Policy Issues

The preceding recommendations have generally addressed the physical roadway system. Throughout the further development of Rigby and Jefferson County, decision makers will face a multitude of individual issues. Any single decision may not have a large effect. However, as a body of decisions over time, the effect on the transportation system can be profound. The following sections provide recommendations for various policies to guide decision makers toward a greater whole. The focus is always on the sum of the parts.

Functional Classification System

ITD classifies a statewide network of roadways according to a hierarchy based on the service function of the roadway. The highest classification is "Interstate" meant to serve long distance, high speed trips. Underneath "Interstate" are the following classifications, followed by an example roadway within Jefferson County:

Functional Class	Jefferson County Examples
Principal Arterial	US 20
Minor Arterial	SH 33
Principle Collector	SH 48, Menan-Lorenzo Highway, Annis Highway
Minor Collector	500 North, 3800 East

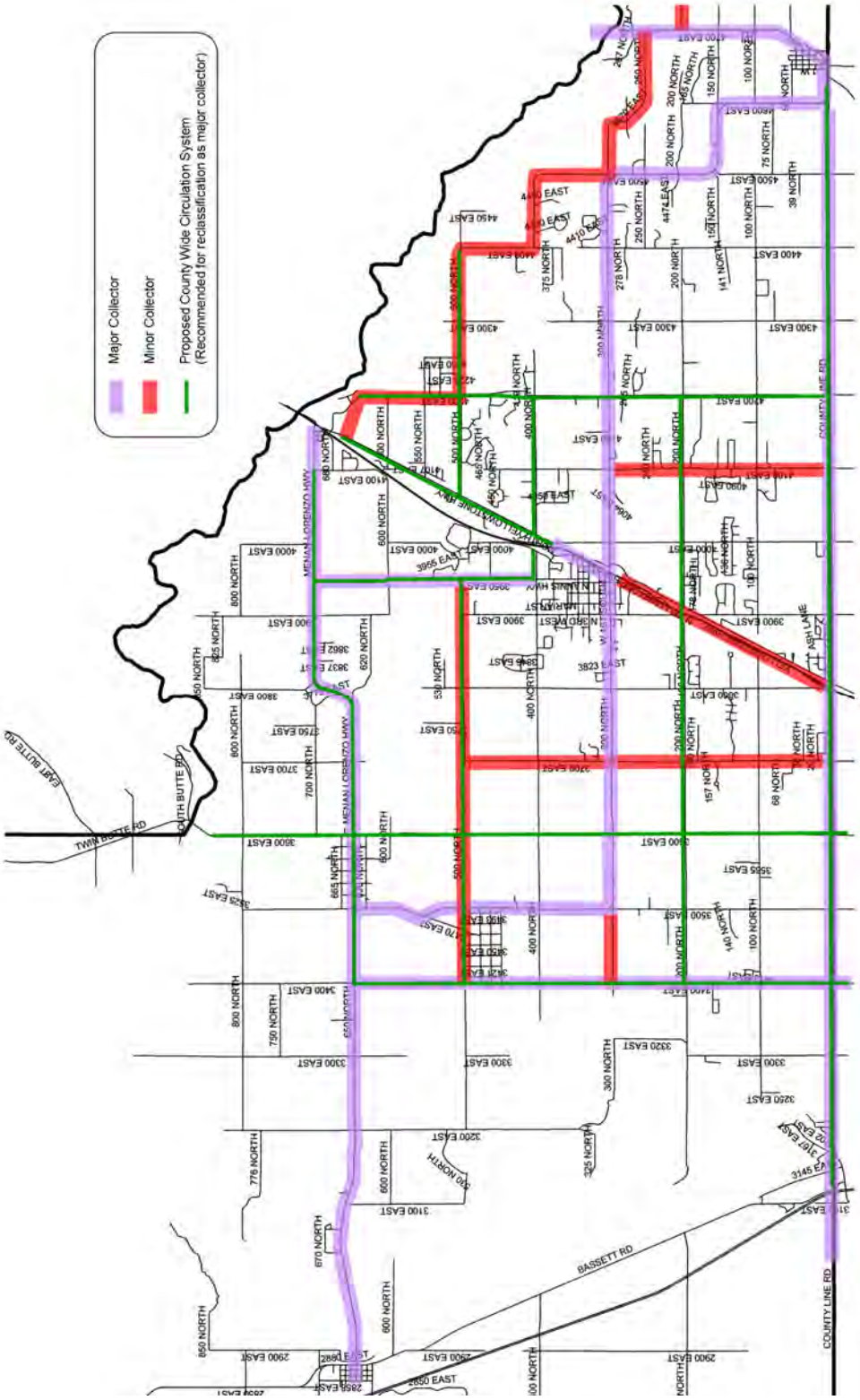
As can be seen, the roadway function declines from regional travel to more local travel – with associated reductions to expected speed and ease of travel.

The statewide functional classification essentially embodies the elements of circulation planning that have been discussed in this report - at the state level. It is therefore important to maintain the quality of travel associated with each functional classification in terms of roadway design, hierarchy of control, and access management. As additional development occurs, the functional classification plan becomes a guide to decision makers as to which roadways should be given priority, and at what level they should be developed. The existing design characteristics of classified roadways do not always meet the intentions of their classification, particularly at the lower levels.

The functional classification of a roadway is also important with respect to state funding. Roadways classified as Principle Collector or above are considered "on the state system" and thus directly eligible for state urban and rural funding. Figure 24 shows the existing functional classification of roadways in the southeast corner of Jefferson County. Also shown is the proposed Jefferson County Circulation System. There is a reasonable correlation between the two, with differences stemming generally from the lack of development foreseen at the time of the last functional classification update. Within the area of interest, there is approximately 31.5 miles of roadway classified as Major Collector (excluding SH 48) and 26 miles of roadway classified as Minor Collector. Of the 62 miles of roadway included in the Jefferson County Circulation System, 40.5 miles are already on the functional classification plan.

FIGURE 24

FIGURE 24
Jefferson County Transportation Plan
Existing and Proposed Functional Classification System



Based on the findings of this study, Jefferson County should initiate the steps necessary to reclassify roadways as necessary such that all segments of the Circulation System are classified as Major Collector. That will have the effects of increasing the total miles of classified roadway by 13.5 miles and increasing the number of miles of Major Collector from 31.5 to 62 miles.

In the current budget climate, ITD is reluctant to increase the number of miles in the state system. However, a review of functional classifications in other areas indicates that the proposed density of classified roadways is well within that of urbanizing counties. It should also be noted that with the upward reclassification of roadways, ITD will expect that Jefferson County actively seek to maintain an increased level of access management appropriate to the new classification level. This is fully compatible with the County's interest in developing the Circulation System as is discussed in the Access Management Section.

System Continuity

System continuity implies an orderly and logical interconnection of roadways enabling travel from point to point in an efficient manor. Efficiency is lost within a system if there are links missing – resulting in circuitous or "out of direction" travel. Efficiency is also lost if a link exists, but its condition is not consistent with its position in the system (road too narrow, poor pavement, operating speed too slow, not enough capacity)

Southeast Jefferson County is generally flat, allowing the development of a "mile grid" system throughout most of the area. The existing system provides a high degree of system continuity on this scale in terms of the pattern of improved roadways. There are "missing links, however they are generally due to topographic barriers that make it illogical to rigidly extend the grid. I-15 and US 20 also create barriers. As has been discussed in earlier recommendations, future development will create a need for better crossings of the "US 20 barrier".

With respect to the mile grid, the more pressing need will be to maintain system continuity through upgrades to the existing roadways to keep up with traffic, capacity and safety needs as travel demand increases. The County-wide Circulation System and recommendations as to the evolution of the mile-grid system have addressed this issue within the recommended plan.

Except within existing communities there is little or no system continuity below the mile grid spacing. Lacking sufficient planning and guidance, subdivisions have been developed within the mile squares in a manner that precludes through travel other than on the mile grid. Left unchecked, this pattern of development will have the following negative effects:

- Approaching a particular location from an adverse direction will require additional travel because the vehicle must travel *around* the mile square until finding the particular subdivision entrance rather than *through* the mile square to reach the same point. This will increase congestion on the mile grid and has an adverse effect on emergency response as well.

- With no other travel choices, the mile grid will become very congested with both local and longer distance trips.
- The mile grid roads will become increasingly inefficient because of the number of access points required to serve multiple subdivisions with individual access points. Capacity and safety will be compromised.

Experience with this pattern of development in other areas throughout the country has always lead to the same question – "Why did we let that happen?". Some development of this type has occurred in Jefferson County. However the amount of development is not yet sufficient as to make the effects stand out. The obvious effects and thus the public/political pressure to change things only comes later, after development has occurred and little can be done.

It is recommended that all jurisdictions within and including Jefferson County embrace the following policies through clarification and enhancement of subdivision ordinances as appropriate:

a) Require that development within a mile square must be arranged such that through roadways can be developed between parallel sides of the square. The minimum spacing for these sub-grid through roadways should be a minimum of ½ mile for densities of 0.5 dwellings per acre and ¼ mile for densities higher than that.
b) Were possible, access to all development should be arranged so as to come through the sub-mile roadways. Exceptions are likely where ½ mile spacing is in place. However, in no case should spacing of access to the mile grid be less than ¼ mile (unless land ownership patterns make this impossible).
c) Sub-mile through route intersections with the mile grid are required to match adjoining squares. If no system has been developed in adjoining squares, the spacing of intersections with the mile grid road should be even within the mile unless natural features make this impractical.
d) The responsible jurisdiction must be prepared to "bridge over" development time lines and property ownership issues to create the greater whole from multiple individual development requests. First, Jefferson County and Rigby should develop sub-mile circulation plans ahead of development requests to allow developers to plan accordingly. These plans could be subject to change as conditions warranted. Second, Jefferson County and Rigby should be prepared to "front" the capital necessary to construct sections of sub-grid through roads that may be necessary to serve smaller developments ahead of overall development within a square. Much of this funding should be recoverable through impact fees as further development takes place.
e) Finally, it is important the each jurisdiction embrace an understanding that the real impact of any given development proposal may appear to be little, particularly at an early point in time. However, any development that deviates from the above principles is no less responsible for degrading efficiency of the roadway system that the more obvious effects of a very large development. It is the sum of the whole that is important. Thus, "exceptions" for smaller or earlier developments with little immediate effect on traffic conditions are as damaging as

decisions relating to the more obvious effects of larger developments. Rather, early exceptions can cause greater damage if they preclude the future development of sub-mile circulation elements.

Access Management

Access management refers to the body of policy and design decisions that seek to balance the ever present desire for access to an adjoining roadway with the goal of preserving the efficiency of travel on that roadway. Put simply, a greater the number of access points (intersections, driveways) on a given segment of roadway will increase roadway congestion and increase accidents. With the continued increase in automobile travel, and limited ability to create ever wider roadways, there is greater importance being placed on increasing the efficiency and safety of the roadways we have or will build.

The fundamental purpose of access management is to minimize interference to traffic flow from vehicles turning onto and off of the primary roadway. The primary tools are to minimize the number of access points and increase the spacing between points. Medians and other access designs are ways of limiting movements from certain access points. All of these efforts reduce the number of potential conflicts in a given roadway segment thereby reducing the likelihood of congestions and accidents. Since the early 1990's a large body of research has emerged to substantiate the effectiveness of access management techniques. A sampling of this evidence is provided in Table 9 which summarizes the benefits of selected access management strategies.

The number and spacing of access points is, of course, dependant on the functional classification of the roadway in questions. Local streets directly serving homesites need little control. Access to mile grid roadways intended to move large volumes of traffic from one area to another should be managed. ITD has developed an access control policy for application on all roadways on their system. The policy specifies the maximum number of access points per mile and the minimum spacing between points. Another important parameter is limiting access within a minimum distance from intersections.

Pertinent chapters of the ITD Access Control Policy are reproduced in Appendix F.

Access Control Levels I through III are applicable to Jefferson County roads. Primary elements of these access management levels are:

Minimum Intersection Spacing	½ to ¼ mile
Minimum Approach Spacing	150 to 300 feet
Signal Spacing	¼ mile

It is recommended that Jefferson County adopt and aggressively apply an access management policy for all of the mile grid roads. ITD Type III Urban policy should be applied to the designated County-wide Circulation System. Type II Urban policy is recommended for all other grid roads.

TABLE 9

Jefferson County Transportation Plan

Selected Access Management Measures - Summary of Benefits

Effect of Medians

Median Type	Rate*
Undivided	3.8
Two-Way Left-Turn Lane	3.4
Non Traversable Median	2.9

* Accidents per million vehicle miles

Right Turn Slowing

Driveway Spacing	Percent of Vehicles Slowed
100 ft	64%
200 ft	40%
300 ft	29%

Effects of Access Points

Access Points / Mile	Crash Index
10	1.0 (base)
20	1.4
30	1.8

Signal Spacing Vs Travel Time

Signals / Mile	Spacing	Travel Time Increase
2	2640 ft	1 (base)
3	1760 ft	9%
4	1320 ft	16%
8	660 ft	39%

Source: Summary of data extracted from "Access Management Manual", Transportation Research Board, 2003

Experience has shown that achieving desirable levels of access management is virtually impossible after development has already occurred. Jefferson County is fortunate in that establishing a strong policy now will have significant and long lasting results as development has yet to preempt positive results in much of the county. However, even though development has not occurred, the benefits of access management will not be achieved without strong resolve on the part of county decision makers. Reducing access points to major adjacent roadways means that additional local roadways must be constructed to bring traffic to the nearest access point. This is not difficult to plan. However some will perceive this as a limitation on development potential. In other cases, an individual property may require interim access until the full off-grid circulation system is developed. As with efforts to achieve system continuity, this may require the county to be in a position to fund various improvements overcome development timing issues to achieve the greater whole. In addition, the benefits of individual application of access control policy may not be apparent until further development takes place. Thus early implementation requires firm resolve and constant attention to the sum of the parts.

Inter-Agency Cooperation

Jefferson County, Rigby and other municipal governments and ITD are each responsible for the development and maintenance of different parts of the roadways within Jefferson County. From the standpoint of performance, the roadway *system* in Jefferson County would be best developed without regard to jurisdictional boundaries. This can be difficult for a variety of reasons; with differences in funding opportunities often leading the way. Regardless of how various improvements are funded, it is (again) the sum of the whole that is important. It is important that county, city and state governments understand their rolls and responsibilities in developing the Jefferson County transportation system. At present, these understandings do not exist. Each of the parties have an interest in the others activities. And the goals of one party can often be complimented by the actions of another. For example the state has a goal of preserving the functionality of SH 48 through access management. This is very much in Jefferson County's interest as well because SH 48 is and will continue to be the primary cross-county roadway. Jefferson County, with there responsibility for plat approvals, is in the best position to mold development proposals to satisfy this goal. A memorandum of understanding between Jefferson County and ITD regarding each agencies' contributions toward achieving the fundamental goal (preserving the functionality of SH 48) would serve everyone's interests.

An example of a similar overlap of interests between city and county jurisdictions can be found in the issue of sub-mile through roadways. Rigby is already experiencing some of the problems that stem from a lack of a coordinated approach to development. As growth continues west of Rigby, it will cross the city limits and be under county jurisdiction. If Rigby and Jefferson county do not agree on minimum requirements to preserve the continuity of sub-mile roads, then any real efforts by Rigby will fail because a) the benefits will stop at the city limits, and b) because development is likely to take the path of least resistance and move outside of Rigby. It is thus imperative that the Jefferson County and Rigby work toward a common set of requirements for the benefit of both.

The lack of inter-agency agreements in Jefferson County is far from unique. By taking these issues to hart and defining the roles and responsibilities of all agencies in the future development of the transportation system, Jefferson County, ITD and Rigby would set a leadership example within Idaho for similarly developing counties. The need for this undertaking will never be eliminated. Over time, however, the opportunities for benefits will be lost and the complexity of achieving such agreements will increase.

There is one additional agency to agency agreement that should be developed that is applicable specifically to Jefferson County. As this study has shown, it will be necessary to upgrade the mile grid system as increased development occurs. In many cases additional right-of-way will be required. This is normal. However, the system of irrigation distribution canals that adjoins many, if not most, sections of the mile-grid system greatly complicates the matter of additional right of way. In any given mile segment:

- If the adjoining canal is not to be affected, that dictates that all widening be on the side opposite the canal. This may conflict with existing development or environmentally sensitive areas.
- The presence of a canal will complicate right-of-way contributions by developers adjoining the canal unless the canal can be relocated.
- Relatively "simple" intersection approach improvements on the grid system will be far more complex and expensive where the intersections are adjacent to not only canals, but also irrigation distribution structures and gates.

Given the potential effects of the irrigation canal system on the cost and complexity of roadway improvement projects, it is suggested that Jefferson County initiate memorandums of understanding between the county and the canal companies. These memorandums would become the basis for all future agreements necessary to achieve improvements to the grid system that could affect the canals. The memorandum would set out policies and procedures to be followed in communicating with the canal companies; criteria governing the relocation or enclosure of canal faculties; procedures and standards for the corresponding changes in property, easements and other real estate issues; and design requirements for relocating canals and distribution structures when necessary. The idea is to establish the basic policies and procedures ahead of time for what will become a common issue as improvements to the mile grid system are made. This will allow engineers and planners to better evaluate the merits of various improvement alternatives for any particular project and avoid "reinventing the wheel" any time a portion of the canal system may be affected. Changes to any of the general provisions would, of course, be made to suit the needs of any particular project.

Review of Subdivision Ordinances

Both Rigby and Jefferson County have subdivisions ordinances. These ordinances provide the primary vehicle for establishing roadway building practice within the county. They provide guidance and expectations on roadway characteristics from depth and type of materials, pavement widths, horizontal and vertical geometry, and system related requirement such as intersection and driveway spacing.

The Rigby subdivision ordinance is comprehensive and provides specific, numerical guidance where appropriate. The Jefferson County ordinance is very similar to the Rigby ordinance in intent, but often lacks specific guidance. Both ordinances were reviewed, resulting in a list of comments and recommendations that are shown in Tables 10 and 11 for Rigby and Jefferson County, respectively. Most of the comments can be characterized as follows:

- Suggestions for clarification where an issue could be misinterpreted.
- Better definition substituted for words such as "normal".
- Narrowing good practice options that can be done without approval.
- Revising various provisions to better embrace the concepts of System Continuity and Access Management discussed in this report.

With the exception of development density, there is little rationale as to why roadway development requirement should be significantly different between either Rigby or Jefferson County. Principles of roadway construction, system continuity, access and street widths should apply equally for new development, whether it be within County or City jurisdiction. This not only provides for a consistent system of roadways, but it also keeps development from jumping across artificial lines for some perceived regulatory advantage. To this end, representatives of Rigby and Jefferson County are encouraged to form a joint committee to eliminate as many differences in the two subdivision ordinances as possible with respect to roadways.

TABLE 10

Jefferson County Transportation Plan

Review of Subdivision Ordinance, City of Rigby

Ordinance Reference		Current wording or intention	Recommendations
11-5-2	A	Calls arterial and collector streets to conform to an Official Street Plan or Comprehensive Development Plan.	Develop plans embracing System Continuity and Access Management concepts as described in this report.
11-5-2	B	Discourages grid pattern for minor streets.	Street classification should be defined so as not to conflict with intentions of System Continuity recommendations. Formal discouragement of grid system development at any level is not necessary or beneficial.
11-5-2	F	Access to Major Arterials.	Add spacing criteria for arterial access at this point. Embrace System Continuity and Access Management concepts as described in this report.
11-5-2	I	Private streets shall be designed and constructed to basically same standards as public roads.	Eliminate the word "basically". If necessary, define acceptable deviations from city standards.
11-5-2	J	Width of new streets should be treated as a continuation of existing streets except where conditions or new requirements make modifications advisable.	Identify person responsible for making this judgment. Embrace System Continuity and Access Management concepts as described in this report. Discourage downgrading of standards.
11-5-3	A	Required ROW width is min 90 feet in vicinity of intersections with section line roads and other arterials.	Increase required ROW width to min 94' feet in vicinity of intersections for Section line roads or other arterials. Suggest additional width extends a minimum of 500 feet back from intersection unless engineering study suggests more or less required.
11-5-3	B	General requirements for street width and spacing.	Modify as necessary to embrace System Continuity and Access Management concepts as described in this report.
11-5-4	A	Street width requirements specified as back of curb to back of curb for various street classifications.	Preferable to specify street widths exclusive of curb and gutter rather than back to back of curb. Collector at 48 feet cannot operate as 4 lanes including C&G unless lanes are less than 12 feet wide.
11-5-7	A	Section defines pavement ballast depths for "normal" subgrade conditions.	Define minimum R value assumed for "normal subgrade conditions" to better handle potential disputes.
11-5-9	A	Recommends City approval of intersection angles over 75 degrees.	Reword to require of approval of intersection angles over 85 degrees.
11-5-9	E	Specifies spacing between intersections for various classes of streets.	Spacing between intersections on major arterials of 1320 ft is ok, but spacing on arterials of 400-600 feet maybe low. Reconsider this section embracing System Continuity and Access Management concepts included in this report.
11-5-11	A	Unclear as to whether ramp to depressed driveway elevation counts in max driveway vs frontage width.	Clarify.

TABLE 10

Jefferson County Transportation Plan

Review of Subdivision Ordinance, City of Rigby

Ordinance Reference		Current wording or intention	Recommendations
11-5-11	D	The edge of driveway shall be at least 5-feet from any property line.	This is ok for local/minor streets. However it conflicts with access management methods to minimize access points on higher level roadways. Reconsider.
11-5-11	D	Private access prohibited on all designated controlled access streets and shall be kept to an absolute minimum on all arterial streets.	This provision should be revised to embrace a comprehensive access management strategy as described elsewhere in this report. Terms like "absolute minimum" should be avoided in favor of standards that can be modified with the approval of the City.
11-5-11	H	The Public Works Director can approve variances for driveway spacing and width.	As driveway approvals are critical to effective access management it is recommended that approval be elevated to City Counsel level - with prior recommendation from the Public Works Director.
11-6-2	O	Street lighting costs are the responsibility of subdivider.	The context suggests that this section pertains to capital costs. If not covered in another area, define responsibility for operating costs as well.
11-6-8	C	Construction of controlled access streets shall be the responsibility of City.	This provision is too broad. Incorporating access management principals at various levels my be construed to mean that every roadway above minor streets have "access control" and are thus the responsibility of the City. In addition, were the city to develop an impact fee ordinance it is common for the fees to apply only to the needs of the primary circulation system. This provision could be seen to interfere with such an ordinance. Finally, this may be appropriate in the context of a greater understanding, where developers are to provide internal circulation roadways so as to meet the requirements of access management on the adjacent arterial roadway. However, this context is missing at this time.
11-6-8	D.1	City responsible for paving full street if development does not require private driveways on an arterial street.	This provision should be reconsidered in light of adoption of access management policy. In general private access to arterial streets would not be allowed - thus this "incentive" wording should be eliminated.

TABLE 11

Jefferson County Transportation Plan

Review of Subdivision Ordinance, Jefferson County

Ordinance Reference		Current wording or intention	Recommendations
3-3-3-1	A	Calls for subdivision compliance to official street plan or comprehensive subdivision plan.	Official Street Plan and Comprehensive Plans should be developed to embrace System Continuity concepts.
	B	Minor streets shall be arranged to discourage use by through traffic.	Street classification should be defined so as not to conflict with intentions of System Continuity recommendations. Formal discouragement of grid system development at any level is not necessary or beneficial.
	F	Frontage Roads - or such other treatment as is necessary for the adequate protection of residential properties and to separate through traffic from local traffic.	Should be reworded to embrace principles of access management. Start from premise of no individual access to arterial roadways.
	H	Half streets are allowed if "satisfactory assurance" that the full street width will be completed with future development.	Define "satisfactory assurance".
3-3-3-2	A	All subdivision streets are to be a minimum of 30 feet wide.	The width measurement should be defined relative to curb and gutter. A 30-foot width is adequate for local (minor) streets, but larger subdivisions will require "collector" and even "minor arterial" streets that should have greater width requirements.
	A	Paving shall meet minimum Jefferson County Standards unless a surety bond is provided.	Minimum Standards should be stated in this documentation. The option to not meet standards and pos a surety bond should be deleted or revised to require a surety bond if inspection determines that minimum standards were not met.
3-3-3-3	A	Angle of intersection greater than 75 degrees must be approved by the Road & Bridge Department	Reword to require of approval of intersection angles less than 85 degrees.
	D	Intersection of major streets should be at least 800 feet apart.	Street classes should be better defined. If the term "major street" is continued the spacing should be a minimum of 1320 feet. This section should also be revised to embrace System Continuity Concepts.
3-3-3-5	A	Hereafter there will be no further private streets in Jefferson County. However this is not meant to eliminate flexibility in design width and pavement standards.	The second regarding flexibility in design should be eliminated. It potentially overrides any other stipulations of design standards.

TABLE 11
Jefferson County Transportation Plan
Review of Subdivision Ordinance, Jefferson County

Ordinance Reference		Current wording or intention	Recommendations
3-4-5-2	9	Adequate provision shall be made to provide ingress and egress so designed as to minimize both internal and external traffic hazards and congestion.	Greater definition is need. Who decides what "adequate provision" for traffic is and by what standards? An traffic engineering study is suggested - with an outline provided b the County so that issues are uniformly and effectively covered.
3-5-4-4	1(7)	Traffic analysis.	This traffic analysis is included under the Step 2 submittal, which is optional. A traffic analysis should be required. Also see above comments.
	2( )	Preliminary plan submittal - including roadways.	Documentation of design standards, capacity analyses, determination of number of lanes, taper lengths, maximum curvature and other design elements should be included with the submittal.

Maintaining the Roadway Inventory / Asset Management Database

The analyses and recommendations for pavement maintenance presented in this plan were based on roadway condition ratings reflecting roadways in the City of Rigby as of Fall, 2006. The sample of conditions used to describe conditions of Jefferson County roadways were obtained in Fall, 2006 and Summer, 2007. These ratings were processed by the TAMS software to determine remaining service life (RSL) and suggested treatments. From this base, future maintenance needs were projected.

In every jurisdiction it is necessary to periodically update the roadway condition database for the TAMS software to remain a valid and effective tool. There are two ways that TAMS accepts update data and resets the RSL.

If an improvement is made, the date and improvement type can be recorded for each segment on the segment data input screen by selecting the "Enter Work Done" button. After an entry is made, TAMS does two things: it increases the RSL of the segment depending on prior RSL and the type of improvement made; and it resets all of the condition ratings to a "no rating" condition. Actual field rating of distress conditions of the improved segments must be made. These post-improvement ratings can be made three to six months after the improvement to more accurately reflect the long term results of the improvement. This is particularly true of limited improvements such as chip seals which can mask more serious defects for a short time after initial placement.

In addition to updating the file to reflect ongoing maintenance and improvement efforts, it is desirable to conduct a general update of condition data throughout the system on a 3 to 5 year basis. It is not necessary that the entire system be done in any one year. When new distress ratings are input, TAMS reevaluates the pavement condition and RSL based on the field data.

The new field data will result in an updated RSL that could be:

- Lower than the previous value – expected if little or no maintenance has occurred
- Higher then the previous value – expected if improvements have been made
- Different from expected values based on past predictions and improvement actions.

The last condition really defines the need to update the roadway condition data. TAMS employs a model for predicting RSL based on the most recent set of conditions. No model is perfect, thus the need to "reset the base" on which the predictions are made. Obtaining new condition data every several years insures the validity of the forecasts. After several iterations it may also be apparent that the model is either over or under estimating the rate of deterioration for various roadway conditions. The software enables the user to change the "aging" curves. Over time the model can be adjusted to conform to the set of physical conditions affecting roadway life in Jefferson County.

Completion of the Road Inventory

This study did not include the resources necessary to complete inventories of roadway systems in the other Jefferson County municipalities. However, the roadway geometry

and descriptions files necessary to complete the roadway inventory are complete by virtue of the work accomplished for the 911 system. What remains is the effort to rate the condition of the roadways in the individual municipalities.

The actual rating for each city would consume approximately two days time. It is suggested that the remaining cities make arrangements with the Jefferson County Road & Bridge Department to complete the inventories. Ideally a single person would be made available by the cities to inventory all of the cities. This would contribute to uniformity and efficiency. Jefferson County could train the individual, oversee the work, and maintain the inventory files.

There after the cities could contract with Jefferson County to update inspections input maintenance work (as contracted with Jefferson County) to keep the files current. Jefferson County should also be contracted to produce an annual analysis of roadway maintenance needs for consideration during the budgeting process. After the initial data input, it could be expected that maintaining the files and creation of the report would require 3 to 4 days of effort per year.

Attachment A
South Rigby Interchange Study

South Rigby Interchange Study

November 19, 2007

KELLER ASSOCIATES

105085

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EXECUTIVE SUMMARY

US 20 is the primary roadway serving Rigby and eastern Jefferson County. In 2003 the Idaho Transportation Board (IT Board) approved a program of access improvements to US 20 that included construction of an interchange County Line Road, and closing at-grade intersections at 100 North and 200 North (Holbrook Road). An existing ramp pair provides access between 300 North and US 20 to and from the north.

Closing intersections at 100 and 200 North had the effect of limiting access to US 20 between 300 North (SH 48) and County Line Road. In response to local concerns, the IT Board encouraged the City of Rigby and Jefferson County to prepare a county-wide transportation plan that would evaluate circulation and US 20 access needs in southeast Jefferson County. This document, prepared as a part of Jefferson County Transportation Plan, presents findings specifically related to the feasibility of a new South Rigby Interchange.

Traffic Evaluation

The evaluation of changes in traffic behavior with or without a full interchange south of Rigby is central to the identification of needs and benefits. Specific data available for this analysis include existing traffic counts, and a 20-year traffic growth estimate. The results of an Employer Questionnaire were also used to estimate diversion of traffic between interchanges.

Traffic on US 20 ramps serving Southeast Jefferson County is expected to increase from 8,000 vehicles per day to 13,200 trips or 63 percent by 2025. The basic concept of a new South Rigby Interchange included a new US 20 ramp pair to and from the north located at or south of 300 North (SH 48). Consistent with needs determined by the County Transportation Plan, the proposed South Rigby Interchange is assumed to be easily accessible from 200 North. Given these characteristics, the following effects were found to occur:

- The addition of the ramp pair to/from the north to the South Rigby interchange would attract approximately 2,000 trips per day (40 percent of those movements) from the North Rigby interchange. About 1,600 of these trips are trips currently passing through central Rigby to SH 48 and points south.
- About 80 percent of trips (1,300 trips per day) to/from US 20 north now exiting at the County Line Road interchange would switch to the new ramp pair at the South Rigby interchange.
- In summary, the new ramps to/from US 20 north would be preferred by about half of the trips currently making this movement.
- About a third of the trips (500 trips per day) using ramps to/from the south at County Line Road interchange would shift to the proposed south ramps at the South Rigby interchange. This change results from convenient access to the new interchange from 200 North.
- 65 percent all existing traffic accessing US 20 from Jefferson County would prefer a reconfigured South Rigby interchange

- A reconfigured South Rigby interchange would eliminate approximately 250 heavy truck trips per day from passing through downtown Rigby en rout to other destinations.
- Reconfiguring the South Rigby interchange would reduce the number of trips traveling on or across congested sections of SH 48 by about 1,000 vehicles per day.
- With diversion to a reconfigured South Rigby interchange, the North Rigby interchange should accommodate forecast 2025 traffic without major physical roadway changes.
- Analysis of county-wide travel demand indicates an increase of 13,200 vpd seeking to cross US 20 south of SH 48 by 2025. A reconfigured South Rigby interchange would directly service this need and reduce future travel on congested SH 48.

Conceptual Interchange Alternatives

Chapter 2 presents sketches of three possible configurations of a new South Rigby interchange. These provide a conceptual level indication of potential right-of-way needs and the basis for order-of magnitude/comparison level cost estimates. The layouts were developed to be responsive to several criteria:

- Provide for the missing access between south Rigby and US 20 to/from the north.
- Maintain convenience for users of US 20 to/from the south
- Be accessible from 200 North and provide an overpass for local traffic to cross US 20.

Three interchange concepts were developed to explore the general feasibility and costs of a new South Rigby interchange:

- The 3N Concept - favoring access directly from 300 North (SH 48),
- The Central Concept – locating the interchange between 200 and 300 North with access available from both roadways, and
- The 2N Concept - which presents an interchange configuration that emphasizes continuity of east-west travel on 200 North.

The 3N Concept Interchange. - This concept would continue to utilize the existing ramp pair providing access to US 20 to and from the south from 300 North. Ramps between US 20 North and 300 North (SH 48) would be added. Concept 3N estimated cost - $24 million.

The Central Concept Interchange. - A full interchange would be located between 200 and 300 North. The intent of this interchange configuration would be to provide better service to areas south of 300 North while still being convenient to those using the existing US 20 access, to/from the south. An overpass structure would carry the interchange crossroad over Yellowstone Highway, the Eastern Idaho Railroad, and a new alignment of US 20. Four ramps serving both directions of traffic entering and exiting US 20 would extend down to US 20 from the elevated

crossroad. Access to the interchange would be via a two-way frontage road west of US 20. East of US 20 a "U-turn" roadway from Yellowstone Highway and a new connector to 200 North would be built. Central Concept estimated cost - $44 million.

The 2N Concept Interchange. - This interchange configuration that was developed to maximize continuity of east-west travel along 200 North. It is otherwise similar to the Central Concept. Higher cost results from a longer crossing structure and extended alignment connecting 200 North. Central Concept estimated cost - $50 million.

Comparisons and Conclusions

The interchange sketches studied indicate that the proximity of US 20 to the Eastern Idaho Railroad, combined with existing development, makes development of a new South Rigby interchange rather complex and expensive. With the possible exception of the 3N concept interchange, many permutations of the concepts shown here can be developed that would change effects to the surrounding areas.

Without the context of future growth, travel demand, and transportation needs identified in the Jefferson County Transportation Plan, selection of a favored concept could easily be influenced by the relatively low cost of the 3N Concept. However, the transportation plan, and detailed analyses of traffic patterns within this study indicate that an interchange concept with good connectivity to 200 North provides far greater value to the transportation needs of Southeast Jefferson County.

The areas most directly affected by either the Central Concept or the 2N Concept are not yet developed to the point of making either alternative impractical. It is suggested that IDT, Jefferson County and the City of Rigby work to find concurrence in both the future need for an improved South Rigby interchange and the most promising concept. From that point, all agencies should collaborate to shape future growth in the 200 North area so as to maintain the feasibility of a future interchange.

The alternatives presented here are far more complex and expensive than the alternatives envisioned in the 2002 Design Study Report prepared by ITD for a new interchange (see Figures 12a and 12b). There are two important reasons for this:

- The ITD Concept report did not have the benefit of the analysis of countywide growth and hence did not make any provision for east-west movement across US 20 - a key element in the current evaluation.
- The interchange configurations presented in the Draft South Rigby Interchange Study assumed that the crossroad would cross over US 20 and the adjacent railroad – adding about 30 percent to the cost. Allowing an at-grade crossing of the railroad as was done in the ITD concepts could simplify any interchange configuration.

A new Concept Report should be prepared to weigh the importance of all of these issues.

CHAPTER 1 TRAFFIC EVALUATION

Introduction

US 20 is the primary roadway serving Rigby and eastern Jefferson County. Since the reconstruction of US 20 following the Teton Dam failure, Rigby and areas adjacent to the City were served by three access points (See Figure 1):

- The North Rigby interchange (US 20 Milepost 322.26) – A full diamond interchange generally in the north east corner of the City of Rigby.
- The current South Rigby Interchange (US 20 Milepost 320.64) – A half-diamond interchange with ramps to and from the south only. Northbound exiting traffic crosses over US 20 and proceeds approximately 0.7 miles north to the intersection of SH 48 (1st South in Rigby), thus providing direct access to the Rigby business district.
- An at-grade intersection at 200 North (Holbrook Road) provided access from US 20 to businesses and housing located generally south of SH 48.

A fourth access, County Line Road, is also important to south Jefferson County. This access is located at Milepost 317.91.

In 2001 the Idaho Transportation Department (ITD) completed a corridor study for US 20 from Idaho Falls to Ashton. The report concluded that increasing traffic on US 20 and various cross roads had made at-grade intersections a safety hazard and recommendations were made to close all at grade intersections and construct a series of interchanges to provide access to US 20.

Recommendations from the Corridor Study pertaining to the City of Rigby and southeastern Jefferson County were as follows:

- Close at-grade access at County Line Road.
- Close at-grade access at 100 North.
- Close at-grade access at Holbrook Road (200 North).
- Construct an interchange at US 20 and County Line Road
- Reconstruct/relocate or otherwise modify the South Rigby interchange to provide all direction access to US 20 (add ramps to and from the north). This interchange would also be intended to serve the general city and county areas south of SH 48.

ITD completed a Concept Report for completion of an interchange in the vicinity of Holbrook Road in 2002. A key outcome of that study was that public comments regarding the project was about equally split between building a new interchange and *not* building a new interchange. (see Figure 12a and 12b for alternatives studied).

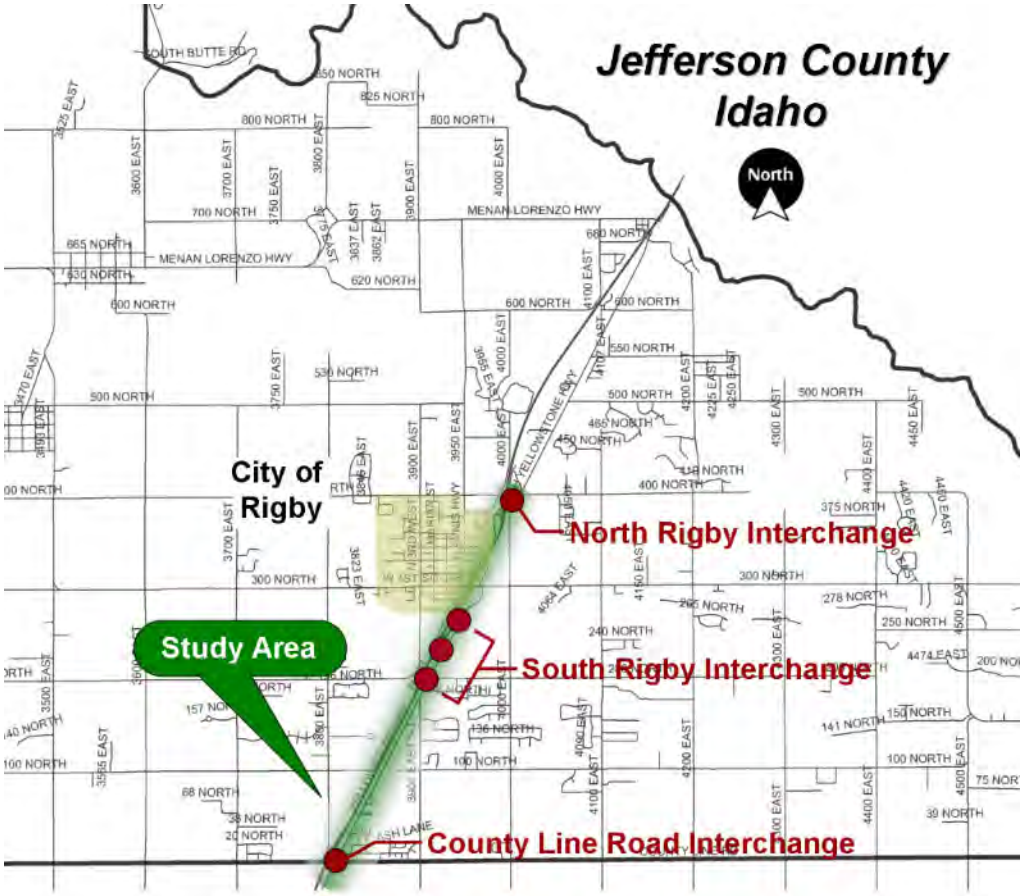
In 2003 the Idaho Transportation Board (IT Board) approved a program of access improvements to US 20 that included closing the at-grade intersections at County Line Road, 100 North and Holbrook Road; and construction of an interchange at County Line Road.

At that time the ITD Board deferred reconstruction of a South Rigby interchange. Prior to reaching a final decision on a new or modified interchange south of Rigby, the IT Board encouraged the City of Rigby and Jefferson County to prepare a county-wide transportation plan that would evaluate circulation and US 20 access needs in southeast Jefferson County.

The interchange construction and at-grade crossing closures have been completed. In terms of access to US 20 this action has had the following effects:

- Access between US 20 and areas south of US 48 has been limited due to the closing of the intersections at 100 and 200 North. Using 200 North as a point of reference, business and residential traffic from south east Jefferson County seeking to travel north on US 20 must travel either 2 miles north (to the North Rigby interchange) or 2 miles south (to County Line Road) to reach an interchange with US 20.
- Access to and from the south is a little better because of the South Rigby partial interchange. However, again using 200 north as a reference, traffic to and from the south must travel either 1 mile north (to SH 48) or 2 miles south (to County Line Rd) to access US 20.

Figure 1
South Rigby Interchange Study
Study Area



The City of Rigby and Jefferson County have completed a county-wide transportation plan. This report, completed as a separate document within the context of the county-wide transportation plan, specifically addresses the need for and benefits of a new South Rigby Interchange.

Traffic Evaluation

The evaluation of changes in traffic behavior with or without a full interchange south of Rigby is central to the identification of needs and benefits. Traffic data developed for the Rigby/Jefferson County Transportation Study facilitated the evaluation of the effects of a full South Rigby interchange. Specific data available for this analysis include:

- Average annual daily traffic (AADT) counts from ITD.
- Various intersection turning movement counts, conducted as part of the City/County transportation plan.
- The response to an employer survey conducted as part of the City/County transportation plan regarding travel patterns of employees, customers, and delivery vehicles.
- A county-wide 20-year growth estimate and corresponding traffic forecast.

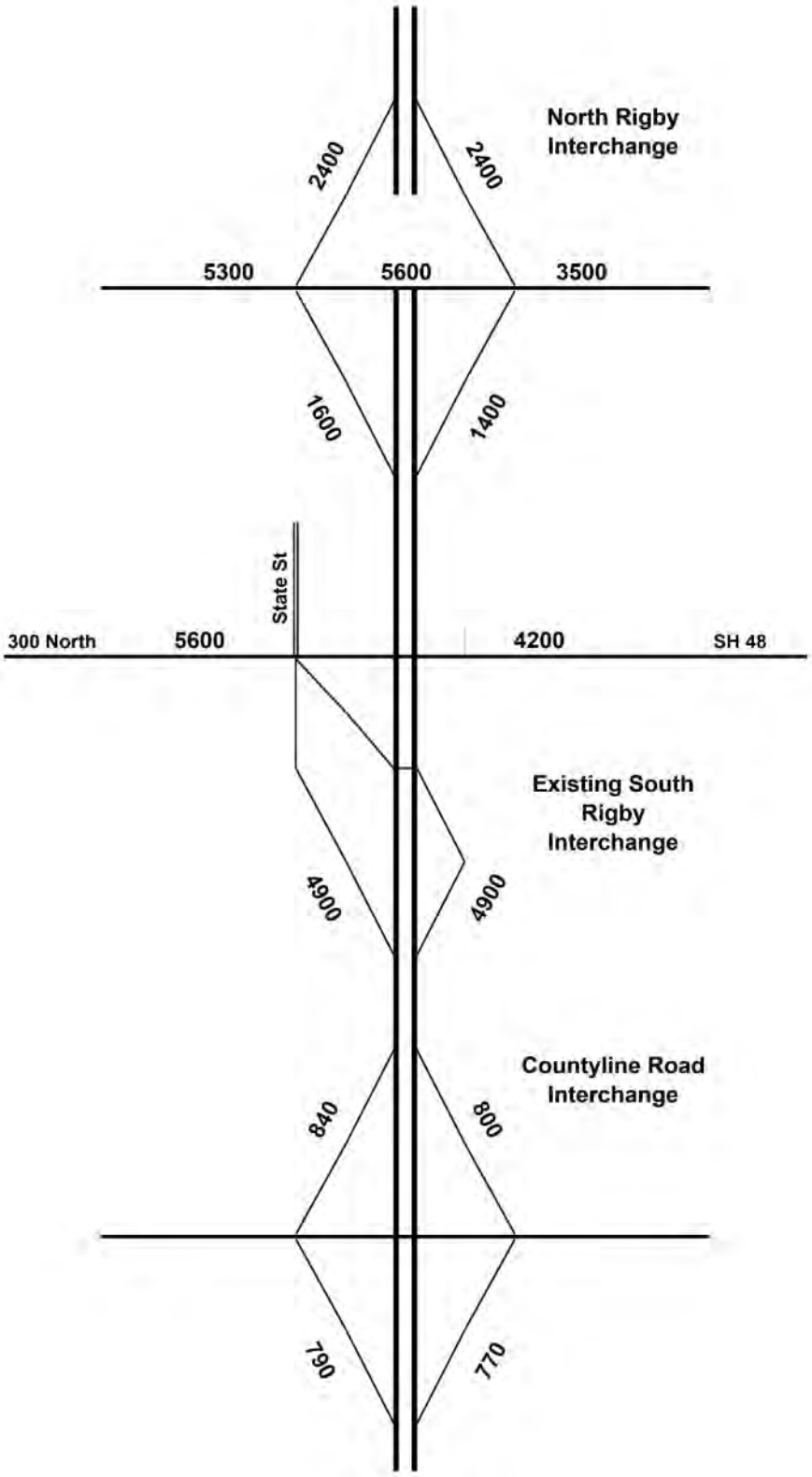
All of these sources were used to establish "Before" and "After" traffic levels under existing and future conditions – "Before" signifying no changes to the US 20 access south of SH 48, and "After" signifying relocation/reconstruction of the current South Rigby half diamond interchange.

Existing Traffic Volumes

Figure 2 illustrates existing ("before") ramp AADT's at the County Line Road, South Rigby, and North Rigby interchanges. Existing volumes assuming reconfiguration of the South Rigby interchange (the "after" condition) are also shown. The following observations relate to the existing patterns of US 20 access:

- The ramps to and from the south at the South Rigby interchange are the most heavily used access points – accounting for about half of all ramp traffic at the three interchanges. This mirrors the sense of Rigby and Jefferson County as being satellite to the major activity center in Idaho Falls. Further these ramps lead directly into the business district of Rigby and connect with SH 48 - the primary cross-county roadway.
- The second highest volumes are those at the North Rigby interchange leading to and from the north. This could be expected since this ramp pair is the only opportunity for traffic to and from the north to access Rigby. The next opportunity is four miles south at County Line Road. These movements also reflect the growth of Rexburg as an academic and employment center.
- The County Line Road Interchange is of lesser importance at this time because there is little development directly adjacent to County Line Road and most commercial development is at least two miles north of this interchange. Volumes at this interchange may be expected to increase as residential development continues in north Bonneville County.

Figure 2
South Rigby Interchange Study
2005 Average Daily Ramp Volumes



The development of a full interchange south of Rigby can be expected to have several effects on existing traffic patterns.

The first and most obvious is a shift of some traffic on US 20 traveling to and from the north away from the existing North Rigby interchange (4,800 vehicles per day) and County Line Road interchange (1,640 vpd).

The second effect of an expanded interchange is to provide another opportunity for local traffic south of SH 48 to access the South Rigby interchange more directly. Reconfiguring the South Rigby interchange also offers the opportunity for an additional crossing of US 20 between County Line Road and SH 48. Both of these effects will improve local circulation south of SH 48 and potentially shift additional traffic to the South Rigby interchange.

Derivation of Existing US 20 Access Patterns

To determine the shift of traffic between changed access points it is necessary to have an understanding of the pattern of origins and destinations of trips using US 20. As part of the County Study, a questionnaire was sent to 246 employers in Jefferson County. The questionnaire asked employers to indicate approach direction of employees, customers, and delivery trucks using a zone system provided. See Attachment 1. Table 1 summarizes the number of employers contacted and the response rate for various information requested.

Although not all of the surveys were returned and some returns were incomplete, the information obtained from the survey does represent a reasonable sample of trips. The most frequent deficiency in the returns was reporting the number of employees or customers without providing a distribution of origins. Wherever possible, the reported trips were distributed to the origin zones based on similar business type and location. The raw data from the questionnaire was thus "expanded" to yield a greater survey base.

Table 1
South Rigby Interchange Study
Employee Questionnaire Response Data

Category		Responses
Total Questionnaires Sent		246
Total Returned		175
Comments Supporting New Interchange		187
Number Reporting Employees		173
Total Employees Represented		2,816
Number Reporting Employee Distribution		68
Number Reporting Customers		100
Total Customers Represented		6,074
Number Reporting Customer Distribution		59
Number Reporting Truck Trips		68
Total Truck Trips Represented		
	Semi-trailer	214
	Heavy-trailer	171
	Single unit	346
	Total	731
Number Reporting Truck Distribution		50
Total Trips Represented (all types)		9,609
Number of Trips Designated to US 20 North		
	Employees	206
	Customers	365
	Truck Trips	171
	Total	742
Number of Trips Designated to US 20 South		
	Employees	1,080
	Customers	422
	Truck Trips	116
	Total	1,618

The zone system used in the questionnaire (illustrated in Figure 3) was established to yield travel patterns throughout Jefferson County. For the purposes of the Interchange Study, the data was aggregated into a different set of areas more specific to the question of existing and potential interchange use. Eight "interchange analysis areas", also shown in Figure 3, were established to be sensitive to the areas or routes tributary to a given interchange. The analysis areas are described as follows:

North. – All areas north of the North Rigby interchange.

Downtown. – Essentially the City of Rigby.

Approach. – A relatively small area west of US 20 and south of SH 48 that is adjacent to the existing South Rigby interchange ramps.

SH 48 West. – All areas west of US 20 from which traffic destined to US 20 would be expected to approach US 20 via SH 48.

SH 48 East. – All areas east of US 20 from which traffic destined to US 20 would be expected to approach US 20 via SH 48.

Southwest. – An area west of US 20, between County Line Road and SH 48, from which travel via US 20 would be conveniently served by US 20 access in the vicinity of 200 North (Holcomb Road).

Southeast. – An area east of US 20, between County Line Road and SH 48, from which travel via US 20 would be conveniently served by US 20 access in the vicinity of 200 North (Holcomb Road).

County Line. – Those areas, east or west of US 20 most conveniently served by County Line Road and the County Line Road interchange.

From this point, the number of surveyed trips from each analysis area known to use either US 20 north or US 20 south were routed to the most convenient existing US 20 access ramp. Travel in both directions was considered. Table 2 shows resulting Analysis Area – Access Ramp trip table. Table 2a shows the area to ramp volumes derived directly from the employer survey. The total number of trips derived from the survey accounted for about half of the counted ramp traffic, although the comparison between survey and ramp volumes ranged from 30 percent to 100 percent depending on ramps. The comparisons were similar for ramps serving reverse movements (e.g. NB exit / SB entrance) – showing a general consistency of data.

The final estimate of existing travel between an analysis area and a given interchange ramp is shown in Table 2b. In Table 2b, the individual movements from each analysis zone have been factored (evenly) so that the total matches the counted ramp volume. Table 2b represents the estimated pattern of interchange use "Before" possible changes to the South Rigby interchange.

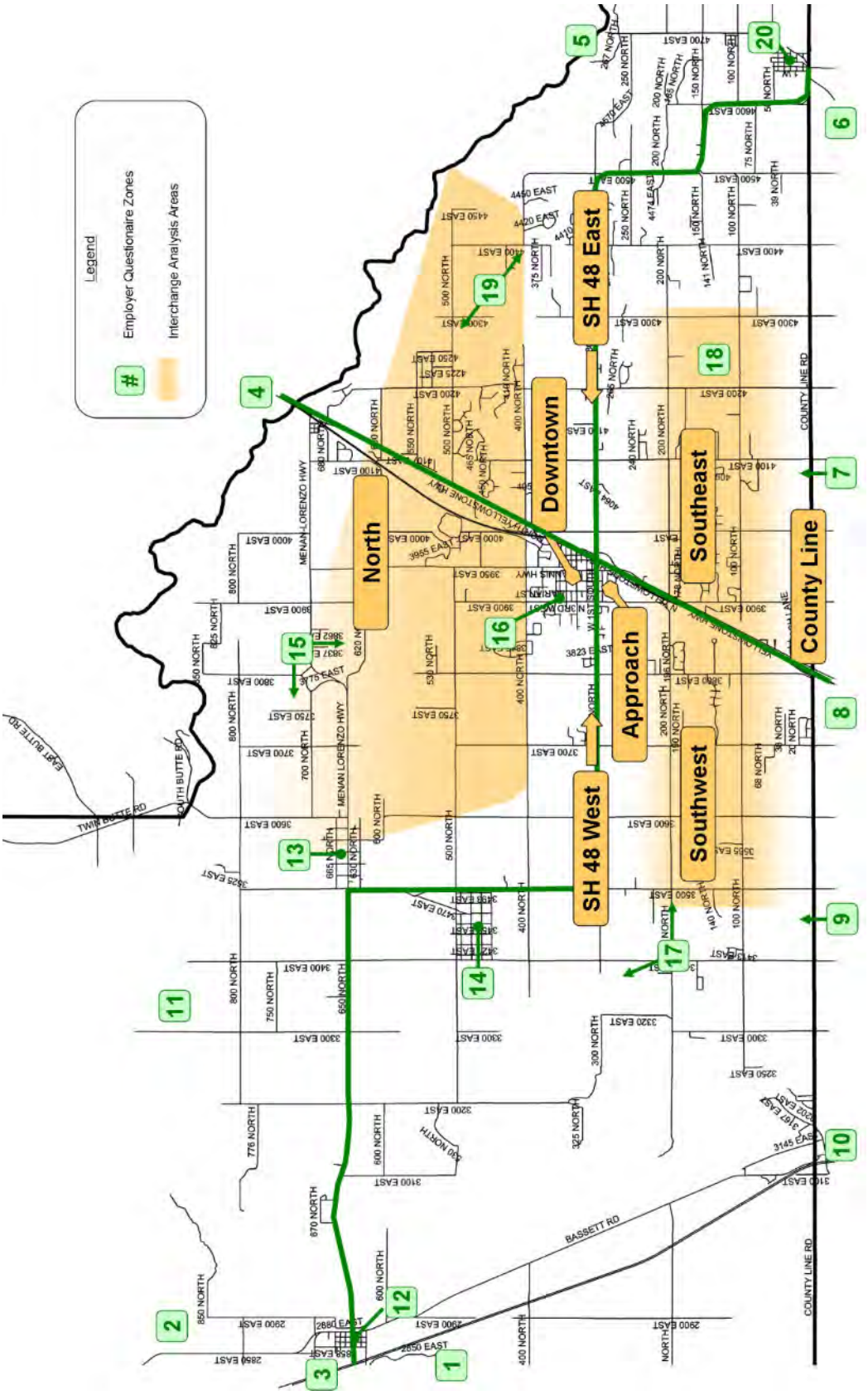


Figure 3
South Rigby Interchange Study
Traffic Analysis Zone System

Table 2
South Rigby Interchange Study
Existing Travel between Analysis Areas and US 20 Ramps

Table 2a
Average Daily Trips Derived Directly from Employer Survey

Analysis Area	County Line Road Ramps				South Rigby Ramps				North Rigby Ramps				Total
	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	
North	-	-	-	-	80			80	600	570	550	600	2,480
Downtown	-	-	-	-	700			710	20	650	650	20	2,750
Approach	-	-	-	-	370			370	-	380	360	-	1,480
SH-48 West	10	10	10	10	100			100	-	50	50	-	340
SH-48 East	60	30	30	70	110			120	-	110	120	-	650
South West	210	110	110	210	70			70	-	90	100	-	970
South East	440	260	220	460	60			60	-	170	180	-	1,850
County Line	60	20	20	60	-			-	-	20	20	-	200
SurveyTotal	780	430	390	810	1,490			1,510	620	2,040	2,030	620	10,720
Ramp Count	770	800	840	790	4,900			4,900	1,400	2,400	2,400	1,600	20,800
Survey/Count	1.01	0.54	0.46	1.03	0.30			0.31	0.44	0.85	0.85	0.39	0.52

Table 2b
Averaged Daily Trips Scaled to Counted Ramp Volumes

Analysis Area	County Line Road Ramps				South Rigby Ramps				North Rigby Ramps				Total
	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	
North	-	-	-	-	260			250	1,350	670	660	1,540	4,730
Downtown	-	-	-	-	2,310			2,300	50	760	770	60	6,250
Approach	-	-	-	-	1,210			1,210	-	450	420	-	3,290
SH-48 West	10	20	30	10	330			330	-	60	60	-	850
SH-48 East	60	60	70	70	380			390	-	130	140	-	1,300
South West	210	210	220	210	240			230	-	110	120	-	1,550
South East	430	470	470	450	180			180	-	200	220	-	2,600
County Line	60	40	50	60	-			-	-	20	20	-	250
Total	770	800	840	800	4,910			4,890	1,400	2,400	2,410	1,600	20,820

Changes to US 20 Access Patterns Resulting from Changes to the South Rigby Interchange

The changes in travel patterns were estimated assuming that the existing South Rigby interchange serving only movements to and from the south were replaced by a full interchange that included movements to and from the north. This was accomplished by looking at each Analysis Area to ramp movement and estimating the number of trips that would divert to a new South Rigby interchange.

To make this estimate, it was necessary to make some assumptions about the accessibility of the reconfigured interchange with the surrounding circulation system. The following accessibility assumptions were used when estimating the number of trips likely to use a reconfigured South Rigby interchange:

- The level of connectivity between US 20 (south) and central Rigby/SH 48 would be maintained at least to a level that would not induce motorists to and from US 20 south to switch to the North Rigby interchange.
- The new interchange would be readily accessible for trips approaching US 20 from 200 North.
- The new interchange would provide a new grade-separated crossing of US 20 generally convenient to traffic traveling east-west along 200 North.

With the above assumptions in mind, an estimate was made of the number of trips from each analysis area/ramp combination that would change access points. Table 3 presents the results of this analysis. Table 3a shows the estimated distribution of trips after reconfiguration of the South Rigby interchange. Table 3b shows the difference in estimated trips due to reconfiguration for each analysis area / ramp pair. The following changes are noted:

- The addition of the ramp pair to/from the north to the South Rigby interchange would attract approximately 40 percent of those movements from the North Rigby interchange or about 2,000 trips per day. About 1,600 of these trips are trips currently passing through central Rigby to SH 48 and points south.
- About 80 percent of trips (1,300 trips per day) to/from US 20 north now exiting at the County Line Road interchange would switch to the new ramp pair at the South Rigby interchange.
- The new ramps to/from US 20 north would be preferred by about half of the trips currently making this movement.
- About a third of the trips (500 trips per day) using ramps to/from the south at County Line Road interchange would shift to the existing ramps at the South Rigby interchange. This change results from the addition of a new grade separated crossing of US 20 convenient to travel along 200 North assumed to occur as part of the South Rigby interchange reconfiguration.

Table 3
South Rigby Interchange Study
Estimated Travel between Analysis Areas and US20 Ramps with New South Rigby Interchange

Table 3a
Existing Averaged Daily Trips After South Rigby Interchange Reconfiguration

Analysis Area	County Line Road Ramps				South Rigby Ramps				North Rigby Ramps				
	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	Total
North	-	-	-	-	190			190	1,470	700	700	1,480	4,730
Downtown	-	-	-	-	2,250	210	330	2,170	60	630	540	60	6,250
Approach	-	-	-	-	1,090	470	460	1,120	-	80	70	-	3,290
SH-48 West	10	-	10	10	330	50	50	330	-	30	30	-	850
SH-48 East	30	40	50	40	410	110	120	440	-	30	30	-	1,300
South West	180	50	40	170	330	220	230	330	-	-	-	-	1,550
South East	230	30	30	260	440	490	480	620	-	10	10	-	2,600
County Line	60	30	30	60	-	10	20	-	-	10	10	-	230
Reconfigured Total	510	150	160	540	5,040	1560	1690	5,200	1,530	1,490	1,390	1,540	20,800
Exisiting Total	770	800	840	800	4,910			4,890	1,400	2,400	2,410	1,600	20,820
Difference	(260)	(650)	(680)	(260)	130	1,560	1,690	310	130	(910)	(1,020)	(60)	(20)

Table 3b
Net Change in Trips After South Rigby Interchange Reconfiguration

Analysis Area	County Line Road Ramps				South Rigby Ramps				North Rigby Ramps			
	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent	NB Exit	NB Ent	SB Exit	SB Ent
North	-	-	-	-	(70)			(60)	120	30	40	(60)
Downtown	-	-	-	-	(60)	210	330	(130)	10	(130)	(230)	-
Approach	-	-	-	-	(120)	470	460	(90)	-	(370)	(350)	-
SH-48 West	-	(20)	(20)	-	-	50	50	-	-	(30)	(30)	-
SH-48 East	(30)	(20)	(20)	(30)	30	110	120	50	-	(100)	(110)	-
South West	(30)	(160)	(180)	(40)	90	220	230	100	-	(110)	(120)	-
South East	(200)	(440)	(440)	(190)	260	490	480	440	-	(190)	(210)	-
County Line	-	(10)	(20)	-	-	10	20	-	-	(10)	(10)	-
Net Change	(260)	(650)	(680)	(260)	130	1560	1690	310	130	(910)	(1,020)	(60)
Net Change as a Percent of Existing Volume	34	81	81	33	13			18	9	38	42	4

Forecast 2025 Traffic Volumes

Year 2025 traffic growth forecasts were developed for the Rigby/Jefferson County transportation plan. Based on land use growth provided by the Jefferson County Economic Development Office, the population of Jefferson County is expected to increase by a factor of 1.83 between 2005 and 2025. This growth would be distributed among the traffic zones based on estimates also provided by the Economic Development Office. Zonal Trip Growth is shown in Figure 4.

For the purposes of the interchange study, the increased trips between county zones and US 20 forecast for 2025 were redistributed to the interchange analysis areas. The shift in traffic between US 20 ramps resulting from the South Rigby interchange reconfiguration was then estimated. Figure 5 shows the existing rap volumes before and after the South Rigby Interchange reconfiguration. Figure 6 illustrates additional 2025 average daily traffic for before and after conditions. Considering all ramps, traffic on US 20 ramps is expected to increase by 13,200 trips or 63 percent by 2025.

Figure 7 shows the existing ramp traffic and future growth traffic combined to form the total 2025 traffic estimate. Were the South Rigby interchange to be reconfigured, approximately 21 percent of the traffic growth would change routes, raising the use of the South Rigby interchange from 37 percent of the total ramp traffic to 58 percent of the total ramp traffic.

Operational Effects of the South Rigby Interchange Reconfiguration

As noted above, reconfiguration of the South Rigby interchange would have the obvious effect of being more convenient to 21 percent of forecast traffic accessing US 20. Changes in access patterns will affect other travel patterns as well. These include:

- A reduction of traffic passing through central Rigby to reach US 20 to/from the north,
- A reduction of traffic required to either cross SH 48 or travel along SH 48 to access US 20,
- Diversion of traffic from the County Line Road interchange and the North Rigby interchange, potentially reducing improvement needs at these locations, and
- Unrelated to US 20 access, providing another grade separated crossing of US 20 to serve growth in southeastern Jefferson County.

Reduction of Pass Through Traffic. - Analyses of before and after travel patterns indicate that in 2005, approximately 1,800 vehicles per day (vpd) traveled through Central Rigby to reach ramps to/from the north at the North Rigby interchange. It is estimated that about 14 percent or 250 trips were heavy truck trips. Removal of this through traffic can be considered as positive step to ease congestion in the Central Rigby. This is particularly true of the truck trips.

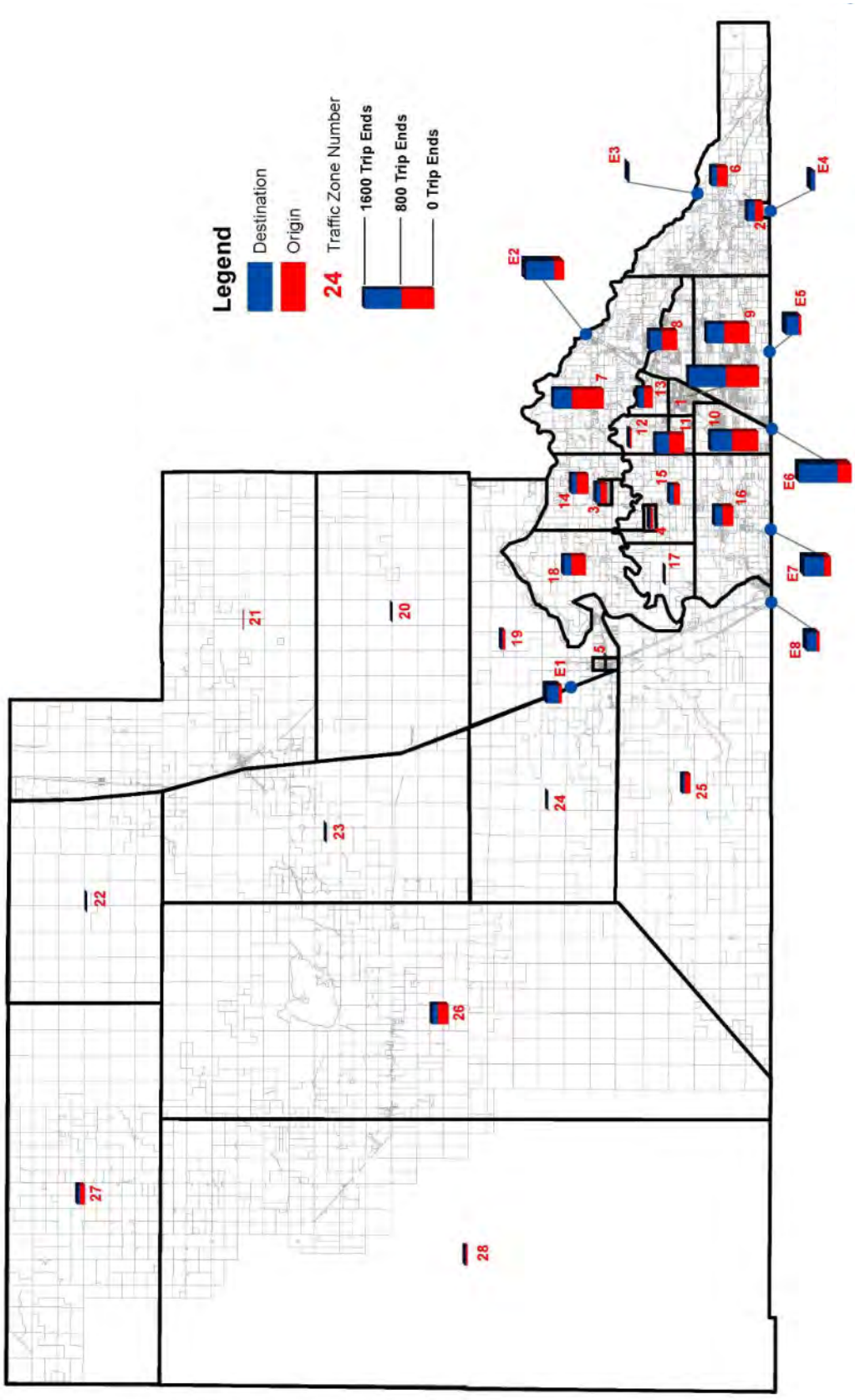


Figure 4
South Rigby Interchange Study
County-wide Forecast Zonal Trip Growth

Figure 5
South Rigby Interchange Study
Estimated 2005 Average Daily Ramp Volumes

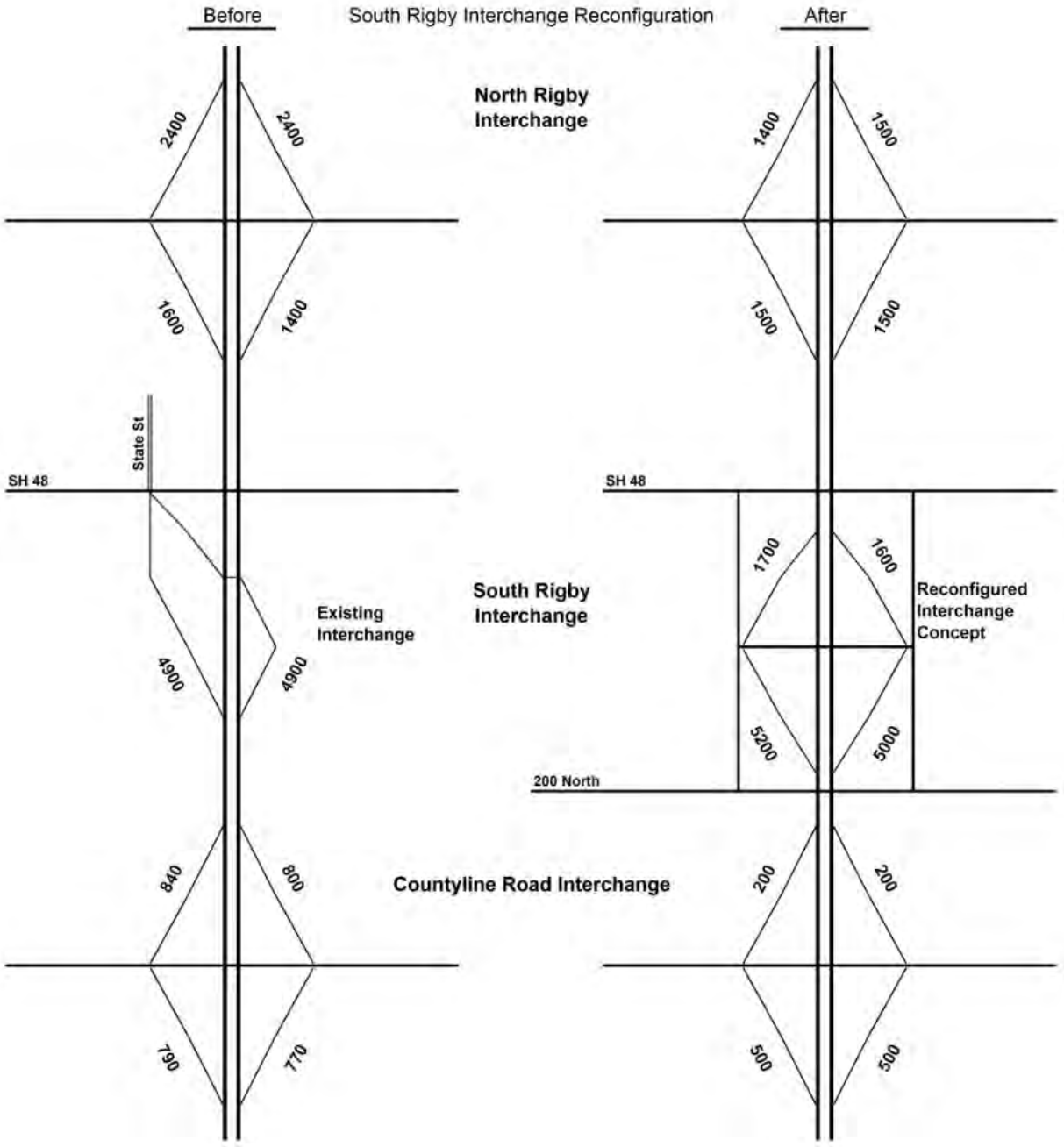


Figure 6
South Rigby Interchange Study
Estimated 2025 Ramp Volume Growth

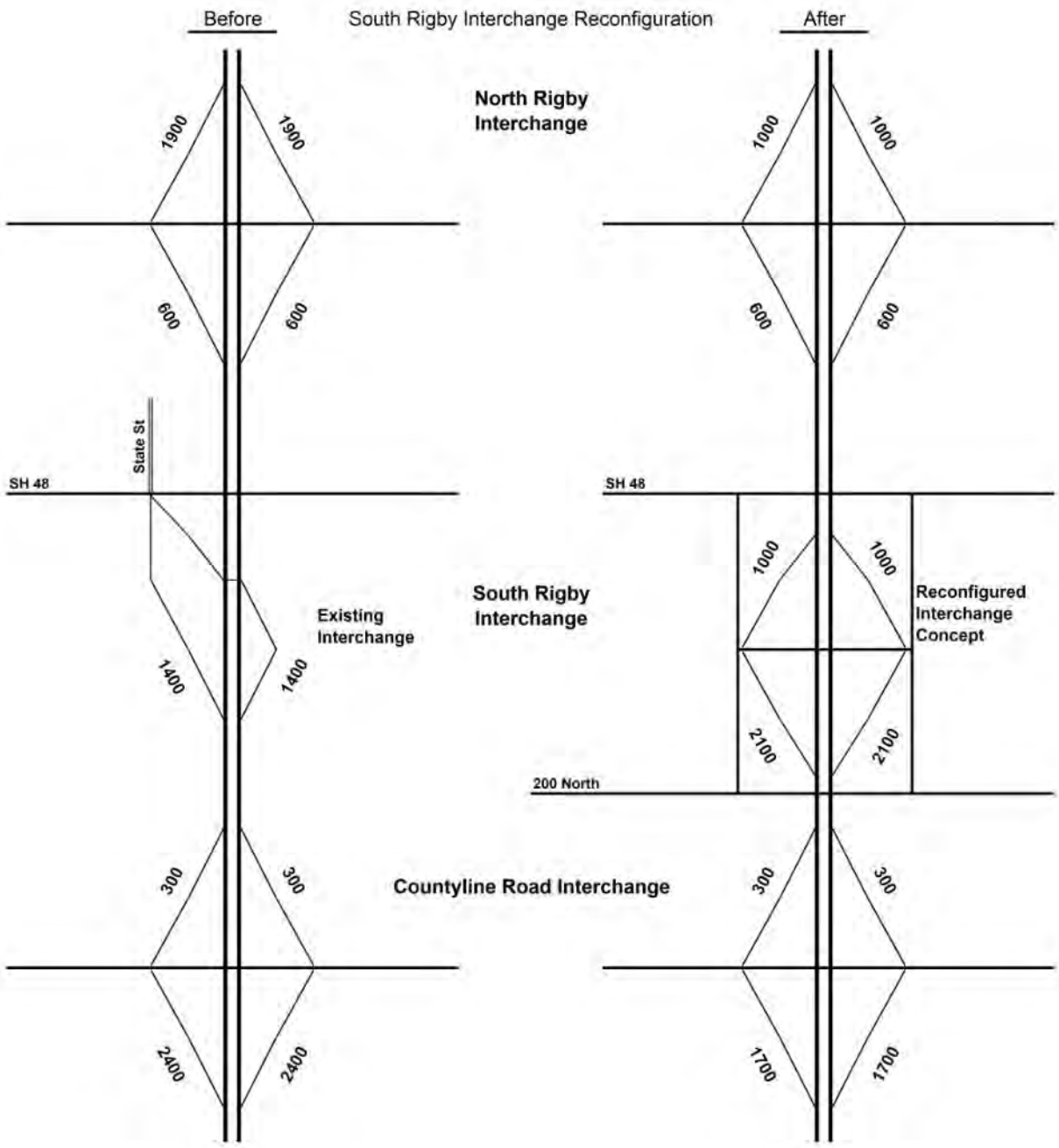
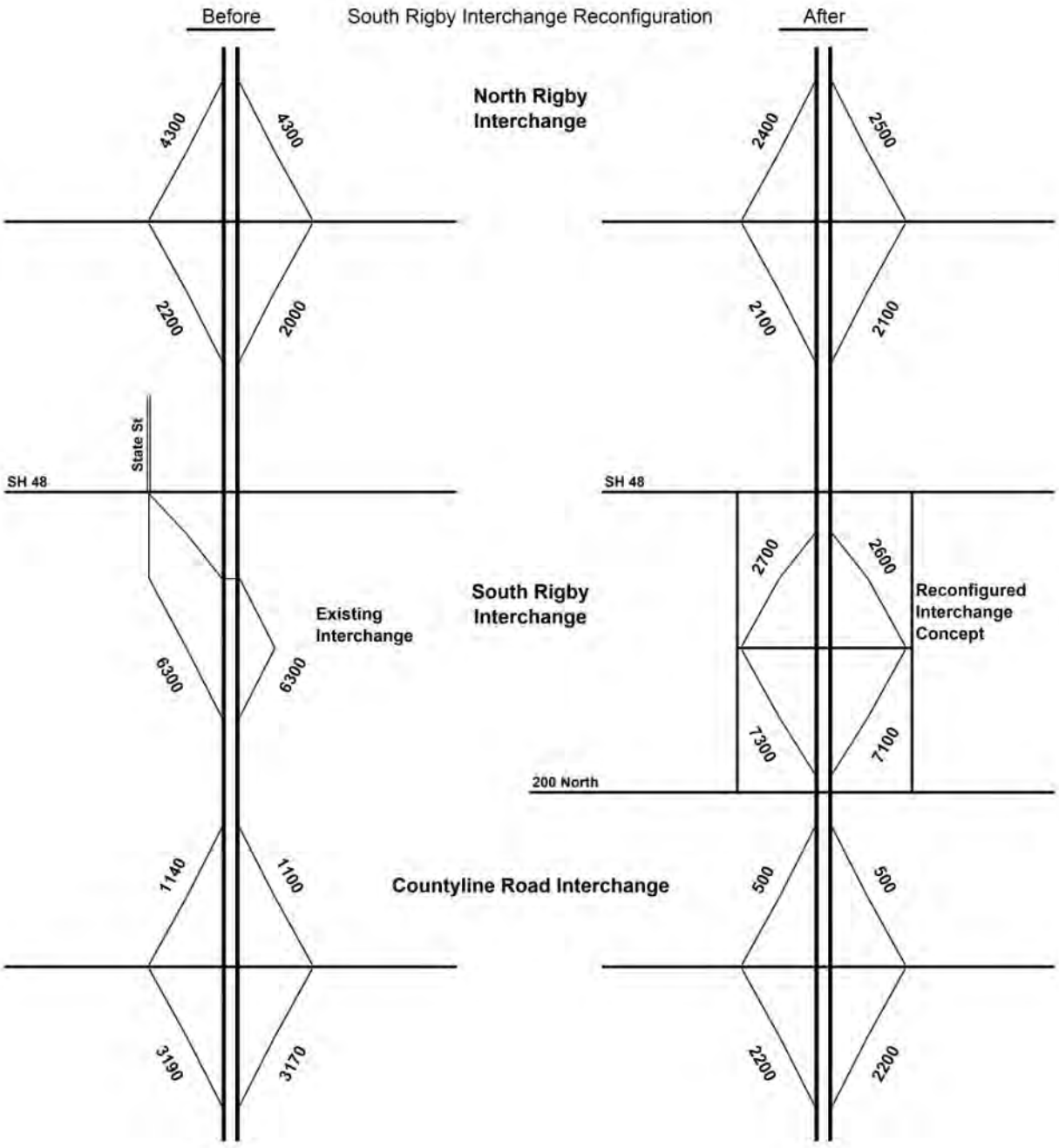


Figure 7
South Rigby Interchange Study
Estimated Total Future Ramp Volumes



While the reduction in through traffic within Central Rigby is generally considered to be positive from a traffic operations perspective, there may concern about a reduction in traffic passing various business. The reductions sited here represent only 13 percent of the total traffic using either the North Rigby or South Rigby interchanges and do not include any traffic destined to or from Central Rigby itself.

Reduction of Traffic Crossing or Using SH 48. – The Rigby/Jefferson County Transportation Plan documents the need for improvements to SH 48 generally between 3700 East and 4200 East due to increasing traffic entering or crossing SH 48. Currently, all traffic using the existing South Rigby interchange ramps to/from the south must use or cross SH 48 because the ramps are accessed via an intersection on SH 48. The reconfiguration of the South Rigby interchange will reduce the need for crossing or entering movements on SH 48 – thus benefiting traffic operations in this critical area. With the reconfiguration, trips approaching the South Rigby interchange from north of SH 48 would still cross SH 48. However, many trips from areas south of SH 48 will be able to access the South Rigby interchange via 200 North, thereby avoiding SH 48. Analysis of before and after traffic patterns indicate that reconfiguring the South Rigby interchange would reduce the number of trips traveling on or across SH 48 by about 1,000 vehicles per day (13 percent of the trips using SH 48 to access US 20).

Reduction of Traffic Pressure at Adjacent Interchanges. –The North Rigby interchange was constructed as simple rural diamond interchange with 1 lane ramps leading to 2-lane crossroads. Single lane roads / ramps without turn lanes severely limit the capacity of this interchange and congestion is already appearing at the North Rigby interchange. Providing additional capacity is primarily a matter of adding lanes to the crossroad through the interchange. However, the ability to accomplish this is limited by the width of the existing structure. At the North Rigby interchange, the underpass structure carrying vehicles over US 20 has a width of 43 ft (face of curb to face of curb); sufficient for three-lane operation. The newer County Line Road interchange overpass structure was constructed with sufficient width to carry five lanes of traffic when necessary.

Table 4 summarizes future year (2025) traffic operations at the ramp terminal intersections with and without the South Rigby interchange reconfiguration. The data shown in Table 4 indicates the following:

- The North Rigby interchange will not operate in its current configuration of single lane approaches and 2-way stop control.
- Without any traffic diversion to a reconfigured South Rigby interchange, the North Rigby interchange will require 2-lane approaches on all legs of the two ramp terminal intersections and switching to all-way stop control to accommodate future traffic. This would require widening of the approaches to the existing structure to three lanes. The existing structure could be reused by restriping to include three 12-foot lanes within 43 feet of available width.
- With diversion to a reconfigured South Rigby interchange, the North Rigby interchange can be expected to accommodate forecast 2025 traffic without any physical roadway changes. All-way stop control would be required.

Table 4
South Rigby Interchange Study
Ramp Terminal Intersection Operation Summary

Southbound Ramp Terminal Intersection				Northbound Ramp Terminal Intersection			
Control Type	Added Lanes	Critical Movement	LOS	Control Type	Added Lanes	Critical Movement	LOS
North Rigby Interchange Evaluation - No Change To South Rigby Interchange							
1-way Stop	None	SB Left	F	1-way Stop	None	NB Left	F
1-way Stop	SB right, EB right	SB Left	F	1-way Stop	NB right, WB right	NB Left	F
1-way Stop	Above + WB left	SB Left	F	1-way Stop	Above + EB left	NB Left	F
All-way Stop	None	SB Left	F	All-way Stop	None	EB Left	F
All-way Stop	SB right, EB right	WB Left	F	All-way Stop	NB right, WB right	EB Left	F
All-way Stop	Above + WB left	WB Left	C	All-way Stop	Above + EB left	EB Left	C
North Rigby Interchange Evaluation - With Reconfiguration of South Rigby Interchange							
1-way Stop	None	SB Left	F	1-way Stop	None	NB Left	F
1-way Stop	SB right, EB right	SB Left	F	1-way Stop	NB right, WB right	NB Left	F
1-way Stop	Above + WB left	SB Left	E	1-way Stop	Above + EB left	NB Left	F
All-way Stop	None	n/a	C	All-way Stop	None	n/a	B
County Line Road Interchange Evaluation - No Change To South Rigby Interchange							
1-way Stop	None	SB Left	F	1-way Stop	None	NB Left	F
1-way Stop	SB right, EB right	SB Left	F	1-way Stop	NB right, WB right	NB Left	F
1-way Stop	Above + WB left	SB Left	F	1-way Stop	Above + EB left	NB Left	F
All-way Stop	None	SB Left	F	All-way Stop	None	EB Left	F
All-way Stop	SB right, EB right	WB Left	F	All-way Stop	NB right, WB right	EB Left	F
All-way Stop	Above + WB left	WB Left	C	All-way Stop	Above + EB left	EB Left	C
County Line Road Interchange Evaluation - With Reconfiguration of South Rigby Interchange							
1-way Stop	None	n/a	C	1-way Stop	None	NB Left	F
				1-way Stop	NB right, WB right	NB Left	F
				1-way Stop	Above + EB left	NB Left	F
All-way Stop	None	WB Left	D	All-way Stop	None	NB Left	F
All-way Stop	SB right, EB right	WB Left	E	All-way Stop	NB right, WB right	n/a	C
All-way Stop	Above + WB left	WB Left	C				

- The County Line Road interchange will require additional approach lanes and adoption of all-way signal control to accommodate future traffic; even with diversion of traffic to a reconfigured South Rigby interchange. However, no structure widening would be required.

Additional Grade Separated Crossing of US 20. – The forecast of non-US 20 related traffic growth in southeastern Jefferson County indicates a need for additional crossing capacity for east-west travel between areas south of SH-48. This forecast was completed as part of the Rigby/Jefferson County Transportation Plan. Figure 8, taken from that plan, shows future increased travel demand throughout the county and, specifically, crossings of US 20. Movements D-F, E-F, and H-G indicate a forecasted increase in US 20 crossings of 13,200 trips per day. This additional demand, combined with the existing 8,000 trips per day currently served by the SH 48 and County Line Road crossings indicates a definite need for additional crossing capacity. Furthermore, the pattern of crossing demand indicates that the most useful location for a new crossing would be in the vicinity of 200 North. A reconfigured South Rigby interchange could provide this additional crossing and thus address more than one of the future traffic circulation needs of Jefferson County.

Summary of Traffic Related effects of the South Rigby Interchange Reconfiguration

The above analyses indicated that implementation of a reconstructed South Rigby interchange would benefit travel and circulation in Southeast Jefferson County as follows:

- 65 percent all existing traffic accessing US 20 from Jefferson County would prefer a reconfigured South Rigby interchange (an increase of 18 percent over no improvement).
- Southeastern Jefferson County (the area between 300 North/SH 48 and County Line Road) will account for 20 percent of the forecast growth in Jefferson County.
- 46 percent all existing traffic accessing US 20 from Jefferson County would prefer a reconfigured South Rigby interchange (an increase of 18 percent over no improvement).
- A reconfigured South Rigby interchange would eliminate approximately 250 heavy truck trips per day from passing through downtown Rigby en rout to other destinations.
- Reconfiguring the South Rigby interchange would reduce the number of trips traveling on or across congested sections of SH 48 by about 1,000 vehicles per day (13 percent of the trips using SH 48 to access US 20).
- With diversion to a reconfigured South Rigby interchange, the North Rigby interchange can be expected to accommodate forecast 2025 traffic without any physical roadway changes. All-way stop control would be required.
- Analysis of county-wide travel demand indicates increase of 13,200 trips crossing US 20 South of SH 48 by 2025. A reconfigured South Rigby interchange could provide an additional crossing and thus address more than one of the future traffic circulation needs of Jefferson County.

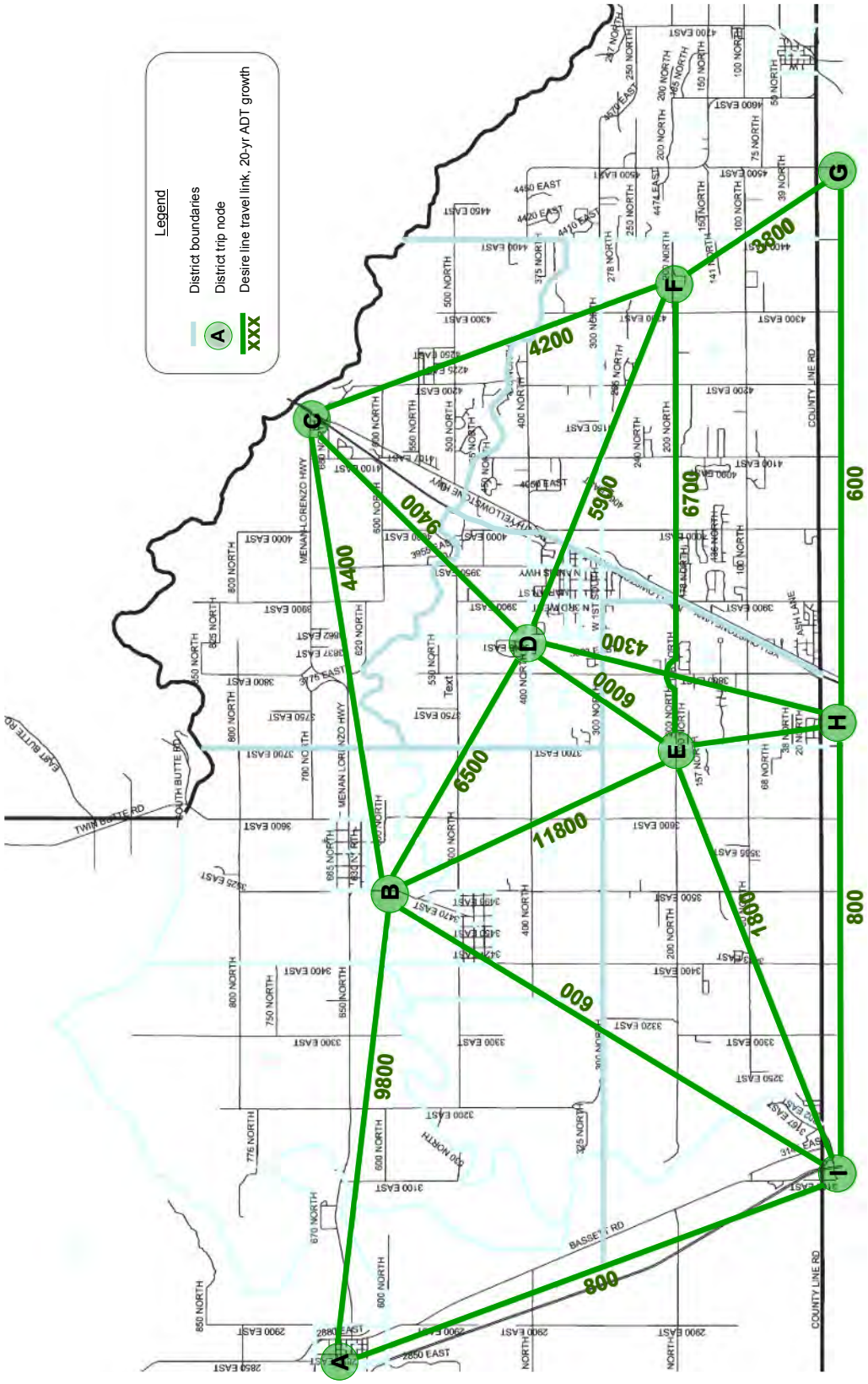


Figure 8
South Rigby Interchange Study
County Wide Travel Increase Patterns

CHAPTER 2 INTERCHANGE LAYOUT FEASIBILITY

Introduction

Chapter 1 presented an analysis of existing and future traffic patterns within Rigby and Jefferson County and how a new South Rigby interchange could benefit travel in Southeastern Jefferson County. The analyses supported a conclusion that a new South Rigby interchange would be beneficial and is justifiable on the basis of traffic demand and county circulation needs.

Chapter 2 presents several sketches of possible configurations of a new South Rigby interchange. These provide a conceptual level indication of potential right-of-way needs and the basis for order-of magnitude/comparison level cost estimates.

The reviewer should be aware that information regarding right-of-way and cost derived from the sketches presented here is conceptual and suitable for this feasibility study. The depiction of interchanges are "reasonable sketches" of potential layouts. Enough engineering checks have been made so as to present a concept that is "possible" from the standpoint of general design standards for horizontal and vertical geometry. No proposed right-of-way lines are shown as it would be inappropriate at this level of analysis.

As noted in Chapter 1, it is desirable that a new South Rigby interchange meet several different and somewhat competing service criteria. These include:

- The new interchange must provide for the missing access between south Rigby and US 20 to and from the north.
- The new interchange should provide a similar level of convenience for users of US 20 to and from the south as does the existing interchange.
- Analysis of future travel demand indicates that a new crossing of US 20 at 200 North will be needed, and access to US 20 from 200 North is very desirable.

The above suggests looking at interchange concepts with satisfactory connections to serve traffic from both 200 and 300 North. This task is made more difficult by the presence of the Eastern Idaho Railroad mainline located approximately 80 feet east of US 20. Other right-of-way constraints adjacent to the US 20 corridor must also be considered.

Conceptual Interchange Alternatives

This study presents three interchange concepts to illustrate the general feasibility and costs of a new South Rigby interchange. (Many more configurations along with input from a full public participation process would be considered prior to design and implementation.) The three concepts shown each illustrate a different emphasis on service to south Rigby/SH 48 or south Jefferson County/200 North. It is intended that the three concepts shown not be taken as including "an answer", but rather illustrate the broad range of possible configurations that should ultimately be evaluated.

The three concepts are described as:

- The 3N Concept – favoring access directly from 300 North (SH 48),
- The Central Concept – locating the interchange between 200 and 300 North with access available from both roadways, and
- The 2N Concept – which presents an interchange configuration that emphasizes continuity of east-west travel on 200 North.

The 3N Concept Interchange. – Figure 9 shows a conceptual layout of the 3N Concept interchange. This concept would continue to utilize the existing ramp pair providing access to US 20 to and from the south from 300 North. Ramps to/from US 20 north and 300 North would be added as indicated in Figure 6. Although space is limited, the addition of a southbound exit ramp at 300 North would be relatively straightforward. The alignment of the added exit ramp would be within about 100 feet of the existing US 20 alignment, similar to a typical tight diamond interchange design. A retaining wall would be required to allow for the elevation difference of the ramp and the US 20 mainline. The effect on the adjacent area would be to close Clark Street between 300 North and Main Street. One existing parcel would lose its only access.

The construction of a northbound entrance ramp from 300 North is far more complex due to the proximity of the Eastern Idaho Railroad, approximately 80 feet east of the US 20 northbound edge of pavement. A "loop" type entrance ramp would allow access to northbound US 20 from 300 North starting at a point approximately 700 feet east of US 20. This distance allows sufficient length for the ramp to reach the vertical clearance necessary to bring the ramp over the railroad, after which it would descend to join northbound US 20. Yellowstone Highway would be relocated about 80 feet east as well.

A separate access road would be built to allow vehicles traveling northbound on Yellowstone Highway to access the northbound entrance ramp. This access roadway would diverge from Yellowstone Highway about 1200 feet south of 300 North and proceed north parallel to the railroad, passing under the ramp structure. At 300 North the access road would turn east to form an added lane on 300 North. Eastbound 300 North traffic and northbound Yellowstone traffic would merge on this lane and proceed to the northbound US 20 entrance ramp.

The concept cost estimate for the 3N Concept interchange alternative is $24 million, exclusive of right-of-way and relocation costs. Potential relocations include three residences and two businesses. Proximity impacts cannot be determined at this level of evaluation.

The Central Concept Interchange. – Figure 10 shows a conceptual layout of a full interchange located between 200 and 300 North. The intent of this interchange configuration was provide better service to areas south of 300 North while still being convenient to those using the existing US 20 access to and from the south.

Figure 9
South Rigby Interchange Study
3N Concept Interchange

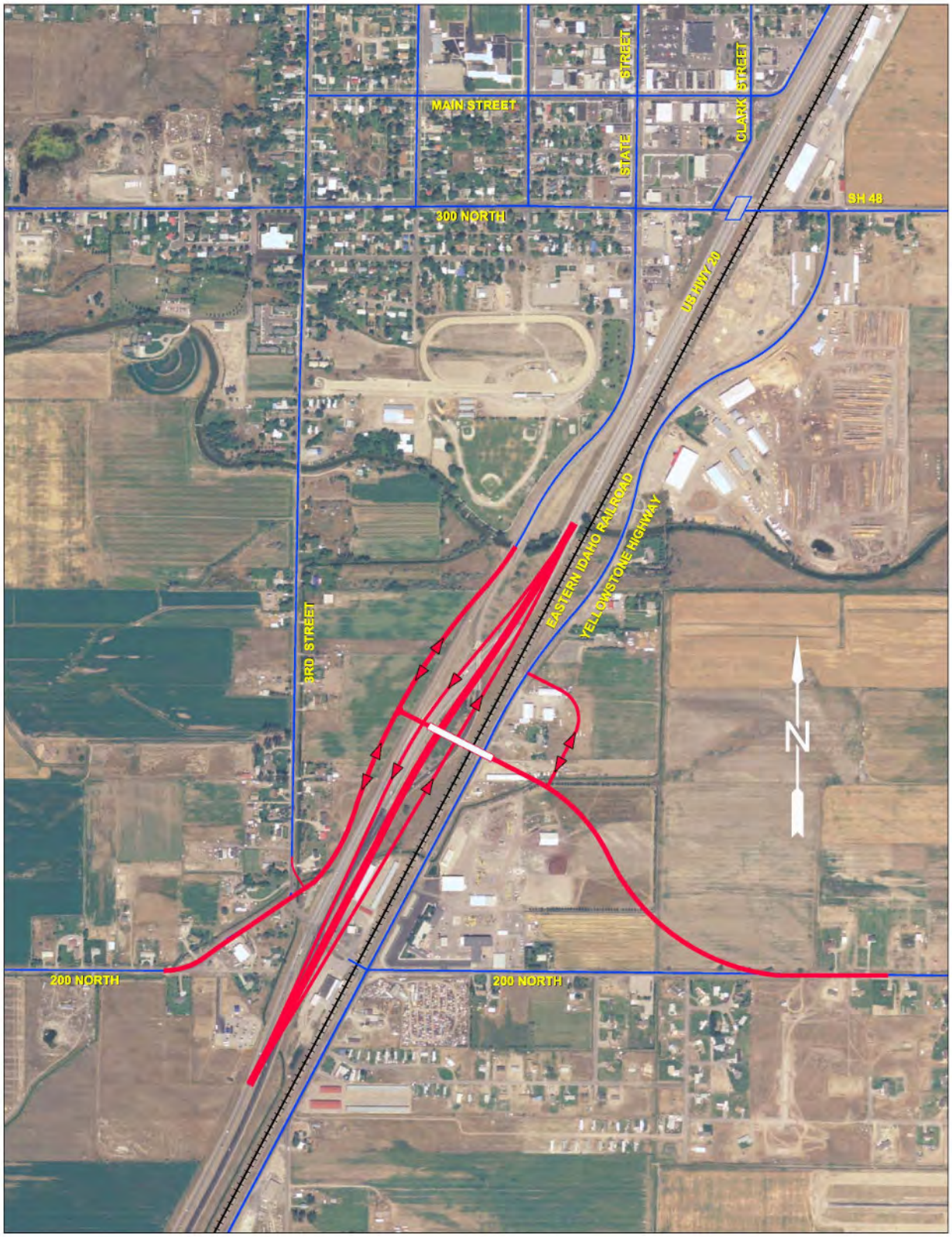


Figure 10
South Rigby Interchange Study
Central Concept Interchange

It consists of a tight diamond interchange located about 1,800 feet north 200 North and 2,400 feet south of 300 north. At this point an overpass structure would carry the interchange crossroad over Yellowstone Highway, the Eastern Idaho Railroad, and a new alignment of US 20. Structure length would be minimized by aligning the interchange to be perpendicular to US 20. Four ramps serving both directions of traffic entering and exiting US 20 would extend down from the elevated crossroad to US 20.

Access to the interchange on the west side of US 20 would be via a two-way frontage road developed by extending the existing ramp access roadway south, past the interchange, to 200 North. Access on the east side of US 20 would be via a "U-turn" ramp from Yellowstone Avenue. This road would connect with the interchange crossroad that extends further east to provide more convenient access to 200 North east of US 20.

If necessary to minimize impacts to adjacent land use and buildings, the location of the interchange crossroad could be moved north or south several hundred of feet without significantly affecting the operational concept.

The concept cost estimate for the Central Concept interchange alternative is $44 million, exclusive of right-of-way and relocation costs. As shown, potential relocations include three residences and three businesses. Proximity impacts cannot be determined at this level of evaluation.

The 2N Concept Interchange. - Figure 11 illustrates an interchange configuration that was developed to maximize continuity of east-west travel across US 20 along 200 North. This alternative includes a full directional diamond interchange located on a relocated 200 North alignment over US 20 (about 800 feet north of the existing 200 North alignment). The realignment of 200 north is suggested because the grades necessary to bring 200 North over the railroad would require embankments extending an estimated 1000 feet on either side of the railroad. This would affect numerous businesses and residences along 200 North. Moving the interchange south of 200 North was also studied but rejected because of the potential impacts to existing residential development south of 200 North and east of US 20.

Access to this interchange would be similar to that of the Central Concept interchange, including the U-turn ramp from Yellowstone Highway on the east side of US 20 and extension of the existing ramp access road south to the new interchange.

The concept cost estimate for the 2N concept interchange alternative is $50 million, exclusive of right-of-way and relocation costs. As shown, estimated relocations include eight residences and two businesses. Proximity impacts cannot be determined at this level of evaluation.

Comparisons and Conclusions

The interchange sketches shown indicate that the proximity of US 20 to the Eastern Idaho Railroad, combined with existing development, makes development of a new South Rigby interchange rather complex and expensive. With the possible exception of the 3N concept

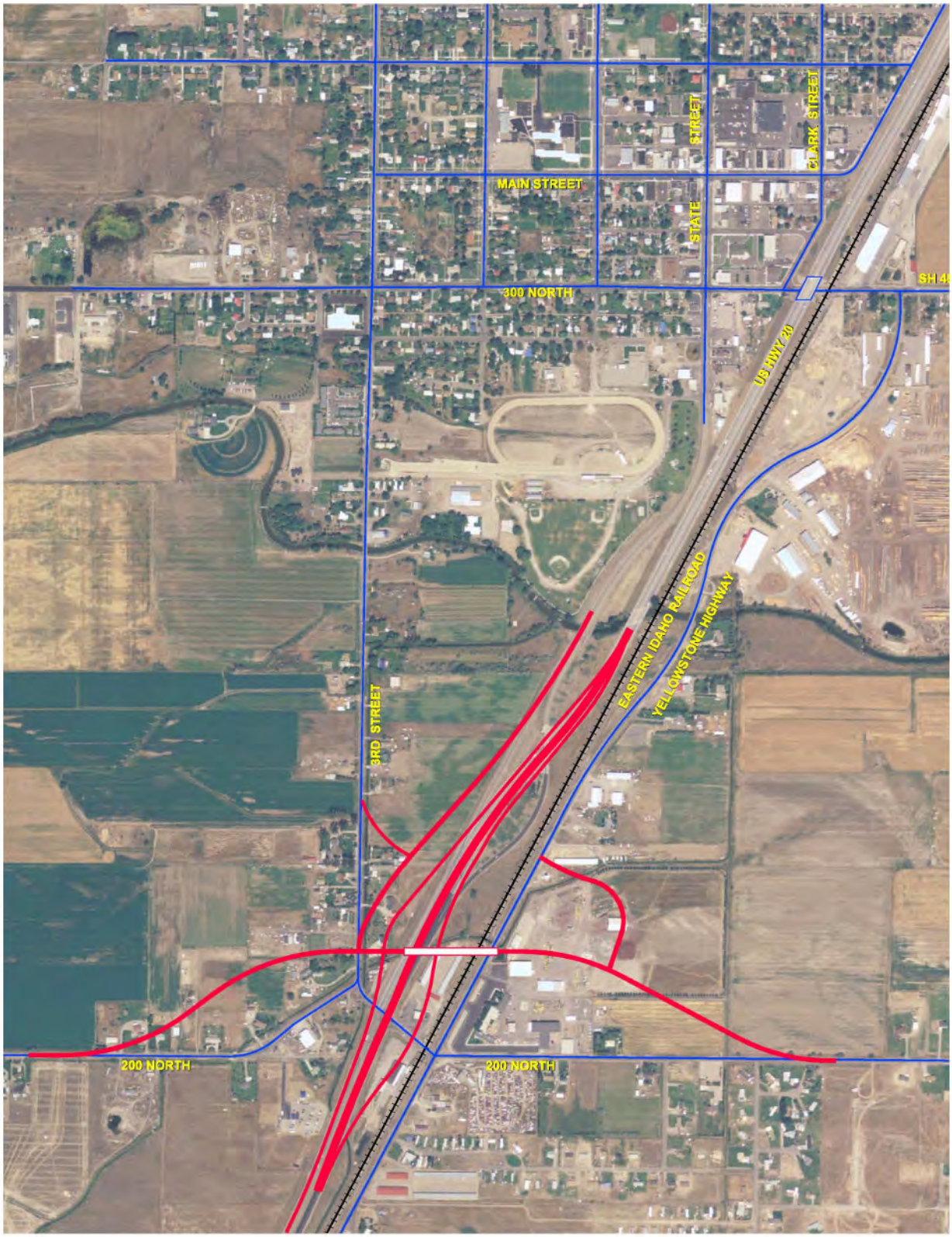


Figure 11
South Rigby Interchange Study
2N Concept Interchange

interchange, many permutations of the concepts shown here can be developed that would change effects to the surrounding areas.

Table 5 presents a comparison of the benefits and costs of the three interchange concepts studied. Without the context of future growth, travel demand, and transportation needs identified in the Jefferson County Transportation Plan; selection of a favored concept could easily be influenced by the relatively low cost of the 3N Concept. However, the transportation plan and detailed analyses of traffic patterns within this study indicate that an interchange concept with good connectivity to 200 North provides far greater value to the transportation needs of Southeast Jefferson County.

The areas most directly affected by either the Central Concept or the 2N Concept are not yet developed to the point of making either alternative impractical. It is suggested that IDT, Jefferson County and the City of Rigby work to find concurrence in both the future need for an improved South Rigby interchange and the most promising concept. From that point, all agencies should collaborate to shape future growth in the 200 North areas so as to maintain the feasibility of a future interchange.

The alternatives presented here are far more complex and expensive than the alternatives envisioned in the 2002 Design Study Report prepared by ITD for a new interchange (see Figures 12a and 12b). There are two important reasons for this:

- The ITD Concept report did not have the benefit of the analysis of countywide growth and hence did not make any provision for east-west movement across US 20 - a key element in the current evaluation.
- The interchange configurations presented in the Draft South Rigby Interchange Study assumed that the crossroad would cross over US 20 and the adjacent railroad – adding about 30 percent to the cost. Allowing an at-grade crossing of the railroad as was done in the ITD concepts could simplify any interchange configuration.

A new Concept Report should be prepared to weigh the importance of all of these issues.

Table 5
South Rigby Interchange Study
South Rigby Alternative Interchange Concepts Comparison

Evaluation Criteria	Interchange Alternative		
Existing Ramp Users	**3N Concept**	**Central Concept**	**2N Concept**
Existing Ramp Users - North of SH 48	No Change	Must travel 1/4 mile further and make two turns	Must travel 1/2 mile further and make two turns
Existing Ramp Users - South of SH 48	No Change	More convenient for those closer to 200 North	More convenient for those closer to 200 North
Access to Yellowstone Avenue and generally East of US 20	No Change	Direct access to Yellowstone Avenue - eliminating from 3/4 to 2 miles of surface road travel	Direct access to Yellowstone Avenue - eliminating from 3/4 to 2 miles of surface road travel
New Northbound Ramp Users	**N3 Concept**	**Central Concept**	**N2 Concept**
Potential Ramp Users - North of SH 48	Best of three concepts	Requires 1/2 mile travel south to go north	Requires 3/4 mile travel south to go north
Potential Ramp Users - South of SH 48	Most convenient for those approaching via SH 48	More convenient for those south of SH 48	Most convenient for those south of SH 48
Access to Yellowstone Avenue and generally East of US 20	Slightly favored due to proximity to SH 48	Excellent	Excellent
Southeast County System Needs	**N3 Concept**	**Central Concept**	**N2 Concept**
US 20 Access	Improved access to/from north only	All access directions improved	Offers most improvement for all travel on US 20
East - West Circulation / US 20 Crossing	No improvement. Would require additional construction of overpass similar to that proposed for SCI.	Provides additional crossing as part of interchange. However east west travel continuity is poor.	Meets needs of east west travel continuity.
Potential to Divert Traffic from Existing US 20 Crossings	None	Adequate	Excellent
Resource Measures	**N3 Concept**	**Central Concept**	**N2 Concept**
Order of Magnitude Cost	$24 Million	$44 Million	$50 Million
Residential Relocations (as shown)	3	3	8
Business Relocations (as shown)	2	3	2

Figure 112a
South Rigby Interchange Study
US -20 Holbrook Interchange Alternatives
Alternative A and B

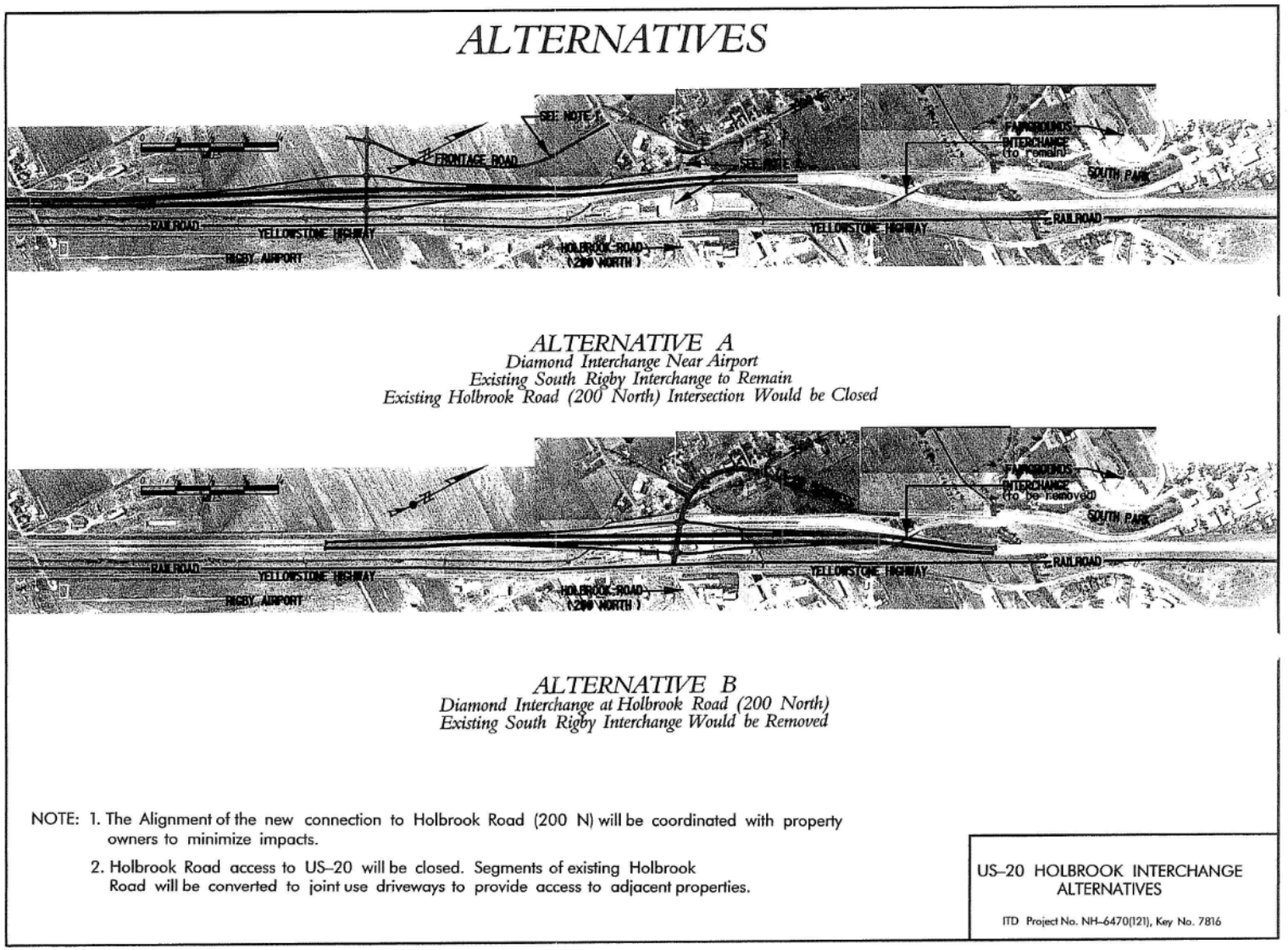


Figure 12a

Figure 112b
South Rigby Interchange Study
US -20 Holbrook Interchange Alternatives
Alternative C and D

Figure 12b

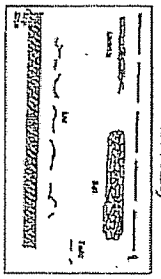
Appendix A
TAMS Pavement Rating Criteria

Appendix A

Jefferson County Transportation Plan

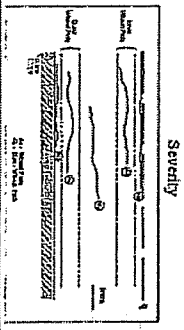
TAMS Roadway Characteristics Rating Form
Asphalt Roads

FATIGUE CRACKING



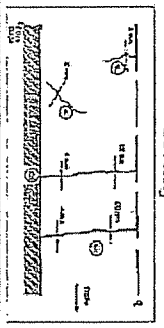
Severity	Extent: Low	Medium	High
0 None			
Low Cracks < 1/4"	1	2	3
Medium Cracks 1/4" to 3/4"	4	5	6
High Cracks > 3/4"	7	8	9

LONGITUDINAL CRACKING



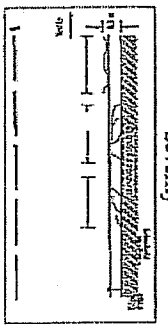
Severity	Extent: Low	Medium	High
0 None	1 Crack Full Length	2 Cracks Full Length	> 2 Cracks Full Length
Low Cracks < 1/4"	1	2	3
Medium Cracks 1/4" to 3/4"	4	5	6
High Cracks > 3/4"	7	8	9

TRANSVERSE CRACKING



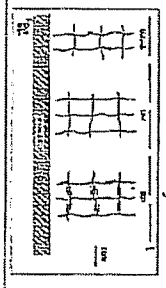
Severity	Extent: Low	Medium	High
0 None	> 200' between Cracks	200'-50' between Cracks	< 50' between Cracks
Low Cracks < 1/4"	1	2	3
Medium Cracks 1/4" to 3/4"	4	5	6
High Cracks > 3/4"	7	8	9

EDGE CRACKING



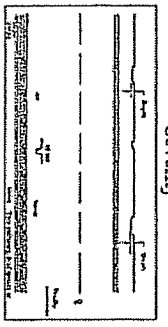
Severity	Extent: Low	Medium	High
0 None	0-10% of Length	10-30% of Length	> 30% of Length
Low 0-6" from Curb	1	2	3
Medium 6-18" from Curb	4	5	6
High 18" from Curb	7	8	9

BLOCK CRACKING



Severity	Extent: Low	Medium	High
0 None	> 15'x15' Squares	15'-10'x Squares	< 10'x10' Squares
Low Cracks < 1/4"	1	2	3
Medium Cracks 1/4" to 3/4"	4	5	6
High Cracks > 3/4"	7	8	9

UTILITY CUTS



Severity	Extent: Low	Medium	High
0 None	0-10% of Length	10-30% of Length	>30% of Length
Low Cracks < 1/4"	1	2	3
Medium Cracks 1/4" to 3/4"	4	5	6
High Cracks > 3/4"	7	8	9

Drainage / Roughness

Good	Fair	Poor

Rutting

Low	0-3/8"	Med	1/2"-3/4"	High	>3/4"

Appendix B

TAMS Recommended Maintenance Action by Segment

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
1225	1 North	3Rd West	2Nd West	765	Fatigue	10	Cold Patch	10/4/2006
1193	2 North	1St West	State St	762	Block	10	Crack Seal	10/4/2006
1194	2 North	State St	Annis Hwy	251	Patch\Pothole	14	Crack Seal	10/4/2006
1916	275 North	Centennial Ln	Fair Grounds	2,527	Patch\Pothole	14	Crack Seal	10/4/2006
1139	4Th West	Boulder St	Dead End	118	None	20	None	10/3/2006
1133	Autumnwood Dr	Marian St	Blaine	747	Patch\Pothole	14	Crack Seal	10/4/2006
1131	Blaine	Madsen	Autumnwood Dr	595	Roughness	16	None	10/4/2006
1132	Blaine	Autumn Wood Dr	End	193	None	20	None	10/4/2006
1140	Boulder St	4Th West	Dead End	325	None	20	None	10/3/2006
1141	Boulder St	402	498	1,008	None	20	None	10/3/2006
21	Caribou St	4Th West	Dead End	898	Patch\Pothole	14	Crack Seal	10/3/2006
1967	Centennial Way	State St.	Public Park Rd	258	Patch\Pothole	10	Single Chip Seal	10/4/2006
24	Community Ln	Farnsworth Way	District 7 Health	310	Fatigue	10	Cold Patch	10/5/2006
110	Dove Av	Annis Hwy	Edmark	1,138	Transverse	6	Rotomill & Thick Overlay (3 in.)	10/4/2006
1220	E 1St North	State St	Bennett	254	Patch\Pothole	10	Single Chip Seal	10/4/2006
1209	E 1St North	Farnsworth Way	Bonham	254	Fatigue	10	Cold Patch	10/5/2006
1217	E 1St North	Clark St	Bennett St	512	Patch\Pothole	12	Digout and Hot Patch	10/5/2006
1218	E 1St North	Bonham	Clark St	365	Fatigue	10	Cold Patch	10/5/2006
1195	E 2Nd North	Clark St	Bennett	512	Longitudinal	14	Crack Seal	10/5/2006
1199	E 2Nd North	Bonham	Clark St	364	Fatigue	10	Cold Patch	10/5/2006
1200	E 2Nd North	Farnsworth Way	Bonham	657	Patch\Pothole	12	Digout and Hot Patch	10/5/2006
1167	E 4Th North	State St	Annis Hwy	325	Block	10	Crack Seal	10/4/2006
1198	E Idaho Av	State St	Bennett	252	Patch\Pothole	14	Crack Seal	10/4/2006
1202	E Idaho Av	Bennett St	Clark St	507	Longitudinal	12	Crack Seal	10/5/2006
1204	E Idaho Av	Clark St	Bonham	366	Block	12	Crack Seal	10/5/2006

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
1205	E Idaho Av	Bonham	Farnsworth Way	452	Fatigue	10	Cold Patch	10/5/2006
1927	Edmark	Dove Ave	Dead End	233	Fatigue	10	Cold Patch	10/4/2006
1221	Fremont Ave	1St West	State St	771	Fatigue	10	Cold Patch	10/4/2006
1129	Madsen	Marian St	2Nd West	298	Patch\Pothole	14	Crack Seal	10/4/2006
1130	Madsen	2Nd West	Blaine	399	Roughness	16	None	10/4/2006
1134	Marian St	Autumn Wood Dr	Madsen Dr	557	Patch\Pothole	14	Crack Seal	10/4/2006
1136	Marian St	4Th North	End	394	Patch\Pothole	12	Crack Seal	10/4/2006
1137	Marian St	4Th North	Autumn Wood Dr	300	Patch\Pothole	14	Crack Seal	10/4/2006
1175	N 1St West	Ramona St	3Rd North	267	Transverse	14	Crack Seal	10/4/2006
1176	N 1St West	2Nd North	Ramona St	492	Transverse	14	Crack Seal	10/4/2006
1222	N 1St West	Main St	Fremont Ave	373	Patch\Pothole	10	Single Chip Seal	10/4/2006
1226	N 1St West	1St North	2Nd North	757	Fatigue	10	Cold Patch	10/4/2006
1227	N 1St West	Fremont Ave	1St North	380	Fatigue	10	Cold Patch	10/4/2006
18	N 2 West	400 North	Madsen	340	Roughness	16	None	10/4/2006
1173	N 2Nd West	3Rd North	Dead End	303	Fatigue	10	Cold Patch	10/4/2006
1181	N 2Nd West	2Nd North	Ramona St	490	Roughness	16	None	10/4/2006
1182	N 2Nd West	Romona St	3Rd North	272	Roughness	16	None	10/4/2006
1190	N 2Nd West	Tall Ave	2Nd North	352	Fatigue	10	Cold Patch	10/4/2006
1223	N 2Nd West	Main St	1St North	757	Fatigue	10	Cold Patch	10/4/2006
1224	N 2Nd West	1St North	Tall Ave	403	Fatigue	10	Cold Patch	10/4/2006
1138	N 3Rd West	400 North	Boulder St	1,639	Block	12	Crack Seal	10/3/2006
1144	N 3Rd West	3Rd North	Boulder St	510	Block	12	Crack Seal	10/3/2006
1147	N 3Rd West	2Nd North	3Rd North	829	Fatigue	10	Cold Patch	10/3/2006
1151	N 3Rd West	Main St	1St North	753	Longitudinal	14	Crack Seal	10/3/2006
1188	N 3Rd West	Tall Ave	2Nd North	352	Patch\Pothole	12	Digout and Hot Patch	10/3/2006

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
1189	N 3Rd West	1St North	Tall Ave	410	Patch\Pothole	14	Crack Seal	10/3/2006
1145	N 4Th West	Caribou St	Dead End	113	None	20	None	10/3/2006
1148	N 4Th West	1St North	Aspen Dr	414	Patch\Pothole	12	Digout and Hot Patch	10/3/2006
1149	N 4Th West	Aspen Dr	Dead End	173	Patch\Pothole	14	Crack Seal	10/3/2006
1830	N 4Th West	3Rd North	Caribou St	338	None	20	None	10/3/2006
1831	N 4Th West	3Rd N	Boulder St	852	None	20	None	10/3/2006
22	N 5Th West	1St Norht	Dead End	201	Longitudinal	10	Digout and Hot Patch	10/3/2006
1166	N Annis Hwy	Stockham	400 North	911	Edge	8	Crack Seal	10/4/2006
1168	N Annis Hwy	4Th North	Stockham	311	Fatigue	10	Cold Patch	10/4/2006
1169	N Annis Hwy	Dove Ave	4Th North	1,255	Fatigue	10	Cold Patch	10/4/2006
1170	N Annis Hwy	2Nd North	Dove Ave	495	Fatigue	8	Thin Hot Mix Overlay (<2 in)	10/4/2006
1196	N Bennett	Idaho Ave	2Nd North	380	Transverse	10	Thin Hot Mix Overlay (<2 in)	10/4/2006
1197	N Bennett	1St North	Idaho Ave	385	Transverse	10	Thin Hot Mix Overlay (<2 in)	10/4/2006
1203	N Bonham	Idaho Ave	2Nd North	380	Longitudinal	14	Crack Seal	10/5/2006
1210	N Bonham	1St North	Idaho Ave	380	Transverse	14	Crack Seal	10/5/2006
1211	N Bonham	Fremont Ave	1St North	380	Longitudinal	12	Crack Seal	10/5/2006
1201	N Clark	Idaho Ave	2Nd North	381	Transverse	14	Crack Seal	10/5/2006
1214	N Clark	Main St	Fremont Ave	380	Longitudinal	14	Crack Seal	10/5/2006
1215	N Clark	Fremont Ave	1St North	376	Block	12	Crack Seal	10/5/2006
1216	N Clark	1St Norht	Idaho Ave	383	Patch\Pothole	14	Crack Seal	10/5/2006
1172	N Estella	Ramona St	3Rd North	277	Transverse	14	Crack Seal	10/4/2006
1212	N Fremont	Clark St	Rarnsworth Way	411	Fatigue	10	Cold Patch	10/5/2006
1213	N Fremont	Clark St	Broulim'S Grocery	185	Fatigue	10	Cold Patch	10/5/2006
2003	N Railroad	Asphalt	Taylor	373	Drainage	4	Ditch/Side Slope Repair	10/5/2006
1253	N Rigby Lake Dr	Stockham Blvd	400 North	1,226	Longitudinal	14	Crack Seal	10/5/2006

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
19	N State St	4Th North	Dead End	156	Longitudinal	14	Crack Seal	10/4/2006
1178	N State St	3Rd North	4Th North	998	Longitudinal	14	Crack Seal	10/4/2006
1185	N State St	Ramona St	3Rd North	274	Longitudinal	14	Crack Seal	10/4/2006
1186	N State St	2Nd North	Ramona St	504	Block	12	Crack Seal	10/4/2006
1192	N State St	Idaho Ave	2Nd North	380	Patch\Pothole	14	Crack Seal	10/4/2006
1219	N State St	1St North	Idaho Ave	386	Patch\Pothole	14	Crack Seal	10/4/2006
1828	N State St	Main St	Fremont Ave	379	Fatigue	10	Cold Patch	10/4/2006
1829	N State St	Fremont Ave	1St North	374	Transverse	14	Crack Seal	10/4/2006
1926	Pleasant County Ln	Stockham Blvd	Rigby Lake Dr	880	Longitudinal	14	Crack Seal	10/4/2006
1957	Rigby Lake Dr	Stockham Blvd	Bend	925	None	20	None	10/4/2006
1958	Rigby Lake Dr	Bend	End	579	None	20	None	10/4/2006
1239	S 1St West	Short St	Main St	387	Patch\Pothole	10	Single Chip Seal	10/4/2006
1241	S 1St West	1St South	Short St	376	Patch\Pothole	10	Single Chip Seal	10/4/2006
1242	S 1St West	1St South	2Nd South	378	Longitudinal	14	Crack Seal	10/4/2006
1247	S 2Nd West	2Nd South	Summers St.	328	Longitudinal	14	Crack Seal	10/4/2006
1248	S 2Nd West	Summers St.	End	248	Transverse	14	Crack Seal	10/4/2006
1251	S 2Nd West	1St South	Main St	763	Block	12	Crack Seal	10/4/2006
1252	S 2Nd West	1St South	2Nd South	374	Patch\Pothole	14	Crack Seal	10/4/2006
1152	S 3Rd West	Main St	1St South	772	Patch\Pothole	12	Crack Seal	10/3/2006
1162	S 3Rd West	1St South	2Nd South	359	Block	12	Crack Seal	10/3/2006
1163	S 3Rd West	2Nd South	375 South	896	Block	12	Crack Seal	10/3/2006
78	S 5 West	5Th West	End	262	None	20	None	10/4/2006
1153	S 5Th West	1St South	292 North	262	Longitudinal	14	Crack Seal	10/4/2006
1154	S 5Th West	292 South	End	268	Patch\Pothole	14	Crack Seal	10/4/2006
1158	S Church	1St South	Claremore Dr.	275	Fatigue	6	Thick Overlay (3 in.)	10/4/2006

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
1159	S Church	Claremore Dr.	End	930	Roughness	16	None	10/4/2006
1257	S Clark	Short St	Main St	443	Patch\Pothole	14	Crack Seal	10/5/2006
1258	S Clark	1St South	Short St	396	Transverse	14	Crack Seal	10/5/2006
2002	S Railroad	1St South	Gravel	863	Fatigue	8	Thin Hot Mix Overlay (<2 in)	10/5/2006
1236	Short St	Clark St	State St	711	Fatigue	10	Cold Patch	10/5/2006
20	Snake River Circle	3Rd North	Dead End	203	None	20	None	10/3/2006
1949	Stockham	Pleasant County Ln	Rigby Lake Dr	604	Longitudinal	12	Crack Seal	10/4/2006
1950	Stockham	Annis Hwy	Pleasant County Ln	742	Longitudinal	12	Crack Seal	10/4/2006
17	Stockham Blvd	Rigby Lake Dr	Farnsworth Way	448	Patch\Pothole	14	Crack Seal	10/4/2006
79	Summers St	2Nd West	End	402	Transverse	12	Crack Seal	10/4/2006
1826	W 1St North	3Rd West	4Th West	937	Fatigue	10	Cold Patch	10/3/2006
1827	W 1St North	4Th West	5Th West	907	Edge	8	Crack Seal	10/3/2006
1228	W 1St North	2Nd West	1St West	757	Block	10	Crack Seal	10/4/2006
1229	W 1St North	1St West	State St	769	Fatigue	10	Cold Patch	10/4/2006
1146	W 2Nd North	3Rd West	Dead End	556	Transverse	6	Rotomill & Thick Overlay (3 in.)	10/3/2006
1187	W 2Nd North	3Rd West	2Nd West	763	Longitudinal	12	Crack Seal	10/4/2006
1191	W 2Nd North	1St West	2Nd West	757	Longitudinal	12	Crack Seal	10/4/2006
1240	W 2Nd South	1St West	State St.	765	Fatigue	10	Cold Patch	10/4/2006
1243	W 2Nd South	3Rd West	2Nd West	774	Roughness	10	Rotomill & Overlay (<2 in)	10/4/2006
1244	W 2Nd South	2Nd West	1St West	770	Patch\Pothole	12	Crack Seal	10/4/2006
1142	W 3Rd North	3Rd West	Snake River Cir	667	None	20	None	10/3/2006
1143	W 3Rd North	Snake River Cir	4Th West	299	None	20	None	10/3/2006
1171	W 3Rd North	Estella St	3Rd West	509	Transverse	14	Crack Seal	10/4/2006
1174	W 3Rd North	2Nd West	Estella St	283	Transverse	14	Crack Seal	10/4/2006
1179	W 3Rd North	1St West	2Nd West	758	Transverse	14	Crack Seal	10/4/2006

Appendix B

Rigby/Jefferson County Transportation Plan

TAMS Recommended Road Maintenance

City of Rigby

ID	Road Name	From Address	To Address	Length	Distress	Life	Suggested Treatment	Survey Date
1180	W 3Rd North	State St	1St West	677	Transverse	14	Crack Seal	10/4/2006
1135	W 4Th N	Marian St	Dead End	173	Longitudinal	14	Crack Seal	10/4/2006
1832	W 4Th North	State St	1St West	688	Block	10	Crack Seal	10/4/2006
1833	W 4Th North	1St West	Marian St	445	Block	8	Rotomill & Overlay (<2 in)	10/4/2006
23	W Aspen Dr	4Th West	Dead End	702	None	20	None	10/3/2006
1156	W Claremore	1St South	Claremore Dr.	278	Fatigue	8	Thin Hot Mix Overlay (<2 in)	10/4/2006
1160	W Claremore	S. Church St.	Claremore	466	Fatigue	8	Thin Hot Mix Overlay (<2 in)	10/4/2006
1230	W Main St	1St West	2Nd West	757	Fatigue	10	Cold Patch	10/4/2006
1231	W Main St	2Nd West	3Rd West	761	Fatigue	10	Cold Patch	10/4/2006
1232	W Main St	1St West	State St	766	Fatigue	10	Cold Patch	10/4/2006
1177	W Ramona	1St West	State St	686	Roughness	16	None	10/4/2006
1183	W Ramona	1St West	2Nd West	757	Roughness	16	None	10/4/2006
1184	W Ramona	2Nd West	Estella St	269	Transverse	14	Crack Seal	10/4/2006
1235	W Short St	1St West	State St	773	Fatigue	10	Cold Patch	10/4/2006
80	W Tall Av	2Nd West	3Rd West	760	Fatigue	10	Cold Patch	10/4/2006

Appendix C
Zonal Traffic Forecast Data

Appendix C

Rigby/Jefferson County Transportation Plan

Zonal Traffic Forecast Data

2025 Dwelling Unit Forecast

General Area Summary

Zone	Existing DU	Added DU	Future DU	Increase Factor	20 Yr % / Yr
Cities	2,044	682	2,726	1.3	1.44
East	1,383	1,800	3,183	2.3	4.25
NearWest	845	1,000	1,845	2.2	3.97
CentWest	558	1,000	1,558	2.8	5.26
West	1,021	400	1,421	1.4	1.66
OuterRing	394	300	694	1.8	2.87
Total	**6,245**	**5,182**	**11,427**	**1.83**	**3.07**

Zone Level Growth Estimate

Zone	Existing DU	Added DU	Future DU	Increase Factor	20 Yr % / Yr
1 (A-K) Rigby	1,226	325	1,551	1.3	1.20
2 - Ririe	238	130	368	1.6	2.22
3 - Menan	231	146	377	1.6	2.47
4 - Lewisville	156	65	221	1.4	1.77
5 - Roberts	193	16	209	1.1	0.39
Cities	**2,044**	**682**	**2,726**	**1.33**	**1.44**
6	88	243	331	3.8	6.85
7	1,081	746	1,827	1.7	2.66
8	21	278	299	14.2	14.20
9	193	533	725	3.8	6.85
East	**1,383**	**1,800**	**3,182**	**2.30**	**4.25**
10	517	535	1,052	2.0	3.60
11	88	256	344	3.9	7.06
12	103	50	154	1.5	2.05
13	137	159	296	2.2	3.93
NearWest	**845**	**1,000**	**1,846**	**2.18**	**3.97**
14	413	309	722	1.8	2.84
15	14	98	112	8.0	10.96
16	56	228	284	5.1	8.46
17	67	4	71	1.1	0.29
18	8	361	369	46.1	21.12
CentWest	**558**	**1,000**	**1558**	**2.79**	**5.26**
23	104	4	108	1.0	0.20
24	597	5	602	1.0	0.05
25	203	135	338	1.7	2.60
26	117	256	373	3.2	5.97
West	**1,021**	**400**	**1,421**	**1.39**	**1.66**
19	27	71	98	3.6	6.66
20	3	5	8	2.7	5.03
21	103	27	130	1.3	1.16
22	5	-	5	1.0	-
27	87	132	219	2.5	4.73
28	169	65	234	1.4	1.62
OuterRing	**394**	**300**	**694**	**1.76**	**2.87**
Total	**6,245**	**5,182**	**11,427**	**1.83**	**3.07**

Appendix D
Employer Survey

Appendix D

Rigby/Jefferson County Transportation Plan

Employer Survey

Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
3	HYM 20 or HYM 48	HYM 20 & 48	No	Lower speed limit by the schools to 45 mph on HYW 48
7	Highway 20, Business Route 20, 1st N St., Clark Street, Fremont Ave, Main Street,	Opposite of TO business routes		Snow plow services performed between 10pm and 6am. Street parking on Clark zoned for
9	City of Rigby, State, Main, Clark, Farnsworth	Main, Clark, Farnsworth, State	No, Just Parking	
10	Highway 20, 4200 E near #4 on your map	Highway 20, 4200 E near #4 on your map	No	Fix potholes on 4200 and widen roads at curves
11	I'm a cabinet maker, I usually go to jobs	they don't come to shop		
14	State Street	State Street	?	
20	Hwy 48 from Roberts and Rigby. Lewisville Hwy also used. 508 N. is used on the east and Lewisville Main Street from the West. County Line Road and I15	Same as TO business routes	No - not much that can be done for better access	Just better care of the county roads (potholes) and more police patrols around the Jefferson Alternative School as truck traffic is quite an issue in and around our surrounding areas
21	Highway 26, Old Highway 26, Highway 48, County Line Road, Archer Hwy	Same as TO business routes	We have good access all around us	
26	Highway 48 and 3rd West	Highway 48 and 3900 East	Yes	Interchange
27	Hwy 20, State St., Main St. Rigby	Main St, State St, Farnsworth Way, Hwy 20 N. and S.	It would make it more convenient on occasion to access the Southern Route	Additional access to Hwy 20 on South Side of Rigby (bring back access that we used to have)
28	Interstate 15, Hwy 48	Interstate 15, Hwy 48		
30	Hwy 20	Hwy 20	We have access (direct) but its not safe having to cross 4 lanes of Hwy 20	I believe they are planning an overpass (district 7)
45	SH-48, Main, Clark, Hwy 20	SH-48, Main, Clark, Hwy 20	Yes	When snowing, more care in snowplowing city streets and parking lots and alleyways
34	Hwy 20, 4000 E, Yellowstone Hwy, Hwy 48 (300 N)	Hwy 20, 4000 E, Yellowstone Hwy, Hwy 48 (300 N)	N/A	Better access road on 4000 E to Hwy 20 North Rigby Exit
36	Hwy 20, Main Street Rigby	Hwy 20	No	4000 E improved, more grading
38	US 20, State St, Main St	Main st, State St, US 20, SH 26	Yes! A southbound exit on the south exit would help.	More appealing downtown
42	I-15 N. and S., US 20 N. and S., County Line E. and W.	I-15 N. and S., US 20 N. and S., County Line E. and W.	No	Speeding on thoroughfares in the county, such as the County line Road. As a transportation oriented company, I feel the power line poles and trees at all driveways and intersections need to be moved back for a safer more clear view. Especially for slower merging vehicles such as Semi trucks.
46	Hwy 20, State St.	Hwy 20, State St.	No	None
47	Hwy 20, SH 48, State St., Freemont	Hwy 20, SH 48, State St., Freemont	no	
50	Hwy 20, Hwy 48	Hwy 20, Hwy 48	yes	
51	Hwy 48, Farnsworth, Hwy 20, Riot Zone Road	Riot Zone Rd to Farnsworth to Main	Yes!	Better parking. Upgrade fronts of buildings with grant money. (possible theme to attract tourists passing by on and off ramp, landscape nice done and kept up. Buy up and clean up Farnsworth

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Rigby/Jefferson County Transportation Plan

Employer Survey

Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
52	#4, 8, 19	#4, 8, 19	Yes, overpass should help in 2008	Lenient restrictions on billboard and advertising for businesses.
54	200 N	200 N	no	Intersection of Yellowstone Hwy and 300 N and also Yellowstone Hwy and Countyline Rd need some sort of stop light or caution lights
55	Hwy 20 to Countyline Rd, 3700 East	Hwy 20 to Countyline Rd, 3700 East	We are not dependent on customer foot traffic	An on/off ramp for South Rigby exit and more East/West access across Hwy 20
56	State St., Main St.	State St., Main St.	no	more parking
61	158 E. Main St.	Alley	no	Deicadeted parking in Alley
62	Hwy 20 to 3rd West	Hwy 20 to 3rd West	no	none
63	US 20, Farnsworth Way, Stockam, Rigby Lake Dr.	US 20, Farnsworth Way, Stockam, Rigby Lake Dr.	Access is ok	There is no street sign posted for Sotckam when you turn off of Farnsworth Way - a street sign would help significatly. Some people turn onto the freeway exit - heading into traffic, going the wrong direction. They think the freeway exit is stockam. More signs are needed. Also - it would help the flow of traffic and safety if there were stop lights at the corner of Stockam and Farnsworth Way
64	South Rigby Exit Right at stoplight (300 No. Hwy 48)	Hwy 48 - East Right 4000 N Rigby Exit	it's ok	Lower speed limit on Hwy 48. Stop signs and lights make it safer
66	8 -> 16	16 -> 8	no	Countyline, 48
69	Hwy 48	Hwy 48 - East Right 4000 N Rigby Exit	no	None
71	Hwy 20, State Street, Main	Hwy 20, State Street, Main	no	
72	4200 E, 4108 E, 500 N, Hwy 48, State Street, Old Yellowstone Hwy, Main Street, 2nd West, Tall Ave.	4200 E, 4108 E, 500 N, Hwy 48, State Street, Old Yellowstone Hwy, Main Street, 2nd West, Tall Ave.		
73	300 N, Main St.	300 N, Main St.		
76	4th North, 1st North		no	plowing city roads in the winter
77	Archer Hwy, Hwy 48, Hwy 20, Hwy 33			
78	US 20, State St.	US 20, State St.	no	Lot next to me (in front of car wash) very messy, needs cleaned up
79	Main streets in town	main streets in town	no	longer street lights
80	Hwy 48, State St, US 20	Hwy 48, State St, US 20	yes	
81	Main St, Clark St., Farnsworth Way	Main St, Clark St., Farnsworth Way	No. Our access is fine	A south Rigby exit in the south bound lane would be nice
87	Hwy 48, 4200 E	Hwy 48, 4200 E	no	wider
89	Hwy 48, US 20, Farnsworth Way	Hwy 48, US 20, Farnsworth Way	access is adequate	
90	US 20, Old Yellowstone Hwy	US 20, Old Yellowstone Hwy	possibly	New interchange on 20 scheduled 2008 will probably
92	Hwy 20, 3800 E, 100 N, SH 48	Hwy 20, 3800 E, 100 N, SH 48, County Line Rd.	yes, many have difficulty finding us. Since 100 N was cut off at highway 20	A frontage Rd on the west side of Hwy 20 between County Line Rd and Rigby
103	Hwy 48, Lewisville Hwy, Interstate 20, County Line Rd, Menan-Lorenzo Hwy	Hwy 48, Lewisville Hwy, Interstate 20, County Line Rd, Menan-Lorenzo Hwy		Turning lane on Hwy 48 in front of Fresk Pack. Is currently dangerous for school buses and trucks during peak hours.

Appendix D

Rigby/Jefferson County Transportation Plan

Employer Survey

Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
107		Hwy 20, 4100 E	Yes	The interchange at the Menan-Lorenzo Bridge off Hwy 20
108	I-20, Annis Hwy, Hwy 48, State St.	I-20, Annis Hwy, Hwy 48, State St.	No	Better signs, more lighting
112	US 20 to Old Yellowstone Hwy			Better signing for Golf Course
118	All routes are used as clients come in from IF and Rexburg and West and East	Journeys use all routes to deliver clients from and to various direction	Parking is going to be a problem when Main St	
119	Hwy 20, 300 N, Farnsworth Ave., Main St., 2nd N, 3rd W, 400 N	Farnsworth, Main St, State St., Hwy 20	yes	entrance to Rigby from South side off ramp
121	North Yellowstone, Countyline Rd	North Yellowstone, Countyline Rd	YES	better access from Hwy 20, like we had at Holbrook
123	Kelly Canyon Rd	Kelly Canyon Rd	N/A	The county does a great job. We would all like bigger and better, but it's ok
126	Hwy 20, Farnsworth Way	Farnworth Way	Yes	Turning Lane
128	Hwy 48	Hwy 48	No	From 7 - 8:30am and from 3 - 3:30pm the High School kids and buses pass my shop and it is almost impossible to get out of my driveway without getting hit by a car. A stop light might work.
129	Alley Behind Broulims	Hwy 20	No	better parking
130	Hwy 20, Yellowstone Hwy, Countyline Rd.	Hwy 20, Yellowstone Hwy, Countyline Rd.	Our access is good	
131	State St., Main St.	State St., Main St.	No	
132	Very difficult with Highway 20 shut off either have to get off early at left or go all through town out to Hwy 48 - turn on Yellowstone and back south 2 miles	Yellowston to 48 or to left Hwy 20 to go to west of Rigby or North or South - NOT Good. Current access - access has been hurt since closure of Hwy 20 by Taylor's and State Transportation Department	YES, we need the South Rigby Interchange by "Taylors" put in - Customers complain continually about "no access". If coming from Rexburg, there is only 1 way off by Bob's. If missed you must go to County Line and back.	We need the South Interchange to help our business continue to thrive. How many more must be "out of business" before something in put on track for future completion of interchange? This will allow more businesses to come to Rigby. South end businesses like Hall's and Logging companies have no access at all! We have difficult access. We have contacted John Hart, ITD, who says they are waiting for this report and COunty/City plan to be presented.
136	Hwy 20, State St., 2nd W	Hwy 20, State St., 2nd W	from the north a 2nd exit would help so from north you don't have to go all through town	pave the service rd between Fair ground and us
140	Main St., State St., US Hwy 20	Main St., State St., US Hwy 20	no	
143	Hwy 48, Old Yellowstone Hwy, Hwy 20, County Line	Hwy 48, Old Yellowstone Hwy, Hwy 20, County Line	yes	overpass at 200 and #20
144	Farnsworth Way	Hwy 20, Farnsworth Way	Yes, Better flow of traffic and slow down the speel in front of this business	Widen Farnsworth with turn lanes. Stop light down by Wendy's and Farnsworth intersection. Slow speed limit down from overpass to main street.

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Rigby/Jefferson County Transportation Plan

Employer Survey
Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
146	US 26, Heise Rd., Hwy 48	US 26, Heise Rd., Hwy 48		Lower speed limits through the area between Mountain River Ranch and Kelley Canyon ski resort. The public's use of the area and visitation to existing businesses is at all time highs. Without checking speeds we are going to have a major accident and the County is going to have a major public relations issue.
147	Hwy 20, County Line Rd.	Hwy 20, County Line Rd.	no	
150	From North Rigby Exit to Farnsworth Way, to Main Street, to 3rd West, to 200 N	From North Rigby Exit to Farnsworth Way, to Main Street, to 3rd West, to 200 N	yes - definitely	A four way interchange at the south end of Rigby is desperately needed to replace the current north exiting and south entering overpass that is in place now. Access to businesses is severely limited form receiving traffic at the south end of town. Traffic currently is routed through the center of town to get to South end businesses and is very difficult for people not familiar wiht the area to find their way to businesses at the south end of town.
153	Hwy 48	Hwy 48	Yes	Move all school traffic
155	Main St. Rigby, Clark	Main St.	No	Get rid of unused vehicles parked on private property
157	Hwy 48, Yellowstone Hwy	Yellowstone Hwy	Yes	Interchange at Taylors Quick Stop
158	Hwy 48	Hwy 48		
161	Exit 322 to Business	Business to Hwy 20	No - Good access now	
162	Hwy 20	Hwy 20		Hwy 48 to North Rigby Exit
164	300 N, Yellowstone Hwy	300 N, Yellowstone Hwy		
165	Old Yellowstone Hwy	Old Yellowstone Hwy	N/A	Airport Road repaved. 4 way stop at Old Yellowstone/Countyline
166	Hwy 20, 400 N, 4100 E	Hwy 20, 400 N, 4100 E	Not really	The intersection of 400 N and 4100 E is too narrow.
168	400 N, 4000 E	400 N	no	none
169	Hwy 20, Old Yellowstone Hwy	Hwy 20, Old Yellowstone Hwy	yes	They closed our exit at Taylor Quick Stop. Overpass would be nice.
171	N. Yellowstone, 500 N	N. Yellowstone, 500 N	Not right now. We will be looking for a new business location in the near future	
174	SH 48, Hwy 20	SH 48, Hwy 20	yes	Full interchange where the South Rigby entrance/exit is currently. Wider SH 48/turn lane within two miles each side of Rigby. Wider intersection at Hwy 48 and State Street.
175	Hwy 20, Hwy 48, State St., Main St.	Hwy 48, State St.		
176	Hwy 48, Hwy 20, State St.	Hwy 48, Hwy 20, State St.	yes	Off ramp on Hwy 20 South Bound South of Rigby.
177	Hwy 48	Hwy 48	no	Wider

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Rigby/Jefferson County Transportation Plan

Employer Survey

Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
182	Hwy 20, Rigby Lake Drive	Hwy 20, Rigby Lake Drive	no	We are satisfied with the way things are already
185	US 20, ID 48	US 20, ID 48	no	
186	Main St., Hwy 48, Hwy 20	Main St., Hwy 48, Hwy 20	no	None
187	Hwy 20, Yellowstone Hwy.	Hwy 20, Yellowstone Hwy, Main St.	yes	You need an overpass South of town! On and off on both sides.
188	Hwy 20	Hwy 20	no	
189	Menan-Lorenzo	Menan-Lorenzo	no	Better access to Hwy 20 from Menan-Lorenzo
195	Hwy 20, Countyline Rd., Hwy 48, 100 N	Hwy 20, Countyline Rd., Hwy 48, 100 N	yes, frontage rd to Rigby or Hwy 20	South interchange to City of Rigby and East/West of access to Rigby
197	Hwy 48, 3900 E, 200 N, Hwy 20, 3800 E, 200 N	Hwy 48, 3900 E, 200 N, Hwy 20, 3800 E, 200 N	Open Holbrook Access	Interchange south of Rigby would be great.
198	Hwy 20, Countline Rd, 3300 E, I-15, Lewisville Hwy	Hwy 20, Countline Rd, 3300 E, I-15, Lewisville Hwy	3300 E wider would be lovely	3300 E wider would be lovely
200	3rd West, Main St.	State St, Annis Hwy	no	
201	Hwy 20	Hwy 20		Roads and potholes repaired
203	Idaho Hwy 48	Idaho Hwy 48	YES!!!	Left turn lane from 3900 E to 3800 E. You need to know how many accidents happen in this stretch of highway. Many clients are bringing in their pets for surgery at 8am. The traffic going to the High school is horrendous at that time. Many, many rear-end collisions. If a client tries to leave the clinic pulling a stock trailer at 3pm, the traffic is bad enough, he may have to wait a very long time to pull onto the highway. Ask for accident reports for this 1 mile of road in the past 24 months.
205	Hwy 48	Hwy 48	yes	Install a turning lane in front - there are six businesses in this area and I know it would benefit all of us.
206	Hwy 48, Main St., Clark St., Fremont	Clark, Main, Fremont, State	yes	
207	Hwy 20, 4100 E	Hwy 20, 4100 E	no	4100 E widened
208	SH 48, State St., US 20, Main St.	SH 48, State St., US 20, Main St.	no	can't think of any
210	State St, 1st S, Hwy 48	State St, 1st S, Hwy 48	no	
211	Farnsworth Way	Farnsworth Way	no	better county roads
218	Hwy 20, Countyline Rd.	Hwy 20, Countyline Rd.	not really	
221	Main St, Clark St, SH 48	Main St, Clark St, SH 48		
222	Hwy 48, 300 N, 4064 E, 290 N	Hwy 48, 300 N, 4064 E, 290 N	It would make more people aware of our facility	Hwy 48 could be made wider. Congestion from Old Yellowstone hwy to Hwy 48 caused semi trailer and truck makes travel time slower and decreased visibility
224	Hwy 20, Hwy 48	Hwy 20, Hwy 48		Have south Rigby interchange installed
225	I-20, 4200 E, 653 N	I-20, 4200 E, 653 N	no	none
226	Hwy 20, Old Yellowstone Hwy, Countyline Rd, SH 48	Hwy 20, Old Yellowstone Hwy, Countyline Rd, SH 48	no	easier access for south-bound traffic off of Hwy 20

Appendix D

Rigby/Jefferson County Transportation Plan

Employer Survey

Comments Summary

Return Index	Primary Route TO Business	Primary Route FROM Business	Would better access help?	Improvements Wanted
228	Hwy 48, Center St., Main St.	Hwy 48, Center St., Main St.	Parking is sometimes a problem, but road access is good	My only concern is snow removal on S. side of Main Street. Snow and ice build-up on the side of the road is a safety concern for my customers
230	Hwy 20, Farnsworth Way, Annis-Menan Hwy, Stockholm Dr.	Hwy 20, Farnsworth Way, Annis-Menan Hwy, Stockholm Dr.	a stop light at our intersection off the over pass to the new division	
233	SH 48, Menan-Lorenzo Hwy	SH 48, Menan-Lorenzo Hwy	no	
236	Hwy 48, Hwy 20, South Railroad Street	Hwy 48, Hwy 20, South Railroad Street	not unless you put an exit off of 20 onto 48	fix potholes on S. Railroad off of 48
238	Hwy 20, Farnsworth Way, Stockholm, Rigby Lake Dr.	Hwy 20, Farnsworth Way, Stockholm, Rigby Lake Dr.		Better traffic control
240	Annis Hwy, I20, Hwy 48, Rigby Lake Dr., Farnsworth Way	Annis Hwy, I20, Hwy 48, Rigby Lake Dr., Farnsworth Way	We feel we have great access.	Traffic light / 3 way stop / round-a-bout at junction between Community care and Hwy 48
243	Hwy 20, Old Yellowstone Hwy.	Hwy 20, Old Yellowstone Hwy.	Yes, better access to Yellowstone Do It Center and Yellowstone Log Homes	We need the Holbrooke diamon/overpass completed as soon as possible. Replace existing overpass
245	Hwy 20, 600 N	Hwy 20, 600 N	Not for now. However when they put in the overpass at Lorenzo they will cut off our access to Hwy 20. That is going to cause problems with neighbors and roads.	Put a frontage road down the west side of Hwy 20 from Lorenzo to Rigby or put some overpasses over Hwy 20 to the Yellowstone Highway.
246	Farnsworth Way, Clark St., Fremont Ave., Main Street, North Alley, Hwy 20, Rigby Lake Drive, Pleasant Country, Stockholm, Annis Hwy	Farnsworth Way, Clark St., Fremont Ave., Main Street, North Alley, Hwy 20, Rigby Lake Drive, Pleasant Country, Stockholm, Annis Hwy	Yes	Access points at Hwy 20/North overpass and Stockham are very inadequate for volume of traffic. Need wider lanes, turning lanes, possibly a signal light. Also need another access opint further south of this intersection. Also the State needs to get the overpass at Hwy 20 and Lorenzo started.

Total Questionnaires Sent				**246**
Total Returned				**172**
Number of Employers within 1 mile of SH 20				**216**
Total Trips Represented (all types)				**9682**
Number Reporting employees				**171**
Total Employees represented				**2737**
Number reporting employee distribution				**1347**
Number Reporting Customers				**100**
Total Customers represented				**6074**
Number reporting customers distribution				**2872**
Number reporting deliveries	Semi-trailer **214**	Heavy-trailer **171**	Single unit **346**	
Total trucks represented				**731**
Number reporting deliveries distribution				**722**
Total Deliveries represented				**620**
Number of comments received in support of new interchange				**187**
Number of trips designated to US 20 North	Empl. **180**	Cust. **422**	Truck **116**	
Number of trips designated to US 20 South	Empl. **206**	Cust. **365**	Truck **171**	

Folks:

The office of Planning and Zoning needs your help by filling out and returning the enclosed questionnaire about trips to and from your business.

Jefferson County and the City of Rigby are undertaking a study of the transportation needs of Jefferson County. This study will help us identify the immediate and long term needs for the roadway systems which serve your businesses and the citizens of Jefferson County. Of equal importance, having an adopted Transportation Plan is a necessary step in allowing Jefferson County and Rigby to compete for transportation funding at the State and Federal level.

A critical need in developing a plan is understanding the travel patterns within the county. Simply put, we know were people live, and thus were people come from. We are less certain about how many people work in Jefferson County and where they are located. The enclosed survey will help us. You will be asked questions about employees, customers, and deliveries.

Please be assured that the information you provide will be treated with the strictest of confidence. All of the data will be turned over to our transportation consultant, Keller Associates, who will use the information only to derive trip patterns. Data will not be available to other County or City offices or individuals.

Here Is What To Do:

- Scan the questionnaire and map
- If you have an questions call Tandy Markcum at 238-2146
- Complete questionnaire and return in envelope provided
- Please **return by April 7th.**

We are excited about developing a future transportation plan for Rigby and Jefferson County. **Your contribution to this process is very important**. Also, feel free to let us know how specific improvements could help your individual business.

Thank you for your efforts.

Sincerely:

Business Travel Questionnaire

Jefferson County / City Of Rigby
Transportation Plan

General Information

Jefferson County and the City of Rigby are beginning a Transportation Study that will evaluate existing and future needs of our roadways and other travel modes. As part of this study we are interested in understanding the pattern of trips generated by all businesses in the County. We ask your cooperation by responding to several questions below concerning travel to and from your business.

All information will be handled in strict confidence and data from individual enterprises will not be made available from this study. Data will be grouped, avoiding disclosures of information from individual businesses.

Note that the following form has a serial number for identification purposes but does not otherwise ask for further information about your business. If you have any questions or concerns regarding this please contact Tandy Markcum at 208.238.2146.

Please be as accurate as possible. However, we are interested in establishing trip making patterns, not numerical certainty.

Your cooperation is greatly appreciated. Questions follow...

1. How many people do you employ?	
2. How many employees come to work between 7:00 and 9:00 a.m.?	
3. How many employees leave work between 4:40 and 6:00 p.m.?	
4. Approximately how many Customer Trips are made to your business daily?	

5. Approximately how many truck trips are made to your business daily?

Semi-trailer ☐ Heavy Single Unit (more than 4 tires) ☐ Single Unit ☐

6. Primary Route TO your place of business
(list streets / highways used to approach your business):

7. Primary Route FROM your place of business
(list streets / highways used to approach your business):

8. Would better access help your business?

9. Describe improvements you would like to see?

(Over)

Remaining Questions

The remaining questions ask you to approximate the direction of trips to or from your business.

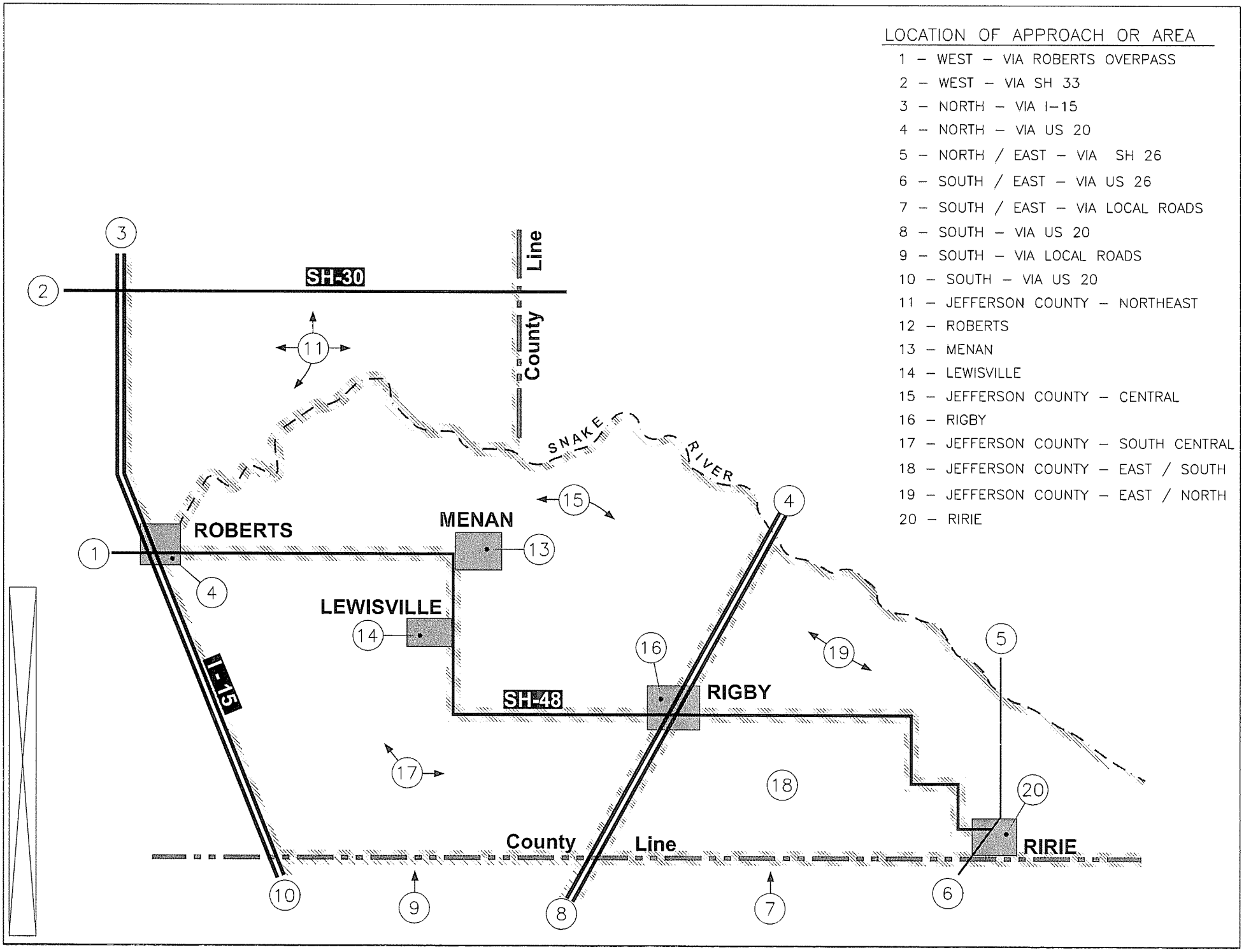
A. Approximately where do your employees live?
B. Where do your customers come from?
C. Where do your deliveries come from?
D. Where do your deliveries depart to?

Questions?
Call Tandy
208.238.2146

To answer these questions, please refer to the attached map showing areas within southeast Jefferson County or approach routes for areas beyond the map. Estimate the number of people / trips from a given area, note the circled area code, and record your responses in the table below.

	Approximate Daily Trips from Each Location			
	A	**B**	**C**	**D**
Code – Area or Aproach:	**Employees Come From:**	**Customers Come From:**	**Heavy Vehicle Deliveries Come From:**	**Heavy Vehicle Deliveries Leave to:**
1. West -- via Roberts Overpass				
2. West – via SH 33				
3. North – via I-15				
4. North - via US 20				
5. North / East – via SH 26				
6. South / East – via US 26				
7. South / East – via Local Road				
8. South – via US 20				
9. South – via Local Roads				
10. South – via US 20				
11. Jefferson County -- Northeast				
12. Roberts				
13. Menan				
14. Lewisville				
15. Jefferson County – Central				
16. Rigby				
17. Jefferson County – S. Central				
18. Jefferson County-East / South				
19. Jefferson County – East / North				
20. Ririe				

Thank You!


LOCATION OF APPROACH OR AREA
1 – WEST – VIA ROBERTS OVERPASS
2 – WEST – VIA SH 33
3 – NORTH – VIA I–15
4 – NORTH – VIA US 20
5 – NORTH / EAST – VIA SH 26
6 – SOUTH / EAST – VIA US 26
7 – SOUTH / EAST – VIA LOCAL ROADS
8 – SOUTH – VIA US 20
9 – SOUTH – VIA LOCAL ROADS
10 – SOUTH – VIA US 20
11 – JEFFERSON COUNTY – NORTHEAST
12 – ROBERTS
13 – MENAN
14 – LEWISVILLE
15 – JEFFERSON COUNTY – CENTRAL
16 – RIGBY
17 – JEFFERSON COUNTY – SOUTH CENTRAL
18 – JEFFERSON COUNTY – EAST / SOUTH
19 – JEFFERSON COUNTY – EAST / NORTH
20 – RIRIE
SH-30
County Line
SNAKE RIVER
ROBERTS
MENAN
LEWISVILLE
I-15
SH-48
RIGBY
RIRIE
County Line

Appendix E
Final Zone to Zone Forecast Trip Table

Appendix E

Rigby/Jefferson County Transportation Plan

Forecast Zone to Zone Trip Table

Zone	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	21	25	26	27	28	E-1	E-2	E-4	E-5	E-6	E-7	E-8
1	125	25	20	10	5	30	115	50	80	70	40	10	30	30	20	30	0	40	10	5	15	30	15	10	5	15	0	5	20	10	5
2	20	15	0	0	0	20	15	10	15	10	5	0	5	5	5	5	0	5	0	0	0	5	0	0	0	5	0	0	10	5	0
3	15	0	15	0	0	0	10	5	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	10	5	0
4	10	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
6	20	10	0	0	0	0	5	5	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10	0	5	15	10	5
7	70	10	10	0	0	10	25	20	25	25	20	0	10	10	10	10	0	10	0	0	5	10	5	0	15	30	5	15	40	20	10
8	40	10	5	0	0	10	25	15	20	25	15	0	10	10	5	10	0	10	0	0	5	10	5	0	5	15	0	5	15	10	5
9	55	10	10	5	0	10	30	20	30	30	20	0	10	10	10	15	0	15	0	0	5	10	5	0	10	25	5	10	30	15	10
10	50	10	10	5	0	20	35	25	40	40	30	5	15	15	10	15	0	20	5	0	10	15	5	5	10	25	5	10	30	15	10
11	25	5	0	0	0	5	25	15	20	35	15	5	10	20	10	15	0	20	5	0	10	15	10	5	5	10	0	5	15	10	5
12	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
13	20	5	0	0	0	5	10	10	10	10	10	0	5	5	5	5	0	5	0	0	0	5	0	0	0	10	0	0	10	5	0
14	20	0	0	0	0	0	5	5	5	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	0	5	20	10	5
15	15	5	0	0	0	0	10	5	10	10	10	0	5	5	0	5	0	5	0	0	0	0	0	0	0	5	0	0	5	5	0
16	25	5	0	0	0	5	15	10	15	15	10	0	5	5	5	5	0	5	0	0	0	5	0	0	5	10	0	5	15	10	5
18	25	5	0	0	0	0	10	10	10	15	15	0	5	0	0	5	0	5	0	0	0	0	0	0	5	15	0	5	20	10	5
19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0
21	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	10	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	10	5	0
26	20	5	0	0	0	0	10	5	10	10	10	0	0	0	0	5	0	5	0	0	0	0	0	0	5	10	0	5	15	10	5
27	10	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	10	5	0
28	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0
E-1	15	10	10	5	0	15	35	15	25	25	15	0	10	15	5	10	0	20	5	0	10	15	10	5							
E-2	40	15	20	10	0	30	90	35	65	65	30	10	20	35	15	30	0	45	10	5	15	30	15	10							
E-3	0	0	0	0	0	0	5	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
E-4	5	0	0	0	0	5	15	5	10	10	5	0	0	5	0	5	0	5	0	0	0	5	0	0							
E-5	15	10	10	5	0	15	35	15	25	25	15	0	10	15	5	10	0	20	5	0	10	15	10	5							
E-6	55	25	25	10	5	40	120	45	85	85	45	10	25	50	20	40	0	60	15	5	25	45	25	10							
E-7	30	10	15	5	0	20	60	25	45	45	20	5	15	25	10	20	0	30	10	0	15	20	15	5							
E-8	15	5	5	0	0	10	30	10	20	20	10	0	10	15	5	10	0	15	5	0	5	10	5	0							
	770	195	155	55	10	250	740	360	590	620	360	45	200	275	140	250	0	340	70	15	130	245	125	55							

Note: Rows or columns missing from numerical sequence have no trips.

Internal Zone

External Zone

External to Internal Trips

Internal to External Trips