US 20 FROM THE ASHTON HILL BRIDGE TO THE MONTANA STATE LINE
AND AN ASSESSMENT OF THE SH 87 LOW VOLUME CORRIODR

HDR

ASHTON TO MONTANA STATE LINE US 20 CORRIDOR PLAN

FINAL REPORT

JULY 2006

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COMMENT AND RESPONSE

Several hundred comments were received that expressed concern for fish passage across SH 87 at Howard and Targhee creeks and in the US 20 corridor and wildlife strikes in the corridor.

Two fish passage projects were completed on SH 87 at Howard and Targhee Creeks prior to the release of this report. In addition the plan calls for continued improvements to fish passage throughout the corridor as projects are developed. The plan also calls for the continued study of animal crossing patterns and wildlife strikes aimed at implementation of a more sophisticated driver warning system, or other avoidance measures to reduce the amount of animal-vehicle collisions.

Comment: I am extremely concerned about access to those in business at Last Chance. The small "lane" that appears to be your solution to access to this area belongs to the business owners. My property starts from where the east side of Highway 20 ends. (I understand you can take this property by eminent domain but I hope you understand that this is private property you are planning to use and it is essential for the success or failure of our business) Part of this frontage is used for parking because in most cases the 50 foot (wide) lots do not provide ample parking. There just isn't room for a 2 way access along the path you have chosen.
The amount of traffic we now have in the summer is almost more than what can be handled; If there are fewer places to enter and exit almost all traffic for the area (including the large subdivision behind our business) will pass in front of our office. This will cause serious hazards for those using the commercial business's in this area. We will all lose our highway signage. There isn't much sense in putting a commercial sign behind the building. You will be destroying the business area of Last Chance. This is really the only area with enough private land available for Commercial growth in the area.

I am also concerned about where you have planned to move the snow in the winter. There will be no place to blow it because if it were to be blown it would blow either onto StateHighway 20 or into our commercial buildings. It will have to be hauled to a State or County owned area. Has anyone been to Island Park this winter to see how much snow we have to deal with???? We still have about 3-4 feet of snow on the ground - and it is almost May. Has anyone inquired to see how many inches of total snow falls here in the winter? THE SNOW FALL IS A VERY BIG PROBLEM IN THE WINTER.

I can understand closing off some of the entry/exit points but to cut them back to the present proprosal would eventually kill all of the business and potential grown at Last Chance.
Your attention to these potential problems would be appreciated.

Response: The plan calls for an improved 5 lane section through the Last Chance area with the reduction of access points from the current 27 accesses to something around 8 to 12 access points within the ½ mile area that makes up the Last Chance business area. It is believed that 8 to 12 accesses will allow for sufficient direct highway access to US 20, improving overall safety and thus the attractiveness of the business area for the traveling public.

Snow fall is a concern for the improvement area which could be handled one of two ways, either snow could be hauled to a snow dump, or the outer through lane of the 5-lane improvement could be used for snow storage during lower volume winter months.

Comment: …my wife and I reside in the Seattle, Washington area. We own five parcels of undeveloped land totaling approximately 70 acres on the north side of Henry's Lake that border on Highway 87 that we intend to sell and or build on as retirement property in the near future. We have been informed that the US 20 Corridor Planning study includes Highway 87 that runs along this property in the vicinity of the State fish hatchery.

I have reviewed the information available on the internet regarding the project but can find no specific information with regard to Highway 87 other than that it is included in the planning study.

We need to know if there will be any impacts to property access along the highway in this area as this is property that will need access to the highway. We are also concerned about the corridor width and if there is any intent to change it.

Response: There are no plans to physically widen the SH 87 portion of the study area, nor to limit access to this low volume corridor now or within the 20-year planning horizon of this document.

Comment: I am a year-round resident of Pinehaven in Island Park. I have reviewed your proposed "improvements" for our area.

My major concern is that your drawing proposes routing traffic from south of Pinehaven north via West Pinehaven Drive through Pinehaven to one access to the North. The Henry's Fork Lodge is located south of Pinehaven. This and the adjacent properties are not part of the Pinehaven community. The southern most access must remain open for access to those occupants and business located there.

The Henry's Fork lodge supports a large amount of tourist traffic that West Pinehaven Drive can not support. The road is a one lane road that is not conducive to large amounts of traffic in more than one direction at any time.

The bottom line is this, you can not re-route traffic through private property.

Could I suggest routing commercial traffic through Rolling Hills Place in Marsing Idaho or through South Pinehurst Drive in Idaho Falls?

I have edited your drawing and attached it for your review and records.

Response: The southern most access which is identified in the general area of Pinehaven has been re-designated within the plan to remain open, allowing for circulation and direct access to the area south of the Pinehaven community. Due to the location of the Henry's Fork Lodge, and the vehicle traffic associated with this tourist destination we have determined leaving the direct access from US 20 to the Lodge would promote a safer solution to US 20 access concerns in the area.

Comment: I am very interested in the proposed highway improvements geared towards the reduction in animal/human accidents on Hwy 20. I used to be an over the road truck driver and have seen my share of wildlife on the road. I think the crossings in Reynolds Pass and Targhee Pass are a great idea. Also I never thought of culverts for fish, but it really sounds like a good idea. I am an avid wetlands lover and always enjoy that Island Park area. I am hoping that Montana can follow in Idaho's good footsteps. Thank you for listening.

Response: Wildlife/vehicle collisions have been a concern for many throughout this process. Additional study is recommended to identify wildlife areas where some type of roadway treatment for warning drivers is developed and implemented.

Comment: The description of the area listed in the document as Pinehaven contains areas not associated with Pinehaven. The southern (bottom of the photo on page 14) is not connected to Pinehaven by roads. What may appear to be connecting roads are not there and the southern zone is not part of the organized Pinehaven community.

The top of the photo indicates a road (this road has a turn zone in the two lane zone) but this is NOT the northern entry road into the area. That road which is off the photo is Moose Lane (in an area after the start of the passing lane) which take most of the traffic from North Pinehaven. As Moose Lane makes a turn leaving US 20, it will not be apparent from someone on the main road that houses are just around that curve.

Thus from the many errors in this report, closing the middle road is actually closing the South entry road into Pinehaven. The Northern road which the reports states to keep open is actually the center entry into the community.

General statements:

1. There are too many errors to make a judgment on what an actual engineering review would actually recommend thus this document is worthless for evaluation.

2. If (the contractor) got off the road it would have taken less than 30 minutes to fully understand the road system into the different zones of what is generally called Pinehaven although the southern end of the community is not associated legally with Pinehaven. If (the Contractor) got off the road into this zone, then their report is a result of incompetent engineering and the state should deny payment.

3, If (the contractor) did not get off US 20 into Pinehaven, the state should deny payment.

4. If the (Contractor) report was submitted to the State under a signature of a reregister engineer, please provide the name and the number of that engineer.

5. This report needs to be redone and a new draft issued in which real decisions between issues can be discussed.

Response: Nomenclature revisions were made in the final document.

Comment: I am a graduate student at Montana State University. This summer, as an intern for the Greater Yellowstone Coalition, I am investigating wildlife mortality on roads in the Greater Yellowstone Ecosystem. I noticed a map on the US 20 corridor plan website that identifies a few locations with animal crossing issues. I am curious if those locations were chosen because of existing problems with road kill or simply because of their proximity to wildlife habitat. I am trying to identify places in the Greater Yellowstone Ecosystem that have significant impacts on wildlife mortality. Unfortunately, road kill data are not recorded in many locations and is often spotty at best when it is recorded. Any information you have regarding road kill in this region would be quite helpful. Thanks.

Response: Wildlife/vehicle collisions have been a concern for many throughout this process. Additional study is recommended to identify wildlife areas where some type of roadway treatment for warning drivers is developed and implemented.

Comment: 1. Speed and Speed limits.

(a) Highway 20 from the base of the Henrys Fork Bridge crossing just north of Ashton north through Island Park is a major migration pathway for Elk and Moose and to a lesser extent deer. Therefore, US 20 should never be a high speed multilane highway. Not only is high speed undesirable for animal conservation but even more importantly high speed along a road frequently crossed by animals is a hazard to road users. There have been several fatal accidents and injuries in the Greater Yellowstone area due to car-animal collisions. I am sure the statistics are available somewhere. The danger is especially great at night and I would suggest at the least signs stating "maximum recommended speed after dark 45mph."

(b) From the Pinehaven area north there is frequent pedestrian activity on the road. I suggest a maximum of 55mph from that area north to the State Line.

(c) The present 45mph zones should remain. These limits are frequently violated. In most areas this is a deliberate act but in the Island Park Area we are faced with visitors entering the area after a long drive. Their heads are filled with Yellowstone Park, Geysers and fishing and I am sure that much speeding is due to carelessness rather than a deliberate act.

Therefore, each 45mph zone should be preceded by a rumble strip. With less speeding the restricted zones would be safer. Enforcement would still be required but some effort could be directed toward unsafe overtaking along US 20 and use of turn lanes as overtaking lanes.

(d) More overtaking lanes are needed between Ashton and Pinehaven and also over Henrys Flat. Provision of such lanes would reduce incidents of unsafe overtaking.

2. Road Usage-US 20 is used increasingly by trucks as a short cut to Bozeman and also to avoid Interstate 15 and 90. Use of US 20 as a truck route should be discouraged because this highway is primarily a tourist route serving the Yellowstone area.

(a) Possibly US 20 in Idaho can be redesigned to accommodate heavy truck traffic but this would only make highway 191 from West Yellowstone to Bozeman more dangerous than it already is. This highway is of course in Montana but I strongly believe that we should not take any action to make highways more dangerous wherever those highways are situated.

(b) Traffic on highway 191 through Yellowstone Park is already a problem and animals crossing the highway are currently being monitored by radar presumably to determine the extent of the problem. Any redesign of US 20 in Idaho that encourages more trucks to bypass the interstates will compound the problems along highway 191.

(c) I suspect that increasing truck usage of US 20 is an attempt to avoid check points on the interstates.
For a start, weigh stations on US 20 should be manned always.

(d) Finally, I am all in favor of measures to increase safety on US 20 but do not favor measures that would increase speed along the highway as for example bypasses and 4 lane highways. Increased average speed would encourage more truck usage along the highway and this would make US 20 connecting highways less safe and thereby offset any new safety features.

Response: Speed limits on all state highways are set according to engineering standards based on the overall traffic flow within a corridor. While we believe some adjustments may be necessary, it is in an attempt to reduce the amount of posted speed changes within the corridor.

Trucks will continue to be able to use US 20. It is a trans-continental US highway that is on the National Highway System as vital to commerce, mobility, and national defense. Truck speeds in the corridor should be monitored and enforced.

Comment: I am an architect and am employed at the redevelopment agency in Portland Oregon. This year I am President of the American Institute of Architects, Portland Chapter. My family owns a cabin 3541 Box Canyon, Island Park, Idaho. I have been traveling on Highway 20 in summer and winter for 26 years (I grew up in Pocatello). I read about the US20 project in the Island Park News July 25, 2003.

I would like to send you my concerns about the upcoming plan, especially as I read that few neighbors attended the early outreach meetings. I want to convey a list of my thoughts and requests for your project:

- that towns, including Island Park, are not bypassed by upgrades to US20;
- that current land uses and access patterns are maintained;
- that US20 will not be turned into a 4-lane separated highway, but instead made into a three lane road that insures direct access side roads and driveways. This could be accomplished by having double travel lanes and single lane alternating, like the highway north of Ashton on the hill (in some busy places, it would be acceptable to have two travel lanes on one side, one turn lane in the middle and one travel lane on the opposite side);
- that overpasses and underpasses are not built, but surface crossing be marked and signaled at busy places such as Mack's Inn, Pond's Lodge, etc.
- I want the project to highlight the local community needs first, and the pass through traffic to Yellowstone second. Having seen many towns between Idaho Falls and Ashton decline after the 4 lane separated highway was built bypassing them, I do not want to see that happen from Ashton to West Yellowstone.

Thank you for the opportunity to comment. I hope I will be included in your mailing list. I signed up recently but have not heard anything yet. Please note, I entered these comments on your web page, but have edited the parts highlighted in blue. I would be pleased if you can address my concerns. My contact information is below.

Response: A three-lane section is proposed over time, eventually creating a three lane roadway with alternating passing opportunities between Aston and the Montana state line. Overpasses were considered in early options, but were not recommended largely due to developing a context sensitive highway. Bypasses, while not recommended in this plan remain a viable option if areas grow without regard to their impacts to the highway.

Comment: We live in Pinehaven so we hear the road noise, see the blood on the highway, skirt the dead moose, skunk, raccoon, bird and varmint road kill as we clean up the disgusting litter (urine bottles from truckers, food and drink containers and other odd items), put up with the threatening semi trucks following too close or passing inappropriately. It was a huge improvement to add our turning lane and the passing lane north of the middle entrance--this would help in other areas also.

Comments on Highway 20:

Summer is a rough time to get input from folks here as they are inundated with company and activities. It does not mean they are not very concerned about more changes to the highway.

It turns out that 65 miles an hour is too fast a marked speed in many places as people drive 75 which is too fast. In the summer there is too much traffic, in the winter--figure it out.

The passing lanes are very helpful when behind big rigs. Another passing lane towards the hill might help driver frustration, but not four or five lanes.

Four or five lanes with restricted on/off roads would only help truckers (in other words businesses) or those only driving through. These people don't stop in our community, don't look at the Yellowstone-like quality of life we have here. This is what we need to save.

Making this highway wider and faster would be like doing the same in a national park or someone's neighborhood.

There have been additional patrols in the area from the sheriff's department, but very few highway patrol folks come up here to see the speeding and other infractions that year-rounders like us see all the time.

Please lower the speed limit to 55 or 60 and keep truckers off our road and send them to the freeways, and don't make Highway 20 have four or five lanes.

I noticed you had a road kill count, but I would bet it is much higher as all road kill of even large animals are not counted. You see a moose walk through one day and a streak of blood on the road the next. We need more signs about the wildlife and slowing down etc.

The litter up here is horrid. It can't be picked up fast enough. How would more lanes improve this? We need more patrol cars citing drivers with harsher warning signs or something to stop the trashing of our beautiful places. It isn't enough to have the volunteers pick up after the slobs.

Sadly, I hear people say that the decision has been made and our input will mean nothing in the end. Stress is growing here in Island Park. We pay the taxes and so far have put up with few services because we enjoy the quality of life we have away from the hustle and bustle. We hope we will be listened to on this issue because there are a lot of upset people. I hope you get lots of feedback and folks aren't feeling that it won't do any good.

Response: A three-lane section is proposed over time, eventually creating a three lane roadway with alternating passing opportunities between Aston and the Montana state line, not a four lane highway. Short four-lane sections may be constructed in areas for passing opportunities, but this plan does not propose a four-lane improvement throughout the corridor.

Speed enforcement should be addressed in the study area, particularly in the summer months. As this study progressed the Idaho State Patrol had located an officer in Ashton, Idaho. This should help with enforcement activities over time.

Wildlife/vehicle collisions have been a concern for many throughout this process. Additional study is recommended to identify wildlife areas where some type of roadway treatment for warning drivers is developed and implemented.

Comment: I have these additional comments:
Turn lanes at Henry' Fork Lodge in Pinehaven
If traffic lights end up being the answer, I think blinking lights at this time of year would work.

Response: Turn lanes are being evaluated throughout the corridor.

Comment: In general, I think there is a definite problem in the United States towards fixing things that don't need to be fixed (such as the Beartooth Highway). I'm an art historian who works most of the time in northern Italy, where aesthetic impact does play a role in decisions (although cement is taking over there as well). I will look more carefully at proposals for the Last Chance bypass, but it just seems that it will accomplish little more than ripping up more ground and probably increasing truck noise. In all my years in the area, I've rarely, if ever, noticed a traffic problem and I'm there every August-September. The extant passing lanes function just fine and can handle this non-problem.

Thanks for your reply,

Response: Passing lanes are being considered throughout the corridor eventually creating a three-lane section. The early proposal of a bypass around Island park has been dropped from the recommendations in this report. However, if the area continues to grow without regard to highway impacts a bypass option will need to be reconsidered.

Comment: I intended to express a concern at the last meeting but ended up chatting with (Name withheld). I am concerned about the snowmobile crossings. I do not snowmobile, but I have nearly run over them a few times when they cross U. S. 20. I believe there are eight locations where snowmobile...(drivers)cross the highway. Once last winter that I now of, a snowmobile…(driver) did not make it over the snow bank and the machine turned over on her and she and the machine slid into the highway. They would have been flattened if a truck has come along. Luckily, I saw them and stopped- I was observing the 45 mph speed limit near Pond's Lodge.

Another concern is the growing amount of traffic in the highway right-of-way by snowmobile…(drivers) and (off road vehicle riders). It has been crazy this summer. They have made the right of way a regular route, and they drive fast, churning up dust that impacts visibility on the highway.

Finally, the many, many accesses are a growing concern, especially now with all the summer traffic. Last Chance is the most problematic and should be dealt with sooner rather than later. Angler's Lodge has made still another one!

Will any of these safety issues be dealt with before the plan is made final? Some of them involve violations of the law, and it seems that they could be handled now.

Thanks for your time,

Response: Access control is a primary goal in the Last Chance area. At the time of this study there were 27 access points in the ½ mile of Last Chance. This plan recommends lowering that number to between 8 and 12. Snowmobiles have designated crossings of the US 20 corridor. These crossings are marked and have been legalized through the State Legislature. It is the responsibility of the snowmobile operator to cross with caution. ATV's are not allowed in the highway right-of-way. Local law enforcement efforts are needed to reduce the amount of violations from ATV operators.

Finally, we received a comment regarding the change in a stream outflow from Henry's lake that occasionally causes some flooding where the creek bed used to be. This was a comment submitted by a local irrigation district representative.

As projects are developed in the area it is appropriate to revisit this issue to see if there is an appropriate way to improve the situation.

SECTION 1: EXECUTIVE SUMMARY

1.1 Introduction

The US 20 Corridor Plan is a long-range planning effort conducted by and for the Idaho Transportation Department. The purpose of the Plan is to assess the condition of the US 20 Corridor and identify the necessary improvements to meet the corridor's system and user needs for the next 20 years.

1.2 Planning Steps

The US 20 Corridor Plan was developed over an 18-month period according to the steps outlined in the ITD Corridor Planning Guidelines. The process integrated technical assessment and public input as shown in Table 1. The planning process used in the development of the US 20 Corridor Study is outside of but parallel to the National Environmental Policy Act (NEPA) process. Future project development efforts could invoke NEPA, depending upon the funding source used and level of anticipated environmental impacts.

Planning Steps
Stakeholder Interviews
Public Workshop #1 ***Project Kick Off—Identify Issues***
Research Existing Conditions
Document Existing/Projected Environment/Land Use
Analyze Future Travel Demand and Performance
Develop Corridor Purpose & Need Statement
Public Workshop #2 ***Corridor Goals and Alternatives***
Generate Alternatives
Evaluate to identify Feasible Alternatives
Public Workshop #3 ***Review Draft Feasible Alternatives***
Analysis to determine Recommended Alternatives
Public Workshop #4 ***Present Draft Corridor Plan Recommendations***
Prepare Draft Corridor Plan
Prepare Final Corridor Plan

1.3 Corridor Study Area/Land Use

The US 20 Corridor Plan study area extends from the Ashton Hill Bridge to the Montana state line and includes the SH 87 corridor from its junction with US 20 at milepost 0, north to the Montana state line at milepost 9.15, as shown in the Project Map (page 6). For the purposes of this study, the corridor was divided into four segments;

Segment 1

Extending from the Ashton Hill Bridge (milepost 363.37) to Island Park (milepost 382.28), this segment consists of mountainous to rolling terrain, with high mountain forests. Much of the land immediately adjacent to the corridor is in State or Federal ownership, with few private property holdings. In the northern portion of this segment there are campgrounds, access to Harriman State Park, and the Mesa Falls Scenic Byway (State Highway 47). Access to the highway in this segment consists primarily of forest road access, or Jeep trails, a subdivision (Pinehaven), and a resort (Henry's Fork Lodge).

Segment 2

Crossing the Henry's Fork of the Snake River twice and the Buffalo River once, Segment 2 traverses the main part of the Island Park community and continues North through the Henry's Lake Flats to the intersection of SH 87. While incorporated Island Park proper is approximately 32 miles long, the most developed portion extends from Last Chance (north of Harriman State Park) to Sawtell Road (just south of the Henry's Lake Flats). The majority of the commercial services are located along this portion of the corridor and include gas stations, restaurants, outfitters and guides, real estate offices,

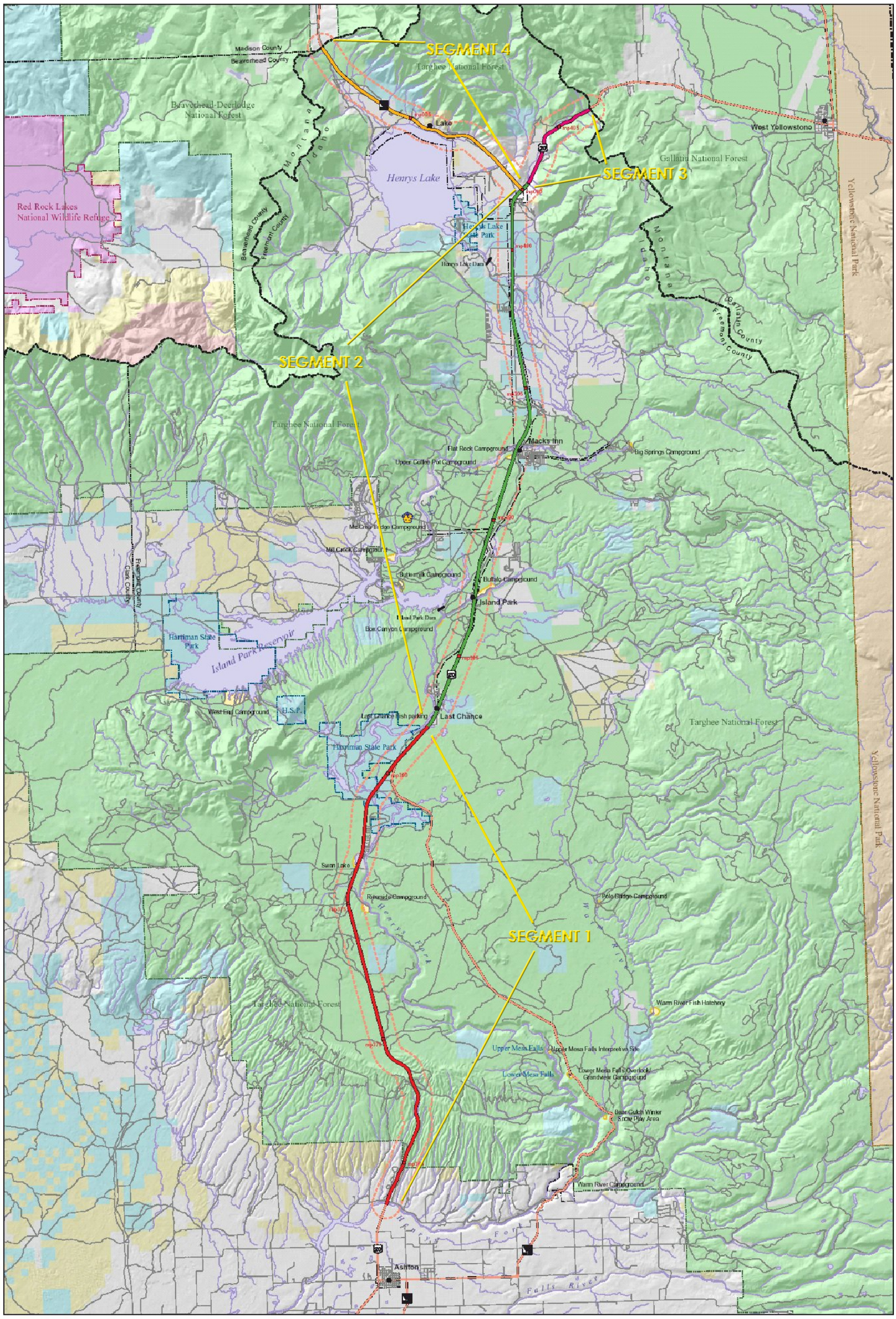
and other specialty retail shops, many of which access US 20 directly. This area is characterized by campgrounds, lodges, and "second-home" communities. While much of the land north of Sawtell Road is privately held, development has not been as intense as in the remainder of this segment.

Segment 3

The shortest segment in the analysis area is only 3.7 miles in length and traverses the Continental Divide separating Idaho from Montana. This area is largely wooded and has very few destination locations, although a parking area for a trail along the top of the divide is located a few hundred yards west of the Montana state line. This part of the corridor is mountainous and has large portions of the highway covered in shade for most of the winter months resulting in snow and ice buildup. The greatest horizontal curvature is found in this portion of the study area.

Segment 4

Encompassing that portion of SH 87 as it lies in the state of Idaho, Segment 4 travels around the north side of Henry's Lake, where there is significant second-home ownership. SH 87 is a low volume corridor with approximately 600 vehicles per day during the summer months, tapering off to approximately 120 vehicles per day during the winter months.



Project Map

N
W
E
S
0 1 2 3 4 Miles

- Places
- City Limits
- State Park Boundary
- National Forest Boundary
- National Park Boundary
- National Wildlife Refuge Boundary
- State Boundary
- County Boundary
- Streams
- Waterbodies

Roads

- Highways
- Local Roads
- Mileposts
- Study Area

Project Areas

- Ashton Hill Bridge to Island Park
- Island Park Community
- Island Park to the Montana State Line
- State Highway 87
- Recreation Sites

Public Land Ownership

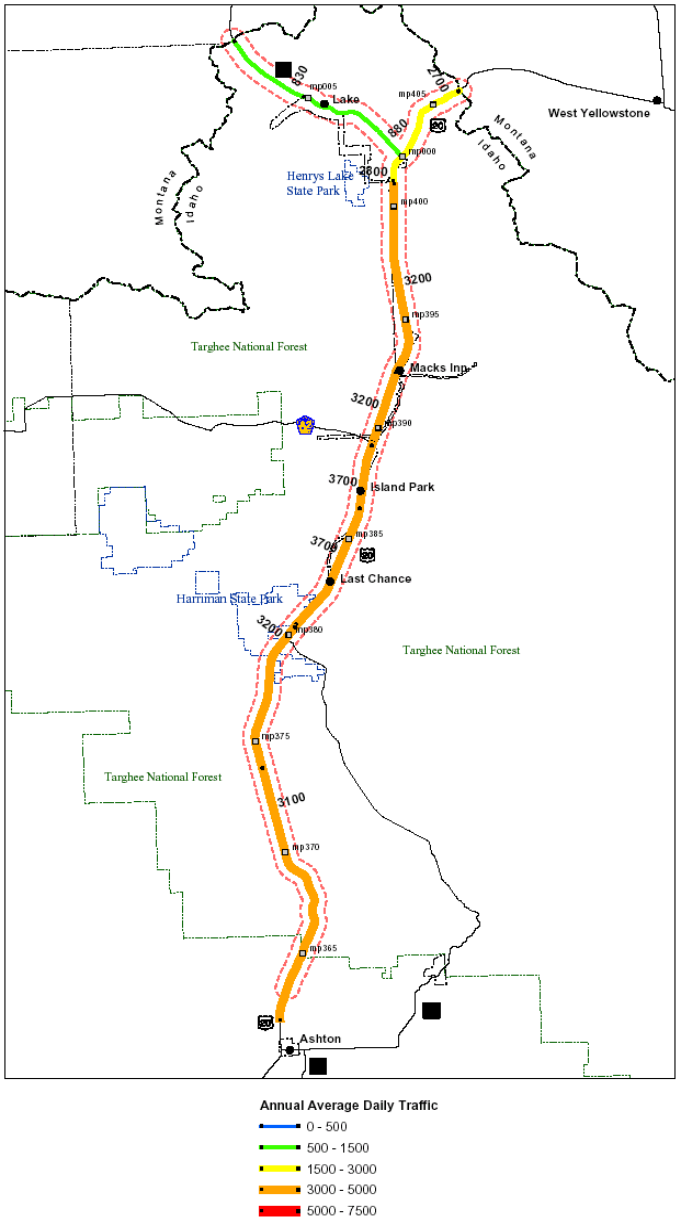
- B.L.M.
- Bureau of Indian Affairs
- Department of Energy
- Forest Service
- Military Reservations
- National Parks & Monuments
- Open water
- Private
- State of Idaho
- U.S. Fish & Wildlife Service

1.3.1 Corridor Communities

Island Park, with a population of approximately 225 year-round residents is the only incorporated community in the Corridor. Island Park touts itself as the community with the "longest main street in America". Main Street in this case is US 20, including approximately 29 miles of right-of-way though the Island Park city limits. Island Park is primarily a tourist and recreation area with opportunities for fishing, hunting, hiking, boating, camping, and winter snowmobiling. The community also includes a substantial and growing number of vacation homes. Unincorporated community areas within Island Park providing visitor services, accommodations, food, and fuel include Last Chance, Mack's Inn and Island Park Resort.

1.3.2 Existing System Conditions

US 20 is predominantly a two-lane rural highway and is classified as a National Highway System (NHS) roadway. Both US 20 and SH 87 are classified as arterial roadways. The two lane configuration is augmented with occasional passing lanes on grades such as Federal Hill and near Mack's Inn, center turn lanes in developed areas through Last Chance and intermittent left and right turn lanes at Island Park and Mack's Inn. Due in part to recent widening to add passing lanes in some areas, much of US 20 has substandard shoulder widths of four to six feet or less. This width does not adequately accommodate emergency stopping or shared use with the growing number of bicyclists. Access on the Corridor exceeds ITD's goal of three approaches per mile for rural sections and four approaches per mile for urban sections in many areas. This is especially evident through the Last Chance area of Island Park, which has approximately 30 approaches within 0.6 miles. As a result, many of the improvement strategies focus on this highly developed area. It is important to note that shoulder widths of four to six feet on SH 87 are not viewed as substandard due to its low traffic volume of 600 AADT.



1.4 Traffic Volumes

Perhaps the most challenging issue confronted during the US 20 corridor planning process is the widely fluctuating traffic volumes. This fluctuation results from a higher than average seasonal variation in use, which reflects the primary summer recreation-related uses on and through the corridor. Traffic volumes reach an annual high in July and a low in January. Permanent traffic counters recorded traffic volumes in July as approximately 98 percent higher than the annual average daily traffic, and in January, traffic volumes drop 52 percent below the annual ADT. This puts summer volume highs at approximately five times greater than winter volume lows. Traffic volumes are illustrated in the corridor map shown above.

Increasing traffic in the corridor was expressed as a significant concern. During the public involvement portion of the planning process, it was noted that as the area develops, it is expected that there will be more commercial truck traffic, and the concern that this route will be preferred by truck drivers in an effort to bypass the port of entry on I 15.

In addition, truck volumes on SH 87 have increased sharply from 2001 to present. Historically, volumes were approximately 70 trucks per day and have jumped to over 300 per day in 2002, remaining at that level since. These increasing volumes present safety concerns to area residents and the corridor's wildlife. The average annual daily traffic volumes for the corridor, by section for 1993 and 2002 are shown below.

US 20 AVERAGE ANNUAL GROWTH RATES (1993-2002)

Location	1993 AADT	2002 AADT	Growth Rate
South of Pine Haven Dr.	2533	3104	2.50%
South of Sawtell Rd.	2410	3698	5.94%
Southwest of SH 87	2045	3056	5.49%
Northeast of SH 87	1718	2757	6.72%

*This average growth rate was adjusted by removing the highest and lowest AADT over the 9-year period from the average growth rate calculation. The high and low volumes were inconsistent with annual growth in the area, producing unrealistic rates.

Source: Idaho Transportation Department, Transportation Planning Division

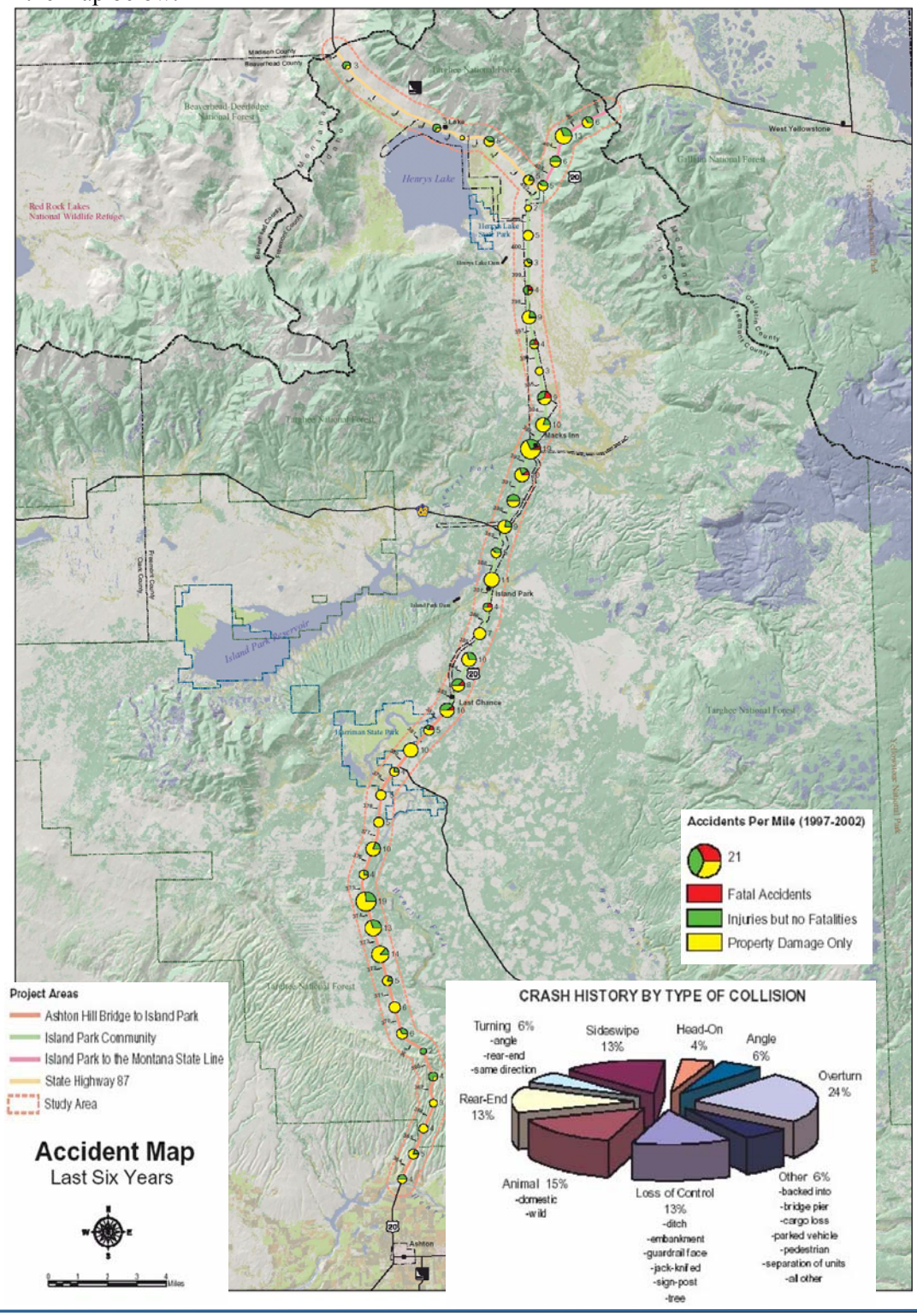
1.5 Level of Service Analysis

This analysis provides the level of service (LOS) for a roadway segment based on both directions of travel. Level of service may be considered a measure of "traffic density", based on how easy (or difficult) it is for a driver to maneuver through the traffic flow. An LOS A describes a free flow operation and little impedance is encountered, whereas an LOS F represents significant delays in traffic movement. In general, the existing and 2002 levels of service within the US 20 Corridor are C or better. (The LOS was not calculated for SH 87 since volumes are so low that the LOS is A at all times of the day and the year).While conducting the existing conditions analysis, all of the roadway segments were noted to have travel speeds greater than 50 miles per hour and percent time spent following (PTSF) values of less than 60 percent. Both the average travel speed and the PTSF were slightly worse between mileposts 380.499 and 389.245 (from Harriman State Park through Island Park) due to the higher traffic volumes and the number of access points per mile located within this segment.

YEAR 2002 – TWO-WAY ANALYSIS				
US 20 Capacity and Level of Service				
Begin MP	End MP	Year 2002		
		LOS	Average Speed	% Time Spent Following
363.370	373.728	B	55.4	49.8
373.728	380.499	C	54.6	54.7
380.499	389.245	C	52.1	58.4
389.245	401.034	C	53.2	55.0
401.034	402.270	C	54.4	59.9
402.270	406.300	C	54.4	59.3

1.6 Corridor Accidents

Accidents on the corridor were analyzed from data provided by ITD, Idaho State Police and the Fremont County Sheriff's department. Accident data is helpful in determining locations of possible roadway design deficiencies, need for safety improvements, maintenance issues, and needs and sites of high number of animal collisions. The accident data, including location by milepost and type of accidents is shown in the map below.



1.7 Highway Capacity Assessment

1.7.1 Standard Highway Capacity Calculation Method

A significant factor in determining appropriate improvements is the assessment of Design Hour Volume (DHV). Design Hour Volumes are commonly calculated using the 30th highest hour for the roadway, typically around 85 percent of the peak hour of traffic for the road on an annual basis. However, on US 20, the 30th highest hour is well over 90 percent of the peak hour for the road due to the makeup of the traffic using the highway (i.e. seasonal and weekend traffic). This creates concerns that improvements planned to accommodate DHV's using this method will likely exceed the routine capacity needs for the corridor and would not support ITD's goal of context sensitive design.

1.7.2 Alternative Capacity Analysis Assessment Method

To address concerns that recommendations should be appropriate for the majority of the corridor's traffic volumes and context sensitive, an alternative methodology was used. The Alternative Capacity Analysis method for calculating DHV is described in the AASHTO Greenbook and multiplies the average of the top three hours on the corridor by 50 percent. This analysis may or may not yield a lower traffic volume, but it should provide a LOS result that is more reflective of the actual traffic situation. This methodology is called out specifically for use in the situation where a highly seasonal use roadway is being analyzed. For the US 20 corridor, it was determined that this method would be used for the existing DHV, and that forecasts be developed using the alternate methodology DHV as the base number.

1.8 Public Involvement

The public involvement effort for the US 20 corridor plan was structured in accordance with ITD Public Involvement Guidelines and fully integrated into the overall planning process. The public involvement plan included a blend of activities designed to support the needs of corridor residents, while meeting the needs of the planning process to provide information and gather input at key decision points. Input from the public, including stakeholders and agencies, was critical in the development of the corridor purpose and need, goals and objectives, which were used to build project understanding and support and to guide the determination of improvement alternatives. The public involvement activities conducted are shown in the table below.

US 20 Corridor Plan Public Involvement Plan Summary	
ACTIVITY	**SCHEDULE**
Stakeholder Interviews	**April/May 2003**
Public Workshop #1 • Intro the project and identify issues & concerns	**(June 3, 4, 5, 2003) Island Park, Idaho Falls, Ashton**
Transportation Advisory Committee (TAC) Meeting #1 • Intro planning process • Confirm roles and responsibilities • Identify initial issues and concerns	**June 4, 2003**
Stakeholder Workshop • Refine issues • Present existing conditions • Identify preliminary Corridor purpose and goals	**July 16, 2003** *Note: Stakeholder Workshop includes the TAC and key corridor representation*
Project Team / ITD Work Session • Refine purpose, draft goals and objectives	**Mid July 2003**
Public Workshop #2 • Confirm draft purpose and goals • Brainstorm initial alternatives	**October 1 and 2, 2003 – Ashton and Last Chance**
Transportation Advisory Committee (TAC) Meeting #2 • Present purpose, goals and objectives • Refine initial alternatives	**October 2, 2003**
NEPA Agency Workshop • Present draft purpose, goals and alternatives • Review screening criteria • Discuss alternatives as per NEPA compliance	**December 16, 2003**
Public Workshop #3 • Review screening criteria • Present preliminary feasible alternatives	**April 14 and 15, 2004 – Ashton and Island Park**
Transportation Advisory Committee (TAC) Meeting #3 • Present results of public workshop #3 • Refine feasible alternatives	**April 15, 2004**
Public Workshop #4 (TAC Invited) • Present most feasible alternatives • Present draft plan recommendations	**July 27 and 28, 2004 – Ashton and Last Chance**
PUBLIC INVOLVEMENT TOOLS	
• Media coverage (newspaper, radio and TV)	As needed to support Public Involvement P and meet public needs
• Surveys and comment forms	Coordinate with public events and project needs
• Study brochure and newsletters	At Intro and prior to each public workshop
• Study mailing list	Ongoing use and upcoming event notification
• E mail tree	To support and augment study mailing list
• Plan web site and E-mail address	To provide information and gather input
• Presentations (optional)	To present study information and gather input

1.8.1 Public Input Highlights

Public input was important to the planning process, by assisting the planning team in identifying key issues and refining improvement alternatives into plan recommendations. Although public events were held at Last Chance, Ashton and Idaho Falls (first session only), participation was greatest at the Last Chance sessions, due to its proximity to the greatest number of corridor residents. In addition to on-corridor opportunities, there were a high number of written comments received via mail, in comment forms, and the plan's web page.

Highlights of initial public input identified the following key issues:

- *Collisions with wildlife*
- *Narrow shoulders*
- *Excessive speeds and Speed limits too high*
- *High volume and speed of truck traffic*
- *Dangerous access points at Last Chance, Elk Creek, Mack's Inn, and Island Park Resort*
- *Lack of passing lanes*
- *Desire for additional left turn lanes at key access points*
- *Protect adjacent wetlands*
- *Dysfunctional culverts and stream crossings at Targhee, Tighe, and Howard Creek that prevent fish migration*

Public input regarding alternatives gathered the following key comments:

- *Minimize impacts to businesses when reducing accesses*
- *Recognized need to reduce the number of accesses through Last Chance*
- *Strong support for new left turn lanes at key corridor intersections such as Red Rocks*
- *Reduce speed on SH 87 along Henry's Lake residential area*
- *Reduce speed to 45 in advance of Last Chance and to 35 through Last Chance*
- *Lack of support for bypass around Last Chance*
- *Widening of US 20 to 4 lanes (plus center turn lane) through Last Chance must include "urban section" improvements to enhance pedestrian movements and community function on both sides and across US 20*
- *Pursue culvert and stream crossing improvements at Tighe, Targhee and Howard Creeks as soon as possible*
- *Continue research to determine the most effective methods to reduce wildlife collisions*
- *Strong support for additional passing lanes*
- *Very little support to widen US 20 throughout*
- *Lack of support for traffic signal or interchange at Big Springs intersection*
- *Strong desire for additional public involvement opportunities during project development to work out specific access and design issues.*

A complete description of the public involvement plan, its activities, comments, and a detailed summary of all meeting results is included in the appendix.

1.9 Purpose and Need

The Purpose and Need for the corridor plan is derived from a combination of technical assessment and public input outlined above. It served as the general guide to the identification and evaluation of alternatives to meet the long-term needs of the corridor and its users.

Purpose: The purpose of the US 20 corridor is to provide a safe multi-use facility that is context sensitive and serves local, regional, and through traffic demands.

Need: Highly fluctuating seasonal demand places a greater volume of traffic on the corridor in the summer peak season. The corridor serves many recreational sites, and several of the Forest Service road approaches are substandard. Other present geometric deficiencies that are present include substandard shoulders, and some advisory speeds below 50 miles per hour. As the area has grown in popularity, growth of businesses along the corridor has created an abundance of driveway approaches. As traffic volumes have increased, congestion and safety concerns have developed. There is a lack of adequate turn lanes at major intersections. As volumes have increased, so have collisions with wild animals, which are the second highest recorded reason for crashes on the corridor. Finally, when the highway was built, and as it has been improved over the years, it has bisected wetlands as well as restricted stream flows and spawning areas for fish passage.

1.10 Corridor Goals

A series of goals were developed to more specifically outline the needs of the Corridor and the issues that are to be addressed through improvements to the system. The goals are based on technical assessment of corridor conditions and needs, but are also driven substantially by public input. Each goal is also supported by more specific objectives, which are listed in full in the corridor plan document.

1. **CORRIDOR SAFETY –** To accommodate the safe use of various traffic modes:
    a. Provide safe access on and off the corridor.
    b. Decrease animal/vehicle accidents.

2. **LOCAL CONTEXT DESIGN** - Provide roadway improvements that are context sensitive.

3. **CONGESTION –** Provide improvements to decrease congestion.

4. **ENVIRONMENT** - Minimize adverse corridor impacts to the environment.

5. **RECREATION FACILITY ACCESS** – To enhance recreation support facilities.
    a. Provide for bike/pedestrian/ATV facilities.

6. **TRAVELER INFORMATION**
    a. Provide adequate and visible signage.
    b. Provide traveler improved roadway condition information.

7. **ROADWAY DEFICIENCIES** - Correct roadway deficiencies.

8. **MAINTENANCE** - Provide adequate, cost effective, low impact winter maintenance.

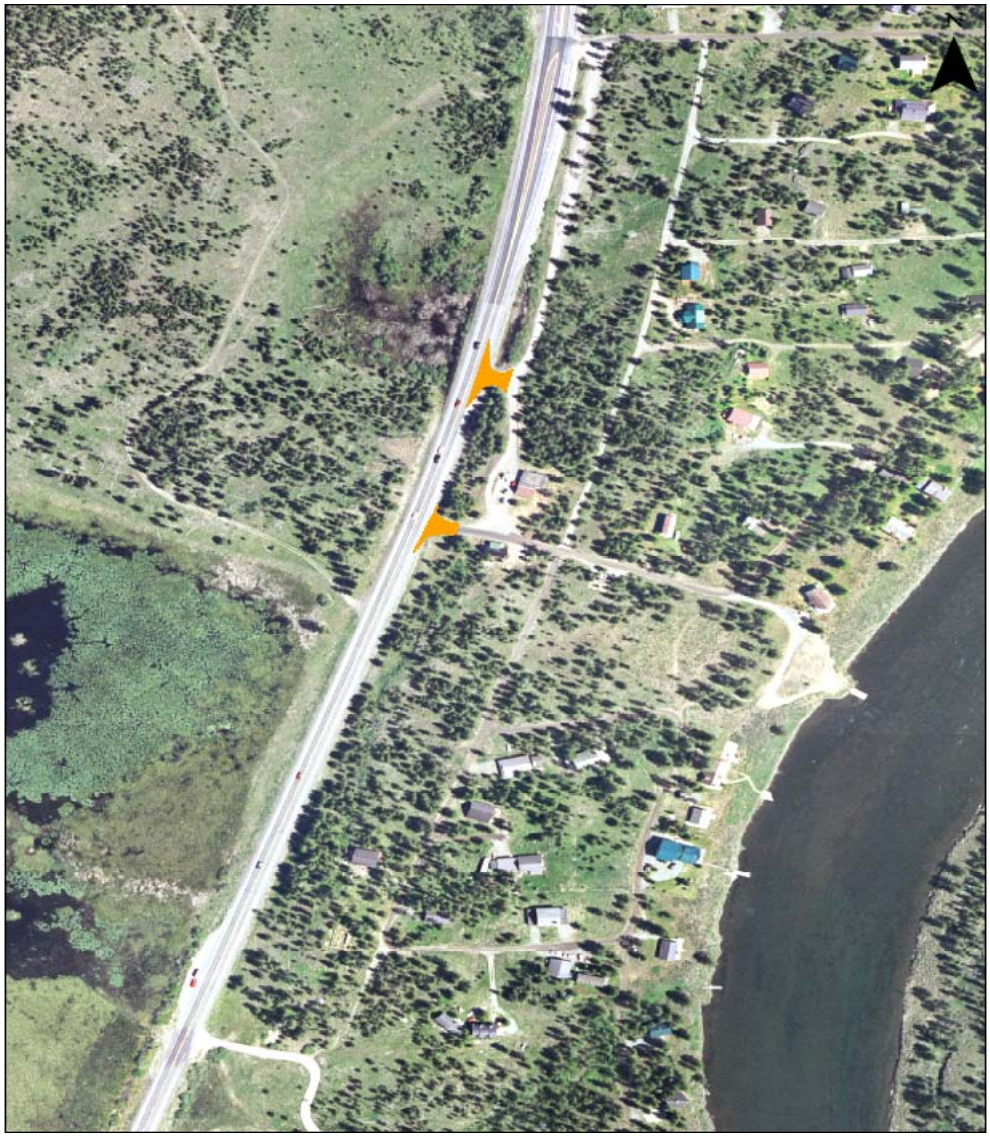
1.11 Plan Recommendations: Build Alternatives

Improvement alternatives to address corridor deficiencies satisfy the purpose, need, and goals and meet long-term needs were developed at three levels; possible alternatives, feasible alternatives and most feasible alternatives. Concept illustrations of the most feasible alternatives are included as part of the final plan recommendations. ITD recognizes the need for additional detailed planning and discussion with affected business and property owners and corridor residents during project development to determine the specific and most appropriate improvements.

1.11.1 Pinehaven

- Reduce the number of access points into the south Pinehaven community by closing the two southern access points to the residential area and allowing access through the central Pinehaven entrance where turn lanes on US 20 currently exist.

- Allow southern access to Henry's Fork Lodge to remain intact. Consider installation of turn lanes on US 20 at this intersection.



1.11.2 Last Chance

- Reduce the number of access points to the roadway to a maximum of 8 to 12 main points through the area.
- Consider enhancement of internal vehicle circulation by improving frontage or backage roads to the east of the present highway.
- Widen US 20 to four through lanes with left-turn bays at major intersections to reduce traffic congestion.

1.11.3 Yale Kilgore

- Reduce the number of access points to the roadway and incorporate acceleration and deceleration lanes.

- Minor realignment of the Yale-Kilgore Road to intersect with Big Elk Creek Road creating a four-legged intersection and improving safety.

  OR

- Realign the present roadway to the west of the existing intersection to eliminate conflicts with high-speed traffic and the many driveways and roadway access points in the area.

1.11.4 Mack's Inn

- Reduce the number of access points to the roadway and add acceleration and deceleration lanes where possible.

  OR

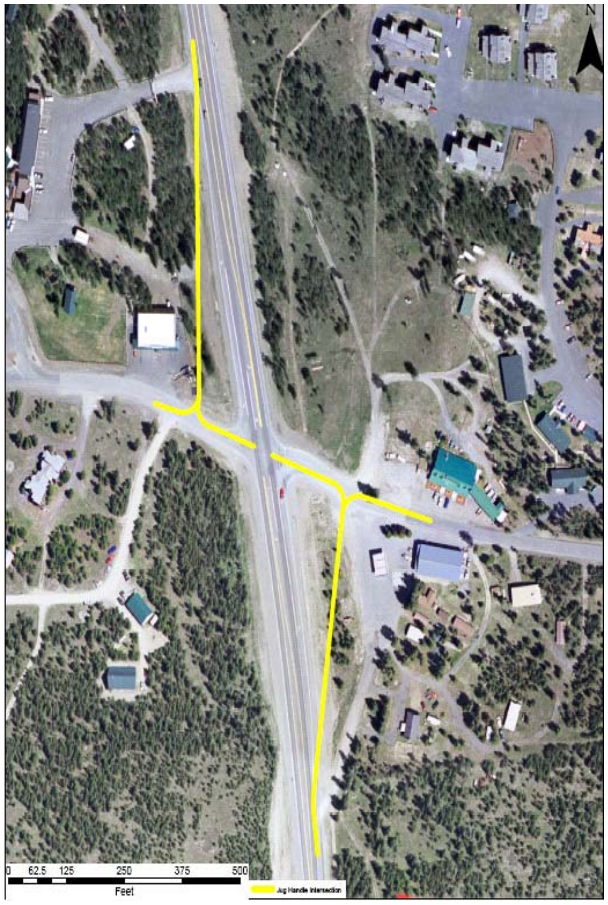
- Realign the South Big Springs Loop Road to the top of the grade, reduce the number of access points to the roadway, and add acceleration and deceleration lanes where possible.

1.11.5 Sawtell/Big Springs

- Add right turn acceleration and deceleration lanes, and limit access to major intersections only.

  OR

- Add "Jug Handle" type improvements to the intersection to decrease the amount of left turning traffic and limit access to the major intersection only.



1.11.6 State Highway 87

- Improve the roadway surface to match that of the Montana section, including shoulder width, clear zones, and pavement condition.

- Reduce the speed limit between mileposts 3 and 5 to 45 miles per hour, along with signage improvements associated with the speed limit change.

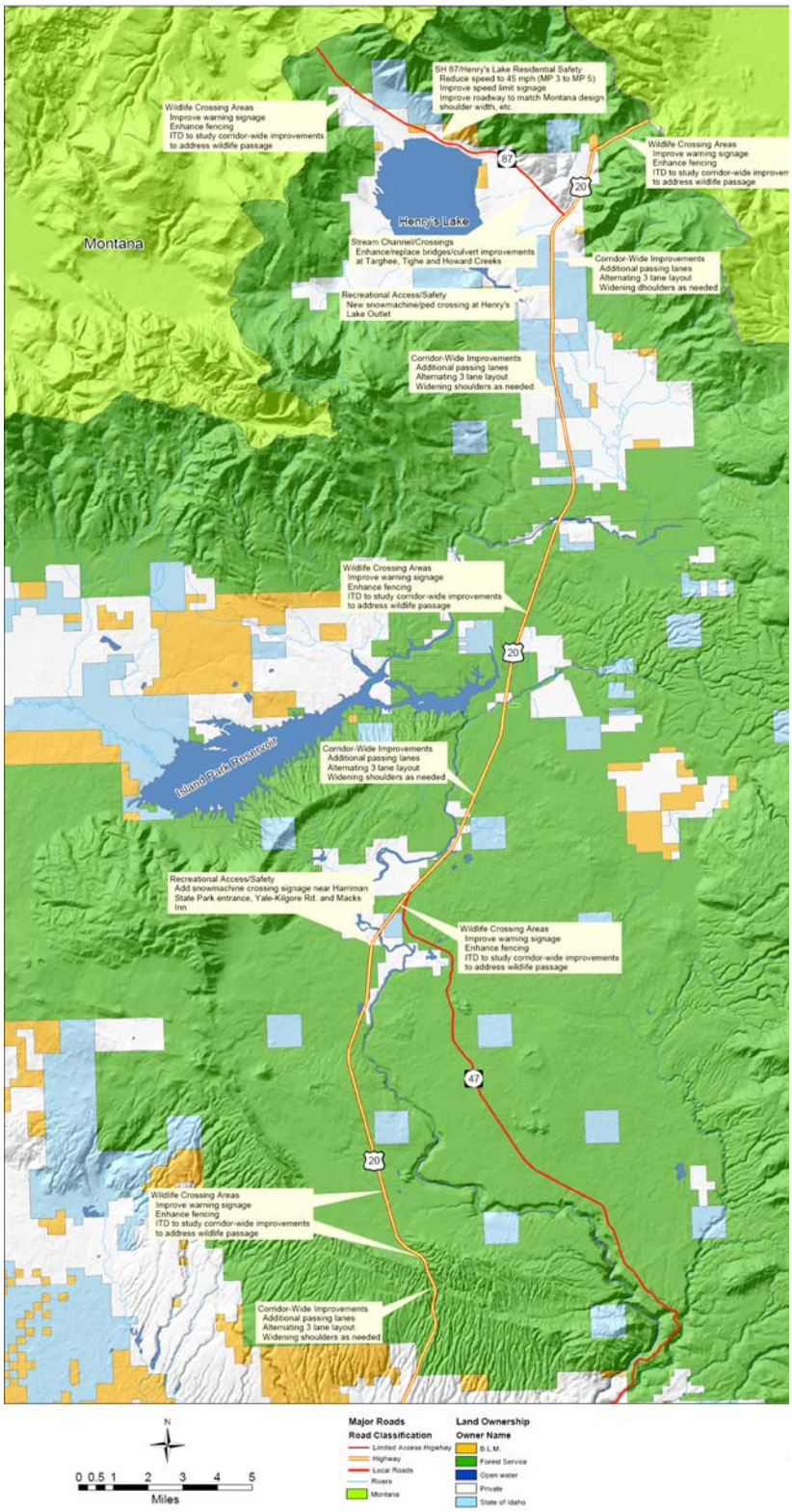
1.11.6 Corridor-Wide Improvement Alternatives

Corridor-wide improvement alternatives include measures to:

- address safety concerns
- increase capacity
- improve level of service
- reduce wildlife collisions
- improve fish migration
- enhance roadway
- information for corridor users.

Specific improvements include:

- the addition of passing lanes and alternating three-lane layouts
- additional left turns at major intersections such as Red Rocks
- enhanced informational and directional signage
- widened shoulders
- continued studies to determine the most effective method to reduce wildlife collisions.



Note: ITD District 6 feels that it is best to not commit to one or a few alternatives at this time in order to keep a wide range of options open. Final decisions will be made with input from corridor residents as part of project design and development.

1.12 Plan Recommendations: Policy Changes

The following recommended policy changes are designed to support the safe and efficient function of the US 20 corridor, the implementation of the US 20 Corridor Plan, and the management of growth along the corridor. These policy recommendations are intended to be implemented in a manner that is in conformance with local land use policies and that are not detrimental to the corridor operation.

Access Control

- No new accesses to US 20 will be allowed without prior review and approval by the Idaho Transportation Department and either the City of Island Park or Fremont County, whichever is the regulatory jurisdiction.

- The Idaho Transportation Department will be a requisite reviewer of all Island Park and Fremont County development proposals that have impacts of 100 or more vehicle trips per day during peak season.

Environmental Impacts

- All improvements to the US 20 corridor will be planned and implemented with sensitivity to the natural and man made environment; with preference to solutions that minimize impacts to the environment.

Improvements Design

- New improvements to the US 20 Ashton Hill to the Montana state line corridor will be done in a manner that is context sensitive to the function, aesthetics, and safety of the communities, residences, businesses, and resources along the US 20 corridor.

- New improvements to the US 20 corridor will include the accommodation of bicycle and pedestrian facilities and for safe mobility across and along the corridor

Coordination of Efforts

- The planning and implementation of any new development and improvements to the US 20 corridor will be done in a collaborative manner, involving the Idaho Transportation Department, all affected local governments, related agencies, interested user groups, property owners, and business operators. In addition, the Montana Department of Transportation will be invited to participate as may be appropriate in order to enhance the compatibility of US 20 and SH 87 facilities with the continuation of US 20 and SH 87 into Montana.

Developer Impacts and Responsibility for US 20 Improvements

- In concert with both the City of Island Park and Fremont County ordinances, developers will be responsible for improvements to mitigate impacts to the US 20 corridor resulting from their development, including, but not limited, to intersection improvements such as turning lanes and shoulder widening.

- Developers may be required to conduct an impact study to determine the necessary improvements or modifications to be implemented on the US 20 corridor result from the development of adjacent lands. The threshold for conducting such an impact study will be determined by the regulatory entity, as outlined in the Island Park and Fremont County comprehensive plans and ordinances, with input from the Idaho Transportation Department.

    - Traffic impact studies should be used to determine the impacts and any necessary mitigation on US 20, SH 87, adjacent roadway systems, other nearby developments and neighborhoods resulting from development in the vicinity.

SECTION 2: INTRODUCTION

The US 20 Corridor Plan, from the Ashton Hill Bridge to the Montana State Line, is the second phase of a corridor analysis (first phase completed in 1999) commissioned to ensure that improvements to the entire corridor between Idaho Falls and the Montana State Line are guided by a long range plan. This portion of the corridor travels through Island Park, Idaho, a community that touts itself as having the "longest Main Street in America". Main Street is US 20, wherein approximately 29 miles of the highway right-of-way travels through the City of Island Park.

Many traffic issues have arisen from growth in the number of second homes and tourism-related land uses. In the last ten years, several new fishing and hunting lodges have opened, and hundreds of new housing units have been constructed (most are built as year-round units, but are only used as vacation homes). This trend is beginning to shift as the popularity of winter sports continues to grow to the point where people are settling into the area on a year-around basis. This tendency will push the need for additional services like retail, grocery, schools, and healthcare - to name a few. Until recently, growth of this type has not been considered, which now prompts the planning of transportation infrastructure improvements for the next 20 years, on both US 20 and SH 87 to the Montana state line, to serve the long-term needs and accommodate the anticipated traffic increases in the area.

The purpose of this plan is to help guide the Idaho Transportation Department in the development and maintenance of the highway over the next 20 years and beyond. The planning process involved several steps, culminating in the drafting of recommendations for improvements that may be made (dependent upon funding) during the years 2005 to 2025.

TABLE 1: PLANNING STEPS
Stakeholder Interviews
Public Workshop #1 ***Project Kick Off—Identify Issues***
Research Existing Conditions
Document Existing/Projected Environment/Land Use
Analyze Future Travel Demand and Performance
Develop Corridor Purpose & Need Statement
Public Workshop #2 ***Corridor Goals and Alternatives***
Generate Alternatives
Evaluate to identify Feasible Alternatives
Public Workshop #3 ***Review Draft Feasible Alternatives***
Analysis to determine Recommended Alternatives
Public Workshop #4 ***Present Draft Corridor Plan Recommendations***
Prepare Draft Corridor Plan
Prepare Final Corridor Plan

The planning process used to develop this document is presented in Table 1 as well as described below. The remainder of this chapter discusses in greater detail the layout, coordination, and background for this document.

- *Stakeholder Interviews* - This step introduced several key people to the project, and generated feedback regarding the types of issues that the area was facing. A summary of their input is in the Appendix.

- *Project Kick Off - Identify Issues* - The first public meeting for the project was held to identify issues, and to provide background information about the project. ITD staff members and consultants were available at the open houses to discuss issues and receive input. Comment forms were made available to participants.

- *Research Existing Conditions* - Throughout the first several months of the project, activities were devoted to research on the existing conditions within the corridor. Information collected from known data sources was assimilated into one document, which included field research for roadway access points, and environmental conditions around the corridor. Data included traffic volumes, turn movement counts, crash statistics, area land uses, and roadway geometry data.

- *Analyze Future Travel Demand and Performance* - The intent of this task was to develop an analysis of existing and forecasted traffic conditions. Based on this analysis, improvement alternatives are developed to address the anticipated traffic needs of the highway system.

- *Develop Corridor Purpose & Need Statement* - A workshop was held wherein major stakeholders (business persons and affected citizens), various agency representatives, and ITD District 6 staff were invited to help complete and prioritize issues to be addressed by the plan. Input gathered from this meeting, as well as separate interviews with the stakeholders and ITD staff, helped to formulate the framework for the project's Purpose and Need Statement.

- *Public Workshop #2 Corridor Goals and Alternatives* - This workshop was the second opportunity to gather input from the general public. Held in an open house format, the meeting allowed the presentation of the purpose and need statement, corridor goals, and preliminary alternatives based on existing conditions and stakeholder input. This process yielded additional input on alternatives that was then used to refine project-level alternatives.

- *Generate Alternatives* - The input from the second public workshop produced a wide range of alternatives to be considered for evaluation

- *Evaluate to Identify Feasible Alternatives* - Once the range of alternatives was identified, engineering analysis helped to narrow the range to only those alternatives that were feasible.

- *Public Workshop #3 to Review Draft Feasible Alternatives* - Once again held in an open house format, workshop participants were shown displays on alternatives deemed feasible, as well as some additional traffic analysis that was developed for the project. Final input was received on the alternatives presented and the participants were informed about possible sequencing and timing of projects (based on traffic analysis) and when the projects would be necessary.

- *Analysis to Determine Recommended Alternatives* - A final check on the level of service options available in the corridor, as well as a meeting with ITD District 6, was implemented to ensure that the list of corridor plan recommendations was supported internally by district staff and management.

- *Public Workshop #4 to Present Draft Corridor Plan Recommendations* - Recommended alternatives, policies, and corridor-wide treatments for both US 20 and SH 87 were presented to workshop participants.

- *Prepare Draft Corridor Plan* - The draft plan was written for ITD and public review.

- *Prepare Final Corridor Plan* - The final plan was prepared, taking into account suggested changes to the draft document.

2.1 Development of Plan

The plan is organized in a format based on the Idaho Corridor Plan Guidebook, which outlines aspects of the planning process. While focusing on many of the aspects developed during the planning process, a separate appendix with in-depth information is available for review.

The seven sections included herein summarize the information gathered and analyzed regarding the US 20 and SH 87 corridors, and include recommendations for improvements based on the data. The following is a review of each section:

1.0 Executive Summary
This section of the report is a stand alone document, as well as the first chapter of the full plan document, which summarizes the process and findings of the plan.

2.0 Introduction
This section introduces the plan, the process used, and provides an overview of the contents.

3.0 Overview of Existing Transportation, Land Use, and Community and Environmental Conditions
This section delivers an in-depth look at the present conditions on the corridor, including geometrics, right-of-way availability, accident statistics, pavement and shoulder widths, pavement condition, classification of land use around the corridor, and identification of access points. An environmental scan of the study area will also be summarized in this section.

4.0 Transportation Forecasts and Corridor Performance
This section reviews the projected levels of traffic on the corridor and the anticipated performance of the corridor under those circumstances. Using Highway Capacity Manual (HCM) software, the corridor traffic has been assessed for levels of congestion, and possible methods to be employed to improve the congested areas.

5.0 Public Process and Corridor Plan Goals
This section recaps the public outreach efforts that were developed for this project, including newsletters, open houses, workshops, stakeholder interviews, and other communications such as meetings with the Island Park City Council. Actual comments, and copies of the comment sheets received, are included in a separate plan Appendix.

6.0 *Alternatives Development*
This section details the process for determining the recommended alternatives, environmental data for all alternatives, and the reasons that alternatives were eliminated from further consideration.

7.0 *Plan Recommendations*

The final section of the plan discusses the recommendations made for specific projects, corridor-wide improvements, improvements on SH 87 (a low-volume corridor), and policy recommendations to improve the operation of the corridor over the next 20 years.

2.2 Corridor Planning within ITD

Corridor planning as a practice for the Idaho Transportation Department began in February 1998 with the Idaho Transportation Board adoption of the Corridor Planning Guidebook. The intent is to develop plans for individual facilities that describe the impacts of the State Transportation Plan and the State Highway Plan to determine the impacts and needs on an individual facility basis. The State Corridor Planning Guidebook includes key concepts for corridor plans to address:

- Assisting in prioritizing transportation projects and preserving public right-of-way.
- Comprehensively addressing future transportation needs and developing management strategies in the corridor area.
- Tailoring of key elements based on Idaho Code, as well as ITD plans for the individual corridor.
- Fostering cooperative State and local transportation planning efforts.
- Developing a clearly defined purpose and need statement to guide the planning effort.
- Promoting active public participation throughout the planning effort on a local level.
- Considering all modes of transportation and their impacts within the limited geographic area served and sustained by the corridor.

One other benefit of the corridor planning process is the ability of the State and local government agencies to approach transportation planning for their respective jurisdictions in a coordinated, comprehensive, and continuous manner, leading to improved coordination and support of mutually beneficial planning goals.

2.3 The Evolution of Corridor Planning

With all the benefits of corridor planning, there tends to be confusion regarding the corridor planning process (an analysis and evaluation of project alternatives within the study area) and its role with project selection and development. The development of preferred alternatives for implementation is based on public involvement, district priorities, cost, and an environmental scan that all help to identify potential environmental problems or implementation difficulties that may be encountered on proposed projects as they proceed into the more formal project development process.

Confusion ensues when projects, identified as requiring National Environmental Policy Act (NEPA) documentation, proceed through to project development on a fast track basis following a recommendation in the corridor plan. This confusion tends to center on the public involvement portion of the plan, and whether alternatives could be eliminated based on public dissent in the corridor planning process. NEPA proponents stated that the Alternatives Analysis process conducted within NEPA is the only legitimate way to truly narrow the range of alternatives and to identify a Preferred Alternative for permitting and construction. Proponents of corridor planning argued that there were preferences identified in the planning process that were legitimate and should be considered in the project development process. These differing views led to the development of standards for the integration of NEPA and Corridor Planning practices, with an understanding of the appropriate level of coordination required, given the possible construction of projects forwarded through the corridor planning process.

2.4 Integration with NEPA

The following tables are from a memorandum put together by ITD to discuss the various ways in which to integrate NEPA into Corridor Planning. The source of the information is NCHRP Report 435, which discusses the topic of Corridor Planning and NEPA integration.

The following matrix summarizes a series of five approaches that aid in coordinating and integrating (to various degrees) Corridor Planning and NEPA. Each approach summarizes the relative advantages, disadvantages, and conditions under which the approach is most applicable. The lower the approach number, the higher the level of integration between corridor planning and NEPA. For example, Approach No. 1 is a fully integrated corridor plan, where NEPA is part and parcel of the work effort. At the other end of the scale, Approach No. 5 is a corridor plan approach completely developed outside the NEPA process.

TABLE 2: INTEGRATION OF NEPA AND CORRIDOR PLANNING

No.	*Approach*	*Advantages*	*Disadvantages*	*Most Appropriate*
1.	**Make corridor improvement decisions only within the formal NEPA process.** ***(With-NEPA Corridor Plan)***	Decisions are made under the NEPA umbrella. Likely to generate formal resource and local agency attention. Process is usually well understood, less chance of confusion.	Requires Federal signatures, less local autonomy than if done outside of NEPA. Document has a 3-year shelf life. Developers must be prepared to keep moving. Potential corridor plan schedule delays because of environmentally significant issues.	When agencies expect projects will keep moving through project development and construction (i.e., document is unlikely to lapse). When significant streamlining of the planning and project development process is necessary.
	***EIS* – Environmental Impact Statement** ***DEIS* – Draft Environmental Impact Statement** ***EA* – Environmental Assessment**	Elimination and selection of alternatives is most defensible when conducted in conjunction with the NEPA process. Can begin as an EA and transition to an EIS where the potential significance of impacts can be confirmed.	Multiple projects resulting from a planning study could require additional environmental documentation. Additional work developing consultant scopes of work is required by ITD Districts/FHWA Area Engineers.	

No.	Approach	Advantages	Disadvantages	Most Appropriate
2.	**Conduct a tiered EIS*.** **Tier 1 conducted for alignment selection, design concept and scope decisions (or possibly corridor protection). From initial tiered EIS, subsequent environmental documents are prepared to address discrete projects within logical termini.** ***(With-NEPA Corridor Plan)*** *Note: No Idaho-specific experience in this type of environmental documentation.	Decisions are made under the NEPA Umbrella. Likely to generate formal resource and local agency attention. Federal signatures on Tier 1 reinforce design concept and scope decision. Amount of information in each tier can be tailored to needs.	Requires education of resource agencies and public as to objectives of plan. Could confuse public if not properly explained. Requires two drafts and a final EIS, including all necessary agency signatures. Potential corridor plan schedule delays because of environmentally or locally significant issues, reviews and approvals. Additional work developing consultant scopes of work is required by ITD Districts/FHWA Area Engineers.	Where Federal buyoff on design concept and scope helps cement decision. When it would help the lead agency focus on the issues that are ready for decision, while excluding those that are already decided or not yet matured. When significant time lag is expected between planning decision and project development. When corridor protection is an issue. When some streamlining of the planning and project development process is necessary.

No.	Approach	Advantages	Disadvantages	Most Appropriate
3.	**Prepare less detailed DEIS* for the design concept and scope decision, with expectations of a Supplemental DEIS or new DEIS for project development decisions.** **Also identified as the integrated planning and project development guidance approach.** ***(With-NEPA Corridor Plan)*** *Note: No Idaho-specific experience in this type of environmental documentation.	Approach is likely to generate formal resource and local agency attention. Provides flexibility on level of detail for DEIS, commensurate with what is required to make a decision on design concept and scope. Provides flexibility in whether to move ahead immediately into project development or wait. Less detailed EIS could lower costs and expedite schedules.	Resource agencies may expect more detail than DEIS is intended to provide. Some education of stakeholders may be needed. Supplemental DEIS may be necessary to provide additional environmental detail to achieve regulatory approval. Potential corridor plan schedule delays because of environmentally or locally significant issues. Additional work developing consultant scopes of work is required by ITD Districts/FHWA Area Engineers.	When agencies are not sure whether there will be a time lag between planning decision and project development. When Federal involvement in DEIS (but not necessarily buyoff) is viewed to be a positive aspect. When some streamlining of the planning and project development process is necessary.

No.	Approach	Advantages	Disadvantages	Most Appropriate
4.	**Initiate NEPA scoping process to begin the corridor plan, but do not prepare draft and final NEPA documents until later, when project development begins. Also described as the middle ground approach between the traditional NEPA process and making decisions outside of the NEPA process.** ***(With-NEPA Corridor Plan)***	Allows corridor plan to take the place within the umbrella of NEPA. Obligates resource agencies to become more involved in the process. Does not require Federal signatures until project development. Planning decisions made locally. Environmental scans could inform future project-level environmental documentation, especially for cumulative and secondary impacts.	Resource agencies may be unclear about their role and obligations under this approach. Responsibilities and expectations of all parties would need to be clearly understood and explained. May require preparation of Notice of Intent (NOI) and conduct of a scoping process, if Draft EIS is anticipated. Potential corridor plan schedule delays because of environmentally or locally significant issues. Additional work developing consultant scopes of work is required by ITD Districts/FHWA Area Engineers.	When there is a concern about making decisions outside the NEPA umbrella, but it is viewed to be premature to initiate NEPA documentation. When some streamlining of the planning and project development process is necessary.

No.	Approach	Advantages	Disadvantages	Most Appropriate
5.	**Conduct corridor plan outside of formal NEPA process. Follow with NEPA documentation at appropriate time.** **Recognize planning documentation and associated decisions in the NOI and at scoping meeting.** **Confirm acceptability of analysis and conclusions there.** **Particular focus should be given to statements of problems, comparative data among alternatives, and descriptions of alternatives considered but eliminated.** ***(Pre-NEPA Corridor Plan)***	Provides greatest local flexibility. If study is conducted well, most information can usually be confirmed and incorporated into NEPA record. Have the option to initiate EIS/EA when appropriate, or "spin-off" projects to EIS/EA even in the middle of the planning process. Based on what is necessary to make a recommendation, environmental analysis should match detail appropriately.	Resource agencies may take study less seriously. Heightens possibility of revisiting decisions if study eliminates certain alternatives outside of NEPA umbrella. Public participation could decrease, as they are confronted with too many public meetings to attend.	When a multi-corridor plan is appropriate, with expectation of multiple recommended projects. When significant time lag is expected between planning decision and project development. When a more streamlined planning and project development process is not necessary.

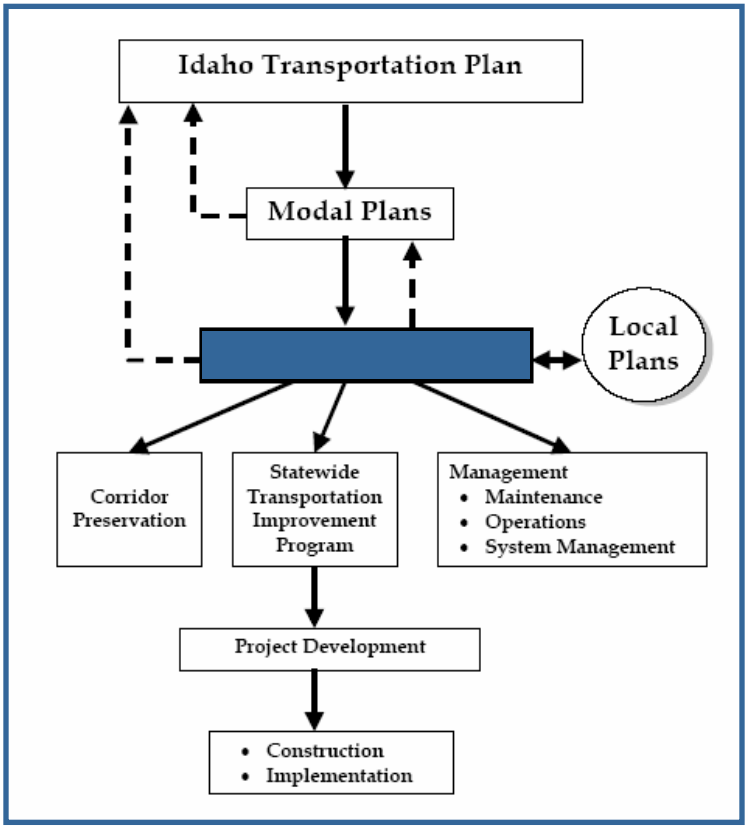
The US 20 and SH 87 Corridor Plan is using Approach No. 5 which completes the corridor plan outside of the NEPA process. There are no earmarked funds or project outcome that is expected to be a part of

the final plan. If one or more of the project recommendations proceed relatively quickly into project development, the recommendations within the planning process are general, and the public has been informed that this is just the beginning of project development, and that if additional work is to be done within the corridor, a much more comprehensive planning and environmental analysis would be conducted at that time. This would include a comprehensive look at the alternatives and potentially another analysis and consideration of projects that initially did not have popular support.

2.5 Corridor Plan Documentation and its Uses

As stated previously, a corridor plan documents the implementation of the Idaho Transportation Plan and its modal plan elements on a specific facility. The flow chart below is from the Idaho Corridor Planning Guidebook, and shows corridor plans as they fit into the overall process of planning at the State and local levels.

FIGURE 1: HOW CORRIDOR PLANNING FITS IN



Corridor plans are adopted by the Idaho Transportation Board as policy, thus the recommendations for projects that are borne of the planning process serve as the basis for improvements within the corridor boundaries. Should a project be suggested that is not included in the corridor plan, an evaluation of the project for plan consistency should be performed and a subsequent plan update or revision should be done to include the project.

2.6 Corridor Plan Background

The US 20 corridor study boundaries (as illustrated in Figure 2) extend from the Ashton Hill Bridge to the Montana state line, inclusive of State Highway 87 from the US 20 Junction to the Montana border. The corridor is approximately 39 miles in length, encompassing an area extending one-half mile to both the west and east of US 20.

The US 20 corridor must accommodate heavy tourist traffic, local traffic, and the majority of the freight movement between West Yellowstone, southern Montana, and the Snake River plain. Effectively balancing these competing interests and needs is the goal of the corridor planning process. The information presented in the following report provides a complete description of conditions on US 20 and forms the basis for forecasting the future performance of the transportation system.

2.7 Corridor Segments for Analysis

For the purposes of this study, the corridor was divided into four segments to identify needed traffic and roadway improvements. Segment 1 extends from the Ashton Hill Bridge to Island Park (milepost 363.37 to 382.28); Segment 2 encompasses the Island Park Community (milepost 382.28 to 402.62). Segment 3 covers the area between Island Park and the Montana State Line (milepost 402.62 to 406.30), and Segment 4 covers State Highway 87 from milepost 0 to 9.15.

Segment 1 travels north through the Caribou-Targhee National Forest Service lands, home to Harriman State Park, a 16,000 acre wildlife reserve within the Greater Yellowstone Ecosystem, and is in the heart of the US 20 Corridor Plan study area. The park spans both sides of the corridor and is home to moose, resident herds of elk and deer, bald eagles, trumpeter swans, and other raptor species. The Henry's Fork of the Snake River flows through the park and parallels much of the distance of the corridor.

Segment 2 begins at the Island Park City limits south of Last Chance and travels through the most highly developed part of the corridor to the junction with State Highway 87. This area is characterized by the close proximity to the Henry's Fork and the tourist and recreational development patterns. The area has many second homes that are mostly used during the summer vacation months. Other tourist based development includes several nationally known lodges, cabins, and associated support facilities including guide services, fly fishing stores, and gas and convenience stores. This segment also crosses the Henry's Lake Flat, an area within Henry's Lake State Park that is dominated by wetlands and the headwaters to the Henry's Fork of the Snake River. Blowing and drifting snow during winter is a common occurrence.

Segment 3 travels from the highly developed area and climbs to the top of Targhee Pass (elevation - 7,072-feet) over the continental divide and into Montana (the study boundary ends at the Idaho state line). This area is characterized by steep mountain terrain and lodgepole pine forests where the highway travels through a canyon area that is shaded most of the day, creating a hazard with ice build-up.

Segment 4 includes State Highway 87 (in its entirety), a low volume road with no passing or hill climbing lanes that stretches a little more than nine miles to the Montana state line. This highway parallels Henry's Lake for about four miles, and provides access to lakefront development and enclaves of second homes that are not adjacent to the lake. The lake and its tributaries are a source of water for a multitude of diverse wildlife, including moose, elk, deer, bears, wolves, and mountain lions, to name a few. This highway has experienced a large increase in truck traffic over the last five years, including a distinct jump in 2001 when volumes increased from approximately 70-trucks per day to approximately 220-300 trucks per day. This increase could be due to improved roadway conditions in Montana and the closure of US 191 through Yellowstone National Park to certain types of commercial traffic.

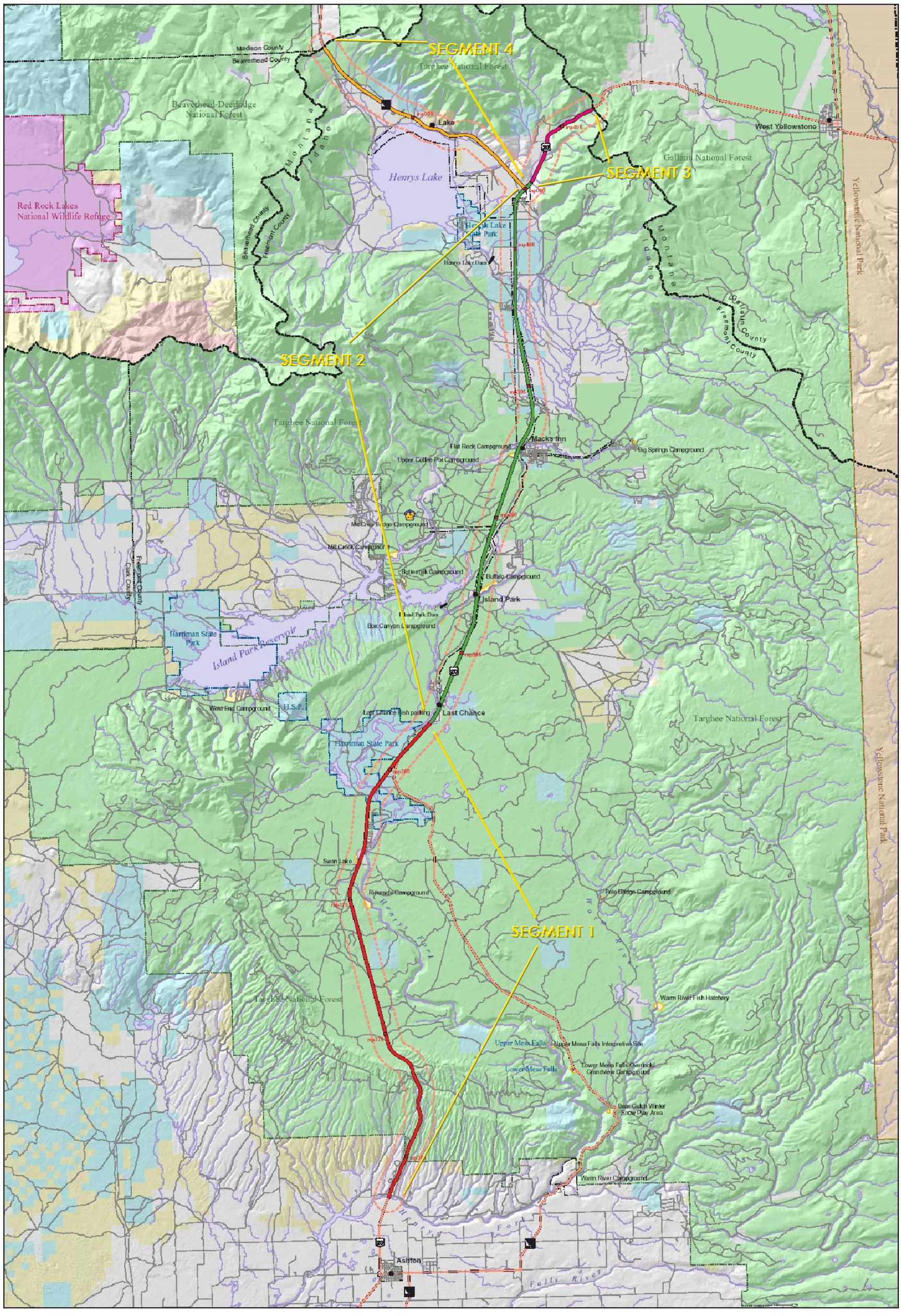


FIGURE 2: STUDY AREA

2.8 Project Purpose and Need

For a corridor plan, the purpose of the project relates to its intended function, and the need relates to present deficiencies that must be corrected through some project action. In the case of a corridor plan, that action includes recommendations for project improvements and policy changes to facilitate the correction of the deficiency. The project Purpose and Need statement for the US 20 Ashton Hill Bridge to the Montana State Line Corridor Plan is:

Purpose: The purpose of the US 20 corridor is to provide a safe multi-use facility that is context sensitive and serves local, regional and through traffic demands.

Need: Highly fluctuating seasonal demand places a greater volume of traffic on the corridor in the summer peak season. The corridor serves many recreational sites, and several of the Forest Service road approaches are substandard. Other geometric deficiencies present include substandard shoulders, and some advisory speeds below 50 miles per hour. As the area has grown in popularity, growth of businesses along the corridor has created an abundance of driveway approaches. As traffic volumes have increased, congestion and safety concerns have developed. There is a lack of adequate turn lanes at major intersections. As volumes have increased so have collisions with wild animals, which are the second highest recorded reason for crashes on the corridor. Finally, when the highway was built, and as it has been improved over the years, it has bisected wetlands, and restricted stream flows and spawning areas for fish passage.

2.9 Project Goals and Objectives

Goals and Objectives help frame a planning process. In the development of a corridor plan there is a high likelihood that some project alternatives will be suggested that are inconsistent with good design principles, or with state policy, or may correct a deficiency in one area, and create a detriment elsewhere in the study area. To avoid these pitfalls, the project goals and objectives are crafted in such a way to guide the development of the project and policy alternatives, acting as filters for suggestions that would be inconsistent with the long term needs of the corridor.

The following Goals and Objectives were generated from input received at a stakeholder workshop, as well as input received during the issues identification portion of the planning process.

1. CORRIDOR SAFETY – To accommodate the safe use of various traffic modes:

a. Provide passing lanes where needed.
b. Provide acceleration / deceleration lanes at major intersections.
c. Provide turnouts for slow moving vehicles.
d. Provide extra-wide shoulders on uphill grades to accommodate vehicle breakdown and emergency use.

Provide safe access on and off the corridor:

e. Align permitted access points with approved access permits, and work with property owners to close illegal accesses.
f. Ensure proper sight distance is maintained at access points.
g. Decrease numbers of access points through developed areas.
h. Provide frontage roads in areas in need of improved local traffic circulation.
i. Provide turning lanes at intersections as may be necessary.

Decrease animal/vehicle accidents:

j. Implement improved signage and awareness programs.
k. Work with Idaho Fish and Game to utilize advanced animal warning systems in corridor.
l. Evaluate speed limits through corridor and recommend to ISP to increase enforcement of speed limits.
m. Investigate high accident locations to install improvements to increase safety.

2. LOCAL CONTEXT DESIGN - Provide roadway improvements that are context sensitive:

n. Utilize Context Sensitive Design standards in roadway improvements.
o. Enhance the livability for local communities through amenable project design.
p. Design roadway improvements that reflect the desired community character.

3. CONGESTION – Provide improvements to decrease congestion:

q. Provide easy in and easy out access at primary intersections/driveways.
r. Provide passing lanes in both directions at points no more than ten miles apart throughout the corridor.
s. Provide additional lanes and frontage roads where forecasted traffic volumes dictate.
t. Limit future access points, and require consolidated accesses where possible.

4. ENVIRONMENT - Minimize corridor impact to the environment:

u. Minimize or avoid corridor impacts to unique plant and animal species.
v. Provide where necessary adequate clear span or culvert structures that allow optimum stream flow and support fish passage and spawning conditions.
w. Consider improvements that minimize or buffer corridor noise impacts.
x. Recommend local ordinance for prohibition of truck engine compression brake use through community areas.
y. Minimize negative visual impacts of the corridor to adjacent property.
z. Ensure roadway improvements do not create bisected wetlands.
aa. Work to restore previously bisected wetlands.
bb. Control corridor storm water runoff to prevent adjacent contamination.
cc. Provide improvements that do not adversely affect socio-economic activities in the corridor.

5. RECREATION FACILITY ACCESS – To enhance recreation support facilities:

dd. Provide turnouts for scenic observation points.
ee. Investigate opportunities to partner with other agencies to provide interpretive facilities throughout the corridor.
ff. Work with Fremont County to develop and improve snow machine access to trails.
gg. Determine needs and implement additional snow machine parking along corridor.

hh. Define and provide safe snow machine crossing locations.
ii. Provide safe access points for sportsmen and consolidate Forest Service road access where possible.

Provide for bike/pedestrian/ATV facilities:

jj. Work with Fremont County and the City of Island Park (and other appropriate agencies) to develop a separated grade multi-use bicycle and pedestrian pathway between Harriman State Park and Henry's Lake State Park.
kk. Provide adequate roadway shoulders for bicycles and pedestrians throughout the corridor.
ll. Provide safer crossing opportunities for pedestrians in developed areas of the corridor.

6. TRAVELER INFORMATION

Provide adequate and visible signage:

mm. Replace and upgrade existing signage structures to current standards.
nn. Provide adequate and appropriately located informational and regulatory signage as necessary.

Provide traveler improved roadway condition information:

oo. Locate weather-reading stations at key locations on corridor to provide atmospheric information to travelers.
pp. Provide roadway condition information at corridor entry points.
qq. Provide information via the Internet noting current conditions, including regularly updated camera views.

7. ROADWAY DEFICIENCIES - Correct roadway deficiencies:

rr. Realign the roadway to eliminate the speed advisory posting north of Mack's Inn
ss. Provide a minimum six-foot wide paved shoulder and gravel extensions (as may be appropriate) throughout corridor, including areas with guard rails and on bridges.
tt. Improve sight distance as may be necessary
uu. Provide AASHTO recommended roadway slope and recovery areas within clear zones.

8. MAINTENANCE - Provide adequate low impact winter maintenance:

vv. Reduce the use of salts as solvents for snow and ice removal.
ww. Provide signage identifying travel lane configurations for snow and ice covered roads.

SECTION 3: OVERVIEW OF EXISTING TRANSPORTATION, LAND USE/COMMUNITY AND ENVIRONMENTAL CONDITIONS

The US 20 corridor must accommodate local traffic, heavy tourist traffic, and the majority of the freight movement between West Yellowstone, southern Montana, and the Snake River Plain. Effectively balancing these competing interests and needs is the goal of the corridor planning process. The information presented in this chapter provides a complete description of conditions on US 20 and forms the basis for forecasting the future performance of the transportation system.

Land use within the corridor was inventoried in the GIS (Geographical Information System) format using aerial data, and then a "ground truth" was initiated using handheld maps and windshield survey. This land use inventory included the production of a GIS data layer that counted and classified all access points on the corridor, including the type of land use being accessed. This information is provided in a digital format, as well as included in the appendix material under separate cover.

Environmental conditions were assessed in two ways. Existing data was inventoried and updated using available GIS data in which GIS field maps were then created and used for ground-truthing the digital data. Observations of additional environmental conditions were recorded along the highway for the one-half mile wide land sections located on either side of the center line of the road (more detailed information was produced in specific project locations).

3.1 Existing Transportation System

Presently, the US 20 Corridor is predominantly a two-lane rural highway with four to six foot wide shoulders along the majority of its length. Its function as a National Highway System (NHS) roadway is at odds with the environment being traversed, as well as with the land uses being developed in Fremont County and the City of Island Park. This is a scenic corridor that travels through the Greater Yellowstone Ecosystem, an environment rich with big game animals, raptors, and fish. It is an area highly focused around tourism and has historically been an outdoor-recreation area.

3.1.1 Highway Geometrics

An investigation of roadway geometrics is an important element of corridor planning. It establishes the base line condition of a facility to determine whether a preponderance of the known corridor issues might be mitigated through physical changes to the roadway. On US 20 from Ashton Hill to the Montana state line, and on SH 87 from US 20 to the Montana state line, the Existing Conditions report chronicles the physical features and aspects of each roadway. To avoid redundancy this plan will instead focus on geometric issues that have arisen *through* the planning process. To view a chronicle of geometric conditions, refer to the Existing Conditions Report.

3.1.2 Shoulders

Ideally, a highway shoulder is wide enough to allow a stopped vehicle to be clear of the travel lanes by one to two feet. The American Association of State Highway and Transportation Officials (AASHTO) recommended width of usable shoulder for design traffic volumes over 2,000 vehicles is eight feet. On low-volume highways in difficult terrain, the AASHTO recommendation may not be feasible, but a minimum shoulder width of four feet should be available. Since both US 20 and SH 87 are classified as arterial roadways, the usable shoulder should be paved; however, where traffic volumes are low or a narrow roadway section is necessary to reduce construction impacts, the paved shoulder may be reduced to two feet. Wider shoulders (six to eight feet) are necessary where bicycle travel is common. Lack of a continuous shoulder (the shoulder is non-existent or has been poorly maintained and the edge has been allowed to crumble) can be difficult to negotiate for a cyclist or a vehicle pulling out of the traveled roadway. There are also sections along the corridor where road improvements have been made, such as

the addition of hill climbing or turn lanes that result in the shoulder width having been reduced below recommendations.

The shoulders on SH 87 may be considered adequate due to the reduction in traffic volumes (only 600 AADT, approximately), thus a narrower shoulder width of two to four feet paved is acceptable. As it crosses the border, this facility also matches the facility in Montana, providing roadway continuity between states.

During the peak summer months, US 20 is frequented by bicyclists who share the route with freight haulers moving product to market. In addition, the volumes within the project study area warrant a wider paved shoulder. While most of the corridor is served by shoulders with widths of at least four feet, there are some exceptions. Most notably are those areas where the roadway has been widened to accommodate an additional lane (either for passing, turning, or for hill climbing) resulting in conditions which are particularly unnerving for cyclists and difficult for vehicles to negotiate in the event of a breakdown. During the analysis period, one serious injury accident involving a cyclist occurred in an area where the roadway had been re-striped to add a hill climbing lane, leaving virtually no shoulder, all of which was banded by a guard rail. The cyclist, coming down the grade at a high rate of speed, was clipped in the rear tire by a passing vehicle.

3.1.3 Access Management

ITD's goal is to allow no more than four approaches per mile per roadway side in urban areas and three approaches per mile per side in rural sections. This is inclusive of all existing approaches plus any additional approaches. Minimum access spacing must meet the requirements as stated in ITD's access policy ITD-2109, *Right-of-Way Encroachment application and Permit – Approaches and Other Encroachments*, which provides standards and procedures necessary to regulate and control access and encroachments with State highway rights-of-way. This policy is currently under review and major revisions are possible. The current spacing standards outlined by ITD are represented in Table 3.

TABLE 3: SPACING STANDARDS

ACCESS TYPE	URBAN / RURAL	TYPE	APPROACHES		FRONTAGE ROADS
			INTERSECTION SPACING	APPROACH SPACING	
I	Urban sections shall be upgraded to Type II or greater				
	R	At-grade	.4 km (.25 mi.)	91.4 m (300')	.4 km (.25 mi.)
II	U	At-grade	201.2 m (660')	45.7 m (150')	.4 km (.25 mi.)
	R	At-grade	.4 km (.25 mi.)	.15 km (500')	.4 km (.25 mi.)
III	U	At-grade/ Interchange	.4 km (.25 mi.)	91.4 m (300')	.4 km (.25 mi.)
	R	At-grade/ Interchange	.8 km (.5 mi.)	.3 km (1000')	.4 km (.25 mi.)
IV	U	At-grade/ Interchange	.8 km (.5 mi.)	NA	.4 km (.25 mi.)
	R	At-grade/ Interchange	1.6 km (1 mi.)	NA	.4 km (.25 mi.)
V	U	Interchange	1.6 km (1 mi.)	NA	NA
	R	Interchange	4.8 km (3 mi.)	NA	NA

Numerous driveways from residential, farm, and business land-uses directly access US 20; there are areas where more than three approaches per side per mile exist, exceeding ITD's maximum goal. Through geographic information systems data, and by inspection of the corridor, the data in Tables 4 and 5 show approach standards, quantity, and location. In Appendix A of the Existing Conditions Report, a table is provided that displays all of the intersections along the US 20 corridor with maps of the corridor that were used for the following analysis.

TABLE 4: APPROACH VOLUMES BY SEGMENT

Segment No.	Segment Description	Milepost Range	Total Approaches	High Volume	Med Volume	Low Volume
1	Ashton Hill Bridge to Island Park	363.37 – 382.28	38	5	12	21
2	Island Park Community	382.28 – 402.62	120	37	54	29
3	Island Park to the Montana State Line	402.62- 406.30	13	2	4	7
4	State Highway 87	0.00 – 9.15	59	0	34	25
TOTALS			**230**	**44**	**104**	**82**

HDR Analysis

TABLE 5: EAST SIDE / WEST SIDE APPROACHES

Segment No.	Milepost Range	Distance (miles)	West Side Approaches	East Side Approaches	Total Approaches	Average Approaches per mile
1	363.37 – 382.28	18.91	12	26	38	2
2	382.28 – 402.62	20.34	54	66	120	6
3	402.62- 406.30	3.68	4	9	13	4
4	0.00 – 9.15	9.15	30	29	59	6
TOTALS		**52.08**	**100**	**130**	**230**	**4**

HDR Analysis

It should be noted that while there is an average of six approaches per mile in Segment 2, the community of Last Chance has approximately 30 approaches located within 0.6 miles. Being the most developed area on the corridor, this roadway segment is the subject of a number of improvement strategies to be reviewed later in this document.

3.1.4 Highway Operational Conditions

Characterized by the levels of traffic flow and the types of corridor users, highway operational conditions (in large part) dictate the type of improvements necessary to be completed over the life of the corridor plan. It is important to note the accident record on a highway when discussing operations in order to determine whether a problem exists in a specific location or under a specific set of circumstances. It may be possible to reduce accidents and improve safety if the conditions of the accident are related to roadway geometrics (or other physical conditions) that can be controlled through project improvements.

3.1.5 Average Daily Traffic

The ITD Transportation Planning division estimates the Average Annual Daily Traffic volumes (AADT) at several locations within the corridor study area based on actual traffic counts updated periodically (there is one permanent count location on the corridor). AADT values for a nine year time period (1993-2002) translate into a range of growth patterns at different locations along the corridor. Of the eight traffic counts conducted in 1993 and 2002, only four were in the same locations, as shown in Table 6.

TABLE 6: US 20 AVERAGE ANNUAL GROWTH RATES (1993-2002)

Location	1993 AADT	2002 AADT	Growth Rate
South of Pine Haven Dr.	2533	3104	2.50%
South of Sawtell Rd.	2410	3698	5.94%
Southwest of SH 87	2045	3056	5.49%
Northeast of SH 87	1718	2757	6.72%

*This average growth rate was adjusted by removing the highest and lowest AADT over the 9 year period from the average growth rate calculation. The high and low volumes were inconsistent with annual growth in the area, producing unrealistic rates.

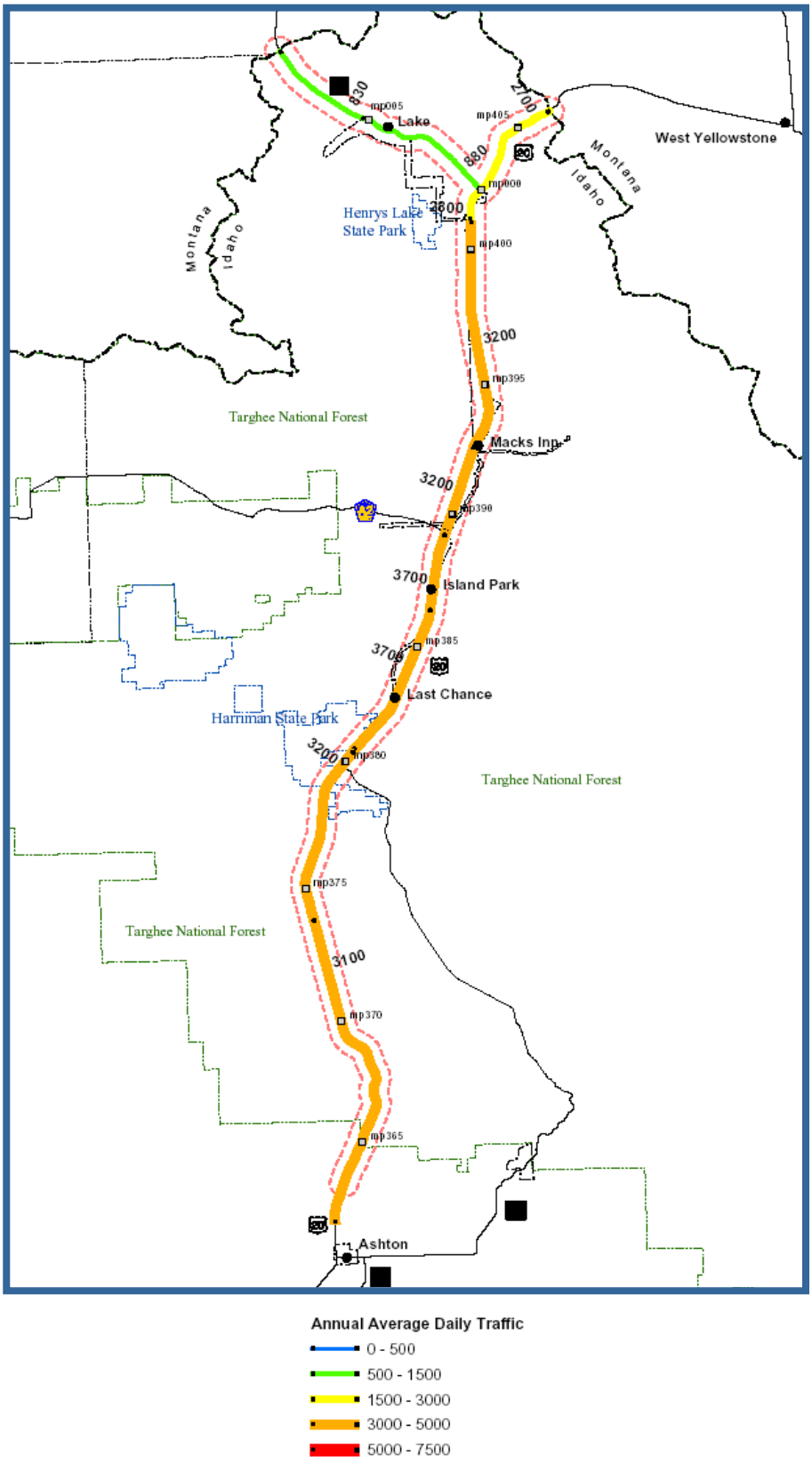
Source: Idaho Transportation Department, Transportation Planning Division

Averaging the location-specific traffic growth rates produces a corridor-wide average annual growth rate of 5.16%. However, those annual traffic growth rates which exceed 3% are usually not sustainable over a long period of time, and applying a growth rate that is negative or extremely small produces long range estimates of traffic volumes that are unrealistic when considering growth potential in the area. Therefore, applying an average calculated growth rate of 3% (maximum) to the current AADT volumes generates a realistic forecast of traffic volumes linearly to the year 2025. On the US 20 corridor, using a single growth rate for the entire corridor produces more reasonable future volumes than those produced using separate growth rates at individual locations.

3.1.6 Seasonal Traffic Variations

The portion of US 20 studied in the corridor plan is heavily traveled during the summer tourist months, and despite anecdotal evidence that winter months are experiencing increased traffic, the data still shows a disparate use of the facility between summer highs and winter lows. Analysis of historic traffic volume data (1991-2000) from one permanent count station in the area of study reveals that there are seasonal trends in average daily traffic volumes. Permanent counter number 32 (milepost 377.080) is located on US 20, 17.5 miles north of junction SH 32 in Ashton. Based on the count data, traffic volumes reach an annual high in July and a low in January. Permanent counter number 32 records traffic volumes in July as approximately 98% higher than the annual average daily traffic, and in January, traffic volumes drop 52% below the annual ADT. This puts summer volume highs at approximately five times greater than winter volume lows.

FIGURE 3: 2002 AVERAGE ANNUAL DAILY TRAFFIC VOLUMES



3.1.7 Highway Capacity Software Methodology

Currently, the Highway Capacity Manual (HCM) classifies two-lane highways as either Class One or Class Two. Class One Highways are NHS type routes that primarily serve the traveling public. US 20 fits this description as it is a coast-to-coast US highway with strategic importance nationally and in the State of Idaho. Class Two Highways are those that serve more as a scenic or recreation based highway.

The Class One Highway analysis uses two factors to measure the Level of Service (LOS), speed on the highway, and the Percent Time Spent Following (PTSF). The PTSF is a new measure that reviews the amount of time a driver would expect to spend following another vehicle or a queue of vehicles. Table 7 depicts the thresholds used to determine level of service along two-lane highways.

TABLE 7: 2000 HIGHWAY CAPACITY MANUAL LOS THRESHOLDS

Level of Service	Percent Time Spent Following	Average Travel Speed (mph)
A	≤ 35	≥ 55
B	> 35-50	> 50-55
C	> 50-65	> 45-50
D	> 65-80	> 40-45
E	> 80	< 40

Source: Highway Capacity Manual

The classification of the highway establishes the measures of effectiveness used in determining the level of service along the highway. The latest version of Highway Capacity Software (HCS) has significantly changed the methodology on how the traffic level of service for two-lane highways is analyzed. This was the most significant methodological overhaul for this analysis in 20-years. Whenever sweeping changes are made, the law of unintended consequences may occur, and this seems to be the case on highways with highly seasonal traffic fluctuations.

By virtue of the highway being highly seasonal in use and serving a highly recreational area, the mix of vehicles using the corridor includes a large number of RVs and vehicles towing trailers. This creates high levels of PTSF, which can create unacceptable LOS findings. This is a rather subjective measure, yet in other roadway applications it makes perfect sense since it acts as a measure of human behavior, which may indicate a higher willingness of people to take risks in passing other vehicles. However, on highly seasonal use highways, people tend to have more patience, especially when the speed is acceptable. The speed measurement in our 2025 analysis indicates that the roadway should be at LOS C or better in the forecast year without any improvements, but the high value of the PTSF is creating a lower LOS when using the new analysis measures.

3.1.8 Existing Design Hour Volume

The traffic volumes used to calculate level of service are based on the 30th highest hour volume. On a highly seasonal use road like US 20 where the summer traffic is five times the amount of the winter traffic, a very high 30th highest hour figure is created when compared to the demand of the remaining ten months of the year. This may be producing an artificially high traffic volume for analysis as compared to the actual demands that are being placed on the highway.

3.1.9 Standard Calculation

As stated previously, Design Hour Volumes (DHVs) are calculated using the 30th highest hour for the roadway, typically around 85% of the peak hour of traffic for the road on an annual basis. However, on

highly seasonal roadways, the 30th highest hour can be well over 90% of the peak hour for the road due to the makeup of the traffic using the highway (i.e. seasonal and weekend traffic). Indeed, the top 20 hours on US 20 occurred on only 10 days (typically holiday or weekend travel days), again due to this peaking nature of roadway travel.

One other concern associated with this type of facility is that off-season volumes are typically far lower on a percentage basis than other types of highways that experience what are considered typical use patterns. Thus a roadway with highly seasonal traffic that is measured with the 30th highest hour as the design hour volume increases the risk of over-designing the facility, giving it far greater capacity than would otherwise be justified to meet the demands of the short peak traffic patterns. This is particularly true on seasonal use highways in the west where major improvements to roadways traversing scenic or sensitive environments would be out of context with the surrounding environs.

3.1.10 Special Calculation

An alternative methodology listed within the AASHTO Greenbook for calculating Design Hour Volume (DHV) multiplies the average of the top three hours on the corridor by 50%. This analysis may or may not yield a lower traffic volume, but it should provide an LOS result that is more reflective of the actual traffic situation. This methodology is called out specifically for use in the situation where a highly seasonal use roadway is being analyzed. For the US 20 corridor, it was determined that this method is to be used for the existing DHV, and that forecasts be developed using the alternate methodology DHV as the base number.

3.1.11 Justification To Use Alternate Design Hour Volume

Since summertime high volumes are almost five times greater than wintertime low volumes, US 20 from the Ashton Hill Bridge to the Montana state line is considered a high seasonal use roadway. Congestion issues peak in late July to mid September primarily on weekend days, are not problematic at any other time, and are not expected to become problematic during the forecast period. The area of highest congestion in and around Last Chance will be addressed with appropriate congestion mitigation to handle existing and predicted traffic volumes. Taking a conservative approach to widening the highway shows good stewardship of resources and improved responsiveness to local conditions.

3.1.12 General Information

Methodologies consistent with the 2000 Highway Capacity Manual (HCM) were used to assess both the existing and Year 2025 conditions within the US 20 Corridor. The analysis was completed using the two-lane analysis module of the Highway Capacity Software (HCS 4.1d), and by using existing and 2025 design hourly volumes (DHV's) and average daily traffic volumes (ADT's) provided by the Idaho Department of Transportation. A directional split of 60/40, a peak hour factor of 0.94, a rolling terrain, and a free-flow speed of 65 mph were used for the analysis. Table 8 below provides a summary of the data inputs used for the operational assessment of US-20.

TABLE 8: GENERAL INFORMATION USED FOR HCS ANALYSIS

Begin MP	End MP	Section Length (miles)	Shoulder Width (ft)	2002		2030		% No Passing Zone
				Volume	% Trucks	Volume	% Trucks	
363.370	373.728	10.4	4	428	11	645	11	30
373.728	380.499	6.8	4	442	11	666	11	50
380.499	389.245	8.7	4	511	13	772	13	50
389.245	401.034	11.8	3	442	14	671	14	50
401.034	402.270	1.2	5	387	13	521	13	70
402.270	406.300	4.0	5	373	15	568	15	70

3.1.13 Existing Level of Service

This analysis provides the level of service for a roadway segment based on both directions of travel. In general, the existing and 2002 levels of service within the US 20 Corridor are LOS C or better. While conducting the existing conditions analysis, all of the roadway segments were noted to have travel speeds greater than 50 miles per hour and the percent time spent following (PTSF) values less than 60%. Both the average travel speed and the PTSF were slightly worse between mileposts 380.499 and 389.245 due to the higher traffic volumes and the number of access points per mile located within this segment.

TABLE 9: YEAR 2002 – TWO-WAY ANALYSIS

Begin MP	End MP	Year 2002		
		LOS	Average Speed	% Time Spent Following
363.370	373.728	B	55.4	49.8
373.728	380.499	C	54.6	54.7
380.499	389.245	C	52.1	58.4
389.245	401.034	C	53.2	55.0
401.034	402.270	C	54.4	59.9
402.270	406.300	C	54.4	59.3

The LOS was not calculated for SH 87 since volumes are so low that the LOS is "A" at all times of the day, and all times of the year.

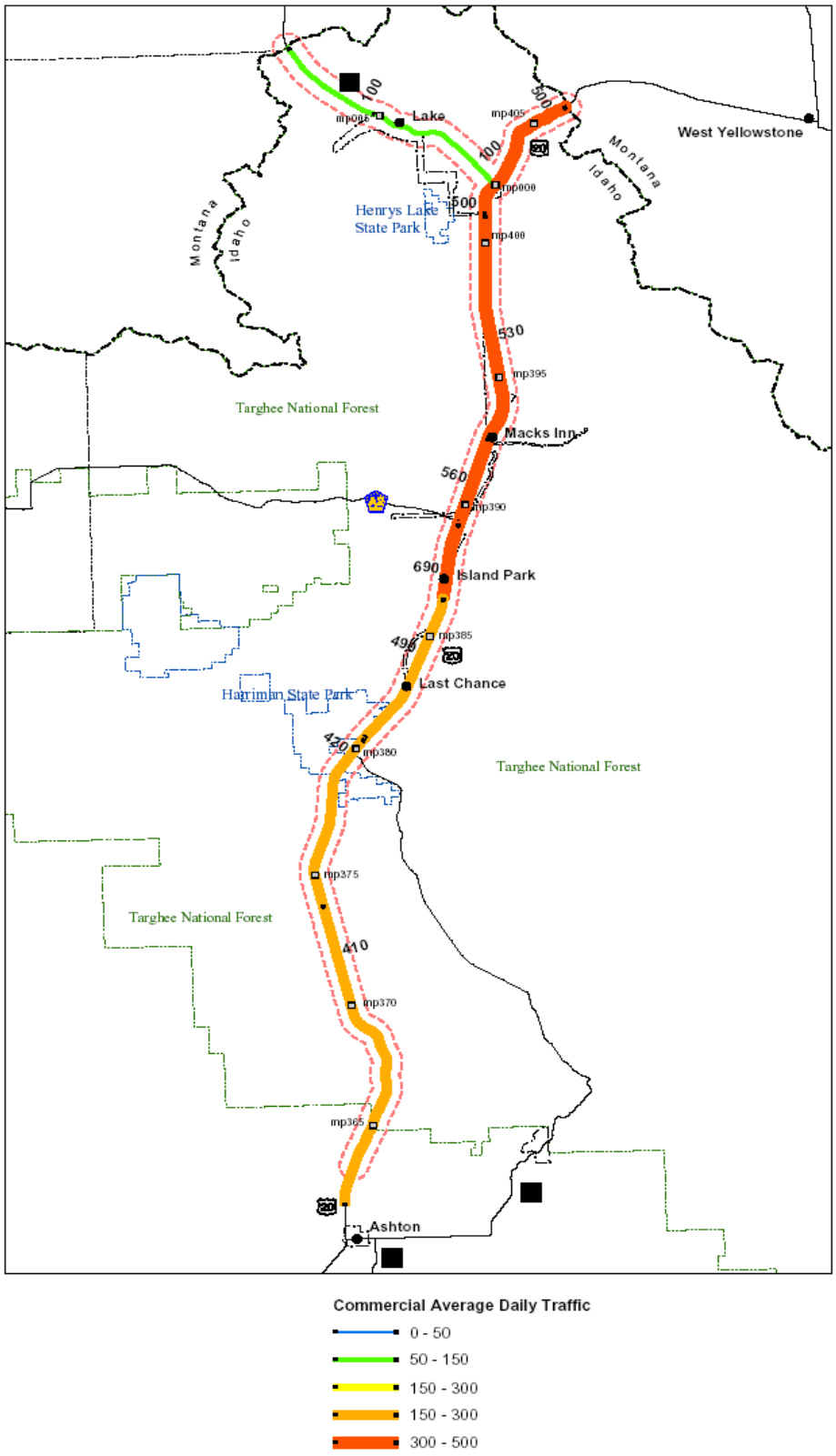
3.1.14 Truck Volumes

During the public involvement portion of the planning process, it was noted that as the area develops, it is expected that there will be more truck traffic, and the concern that this route will be preferred by truck drivers in an effort to bypass the port of entry on I-15. A check with local law enforcement personnel and State Weigh Masters suggests that the reason trucks are using the route is not to bypass the port of entry; rather it is the shortest and quickest route from origin to destination. According to Paul Sudmeier, President and CEO of the Idaho Trucking Association, the highway, compared to I-15 through the Monida Pass, is much better protected from snow events and closures (due to inclement weather).

The Idaho Transportation Department is currently studying the placement of a port of entry on US 20. There is broad based public support for this endeavor to ensure the legal operation of commercial vehicles on Idaho highways.

Truck volumes on SH 87 have increased sharply from 2001 to present. Volumes historically were seventy trucks per day (approximately) and jumped to over three-hundred per day in 2002, remaining at that level since. A combination of factors seems to be creating this increase on SH 87; continued development in the Island Park area has created demand for more service delivery vehicles (primarily beverage and fuel trucks), the highway does not have the steep grades that are present on other routes (I-15), and improvements to Montana highways have made the route more desirable for truck drivers. Additionally, there seems to be anecdotal evidence that the North America Free Trade Agreement (NAFTA) may be influencing the shipping of beef from Canada to the US, and State Highway 87 may be a desirable link in this shipping activity. Finally, portions of US 191 (through Yellowstone National Park) have been closed to trucks shipping hazardous materials, which now must find alternate routes through the area. Other trucks that were not banned from the route may have likewise changed course to avoid the area.

FIGURE 4: 2002 COMMERCIAL AVERAGE DAILY TRAFFIC



3.1.15 Bicycle/Pedestrian Use

US 20 is designated as a Bicycle Route by the State of Idaho, yet in certain locations, the infrastructure along the study portion of the corridor is not bicycle friendly. Clearly, infrastructure improvements are needed since inadequate shoulder width in many areas along the corridor makes the riding of bicycles difficult. The American Association of State Highway and Transportation Officials (AASHTO) *Guide for Development of Bicycle Facilities* describes design practices and highway improvements that may be used to enhance the travel environment for bicyclists. On highways in rural areas, adding or improving roadway shoulders is an effective way to accommodate bicyclists and pedestrians. The *Idaho Bicycle and Pedestrian Transportation Plan* recommends a shoulder width of six feet to safely accommodate bicyclists and pedestrians; AASHTO recommends a minimum width of four feet. On roadways with speed limits exceeding 35 mph, an additional shoulder width is desirable. When funding is available, shoulders on uphill sections should be improved to decrease conflicts between bicyclists and faster moving vehicles.

Few pedestrians use the US 20 corridor as a walking facility, although users do include school-aged children walking to bus stops along the corridor, residents who live in the area, and lodge users that must cross US 20 to access the river. Pedestrian use of the corridor is most prevalent in the Last Chance area, around the Buffalo River campground location at Pond's Lodge, and in the area around Mack's Inn and the Island Park Resort.

3.1.16 Snow Machine and ATV Use

During winter months, snow machine usage in the area is a popular activity and may be considered important not only as a recreational pursuit (with corresponding local economic benefits) but as an alternative form of transportation. These activities may create conflict as snow machines and automobiles navigate the roadway corridor. Idaho Code Title 67-7109 states that snow machines are allowed to cross the highway, but are required to yield the right-of-way and not allowed to interfere with the free movement of vehicular traffic. In addition, snow machines are allowed to operate within state highway right-of-way in those areas not used by conventional motor vehicles. Similar legislation has been passed by the State Legislature for the operation of ATVs.

3.1.17 Utilities

Utilities in the US 20 corridor area include telephone, Fremont Telecom, and electric service, Falls River Rural Electric Cooperative, the only companies to provide their respective service in the area. According to staff of the above companies, the only anticipated change by Fremont Telecom (in the next 5 years) is a new fiber-line between Elk Creek Station and the Island Park Lodge to accommodate the moderate growth in the area.

3.1.18 Crash History and Analysis

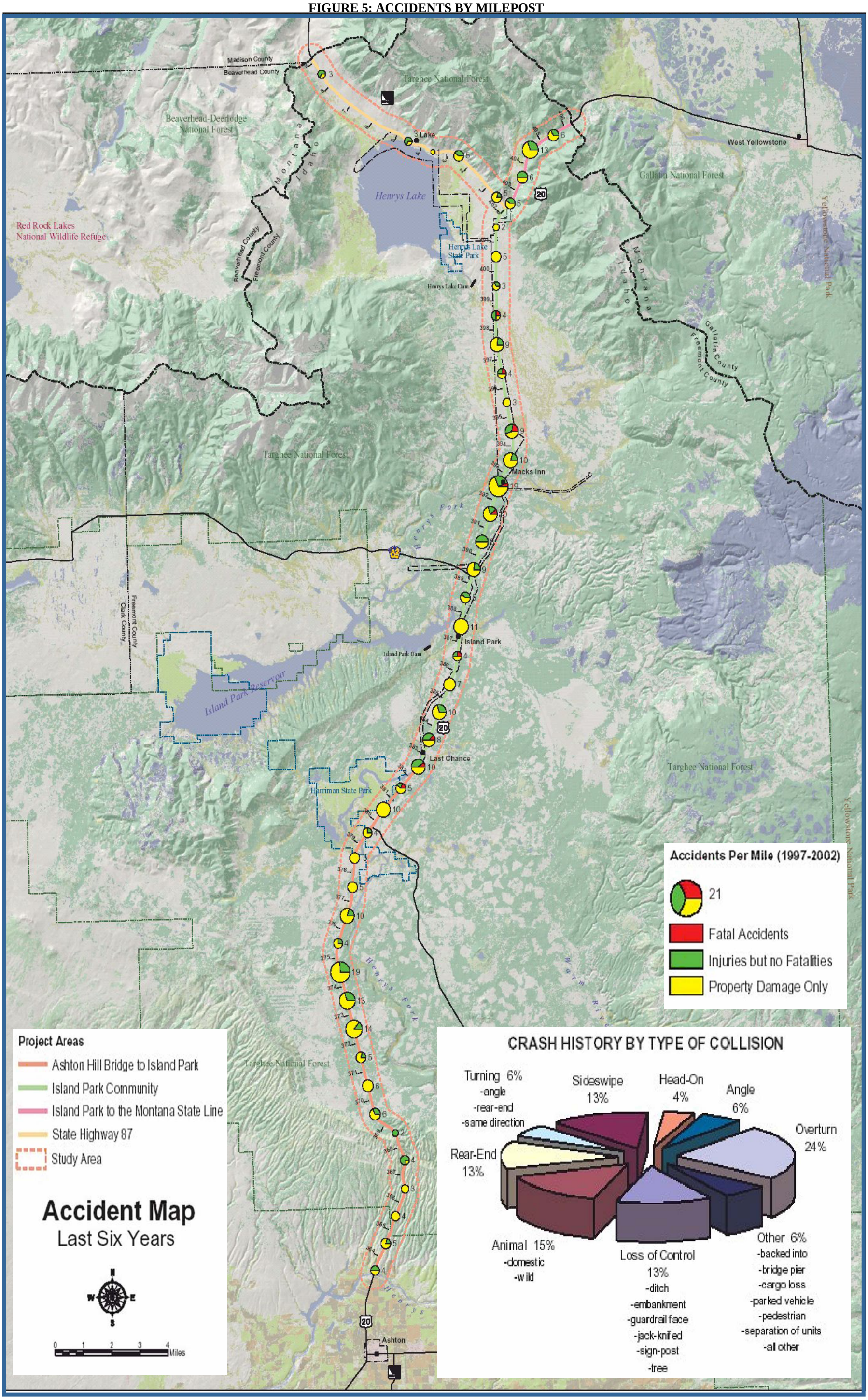
Accident statistics (1997-2002) provided by the ITD Office of Highway Safety were reviewed to identify areas on US 20 with high accident levels. Figure 5 shows the number of injury accidents and fatal accidents reviewed at each mile post (accidents that resulted in property damage only are not shown). Table 10 shows a comparison of the accident rates for each segment on the US 20 corridor with the statewide accident rate for 2001. Segment 1 between the Ashton Hill Bridge and Island Park had the highest accident rate on the corridor, exceeding the statewide accident rate. All other segments of the US 20 corridor had accident rates below the statewide accident rate.

TABLE 10: US 20 ACCIDENTS AND ACCIDENT RATES

Segment No.	Milepost Range	Total Yearly Accidents			2001 Accident Rate	
		1999	2000	2001	Segment Rate*	Statewide Rate**
1	363.37 – 382.28	25	31	40	199.8	178.9
2	382.28 – 402.62	30	42	37	162.3	178.9
3	402.62- 406.30	5	13	6	171.8	178.9
4	0.00 – 9.15	1	3	2	93.6	178.9
TOTAL		**61**	**89**	**85**	**175.4**	**178.9**

*Rate is per 100 million miles driven
**Rate is per 100 million miles driven (State System Roads-Non Interstate)
Source: ITD Office of Highway Safety

FIGURE 5: ACCIDENTS BY MILEPOST



3.1.19 ITD High Accident Locations

The High Accident Location (HAL) identification and analysis tool was created by ITD to improve safety on Idaho's highways. The HAL program was developed with the following objectives:

1. To identify locations on the State Highway System with potential safety deficiencies.
2. To systematically compare problem locations on a statewide basis.
3. To minimize the probability of identifying spurious problem areas.

HAL is a method of prioritizing safety improvements in locations where funding can be spent in the most efficient and effective manner. Combined into a single ranking, HAL is based on collision data comprised of three components: collision frequency, collision severity (economic costs), and collision rate. Each of the three rankings mentioned above are weighted, and for each individual location the weighted rankings are summed to calculate each location's individual weighted score. Locations are then listed in ascending order by the weighted score.

The HAL program analyzes two separate methodologies: the identification of problem intersections and the identification of problem road sections. Collisions designated to have occurred at or near intersections are analyzed under problem intersections/interchanges. In order to identify dangerous roadway sections, HAL uses non-intersection-related collisions in a clustering process. A cluster is a section of roadway defined by a high frequency of collisions per mile relative to the surrounding roadway. The HAL report indicates that "clusters are not automatically high accident locations, they are simply sites that will be analyzed by ranking criteria."

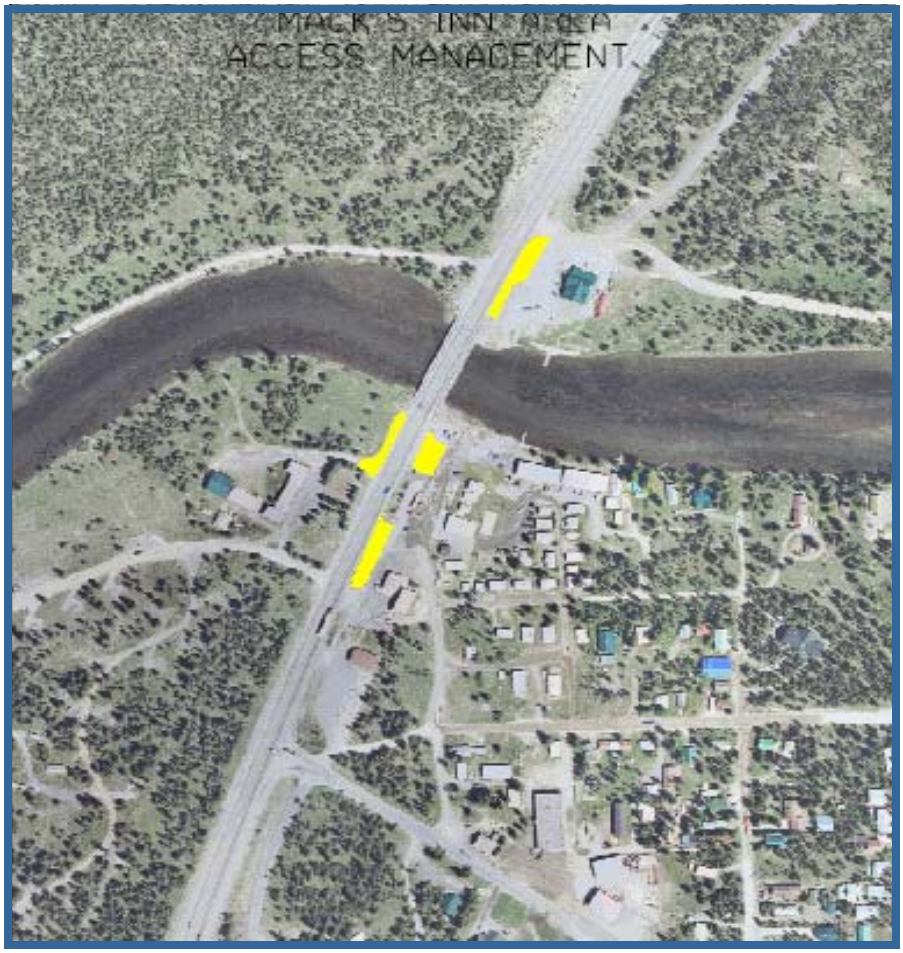
According to the most recent Idaho Transportation Department HAL Summary Report (Years 1999 through 2001), there were no intersections with HAL rankings, while three cluster locations along US-20 between mileposts 372.863 and 392.917 were identified and given an overall ranking.

- Mileposts 372.863 – 373.103
- Mileposts 374.618 – 375.158
- Mileposts 392.697 – 392.917

The accident clusters between mileposts 372 and 375 are in an area where ice accumulates on the highway during winter months, with occasion for visibility problems due to fog. This area has also been identified as a part of the Harriman State Park that includes a migratory route for elk, resulting in a concentration of animal collisions.

The area around milepost 392 (Mack's Inn) has been identified as in need of additional access management and a possible local roadway realignment. The main issue here is that there is little to no access management since vehicles enter and exit the highway at random locations.

FIGURE 6: MACK'S INN ACCESS



ACCESS MANAGEMENT

3.2 Land Use

The linkage between transportation and land use is significant; land uses depend on access to and from the transportation infrastructure, yet the types of land use in an area affect the ability of a highway to adequately serve the travel demands. The following is a description of the land use in the project study area, with information about the type of access and land use along the various highway segments.

Segment 1

Extending from the Ashton Hill Bridge (milepost 363.37) to Island Park (milepost 382.28), this segment consists of mountainous to rolling terrain, with high mountain forests. Much of the land immediately adjacent to the corridor is in State or Federal ownership, with few private property holdings. In the northern portion of this segment there are campgrounds, access to Harriman State Park, and the Mesa Falls Scenic Byway (State Highway 47). Access to the highway in this segment consists primarily of forest road access, or Jeep trails, a subdivision (Pine Haven), and a resort (Henry's Fork Lodge).

Segment 2

Crossing the Henry's Fork of the Snake River twice and the Buffalo River once, Segment 2 traverses the main part of the Island Park community and continues North through the Henry's Lake Flats to the

intersection of SH 87. While Island Park proper is approximately 32 miles long, the most developed portion extends from Last Chance (north of Harriman State Park) to Sawtell Road (just south of the Henry's Lake Flats). This area is characterized by the development of campgrounds, lodges, and "second-home" type communities. The majority of the commercial services are located along this portion of the corridor and include gas stations, restaurants, outfitters and guides, real estate offices, and other specialty retail shops, many of which access US 20 directly. While much of the land north of Sawtell Road is privately held, development is not to the level of intensity as is present in the remainder of this segment.

Segment 3

This is the shortest segment in the analysis area, 3.7 miles in length as it traverses the Continental Divide separating Idaho from Montana. This area is largely wooded and has very few destination locations, although a parking area for a trail along the top of the divide is located in Idaho a few hundred yards from the Montana state line. This part of the corridor is mountainous and has large portions of the highway covered in shade for most of the winter months, making snow and ice buildup problematic. The greatest horizontal curvature is found in this portion of the study area.

Segment 4

Encompassing that portion of SH 87 as it lies in the state of Idaho, Segment 4 travels around the north side of Henry's Lake, where there is a high degree of second-home ownership. SH 87 also provides access to the Rose Lodge, the only structure in the study area currently placed on the National Register of Historic Places. SH 87 is a low volume corridor with approximately 600 vehicles per day during the summer months, tapering off to approximately 120 vehicles per day during the winter months.

3.2.1 Fremont County Community Profile

Approximately 410 miles northeast of Salt Lake City, Fremont County in southeastern Idaho abuts the Wyoming and Montana borders, situated near some of the nation's best-known recreation areas, including Yellowstone and Grand Teton Parks, Henry's Lake, and Island Park. Although less than 1% of the land in the county is considered urbanized, the population was classified as 28% urban in 2000. The largest population is located in the county seat of Saint Anthony; other cities in the county include Ashton, Drummond, Island Park, Newdale, Parker, Teton, and Warm River.

The region's economy is diverse, from the Idaho National Laboratory, a nuclear and high-tech research facility employing about 8,000 persons, to recreational employment such as a one-person seasonal rafting and guide company. Major employment categories include agriculture, agricultural processing, nuclear and high-tech research, manufacturing, and tourism. The City of Idaho Falls is the retail hub for the trade market area, which includes nine Idaho counties, two Wyoming counties, and one Montana County.

3.2.2 Population

Fremont County's population change has fluctuated over time, with a large population gain occurring in the 1970's (from 8,710 to 10,813) followed by a relatively flat growth rate in the 1980's (only a 124 person gain). The population reached 11,819 in 2000, a gain of less than 1% annually which is about the same as the national rate, but less than 50% of the State of Idaho's annual population increase.

Even though Fremont County's total population increased in the 1990 to 2000 decade, there was a net out-migration of 282 persons from the county. The excess of births over out-migration and deaths was responsible for all of the county's population gain. The population declines in the 25 to 29 and 30 to 34 year old age groups (the most mobile age groups in the area) indicated that people may be leaving the area due to economic reasons. The largest percentage population gain was in the over 85 age group, with a gain of 63%. This graying of the population in Fremont County indicates the need for County officials to begin investigating the need for transit services. Currently, Community and Rural Transportation

(CART) out of Idaho Falls serves the Saint Anthony area, with periodic service to Ashton. There is no service in the Island Park area, and this is reasonable for now, as the population is low, and very mobile.

TABLE 11: 1990 to 2000 FREMONT COUNTY POPULATION BY AGE

Age Group	1990	% of Total	2000	% of Total	# Change	% Change
Under 5	951	8.70	1,000	8.46	49	5%
5 to 9	1,189	10.87	1,003	8.49	-186	-16%
10 to 14	1,268	11.59	1,051	8.89	-217	-17%
15 to 19	1,047	9.57	1,264	10.69	217	21%
20 to 24	596	5.45	698	5.91	102	17%
25 to 29	683	6.24	611	5.17	-72	-11%
30 to 34	743	6.79	693	5.86	-50	-7%
35 to 39	744	6.80	774	6.55	30	4%
40 to 44	589	5.39	842	7.12	253	43%
45 to 49	542	4.96	769	6.51	227	42%
50 to 54	456	4.17	587	4.97	131	29%
55 to 59	439	4.01	581	4.92	142	32%
60 to 64	452	4.13	477	4.04	25	6%
65 to 69	377	3.45	445	3.77	68	18%
70 to 74	344	3.15	399	3.38	55	16%
75 to 79	268	2.45	254	2.15	-14	-5%
80 to 84	148	1.35	206	1.74	58	39%
85 And Older	101	0.92	165	1.40	64	63%
TOTAL	**10,937**	**100**	**11,819**	**100**	**882**	**8%**

Sources: Intermountain Demographics, U. S. Census Bureau

3.2.3 Housing

Fremont County contained nearly 6,900 housing units in 2000 (Table 12) consisting mainly of owner-occupied units accounting for more than eighty-percent of all housing units. More than 3,000 units, or twenty-percent of the total housing stock, were vacant in April 2000, when the census was taken. Most (about 80%) of those housing units were seasonal, vacation, or second homes. The vacancy rate for year-round housing units was about 10%.

TABLE 12: 1990 to 2000 FREMONT COUNTY HOUSING CHARACTERISTICS

Housing Characteristic	1990	2000	# Change	% Change
Total Housing Units	5,961	6,890	929	16%
Occupied Units	3,453	3,885	432	13%
Renter Units	684	607	-77	-11%
Owner Units	2,769	3,278	509	18%
Vacant units	2,508	3,005	497	20%
Seasonal Units	2,168	2,336	168	8%

Sources: Intermountain Demographics, U. S. Census Bureau

The number of owner-occupied units increased by more than 400, an 18 % gain while there was a net decline of 77 units in the rental market. This 11% decline may be attributable to housing unit conversions from rental to owner units.

3.2.4 Employment

More than 4,800 persons were employed in Fremont County in 2000 (Table 13), with the largest concentration of employment in the government sector, accounting for almost 25% of the county's total employment. Major employers in the county were the school district, Youth Services Center, U. S. Forest Service, Fremont County government, St. Anthony Medical Center, and the Ashton Nursing Home. The county lost employment in the traditional base industries such as manufacturing and wholesale trade. Another employment loss was in the farming sector, which had been a major part of the county's economy in previous decades. By 2000, employment in the local economy was highest in the sectors associated with tourism and second home development: construction; services; and finance, insurance, and real estate. The county's annual average unemployment rate stood at 7.0 %in 2000 and had declined slightly to 5.0% in May 2003.

TABLE 13: 1990 to 2000 FREMONT COUNTY Full AND PART-TIME EMPLOYMENT

Employment Sector	1990	2000	# Change	% Change
Farming	955	821	(134)	(14%)
Forestry, Fisheries	147	316	169	115%
Mining	3	10	7	233%
Construction	137	391	254	185%
Manufacturing	390	76	(314)	(81%)
Transportation Utilities	157	232	75	48%
Wholesale Trade	217	149	(68)	(31%)
Retail Trade	607	698	91	15%
Finance	104	262	158	152%
Services	597	815	218	37%
Government	994	1,036	42	4%
TOTAL	**4,308**	**4,806**	**498**	**12%**

Sources: Intermountain Demographics, U. S. Census Bureau

3.2.5 Tourism

Northern Fremont County is home to Harriman State Park, the Henry's Fork of the Snake River, Island Park Reservoir, and Henry's Lake. Year-round recreation activities are available in the area, including sightseeing, fishing, hiking, bicycling, horseback riding, boating, and animal/bird watching in the summer. Hunting, fishing, and hiking are popular in the fall, along with driving trips as the aspen leaves change color. Snowmobiling and cross-country skiing are winter sports that may continue into late spring in a good snow year.

The level of tourism in an area often is measured by lodging sales - the amount of money generated from renting rooms in hotels and motels, as well as receipts from private campground space rentals (only the receipts from the room or space were calculated). State and local taxes associated with the rentals were not included.

TABLE 14: 1993 to 2000 FREMONT COUNTY ANNUAL LODGING SALES

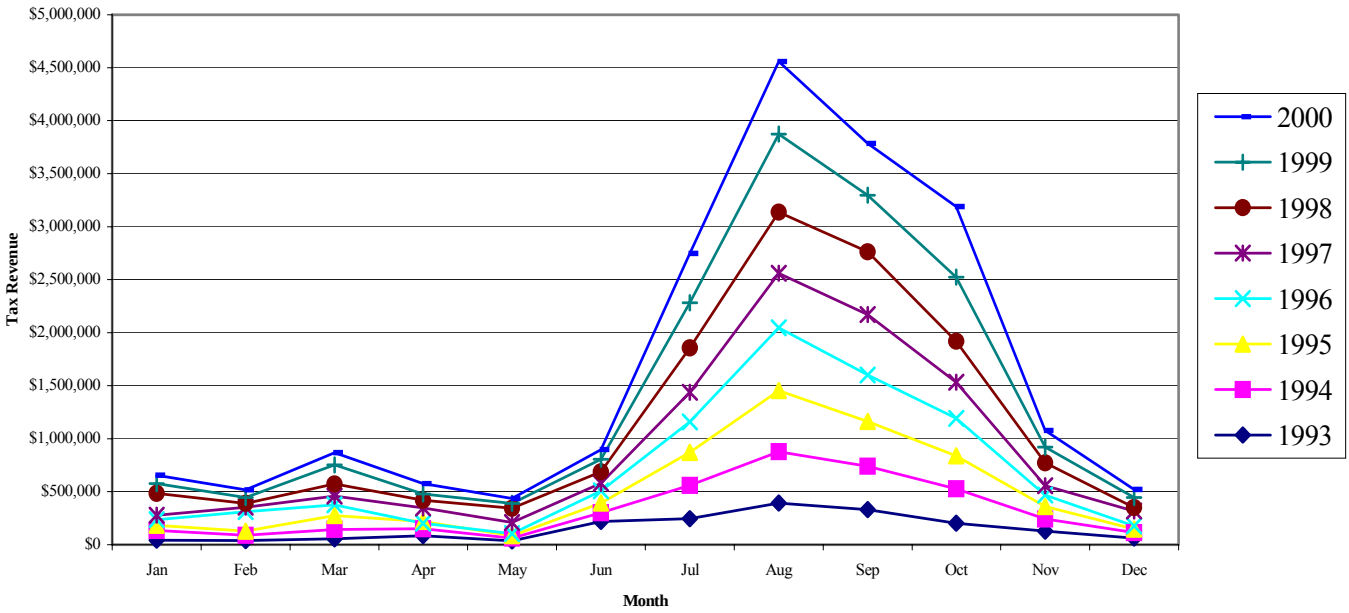
Year	Annual Lodging Sales	Percent Change
1993	$1,834,926	N/A
1994	$2,107,952	13.0
1995	$2,177,505	3.2
1996	$2,261,139	3.7
1997	$2,428,591	6.9
1998	$2,883,024	15.8
1999	$3,101,611	7.0
2000	$3,026,183	(2.5)

Sources: Intermountain Demographics, Idaho Department of Commerce

In January 2001, a new method of calculating annual lodging tax was instituted which pre-2000 data and post-2000 data incomparable. However, lodging receipts did increase from $3,273,428 in 2001 to $3,474,295 in 2002, a gain of about 6%.

Lodging sales data also were reported on a monthly basis and revenue may fluctuate with weather conditions. In years with high levels of snowfall, January, February, and March have recorded higher than normal revenues due to snow machinists, and to some extent cross country skiers. October also has been a near peak month due in part to hunting and late season fishing in the area.

FIGURE 7: FREMONT COUNTY LODGING TAX



Sources: Intermountain Demographics, U. S. Census Bureau

3.2.6 Income

Changes in income characteristics in Fremont County were positive from 1990 to 2000 where both median household and per capita income gains in Fremont County outpaced the national inflation rate. Fremont County's median income was about 12% less than the State of Idaho's median ($37,572) while its per capita income was 28% percent below the state's per capita income of $17,871.

Median household income can be a good barometer for transportation impacts, and the other demographic data indicate a growth in transportation, which is supported by count data in the area. Also the geographical layout of Island Park, being an incorporated area that is 32 miles long all increases the amount of vehicle usage by area residents. The increase in income and population has correlated with the increase in traffic growth.

TABLE 15: 1990 to 2000 FREMONT COUNTY HOUSEHOLD INCOME DISTRIBUTION

Income Range	1990	2000	# Change	% Change
Under $15,000	1,065	633	-432	-41%
$15,000 to $25,000	798	714	-84	-11%
$25,000 to $35,000	704	715	11	2%
$35,000 to $50,000	579	827	278	48%
$50,000 to $75,000	232	595	363	156%
$75,000 to $100,000	52	230	178	342%
$100,000 to $150,000	33	103	70	212%
$150,000 and More	13	45	32	246%
TOTAL	**3,476**	**3,892**	**416**	**N/A**

Sources: Intermountain Demographics, U. S. Census Bureau

3.2.7 Island Park Profile

The City of Island Park is approximately 32 miles in length as it extends along both sides of US 20 and contains most of the development located adjacent to the corridor. Having just been reincorporated in 1999, there is no comparative information available from the 1990 census although information for the area surrounding Island Park for 2000 is included in the Island Park community profile

3.2.8 Population

In 2000, the Census Bureau counted 125 residents in Island Park or approximately two percent of Fremont County's total population. Persons who were temporarily living elsewhere in April of 2000 were included in the Island Park population if they claimed it as their permanent place of residence. Population in the balance of Fremont County north of the Henry's Fork at Osborne Bridge was 882 persons in 2000.

The largest percentage of Island Park residents were in the 40 to 44 and the 45 to 49 age groups (Table 16). Together, those groups were about twenty-five percent of the city's total population. Median age in Island Park was 41.6 years old in 2000, about ten years older than Fremont County's median age of 31.9. More than 95 % of Island Park's 2000 residents were white in 2000. Persons of Hispanic origin were about 4% of the community population.

TABLE 16: 2000 CITY OF ISLAND PARK POPULATION BY AGE

Age Group	2000	% Total
Under 5	9	4%
5 to 9	15	7%
10 to 14	10	5%
15 to 19	16	7%
20 to 24	16	7%
25 to 29	12	8%
30 to 34	9	4%
35 to 39	13	6%
40 to 44	25	12%
45 to 49	24	11%
50 to 54	8	4%
55 to 59	11	5%
60 to 64	18	8%
65 to 69	9	4%
70 to 74	10	5%
75 to 79	7	3%
80 to 84	1	-
85 And Older	2	-
TOTAL	**215**	**100%**

Sources: Intermountain Demographics, U. S. Census Bureau

3.2.9 Housing

According to the 2000 census, the City of Island Park contained 425 housing units, of which more than 330 were vacant at the time (Table 17). Nearly 290 (about 66%) of all vacant housing was seasonal, vacation, or second homes. Seasonal homes represented 86% of all housing in Island Park, while owners occupy the majority (about 70%) of the year-round housing units. The number of persons per household in Island Park was 2.39 in 2000, well below the Fremont County level of more than three persons per household.

TABLE 17: 2000 CITY OF ISLAND PARK HOUSING CHARACTERISTICS

Housing Characteristic	Year 2000
Housing Units	425
Occupied Units	90
Renter Units	27
Owner Units	63
Vacant units	335
Seasonal Units	289

Sources: Intermountain Demographics, U. S. Census Bureau

3.2.10 Employment

Employment data for the corridor was sketchy and incomplete. Federal employment data were available only at the county level while State employment data could be assembled for small areas, but included only full-time employees covered by unemployment compensation. Many workers had multiple jobs, since most of the employment in the corridor was seasonal or part-time, with differing levels of employment in the summer, fall, and winter months.

A number of employees commuted to work from St. Anthony and West Yellowstone, due in part to a shortage of employee housing, and in some trades, such as construction, employees commuted from as far away as Idaho Falls. Major employers in the corridor area include Henry's Fork Lodge, Sawtell Mountain Resort, Island Park Village, and the U. S. Forest Service.

3.2.11 Income

In 2000, 48% of all Island Park's households had incomes below $25,000, (Table 18), a higher percentage than all of Fremont County (34% of all households). The greatest concentration of Island Park households (30%) was in the $15,000 to $25,000 income range.

TABLE 18: 2000 CITY OF ISLAND PARK HOUSEHOLD INCOME DISTRIBUTION

Income Range	Year 2000	% Total
Under $15,000	16	18%
$15,000 to $25,000	26	30%
$25,000 to $35,000	8	9%
$35,000 to $50,000	18	20%
$50,000 to $75,000	11	13%
$75,000 to $100,000	3	2%
$100,000 to $150,000	5	9%
$150,000 and More	1	-
TOTAL	**88**	**100%**

Sources: Intermountain Demographics, U. S. Census Bureau

One theory to explain this income distribution is that the actual corporate boundaries of Island Park are very narrow along US 20, and in some cases, include only the businesses that front the highway and not the homes behind the businesses. Thus, the housing stock that exists in very close proximity to the highway consists of lower-end housing and rental properties. While the income level in the immediate surrounding vicinity may be quite a bit higher, the income level of those actually residing in the corporate city limits of Island Park is quite a bit lower.

Island Park's median household income was $26,250 in 2000, while the per capita income was $15,617 that same year. Median household income in Island Park was 8% of the total median household income in Fremont County for 2000. Island Park's per capita income was about 10% greater than Fremont County's that same year.

3.3 FORECASTS

3.3.1 Population

Population forecasts gathered from Idaho Power Company indicated that Fremont County's population would increase from 11,820 in 2000 to 16,470 in 2025 (Table 19), a 40% population gain. The population forecasts were for year-round or permanent residents and did not include the vacation or second home population.

TABLE 19: 2000 to 2025 FREMONT COUNTY AND CORRIDOR AREA POPULATION FORECAST

Year	Fremont County Population	Corridor Area Population
2000	11,820	1,097
2005	12,870	1,197
2010	13,790	1,282
2015	14,770	1,374
2020	15,580	1,477
2025	16,470	1,532

Sources: Intermountain Demographics, Idaho Power Company

Population in the portion of Fremont County north of the Henry's Fork was forecast to reach 1,532 by 2025, an increase of more than 500 permanent residents. The corridor area population was assumed to remain at a constant percentage of Fremont County's population, based on the 2000 corridor area to total county population ratio.

The short term forecasts showed the county's population increasing to 12,870 by 2005, a 10% population gain, and to 13,790 by 2010, an increase of 17% since 2000. The county's population forecast for 2005, may be overstated when taking the census bureau estimate of 11,859 for July 2002. A continuing economic downturn at the national level may be responsible for the low rate of population growth since 2000, and would impact the short-term forecasts.

3.3.2 Traffic Implications

The forecast for the County population and the corridor area population shows slow to moderate growth. The land uses planned for the County have remained static over time, but as the economy has improved more second homes have been built. There are planned subdivisions along Yale-Kilgore Road and Sawtell Peak Road which have been addressed through the planning process regarding roadway project improvements. The population forecast in the community profile and the traffic forecast provided by ITD are consistent, thus ITD's forecasts for traffic will be used for further analysis.

There are several unknowns for population and, more specifically, for tourism that could radically change the existing ITD projections, which are based on a trend line analysis. Included are items such as tax benefits for second homes which, if removed as an allowable deduction, could significantly reduce future development of the Island Park area. In the same way, should the economy become robust once again, this area could be subject to intensified development pressure, increasing traffic volumes above current forecast levels. Several regulatory changes in Yellowstone National Park, such as limiting the number of motorized vehicles that can be in the park at any one time, could have a significant impact on the amount of traffic using US 20 to access the National Park. Finally, reductions in the amount and type of snow machines that can access the Park could have a significant impact on winter travelers using the highway. Fremont County has no restrictions on snow machines and grooms hundreds of miles of trails, which will provide an attractive alternative to people who used to pursue snow machine activities in Yellowstone Park. Permanent traffic counter information, as well as hotel receipt information, will be tracked to see if there is a significant difference in usage levels.

3.3.4 Description of Existing Plans

An important part of the corridor planning process is the review of existing plans (federal, state and local) to examine the goals, growth projections, project needs, and data sources in order to achieve consistency between plans. The following information summarizes the local land use and comprehensive plans for Fremont County, the City of Island Park, City of Ashton, and Harriman State Park Master Plan.

Summary Comments on Fremont County Comprehensive Plan (1997) and Development Code

The Fremont County Comprehensive Plan is based on the desire to maintain the rustic, peaceful atmosphere and high quality of life currently enjoyed by county residents. These residents recognize the importance of visitors to the region, the value of tourism to the local economy, and the dependence upon the US 20 corridor for access to Fremont County sites and attractions. US 20 serves as a through route to nearby Yellowstone Park, which in turn encourages visitation, local travel, and economic development to the area.

The Fremont County Comprehensive Plan further recognizes the importance of the US 20 and SH 87 corridors in meeting the needs of local residents and visitors to and through the county. The comprehensive plan and development code emphasizes the importance of a safe and efficient transportation system to meet these needs, for pedestrians and those in vehicles.

Development regulations that address requirements for access management, parking, and street connections, along with an assigned responsibility to developers to contribute to the provision of these facilities, demonstrate the plan's support for these issues. In addition to the various development requirements, there is also a code requirement to complete a facilities' study for large-scale developments.

The plan and development code also expresses the area residents' desire to ensure that development will provide for and not encumber appropriate transportation and roadway systems that are supportive of the county's policies and future vision for Fremont County.

Summary Comments on Island Park City Comprehensive Plan (adopted August. 14th, 1998) and Development Code

The City of Island Park Comprehensive Plan stresses the importance of maintaining the quality of the natural resources, recreation opportunities and rural way of life that makes Island Park unique. Residents recognize the importance of visitors to the region, the value of these visitors to the local economy and the dependence upon the US 20 corridor for access to Island Park and nearby Yellowstone Park, in turn supporting visitation, local travel, and economic development.

With regard to planning for the US 20 corridor, the Island Park Comprehensive Plan and Development Code emphasize the importance of a safe and efficient transportation system to meet the needs of both residents and visitors, whether as pedestrians or in vehicles. The development regulations pertaining to access management, parking, street connections, and a recognition of the need for well developed local, collectors, and arterials all point to the community's desire to ensure that the appropriate transportation and roadway systems (that are supportive of the community's codes and vision for Island Park) will be constructed, and not encumbered, as conditions of development.

Summary Comments on CITY OF ASHTON COMPREHENSIVE PLAN – adoption date unknown / Development Code October 1998

The City of Ashton is located just outside and to the south of the study area for the US 20 Corridor Plan. However, due to its close proximity to the study area and potential impact or benefit from US 20, the following summary statements have been gathered from the comprehensive plan and development code.

- Travelers on US 20, with greater numbers in summer than winter, contribute to the local/tourist economy in Ashton.
- US 20 travelers pass directly through Ashton and in cases of poor weather, may elect to stay overnight until travel conditions improve – as a result, both the number of travelers and condition of the roadway is important to the City.
- SH 47 leaves US 20 at Ashton as the Mesa Falls Scenic Byway and reconnects with US 20 near Osborne Bridge on the corridor – any change in daily traffic counts to SH 47 resulting from recommendations for the US 20 corridor, could have impact to the City of Ashton.

Summary Comments on HARRIMAN STATE PARK MASTER PLAN – adopted August 2002

The Idaho Department of Parks and Recreation Board completed the Harriman State Park Master Plan through an open public process from July 2001 to its adoption in August 2002. The Master Plan Map in Figure 7 consists of the existing and proposed land uses, facilities and services. The purpose of the plan was to provide long-term direction for the operation, development, and management of the park, its resources and facilities. The final recommendations were developed pursuant to the conditions of the initial property donation to the state of Idaho; in accordance with the vision, goals and policies of the Idaho Department of Parks and Recreation; reflective of the significant public input gathered during the planning process; and finally, with respect to the world class natural, cultural, and historical resources that make the Harriman State Park property unique. The development of the final plan also took into consideration the Fremont County Comprehensive Plan and Development Code and was presented to the Fremont County Planning and Zoning Commission in June 2002, receiving a favorable review.

Location and Park Overview

Harriman State Park (the park) is located along the Henry's Fork of the Snake River, thirty miles west of Yellowstone National Park. The park includes 11,700 acres and is surrounded primarily by the Caribou-Targhee National Forest, a small property held by the Idaho Department of Lands and private lands (within the town of Last Chance) located along the northeast boundary of the park. US Highway 20 bisects the park separating the main Railroad Ranch from Harriman East. The park also includes two other former Harriman properties; section 16 (Spring Site) and the Sheridan Ranch, both accessed by Green Canyon Road off US 20.

The park is renowned for its world class fishery in the Henry's Fork, deep historical values, outstanding hiking and cross country skiing opportunities and spectacular scenic vistas of the valley, river and distant Teton Mountain Range. In 2001, the park hosted over 56,000 visitors, more than double the visitation numbers of five years prior (1996). Of the visitors who came to participate in day use activities, 48% of them were Idaho residents and 52% were from out of state. Of the overnight guests at the park, 75% were from Idaho and 25% were from other states. All visitors to the park arrived via the US 20 corridor.

Related Master Plan Goals and Objectives

The park's master planning process began with the development of a series of goals and objectives based on an understanding of the park's mission, vision, and initial input from the public and park staff. Those goals and objectives that are relevant to the planning for the US 20 corridor are as follows:

Goal: Enhance the park entrance and provide for fee collection

Objectives:

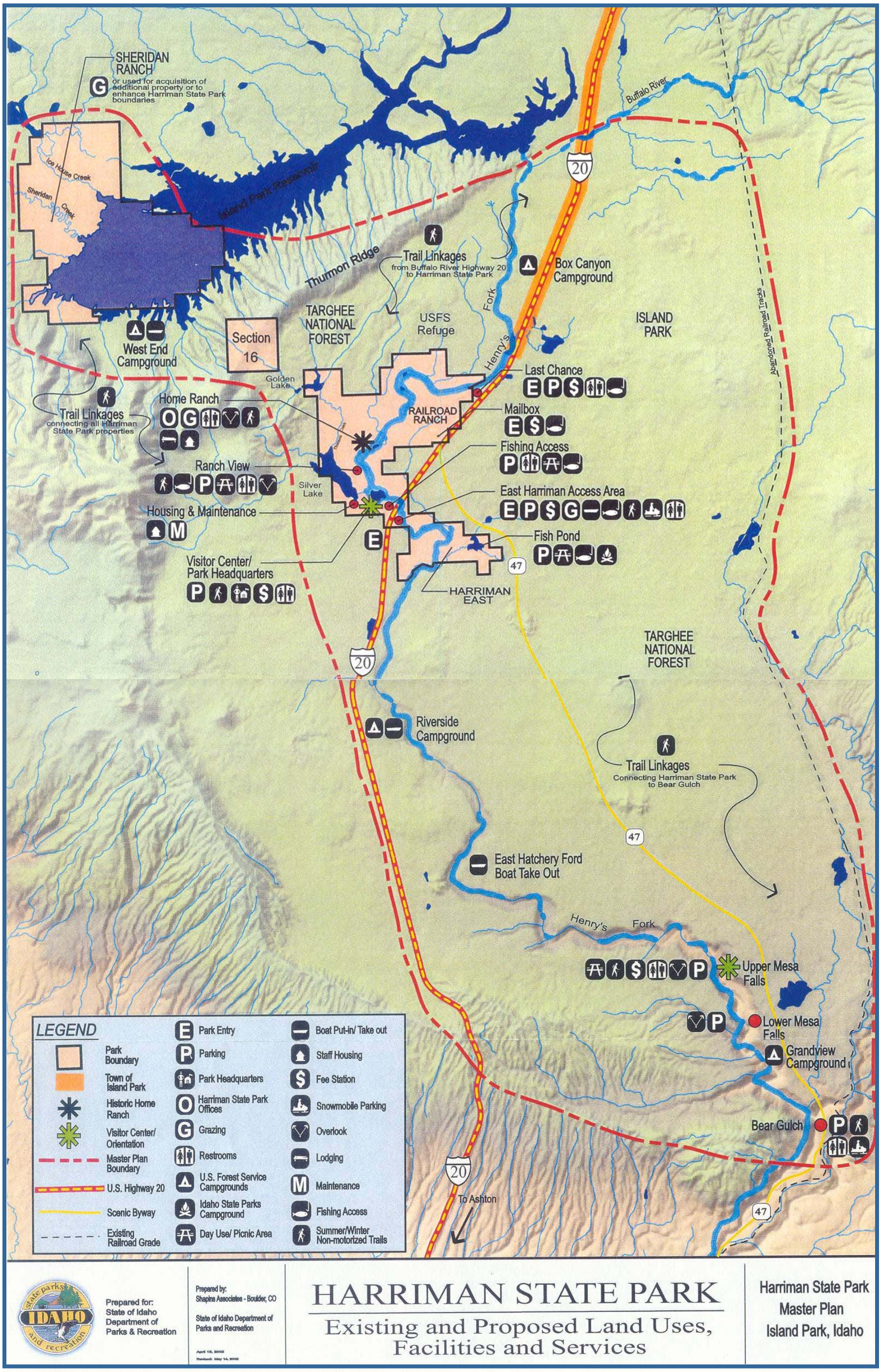
- Designate the Railroad Ranch entrance as the "main entrance" of the park and provide it with the most extensive signage. Provide additional entrance, information and orientation signs in other areas of the park. Request additional signage from the Idaho Transportation Department to be located along US Highway 20 for the park.
- Create a major park entrance at the intersection of Green Canyon Road and US 20 that will inform passersby of the park's location and invite them to enter.

Goal: Provide for access, circulation and parking

Objectives:

- Reroute and pave the main entry road into the park from its current location on Green Canyon Road (accessed from US 20) to a point farther west, at or near the historic ranch entry.

FIGURE 8: HARRIMAN STATE PARK



Related Proposed Development Plans

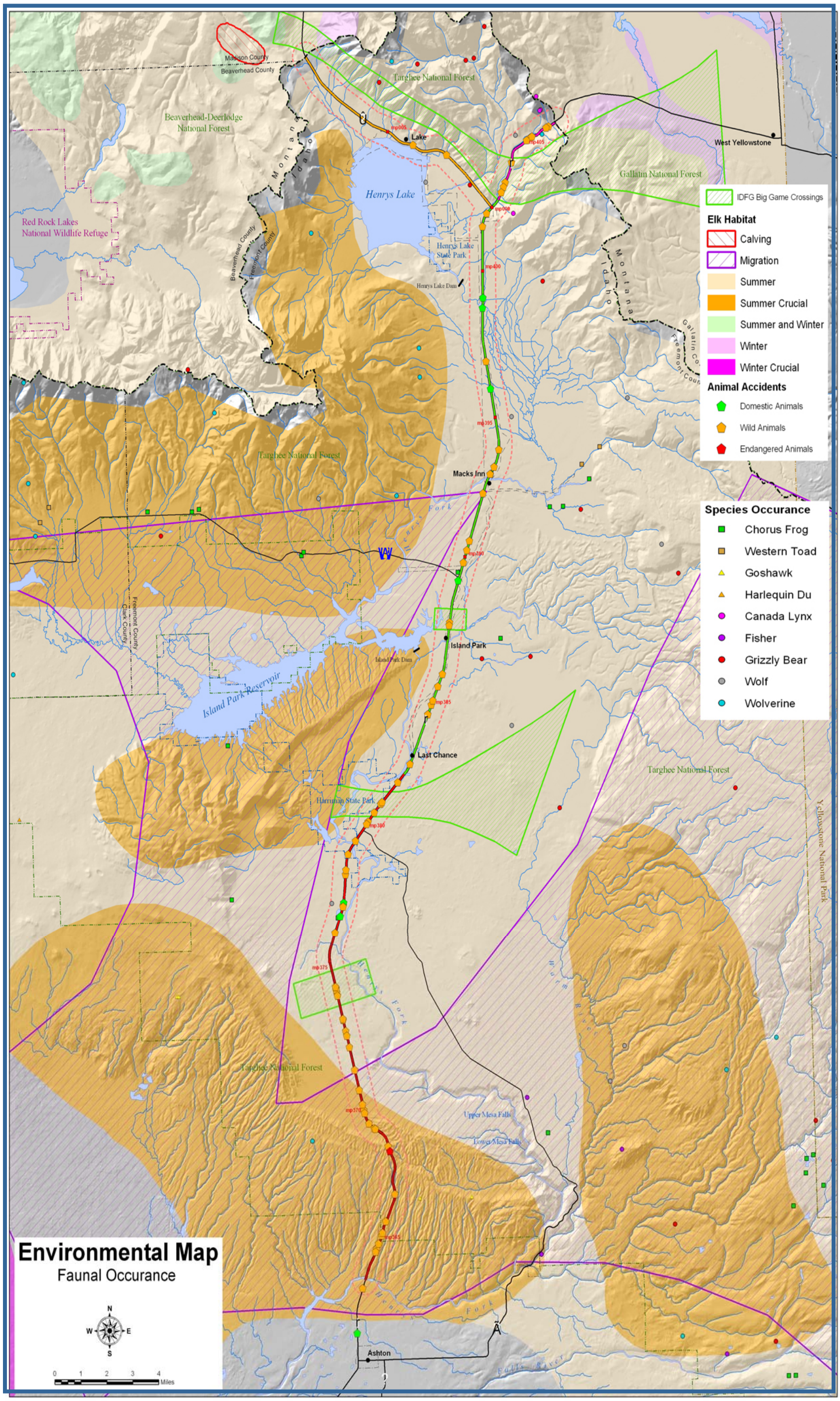
The master plan includes a variety of proposed improvements, projects and management recommendations. Those that apply to the planning for the US 20 corridor are:

- Enhance a Major Park Entrance at US Highway 20.
- Re-route the Park Entry from Green Canyon Road.
- Construct a Restroom at the Osborne Boat Launch across US 20 near the main park entrance.

3.4 Environmental Scan Data

The purpose of an environmental scan is to identify critical environmental planning factors, including biological, physical, and cultural issues, which could affect the analysis and development of alternatives for the corridor. The following is a description of the environmental characteristics within the project study area along the highway segments as they relate to the various alternatives presented.

FIGURE 9: ENVIRONMENTAL MAP



3.4.1 Sawtell/Big Springs Alternatives

The Sawtell/Big Springs group of alternatives has fewer environmental factors present than the other alternative groups. Three preliminary alternatives are analyzed in the Sawtell/Big Springs area: Sawtell/Big Springs Interchange, Sawtell/Big Springs Jughandle Intersection, and Sawtell/Big Springs Signalization Turn and Acceleration Lanes.

Approximately 14% of the total acreage in the 1,000-foot buffer area associated with these alternatives is characterized as wetlands by the National Wetland Inventory (NWI). It does not appear that wetlands would be affected under the Sawtell alternatives. No threatened or endangered species or Caribou-Targhee National Forest Species of Special Concern have been identified with this project area. In general, this area is a forested portion of the US 20 corridor that allows for movement of both big game and large carnivore species from areas east (e.g., the Moose Creek Plateau and Yellowstone National Park), across US 20, and into the Centennial Mountains to the west. The project area is within elk summer range as identified by the Rocky Mountain Elk Foundation (RMEF). Site-specific environmental/biological surveys are recommended to identify potentially sensitive species and resources present within and adjacent to the project area. Any wetlands or stream channels occurring within, and adjacent to, the 1,000-foot buffer area would require delineation and jurisdictional determination. Temporary and permanent effects would be analyzed pursuant to permitting concerns under Section 404 of the Clean Water Act and under the jurisdiction of the United States Army Corp of Engineers and the United States Environmental Protection Agency.

The historic Island Park Resort is located in the vicinity of these alternatives. From the aerial photographs, it does not appear that proposed construction would affect this historic site. There is a potential for unrecorded archaeological resources in previously undeveloped areas within the project area. Compliance with Section 106 of the National Historical Preservation Act (NHPA), including the State Historical Preservation Office (SHPO) and Native American consultation would be required prior to project construction.

Sawtell/Big Springs Interchange

Land Ownership. Maps at the 1:24,000 scale indicate that construction under this alternative would take place on Forest Service, state, and private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Construction under this alternative would not affect known water resources.

Biological Resources. This area allows for movement of both big game and large carnivore species from areas east across US 20 and into the mountains to the west. The project area is within elk summer range as identified by the RMEF. This alternative minimizes potential impacts by utilizing the existing road alignments. Any loss of acreage to road widening activities would appear to be offset by gains from restrictions in access management.

Cultural Resources. The Island Park Resort historic site is located to east and north of the proposed construction. From the aerial photographs, it appears that the proposed construction would not affect Island Park Resort. Archaeological and traditional resources have not been identified within the proposed construction area. There is a potential for unrecorded archaeological resources in undeveloped areas within the project area. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

Sawtell/Big Springs Jug Handle Intersection

Land Ownership. Maps at the 1:24,000 scale indicate that construction under this alternative would take place on Forest Service, state, and private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Construction under this alternative would not affect known water resources.

Biological Resources. This alternative would disturb a limited quantity of forested acreage in the immediate vicinity of the existing Sawtell/Big Springs intersection. Effects would be confined in extent to areas already highly modified by the existing interchange alignment. This area allows for movement of both big game and large carnivore species from areas east across US 20 and into the mountains to the west. The project area is within elk summer range as identified by the RMEF.

Cultural Resources. The historic Island Park Resort is east and north of the proposed construction. From the aerial photographs, it appears that the proposed construction would not affect this historic site. Archaeological and traditional resources have not been identified within the proposed construction area. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

Sawtell/Big Springs Signalization Turn and Acceleration Lanes

Land Ownership. Maps at the 1:24,000 scale indicate that construction under this alternative would take place on private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Construction under this alternative would not affect known water resources.

Biological Resources. This area allows for movement of both big game and large carnivore species from areas east across US 20 and into the mountains to the west. The project area is within elk summer range as identified by the RMEF. This alternative minimizes potential impacts by utilizing the existing road alignments. Any loss of acreage to road widening activities would appear to be offset by gains from restrictions in access management.

Cultural Resources. The Island Park Resort historic site is located to the east and north of the proposed construction. From the aerial photographs, it appears that the proposed construction would not affect Island Park Resort. Archaeological and traditional resources have not been identified within the proposed construction area. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

3.4.2 Last Chance Alternatives

Two preliminary alternatives were analyzed in the Last Chance area: Last Chance Frontage Roads and Last Chance Backage Roads. Wetland acreage calculations were based on NWI maps at 1:24,000, with an accuracy of +/- 40 feet. Public land ownership is digitized at 1:100,000, with an accuracy of +/- 167 feet. Land ownership to the parcel level would be identified later in the planning process, prior to project implementation.

Approximately 40 % of the total acreage in the project area associated with the Last Chance alternatives is characterized as wetlands by the National Wetlands Inventory (NWI). Wetland delineation would be required in those areas potentially affected by highway improvements. There is a bald eagle nest of unknown status to the west of the Last Chance area. The exact location is unknown, but it is most likely within one mile. The United States Fish and Wildlife Service (USFWS) should be contacted regarding specific known nest and roost locations. Current USFWS guidelines require a disturbance-free buffer zone of one mile around known nest and roost sites. If this is not practicable, then activity should be conducted outside of the February 15 to August 15 time period to protect nesting birds and November 1 to April 15 to protect roosting birds. The Last Chance area is also within elk summer range and is near the elk migration corridor (within two to three miles) as identified by the Rocky Mountain Elk Foundation (RMEF). Site-specific environmental/biological surveys are recommended to identify potentially sensitive species and resources present within and adjacent to the project area. All wetlands and stream channels occurring within, and adjacent to, the 1000-foot buffer area would require delineation and jurisdictional determination. Temporary and permanent effects would be analyzed pursuant to permitting concerns under Section 404 of the Clean Water Act and under the jurisdiction of the United States Army Corp of Engineers and the United States Environmental Protection Agency.

Although no cultural resources have been previously recorded in this project area, potential historic architectural resources may be present. Resource inventory and evaluation, and SHPO consultation in compliance with Section 106 of the NHPA, would be required prior to project construction.

Last Chance Frontage Roads

Land Ownership. Maps at the 1:24,000 scale indicate that construction under this alternative would take place on Caribou-Targhee National Forest land west of the road, and on private lands elsewhere. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. This alternative is within the Henrys Fork 100-year floodplain with its associated ponds and marshes.

Biological Resources. Under this alternative, the existing highway would be widened for much of the project area. Proposed road alignments would disturb a limited amount of forested/shrub community in the northern portion. Proposed road alignments would also disturb grasslands in the southern and central portions of the project area. This alternative appears to minimize new impacts by utilizing existing road alignments. New impacts would result from upgrading existing roads, including widening and resurfacing. There is a bald eagle nest of unknown status west of the Last Chance area. The exact location is unknown, but it is most likely within one mile. The Last Chance area is also within elk summer range and is near the elk migration corridor (within two to three miles) as identified by the Rocky Mountain Elk Foundation (RMEF).

Cultural Resources. Under this alternative, part of the Last Chance Motel property could potentially be affected by construction. This resource would require inventory and evaluation to identify whether it is a historic property. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Under this alternative, proposed road construction could impact the Grub Stake fuel station property. The Last Chance General Store fuel station is located to the east of the proposed construction, and should not be affected.

Last Chance Backage Roads

Land Ownership. Maps at the 1:24,000 scale indicate that construction under this alternative would take place on Caribou-Targhee National Forest land west of the road, and on private lands elsewhere. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. This alternative is within the Henrys Fork 100-year floodplain with its associated ponds and marshes.

Biological Resources. Under this Alternative, US 20 would be widened for much of the project area. Proposed road alignments would disturb a limited quantity of forested/shrub community in the northern portion of the area. Proposed road alignments would also disturb grasslands in the southern and central portions of the project area. This alternative appears to minimize new impacts by utilizing existing road alignments. New impacts would result from upgrading existing roads, including widening and resurfacing. There is a bald eagle nest of unknown status west of the Last Chance area. The exact location unknown, but it is most likely within one mile. The Last Chance area is also within elk summer range and is near the elk migration corridor (within two to three miles) as identified by the RMEF.

Cultural Resources. Under this alternative, the Last Chance Motel property could potentially be affected by construction. This resource would require inventory and evaluation to identify whether it is a historic property. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Under this alternative, proposed road construction could impact the Grub Stake fuel station property. The Last Chance General Store fuel station is located to the east of the proposed construction, and should not be affected.

3.4.3 Mack's Inn Alternatives

Two preliminary alternatives are analyzed in the Mack's Inn area: Mack's Inn Area Access Management, Mack's Inn Area Signalization and Alternative Access. Approximately 5% of the total acreage associated with this project area is characterized as wetlands by the NWI. It does not appear that wetlands would be affected under any of these alternatives. At least one bald eagle nest is immediately adjacent to the Mack's Inn project area. It is within the one mile buffer for nests and timing restrictions would be recommended. The project area is within elk summer range and the elk migration corridor as identified by the RMEF. Site-specific environmental / biological surveys are recommended to identify potentially sensitive species and resources present within and adjacent to the project area. Any wetlands or stream channels occurring within, and adjacent to, the 1,000-foot buffer area would require delineation and jurisdictional determination. Temporary and permanent effects would be analyzed pursuant to permitting concerns under Section 404 of the Clean Water Act and under the jurisdiction of the United States Army Corp of Engineers and the United States Environmental Protection Agency.

There are thirty-nine historic structures associated with the Mack's Inn historic site in this area. The historic structures appear to be outside of the construction area and are unlikely to be affected. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Mack's Inn Area Access Management

Land Ownership. Maps at the 1:24,000 scale indicate that access management under this alternative would take place on Caribou-Targhee National Forest and private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. This area includes the Henrys Fork 100-year floodplain and the Elk Creek 100-year floodplain, with a stream crossing at Henrys Fork River.

Biological Resources. It does not appear that wetlands would be affected under this alternative, provided activities do not encroach on the Henrys Fork River. At least one bald eagle nest is immediately adjacent to the Mack's Inn project area. It is within the one mile buffer for nests and timing restrictions would be recommended. The project area is within elk summer range and the elk migration corridor as identified by the RMEF.

Cultural Resources. There are thirty-nine historic structures in the vicinity of this alternative. These are associated with the Mack's Inn historic site to the east of the proposed highway improvements. All identified historic structures are outside of the proposed construction and are unlikely to be affected. Archaeological resources have not been identified within the access management area. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. One fuel service station, listed by the Idaho Department of Environmental Quality (IDEQ) as an open underground storage tank (UST), is located near milepost 393 east of US 20. Based on aerial photographs of the area, it appears that the proposed construction would not affect the fuel service station.

Mack's Inn Area Signalization and Alternative Access

Land Ownership. Maps at the 1:24,000 scale indicate that access management under this alternative would take place on Caribou-Targhee National Forest, state, and private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. This area includes the Henrys Fork 100-year floodplain and the Elk Creek 100-year floodplain, with a stream crossing at Henrys Fork River.

Biological Resources. It does not appear that wetlands would be affected under this alternative provided activities do not encroach on the Henrys Fork River. This alternative would use existing road alignments to the east of US 20. To the west, access would be achieved by disturbing a limited quantity of forested habitat. At least one bald eagle nest is immediately adjacent to the Mack's Inn project area. The project area is within the one mile buffer for nests, and timing restrictions would be recommended. The project area is within elk summer range and the elk migration corridor as identified by the RMEF.

Cultural Resources. There are thirty-nine historic structures associated with Mack's Inn to the east of the proposed construction. Historic structures appear to be outside of the area and would not be affected. Archaeological resources have not been identified within the proposed

construction area. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. One fuel service station, listed by the IDEQ as an open UST, is located near milepost 393 on the east side of US 20. From the aerial photos, it appears that the proposed construction would not affect the fuel service station.

3.4.4 Yale – Kilgore Alternatives

Three preliminary alternatives are analyzed in the Yale - Kilgore area: Yale - Kilgore Bypass, Yale – Kilgore Interchange, and Yale – Kilgore Signalization and Turn Lanes. Approximately 17% of the total acreage associated with these alternatives is characterized as wetlands by the NWI. Wetland delineations would be required in those areas potentially affected by road improvements. The proposed road alignments would bisect an existing wetland area north of the Yale/Kilgore intersection. Opportunities to enhance the connectivity of this existing wetland could be explored. About 63% of this project area is forested in an area that allows for movement of both big game and large carnivore species from areas east (e.g., the Moose Creek Plateau and Yellowstone National Park), across US 20, and into the Centennial Mountains to the west. There is a bald eagle Conservation Data Center (CDC) occurrence observation to the southeast, as well as a Canada lynx CDC occurrence just north of the Yale-Kilgore intersection. These alternatives are within elk summer range and near an elk migration corridor (within one mile) identified by the RMEF. A chorus frog (a Caribou-Targhee National Forest Species of Special Concern) was documented in the Yale Creek Pond (the wetland area northwest of the Yale-Kilgore intersection).

Site-specific environmental/biological surveys are recommended to identify potentially sensitive species and resources present within and adjacent to the project area. Any wetlands or stream channels occurring within, and adjacent to, the 1,000-foot buffer area would require delineation and jurisdictional determination. Temporary and permanent effects would be analyzed pursuant to permitting concerns under Section 404 of the Clean Water Act and under the jurisdiction of the United States Army Corp of Engineers and the United States Environmental Protection Agency.

Several historic properties are located within this project area and could be affected. A historic homestead cabin and two associated structures, the Henry Garner Gravesite, and the Flying R Ranch are all considered eligible for the National Registry of Historic Places (NRHP). An unrecorded potential historic structure is also located in the area. It would require recording and evaluation for NRHP eligibility. There is a potential for unrecorded archaeological resources in undeveloped locations. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Yale – Kilgore Bypass

Land Ownership. Maps at the 1:24,000 scale indicate that access management under this alternative would take place on private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Proposed construction would cross Howard Creek, within the 100-year floodplain of the creek and its drainages and wetlands.

Biological Resources. The proposed bypass alignment would affect wetlands to the northwest of the existing intersection. Refer to Table 20 for wetland acreage. A chorus frog (a Caribou-Targhee National Forest Species of Special Concern) has been documented in the Yale Creek Pond (the wetland area northwest of the Yale-Kilgore intersection). This alternative would

disturb forested and wetland acreages unaffected at the present time, and create effects outside of the existing alignment area. This could potentially create a wider and longer zone of effect in the Yale-Kilgore area, and may reduce the likelihood of wildlife moving across the US 20 Corridor in this area. Potential opportunities for incorporating wildlife crossings may help mitigate potential effects and encourage movement between areas east and west of the interchange. There is a bald eagle CDC occurrence observation to the southeast, and a Canada lynx CDC occurrence just north of the Yale-Kilgore intersection. This alternative is within elk summer range and near an elk migration corridor (within one mile) identified by the RMEF.

Cultural Resources. Based on the aerial photographs, the proposed construction is not likely to affect identified archaeological or engineering resources. However, the proposed construction may affect unrecorded archaeological resources because the proposed route extends through potentially undisturbed areas west of the road. Archaeological and traditional resources have not been identified within the proposed construction area. A homestead cabin and two associated structures dating to the early 20th century, and considered eligible for the NRHP, are east of the proposed construction area, and would not be affected by the project. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

Yale – Kilgore Interchange

Land Ownership. Maps at the 1:24,000 scale indicate that access management under this alternative would take place on private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Proposed construction would cross Howard Creek within the 100-year floodplain of the creek and several unnamed drainages.

Biological Resources. The proposed alignment would impact wetland areas to the north and southeast of the Yale-Kilgore interchange. Additional acreages of forest/shrub communities would be disturbed. There is a bald eagle CDC occurrence observation to the southeast, and a Canada lynx CDC occurrence just north of the Yale-Kilgore intersection. This alternative is within elk summer range and near an elk migration corridor (within one mile) identified by the RMEF.

Cultural Resources. Several historic properties could be affected under this alternative. A historic homestead cabin and two associated structures dating to the early twentieth century and considered eligible for the NRHP are within the proposed construction area. The Henry Garner Gravesite and the Flying R Ranch, both of which are considered eligible for the NRHP are located to the east of US 20 within the proposed construction right-of-way (ROW). In addition, a portion of the proposed highway construction appears to cross property associated with a potential historic structure that would require recording and evaluation for NRHP eligibility. Archaeological or traditional resources have not been identified in the area. There is a potential for unrecorded archaeological resources in undeveloped locations. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

Yale – Kilgore Signalization and Turn Lanes

Land Ownership. Maps at the 1:24,000 scale indicate that access management under this alternative would take place on private land. A more detailed evaluation of land ownership by parcel would take place prior to project construction.

Water Resources. Proposed construction would cross Howard Creek and affect the 100-year floodplain boundaries associated with Howard Creek and its numerous unnamed drainages. Construction is also adjacent to wetlands associated with Howard Creek.

Biological Resources. Road widening activities would impact the wetland to the north of the Yale-Kilgore intersection. Additionally, the proposed Kilgore alignment would disturb acreage to the south of the existing helipad adjacent to the Yale-Kilgore intersection. There is a bald eagle CDC occurrence observation to the southeast, and a Canada lynx CDC occurrence just north of the Yale-Kilgore intersection. This alternative is within elk summer range and near an elk migration corridor (within one mile) identified by the RMEF. This alternative uses existing road alignments to a greater degree than the other alternatives. New impacts could occur from upgrading existing alignments, including road widening and resurfacing.

Cultural Resources. Several historic structures could be affected under this alternative. A historic homestead cabin and two associated structures dating to the early twentieth century and considered eligible for the NRHP are adjacent to US 20 within the proposed construction ROW. Archaeological or traditional resources have not been identified within the proposed construction area. There is a potential for unrecorded archaeological resources in undeveloped areas. Compliance with Section 106 of the NHPA, including SHPO and Native American consultation would be required prior to project construction.

Hazardous Materials. Construction under this alternative would not affect known hazardous materials sites.

TABLE 20. IDENTIFIED ENVIRONMENTAL FACTORS, PRELIMINARY ALTERNATIVES*

Environmental Factor	Sawtell/Big Springs Alternatives			Last Chance Alternatives		Mack's Inn Alternatives		Yale-Kilgore Alternatives		
	Interchange	Jughandle	Signalization	Frontage	Backage	Access Management	Signalization	Interchange	Bypass	Signalization
Wetlands								●	●	●
Vegetation		●	●	●	●		●	●	●	●
Bald eagle nest / occurrence				●	●	●	●	●	●	●
Canada lynx occurrence								●	●	●
Chorus frog occurrence									●	
Wildlife corridor / range	●	●	●	●	●	●	●	●	●	●
Archaeological resources	●							●	●	
Historic buildings	●	●	●	●	●	●	●	●	●	●
Traditional resources										
Hazardous materials				●	●	●	●			

● *Environmental factor present.*

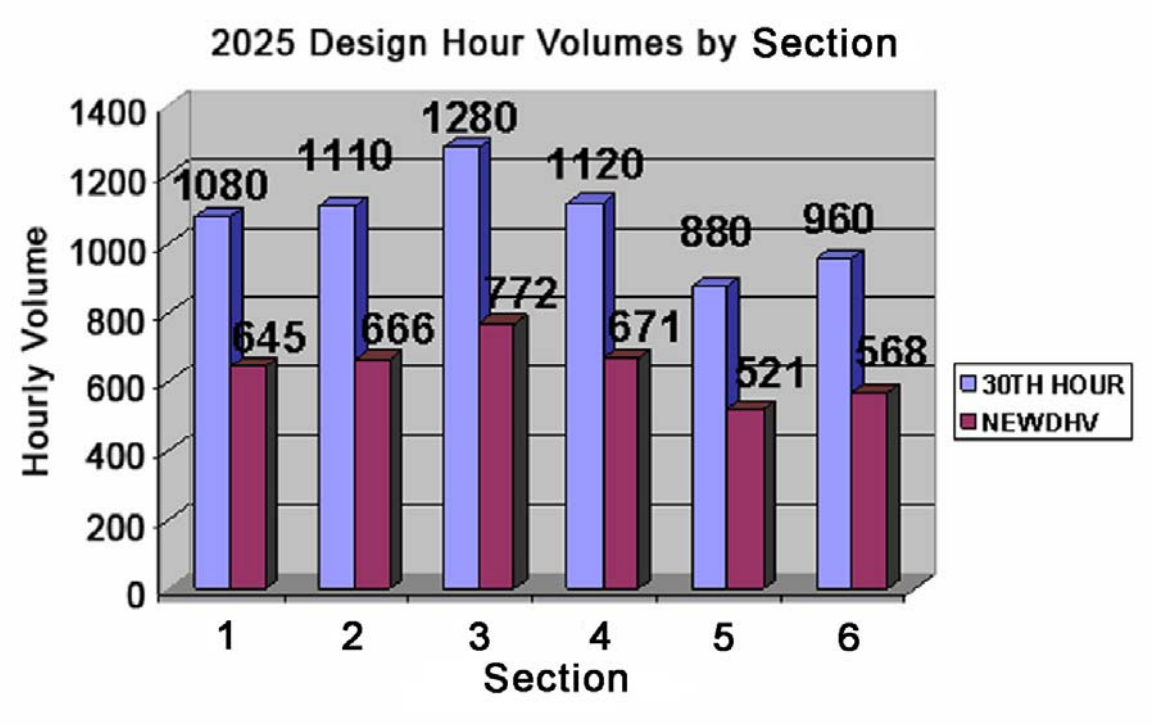
* Based on aerial photo review.

SECTION 4: TRANSPORTATION FORECASTS AND CORRIDOR PERFORMANCE

4.1 Capacity Analysis Results

Figure 9 shows the results of using the new methodology for calculating the design hour volume. The lower volumes represent a "deseasonalized" average design hour volume that takes into account the unique peaking characteristics of this facility and doesn't result in project recommendations that would over design a solution for this highway.

FIGURE 10: DESIGN HOUR VOLUMES



4.2 General Information

Methodologies consistent with the 2000 Highway Capacity Manual (HCM) were used to assess both the existing (2002) and 2025 conditions within the US 20 Corridor. The analysis was completed using the two-lane analysis module of the Highway Capacity Software and by using existing and 2025 design hourly volumes (DHV's) and average daily traffic volumes (ADT's) provided by the Idaho Department of Transportation. Table 21 provides a summary of the data inputs used for the operational assessment of US 20.

TABLE 21: GENERAL INFORMATION USED FOR HCS ANALYSIS

Section	Begin MP	End MP	Section Length (miles)	Shoulder Width (ft)	2002		2025		% No Passing Zone
					Volume	% Trucks	Volume	% Trucks	
1	363.370	373.728	10.4	4	428	11	645	11	30
2	373.728	380.499	6.8	4	442	11	666	11	50
3	380.499	389.245	8.7	4	511	13	772	13	50
4	389.245	401.034	11.8	3	442	14	671	14	50
5	401.034	402.270	1.2	5	387	13	521	13	70
6	402.270	406.300	4.0	5	373	15	568	15	70

4.3 Forecast Methodology

Currently, the Highway Capacity Manual (HCM) classifies two-lane highways as Class One and Class Two. The classification of the highway establishes the measures of effectiveness that are used to determine the level of service along the highway. For purposes of this analysis, US 20 was classified as a Class One Highway. This classification uses both percent time spent following (PTSF) and average travel speed to determine level of service (Class Two highways are based on percent time following only).

4.3.1 Brief Overview of Two-Way Analysis

This analysis provides the level of service of a roadway segment based on both directions of travel. In general, the existing and Year 2025 levels of service (LOS) within the US-20 Corridor are LOS C except in the area around Last Chance. In general all of the roadway segments, with the exception of Section 3, have travel speeds greater than 51 mph and percent time spent following (PTSF) values less the 65%. Both average travel speed and PTSF were slightly worse within roadway Section 3 due to the higher traffic volumes and access points/mile located within this section. During the Year 2025, without implementing any improvements, five of the roadway sections are expected to operate at LOS C.

TABLE 22: 2025 TWO-WAY ANALYSIS RESULTS

Section	Year 2025		
	LOS	Average Speed	% Time Spent Following
1	C	53.8	58.8
2	C	53.1	62.1
3	D	50.2	66.3
4	C	51.6	62.6
5	C	53.5	60.9
6	C	53.2	62.1

Source: HDR Analysis

4.4 Projected Corridor Deficiencies

Based on analysis for the project, most of the corridor will be deficient as defined by State standards. ITD standards for Level Of Service (LOS) stipulate a LOS B is desirable in rural parts of the corridor and LOS C is acceptable in urbanized areas. By that definition, Sections 1, 2, 5, and 6 are rural, and Sections 3 and 4 would be considered urbanized, as they go through the developed portion of Island Park. By this definition, only Section 4 would be considered non-deficient, however this analysis does not account for passing lanes. The HCS software is not robust in the analysis of passing lane facilities on LOS. HCS has only been capable of this type of analysis since the 2000 release, and there are several fixes expected in the next comprehensive update of the software. In isolation the passing lanes that exist all operate at or above the State standard for LOS, but HCS cannot be used as a sensitivity tool to look at overall corridor LOS given project improvements. This being the case, it is expected that with recommended improvements as presented in Chapter 7, the overall facility LOS will meet or exceed State standards.

4.5 Alternative Modes

There is little in the corridor study area at this time for public transportation. There is a local dial-a-ride service that is run through the County aging program to help get elderly to and from critical appointments, shopping, etc. There is no public transit available. This area is growing, but at a slow steady rate and the area is not expected to intensify to the point that it could support public transit service in the foreseeable future.

In this setting, use of the highway shoulders is appropriate for bicycles and pedestrians. There is a plan that is being put together by local trail advocates to connect Harriman State Park and Henry's Lake State Park with a multi-use pathway. This plan supports that effort and acknowledges its need for funding. Should enhancement funds be available for this project, this plan is in full support of the trail's development.

4.6 Snow Removal (Winter maintenance)

The US 20 corridor is designated by ITD as a Level II route for winter maintenance standards which require snow removal during storms to keep roads open - except when blizzard, avalanche, or other conditions prevent maintenance crews from reasonably negotiating the roadway. Level II does not require that snow pack left by plows be removed until thawing conditions exist or the pack constitute a traffic hazard.

SH 87 is designated by ITD as a Level IV route for maintenance, which requires snow removal during storms only when manpower and equipment are not being utilized to clear other routes. SH 87 may be closed for an extended period of time until resources are available to plow during regularly scheduled working hours.

The US 20 Corridor Plan will investigate areas requiring high maintenance due to snow drifting and make recommendations to reduce maintenance demands. Some specific areas that require high maintenance are Federal Hill, Henry's Lake Flat, and the snow packed areas north of Highway 87 on US 20. Federal Hill consistently has ice build-up while Henry's Lake Flat has severe snowdrifts during the winter months. The current winter maintenance routine around Henry's Lake Flat is to dig several trenches along the side of the roadway that will initially fill with blowing snow versus drifting directly onto the road. Around Federal Hill, and north of Highway 87, anti-skid (a mixture of small stones and sand) is used to improve traction and reduce slippery conditions. Magnesium chloride is currently only being used on the bridges along the corridor.

SECTION 5: PUBLIC PROCESS AND CORRIDOR PLAN GOALS

5.1 Introduction

The US 20 corridor, from Ashton to the Idaho / Montana border is a critical gateway to Yellowstone National Park, a key access to the world famous Henry's Fork of the Snake River and a regional connection to a wide variety of year round recreational activities available in the Island Park area. The corridor is also the only route to access these resources and sites from the intersection with SH 47 to SH 87, a distance of 22 miles, which further illustrates its significance to the area.

The US 20 corridor presented many challenges to address during the planning process. These included high volume seasonal traffic, sensitive environmental conditions such as wetlands, river and stream crossings, big game crossings and increasing congestion and conflict from mixed vehicle access and pedestrian activities in the Last Chance area. Residential development along the corridor is also growing, which will result in increased passenger vehicle activity, as well as related commercial development. These changes will increase congestion and conflicts along the corridor among personal vehicles, trucks, recreational vehicles and pedestrians. Although recent roadway improvement projects such as new center left turn lanes in Island Park and replacement and widening of Osborne Bridge have improved the corridor's safety and operating conditions, it appears there are still challenges to address to meet the corridor's needs for the next 20 years. The public involvement activities provided integrated support to the technical transportation planning elements to ensure the most appropriate and publicly supportable solutions to these challenges have been identified.

5.2 Public Involvement Strategy

With this demonstrated public significance in mind, the planning of the US 20 corridor utilized a Public Involvement Plan (PIP) designed to meet the needs of the area's residents and support the overall planning process. The PIP included a variety of integrated public involvement activities:

The primary goal of the public involvement process was to engage area residents and key stakeholders through activities that will foster participation, awareness and support for the final recommendations of the study.

The PIP included meaningful opportunities for public participation and comments, to help ensure that the process identified and addressed the most important public needs and involved residents in the determination of the most feasible solutions to those needs. A draft PIP was developed in partnership with the Idaho Transportation Department with the opportunity for stakeholder and public input. The draft PIP was then revised as needed to create the most appropriate final PIP to meet the needs of the study and the public. In addition to the specific elements of the PIP outlined below, it is important to note that the PIP was designed to be flexible and was monitored throughout the process and modified as needed to meet the changing needs of the public and the evolving needs of the project.

The PIP is integrated with each of the steps in the overall planning process so that opportunity for public input was provided at primary decision points. The PIP included elements designed to reach all aspects of the public, through sources and activities appropriate for each community in the study area. The PIP recognized that the corridor included several communities along its length, each of which has unique issues, concerns and needs for participation and resolution of their individual concerns. To enhance the satisfaction of these individual differences and needs, the PIP provided participation opportunities throughout the corridor beginning with interviews of stakeholders in all corridor communities and continuing with a series of four public workshops held in Ashton and alternating between Island Park and Last Chance. To further enhance

participation and address regional user needs, the first public workshop was held in Idaho Falls. To augment these events, the PIP utilized a variety of local and regional media to provide study information and invite comment. These included the Island Park News, the Island Park Guide and the Post Register printed in Idaho Falls.

The PIP also included ongoing personal communications through the development of a project mailing list, email communications, newsletters and a project web site to ensure information was available regardless of subscription to the newspapers listed above. Clearly, the intention has been to maintain optimum communications with area residents to produce the broadest awareness and support for the final study recommendations.

The PIP provided opportunities for resident involvement in several ways; first, as active participants with the consultant team in the identification of issues, alternatives and possible solutions. This participation included the creation of a Transportation Advisory Committee (TAC) to represent key corridor agencies, local governments and key stakeholders. The purpose of the TAC was to assist the consultant team in identifying issues and alternatives, and to review and comment on the study's final recommendations.

The second type of participation for key corridor representatives was the Stakeholder Workshop, a half-day session involving a broad-based representation of individuals from corridor agencies, organizations, local governments, user groups and other key interested parties. The purpose of the workshop was to refine corridor issues and assist in the development of preliminary corridor vision and goals, to guide the future identification and evaluation of alternatives.

The third type of opportunity for participation was in the general functions of public comment and review of the alternatives and general plan recommendations. These opportunities occurred through general public workshops, project mailings and regular use of the media to provide broad information and invite comment. Through these three general types of opportunities and their related activities the public was encouraged to participate in ways that best met their needs, for their benefit and that of the project.

Finally, public participation was planned to directly support the planning process, for example, from the very beginning, the general public and TAC were afforded opportunities to identify their issues and concerns regarding the US 20 Corridor. From this input, the consultant team, in cooperation with ITD, the TAC and stakeholders, developed goals for the corridor. These goals, together with corridor data, were used to guide the evaluation of alternatives and identification of most feasible alternatives and final recommendations to meet corridor needs for the next 20 years.

5.3 Public Involvement Goals

- To create a high degree of public awareness to the study's purpose, process and opportunities for public involvement;
- To identify and implement specific public involvement activities that meet area residents' unique needs for participation;
- To provide ongoing opportunities for participation; at project kick-off and at key decision points throughout the planning process;
- To thoroughly identify and address the public's most important needs and concerns;
- To develop public trust in the process, consultant team, and ITD;

- To foster understanding and general support among residents, local governments affected entities and key stakeholders for the final recommendations of the study; and

- To effectively involve stakeholder agencies that are key in the NEPA environmental process for project development, in the formation of the 20-year plan for facility improvement.

5.4 Public Involvement Objectives

- Establish early and on-going communication with key stakeholder groups and potentially affected landowners to inform them of the plan and invite their participation in the process;

- Work with ITD and get input from stakeholders and the general public to identify and implement the most effective PIP and supporting activities that most closely meets the public's needs and achieves the goals of the study;

- Plan and implement public involvement activities that ensure the thorough identification of all significant stakeholder and public issues regarding the corridor study area;

- Provide ongoing open and positive communications with the general public who may have an interest in the study, and who do not consider themselves stakeholders or other groups requiring more detailed and specific role in the planning process;

- Provide ongoing clear communications through an appropriate use of media and activities that will help to reach and involve the greatest number of area stakeholders and residents;

- Plan and conduct appropriate public involvement activities throughout plan development that meet the changing needs of the process and the public, and which encourage continued and effective public exchange; and

- Execute all public involvement activities with the intent to meet needs and achieve broad understanding and support for the study's final recommendations.

5.5 Public Involvement Activities (in order of occurrence)

- **Initial Stakeholder Interviews**
  The intent of the interviews was to explain to and orient key stakeholders to the planning process and its purpose while identifying issues of concern. Key individuals were asked to be involved with the TAC (and during the public process) as well as to determine those other people that should be involved and in what way. It was also intended to be a means of discussing and identifying the most appropriate elements of the PIP that were needed to meet the requirements of the stakeholders as well as address those issues that must be resolved through the planning process.

- **Corridor Stakeholder Involvement**
  During the stakeholder interviews, the consultant team developed an overall list of corridor stakeholders, who had specific interest in the corridor and the planning process. The list included a broad representation of corridor agencies, organizations, user groups, landowners and other interested parties. These individuals were notified of all corridor planning events and included on a project mailing list for project updates, etc. The intent was to optimize corridor planning information, generate

participation and input and build awareness and support for the project. In addition to general involvement, the stakeholders were invited to a special **Stakeholder Workshop**, held early in the planning process to help determine corridor vision, goals and confirm priority issues to be addressed during the process.

- **The Transportation Advisory Committee (TAC)**

  The TAC was an organized group whose purpose was to afford participation by the primary corridor stakeholders to provide ongoing input, to assist in issues and alternatives identification and to provide comments on draft feasible and final recommendations of the study.

  Membership in the TAC included representatives of local governments, state and federal compliance agencies, organizations and key user groups with a relationship to implementation of final study recommendations. Participation was identified during the stakeholder interviews and from individual referrals and recommendations to include key representation.

  Meetings of the TAC were coordinated to coincide with the schedule for public workshops. In addition to meetings, the TAC was asked to review draft documents during the process to provide both technical guidance and local perspective for Study recommendations.

TABLE 23: CORRIDOR STUDY TRANSPORTATION COMMITTEE

US 20 Corridor Study Transportation Committees ** *Transportation Advisory Committee Members* / Stakeholders	
• ***Fremont Co. Commissioner***	• Montana Department of Transportation
• Fremont Co. Planning Administrator	• ***Idaho Transportation Department Project. Mgr.***
• ***Island Park City Council / Mayor***	• ***Idaho Transportation Dept. Design Engineer***
• Island Park Planning Administrator	• ***Fremont Co. Irrigation District***
• Island Park Resort	• ***Harriman / Henry's Lake State Park***
• ***Island Park Guides representative***	• ***City of Ashton, Mayor***
• Bureau of Land Management	• Aston Planning Administrator
• ***USFS – Targhee National Forest***	• Local Snowmobile Association
• Henry's Fork Foundation	• ***Idaho Dept. of Fish and Game***
• The Nature Conservancy (Flat Ranch)	• ***Idaho Dept. of Environmental Quality***
• Henry's Fork Coalition	• ***Trucking Industry rep***
• ***Island Park Chamber of Commerce***	• ***Idaho State Police***
• West Yellowstone Chamber of Commerce	• Island Park Realtors
• ***NRCS***	• Others as identified during the process

- **Transportation Advisory Committee Meeting #1 – June 4th 2003**

  The purpose of the first meeting was to review the project and the planning process (including anticipated communication methods) while clarifying the roles and responsibilities of team members, committees, and stakeholders. It was also an opportunity to establish desired outcomes and to review the results of the stakeholder interviews to identify initial issues.

- **Public Workshop #1 – (June 3,4,5 - 2003) 3 locations – Island Park, Ashton, Idaho Falls**
  At this meeting, the purpose of the project and the planning process were outlined and included an introduction to the planned public involvement methods. Initial corridor issues (as identified by stakeholder interviews) were presented along with available corridor information in order to prioritize the issues and concerns as well as answer questions from the participants.

- **Stakeholder Workshop – half-day session (July 16, 2003)**
  Corridor Vision, Goals and Objectives
  This workshop involved the review of the project and the planning process, and to clarify the roles and responsibilities of the participants. Results from the first public workshop were presented to allow for refinement and enhancement of the issues. This process enabled the stakeholders to formulate a preliminary corridor vision and to identify corridor goal concepts.

- **Corridor Vision, Goals, and Objectives Work Session (July 2003)**
  The consultant team met with Lance Holmstrom (Idaho Transportation Department Project Manager) and other ITD representatives in a work session to refine the corridor vision and to identify the draft corridor goals and objectives.

- **Public Workshop #2 – (October 1st and 2nd – 2003) 2 locations – Ashton and Last Chance**
  The corridor goals were presented, and the public was invited to comment regarding their concerns and issues about the corridor. This led to an opportunity to brainstorm some initial corridor alternatives which, it was explained, would all have to go through a screening process in order to ensure that the alternatives met the criteria of the plan as well as engineering and environmental standards.

- **Transportation Committee Meeting #2 (October 2, 2003)**
  The corridor draft existing conditions information was reviewed and the corridor vision, goals, and objectives (as determined by discussion at the stakeholder workshop) were presented. The initial corridor alternatives from the second public workshop were also presented and enhanced or modified as it was felt needed.

- **NEPA Agency Workshop (December 16, 2003)**
  Information was provided on the project along with a review of the preliminary array of alternatives, the corridor vision, goals, and objectives, and a preliminary environmental scan. It also allowed an opportunity to express any concerns related to items that may have been missed or needed to be explored further, planned activities that needed to be accommodated in the plan, and to advise on compliance relative to the NEPA perspective.

- **Public Workshop #3 – 2 locations – Ashton and Last Chance (April 14 and 15, 2004)**
  The screening criteria and process for the alternatives was reviewed, relative to the corridor goals and data. Alternatives that were defined as feasible (by the consultant team) were presented to elicit comment from participants and then the alternatives were modified as needed.

- **Transportation Committee Meeting #3 (April 15, 2004)**
  The results of the third public workshop were presented, and modifications and refinements to the feasible alternatives (as defined by the Project Team and modified by the public) were made.

- **Public Workshop #4 – 2 locations – Ashton and Last Chance (July 27 and 28, 2004)**
  The most feasible alternatives were presented and discussed, and comments were received from the public. Additional comments were gathered after a presentation of the draft study recommendations, and the public was informed of the next steps to be undertaken in the planning process.

5.6 Public Involvement Tools

Media Coverage

The media plays a critical role in the public involvement process. The consultant team, with the assistance of ITD, District 6 and Headquarters Public Affairs staff, provided regular information to local media sources and facilitated additional opportunities to disseminate needed information to meet the needs of the planning process and the public.

Newspaper – The consultant developed and provided draft media releases at critical points to the ITD Public Affairs office for the review, edit, and final distribution to local newspapers such as the Island Park News, Island Park Guide, Post Register, and others as appropriate within the corridor. The information in the media releases included project updates, present interim study results as they were developed, surveys, comment forms, and information on project events and meetings.

Radio – Similar to newspapers, the consultant team and ITD utilized local radio stations to provide study updates, present results as they were developed, and provide information on study events and meetings.

Written Surveys and Comment Forms

The consultant team, in cooperation with ITD, utilized a variety of written formats to gather public comments and input. Written comment forms were provided at critical decision points in the planning process and at each public workshop and presentations to local groups and committees. Written comment forms were provided through the local newspaper and the study newsletter.

Study Introductory Brochure and Newsletters

The consultant team developed and distributed an introductory project brochure to provide basic information about the project, planning process and schedule. Once the process was underway, the consultant team developed four study newsletters that were distributed prior to each of the four public workshops to provide updates on project status and summary results as they were developed. The project newsletters were sent to all members of the TAC, key stakeholders, previous workshop attendees, the media, and all interested citizens who provided names for the mailing list. Project newsletters and notices were sent to local organizations, such as Chambers of Commerce, for distribution within or along with their regular newsletters.

Study Mailing List

To provide and gather public information, the consultant team, in cooperation with ITD, developed and maintained a mailing list for distribution of all study information,

newsletters, notification of meetings, interim study results as appropriate, and any other uses deemed necessary by the consultant team, TAC, and ITD. The mailing list was updated by the consultant team as needed during the planning process to include anyone interested in receiving information on the study status.

E-mail Tree

The consultant team developed and used as a communication tool an e-mail tree. A list was compiled and updated as stakeholders and the public provided e-mail addresses. Notification of website updates, upcoming meetings, and input deadlines were e-mailed to e-mail tree participants.

Study Website and E-mail Address

As part of the public comment and information process, the consultant team created and maintained a study web-site (with e-mail address) to provide study updates and opportunities for communication with the public during the planning process. The study web site and e-mail address were monitored on a regular basis and responses to public requests and questions were provided as needed.

Presentations to Groups and Organizations (Optional)

The consultant team supported ITD in the development and delivery of presentations to interested groups and organizations as needed during the planning process (including such venues as the annual Henry's Fork Fishing day program at Harriman State Park, Snowmobile Race Events, etc). Presentations included study status, intermediate results or findings, draft and final conclusions, and additional opportunities for public input.

5.7 Public Involvement Plan Management

The PIP was managed in a collaborative manner, with overall management handled by the consultant team project manager (based on the approved PIP and general direction by the ITD Project Manager) while the day-to-day management was done by the public involvement coordinator. The PIP was evaluated on an ongoing basis by the consultant team and ITD and modified as needed to meet the evolving needs of the study and the public. Documentation on the implementation and results of all public involvement activities is developed and maintained by the public involvement coordinator, for use in the evaluation of the PIP and summary in the US 20 corridor project notebook as well as the final plan document.

5.8 Public Involvement Plan Evaluation

The PIP was evaluated continually during the planning process to ensure its effectiveness and appropriateness for the study and the participants. At the completion of the planning process, a discussion with the TAC will be held to identify any recommended changes in PIP activities in order to improve upcoming projects. In addition, a meeting will be held with the ITD Project Manager and the consultant team to evaluate the success of the PIP and to make recommendations for future similar studies.

SECTION 6: ALTERNATIVES DEVELOPMENT

6.1 Early Alternatives

Throughout the corridor study area, access management was found to be the major concern with regard to safety and roadway operations. When reviewing the existing conditions on the roadway, the type and quantity of access points were scrutinized in order to develop a plan to lessen, define, and control access to the roadway. These early alternatives, as well as others, are addressed below. Areas were selected for improvement based on several key factors. First, areas with higher levels of commercial development were selected based on activity around the roadway. Next areas that serviced large residential tracts in the county were included, and finally areas where there was a significant accident history were included to improve overall roadway safety. This level of analysis yielded several site-specific areas where improvements are recommended. They are:

- Pinehaven - Residential development, nearby commercial development
- Last Chance - Commercial development, safety
- Yale-Kilgore - Residential development, localized commercial development
- Mack's Inn - Residential development, commercial development, safety
- Sawtell/Big Springs - Residential development, commercial development
- SH 87 - Low volume study approach.

State Highway 87 has been included in the corridor analysis because it accesses area residential development and commercial development on Henry's Lake. It also provides access to the only air strip in the study area. As a low volume corridor it was not studied using level of service analysis as the low volumes would assure that the LOS will be within acceptable parameters now and within the forecast period.

6.1.1 Pinehaven (within Segment 1)

While not originally identified as a project area, after a more detailed reconnaissance of the corridor this area was discovered needing access management. The original proposal for this area included the closure of three accesses including the access to the Henry's Fork Lodge south of Pinehaven. This was proposed in combination with improvements to internal circulation roads in the Pinehaven area to allow for access to the Lodge and surrounding home sites. This alternative was rejected by local residents as too aggressive and that additional access was needed for the Henry's Fork Lodge traffic. Recommended alternatives include keeping this southernmost access open.

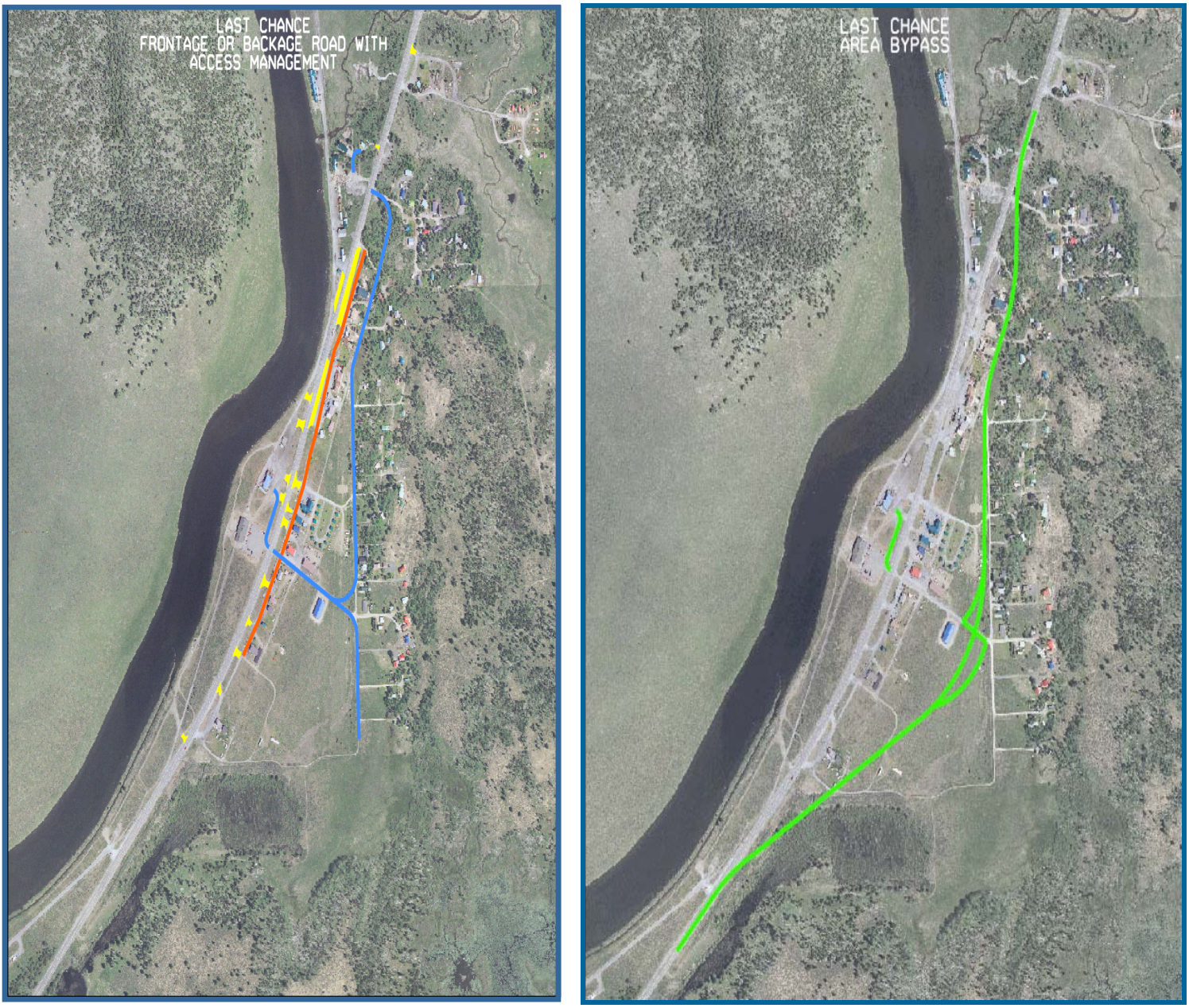
FIGURE 11: PINEHAVEN EARLY ALTERNATIVES

6.1.2 Last Chance (within Segment 2)

Numerous driveways and roadway connections in the Last Chance area, as well as the intense commercial development immediately adjacent to the highway corridor, produced alternatives including a bypass road around the area; a frontage road; a backage road; and access management. After public meetings were held, there was opposition to constructing a bypass as well as to a backage road. The remaining options were to move forward with consideration of a frontage road along US 20, and that ITD's access management standards be employed to close numerous access points causing, or creating the potential, for conflict.

The LOS analysis for this area showed the worst congestion conditions in the study area. To achieve the needed capacity to bring LOS into conformance with State standards, capacity of the highway must be increased through the developed area of Last Chance. This capacity enhancement could be achieved by an alternate route that provides redundant capacity to the existing roadway, or by widening the existing three lane facility to add two more travel lanes, one in each direction. Public sentiment would dictate that there is more support for widening-in-place at this time than the construction of an alternate route. This does not preclude the development of an alternate route for some time in the future should traffic conditions warrant.

FIGURE 12: LAST CHANCE EARLY ALTERNATIVES



6.1.3 Yale Kilgore (within segment 2)

The majority of the development in this part of the study area is occurring farther away from this stretch of highway, and thus multiple access points are not the main issue. Rather, there is one particularly continuous and undefined driveway serving a small commercial development and the Island Park Post Office that poses a greater potential for vehicle conflict. The main intersection in this area does receive a lot of use due to a large scale residential development occurring approximately four miles to the west of US 20, as well as a helicopter landing pad immediately adjacent to the highway for life flight operations.

Early options for improving operations in this area included access management, the signalization of the intersection with a minor realignment of the Yale-Kilgore Road, a full interchange installation, acceleration and deceleration lanes and a realignment of US 20 (bypass) to the west, and keeping the current US 20 alignment as a local access road for the commercial development and post office. ITD believes that an unrestricted travel corridor is the purpose of the highway and is opposed to the signalization of the intersection. Residents in the area believe that the construction of a full interchange is not in keeping with the character of the area. The options that remain for consideration include access management, and installing acceleration and deceleration lanes at the intersection, with the potential for realignment of the US 20 in the future.

FIGURE 13: YALE/ KILGORE EARLY ALTERNATIVE

ACCELERATION LANE

DECELERATION LANE

FIGURE 14: YALE/KILGORE EARLY ALTERNATIVE – INTERCHANGE

ACCESS MANAGEMENT

INTERCHANGE AND CONNECTIONS

FIGURE 15: YALE / KILGORE EARLY ALTERNATIVE – BYPASS

BYPASS

6.1.4 Mack's Inn (within Segment 2)

The Mack's Inn area includes commercial development where accesses are undefined and continuous along the roadway edge. The US 20 connections in this immediate area are heavily used by tourists and area residents. Significant residential development is occurring in the immediate vicinity of Mack's Inn which also serves as a primary access to the Big Springs area. This area has also had two fatal collisions in the five-year accident analysis period.

Preliminary alternatives included signalizing the main intersection, and access management controls through the area. Signalization of the main intersection at Big Springs Loop Road is a problematic scenario due to the intersection being located towards the bottom of a hill, and the potential for icy conditions in the winter to interfere with stopping. A suggestion that surfaced during the public meeting process proposed the realignment of the South Big Springs Loop Road to the top of the grade, which is a safer location for an intersection with regard to incline and sight distance. Alternatives that were forwarded for consideration included access management, and acceleration /deceleration lanes. A second alternative included the suggested realignment of the South Big Springs Loop Road, along with access control and the addition of acceleration /deceleration lanes.

FIGURE 16: MACK'S INN EARLY ALTERNATIVES

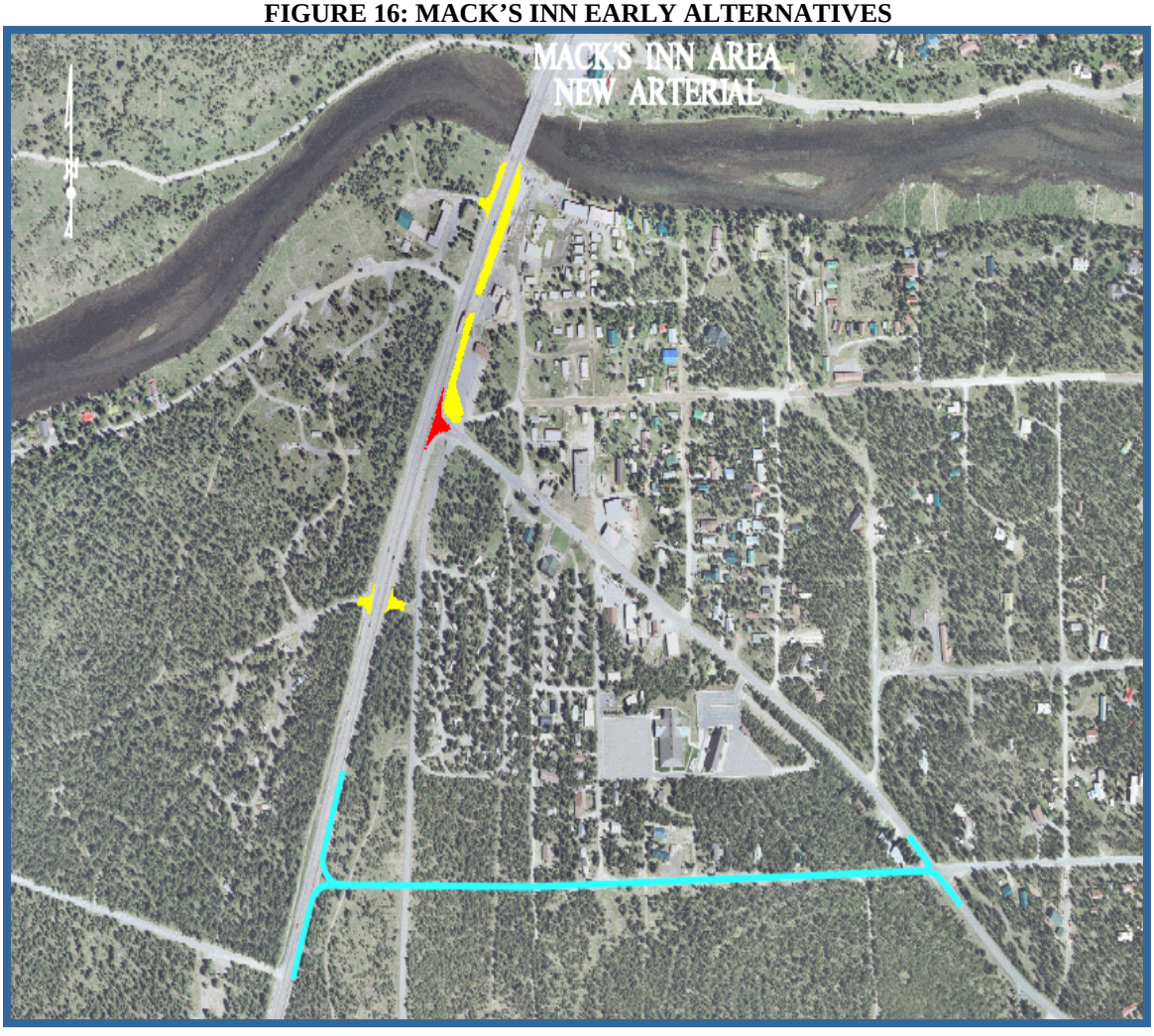
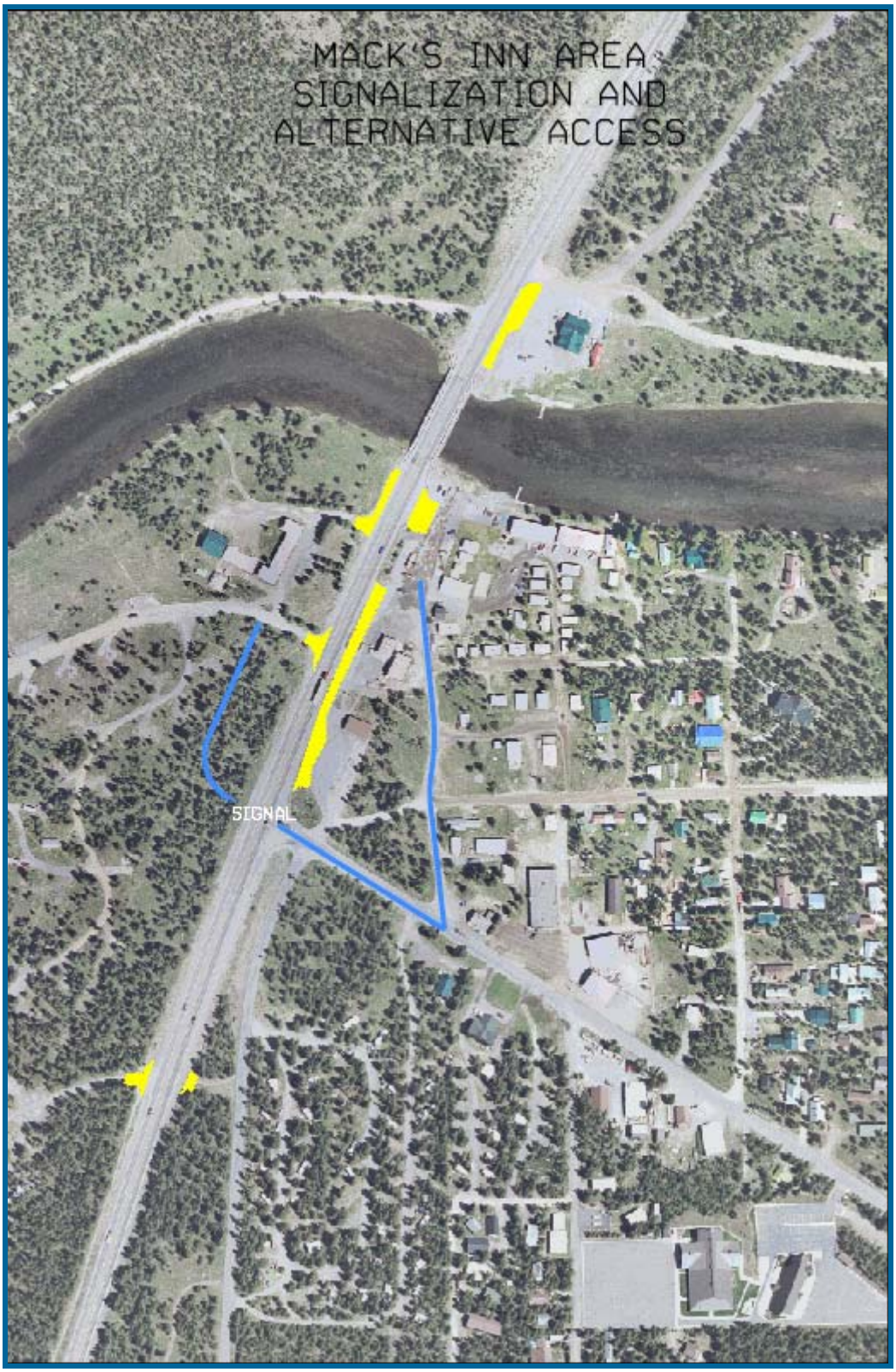


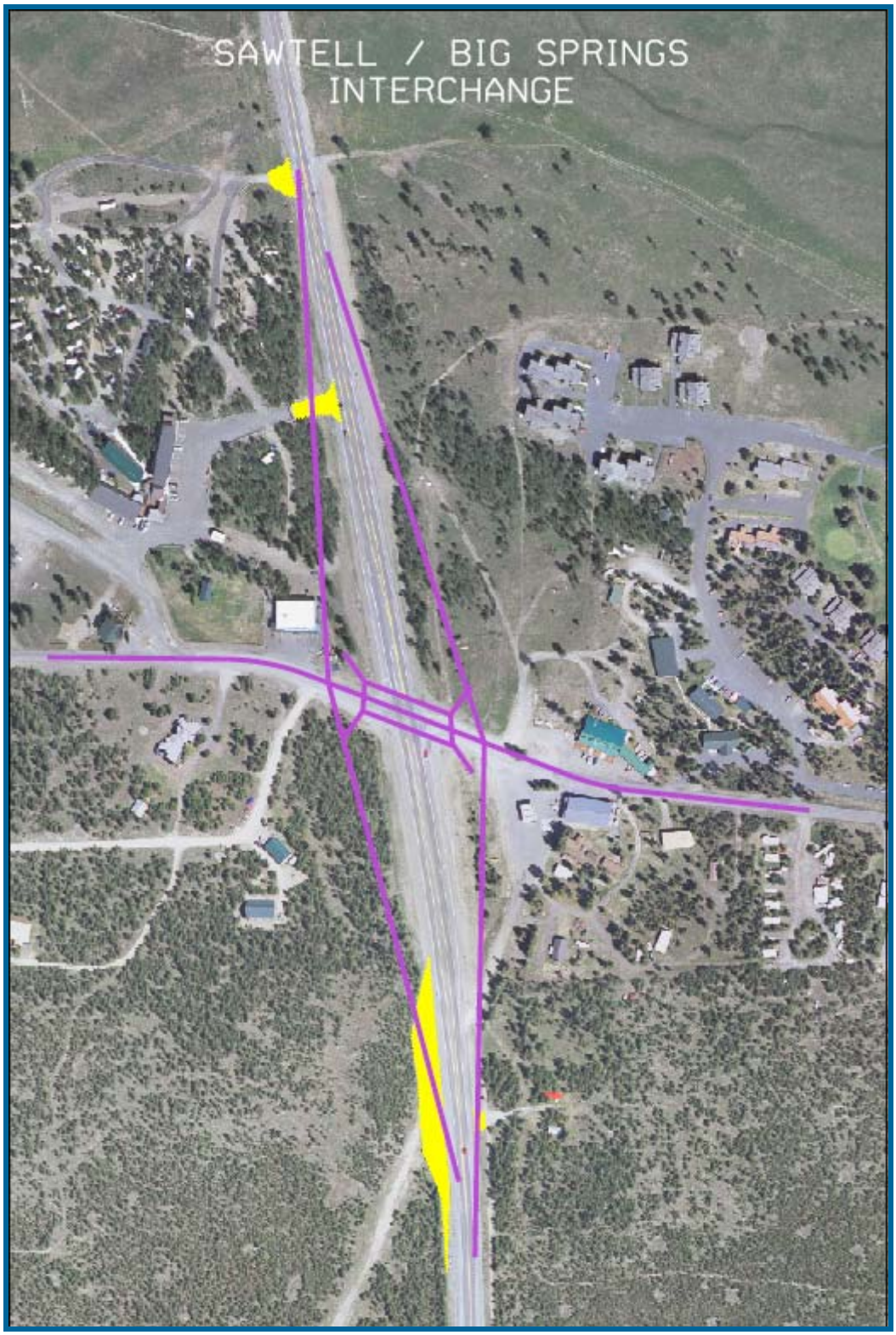
FIGURE 17: MACK'S INN EARLY ALTERNATIVE – SIGNALIZATION



6.1.5 Sawtell/Big Springs (within segment 2)

While there are not many access points in this stretch of roadway, development has occurred around the intersection, as well as away from the roadway, leaving the main intersection heavily used. Early options for improving operations in this area included access management, the signalization of the intersection, a full interchange installation, acceleration and deceleration lanes, and a "Jug Handle" intersection design. ITD believes that an unrestricted travel corridor is the purpose of the roadway and is opposed to the signalization of the intersection; a full interchange design was not thought to be deserving of consideration. The alternatives remaining for consideration include access management; acceleration and deceleration lanes or the redesign of the intersection to include "Jug Handle" type circulation. Neither of these alternatives do not preclude the development of a more intensive treatment later should traffic conditions dictate.

FIGURE 18: SAWTELL / BIG SPRINGS EARLY ALTERNATIVE – INTERCHANGE

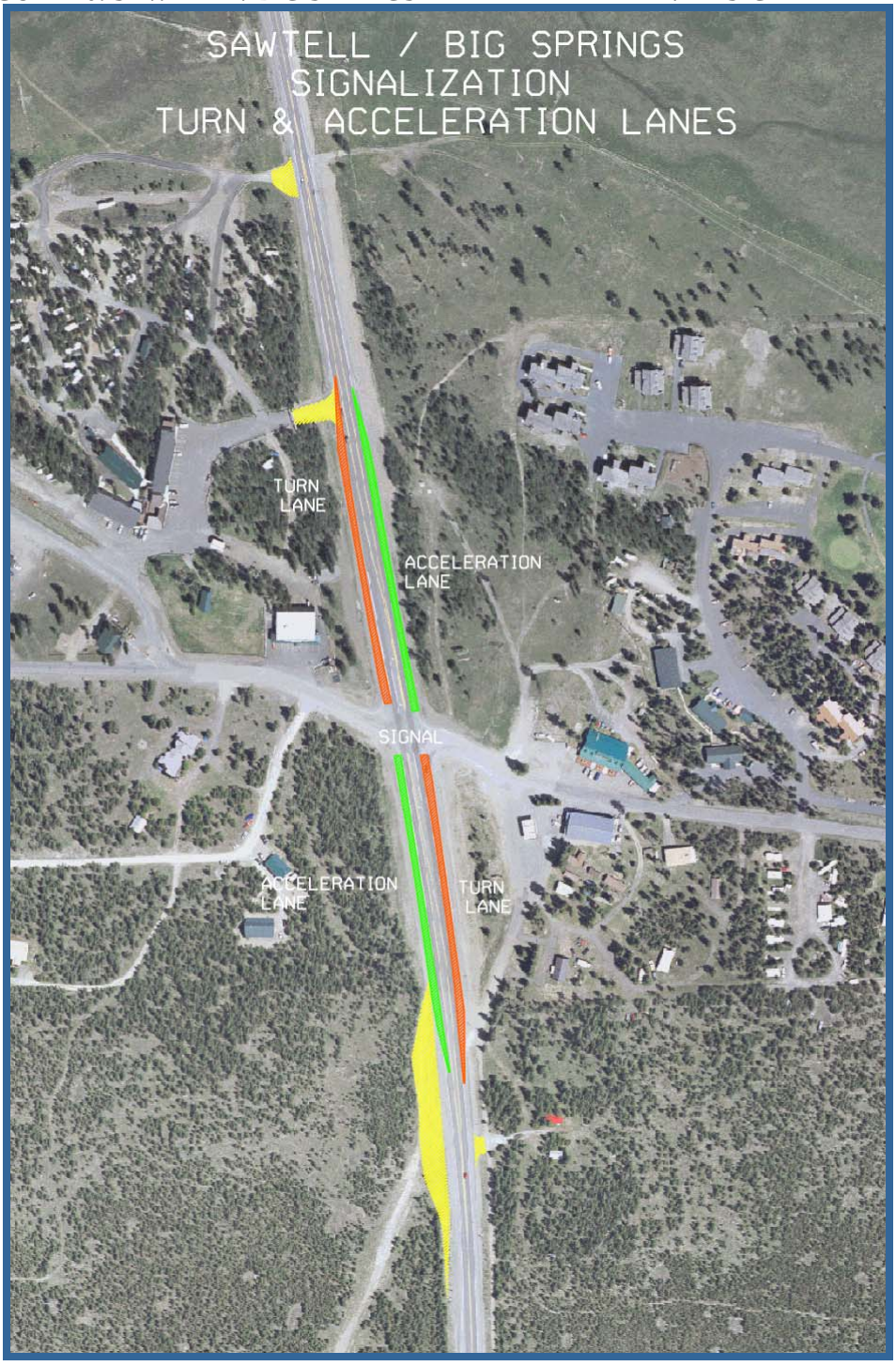


ACCESS MANAGEMENT

INTERCHANGE AND CONNECTIONS

FIGURE 19: SAWTELL / BIG SPRINGS EARLY ALTERNATIVE – JUG HANDLES

FIGURE 20: SAWTELL / BIG SPRINGS EARLY ALTERNATIVE – SIGNALIZATION



6.1.6 State Highway 87 (Segment 4)

This section of the corridor has experienced a steep increase in truck traffic, from approximately 70 trucks per day 300 trucks per day. While it is presumed that the volume has increased due to the desire to avoid Ports-of-Entry, shorter travel distances and improvements to roadway conditions on the Montana portion of the route offer a more favorable trip for truck drivers. In addition, truck traffic has been restricted on US 191 through Yellowstone National Park, requiring truck drivers to seek alternative routes. Short of restricting all truck traffic on this portion of the corridor, it appears that truck traffic will continue to use SH 87 to transport goods. Reducing the speed limit to 45 miles per hour between mileposts 3 and 5 would alleviate some concern of residents in the area. The highway should also be considered for roadway surface improvements and widening of the roadway shoulders with the provision for clear zones to match to roadway improvements on the Montana side of the corridor.

SECTION 7: PLAN RECOMMENDATIONS

7.1 Policy Changes

The following policy recommendations are designed to support the safe and efficient function of the US 20 corridor, the implementation of the US 20 Corridor Plan, and the management of growth along the corridor. These policy recommendations are intended to be implemented in a manner that is in conformance with local land use policies and that is not a detriment to the corridor operation.

It is recommended that Fremont County and the City of Island Park adopt the US 20 Corridor Plan as an extension of their comprehensive plans. The plan should be used to evaluate land use, zoning and development ordinances, and transportation plans. For policies to be most effective, they should be endorsed or adopted by all entities with jurisdiction in the corridor.

Access control

- No new accesses to US 20 will be allowed without prior review and approval by the Idaho Transportation Department and either the City of Island Park or Fremont County, whichever is the regulatory entity.

- The Idaho Transportation Department will be a requisite reviewer of all Island Park and Fremont County development proposals that have impacts of 100 or more vehicle trips per day during peak season.

Environmental Impacts

- All improvements to the US 20 corridor will be planned and implemented with sensitivity to the natural and built environment; with preference to solutions that minimize impacts to the environment.

Improvements Design

- New improvements to the US 20 Ashton Hill to the Montana state line corridor will be done in a manner that is context sensitive to the function, aesthetics, and safety of the communities, residences, businesses, and resources along the US 20 corridor.

- New improvements to the US 20 corridor will include the accommodation of bicycle and pedestrian facilities and for safe mobility across and along the corridor

Coordination of Efforts

- The planning and implementation of any new development and improvements to the US 20 corridor will be done in a collaborative manner, involving the Idaho Transportation Department, all affected local governments, related agencies, interested user groups, property owners, and business operators. In addition, the Montana Department of Transportation will be invited to participate as may be appropriate in order to enhance the compatibility of US 20 and SH 87 facilities with the continuation of US 20 and SH 87 into Montana.

Developer Impacts and Responsibility for US 20 Improvements

- In concert with both the City of Island Park and Fremont County ordinances, developers will be responsible for improvements to mitigate impacts to the US 20 corridor resulting from their development, including, but not limited, to intersection improvements such as turning lanes and shoulder widening.

- Developers may be required to conduct an impact study to determine the necessary improvements or modifications to be implemented on the US 20 corridor result from the development of adjacent lands. The threshold for conducting such an impact study will be determined by the regulatory entity, as outlined in the Island Park and Fremont County comprehensive plans and ordinances, with input from the Idaho Transportation Department.

    - Traffic impact studies should be used to determine the effects, and any necessary mitigation, on US 20, SH 87, on adjacent roadway systems, on other nearby developments, and on neighborhoods that result from development in the vicinity.

7.2 Build Alternatives

It is understood that for this plan, ITD District 6 believes that it is best to keep a wide range of options open at this time. Final decisions will be made with input from corridor residents as part of project design and development.

7.2.1 Corridor-wide

- Capacity expansions in the form of passing lanes will be implemented over time to limit congestion and improve safety. The goal is to create over time a full three-lane section profile with passing lanes alternating direction every two to three miles throughout the study area.

- Shoulder widening will allow for safer pedestrian and bicycle use, as well as relief for vehicle emergency stops. Most roadway shoulders along portions of the corridor are four to six feet wide or are non-existent due to paint re-striping to accommodate turning or passing lanes. As such, all those shoulder areas less than eight feet should be widened (or constructed) to maintain a uniform section throughout the corridor. In those areas where hill-climbing is necessary, a minimum of ten-foot wide shoulders should be installed where the tendency for trucks to breakdown is greater. In addition, rumble strips should be provided along the fog line to alert drifting drivers of the roadway edge.

- Warning signage and other mitigation measures should be improved and or installed in wildlife crossing areas where appropriate. Future improvements that may be considered *after* detailed study are detection devices that relay information to "real-time" signage, and the construction of under/over passes for crossings. Support of ITD studies of wildlife crossing improvements should continue with the creation of animal migration and clustering maps, and through the sharing of data and analysis completed to date.

- Continue to improve stream channel crossings in the Henry's Lake watershed area to support fish-friendly improvements to the Targhee, Howard, and Tighe Creeks.

- Install improvements for better and safer access to recreational areas, specifically for snow machine access in winter months. Access to groomed runs from parking areas often requires snow machines to travel into the roadway, particularly at bridges. Access trails should be improved/installed as needed to provide safe passage of machines to the recreational areas without impeding highway traffic. Snow machines traveling along or near the roadway are not clearly visible to other vehicles; high snow banks should be maintained at low levels to provide adequate sight distance for all users to be aware of others in the area. Efforts should be initiated to educate snow machine users of the need to use proper warning equipment (such as orange flags) to alert others to their presence, and to yield to vehicular traffic when accessing or crossing the roadway.

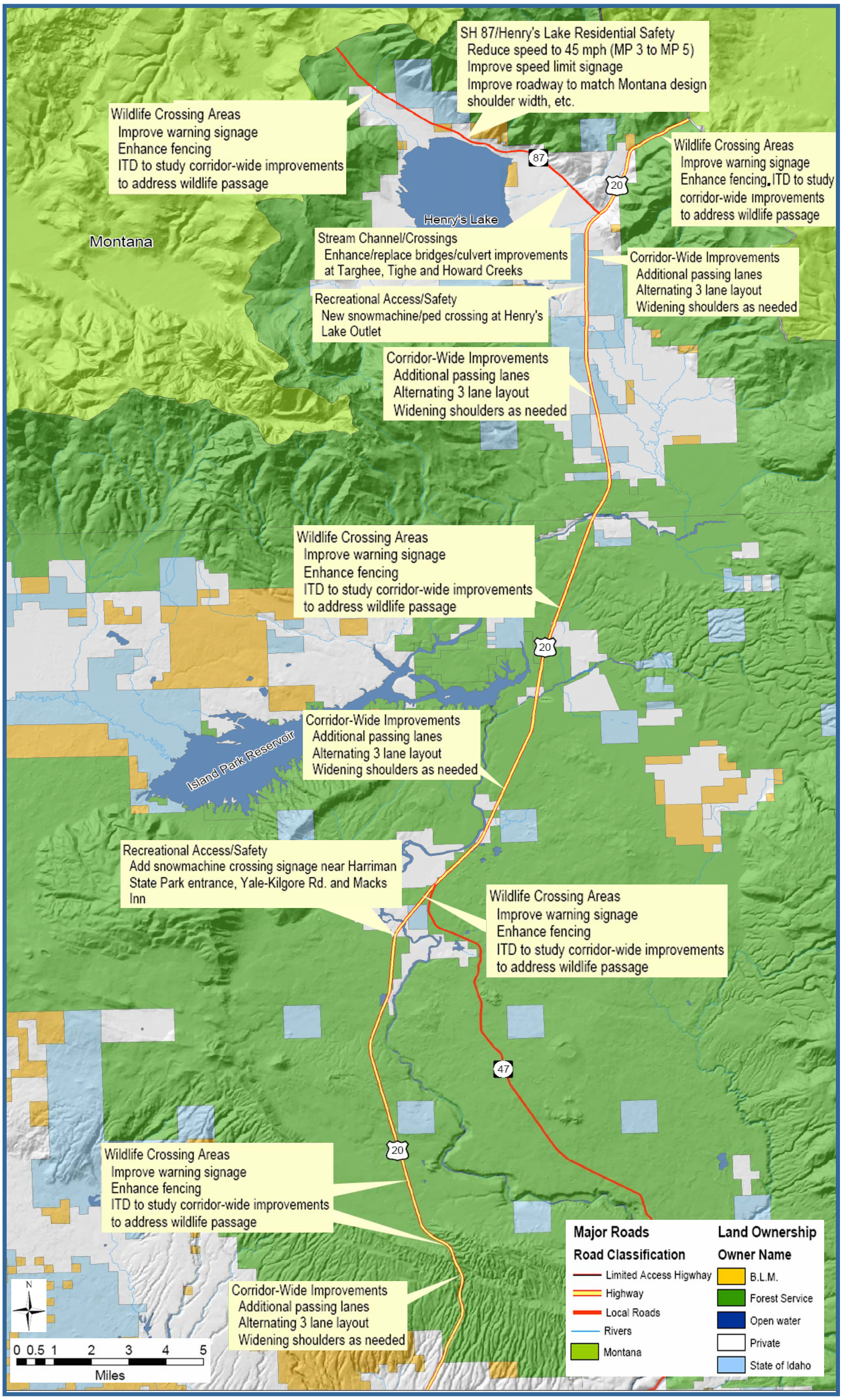
  Improvements to bicycle and pedestrian trail systems, through the development of trailhead parking lots and rest area facilities, may be advanced through cooperative efforts with recreational groups, private, and public land owners.

- Provide improvements to left-turn movements at the more heavily traveled intersections on the corridor, particularly at Red Rock Road.

- Continue to monitor roadway operations for future improvements, particularly at significant Forest Service road intersections.

FIGURE 21: CORRIDOR-WIDE LEFT TURN ALTERNATIVES

FIGURE 22: CORRIDOR-WIDE ALTERNATIVES



7.2.2 Pinehaven

- Reduce the number of access points into the south Pinehaven community by closing the two southern access points to the residential area and allowing access through the central Pinehaven entrance where turn lanes on US 20 currently exist.

- Allow Southern access to Henry's Fork Lodge to remain intact. Consider installation of turn lanes on US 20 at this intersection.

FIGURE 23: PINEHAVEN ALTERNATIVE

ACCESS MANAGEMENT

7.2.3 Last Chance

- Reduce the number of access points to the roadway to a maximum of 8 to 12 main points through the area.

- Consider enhancement of internal vehicle circulation by improving frontage or backage roads to the east of the present highway.

- Widen US 20 to four through lanes with left-turn bays at major intersections to reduce traffic congestion.

FIGURE 24: LAST CHANCE ALTERNATIVES

ACCESS MANAGEMENT

IMPROVEMENTS TO FRONTAGE/BACKAGE ROADS

WIDEN TO FOUR LANES WITH LEFT-TURN BAYS

7.2.4 Yale Kilgore

- Reduce the number of access points to the roadway and incorporate acceleration and deceleration lanes.

- Minor realignment of the Yale-Kilgore Road to intersect with Big Elk Creek Road creating a four-legged intersection and improving safety.

  OR

- Realign the present roadway to the west of the existing intersection to eliminate conflicts with high-speed traffic and the many driveways and roadway access points in the area.

FIGURE 25: YALE/KILGORE ALTERNATIVES

ACCELERATION/DECELERATION LANES

WEST SIDE ALIGNMENT

7.2.5 Mack's Inn

- Reduce the number of access points to the roadway and add acceleration and deceleration lanes where possible.

  OR

- Realign the South Big Springs Loop Road to the top of the grade, reduce the number of access points to the roadway, and add acceleration and deceleration lanes where possible.

FIGURE 26: MACK'S INN ALTERNATIVES

ACCESS MANAGEMENT

ACCEL/DECEL LANES

ACCESS MANAGEMENT

ACCEL/DECEL LANES

SOUTH BIG SPRINGS ROAD

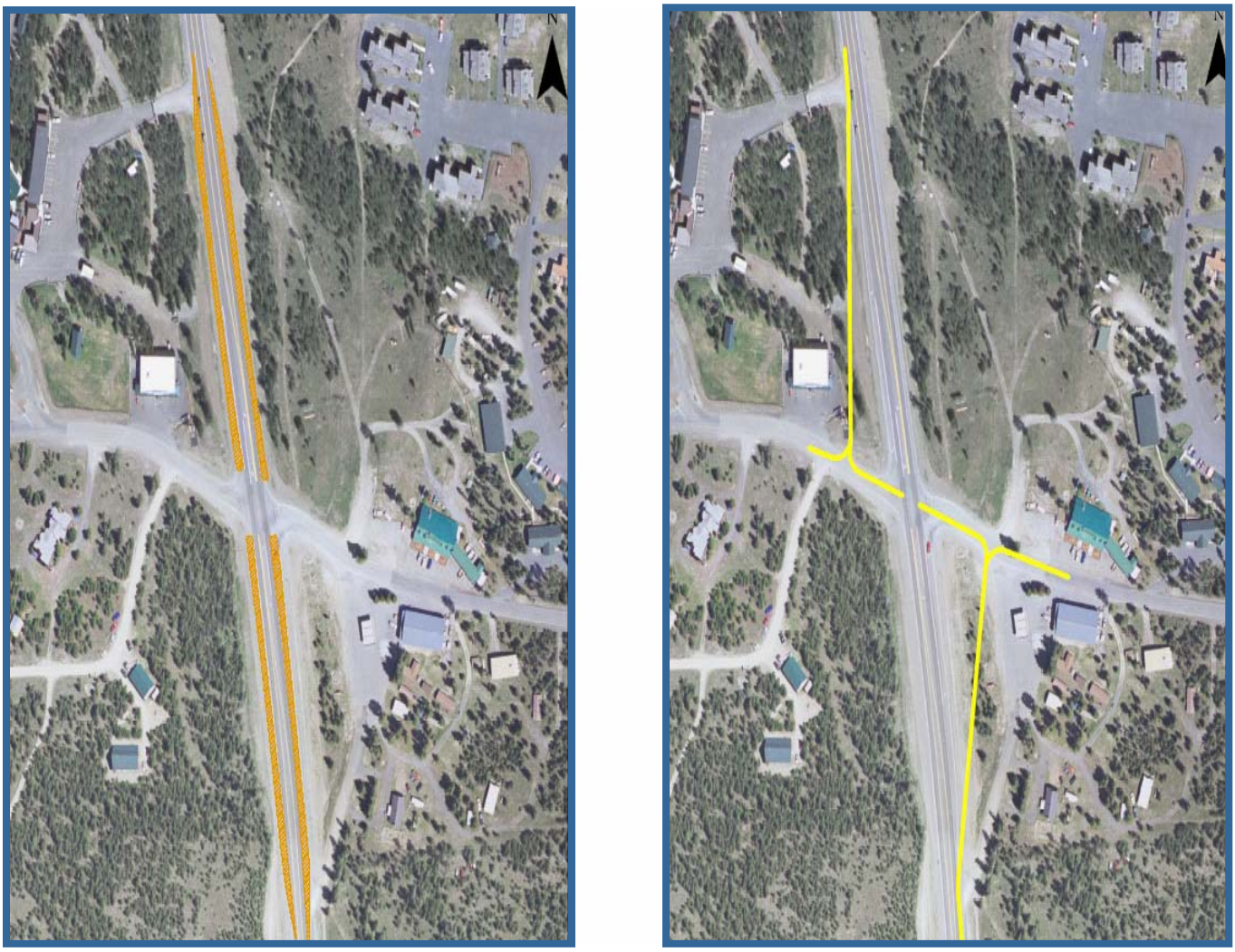
7.2.6 Sawtell/Big Springs

- Add right turn acceleration and deceleration lanes, and limit access to major intersections only.

OR

- Add "Jug Handle" type improvements to the intersection to decrease the number of left turning vehicles throughout the intersections and limit access to the major intersection only.

FIGURE 27: SAWTELL/BIG SPRINGS ALTERNATIVES



ACCEL/DECEL LANES

JUG HANDLE INTERSECTION

7.2.7 State Highway 87

- Improve the roadway surface to match that of the Montana section, including shoulder width, clear zones, and pavement condition.

- Reduce the speed limit between milepost 3 and milepost 5 to 45 mph, along with signage improvements associated with the speed limit change.

GLOSSARY

AADT – The annual average daily traffic count for the highway or road segment represented (Total of all vehicles counted in a year divided by 365 days). AADT is calculated annually for all highway segments.

accessibility – the extent to which facilities allow access or contact. In transportation, this refers to the entrance opportunities a roadway allows, usually categorized by the number of entry points per mile.

access control - regulating the location, spacing and the design of driveways, medians, median openings, intersections, and interchanges access based on the type of adjacent roadway.

arterial – a major thoroughfare used primarily for through traffic rather than adjacent land access. Usually these roadways have limited entry points.

ascending passing lane – passing lane along a section of highway with traffic flowing in the direction of increasing mile posts.

capacity – the maximum sustainable flow rate at which vehicles or persons reasonably can be expected to traverse a point or uniform segment of a lane or roadway during a specified time period under given roadway, geometric, traffic, environmental, and control conditions; usually expressed as vehicles per hour.

climbing lane – a passing lane added on an upgrade to allow traffic to pass heavy vehicles whose speeds are reduced.

comprehensive plan – the basic foundational document for local planning which outlines the future needs and establishes policies for the development and improvement of the region's transportation system, infrastructure, land use, and zoning.

degree of curvature – the angle formed by two radii that extend from the center of a circle to the ends of a 100 foot arc. Surveyors determine this by laying a 100-foot tape along the centerline of a highway and measuring the central angle between the two ends.

demographics – characteristics of the population that influence use of products and services. They include age, sex, race, family size, level of education, occupation, income, and location of residence.

descending passing lane – passing lane along a section of highway with traffic flowing in the direction of decreasing mile posts.

FAA – Federal Aviation Administration. This governmental agency is responsible for the safety of civil aviation including the development of regulations and research programs.

functional classification – the classification of the segment of road, as defined by FHWA, which is broken down between rural and urban areas. The functional classification system is based on the grouping of streets and highways into classes, or systems, according to the character of the service they are intended to provide.

GIS – Geographic Information System. This is a system of computer hardware, software, and data for collecting, storing, analyzing, and disseminating information about areas of

the earth. From this, GIS can display attributes, such as roadway networks, and analyze results electronically in map form.

geometrics – the spatial and dimensional characteristics of an item. For roadways, this term refers to length, width, superelevation, grade, and curvature.

high flexible pavement – asphalt cement concrete roadway surface of seven inches in thickness or more.

HPMS – Highway Performance Monitoring System. The HPMS is a national level highway information system provided by the Federal Highway Administration (FHWA) that includes data on the extent, condition, performance, use, and operating characteristics of the Nation's highways.

intermodal transportation – network of transportation options working together to provide individual users with a choice of travel services. Modes include, but are not limited to, highways, transit, walkways, railways, airports, and waterways functioning as a unit, with the consequences and benefits of each shared by the entire system.

level of service – a group of characteristics classifying the quality and quantity of use of a given transportation system.

median age – a calculation dividing the population into two parts, with exactly half of the individuals younger and half older than the calculated median.

MUTCD – Manual on Uniform Traffic Control Devices. The MUTCD contains standards for traffic control devices that regulate, warn, and guide road users along the highways and byways in all 50 States.

paratransit – alternate and comparable transportation service for persons with disabilities unable to utilize existing fixed-route public transit options. This service is a requirement of the Americans with Disabilities Act.

platooning – the grouping of vehicles traveling together, either voluntarily or involuntarily because of signal control, geometrics, or other factors.

public transit – local, metropolitan, or regional transportation services, publicly or privately owned, that are available to any person who pays an agreed fare. Included are bus and rail services, as well as any other conveyance provided on a consistent and continued basis.

right-of-way – publicly or privately owned area that allows for passage of people or goods, including, but not limited to, freeways, streets, bicycle paths, alleys, trails and walkways. A public right-of-way is dedicated or deeded to a public entity for use under the control of the public agency.

side friction – coefficient of lateral friction between the design vehicle's tires and the roadway surface. This is a design factor used in determining a suitable superelevation and horizontal curvature for a roadway.

STIP – Statewide Transportation Improvement Program. The STIP is a system which prioritizes transportation projects to be implemented within a given time period.

superelevation – the difference in elevation between the higher outside edge and lower inside edge of a roadway on a horizontal curve. It is required to counteract the centrifugal force generated by the vehicle traveling around the curve.

traffic field reconnaissance – a combination of different techniques to track actual traffic flows through a region and collect data concerning the origins and destinations of vehicles in a certain time period. Intersection turning movement counts, traffic counts, and license plate tracking are all used to perform this operation.

volume-capacity ratio – the ratio, sometimes expressed as a percentage, of the actual number of vehicles using a roadway divided by the maximum number of vehicles the roadway can accommodate. The ratio will always be less than unity (100%).