

**LINCOLN COUNTY TRANSPORTATION PLAN
TABLE OF CONTENTS**

EXECUTIVE SUMMARY

Section 1 - Inventory & Analysis Summary BriefES-1
Section 2 – Forecasts & Recommendations Summary Brief.....ES-8
Section 3 – Master Roadway Improvement Plan Summary Brief ES-13

SECTION 1: INVENTORY & ANALYSIS

Inventory of County Road Network.....1-1
Supplemental Sign Inventory 1-10
Transportation Aspects of Land Use Regulations 1-19
Safety Analysis 1-23
Existing Traffic Analysis 1-34
Capacity Analysis..... 1-37
Weakness and High Stress Points..... 1-76
Additional Recommendations..... 1-84
Public Meeting Comments and Recommendations..... 1-89

SECTION 2: FORECASTS & RECOMMENDATIONS

2030 Capacity Analysis2-1
Roadway Surface Conditions..... 2-40
2030 Anticipated Land Use 2-47
Weakness and High Stress Points..... 2-47
Functional Classification Update Recommendations 2-50
Additional Comments and Recommendations..... 2-50

SECTION 3: MASTER ROADWAY IMPROVEMENT PLAN

General System Upgrades3-1
Recommended Improvements Based on Existing Conditions3-2
Future Growth Related Improvements3-4
New Transportation Links3-7
Functional Classification Upgrades3-7
Improvement Summary 3-10

**LINCOLN COUNTY TRANSPORTATION PLAN
TABLE OF CONTENTS**

EXECUTIVE SUMMARY

Section 1 - Inventory & Analysis Summary BriefES-1
Section 2 – Forecasts & Recommendations Summary Brief.....ES-8
Section 3 – Master Roadway Improvement Plan Summary Brief ES-13

SECTION 1: INVENTORY & ANALYSIS

Inventory of County Road Network.....1-1
Supplemental Sign Inventory 1-10
Transportation Aspects of Land Use Regulations 1-19
Safety Analysis 1-23
Existing Traffic Analysis 1-34
Capacity Analysis..... 1-37
Weakness and High Stress Points..... 1-76
Additional Recommendations..... 1-84
Public Meeting Comments and Recommendations..... 1-89

SECTION 2: FORECASTS & RECOMMENDATIONS

2030 Capacity Analysis2-1
Roadway Surface Conditions..... 2-40
2030 Anticipated Land Use 2-47
Weakness and High Stress Points..... 2-47
Functional Classification Update Recommendations 2-50
Additional Comments and Recommendations..... 2-50

SECTION 3: MASTER ROADWAY IMPROVEMENT PLAN

General System Upgrades3-1
Recommended Improvements Based on Existing Conditions3-2
Future Growth Related Improvements3-4
New Transportation Links3-7
Functional Classification Upgrades3-7
Improvement Summary 3-10

EXECUTIVE SUMMARY

SECTION 1: INVENTORY & ANALYSIS SUMMARY BRIEF

The Lincoln County Transportation Plan includes an inventory and analysis of the existing physical roadway system, traffic volumes, crash data and land use plan and their effects on the overall transportation system. Based on this information, weaknesses in the system have been identified and improvement recommendations made. As a general rule, the transportation system within the county is adequate to handle the volume of traffic currently experienced. Deficiencies of the existing transportation network are related to substandard widths, geometry, signing and delineation. These deficiencies can contribute to crashes and maintenance problems. Based on these weaknesses, the recommended improvements fall into three general categories:

- Improve delineation and signage
- Improve intersection alignments and accesses
- Widen and improve roadways to specific county standard, meeting both Wyoming County Road Fund Standards and AASHTO (American Association of State Highway & Transportation Officials) standards for
 - Rural Local Roads
 - Rural Minor Collector
 - Rural Major Collector

Inventory of County Road Network

An inventory of the Lincoln County road network was conducted during July/August of 2005. The road inventory is outlined by regions within Lincoln County, specifically the Star Valley, Cokeville and Kemmerer areas. The following characteristics were observed during this road network inventory:

- Road Number
- Road Name
- Beginning Milepost
- Ending Milepost
- Street Names
- Direction
- Road Classification
- Existing Right of Way width
- Roadway Width
- Roadway Surface Type
- Traffic Control (by leg)

According to this inventory, three types of roadway functional classifications currently exist along all roads in Lincoln County. The roadway functional classifications currently identified in Lincoln County are:

- Rural Local
- Rural Minor Collector
- Rural Major Collector

Table 1.1 below identifies the breakdown for the functional classification of roadways in Lincoln County.

Table 1.1

Segment Type	Number of Segments	Segment Miles	Percentage of Segment Miles
Rural Local	163	147.21	48%
Rural Minor Collector	37	131.35	42%
Rural Major Collector	9	30.50	10%

Based on the information acquired from the inventory the following general concerns were identified:

- Significant portion of roadways are not paved
- Paved roads do not have adequate striping
- Some traffic control devices need updating

Four roadway surface types were used for surface identification. “Paved 1” indicates hot plant batched pavement. “Paved 2” is a paved surface of lesser quality, primarily a chip sealed gravel road. “Gravel” is a gravel surface that has not been treated. “Primitive” is a road that has not been graveled and is likely unimproved (no crown or ditch).

Table 1.2 identifies the breakdown of the road surface types that currently exist in Lincoln County.

Table 1.2

Road Surface Segment Type	Number of Segments	Segment Miles	Percentage of Segment Miles
Paved 1	48	134.21	43%
Paved 2	73	64.32	21%
Gravel	81	105.63	34%
Primitive	6	4.9	2%

Supplemental Sign Inventory

In addition to the road inventory a Lincoln County regulatory and warning sign inventory was conducted for all roadways not included as a part of the Lincoln County Roads Speed Zoning Signing Plans, assembled in July of 2002

Transportation Aspects of Land Use Regulations

In May of 2005 Land Use Regulations were adopted for Lincoln County, WY. This Land Use document designated general and specific zoning areas and is used as criteria for establishing the type of development that will occur in these areas. Transportation impacts are a result of how land is used and the traffic demand it generates.

A significant amount of land is currently being developed in the Lower Valley from Rural uses to Mixed and Recreational uses. Specifically, the town of Alpine has experienced significant growth over the last five years. Additionally Star Valley Ranch, Wyoming has also seen significant growth. The primary development which has occurred in these areas is low to high density residential, which is a result of commuters that work in the Jackson area and live in the Lower Valley.

Based on current growth in Alpine and Star Valley Ranch, it is assumed that more land in the entire Lower Valley is going to convert from a Rural use to either a Recreational or Mixed use. Towns such as Thayne and Etna will also likely see growth similar to what is occurring in Alpine. The growth rates assumed for the 2030 future roadway conditions reflect these anticipated land use changes and were taken into consideration.

The Upper Valley, specifically areas surrounding the city of Afton are also experiencing similar land use changes. This growth is not as significant as what is anticipated to occur in the Lower Valley however, these trends have also been taken into consideration in determining the 2030 future roadway condition growth rates.

All growth rates determined for the 2030 future roadway conditions are noted in Task 2 of this report.

In order to better understand the types of land use changes likely to occur a model should be created based on existing Traffic Analysis Zones (TAZ's), socio-economic data, employment rates, and household rates. This type of analysis is not part of this transportation plan. To identify what type of land use changes will affect the most growth and demand on the transportation network, it is recommended that a model be generated to determine those demands.

Safety Analysis

The Wyoming Department of Transportation (WYDOT) provided crash data for all Lincoln County Roadways from January 2000 to March of 2005. In addition WYDOT provided a copy of the Average State Wide Crash Rates by Functional Classification. An inventory of the crash location, crash cause, crash type, and road conditions was formatted from the WYDOT raw data and is shown in Appendix C. The WYDOT average state wide crash rates by functional classification are also located in Appendix C. WYDOT crash data was used to determine roadway surface conditions, collision type and crash causes that contributed to these crashes. Roads with a high crash incidence and crash rates were identified and similar conditions among crashes at these locations were also identified.

According to the information provided by WYDOT, Lincoln County roads recorded 183 crashes with 53 injury crashes and one fatal crash for the period. The remaining 129 crashes were property damage only crashes (no injuries or fatalities). Of the 183 crashes 87 people were injured.

Similar crash conditions were identified for certain crashes that occurred more than once at a specific location on the county road network. These roadway sections and intersections might warrant a site specific crash study if crashes continue to occur in these locations. Improved signing, width and geometry can be used to reduce crashes. Site specific studies should be conducted to establish specific mitigation measures.

The Institute of Transportation Engineers (ITE) Traffic Engineering Handbook contains a section regarding traffic-data analysis. Table 7-13, Traffic Safety-Related Accident Countermeasure Ideas, lists possible crash patterns, probable causes for and possible countermeasures for crashes. Table 7-14, Accident Pattern Countermeasures, discusses crash cause, potential studies, and possible safety enhancements based on a specific crash type.

EXISTING TRAFFIC ANALYSIS

Traffic Data Collection

A total of fifty five intersections and/or roadway segments were identified for analysis. Of the fifty five intersections and segments, forty one were identified for field traffic counts. Thirty eight were intersection counts and the remaining three were roadway segment counts. Those intersections that were not counted as part of this study involved state highways intersecting county roads and were counted by WYDOT through their regular traffic counting processes. This information was obtained from WYDOT and used in the analysis.

Intersection Counts

The thirty eight intersection counts were performed on weekdays, Monday through Thursday and excluded weeks with holidays. The intersection counts occurred from early June and were completed by the beginning of August. The PM peak hour was counted at each intersection, with the exception of the intersection of Swift Creek Lane (CR 137) and Allred Lane (CR 135) which was conducted during the AM and PM peak hour.

A photo was taken for each intersection counted and the following outlined criteria were identified and established:

- Intersection diagram, including
 - street names
 - north arrow
 - lane configuration
 - lane movements
 - roadway widths
 - turn bay lengths
 - offset to physical obstructions
 - speed limits
- Setback problems with structures
- Ped/Bike use at intersections during peak hour
- Vertical sight obstructions
- Horizontal sight obstructions

- Congestion
- Unsafe roadway conditions
- Traffic and safety problems

Heavy vehicles were recorded independently during each count to determine the percentage of heavy vehicles using each identified intersection. A copy of the raw traffic collected data, formatted traffic count data (excel format), an intersection diagram, and a photo of each intersection is included in Appendix B.

Fourteen additional intersections were identified by WYDOT and Lincoln County for analysis. All necessary count data at these intersections were provided by WYDOT and intersection diagrams for each of the fourteen identified intersections were developed. These are also included in Appendix A

Traffic counts were conducted on three roadway segments: Ham's Fork Road (CR 305), Fontenelle North (CR 316) and Shute Creek (CR 340).

A one week segment count was conducted on Ham's Fork Road, (CR 305) approximately 2 miles before the roadway changes from SR 233 to Ham's Fork Road.

Fontenelle North, (CR 316), was counted 1.5 miles north of the intersection with SR (State Road) 372. Because this roadway is surfaced with gravel, a supplemental count was conducted to ensure accurate results. Because a gravel surface is more flexible the potential for a car to not register as it passes over the tube counter is more likely. Comparison of the supplemental count, which was conducted by hand over the course of one hour with the hose counter, verified that all traffic crossing this location was being recorded. A one-day segment count was performed at Fontenelle North.

Shute Creek, (CR 340), was set up approximately 2 miles east of the intersection with SR 240. A one-week segment count was conducted at this location. All field count information is located in Appendix B.

Capacity Results

Most Of the 38 intersections identified for traffic counting operated at Level of Service (LOS) B or better. The most significant delay was observed for roadways that intersect with US 89. One intersection was predicted to operate at LOS A, 12 intersections were anticipated to operate at LOS B, and one intersection was identified to function at LOS C for the existing 2005 traffic volumes. The intersection of US 89 & SR-238 located in the City of Afton was noted as having the largest delay. The eastbound traveling traffic can expect a delay of approximately 15.5 seconds at LOS C.

In Figures 1-6 through 1-18, each intersection analyzed for capacity is identified and the corresponding LOS is indicated in the figure.

According to the results of the analysis, no capacity related improvements have been identified for the 2005 existing roadway traffic conditions. Similarly, analysis of each of the segments counted did not identify any capacity related improvements.

RECOMMENDATIONS

Safety

The following roadway segments were identified in the safety analysis sections as having a high crash incidence as well as crash rates over WYDOT averages.

- CR 117
- CR 122
- CR 123
- CR 126
- CR 135
- CR 137
- CR 140
- CR 141
- CR 207
- CR 304
- CR 315
- CR 340

Improved signing, width and geometry can be used to reduce crashess. Site specific studies should be conducted to establish specific mitigation measures. This safety investigation should take place at the crash location clusters identified in the Figures 1.1 - 1.5 in the report, in conjunction with the above identified county road locations. Roadway segments as well as intersections should be investigated. The ITE Traffic Engineering Handbook Table 7-13 and 7-14, should be used to identify potential countermeasures.

Delineation

Delineation of roadways in Lincoln County are generally inadequate. Some of the intersections identified above call for delineation improvements. However the majority of intersections and roadway segments throughout the county are without delineation.

All county roadways with horizontal curve radii greater than 50 feet and less than 1000 feet should have delineation installed. All installed delineation should meet the requirements set forth in the Manual of Uniform Traffic Control Devices (MUTCD) (2003 Edition - Table 3D-1).

Route Signage

Install route signage at all T-intersections. Based on the photo log located in Appendix A route signage is not apparent at the majority of T-intersections along the stopping/yielding leg. Placement of route signage at these intersections is primarily for road users who are not familiar with the area. In addition, they will enhance the emergency response ability by familiarizing and standardizing names and locations of roadways.

Use the Lincoln County Roads Speed Zone Signing Plan as a guide in determining where route signage is inadequate.

Speed Limit Signage

Post speed limit signs in the vicinity of all intersections within the county where it is missing. Posted speed limits are present in the majority of identified intersections within the county.

Use the Lincoln County Roads Speed Zone Signing Plan as a guide in determining where speed signage is inadequate.

Roadway Surface Conditions

The AASHTO-Guidelines for Geometric Design of Very Low-Volume Roads ($ADT \leq 400$) addresses unpaved roads. These AASHTO guidelines state that “provision of an unpaved surface is an economic decision that is appropriate for many very low-volume roads for which the cost of constructing and maintaining a paved surface would be prohibitive”.

These guidelines also discuss the NCHRP Report 362 which discusses the safety of unpaved roads as opposed to paved roads. The NCHRP Report 362 indicates that crash rates were typically higher for unpaved roads compared to paved roads when the ADT reaches 250 vehicles per day (vpd). Additionally, the paving of a road with traffic volumes between 300 to 350 vpd can expect to see one less severe crash every 10 to 15 years.

The report gives “... no specific guidelines that indicate the maximum traffic volume level for which unpaved surfaces are appropriate”.

Unpaved roads within Lincoln County should be monitored for both ADT volumes and as well as crashes. As ADT volumes exceed 250 vehicles per day, or if the number of crashes along a given unpaved roads increases, Lincoln County should consider paving the identified road segments. Economic considerations also need to be included when evaluating the demand of a paved road opposed to a gravel road.

Based on existing average daily traffic counts and safety analysis, the following roads should be considered for pavement improvements:

- Fontenelle North (CR 316) – MP 0.5. to MP 3.27
- Fontenelle Dam (CR 313) – MP 0.0 to MP 3.97
- Elkol Road (CR 304) – MP 0.0 to MP 3.2
- Shute Creek (CR 340) – MP 0.0 to MP 9.45

The Fontenelle Roads are just over the 250 VPD threshold, but current energy development is increasing the use of this road. This road is used as a cutoff, bypassing State Highway 372 to US 189. Crow Creek (CR 141) from MP 3.50 to MP 5.98 and LaBarge Creek (CR 315) from MP 11.2 to MP 13.0 were also identified as a concern based on the safety analysis, however both roads experience well under the 250 ADT Threshold. Pavement improvements are not justified at this time. The Elkol Road and Shute Creek Road are seeing increased industrial traffic.

Roadway/Shoulder Widening

The roadway inventory identifies travel widths on each county roadway. The projected ADT volumes determined from the capacity analysis section of this report was used in conjunction with the Wyoming County Road Fund Manual Chapter IX Design Standards, Table 10 and the 1990 AASHTO Table V-8. These tables list the criteria for Minimum Width of Traveled Way and Shoulders.

SECTION 2: FORECASTS & RECOMMENDATIONS, SUMMARY BRIEF

A capacity analysis was conducted for the anticipated future traffic demand on the Lincoln County road network. All intersections and road segments identified in Task 1 were included for the 2030 capacity forecast and analysis.

The 2030 projected traffic volumes are based on growth rates established for various regions within Lincoln County, these included:

- Lower Valley
- Upper Valley
- Cokeville Area
- Eastern Lincoln County

Various sources were used in determining the proposed growth rates for each identified area. Growth rate information was obtained from the US 89 Corridor Study-Star Valley (WYDOT), US Census Data, and the Lincoln County: Profile and Data Book; Bureau of Economic and Business Research (University of Utah).

For each identified area, growth rates of the cities were used as a means in determining the final value. Some decline in growth was noted within all areas in Lincoln County during various time frames from 1950 to 2000. However no declining values were used in determining a final growth rate.

A list of the growth rates used for analyzing the 2030 roadway network and intersections is listed below:

Lincoln County Growth Rates

Area	Growth Rate
Lower Valley	4.00%
Upper Valley	1.40%
Cokeville Area	0.90%
Eastern Lincoln County	1.00%

Capacity Results

Using these growth rates, each of the study intersections were analyzed for the future LOS conditions:

- 29 intersections are predicted to operate at LOS A
- 11 intersections are predicted to operate at LOS B
- 7 intersections are predicted to operate at LOS C
- 1 intersection is predicted to operate at LOS D
- 2 intersections are predicted to operate at LOS E
- 2 intersection are predicted to operate at LOS F

Mitigation Measures

Four intersections were identified to have LOS below D. The intersections of US 89/CR 116-SR 239 and US 89/CR 108-CR 106 are expected to operate at LOS E and the intersection of US 89/CR 126-CR 192 and US 89/US 26 are expected to operate at LOS F for the 2030 planning year. Of these, Lincoln County has jurisdiction for three intersections.

US 89/CR116-SR 239 Intersections

The current intersection lane configuration of US 89/CR 116-SR 239 has a separate left turn bay and a thru-right for northbound traffic, thru-left and a free right for the southbound traffic, thru-left and free right for eastbound traffic, and one lane (thru-left-right) for the westbound traveling traffic. The 2030 projected LOS E is for the eastbound and westbound traveling traffic.

Changing the lane configuration so a dedicated left turn bay and thru-right lane are placed for each leg of the intersection will improve the intersection to an acceptable LOS D. The westbound traveling traffic is anticipated to operate at LOS D and the eastbound traveling traffic is anticipated to operate at LOS C by the 2030 planning year if this lane configuration change is implemented.

US 89/CR 106-CR 108 Intersections

The current intersection lane configuration of US 89/CR 106-CR 108 has a separate left turn bay and a thru-right for the north and southbound traveling traffic, the east and westbound traveling traffic have one thru-left-right lane.

Three different mitigation measures were analyzed for improving this intersection to an acceptable LOS including the addition of dedicated left turn bays, All Way Stop Control (AWSC) and signalization. All of the analyzed improvements failed to improve the LOS to an acceptable level except for signalization. The installation of a signal by the year 2030 at the intersection of US 89/CR 106-CR 108 would generate an acceptable LOS A. This intersection should be considered for signalization and dedicated left turning bays for each leg by the 2030 planning year. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

US 89/CR 126-CR 192 Intersections

The current intersection lane configuration of US 89/CR 126-CR 192 has thru-left and free right lanes for the northbound traveling traffic, a dedicated left turn bay and thru-right for the southbound traveling traffic, and a left-thru-right line for both east and westbound traveling traffic.

Again, three different mitigation measures were analyzed for improving this intersection to an acceptable LOS including the addition of dedicated left turn bays, All Way Stop Control (AWSC) and signalization. All of the analyzed improvements failed to improve the LOS to an acceptable level except for signalization. The signalization of the US 89/CR 126-CR 192 intersection would improve from LOS F to LOS A by the 2030 planning year. This intersection should be considered for signalization, with dedicated left turning bays for each leg, by the 2030 planning year. Realignment options should also be considered to better align each leg of the intersection. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

2030 Segment Analysis

The roadway segments identified for field hose counts were analyzed for the 2030 planning year condition, these include:

- Hams Fork Road (CR 305)
- Fontenelle North (CR 316)
- Shute Creek (CR 340)

No capacity improvements have been identified for the 2030 planning year roadway conditions along the identified roadway segments.

2030 Average Daily Traffic (ADT)

All roadway segments in the vicinity of each of the study intersections were evaluated to determine ADT. Each ADT value was based on the existing volumes and growth rates were applied according to the regional location of the segment within Lincoln County. No roadway segment capacity improvements were identified for the 2030 planning year ADT analysis.

Roadway Surface Conditions

As ADT volume in Lincoln County increases so does the demand for improving roadway surfaces. The AASHTO-Guideline for Geometric Design of Very Low-Volume Roads ($ADT \leq 400$) was used as a guideline in determining roadway surface conditions for the 2030 planning year. All roadways that exceed 250 vehicles per day and are currently gravel road surfaces should be improved to a Paved 2 surface (as defined in the inventory section in Task 1) prior to the 2030 planning year. The proposed roadway surface improvements are listed below:

Proposed Roadway Surface Improvements

Road Name	Road #	Leg	MP Begin	MP End	Segment Length (mi)
Bridle Trail	n/a	East	n/a	n/a	To be determined
Whitetail Lane	n/a	West	n/a	n/a	To be determined
Swimming Pool	CR 108	East	0.00	1.30	1.30
Prater Canyon	CR 116	West	0.00	2.00	2.00
Lincoln-Sweetwater	SR 372	South	0.00	0.85	0.85
Fontenelle North	CR 316	North	0.50	3.27	2.77

Roadway/Shoulder Widening

An evaluation for the need of roadway/shoulder widening was conducted based on the 2030 planning year projected ADT values, design speed and criteria based on the Wyoming County Road Funds Manual, Chapter IX; Design Standards. Roadway capacity needs do not justify additional travel lanes however intersection improvements to improve levels of service and widening of the traveled way on various roadways to meet current AASHTO criteria are justified. Summarized below are recommended improvements based on the future forecasts and traffic analysis:

Intersection Modifications:

Intersection	Modification
US89/CR116/SR239	Add Left Turn Bays
US89/CR106/CR192	Signalize & Add Left Turn Bays*
US89/CR126/CR192	Signalize & Add Left Turn Bays*

*Must meet current WYDOT signal warrants

Segment Improvements:

Widening based on ADT and Assumed Design Speed

Roadway Segment	Current Road Width (feet)	Assumed Design Speed (mph)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	2030
Lost Creek (CR 120)	20	45	22	6	1150
East Etna (CR 110)	19	45	22	6	720
Stewart Trail (CR 106)	18	45	22	6	880
State Line (CR 164)	22	45	22	6	1330
State Line (CR 114)	21	45	22	6	1890
Riverview Ranchettes (CR 173s)	20	45	22	6	640

Based on our study and comments from the public, it is apparent that additional corridors will benefit the overall transportation network. As development continues to occur in the lower valley, the need for additional north/south corridors will ease the traffic demand along adjacent and parallel roadways.

A private north/south roadway currently exists from Clark Lane (CR 115) to Etna-Forest (CR 112) and ties into the north/south East Etna (CR 110) roadway. This section of road should be purchased and used/maintained as a county road. Additionally, a north/south road should be constructed from Clark Lane south to Perkins Road (CR 119), and continue south to tie into the town of Thayne at Thayne Bedford Road (CR 122). This will remove traffic from the US 89 corridor and allow interconnectivity among the residential and commercial development which is anticipated to occur in this area.

A private north/south roadway currently exists from Thayne Bedford (CR 122) to Lost Creek (CR 120). This section of road should be purchased and used/maintained as a county road. A north/south road should be constructed to tie in this existing private road from Lost Creek (CR 120) to Perkins/Extension (CR 119). Another north/south road should be constructed from CR Thayne Bedford (CR 122) to Strawberry Creek (CR 126). This proposed roadway construction will improve interconnectivity and mobility.

Functional Classification Update Recommendations

The functional classification of roadways was investigated for recommendations and updates based on the 2030 planning year ADT values. The existing functional classification was compared to the 2030 ADT values. All functional classification recommendations are consistent with the WYDOT access manual functional classification standards and practices. The intent of this functional classification update is to provide consistency among road classifications in Lincoln County through the 2030 planning year. Functional classification updates are only recommended for roadways in the vicinity of the study intersections.

The proposed functional classification updates recommended to occur before the 2030 planning year are shown below:

Proposed Functional Classification Updates

Roadway	CR #	Existing Functional Class	Proposed Functional Class
Stewart Trail	106	Rural Local	Rural Minor Collector
Swimming Pool	108	Rural Local	Rural Major Collector
Prater Canyon	116	Rural Local	Rural Major Collector
Cedar Creek	118	Rural Local	Rural Major Collector
Perkins	119	Rural Local	Rural Minor Collector
Strawberry Creek	126	Rural Minor Collector	Rural Major Collector
Allred Lane	135	Rural Local	Rural Minor Collector
Swift Creek Lane	137	Rural Local	Rural Minor Collector

SECTION 3: MASTER ROADWAY IMPROVEMENT PLAN SUMMARY BRIEF

The Master Roadway Improvement Plan for Lincoln County is developed from the conclusions of the existing conditions, and the forecasts and recommendations sections of the Lincoln County Transportation Plan. This Master Roadway Improvement Plan identifies those improvements that should be completed in the near term based on improving existing roadway conditions to address safety and functional needs. It then outlines improvements anticipated to address the growth that is occurring in Lincoln County. Finally, priorities are developed and costs are estimated to guide decision makers in implementing this plan.

GENERAL SYSTEM UPGRADES

Delineation

Appropriate delineation will improve the drive ability, function and safety of the county roads. Delineation on all of the roadways may not be cost effective, but higher order roads, those roadways experiencing higher traffic and areas where there are sudden changes in horizontal alignment will benefit from proper delineation.

Route Signage

Route signage should be installed at all T-intersections. Placement of route signage at these intersections is primarily for road users who are not familiar with the area. In addition, it enhances emergency response by familiarizing and standardizing names and locations of roadways.

Speed Limit Signage

While posted speed limits are present in the majority of identified intersections within the county. Those that are not posted should be considered for posting.

Roadway Surface Conditions

Unpaved roads within Lincoln County should be monitored for both ADT volumes as well as crashes. As ADT volumes exceed 250 vehicles per day, or if the number of crashes along a given unpaved roads increases, Lincoln County should consider paving the identified road segments. Economic considerations also need to be included when evaluating the demand of a paved road opposed to a gravel road.

As roadways are considered for pavement, the geometry of the roadway including horizontal alignments, profiles affecting sight distance and roadside shoulders and slopes should also be considered. With improvement of the surface, speeds and expectations increase. If geometric issues are not addressed along with pavement improvements, safety of the roadway itself could be compromised. Often, the geometric improvement costs can exceed the cost of improving the pavement.

RECOMMENDED IMPROVEMENTS BASED ON EXISTING CONDITIONS

Intersection Improvements

The Weaknesses and High Stress Points section of the Inventory and Analysis Chapter identifies specific intersections and recommends improvements that will improve function and safety. These recommendations are summarized in the improvement plan. These recommendations consist primarily of signing, striping and delineation improvements discussed above.

Roadway Surface Improvements

Based on existing average daily traffic counts and safety analysis, the following roads should be considered for pavement improvements:

- Fontenelle North (CR 316) – MP 0.5. to MP 3.27
- Fontenelle Dam (CR 313) – MP 0.0 to MP 3.97
- Elkol Road (CR 304) – MP 0.0 to MP 3.2
- Shute Creek (CR 340) – MP 0.0 to MP 9.45

The Fontenelle Roads are just over the 250 VPD threshold, but current energy development is increasing the use of this road. This road is used as a cutoff, bypassing State Highway 372 to US 189. Crow Creek (CR 141) from MP 3.50 to MP 5.98 and LaBarge Creek (CR 315) from MP 11.2 to MP 13.0 were also identified as a concern based on the safety analysis, however both roads experience well under the 250 ADT Threshold. Pavement improvements are not justified at this time. The Elkol Road and Shute Creek Road are seeing increased industrial traffic.

Safety

The following roadway segments were identified in the safety analysis sections as having a high crash incidence as well as crash rates over WYDOT averages.

○ CR 137	○ CR 304
○ CR 135	○ CR 141
○ CR 122CR 123	○ CR 340
○ CR 126	○ CR 140
○ CR 117	○ CR 315
	○ CR 207

Improved signing, delineation, width and geometry can be used to reduce crashes. Site specific studies should be conducted to establish specific mitigation measures. This safety investigation should take place at the crash location clusters identified in the Figures 1.1 - 1.5 in the report, in conjunction with the above identified county road locations. Roadway segments as well as intersections should be investigated. The ITE Traffic Engineering Handbook Table 7-13 and 7-14 identifies potential countermeasures used to address roadway improvements at crash locations.

FUTURE GROWTH RELATED IMPROVEMENTS

Predicted future roadway capacity needs do not justify additional travel lanes however intersection improvements to improve levels of service and widening of the traveled way on various roadways to meet current AASHTO criteria are justified. Growth anticipated through the 2030 planning year identified three county controlled intersections that will experience LOS below D. These include the intersections of US 89/CR 116-SR 239 and US 89/CR 108-CR 106 expected to operate at LOS E and the intersection of US 89/CR 126-CR 192 expected to operate at LOS F by the 2030 planning year. Proposed improvements include changes in lane configurations, providing dedicated left turn bays and possible signalization as WYDOT signal warrants are met. WYDOT signal warrant information is included in Appendix E.

Roadway/Shoulder Widening

An evaluation for the need of roadway/shoulder widening was conducted based on the 2030 planning year projected ADT values, design speed and criteria based on the Wyoming County Road Fund Manual, Chapter IC, Design Standards Table 10. In general, roadways functionally classified as a rural collector with speeds over 45 miles per hour and ADT between 400 and 650 vehicles per day should have a roadway width of 30 feet including two 11 foot lanes and two four foot graded shoulders. Total right of way width of 66 feet will allow for proper side treatments and drainage. For ADT's between 650 to 2000 vehicles per day, the roadway width should be increased to 34 feet, providing two 11 foot lanes and two 6 foot shoulders. Local roads with speeds less than 40 mph should have a roadway width of 26 feet, providing two 11 foot lanes with two 2 foot graded shoulders.

Roadway Type & ADT	Number of Lanes	Lane Width	Graded Shoulder Width	Roadway Width/Right of Way Width
Collector 400 to 650 ADT	2	11	4	32/66
Collector 650 to 2000 ADT	2	11	6	36/66
Local <400 ADT	2	11	2	26/50

Widening should be considered as part of overall roadway improvements or reconstruction. Improvements to these sections should consider traffic volumes, safety and economic benefit. Some of these improvements should be considered as development occurs and incorporated into the costs associated with that development. If development contributes to increased traffic, that development should be responsible for these improvements.

Summarized below are recommended improvements based on the future forecasts and traffic analysis:

Intersection Modifications:

Intersection	Modification
US89/CR116/SR239	Add Left Turn Bays
US89/CR106/CR192	Signalize & Add Left Turn Bays*
US89/CR126/CR192	Signalize & Add Left Turn Bays*

*Must meet current WYDOT signal warrants.

Widening Based on ADT and Assumed Design Speed

Roadway Segment	Current Road Width (feet)	Assumed Design Speed (mph)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	2030
Lost Creek (CR 120)	20	45	22	6	1150
East Etna (CR 110)	19	45	22	6	720
Stewart Trail (CR 106)	18	45	22	6	880
State Line (CR 164)	22	45	22	6	1330
State Line (CR 114)	21	45	22	6	1890
Riverview Ranchettes (CR 173s)	20	45	22	6	640

NEW TRANSPORTATION LINKS

Although no additional travel lane improvements were determined from the analysis, it is apparent that additional transportation links would benefit the overall transportation network. As development continues to occur in the lower valley, the need for additional north/south corridors will ease the traffic demand along adjacent and parallel roadways. As Star Valley Ranch continues to develop and build out, the benefit of integrating a north/south corridor for connectivity purposes will be beneficial. Improvements to existing north/south roadways along with corridor preservation should be considered in addressing these links. Although not capacity driven, the following improvements to the transportation network are recommended.

A private north/south roadway currently exists from Clark Lane (CR 115) to Etna-Forest (CR 112) and ties into the north/south East Etna (CR 110) roadway. As part of this transportation plan it is recommended this section of road be acquired and used/maintained as a county road. Additionally, a north/south road should be constructed from Clark Lane south to Perkins Road (CR 119), and continue south and tie into the town of Thayne at Thayne Bedford Road (CR 122). Alignment alternatives will need to be considered for the section between CR119 and CR122 to overcome terrain issues. A two lane roadway will be adequate since this is not a capacity driven recommendation, however this will remove traffic from the US 89 corridor and allow interconnectivity among the residential and commercial development which is anticipated to occur in this area.

A private north/south roadway currently exists from Thayne Bedford (CR 122) to Lost Creek (CR 120). As part of this transportation plan it is recommended this section of road be purchased and used/maintained as a county road. A north/south road should be constructed to tie in this existing private road from Lost Creek (CR 120) to Perkins/Extension (CR 119). Another north/south road should be constructed from CR Thayne Bedford (CR 122) to Strawberry Creek (CR 126). This is not a capacity driven recommendation, therefore a two lane roadway will be adequate. This proposed roadway construction will improve interconnectivity and mobility in the area of this recommended improvement.

Development should drive these additional links. In planning and approving development in the area, the county should work with property owners to preserve corridors that would allow these links in the future. In the interim improvements to CR-117 (Muddy String) will address much of the needs outlined above. These improvements may include adequate shoulder width, intersection improvements, pavement reconstruction as necessary, and drainage improvements to improve maintainability and to allow the road to handle additional traffic and enhance safety.

Additional Links that should be considered include linking the Shute Creek Road with the BLM road that extends on into Sweetwater County. Links should also be considered with existing BLM and Forest Service roads throughout Lincoln County.

Upper valley links include links from CR-136 to SR238 or SR237. These improvements should be development driven, and made if and when the area develops.

FUNCTIONAL CLASSIFICATION UPGRADES

The functional classification of roadways was investigated for recommendations and updates based on the 2030 planning year ADT values. All functional classification recommendations are consistent with the WYDOT access manual functional classification standards and practices. Table 2-10 below indicates the proposed functional classification updates recommended to occur before the 2030 planning year.

Table 2-10 Proposed Functional Classification Updates

Roadway	CR #	Existing Functional Class	Proposed Functional Class
Stewart Trail	106	Rural Local	Rural Minor Collector
Swimming Pool	108	Rural Local	Rural Major Collector
Prater Canyon	116	Rural Local	Rural Major Collector
Cedar Creek	118	Rural Local	Rural Major Collector
Perkins	119	Rural Local	Rural Minor Collector
Strawberry Creek	126	Rural Minor Collector	Rural Major Collector
Allred Lane	135	Rural Local	Rural Minor Collector
Swift Creek Lane	137	Rural Local	Rural Minor Collector

Roadway Jurisdiction:

There are several roads on the County and State systems that should be considered for jurisdictional transfers, from state control to county control and county control to state control. These jurisdictional transfers are generally based on functional classification. Roadways generally serve two purposes, traffic mobility and access to property. The more that a roadway serves access, the poorer it functions serving mobility. As a general rule, counties and local government agencies are more concerned with providing local access, where the state is charged with providing mobility. Further analysis of the county road network; including state, county and local roads, should be conducted along with discussions with WYDOT regarding the appropriate roadway jurisdiction as it relates to the functions of each road.

Many of the subdivisions throughout the county consist of primarily private roadways, owned and maintained by the subdivision property owners or associations. The county has a long held policy of leaving those roadways in private jurisdiction. Roads may be considered for public jurisdiction based on the following criteria:

1. Does the roadway serve the general public?
2. Does the roadway provide connectivity between other county, state or federal roads?
3. Would including the roadway on the public system enhance the operations of school bus and emergency equipment?
4. Is there a compelling reason for the county to accept jurisdiction?

In accepting roadways currently under private jurisdiction, or in vacating public roadways, the county should follow current state and county laws and ordinances.

Pavement Management/Maintenance Strategies:

With increased industrial uses of some of the Lincoln County Roadways, it becomes more important that the county continue and further refine their pavement management systems. Through the use of these management systems, maintenance strategies should be developed that optimize the pavement life cycle. Appropriate maintenance applied at the appropriate times will increase the life cycle of the roadway and save money in the long run. Application of asphalt seal coats and asphalt overlays will extend the life of a roadway and help to avoid costly reconstruction.

A summary of the proposed transportation improvements along with cost estimates and priority are included in this report. Priorities are based on traffic volumes, problems identified in the existing conditions analysis, safety and future need. The priorities are broken out into a low medium and high priority. Those issues dealing with safety generally are higher on the priority, as are those indicated by immediate need and relatively low costs.

SECTION 1: INVENTORY AND ANALYSIS

A. INVENTORY OF COUNTY ROAD NETWORK

An inventory of the Lincoln County road network was conducted during July/August of 2005. The road inventory is outlined by regions within Lincoln County, specifically the Star Valley, Cokeville and Kemmerer areas. The following characteristics were observed during this road network inventory:

- Road Number
- Road Name
- Beginning Milepost
- Ending Milepost
- Street Names
- Direction
- Road Classification
- Existing Right of Way width
- Roadway Width
- Roadway Surface Type
- Traffic Control (by leg)

All information recorded in this inventory is listed in Table 1.3 in ascending order by County Road number. All road lengths, roadway classifications, Right of Way (ROW) width, and surface type information were obtained from the 2004 Governmental Accounting Standards Board (GASB) road inventory provided by Lincoln County. All roadway widths and surface types were verified during field observation.

Four roadway surface types were used for surface identification. “Paved 1” indicates hot plant batched pavement. “Paved 2” is a paved surface of lesser quality, primarily a chip sealed gravel road. “Gravel” is a gravel surface that has not been treated. “Primitive” is a road that has not been graveled and is likely unimproved (no crown or ditch).

According to this inventory, three types of roadway functional classifications currently exist along all roads in Lincoln County. The roadway functional classifications currently identified in Lincoln County are:

- Rural Local
- Rural Minor Collector
- Rural Major Collector

Of the 209 segments identified, Table 1.1 below identifies the percentage breakdown determined for the functional classification of roadways in Lincoln County.

Table 1.1

Segment Type	Number of Segments	Segment Miles	Percentage of Segment Miles
Rural Local	163	147.21	48%
Rural Minor Collector	37	131.35	42%
Rural Major Collector	9	30.50	10%

Based on the information acquired from the inventory the following general concerns were identified:

- Significant portion of roadways are not paved
- Paved roads do not have adequate striping
- Some traffic control devices need updating

Of the 209 segments identified, Table 1.2 identifies the percentage breakdown of the road surface types that currently exist in Lincoln County.

Table 1.2

Road Surface Segment Type	Number of Segments	Segment Miles	Percentage of Segment Miles
Paved 1	49	134.21	43%
Paved 2	73	64.32	21%
Gravel	81	105.63	34%
Primitive	6	4.9	2%

Table 1.3 - County Road Network Inventory

Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB
STAR VALLEY AREA ROADS														
100	Old Alpine	0.00	US 89	1.25		West	Rural Local	60	Paved 2	21	Stop			
100	Old Alpine	1.25		1.50	End	West	Rural Local	60	Gravel	21				
101	Palisades Reservoir	0.00	US 89	0.75	End	North	Rural Local	100	Gravel	24				Stop
104	McNeel Power Plant	0.00	US 89	0.60	End	West	Rural Local	100	Gravel	18	Stop			
106	Stewart Trail	0.00	US 89	2.10	End	North	Rural Local	60	Paved 2	18				Stop
107	Sanderson	0.00	US 89	1.00	110	East	Rural Minor Collector	60	Paved 2	24	Yield	Stop		
108	Swimming Pool	0.00	US 89	1.30	End	West	Rural Local	60	Gravel	21	Stop			
109	Roberts-Wolfley	0.00	111	2.30	108	North	Rural Local	60	Paved 2	20			Yield	Stop
110	East Etna	0.00	112	3.50	End	North	Rural Minor Collector	60	Paved 2	19				
111	Creamery	0.00	US 89	1.60	114	West	Rural Minor Collector	60	Paved 1	24	Stop	Stop		
112	Etna-Forest	0.00	US 89	1.00	110	East	Rural Minor Collector	60	Paved 2	19		Stop		
112	Etna-Forest	1.00	110	1.40	End	East	Rural Local	60	Gravel	19		Yield		
113	Chokecherry	0.00	US 89	1.50	End	East	Rural Local	60	Gravel	21		Stop		
114	State Line	0.00	SR 239	4.20	111	North	Rural Major Collector	60	Paved 1	21			Stop	
114	State Line	4.20	111	6.50	End	North	Rural Major Collector	60	Gravel	21				Stop
115	Clark Lane	0.00	US 89	2.00	117	East	Rural Major Collector	60	Paved 1	22		Stop		
116	Prater Canyon	0.00	US 89	2.00	117	East	Rural Local	60	Gravel	21		Stop		
117	Muddy String	0.00	115	1.00	116	South	Rural Major Collector	60	Paved 1	22				
117	Muddy String	1.00	116	5.50	122	South	Rural Major Collector	60	Paved 1	24				Stop
118	Cedar Creek	0.00	US 89	2.00	117	East	Rural Local	60	Paved 1	28	Stop	Stop		
119	Perkins	0.00	US 89	2.20	117	East	Rural Local	60	Paved 2	20		Stop		
119	Perkins	2.20	117	3.80	End	East	Rural Local	60	Paved 2	20		Stop		
120	Lost Creek	0.00	117	2.00	121	East	Rural Local	60	Paved 2	20		Stop		
121	Bedford North	0.00	120	2.20	122	South	Rural Local	60	Paved 2	24				
122	Thayne-Bedford	0.00	Thayne	0.70	117	East	Rural Major Collector	60	Paved 1	30		Stop		
122	Thayne-Bedford	0.70		3.00		East	Rural Major Collector	60	Paved 1	25				
122	Thayne-Bedford	3.00		4.00	126	South	Rural Minor Collector	60	Paved 1	25			Stop	Stop
123	Bedford-Turnerville	0.00	126	2.10		South	Rural Minor Collector	70	Paved 1	25			Stop	
123	Bedford-Turnerville	2.10		5.40	Forest	South	Rural Minor Collector	70	Paved 1	20				
124	Robinson Lane	0.00	123	0.30	End	South	Rural Local	60	Gravel	20			Yield	
125	Thayne-Freedom	0.00	US 89	0.80		North	Rural Local	60	Paved 1	24				Stop
125	Thayne-Freedom	0.80		5.60	SR 239	North	Rural Local	60	Paved 1	22				
126	Strawberry Creek	0.00	US 89	3.10	122	East	Rural Minor Collector	60	Paved 1	23		Stop		
126	Strawberry Creek	3.10	122	4.59		East	Rural Minor Collector	60	Paved 1	20				
126	Strawberry Creek	4.59		5.67	Forest	East	Rural Minor Collector	60	Gravel	18				
126A	Strawberry Landfill	0.00	126	0.10	End	North	Rural Local	60	Gravel	26				Stop
127	Heiner-Suter Lane	0.00	123	1.00	End	East	Rural Local	60	Paved 2	19		Stop		

Table 1.3 - County Road Network Inventory

Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB 
128	Narrows-Turnerville	0.00	US 89	1.32	End	East	Rural Minor Collector	60	Gravel	20		Stop		
129	Grover North	0.00	US 89	0.93	End	North	Rural Local	60	Paved 2	19				Stop
130	Grover Narrows	0.00	SR 237	2.00	US 89	North	Rural Local	60	Paved 2	21			Stop	Stop
131	Tom's Canyon	0.00	US 89	1.00		West	Rural Local	60	Paved 2	22	Stop			
131	Tom's Canyon	1.00		1.75	End	West	Rural Local	60	Gravel	22				
132	Worton Lane	0.00	131	0.74		South	Rural Local	60	Gravel	22			Yield	
132	Worton Lane	0.00		0.74	US 89	East	Rural Local	60	Paved 2	22	Stop			
133	Stump Creek	0.00	197	2.18	134	West	Rural Local	60	Paved 1	20	Yield	Stop		
134	Auburn-Tygee	0.00	SR 238	2.27	Idaho	West	Rural Local	60	Paved 1	24	Stop			
135	Allred Lane	0.00	SR 238	2.00	136	North	Rural Local	60	Paved 1	24			Stop	Stop
136	Kennington-Burton	0.00	Afton	1.20		West	Rural Local	60	Paved 1	24	Stop			
136	Kennington-Burton	1.20		3.00	End	West	Rural Local	60	Gravel	22				
137	Swift Creek Lane	0.00	135	0.80	Afton	East	Rural Local	60	Paved 1	24		Stop		
139	Auburn-Forest	0.00	238	0.72	Forest	North	Rural Local	60	Gravel	20				Stop
140	Bitter Creek	0.00	148	6.20	SR 236	West/North	Rural Minor Collector	60	Paved 1	22			Stop	
140	Bitter Creek	6.20	SR 236	8.30	238	North	Rural Minor Collector	60	Paved 1	22			Stop	Stop
141	Crow Creek	0.00	SR 238	3.50		South	Rural Minor Collector	60	Paved 2	22			Stop	
141	Crow Creek	3.50		5.98	Idaho	South	Rural Minor Collector	60	Gravel	22				
142	Fairview North	0.00	140	0.80	141	West	Rural Minor Collector	60	Paved 2	23	Stop	Yield		
143	Fairview South	0.00	140	0.90	141	West	Rural Minor Collector	60	Paved 2	23	Stop	Yield		
144	Fairview Spring Creek	0.00	142	0.25	143	South	Rural Local	60	Paved 2	22			Stop	Stop
144	Fairview Spring Creek	0.25	143	1.40		South	Rural Local	60	Paved 2	22			Stop	
144	Fairview Spring Creek	1.40		2.70		South	Rural Local	60	Gravel	22				
144	Fairview Spring Creek	2.70		3.00	End	South	Rural Local	60	Gravel	18				
145	Papworth Lane	0.00	US 89	0.30	Airport	West	Rural Local	60	Paved 1	19	Stop			
145	Papworth Lane	0.30	Airport	0.60	198	West	Rural Local	61	Paved 2	20		Yield		
145	Papworth Lane	0.60	198	1.60	End	West	Rural Local	60	Primitive	18	Yield			
146	Dry Creek	0.00	140	2.40	SR 241	East	Rural Local	60	Paved 2	21	Stop	Stop		
146	Dry Creek	2.40	SR 241	2.80	US 89	East	Rural Local	60	Gravel	21	Stop	Stop		
146	Dry Creek	2.80	US 89	3.49	Forest	East	Rural Local	60	Gravel	22		Stop		
147	Lancaster Lane	0.00	SR 241	1.10	End	West	Rural Local	60	Paved 2	20	Stop			
148	Smoot-Afton	0.00	US 89	1.00	140	West	Rural Minor Collector	60	Paved 1	22	Stop			
148	Smoot-Afton	1.00	140	2.50	SR 241	North	Rural Minor Collector	60	Gravel	24			Stop	Yield
149	Reeves-Schwab	0.00	150	1.53	US 89	East	Rural Local	60	Gravel	23	Stop	Yield		
150	E. L. Clark	0.00	140	0.80	End	South	Rural Local	50	Gravel	20			Yield	
151	Smoot	0.00	US 89	1.10	148	West	Rural Local	60	Paved 2	20	Stop	Yield		
152	Smoot-Forest	0.00	US 89	0.90	End	East	Rural Local	66	Paved 2	20		Stop		
153	Cottonwood Creek	0.00	US 89	1.00	Forest	East	Rural Local	60	Paved 2	20		Stop		

Table 1.3 - County Road Network Inventory

Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB 
154	Pine Grove	0.00	US 89	0.55	End	East	Rural Local	60	Gravel	24		Stop		
155	McCoy	0.00	US 89	0.45	End	East	Rural Local	60	Gravel	20		Stop		
156	Happy Valley	0.00	US 89	0.50	SR 241	West	Rural Local	60	Paved 1	22	Stop	Stop		
157	Peterson Court	0.00	US 89	0.30	End	East	Rural Local	60	Gravel	20		Stop		
159	Birch Creek	0.00	110	0.75	End	East	Rural Local	60	Gravel	20		Yield		
164	Cottonwood Drive	0.00	151	0.30	151	North/West	Rural Local	60	Paved 2	20		Yield		Yield
166	Aspen Hills	0.00		0.50		East	Rural Local	60	Paved 1	19		Stop		
167	Westview Village Drive (Westview Drive)	0.00	US 89	0.42	End	East	Rural Local	60	Paved 2	21				Stop
167	Westview Village Drive (Circle Drive)	0.00	Westview Dr	0.25	Westview Dr	North/South	Rural Local	60	Paved 2	19			Yield (2)	
168	Porter Lane	0.00	US 89	0.20	End	South	Rural Local	60	Gravel	24			Stop	
169	Good Neighbor Lane	0.00	US 89	0.50	End	West	Rural Local	60	Paved 2	20	Stop			
170	Tolman Lane	0.00	144	0.20	End	South	Rural Local	60	Gravel	16				
171	Bateman	0.00	123	0.50	End	South	Rural Local	60	Gravel	24			Yield	
172	Grover Park	0.00	US 89	0.60	Forest	East	Rural Local	66	Paved 2	22		Stop		
173	Riverview Ranchettes (Ellis Lane)	0.00	US 89	0.43	Duffin Cir	East	Rural Local	60	Paved 1	20		Stop		
173	Riverview Ranchettes (Ellis Lane)	0.43	Duffin Cir	0.56	186	East	Rural Local	60	Paved 2	19				
173	Riverview Ranchettes (Fidler Lane)	0.00	186	0.55	Duffin Cir	South	Rural Local	60	Paved 2	19			Stop	Yield
173	Riverview Ranchettes (Duffin Circle)	0.00	Ellis Ln	0.50		South	Rural Local	60	Paved 2	19				
173	Riverview Ranchettes (Duffin Circle)	0.50		1.60	End	North	Rural Local	60	Gravel	20			Yield	
174	Bowles Lane	0.00	SR 241	0.50	US 89	East	Rural Local	60	Gravel	22	Stop	Stop		
174	Bowles Lane	0.50	US 89	1.30	End	East/South	Rural Local	60	Gravel	22		Stop		
175	Gardner	0.00	US 89	0.65	End	East	Rural Local	49.5	Gravel	18		Stop		
177	Willow Creek Canyon	0.00	123	0.25		East	Rural Local	60	Paved 2	19		Yield		
177	Willow Creek Canyon	0.25		0.60	Forest	East	Rural Local	60	Gravel	12				
178	Corsi	0.00	110	0.25	End	East	Rural Local	60	Gravel	20		Yield		
179	Alford Way	0.00	120	0.70	End	North	Rural Local	60	Paved 2	22				Yield
181	Fairview Townsite (First West)	0.00	142	0.25	143	South	Rural Local	60	Paved 2	20			Yield	Stop
181	Fairview Townsite (First South)	0.00	140	0.12	1st W	West	Rural Local	60	Paved 2	20	Stop	Yield		

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Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB 
181	Fairview Townsite (First South)	0.12	1st W	0.25	144	West	Rural Local	60	Paved 2	20	Yield	Yield		
181	Fairview Townsite (First South)	0.25	144	0.37	End	West	Rural Local	60	Paved 2	20	Yield			
183	Rex Bateman Lane	0.00	110	0.30	End	East	Rural Local	60	Gravel	20		Yield		
184	Grant Clark Court	0.00	114	0.10	End	East	Rural Local	60	Gravel	19				
185	Tee-Mont Drive	0.00	136	0.45	136	North/South	Rural Local	60	Paved 2	18			Stop	Stop
186	Lazy Box J Ranch	0.00	173	0.10	End	East	Rural Local	60	Gravel	19				
187	Astle	0.00	2nd W	0.45	End	West	Rural Local	60	Gravel	20				
188	Lone Tree Lane	0.00	US 89	0.30	End	East	Rural Local	60	Gravel	21		Stop		
189	Lyle Clark	0.00	123	0.20	End	East	Rural Local	60	Gravel	18		Yield		
190	South Grover	0.00	1st St	0.25	US 89	East	Rural Local	60	Paved 2	20	Stop			
190	South Grover	0.25	US 89	0.50	5th St	East	Rural Local	60	Paved 2	20		Stop		
191	Grover Townsite (First Street)	0.00	190	0.25	SR 237	North	Rural Local	99	Paved 2	20			Stop	
191	Grover Townsite (Second Street)	0.00	190	0.12	Main St	North	Rural Local	99	Paved 2	20			Yield	Yield
191	Grover Townsite (Second Street)	0.12	Main St	0.25	SR 237	North	Rural Local	99	Paved 2	20			Stop	Yield
191	Grover Townsite (Fourth Street)	0.00	190	0.12	Main St	North	Rural Local	99	Paved 2	20			Yield	Yield
191	Grover Townsite (Fourth Street)	0.12	Main St	0.25	172	North	Rural Local	99	Paved 2	20				Yield
191	Grover Townsite (Fifth Street)	0.00	190	0.25	172	North	Rural Local	99	Paved 2	20			Yield	
191	Grover Townsite (Main Street)	0.00	1st St	0.25	US 89	East	Rural Local	99	Paved 2	20	Stop	Yield		
191	Grover Townsite (Main Street)	0.25	US 89	0.50	5th St	East	Rural Local	99	Paved 2	20	Yield	Stop		
195	Smoot Townsite (E Street)	0.00	148	0.25	406	North	Rural Local	99	Paved 2	20		Yield		Yield
196	Bedford Townsite (Strawberry St)	0.00	126	0.50	122	North/West	Rural Local	82.5	Paved 2	20		Yield		Yield
196	Bedford Townsite (B Street)	0.00	1st W St	0.12	122	East	Rural Local	82.5	Paved 2	20	Stop			

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Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB
196	Bedford Townsite (B Street)	0.12	122	0.25	Staw-berry St	East	Rural Local	82.5	Paved 2	20		Stop		
196	Bedford Townsite (1st West Street)	0.00	126	0.25	B Street	North	Rural Local	82.5	Paved 2	20				Yield
197	Auburn Townsite (1st Street West)	0.00	134	1.30	132	North	Rural Local	99	Paved 2	22			Yield	Stop
197	Auburn Townsite (2nd Street West)	0.00	134	0.57	1st St N	North	Rural Local	99	Paved 2	20				Stop
197	Auburn Townsite (3rd Street West)	0.00	134	0.43	Main St	North	Rural Local	99	Paved 2	20				Stop
197	Auburn Townsite (Main Street)	0.00	US 89	0.16	1st St W	North	Rural Local	99	Paved 2	22	Stop	Yield		
197	Auburn Townsite (Main Street)	0.16	1st St W	0.45	3rd St W	North	Rural Local	99	Paved 2	20	Yield			
197	Auburn Townsite (1st Street North)	0.00	SR 237	0.15	2nd St W	North	Rural Local	99	Paved 2	20	Stop			
198	Allred South	0.00	SR 238	2.00	SR 236	South	Rural Local	60	Paved 1	28			Stop	Stop
199	Thompson	0.00	110	0.62	End	East	Rural Local	60	Gravel	19		Yield		
400	Griffey Lane	0.00	US 89	0.13	End	West	Rural Local	60	Gravel	22	Stop			
400	Griffey Lane	0.13	US 89	0.25	End	West	Rural Local	60	Gravel	18	Stop			
402	Auburn Cemetery	0.00	134	0.42	End	South/West	Rural Local	60	Gravel	18			Yield	
403	Meadow Lane	0.00	US 89	1.00	End	West	Rural Local	60	Gravel	20	Stop	Stop		
405	Hialeah	0.00	241	0.40	End	West	Rural Local	60	Gravel	23	Stop			
406	Bellview	0.00	148	0.50	151	North	Rural Local	60	Paved 2	21				Yield
407	Mills	0.00	US 89	0.20	119	North	Rural Local	60	Gravel	21				
408	Starview	0.00	US 89	0.46	End	West	Rural Local	60	Gravel	19	Stop			
414	Saddle Drive	0.00	110	1.10	End	West	Rural Local	60	Gravel	24	Stop			
415	Hoback Drive	0.00	119	0.60	End	North	Rural Local	60	Gravel	22				
416	Moose Manor Lane	0.00	SR 236	0.50	End	South	Rural Local	60	Gravel	22			Stop	
417	Easy Acres	0.00	135	0.31	End	West	Rural Local	60	Gravel	20	Stop			
COKEVILLE AREA ROADS														
200	Raymond	0.00	US 89	0.20	Idaho	West	Rural Local	60	Paved 2	20	Stop			
204	Pine Creek	0.00	SR 232	2.75		East	Rural Local	60	Paved 1	24		Stop		
204	Pine Creek	2.75		4.00	End	East	Rural Minor Collector	60	Gravel	24				
206	Cokeville-Stopher	0.00	SR 332	0.75	End	East	Rural Local	60	Gravel	22		Stop		
207	Cokeville-Utah State Line	0.00	SR 231	5.00		South	Rural Minor Collector	60	Paved 1	28				
207	Cokeville-Utah State Line	5.00		17.00	Utah	South	Rural Minor Collector	100	Paved 1	25				

Table 1.3 - County Road Network Inventory

Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB
209	Rock Creek	0.00	US 30	1.00		North	Rural Local	60	Gravel	25				Stop
209	Rock Creek	1.00		4.40		North	Rural Local	60	Gravel	21				
209	Rock Creek	4.40		5.15	End	North	Rural Local	60	Primitive	12				
211	Forgren Slough	0.00		0.20			Rural Local	60	Gravel	20				
216	Etcheverry	0.00	US 89	0.25	Idaho	West	Rural Local	66	Gravel	20	Stop			
217	Johns Lane	0.00	US 89	0.36	End	West	Rural Local	60	Gravel	20	Stop			
218	Taylor Subdivision (Valley View Dr)	0.00	207	0.40	End	West	Rural Local	60	Paved 2	22	Stop			
218	Taylor Subdivision (Taylor Ln)	0.00	207	0.40	End	West	Rural Local	60	Paved 2	22	Stop			
219	Dipper Creek	0.00	US 89	0.81	End	East	Rural Local	60	Primitive	12				
220	Crawford Mountains	0.00	US 89	1.00	Utah	South	Rural Local	100	Gravel	22				Stop
KEMMERER AREA ROADS														
234	Kemmerer Airport	0.00	SR 233	0.20		West	Rural Local	200	Paved 1	26	Stop			
234	Kemmerer Airport	0.20		1.40	End	West	Rural Local	200	Paved 1	22				
300	Fossil Butte	0.00	US 30	4.00	End	East	Rural Local	80	Paved 1	24		Stop		
302	Alleman	0.00	304	1.43	End	West	Rural Local	60	Paved 1	24				
304	Elkol (east/west)	0.00	US 189	0.10	304	East	Rural Minor Collector	100	Paved 1	28	Stop	Stop		
304	Elkol (north/south)	0.00	302	0.80	304	South	Rural Minor Collector	200	Paved 1	24				Stop
304	Elkol (north/south)	0.80	304	2.82	End	South	Rural Minor Collector	200	Paved 1	24			Stop	
305	Ham's Fork	0.00	SR 233	14.5	Forest	North	Rural Minor Collector	60	Gravel	22				
306	Sublet-Pomeroy Basin	0.00	US 189	5.00		North	Rural Minor Collector	200	Paved 1	28				Stop
306	Sublet-Pomeroy Basin	5.00		9.40		North	Rural Minor Collector	60	Paved 2	24				
306	Sublet-Pomeroy Basin	9.40		23.50	334/344	North	Rural Minor Collector	60	Gravel	28				
310	Graham's Lane	0.00	US 30	2.00	End	West	Rural Local	100	Paved 2	18	Stop			
311	Lincoln-Sweetwater	0.00	SR 372	0.85	Sweetwater	East	Rural Minor Collector	100	Gravel	24		Stop		
313	Fontenelle Dam	0.00	US 189	3.97	316	East	Rural Minor Collector	100	Gravel	24		Stop		
314	Fontenelle Creek	0.00	US 189	11.62	End	West	Rural Minor Collector	100	Paved 1	22	Stop			
315	LaBarge Creek	0.00	US 189	11.20		West	Rural Minor Collector	100	Paved 1	22	Stop			
315	LaBarge Creek	11.20		13.00	Forest	West	Rural Minor Collector	100	Gravel	19				
316	Fontenelle North	0.00	SR 372	0.50		North	Rural Minor Collector	100	Paved 1	20				Stop
316	Fontenelle North	0.50		3.27	313	North	Rural Minor Collector	100	Gravel	24				
318	Sublette Cutoff	0.00	US 189	1.15	Sublette	East	Rural Local	60	Paved 1	25		Stop		
319	Aspen Springs	0.00	US 189	2.66	End	East	Rural Local	100	Paved 2	22		Stop		
321	LaBarge Airport	0.00	US 189	0.50	End	West	Rural Minor Collector	60	Gravel	22	Stop			
322	Conroy	0.00	US 30	0.19	End	South	Rural Local	66	Gravel	22			Stop	
323	Calhoun	0.00	US 30	1.92	End	East	Rural Local	60	Paved 1	24		Stop		
325	Skull Point	0.00	US 189			West	Rural Local	100	Paved 1	25	Stop			

Table 1.3 - County Road Network Inventory

Road Number	Road Name	From		To		Direction	Classification ¹	Existing ROW Width ¹ (Feet)	Travelway		Traffic Control			
		Mile	Street	Mile	Street				Surface Type ²	Width ³ (feet)	EB 	WB 	NB 	SB
325	Skull Point			2.80	End	West	Rural Local	200	Paved 1	25				
326	Waterfall	0.00	US 30	0.33	End	South	Rural Local	60	Gravel	24			Stop	
327	Fox Farm	0.00	SR 233	0.88	US 189	North	Rural Local	60	Gravel	22			Stop	Stop
328	Twin Creek - South Fork	0.00	US 30	0.60	342	South	Rural Local	60	Paved 2	22			Stop	
328	Twin Creek - South Fork	0.60	342	7.10	End	South	Rural Local	60	Gravel	20			Stop	
329	Oakley Subdivision	0.00	US 30	0.42	End	North	Rural Local	60	Paved 2	18				Stop
330	Frontier Townsite	0.00		1.77			Rural Local	60	Gravel	16-22				
331	Clear Creek	0.00	US 30	1.00		South	Rural Local	60	Gravel	24			Stop	
331	Clear Creek	1.00		3.30		South	Rural Local	60	Gravel	22				
331	Clear Creek	3.30		4.00	End	South	Rural Local	60	Primitive	12				
334	Fontenelle-Forest	0.00	306	1.90	Forest	North	Rural Local	60	Gravel	20				
336	Niobe	0.00	333	0.11	Sublette	North	Rural Local	60	Primitive	16				
338	Gomer	0.00	SR 233	2.90	306	East	Rural Local	60	Gravel	24	Yield			
340	Shute Creek	0.00	240	9.80		East	Rural Major Collector	100	Paved 1	26	Stop	Stop		
340	Shute Creek	9.80		13.50	Sublette	East	Rural Major Collector	100	Paved 1	26				
341	Twin Creek North	0.00	US 30	0.66	328	East	Rural Local	60	Paved 2	20				
342	Twin Creek South	0.00	328	2.44	End	East	Rural Local	60	Paved 2	22				
343	Viola Cemetery	0.00	315	0.70	End	North	Rural Local	60	Gravel	20				
344	Little Coal Creek Access	0.00	306	1.53	End	East	Rural Local	30	Primitive	12				
345	Kemmerer Landfill	0.00	US 30	0.65	End	North	Rural Local	60	Paved 1	20				Stop
346	Viola Subdivision	0.00	315	1.64	End	North	Rural Local	60	Gravel	20				Stop

NOTES:

¹ See 2004 road inventory performed by Lincoln County

² "Paved 1" is hot plant type pavement, "Paved 2" is a lesser quality paved surface constructed by chip sealing a gravel road

³ Paved - Width was measured from the edge of pavement (striping was neglected on the few county roads that have striping; Shute Creek, Fossil Butte, and)
Gravel - Width was measured from the hinge point (or break in slope) at the edge of the road

B. SUPPLEMENTAL SIGN INVENTORY

In addition to the road inventory a Lincoln County regulatory and warning sign inventory was conducted for all roadways not included as a part of the Lincoln County Roads Speed Zoning Signing Plans, assembled in July of 2002.

This sign inventory includes all roadway signage in Lincoln County that was not originally included in the Speed Zoning Signing Plans. Table 1.4 outlines all the additional regulatory and warning signage located in Lincoln County. This inventory includes the road number, road name, station orientation, and sign type. As noted in Table 1.4, all signage is listed according to “increasing station” or “decreasing station”.

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
STAR VALLEY AREA ROADS						
100	Old Alpine	US 89	West	0.00	"Speed Limit 45"	"Stop"
			West	0.10		"Stop Ahead"
			West	0.50		"Speed Limit 45"
			West	1.10		"Speed Limit 45"
101	Palisades Reservoir	US 89	North	0.00	"Lincoln County 101"	"Stop"
104	McNeel Power Plant	US 89	West	0.00	"Lincoln County 104"	"Stop"
			West	0.05	"Weight Limit 18 Tons"	
			West	0.50	"Weight Limit 18 Tons"	
108	Swimming Pool	US 89	West	0.00	"Lincoln County 108"	"Stop"
			West	0.00	"Speed Limit 30"	
			West	0.70	"Dead End"	
109	Roberts-Wolfley	111	North	0.00	"Lincoln County 109"	"Stop"
			North	0.10	"Speed Limit 45"	
			North	1.40	"Caution"	
			North	1.60		"Caution"
			North	2.10	T Intersection	"Speed Limit 45"
			North	2.20	"Stop"	"Lincoln County 109"
112	Etna-Forest	US 89	East	0.00	"Lincoln County 112"	"Stop"
			East	0.00	"Speed Limit 25"	
			East	0.10		"Stop Ahead"
			East	0.35	"Speed Limit 40"	"Speed Limit 25"
			East	0.90		"Speed Limit 40"
			East	0.95		"Yield"
			East	1.35	"End of County Road"	
			East	1.35	"Dead End"	
113	Chokecherry	US 89	East	0.00	"Lincoln County 113"	"Stop"
			East	0.00	"Speed Limit 35"	
116	Prater Canyon	US 89	East	0.00	"Lincoln County 116"	"Stop"
			East	0.05	"Speed Limit 35"	
			East	1.95		"Speed Limit 35"
			East	2.00	"Stop"	
119	Perkins	US 89	East	0.00	"Lincoln County 119"	"Stop"
			East	0.05	"Speed Limit 35"	
			East	0.70	Left Curve	
			North	0.80		Right Curve
			North	1.10	Right Curve	

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
			East	1.20		Left Curve
			East	1.50	Winding Road	
			East	1.70		Winding Road
			East	2.15		"Speed Limit 35"
			East	2.19	"Stop"	"Lincoln County 119"
			East	2.21	"Lincoln County 119"	"Stop"
			East	2.25	"Speed Limit 35"	
			East	2.30		"Stop Ahead"
			East	3.40	"Dead End"	
124	Robinson Lane	123	South	0.00	"Lincoln County 124"	"Yield"
			South	0.00	"Speed Limit 25"	
126A	Strawberry Landfill		South	0.00	"Lincoln County 126A"	"Stop"
127	Heiner-Suter Lane	123	East	0.00	"Lincoln County 127"	"Stop"
			East	0.05	"Speed Limit 25"	
			East	0.50		"Speed Limit 25"
128	Narrows-Turnerville	US 89	East	0.00	"Lincoln County 128"	"Stop"
			East	0.05	"Speed Limit 35"	
			East	0.05	"Weight Limit 30 Tons"	
			East	0.10	Left Curve	
			East	0.50	Right Curve	
			East	0.60		Left Curve
			East	1.20		"Speed Limit 35"
			East	1.30	"End County Road"	
129	Grover North	US 89	North	0.00	"Lincoln County 129"	"Stop"
			North	0.05	"Speed Limit 35"	
			North	0.85		"Lincoln County 129"
130	Grover Narrows	SR 237	North	0.00	"Lincoln County 130"	"Stop"
			North	0.05	"Speed Limit 35"	
			North	1.50	Left Curve	
			North	1.90		"Speed Limit 35"
			North	2.00	"Stop"	"Lincoln County 129"
131	Tom's Canyon	US 89	West	0.00	"Lincoln County 131"	"Stop"
			West	0.00	"Speed Limit 35"	
132	Worton Lane	131	South	0.00	"Lincoln County 132"	"Yield"
			East	0.50	"Yield"	
			East	0.70	"Stop"	"Lincoln County 132"

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
139	Auburn-Forest	238	North	0.00	"Lincoln County 139"	"Stop"
			North	0.00	"Speed Limit 25"	
144	Fairview Spring Creek	142	South	0.00		"Stop"
			South	0.24	"Stop"	
			South	0.25	"Lincoln County 144"	"Stop"
145	Papworth Lane	US 89	West	0.00	"Lincoln County 145"	"Stop"
			West	0.60	"Yield"	"Dead End"
			West	0.62	"Dead End"	"Yield"
147	Lancaster Lane	SR 241	West	0.00	"Lincoln County 147"	"Stop"
			West	0.00	"Speed Limit 35"	
149	Reeves-Schwab	150	East	0.00	"Lincoln County 149"	"Yield"
			East	0.00	"Speed Limit 25"	
			East	0.25		"Yield"
			East	1.50	"Stop"	"Speed Limit 25"
			East	1.50		"Lincoln County 149"
150	E. L. Clark	140	South	0.00	"Lincoln County 150"	
151	Smoot	US 89	West	0.00	"Lincoln County 151"	"Stop"
			West	0.00	"Speed Limit 45"	
			West	1.00	"Yield"	
152	Smoot-Forest	US 89	East	0.00	"Lincoln County 152"	"Stop"
			East	0.00	"Dead End"	
			East	0.05	"Speed Limit 25"	
154	Pine Grove	US 89	East	0.00	"Lincoln County 154"	"Stop"
			East	0.05	"Speed Limit 25"	
155	McCoy	US 89	East	0.00	"Lincoln County 155"	"Stop"
			East	0.05	"Dead End"	
156	Happy Valley	US 89	West	0.00	"Stop"	"Lincoln County 156"
			West	0.35	"Lincoln County 157"	"Stop"
157	Peterson Court	US 89	East	0.00	"Lincoln County 157"	"Stop"
159	Birch Creek	110	East	0.00	"Lincoln County 159"	"Yield"
			East	0.00	"Speed Limit 25"	
164	Cottonwood Drive	151	North	0.00	"Lincoln County 164"	"Yield"
			West	0.30	"Yield"	"Lincoln County 164"
167	Westview Village Drive (Westview Drive)	US 89	East	0.00	"Lincoln County 167S"	"Stop"
			East	0.05	"Speed Limit 25"	

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
167	Westview Village Drive (Circle Drive)	West-view Dr	North	0.00	"Yield"	
			South	0.30		"Yield"
168	Porter Lane	US 89	South	0.00	"Lincoln County 168"	"Stop"
169	Good Neighbor Lane	US 89	West	0.00	"Lincoln County 169"	"Stop"
			West	0.05	"Dead End"	
			West	0.05	"Speed Limit 25"	
170	Tolman Lane	144	South	0.00	"Lincoln County 170"	
171	Bateman	123	South	0.00	"Lincoln County 171"	"Yield"
			South	0.00	"Speed Limit 25"	
			South	0.00	"Dead End"	
174	Bowles Lane	SR 241	East	0.00	"Lincoln County 174"	"Stop"
			East	0.05	"Speed Limit 25"	
			East	0.45		"Speed Limit 25"
			East	0.50	"Stop"	"Lincoln County 174"
			East	0.55	"Lincoln County 174"	"Stop"
175	Gardner	US 89	East	0.00	"Lincoln County 175"	"Stop"
177	Willow Creek Canyon		East	0.00	"Lincoln County 177"	"Yield"
178	Corsi	110	East	0.00	"Lincoln County 178"	"Yield"
			East	1.00	"Speed Limit 25"	
179	Alford Way	120	North	0.00	"Speed Limit 25"	"Yield"
			North	0.00	"Dead End"	
			North	0.03	"Lincoln County 170"	
181	Fairview Townsite (First West)	142	South	0.00		"Yield"
			South	0.25	"Stop"	
181	Fairview Townsite (First South)	140	West	0.00		"Stop"
			West	0.12	"Yield"	"Yield"
			West	0.25	"Yield"	"Yield"
182	Hurd-Jenson Court	SR 237	North	0.00	"Lincoln County 182"	"Stop"
183	Rex Bateman Lane		East	0.00	"Lincoln County 183"	"Yield"
			East	1.00	"Speed Limit 25"	
184	Grant Clark Court	114	East	0.00	"Lincoln County 184"	

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
185	Tee-Mont Drive	136	North	0.00	"Lincoln County 185S"	"Stop"
			South	0.45	"Stop"	"Lincoln County 185S"
186	Lazy Box J Ranch	173	East	0.00		
187	Astle	2nd W	West	0.00		
188	Lone Tree Lane	US 89	East	0.00	"Lincoln County 188"	"Stop"
189	Lyle Clark	123	East	0.00	"Lincoln County 189"	"Yield"
195	Smoot Townsite (E Street)	148	North	0.00	"Lincoln County 195S"	"Yield"
196	Bedford Townsite (Strawberry Street)	126	North	0.00	"Lincoln County 196S"	"Yield"
196	Bedford Townsite (A Street)	122	East	0.00		"Yield"
196	Bedford Townsite (B Street)	1st W	East	0.12	"Stop"	
			East	0.14		"Stop"
196	Bedford Townsite (1st West Street)	126	North	0.00		"Yield"
199	Thompson	110	East	0.00	"Lincoln County 199"	"Yield"
			East	0.00	"Speed Limit 25"	
			East	0.20	"Dead End"	
400	Griffey Lane	US 89	West	0.00	"Lincoln County 400"	"Stop"
402	Auburn Cemetery	134	South	0.00	"Lincoln County 402"	"Yield"
403	Meadow Lane	US 89	West	0.00	"Lincoln County 403"	"Stop"
			West	0.80	"Stop"	
405	Hialeah	241	West	0.00	"Lincoln County 405"	"Stop"
406	Bellview	148	North	0.00	"Lincoln County 406"	"Yield"
			North	0.05	"Speed Limit 25"	
407	Mills	US 89	North	0.05	"Lincoln County 407"	
			North	0.15	"Yield"	"Lincoln County 407"
408	Starview	US 89	West	0.00	"Lincoln County 408S"	"Stop"
414	Saddle Drive	110	West	0.00	"Lincoln County 414"	"Stop"
			West	0.00	"Speed Limit 30"	
			North	0.40		"Lincoln County 414"
			South	1.40	"Stop"	
415	Hoback Drive	119	North	0.00	"Lincoln County 415"	"Stop"
			North	0.10	"Dead End"	
416	Moose Manor Lane	SR 236	South	0.00	"Lincoln County 416"	"Stop"
417	Easy Acres	135	West	0.00	"Lincoln County 417"	"Stop"

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
COKEVILLE AREA ROADS						
200	Raymond	US 89	West	0.00	"Lincoln County 200"	"Stop"
206	Cokeville-Stopher	SR 332	East	0.00	"Lincoln County 206"	"Stop"
			East	1.00	"Dead End"	
209	Rock Creek	US 30	North	0.00	"Lincoln County 209"	"Stop"
			North	4.10	"Speed Limit 20"	
211	Forgren Slough	US 89	West	0.00	"Lincoln County 211"	"Stop"
216	Etcheverry	US 89	West	0.00	"Lincoln County 216"	"Stop"
217	Johns Lane	US 89	West	0.00	"Lincoln County 217"	"Stop"
218	Taylor Subdivision (Valley View Dr)	207	West	0.00	"Speed Limit 20"	"Stop"
218	Taylor Subdivision (Taylor Ln)	207	West	0.00	"Speed Limit 20"	"Stop"
219	Dipper Creek			0.00		
220	Crawford Mountains	US 89	South	0.00	"Lincoln County 220"	"Stop"
KEMMERER AREA ROADS						
300	Fossil Butte	US 30	East	0.00	"Lincoln County 300"	"Stop"
			East	0.20		"Stop Ahead"
			East	0.25	"Speed Limit 50"	
			East	0.40		Right Curve
			East	2.10		Narrow Bridge
			East	2.50	"Speed Limit 50"	
			East	4.00		"Lincoln County 300"
305	Ham's Fork	SR 233	North	0.00	"Lincoln County 305"	
			North	14.50		"Lincoln County 305"
306	Sublet-Pomeroy Basin	US 189	North	0.00	"Lincoln County 306"	"Stop"
			North	0.02	"Speed Limit 55"	
			North	0.15		"Stop Ahead"
			North	3.90	Left Curve "35 mph"	
			North	6.00	"Speed Limit 35"	
			North	7.10		"Lincoln County 306"
			North	10.80	"Speed Limit 35"	
			North	12.00	Winding Road	
310	Graham's Lane	US 30	West	0.00	"Lincoln County 310"	"Stop"
318	Sublette Cutoff	US 189	East	0.00	"Lincoln County 318"	"Stop"
			East	0.05	"Speed Limit 35"	
			East	0.50	Winding Road "20 mph"	

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
			East	0.90	"One Lane Bridge 5 mph"	"Speed Limit 35"
			East	1.00		"Lincoln County 318"
321	La Barge Airport	US 189	West	0.00		"Stop"
			West	0.10	"Slow Children Playing"	
			West	0.30		"Slow Children Playing 20 mph"
322	Conroy	US 30	South	0.00		"Stop"
323	Calhoun	US 30	East	0.00	Large Left Arrow	"Stop"
			East	0.10	"Lincoln County 323"	
			East	0.10	"Speed Limit 45"	
325	Skull Point	US 189	West	0.00	"Lincoln County 325"	"Stop"
			West	0.10		"Stop Ahead"
			West	2.60		"Speed Limit 55"
326	Waterfall	US 30	South	0.00	"Lincoln County 326"	"Stop"
327	Fox Farm	SR 233	North	0.00	"Lincoln County 327"	"Stop"
			North	0.50	"6 Ton Load Limit"	
			North	0.70		"6 Ton Load Limit"
			North	0.85		Winding Road "30 mph"
			North	0.90	"Stop"	"Lincoln County 327"
329	Oakley Subdivision	US 30	North	0.00	"Speed Limit 20"	"Stop"
		US 30	North	0.00	"Lincoln County 329"	
		US 30	North	0.00	"Speed Limit 20"	
		US 30	North	0.20	"Dead End"	
331	Clear Creek	US 30	South	0.00	"Lincoln County 331"	"Stop"
334	Fontenelle-Forest	306	North	0.00	"Lincoln County 334"	
			North	1.40		"Lincoln County 334"
338	Gomer	SR 233	East	0.00	"Lincoln County 338"	
			East	0.05	"Speed Limit 35"	
			East	2.70	"Yield"	
340	Shute Creek	240	East	0.00		"Stop"
			East	0.03	Left Curve, "30 mph"	
			East	0.04	"Lincoln County 340"	
			East	0.05	"Speed Limit 65"	
			East	0.10		"Stop Ahead"
			East	0.12		Right Curve, "30 mph"
			East	8.90		"Speed Limit 65"
			East	8.90	"Reduced Speed Ahead", "30 mph"	
			East	8.90	"Caution Heavy Truck Traffic"	

Table 1.4 - Supplemental Sign Inventory

Road Number	Road Name	Mile Mark 0.0	Direction of Increasing Station	Mile	Sign Description	
					Increasing Station Traffic	Decreasing Station Traffic
			East	8.90	Right Side Intersection	
			East	9.20		"Reduced Speed Ahead", "30 mph"
			East	9.20		"Caution Heavy Truck Traffic"
			East	9.20		Right Side Intersection
			East	9.70	"Stop Ahead"	
			East	9.70		"Lincoln County 340"
			East	9.75		"Speed Limit 65"
			East	9.80	"Stop"	
			North	9.85		"Truck Traffic Congested Area"
			North	9.90		Right Curve, "20 mph"
			North	10.00	"Speed Limit 55"	
343	Viola Cemetery	315	North	0.00		
344	Little Coal Creek Access	306	East	0.00	"Lincoln County 344"	
			East	1.30	Right Curve	
			East	1.30	"Speed Limit 15"	
			East	1.40	"Speed Limit 15"	
345	Kemmerer Landfill	US 30	North	0.00	"Lincoln County 345"	"Stop"
			North	0.20	"Speed Limit 20"	
346	Viola Subdivision	315	North	0.00	"Lincoln County 346S"	"Stop"
			North	0.05	"Speed Limit 20"	
			West	0.20		Left Curve
			South	1.10	Right Curve "10 mph"	
			South	1.40	"Slow Children"	Left Curve

C. TRANSPORTATION ASPECTS OF LAND USE REGULATIONS

In May of 2005 Land Use Regulations were adopted for Lincoln County, WY. This Land Use document designated general and specific zoning areas and is used as criteria for establishing the type of development that will occur in these areas. Transportation impacts are a result of how land is used and the traffic demand it generates.

1. Primary Zoning

As outlined in the Land Use Regulations, zoning is broken down into two types, primary and overlay zones. Primary zoning is zoning which is more general in nature where overlay zones are more restrictive and specific. The following is a list of the primary zones outlined in the Lincoln County Land Use Regulations:

- Rural Zone
- Mixed Zone
- Recreational Zone
- Industrial Zone
- Public Zone

The rural zone is primarily established to maintain agricultural use and allow some low density residential development to occur. All areas in the rural zone will have lesser impact on the transportation network as agricultural and low density residential uses do not typically generate a large amount of traffic demand.

The mixed zone has multiple uses primarily associated with that allowed in the rural zone in addition to commercial applications, high density residential and community service. Mixed zone areas will have a large impact on the transportation network as high density residential, Planned Unit Developments, and most commercial applications generate larger amounts of traffic.

The intent of the recreational zone is to develop and promote an area primarily for tourist and leisure activities without affecting the natural elements most recreational zones have. Recreational zones typically generate highly seasonal trips (summer and winter months) and have the largest traffic demand during these “seasonal” months.

Star Valley Ranch is typical of residential development located in a recreational zone. If more development similar to Star Valley Ranch occurs in areas zoned recreational, traffic demand on adjacent roadways will increase as a result.

Industrial zoning is established so specific zones can be identified only for industrial uses. Industrial zones are independent of other zones such as rural and mixed zones so conflict doesn't arise between industrial and residential or commercial applications. The amount of traffic that an industrial zone might generate depends on the type of industrial application. Light industrial use typically has less of a traffic impact than high industrial use. Industrial development typically increases the amount of heavy vehicle trips occurring in the area.

The public zone pertains to the large amount of publicly owned land in Lincoln County. According to the Lincoln County Land Use Regulations over half of the land in Lincoln County is managed by state and federal government. Traffic impacts for public zones vary by the type of use that might occur on public lands. Overall, traffic demand impacts associated with publicly zoned land is minor.

2. Overlay Zoning

Overlay zones are more restrictive zones in Lincoln County and these zones prevail as a more restrictive zone when conflict arises with the primary zone. The overlay zones categorized in the Land Use Regulations can be broken down into two overlay zone categories, general and specific overlay zones. These general overlay zones are as follows:

- Airport Overlay Zone
- Floodplain Overlay Zone
- Slope Movement Overlay Zone
- Earthquake Overlay Zone
- Source Water and Well Head Protection Overlay Zone
- Scenic Corridor Zone

These general overlay zones are established and identified to address sensitive land use issues and ensure more stringent compliance. An example of more stringent compliance would be the FEMA guidelines which must be applied to any floodplain overlay zone. No direct roadway transportation affects were identified with these general overlay zones.

Specific overlay zones have a more direct impact on the surrounding cities and townships. Each specific overlay zone is based on an established built up community (exception upper valley and multiple use) and has specific criteria outlined as to what type of zones are allowable within these areas. The following is a list of the established specific overlay zones according to the Land Use Resolution:

- Alpine Community Plan Overlay Zone
- Etna Community Plan Overlay Zone
- Freedom Community Plan Overlay Zone
- Star Valley Ranch Community Plan Overlay Zone
- Thayne Community Plan Overlay Zone
- Upper Valley Community Plan Overlay Zone
- Cokeville Community Plan Overlay Zone
- Commissary Community Plan Overlay Zone
- LaBarge Community Plan Overlay Zone
- Kemmerer Community Plan Overlay Zone
- Opal Community Plan Overlay Zone
- Multiple Use Community Plan Overlay Zone

Each specific overlay zone has established policies. These policies promote the type of development that is allowed to occur within each zone. Additionally, these zones designate which type of land use application is not allowed. This outlined criteria helps establish what type of anticipated transportation demands might result from growth of the area. For additional information pertaining to these overlay zones refer to the Lincoln County Land Use Resolution.

3. Changes in Land Use

As land use changes over time so does the demand on the transportation network. As the population of Lincoln County increases there will be a demand for land use to change. The following is a list of anticipated land use changes that will have an affect on the transportation network.

- Public Zone to Rural Zone
- Rural Zone to Recreational Zone
- Rural Zone to Industrial Zone
- Rural Zone to Mixed Zone

4. Public Zone to Rural Zone

Approximately half of the land in Lincoln County is zoned public. The public land is principally owned by the state of Wyoming and the Federal government. The bulk of this land will likely not change from a public zone. If the land use does change from the public zone to the rural zone traffic demand will increase as a result. However, most rural applications are not major generators of traffic and this potential change in land use will have a minor impact on the roadway network.

5. Rural Zone to Recreational Zone

According to the official zoning maps of Lincoln County a substantial portion of the county is currently zoned rural. Land changing from a rural zone to a recreational zone can have a significant impact on the transportation network. If a large portion of land currently zoned rural changes to a recreational zone and development occurs similar to that of Star Valley Ranch, roadways in the vicinity can expect a high demand of daily vehicle trips during peak seasonal months.

Other recreational zoning specific for recreational activities and tourism attractions will have less of a demand on the roadway network than that of a major land development (similar to Star Valley Ranch). These other developments will likely impose a seasonal demand on the transportation network.

6. Rural Zone to Industrial Zone

Any rural zone that may change into an industrial zone will have an impact on the vicinity roadways where the change might occur. Rural applications such as agricultural and low density residential do not generate significant traffic demand, however industrial applications may generate large amounts of traffic, specifically heavy vehicle traffic. The amount of traffic that may be generated as a result of rural zoning to industrial zoning is highly dependant on the type of development that will occur. Light industrial will create less of a demand on the roadway network and heavy industrial will create more of a demand.

7. Rural Zone to Mixed Zone

The most significant impact to the transportation network is when a rural zone (or any zone) is converted to a mixed zone. Mixed use zoning allows for higher density applications to occur. Development such as high density residential, office and business development, commercial activities and Planned Unit Developments are all major traffic generators and will have the most significant impact on the transportation network. Land use changes from rural to mixed should be carefully monitored as this change will have a significant affect on the vicinity roadways.

Many other combinations can occur where land use will change from one specific zone to another. When any type of public or rural zoned land is converted to industrial, recreational, incorporated, or mixed use there is a strong likelihood that increases in the local transportation network can be anticipated. Specifically when any zone is converted to a mixed zone the amount of development that occurs in this zone is going to have significant impact on the roadways in the vicinity.

8. Conclusion

A significant amount of land is currently being developed in the Lower Valley from rural uses to mixed and recreational uses. Specifically, the town of Alpine has experienced significant growth over the last five years. Additionally Star Valley Ranch, Wyoming has also seen significant growth. The primary development which has occurred in these areas is low to high density residential, which is a result of commuters that work in the Jackson area and live in the Lower Valley.

Based on current growth in Alpine and Star Valley Ranch, it is assumed that more land in the entire Lower Valley is going to convert from a rural use to either a recreational or mixed use. Towns such as Thayne and Etna will also likely see growth similar to what is occurring in Alpine. The growth rates assumed for the 2030 future roadway conditions reflect these anticipated land use changes and were taken into consideration.

The Upper Valley, specifically areas surrounding the city of Afton are also experiencing similar land use changes. This growth is not as significant as what is anticipated to occur in the Lower Valley; however these trends have also been taken into consideration in determining the 2030 future roadway condition growth rates.

All growth rates determined for the 2030 future roadway conditions are noted in Task 2 of this report.

In order to gain a better understanding of how land use changes that would likely occur affect the transportation system a model would need to be created based on existing Traffic Analysis Zones (TAZ), socio-economic data, employment rates, and household rates. This type of analysis was not outlined for this transportation plan.

9. Access Policies and Setback Requirements

Access policies and setback requirements outlined in the Lincoln County Land Use Resolution are clearly defined. Increased setbacks are defined for US 89 however increased setbacks on other state highways are not defined. It is recommended that additional setback criteria be outlined for all state highways in Lincoln County. Additionally, in areas of incorporated cities along major corridors (i.e. Afton, Kemmerer, Alpine) a strict access policy should be implemented to limit the amount of direct access that is granted onto state highway corridors. WYDOT has developed an access control policy and it is recommended that Lincoln County use this policy.

For further information regarding access policy and setback requirements please refer to the Land Use Resolution for Lincoln County, WY.

D. SAFETY ANALYSIS

WYDOT provided crash data for all Lincoln County Roadways from January 2000 to March of 2005. In addition WYDOT provided a copy of the Average State Wide Crash Rates by Functional Classification. An inventory of the crash location, crash cause, crash type, and road conditions was formatted from the WYDOT raw data and is shown in Appendix C. The WYDOT average state wide crash rates by functional classification is also located in Appendix C. WYDOT crash data was used to determine the affects roadway surface conditions, collision type and crash causes that contributed to these accidents. Roads with a high crash incidence and crash rates were identified and similar conditions among crashes at these locations were also identified.

According to the information provided, Lincoln County roads recorded 183 crashes with 53 injury crashes and one fatal crash. The remaining 129 crashes were property damage only crashes (no injuries or fatalities). Of the 183 crashes 87 people were injured. Figures 1-1 through 1-5 represent all the noted crashes according to information obtained from WYDOT.

1. Similar Crash Conditions

Additional analysis was conducted on the county roads which experienced a high crash incidence. All county roads with a high crash incidence were further investigated to determine any similar conditions related to crashes that occurred.

Eleven separate crashes occurred where at least one similar condition was identified. Table 1.5 outlines the roadways where similar crashes occurred, milepost, number of crashes, and the similar conditions that were noted. Icy conditions were observed in more than half of the total similar crashes.

Table 1.5

Roadway	Milepost	No. of Accidents	Similar Conditions
CR 117	1	2	Road Section
CR 122	3	2	Unsafe speed, icy/slushy, road section
CR 123	1	2	Sideswipe, icy
CR 123	1.8	2	Icy, T-intersection
CR 123	2.2	2	Icy, road section
CR 126	3.2	2	Unsafe speed, T-intersection
CR 135	1.1	2	Unsafe speed, icy, T-intersection
CR 137	0.5	2	Angle collision, icy, driveway access
CR 137	0.6	2	Icy, business entrance
CR 137	0.9	2	Road section
CR 340	5	2	Dry, road section

Lincoln County WY Transportation Plan

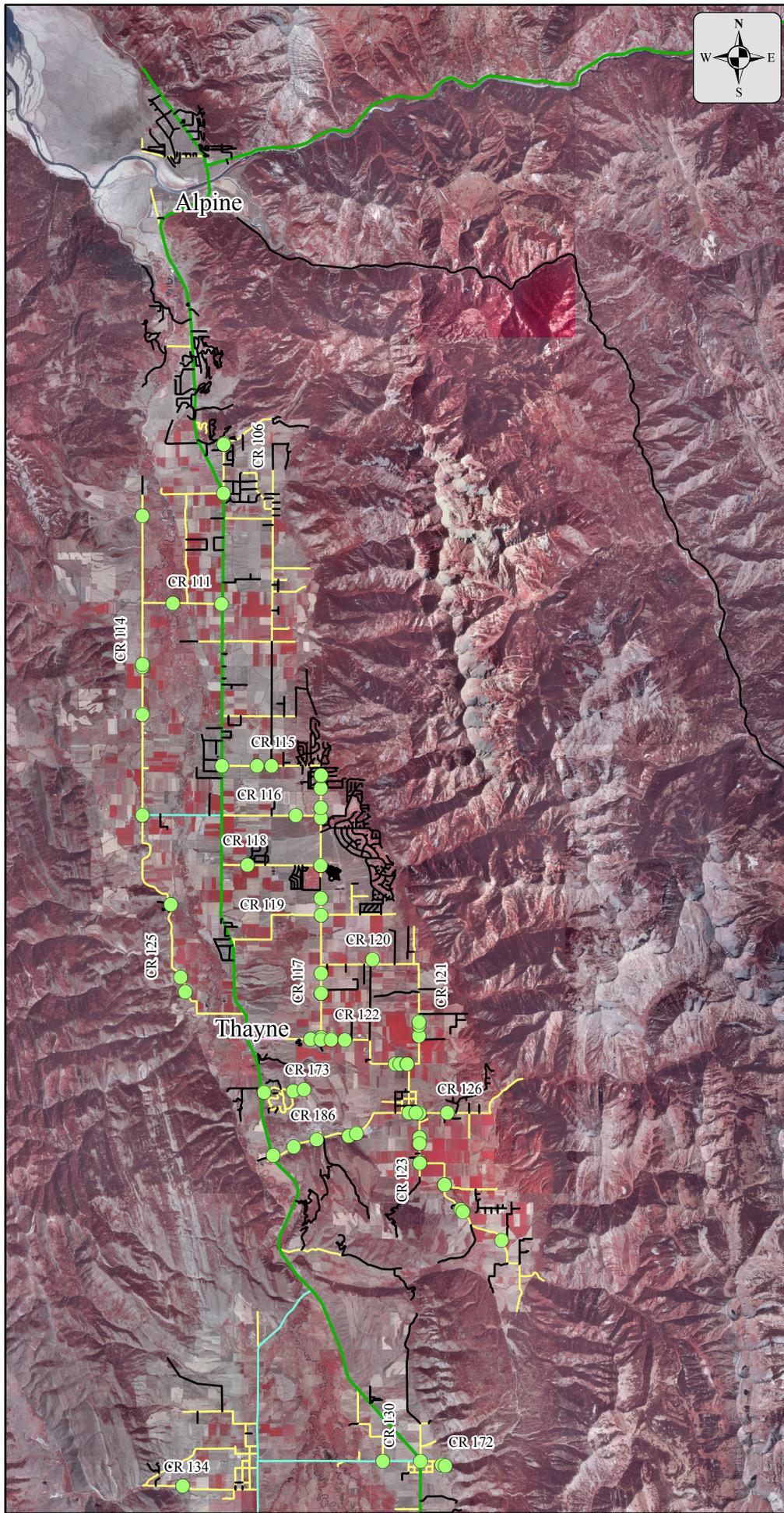
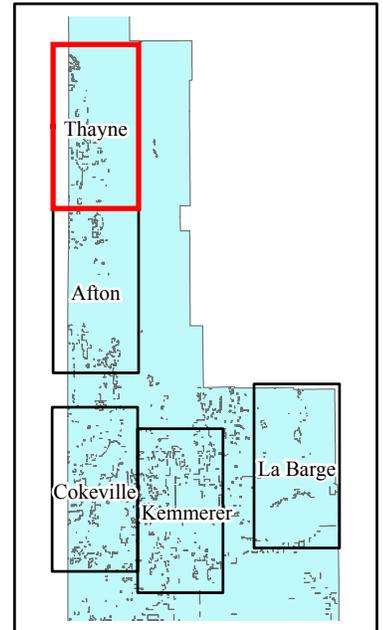
WYDOT Provided Crash Data
2000 - 2005

Figure 1 - 1
Thayne Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Accident Location

Locator Map

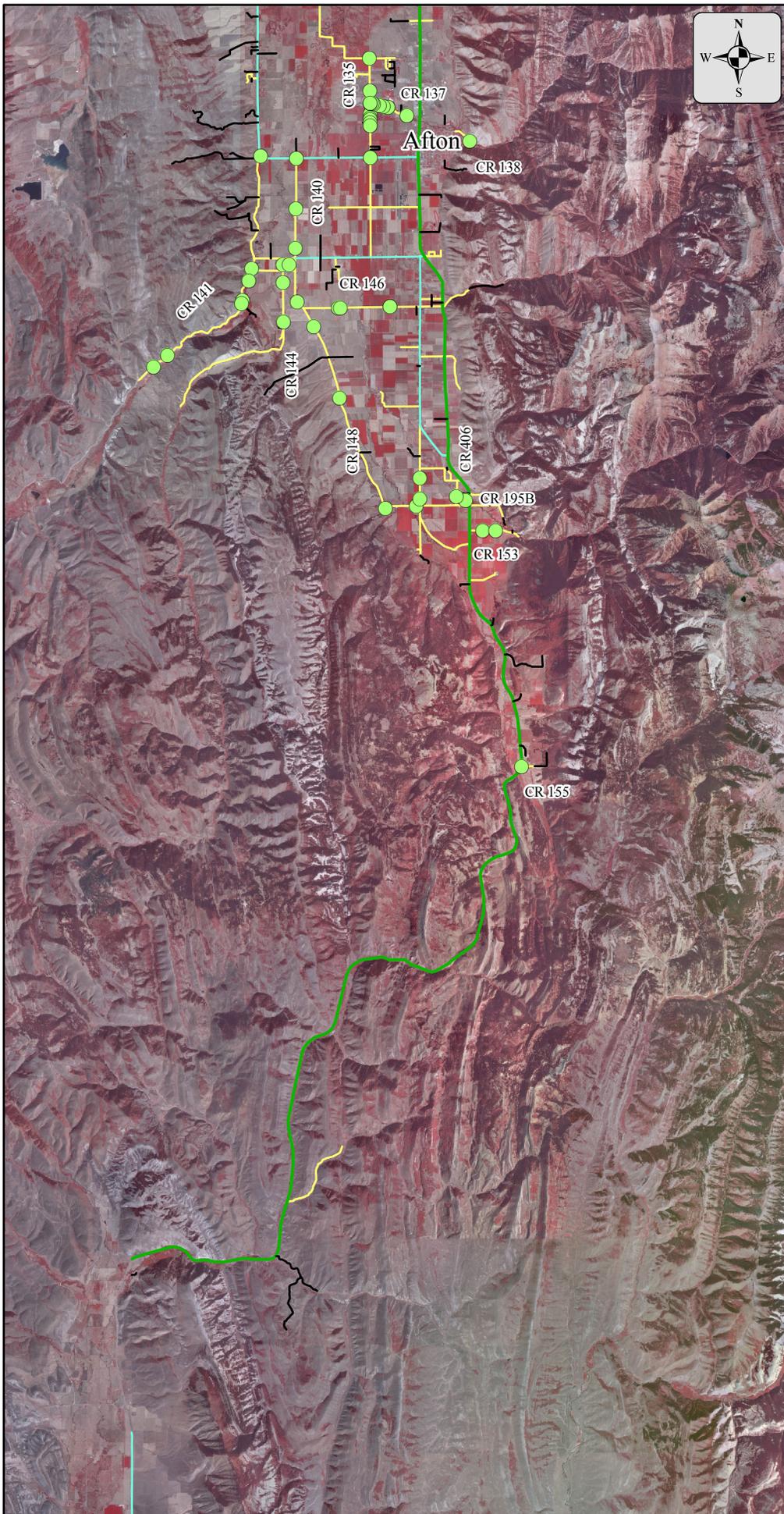


Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

WYDOT Provided Crash Data
2000 - 2005

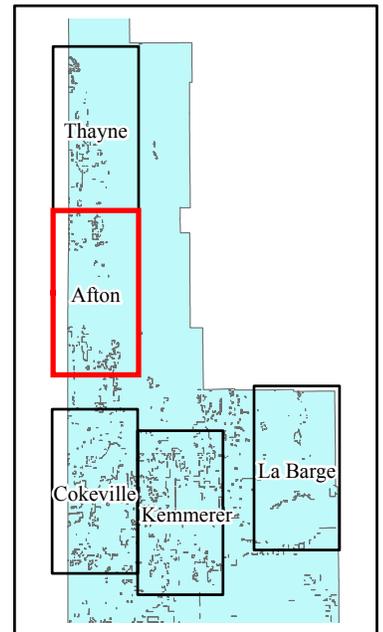
Figure 1 - 2
Afton Area Map



Legend

- County Road
- State Highway
- US Highway
- City Street
- Private Drive
- Accident Location

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

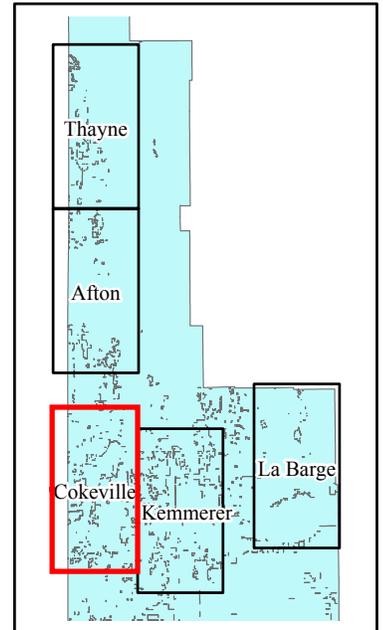
WYDOT Provided Crash Data
2000 - 2005

Figure 1 - 3
Cokeville Area Map

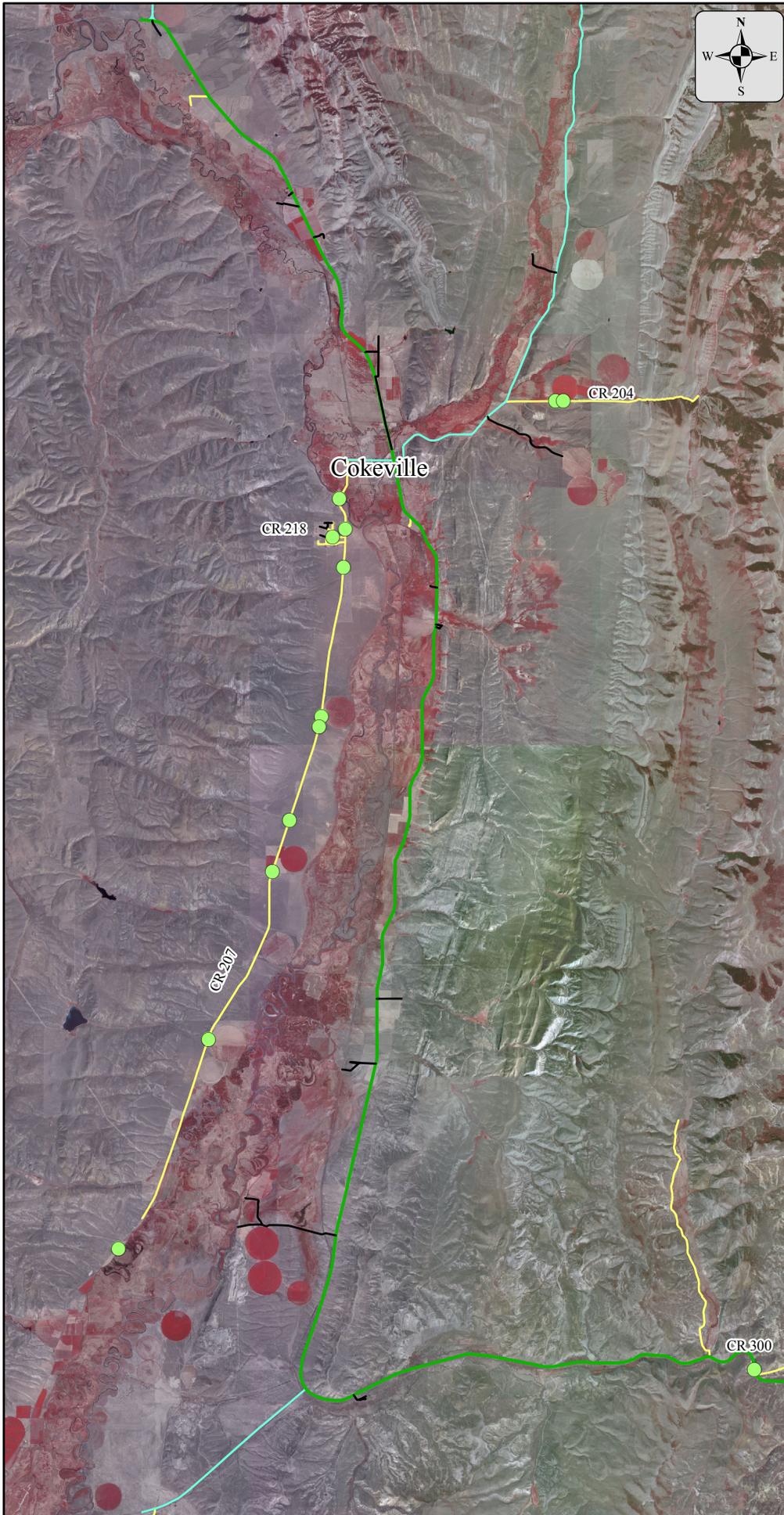
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Accident Location

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

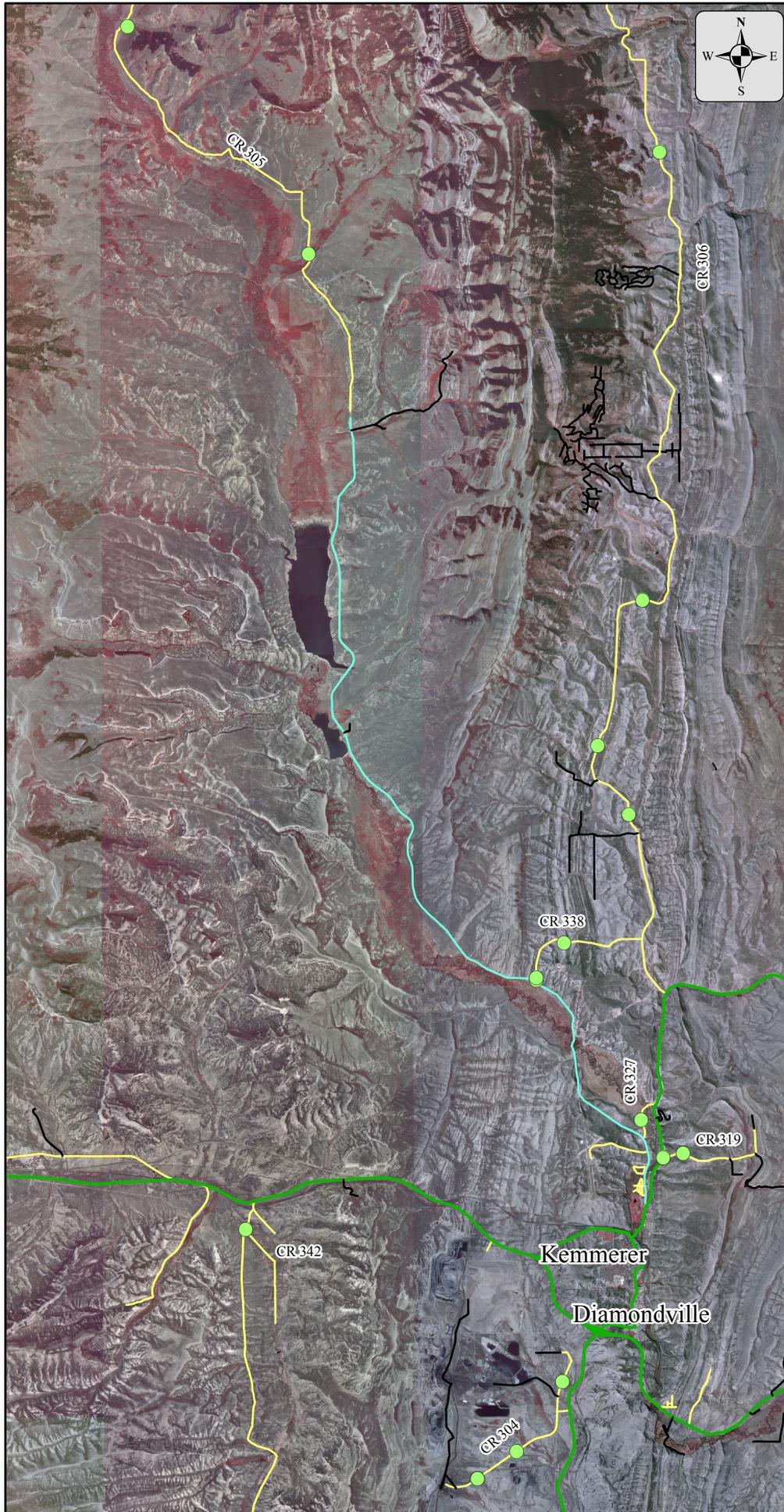
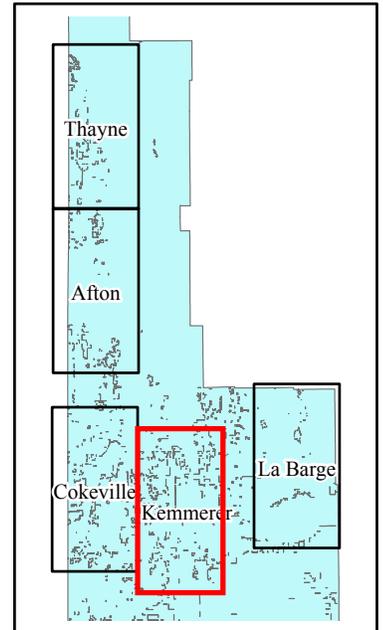
WYDOT Provided Crash Data
2000 - 2005

Figure 1 - 4
Kemmerer Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Accident Location

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

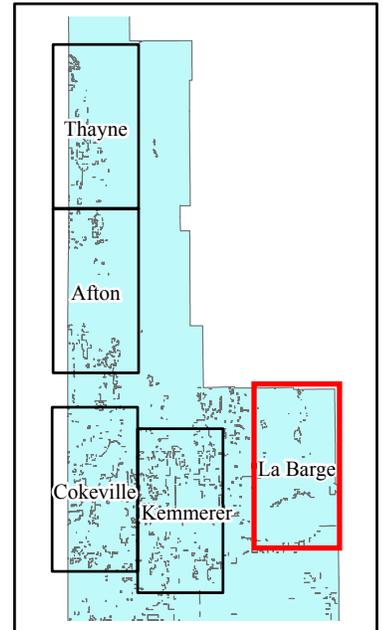
WYDOT Provided Crash Data
2000 - 2005

Figure 1 - 5
La Barge Area Map

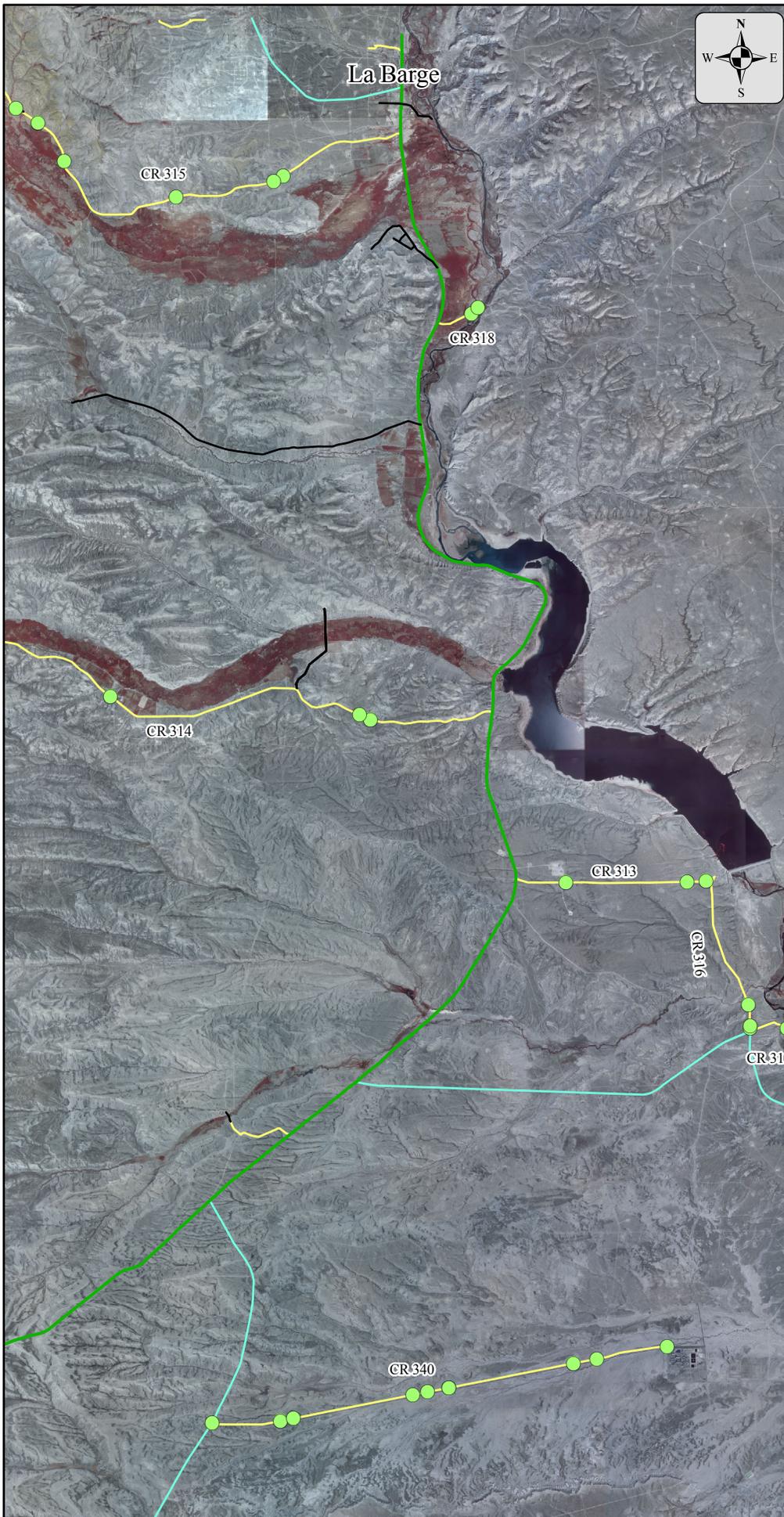
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Accident Location

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



2. Roadway Surface Conditions

Roadway surface conditions were investigated to determine the amount of crashes that occur in adverse or less desirable conditions. Table 1.6 shows the roadway surface conditions at the time of the recorded incident. 51% of the recorded crashes occurred on a dry roadway surface. The remaining 49% of recorded crashes (less 1% unknown conditions) occurred during adverse roadway surface conditions.

Table 1.6

Surface Condition	Times Occurred	Percent of Total
Dry	94	51.4%
Wet	12	6.6%
Icy	59	32.2%
Snowy	13	7.1%
Slushy	2	1.1%
Muddy	1	0.5%
Unknown	2	1.1%

3. Collision Type

Collision Type determines the type of crash involving more than one vehicle. From the 183 crashes 61 crashes involved more than one vehicle. Table 1.7 indicates which type of collision occurred. Of the 61 crashes involving more than one vehicle the majority of incidents were angle collisions.

Table 1.7

Collision Type	Times Occurred	Percent of Total
Head On	5	2.7%
Rear End	7	3.8%
Angle Collision	20	10.9%
Left Turn	10	10.9%
Right Turn	6	5.5%
Sideswipe	13	7.1%
Nothing Reported	122	66.7%

4. Crash Cause (Human Error)

Crash cause indicates the type of human factor and/or error that could have contributed to the crash. An example of a crash cause would be falling asleep, improper lane use, or alcohol. Table 1.8 shows what type of human errors contributed to the crashes on Lincoln County roads. From 2000 to 2005, unsafe speed and inattentive drivers were the major contributing factors for crash cause.

Approximately 34% of the total crashes that occurred in Lincoln County did not report which type of human error may have contributed to the crash.

Table 1.8

Human Error	Times Occurred	Percent of Total
Pedestrian Related	1	0.5%
Alcohol	12	6.6%
Unsafe Speed	49	26.8%
Following too Closely	2	1.1%
Inattentive Driver	33	18.0%
Inexperienced Driver	9	4.9%
Failure to Yield ROW	6	3.3%
Disregard for Traffic Control	2	1.1%
Fell Asleep	1	0.5%
Improper Turn Movement	2	1.1%
Backing Up	1	0.5%
Improper Lane Use	3	1.6%
Not Reported	62	33.9%

No issues regarding setbacks were identified with this safety analysis. Setback requirements are outlined in the Lincoln County, WY Land Use Regulations. Section 6.2 in the Lincoln County Land Use Regulations should be referred to if any potential setback discrepancies arise.

5. High Crash Incidence

Once the WYDOT crash data was formatted roadways were identified that had increased crash occurrences. Out of the 52 county roads identified for analysis 12 experienced a higher frequency of crashes. Table 1.9 indicates the county road, number of crashes and roadway section length (miles). The roadway section length identifies the length of roadway relative to the recorded crashes on that road and indicates the calculated crashes per mile.

CR 137 experienced a large volume of crashes in a short section of road during the survey period. Nine crashes were recorded on CR 137 from milepost (MP) 0.5 to MP 1.0. Two of the crashes occurred at a driveway access, two at a business entrance, one at a T-intersection and the remainder along the road section. Icy conditions existed for six of the eight crashes.

Table 1.9

Roadway	No. of Crashes	Road Section Length (mi)	Crashes/Mile
CR 137	9	0.96	9.38
CR 135	8	2	4.00
CR 122	8	2.5	3.20
CR 123	10	3.18	3.14
CR 126	9	4	2.25
CR 117	11	5.46	2.01
CR 304	5	2.6	1.92
CR 141	8	5.6	1.43
CR 340	10	9.5	1.05
CR 140	8	8.26	0.97
CR 315	6	6.8	0.88
CR 207	10	16.9	0.59

During the survey period CR 123 also experienced a large volume of crashes in a short section of road. Six crashes were reported from MP 1.0 to MP 2.3 on CR 123. Three of the crashes occurred at a T-intersection and three crashes occurred along the road section. Icy conditions existed for all of the recorded crashes on CR 123 from MP 1.0 to MP 2.3.

6. Calculated Crash Rates

Crash rates were calculated for roadway segments identified to have a high crash incidence. Crash rates were evaluated based on the Institute of Transportation Engineers rate per Million Entering Vehicles (MEV). These crash rates were compared to the 2003 WYDOT crash rates, based on roadway classification. Table 1.10 shows crash rates along the identified Lincoln County roadway segments identified to have a high crash incidence. As the table shows, all calculated crash rates for Lincoln County roads exceeded WYDOT averages for rural roadways.

All ADT values used for determining crash rates were obtained from the estimated values based on existing intersection turning movement data located in the capacity analysis section of this report.

Table 1.10 - Calculated Crash Rates

Roadway	Func. Class	No. of Crashes	Road Section Length (mi)	Calculated ADT	Calculated Crash Rate	WYDOT 2003 Average Crash Rate	Over/Under WYDOT Averages
CR 137	Rural Local	9	0.96	840	7.19	0.83	Over WYDOT Average
CR 135	Rural Local	8	2	780	3.31	0.83	Over WYDOT Average
CR 122	Rural Major Collector	8	2.5	1960	1.05	1.58	Under WYDOT Average
CR 123	Rural Minor Collector	10	3.18	320	6.33	1.72	Over WYDOT Average
CR 126	Rural Minor Collector	9	4	760	1.91	1.72	Over WYDOT Average
CR 117	Rural Major Collector	11	5.46	1160	1.12	1.58	Under WYDOT Average
CR 304	Rural Minor Collector	5	2.6	n/a	n/a	1.72	n/a
CR 141	Rural Minor Collector	8	5.6	1020	0.90	1.72	Under WYDOT Average
CR 340	Rural Major Collector	10	9.5	350	1.94	1.58	Over WYDOT Average
CR 140	Rural Minor Collector	8	8.26	10540	1.16	1.72	Under WYDOT Average
CR 315	Rural Minor Collector	6	6.8	90	6.32	1.72	Over WYDOT Average
CR 207	Rural Minor Collector	10	16.9	330	1.16	1.72	Under WYDOT Average

The similar crash condition analysis identified certain crashes that occurred more than once at a specific location on the county road network. These roadway sections and intersections may warrant a site specific crash study if crashes continue to occur in these locations. All details regarding recommendations for site specific crash studies is located in the weakness and high stress points section of this transportation plan.

The Institute of Transportation Engineers (ITE) Traffic Engineering Handbook contains a section regarding traffic-data analysis. Table 7-13, Traffic Safety-Related Accident Countermeasure Ideas, lists possible crash patterns, probable causes for and possible countermeasures for crashes. Table 7-14, Accident Pattern Countermeasures, discusses crash cause, potential studies, and possible safety enhancements based on a specific crash type. If site specific studies are conducted for a specific roadway section or intersection it is recommended that ITE Table 7-13 and 7-14, which is located in Appendix E, should be used as a means for potential countermeasures.

E. EXISTING TRAFFIC ANALYSIS

1. Traffic Data Collection

A total of fifty five intersections and/or roadway segments were identified for analysis. Of the fifty five intersections and segments, forty one were identified for field traffic counts. Thirty eight were intersection counts and the remaining three were roadway segment counts. Those intersections that were not counted as part of this study involved state highways intersecting county roads and were counted by WYDOT through their regular traffic counting processes. This information was obtained from WYDOT and used in the analysis. The intersections counted as part of this transportation plan are listed in Table 1.11. Included in the list is the count location by name (county road number is included where applicable), count type and the general vicinity where the count took place.

2. Intersection Counts

The thirty eight intersection counts were performed on weekdays, Monday through Thursday and excluded weeks with holidays. The intersection counts occurred from early June and were completed by the beginning of August. The PM peak hour was counted at each intersection, with the exception of the intersection of Swift Creek Lane (CR 137) and Allred Lane (CR 135) which was conducted during the AM and PM peak hour.

A photo was taken for each intersection counted and the following outlined criteria were identified and established:

- Intersection diagram, including
 - street names
 - north arrow
 - lane configuration
 - lane movements
 - roadway widths
 - turn bay lengths
 - offset to physical obstructions
 - speed limits
- Setback problems with structures
- Ped/Bike use at intersections during peak hour
- Vertical sight obstructions
- Horizontal sight obstructions
- Congestion
- Unsafe roadway conditions
- Traffic and safety problems

Heavy vehicles were recorded independently during each count to determine the percentage of heavy vehicles using each identified intersection. A copy of the raw traffic collected data, formatted traffic count data (excel format), an intersection diagram, and a photo of each intersection is included in Appendix A.

Fourteen additional intersections were identified by WYDOT and Lincoln County for analysis. All necessary count data at these intersections was provided by WYDOT and intersection diagrams for each of the fourteen identified intersections were developed. These are also included in Appendix A.

Table 1.11 – Traffic Count Locations

Count Location	Count Type	Area
Bitter Creek & Smoot-Afton (148)	Intersection	Smoot
Cottonwood Drive (164s) & (406)	Intersection	Smoot
Dry Creek (146) & Bitter Creek (140)	Intersection	Fairview
SR-236 & Bitter Creek (140)	Intersection	Fairview
Fairview Spring Creek (144) & Fairview South (143)	Intersection	Fairview
Fairview South (143) & Crow Creek (141)	Intersection	Fairview
SR-238 & Allred (135 & 198)	Intersection	Afton
SR-238 & Crow Creek (141)	Intersection	Fairview
Swift Creek Lane (137) & Allred (135)	Intersection	Afton
Swift Creek Lane (137) & Allred (135)	Intersection	Afton
(136) & Allred (135)	Intersection	Afton
Grover Park & Fifth Street	Intersection	Grover
Auburn-Tygee (134) & Stump Creek (133)	Intersection	Auburn
Main Street & First West Street	Intersection	Auburn
(131) & (132)	Intersection	Auburn
Willow Creek Canyon (177) & Bedford-Turnerville (123)	Intersection	Turnerville
Heiner-Suter (127) & Bedford-Turnerville (123)	Intersection	Turnerville
Strawberry Creek (126) at Strawberry Street	Dual-Intersection	Bedford
Strawberry Creek (126) & Thayne Bedford (122)	Dual-Intersection	Bedford
Thayne Bedford (122) & Bedford North (121)	Intersection	Bedford
Thayne Bedford (122) & Muddy Spring (117)	Intersection	Thayne
Lost Creek (120) & Muddy Spring (117)	Intersection	Thayne
(119) & Muddy Spring (117)	Intersection	Star Valley
Cedar Creek (118) & Muddy Spring (117)	Intersection	Star Valley
Muddy Spring (117) & Vista Drive	Intersection	Star Valley
SR-239 & State Line (164)	Intersection	Freedom
SR-34 (Idaho) & State Line (164)	Intersection	Freedom
Creamery (111) & State Line (164)	Intersection	Etna
Sanderson Lane (107) & East Etna (110)	Intersection	Etna
Bridle Trail & Stewart Trail (106)	Intersection	Etna
Pine Creek & SR-232	Intersection	Cokeville
Hams Fork Rd (305)	Segment	Kemmerer
Pomeroy Basin Rd. & Gomer Rd.	Intersection	Kemmerer
Pomeroy Basin Rd. & Commesary Ridge	Intersection	Kemmerer
Shute Creek (240)	Segment	Kemmerer
(341) & (342)	Dual-Intersection	Kemmerer
Twin Creek (328) & (342)	Dual-Intersection	Kemmerer
Fontenelle North (316)	Segment	Kemmerer
Taylor & CR 207	Dual-Intersection	Cokeville
Valley View & CR 207	Dual -Intersection	Cokeville
SR-372 & (316) & (311)	Intersection	Fontenelle
(315) & Looney Drive	Intersection	LaBarge
US-89 & SR-236	Intersection	Fairview
US-89 & SR-238	Intersection	Afton
US-89 & SR-237	Intersection	Grover
US-89 & SR-238 (north)	Intersection	Turnerville
US-89 & Strawberry Creek (126)	Intersection	Bedford
US-89 & (173s)	Intersection	Thayne
US-89 & Spring Creek Rd. (119)	Intersection	Thayne
US-89 & (118)	Intersection	Freedom
US-89 & Prater Canyon Rd. (116)	Intersection	Freedom
US-89 & Creamery (111)	Intersection	Etna
US-89 & Sanderson Lane (107)	Intersection	Etna

Table 1.11 – Traffic Count Locations (Con’t)

Count Location	Count Type	Area
US-89 & (108) & (106)	Intersection	Etna
US-89 & McNeal Power Plant (104)	Intersection	Alpine
US-89 & US-26	Intersection	Alpine

3. Segment Counts

Traffic counts were conducted on three roadway segments: Ham’s Fork Road (CR 305), Fontenelle North (CR 316) and Shute Creek (CR 340).

A one week segment count was conducted on Ham’s Fork Road, (CR 305) approximately 2 miles before the roadway changes from SR 233 to Ham’s Fork Road.

Fontenelle North, (CR 316), was counted 1.5 miles north of the intersection with SR (State Road) 372. Because this roadway is surfaced with gravel, a supplemental count was conducted to ensure accurate results. Because a gravel surface is more flexible the potential for a car to not register as it passes over the tube counter is more likely. Comparison of the supplemental count, which was conducted by hand over the course of one hour with the hose counter, verified that all traffic crossing this location was being recorded. A one-day segment count was performed at Fontenelle North.

Shute Creek, (CR 340), was set up approximately 2 miles east of the intersection with SR 240. A one-week segment count was conducted at this location. All field count information is located in Appendix B.

F. CAPACITY ANALYSIS

Thirty eight intersections were identified for traffic data collection. These intersections along with an additional fourteen intersections, all located along the US 89 corridor, were also identified for capacity analysis to assess existing Level of Service (LOS).

The Highway Capacity Manual 2000 (HCM) defines Level of Service as, “A qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience”.

The HCM clearly defines six LOS categories that define these operational characteristics within a traffic stream. LOS A, thru LOS F, represents the optimum operating condition thru the worst operating condition. Table 1.12 below represents each of the six operational LOS categories based on delay for Two-Way Stop Controlled (TWSC) intersections. Please note that safety is not included as a variable to establish LOS.

Table 1.12 - Level of Service Criteria for TWSC Intersections

Level of Service	Average Control Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35.50
F	>50

All-Way Stop Controlled (AWSC) intersection delay criteria are similar to TWSC intersections. The established delay noted for TWSC intersections in Table 1.12 is also the criteria for AWSC intersections according to the HCM.

1. Intersection Control

Fifty two intersections were identified for analysis. Of these 52 intersections 26 use a One-Way Stop Control, 12 use a TWSC, 8 use a One-Way Yield Control, 2 use a Two-Way Yield, 2 used an AWSC, and the remaining two intersections did not have any traffic control.

For purposes of this transportation plan, all intersections with Yield or No Control were analyzed as Stop Control intersections. All intersections were analyzed using Highway Capacity Software (HCS+). HCS+ does not have analysis tools for Yield Controlled intersections.

2. Factors for Capacity

All heavy vehicle percentages and Peak Hour Factors (PHF) were determined from field traffic counts conducted on the 39 intersections. All determined PHF's and heavy vehicle percentages are located in Appendix B. A PHF is a measure of traffic demand fluctuation during the peak hour. The percentage of heavy vehicles at an intersection can affect the LOS and therefore is necessary input for any type of capacity analysis.

A default PHF of 0.88 was used for intersections where a field investigation was not either available or evident. A default percent heavy vehicle of 4% was also used for intersections where a relative value could not be determined. All intersections provided by WYDOT used these default values.

3. Level of Service

Table 1.13 shows the determined LOS for identified intersections within Lincoln County. Table 1.13 lists the intersection, traffic control type, LOS and delay that can be anticipated for each leg of the intersection based on current roadway conditions and traffic volumes.

In Table 1.13 note that any travel legs with a dash mark (-) indicates traffic volumes were so low the HCS software would not calculate a control delay or LOS. These travel legs experience essentially no delay. Also note that any travel legs which have an “n/a” means no corresponding travel lanes exist for that leg. This is primarily a result of the numerous T-intersections that exist in the county.

The only intersection identified for both an AM and PM capacity analysis was the intersection of Swift Creek Lane (CR 137) and Allred Lane (CR 135). All other capacity analysis for each intersection is based solely on the PM peak hour.

For each intersection noted in Table 1.13 the leg which is highlighted in bold indicates the largest control delay for the intersection.

According to HCM criteria for TWSC intersections “LOS is not defined for the overall intersection”, however for purposes of this study it has been assumed that the largest delay evaluated from the analysis will govern as the determined delay for each identified intersection. All 2005 existing roadway condition intersection capacity analysis is located in Appendix B.

Table 1.13 – Intersection Level of Service

Intersections	Traffic Control	2005 Existing		2005 Existing		2005 Existing		2005 Existing	
		EB	EB	WB	WB	NB	NB	SB	SB
		LOS	Delay(s)	LOS	Delay(s)	LOS	Delay(s)	LOS	Delay(s)
Bitter Creek & Smoot-Afton (148)	2-way yield	A	7.2	A	7.3	A	8.5	A	8.8
Cottonwood Dr. (164s) & (140)	1-way yield	-	-	A	7.3	A	8.7	n/a	n/a
Dry Creek (146) & Bitter Creek (140)	1-way stop	n/a	n/a	A	8.5	-	-	A	7.3
SR-236 & Bitter Creek (140)	All-way stop	A	7.3	A	7.5	A	6.9	A	7.2
Fairview Spring Creek (144) & Fairview South (143)	2-way stop	A	7.5	A	7.5	A	9.1	A	9.2
Fairview South (143) & Crow Creek (141)	1-way yield	n/a	n/a	A	8.7	-	-	A	7.3
SR-238 & Allred (135 & 198)	2-way stop	A	7.4	A	7.3	A	9.3	A	9.7
SR-238 & Crow Creek (141)	1-way stop	-	-	A	7.4	A	9.0	n/a	n/a
Swift Creek Lane (137) & Allred (135) AM Peak	1-way stop	n/a	n/a	A	9.2	-	-	A	7.4
Swift Creek Lane (137) & Allred (135) PM Peak	1-way stop	n/a	n/a	A	9.5	-	-	A	7.4
(136) & Allred (135)	2-way stop	A	7.3	A	7.2	A	8.5	A	8.9
Grover Park & Fifth Street	1-way stop	-	-	A	7.2	-	-	n/a	n/a
Auburn-Tygee (134) & Stump Creek	1-way stop	A	7.3	-	-	n/a	n/a	A	8.6
Main Street & First West Street	2-way yield	A	9.1	A	9.2	A	7.3	A	7.3
(131) & (132)	1-way yield	A	7.3	A	7.3	A	8.9	A	9.1
Willow Creek Canyon (177) & Bedford-Turnerville (123)	1-way yield	n/a	n/a	A	8.4	-	-	A	7.2
Heiner-Suter Lane (127) & Bedford-Turnerville (123)	1-way stop	n/a	n/a	A	8.6	-	-	A	7.3
Strawberry Creek (126) at Strawberry Street	1-way yield	A	7.3	-	=	n/a	n/a	-	-
Strawberry Creek (126) & Thayne Bedford (122)	1-way stop	A	7.3	-	-	n/a	n/a	A	9.1
Thayne Bedford (122) & Bedford North (121)	1-way stop	-	-	A	7.4	A	8.9	n/a	n/a
Thayne Bedford (122) & Muddy String	1-way stop	A	7.4	A	7.4	B	11.0	A	9.0
Lost Creek (120) & Muddy String	1-way stop	n/a	n/a	A	9.3	-	-	A	9.3
(199) & Muddy String (117)	2-way stop	A	9.4	A	9.8	A	7.4	A	7.4
Cedar Creek (118) & Muddy String	2-way stop	B	10.0	B	10.	A	7.4	A	7.3
Muddy String (117) & Vista Drive	1-way stop	n/a	n/a	A	9.4	-	-	A	7.4
SR-239 & State Line (164)	1-way stop	n/a	n/a	A	9.0	-	-	A	7.4
SR-34 (Idaho) & State Line (164)	1-way stop	A	7.3	A	7.4	A	9.3	A	9.2
Creamery (111) & State Line (114)	All-way stop	A	6.7	A	7.4	A	6.8	A	7.4
Sanderson Lane (107) & East Etna (110)	1-way yield	A	8.6	n/a	n/a	A	7.2	-	-
Bridle Trail & Stewart Trail (106)	1-way stop	n/a	n/a	A	8.7	-	-	A	7.3
Pine Creek & SR 232	1-way stop	n/a	n/a	A	7.4	A	9.1	A	9.3
Hams Fork Rd (305)	Segment								

Table 1.13 – Intersection Level of Service (Con't.)

Intersections	Traffic Control	2005 Existing		2005 Existing		2005 Existing		2005 Existing	
		EB	EB	WB	WB	NB	NB	SB	SB
		LOS	Delay(s)	LOS	Delay(s)	LOS	Delay(s)	LOS	Delay(s)
Pomeroy Basin Rd. & Gomer Rd.	1-way yield	A	8.3	n/a	n/a	A	7.2	-	-
Pomeroy Basin Rd. & Commissary Ridge	1-way yield	A	7.2	-	-	A	9.0	A	9.0
Chute Creek (340)	Segment								
(341) & (342)	No Control	n/a	n/a	-	-	-	-	A	7.3
Twin Creek (328) & (342)	1-way stop	n/a	n/a	-	-	-	-	A	7.3
Fontenelle North (316)	Segment								
Taylor & CR 207	1-way stop	A	8.9	n/a	n/a	A	7.4	-	-
Valley View & CR 207	1-way stop	A	8.7	-	-	A	7.3	-	-
SR-732 & (316) & (311)	2-way stop	8.6	A	9.0	A	A	7.4	A	7.3
(315) & Looney Drive	1-way stop	A	7.2	-	-	n/a	n/a	A	8.6
US089 & SR-236	2-way stop	B	11.2	A	9.2	A	7.8	A	7.5
US-89 & SR-238	1-way stop	C	15.5	n/a	n/a	A	8.5	-	-
US-89 & SR-237	2-way stop	A	9.6	B	12.0	A	7.8	A	7.7
US-89 & SR-238 (North)	1-way stop	B	11.3	n/a	n/a	A	7.7	-	-
US-89 & Strawberry Creek (126)	2-way stop	B	12.7	B	11.7	A	7.7	A	7.7
US-89 & (173s)	1-way stop	n/a	n/a	B	10.3	-	-	A	7.7
US-89 & Spring Creek Rd. (119)	No Control	n/a	n/a	B	11.1	-	-	A	7.7
US-89 & (118)	1-way stop	n/a	n/a	B	10.7	-	-	A	7.6
US-89 & Prater Canyon Rd. (116)	2-way stop	B	10.6	B	12.8	A	7.9	A	7.5
US-89 & Creamery (111)	1-way stop	B	10.6	n/a	n/a	A	7.9	-	-
US-89 & Sanderson Lane (107)	2-way stop	-	-	B	11.1	A	7.8	A	7.5
US-89 & (108) & (106)	2-way stop	B	11.3	B	11.7	A	8.0	A	7.5
US-89 & McNeel Power Plan (104)	1-way stop	-	-	n/a	n/a	A	8.1	-	-
US-89 & US-26	1-way stop	n/a	n/a	B	14.1	-	-	A	7.6

For AWSC intersections, an overall delay is identified for the intersection. Two of the intersections studied as part of this plan have existing AWSC configuration. Table 1.14 indicates the overall intersection delay that can be anticipated for both AWSC intersections:

Table 1.14 - LOS for AWSC intersections

Intersections	2005 Existing	
	Intersection	
	LOS	Delay(s)
SR-236 & Bitter Creek (140)	A	7.3
Creamery (11) & State Line (114)	A	7.2

4. Capacity Results

Most Of the 38 intersections identified for traffic counting operated at LOS B or better. The most significant delay was observed for roadways that intersect with US 89. One intersection was predicted to operate at LOS A, 12 intersections were anticipated to operate at LOS B, and one intersection was identified to function at LOS C for the existing 2005 traffic volumes. The intersection of US 89 & SR-238 located in the City of Afton was noted as having the largest delay. The eastbound traveling traffic can expect a delay of approximately 15.5 seconds at LOS C.

In Figures 1-6 through 1-18, each intersection analyzed for capacity is identified and the corresponding LOS is indicated in the figure.

According to the results of the analysis, no capacity related improvements have been identified for the 2005 existing roadway traffic conditions.

Lincoln County WY Transportation Plan

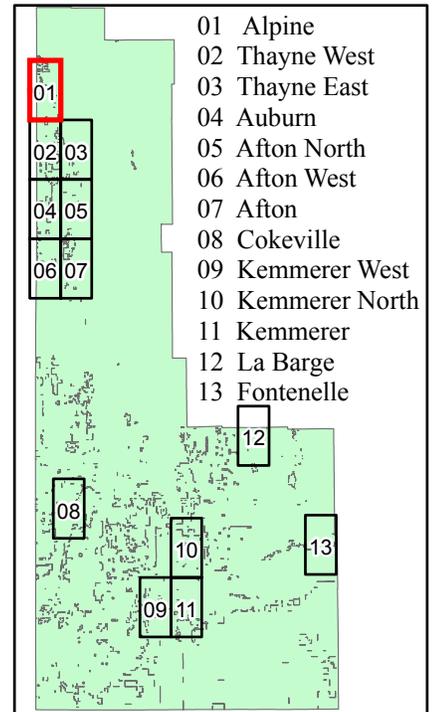
2005 Existing Condition Intersection Level of Service

Figure 1 - 6
Alpine Area Map

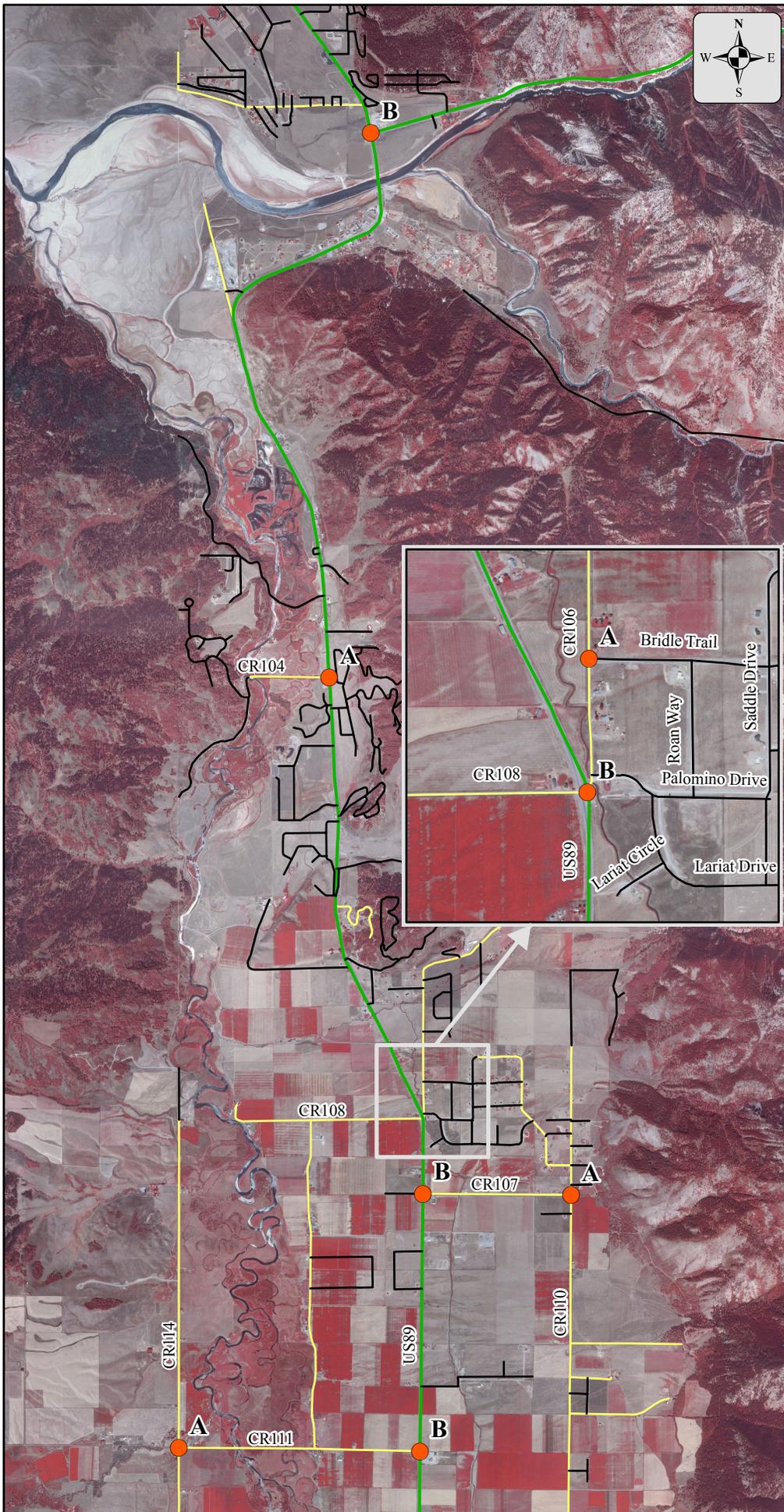
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

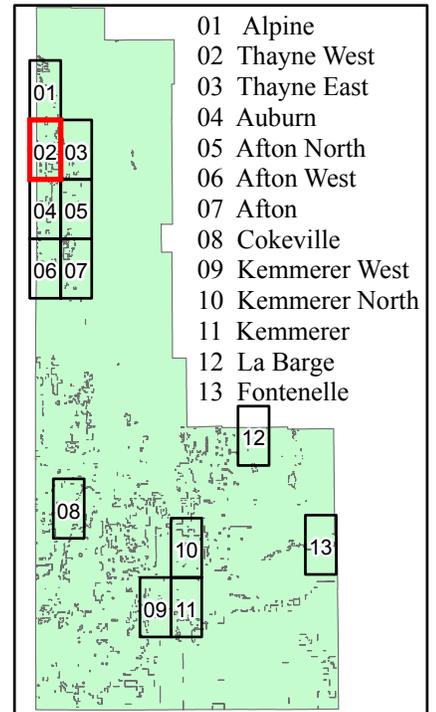
2005 Existing Condition Intersection Level of Service

Figure 1 - 7
Thayne West Area Map

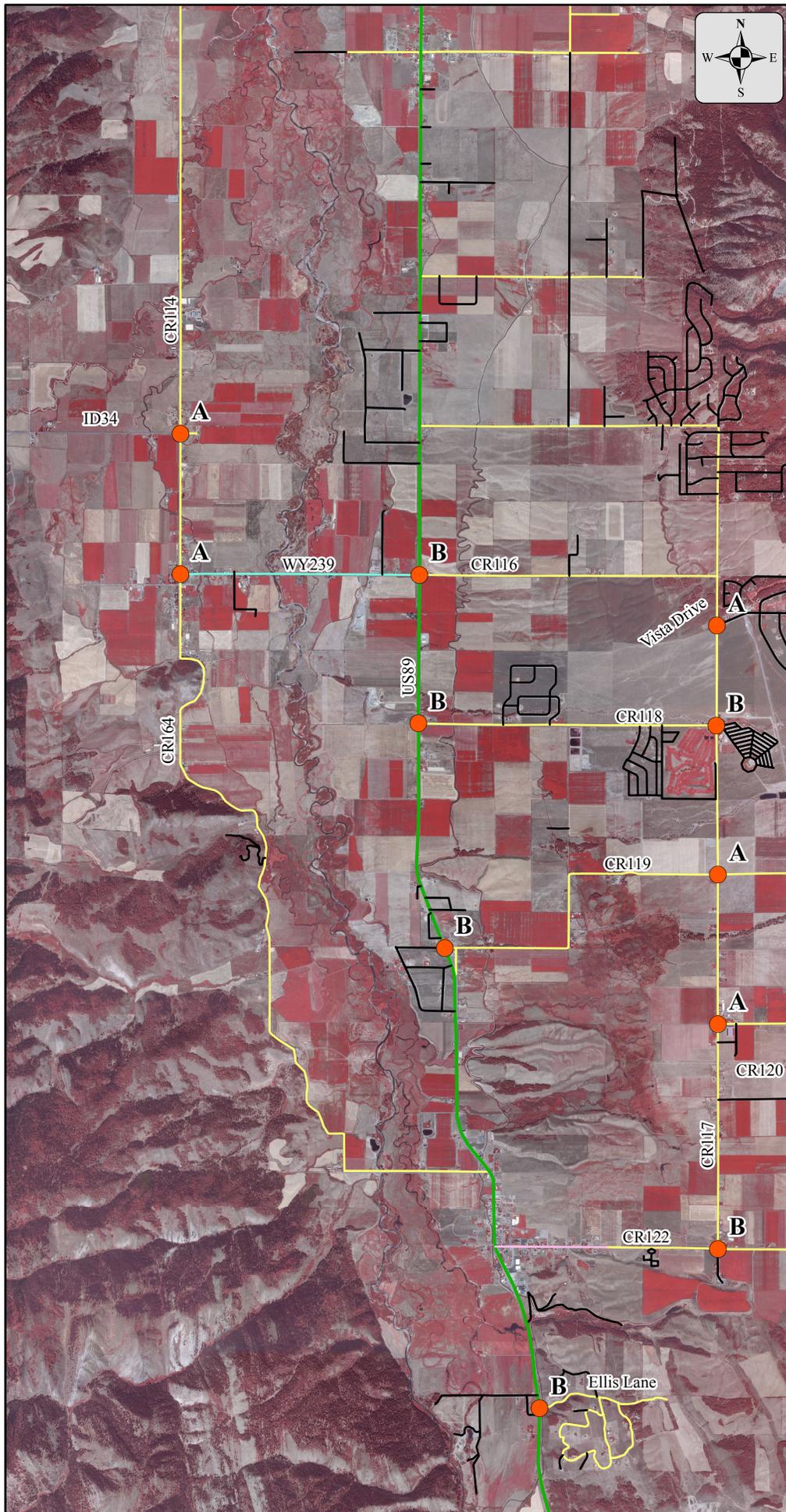
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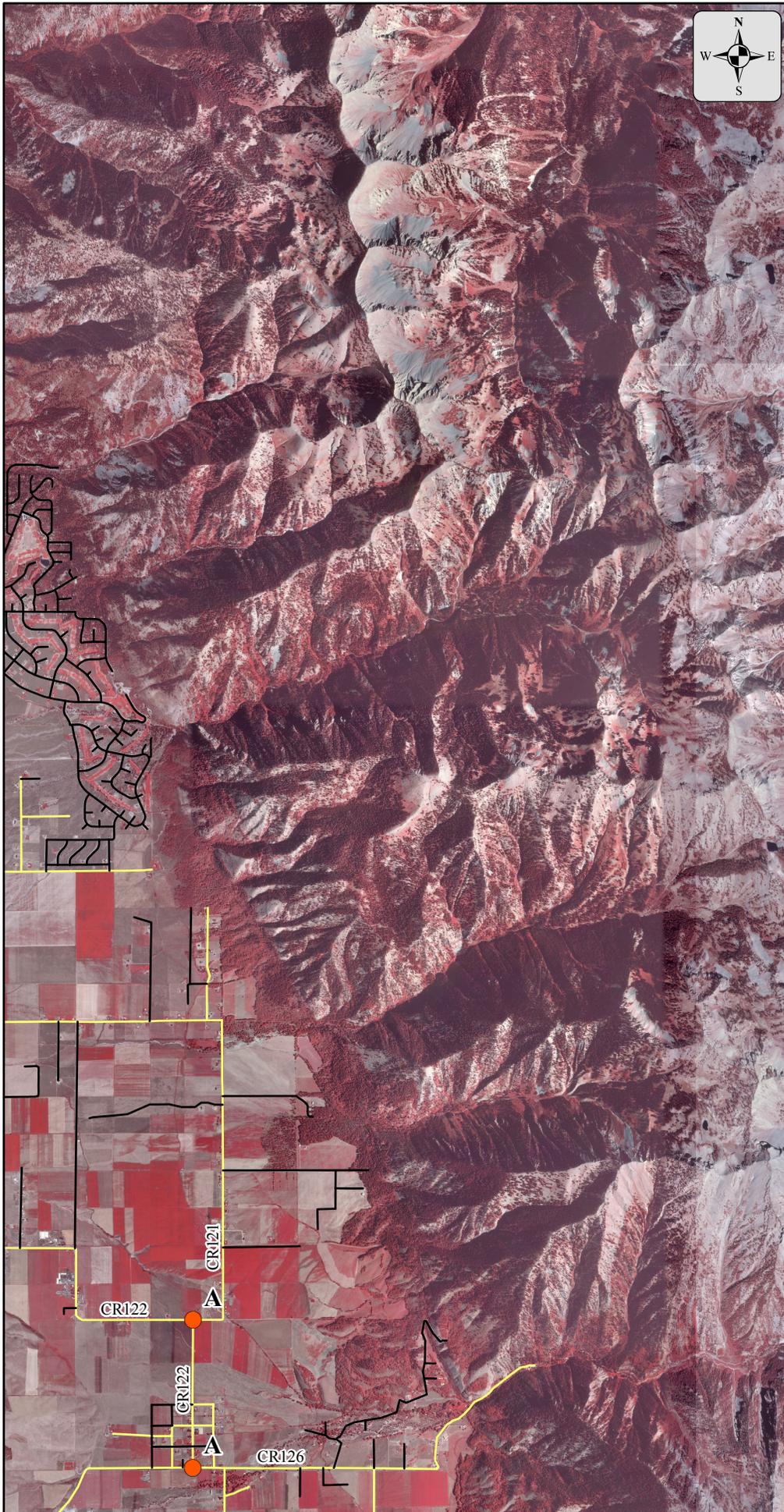
-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.





Lincoln County WY Transportation Plan

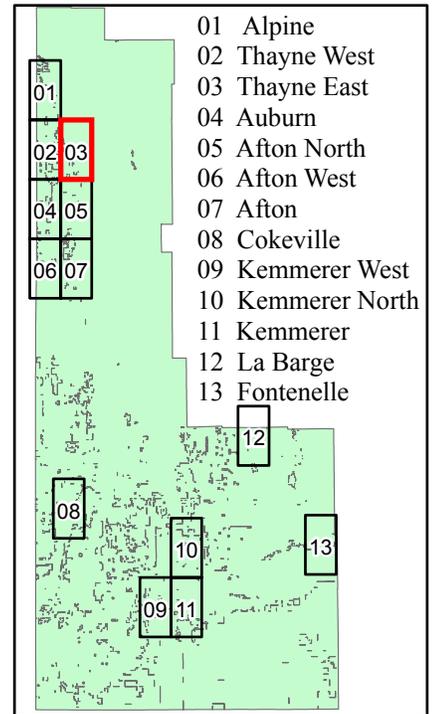
2005 Existing Condition Intersection Level of Service

Figure 1 - 8
Thayne East Area Map

Legend

- County Road
- State Highway
- US Highway
- City Street
- Private Drive
- Level of Service

Locator Map



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Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

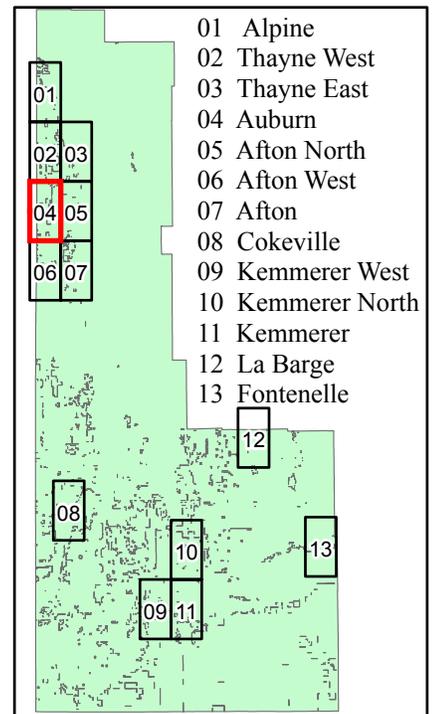
2005 Existing Condition Intersection Level of Service

Figure 1 - 9
Auburn Area Map

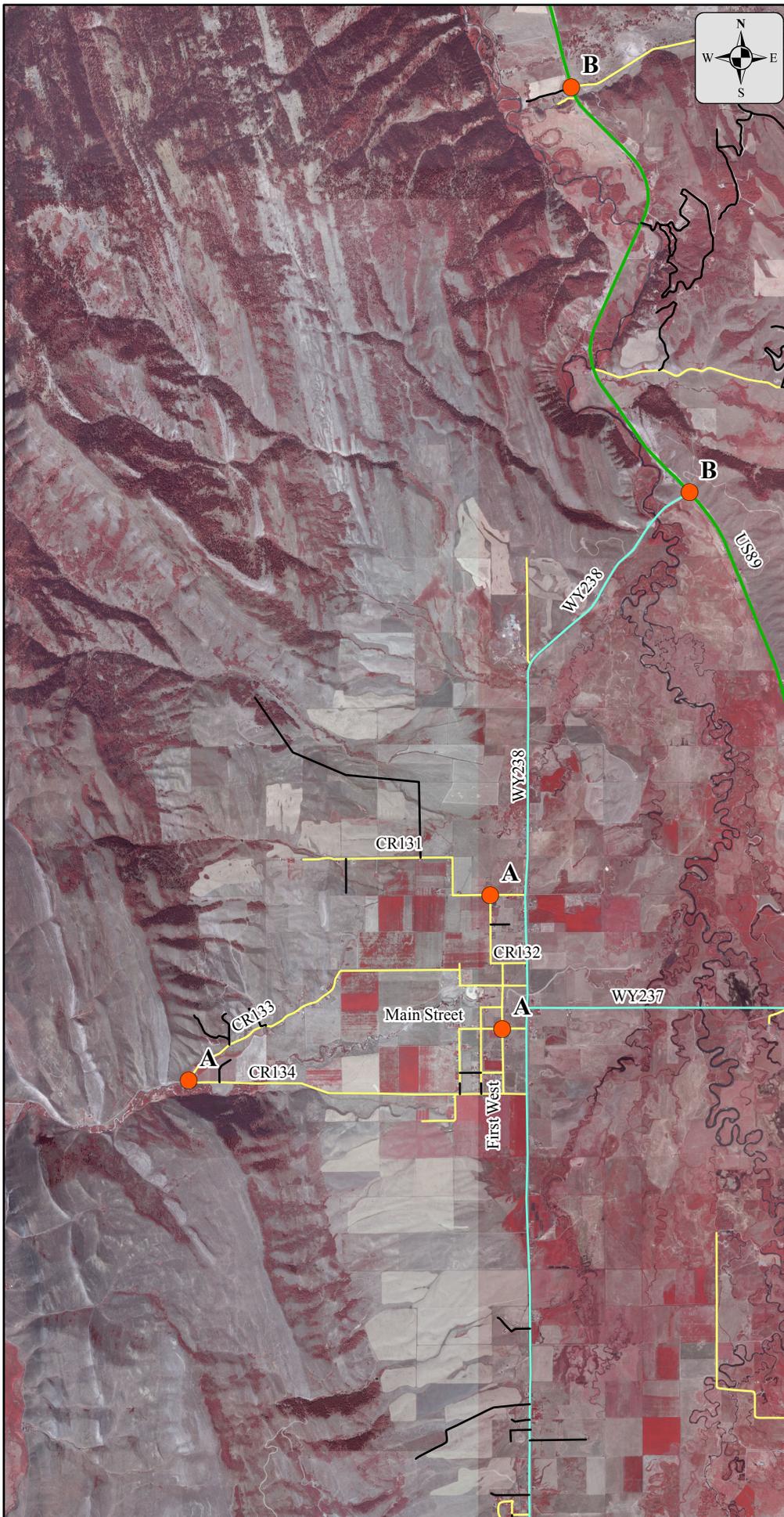
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

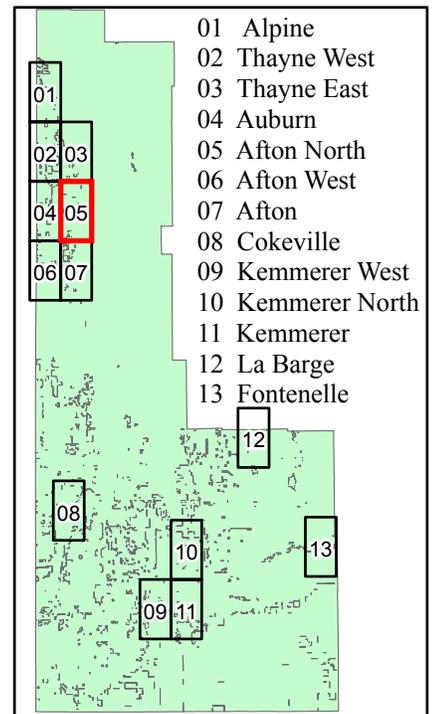
2005 Existing Condition Intersection Level of Service

Figure 1 - 10
Afton North Area Map

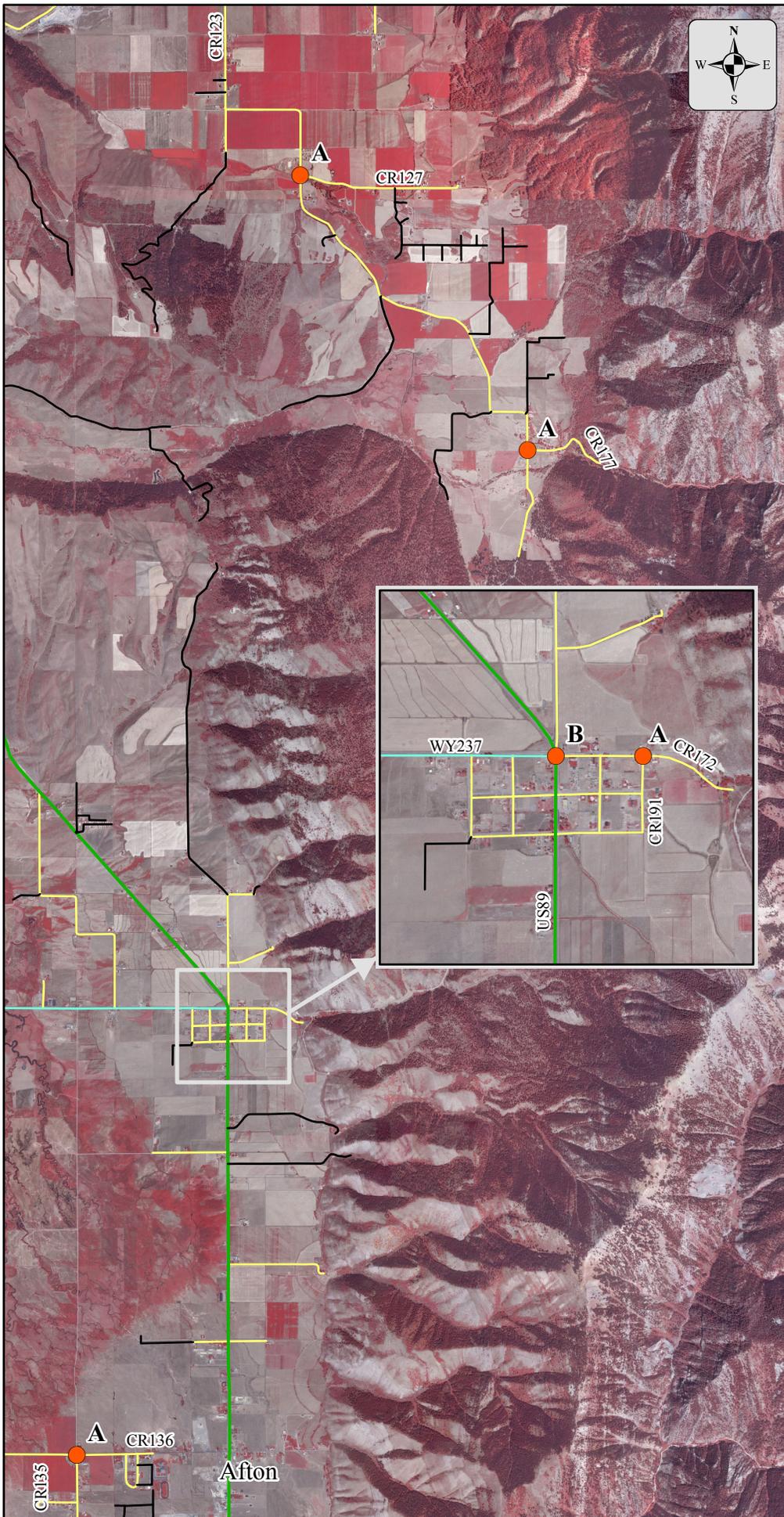
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

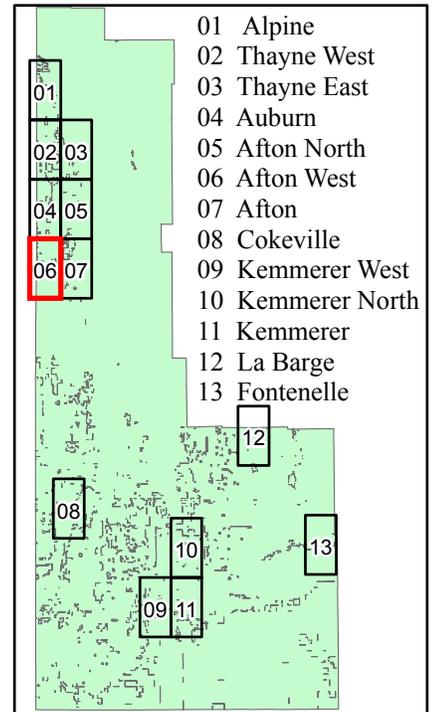
2005 Existing Condition Intersection Level of Service

Figure 1 - 11
Afton West Area Map

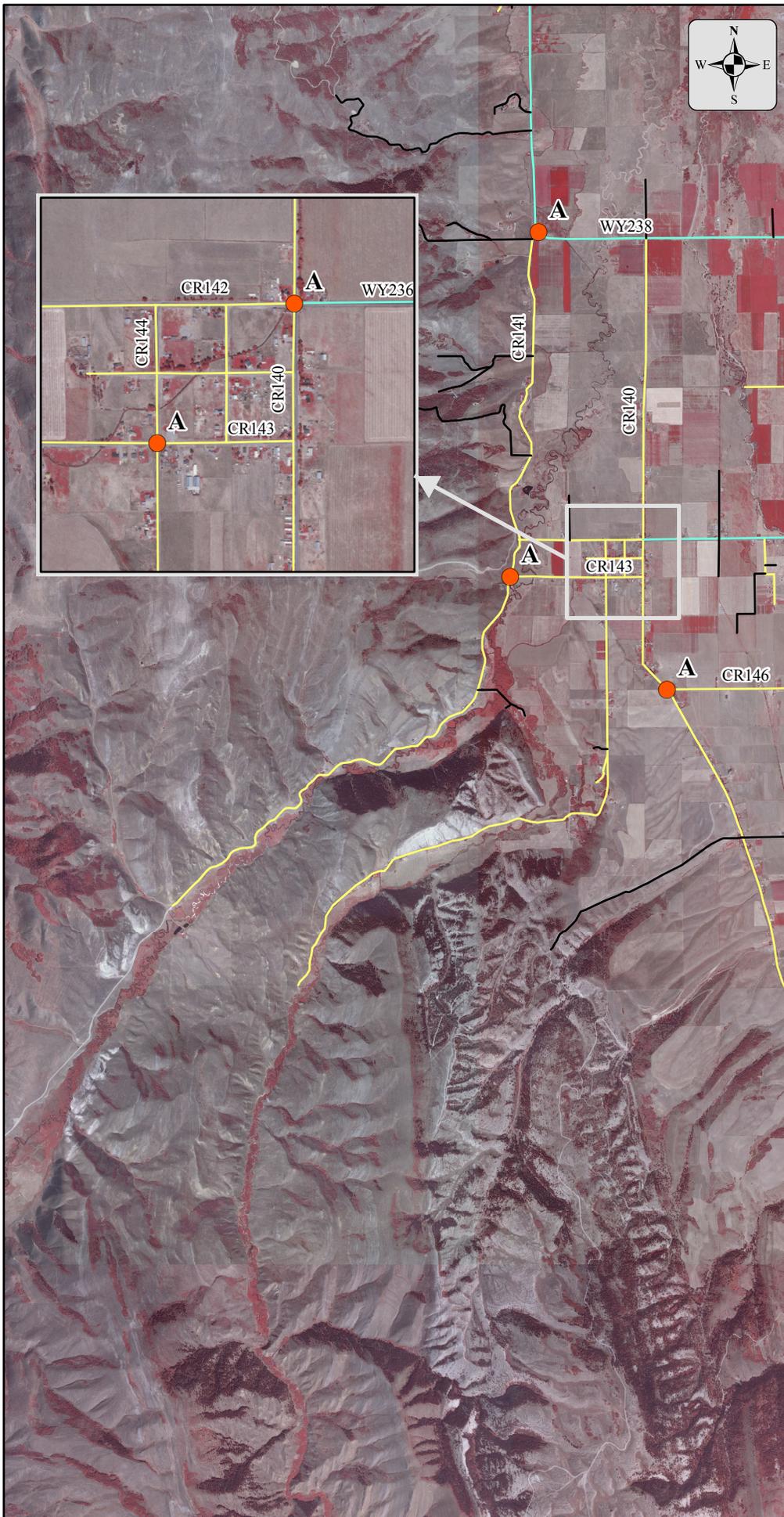
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

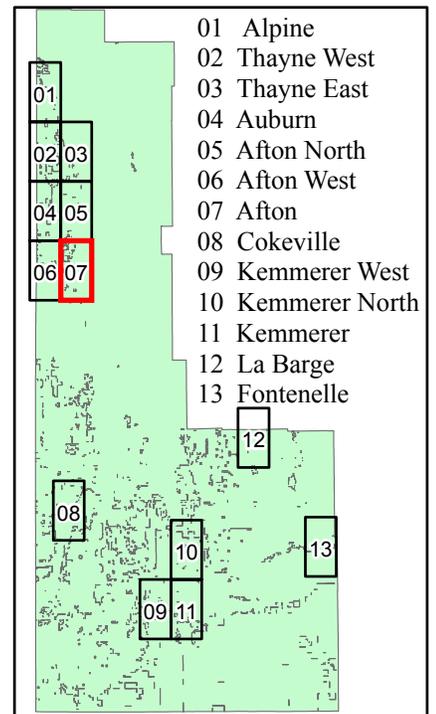
2005 Existing Condition Intersection Level of Service

Figure 1 - 12
Afton Area Map

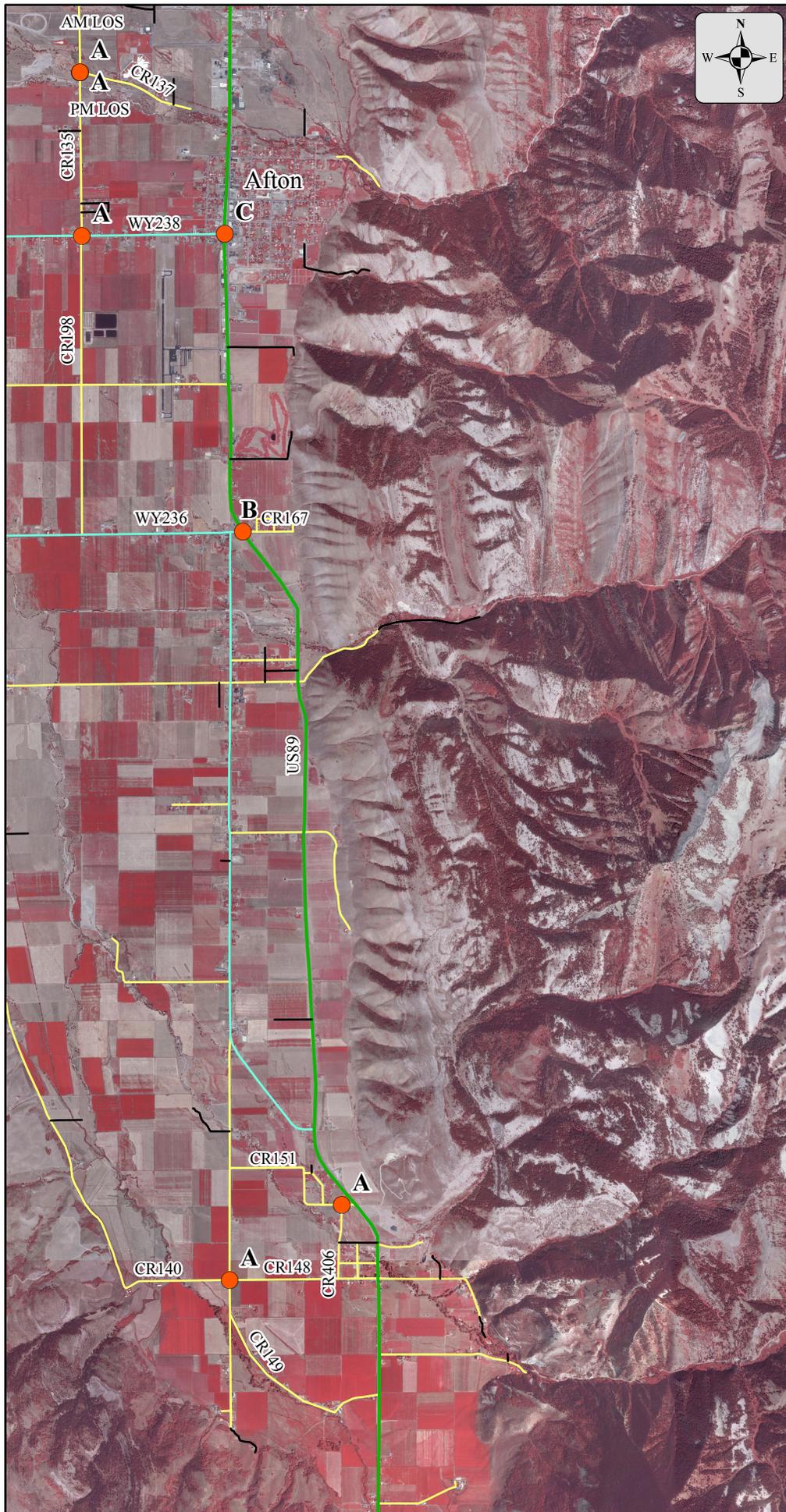
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

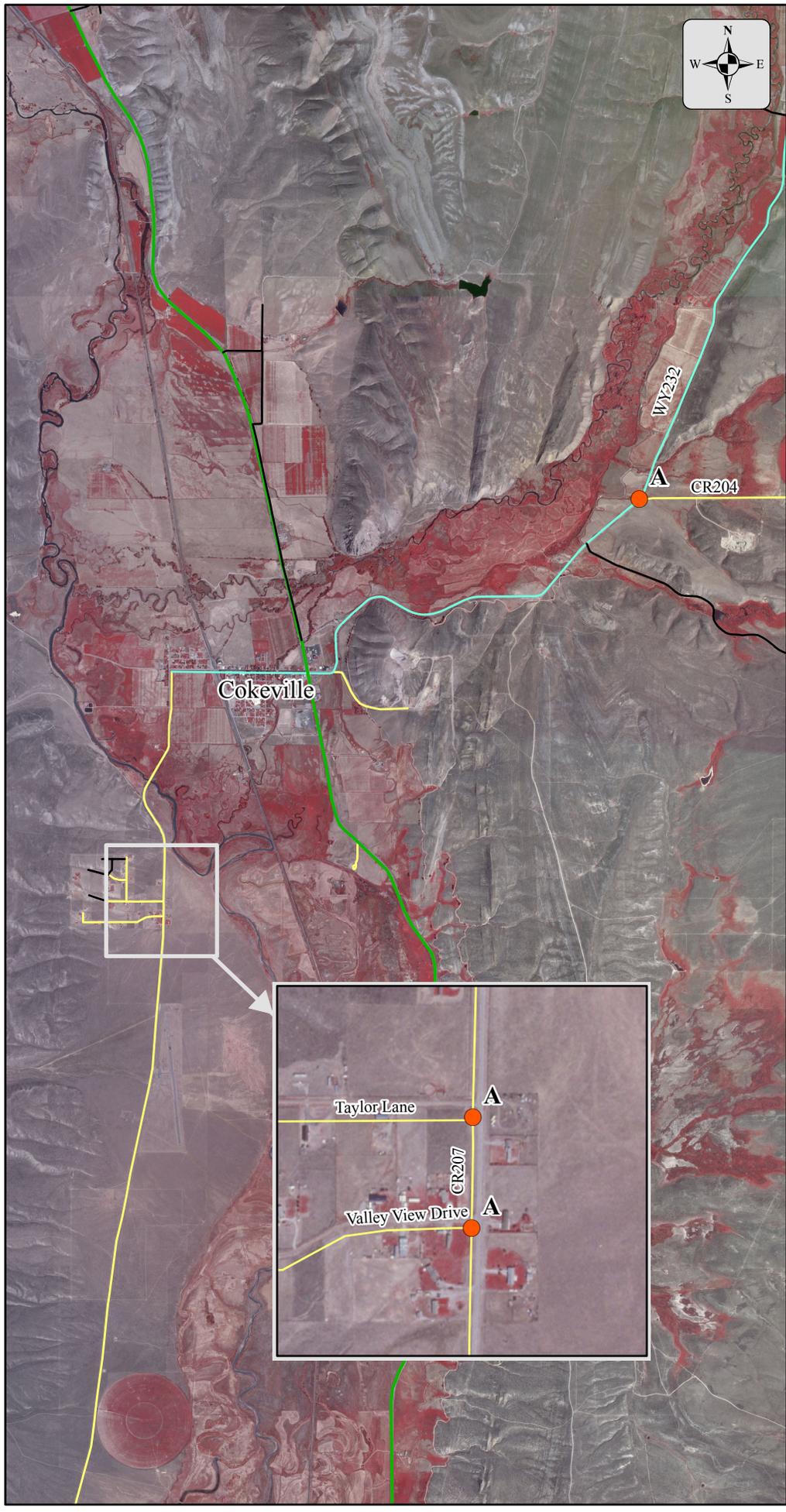
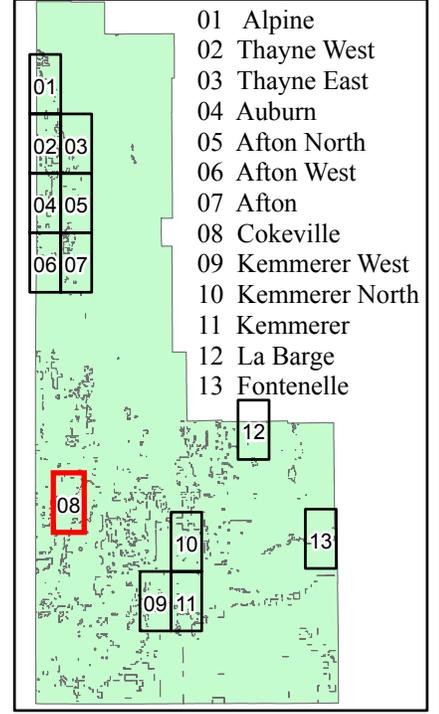
2005 Existing Condition Intersection Level of Service

Figure 1 - 13
Cokeville Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

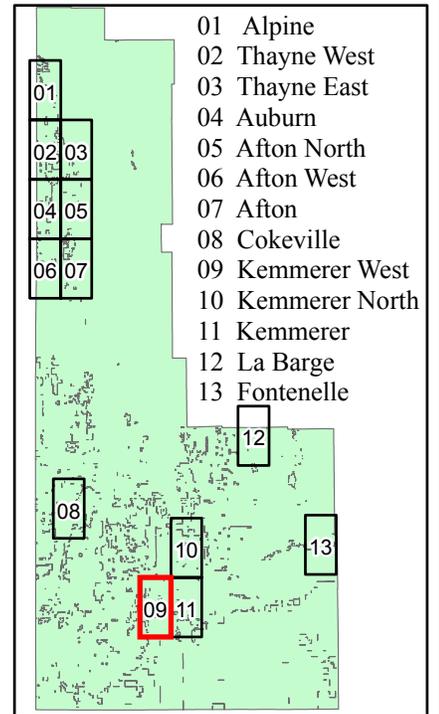
2005 Existing Condition Intersection Level of Service

Figure 1 - 14
Kemmerer West Area Map

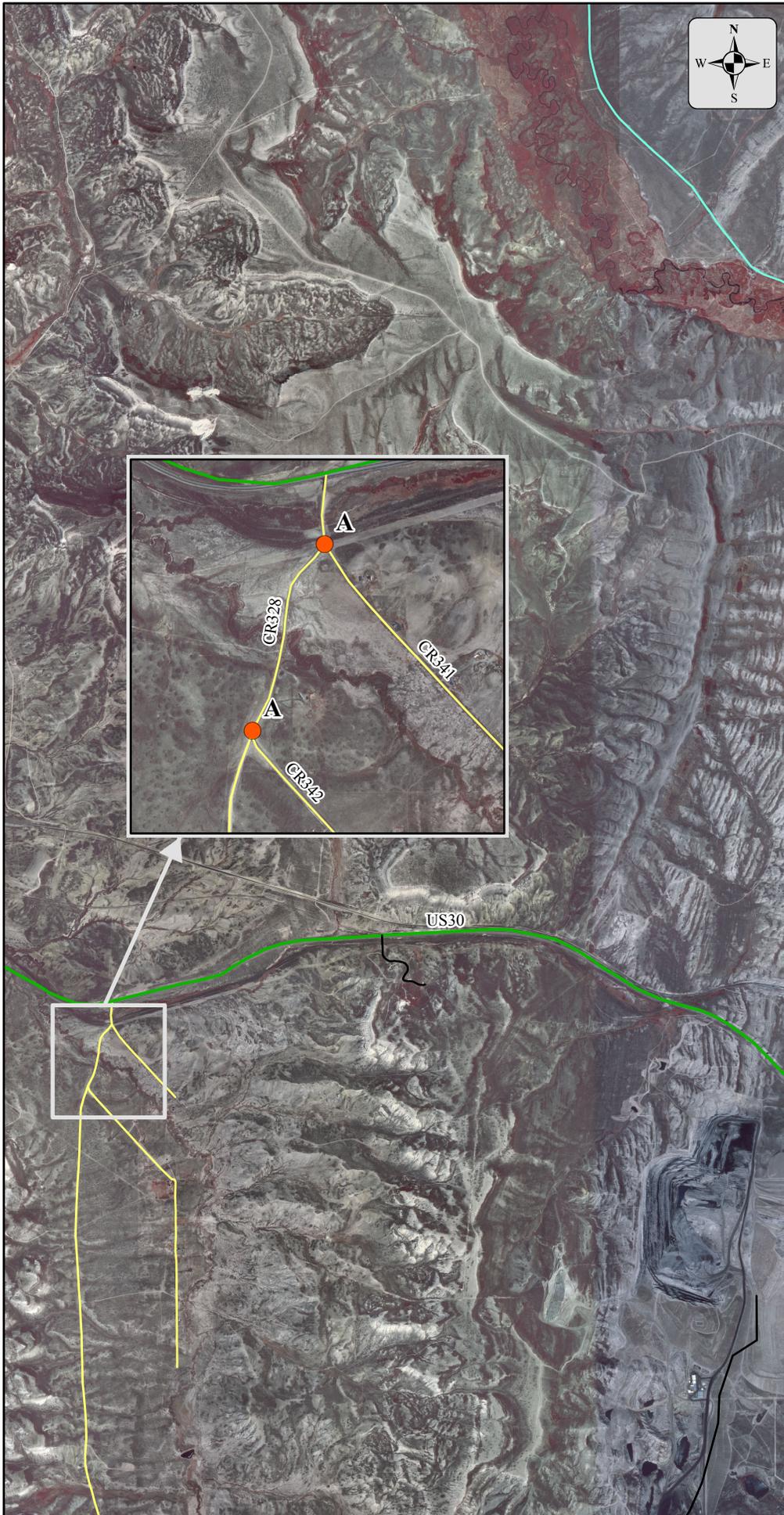
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

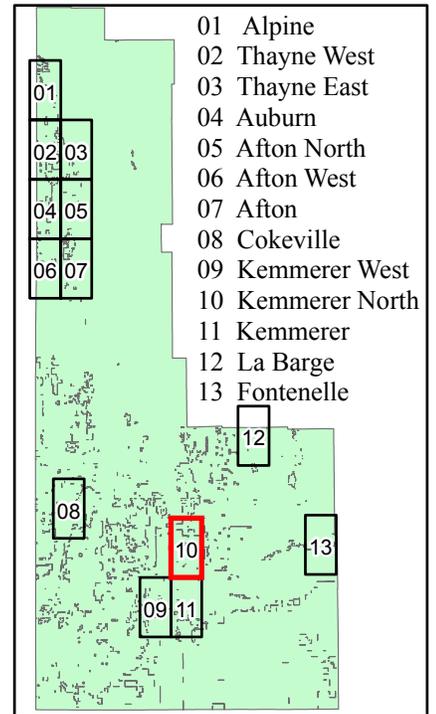
2005 Existing Condition Intersection Level of Service

Figure 1 - 15
Kemmerer North Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

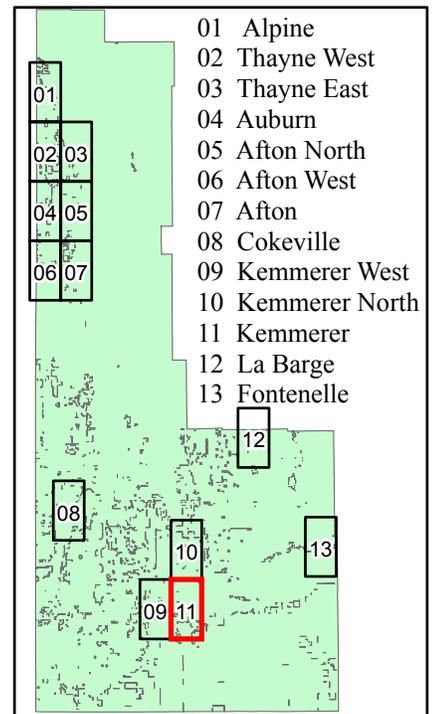
2005 Existing Condition Intersection Level of Service

Figure 1 - 16
Kemmerer Area Map

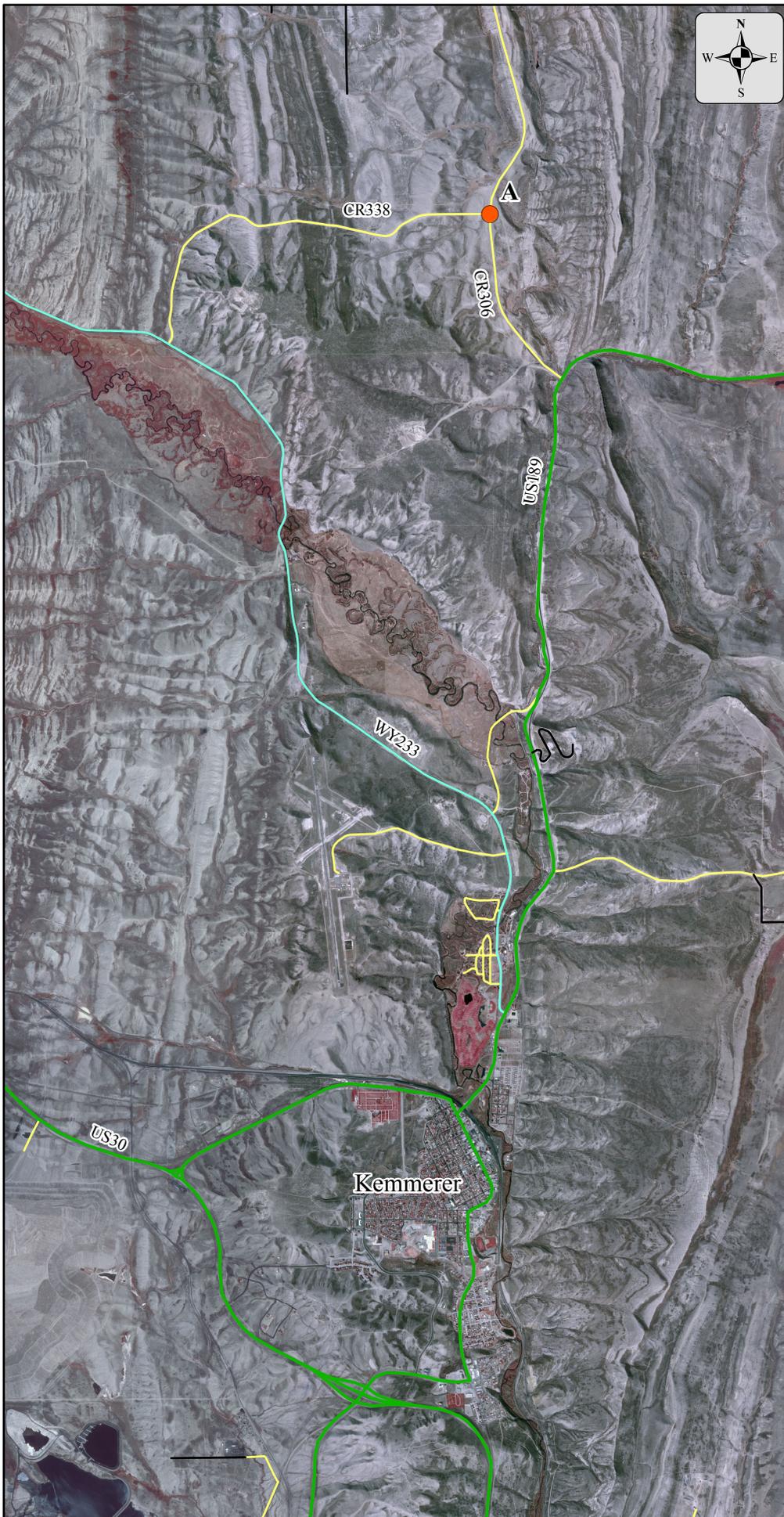
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

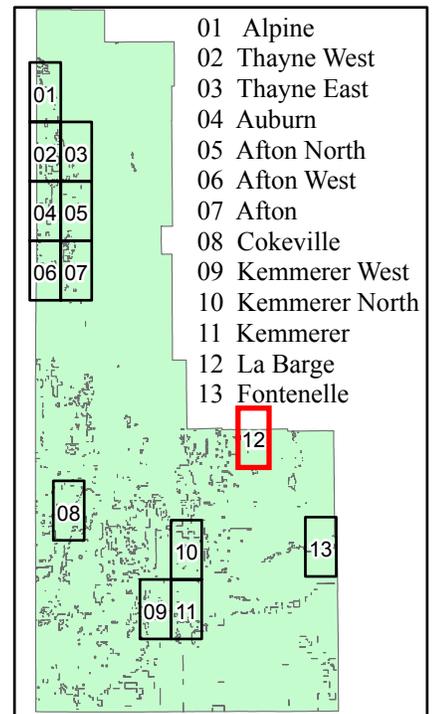
2005 Existing Condition Intersection Level of Service

Figure 1 - 17
La Barge Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Lincoln County WY Transportation Plan

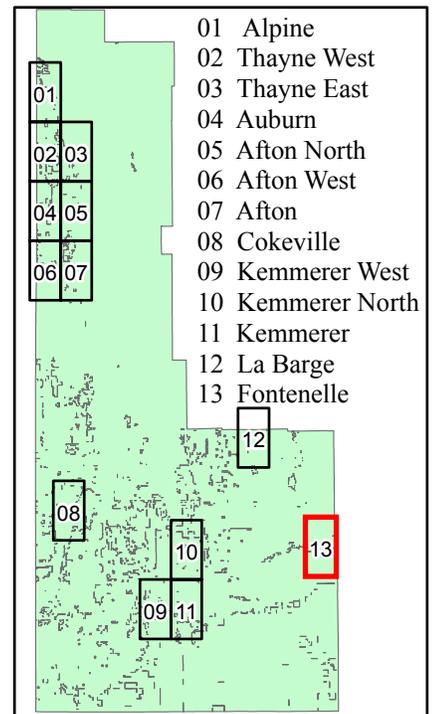
2005 Existing Condition Intersection Level of Service

Figure 1 - 18
Fontenelle Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



5. Segment Analysis

The following roadway segments were identified for field hose counts:

- Hams Fork Road (CR 305)
- Fontenelle North (CR 316)
- Shute Creek (CR 340)

According to the HCM there are two classifications for two lane highways, Class I and Class II. Class I highways are designed for efficient mobility where LOS is defined in terms of both average travel speed and percent time-spent-following. Class II highways serve both mobility and access needs. Class II LOS is defined only in terms of percent time-spent-following. According to the HCM, “Drivers will tolerate higher levels of percent time-spent-following on a class II facility than on a Class I facility, because Class II facilities usually serve shorter trips and different trip purposes”. The segments identified above were analyzed as Class II highways using HCS+ software.

Table 1.15, listed below, is the HCM LOS criteria for two-lane Class II highways.

**Table 1.15
LOS criteria for Two-Lane Highways in Class II**

Level of Service	Percent Time-Spent-Following (sec)
A	≤ 40
B	>40-55
C	>55-70
D	>70-85
E	>85

Note: LOS F applies whenever the flow rate exceeds the segment capacity

The critical variables in this analysis pertain specifically to the two-way flow rate (passenger cars/hour), directional split, PHF, estimated free flow speed, and the percentage of no passing zones on the roadway. The two-way hourly volume, roadway speed, and directional split were known variables from the field segment count. A PHF of 0.88 was assumed and the percentage of no passing zones on the roadway was assumed to be 50 percent.

According to two-way two-lane highway segment analysis software the following results were determined and are listed in Table 1.16 below. Volume Capacity (V/C) ratio is also shown in Table 1.16.

**Table 1.16
Roadway Segment Level of Service**

Intersections	2005 Existing		
		% time spent	v/c
	LOS	Following(s)	Ratio
Hams Fork Rd (305)	A	18.2	0.01
Fontenelle North (316)	A	22.5	0.01
Shute Creek (340)	A	21.0	0.01

No roadway segment capacity improvements have been identified for the existing 2005 roadway conditions along Hams Fork Road, Fontenelle North or Shute Creek Road. The full report of this analysis can be found in Appendix B.

6. Average Daily Traffic (ADT)

A determination of the Average Daily Traffic (ADT) in the vicinity of each identified intersection was evaluated to gain a better understanding of the daily traffic volumes for each roadway.

All ADT values were determined from known peak hour traffic volumes from field data collection or acquired through WYDOT. Traffic volumes for each leg of the identified intersections were determined by combining the necessary directional traffic for each leg. For example all traffic for a north leg of a four-way intersection is the sum of the southbound left (SBL), southbound through (SBT), southbound right (SBR), eastbound left (EBL), northbound through (NBT), and westbound right (WBR).

ADT values are a function of the peak hour traffic volumes experienced at an intersection. This percentage as a function of the peak hour traffic volume typically varies by regional characteristics. Lower proportions are arrived at for urban areas (8-11%) where higher proportions are determined in rural areas (11-15%). A 12% factor was used in determining ADT values for this transportation plan.

Based on this assumption the following ADT volumes were determined for each travel leg in the vicinity of each identified intersection. Typically ADT volumes are rounded to the nearest hundred trips, however due to the exceptionally low volumes that were determined all ADT trips were rounded to the nearest ten trips.

Table 1.17 shows the determined ADT values based on peak hour volumes acquired either through WYDOT or field traffic data collection.

Table 1.17 - ADT Values in Vicinity of Evaluated Intersections

Intersections	North Leg NL ADT	South Leg SL ADT	East Leg EL ADT	West Leg WL ADT
Bitter Creek & Smoot-Afton (148)	60	120	100	80
Cottonwood Drive (164s) & (406)	n/a	60	160	140
Dry Creek (146) & Bitter Creek (140)	430	330	220	n/a
SR-236 & Bitter Creek (140)	310	540	530	480
Fairview Spring Creek (144) & Fairview South (143)	180	190	150	130
Fairview South (143) & Crow Creek (141)	80	130	50	n/a
SR-238 & Allred (135 & 198)	530	280	1530	1180
SR-238 & Crow Creek (141)	n/a	230	1020	980
Swift Creek Lane (137) & Allred (135) AM	380	750	680	n/a
Swift Creek Lane (137) & Allred (135) PM	550	780	840	n/a
(136) & Allred (135)	90	150	210	130
Grover Park & Fifth Street	n/a	20	90	110
Auburn-Tygee (134) & Stump Creek (133)	30	n/a	250	250
Main Street & First West Street	100	80	90	110
(131) & (132)	40	70	130	100
Willow Creek Canyon (177) & Bedford-Turnerville (123)	180	170	30	n/a
Heiner-Suter Lane (127) & Bedford-Turnerville (123)	320	230	150	n/a
Strawberry Creek (126) at Strawberry Street	20	n/a	760	760
Strawberry Creek (126) & Thayne Bedford (122)	590	n/a	760	480
Thayne Bedford (122) & Bedford North (121)	n/a	680	250	650
Thayne Bedford (122) & Muddy Spring (117)	1150	10	1070	1960
Lost Creek (120) & Muddy Spring (117)	1070	1090	430	n/a
(119) & Muddy String (117)	1000	1160	430	70
Cedar Creek (118) & Muddy Spring (117)	910	880	780	1130
Muddy String (117) & Vista Drive	640	820	1030	n/a
SR-239 & State Line (164)	710	500	780	n/a
SR-34 (Idaho) & State Line (164)	360	730	30	580
Creamery (111) & State Line (114)	80	280	290	210
Sanderson Lane (107) & East Etna (110)	270	100	n/a	230
Bridle Trail & Stewart Trail (106)	200	330	140	n/a
Pine Creek & SR-232	80	90	30	n/a
Hams Fork Rd (305)	130	130	n/a	n/a
Pomeroy Basin Rd. & Gomer Rd.	110	130	n/a	20
Pomeroy Basin Rd. & Commesary Ridge	50	50	n/a	0
Shute Creek	n/a	n/a	350	350
(341) & (328)	90	80	10	n/a
Twin Creek (328) & (342)	80	100	30	n/a
Fontenelle North	280	280	n/a	n/a
Taylor & CR 207	330	220	n/a	130
Valley View & CR 207	280	210	n/a	90
SR-372 & (316) & (311)	230	440	140	300
(315) & Looney Drive	40	n/a	90	50

Table 1.17 - ADT Values in Vicinity of Evaluated Intersections (con't.)

Intersections	North Leg NL ADT	South Leg SL ADT	East Leg EL ADT	West Leg WL ADT
US-89 & SR-236	--	--	340	1870
US-89 & SR-238	--	--	<i>n/a</i>	1480
US-89 & SR-237	--	--	100	640
US-89 & SR-238 (north)	--	--	<i>n/a</i>	390
US-89 & Strawberry Creek (126)	--	--	730	100
US-89 & (173s)	--	--	240	<i>n/a</i>
US-89 & Spring Creek Rd. (119)	--	--	120	<i>n/a</i>
US-89 & (118)	--	--	730	<i>n/a</i>
US-89 & Prater Canyon Rd. (116)	--	--	120	770
US-89 & Creamery (111)	--	--	<i>n/a</i>	380
US-89 & Sanderson Lane (107)	--	--	210	0
US-89 & (108) & (106)	--	--	530	50
US-89 & McNeal Power Plant (104)	--	--	<i>n/a</i>	10
US-89 & US-26	--	--	--	<i>n/a</i>

In Table 1.17 note that any travel legs with a double dash mark (--) indicates that ADT traffic volumes were not evaluated as part of this transportation plan. Also note that any travel legs which has an "n/a" means no corresponding travel lanes exist for that leg. This is a result of T-intersections that exist in the county.

Figures 1-19 through 1-33 lists the existing ADT values for each identified intersection.

Based on these determined ADT values no capacity related roadway improvements have been identified as part of the 2005 existing condition analysis.

Lincoln County WY Transportation Plan

2005 Existing Condition
Estimated Average Daily Traffic

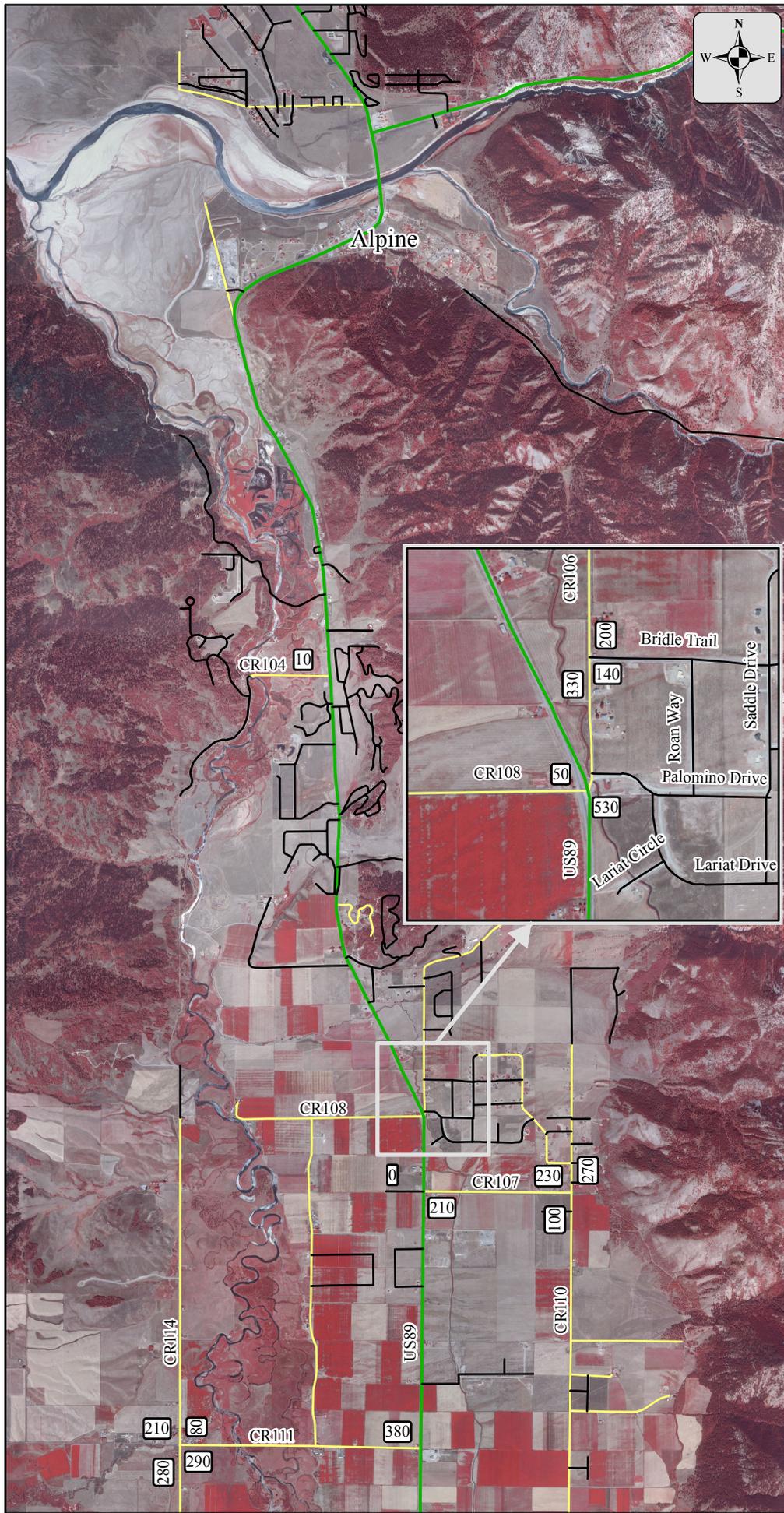
Figure 1 - 19
Alpine Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  430 ADT Values

Locator Map

- | | | |
|----|----|----|
| 01 | 02 | 03 |
| 04 | 05 | 06 |
| 07 | 08 | 09 |
| 10 | 11 | 12 |
| 13 | 14 | 15 |
- 01 Alpine
 - 02 Thayne West
 - 03 Thayne East
 - 04 Auburn
 - 05 Afton North
 - 06 Afton West
 - 07 Afton
 - 08 Cokeville
 - 09 Kemmerer Northwest
 - 10 Kemmerer Northeast
 - 11 Kemmerer Southwest
 - 12 Kemmerer Southeast
 - 13 La Barge
 - 14 Opal
 - 15 Fontenelle



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

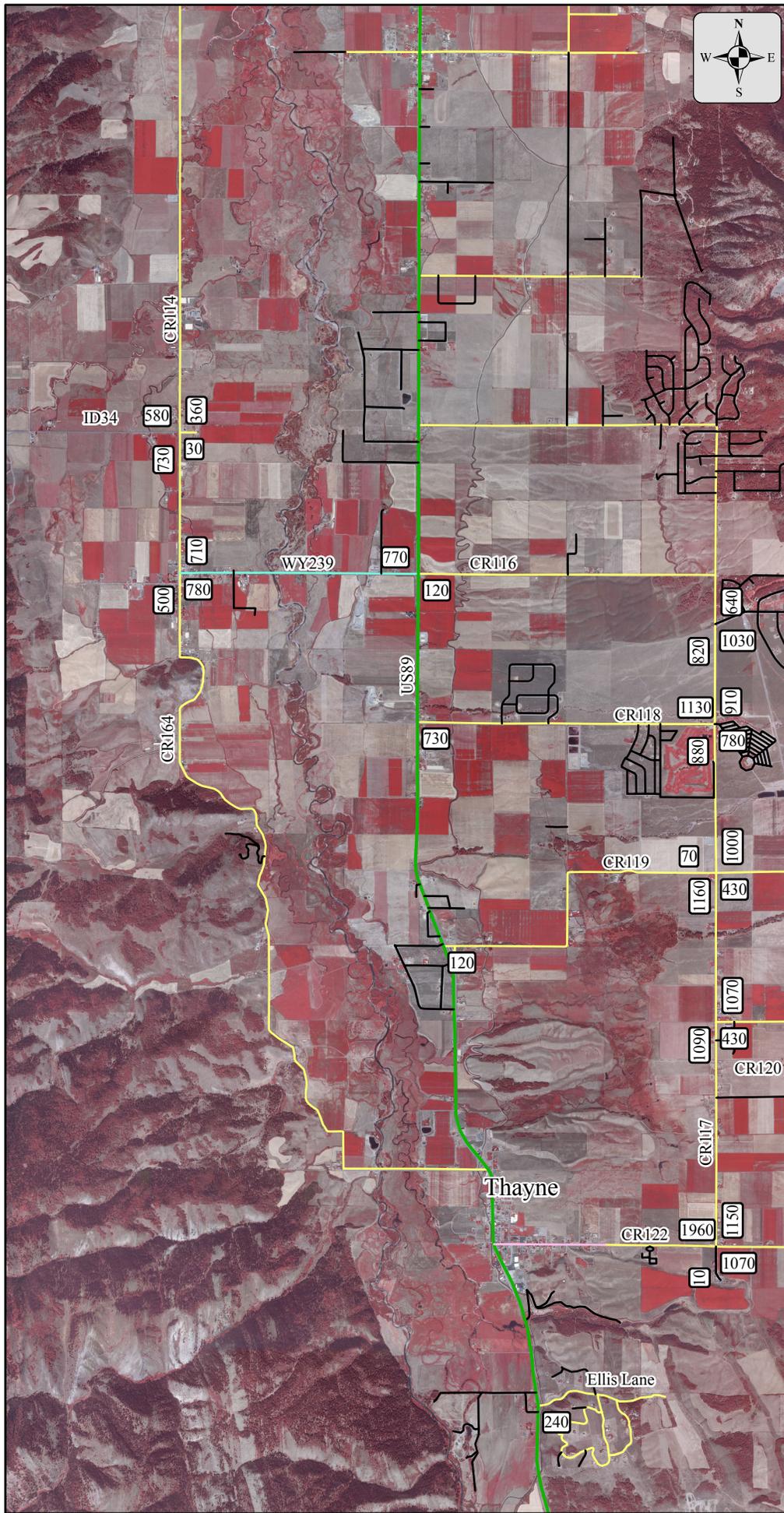
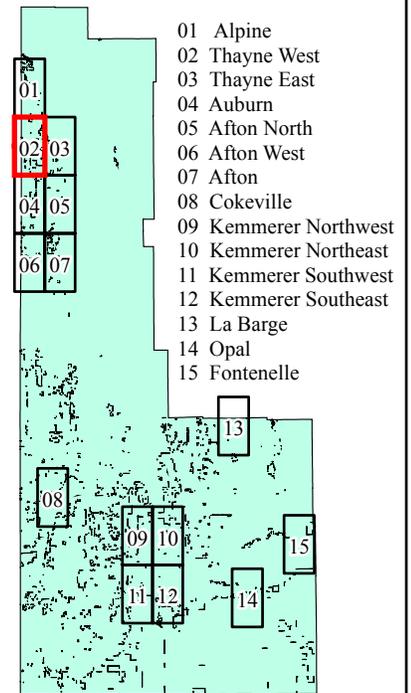
2005 Existing Condition Estimated Average Daily Traffic

Figure 1 - 20
Thayne West Area Map

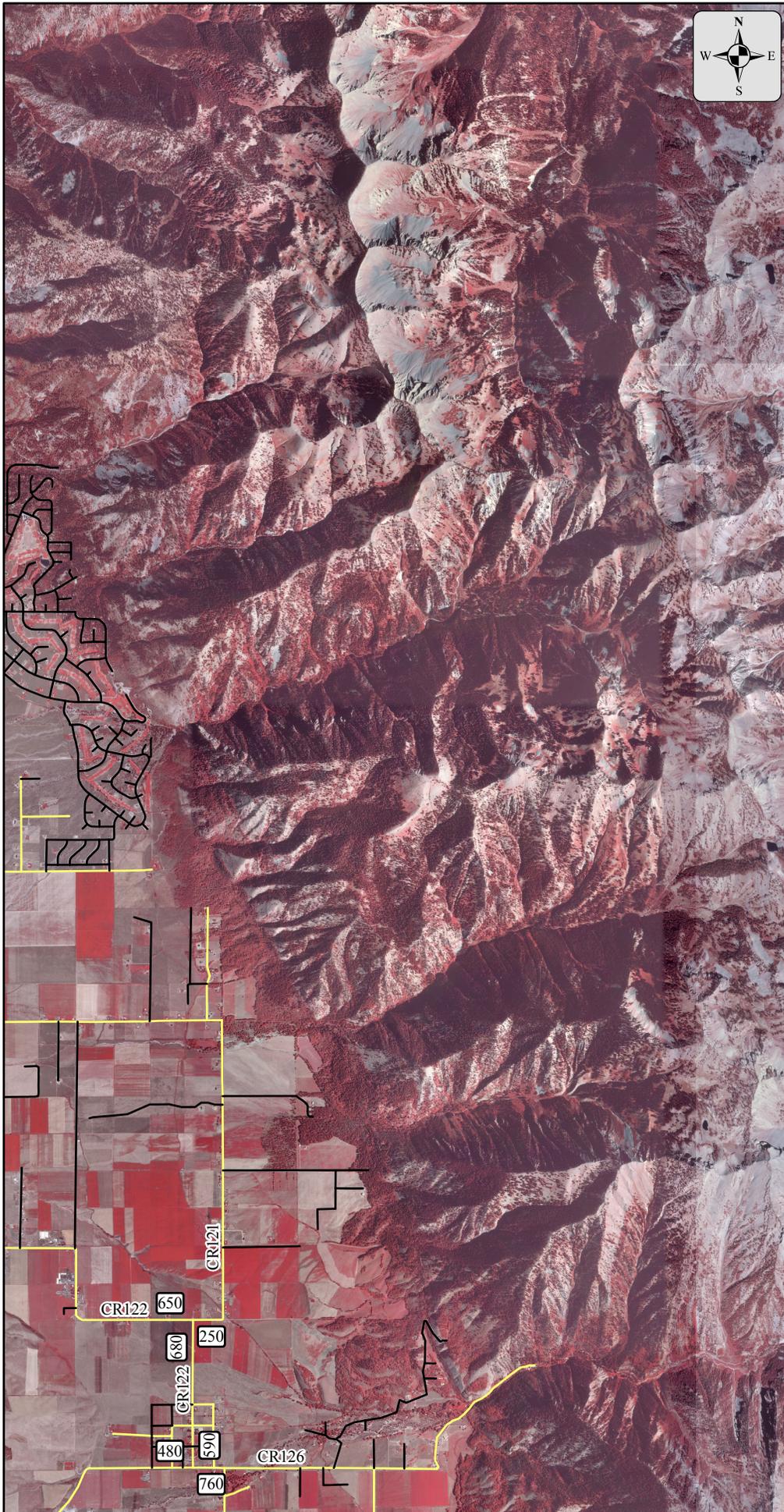
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

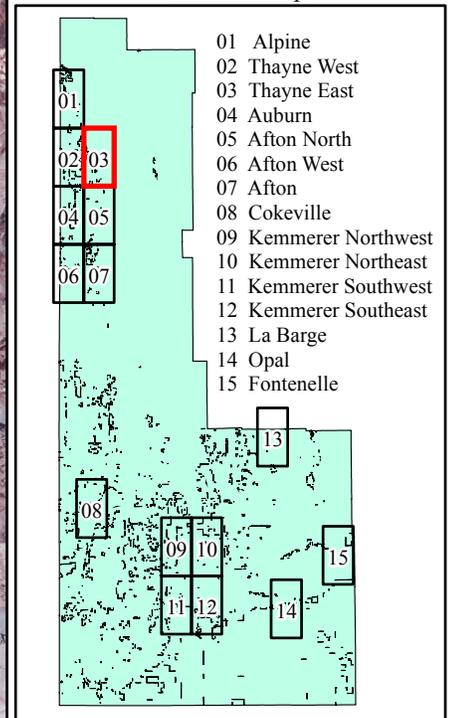
2005 Existing Condition
Estimated Average Daily Traffic

Figure 1 - 21
Thayne East Area Map

Legend

- County Road
- State Highway
- US Highway
- City Street
- Private Drive
- 430 ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

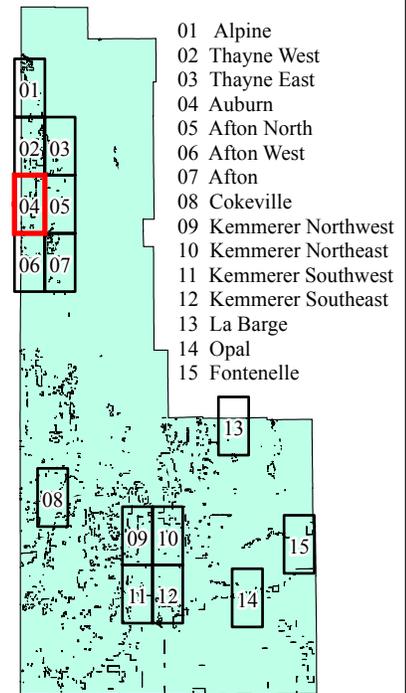
2005 Existing Condition Estimated Average Daily Traffic

Figure 1 - 22
Auburn Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

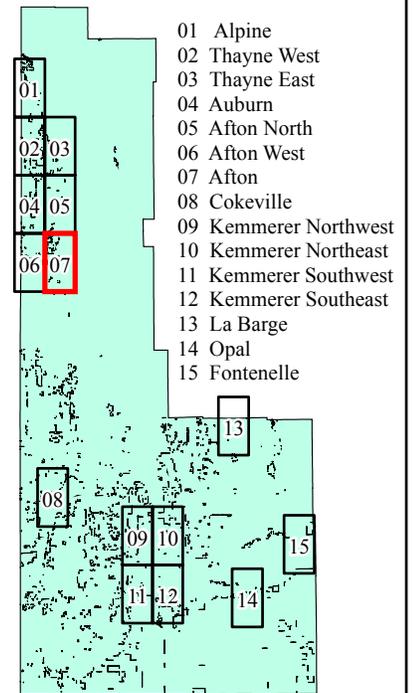
2005 Existing Condition Estimated Average Daily Traffic

Figure 1 - 25
Afton Area Map

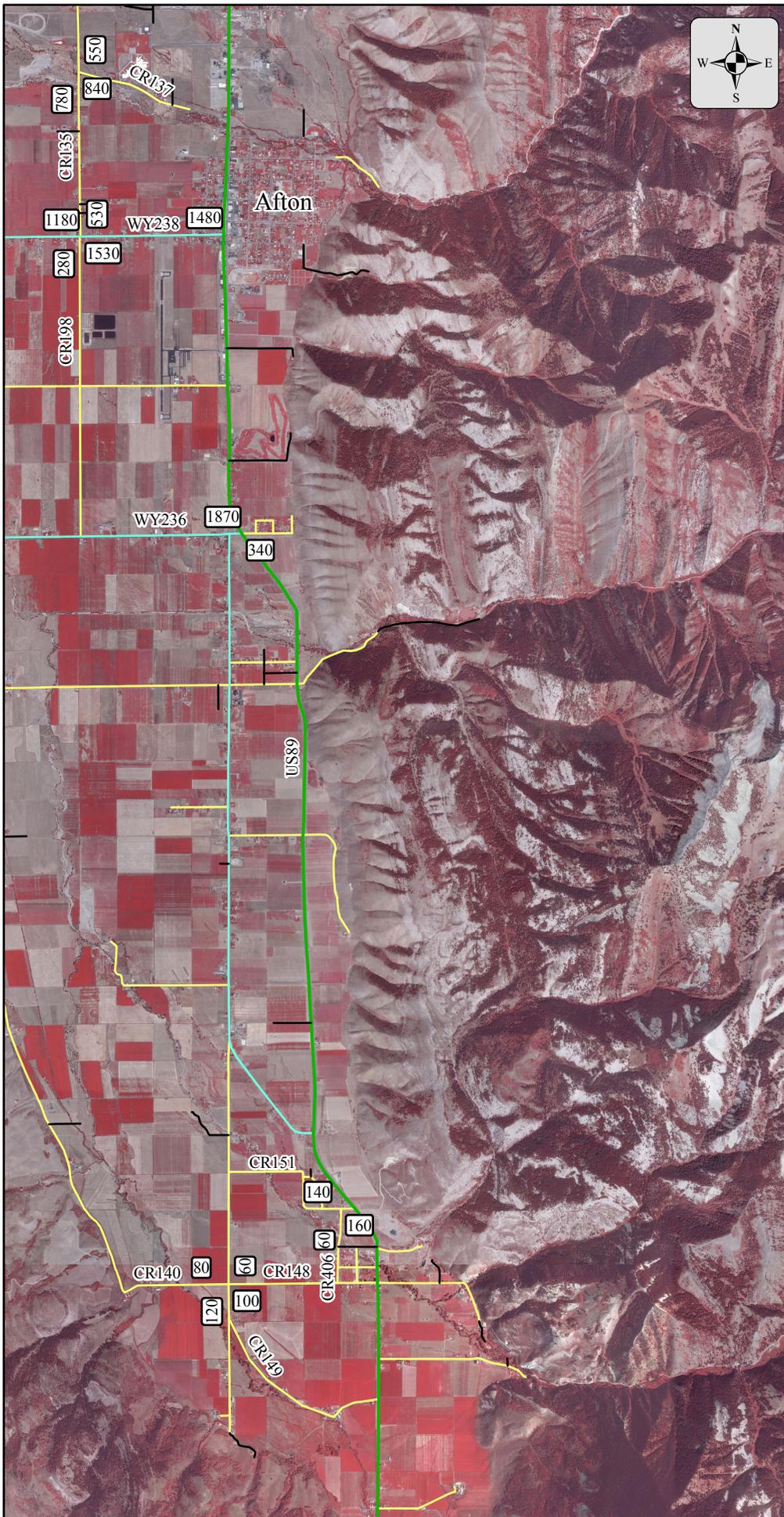
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

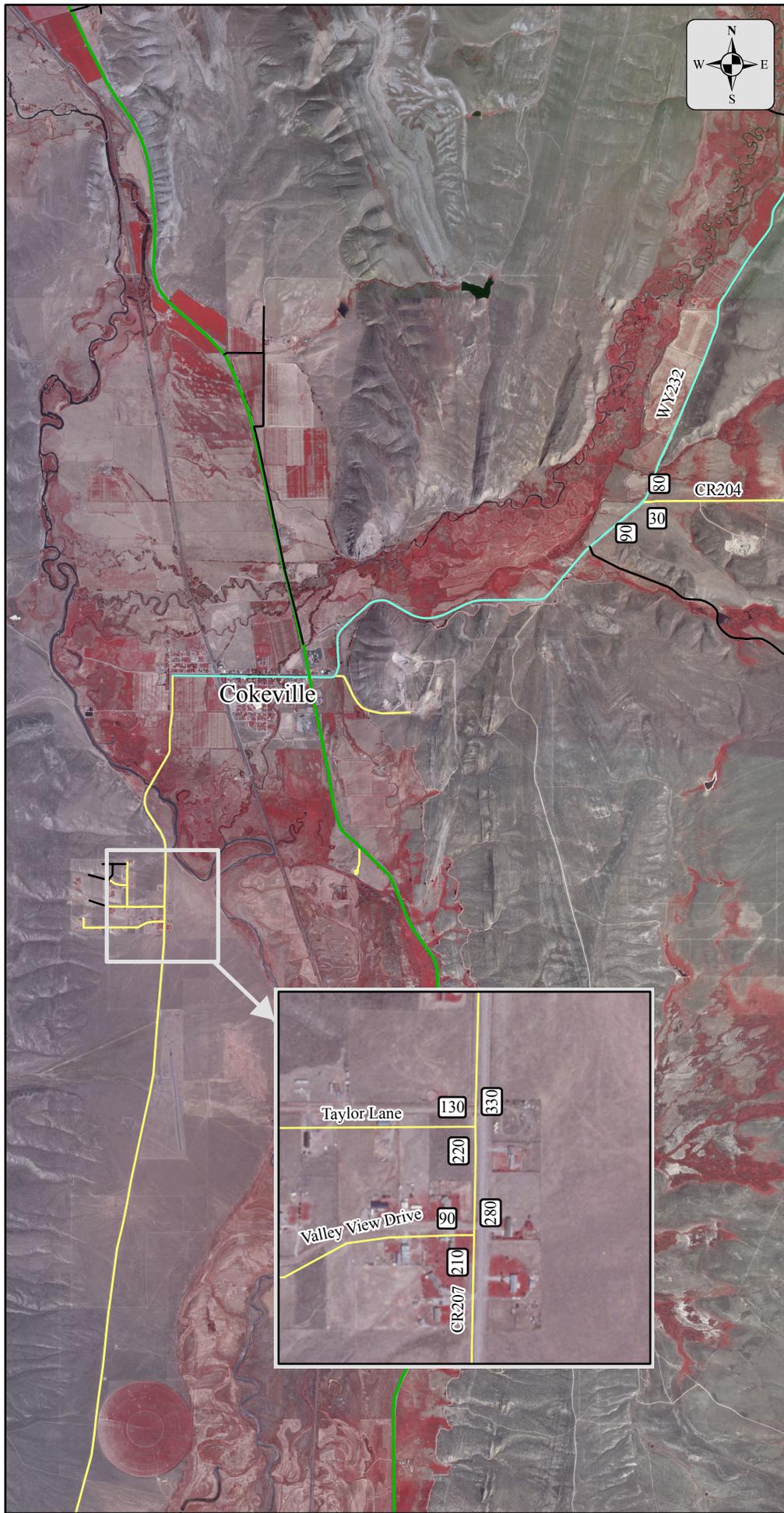
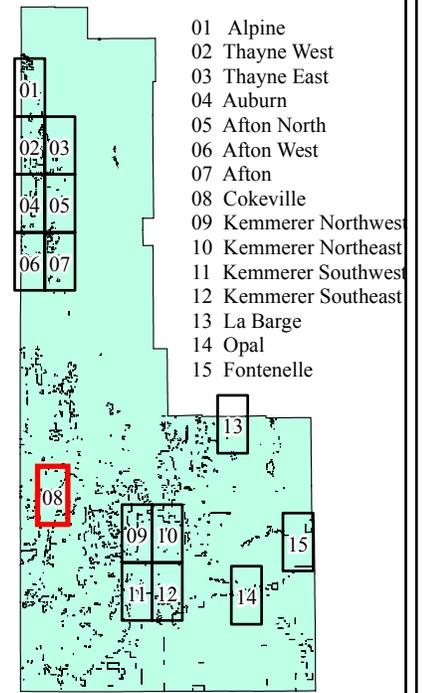
2005 Existing Condition
Estimated Average Daily Traffic

Figure 1 - 26
Cokeville Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

2005 Existing Condition
Estimated Average Daily Traffic

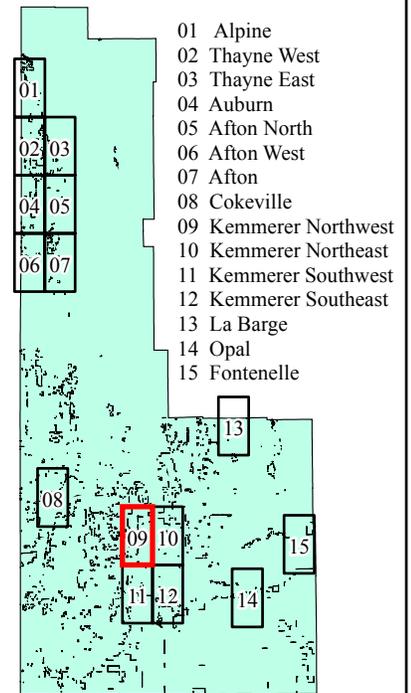
Figure 1 - 27

Kemmerer Northwest Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

2005 Existing Condition Estimated Average Daily Traffic

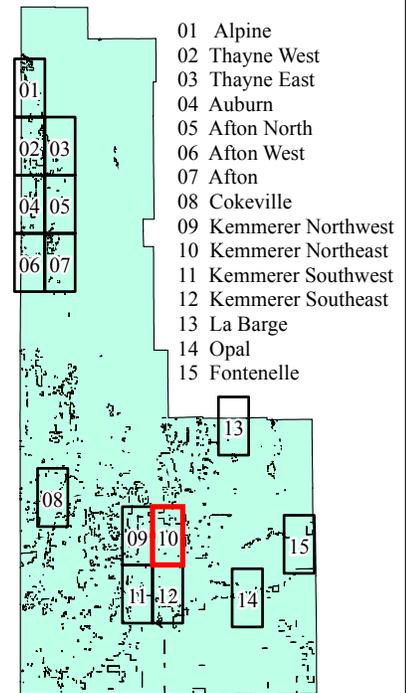
Figure 1 - 28

Kemmerer Northeast Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

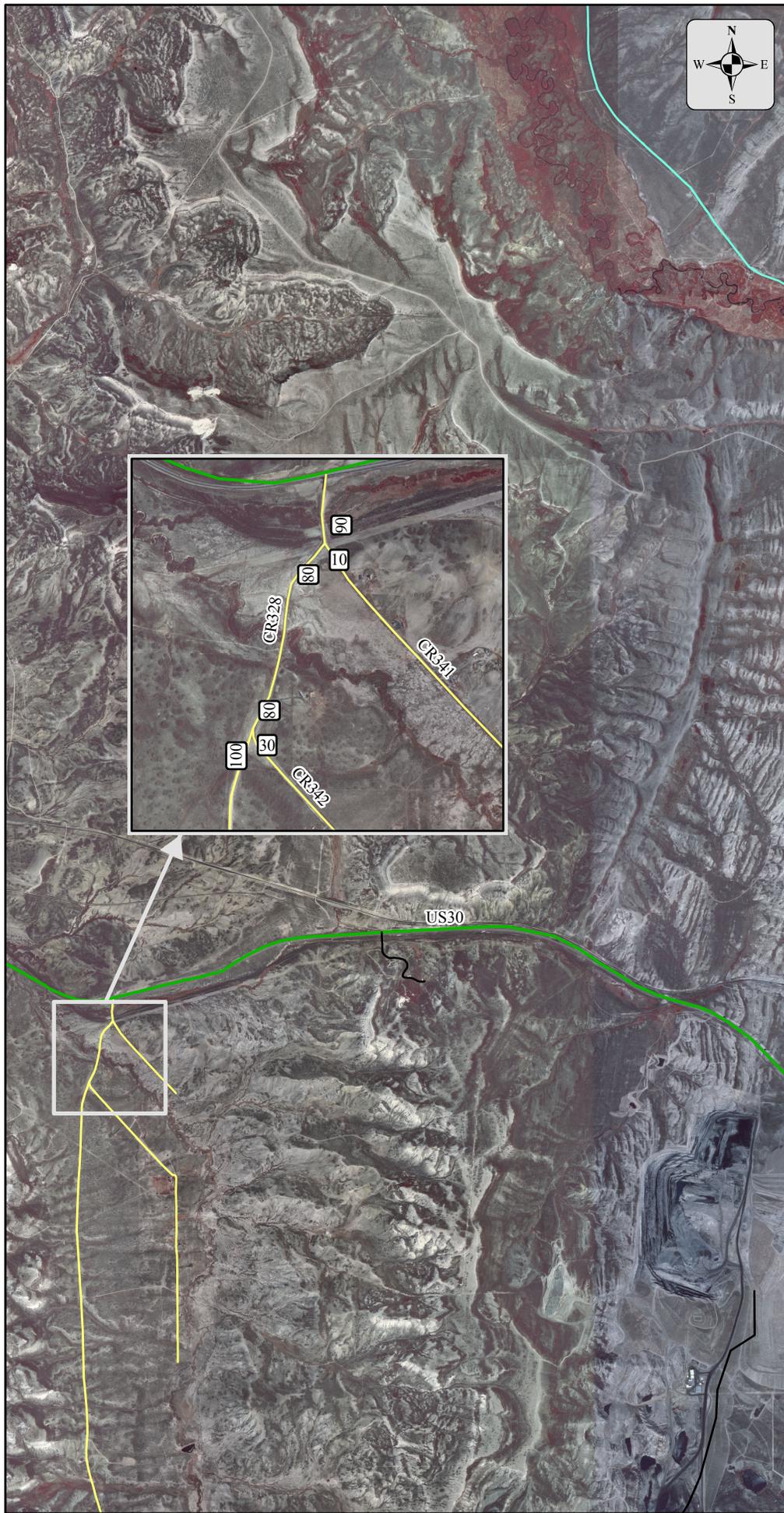
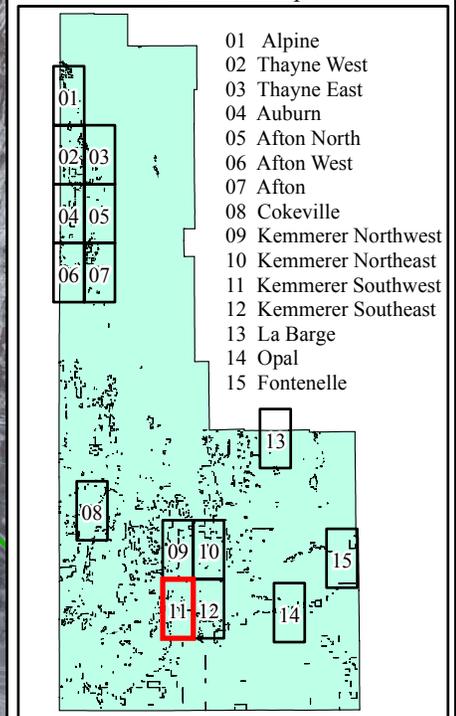
2005 Existing Condition Estimated Average Daily Traffic

Figure 1 - 29
Kemmerer Southwest Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

2005 Existing Condition
Estimated Average Daily Traffic

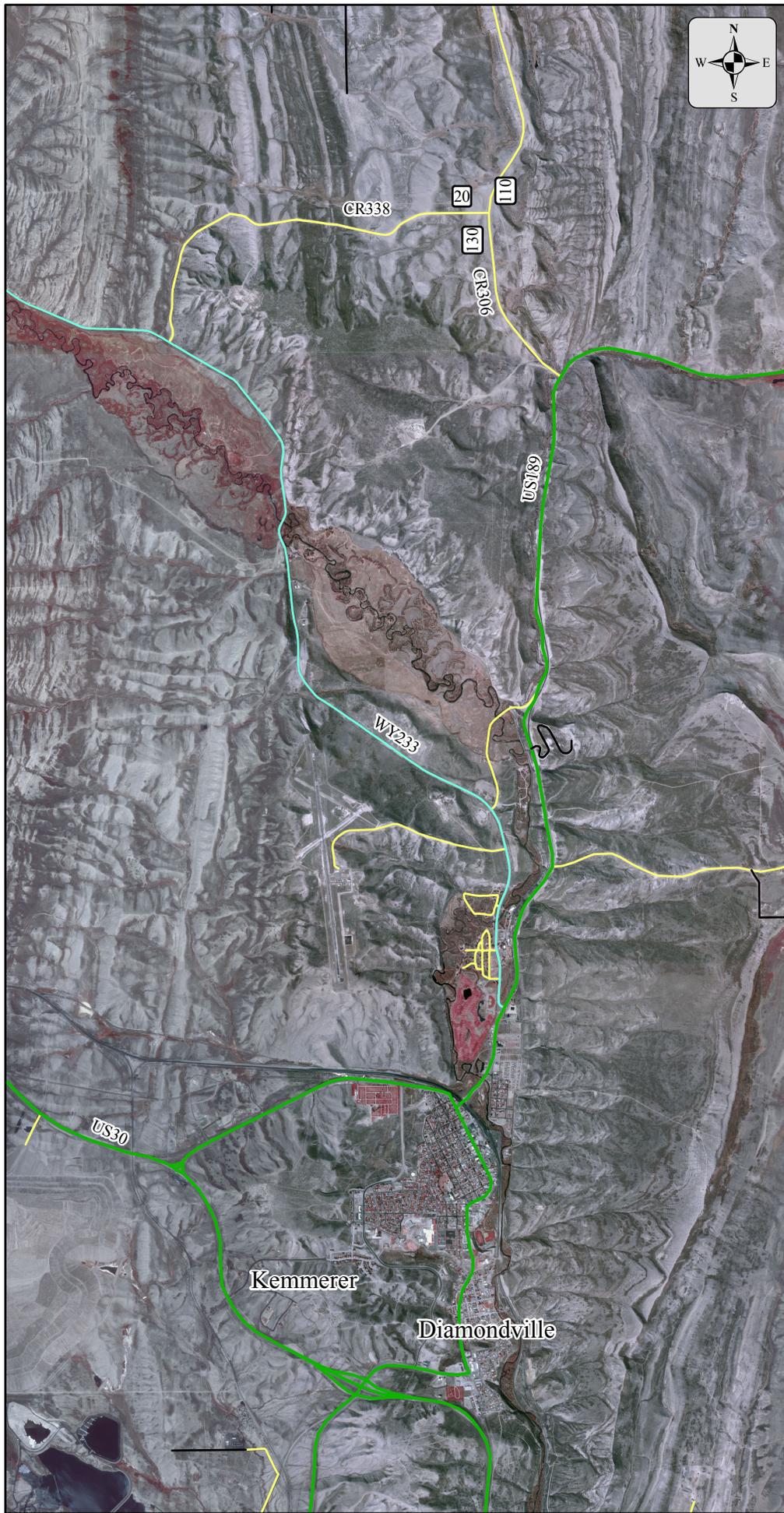
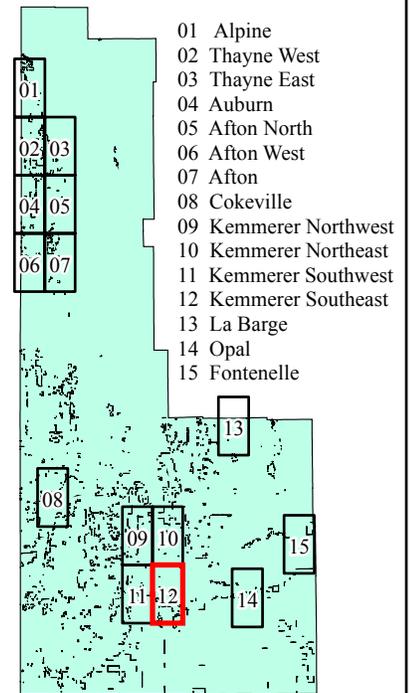
Figure 1 - 30

Kemmerer Southeast Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

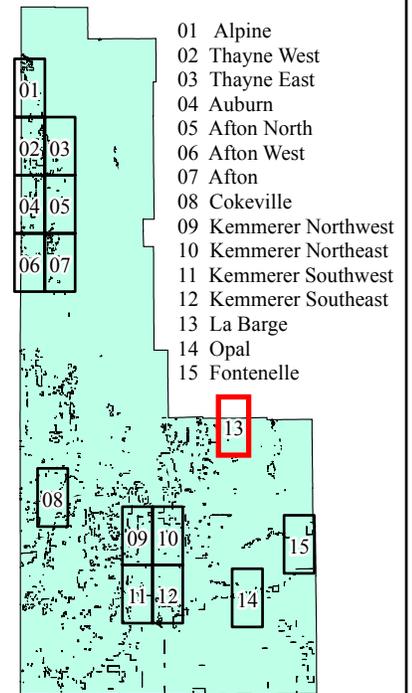
2005 Existing Condition
Estimated Average Daily Traffic

Figure 1 - 31
LaBarge Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

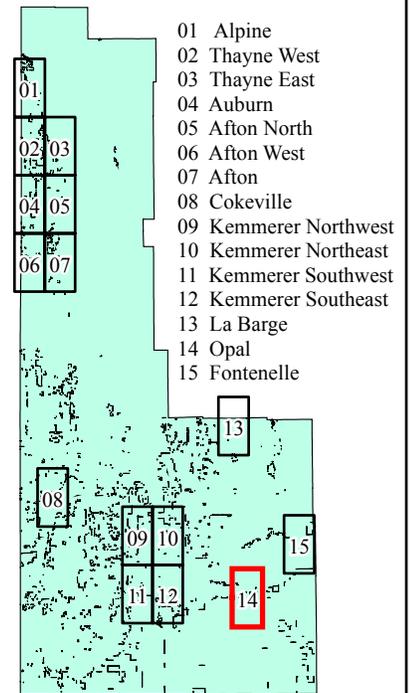
2005 Existing Condition
Estimated Average Daily Traffic

Figure 1 - 32
Opal Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

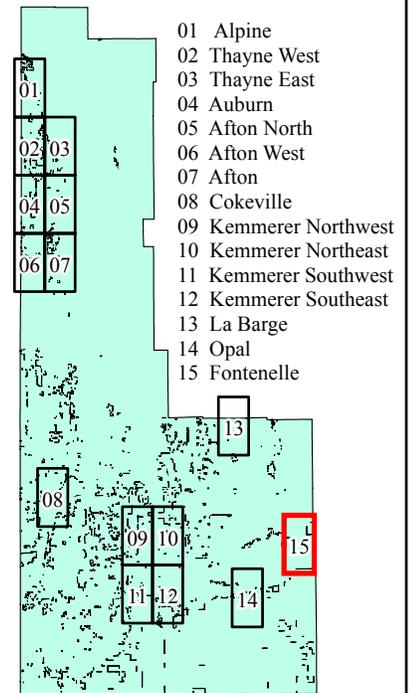
2005 Existing Condition
Estimated Average Daily Traffic

Figure 1 - 33
Fontenelle Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

G. WEAKNESSES AND HIGH STRESS POINTS

Through the use of the roadway inventory, existing traffic analysis, safety analysis the analysis of the land use impacts and input from the public at hearings held in Afton and Kemmerer, weaknesses and high stress points on the Lincoln County Transportation System were identified. These weaknesses and stress points are based on three major categories:

- Traffic & Safety Improvements
- Roadway Improvements
- Access Improvements

Each intersection studied and corresponding roadway segments were investigated for each of these categories. Under each category sub categories were identified to define how each intersection was investigated.

- Traffic
 - Signing & Striping
 - Delineation
 - Safety
- Roadway
 - Existing Approach Widths
 - Surface Type (gravel, improved, paved, etc...)
 - Geometry
 - Shoulder Widths
- Access
 - Proximity of Accesses
 - Combining access points
 - Sight Lines

Recommended improvements listed are based on existing roadway/intersection conditions.

Bitter Creek (CR 140) & Smoot-Afton (CR 148)

Traffic Improvements

- Add striping along centerline and edge of roadway (CR 140).
- Replace yield signs with stop signs for CR 148 legs.

Cottonwood Drive (CR 164s) & CR 406

Traffic Improvements

- Replace yield sign with stop sign (CR 406)
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)
- Add edge line striping along both segments

Dry Creek (CR 146) & Bitter Creek (CR 140)

Traffic Improvements

- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)
- Add edge line striping along CR 140

SR 236 & Bitter Creek (CR 140)

Traffic Improvements

- Re-stripe all existing striping
- Add stop bars for each leg of the intersection

Roadway Improvements

- Install guardrail along concrete bridge section

Fairview Spring Creek (CR 144) & Fairview South (CR 143)

Access Improvements

- Increase offset distance from post office access and intersection

Fairview South (CR 143) & Crow Creek (CR 141)

Traffic Improvements

- Replace yield sign with stop sign (CR 143)
- Place either Type III or concrete barricade parallel to 1:1 cut slope

Access Improvements

- Consolidate driveways along CR 141 if possible

SR-238 & Allred (CR 135/CR 198)

Traffic Improvements

- Re-stripe striping along SR-238
- Add striping along CR 135/CR 198
- Add stop bars along CR 135/CR 198

Access Improvements

- Increase offset distance to driveway along east leg SR-238

SR-238 & Crow Creek (CR 141)

Traffic Improvements

- Re-stripe striping along SR-238
- Replace all existing delineation (refer to MUTCD for spacing requirements)
- Relocate approach east of intersection

Roadway Improvements

- Trees along SR-238 limit sight distance, cut back or down

Swift Creek Lane (CR 137) & Allred Lane (CR 135)

Traffic Improvements

- Add striping along all legs of intersection
- Add stop bar along CR 137

Roadway Improvements

- Intersection is skewed for CR 137 leg, consider perpendicular approach onto CR 135

Kennington-Burton Lane (CR 136) & Allred Lane (CR 135)

Traffic Improvements

- Add striping along all legs of intersection
- Add stop bar along paved section of CR 135

Grover Park & Fifth Street

Traffic Improvements

- Add edge line striping along all legs of intersection
- Add stop bar on Fifth Street
- Remove yield sign and replace with stop sign (Fifth Street)

Auburn-Tygee (CR 134) & Stump Creek (CR 133)

Traffic Improvements

- Add edge line striping along all legs of intersection
- Add stop bar on CR 133

Access Improvements

- Driveway along Stump Creek creates conflict for turning traffic, considering increasing offset from intersection.

Main Street & First West Street

Traffic Improvements

- Add edge line striping along all legs of intersection

Willow Creek Canyon (CR 177) & Bedford-Turnerville (CR 123)

Traffic Improvements

- Add edge lines along CR 131 and CR 132
- Replace existing yield sign with stop sign
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

Heiner-Suter Lane (CR 127) & Bedford-Turnerville (CR 123)

Traffic Improvements

- Add edge lines along CR 123
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

Roadway Improvements

- Limited vertical sight distance on CR 123 north of intersection due to hill, regrade

Strawberry Creek (CR 126) & Strawberry Street

Traffic Improvements

- Add edge lines along CR 126
- Replace existing yield sign with stop sign
- Add stop bar on CR 126
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

Roadway Improvements

- Realign private driveway along south leg with Strawberry Street

Strawberry Creek (CR 126) & Thayne-Bedford (CR 122)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 122
- Add T-intersection advance warning sign (W2-4 MUTCD sign)

Thayne-Bedford (CR 122) & Bedford North (CR 121)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 122
- Add T-intersection advance warning sign (W2-4 MUTCD sign)

Thayne-Bedford (CR 122) & Muddy String (CR 117)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 117

Muddy String (CR 117) & Lost Creek (CR 120)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 120

Perkins (CR 119) & Muddy String (CR 117)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 119

Cedar Creek (CR 118) & Muddy String (CR 117)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on CR 118 legs
- Speed zones need to be re-evaluated (currently 30 mph speed zone drop)
- Place crosswalk from RV parking to Golf course

Access Improvements

- Relocate access to golf course, too close to intersection

Muddy String (CR 117) & Vista Drive

Traffic Improvements

- Add edge lines along CR 117
- North stop sign is not visible, cut back trees
- Remove island
- Cut back all trees that encroach intersection

Roadway Improvements

- Re-configure intersection as T with free rights. Current geometry is very poor for left turning traffic.

SR-239 & State Line (CR 164)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on SR 239
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

State Line (CR 114) & Idaho 34

Traffic Improvements

- Add edge lines along all paved roadway legs
- Re-stripe stop bar on Idaho 34
- Add stop sign on east leg of intersection (gravel leg)

Roadway Improvements

- Realign minor legs (EB and WB legs) of roadway, geometry is currently skewed

Creamery Road (CR 111) & State Line (CR 114)

Traffic Improvements

- Add edge lines along all roadway legs
- Add stop bar on all legs
- Ensure sign heights are to MUTCD standards

Sanderson Lane (CR 107) & East Etna (CR 110)

Traffic Improvements

- Replace existing signage, old signs
- Add edge lines along all roadway legs
- Add stop bar on CR 107
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Remove yield sign and replace with stop sign

Bridle Trail & Stewart Trail (CR 106)

Traffic Improvements

- Add edge lines along CR 106
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

SR-232 & Pine Creek (CR 204)

Traffic Improvements

- Add striping along CR 204
- Add stop bar along CR 204
- Replace all existing delineation (refer to MUTCD for spacing requirements)
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

Roadway Improvements

- Realign CR 204 perpendicular to SR 232
- Re-grade SR 232 south of CR 204, sag curve presents sight distance issues for traffic turning from CR 204

Pomeroy Basin Road (CR 306) & Gomer Road (CR 338)

Traffic Improvements

- Add striping along CR 306
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

Pomeroy Basin Road (CR 306) & Commissary Ranches)

Roadway Improvements

- Sight distance is limited due to hill, consider relocating intersection 200' north

CR-341 & CR 342

Traffic Improvements

- Post speed limit signage
- Add stop sign on CR 341
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

CR-328 & CR 342

Traffic Improvements

- Post speed limit signage

CR-207 & Taylor Lane (CR 218)

Traffic Improvements

- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

CR-207 & Valley View (CR 218)

Traffic Improvements

- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

SR-372 & Fontenelle North (CR 316)/Lincoln Sweetwater (CR 311)

Traffic Improvements

- Re-stripe SR-372

LaBarge Creek Road (CR 315) & Looney Drive (CR 346s)

Traffic Improvements

- Replace existing stop sign, no longer visible
- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

US-89 & SR-236/CR 167

Roadway Improvements

- Realign CR 167 with SR-236, current intersection creates additional conflict points

US-89 & SR-238n

Traffic Improvements

- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

US-89 & CR 126

Traffic Improvements

- Add T-intersection advance warning sign (W2-4 MUTCD sign)
- Add two direction large arrow sign at T-intersection (W1-7 MUTCD sign)

US-89 & CR 106

Roadway Improvements

- Realign CR 106 perpendicular to US 89

H. ADDITIONAL RECOMMENDATIONS

1. Safety

The following roadway segments were identified in the safety analysis sections as having a high crash incidence as well as crash rates over WYDOT averages.

- CR 137
- CR 135
- CR 122
- CR 123
- CR 126
- CR 117
- CR 304
- CR 141
- CR 340
- CR 140
- CR 315
- CR 207

Site specific safety investigations should be conducted along these roadways. This safety investigation should take place at clusters identified in the Figures 1.1 - 1.5 in conjunction with the above identified county road locations. Roadway segments as well as intersections should be investigated. The ITE Traffic Engineering Handbook Table 7-13 and 7-14, located in Appendix E should be used as a means for potential countermeasures.

2. Delineation

Delineation of roadways in Lincoln County is generally inadequate. Some of the intersections identified above call for delineation improvements. However the majority of intersections and roadway segments throughout the county are without delineation.

All county roadways with horizontal curve radii greater than 50 feet and less than 1000 feet should have delineation installed. All installed delineation should meet the requirements set forth in the MUTCD (2003 Edition - Table 3D-1).

3. Route Signage

Install route signage at all T-intersections. Based on the photo log located in Appendix A route signage is not apparent at the majority of T-intersections along the stopping/yielding leg. Placement of route signage at these intersections is primarily for road users who are not familiar with the area. In addition, they will enhance the emergency response ability by familiarizing and standardizing names and locations of roadways.

Use the Lincoln County Roads Speed Zone Signing Plan as a guide in determining where route signage is inadequate.

4. Speed Limit Signage

Post speed limit signs in the vicinity of all intersections within the county where it is missing. Posted speed limits are present in the majority of identified intersections within the county.

Use the Lincoln County Roads Speed Zone Signing Plan as a guide in determining where speed signage is inadequate.

5. Roadway Surface Conditions

The AASHTO-Guidelines for Geometric Design of Very Low-Volume Roads (ADT ≤ 400) addresses unpaved roads. These AASHTO guidelines state that “provision of an unpaved surface is an economic decision that is appropriate for many very low-volume roads for which the cost of constructing and maintaining a paved surface would be prohibitive”.

These guidelines also discuss the NCHRP Report 362 which discusses the safety of unpaved roads as opposed to paved roads. The NCHRP Report 362 indicates that crash rates were typically higher for unpaved roads compared to paved roads when the ADT reaches 250 vehicles per day (vpd). Additionally, the paving of a road with traffic volumes between 300 to 300 vpd can expect to see one less severe crash every 10 to 15 years.

The report gives “... no specific guidelines that indicate the maximum traffic volume level for which unpaved surfaces are appropriate”.

Unpaved roads within Lincoln County should be monitored for both ADT volumes and as well as crashes. As ADT volumes exceed 250 vehicles per day, or if the number of crashes along a given unpaved roads increases, Lincoln County should consider paving the identified road segments. Economic considerations also need to be included when evaluating the demand of a paved road opposed to a gravel road.

Based on existing ADT’s, Safety analysis, the following roads should be considered for pavement improvements:

- Fontenelle North (CR 316) – MP 0.5. to MP 3.27
- Fontenelle Dam (CR 313) – MP 0.0 to MP 3.97
- Elkol Road (CR 304) – MP 0.0 to MP 3.2
- Shute Creek (CR 340) – MP 0.0 to MP 9.45

The Fontenelle Roads are just over the 250 VPD threshold, but current energy development is increasing the use of this road. This road is used as a cutoff, bypassing State Highway 372 to US 189. Crow Creek (CR 141) from MP 3.50 to MP 5.98 and LaBarge Creek (CR 315) from MP 11.2 to MP 13.0 were also identified as a concern based on the safety analysis, however both roads experience well under the 250 ADT Threshold. Pavement improvements are not justified at this time. The Elkol Road and Shute Creek Road are seeing increased industrial traffic.

6. Roadway/Shoulder Widening

The roadway inventory identifies travel widths on each county roadway. The projected ADT volumes determined from the capacity analysis section of this report was used in conjunction with the Wyoming County Road Fund Manual Chapter IX, Design Standards, Table 10 and the 1990 AASHTO Table V-8. These tables list the criteria for Minimum Width of Traveled Way and Shoulders. This criteria is based on design speed and ADT volume for roadway segments and a copy is located in Appendix E Design Speed ranges were assumed when unknown based on the general roadway geometry and distances between intersections. Roadways that might have reached an ADT threshold were identified and are listed below in Table 1.18.

Table 1.18

Roadway Segment	Current Pavement Width (feet)	Assumed Design Speed (mph)	Proposed Pavement Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	760
Lost Creek (CR 120)	20	45	22	4	430
East Etna (CR 110)	19	45	20	2	270
Stewart Trail (CR 106)	18	45	20	2	330

Table 1.19 below lists road segments in the vicinity of identified intersections and the need for roadway widening improvements based on AASHTO criteria.

For information regarding shoulder improvements for roadways in Lincoln County refer to Wyoming County Road Fund Manual Chapter IX Design Standards.

Table 1.19 - Roadway Widening Warrants

Road Segments Near Identified Intersections	North Leg ADT	South Leg ADT	East Leg ADT	West Leg ADT	Existing Road Width	Road Widths Improvement Warrants
Bitter Creek	-	-	100	80	22	No
Smoot-Afton (148)	60	120	-	-	24	No
Cottonwood Dr. (164x)	-	-	160	140	18	No
406	n/a	60	-	-	18	No
Dry Creek (146)	-	-	220	n/a	21	No
Bitter Creek (140)	430	330	-	n/a	22	No
SR-236	-	-	530	480	22	No
Bitter Creek (140)	310	540	-	-	22	No
Fairview Spring Creek (144)	180	190	-	-	22	No
Fairview South (143)	-	-	150	130	20	No
Fairview South (143)	-	-	50	n/a	22	No
Crow Creek (141)	80	130	-	-	22	No
SR-238	-	-	1530	1180	30	No
Allred (135 & 198)	530	280	-	-	24	No
SR-238	-	-	1020	980	24	No
Crow Creek (141)	n/a	230	-	-	22	No
Swift Creek Lane (137) AM	-	-	680	n/a	24	No
Allred (135) AM	380	750	-	-	24	No
Swift Creek Lane (137) PM	-	-	840	n/a	24	No
Allred (135) PM	550	780	-	-	24	No
(136)	-	-	210	130	24	No
Allred (125)	90	150	-	-	24	No
Grover Park	-	-	90	110	20	No
Fifth Street	n/a	20	-	-	20	No
Auburn-Tygee (134)	-	-	250	250	24	No
Stump Creek (133)	30	n/a	-	-	20	No
Main Street	-	-	90	110	20	No
First West Street	100	80	-	-	22	No
(131)	-	-	130	100	22	No
(132)	40	70	-	-	22	No
Willow Creek Canyon (177)	-	-	30	n/a	19	No
Bedford-Turnerville (123)	180	170	-	-	20	No
Heiner-Suter Lane (127)	-	-	150	n/a	19	No
Bedford-Turnerville (123)	320	230	-	-	25	No
Strawberry Creek (126)	-	-	760	760	20	See table above
Strawberry Street	20	n/a	-	-	22	No
Strawberry Creek (126)	-	-	760	480	23	No
Thayne Bedford (122)	590	n/a	-	-	25	No
Thayne Bedford (122)	-	-	250	650	25	No
Bedford North (121)	n/a	680	-	-	24	No
Thayne Bedford (122)	-	-	1070	1960	25	No
Muddy String (117)	1150	10	-	-	24	No
Lost Creek (120)	-	-	430	n/as	20	See table above
Muddy String (117)	1070	1090	-	-	24	No
(119)	-	-	430	70	20	No
Muddy String (117)	1000	1160	-	-	24	No
Cedar Creek (118)	-	-	780	1130	28	No

Table 1.19 - Roadway Widening Warrants (Cont.)

Road Segments Near Identified Intersections	North Leg ADT	South Leg ADT	East Leg ADT	West Leg ADT	Existing Road Width	Road Widths Improvement Warrants
Muddy String (117)	910	880	-	-	24	No
Vista Drive	-	-	1030	n/a	24	No
SR-239	-	-	780	n/a	22	No
State Line (164)	710	500	-	-	22	No
SR-23 (Idaho)	-	-	30	580	24	No
State Line (164)	360	730	-	-	22	No
Creamery (111)	-	-	290	210	24	No
State Line (114)	-	280	-	-	21	No
State Line (114)	80	-	-	-	21	No
Sanderson Lane (107)	-	-	n/a	230	24	No
East Etna (110)	270	100	-	-	19	See table above
Bridle Trail	-	-	140	n/a	25	No
Stewart Trail (106)	200	330	-	-	18	No
Pine Creek	-	-	30	n/a	24	No
SR-232	80	90	-	-	22	No
Hams Fork Rd. (305)	130	130	-	-	22	No
Pomeroy Basin Rd.	110	130	-	-	28	No
Gomer Rd.	-	-	n/a	20	24	No
Pomeroy Basin Rd.	50	50	-	-	28	No
Commissary Ridge	-	-	n/a	0	24	No
Shute Creek	-	-	350	350	26	No
(341)	-	-	10	n/a	20	No
(342)	50	80	-	-	22	No
Twin Creek (328)	80	100	-	-	18	No
(342)	-	-	30	n/a	24	No
Fontelle North	280	280	-	-	24	No
Taylor	-	-	n/a	130	25	No
CR 207	330	220	-	-	28	No
Valley View	-	-	n/a	90	25	No
CR 207	280	210	-	-	28	No
SR 372	-	-	140	300	22	No
(316)	230	-	-	-	24	No
(311)	-	440	-	-	24	No
(315)	-	-	90	50	22	No
Looney Drive	40	n/a	-	-	20	No
US-89	-	-	-	-	-	-
SR-236	-	-	340	1870	24	No
US-89	-	-	-	-	-	-
US-89	-	-	-	-	-	-
SR-237	-	-	100	640	24	No
US-89	-	-	-	-	-	-
SR-238 (North)	-	-	n/a	390	24	No
US-89	-	-	-	-	-	-
Strawberry Creek (126)	-	-	730	-	23	No
Whitetail Lane	-	-	-	100	18	No

Table 1.19 - Roadway Widening Warrants (Cont.)

Road Segments Near Identified Intersections	North Leg ADT	South Leg ADT	East Leg ADT	West Leg ADT	Existing Road Width	Road Widths Improvement Warrants
US-89	-	-	-	-	-	-
(173s)	-	-	240	n/a	20	No
US-89	-	-	-	-	-	-
Spring Creek Rd. (119)	-	-	120	n/a	20	See table above
US-89	-	-	-	-	-	-
(118)	-	-	730	n/a	28	No
US-89	-	-	-	-	-	-
Prater Canyon Rd. (116)	-	-	120	-	21	No
US-89	-	-	-	-	-	-
Creamery (111)	-	-	n/a	380	24	No
US-89	-	-	-	-	-	-
Sanderson Lane	-	-	210	0	24	No
US-89	-	-	-	-	-	-
(108)	-	-	530	-	21	No
(106)	-	-	-	50	18	See table above
US-89	-	-	-	-	-	-
McNeel Power Plant (104)	-	-	n/a	10	18	No
US-89	-	-	-	-	-	-
US-26	-	-	-	-	-	-

I. PUBLIC MEETING COMMENTS AND RECOMMENDATIONS

Public meetings were held on August 9th in Kemmerer, WY and on August 10th in Afton, WY. The intent of this public meeting was to gain public input for roadway improvements, safety/congestion issues, and potential growth areas.

1. Kemmerer Public Meeting 1

The following general comments were noted during the August 9th public meeting in Kemmerer, WY:

- Connectivity of the Shute Creek Road (CR 340) with the BLM Road and Sweetwater County Road that connects with SR 372
- Fontenelle Road should be considered for jurisdiction exchange as it provides direct access to La Barge
- Shute Creek Road & Elkol Road will see increased truck traffic due to changes in the energy industry
- Look for continuity with BLM, Forest, and County Roads

2. Kemmerer Comments Addressed

The connectivity of Shute Creek Road with the BLM road is a good recommendation. Coordination between Lincoln County and the BLM is necessary for this to be implemented.

As part of this transportation plan it is recommended that coordination between BLM, Forest Service, and Lincoln County to determine connectivity of roads.

Discussions between Lincoln County and WYDOT should continue regarding jurisdictional issues on the Fontenelle Roads as well as other roads throughout Lincoln County. The County and WYDOT should look at the entire transportation system and make jurisdictional adjustments that best meet the priorities of each entity. (See the discussion on jurisdictional issues in Section 3 Master Roadway Improvements.)

3. Afton Public Meeting 1

The following general comments were noted during the August 10th public meeting in Afton, WY:

- Connect Willow Creek Canyon (CR 177) through private land and convert to public road
- Big Ridge - Connect through private land and convert to public road
- Widen Access to Airport
- Create new access from US 89 to SR 238
- Continue CR 129 “Over the Top”
- Connect Narrows-Turnerville (CR 128) to Bedford-Turnerville (CR 123)
- Emergency Services would like a County wide grid system
- Dana (CR 122) has a speeding problem
- Stateline (CR 114) should continue to CR 104
- CR117 has significant traffic, pedestrians, and speed
- East Etna South to Clark Lane should be a county road
- Connect Clark Lane to Tincup
- CR 129 used to go through, should continue and be county road
- US 89 safety at Riverview Ranchettes (CR 173s)
- Look at access off main highway to Airport Road (CR 145)
- Look at Perkins & US 89, straight away from MP 101.893 to 102
- Consider combined access near Thayne and other areas
- Look at CR 126 and CR 123 for safety
- Narrows to Turnerville, CR 128, why doesn't this connect, it used to
- Look at dropoff/geometry CR 150 & CR 149
- Sight distance issue in low spot on US 89 near Gardner Lane, just north of Grover
- CR 127/CR 124 intersection sight distance issue
- 90 degree turns are a safety issue

- Meridian Group Development may affect CR 100
- CR 115/CR 117 Star Valley Ranches potential for considerable traffic
- CR 115 warrants a turn lane (US 89)
- Area north of Star Valley Ranches (CR 118, CR 117) will see considerable new development including golf course, 340 lot master planned development and an RV park adding approx. 75 new lots/year up to build out of 1100 lots

4. Afton Comments Addressed

If funding is available a county wide grid system should be considered for Emergency Services.

Conduct a speed study along sections of CR 123. Consider speed reduction or implementing speed control measures (speed bumps, police presence).

Stateline should continue to McNeal Power Plant Road. Adding additional north/south corridors in the Lower Valley is critical. Utilizing existing low volume intersections along US 89 for north/south connectivity is recommended. Any private roads that could potentially “tie-in” Stateline should be acquired and converted to a county road.

Connection of CR 136 to SR 238 is a good comment and should be implemented. An additional east/west corridor in the vicinity of the Afton is not capacity driven however it will ease traffic flow along other east/west corridors in the vicinity.

No safety issues were identified at the Riverview Ranchettes (CR 173S) based on the safety analysis, however a safety study should be conducted as a result from this public comment. CR 126 and CR 123 were also identified as a potential safety issue during the public comment meeting, these roadways have been identified in the safety analysis and recommendations are located in the safety analysis section of this report.

A site investigation needs to be conducted along CR 150 and CR 149 to determine the need of guardrail installation.

A site investigation needs to be conducted along US 89 (near Gardner Lane) to determine the potential sight distance issue.

A site investigation needs to be conducted at the CR 127/CR 124 intersection to determine if there is a sight distance issue.

CR 115 Clark Lane (and the US 89 intersection) may warrant a turn lane but it is not capacity related.

SECTION 2: FORECASTS AND RECOMMENDATIONS

A. 2030 CAPACITY ANALYSIS

A capacity analysis was conducted for the anticipated future traffic demand on the Lincoln County road network. All intersections and road segments identified in Task 1 were included for the 2030 capacity analysis.

In order to determine the 2030 projected traffic volumes growth rates for regions within Lincoln County were established. The county was segmented into four distinct districts:

- Lower Valley
- Upper Valley
- Cokeville Area
- Eastern Lincoln County

Various sources were used in determining the proposed growth rates for each identified area. Growth rate information was obtained from the US 89 Corridor Study-Star Valley (WYDOT), US Census Data, and the Lincoln County: Profile and Data Book; Bureau of Economic and Business Research (University of Utah).

The areas were segregated based on differing growth rates within the county. For each identified area, growth rates within cities for each area were used as a means in determining the final value. Some decline in growth was noted within all areas in Lincoln County during various time frames from 1950 to 2000. However no declining values were used in determining a final growth rate.

Figure 2.1 is a list of the determined growth rates used for analyzing the 2030 roadway network and intersections:

Table 2.1 - Lincoln County Growth Rates

Area	Growth Rate
Lower Valley	4.00%
Upper Valley	1.40%
Cokeville Area	0.90%
Eastern Lincoln County	1.00%

The growth rate applied for the Lower Valley was a result of information provided by the Lincoln County Planning Department. Based on the information located in the Star Valley Corridor Study, US Census Data, and University of Utah economic study a growth rate of 2.1% was considered for the Lower Valley. However, the Lincoln County Planning Director noted that this growth rate may be too conservative for the significant growth occurring in the Lower Valley.

The Lower Valley is seeing a growth rate of 7% in primary homes and 4% in secondary homes. An economic analysis shows that the income of those moving in is generated by investments outside of the county. This growth is a result of the desirability of the location, rather than an economically driven growth. Based on this phenomenon and the number of available building lots and the already zoned capacity for additional lots, the Lincoln County Planning Department recommended a growth rate of 4%. They felt that this rate is realistic and can be sustained over the planning period.

Once these growth rates were applied to the identified intersections a capacity analysis was conducted. A default value of 0.88 was used for the Peak Hour Factor and 4% was used for the percentage of Heavy Vehicles for the 2030 future demand capacity analysis.

1. Level of Service

Table 2.2 shows the estimated 2030 LOS for identified intersections within Lincoln County. Table 2.2 lists the intersection, traffic control type used for analysis, LOS and delay that is expected for each leg of the intersection.

The 2030 intersection capacity analysis is located in Appendix B.

Table 2.2 - 2030 Intersection Level of Service

Intersections	Traffic Control	2030 Projection		2030 Projection		2030 Projection		2030 Projection	
		EB	EB	WB	WB	NB	NB	SB	SB
		LOS	Delay (s)						
Bitter Creek & Smoot-Afton (148)	2-way yield	A	7.2	A	7.3	A	8.6	A	8.8
Cottonwood Drive (164s) & (406)	1-way yield	-	-	A	7.3	A	8.7	n/a	n/a
Dry Creek (146) & Bitter Creek (140)	1-way stop	n/a	n/a	A	7.3	-	-	A	8.6
SR-236 & Bitter Creek (140)	All-way stop	A	7.4	A	7.6	A	6.9	A	7.3
Fairview Spring Creek (144) & Fairview South (143)	2-way stop	A	7.3	A	7.3	A	8.9	A	9.0
Fairview South (143) & Crow Creek (141)	1-way yield	n/a	n/a	A	7.2	-	-	A	7.2
SR-238 & Allred (135 & 198)	2-way stop	A	7.6	A	7.4	A	9.8	B	10.6
SR-238 & Crow Creek (141)	1-way stop	-	-	A	7.5	A	9.2	n/a	n/a
Swift Creek Lane (137) & Allred (135) AM Peak	1-way stop	n/a	n/a	A	9.4	-	-	A	7.5
Swift Creek Lane (137) & Allred (135) PM Peak	1-way stop	n/a	n/a	A	9.3	-	-	A	7.3
(136) & Allred (135)	2-way stop	A	7.3	A	7.3	A	8.5	A	8.9
Grover Park & Fifth Street	1-way stop	-	-	A	7.3	-	-	n/a	n/a
Auburn-Tygee (134) & Stump Creek (133)	1-way stop	A	7.3	-	-	n/a	n/a	A	8.6
Main Street & First West Street	2-way yield	A	9	A	9.1	A	7.3	A	7.2
(131) & (132)	1-way yield	A	7.3	A	7.3	A	8.9	A	9.1
Willow Creek Canyon (177) & Bedford-Turnerville (123)	1-way yield	n/a	n/a	A	7.4	-	-	A	9.1
Heiner-Suter Lane (127) & Bedford-Turnerville (123)	1-way stop	n/a	n/a	A	8.6	-	-	A	7.3
Strawberry Creek (126) at Strawberry Street	1-way yield	A	7.4	-	-	n/a	n/a	-	-
Strawberry Creek (126) & Thayne Bedford (122)	1-way stop	A	7.5	-	-	n/a	n/a	B	10.5
Thayne Bedford (122) & Bedford North (121)	1-way stop	-	-	A	7.6	A	9.6	n/a	n/a
Thayne Bedford (122) & Muddy Spring (117)	1-way stop	A	7.8	A	7.7	C	22.2	B	11.5
Lost Creek (120) & Muddy Spring (117)	1-way stop	n/a	n/a	B	11.1	-	-	A	7.6
(119) & Muddy String (117)	2-way stop	B	10.9	B	12.5	A	7.5	A	7.5
Cedar Creek (118) & Muddy Spring (117)	2-way stop	B	14.8	B	13.5	A	7.6	A	7.6
Muddy String (117) & Vista Drive	1-way stop	n/a	n/a	B	11.9	-	-	A	7.5
SR-239 & State Line (164)	1-way stop	n/a	n/a	B	10.2	-	-	A	7.5
SR-34 (Idaho) & State Line (164)	1-way stop	A	7.3	A	7.4	B	10.5	A	9.9
Creamery (111) & State Line (114)	All-way stop	A	6.6	A	7.5	A	6.8	A	7.4

Table 2.2 - 2030 Intersection Level of Service

Intersections	Traffic Control	2030 Projection		2030 Projection		2030 Projection		2030 Projection	
		EB	EB	WB	WB	NB	NB	SB	SB
		LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Sanderson Lane (107) & East Etna (110)	1-way yield	A	8.9	n/a	n/a	A	7.3	-	-
Bridle Trail & Stewart Trail (106)	1-way stop	n/a	n/a	A	9.0	-	-	A	7.4
Pine Creek & SR-232	1-way stop	n/a	n/a	A	7.2	A	9.0	A	9.1
Hams Fork Rd (305)	Segment								
Pomeroy Basin Rd. & Gomer Rd.	1-way yield	A	8.4	n/a	n/a	A	7.2	-	-
Pomeroy Basin Rd. & Commisary Ridge	1-way yield	A	7.2	-	-	A	9.0	A	9.1
Chute Creek (340)	Segment								
(341) & (342)	No Control	n/a	n/a	-	-	-	-	A	7.2
Twin Creek (328) & (342)	1-way stop	n/a	n/a	-	-	-	-	A	7.2
Fontenelle North (316)	Segment								
Taylor & CR 207	1-way stop	A	8.8	n/a	n/a	A	7.3	-	-
Valley View & CR 207	1-way stop	A	8.7	-	-	A	7.3	-	-
SR-372 & (316) & (311)	2-way stop	A	8.5	A	9.0	A	7.3	A	7.3
(315) & Looney Drive	1-way stop	A	7.3	-	-	n/a	n/a	A	8.6
US-89 & SR-236	2-way stop	B	13.4	B	10.3	A	8.0	A	7.6
US-89 & SR-238	1-way stop	D	27.6	n/a	n/a	A	9.2	-	-
US-89 & SR-237	2-way stop	B	10.3	C	15.5	A	8.0	A	7.9
US-89 & SR-238 (north)	1-way stop	B	13.2	n/a	n/a	A	8.0	-	-
US-89 & Strawberry Creek (126)	2-way stop	E	38.6	F	57.9	A	8.7	A	8.9
US-89 & (173s)	1-way stop	n/a	n/a	C	18.3	-	-	A	8.7
US-89 & Spring Creek Rd. (119)	No Control	n/a	n/a	C	22.6	-	-	A	8.6
US-89 & (118)	1-way stop	n/a	n/a	C	23.5	-	-	A	8.6
US-89 & Prater Canyon Rd. (116)	2-way stop	E	24.2	E	37.1	A	9.5	A	8.1
US-89 & Creamery (111)	1-way stop	C	21.3	n/a	n/a	A	9.7	-	-
US-89 & Sanderson Lane (107)	2-way stop	-	-	C	23.8	A	9.0	A	8.1
US-89 & (108) & (106)	2-way stop	C	23.9	E	46.1	A	10.0	A	8.2
US-89 & McNeal Power Plant (104)	1-way stop	-	-	n/a	n/a	B	10.2	-	-
US-89 & US-26	1-way stop	n/a	n/a	F	596.6	-	-	A	8.3

As noted in the existing capacity analysis section of this report, an overall delay is identified for intersections with AWSC. Table 2.3 shows the overall intersection delay that can be expected for the SR-236/CR 140 and CR 111/CR 114 intersections.

Table 2.3 - 2030 LOS for AWSC intersections

Intersections	2030 Projection	
	Intersection	
	LOS	Delay(s)
SR-236 & Bitter Creek (140)	A	7.2
Creamery (111) & State Line (114)	A	7.0

2. Capacity Results

Of the intersections identified analysis, the following future LOS was predicted:

- 29 intersections are predicted to operate at LOS A
- 11 intersections are predicted to operate at LOS B
- 7 intersections are predicted to operate at LOS C
- 1 intersection is predicted to operate at LOS D
- 2 intersections are predicted to operate at LOS E
- 2 intersection are predicted to operate at LOS F

In figures 2.1 - 2.13, each intersection analyzed for capacity is identified and the corresponding LOS is noted.

Lincoln County WY Transportation Plan

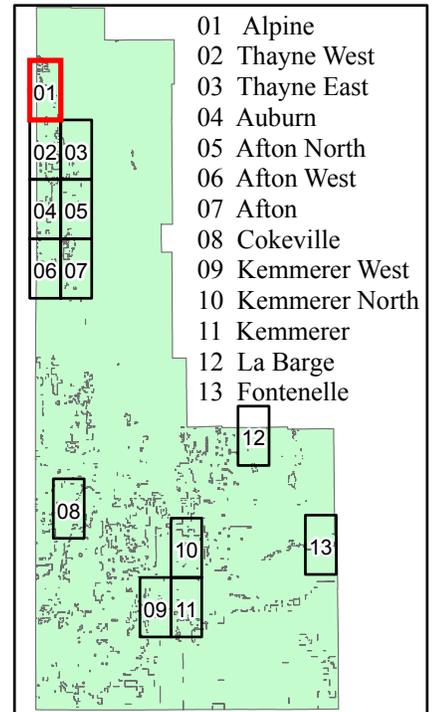
2030 Predicted Intersection Level of Service

Figure 2 - 1
Alpine Area Map

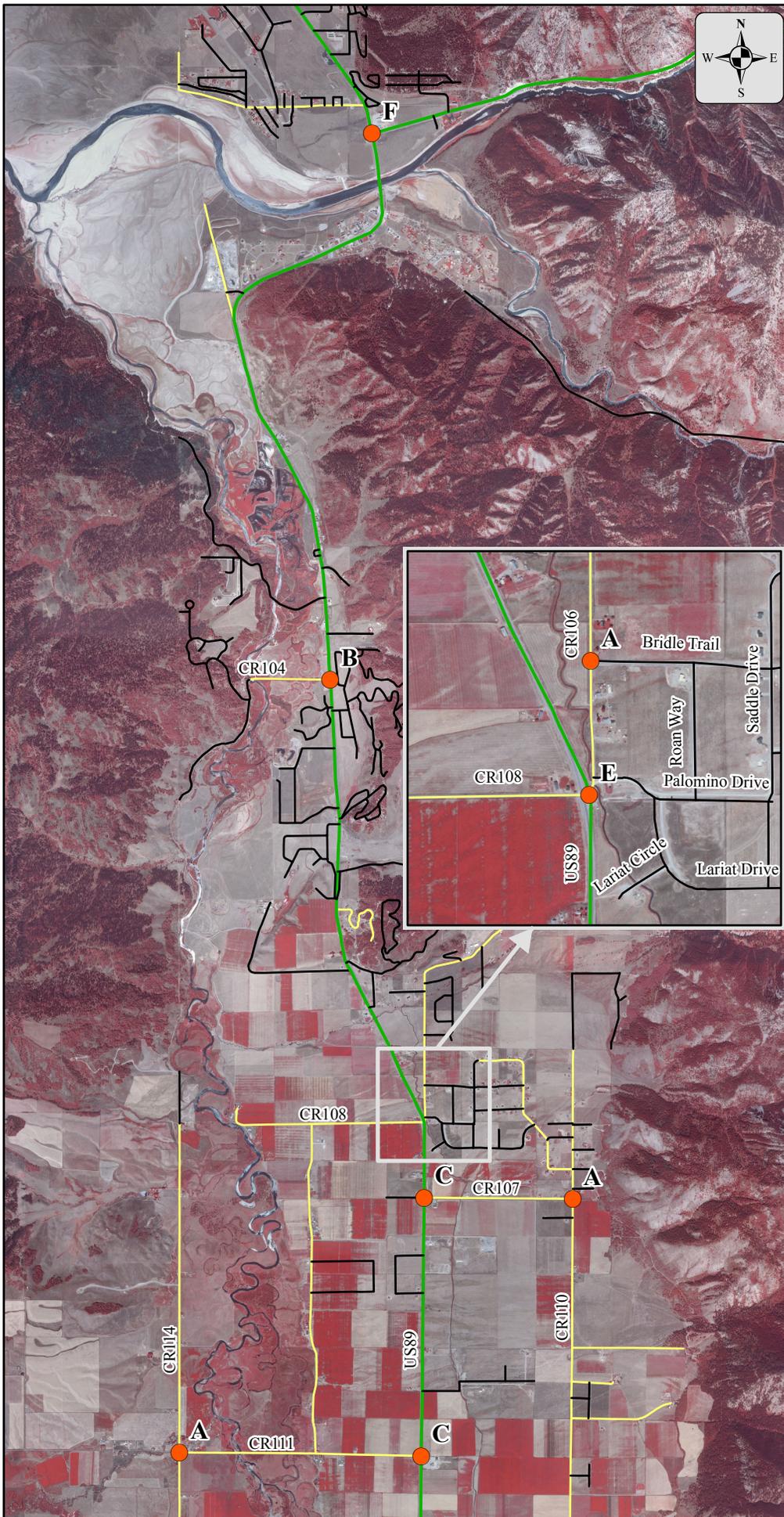
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

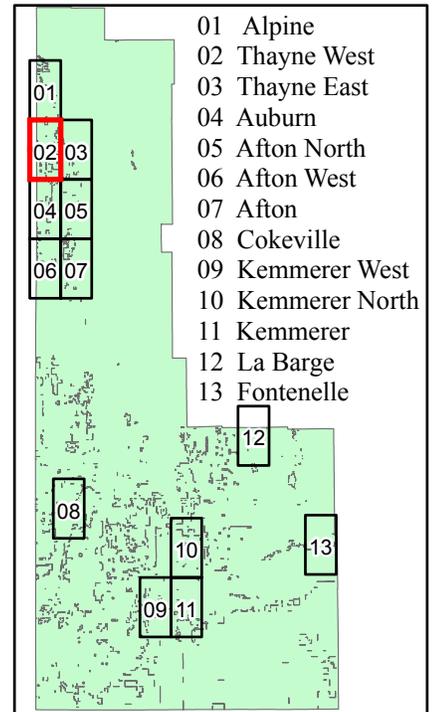
2030 Predicted Intersection Level of Service

Figure 2 - 2
Thayne West Area Map

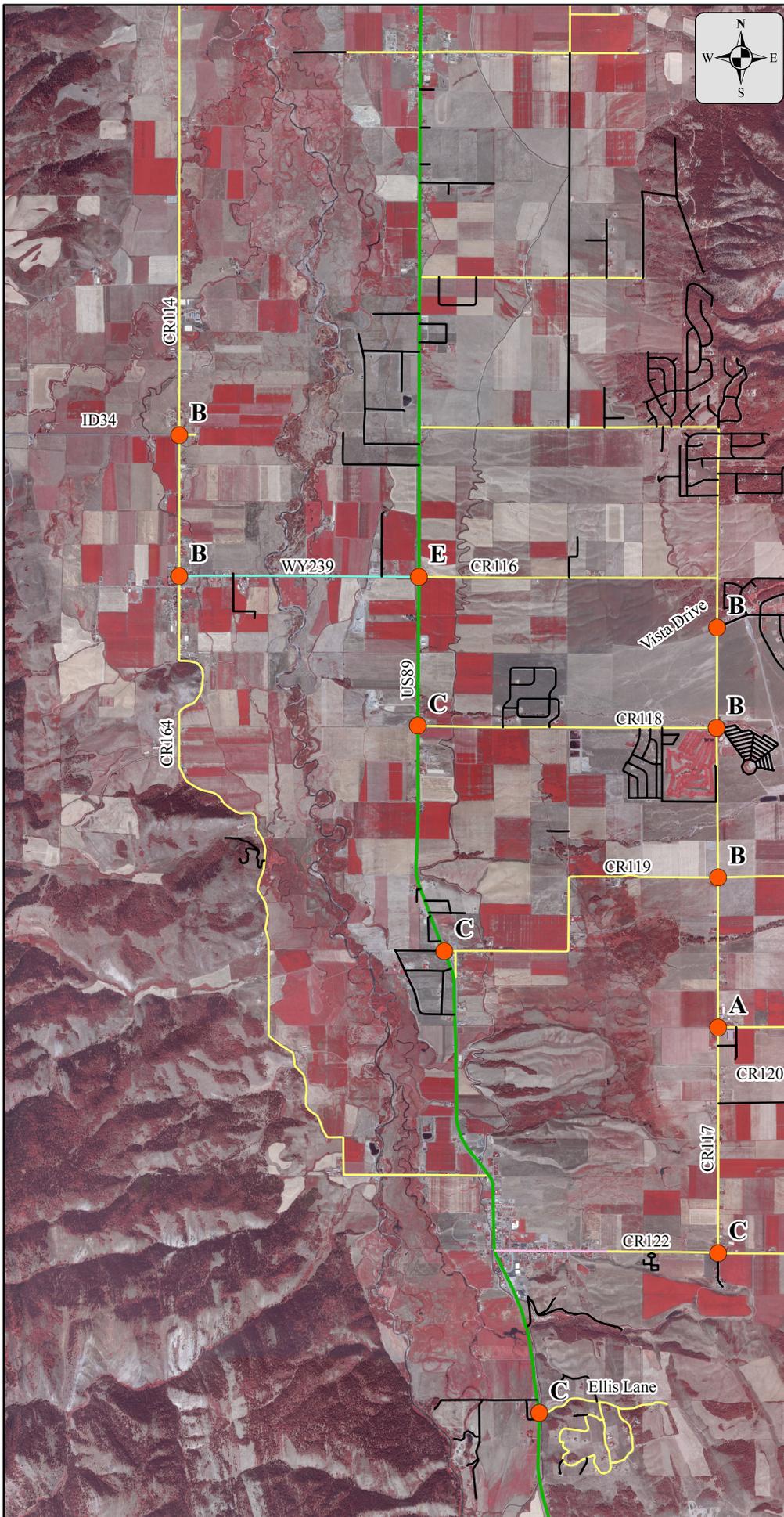
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

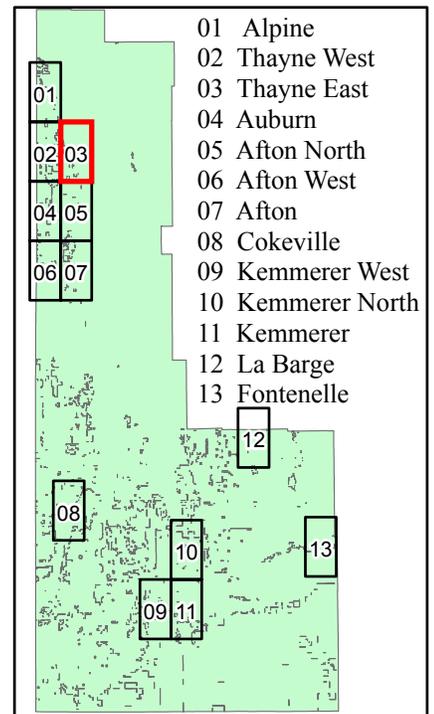
2030 Predicted Intersection Level of Service

Figure 2 - 3
Thayne East Area Map

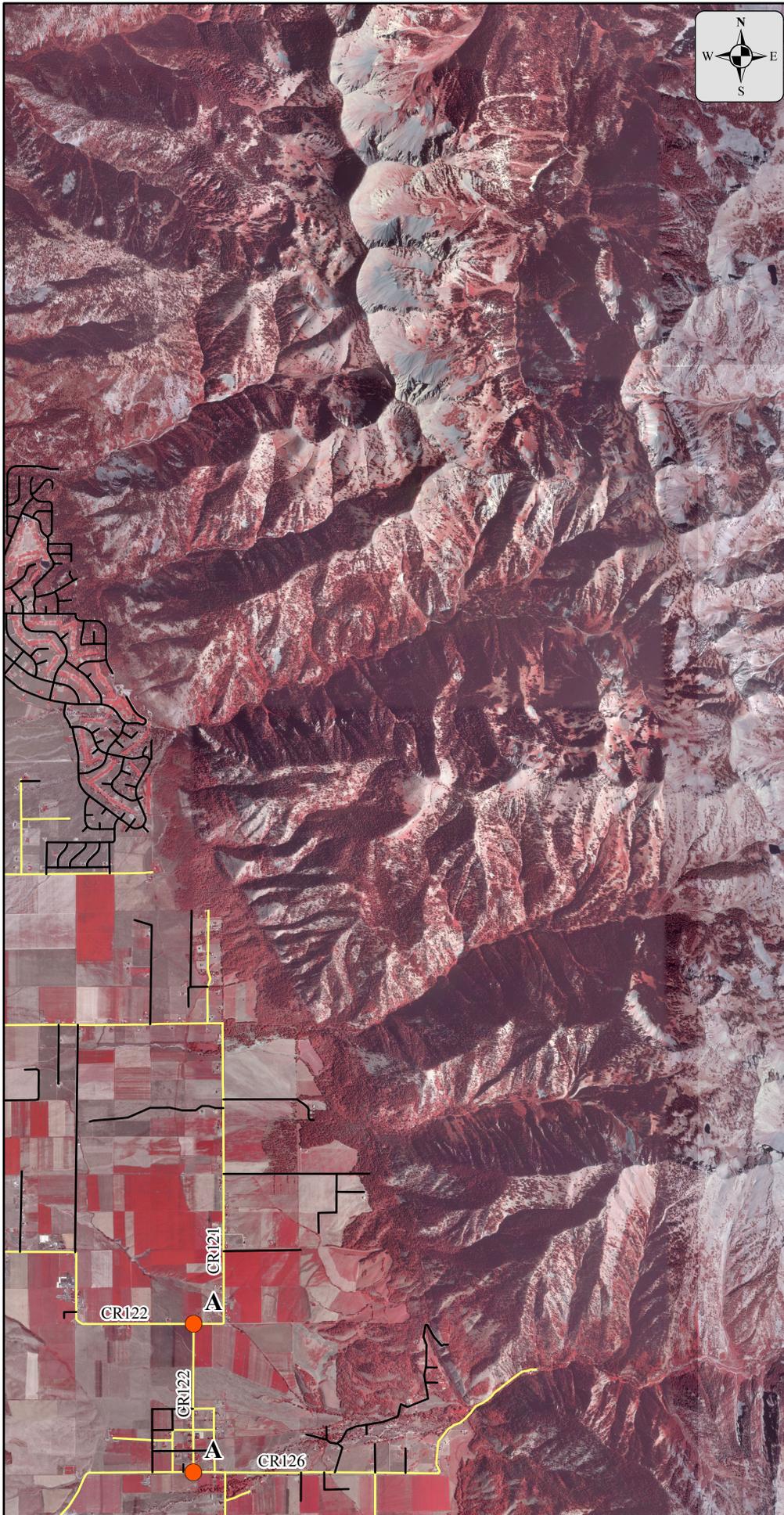
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

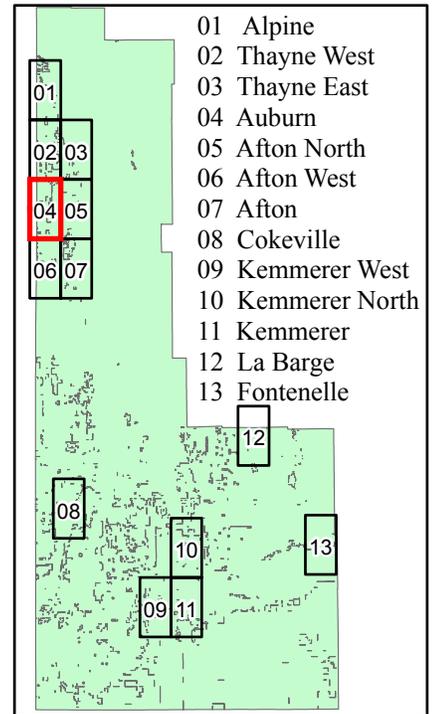
2030 Predicted Intersection Level of Service

Figure 2 - 4
Auburn Area Map

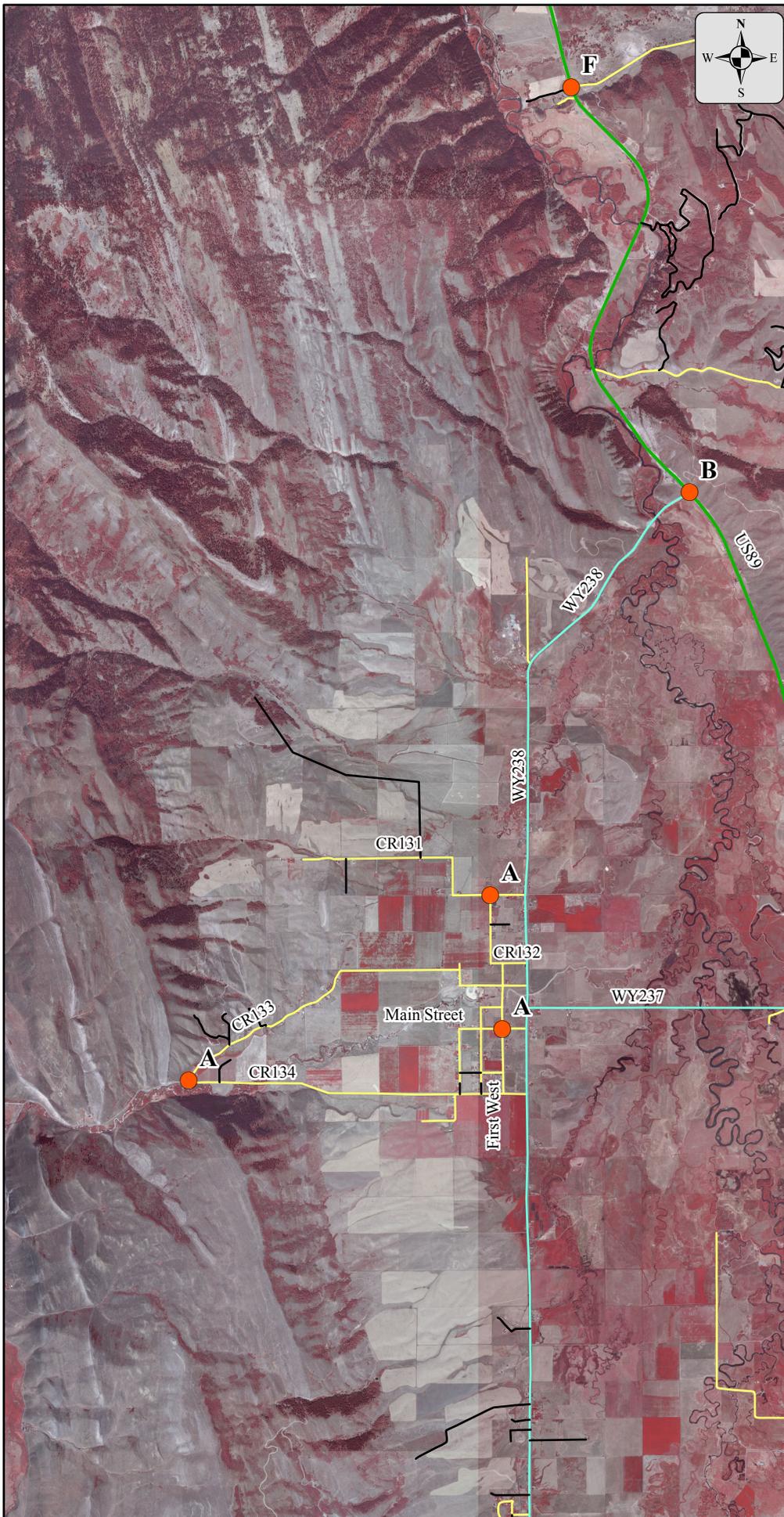
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

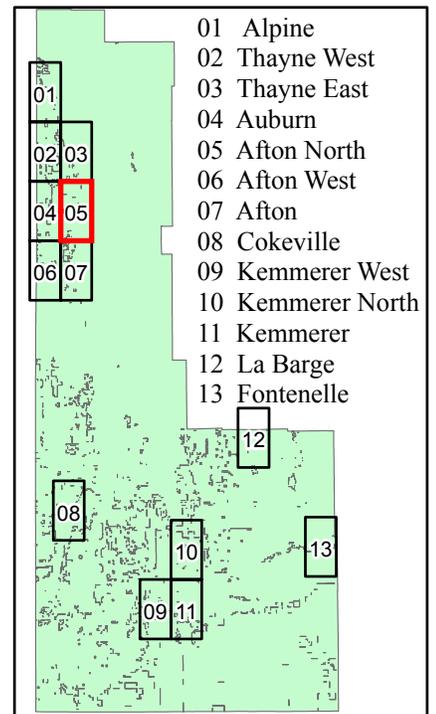
2030 Predicted Intersection Level of Service

Figure 2 - 5
Afton North Area Map

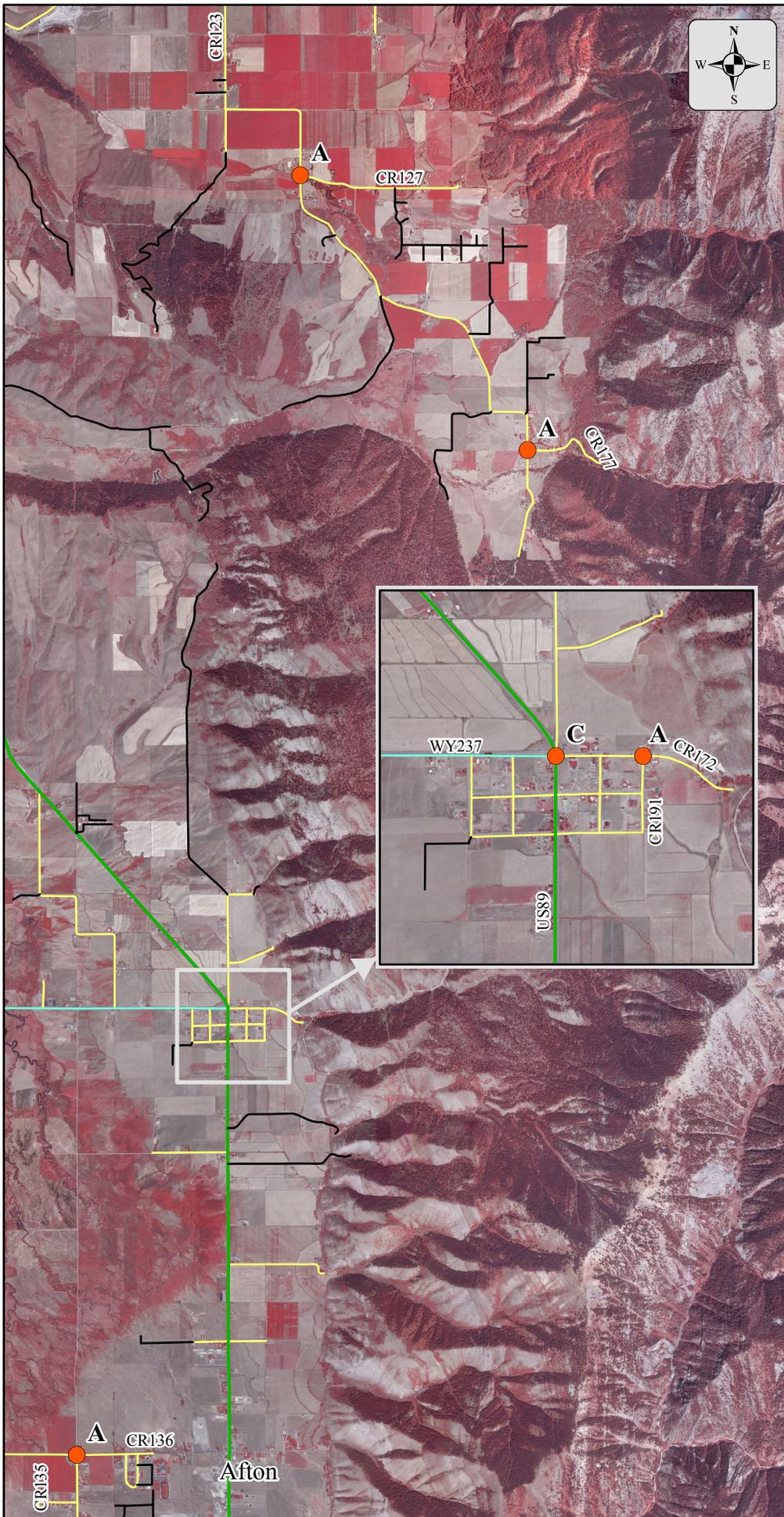
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

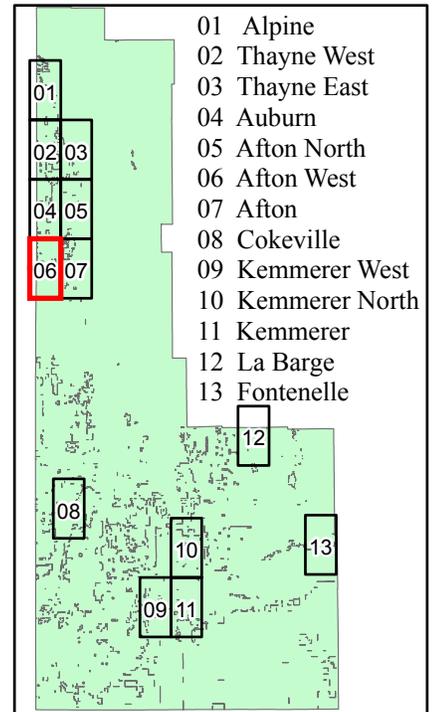
2030 Predicted Intersection Level of Service

Figure 2 - 6
Afton West Area Map

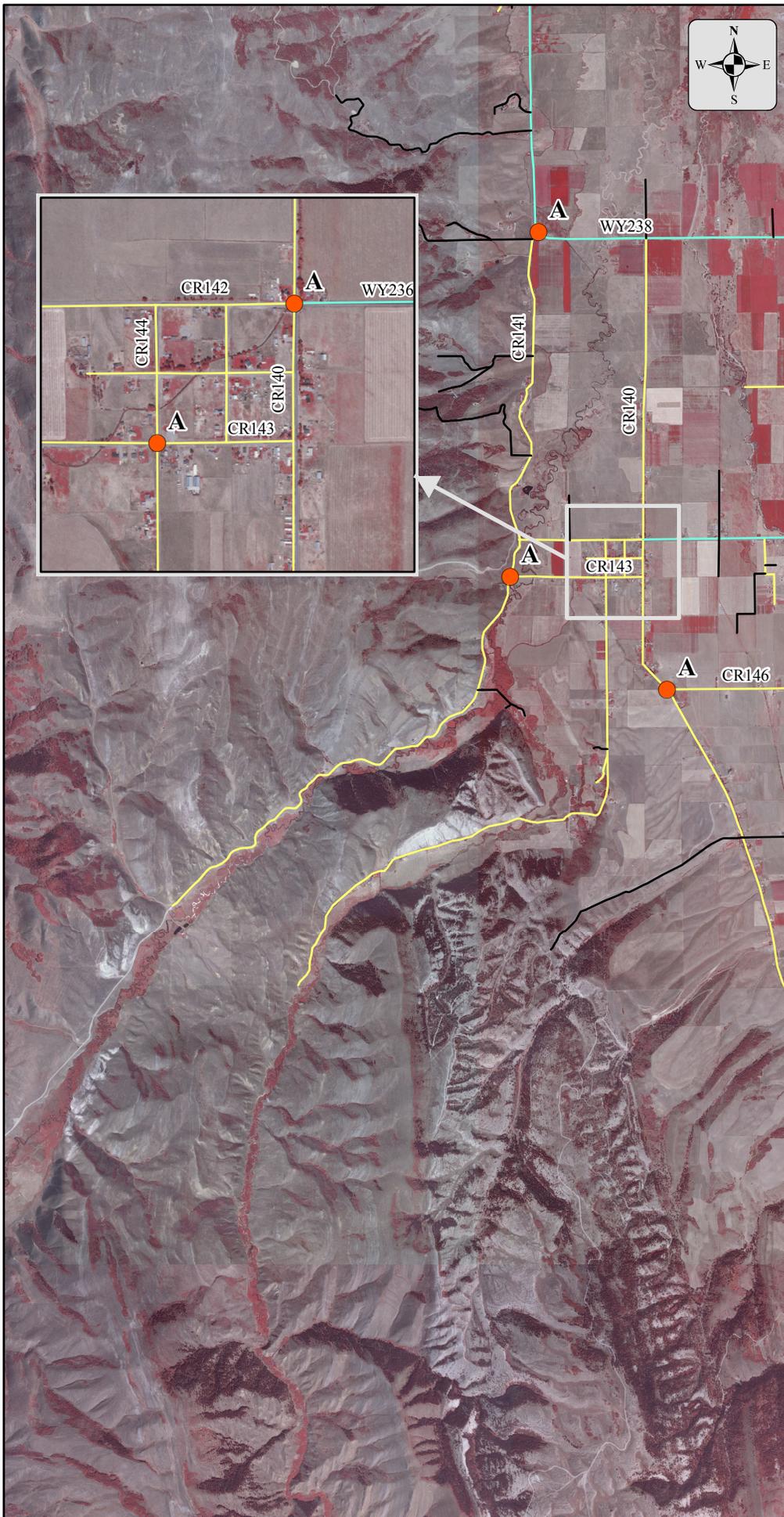
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

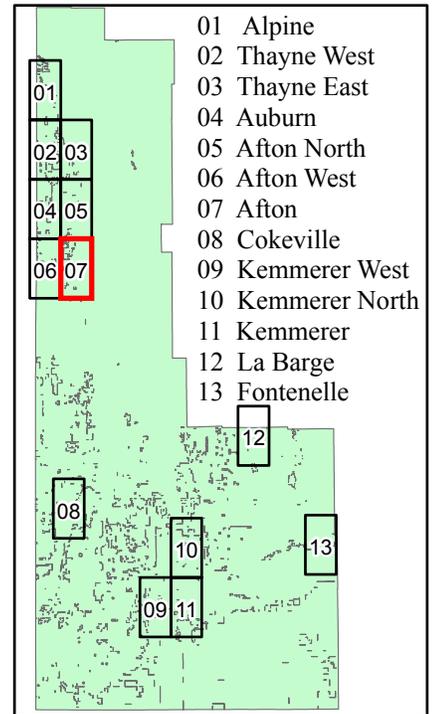
2030 Predicted Intersection Level of Service

Figure 2 - 7
Afton Area Map

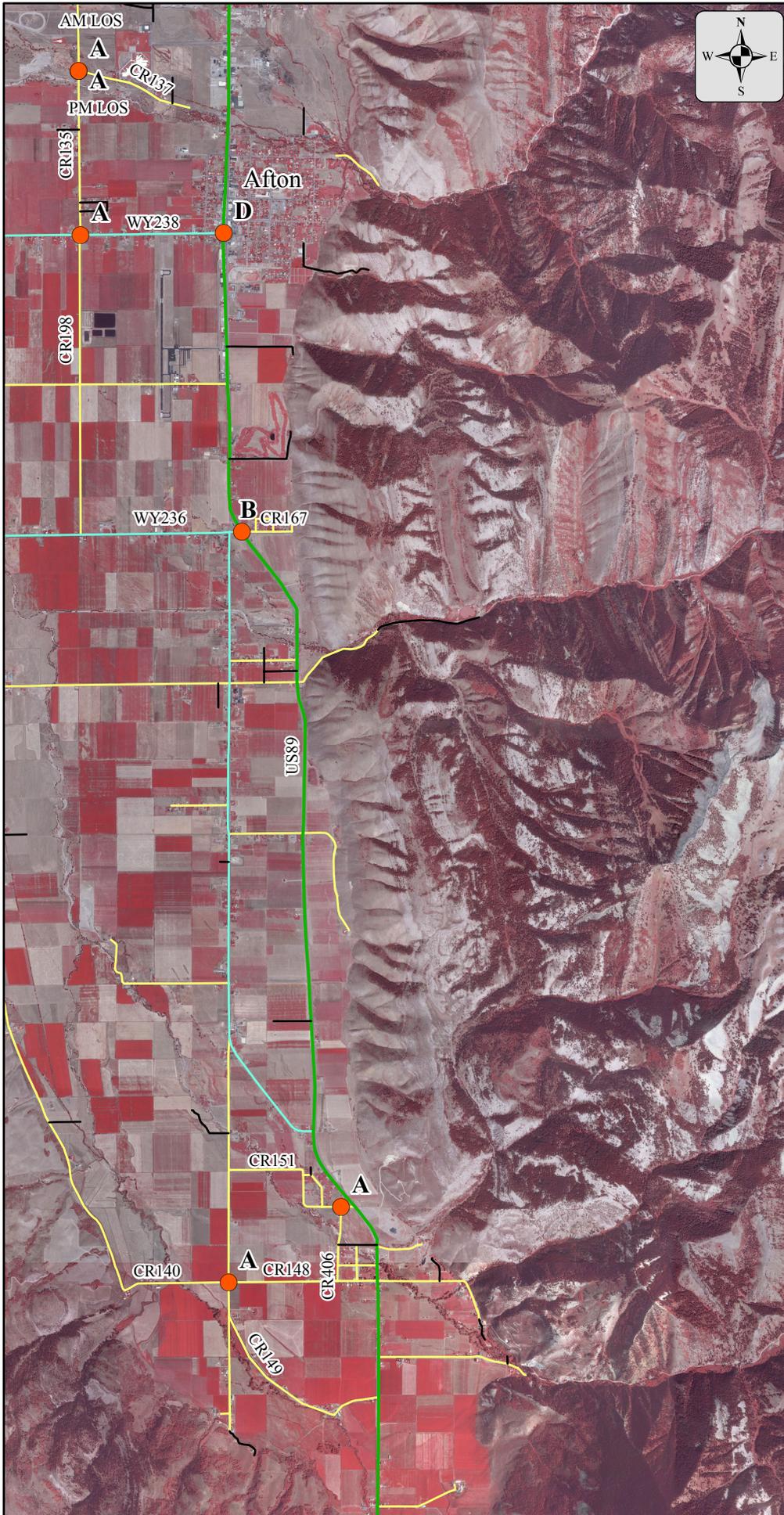
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

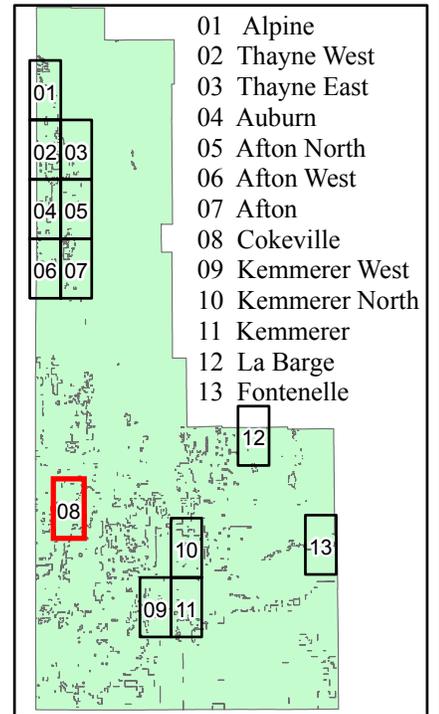
2030 Predicted Intersection Level of Service

Figure 2 - 8
Cokeville Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Lincoln County WY Transportation Plan

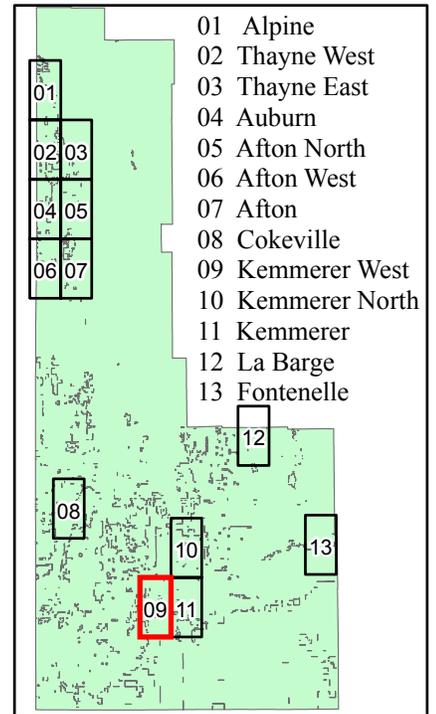
2030 Predicted Intersection Level of Service

Figure 2 - 9
Kemmerer West Area Map

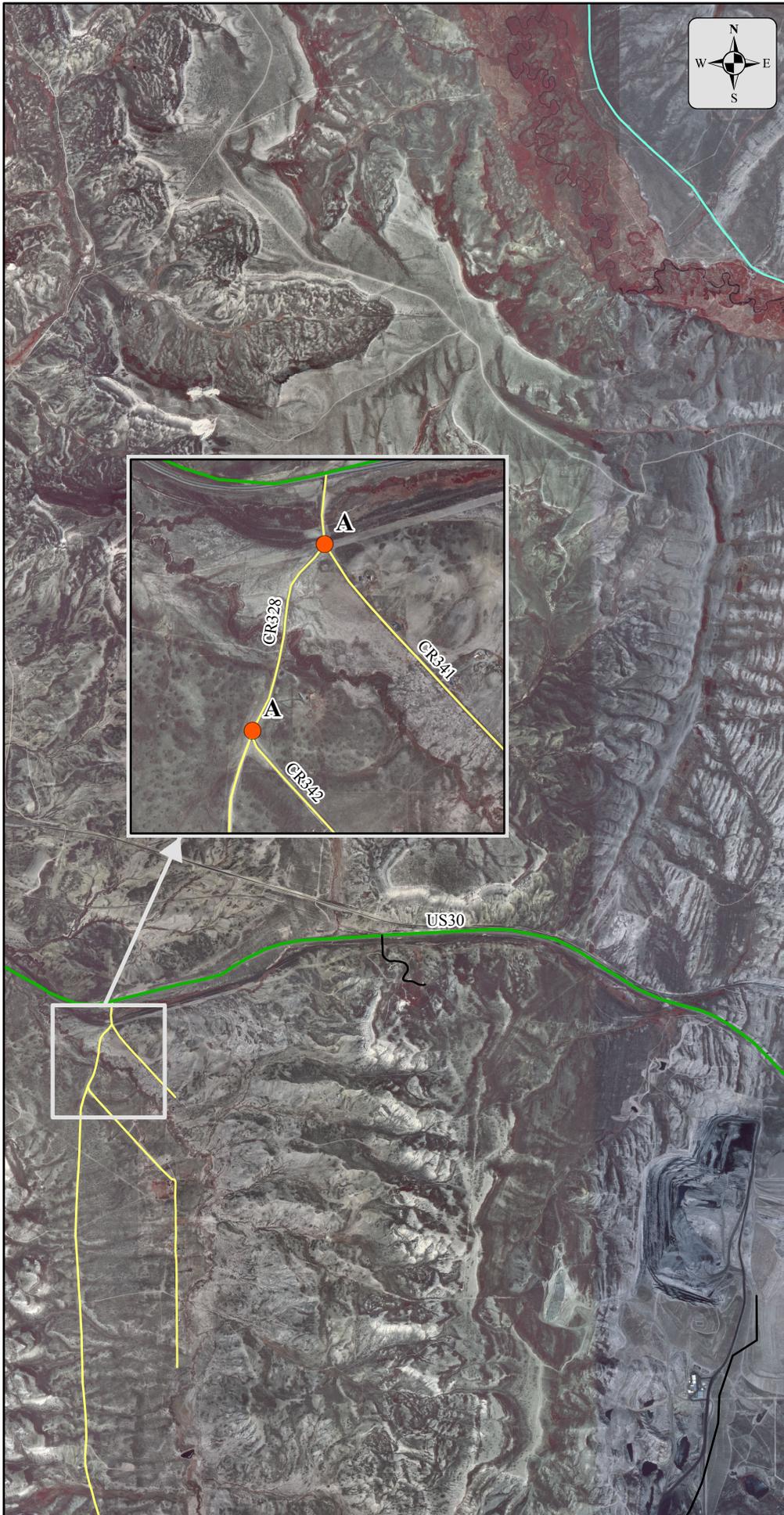
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  430 ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

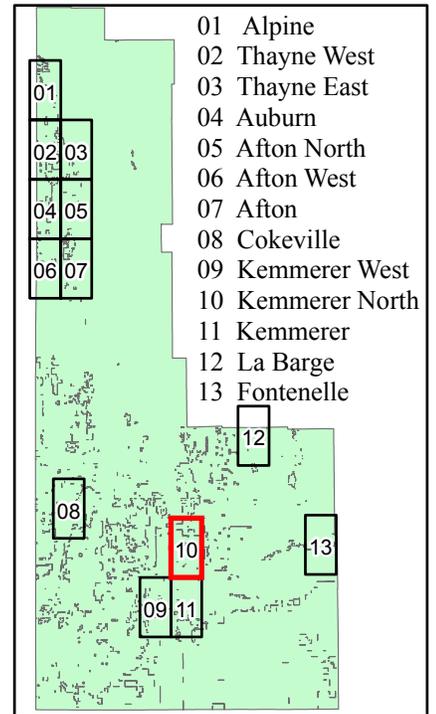
2030 Predicted Intersection Level of Service

Figure 2 - 10
Kemmerer North Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

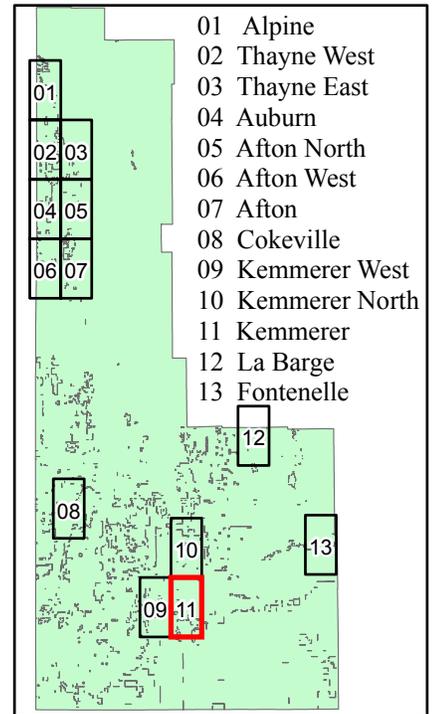
2030 Predicted Intersection Level of Service

Figure 2 - 11
Kemmerer Area Map

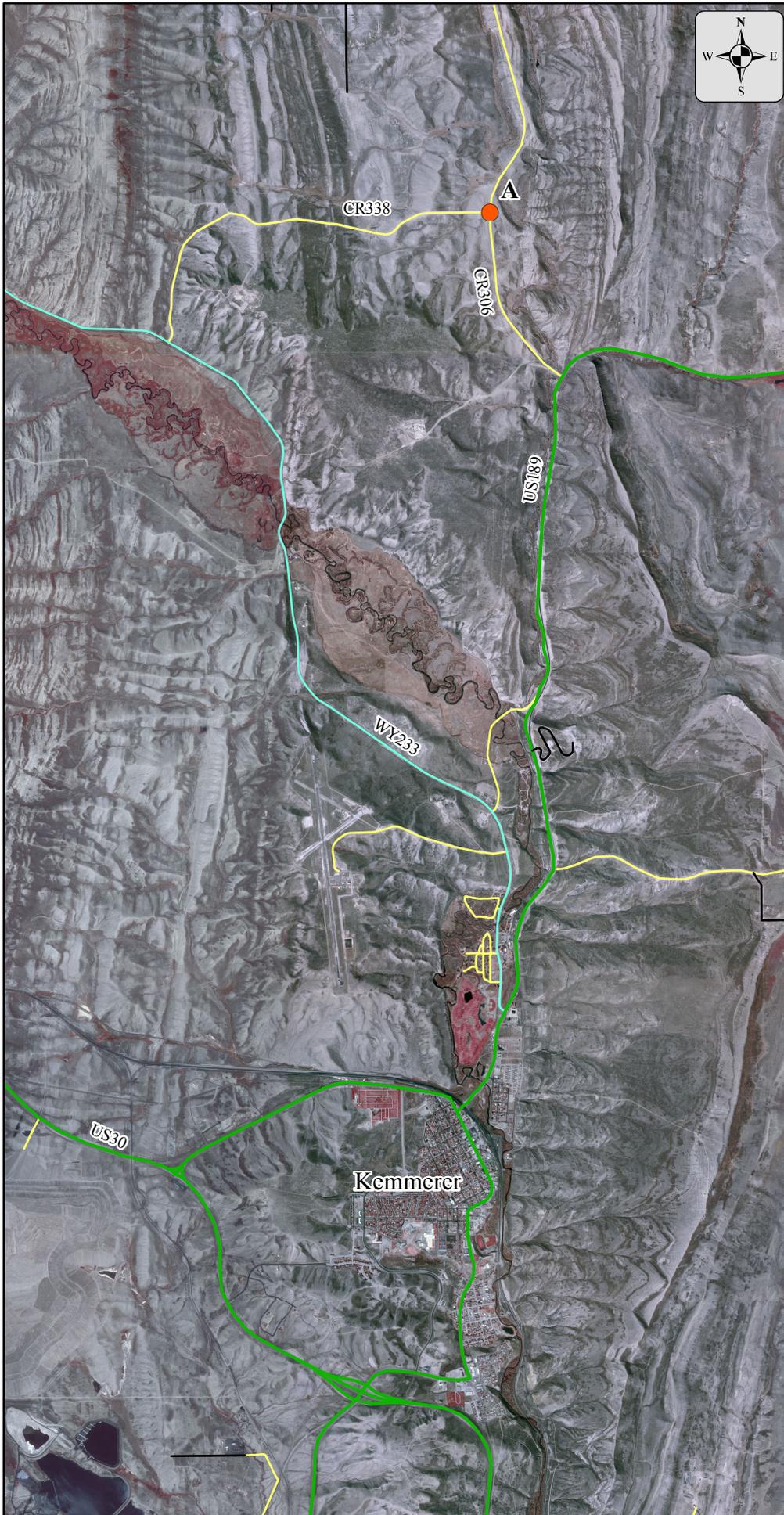
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

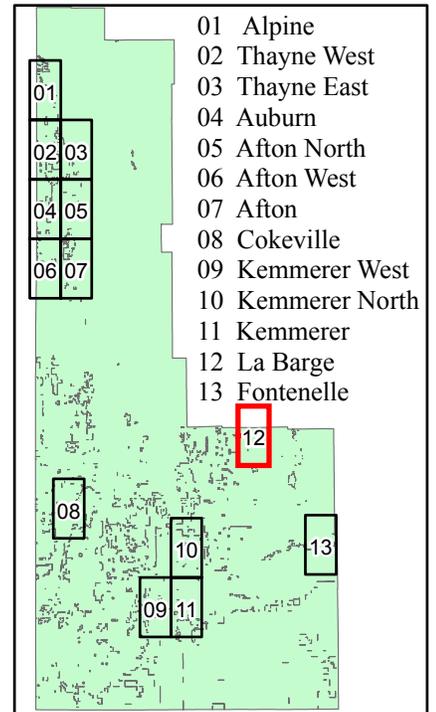
2030 Predicted Intersection Level of Service

Figure 2 - 12
La Barge Area Map

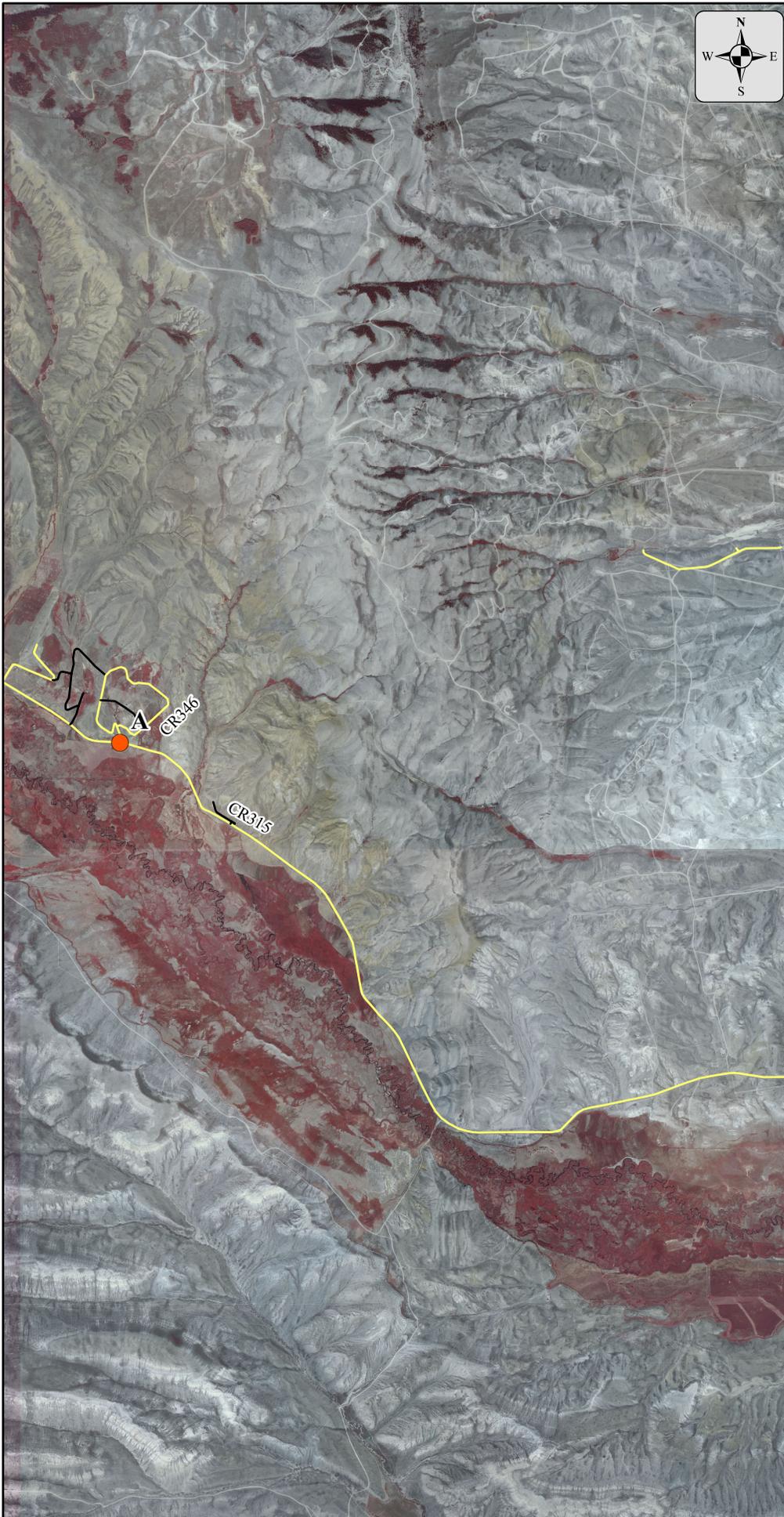
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

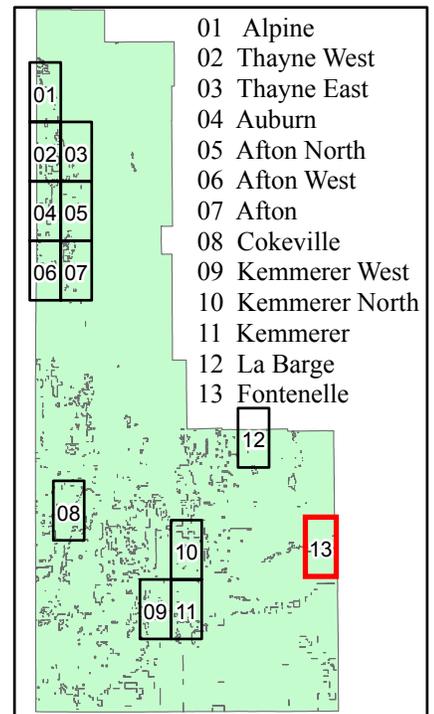
2030 Predicted Intersection Level of Service

Figure 2 - 13
Fontenelle Area Map

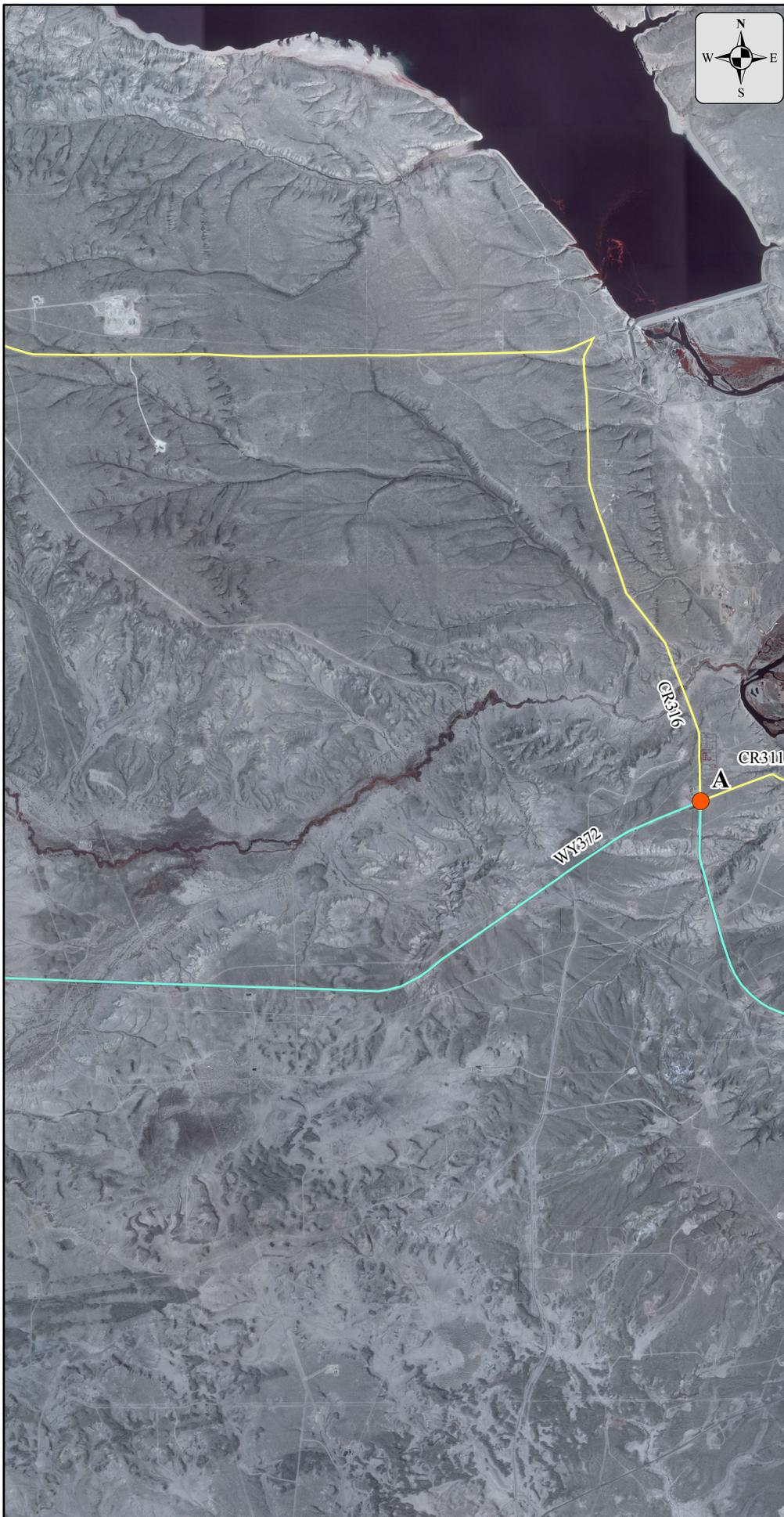
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Level of Service

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



3. Mitigation Measures

Four intersections were identified to have LOS below D. The intersections of US 89/CR 116-SR 239 and US 89/CR 108-CR 106 are expected to operate at LOS E by the planning year of 2030. The intersection of US 89/CR 126-CR 192 and US 89/US 26 are expected to operate at LOS F for the 2030 planning year.

a. US 89/CR116-SR 239 Intersection

The current intersection lane configuration of US 89/CR 116-SR 239 has a separate left turn bay and a thru-right for northbound traffic, thru-left and a free right for the southbound traffic, thru-left and free right for eastbound traffic, and one lane (thru-left-right) for the westbound traveling traffic. The 2030 projected LOS E is for the eastbound and westbound traveling traffic.

Changing the lane configuration so a dedicated left turn bay and thru-right lane are placed for each leg of the intersection will improve the intersection to an acceptable LOS D. The westbound traveling traffic is anticipated to operate at LOS D and the eastbound traveling traffic is anticipated to operate at LOS C by the 2030 planning year if this lane configuration change is implemented.

b. US 89/CR 106-CR 108 Intersection

The current intersection lane configuration of US 89/CR 106-CR 108 has a separate left turn bay and a thru-right for the north and southbound traveling traffic, the east and westbound traveling traffic have one thru-left-right lane.

Three different mitigation measures were analyzed for improving this intersection to an acceptable LOS. The installation of dedicated left turn bays along the eastbound and westbound traveling traffic will not improve the LOS. An AWSC analysis was conducted to determine if this would improve the LOS. According to the analysis, the intersection would go to a LOS F if an AWSC intersection was implemented.

Considering these improvements would not create an acceptable LOS the potential for signalization of this intersection was evaluated. The installation of a signal by the year 2030 at the intersection of US 89/CR 106-CR 108 would generate an acceptable LOS A. It is recommended this intersection be considered for signalization and dedicated left turning bays for each leg before the 2030 planning year. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

c. US 89/CR 126-CR 192 Intersection

The current intersection lane configuration of US 89/CR 126-CR 192 has thru-left and free right lanes for the northbound traveling traffic, a dedicated left turn bay and thru-right for the southbound traveling traffic, and a left-thru-right lane for both east and westbound traveling traffic.

Three alternate mitigation measures were evaluated for improving this intersection to an acceptable LOS. The installation of dedicated left turning bays along the eastbound, westbound, and northbound legs would not improve the LOS to acceptable levels. An AWSC analysis was conducted and the LOS would improve from LOS F to LOS E for the intersection. This is still an unacceptable LOS.

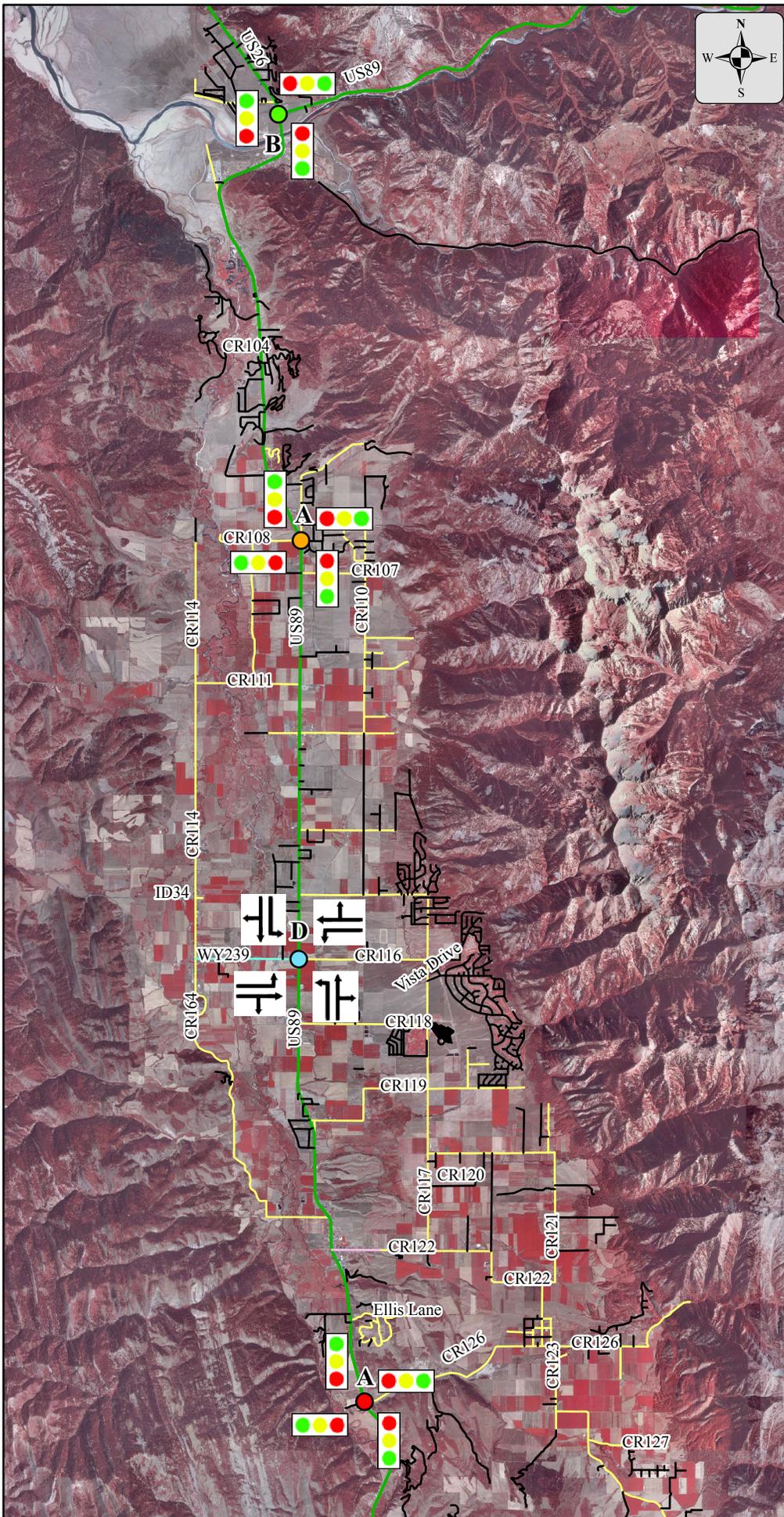
The signalization of the US 89/CR 126-CR 192 intersection would improve from LOS F to LOS A by the 2030 planning year. It is recommended that signalization of this intersection, with dedicated left turning bays for each leg, be implemented before the 2030 planning year. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

All proposed traffic control and lane configuration changes are shown in Figure 2.14.

Lincoln County WY Transportation Plan

2030 Design Year
Mitigation Improvements
With Predicted Levels of Service

Figure 2 - 14



Legend

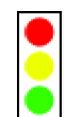
Roads

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive

Intersections

-  US-89 & CR108
-  US-89 & CR116
-  US-89 & CR126
-  US-89 & US-26

Symbols

-  Proposed Lane Configuration
-  Proposed Signal Location



e. 2030 Segment Analysis

The roadway segments identified for field hose counts were analyzed for the 2030 planning year condition. The roadway segments analyzed for the 2030 planning year are:

- Hams Fork Road (CR 305)
- Fontenelle North (CR 316)
- Shute Creek (CR 340)

All roadway segments were analyzed according to the same criteria outlined in the Task 1 section of this report (HCM criteria). All directional splits used for the existing road segment condition was used for the 2030 analysis.

According to two-way two-lane HCS+ highway segment analysis software the following results were determined and are listed in Table 2.4.

Table 2.4 - 2030 Roadway Segment Level of Service

Road Segments	2030 Project		
	LOS	% Time Spent Following(s)	v/c Ratio
Hams Ford Rd. (305)	A	18.8	0.01
Fontenelle North (316)	A	22.8	0.02
Shute Creek (340)	A	22.5	0.02

No capacity improvements have been identified for the 2030 planning year roadway conditions along the identified roadway segments.

f. 2030 Average Daily Traffic (ADT)

As outlined in Task 1 of this report, all roadway segments in the vicinity of each identified intersection were evaluated to determine ADT. Each ADT value was determined based on the existing volumes and growth rates were applied according to the regional location of the segment within Lincoln County. The Lower Valley, Upper Valley, Cokeville Area, and Eastern Lincoln County growth rates were used as shown in Table 2.1.

Table 2.5 shows the projected 2030 planning year ADT volumes and corresponding growth rates that were applied.

No roadway segment capacity improvements have been identified for the 2030 planning year ADT analysis.

Figures 2-15 through 2-29 lists the 2030 ADT values anticipated in the vicinity of each identified intersection.

Table 2.5 - 2030 ADT Values in Vicinity of Evaluated Intersections

Intersections	Applied Growth Rate	2030 North Leg NL ADT	2030 South Leg SL ADT	2030 East Leg EL ADT	2030 West Leg WL ADT
Bitter Creek & Smoot-Afton (148)	1.40%	<i>80</i>	<i>170</i>	<i>140</i>	<i>110</i>
Cottonwood Drive (164s) & (406)	1.40%	<i>n/a</i>	<i>80</i>	<i>230</i>	<i>200</i>
Dry Creek (146) & Bitter Creek (140)	1.40%	<i>610</i>	<i>470</i>	<i>310</i>	<i>n/a</i>
SR-236 & Bitter Creek (140)	1.40%	<i>440</i>	<i>760</i>	<i>750</i>	<i>680</i>
Fairview Spring Creek (144) & Fairview South (143)	1.40%	<i>250</i>	<i>270</i>	<i>210</i>	<i>180</i>
Fairview South (143) & Crow Creek (141)	1.40%	<i>110</i>	<i>180</i>	<i>70</i>	<i>n/a</i>
SR-238 & Allred (135 & 198)	1.40%	<i>750</i>	<i>400</i>	<i>2170</i>	<i>1670</i>
SR-238 & Crow Creek (141)	1.40%	<i>n/a</i>	<i>330</i>	<i>1440</i>	<i>1390</i>
Swift Creek Lane (137) & Allred (135) AM	1.40%	<i>540</i>	<i>1060</i>	<i>960</i>	<i>n/a</i>
Swift Creek Lane (137) & Allred (135) PM	1.40%	<i>780</i>	<i>1100</i>	<i>1190</i>	<i>n/a</i>
(136) & Allred (135)	1.40%	<i>130</i>	<i>210</i>	<i>300</i>	<i>180</i>
Grover Park & Fifth Street	1.40%	<i>n/a</i>	<i>30</i>	<i>130</i>	<i>160</i>
Auburn-Tygee (134) & Stump Creek (133)	1.40%	<i>40</i>	<i>n/a</i>	<i>350</i>	<i>350</i>
Main Street & First West Street	1.40%	<i>140</i>	<i>110</i>	<i>130</i>	<i>160</i>
(131) & (132)	1.40%	<i>60</i>	<i>100</i>	<i>180</i>	<i>140</i>
Willow Creek Canyon (177) & Bedford-Turnerville (123)	1.40%	<i>250</i>	<i>240</i>	<i>40</i>	<i>n/a</i>
Heiner-Suter Lane (127) & Bedford-Turnerville (123)	1.40%	<i>450</i>	<i>330</i>	<i>210</i>	<i>n/a</i>
Strawberry Creek (126) at Strawberry Street	4.00%	<i>50</i>	<i>n/a</i>	<i>2030</i>	<i>2030</i>
Strawberry Creek (126) & Thayne Bedford (122)	4.00%	<i>1570</i>	<i>n/a</i>	<i>2030</i>	<i>1280</i>
Thayne Bedford (122) & Bedford North (121)	4.00%	<i>n/a</i>	<i>1810</i>	<i>670</i>	<i>1730</i>
Thayne Bedford (122) & Muddy Spring (117)	4.00%	<i>3070</i>	<i>30</i>	<i>2850</i>	<i>5230</i>
Lost Creek (120) & Muddy Spring (117)	4.00%	<i>2850</i>	<i>2910</i>	<i>1150</i>	<i>n/a</i>
(119) & Muddy String (117)	4.00%	<i>2670</i>	<i>3090</i>	<i>1150</i>	<i>190</i>
Cedar Creek (118) & Muddy Spring (117)	4.00%	<i>2430</i>	<i>2350</i>	<i>2080</i>	<i>3010</i>
Muddy String (117) & Vista Drive	4.00%	<i>1710</i>	<i>2190</i>	<i>2750</i>	<i>n/a</i>
SR-239 & State Line (164)	4.00%	<i>1890</i>	<i>1330</i>	<i>2080</i>	<i>n/a</i>
SR-34 (Idaho) & State Line (164)	4.00%	<i>960</i>	<i>1950</i>	<i>80</i>	<i>1550</i>
Creamery (111) & State Line (114)	4.00%	<i>210</i>	<i>750</i>	<i>770</i>	<i>560</i>
Sanderson Lane (107) & East Etna (110)	4.00%	<i>720</i>	<i>270</i>	<i>n/a</i>	<i>610</i>
Bridle Trail & Stewart Trail (106)	4.00%	<i>530</i>	<i>880</i>	<i>370</i>	<i>n/a</i>
Pine Creek & SR-232	0.90%	<i>100</i>	<i>110</i>	<i>40</i>	<i>n/a</i>
Hams Fork Rd (305)	1.00%	<i>170</i>	<i>170</i>	<i>n/a</i>	<i>n/a</i>
Pomeroy Basin Rd. & Gomer Rd.	1.00%	<i>140</i>	<i>170</i>	<i>n/a</i>	<i>30</i>
Pomeroy Basin Rd. & Commesary Ridge	1.00%	<i>60</i>	<i>60</i>	<i>n/a</i>	<i>0</i>
Shute Creek	1.00%	<i>n/a</i>	<i>n/a</i>	<i>450</i>	<i>450</i>
(341) & (328)	1.00%	<i>110</i>	<i>100</i>	<i>10</i>	<i>n/a</i>
Twin Creek (328) & (342)	1.00%	<i>100</i>	<i>130</i>	<i>40</i>	<i>n/a</i>
Fontenelle North	1.00%	<i>360</i>	<i>360</i>	<i>n/a</i>	<i>n/a</i>

Table 2.5 - 2030 ADT Values in Vicinity of Evaluated Intersections

Intersections	Applied Growth Rate	2030 North Leg NL ADT	2030 South Leg SL ADT	2030 East Leg EL ADT	2030 West Leg WL ADT
Taylor & CR 207	0.90%	<i>410</i>	<i>280</i>	<i>n/a</i>	<i>160</i>
Valley View & CR 207	0.90%	<i>350</i>	<i>260</i>	<i>n/a</i>	<i>110</i>
SR-372 & (316) & (311)	1.00%	<i>290</i>	<i>560</i>	<i>180</i>	<i>380</i>
(315) & Looney Drive	1.00%	<i>50</i>	<i>n/a</i>	<i>120</i>	<i>60</i>
US-89 & SR-237	1.40%	--	--	<i>140</i>	<i>910</i>
US-89 & SR-238 (north)	1.40%	--	--	<i>n/a</i>	<i>550</i>
US-89 & Strawberry Creek (126)	4.00%	--	--	<i>1950</i>	<i>270</i>
US-89 & (173s)	4.00%	--	--	<i>640</i>	<i>n/a</i>
US-89 & Spring Creek Rd. (119)	4.00%	--	--	<i>320</i>	<i>n/a</i>
US-89 & (118)	4.00%	--	--	<i>1950</i>	<i>n/a</i>
US-89 & Prater Canyon Rd. (116)	4.00%	--	--	<i>320</i>	<i>2050</i>
US-89 & Creamery (111)	4.00%	--	--	<i>n/a</i>	<i>1010</i>
US-89 & Sanderson Lane (107)	4.00%	--	--	<i>560</i>	<i>0</i>
US-89 & (108) & (106)	4.00%	--	--	<i>1410</i>	<i>130</i>
US-89 & McNeal Power Plant (104)	4.00%	--	--	<i>n/a</i>	<i>30</i>
US-89 & US-26	4.00%	--	--	--	<i>n/a</i>

Lincoln County WY Transportation Plan

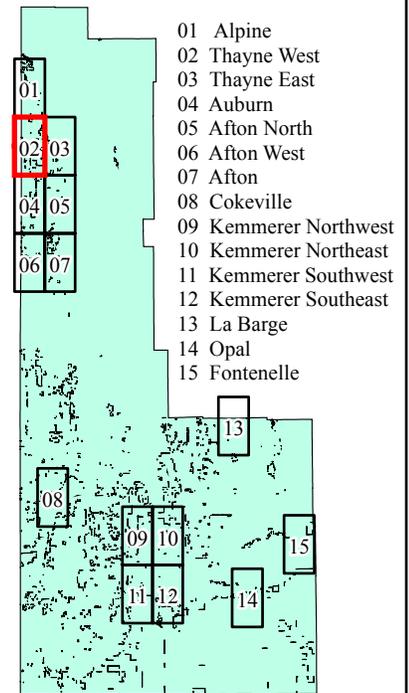
2030 Estimated Condition Average Daily Traffic

Figure 2 - 16
Thayne West Area Map

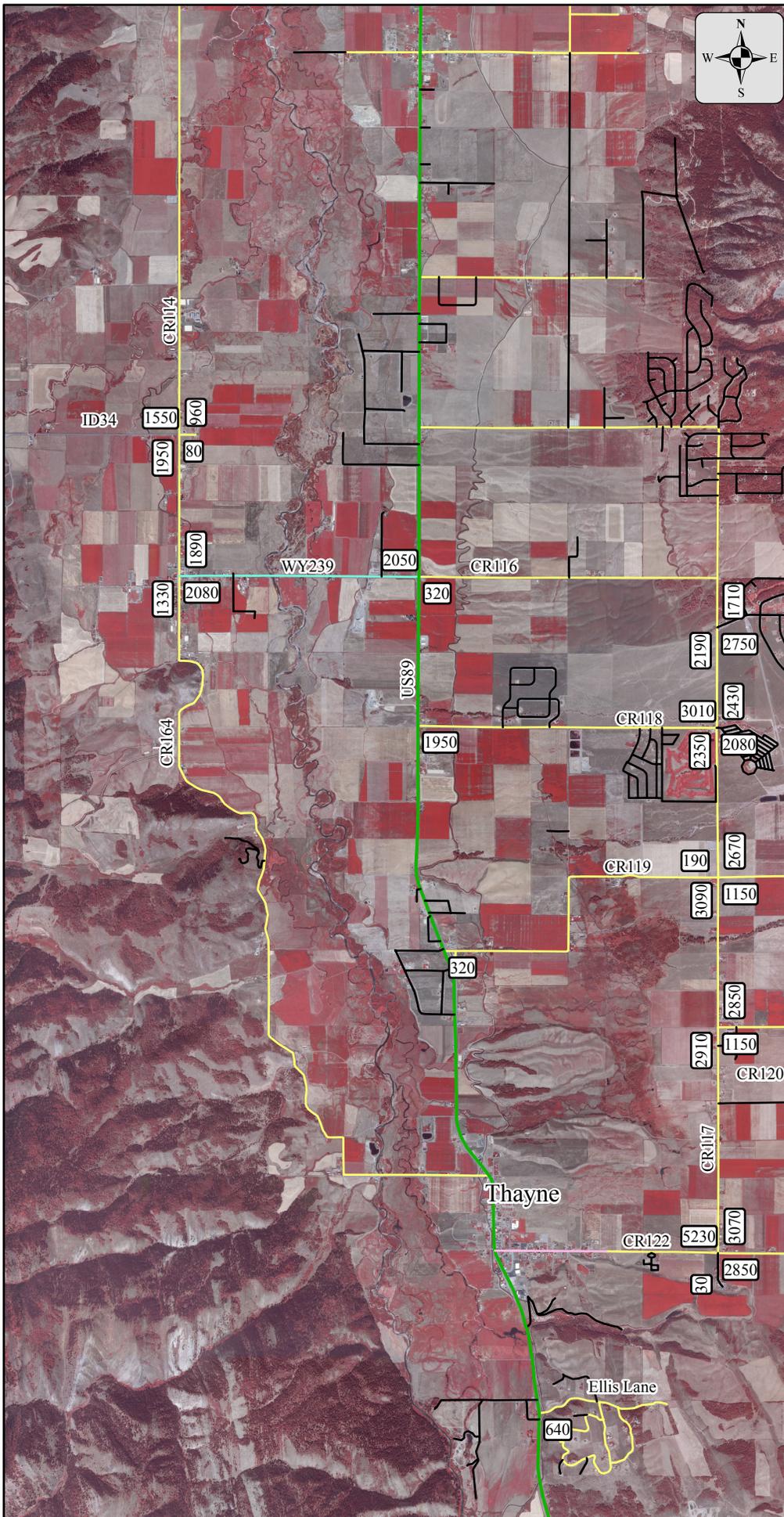
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

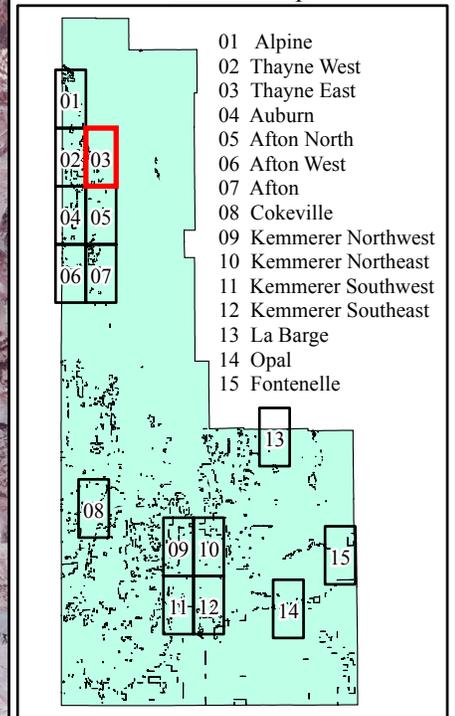
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 17
Thayne East Area Map

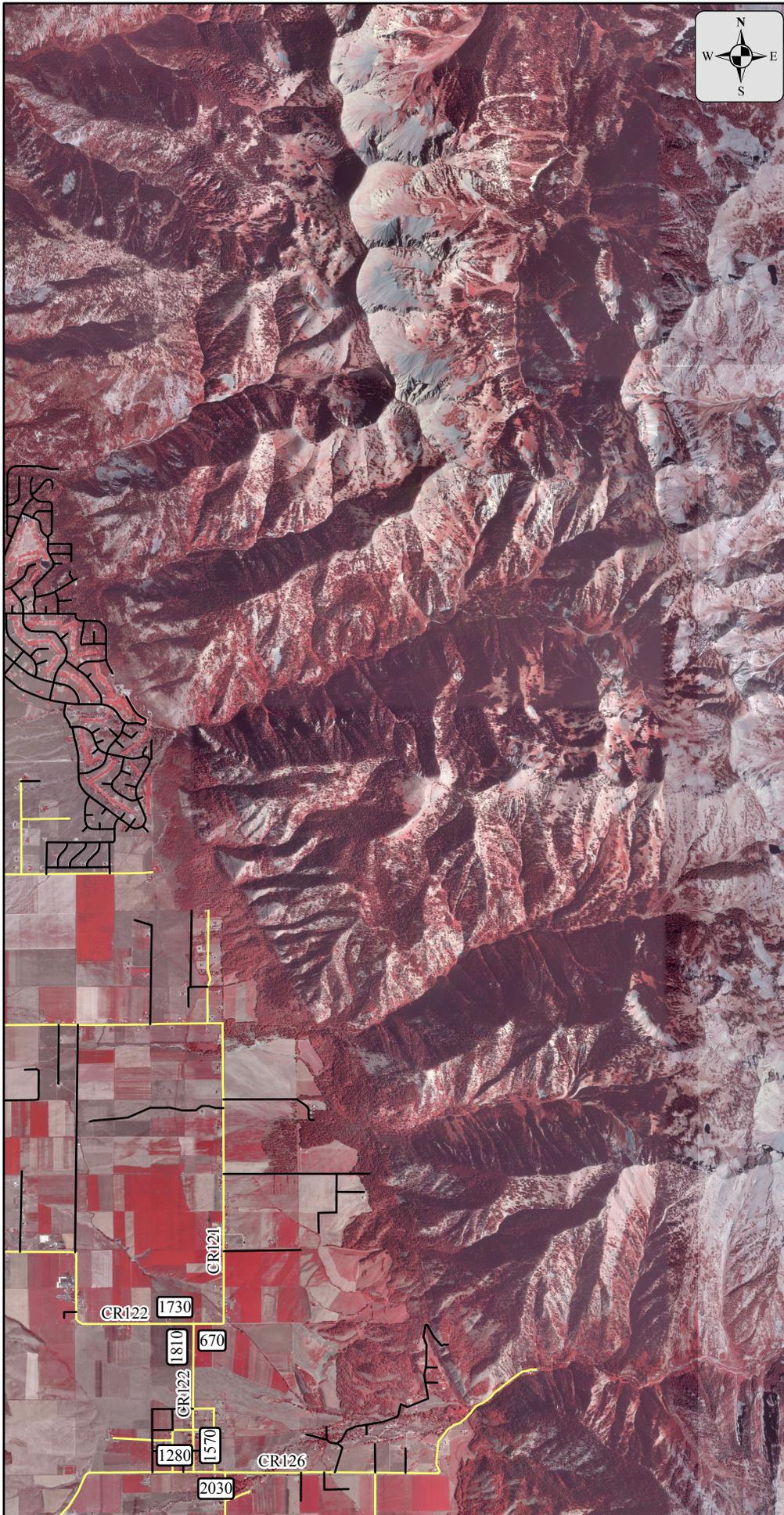
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

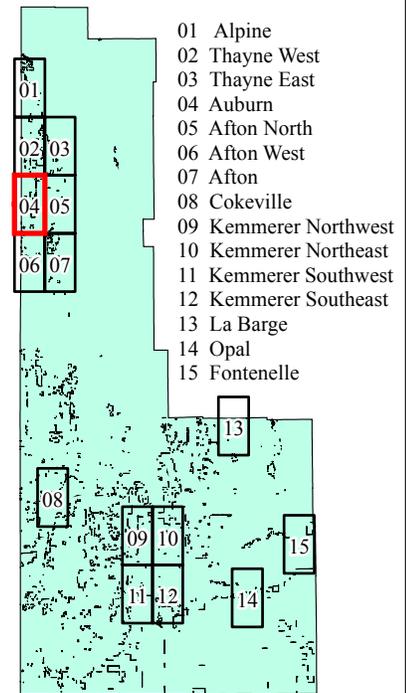
2030 Estimated Condition Average Daily Traffic

Figure 2 - 18
Auburn Area Map

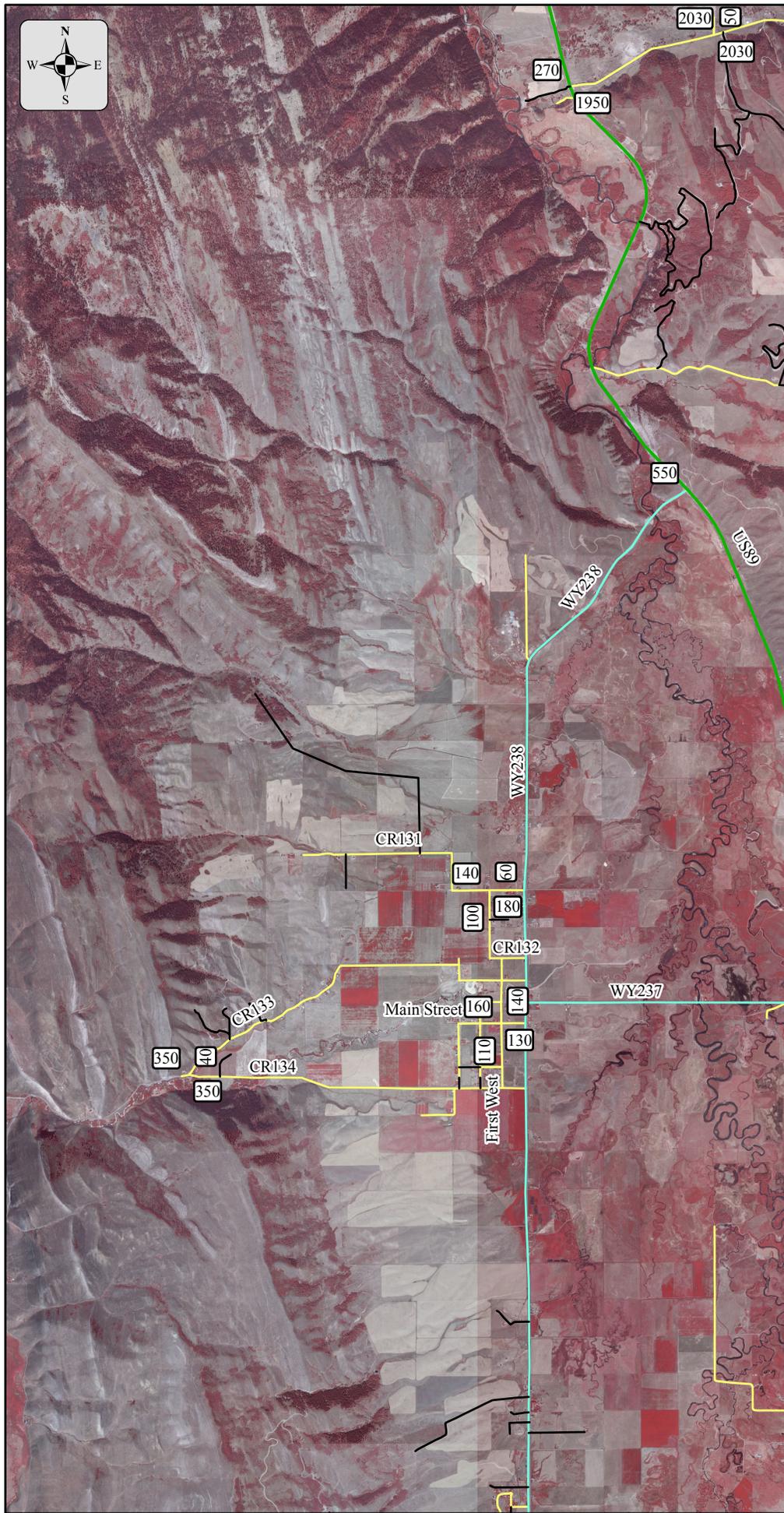
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

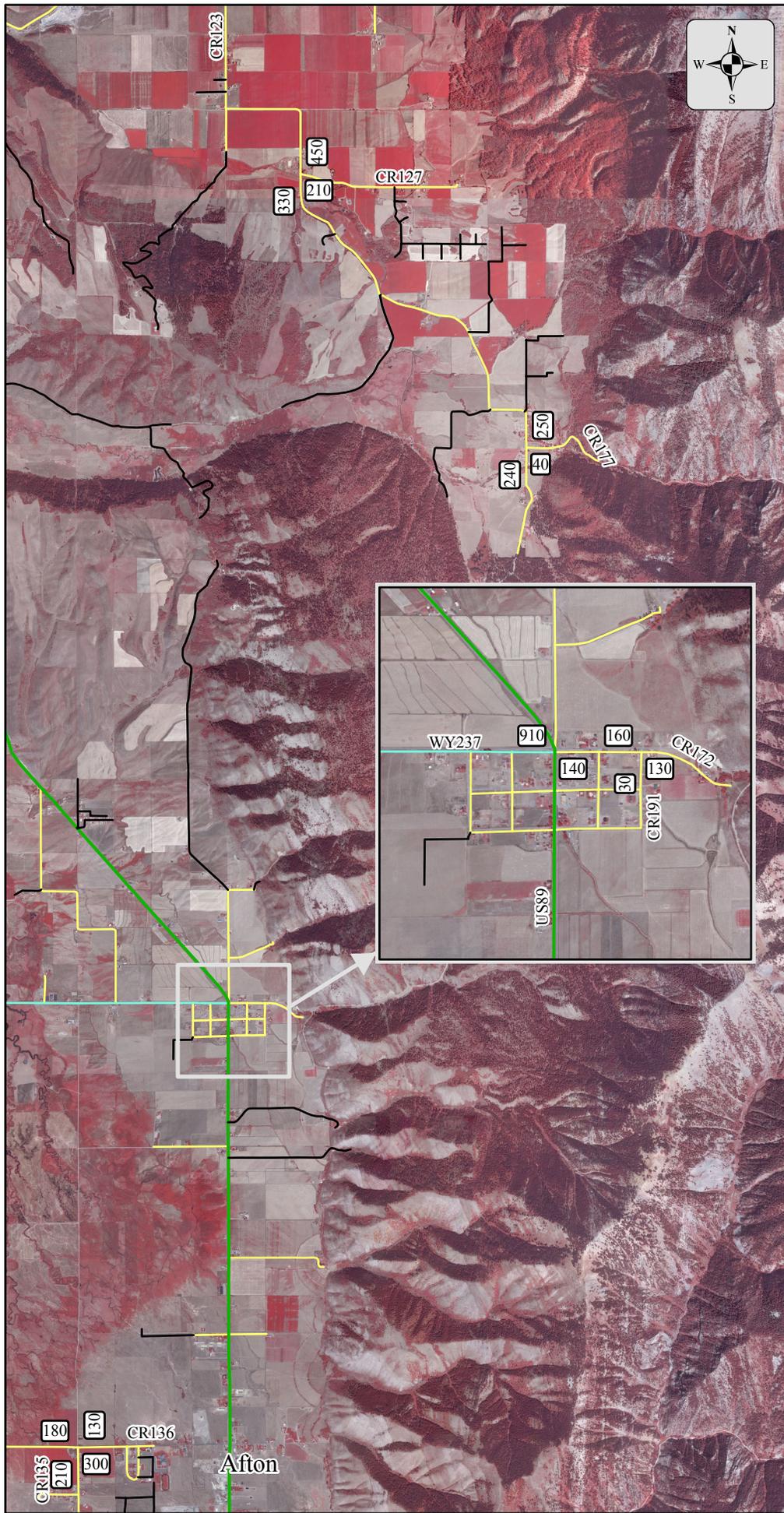
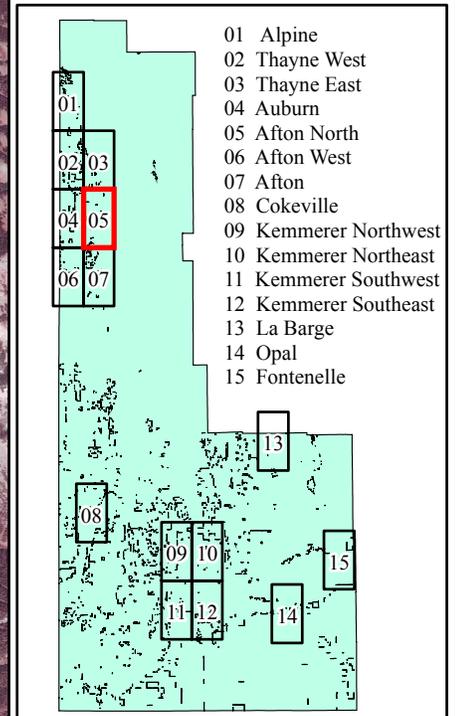
2030 Estimated Condition Average Daily Traffic

Figure 2 - 19
Afton North Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

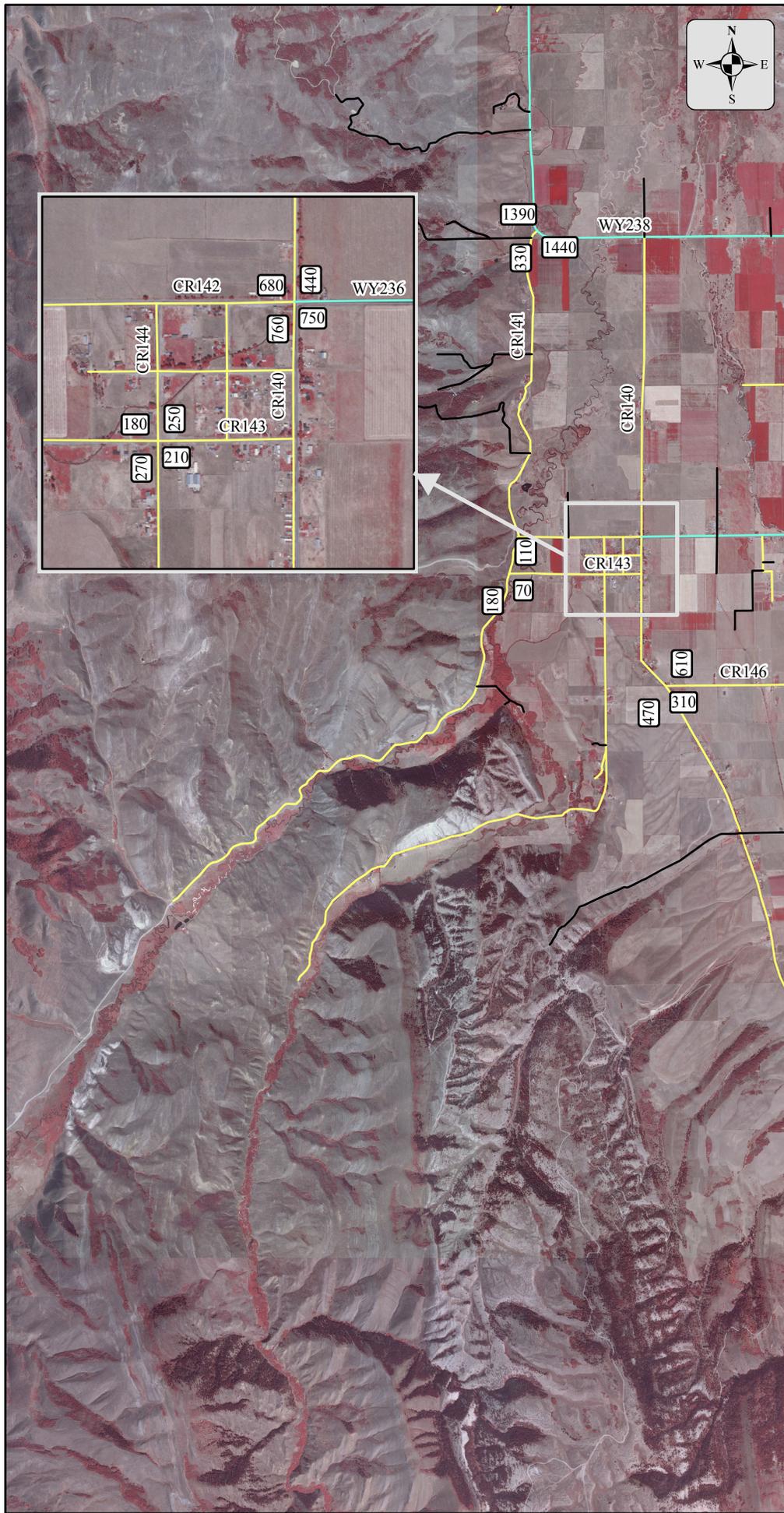
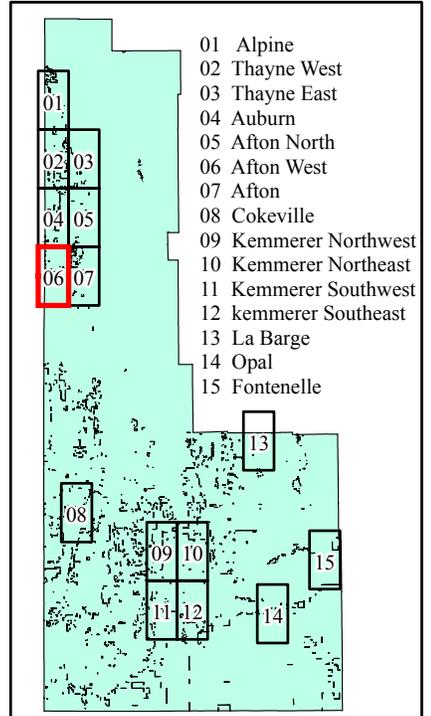
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 20
Afton West Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

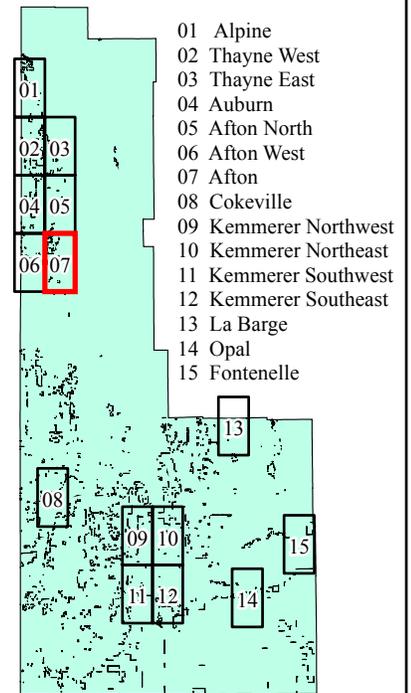
2030 Estimated Condition Average Daily Traffic

Figure 2 - 21
Afton Area Map

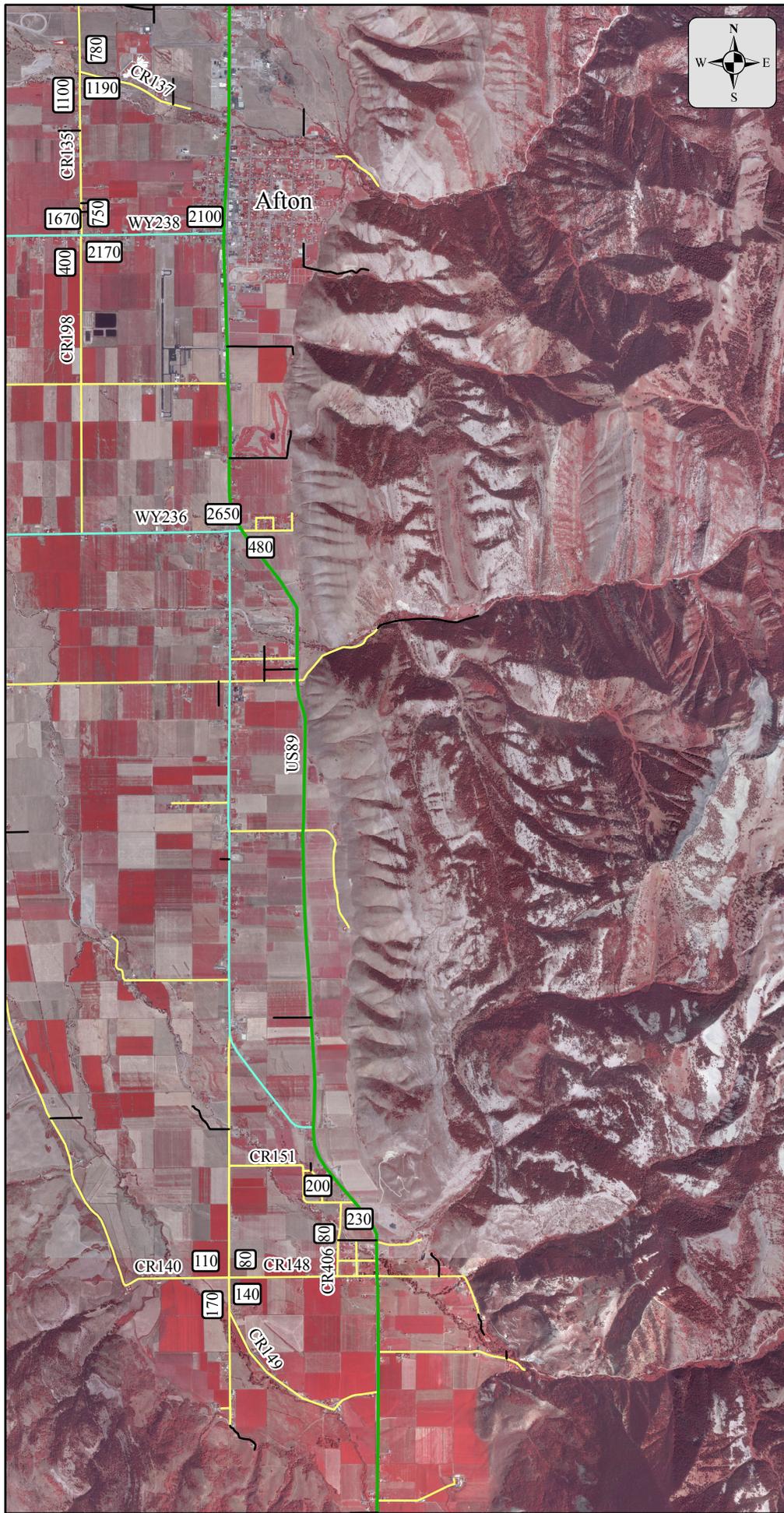
Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

2030 Estimated Condition
Average Daily Traffic

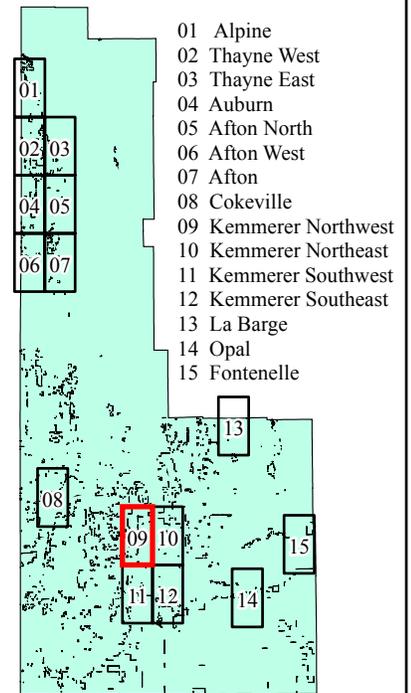
Figure 2 - 23

Kemmerer Northwest Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

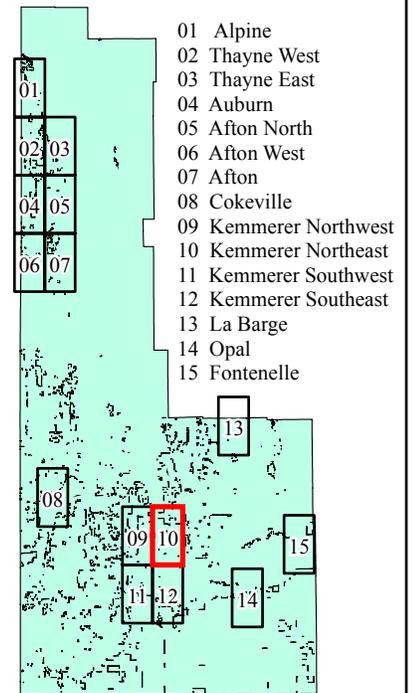
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 24
Kemmerer Northeast Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

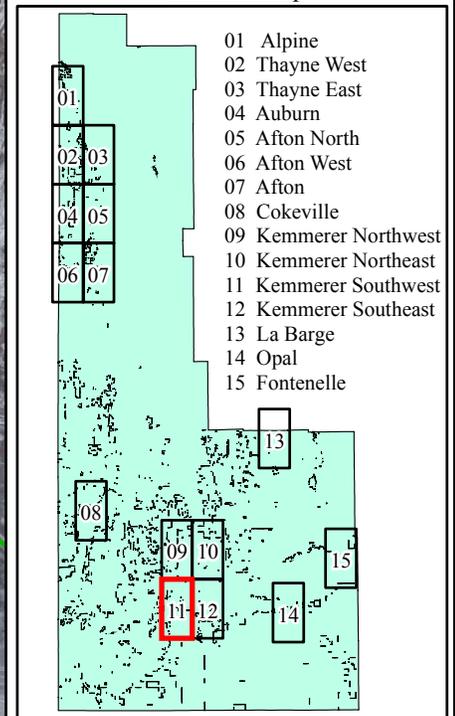
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 25
Kemmerer Southwest Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

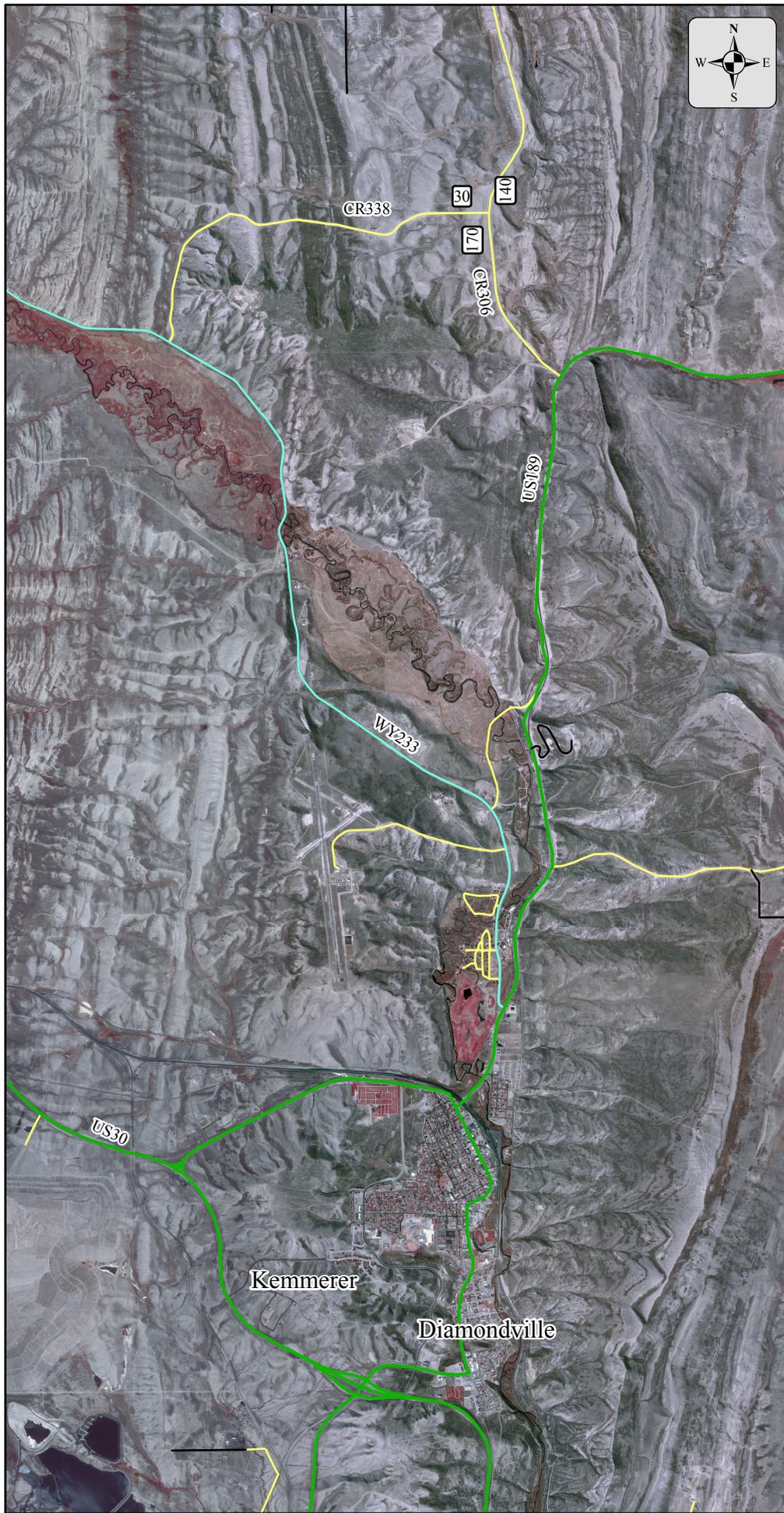
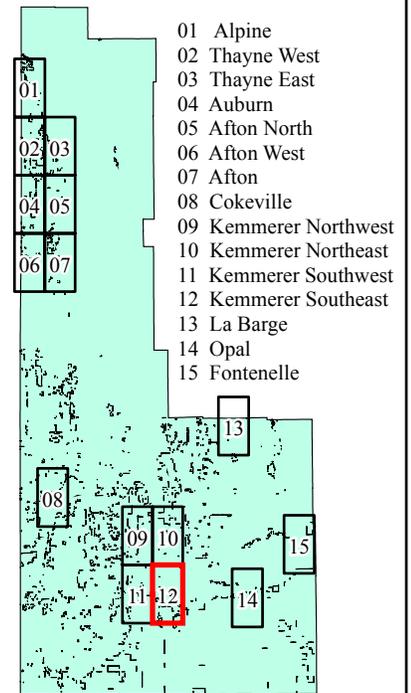
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 26
Kemmerer Southeast Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

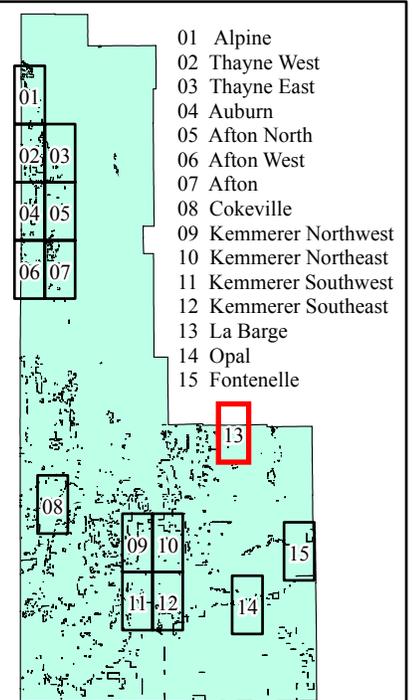
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 27
LaBarge Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  430 ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

Lincoln County WY Transportation Plan

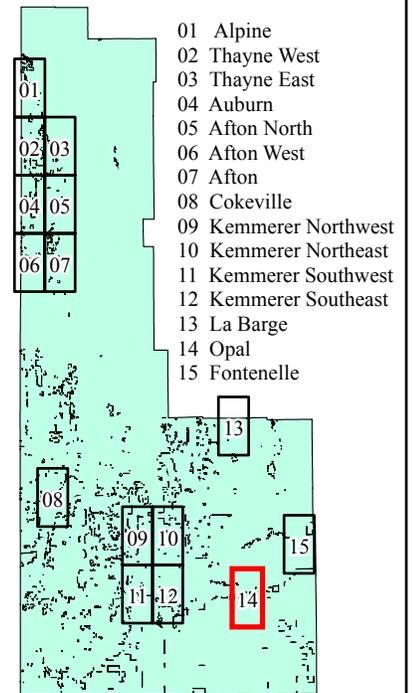
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 28
Opal Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.



Lincoln County WY Transportation Plan

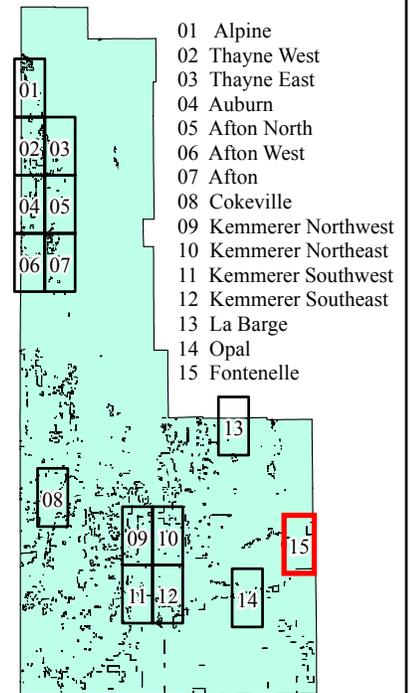
2030 Estimated Condition
Average Daily Traffic

Figure 2 - 29
Fontenelle Area Map

Legend

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  ADT Values

Locator Map



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

B. ROADWAY SURFACE CONDITIONS

As ADT volume in Lincoln County increases so does the demand for improving roadway surfaces. The AASHTO-Guideline for Geometric Design of Very Low-Volume Roads (ADT ≤ 400) was used as a guideline in determining roadway surface conditions for the 2030 planning year (see Task 1-Roadway Surface Conditions Section).

For purposes of this transportation plan, all roadways that exceed 250 vehicles per day and are currently gravel road surfaces are proposed to have surface improvements. The following roads should be improved to a Paved 2 surface (as defined in the inventory section in Task 1), at a minimum, before the 2030 planning year. Table 2.6 below lists the proposed roadway surface improvements:

Table 2.6 - Proposed Roadway Surface Improvements

Road Name	Road #	Leg	MP Begin	MP End	Segment Length (mi)
Bridle Trail	n/a	East	n/a	n/a	To be determined
Whitetail Lane	n/a	West	n/a	n/a	To be determined
Swimming Pool	CR 108	East	0.00	1.30	1.30
Prater Canyon	CR 116	West	0.00	2.00	2.00
Lincoln-Sweetwater	SR 372	South	0.00	0.85	0.85
Fontenelle North	CR 316	North	0.50	3.27	2.77

1. Roadway/Shoulder Widening

An evaluation for the need of roadway/shoulder widening was conducted based on the 2030 planning year projected ADT values. As noted in Task 1 of this report, all roadway widening was determined based on the Wyoming County Road Funds Manual Chapter IX, Design Standards Table 10. Table 2.7 lists the roadway widening improvements needed before the 2030 planning year, regardless of design speed.

Table 2.7 - Roadway Widening Table

Roadway Segment Identified for Widening	Vicinity Roadway	Current Road Width (feet)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	Strawberry Street	20	22	6'	2030

Roadways that reach an ADT threshold which justify widening were also identified. Design speed was considered for this evaluation. Table 2.8 shows the identified roadways that may need to be improved based on ADT threshold and design speed. The design speed of these roadway segments should be verified before any improvements are implemented.

Table 2.8

Roadway Segment	Current Road Width (feet)	Assumed Design Speed (mph)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	2030
Lost Creek (CR 120)	20	45	22	6	1150
East Etna (CR 110)	19	45	22	6	720
Stewart Trail (CR 106)	18	45	22	6	880
State Line (CR 164)	22	45	22	6	1330
State Line (CR 114)	21	45	22	6	1890
Riverview Ranchettes (CR 173s)	20	45	22	6	640

Table 2.9 below lists road segments in the vicinity of identified intersections and the need for roadway widening improvements based on AASHTO criteria. Please note that this table corresponds with Table 2.7 and Table 2.8 above.

For information regarding shoulder improvements for roadways in Lincoln County refer to the Wyoming County Road Funds Manual Chapter IX, Design Standards Table 10.

Table 2.9 - Roadway Widening Warrants

Road Segments Near Identified Intersections	Growth Rate	2030 North Leg ADT	2030 South Leg ADT	2030 East Leg ADT	2030 West Leg ADT	Existing Surface Type	Existing Road Width	Road Widths Improvements Warranted
Bitter Creek	1.40%	--	--	140	110	Paved 1	22	no
Smoot-Afton (148)	1.40%	80	170	--	--	Gravel	24	no
Cottonwood Drive (164s)	1.40%	--	--	230	200	Paved 1	18	no
406	1.40%	n/a	80	--	--	Paved 1	18	no
Dry Creek (146)	1.40%	--	--	310	n/a	Paved 2	21	no
Bitter Creek (140)	1.40%	610	470	--	n/a	Paved 1	22	no
SR-236	1.40%	--	--	750	680	Paved 1	22	no
Bitter Creek (140)	1.40%	440	760	--	--	Paved 1	22	no
Fairview Spring Creek (144)	1.40%	250	270	--	--	Paved 1	22	no
Fairview South (143)	1.40%	--	--	210	180	Paved 2	20	no
Fairview South (143)	1.40%	--	--	70	n/a	Gravel	22	no
Crow Creek (141)	1.40%	110	180	--	--	Gravel	22	no
SR-238	1.40%	--	--	2170	1670	Paved 1	30	no
Allred (135 & 198)	1.40%	750	400	--	--	Paved 1	24	no
SR-238	1.40%	--	--	1440	1390	Paved 2	24	no
Crow Creek (141)	1.40%	n/a	330	--	--	Paved 2	22	no
Swift Creek Lane (137) AM	1.40%	--	--	960	n/a	Paved 1	24	no
Allred (135) AM	1.40%	540	1060	--	--	Paved 1	24	no
Swift Creek Lane (137) PM	1.40%	--	--	1190	n/a	Paved 1	24	no
Allred (135) PM	1.40%	780	1100	--	--	Paved 1	24	no
(136)	1.40%	--	--	300	180	Paved 1	24	no
Allred (135)	1.40%	130	210	--	--	Paved 1	24	no
Grover Park	1.40%	--	--	130	160	Paved 1	20	no
Fifth Street	1.40%	n/a	30	--	--	Paved 1	20	no
Auburn-Tygee (134)	1.40%	--	--	350	350	Paved 1	24	no
Stump Creek (133)	1.40%	40	n/a	--	--	Paved 1	20	no
Main Street	1.40%	--	--	130	160	Paved 2	20	no

Table 2.9 - Roadway Widening Warrants

Road Segments Near Identified Intersections	Growth Rate	2030 North Leg ADT	2030 South Leg ADT	2030 East Leg ADT	2030 West Leg ADT	Existing Surface Type	Existing Road Width	Road Widths Improvements Warranted
First West Street	1.40%	140	110	--	--	Paved 2	22	no
(131)	1.40%	--	--	180	140	Paved 2	22	no
(132)	1.40%	60	100	--	--	Gravel	22	no
Willow Creek Canyon (177)	1.40%	--	--	40	n/a	Paved 2	19	no
Bedford-Turnerville (123)	1.40%	250	240	--	--	Paved 1	20	no
Heiner-Suter Lane (127)	1.40%	--	--	210	n/a	Paved 2	19	no
Bedford-Turnerville (123)	1.40%	450	330	--	--	Paved 1	25	no
Strawberry Creek (126)	4.00%	--	--	2030	2030	Paved 1	20	yes
Strawberry Street	4.00%	50	n/a	--	--	Paved 2	22	no
Strawberry Creek (126)	4.00%	--	--	2030	1280	Paved 1	23	yes
Thayne Bedford (122)	4.00%	1570	n/a	--	--	Paved 1	25	no
Thayne Bedford (122)	4.00%	--	--	670	1730	Paved 1	25	no
Bedford North (121)	4.00%	n/a	1810	--	--	Paved 2	24	no
Thayne Bedford (122)	4.00%	--	--	2850	5230	Paved 1	25	no
Muddy String (117)	4.00%	3070	30	--	--	Paved 1	24	no
Lost Creek (120)	4.00%	--	--	1150	n/a	Paved 2	20	see table above
Muddy String (117)	4.00%	2850	2910	--	--	Paved 1	24	no
Spring Creek Road (119)	4.00%	--	--	1150	190	Paved 2	20	see table above
Muddy String (117)	4.00%	2670	3090	--	--	Paved 1	24	no
Cedar Creek (118)	4.00%	--	--	2080	3010	Paved 1	28	no
Muddy String (117)	4.00%	2430	2350	--	--	Paved 1	24	no
Muddy String (117)	4.00%	1710	2190	--	--	Paved 1	24	no
Vista Drive	4.00%	--	--	2750	n/a	Paved 1	24	no
State Line (164)	4.00%	1890	1330	--	--	Paved 1	22	see table above
SR-34 (Idaho)	4.00%	--	--	80	1550	Paved 1	24	no
State Line (164)	4.00%	960	1950	--	--	Paved 1	22	see table above
Creamery (111)	4.00%	--	--	770	560	Paved 1	24	no

Table 2.9 - Roadway Widening Warrants

Road Segments Near Identified Intersections	Growth Rate	2030 North Leg ADT	2030 South Leg ADT	2030 East Leg ADT	2030 West Leg ADT	Existing Surface Type	Existing Road Width	Road Widths Improvements Warranted
State Line (114)	4.00%	--	750	--	--	Paved 1	21	see table above
State Line (114)	4.00%	210	--	--	--	Gravel	21	no
Sanderson Lane (107)	4.00%	--	--	n/a	610	Paved 2	24	no
East Etna (110)	4.00%	720	270	--	--	Paved 2	19	see table above
Bridle Trail	4.00%	--	--	370	n/a	Gravel	25	no
Stewart Trail (106)	4.00%	530	880	--	--	Paved 2	18	see table above
Pine Creek	0.90%	--	--	40	n/a	Paved 1	24	no
SR-232	0.90%	100	110	--	--	Paved 1	22	no
Hams Fork Rd (305)	1.00%	170	170	--	--	Gravel	22	no
Pomeroy Basin Rd.	1.00%	140	170	--	--	Paved 1	28	no
Gomer Rd.	1.00%	--	--	n/a	30	Gravel	24	no
Pomeroy Basin Rd.	1.00%	60	60	--	--	Paved 2	28	no
Commesary Ridge	1.00%	--	--	n/a	0	Gravel	24	no
Shute Creek	1.00%	--	--	450	450	Paved 1	26	no
(341)	1.00%	--	--	10	n/a	Paved 2	20	no
(342)	1.00%	60	100	--	--	Paved 2	22	no
Twin Creek (328)	1.00%	100	130	--	--	Gravel	18	no
(342)	1.00%	--	--	40	n/a	Gravel	24	no
Fontenelle North	1.00%	360	360	--	--	Gravel	24	no
Taylor	0.90%	--	--	n/a	160	Paved 2	25	no
CR 207	0.90%	410	280	--	--	Paved 1	28	no
Valley View	0.90%	--	--	n/a	110	Paved 2	25	no
CR 207	0.90%	350	260	--	--	Paved 1	28	no
SR-372	1.00%	--	--	180	380	Paved 1	22	no
(316)	1.00%	290	--	--	--	Gravel	24	no
(311)	1.00%	--	560	--	--	Gravel	24	no
(315)	1.00%	--	--	120	60	Paved 1	22	no

Table 2.9 - Roadway Widening Warrants

Road Segments Near Identified Intersections	Growth Rate	2030 North Leg ADT	2030 South Leg ADT	2030 East Leg ADT	2030 West Leg ADT	Existing Surface Type	Existing Road Width	Road Widths Improvements Warranted
Looney Drive	1.00%	50	n/a	--	--	Gravel	20	no
US-89	1.40%	--	--	--	--	--	--	--
SR-236	1.40%	--	--	480	2650	Paved 1	24	no
US-89	1.40%	--	--	--	--	--	--	--
SR-238	1.40%	--	--	n/a	2100	Paved 1	20	see table above
US-89	1.40%	--	--	--	--	--	--	--
SR-237	1.40%	--	--	140	910	Paved 1	24	no
US-89	1.40%	--	--	--	--	--	--	--
SR-238 (north)	1.40%	--	--	n/a	550	Paved 1	24	no
US-89	4.00%	--	--	--	--	--	--	--
Strawberry Creek (126)	4.00%	--	--	1950	--	Paved 1	23	see table above
Whitetail Lane	4.00%	--	--	--	270	Gravel	18	no
US-89	4.00%	--	--	--	--	--	--	--
(173s)	4.00%	--	--	640	n/a	Paved 1	20	see table above
US-89	4.00%	--	--	--	--	--	--	--
Spring Creek Rd. (119)	4.00%	--	--	320	n/a	Paved 2	20	no
US-89	4.00%	--	--	--	--	--	--	--
(118)	4.00%	--	--	1950	n/a	Paved 1	28	no
US-89	4.00%	--	--	--	--	--	--	--
Prater Canyon Rd. (116)	4.00%	--	--	--	2050	Gravel	21	yes
US-89	4.00%	--	--	--	--	--	--	--
Creamery (111)	4.00%	--	--	n/a	1010	Paved 1	24	no
US-89	4.00%	--	--	--	--	--	--	--
Sanderson Lane (107)	4.00%	--	--	560	0	Paved 2	24	no
US-89	4.00%	--	--	--	--	--	--	--
(108)	4.00%	--	--	1410	--	Gravel	21	see table above
(106)	4.00%	--	--	--	130	Paved 2	18	see table above

Table 2.9 - Roadway Widening Warrants

Road Segments Near Identified Intersections	Growth Rate	2030 North Leg ADT	2030 South Leg ADT	2030 East Leg ADT	2030 West Leg ADT	Existing Surface Type	Existing Road Width	Road Widths Improvements Warranted
US-89	4.00%	--	--	--	--	--	--	--
McNeal Power Plant (104)	4.00%	--	--	n/a	30	Gravel	18	no
US-89	4.00%	--	--	--	--	--	--	--
US-26	4.00%	--	--	--	--	--	--	--

C. 2030 ANTICIPATED LAND USE

As indicated in the capacity analysis section of Task 2, the projected growth rates vary between each “region” within Lincoln County. The growth that is projected in the Lower Valley is anticipated to have the most significant impact on the area roadways.

Application of these growth rates in these specific regions within Lincoln County were applied to the 2030 projected traffic data. All capacity related issues and corresponding mitigation from the anticipated growth in these areas are addressed in the capacity analysis section of this report.

Please refer to the Transportation Aspects of Land Use Regulations in Task 1 of this report for full detail of projected growth and the corresponding land use changes that are anticipated within Lincoln County and thus considered in the 2030 capacity analysis. Also refer to the Lincoln County Land Use Resolution.

D. WEAKNESSES AND HIGH STRESS POINTS

All capacity related weaknesses and high stress points from the 2030 capacity analysis are discussed and detailed in the mitigation section of the 2030 capacity analysis report. Based on our analysis, no additional travel lanes are justified on Lincoln County Roads, based on the 2030 projected ADT values. However, intersection improvements to improve levels of service and widening of the traveled way on various roadways to meet current AASHTO criteria are justified.

Intersection Modifications

Intersection	Modification
US89/CR116/SR239	Add Left Turn Bays
US89/CR106/CR108	Signalize & Add Left Turn Bays*
US89/CR126/CR192	Signalize & Add Left Turn Bays*

*Must meet current WYDOT Signal Warrants

Widening based on ADT and Assumed Design Speed

Roadway Segment	Current Road Width (feet)	Assumed Design Speed (mph)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	2030
Lost Creek (CR 120)	20	45	22	6	1150
East Etna (CR 110)	19	45	22	6	720
Stewart Trail (CR 106)	18	45	22	6	880
State Line (CR 164)	22	45	22	6	1330
State Line (CR 114)	21	45	22	6	1890
Riverview Ranchettes (CR 173s)	20	45	22	6	640

Although no additional travel lane improvements were determined from the analysis, it is apparent that additional transportation links would benefit the overall transportation network. As development continues to occur in the lower valley, the need for additional north/south corridors will ease the traffic demand along adjacent and parallel roadways. As Star Valley Ranch continues to develop and build out, the benefit of integrating a north/south corridor for connectivity purposes will be beneficial. Improvements to existing north/south roadways along with corridor preservation should be considered in addressing these links. Although not capacity driven, the following improvements to the transportation network are recommended.

A private north/south roadway currently exists from Clark Lane (CR 115) to Etna-Forest (CR 112) and ties into the north/south East Etna (CR 110) roadway. As part of this transportation plan it is recommended this section of road be acquired and used/maintained as a county road. Additionally, a north/south road should be constructed from Clark Lane south to Perkins Road (CR 119), and continue south and tie into the town of Thayne at Thayne Bedford Road (CR 122). Alignment alternatives will need to be considered for the section between CR119 and CR122 to overcome terrain issues. A two lane roadway will be adequate since this is not a capacity driven recommendation, however this will remove traffic from the US 89 corridor and allow interconnectivity among the residential and commercial development which is anticipated to occur in this area.

A private north/south roadway currently exists from Thayne Bedford (CR 122) to Lost Creek (CR 120). As part of this transportation plan it is recommended this section of road be purchased and used/maintained as a county road. A north/south road should be constructed to tie in this existing private road from Lost Creek (CR 120) to Perkins/Extension (CR 119). Another north/south road should be constructed from CR Thayne Bedford (CR 122) to Strawberry Creek (CR 126). This is not a capacity driven recommendation, therefore a two lane roadway will be adequate. This proposed roadway construction will improve interconnectivity and mobility in the area of this recommended improvement.

Development should drive these additional links. In planning and approving development in the area, the county should work with property owners to preserve corridors that would allow these links in the future. In the interim improvements to CR-117 (Muddy String) will address much of the needs outlined above. These improvements may include adequate shoulder width, intersection improvements, pavement reconstruction as necessary, and drainage improvements to improve maintainability and to allow the road to handle additional traffic and enhance safety.

Additional Links that should be considered include linking the Shute Creek Road with the BLM road that extends on into Sweetwater County. Links should also be considered with existing BLM and Forest Service roads throughout Lincoln County.

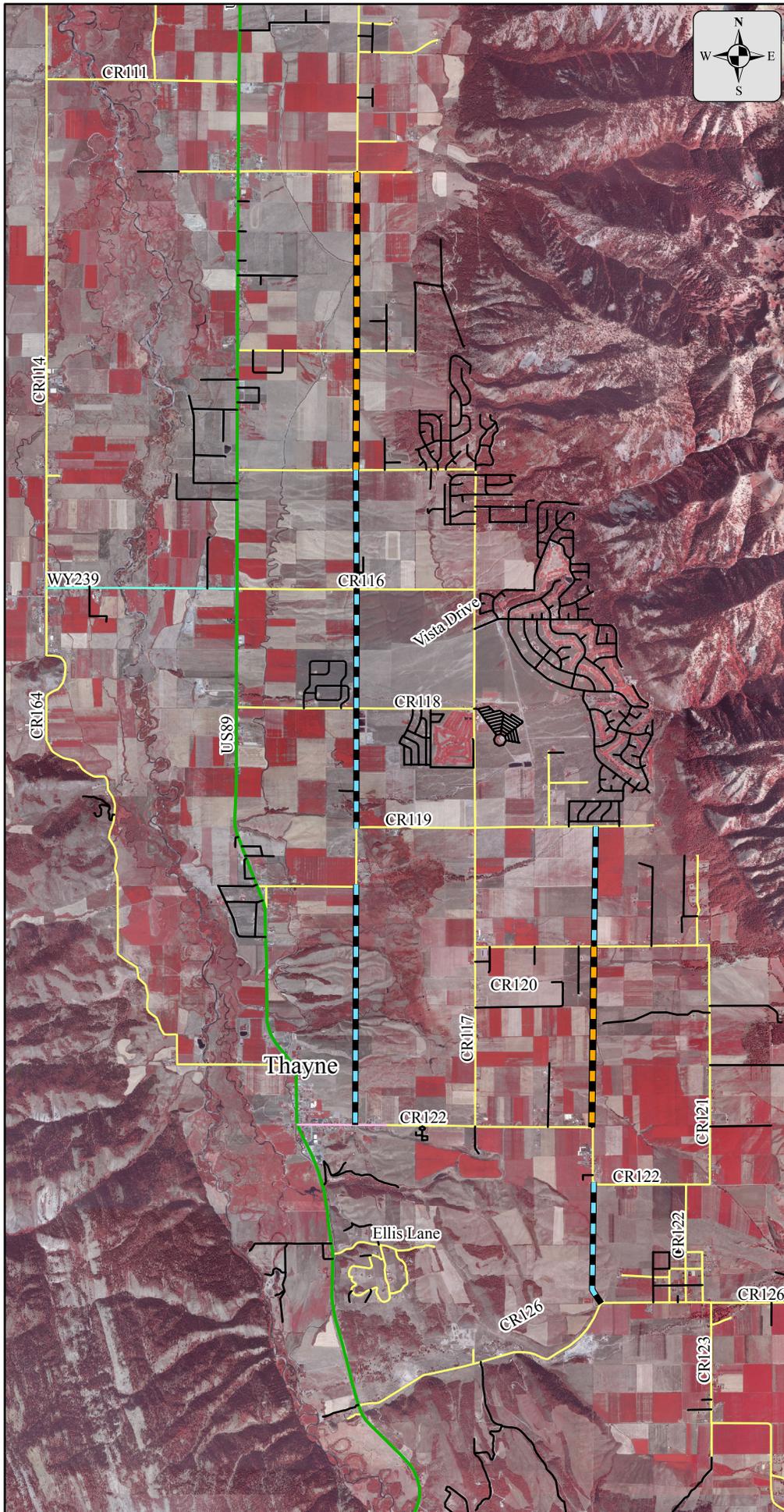
Upper valley links include links from CR-136 to SR238 or SR237. These improvements should be development driven, and made if and when the area develops.

The proposed roadway purchasing and linkage is shown in Figure 2-30.

Lincoln County WY Transportation Plan

2030 Design Year Roadway Network Improvements

Figure 2 - 30



Legend

Roads

-  County Road
-  State Highway
-  US Highway
-  City Street
-  Private Drive
-  Proposed Roadways
-  Existing Private to Proposed County Road



Aerial photography provided by the State of Wyoming.
Road data provided by Lincoln County Wyoming.

E. FUNCTIONAL CLASSIFICATION UPDATE RECOMMENDATIONS

The functional classification of roadways was investigated for recommendations and updates based on the 2030 planning year ADT values. The existing functional classification was compared to the 2030 ADT values. All functional classification recommendations are consistent with the WYDOT access manual functional classification standards and practices. The intent of this functional classification update is to provide consistency among road classifications in Lincoln County through the 2030 planning year. Functional classification updates are only recommended for roadways in the vicinity of intersections identified for traffic counts.

Table 2-10 below indicates the proposed functional classification updates recommended to occur before the 2030 planning year.

Table 2-10 Proposed Functional Classification Updates

Roadway	CR #	Existing Functional Class	Proposed Functional Class
Stewart Trail	106	Rural Local	Rural Minor Collector
Swimming Pool	108	Rural Local	Rural Major Collector
Prater Canyon	116	Rural Local	Rural Major Collector
Cedar Creek	118	Rural Local	Rural Major Collector
Perkins	119	Rural Local	Rural Minor Collector
Strawberry Creek	126	Rural Minor Collector	Rural Major Collector
Allred Lane	135	Rural Local	Rural Minor Collector
Swift Creek Lane	137	Rural Local	Rural Minor Collector

Roadway sections not identified for intersection traffic counts as outlined in Task 1 of this report need to be monitored for potential functional classification updated into the 2030 planning year.

F. ADDITIONAL COMMENTS & RECOMMENDATIONS

As noted in the Lower Valley of Lincoln County, a majority of the land that is currently zoned for agricultural purposes is developing into residential subdivisions and mixed use. This type of development will have the most significant demand on the local transportation network. As part of this transportation plan, it is recommended that a guideline for Traffic Impact Studies be adopted by Lincoln County. WYDOT has specific guidelines for producing a report for the traffic impact that a developments may impose on vicinity roadways.

SECTION 3: MASTER ROADWAY IMPROVEMENT PLAN

The Master Roadway Improvement Plan for Lincoln County is developed from the conclusions of the existing conditions, and the forecasts and recommendations sections of the Lincoln County Transportation Plan. This Master Roadway Improvement Plan identifies those improvements that should be completed in the near term based on improving existing roadway conditions to address safety and functional needs. It then outlines improvements anticipated to address the growth that is occurring in Lincoln County. Finally, priorities are developed and costs are estimated to guide decision makers in implementing this plan.

A. GENERAL SYSTEM UPGRADES

1. Delineation

Appropriate delineation will improve the drive ability, function and safety of the county roads. Delineation on all of the roadways may not be cost effective, but higher order roads, those roadways experiencing higher traffic and areas where there are sudden changes in horizontal alignment will benefit from proper delineation.

Delineation improvements on roadways in Lincoln County should be made, including striping and signing as appropriate at the major intersections. Delineation consisting of post mounted reflectors installed on the shoulders of the roadways, meeting the requirements set forth in the MUTCD (2003 Edition - Table 3D-1) should be installed along horizontal curves with radii greater than 50 feet and less than 1000 feet. Delineation in other areas should be considered based on judgment, crash experience and operational characteristics.

2. Route Signage

Route signage should be installed at all T-intersections. Placement of route signage at these intersections is primarily for road users who are not familiar with the area. In addition, it enhances emergency response by familiarizing and standardizing names and locations of roadways.

3. Speed Limit Signage

While posted speed limits are present in the majority of identified intersections within the county. Those that are not posted should be considered for posting.

4. Roadway Surface Conditions

The AASHTO-Guidelines for Geometric Design of Very Low-Volume Roads (ADT \leq 400) addresses unpaved roads. These AASHTO guidelines state that “provision of an unpaved surface is an economic decision that is appropriate for many very low-volume roads for which the cost of constructing and maintaining a paved surface would be prohibitive”.

These guidelines also discuss the NCHRP Report 362 which discusses the safety of unpaved roads as opposed to paved roads. The NCHRP Report 362 indicates that crash rates were typically higher for unpaved roads compared to paved roads when the ADT reaches 250 vehicles per day (VPD). Additionally, the paving of a road with traffic volumes between 300 to 350 VPD can expect to see one less severe crash every 10 to 15 years.

The report gives "... no specific guidelines that indicate the maximum traffic volume level for which unpaved surfaces are appropriate."

Unpaved roads within Lincoln County should be monitored for both ADT volumes as well as crashes. As ADT volumes exceed 250 vehicles per day, or if the number of crashes along a given unpaved roads increases, Lincoln County should consider paving the identified road segments. Economic considerations also need to be included when evaluating the demand of a paved road opposed to a gravel road.

As roadways are considered for pavement, the geometry of the roadway including horizontal alignments, profiles affecting sight distance and roadside shoulders and slopes should also be considered. With improvement of the surface, speeds and expectations increase. If geometric issues are not addressed along with pavement improvements, safety of the roadway itself could be compromised. Often, the geometric improvement costs can exceed the cost of improving the pavement.

B. RECOMMENDED IMPROVEMENTS BASED ON EXISTING CONDITIONS:

1. Intersection Improvements

The Weaknesses and High Stress Points section of the Inventory and Analysis Chapter identifies specific intersections and recommends improvements that will improve function and safety. These recommendations are summarized in the improvement plan. These recommendations consist primarily of signing, striping and delineation improvements discussed above.

2. Roadway Surface Improvements

Based on existing average daily traffic counts and safety analysis, the following roads should be considered for pavement improvements:

- Fontenelle North (CR 316) – MP 0.5. to MP 3.27
- Fontenelle Dam (CR 313) – MP 0.0 to MP 3.97
- Elkol Road (CR 304) – MP 0.0 to MP 3.2
- Shute Creek (CR 340) – MP 0.0 to MP 9.45

The Fontenelle Roads are just over the 250 VPD threshold, but current energy development is increasing the use of this road. This road is used as a cutoff, bypassing State Highway 372 to US 189. Crow Creek (CR 141) from MP 3.50 to MP 5.98 and LaBarge Creek (CR 315) from MP 11.2 to MP 13.0 were also identified as a concern based on the safety analysis, however both roads experience well under the 250 ADT Threshold. Pavement improvements are not justified at this time. The Elkol Road and Shute Creek Road are seeing increased industrial traffic.

3. Safety

The following roadway segments were identified in the safety analysis sections as having a high crash incidence as well as crash rates over WYDOT averages.

- CR 137
- CR 135
- CR 122
- CR 123
- CR 126
- CR 117
- CR 304
- CR 141
- CR 340
- CR 140
- CR 315
- CR 207

Improved signing, delineation, width and geometry can be used to reduce crashes. Site specific studies should be conducted to establish specific mitigation measures. This safety investigation should take place at the crash location clusters identified in the Figures 1.1 - 1.5 in the report, in conjunction with the above identified county road locations. Roadway segments as well as intersections should be investigated. The ITE Traffic Engineering Handbook Table 7-13 and 7-14 identifies potential countermeasures used to address roadway improvements at crash locations.

4. Roadway/Shoulder Widening

The roadway inventory identified travel widths on each county roadway. Projected ADT volumes determined from the capacity analysis section of this report was used in conjunction with the Wyoming County Road Fund Manual Chapter IX, Design Standards Table 10 to determine deficiencies in roadway and shoulder widths. This table lists the criteria for Minimum Width of Traveled Way and Shoulders based on design speed and ADT. A copy of these design standards is located in Appendix E. Design speed ranges were assumed when unknown based on the general roadway geometry and distances between intersections. Roadways that may have reached the ADT thresholds and should be considered for widening are identified and listed below in Table 1.18.

Roadway Segment	Current Pavement Width (feet)	Assumed Design Speed (mph)	Proposed Pavement Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	760
Lost Creek (CR 120)	20	45	22	4	430
East Etna (CR 110)	19	45	20	2	270
Stewart Trail (CR 106)	18	45	20	2	330

Widening should be considered as part of overall roadway improvements or reconstruction. Improvements to these sections should consider traffic volumes, safety and economic benefit. Some of these improvements should be considered as development occurs and incorporated into the costs associated with that development. If development contributes to increased traffic, that development should be responsible for these improvements.

C. FUTURE GROWTH RELATED IMPROVEMENTS

Predicted future roadway capacity needs do not justify additional travel lanes however intersection improvements to improve levels of service and widening of the traveled way on various roadways to meet current AASHTO criteria are justified. Growth anticipated through the 2030 planning year identified three county controlled intersections that will experience LOS below D. These include the intersections of US 89/CR 116-SR 239 and US 89/CR 108-CR 106 expected to operate at LOS E and the intersection of US 89/CR 126-CR 192 expected to operate at LOS F by the 2030 planning year. Proposed improvements to improve the LOS are listed below:

1. US 89/CR116-SR 239 Intersections

The current intersection lane configuration of US 89/CR 116-SR 239 has a separate left turn bay and a thru-right for northbound traffic, thru-left and a free right for the southbound traffic, thru-left and free right for eastbound traffic, and one lane (thru-left-right) for the westbound traveling traffic. The 2030 projected LOS E is for the eastbound and westbound traveling traffic.

Changing the lane configuration so a dedicated left turn bay and thru-right lane are placed for each leg of the intersection will improve the intersection from a current LOS E for the eastbound and west bound traffic to an acceptable LOS C (eastbound) and LOS D (westbound) respectively by the 2030 planning year if this lane configuration change is implemented.

2. US 89/CR 106-CR 108 Intersections

The current intersection lane configuration of US 89/CR 106-CR 108 has a separate left turn bay and a thru-right for the north and southbound traveling traffic, the east and westbound traveling traffic have one thru-left-right lane. The installation of a signal by the year 2030 at the intersection of US 89/CR 106-CR 108 would generate an acceptable LOS A. This intersection should be considered for signalization and dedicated left turning bays for each leg by the 2030 planning year. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

3. US 89/CR 126-CR 192 Intersections

The current intersection lane configuration of US 89/CR 126-CR 192 has thru-left and free right lanes for the northbound traveling traffic, a dedicated left turn bay and thru-right for the southbound traveling traffic, and a left-thru-right lane for both east and westbound traveling traffic. The signalization of the US 89/CR 126-CR 192 intersection would improve from LOS F to LOS A. This intersection should be considered for signalization, with dedicated left turning bays for each leg by the 2030 planning year. Realignment options should also be considered to better align each leg of the intersection. In considering signalization, the intersection will need to meet current WYDOT Signal Warrants. Level of Service improvement alone may not warrant signalization. A discussion on WYDOT Signal Warrants is included in Appendix E.

4. Roadway Surface Conditions

As ADT volume in Lincoln County increases so does the demand for improving roadway surfaces. The AASHTO-Guideline for Geometric Design of Very Low-Volume Roads ($ADT \leq 400$) was used as a guideline in determining roadway surface conditions for the 2030 planning year. All roadways that exceed 250 vehicles per day and are currently gravel road surfaces should be improved to a Paved 2 surface (as defined in the inventory section in Task 1) prior to the 2030 planning year. The roadways that are anticipated to reach that level and should be considered for surface improvements are listed include:

- Swimming Pool, CR 108 East MP 0.00 to 1.30
- Prater Canyon, CR 116 West MP 0.00 to 2.00
- Lincoln-Sweetwater CR 311, MP 0.00 to 0.85

5. Roadway/Shoulder Widening

An evaluation for the need of roadway/shoulder widening was conducted based on the 2030 planning year projected ADT values, design speed and criteria based on the Wyoming County Road Fund Manual, Chapter IX, Design Standards, Table 10. In general, roadways functionally classified as a rural collector with speeds over 45 miles per hour and ADT between 400 and 650 vehicles per day should have a roadway width of 30 feet including two 11 foot lanes and two four foot graded shoulders. Total right of way width of 66 feet will allow for proper side treatments and drainage. For ADT's between 650 to 2000 vehicles per day, the roadway width should be increased to 34 feet, providing two 11 foot lanes and two 6 foot shoulders. Local roads with speeds less than 40 mph should have a roadway width of 26 feet, providing two 11 foot lanes with two 2 foot graded shoulders.

Roadway Type & ADT	Number of Lanes	Lane Width	Graded Shoulder Width	Roadway Width/Right of Way Width
Collector 400 to 650 ADT	2	11	4	32/66
Collector 650 to 2000 ADT	2	11	6	36/66
Local <400 ADT	2	11	2	26/50

Summarized below are recommended improvements based on the future forecasts and traffic analysis:

6. Intersection Modifications:

Intersection	Modification
US89/CR116/SR239	Add Left Turn Bays
US89/CR106/CR192	Signalize & Add Left Turn Bays*
US89/CR126/CR192	Signalize & Add Left Turn Bays*

***Must meet current WYDOT signal warrants.**

7. Widening Based on ADT and Assumed Design Speed

Roadway Segment	Current Road Width (feet)	Assumed Design Speed (mph)	Proposed Road Width (feet)	Graded Shoulder Width	ADT
Strawberry Creek (CR 126)	20	45	22	6	2030
Lost Creek (CR 120)	20	45	22	6	1150
East Etna (CR 110)	19	45	22	6	720
Stewart Trail (CR 106)	18	45	22	6	880
State Line (CR 164)	22	45	22	6	1330
State Line (CR 114)	21	45	22	6	1890
Riverview Ranchettes (CR 173s)	20	45	22	6	640

D. NEW TRANSPORTATION LINKS

Although no additional travel lane improvements were determined from the analysis, it is apparent that additional transportation links would benefit the overall transportation network. As development continues to occur in the lower valley, the need for additional north/south corridors will ease the traffic demand along adjacent and parallel roadways. As Star Valley Ranch continues to develop and build out, the benefit of integrating a north/south corridor for connectivity purposes will be beneficial. Improvements to existing north/south roadways along with corridor preservation should be considered in addressing these links. Although not capacity driven, the following improvements to the transportation network are recommended.

A private north/south roadway currently exists from Clark Lane (CR 115) to Etna-Forest (CR 112) and ties into the north/south East Etna (CR 110) roadway. As part of this transportation plan it is recommended this section of road be acquired and used/maintained as a county road. Additionally, a north/south road should be constructed from Clark Lane south to Perkins Road (CR 119), and continue south and tie into the town of Thayne at Thayne Bedford Road (CR 122). Alignment alternatives will need to be considered for the section between CR119 and CR122 to overcome terrain issues. A two lane roadway will be adequate since this is not a capacity driven recommendation, however this will remove traffic from the US 89 corridor and allow interconnectivity among the residential and commercial development which is anticipated to occur in this area.

A private north/south roadway currently exists from Thayne Bedford (CR 122) to Lost Creek (CR 120). As part of this transportation plan it is recommended this section of road be purchased and used/maintained as a county road. A north/south road should be constructed to tie in this existing private road from Lost Creek (CR 120) to Perkins/Extension (CR 119). Another north/south road should be constructed from CR Thayne Bedford (CR 122) to Strawberry Creek (CR 126). This is not a capacity driven recommendation, therefore a two lane roadway will be adequate. This proposed roadway construction will improve interconnectivity and mobility in the area of this recommended improvement.

Development should drive these additional links. In planning and approving development in the area, the county should work with property owners to preserve corridors that would allow these links in the future. In the interim improvements to CR-117 (Muddy String) will address much of the needs outlined above. These improvements may include adequate shoulder width, intersection improvements, pavement reconstruction as necessary, and drainage improvements to improve maintainability and to allow the road to handle additional traffic and enhance safety.

Additional Links that should be considered include linking the Shute Creek Road with the BLM road that extends on into Sweetwater County. Links should also be considered with existing BLM and Forest Service roads throughout Lincoln County.

Upper valley links include links from CR-136 to SR238 or SR237. These improvements should be development driven, and made if and when the area develops.

E. FUNCTIONAL CLASSIFICATION UPGRADES

The functional classification of roadways was investigated for recommendations and updates based on the 2030 planning year ADT values. The existing functional classification was compared to the 2030 ADT values. All functional classification recommendations are consistent with the WYDOT access manual functional classification standards and practices. The intent of this functional classification update is to provide consistency among road classifications in Lincoln County through the 2030 planning year. Functional classification updates are only recommended for roadways in the vicinity of intersections identified for traffic counts.

Table 2-10 below indicates the proposed functional classification updates recommended to occur before the 2030 planning year.

Table 2-10 Proposed Functional Classification Updates

Roadway	CR #	Existing Functional Class	Proposed Functional Class
Stewart Trail	106	Rural Local	Rural Minor Collector
Swimming Pool	108	Rural Local	Rural Major Collector
Prater Canyon	116	Rural Local	Rural Major Collector
Cedar Creek	118	Rural Local	Rural Major Collector
Perkins	119	Rural Local	Rural Minor Collector
Strawberry Creek	126	Rural Minor Collector	Rural Major Collector
Allred Lane	135	Rural Local	Rural Minor Collector
Swift Creek Lane	137	Rural Local	Rural Minor Collector

Roadway Jurisdiction:

There are several roads on the County and State systems that should be considered for jurisdictional transfers, from state control to county control and county control to state control. These jurisdictional transfers are generally based on functional classification. Roadways generally serve two purposes, traffic mobility and access to property. The more that a roadway serves access, the poorer it functions serving mobility. As a general rule, counties and local government agencies are more concerned with providing local access, where the state is charged with providing mobility. Further analysis of the county road network; including state, county and local roads, should be conducted along with discussions with WYDOT regarding the appropriate roadway jurisdiction as it relates to the functions of each road.

Many of the subdivisions throughout the county consist of primarily private roadways, owned and maintained by the subdivision property owners or associations. The county has a long held policy of leaving those roadways in private jurisdiction. Roads may be considered for public jurisdiction based on the following criteria:

1. Does the roadway serve the general public?
2. Does the roadway provide connectivity between other county, state or federal roads?
3. Would including the roadway on the public system enhance the operations of school bus and emergency equipment?
4. Is there a compelling reason for the county to accept jurisdiction?

In accepting roadways currently under private jurisdiction, or in vacating public roadways, the county should follow current state and county laws and ordinances.

Pavement Management/Maintenance Strategies:

With increased industrial uses of some of the Lincoln County Roadways, it becomes more important that the county continue and further refine their pavement management systems. Through the use of these management systems, maintenance strategies should be developed that optimize the pavement life cycle. Appropriate maintenance applied at the appropriate times will increase the life cycle of the roadway and save money in the long run. Application of asphalt seal coats and asphalt overlays will extend the life of a roadway and help to avoid costly reconstruction.

A summary of the proposed transportation improvements along with cost estimates and priority follows. Priorities are based on traffic volumes, problems identified in the existing conditions analysis, safety and future need. The priorities are broken out into a low medium and high priority. Those issues dealing with safety generally are higher on the priority, as are those indicated by immediate need and relatively low costs.

Roadway surface improvement costs were estimated as reconstruction because improving roadway geometry should be considered along with surface improvements. New links are assumed to be reconstructed or constructed as new roadways, therefore reconstruction costs are used. These costs may vary significantly depending on the amount of reconstruction, realignment, utility conflicts and right of way acquisition costs are incurred.

F. IMPROVEMENT SUMMARY

Improvement	Priority	Length in Miles	Width	Estimated Cost	Comments
EXISTING IMPROVEMENT NEEDS					
General System Upgrades					
<i>Delineation</i>	High	N/A	N/A	\$ 100,000.00	
<i>Route Signage</i>	Medium	N/A	N/A	\$ 50,000.00	
<i>Speed Limit Signage</i>	Medium	N/A	N/A	\$ 50,000.00	
Miscellaneous Intersection Improvements	Medium	N/A	N/A	\$ 298,000.00	See Misc Intersection Improvements Spreadsheet for breakdown in costs
Roadway Surface Improvements					
<i>Fontenelle North (CR 312)</i>	Medium	3.5	36	\$ 4,200,000.00	Assumes Reconstruction
<i>Fontenelle Dam (CR 316)</i>	Medium	3.5	36	\$ 4,200,000.00	Assumes Reconstruction
<i>Elkol Road</i>	High	3.2	36	\$ 3,840,000.00	Assumes Reconstruction
<i>Shute Creek Road</i>	High	9.45	36	\$ 11,340,000.00	Assumes Reconstruction
Safety					
<i>Conduct Safety Studies at Accident Clusters and develop safety improvement plan</i>	High	N/A	N/A	\$ 25,000.00	
<i>Address Safety Issues w/Intermediate measures</i>	High	N/A	N/A	\$ 150,000.00	Budget may vary based on study recommendations, measures include signing, delineation etc. No Roadway Modifications.
Roadway/Shoulder Widening					
<i>Strawberry Creek (CR 126)</i>	Medium	5.67	32	\$ 6,237,000.00	Assumes Reconstruction
<i>Lost Creek (CR 120)</i>	Medium	2	32	\$ 2,200,000.00	Assumes Reconstruction
<i>East Etna (CR 110)</i>	Medium	3.5	26	\$ 3,500,000.00	Assumes Reconstruction
<i>Twin Creek (CR 328)</i>	Low	6.5	26	\$ 6,500,000.00	Assumes Reconstruction
<i>Spring Creek Road (CR 119)</i>	Medium	3.8	32	\$ 4,180,000.00	Assumes Reconstruction
<i>Prater Canyon Road (CR 116)</i>	Low	2	26	\$ 2,000,000.00	Assumes Reconstruction
<i>Stewart Trail (CR 106)</i>	Low	2.1	32	\$ 2,310,000.00	Assumes Reconstruction

F. IMPROVEMENT SUMMARY

Improvement	Priority	Length in Miles	Width	Estimated Cost	Comments
<i>FUTURE IMPROVEMENT NEEDS</i>					
Intersection Improvements					
<i>US 89/CR 116-CR 239 Turning Lanes</i>	Medium	N/A	N/A	\$ 75,000.00	Monitor Traffic Growth
<i>US89/CR106-CR108 Signalization</i>	Medium	N/A	N/A	\$ 150,000.00	Monitor Traffic Growth
<i>US 89/CR126-CR192 Intersection Signalization & Realignment</i>	Medium	N/A	N/A	\$ 200,000.00	Cost includes minor realignment, Monitor Traffic Growth
Roadway Surface Improvements					
<i>Swimming Pool (CR 108)</i>	Low	1.3	26	\$ 1,300,000.00	Considers Widening w/Pavement Improvement
<i>Prater Canyon (CR 116)</i>	Low	2	36	\$ 2,400,000.00	Considers Widening w/Pavement Improvement
<i>Lincoln-Sweetwater (CR 311)</i>	Medium	0.85	32	\$ 935,000.00	Considers Widening w/Pavement Improvement
Roadway Widening					
<i>Strawberry Creek (CR 126) Strawberry Street</i>	<i>High</i>	3.1	36	\$ 3,720,000.00	Assumes Reconstruction
<i>Strawberry Creek (CR 126) Thayne-Bedford</i>	<i>High</i>	2.57	36	\$ 3,084,000.00	Assumes Reconstruction
<i>Prater Canyon Road (CR 116)</i>	<i>Low</i>	2	36	\$ 2,400,000.00	Assumes Reconstruction
<i>Lost Creek (CR 120)</i>	<i>Medium</i>	2	32	\$ 2,200,000.00	Assumes Reconstruction
<i>East Etna (CR 110)</i>	<i>Medium</i>	3.5	32	\$ 3,850,000.00	Assumes Reconstruction
<i>Twin Creek (CR 328)</i>	<i>Low</i>	6.5	26	\$ 6,500,000.00	Assumes Reconstruction
<i>Spring Creek Road (CR 119)</i>	<i>Low</i>	3.8	26	\$ 3,800,000.00	Assumes Reconstruction
<i>Stewart Trail (CR 106)</i>	<i>Medium</i>	2.1	32	\$ 2,310,000.00	Assumes Reconstruction
<i>State Line (CR 164)</i>	<i>Medium</i>	4.2	32	\$ 4,620,000.00	Assumes Reconstruction
<i>State Line (CR 114)</i>	<i>High</i>	2.3	36	\$ 2,760,000.00	Assumes Reconstruction
<i>Riverview Ranchettes (CR 173s)</i>	<i>Medium</i>	2.71	32	\$ 2,981,000.00	Assumes Reconstruction
<i>Swimming Pool (CR 108)</i>	<i>Low</i>	1.3	26	\$ 1,300,000.00	<i>Assumes Reconstruction</i>

F. IMPROVEMENT SUMMARY

Improvement	Priority	Length in Miles	Width	Estimated Cost	Comments
New Transportation Links					
<i>Clark Lane (CR115) to Thayne-Bedford (CR 122) Corridor</i>	<i>Medium</i>	8	36	\$ 9,600,000.00	Uses reconstruction costs, assumes right of way is in place
<i>Perkins/Extension (CR 119) to Strawberry Creek (CR 126) Corridor</i>	<i>Medium</i>	4	36	\$ 4,800,000.00	Uses reconstruction costs, assumes right of way is in place