Strategies

Goals for the corridor represent issues communicated by participants in the planning process. These goals lay groundwork for the development of a financially feasible multimodal transportation plan designed to support the planning, engineering, construction, operation, and maintenance of the State's transportation system.

The goals and strategies for SSC 13 range from specific needs of the transportation facility to responding to the differing needs of the two urban areas on the route. Improving safety is critical as is improving and preserving the roadway conditions.

The increasing demands of both the tourism business, focused in and around Sheridan, and the energy business, focused in and around Gillette, must be addressed. Both of these industries are important economically to the state in terms of sales tax revenue, employment, and quality of life.

| GOALS | STRATEGIES |
| :--- | :--- |
| Reduce fatalities, injuries, and property damage crash <br> rates | Safety - general improvements |
| Maintain statewide transportation connections | Interchange - new |
|  | ITS/VMS |
| Accommodate growth in truck freight transport | Intermodal freight connections |
|  | Bridge rehabilitation/replacement |
|  | Interchange - reconstruct |
|  | Reconstruction |
| Ensure airport facilities meets existing and future demands | Passenger airport service |
| Improve public transportation opportunities | Transportation and land use coordination |
|  | WYDOT/community partners |
|  | Intercity bus |
|  | Local transit services and operations |
|  | TDM strategies in major traffic generators |

## Primary Investment Type

MOBILITY - Needs on this corridor include all types - mobility, safety, and system preservation. Safety conditions, roadway geometries, shoulders, sight distances, auxiliary lanes, and pavement conditions should be further analyzed to determine where and what investments are appropriate. Other mobility improvements, including ITS applications and public transportation or TDM strategies could help improve the corridor Plans should include the rehabilitation and replacement of deficient bridges.

## Roadway Characteristics

The following maps identify conditions on the corridor with respect to surface condition, total traffic, truck traffic, safety, and bridges. The data represent the most recent available and are subject to change over time as projects are completed or other factors affect existing conditions. The system data play a big part in determining current operating characteristics, the type of need, and the extent of improvements necessary to achieve corridor goals.

## PAVEMENT SURFACE CONDITION



The pavement surface conditions, along SSC 13 from the Montana state line to the South Dakota state line, are rated good/excellent for 70 percent of the corridor. There are intermittent areas where the surface conditions are rated as Fair or Poor, mostly in areas that have higher truck volumes or that have not been recently overlayed. Some pavement conditions for segments of regional corridors are rated poor and include WYO 50 north of WYO 387 and entering Gillette, US 14/16 northwest of Gillette, and WYO 24 north of US 14.

## AVERAGE ANNUAL DAILY TRAFFIC (AADT)



The AADT for the majority of SSC 13 along I-90 averages 2,500 to 5,000 vehicles per day (vpd). The AADT for the sections between Gillette and Moorcroft, between Buffalo and Ranchette, and the section between Sundance and the South Dakota state line averages 5,000 to $10,000 \mathrm{vpd}$.

AVERAGE ANNUAL DAILY TRUCK TRAFFIC (AADTT)


The truck traffic along most of SSC 13 averages 500 to 1,000 trucks per day. There are three sections along this corridor, from the state line to Buffalo, just east of Gillette, and just east of Sundance, where the truck traffic averages 1,000 to 2,500 trucks per day.

SAFETY INDEX


Sixty-six percent of the corridor has a below average Safety Index grade of D or F .

DEFICIENT BRIDGES


There are 22 deficient bridges within the corridor. Thirteen of the 22 bridges are along I- 90 . Two bridges are located on regional corridors and seven are located on local state highways. All deficient bridges visible in the map window are displayed, regardless of designation as SSC, Regional, or Local Routes.

## REGIONAL REFERENCE INFORMATION

## REGIONAL ROUTES

US 14/US 16 serves as an alternative northerly route from Sheridan to Gillette and connects the towns of Clearmont, Leiter, and Spotted Horse. Twenty-six miles east of Gillette at Moorcroft, US 14 makes a loop that connects north to Devils Tower on WYO 24. The highway is designated as part of the Northern Tier EastWest Bicycle Route, which continues northeast from Moorcroft. At the western end of the corridor, WYO 336 serves the city of Sheridan and WYO 338 connects to the small towns of Acme, Wyoming, and Decker, four miles north into Montana.

## URBAN AREAS

There are two urban areas along SSC 13 , Sheridan on the western end and Gillette toward the eastern end. Urban areas are discussed in detail in the Urban Corridors section later in the document.

## INTERMODAL FACILITIES

## LOCAL ROUTES

| LOCAL ROUTE | COUNTY | FROM | TO |
| :--- | :--- | :--- | :--- |
| WYO 59 | Douglas/ <br> Wright/Gillette | US 14/US 16/WYO 59 | Montana State Line |
| WYO 110 | Crook | WYO 24 | Devils Tower National <br> Monument |
| WYO 111 | Crook | I-90/US 14 | WYO 24 |
| WYO 112 | Platte | WYO 24 | Montana State Line |
| WYO 113 | Crook | US 14 | CR 210 |
| WYO 116 | Crook/Weston | US 14 | WYO 450 |
| WYO 193/US <br> 87 | Sheridan | I-90/US 14 | WYO 342 |
| US 212 | Park/Crook | Western Terminus at <br> Montana/Wyoming state line | Passes through Crook <br> County to East |
| WYO 330 | Sheridan | Soldier Creek Rd | US 14 Bus./US 87 <br> Bus./I-90 Bus. |
| WYO 331 | Sheridan | CR 89 | US14/US 87 Bus./I <br> I-90 Bus. |
| WYO 332 | Sheridan | WYO 335 | E. College Ave. |
| WYO 334 | Sheridan | WYO 332 | US 14/US 87 Bus./I <br> I-90 Bus. |
| WYO 335 | Sheridan | Lower Hideaway Ln | US 87 |
| WYO 336 | Sheridan | US 14/US 87 Bus./I-90 Bus. | CR 161 |
| WYO 337 | Sheridan | US 14/US 87 Bus./I-90 Bus. | Veterans Affairs <br> Medical Center |
| WYO 338 | Sheridan | US 14/US 87 Bus./I-90 Bus. | Montana State Line |
| WYO 341 | Sheridan | Arvada | US 16/US 14 |
| WYO 342 | Sheridan | US 87 | I-90 <br> I-90 Bus. |
| WYO 585 | Weston/Crook | US 85 Bus./I |  |

Source: Official State Highway Map of Wyoming

## Intercity Bus Routes

Jefferson Bus Lines and Black Hills Stage lines operate intercity bus lines along the route. Intercity bus tickets are available at stations in Sheridan, Gillette, and Moorcroft.

## Class 1 Railroads

The BNSF Railway Company railroad crosses the corridor near Gillette, then connects north to Montana.

Public Transportation Agencies

| PROVIDER AGENCY <br> NAME | LocATION | TYPE OF SERVICE | SIZE OF <br> FLEET | ANNUAL <br> PASSENGER <br> TRIPS FY08 |
| :--- | :--- | :--- | :--- | ---: |
| RENEW | Sheridan, Gillette <br> and Newcastle | Non-Profit - Demand <br> Response | 15 Vehicles | 57,364 |
| Sheridan Mini Bus | Sheridan | Non-Profit - Demand <br> Response | 12 Vehicles | 58,028 |
| Buffalo Senior Citizens <br> Center | Buffalo | Non-Profit - Demand <br> Response | 3 Vehicles | 18,564 |
| Campbell County Senior <br> Citizens Association | Gillette | Non-Profit - Demand <br> Response | 11 Vehicles | 25,877 |
| Crook County Senior <br> Services | Sundance, Hulett <br> and Moorcroft | Non-Profit - Demand <br> Response | 7 Vehicles | 4,015 |
| Jefferson Bus Lines | Rapid City, SD <br> to Billings, MT <br> through Buffalo | For Profit; Fixed Route <br> Intercity Bus | N/A | N/A |
| Black Hills Stage Lines | I-25 Corridor <br> through Buffalo | Private; Fixed Route <br> Intercity Bus | N/A | N/A |

## DEMOGRAPHIC CHARACTERISTICS

SSC 13 passes through four counties located along Wyoming's northern border with Montana: Campbell, Crook, Johnson, and Sheridan. The highest employment sector in Campbell County, including Gillette, is Mining (22 percent) indicating a high dependence of the population on the Mining industry. Education \& Health is second (17 percent). Ten percent of the county's employment is in Construction, while only two percent is in Agriculture. Campbell County experienced an impressive 23 percent growth from 2000 to 2008.

Crook County in the northeast corner of Wyoming contains two towns along SSC 13: Moorcroft and Sundance, with 2008 populations of 892 and 1,253 respectively. Education \& Health ( 18 percent) as well as Agriculture ( 15 percent) account for most employment in Crook County.

Johnson County contains the town of Buffalo, 2008 population of 4,832 , the only town in this county along I-90. Education \& Health industries along with Agriculture account for 18 percent and 15 percent of the employment respectively.

Sheridan, 2008 population of approximately 17,000 , is at the north western end of SSC 13. Education \& Health industries account for

24 percent of employment, Retail 12 percent, Construction 10 percent, Art \& Recreation 9 percent, and Professional Services 7 percent. This broad base of employment indicates a wide base with no dependence on one particular industry, a strong economic diversity. See Appendix B for more details about employment by county.

| POPULATION: 2000-2008 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| COUNTY | CITY | 2000 | 2008 | \% GROWTH | \% STATE TOTAL (2008) |
| Campbell County |  | 33,698 | 41,473 | 23.1 | 7.8 |
|  | Gillette | 19,646 | 26,871 | 32.4 |  |
|  | Wright | 1,347 | 1,462 | 8.5 |  |
| Crook County |  | 5,887 | 6,457 | 9.7 | 1.2 |
|  | Hulett | 408 | 471 | 15.4 |  |
|  | Moorcroft | 807 | 892 | 8.1 |  |
|  | Pine Haven | 222 | 380 | 71.2 |  |
|  | Sundance | 1,161 | 1,253 | 7.9 |  |
| Johnson County |  | 7,075 | 8,464 | 19.6 | 1.6 |
|  | Buffalo | 3,900 | 4,832 | 23.5 |  |
|  | Kaycee | 249 | 290 | 16.5 |  |
| Sheridan County |  | 26,560 | 28,662 | 7.9 | 5.4 |
|  | Clearmont | 115 | 114 | -0.9 |  |
|  | Dayton | 678 | 757 | 11.7 |  |
|  | Ranchester | 701 | 798 | 13.8 |  |
|  | Sheridan | 15,804 | 17,197 | 8.3 |  |

Source: Population Division, US Census Bureau, July 1, 2009

## Airport Information

| AIRPORT NAME <br> (Associated City) | NPIAS ROLE <br> \& HUB TYPE | NPIAS | WYDOT <br> CLASSIFICATION <br> (2008) | WYDOT <br> CLASSIFICATION <br> (FUTURE) | TOTAL AIRPORT <br> OPERATIONS | BASED <br> AIRCRAFT | TOTAL <br> PASSENGERS <br> (2006) |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: | ---: |
| Campbell County <br> Airport (Gillette) | P-N | NPIAS | Commercial | Commercial | 19,105 | 53 | 55,167 |
| Sheridan County <br> Airport (Sheridan) | P-N | NPIAS | Commercial | Commercial | 37,230 | 88 | 35,557 |
| Johnson County Airport <br> (Buffalo) | GA | NPIAS | Intermediate | Intermediate | 7,320 | 20 |  |
| Hulett Municipal <br> (Hulett) | GA | NPIAS | Local | Intermediate | 1,400 | 5 |  |

Notes: P - Primary Commercial Service, $N$ - Non-hub Facility, GA - General Aviation
${ }^{1}$ NPIAS (National Plan of Integrated Airport Systems) Role and Hub Type are same for both existing (2007) and 5-year federal forecast

