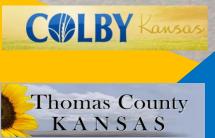
Area Transportation Plan City of Colby Thomas County



Prepared For:





Prepared By:

KIRKHAM MICHAEL

TABLE OF CONTENTS

EXE	ECUTIVE SUMMARY	i
1.	INTRODUCTION Purpose	1.1 1.1
2.	PUBLIC INVOLVEMENT Public Officials Stakeholders General Public How is Public Input Used?	2.1 2.1 2.2
3.	EXISTING CONDITIONS. Land Use	3.1 3.1 3.2 3.2
4.	FUTURE CONDITIONS Land Use Traffic Operations Transportation Needs	4.1 4.2
5.	TRANSPORTATION ALTERNATIVES Short-Term Medium-Term Long-Term Access Management Range Avenue/K-25, Horton Avenue to Willow Street Corridor Bicycle and Pedestrian Considerations Aesthetic Treatments Environmental Impacts and Mitigation	5.1 5.3 5.4 5.5 5.6
6.	RECOMMENDATIONS AND IMPLEMENTATION Implementation Goals	6.1 6.1 6.1
7 .	REFERENCES	7.1
Q	ACKNOWI EDGMENTS	Q 1

Appendix 1: Stakeholder and Agency List

Appendix 2: Existing Roadway Network Characteristics

Appendix 3: Improvement Concepts Considered

Appendix 4: KDOT Toolbox

LIST OF TABLES

Table E.1 Intersection Need for Improvements and Concept Consideration by Time Period	
Table 3.1 Intersection Crash Rate	3.3
Table 3.2 Roadway Segment Crash Rates	
Table 4.1 Future Traffic Estimation Methodology	4.3
Table 4.2 Future Transportation Needs	
Table 6.1 Project Implementation Schedule	6.4

LIST OF EXHIBITS

(Exhibits are located at the end of each chapter)

Exhibit 1.1 Project Study Area

Exhibit 3.1 Existing Land Use

Exhibit 3.2A Existing (2012) Traffic Volumes and Lane Configurations

Exhibit 3.2B Existing (2012) Traffic Volumes and Lane Configurations

Exhibit 3.3A Existing Level of Service

Exhibit 3.3B Existing Level of Service

Exhibit 3.4 Environmental Resources

Exhibit 4.1 City of Colby Zoning

Exhibit 4.2 Colby Comprehensive Plan Future Land Use

Exhibit 4.3 Future Land Use Development

Exhibit 4.4 Short-Term Traffic Volumes

Exhibit 4.5 Medium-Term Traffic Volumes

Exhibit 4.6 Long-Term Traffic Volumes

Exhibit 4.7 East 4th St/US-24 & Country Club Dr Future Traffic Volumes

Exhibit 4.8A Future Peak Hour Level of Service Without Improvements

Exhibit 4.8B Future Peak Hour Level of Service Without Improvements

Exhibit 5.1 Transportation Alternatives Summary

Exhibit 5.2 Range Ave/K-25 Functional Areas

Exhibit 6.1 Recommended Improvement Plan

EXECUTIVE SUMMARY

The Kansas Department of Transportation (KDOT) has partnered with the City of Colby and Thomas County to develop this Area Transportation Plan (ATP). The purpose of the ATP is to provide a framework of transportation infrastructure improvements needed to promote a safe and efficient transportation system to meet current and future anticipated needs.

The ATP includes the southern part of Colby, south to the areas around the two Interstate 70 interchanges (Range Avenue / Kansas State Highway 25 and Country Club Drive). Significant development has occurred in this area, especially along Range Avenue/Kansas State Highway 25 (Range Avenue/K-25), in the past 20 years. With potential for more development, KDOT, Colby, and Thomas County have initiated this plan to be proactive, not reactive, to improving the transportation system.

In addition to the study area, local officials requested the intersection of East 4th Street/US Highway 24 (US-24) and Country Club Drive also be included in the study and evaluated for capacity, geometry, and safety.

Public Involvement

During the planning process public officials, stakeholders and the general public together with businesses and landowners were given the opportunity to provide input for the ATP. Public input was utilized to identify transportation needs in the study area and informed the selection of final recommendations.

Existing Conditions

Most of the undeveloped land in the study area is utilized for agriculture. Land uses in the area include a large number of commercial businesses serving local residents (retail stores, restaurants) and through travelers (gas stations, fast-food restaurants, hotels). Several clusters of industrial areas also exist in the study area.

Capacity analysis of the major intersections within the study area found all intersections are operating at acceptable levels for the AM and PM peak hours. However, Willow Street and Davis Avenue at Range Avenue/K-25 are not operating at desired levels during the Mid-Day peak hour.

Safety data for the study area intersections and roadways indicated all facilities had crash rates below the critical crash rates.

In KDOT's Access Management Policy, Range Avenue/K-25 is identified as a significant thoroughfare in the study area because it carries relatively high traffic volumes and serves as a regional commercial corridor. One impediment for travelers along Range Avenue/K-25 is numerous access points. Many of the existing access points along Range Avenue/K-25 within the study area do not meet spacing guidelines listed in KDOT's current Access Management Policy.

Natural and built environment elements in the study area include an unnamed channel (tributary to Prairie Creek), recreational facilities (Colby Water Park, walking trail), and historic/cultural (Prairie Museum of Art and History) resources.

Future Conditions

Future development in the area is expected to consist of:

- Expansion of existing industrial areas
- New commercial businesses along main routes serving both locals and throughtravelers
- Residential areas
- New and expanded public use development for hospital, clinics, and a public recreation/activity center

Combining traffic generated by the future development with a growth in the existing traffic volumes provided an estimate of the future traffic conditions. Improvements may need to be considered at several of the major intersections in the study area for the three timeframes reviewed (short-term: 0-5 years; medium-term: 5-10 years; long-term: 10-20 years). A summary of the intersections with the anticipated improvement timeframe is included in Table E-1.

Transportation Alternatives

Improvement concepts were developed to address current and future anticipated needs in transportation system. Intersection improvements considered signalization, roundabouts, and turn lanes. Table E.1 summarizes the concepts reviewed for the intersections with needs identified. Improvement concept schematics are included in Appendix 3.

Access management along Range Avenue/K-25 was reviewed and various potential strategies and improvement concepts were developed between Willow Street and Davis Avenue, including:

Table E.1 Intersection Need for Improvements and Concept Considerations by Time Period

Period	Concepts Considered for
Periou	Intersections with Undesirable
Short-	Operation Range Avenue / K-25 & Willow St
Term	
(0-5	Signalize
years)	• Roundabout
years)	Range Avenue / K-25 & EB I-70
	Ramps
	Signalize
	Roundabout
	Single-Point Urban
	Interchange
	Range Avenue / K-25 & Horton Ave
	/ Taylor Ave
	Signalize
Medium-	Range Avenue / K-25 & College
Term	Signal Modifications
(5-10	Country Club Dr & Willow St
years)	Roundabout
	Signalize
	Country Club Dr & College St
	Signalize
	Roundabout
	Franklin Ave & College Dr
	 Signalize
	Roundabout
	Country Club Dr & East 4 th
	Street/US-24
	 Roundabout
	 Signalize
	Geometric Improvements
Long-	Country Club Dr & EB I-70 Ramps
Term	 Signalize
(10-20	
years)	

- Alternate Corridors Maintain existing access on K-25 and improve parallel corridors to provide alternate routes (Country Club Drive)
- Install median on K-25 and maintain access via back streets (Sewell Avenue and Thielen Avenue)

Area Transportation Plan Colby, Thomas County, Kansas

- Consolidate access points into one intersection on Range Avenue/K-25 and maintain access with frontage roads
- Convert all access points to right-in/rightout only

Range Avenue/K-25 between Davis Avenue and College Drive can accommodate two full-access intersections, at Willow Street and at the south driveway to Colby Community College.

Access management was also reviewed on Davis Avenue near Range Avenue/K-25. Options considered for access management on Davis Avenue included:

- Construct medians on Davis Avenue near Range Avenue/K-25, converting the frontage road access on Davis Avenue east of Range Avenue/K-25 to right-in right-out
- Construct median on Davis Avenue west of Range Avenue/K-25; Close frontage road access to Davis Avenue east of Range Avenue/K-25 and provide new right-in rightout only access to Range Avenue/K-25 for frontage road
- Construct median on Davis Avenue west of Range Avenue/K-25; Close frontage road access to Davis Avenue east of Range Avenue/K-25 and provide new full access to Range Avenue/K-25 for frontage road

Both KDOT and the City of Colby foresee Country Club Drive serving as an important alternative route to Range Avenue/K-25 between I-70 and US-24 because it has access to I-70. As such, the Country Club corridor is important to protect through local access management policies. Four points for future access were identified at approximately ¼ mile spacing between Willow Street and College Drive.

Bicycle and Pedestrian Considerations

Needs exist in the study area for pedestrian accommodations as well. Any improvements addressing pedestrian needs should designed and constructed in full compliance Americans with Disabilities with Accessibility Guidelines (ADAAG) and Public Rights-Of-Way Accessibility Guidelines (PROWAG) regulations. **Improvements** considered to address these needs included:

- Connect the sidewalk network, along Willow Street and along Range Avenue/K-25 from Davis south to Willow Street
- Accommodations for bicyclists
- Pedestrian accommodations to cross Range Avenue/K-25 near Davis Avenue

Recommendations and Implementation

KDOT, the City of Colby, and Thomas County prioritized the proposed improvements taking into consideration the needs, benefits to the community, and public comments. While the improvements are based on an assumed timeframe, the ATP has included flexibility to account for changes in future conditions beyond what was assumed for the plan. The tool utilized to include flexibility in the plan is to define triggers for specific improvements. A plan for the implementation of recommended improvements is included in Table 6.1 and illustrated in Exhibit 6.1. It should be noted, Table 6.1 is provided as a guide to program funding and does not imply commitment of funds. In addition, the ATP is a plan meaning it is subject to being amended additional improvements may be considered at the time of implementation.

1. INTRODUCTION

Purpose

The Kansas Department of Transportation (KDOT) has partnered with the City of Colby and Thomas County to develop this Area Transportation Plan (ATP). Recent development and potential future growth on the south side of Colby is driving the need for the ATP. Development increases traffic and pressure for access to roadway facilities which can impact safety and efficiency for travel along a corridor. The ATP considers the balance between maintaining mobility to accommodate regional travel through the area while maintaining access to local businesses and industries. Access control balances the two competing interests on the transportation system: mobility of through traffic and access for local traffic. To preserve both mobility and access, evaluation of access management for the important

corridors in the area included Range Avenue /Kansas Highway 25 (Range Avenue/K-25), Country Club Drive, and the areas near the two Interstate 70 (I-70) interchanges.



The purpose of the ATP is to provide a framework of transportation infrastructure improvements to promote a safe and efficient transportation system to accommodate anticipated development, and support economic opportunities near Colby. KDOT, Colby, and Thomas County will utilize the ATP as a guide for programming funds, when available, for transportation improvements in the area following the recommendations in the ATP.

Study Area

The study area for the Colby ATP is located in the southern part of the City of Colby and includes the areas surrounding Range Avenue / K-25 (an important regional route) and Country Club Drive between Horton Avenue and College Drive. Two interchanges on I-70, on Range Avenue / K-25 and Country Club Drive, are included in the study area. Land and roads within the study area are under jurisdiction of the City of Colby or Thomas County (with the exception of the KDOT facilities of K-25 and I-70). Exhibit 1.1 depicts the boundaries of the study area.

Thirteen intersections located within the study area, indicated on Exhibit 1.1, were analyzed including:

- Range Avenue/K-25 & Horton Avenue / Taylor Avenue
- Range Avenue/K-25 & Eastbound I-70 Ramps
- Range Avenue/K-25 & Westbound I-70 Ramps
- Range Avenue/K-25 & Willow Street
- Range Avenue/K-25 & Davis Avenue/Zelfer Avenue
- Range Avenue/K-25 & College Drive
- Franklin Avenue & College Drive
- Country Club Drive & College Drive
- Country Club Drive & Willow Street
- Country Club Drive & Westbound I-70 Ramps
- Country Club Drive & Eastbound I-70 Ramps
- Country Club Drive & Horton Avenue
- Franklin Avenue & Willow Street

Local officials requested the intersection of East 4th Street/US Highway 24 (East 4th Street/US-24) and Country Club Drive be included in the study. The intersection has been evaluated for capacity, geometry, and safety.

Background

Colby serves as a regional hub and a major way-point along I-70. Within the past 20 years, development has occurred along Range Avenue / K-25 and near the two interchanges with I-70 serving Colby. Several businesses and industries are destinations for the region, and many businesses serve travelers passing through the area. Colby is expected to grow in the future because of its role as a regional center and the location along regional highways.

Colby is situated along major regional routes including I-70 and K-25 (Range Avenue) which connects to the major north-south corridors of US Highways 81 and 83 via US-24. Traffic along these routes has been increasing and is expected to increase in the future. In combination, the increases in both local traffic and regional through traffic could impact the existing roadway system in the southern portion of Colby.

Transportation Planning

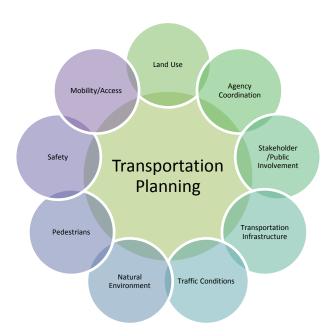
Transportation planning is a tool which can be used to help preserve the K-25 corridor and identify improvements to accommodate the potential future growth in Colby. The transportation planning process develops a vision for future transportation improvements for a defined area. The first step in the planning process is to identify current and future anticipated needs of the transportation system. Once the needs have been clearly identified, alternative solutions are developed to meet the identified needs of the system. Transportation includes comprehensive planning а consideration of various factors to determine the needs of the system and develop improvements to meet these needs.

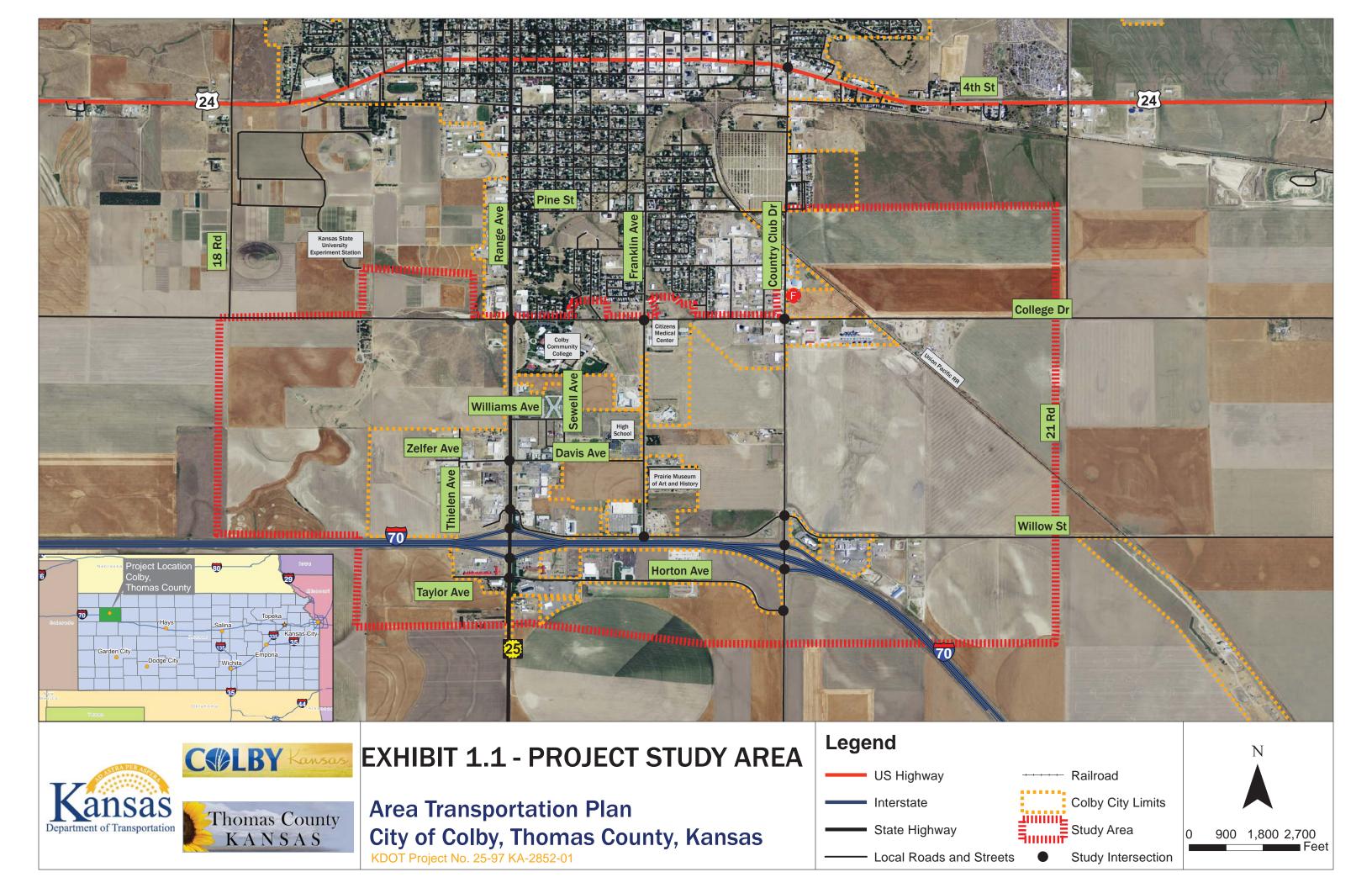
Public involvement is one of the key inputs to the planning process which collects information to help define the needs of the transportation system, and inform the decision-making process.

Future development is an important consideration because changes in land use will affect traffic volumes. Future traffic volumes generated by the new land use are utilized to identify potential future needs on the transportation network and determine if improvements could mitigate the needs.

Safety is the first priority in developing solutions to address future needs. Along with safety, improvements must balance mobility and access. Mobility provides ease of movement through a corridor and is increased with fewer stops, higher speeds, and reduced travel times. Access refers to the ability to enter properties. Accessibility is increased with the number of entry points (driveways).

A comprehensive transportation plan addresses the needs of various means of transportation besides motor vehicles. Pedestrians and bicyclists are also an important part of the transportation options to consider.





2. PUBLIC INVOLVEMENT

Public Involvement is an important factor in the transportation planning process. Input from the public is important to better understand the local conditions, needs, and desires of the community. Public involvement for this project engaged three main groups: public officials, stakeholders and the general public.

Public Officials

Public officials included those in local City and County government as well as KDOT representatives from the District and Area. several officials were involved throughout the entire development of the ATP, all public officials were provided with opportunities to provide input on the ATP. Public officials were involved in the initial phase of the ATP to identify needs in the transportation network and identify important stakeholders. Public officials were informed of project progress and provided opportunities to comment at a Stakeholder Coordination meeting held December 14, 2012 and a project briefing held only for public officials June 7. 2013. Final recommendations of the draft ATP were presented to public officials on November 14, 2013.

Stakeholders

Stakeholders were identified early in the process and consisted of land owners and various agencies with interests in the area (a complete list of these is included in Appendix 1). Phone interviews were conducted with the stakeholders in Fall 2012 as the first step in the public involvement process. Purposes of the interviews were to identify what (if any) development plans exist and to obtain information on any transportation needs within the study area. Common needs identified by the public included:

- Range Avenue is wide and left-turning vehicles on Willow Street need a big gap in vehicles to cross.
- There are no accommodations for pedestrians (which include college students) walking south along Range Avenue between Davis Avenue and Willow Street.
- There are no accommodations for pedestrians crossing Range Avenue going between hotels and restaurants on either side of the street.
- Large industrial traffic travels north/south on Country Club Drive (trucks, tractors, combines) with a "narrow" bridge and roadway over I-70 in the area. Many businesses south of I-70 on Horton Avenue utilize this equipment and use this corridor for access.
- High speeds on Range Avenue and on US-24 near Country Club Drive.
- Range Avenue near Willow Street and I-70 is congested Thursdays, Fridays, and Saturdays.
- People leave the Subway parking lot and drive north in the dirt across private ground to access a driveway at Quality Inn (west side of Range Avenue/K-25 between Willow Street and Davis Avenue).



A stakeholder coordination meeting was held in Colby between the project team and stakeholders on December 14, 2012. Letters

Area Transportation Plan Colby, Thomas County, Kansas

were mailed to the stakeholders to invite them to the meeting. A presentation was given describing the purpose of the ATP, summarizing existing traffic conditions, and discussing current and future land use. Input from the meeting was utilized to estimate future land uses for the study area. Approximately 30 people attended the meeting.

General Public

An opportunity for the general public (those not already identified as stakeholders) was held on June 7, 2013 for the public to review the improvement concepts. During the meeting, the public was made aware of the future needs for the area and preliminary concepts were presented for public review and input. Attendees were asked to provide feedback on the improvement concepts.

First Public Information Meeting. The first meeting was held on June 7, 2013. Methods to reach the public about the meeting included mailing letters to stakeholders, notifications in the local paper, announcements on a local radio station and local access television station, and social media and internet notifications through KDOT. A presentation was given summarizing the purpose of the ATP, existing traffic conditions, future land use assumptions, intersection improvement concepts, and access management options. After the presentation, the public was given an opportunity to review concepts, ask questions, and provide feedback. Approximately 40 people attended the meeting. Some of the public's major comments expressed at the meeting were:

- Concerns with roundabout concepts being able to accommodate larger vehicles
- Accommodations needed for pedestrians/bicyclists
- Speed limit on Range Avenue needs to be reviewed to be reduced

Comment forms were also provided to citizens to provide written feedback on the concepts. A summary of the written comments received is as follows:

- Three-lane concept on East 4th Street/US-24 would cause congestion and safety concerns
- Need to provide easy access to Colby's Visitor Center
- Roundabouts will not work with large vehicles
- Country Club Drive needs to be widened to three-lanes
- A left-turn arrow is needed on Range Avenue/K-25 for the signal at Davis Avenue
- Install traffic signals at I-70 off ramps to Range Avenue/K-25
- Widen the two-lane segment of Range Avenue/K-25 located south of I-70

Stakeholders were given an opportunity to meet with project engineers and KDOT following the public meeting. Meetings were held to address business concerns with access to their properties with the various options presented at the meeting.

Second Public Information Meeting. A second, and final, public meeting was held on November 14, 2013 to present the final recommendations of the ATP. Methods to reach the public about the meeting included mailing letters to stakeholders, notifications in the local paper, announcements on a local radio station and local access television station, and social media and internet notifications through KDOT. A presentation was given summarizing the purpose of the ATP, role of public involvement in the process, and recommendations in the draft ATP. After the presentation, the public was given an opportunity to review the recommendations, ask questions, and provide feedback. Approximately 35 people attended the meeting.

How is Public Input Used?

Stakeholder information was used to develop the future land use conditions and help identify transportation issues. Public input was used in the selection of the final recommended improvements and for revisions to the future land use. Some examples where public input was used to shape the project included:

- Determination of future anticipated land use in the study area
- Providing recommendations for pedestrian/bicycle accommodations in the study area
- Accommodating farm implement traffic (widening of Country Club Drive bridge over I-70)
- Selection of the preferred improvement option for intersections and access control

3. EXISTING CONDITIONS

Existing conditions are reviewed to determine the existing needs of the transportation system and to gain an understanding of the nature of the travel patterns and land use in the study area. This section provides a brief description of the existing conditions for elements in the study area utilized in the development of the ATP. Data sources and descriptions of existing conditions are summarized for each element to establish the setting for which the development of future conditions are based.

Land Use

Existing land use was determined from aerial imagery, site visits, and discussions with stakeholders. Areas surrounding the I-70 interchanges and along Range Avenue/K-25 and Willow Street consist primarily of commercial service types of businesses including fast food restaurants, hotels, and retail stores. Light industrial use areas are located primarily along Horton Avenue, areas west of Range Avenue/K-25 and east of Country Club Drive along Willow Street and at the intersection of Country Club Drive and College Drive. Residential areas exist northeast of Davis Avenue and Range Avenue/K-25. Public facilities in the study area include Colby Community College, Colby High School, Citizen's Medical Center, and the Prairie Museum of Art and History. The study area also contains a large portion of land currently utilized for agricultural purposes. Exhibit 3.1 includes the existing land use within the study area.



Transportation Infrastructure

KDOT has jurisdiction over two roads within the primary study area: Range Avenue/K-25 and I-70. KDOT also has jurisdiction on US-24 for the additional intersection included in the study. The other streets are owned and maintained by the City of Colby or Thomas County. Appendix 2 includes a table with detailed information on roadways and streets in the study area.

Intersections within the study area are under two-way stop control, with the exception of three. Two study intersections are signalized (Range Avenue/K-25 with Davis Avenue/Zelfer Avenue and College Street) and one intersection (Franklin Avenue and College Street) is under all-way stop control. Exhibits 3.2A and 3.2B outline the intersection control for the study intersections.

Existing lane configurations at the study intersections are also included in Exhibits 3.2A and 3.2B. Several intersections have designated left-turn lanes including Range Avenue/K-25 at the I-70 ramps, Willow Street, Davis Avenue/Zelfer Avenue, and College Street. Range Avenue/K-25 is primarily a four-lane roadway with a median through the study area.

A segment of Range Avenue/K-25 from Willow Street to College Drive has a wide median (approximately 36 feet wide). The paved section of the wide median on Range Avenue/K-25 (between Willow Street and just north of Davis Avenue) increases the crossing distance for left-turning vehicles from the side roads making it difficult for motorists to judge adequate gaps in traffic. In addition, it creates a much longer crossing distance for pedestrians which many find undesirable.

Traffic Operations

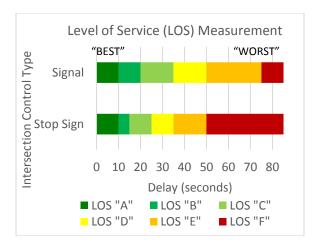
Traffic volumes along the Range Avenue/K-25 corridor vary from 685 vehicles per day (vpd) south of Horton Avenue to 7,430 vpd north of I-70 (2012 KDOT Traffic Count Map).

Existing turning movement traffic counts were obtained from July to August of 2012 during typical weekdays on Tuesday through Thursday for the 14 study intersections. Counts were conducted during three periods from 6:30 AM to 9:15 AM, 11:30 AM to 1:15 PM, and 3:30 PM to 6:15 PM to determine the peak hours of traffic. "Peak hour" refers to the hour during a typical day with the highest volume of traffic and is determined from the highest four consecutive 15-minute periods. Typically, on a weekday there is a peak hour in the morning and evening corresponding to periods when people are commuting to (AM) and from (PM) work. Based on the traffic counts obtained, the existing peak hours in the study area are from 7:45 AM to 8:45 AM, and 4:45 PM to 5:45 PM. Traffic counts were also obtained at the study intersections during the middle of the day to determine the "mid-day" peak hour which was found to be from 12:00 PM to 1:00 PM.

Measurement for the effectiveness of operating conditions for transportation facilities is based on the amount of delay experienced by vehicles. Level of Service (LOS) is the standard measurement used and ranges from "A" to "F", with LOS "A" representing little or no delay, and LOS "F" representing extreme delay and congestion. LOS "C", or better, is considered desirable; however LOS "D" is acceptable in most urban situations. Delay is directly affected by the capacity of the roadway/intersection and intersection control.

Synchro version 8 software, which follows the methodology from the 2010 Highway Capacity Manual, was utilized to determine the operating conditions in LOS for the existing conditions. LOS for each intersection approach is included in Exhibits 3.3A and 3.3B. Most of

the intersection approaches are operating at LOS "A". Several movements are operating at LOS "C" at some point during the three peak hours (AM, PM, and mid-day). The westbound approach on Willow Street at Range Avenue/K-25 is operating at LOS "D" during the mid-day peak. Two approaches, eastbound Willow Street and westbound Davis Avenue both at Range Avenue/K-25, are operating at LOS "F" during the mid-day peak.



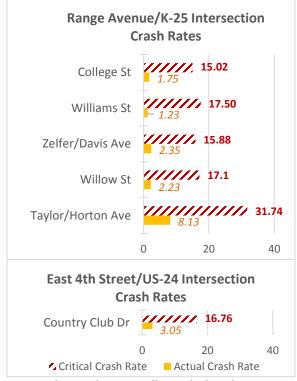
Safety

KDOT conducted a Road Safety Audit (RSA) in 2013 for the area of Colby which included five of the study intersections on Range Avenue and the intersection of East 4th Street/US-24 and Country Club Drive. Crash rates and critical crash rates developed in the RSA were based on reported data for the period of 2009 through 2011.

Intersection crash rates and critical crash rates are included in Table 3.1. All intersection crash rates were below the critical crash rates.

Further review of crash data at East 4th Street/US-24 was completed as part of the analysis of the intersection. KDOT provided crash reports for the past five-year period (2008 through 2012). It was noted out of the 10 crashes at the intersection during this period, four were right-turn crashes, and four were turning crashes.

Table 3.1 Intersection Crash Rates



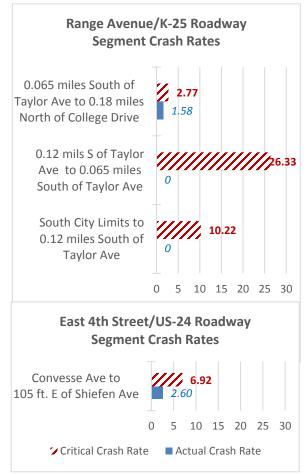
Reported in crashes per million vehicle miles

The RSA also included crash rates for roadway segments along Range Avenue/K-25 in the study area which are summarized in Table 3.2. Furthermore, the segment of East 4th Street/US-24 containing the Country Club Drive intersection was included. All of the roadway segment crash rates were significantly lower than the critical crash rates.

Access Control

K-25 is identified by KDOT as Class B "Most important for statewide & interstate travel" north of I-70 in the study area and is a planned corridor/area. South of I-70, K-25 is a Class D "Routes for inter-county movement" roadway.

Table 3.2 Roadway Segment Crash Rates



Reported in crashes per million vehicle miles

K-25 currently does not have access control in the study area. Six driveways have direct access on Range Avenue/K-25 between Willow Street and Davis Avenue, a distance of approximately 2,000 feet. Between Davis Avenue and College Street, access spacing on Range Avenue/K-25 is approximately 1,200 feet. Local streets within the study area have many driveway accesses. Willow Street has a high density of access driveways as compared to the other local streets.

Environmental Resources/Constraints

The presence and location of environmental resources, both natural and built, are important to consider during the development of alternatives. Use of federal funds for

Area Transportation Plan Colby, Thomas County, Kansas

transportation improvement projects requires compliance with the National Environmental Policy Act (NEPA) which must consider impacts. Even if federal funds are not being used, impacts to various environmental resources may require additional studies and permits.

Information in this section is intended to be utilized only as a resource during the NEPA or other environmental review/permitting processes. Depending on specific requirements, other resources may need to be considered in addition to the items listed in this section. An overview map of the environmental resources discussed in this section is on Exhibit 3.4.

Floodplains. Federal Emergency Management Agency (FEMA) requires construction within a floodway to cause no less than a 1 foot rise in the 100-year floodplain elevation. According to the FEMA maps for Colby and Thomas County, 100-year floodplain surrounds an unnamed tributary to Prairie Dog Creek on the western and northern boundary of the study area.

Historic Resources. Historic resources are protected under Section 106 of the National Historic Preservation Act of 1966. To be protected under this law, a property must be listed on, or eligible for, the National Register of Historic Places (NRHP). There are no properties listed on the NRHP within the study area. The Prairie Museum of Art and History is located within the study area and is comprised of several buildings from the 1930's and older.

Public/Recreational Land. Section 4(f) of the US Department of Transportation Act protects resources owned and open to the public with the primary purpose of recreation. The law protects against "use" of the resources. Colby Aquatic Park, located on Franklin Avenue between College Drive and Davis Avenue, would be expected to qualify for protection under Section 4(f). A small trail loop is located north of the Colby Aquatic Park and would also be

expected to qualify for protection under section 4(f).

Section (6)f of the US Department of Transportation Act protects properties which received funding from the Land and Water Conservation Funds (LWCF) from the National Park Service. Based on review of records for Thomas County, no properties within the study area received support from LWCF and therefore none qualify for Section 6(f) protection.

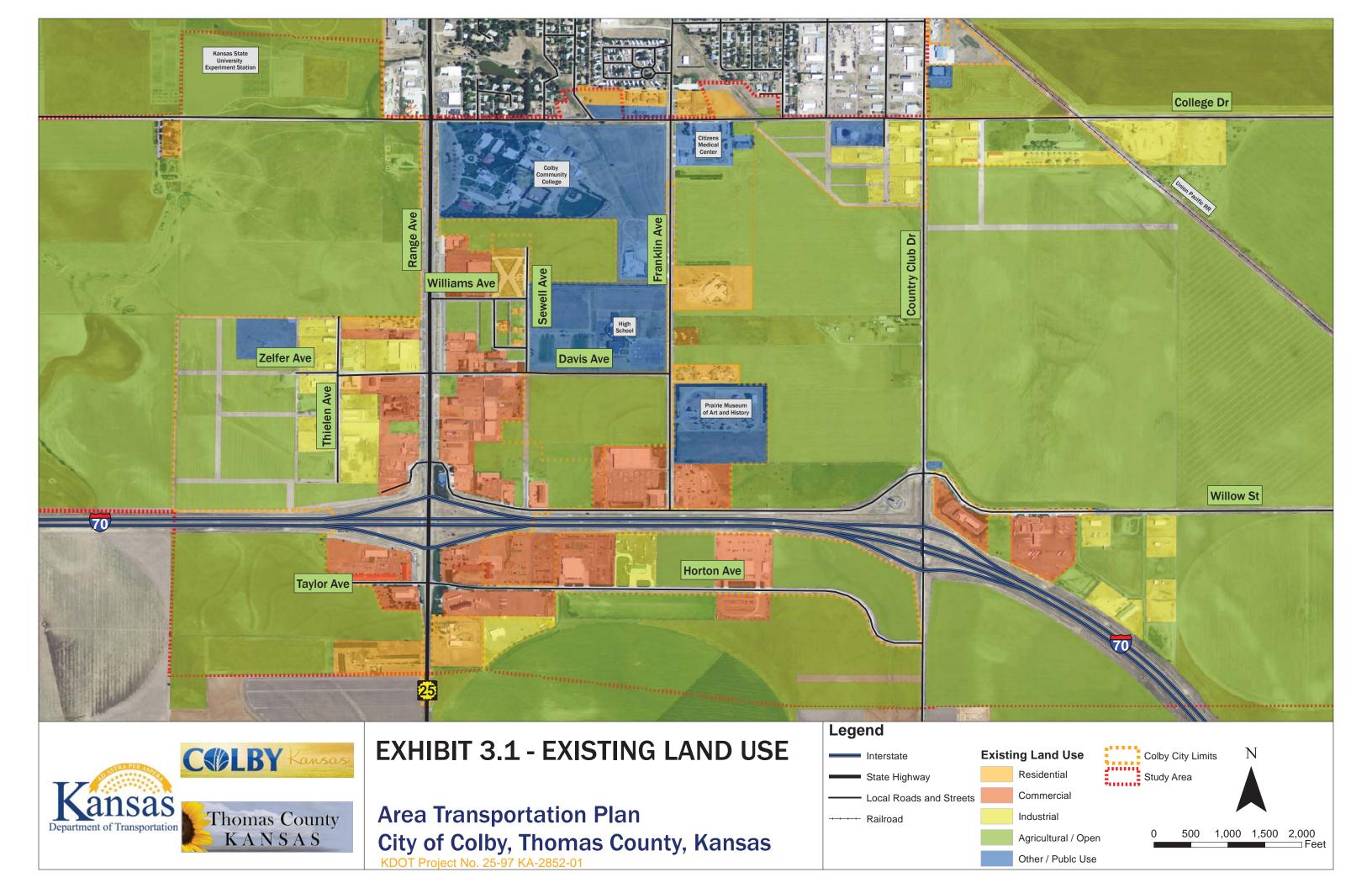
Threatened and Endangered Species. The Endangered Species Act of 1973 protects listed species. There are eight threatened and endangered (T&E) species with a range extending into Thomas County and seven of these species are in need of conservation. While the range for T&E species extends into Thomas County, there are no areas designated as "critical habitat" within the county. None of these species are expected to exist within the study area due to the lack of surface water sources, frequent human disturbance, and lack of forested areas.

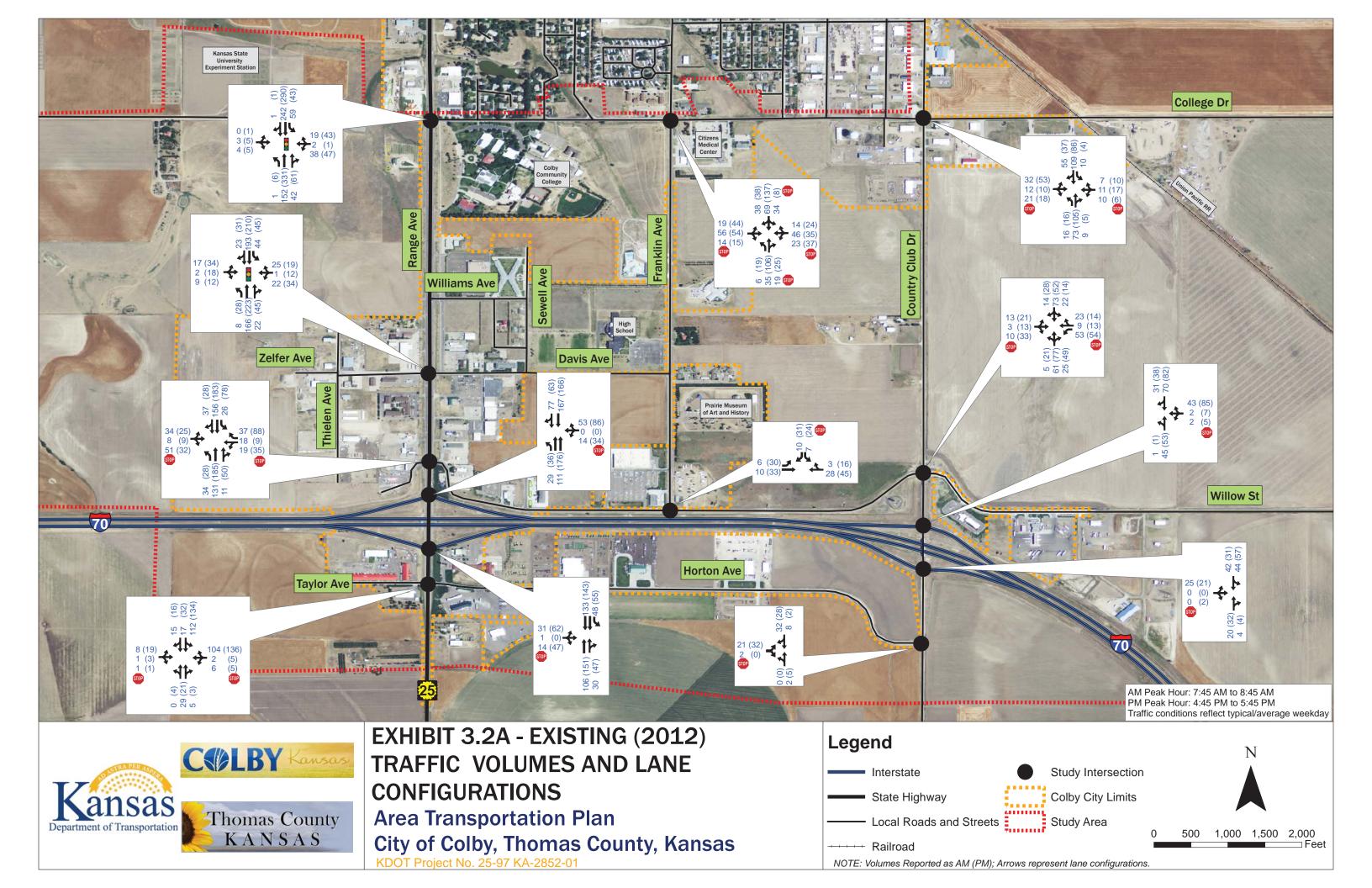
Surface Water Resources. The US Army Corps of Engineers (USACE) regulates impacts to Waters of the US. There are no major streams or lakes within the study area, with an unnamed tributary being the closest located on the west side of the study area. The unnamed tributary is likely considered "Waters of the US" because it has a connection (flows) into a major water, Prairie Dog Creek.



Wetlands. The USACE has authority to regulate impacts to wetlands. According to the National

Wetlands Inventory (NWI), several wetland areas exist in the study area mostly near Willow Street and the I-70 & Country Club Road interchange. Natural depressions and low-lying areas have the potential to contain wetlands.





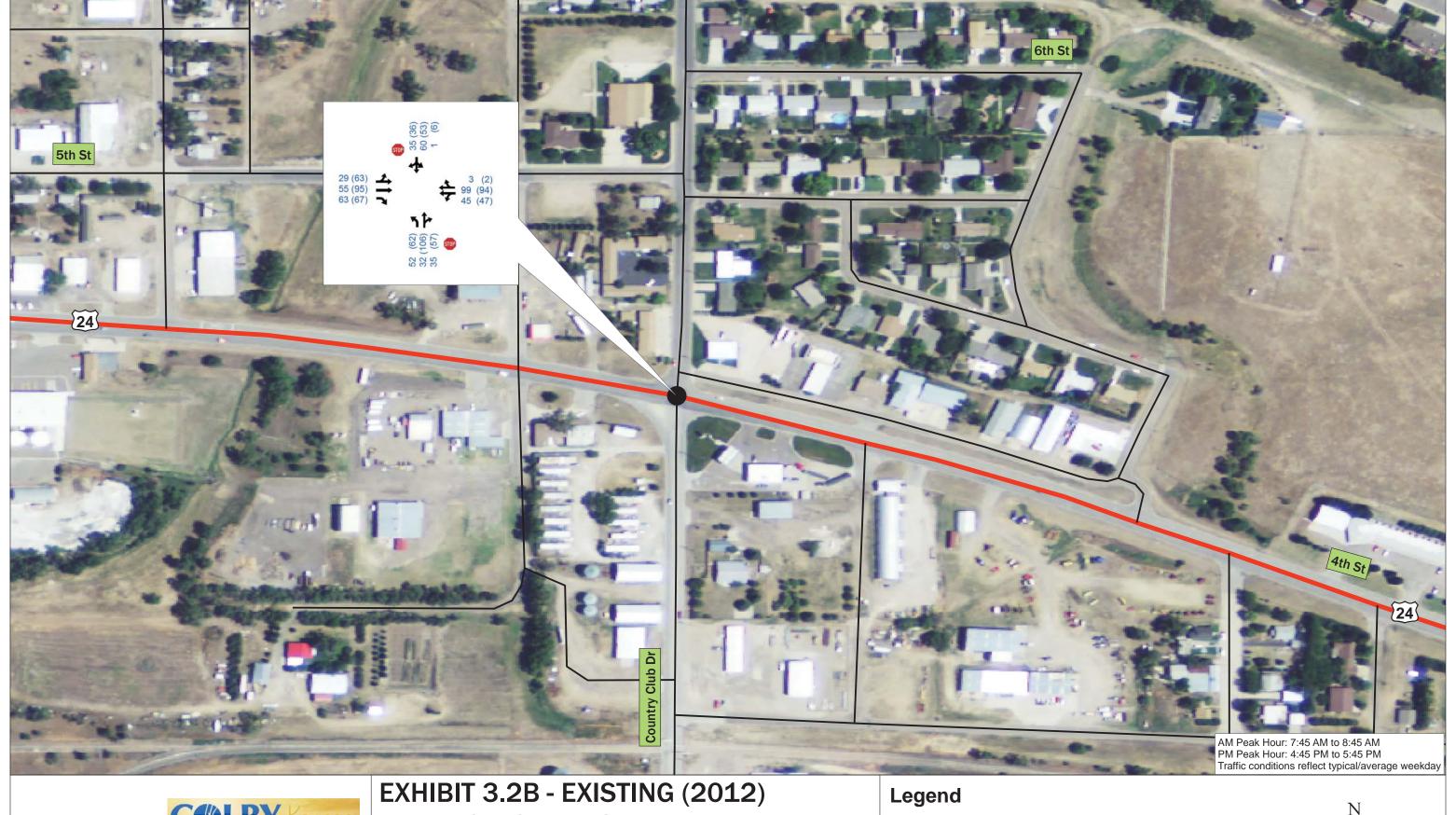
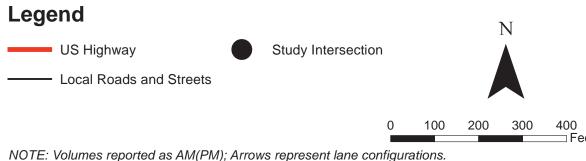
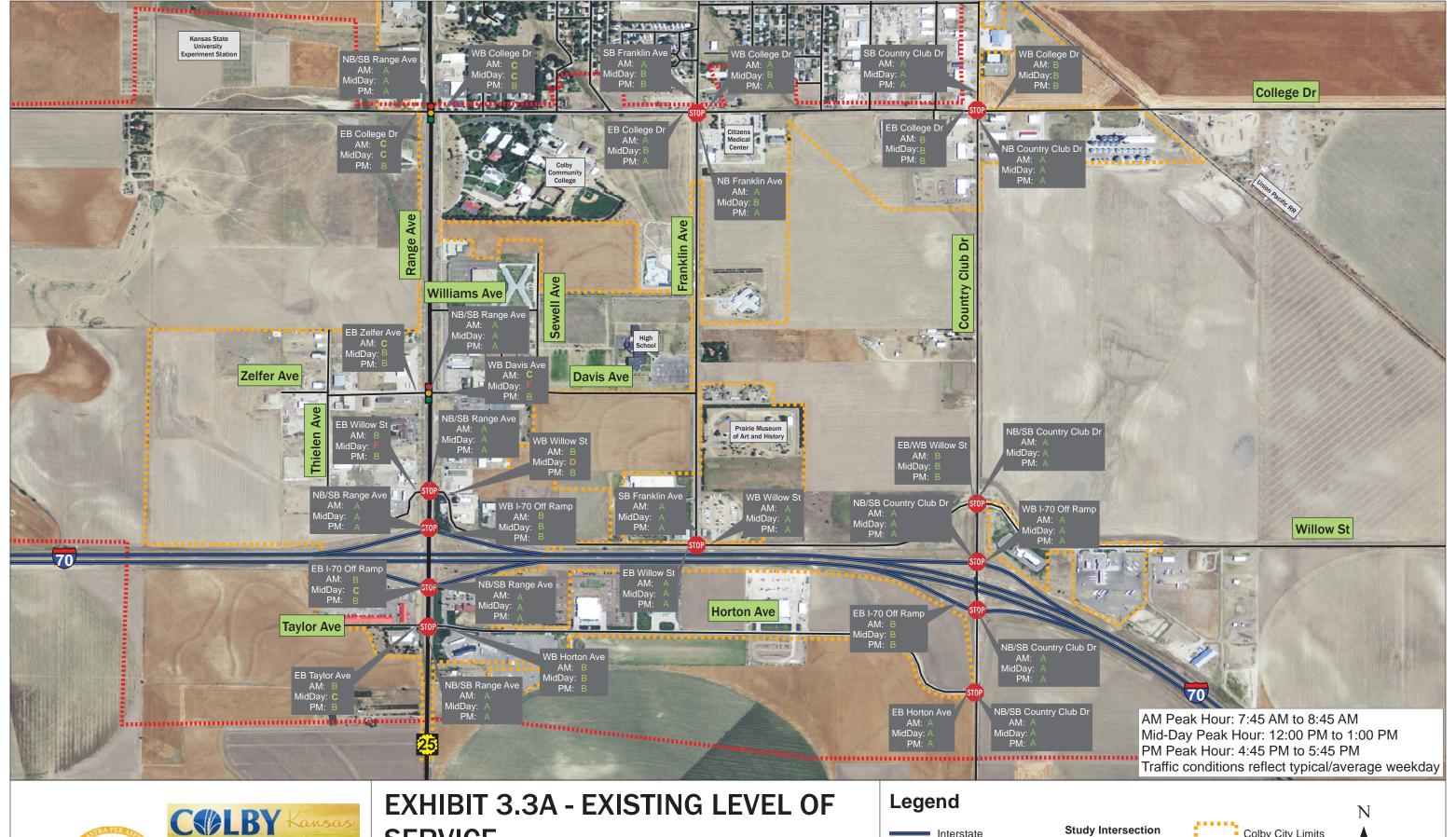




EXHIBIT 3.2B - EXISTING (2012)
TRAFFIC VOLUMES AND LANE
CONFIGURATIONS
Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01







SERVICE

Area Transportation Plan City of Colby, Thomas County, Kansas

KDOT Project No. 25-97 KA-2852-01

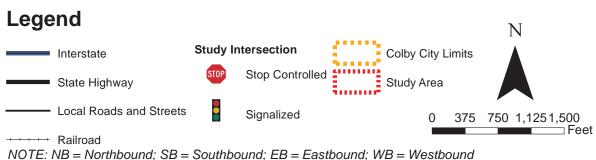




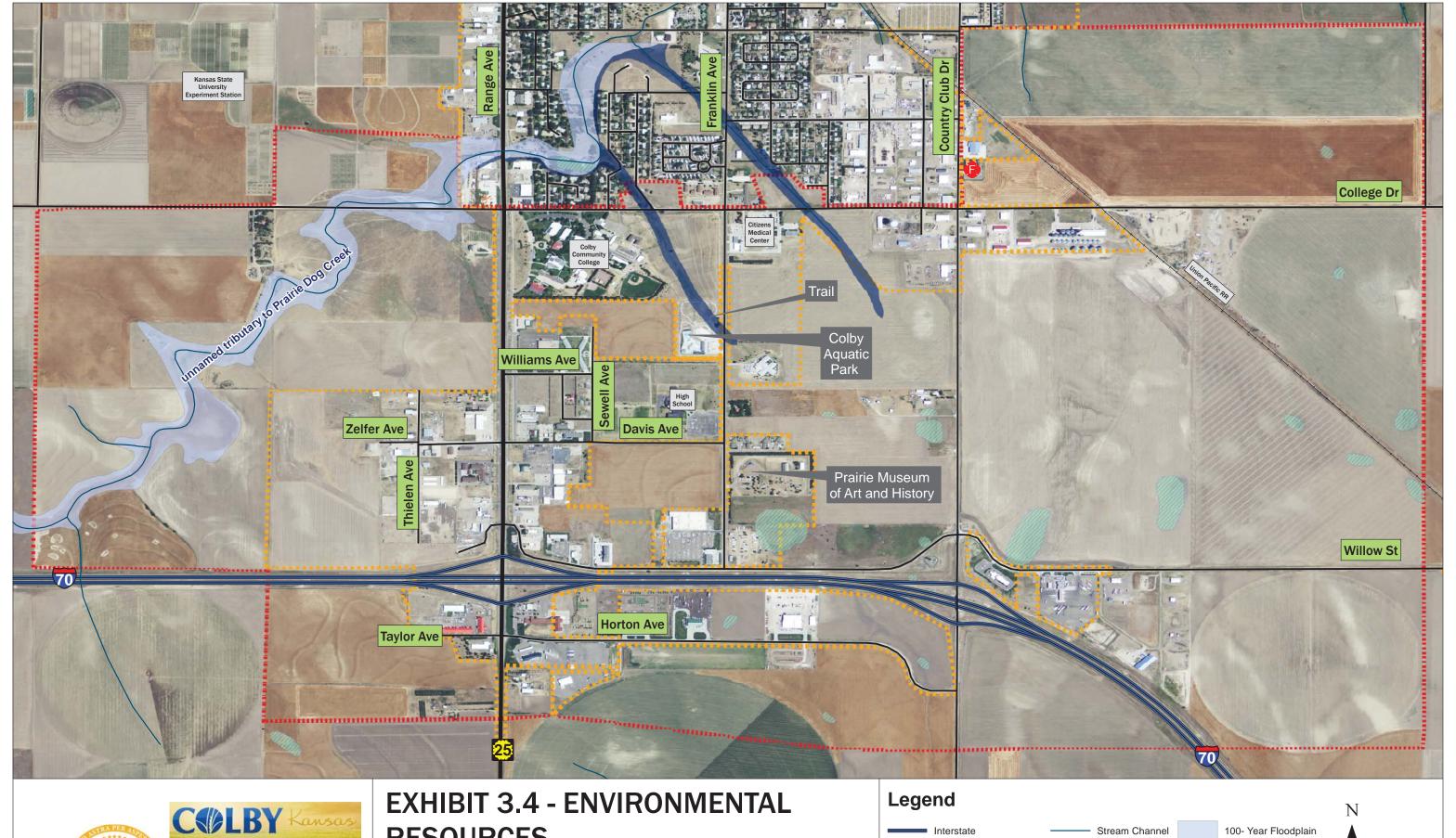


EXHIBIT 3.3B - EXISTING (2012) LEVEL OF SERVICE

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01



NOTE: NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

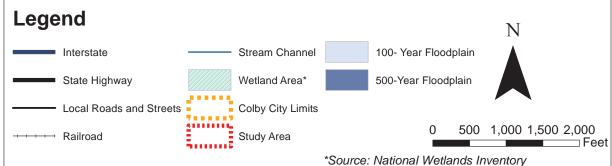




RESOURCES

Area Transportation Plan City of Colby, Thomas County, Kansas

KDOT Project No. 25-97 KA-2852-01



4. FUTURE CONDITIONS

In order to assess the future needs of the transportation network, future conditions of the study area need to be developed. This section summarizes the assumptions, methodology, and results of the development of the future conditions. Anticipated needs in the transportation network identified in the future conditions served as support to generate improvement concepts.

AM and PM peak hour periods on a typical weekday were analyzed for the future conditions because these periods would be expected to experience the most growth and would be the worst LOS scenario. Existing needs during the weekends and the mid-day weekday hour would likely be the same or not as significant as the future anticipated needs during the AM and PM peak hours.

Multiple future scenarios were established in order to better determine when improvements might be needed. Future conditions were divided into the following scenarios:

- Short-Term (0-5 years 2018)
- Medium-Term (5-10 years 2023)
- Long-Term (10-20 years 2033)

Land Use

In order to predict conditions on the roadway network in the future, the framework for development in the area must be first established. Land use is related directly to the generation of traffic. Traffic is generated from employee and customer trips and the type of land use dictates the magnitude of traffic.

Growth and development is anticipated to continue within the study area throughout all the future scenarios. Several areas are currently platted with development expected to occur within the short term period while other areas have no known development plans at this time.

Future land use was estimated utilizing multiple sources of information including stakeholder



(land owner) interviews, the city zoning map, and Colby's future land use plan. Zoning and future land use from the comprehensive

plan are included in Exhibits 4.1 and 4.2 respectively. Estimated areas of development are approximate and do not in any way suggest the land has been committed to the development type and/or timeframe.

Exhibit 4.3 includes the anticipated land use within the study area utilized for analysis of the short, medium, and long term future periods.

Short-Term. Development during the short term period is expected to occur primarily in areas currently platted. While the platted areas are not expected to fully develop in the next five years, they are the most likely to develop first based on input from landowners/stakeholders and availability of utility services. A public Multipurpose Activity Center (MAC) is planned along the east side of Franklin Avenue just north of Davis Avenue. Although funding and plans for the center are uncertain at this time, it was assumed the facility would be in place within the short-term period. A summary of the development assumed for this period includes:

- Industrial platted areas are west of Range Avenue/K-25 south of Zelfer Avenue, along Horton Avenue, south of College Drive on both sides of Country Club Drive, and south of Willow Street east of Country Club Drive.
- Commercial platted lots exist along Range Avenue/K-25 just south of Williams Avenue, near Willow Street and Sewell Avenue intersection, and south of Horton Avenue on Range Avenue/K-25.

Area Transportation Plan Colby, Thomas County, Kansas

 Residential platted lots exist between Davis Avenue and Williams Avenue on the west side of Sewell and some of these would be expected to develop during the short term period.

Medium-Term. During the medium term, the majority of currently platted lots are expected to be developed in addition to other areas. Development patterns for the medium term outside the platted areas followed the City's zoning regulations and future land use plan. Some of the lots adjacent to the Citizens Medical Center were assumed to be developed

during this term with healthcare or clinic-related offices. A summary of the development assumed for this period includes:



- Industrial development was expected to further infill platted areas discussed in the short-term.
- Commercial development areas were located along Sewell Avenue between Willow Street and Davis Avenue, the west side of Range Avenue/K-25 around Williams Avenue, and Willow Street between Franklin Avenue and Country Club Drive.
- Residential development outside of the currently platted areas was forecasted to occur along Sewell Avenue north of Williams Avenue (north of Colby High School property), southwest of the intersection of Franklin Avenue and Davis Avenue (north of Wal-Mart), and on the east side of Franklin Avenue south of College Street (south of Citizens Medical Center).

Long-Term. Development for the long term scenario was primarily projected utilizing the City's zoning regulations and future land use plan. Areas which did not have development plans identified and where development seems

reasonable during the long term period were included in the scenario. Remaining parcels adjacent to the hospital were assumed to be developed during the long-term into healthcare or clinic related uses. A summary of the development assumed during this period includes:

- Industrial development was expected to occur in the area north of Willow Street east of Country Club Drive and on the east side of Country Club Drive south of I-70 as well as east of Range Avenue/K-25 along Zelfer Avenue.
- Commercial development areas were placed along the frontage of Country Club Drive between Willow Street and College Street and a small area on Taylor Avenue west of Range Avenue/K-25.
- Residential development was forecasted to occur in the areas along Sewell Avenue south of Davis Avenue, north of Williams Avenue (north of Colby High School property), southwest of the intersection of Franklin Avenue and Davis Avenue, and along the east side of Franklin Avenue south of College Street (south of Citizens Medical Center).

Traffic Operations

In order to estimate the traffic conditions in the future, several factors affecting traffic volumes on the transportation network within the study area need to be considered. First, development and other factors outside the study area can affect traffic traveling through the study area or originating and terminating at existing development in the study area. Estimates for the increase in this "background" traffic were developed based on historic growth rates of traffic in the area of Colby. Table 4.1 includes the growth rate utilized for the study.

Second, development inside the study area would increase traffic. Forecasted land uses discussed in this chapter were utilized to estimate the traffic. The Institute Transportation Engineers (ITE) Trip Generation Manual (9th Edition) was utilized to estimate the trips generated by the future land use based on the type and size of development. Table 4.1 includes the types of land uses utilized from the ITE manual. Exhibits 4.4, 4.5, and 4.6 include the traffic volumes generated for future development for the short, medium, and long term scenarios respectively. Forecasted traffic volumes for East 4th Street/US-24 & Country Club Drive for short, medium, and long term are included in Exhibit 4.7.

Table 4.1 Future Traffic Estimation Methodology

Existing Traffic

Measured Traffic Volumes Obtained 2012



Traffic Growth due to Factors Outside Study Area

Annual Growth Rate of 1% applied to Existing Traffic Volumes; Average Growth Rate from 2003 to 2012 for Two Segments on K-25 and Two on US-24 Near Colby from KDOT Traffic Flow Maps



Traffic Generated by Development in Study Area

ITE Trip Generation Manual, 9th Edition <u>Industrial</u>: General Light Industrial (110); General Heavy Industrial (120)

<u>Commercial:</u> Drive-In Bank (912); Gasoline/Service Station with Convenience Mart (945); Fast-Food Restaurant with Drive Through Window (934); General Office Building (710); Hotel (310); Specialty Retail Center (814); Quality Restaurant (931); Others

<u>Residential:</u> Single Family Detached Housing (210)



Future Traffic

Combined All of the Above

Estimated future traffic volumes for the three future scenarios were utilized with the existing transportation infrastructure to determine the anticipated LOS. Exhibits 4.8A and 4.8B include the anticipated LOS for the intersection approaches for the future scenarios.

Traffic on Range Avenue/K-25 and Country Club Drive would be expected to continue operating at acceptable levels through the long-term period. Delay to vehicles on roads intersecting Range Avenue/K-25 would continue to increase and is anticipated to reach LOS "D" or worse on College Drive, Willow Street, I-70 ramps, and Horton Avenue/Taylor Avenue.

Intersecting streets to Country Club Drive, including College Drive, Willow Street, and I-70 eastbound ramps, would increase in delay to reach LOS "D" or worse. Existing conditions at the intersection of Willow Street & Franklin Avenue are expected to accommodate vehicles through the long-term period with acceptable delay of LOS "C" or better. Vehicles on both College Street and Franklin Avenue are expected to experience increased delay to reach LOS "D" or worse for all approaches to their intersection.

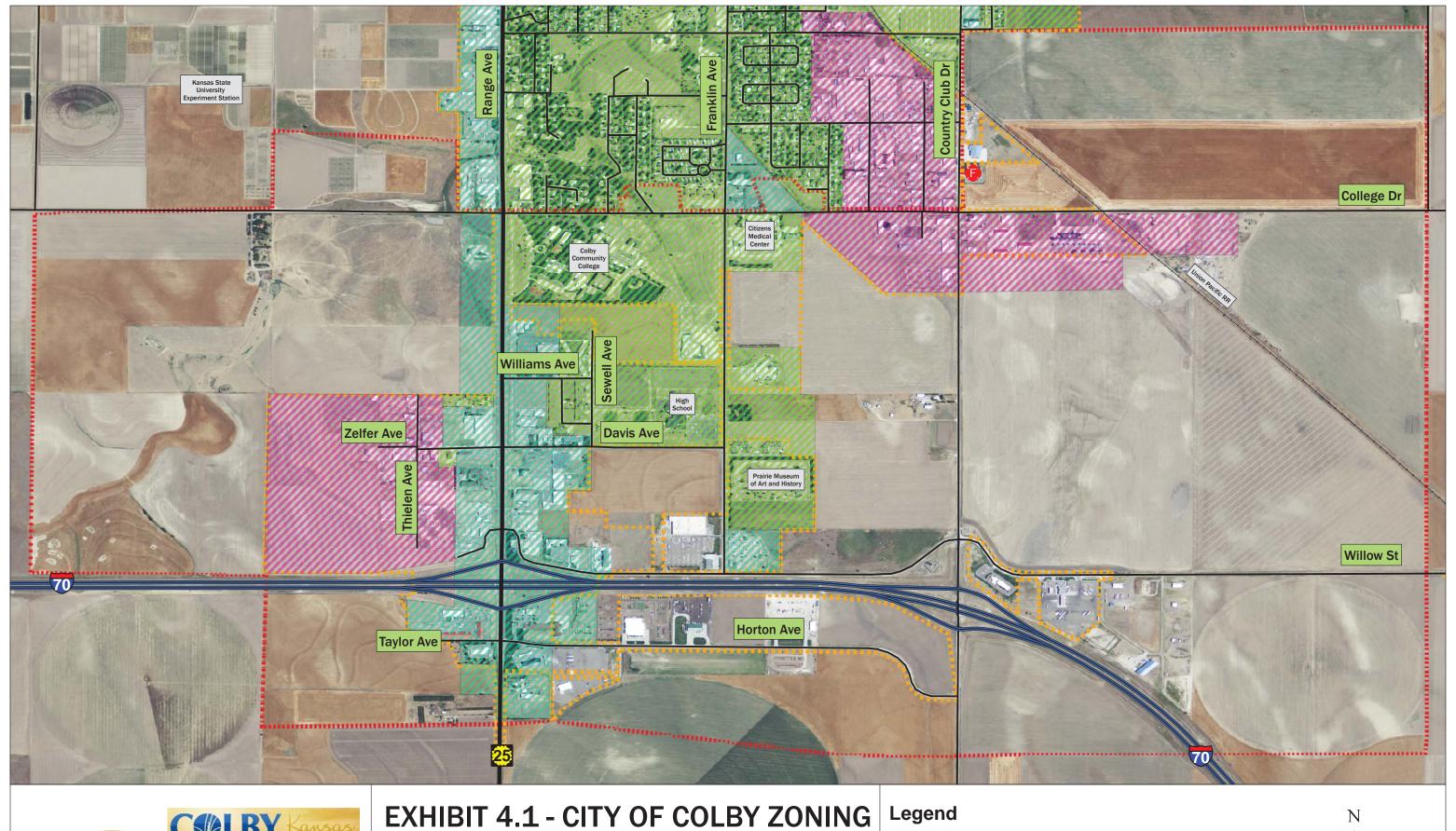
Transportation Needs

Based on the review of the traffic operations with anticipated future traffic, it is apparent improvements should be considered to provide additional capacity. LOS at "D" or worse indicates there is high and unacceptable levels of delay experienced by drivers. Intersections and approaches with LOS at those levels need additional capacity to reduce delay (and thus increase LOS). Table 4.2 summarizes the intersections/approaches anticipated to with delay. operate high Alternatives considered to provide additional capacity are provided in the following section.

It should be noted, the needs for transportation improvements are dependent on the traffic forecasts which are assumptions. If land use develops in a similar fashion as the framework developed for this study, the transportation needs would be anticipated to be similar to those identified in Table 4.2.

Table 4.2 Future Transportation Needs

Table 4.2 Future Transportation Needs					
Period	Intersection Approaches with				
	Movement at LOS "D" or worse				
Short-Term	-Range Avenue / K-25 & Willow Street (2) -Range Avenue / K-25 & EB I-70 Ramps (1) -Range Avenue / K-25 & Horton Avenue / Taylor Avenue (1)				
Medium-Term	-Range Avenue / K-25 & College Drive(1) -Range Avenue / K-25 & Willow Street (2) -Range Avenue / K-25 & WB I-70 Ramps (1) -Range Avenue / K-25 & EB I-70 Ramps (1) -Range Avenue / K-25 & Horton Avenue / Taylor Avenue (1) -Country Club Drive & Willow Street (2) -Country Club Drive & College Street (1) -Franklin Ave & College Drive (4)				
Long-Term	-Range Avenue / K-25 & College Drive (1) -Range Avenue / K-25 & Willow Street (2) -Range Avenue / K-25 & WB I-70 Ramps (1) -Range Avenue / K-25 & EB I-70 Ramps (1) -Range Avenue / K-25 & Horton Avenue / Taylor Avenue (2) -Country Club Drive & EB I-70 Ramps (1) -Country Club Drive & Willow Street (2) -Country Club Drive & College Street (2) -Franklin Ave & College Drive (4)				

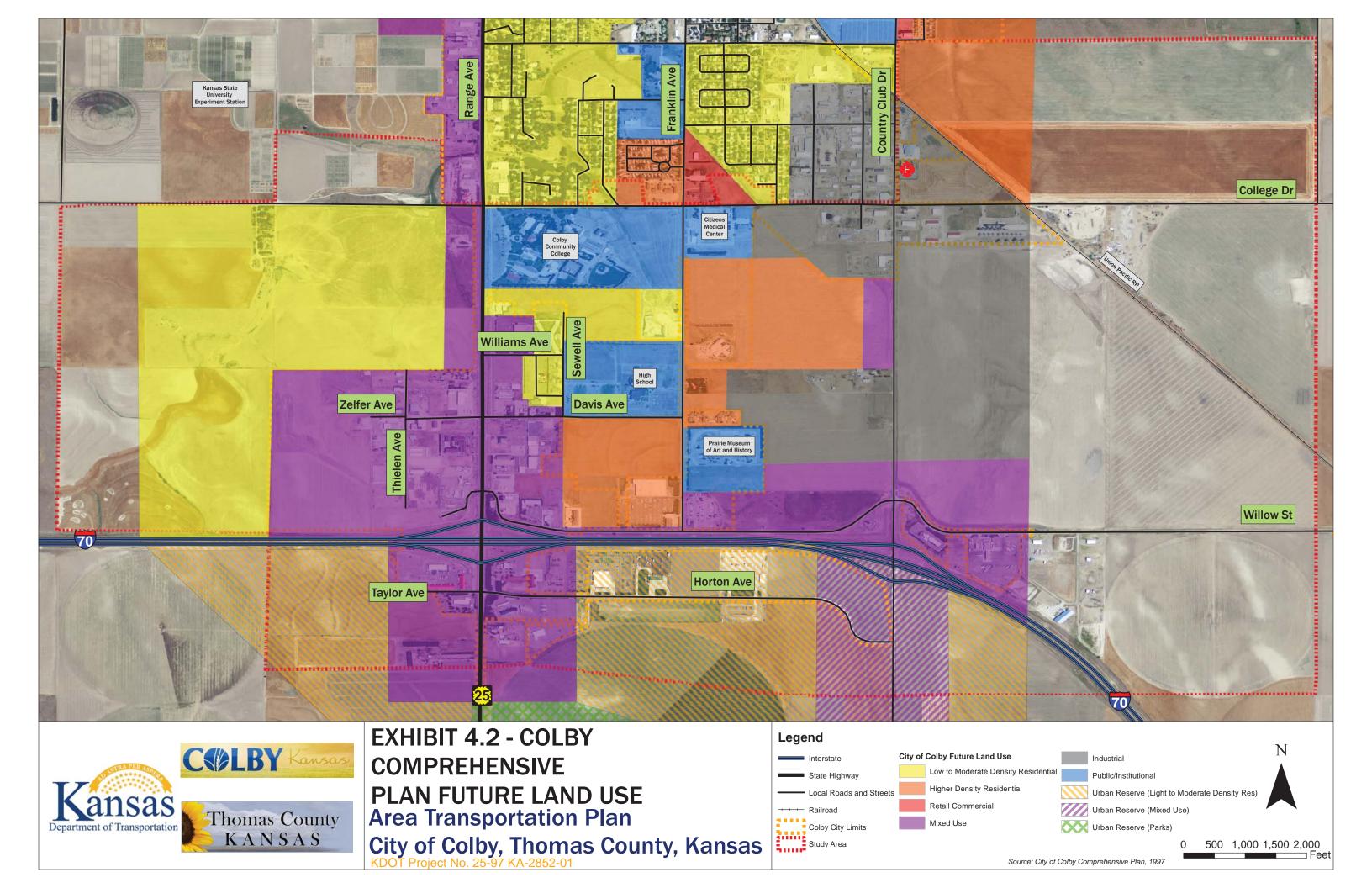


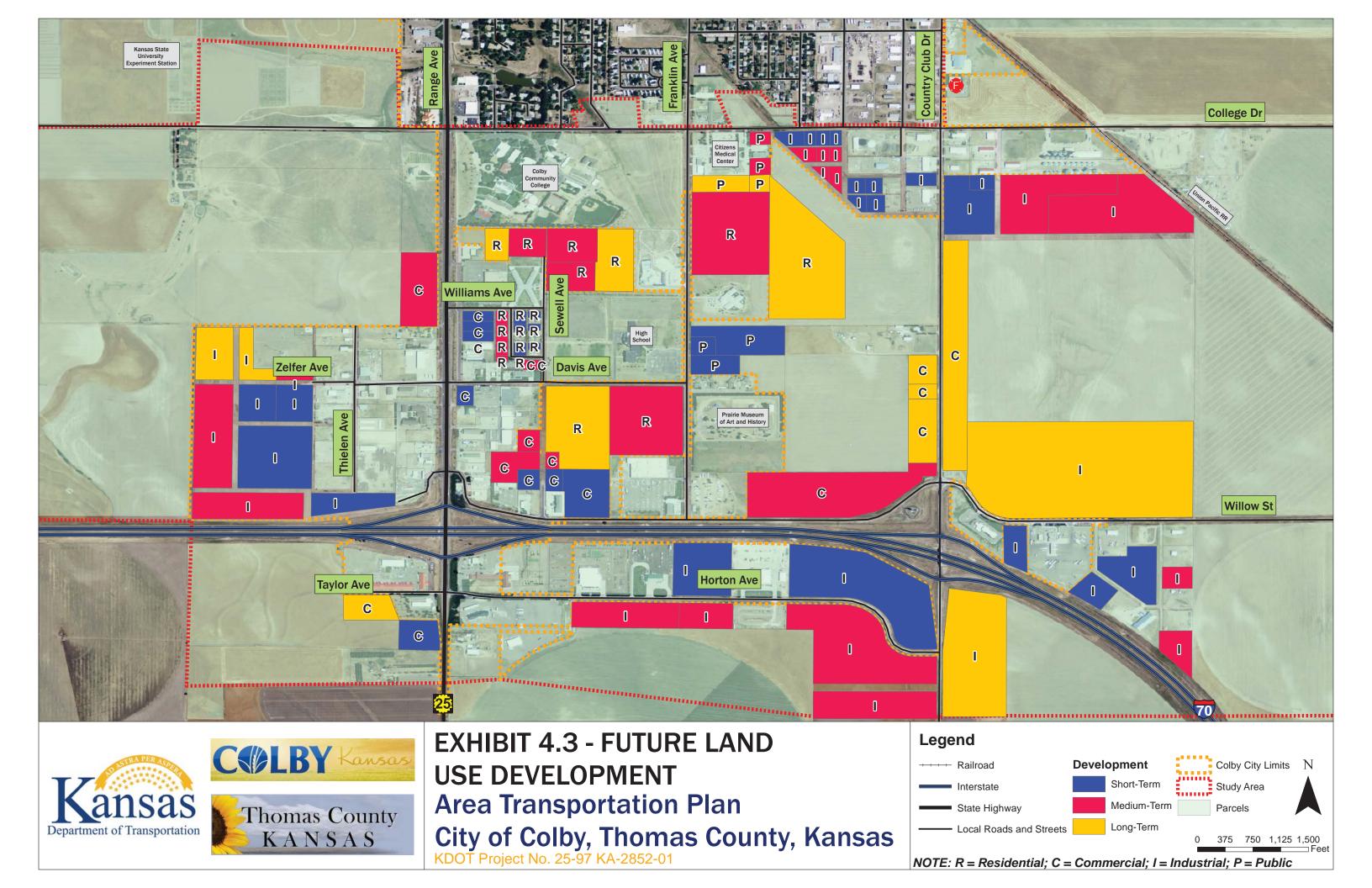


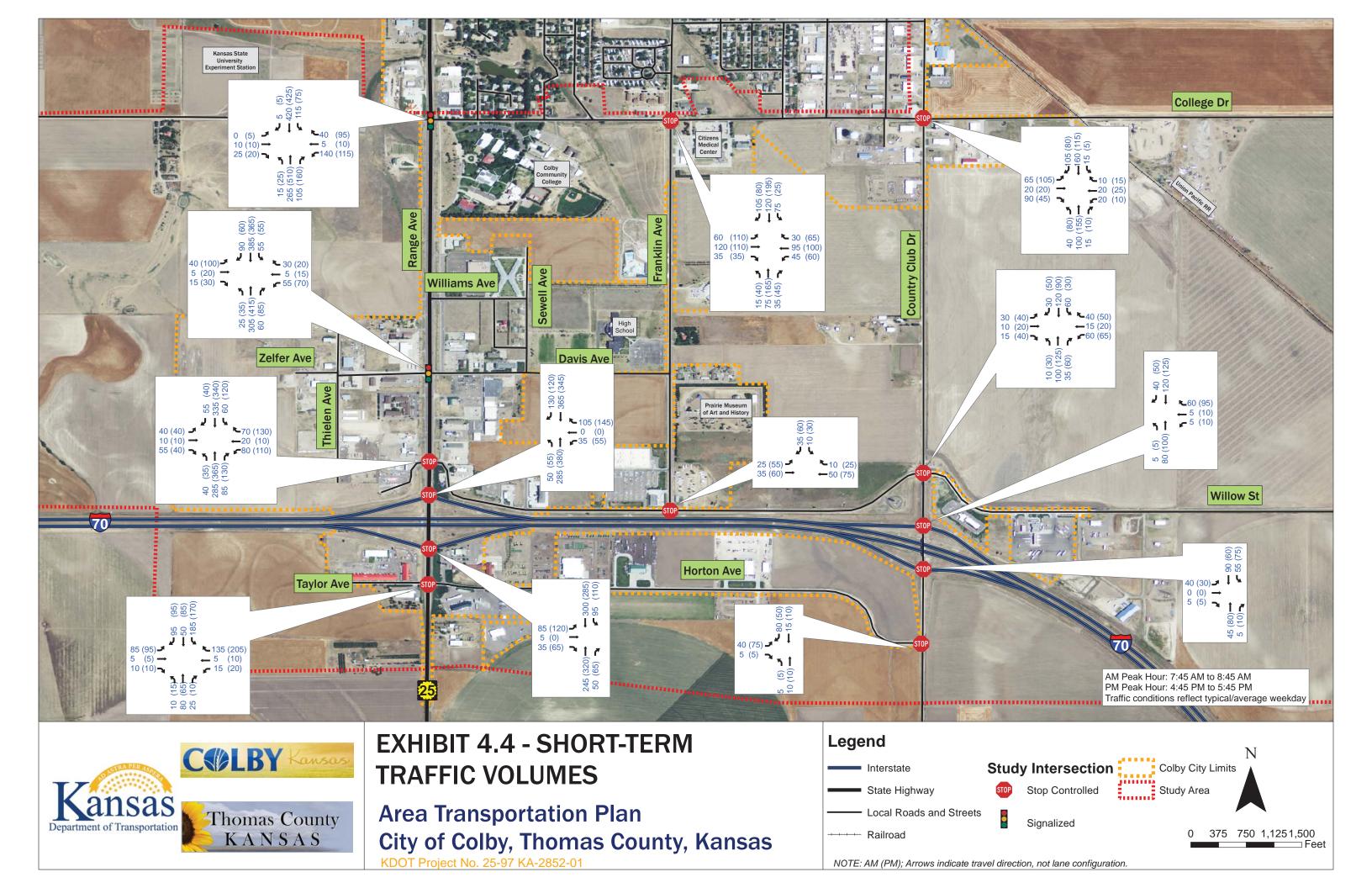
Area Transportation Plan City of Colby, Thomas County, Kansas

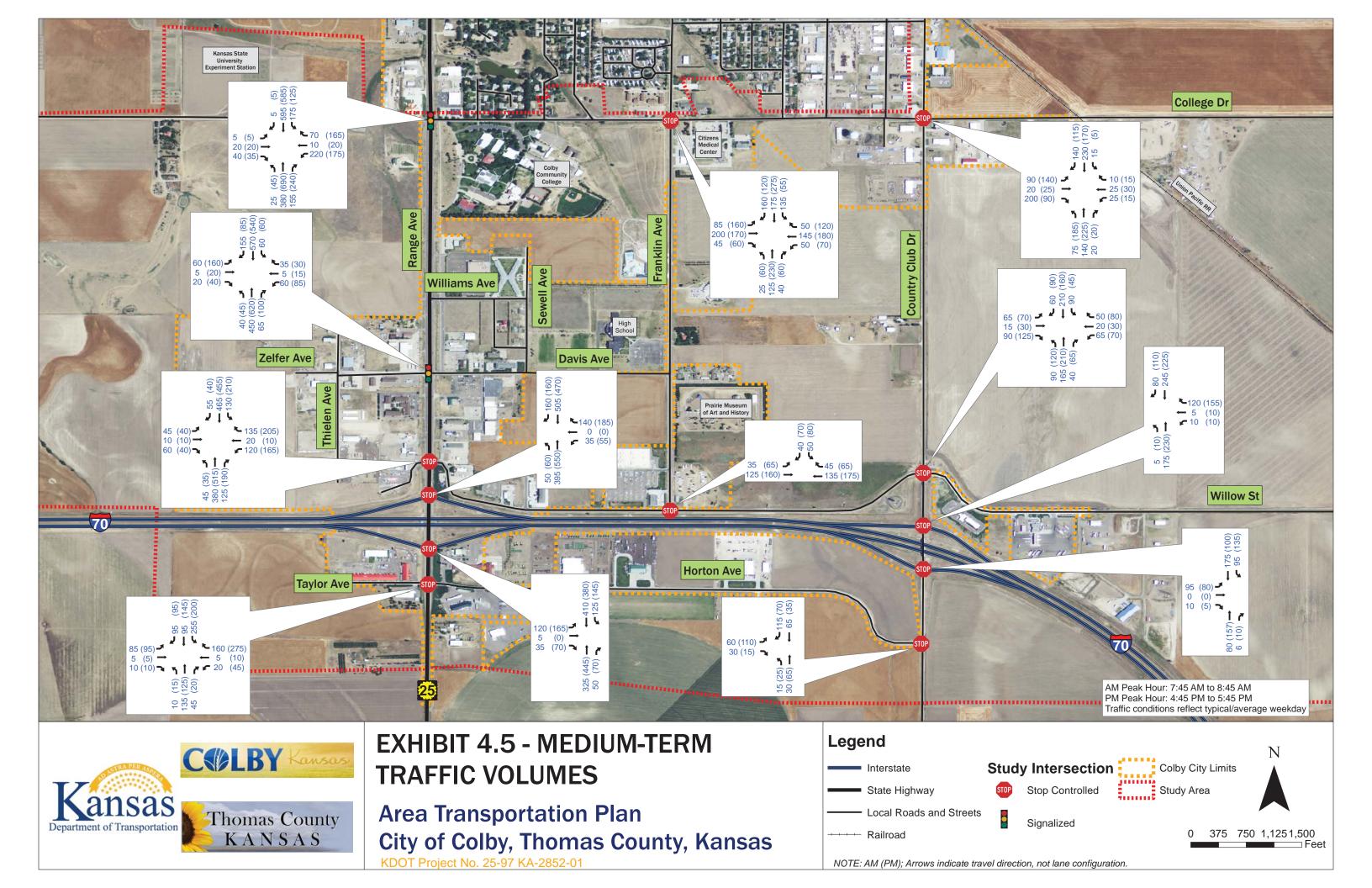
KDOT Project No. 25-97 KA-2852-01

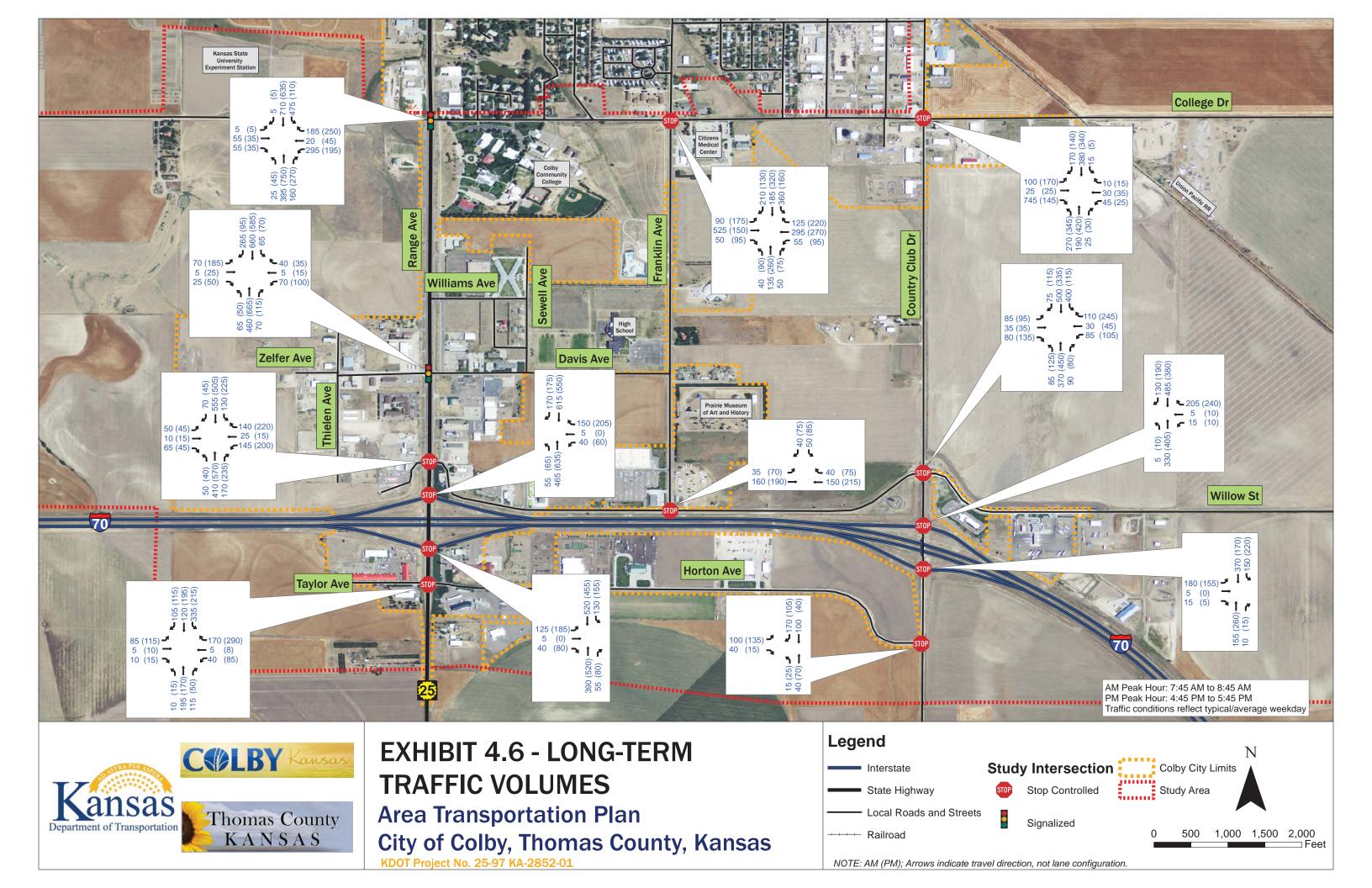


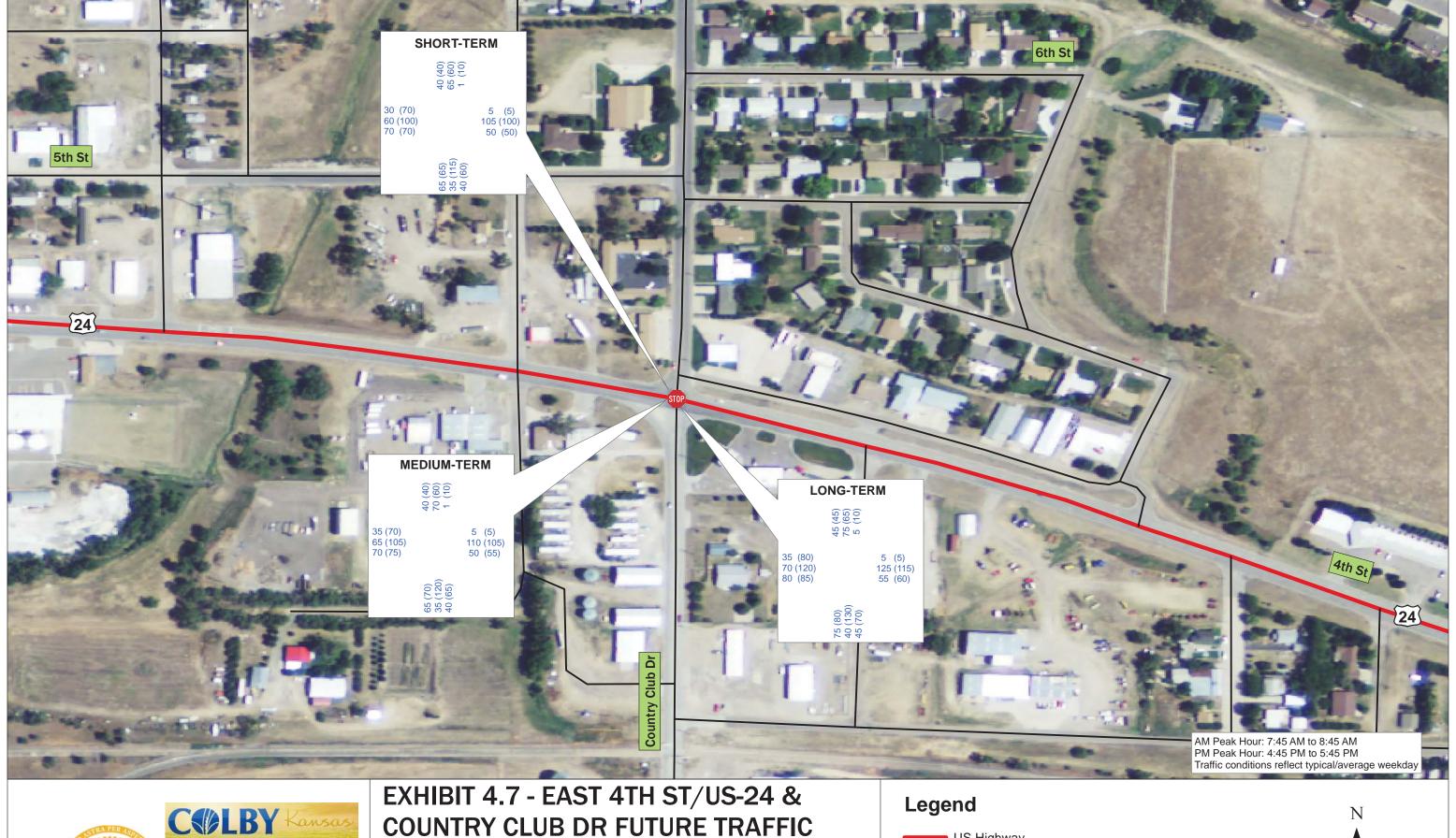








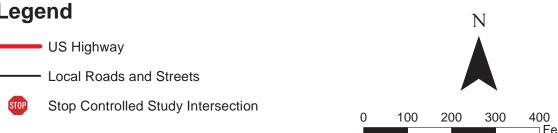






COUNTRY CLUB DR FUTURE TRAFFIC VOLUMES

Area Transportation Plan City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01



NOTE: AM (PM); Arrows indicate travel direction, not lane configuration.

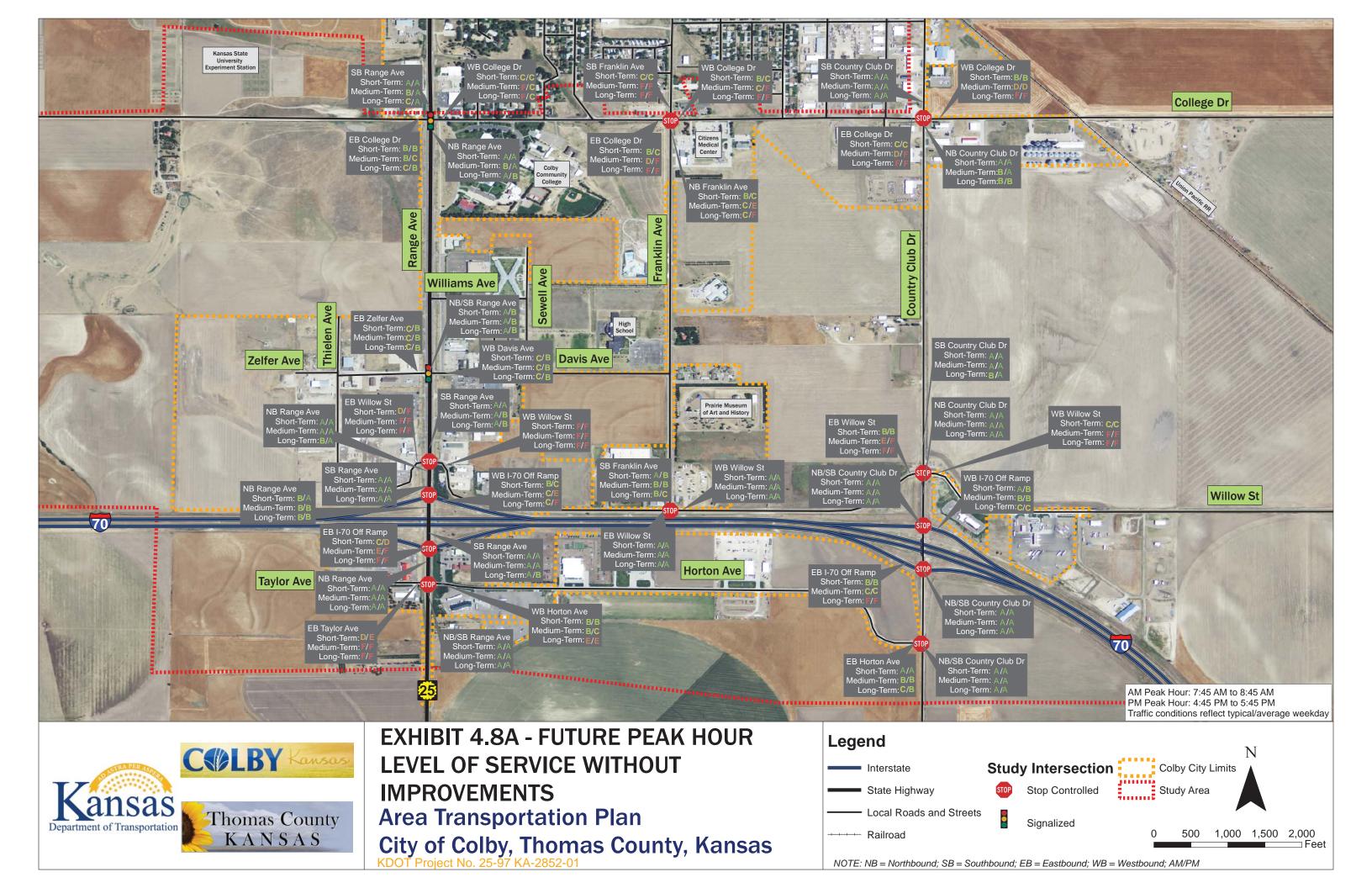






EXHIBIT 4.8B - FUTURE PEAK HOUR LEVEL OF SERVICE WITHOUT IMPROVEMENTS

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

US Highway
Local Roads and Streets
Stop Controlled Study Intersection
0 100 200 300 400
Fe

NOTE: NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound

5. TRANSPORTATION ALTERNATIVES

Improvement concepts were developed for the locations where the delay to drivers was anticipated to reach unacceptable levels for the future conditions. To reduce delay and improve LOS, additional capacity improvements should be considered. Capacity improvements can be accomplished using many different strategies. Improvement strategies utilized during the alternatives development included, but were not limited to, the following:

Infrastructure Improvements

- Auxiliary/Turn Lanes
- Roundabout
- Traffic Signals

Non-Infrastructure Improvements

- Signal Phasing/Timing
- Signing/Marking
- Intelligent Transportation Systems
- Access Management
- Regulation (Speed Limit, Lane Use, etc.)

Improvements to address transportation needs during the AM and PM peaks are expected to address congestion experienced during weekday mid-day and weekend peaks.

Short-Term

Development and traffic growth in the short-term period (within 5 years) is expected to increase traffic in the study area. Several locations are expected to benefit from improvements to accommodate the increase in traffic. Signal warrants as defined in the *Manual of Uniform Traffic Control Devices (2009 edition)* were checked and met with the anticipated traffic volumes for recommendations to install signals. The signal warrant analysis for the future conditions included only the peak hour warrant. Before traffic signals are constructed, additional warrants other than the peak hour

warrant may need to be met with actual measured traffic volumes.

Improvements for those locations are summarized in Exhibit 5.1 and are described in the following paragraphs. Concepts of the improvement options are included in Appendix 3.

Ranae Avenue/K-25 & College Drive. Northbound and southbound left-turning vehicles are expected to experience increased delay due to increasing opposing through traffic. In order to reduce the delay and reduce the queue lengths expected to occur, it is recommend consider adding to protected/permitted left-turn phase for the left turn lanes on Range Avenue/K-25. Depending on the age of the traffic signal equipment, it may be worth replacing and upgrading the signal with new equipment. At a minimum, new signal heads would be needed as well as changing the signal timing and detector control. In addition, the westbound approach would need to be restriped for one exclusive left-turn lane and one shared through/right-turn lane. These improvements would reduce delay and excessive queue lengths expected at the intersection.

Avenue/K-25 & Willow Range Street. Improvements are expected to be needed at this intersection during the short-term period because of high delay currently experienced by vehicles on Willow Street. Several options were considered to improve traffic operations at this intersection. **Improvements** with intersection need to be closely coordinated with access management alternatives on Range and improvements to Avenue/K-25

Westbound I-70 ramp intersection with Range Avenue/K-25 due to the close spacing of



Area Transportation Plan Colby, Thomas County, Kansas

the ramps to Willow Avenue. Discussion on the Willow Street intersection's role in the access management and intersection spacing is included subsequent sections. A traffic signal is the most likely feasible solution for the short-term. Traffic signal warrants are not currently met, but traffic volumes should be periodically reviewed to determine when signal warrants are met.

A roundabout was also considered as an option for the intersection to provide additional capacity for desirable traffic operations.

- Roundabout at Willow Street A roundabout located at the intersection would be expected to operate with acceptable conditions. Adequate median length is needed on the approaches to a roundabout to guide vehicles in/out of roundabout and to prevent vehicles backing up into the roundabout. To achieve a desired median length, some of the access driveways on Willow Street on both sides of Range Avenue/K-25 would be converted to right-in right-out.
- Roundabout at I-70 Westbound Ramps A roundabout at the existing location of the intersection has challenges including close spacing of the access driveways west of Range Avenue/K-25 and the curvature of Willow Avenue on the east. These challenges could be addressed by moving the intersection south, allowing more separation from the access driveways and a straighter entrance of Willow Avenue into the roundabout. Moving the Willow Street intersection south would require it to be placed approximately where the I-70 WB ramps meet Range Avenue/K-25 to avoid impacting the Visitors Center. A roundabout at this location would have several undesirable characteristics:
 - A median on Willow Street east of the roundabout would restrict access on the north-south segment of Willow Street to right-in/right-out.

At this location, the space between the south edge of the roundabout and the I-70 bridges over Range Avenue/K-25 is not adequate to achieve the desired separation between the roundabout and interstate ramps. In this case, the interstate ramps would need to enter the roundabout, for a total of six legs in the roundabout. Two legs would have two-lane approaches, while the other four would have only one lane. A roundabout with this many legs and varying lane configurations could be confusing and difficult to navigate.

Range Avenue/K-25 & I-70 EB Ramps. As traffic on Range Avenue/K-25 increases, the vehicles on the I-70 eastbound ramp will have to wait longer for acceptable gaps to enter traffic. Delays are anticipated to reach unacceptable levels during the short-term period. A traffic signal is warranted with the peak hour volumes expected in the short-term period. As mentioned in the discussion for the Willow Street intersection and the later section Range Avenue/K-25, Horton Avenue to Willow Street Corridor, there are several improvement options for this intersection (traffic signals, interchange roundabout, or Single-Point Urban Interchange, commonly called SPUI).

Range Avenue/K-25 & Horton Avenue/Taylor Avenue. A traffic signal is recommended to be considered at this intersection to reduce delay and queues to acceptable levels. In addition, exclusive northbound and southbound left-turn lanes should be considered. This can be accomplished by restriping the existing median pavement. Moving the left-turning vehicles to their own lane will allow for more efficient and safer through movements of the intersection. Peak hour signal warrants may not be met for the short-term period, but are expected to be met for the medium-term period at this intersection.

East 4th Street/US-24 & Country Club Drive. The intersection of East 4th Street/US-24 & Country Club Drive is expected to accommodate the expected traffic volumes in the short-term period. No improvements are expected to be needed at this intersection for the short-term period.

Medium-Term

Range Avenue/K-25 & Willow Street. If a traffic signal is installed at the intersection in the short-term period, it is recommended to consider striping the westbound approach for one exclusive left-turn lane and one shared through/right-turn lane to provide adequate capacity for the medium-term period.

Range Avenue/K-25 & I-70 WB Ramps. Vehicles on the I-70 westbound off-ramp are expected to begin to experience higher levels of delay during the medium-term period. Additional capacity is recommended to be considered and expected to be warranted at this intersection during the medium-term period. As mentioned in the discussion for the Willow Street intersection and the later section Range Avenue/K-25, Horton Avenue to Willow Street Corridor, there are several improvement options for this intersection (traffic signal timing, roundabout, or SPUI).

Franklin Avenue & College Drive. Traffic growth on both Franklin Avenue and College Drive are expected to increase delay at the intersection during the mid-term period. All approaches are expected to operate at unacceptable levels of delay for one or both of the AM and PM peak hour periods. In order to accommodate traffic at this intersection in the mid-term period, a traffic signal is recommended for consideration. A roundabout was considered as an option at this intersection, however, due to the driveways close to the intersection, it may not be feasible.

Country Club Drive and College Drive. During the mid-term period, vehicles on College Drive at Country Club are expected to experience

unacceptable levels of delay. These vehicles are under currently stop control at the intersection. A traffic signal is expected to be warranted this at location within the midterm period and should considered to



accommodate future traffic volumes. A roundabout was considered as an option at this intersection, however, there is not enough open space at the intersection to avoid impacting adjacent buildings.

College Drive Corridor. Due to the increased traffic volumes on College Drive and numerous access points, it is expected a three-lane roadway (one through lane in each direction and a two-way left-turn (TWLT) median lane) would be beneficial during the medium-term to provide adequate capacity for the corridor between Franklin Avenue and Country Club Drive. Street widening is recommended on the north side of the street to prevent the need to relocate street lights existing on the south side.

Country Club Drive Corridor. Country Club Drive is expected to serve as an alternate connector between I-70 and East 4th Street/US-24, paralleling Range Avenue/K-25. A three-lane roadway (one through lane in each direction and a TWLT median lane) exists north of College Drive and is recommended to consider extending the three lanes south through the I-70 eastbound ramps. As part of this improvement to the corridor, a wider bridge over I-70 should be considered to provide a three lane roadway with wide shoulders to accommodate large farm and implement equipment. Businesses south of I-70 along Avenue frequently utilize equipment and local farmers use the corridor to access areas on both sides of I-70. After coordination with KDOT, it was found the existing bridge is in good condition and the type structure of the bridge does

Area Transportation Plan Colby, Thomas County, Kansas

accommodate adding the additional width on the bridge. Therefore, it is expected complete replacement of the bridge would be needed to provide the additional width and because the bridge is in good condition, this may not occur until later in the future.

Country Club & Willow Drive Street. **Improvements** are recommended for consideration to this intersection during the medium-term period to accommodate anticipated traffic volumes. Two alternatives were considered: a traffic signal and a roundabout. Peak-hour warrants are expected to be met for a traffic signal at the intersection. A single-lane roundabout would accommodate future traffic but would require significant grading and realignment of the existing Willow Street approaches to avoid impacts to the electrical substation on the northeast corner of the intersection (see Exhibit A3.1 in Appendix 3 for concept). Citizens were concerned with the feasibility of a roundabout at this location because of the large implement traffic on Country Club Drive. Roundabouts can be designed to accommodate these types of large vehicles.

East 4th Street/US-24 & Country Club Drive. The existing intersection is expected to benefit from improved traffic control to accommodate growth in traffic both on East 4th Street/US-24 and Country Club Drive. Several concepts were developed for this intersection as summarized in the following:

- Concept 1 (see Exhibit A3.2 in Appendix 3 for concept) consists of reducing East 4th Street/US-24 to three lanes (from four-lane undivided to one lane in each direction with two-way left-turn lane). Previous KDOT investigations also provided this recommendation. Peakhour signal warrants are expected to be met at this location during the mediumterm period.
- Concept 2 (see Exhibit A3.3 in Appendix 3 for concept) consists of realigning

Country Club Drive to the west to intersect East 4th Street/US-24 at a 90 degree angle to correct the existing intersection skew. Skewed intersections are not ideal because drivers are required to look back farther than normal for cross traffic because of the small angle between the intersecting roads. Peak-hour signal warrants are expected to be met at this location during the medium-term period.

Concept 3 (see Exhibit A3.4 in Appendix 3 for concept) consists of constructing a roundabout at the intersection and reducing East 4th Street/US-24 to three-lanes. A roundabout would help reduce speeds on East 4th Street/US-24 and would address the concerns with the existing skewed intersection configuration. With this concept, the roundabout would replace the need for a traffic signal.

Long-Term

Range Avenue/K-25 & College Drive. With improvements to the intersection during the short-term period, the intersection is expected to operate at acceptable levels of delay through the long-term period. A right-turn lane should be considered on the northbound approach for the long-term time period. With the wide right-of-way, the turn lane could likely be constructed with minimal acquisition of new public right of way and would significantly reduce queues on the northbound approach.

Range Avenue/K-25 & Davis Avenue. The existing traffic signal at this intersection is expected to accommodate traffic volumes through the long-term period. A roundabout was considered at this intersection to accompany access control along Range Avenue/K-25 in this corridor (see Exhibit A3.5 in Appendix 3 for concept).

Range Avenue/K-25 & Willow Street. With the installation of traffic signals at this intersection during the short-term period, it is recommended to consider adding a right-turn lane on the northbound approach in the long-term period. The right-turn lane would help in reducing vehicle queue lengths and delay at the intersection for the long-term period. It is anticipated the turn lane could likely be constructed with minimal acquisition of new public right of way.

Franklin Avenue & College Drive. A right-turn lane is expected to be beneficial at this intersection during the long-term period. The turn lane would provide the additional capacity needed with the medium-term recommendation of a traffic signal.

Country Club Drive & College Drive. Traffic is expected to significantly increase at this intersection as the areas along Country Club continue to develop beyond the medium-term period. After the traffic signal recommended in the medium-term, additional improvements should be considered to accommodate the future traffic. An exclusive right-turn lane should be considered on the southbound approach and left-turn lane on the westbound approach. The additional lanes would reduce queue lengths and reduce overall delay for vehicles at the intersection with the traffic signal.

Country Club Drive & Willow Street. Development along Country Club is expected to accelerate after the medium-term period, increasing traffic volumes through the Country Club Drive & Willow Street intersection. If a traffic signal is installed at this intersection in the medium-term, a left-turn lane on the eastbound Willow Street approach, to match the westbound approach, is recommended to reduce delay and queuing at the intersection.

Country Club Drive & I-70 EB Ramps. Traffic is expected to increase on Country Club Drive due to industrial development south of I-70 during

the long-term period. In addition, other development would attract additional trips from I-70. The increase of traffic on Country Club Drive would decrease the chances to turn left onto Country Club Drive for the increasing vehicles on the I-70 eastbound ramp. Delay caused by the interaction of traffic is expected to increase to unacceptable levels on the I-70 EB ramp. It is recommended to consider installing a signal at this intersection during the long-term period.

Access Management

One of the main goals of the ATP is to evaluate the access control along the K-25 corridor and provide recommendations to preserve safe and efficient movement on K-25, a significant highway route in the study area.

Access control sets the distance between access points. Safety and operational problems can arise for closely spaced access points because of the interaction of different traffic movements. The concept of "functional area" is utilized to determine the distance from an intersection needed for vehicle queues from the intersection, distance for navigation decision, and distance for vehicle maneuvering. Functional areas are described in further detail in KDOT's Access Management Policy.

Access points are not desirable within the functional area of an intersection because of safety and operational problems which can occur. To review the access control along Range Avenue/K-25, functional areas were determined for the study intersections on the corridor as shown in Exhibit 5.2.

As indicated in Exhibit 5.2, driveways exist and there is overlap in the functional areas along Range Avenue/K-25 between I-70 and Davis Avenue. Improvement concepts were developed for this segment to implement access control along the corridor and are included in Appendix 3.

Country Club Drive Corridor. Country Club Drive is expected to serve as an important alternative route to Range Avenue/K-25 between I-70 and US-24 because it has access to I-70. Currently, there are a low number of access points on Country Club Drive between I-70 and College Drive. Access control was reviewed along this corridor to preserve through movement on the important corridor. Concepts considered included the following (see Exhibit A3.9 in Appendix 3 for concept):

- Four future access points could be placed along the Country Club Drive corridor between I-70 and College Drive and still maintain desired (1/4 mile) intersection spacing.
- Two access points have the potential to extend a new road connection west to Franklin Avenue providing alternate routes and reducing traffic on College Drive.

Range Avenue/K-25, Horton Avenue to Willow Street Corridor

Access management strategies developed included various treatments at the intersection of Range Avenue/K-25 & Willow Street. Additional consideration was given to the intersection at Willow Street for the case where access management improvements are not implemented because it is located within the functional area of the westbound I-70 ramp intersection with Range Avenue/K-25, as shown in Exhibit 5.2. In addition, the eastbound I-70 ramp and Range Avenue/K-25 intersection overlaps with the functional areas of the Range Avenue/K-25 intersection with Horton Avenue. Improvements are expected to be needed at all four of these intersections at different times during the planning period. Several options for considered improvements intersections on the corridor based on the existing challenges (close intersection spacing, desire of roundabout at Willow Street by local officials). Concepts for the options considered are included in Appendix 3.

Concept 1 – Signalization. Improvements would include installing traffic signals at the four intersections in the corridor (Willow Street, Westbound I-70 ramps, Eastbound I-70 ramps, and Horton Avenue/Taylor Avenue). Traffic signals could be coordinated to facilitate efficient through movement on Range Avenue/K-25. Implementing this concept would be challenging with the undesirable situation of close spacing between the traffic signals. Adaptive signal control could be another option for the intersections on Range Avenue/K-25 from Horton Avenue to Davis Avenue. Additional analysis would be needed to determine if this is a viable alternative.

Concept 2 – Interchange Consolidation. Rebuilding the Range Avenue/K-25 interchange with a configuration which combines the two ramp intersections into one would increase separation to the adjacent intersections (Willow Street and Horton Avenue/Taylor Avenue). This would allow for desirable spacing to the adjacent intersections for traffic signals to be installed. Considerations for the ramp configuration included a Single Point Urban Interchange (commonly referred to as SPUI) or a roundabout interchange, already in use at

various locations in Kansas. The high cost to reconstruct the I-70 interchange presents a significant challenge to implementing this concept.



Concept 3 – Willow Roundabout. Consideration was given for a roundabout on Range Avenue/K-25 at Willow Street for the aesthetic benefits it can provide to serve as a gateway into Colby. A roundabout at this intersection would need to have two travel lanes within the circle (multi-lane roundabout) to match the lane configuration on Range Avenue/K-25 which is a four-lane facility (with two lanes in each direction). The other three intersections (two I-70 ramps and Horton Avenue/Taylor Avenue) in the corridor would be signalized. A roundabout

Area Transportation Plan Colby, Thomas County, Kansas

isn't likely to be built at the intersection in the short-term period due to the high cost. A concern with multi-lane roundabouts is determining the type of traffic control to handle pedestrian accessibility (per PROWAG guidance) and the effect on the operation of the roundabout. Another consideration is the costs to install a traffic signal in the short-term at this intersection would not be recovered with this concept.

Bicycle and Pedestrian Considerations

A community organization, named Colby Walking Trails, has outlined plans for a trail network to be installed along Franklin Avenue, College Drive, and K-25/Range Avenue around

Colby Community College. Most of this trail network is not currently in place and timing of the improvements is dependent on acquisition of funding. While this trail



plan provides a good base for pedestrian facilities in the study area, it does not address the pedestrian issues mentioned during stakeholder and public involvement. Recommendations to resolve pedestrian needs in the study area were developed to be compatible with the current trail system plans.

Pedestrian Connectivity. Students at Colby Community College at the southeast corner of College Drive and Range Avenue/K-25 were observed walking to the businesses on Willow Street for work and shopping. Key gaps in the sidewalk network within the study area exist for these pedestrians. An existing sidewalk on the east side of Range Avenue/K-25 extends south from College Drive and ends at Davis Avenue. There is adequate right of way to extend the sidewalk south to Willow Street. Willow Street has several short segments of sidewalk on the north side between Range Avenue/K-25 and Franklin Avenue. Gaps in the sidewalk on Willow Street in this segment could be completed to enhance pedestrian connectivity for the area.

Bicycle Accommodations. KDOT allows bicyclists to utilize shoulders on state highways, but bicycles are prohibited on the Interstate system. Range Avenue/K-25 does not have paved shoulders within the study area but does have gravel shoulders. If there is local interest (and local funding) to provide better accommodations for bicyclists, several options could be considered. Selection of an option for bicyclists should consider the desired access control option.

- Pave shoulders on Range Avenue/K-25
- Rebuild sidewalks in the area to meet trail standards (8 foot width minimum, 10 foot width preferred)
- Restripe Range Avenue/K-25 to reduce median width and provide paved shoulders utilizing existing pavement

Pedestrian Crossing of Range Avenue/K-25.

With the wide median on Range Avenue/K-25, it can be challenging for pedestrians to cross the roadway. In addition, high travel speeds and large numbers of trucks on Range Avenue/K-25 further decrease the comfort-level of crossing pedestrians. Any treatment for pedestrian crossings should consider how it would integrate with the access control options for the corridor. Several options for pedestrian crossings to consider are as follows:

- Place designated pedestrian crossings at signalized intersections (Davis Avenue). Install crosswalk markings as well as pedestrian signals and push buttons.
- A refuge island for pedestrians could be placed in the median of Range Avenue/K-25. The refuge island would need to be a curbed island with painted curbs and signs to provide visibility and protection of pedestrians in the island. The refuge island would reduce the length pedestrians would need to cross during one cycle of the traffic signal. There is adequate room on the yellow striped-out area on Range Avenue/K-25

at Davis Avenue to place a refuge island.

A "mid-block" crossing for pedestrians could be placed. The mid-block crossing would not need to be located at an intersection with a signal. A new signal specific to pedestrians would be placed, such as the High-intensity Activated crossWalk (HAWK) signal. Considering the high travel speeds and large number of trucks on Range Avenue/K-25, advanced notification of the signals and visibility of the signals would need to be in place to alert drivers of the crossing to allow adequate time to stop.

Accessibility

Proposed pedestrian accommodations will need to meet ADAAG and PROWAG regulations. These documents contain guidelines on building pedestrian facilities which can be used by pedestrians with disabilities. Improvements include sidewalks and pedestrian crossings. Existing traffic signals may need to be upgraded for Accessible Pedestrian Signals to comply with ADAAG and PROWAG regulations where pedestrian crossings are placed.

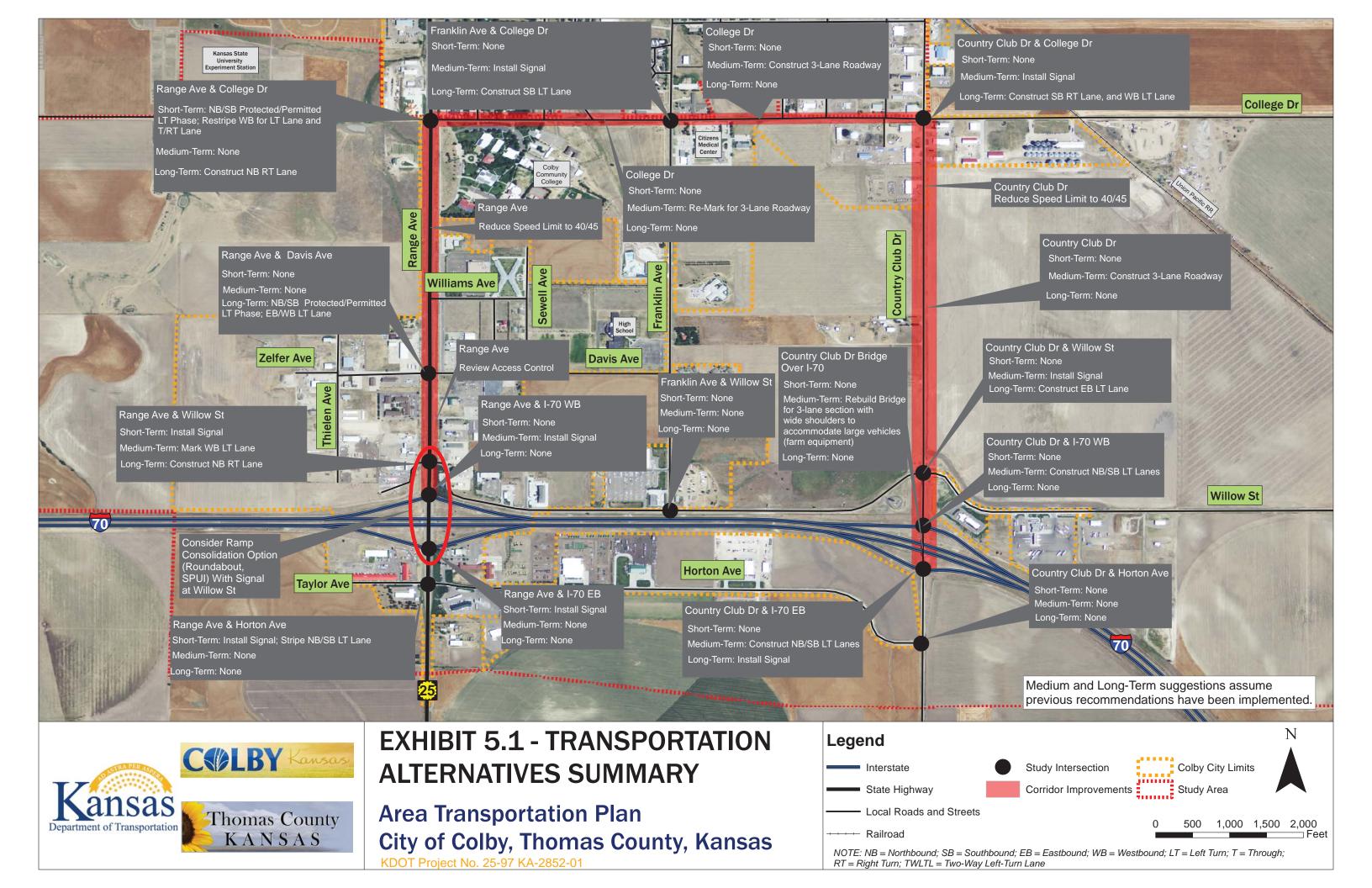
Aesthetic Treatments

common aesthetic treatment for communities like Colby is the concept of a community gateway, or entrance. Gateway concepts include aesthetic treatments to enhance the experience when entering a community through a theme (natural, historic, etc.) tied to the community. Medians and roundabouts provide opportunities aesthetic treatments (landscaping, signing, lighting, etc.). Several of the options discussed in the ATP have medians and roundabouts to incorporate aesthetic amenities. Colby does not have any established themes/aesthetic plans for their community. Further coordination would need to occur between the City and KDOT during implementation of specific projects to determine applicability of aesthetic treatments. Local funding sources would likely be a significant part of any project-level funding package for aesthetic treatments.

Environmental Impacts and Mitigation

Wetlands. Potential exists for roadway improvements to impact wetlands. At the time of design, wetland delineations should be conducted to determine the actual presence of wetlands near the project. If wetlands are impacted by the project, a Section 404 permit would be required from the USACE. Mitigation requirements would be determined on a project-by-project basis depending on the extent of the impacts.

Resources Not Expected to be Impacted. Various resources, such as floodplains, surface water, recreational facilities, historic resources, and threatened and endangered species, are not expected to be impacted because anticipated improvements are not located in the vicinity of these resources. Further investigation on these resources is recommended and may be required during actual project development.



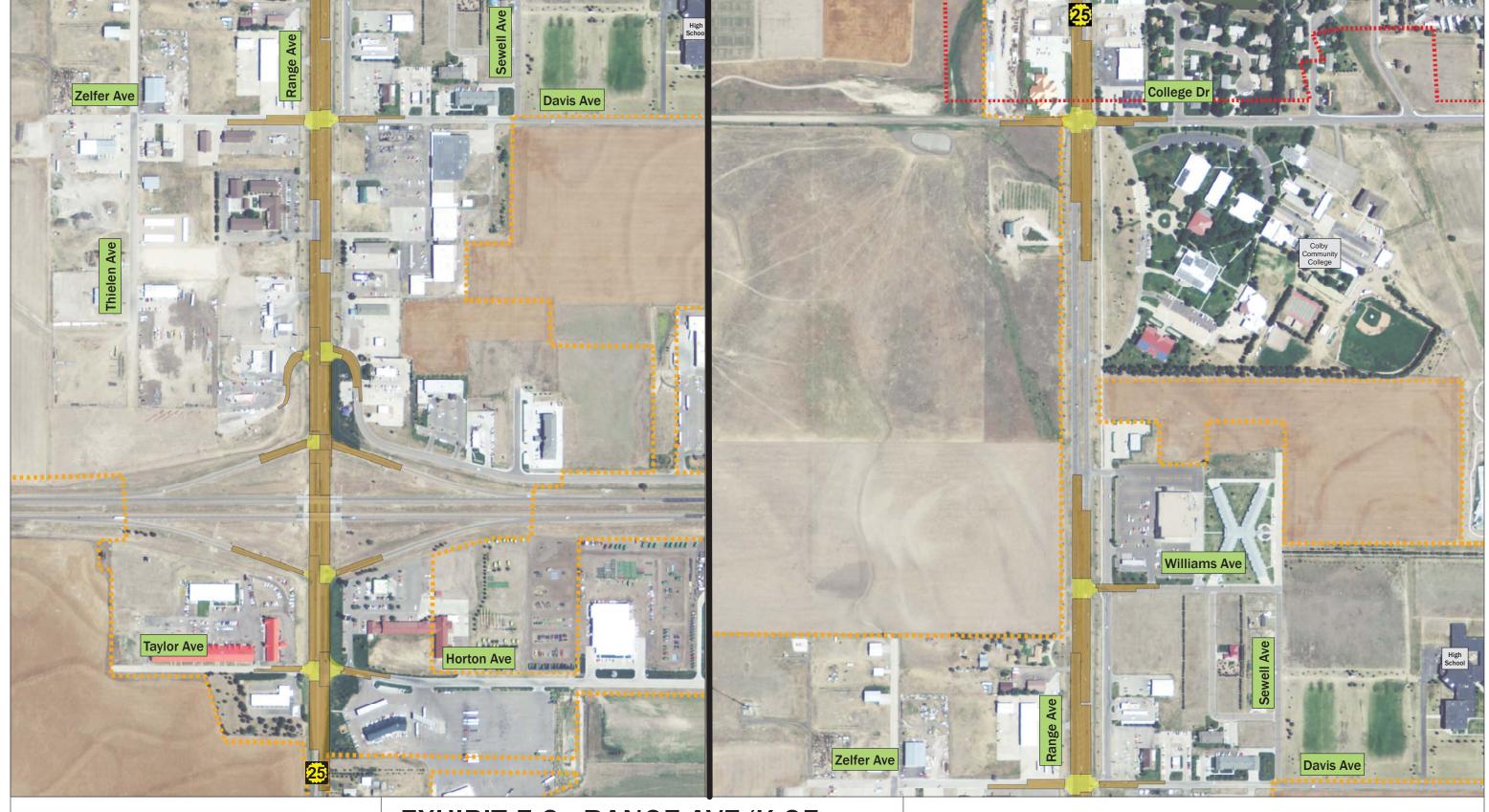


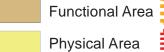


EXHIBIT 5.2 - RANGE AVE/K-25 FUNCTIONAL AREAS

Area Transportation Plan City of Colby, Thomas County, Kansas

KDOT Project No. 25-97 KA-2852-01

Legend







6. RECOMMENDATIONS AND IMPLEMENTATION

Recommendations and an implementation schedule are developed taking into account all of the factors considered throughout the transportation planning process. This section includes the final recommended improvements and provides a timeframe of the expected needs for these improvements.

It should be noted that these recommendations are based on many factors beyond control of the authors. The implementation of these concepts should be considered given the actual observable conditions and availability of funding at the time. In addition, the ATP is a plan meaning it is subject to being amended and additional improvements may be considered at the time of implementation.

Implementation Goals

Many factors affect the timing and elements for implementation of the ATP recommendations. Goals are provided to maintain implementation of recommended improvements progressing despite outside factors. The implementation goals for Colby/Thomas County are to:

- Preserve and enhance mobility and safety on important corridors
- Maximize use of limited funding by implementing recommended improvements in a cost-effective manner
- Observe development and traffic growth to modify timing of improvements if necessary
- Strive to implement recommended improvements which are needed (not pick and choose popular improvements)
- Proactive implementation for improvements (instead of reactive)

Plan Variables

While the goals of a plan are strived to be achieved, in reality, plans often do not unfold as originally intended. Differences between the plan and reality occur because many assumptions about the future are made during the planning process. It is good practice to include flexibility in the plan so it can continue to be utilized as a guide for the future even if assumptions don't materialize as originally envisioned. One tool commonly utilized to add flexibility in transportation plans is the inclusion of "triggers".

Triggers define the events which are expected to prompt the need for improvements. Characteristics of development are the main triggers relevant to Colby and Thomas County. Location, timing, and intensity of development is an indicator where and when improvements should be considered. Traffic volumes and crashes also can serve as triggers for improvements to intersections and roadways.

Improvement Plan

Triggers were utilized to determine when improvements might be needed. Preferred alternatives were selected address to anticipated future transportation needs tied to triggers. Selection of the preferred improvements was made by the City of Colby, Thomas County, and KDOT and considered comments received from stakeholders and the public. Timing of the improvements is also highly dependent on the availability of funding. The recommended improvement plan with associated timeline and triggers and estimated costs is included in Table 6.1 and summarized in Exhibit 6.1. Costs included in Table 6.1 were adjusted for inflation.

Short-term. Short-term improvements are recommended for consideration to address existing needs and accommodate minimal growth in the background traffic and new traffic from development.

Area Transportation Plan Colby, Thomas County, Kansas

One of the existing needs is for additional capacity at the Willow Street intersection with Range Avenue/K-25. In the Transportation Alternatives chapter, several options were discussed for improvements at this intersection. The City desires to keep full-access at this intersection. With the intersection remaining full-access, the viable improvement is to install traffic signals.

In conjunction with a traffic signal at Willow Street, consideration should be given to consolidating the I-70 ramp intersections to increase the spacing between Willow Street and the I-70 westbound ramps. Consolidation of the interstate ramps could be accomplished with a roundabout or SPUI but both would be costly and require replacing the bridges on I-70. KDOT may choose to consider other interchange options which could be developed through future research. Any change to the interchange would involve coordination with FHWA and conducting a Break in Access (BIA) study. Local jurisdictions may be responsible for the cost of the BIA.

During the short-term period, the City of Colby should consider beginning to acquire right-of-way and implement access management along the Country Club Corridor. The first step in this process is to develop right of way plans which establish the location of the right of way for widening of the roadway corridor.

In addition, the City should work to keep adequate separation for development along College Drive to preserve this corridor for a potential widening to three-lanes. College Drive is recommended to be widened during the medium-term period, however the City/County should consider beginning right-of-way acquisition to prevent future development from precluding this improvement.

Medium-Term. Medium-term improvements are mostly recommended to accommodate growth in the background traffic and new traffic from development.

Several intersections along Country Club Drive are expected to need capacity improvements during this period. It is recommended to plan for widening Country Club Drive to a three-lane roadway from College Drive to Horton Avenue during this period. This work would include replacing the bridge on Country Club Drive over I-70 with a wider structure at a three-lane section with wide shoulders to accommodate large implement vehicles. Because the bridge is currently in good condition, the replacement of the bridge may actually be moved to the long-term period.

If the I-70 ramps on Range Avenue/K-25 are not consolidated, additional capacity is expected to be needed at the I-70 westbound ramp intersection with Range Avenue/K-25. It is not desirable to place traffic signals at this location as they will be too close to recommended signals at Willow Street. Signal timing and phasing for the signals at Willow Street and the I-70 eastbound ramps could be adjusted to increase gaps in the vehicles. With additional gaps at I-70 westbound ramps, vehicles would have to wait less, effectively reducing the delay at the intersection.

During the medium-term period, capacity improvements are recommended for consideration along College Drive. It is anticipated a three-lane roadway would provide adequate capacity along this street between Range Avenue/K-25 and Country Club Drive.

Long-Term. Due to the potential for extensive development in the area of Colby, long-term improvements are primarily driven by large developments in the future. Improvements during this time frame are most subject to change as predicting development in the future is based on assumptions.

Most of the improvements for this period consist of adding turning lanes at intersections for increased capacity. In addition, the intersection of Country Club Drive with the

eastbound I-70 ramps is anticipated to need a traffic signal.

Monitoring traffic volumes at the intersection of East 4th Street/US-24 is recommended to determine if and when a traffic signal may be warranted.

Access Management. Other improvement concepts were considered during development of the ATP for access control along Range Avenue/K-25. After reviewing public comments on the access management options presented, the City of Colby felt closing driveways currently on K-25/Range Avenue could be harmful to the businesses along the corridor. The City felt preservation of the Country Club Drive Corridor would have the most significant overall benefit while minimizing impacts to existing businesses and industries. The plan for the County Club Drive corridor consist of constructing a three-lane section and implementing access spacing control.

Traffic Signal Warrants. Recommendations for many of the intersections in the study includes installation of a traffic signal. Traffic signals were recommended for intersections which had projected peak hour volumes meeting warrants as defined in the MUTCD. Before traffic signals are actually installed at intersections, more than just the peak hour warrants may need to be met. It is recommended to monitor traffic volumes at the study intersections to determine when signal warrants are met.

Signal Corridors. Placing signals near other signals along a corridor can actually increase delay and travel time through the corridor. The Range Avenue/K-25 and Country Club Drive corridors have recommendations for signals to adjacent nearby intersections. To prevent delay along the corridor caused by the signals, it is recommended to install conduit and additional signal equipment to establish an "interconnected" signal system along the corridors. Interconnect allows coordination of

the signals to minimize stopping vehicles traveling through the corridors.

If signals are to be implemented on the corridor of Range Avenue/K-25 from Horton Avenue north through Willow Street, it is recommended to complete a systems analysis to determine if adaptive traffic signal control will improve operations for the corridor.

Range Avenue/K-25 Speed Limit. One of the concerns received from the public was the high speeds on Range Avenue/K-25 south of College Drive to Taylor Avenue/Horton Avenue. With numerous driveways and signs in the corridor, it can be more difficult for drivers to discern and process the information at higher speeds. KDOT has completed a traffic speed study for the Range Avenue/K-25 corridor from Davis Avenue south to the city limits just south of Taylor Avenue/Horton Avenue. The speed study recommends a speed reduction to 45 mph and will be implemented in the near term.

Range Avenue/K-25, Horton Avenue to Willow Street Corridor. Additional study and coordination will need to occur in the future between KDOT, Colby, and Thomas County to determine the direction for improvements to this corridor. Concepts considered were signalization, ramp consolidation (SPUI or roundabout) and a roundabout at Willow Street.

Pedestrian Facilities. Sidewalks and/or trails should be included with projects or built separately as funding is available. Specific options to address pedestrian needs in the study area are discussed in the Transportation Alternatives chapter. Key pedestrian improvements are:

- Extend sidewalk on east side of Range Avenue/K-25 from Davis Avenue south to Willow Street
- Install a pedestrian crossing of Range Avenue/K-25
- Providing accommodations for bicyclists

Table 6.1 Implementation Schedule

Short Term Improvements (2013 – 2018)				
Intersection	Improvement	Trigger / Cause	*Cost	Responsible Agency
Range Avenue /K-25 & College Drive	NB/SB protected/permitted LT phase; Restripe WB for LT lane and T/RT lane	Development in Industrial Area West of Thielen Avenue; Development in Commercial Areas near Range Avenue/K-25 and Williams Avenue and near Willow Street and Sewell Avenue; Growth in background traffic	\$30,000	KDOT/City
Range Avenue /K-25 & Davis Avenue	None	N/A	N/A	N/A
Range Avenue /K-25 & Willow Street	Install signal OR Consider improvement in conjunction with I-70 ramps improvements	Development along Willow Street; Growth in background traffic	\$220,000	KDOT/City
Range Avenue /K-25 & I-70 WB	None (Consider consolidating interchange ramps (roundabout or SPUI¹))	N/A	N/A	N/A
Range Avenue /K-25 & I-70 EB	Install signal; Consolidate interchange ramps (roundabout or SPUI)	Development along Taylor Avenue and Horton Avenue	\$200,000 signal (\$20 million roundabout or SPUI)	KDOT/City
Range Avenue /K-25 & Taylor Avenue/ Horton Avenue	Install signal; Stripe NB/SB Lt lane	Development along Taylor Avenue and Horton Avenue	\$250,000	KDOT/City
Franklin Avenue & College Drive	None	N/A	N/A	N/A
Franklin Avenue & Willow Street	None	N/A	N/A	N/A
Country Club Drive & College Drive Country Club Drive & Willow Street Country Club Drive & I-70 WB Country Club Drive & I-70 EB Country Club Drive & Horton Ave	Acquire right of way for three-lane expansion	N/A	\$15,000 (Entire Segment)	City/County

^{*}NOTE: Costs adjusted for inflation (Year 2018)

¹ Requires coordination with FHWA and a BIA – possibly at Local's expense

(Table 6.1 Continued)

Medium-Term Improvements (2019 – 2023)				
Intersection	Improvement	Trigger / Cause	*Cost	Responsible Agency
Range Avenue /K-25 & College Drive	None	N/A	N/A	N/A
Range Avenue /K-25 & Davis Avenue	None	N/A	N/A	N/A
Range Avenue /K-25 & Willow Street	If signalized, mark WB LT Lane	Development along Willow Street and Sewell Avenue	\$1,500	KDOT/City
Range Avenue /K-25 & I-70 WB	Install signal if interchange consolidation improvements (roundabout, SPUI) are not implemented	Development along Taylor Avenue and Horton Avenue	\$270,000	KDOT/City
Range Avenue /K-25 & I-70 EB	None	N/A	N/A	N/A
Range Avenue /K-25 & Taylor Avenue/ Horton Avenue	None	N/A	N/A	N/A
Franklin Avenue & College Drive	Install signal and widen College Drive to three-lane from Range Avenue /K-25 to Country Club Drive	Development along Franklin Avenue; Developments on southwest and southeast corners of Country Club Drive & College Drive	\$3.7 million	City
Franklin Avenue & Willow Street	None	N/A	N/A	N/A
Country Club Drive & College Drive	Install signal	Developments on southwest and southeast corners of Country Club Drive & College Drive	\$270,000	City
Country Club Drive & Willow Street	Install signal	Development along Willow Street; Development along Horton Avenue	\$315,000	City/County
Country Club Drive & I-70 WB Country Club Drive & I-70 EB	Construct NB/SB LT lanes (Widen Country Club Drive to three lanes and new three lane bridge¹ over I-70)	Development along Horton Avenue; Growth in background traffic	\$9.5 million (entire segment with bridge)	KDOT/City /County
Country Club Drive & Horton Avenue	None	N/A	N/A	N/A
East 4 th Street /US-24 & Country Club Drive	Consider installing traffic signal	Monitor traffic volumes at intersection and review for signal warrants as needed	\$315,000	KDOT/City

^{*}NOTE: Costs adjusted for inflation (Year 2023)

¹ Bridge condition may not merit replacement during medium term period; Bridge replacement may occur in long term period

(Table 6.1 Continued)

Long-Term Improvements (2024 – 2033 and beyond)				
Intersection	Improvement	Trigger / Cause	*Cost	Responsible Agency
Range Avenue /K-25 & College Drive	Construct NB RT lane	Development in industrial area west of Thielen Avenue; Development in areas along Sewell Avenue; Growth in background traffic	\$100,000	KDOT/City
Range Avenue /K-25 & Davis Avenue	NB/SB protected/permitted LT phase; Mark EB/ construct WB LT lane	Development in industrial area west of Thielen Avenue; Development in areas along Sewell Avenue; Growth in background traffic	\$90,000	KDOT/City
Range Avenue /K-25 & Willow Street	Construct NB RT lane	Development in industrial area west of Thielen Avenue; Development in areas along Sewell Avenue; Growth in background traffic	\$55,000	KDOT/City
Range Avenue /K-25 & I-70 WB	None	N/A	N/A	N/A
Range Avenue /K-25 & I-70 EB	None	N/A	N/A	N/A
Range Avenue /K-25 & Taylor Avenue/ Horton Avenue	None	N/A	N/A	N/A
Franklin Avenue & College Drive	Construct SB LT lane	Development of areas along Franklin Avenue	\$325,000	City
Franklin Avenue & Willow Street	None	N/A	N/A	N/A
Country Club Drive & College Drive	Construct SB RT lane and WB LT lane	Development along Country Club Drive	\$75,000	City
Country Club Drive & Willow Street	Construct EB LT lane	Development along Willow St east of Country Club Drive	\$85,000	City/County
Country Club Drive & I-70 WB	None	N/A	N/A	N/A
Country Club Drive & I-70 EB	Install signal	Development southeast of Country Club Drive & I-70	\$385,000	KDOT/City /County
Country Club Drive & Horton Avenue	None	N/A	N/A	N/A
East 4 th Street /US-24 & Country Club Drive	Consider installing traffic signal	Monitor traffic volumes at intersection and review for signal warrants as needed	\$450,000	KDOT/City

^{*}NOTE: Costs adjusted for inflation (2033)

(Table 6.1 Continued)

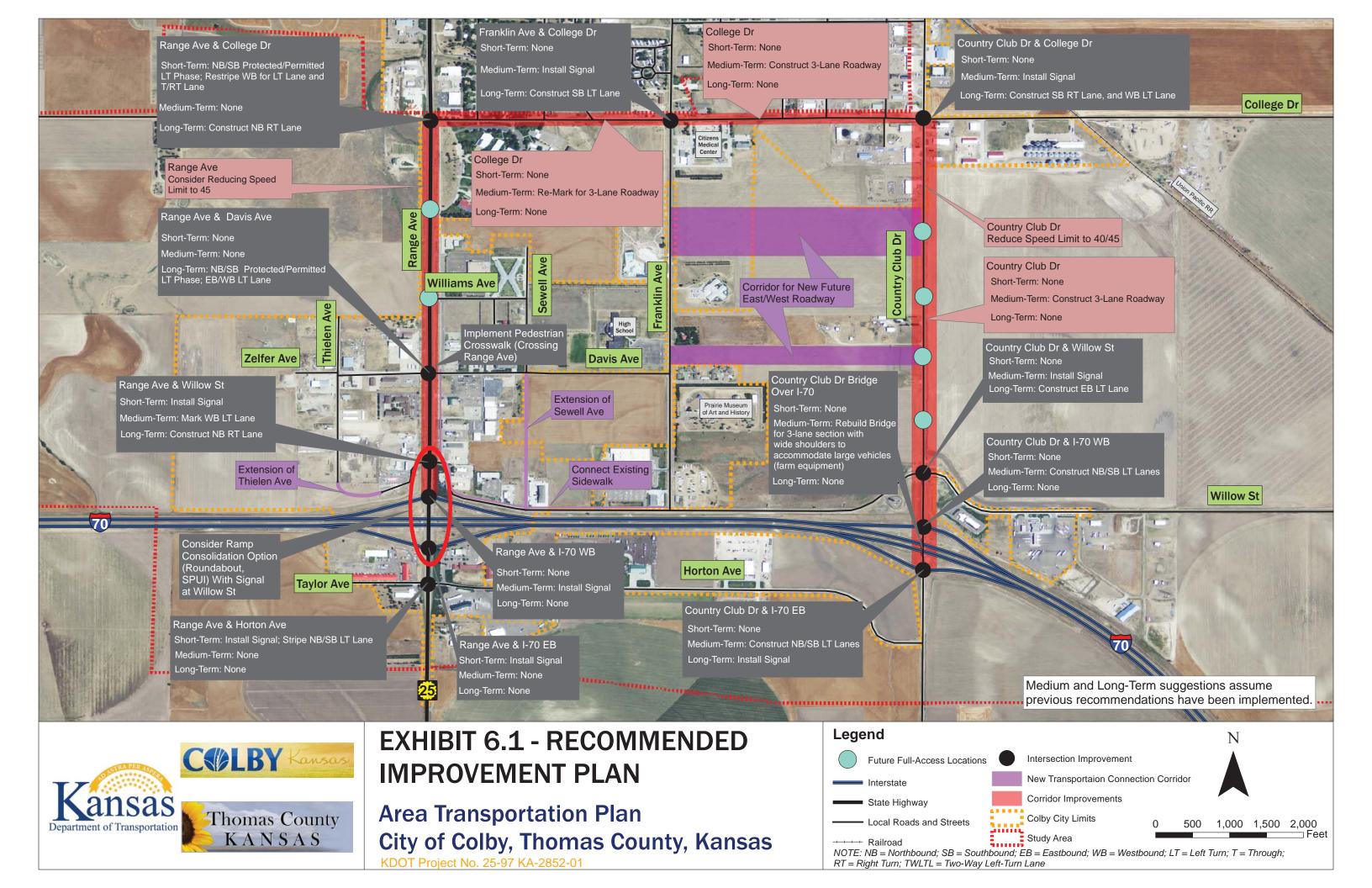
Improvements Not Dependent on Timeframe			
Improvement	Trigger / Cause	*Cost	Responsible Agency
Extend Thielen Avenue to Willow Street	As funds are available	\$395,000	City/County
Extend Sewell Avenue from Davis Avenue to Willow Street	As funds are available	\$450,000	City/County
Construct sidewalk along Range Avenue and Willow Street	As funds are available	\$85,000	KDOT/City
Install actuated pedestrian crossing on Range Avenue /K-25	As funds are available	Varies (Dependent on Option Selected)	KDOT/City
Construct bicycle accommodations	As funds are available	Varies (Dependent on Option Selected)	KDOT/City

^{*}NOTE: Costs are in 2013 Dollars

Implementation Strategies

KDOT has developed a list of corridor management strategies (toolbox) for local agencies to enact. The collection of strategies is included in the Appendix 4.

As previously mentioned, differences between the plan and reality occur because many assumptions about the future are made during the planning process. It is recommended to review and plan regularly (every 5 years) and update according to actual development.



7. REFERENCES

Colby, Kansas Comprehensive Plan 1997 Update. Bucher, Willis & Ratliff Corporation. Adopted April 15, 1997.

Access Management Policy. Kansas Department of Transportation. January 2013.

Zoning Map. City of Colby. Accessed November 2012.

National Wetlands Inventory. USFWS.

Traffic Flow Map. Kansas Department of Transportation. 2003 through 2012.

Road Safety Audit. Kansas Department of Transportation. 2002.

<u>www.colbywalkingtrails.com</u>. Accessed July 2013.

Kansas Bicycle Map. Kansas Department of Transportation. 2012-2013.

County Listing of Threatened and Endangered and Species In Need of Conservation. Kansas Department of Wildlife & Parks, Environmental Section. January 2005.

8. ACKNOWLEDGMENTS

Plan Partners

Kansas Department of Transportation

- Jeff Stewart, District 3 Engineer
- Eric Oelschlager, Area 2 Engineer
- Michael Moriarty, State Transportation Planner
- Kristen Brands, District 3 Public Affairs Manager

City of Colby

- Gary Adrian, Mayor
- Tyson McGreer, City Manager
- Omar Weber, Public Utilities Director

Thomas County

• Paul Steele, County Commission Chairman

Consultant Team

Kirkham Michael & Associates, Inc.

- Sorin Juster, P.E., P.T.O.E.
- Nicholas Gordon
- Jon Halbgewachs, P.E.
- William Strait

Elected Officials

City of Colby

- Gary Adrian, Mayor
- Fred Taylor, City Council President
- Stan Schmidt, City Council
- Peg Tole, City Council
- Pat Mallory, City Council
- Lance Bolyard, City Council
- Francis Britton, City Council
- Mike Hake, City Council
- Bill Mariman, City Council

Thomas County

- Paul Steele, Commission Chairman
- Byron Sowers, Commissioner
- Mike Baughn, Commissioner

Appendix 1: Stakeholder and Agency List

Stakeholder and Agency List

Stakeholder	Stakeholder
Arby's	McDonalds
Baumfalk, Gary R. & Yvonne	McLemore, Bob
Beckley, Robin L	McMahan, Susan
Beringer Hardware	Montana Mikes
Bottle Gallery	Motel 6
BP Service Station	Ohlrogge, Joel A.
Cabb LLC	Orschlein Farm & Home LLC
Cahoj, Gregory A. & Albin D.	Pilot Travel Centers, LLC
Calliham, Judith Ann	Property 23678 LLC
CBAK LLC	Quality Inn
City of Colby	Rocca, Christy
City of Colby	Rodenbeck, Ross H. & Anna Dean
Colby Cinema	Rogers, Lori L.
Colby Lodging LLC	Rottinghaus Real Est LLC
Colby Photo	Schuette, Barbara Jean Tod
College Drive Assembly Inc	Sears
Conoco Travel Shoppe	Secrest Inc
Cooper, Gary E TR & Pawlus, Mary J TR	Service Oil Co
Cooper Grain Inc	Shalz Enterprises LP
Cummins Mid America	Shields, Bill
Days Inn	Simpson, Greg J. & Theresa
Depe, Carroll M. Rita	Sonic Drive In
Dible, Larry J. & Patricia A.	Sperber, Eric
Dillons	State of Kansas
Dirt Developers LLC	Stephens, Paul J.
Dollar General	Stephens, Jacqueline
Fisher, Paul & Danita	Stephens, Peter J.
Flanagin, Vernon L. & Karen D.	Stithem, Robert R.
Foley Industries Inc	Stock, Ronald E. & Kristin K.
Francis, John L.	Stramel, Bert J
G S Bancshares	Subway
Gerstner, Chris	Sunflower I Housing Assoc
Goodheart, Travis S & Velma	Taco Johns
Hampton Inn	The Talent Initiative Inc
Harrison, Terrel	Thomas, Leilani
Health Cottage	Thomas County Historical Society Inc
Hickert, Joe	Thompson, Brad
High Plains Mental Health Center Endowment Assoc	Trenkle, Kevan
Interior Connection & Quilt Cabin	Vacik, Dr. Stephen
J & B Meat Market	Vanderbilts
Johnson, Michael L. & Lana	Vaughn, Max G.
Johnson, Jean	Vision Hotels, Inc.
Jones, Randy	Weber, Omar
Kansas Five Property LLC	Western Sprinklers Inc
Kansas Quick Lube Inc	Whitaker, Holly
Keiser, Bruce A. & Patricia J.	Wooden Inc
Lindberg, Gary D.	Woofter, Mike
L-S Plaza LLC	Zodrow, Renee M.

Appendix 2: Existing Roadway Network Characteristics

Street Inventory Summary

E side, N of Segments) Davis E side W side W side W side N side S side S side N side none **Sidewalks** > z z z > z > > Lighting Flume to OD OD East Side Flume to OD Flume to OD Flume to OD OD East Side, West Side ОО 0 8 8 О ОО ОО 90 88 9 SS SS SS Drainage C&G N Side, NP S 10 ft out 6 ft in, C&G W, NP E C&G W, NP Unpaved Unpaved Unpaved C&G C&GC&G C&G C&G C&G C&G C&G C&G Side Š Α NP ${\sf NP}$ NP NP **Shoulders** NR, P TWL TWL ĭ ΝP R, R, **Median Type** \$ \$ \$ \$ \$ M M M Ž Ϋ́ ¥ Z Ν ¥ ¥ 9 24 36 36 16 12 12 12 Median Width (ft) NS w/Parking 12 12 12 12 12 12 12 12 12 20 Lane Width (ft) NS NS S S S S S S S S 1 WB 2 EB, 4 7 4 2 4 7 7 7 7 **Number of Lanes** 24, NP 24, NP **Roadway Width** 48 32 36 42 40 36 42 24 72 36 24 52 84 64 36 32 84 40 30 (ft) 45/55 45/55 35 50 30 35 50 50 50 35 35 30 35 35 35 35 35 35 35 Speed Limit (mph) Range/K25 to 1,200' E of Range Country Club to Range/K-25 Range/K-25 to Country Club E of Range/K-25 to Franklin 600' N of Davis to College 1,200' E of Range/K-25 to Willow to 600' N of Davis Franklin to Country Club Range/K-25 to Franklin West of Range/K-25 East of Country Club E of Country Club Horton to College Horton to Willow W of Range/K-25 Willow to Davis Davis to College N of College N of College N of College S of Horton W of Range Segment Range Ave./K-25 Taylor Ave. Davis Ave. Zelfer Ave. College Dr Franklin Ave. Country Willow St. Horton/ Club 1-70 ς. Roadway

C&G=Curb and Gutter; NP=Not Paved; NS=Not Striped; OD=Open Ditch; SS=Storm Sewer; TWL=Two Way Left Turn Lane; WB=Westbound; EB=Eastbound KEY:

Appendix 3: Improvement Concepts Considered

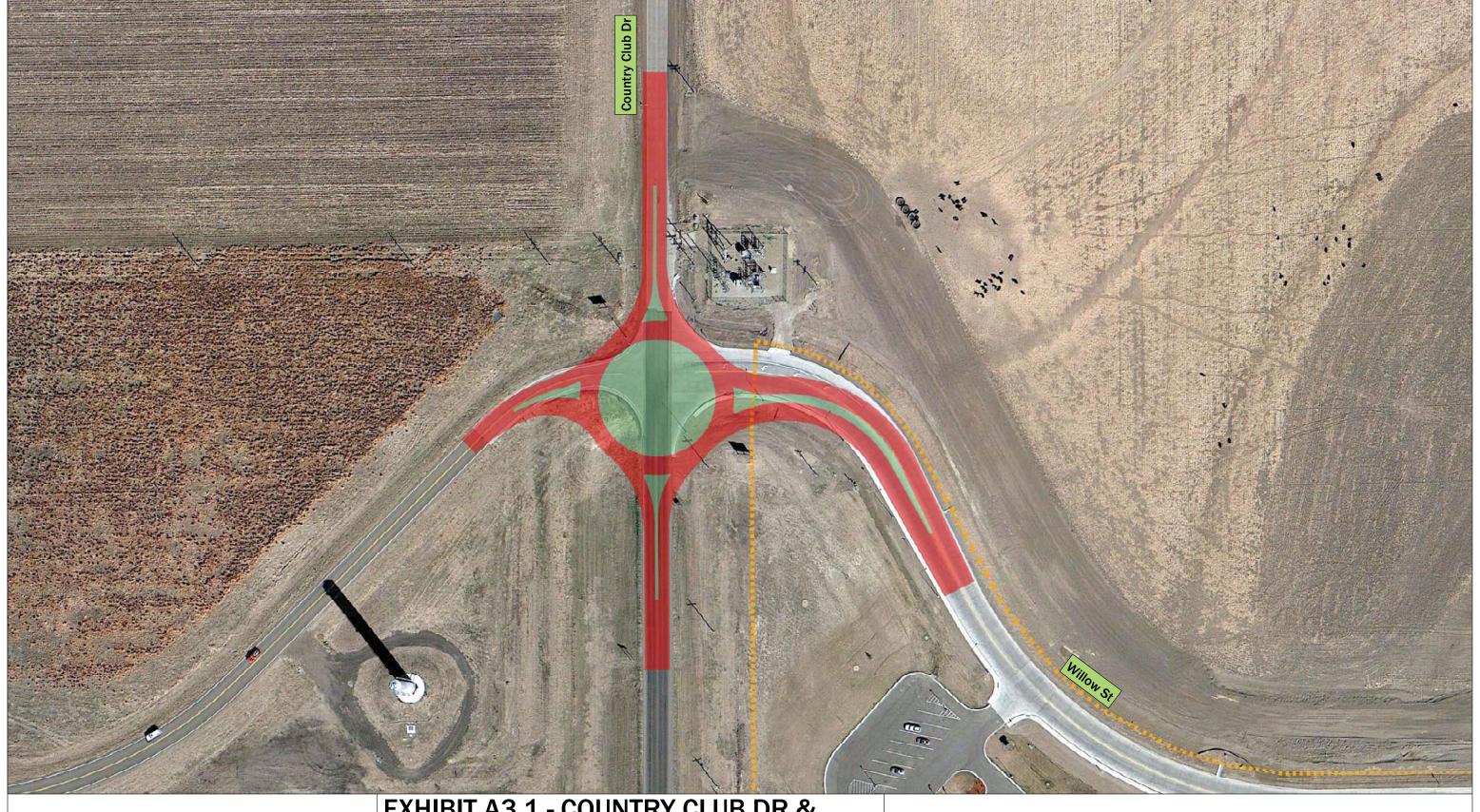




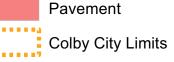




EXHIBIT A3.1 - COUNTRY CLUB DR & WILLOW ST INTERSECTION ROUNDABOUT CONCEPT Area Transportation Plan City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01

Legend







0 25 50 75 100 Fee





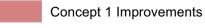




EXHIBIT A3.2 - EAST 4TH ST/US-24 & COUNTRY CLUB DR CONCEPT 1

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

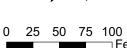
Legend



Concept 1 Future (20 Year) Improvements

Access Removals





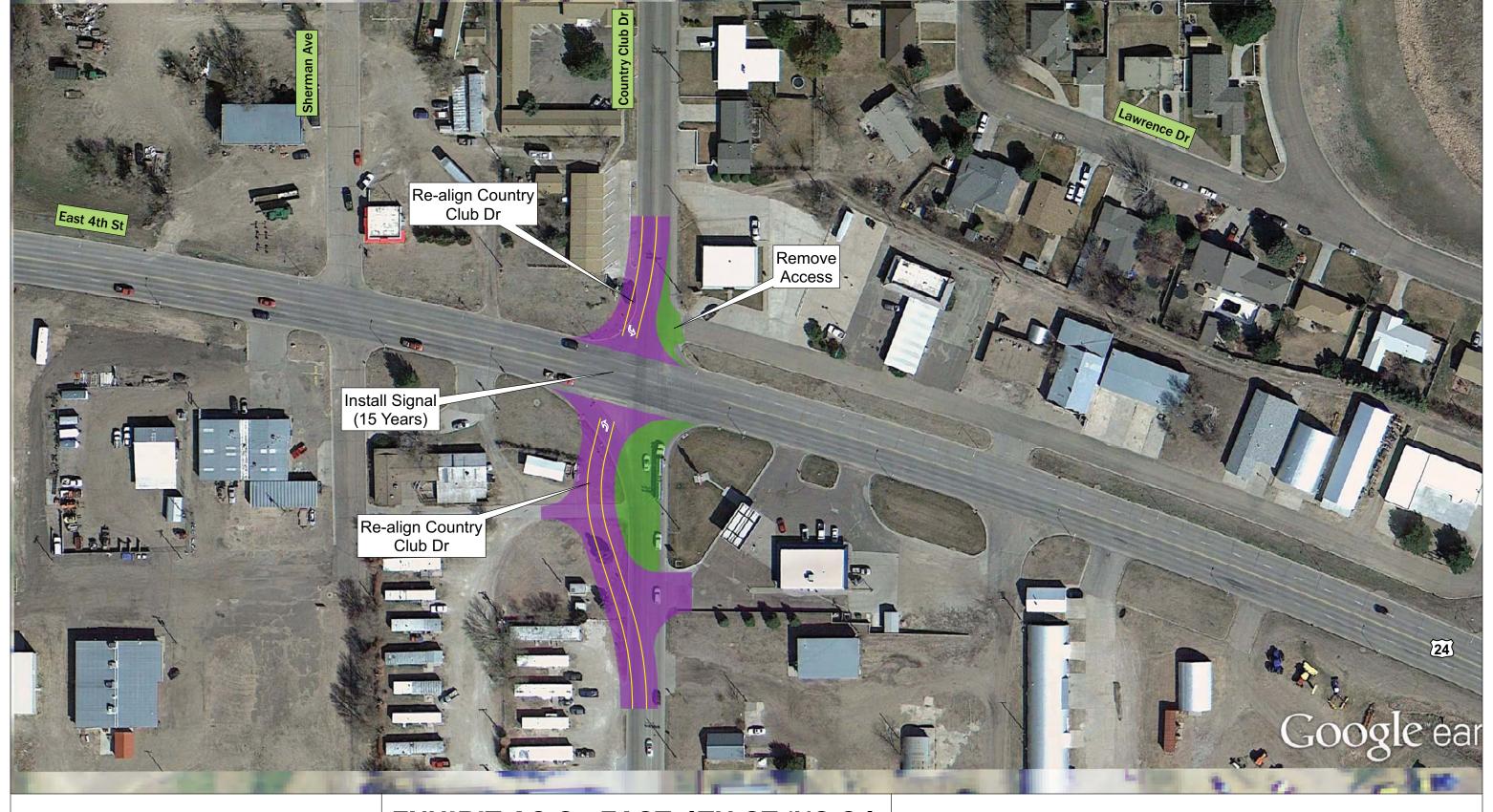








EXHIBIT A3.3 - EAST 4TH ST/US-24 & COUNTRY CLUB DR CONCEPT 2

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

Legend



Concept 2 Improvements

Access/Pavement Removals



0 25 50 75 100 Fee







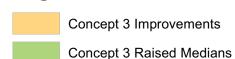


EXHIBIT A3.4 - EAST 4TH ST/US-2 & COUNTRY CLUB DR CONCEPT 3

Area Transportation Plan City of Colby, Thomas County, Kansas

KDOT Project No. 25-97 KA-2852-01

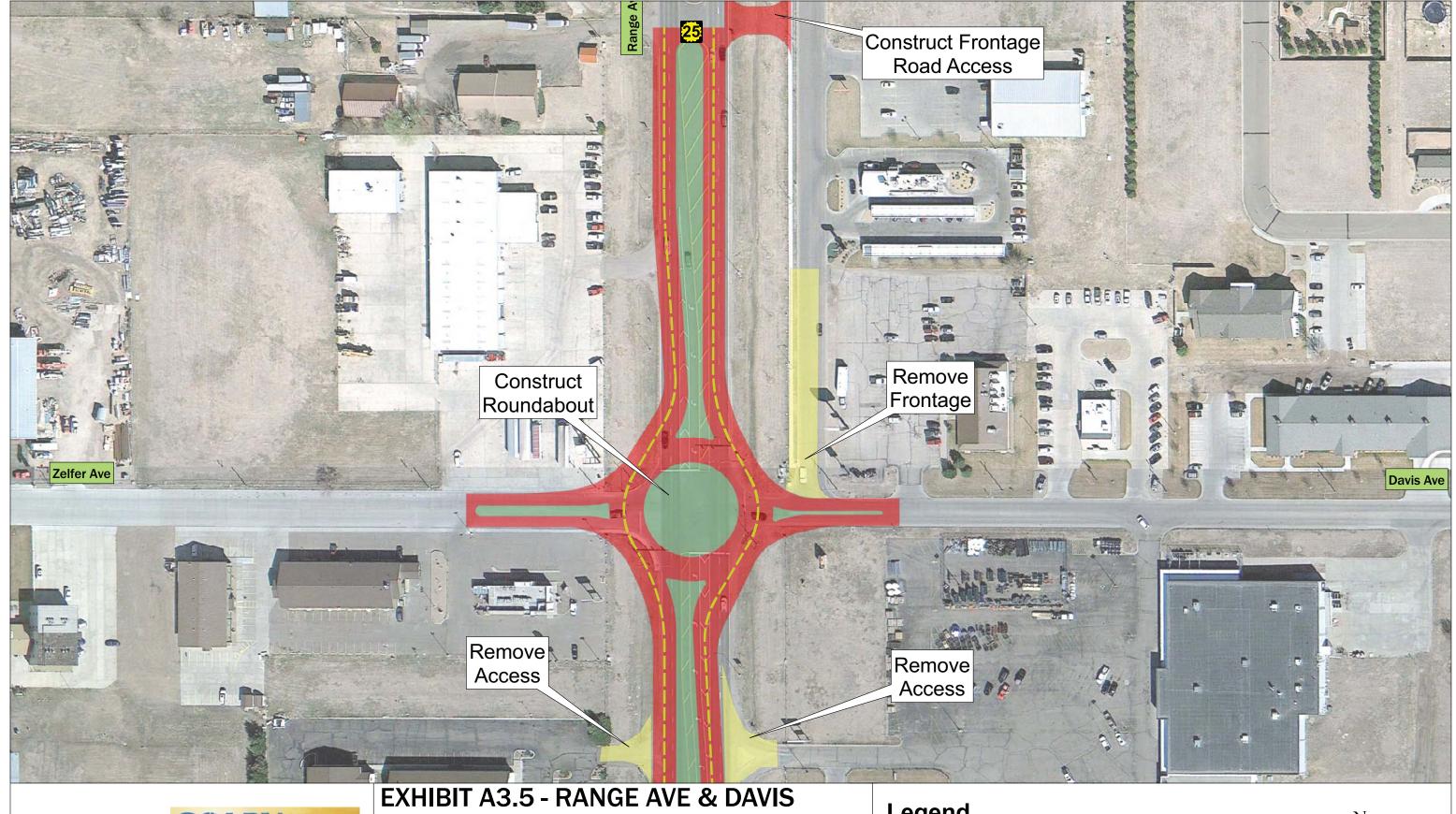
Legend







0 25 50 75 100



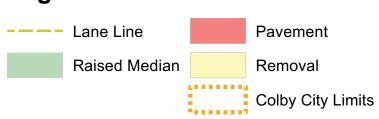




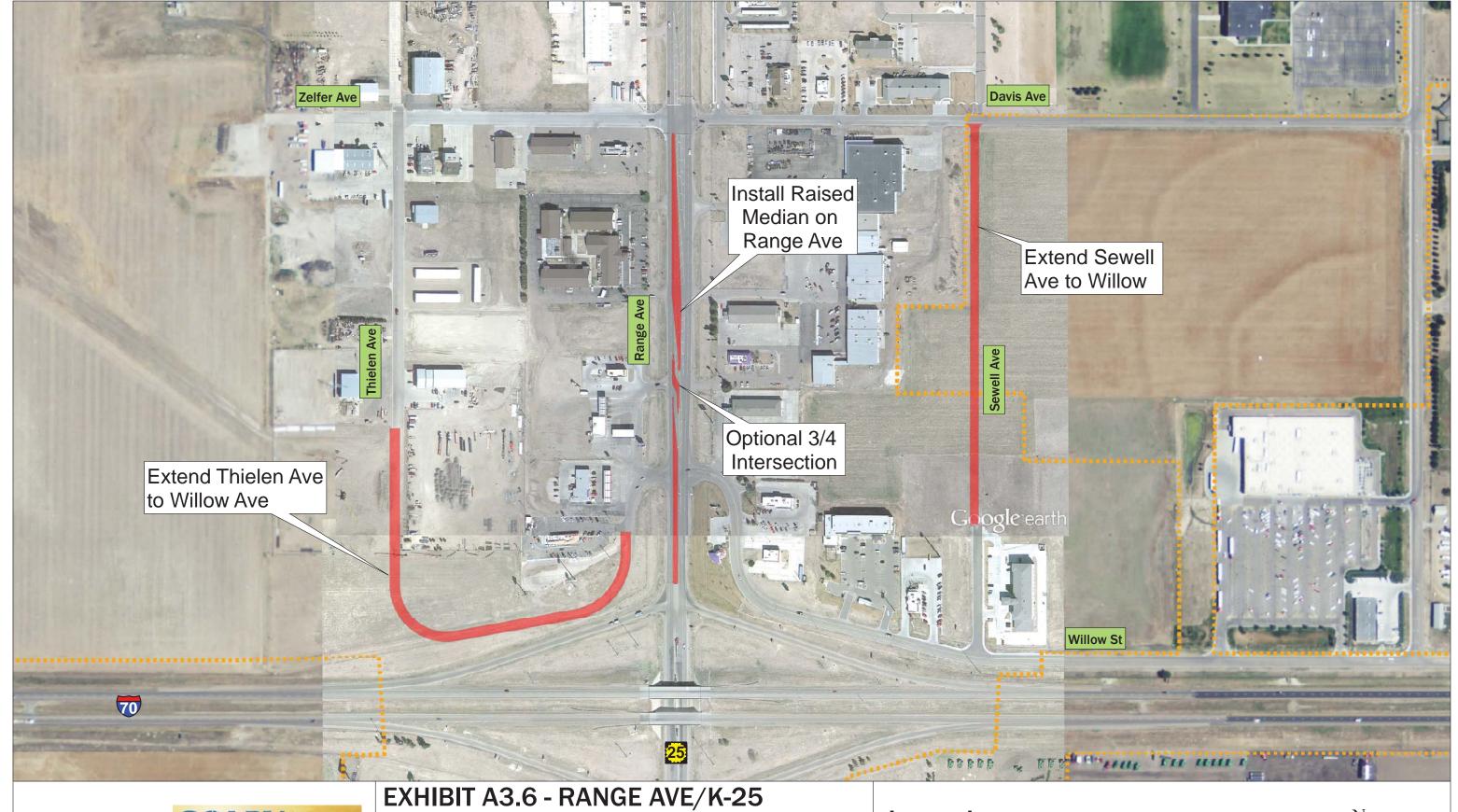


AVE INTERSECTION ROUNDABOUT CONCEPT Area Transportation Plan City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01

Legend













ACCESS MANAGEMENT CONCEPT 1 Area Transportation Plan

City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01

Legend





Concept 1 Improvements



0 100 200 300 400

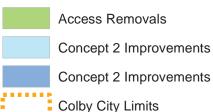








ACCESS MANAGEMENT CONCEPT 2 Area Transportation Plan City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01







0 100 200 300 400









EXHIBIT A3.8 - RANGE AVE/K-25
ACCESS MANAGEMENT
CONCEPT 3
Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

Legend



Colby City Limits



Concept 3 Improvements



0 100 200 300 400 Fee

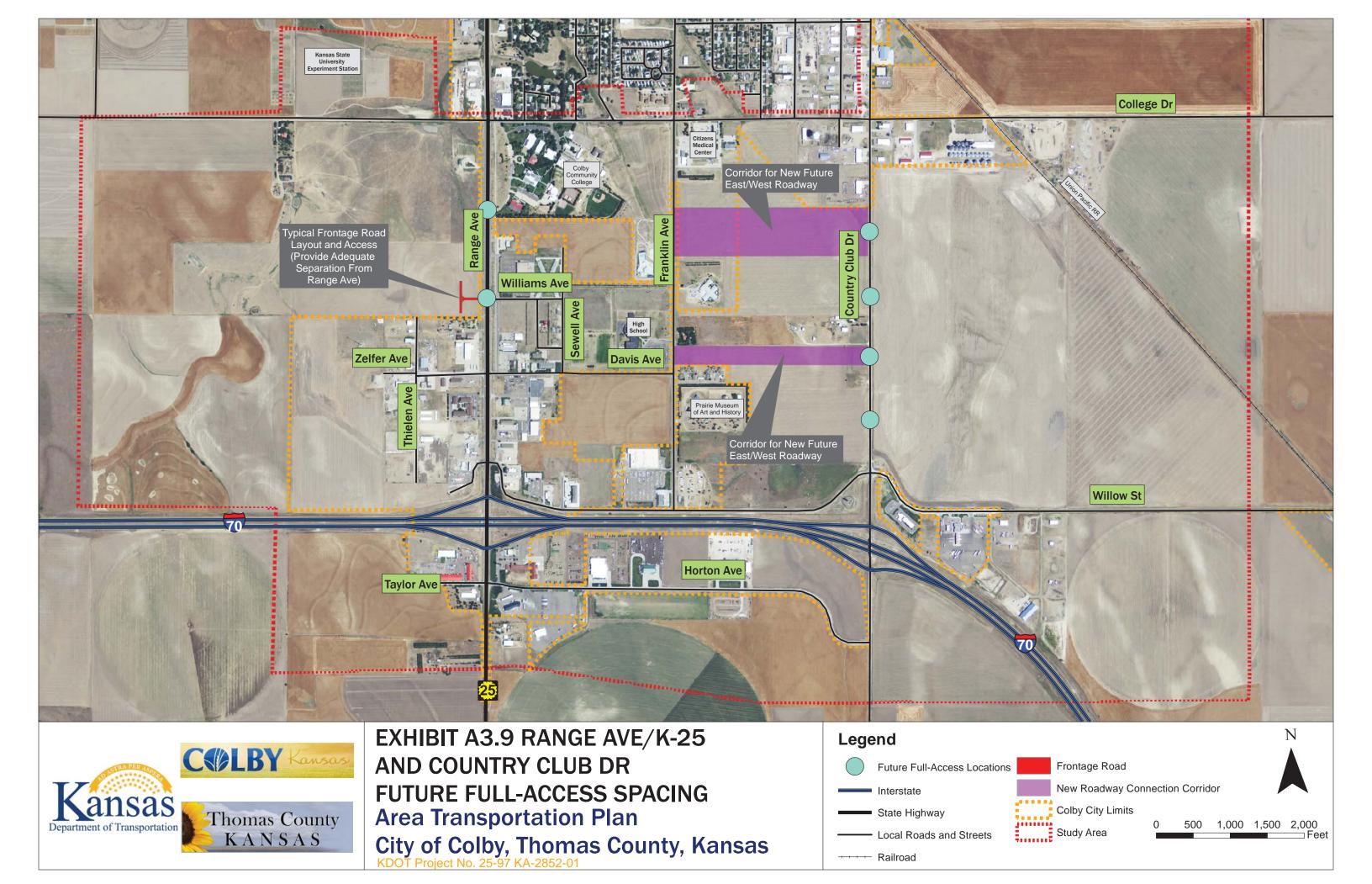






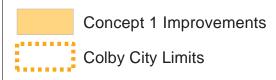




EXHIBIT A3.10 - DAVIS AVE ACCESS MANAGEMENT CONCEPT 1

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

Legend





25 50 75 100 Feet









EXHIBIT A3.11 - DAVIS AVE ACCESS MANAGEMENT CONCEPT 2

Area Transportation Plan City of Colby, Thomas County, Kansas KDOT Project No. 25-97 KA-2852-01

Legend





Remove Frontage Road



Concept 2 Improvements



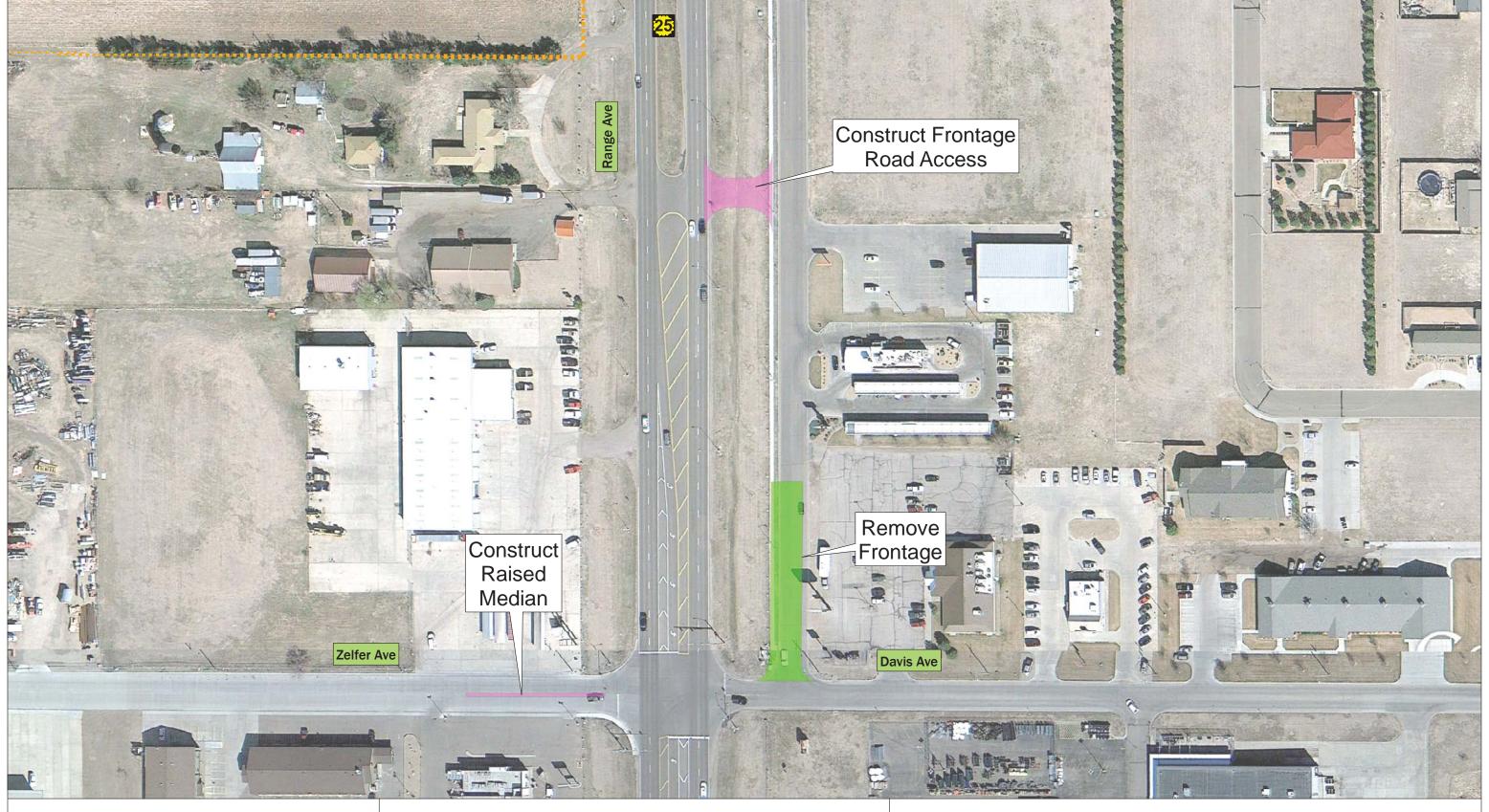








EXHIBIT A3.12 - DAVIS AVE ACCESS MANAGEMENT CONCEPT 3

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

Legend



Colby City Limits



Concept 3 Improvements



Removal of Frontage Road



0 25 50 75 100 Fee





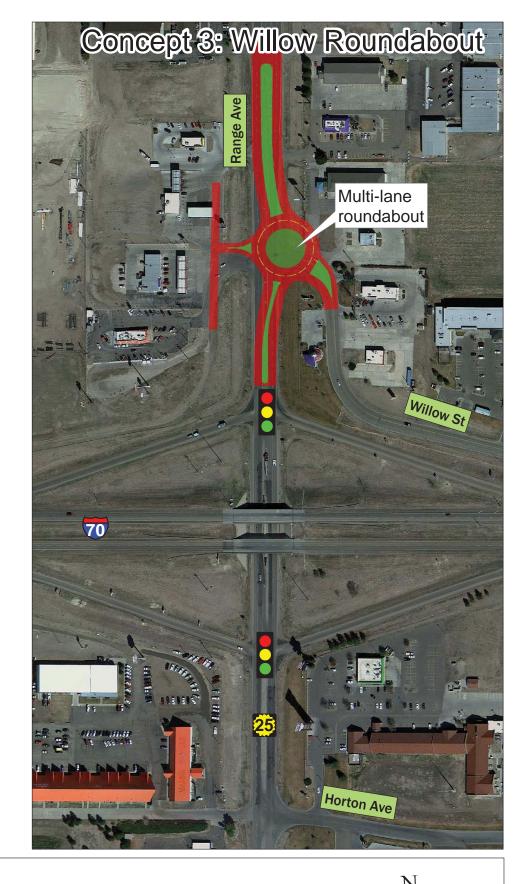




EXHIBIT A3.13 - RANGE AVE/K-25, HORTON AVE TO WILLOW ST CORRIDOR CONCEPTS

Area Transportation Plan
City of Colby, Thomas County, Kansas
KDOT Project No. 25-97 KA-2852-01

Legend



Install Traffic Signal



Scale: Varies

Appendix 4: KDOT Toolbox

KDOT'S TOOL BOX OF IMPLEMENTATION STRATEGIES

Introduction

Substantial effort and expense has been put into the development of this Corridor Management Plan. All of the parties have invested significant resources to:

- collect and analyze all available, relevant background information on the land area included
- within the corridor footprint map to fully understand current conditions;
- study and extrapolate projections from the current plans adopted and being prepared by the parties and other entities whose plans may have an impact on development within the Corridor to identify trends and prepare alternative scenarios of how future development may and can progress;
- prepare market projections on development opportunities and constraints that will either positively or adversely affect development potentials;
- reach out to all interested stakeholders to obtain input and guidance on what has occurred, what exists and what they feel should be the vision for this Corridor into the future; and
- forge a consensus among KDOT, the community partners and interested stakeholders on a plan that captures this shared vision for enhancements to the mainline highway and adjacent local street network and the interface between the two, including the type and location of points of access, as well as land uses and densities and intensities of development within the Corridor.

Successfully completing this planning effort is a major accomplishment in and of itself. The dividends which will flow to the parties from having achieved this goal are inestimable.

That being said, this Corridor Management Plan is just that: A PLAN. The real purpose for doing a plan is to, through comprehensive and thorough analysis, create a guide to decision-making by all the interested parties, so that the vision and, as much as possible, the details of the plan can become reality. To make the vision of the Plan a reality, KDOT and each of the local communities within the Corridor must take action to implement the Plan. This Chapter of the Plan describes a series of techniques that can be used by the partners to help turn the maps, illustrations, policies, goals, strategies and recommendations of the Plan into the actual facility improvements and the associated development patterns envisioned by the Plan. The tools described in this Chapter, when put into place, have the supplemental benefit of establishing additional criterion against which state, county, municipal and utility improvement plans and private development proposals can be evaluated, as each is brought forward through time. Having these supplemental criterion in place will give all parties greater assurance that all the resources the parties put toward creation of this Corridor Management Plan are realized upon and that the vision for this Corridor becomes a well-functioning component of each community.

The tool box of techniques described here is divided into four major sub-sets: Corridor Preservation Strategies; Access Management Strategies, Financing Strategies and Interlocal Cooperation. Each of these sub-sets are, where appropriate, further categorized to give those using the Plan a better understanding of the role the technique plays in this tool box of implementation techniques, the authority to use the tool and how the techniques complement one another when used appropriately.

I. Corridor Preservation Strategies

Corridor preservation is achieved through planning and the implementation of those resulting plans using a variety of regulatory strategies, including zoning, subdivision regulations, access management and exercise of the police power. One primary goal is to control or protect areas identified in the Plan that will be necessary for future enhancement to the mainline of the highway, as well as for improvements to the local street network within the Corridor. An equally important goal is to preserve and, wherever possible, enhance opportunities for development at locations within the Corridor that maximize the economic potential of the Corridor, while simultaneously preserving the functionality of the mainline highway, its access points and the interfacing adjacent local street network. Benefits of corridor preservation include:

- preventing incompatible development;
- minimizing adverse environmental/ social/economic impacts; reducing displacements;
- establishing the location of transportation facilities which allows communities increased opportunities to achieve orderly development through future planning; and
- reducing future project costs.

Close coordination between KDOT and the local communities is essential since authority for some preservation tools are vested in the state and the authority for others is vested in the local governments.

A. Planning Tools

1. Comprehensive Planning - To help ensure that the land development decisions are consistent with and are made in accordance with the recommendations of the Corridor Management Plan, each community should adopt the Corridor Management Plan, including the footprint map covering areas lying within the city's planning area, as a part of the city's comprehensive plan. K.S.A. 12-747 authorizes city and county planning agencies to make or cause to be made a comprehensive plan for the development of that community. There is specific authority to adopt area or sector plans covering only a portion of the area within a community's jurisdictional boundaries. The plan must show the commission's recommendation for the development or redevelopment of the territory included in the portion of the plan prepared. The planning commission must hold a hearing

- on the adoption of the Corridor Management lan and make a recommendation to the governing body on its adoption. The plan does not become effective unless approved by the governing body. *Jurisdiction: Local*.
- 2. Official Maps – An official map is a legally adopted map that conclusively shows the location and width of proposed roads or streets, public facilities and public areas and drainage rights-of- way. It is also commonly referred to as a major street plan. Although the Kansas statutes do not specifically authorize cities or counties to adopt an official map, K.S.A. 12-747, in its description of the elements that should be covered in a comprehensive plan, clearly contemplates that the plan include the type of information that is traditionally included in an official map. It goes without saying that the lack of specific statutory authority to adopt an official map in no way precludes a city or county from acting pursuant to their home rule authority to do so. In addition, K.S.A. 12-765, discussed below, granting authority to cities and counties to establish building or setback lines, does authorize cities doing so to incorporate by reference an official map in the ordinance or resolution, as the case may be. The adoption of an official map as a part of the community's comprehensive plan or as a standalone document gives that community one additional point of reference and source of guidance when considering development applications relating to land that lies within the Corridor to determine whether the development proposed will have an impact on the improvements contemplated by the Corridor Management Plan. Jurisdiction: Local.
- 3. Plan Consistency To help ensure that the community's comprehensive plan is internally consistent and therefore effectively serves as a comprehensive guide to development within the community, upon adoption or in conjunction with the adoption of the Corridor Management Plan, the community should review its existing comprehensive plan to assure that other portions of the plan support and are not in conflict with the recommendations of the Corridor Management Plan. If the community identifies inconsistencies, it should revise and readopt the comprehensive plan with revisions designed to eliminate those inconsistencies using the procedures outlined for the adoption of a comprehensive plan. *Jurisdiction: Local*.
- 4. Utility Planning Utilities necessary to support development will be constructed within the Corridor. It is critical that these utilities be located at places that are consistent with the Corridor Management Plan, so they will not have to be relocated upon construction of enhancements to the mainline highway at future dates. Each community within the Corridor should, in coordination with all providers of utility services within its corporate boundaries, prepare and continually update a utility master plan. These utility master plans must be carefully coordinated with the Corridor Management Plan to ensure consistency

between the two. KDOT and communities within the Corridor should carefully evaluate the Corridor Management Plan, when making decisions about the location of new utilities and related easements. In addition, KDOT and each community should establish a regular point of interface with each utility provider to ensure coordination between the parties in ongoing planning efforts and land acquisition and placement decisions. *Jurisdiction: KDOT/Local*.

5. Conformity of Public Improvements - K.S.A. 12-748 provides that whenever a planning commission has adopted a comprehensive plan for an area, no "public improvement, public facility or public utility," of a type covered by the recommendations of that plan, may be constructed without first being submitted to and approved by the planning commission as being in conformity with the plan. Public entities with plans for construction of these improvements, facilities and utilities should consult with the representative of cities and counties with adopted comprehensive plans early in that entity's decision-making process and timely submit those plans to the appropriate planning commissions for this determination. This requirement applies to any public entity that is intending to do this type of construction within the jurisdictional boundaries of a city or county. This is an important way to ensure due consideration is given to the recommendations of the Management Plan, once it is made a part of a community's comprehensive plan. Cities and counties that learn of plans for construction of this type, by another public entity within their boundaries, should be diligent in contacting the entity to make sure they are aware of this obligation and then to facilitate the contemplated review, thereby helping to ensure the Plan is fully considered in these situations. It is important to note that the governing body of the entity proposing this construction can over-ride a negative recommendation of a local community planning commission, but even in that instance, an important opportunity for review of the consistency between the proposed construction and the Management Plan by the parties is captured. Jurisdiction: KDOT/Local.

B. Regulatory Tools

1. Development Moratoria - A public sector entity may, through passage of a development moratorium, temporarily halt the processing of applications for all or a specified type of development until a governmental activity is completed, such as the adoption of a plan or the passage of a revised ordinance on a specified subject. The United States Supreme Court has held that a reasonable moratorium fulfills a legitimate public purpose and is not per se a taking. As vigilant as the partners to this Plan may be in incorporating the Management Plan into local comprehensive plans and utilizing the regulatory strategies to implement the Plan, situations are bound to arise where development pressures overtake the local professional staff's ability to effectively manage those pressures. In those situations, development moratoria are a very effective tool to help stem those

pressures while the community determines what approach will be most effective; be it an amendment to the comprehensive plan or passage of an ordinance/resolution establishing a new or updated regulatory implementation technique, such as an overlay district. The moratorium ceases the processing of applications during a legislatively established period of time needed to prepare and adopt strategies the community determines will best address the circumstance. It is important to note that adoption of moratoria is generally considered to be a zoning action. Accordingly, that ordinance/resolution must be passed pursuant to the hearing and notice requirement of Article 7 of the Kansas Statutes. For that reason, it is critical that communities act quickly to get a moratorium in place once a situation calling for a "time out" is identified. One way to close the window on the rush of applications that might result from notice of the consideration of a moratorium ordinance is for the community's governing body to adopt a resolution directing staff to stop accepting applications until the moratorium ordinance takes effect. The authority for adoption of a resolution of this type is found in the "pending ordinance" doctrine, which has been accepted by the courts of most states. Jurisdiction: Local.

2. Zoning - Zoning is one of the most prevalent and effective mechanisms for implementing a comprehensive plan. Zoning is a process utilized by local governments to classify land into areas and districts. These areas are generally referred to as "zones," and impose, in each area and district, restrictions related to building and structure designs, building and structure placement, and uses to which land, buildings, and structures within these districts may be put, including setbacks and height, lot coverage, and impervious cover restrictions. The authority to establish setbacks from rights-of-ways is not specifically mentioned, but is derived from the authority to set sizes of buildings, the percentage of each lot that may be occupied and the size of yard and other open space. See Subsection B.2 of the Chapter for a discussion of the authority to establish setbacks or building lines granted in K.S.A. 12-765 and the authority to establish setbacks derived from K.S.A. 12-749, which provides cities and counties with the authority to establish subdivision regulations. The implicit authority to establish setbacks as a part of zoning district restrictions is located in K.S.A. 12-755. These statutory provisions provide authority to establish setbacks for more than just buildings. They may apply to any structure within the designated setback. Traditionally, however, though established at depths adequate to preserve rights-of-way for the local street network system, the normal front and side yard setbacks included in zoning ordinances and subdivision regulations are not generally sufficient in depth to preserve rights of way that may be necessary for enhancement to the mainline highway within the Corridor. Zoning ordinances may also make provisions for certain uses to be established community-wide or in individual zones only by issuance of a special or conditional use permit. Rezoning of parcels that have been previously zoned may be initiated by the local community or by a property owner. Jurisdiction: Local.

Through the adoption of zoning ordinances, which are carefully tailored to implement the strategies and policies of the Corridor Management Plan, development within the Corridor can be effectively managed to ensure successful implementation of that Plan.

K.S.A. 12-755 and 12-756 authorize both cities and counties to adopt zoning ordinances, and K.S.A. 12-757 authorizes the rezoning of properties in those instances where changing a property's zoning classification is advisable or necessary to adapt original zoning to current situations. If a rezoning application proposes a zoning classification that is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. K.S.A. 12-715b authorizes cities, with a couple of exceptions and under certain conditions, to adopt zoning regulations applicable to land located outside of its corporate limits, but only within three miles of those limits and only if the county has not adopted zoning regulations applicable to that area of the county. Written notice of a city's intent to adopt zoning outside its limits must be provided to the appropriate board of county commissioners. Similarly, each county that proposes to adopt zoning regulations affecting property within three miles of the corporate limits of a city, must give written notice of its intent to that city's governing body.

- a. Zoning Approval Criteria -- Arguably, the most important Kansas Supreme Court case dealing with zoning is Golden v. the City of Overland Park. Golden sets out a set of factors that planning commissions and governing bodies may consider when deciding whether to approve or deny a zoning application. One of those factors is consistency with the comprehensive plan. Each community along the corridor, when acting on a development application related to land that lies within the Corridor, should consider. Whether the development proposed by that application is consistent with the Corridor Management Plan, as adopted into its comprehensive plan.
- b. Overlay Districts -- One of the most effective plan implementation zoning techniques is overlay districts. An overlay district can be either mapped or narratively described to be mapped at some later point in time (floating). An overlay district superimposes certain additional restrictions that modify or supplement the restrictions of the underlying zoning district or districts, in recognition that distinguishing circumstances exist within the area that must be regulated in a manner different from the regulations of the underlying district. One misunderstanding about the term overlay district is that communities think there is a model that can be pulled off the shelf and adopted to serve as its overlay district. While it might be accurate to say that a model procedural framework might exist, nothing could be

farther from the truth when talking about the real implementation aspects of the overlay district. The whole goal behind adoption of an overlay district is to address special and unique circumstances and considerations that affect a specific geographic area of the jurisdiction differently than other areas of the jurisdiction. Thus the objective is to identify those circumstances and considerations; articulate a vision for how that particular area should develop over time (while both accommodating and capitalizing on opportunities presented by those considerations); then develop regulations, restrictions and incentives to guide development to effectively realize that vision.

Overlay ordinances are generally composed mainly of design and performance guidelines and standards, and are filled with illustrations and graphics. They are carefully prepared to effectuate the plan for that specific area. In this instance, the Corridor Management Plan has created the vision, or at least, the superstructure of that vision. An overlay district is crafted to implement that Plan. It is also common for people to believe that the community could prepare one overlay district, and that it would apply to all land in its jurisdiction within the Corridor. For the very reasons stated above, that notion is incorrect also. Because the Plan identifies development scenarios that are unique to each different location within the Corridor, the idea that one set of regulations and incentives could be prepared to guide development along an entire length of a corridor is flawed. Each one of those locations should have its own overlay district with carefully chosen implementation techniques employed to achieve Plan objectives. Potentially, one overlay district could be prepared for each jurisdiction along the Corridor, but for it to have any real usefulness, it would have to break the Corridor into distinct segments with a separate set of standards created for each segment. For example, an overlay district can be effectively used to establish setback or building lines that are deeper than the setbacks set out in the underlying district regulations. This can be particularly effectual, as diverse setback distances can be established for different segments along the Corridor, depending on the need for additional rights-of-way at a specific location and on whether the segment is a developed or an undeveloped area, as well as on the nature and intensity of any existing development.

c. <u>Planned Districts</u> -- Conventional zoning allows for an amendment of the zoning classification of land upon application of the governing body or the planning commission. If the proposed amendment affects specific property, the landowner may make application. The procedures set forth above govern the consideration of and action on zoning amendments, generally called rezonings. So long as the decision to rezone is reasonable, in light of the *Golden* criteria, the rezoning may take place at any point in

time. Most commonly, a rezoning is applied for just in advance of development of that property or when a change of use is contemplated as a part of redevelopment of the property. Nothing, however, requires that there be pending development for a rezoning of a particular property to be reasonable. Sometimes properties are rezoned well in advance of any potential development or redevelopment activity. There may be a very valid public purpose for rezoning land substantially before it is ripe for development or redevelopment, and in those instances, the application should be made by the governing body or planning commission. It is generally good planning, however, not to prematurely rezone land to a zoning category other than one that allows its current use or to a use that is imminent. A community can successfully illustrate its vision of how land should be developed, in terms of general uses, through the future land use map of its comprehensive plan. It really does not need to zone land to an anticipated land use well in advance of development to make its community vision for land use known.

Generally, a community's development objectives can best be served if it has as much information about contemplated uses, proposed site terrain, location and type of infrastructure being proposed, building arrangement, architectural design and other features of development, as is possible, when it considers a rezoning application. Planned districts are an excellent tool to help in achieving this objective. A community's zoning ordinance can provide that all its zoning districts are planned districts, it can provide a parallel planned district for each or any number of its conventional districts (such as C-1 and C-1/P) or it can create separate planned districts for certain types of development or for development in certain locations.

The planned district process ensures this type of information is available to the planning commission and governing body by converting the traditional rezoning process into a two-step process. The applicant submits two separate plans to the community at different points in the approval process. The plan contains an increasing level of detail commensurate with the stage at which the property is in the development process. These plans are generally called development plans; one a preliminary and the other a final development plan. Although what the submittal is called is without significance. The preliminary development plan is submitted along with the application for rezoning. The amount of information that is included in the preliminary plan can and should vary from community to community, but in any event should include enough to allow decisions makers to understand the nature and quality of the development being proposed. The following type of information would generally be included: topography, locations of building and other structures, dimensions portraying relationships between buildings and to property and

setback/build to lines, on site and adjacent area circulation, storm water management approach, preliminary sketches depicting the general style, size and exterior construction materials of proposed structures and evidence of adequate public facilities. Both the planning commission and the governing body consider and act on the preliminary plan at the same meeting they consider the rezoning application. No rezoning application may be approved until and unless a preliminary plan for that property is approved. This helps ensure that the decision makers fully understand what is going to be developed on that property when the rezoning is approved. An applicant may opt to combine the two plans into one and submit the combined plan with the rezoning application. It is just necessary that all the submission requirements of the two plans are incorporated in the submitted plan.

If the development proposed by the preliminary development plan application is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application.

Typically, the approved preliminary plan stays in effect for a set period of time; most commonly 2 years, with the possibility of an extension if justified and applied for before the expiration of the approval. This process can be easily adapted to phased projects.

The second step in the planned district approval process is the submission of a final development plan. This occurs after engineering drawings have been approved, but before any building permit may be issued. The final plan must be substantially consistent with the approved preliminary plan or be approved using the same process for preliminary plan approval. The final plan contains much more information than the preliminary, as, of course, the developer has moved farther along in designing the development, so more information is available to provide additional assurance to the community that the development proposed is appropriate for that location. These final plans, when consistent with the preliminary, can be approved administratively or legislatively or through a combination of the two. Once the plan is approved, it is filed of record with the county register of deeds. All development at the location covered by the rezoning and development plan application must then be constructed in accordance with the plan or risk stop work orders and zoning ordinance violations.

d. <u>Site Plans</u> — Although a site plan itself is very similar to the development plans discussed above in the description of Planned Districts, the term is

used here to describe a plan submitted during the course of the development approval process when the community does not employ a planned district process. It is also designed as a mechanism to inform the decision makers of the applicant's proposal for development of a property. Unlike the Planned District process, which is traditionally a two-step plan submittal process undertaken in conjunction with a rezoning of land, the site planning process is generally a one step process that is required of developers that are not required to rezone their property prior to the issuance of a building permit. To institute this mechanism, the community would need to revise its land development codes to require that, in instances of proposed developments, where some other plan approval process is not required prior to issuance of a building permit, the applicant must submit a site plan for review and approval prior to building permit issuance. It would be common for certain types of development to be excluded from the site plan approval process, such as development of a single family house or similar smaller type developments that will have a minimal impact on facilities and services or on the landscape. The usual site plan would be described as a plan for one or more lots on which is shown the existing and proposed conditions of the lot, including topography, vegetation, drainage, floodplains, wetlands, and waterways; landscaping and open spaces; walkways; means of ingress and egress; circulation; utility services; structures and buildings; signs and lighting; berms, buffers, and screening devices; surrounding development; and any other information that reasonably may be required for an informed decision to be made by the approving authority.

It is not uncommon for the site planning process to be divided formally or informally into two parts, and for that matter, for the planned district twostep process to be modified to add a third step. In these circumstances, an initial submittal, often called a concept plan, is made to the technical staff for informal review. The applicant and its consultant sit down with the approving authority's technical staff to discuss the plan and exchange views on what the applicant is proposing and what the technical staff believes will be acceptable to the approving authority. It can also serve as an opportunity to fine-tune the plan for formal submittal. Once that process is complete, a formal site plan, as described above, or a preliminary development plan is submitted for staff review and report. The nature of the approval required for a site plan can vary greatly, depending on the expertise of staff and the appetite of the community to delegate approval authority to an administrative official. So, for example, a community could decide to vest plan approval authority for some categories of development in an administrative official, other categories of development in its planning commission and retain to the governing body still another category of development approvals. One would expect that

administrative approval would be available for those categories of development that are determined to be of the least potential community impact, moving up to governing body approval on those that could have far reaching impacts, such as development at certain locations (key intersections) along the Corridor. If the site plan posed in the application is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. If no hearing is required, this notice should be provided to KDOT in enough time before action on the application takes place to allow meaningful KDOT input.

Another excellent way to approach site planning is to combine site plan review with an overlay district. The site plan is then used to evaluate the extent to which the design and performance guidelines of the overlay district are met by the proposed development. Going a step further, the overlay district could set forth certain guidelines that are mandatory, others that are encouraged and a last tier that are desirable, or some variance of this approach. The nature of the approval could then be tied to the degree to which the different tiers of guidelines are achieved. For example, all proposals that achieve all the mandatory and encouraged guidelines can be approved administratively. If the staff determines that the proposals does not achieve the guidelines in both tiers, the site plan must be considered by the planning commission or governing body. The variants that can be employed here are nearly endless.

3. Subdivision Regulation - The subdivision of land through platting is the second most common method used by communities to manage the development of property within its jurisdiction. The control of the division of a parcel of land is effectuated by adopting subdivision regulations by ordinance or resolution that requires development be in accordance with set design standards and procedures adopted locally. K.S.A. 12 - 749 grants cities and counties the authority to adopt subdivision regulations. Subdivision regulations may include, but need not be limited to: efficient and orderly location of streets; reduction of vehicular congestion; reservation or dedication of land for open spaces; off-site and on-site public improvements; recreational facilities; flood protection; building lines; compatibility of design; storm water runoff; and any other services, facilities and improvements deemed appropriate. It is through the consideration and action on plats that communities are able to require that the distances which structures are set back from rights-of-way (a very important tool for preservation of rights-ofway for mainline highway), the layout of building lots, the points of ingress and egress from the lot(s) (effective in helping to manage access) and the public improvements associated with those lots do , in fact, conform to locally established standards, including adopted plans, such as corridor management

plans. In some locations, subdivision regulation and plat approval may actually be the most significant regulatory tool for managing development. In some more rural areas, it is more common for counties to have adopted subdivision regulations than to have adopted zoning. In those unincorporated areas, there would be no local legislative authority to manage development through zoning restrictions. Accordingly, subdivision regulation would be those counties' primary land management tool.

Subdivision regulations usually specify what improvements the subdivider will be required to provide and the standards to which the improvements need to be constructed. A plat is a map prepared by a registered civil engineer or licensed land surveyor showing the boundaries and locations of individual properties and the streets of the proposed subdivision. The plat generally also shows land to be dedicated to a public sector entity for streets and easements for public utilities. K.S.A. 12-749 authorizes a planning commission to adopt and amend regulations regarding the subdivision of land, including payment of a fee in lieu of dedication of land. This same section also authorizes a county planning commission to establish subdivision regulations. Much like zoning, a city may adopt subdivision regulations that control the subdivision of land outside of its corporate boundaries, but only within three miles of that limit or one half the distance between two cities, whichever is less. Similar written notice requirements apply. The regulations must be considered by the planning commission at a public hearing, and the commission must forward its recommendation to the governing body for its approval. K.S.A. 12-750 lays out a process that must be followed where a city desires to adopt extraterritorial subdivision regulations and the county has its own regulations in effect as to that area. That process can result in the creation of a joint city/county committee for subdivision regulation.

K.S.A. 12-752 establishes the procedure for the consideration of and action on plats. Each plat must be submitted to the planning commission, which determines if the plat conforms to the subdivision regulations. If it finds that it does, it notifies the owners of that fact and endorses that fact on the plat. A dedication of land for public purposes must be accepted by the governing body before it takes effect.

See Section C.2 below, of this Chapter, regarding notices that should be placed on plats prior to their recording with Registers of Deeds to help ensure that prospective purchasers of properties, which are included in the geographic area covered by the Corridor Management Plan, are informed of the ramifications on those properties of being within an the area covered by the Corridor Management Plan. In addition, if the preliminary plat application is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. *Jurisdiction: Local*.

4. Building Permits – The same section of Kansas Statutes discussed immediately above, prohibits the issuance of a building permit for the use or construction of any structure on any platted lot in an area governed by subdivision regulations, except in the manner provided by that section. It further authorizes subdivision regulations adopted by cities and counties to provide a procedure for the issuance of building permits that takes into account the need for adequate street rights-ofway, easements, improvements of public facilities and zoning regulations, if in existence.

The issuance of a building permit is obviously the last step in the typical development approval process. Although courts hold that a building permit must be issued upon submission of a complete application, if all code provisions governing the process for building permit issuance have been fulfilled, this does not mean that communities cannot creatively incorporate building permit requirements into their governing code provisions. For example, it is common for the issuance of a building permit to be conditional upon the payment of a legislatively imposed fee, such as an impact fee.

In cities or counties that have not adopted zoning or subdivision regulations, local regulations governing the issuance of building permits may not only be the last step, but also the first step in the development approval process, thus markedly increasing the importance of this tool in the arsenal of techniques a community may employ to effectively manage land development. Even in communities that have adopted one or both regulatory tools, the procedure for the issuance of building permits still may play a very a critical role. See subsection B.3 above, of this Chapter, on Site Plans for a description of how that technique can be used to more effectively manage the development of land in jurisdictions where either zoning or subdivision regulations have not been enacted.

K.S.A. 12-751 authorizes cities to adopt and enforce building codes outside that city's limits and allows compliance with subdivision regulations to be a condition of the issuance of a building permit. *Jurisdiction: Local*.

5. Transfer of Development Rights and Density Transfers - Some locations along the Corridor, for a variety of reasons, including availability of access, are best developed with more intense and/or dense uses. Other locations along the Corridor, for other reasons, including the lack of direct access, are best suited for less intense or dense development. One way communities along the Corridor can help ensure that property owners are afforded the maximum opportunity to develop their property to its most reasonable and economic potential is to establish a system of density incentives and transfers to encourage more intense development in areas designated on the Plan for that type of development. This system provides those landowners whose land is designated for less intense

development the ability to transfer some or all of their development rights to locations where more intense development is planned, through a sale of those rights to landowners at those intense locations. These systems involve the transfer of all or a part of the permitted density on one parcel to another parcel or to another portion of that same parcel, thus allowing higher density at that location than would be allowed under the existing zoning regulations. The transfer or removal of the right to develop or build is expressed in units per acre or floor area ratio. This transfer generally occurs in accordance with a legislative established program that allows the shifting of development potential from areas where more intense land uses are considered undesirable (the donor site or sending zone), such as at locations which are a distance from the location where mainline interchanges are to be constructed, to other areas (receiving zones) chosen on the basis of its ability to accommodate development that is more dense or intense, such as areas adjacent to proposed interchanges. For example, developers can buy development rights from properties targeted for public open space and transfer the additional density to the base number of units permitted in the zone in which they propose to develop.

- 6. Density Incentives – This technique is an additional method of increasing density at locations designated by the Plan, and thereby maximizing the economic potential of the Corridor without sacrificing the functionality of the mainline highway and the adjacent local street network. It involves identifying areas, such as areas near interchanges or other access points, which are shown on the Management Plan as more appropriate for dense or intense development than other areas within the Corridor and providing incentives that will encourage developers to propose a form of development at those locations that conform to the density or intensity levels contemplated by the Plan. The most common incentive is to allow for a streamlined development approval process for applications that propose developments which exceed the density thresholds established by the local community through the restrictions of the underlying zoning district regulations. This is generally achieved by allowing for administrative, rather than legislative, approvals during the application review process. To be legally valid, the legislation establishing the program must include specific standards to guide the administrative official in decisions on when an application qualifies for streamlined review and when the application approval criteria are met. There are few limits to the innovation that can be used in creating incentives to lure more dense development. The Management Plan should serve as a good source of inspiration on potential incentives. Jurisdiction: Local.
- 7. Cluster Development This technique is yet another tool to help achieve Plan goals of ensuring denser development at locations where the Plan calls for it, while simultaneously keeping development away from or at very minimal levels at locations where it will have an adverse impact on Plan goals. A good example would be to preserve and protect critical environment or cultural resources. This

technique is generally authorized by specific district regulations, such as a cluster subdivision. It is a development design technique that concentrates buildings in specific areas on a site to allow the remaining land to be used for recreational, common open space or preservation of historically or environmentally sensitive areas. Through the employment of this technique, property owners are able to achieve an acceptable average density for the entire parcel, and both the public and private sector participants are able to effectively protect key community resources. This technique is intended to allow for significant creativity in site layout and planning, generally resulting in added value to development areas as a result of access to permanent open space and recreational opportunities. *Jurisdiction: Local.*

8. Setback Ordinances - One of the keys to successful implementation of the Corridor Management Plan is ensuring that development does not encroach on right-ofway that would be necessary for highway and interchange improvements as the Corridor develops. Along with the authority granted to cities and counties to zone and adopt subdivision regulation, one very effective way to achieve this objective is through the adoption of a building or setback line. This tool preserves projected rights-of-way and reduces acquisition costs: both over-riding goals of the Management Plan. K.S.A. 12-765 authorizes cities or counties, which have adopted a plan for a major street or highway system (which would include the Corridor Management Plan), as a part of its comprehensive plan, to adopt building setback lines. After consultation with the Secretary of Transportation, the county engineer and any planning commission of a county or counties within which that highway system lies, the governing body may establish, by ordinance or resolution, a building or setback line along proposed major streets or highways. This enactment, much like building and set back lines established in zoning district regulations and subdivision regulations, includes a prohibition on the location of buildings in front of that setback line. The enacting ordinance or resolution may incorporate by reference an official map showing with survey accuracy the location and width of existing or proposed major streets or highways and any setback or building line. A building or setback line cannot be enforced until a certified copy of the map and any adopting ordinance or resolution is filed with the register of deeds of each county. The key to the enforceability of the setback line is a careful evaluation of the impact of the line, and its attendant prohibition on adjacent landowners. The restriction on development must leave these owners with viable economic uses for their commonly owned contiguous parcels of land. As a safety valve, the local board of zoning appeals is vested by statute with the power to modify any building restrictions to address unwarranted hardships that constitute a complete deprivation of use. Building setback lines, like build-to lines, can also be established as a part of zoning district restrictions, subdivision regulations and as a design guideline in an overlay district. Although this is an additional tool available to communities along the Corridor to implement the Management Plan, it may well be that cities and counties can as effectively accomplish the goals of this tool through set back and building lines established in zoning ordinances and subdivision regulations. One place where this tool may be critical is in counties that have not adopted zoning or subdivision regulations. *Jurisdiction: KDOT/Local*.

- 9. 4(f) Uses Federal statute places significant restrictions on the authority of the United States Secretary of Transportation to approve a transportation program requiring use of publicly owned land, a public park, recreation area or wildlife refuges or land of a historic site. Because state transportation programs or projects often involve federal funds, the Secretary's approval is commonly required. Accordingly, it is important that these uses not be located within the Corridor unless no other viable option is available. This imperative makes it critical that communities avoid locating or approving development applications seeking to establish public parks, recreation areas or wildlife refuges and historic sites, also known as 4(f) uses, in the areas shown on the Plan footprint map as right-of-way for the mainline or of any portion of the local street network. The moniker 4(f) comes from the United States Code provision that limits the Secretary's authority. *Jurisdiction: KDOT/Local*.
- 10. 10. Variances - Communities in Kansas have authority to grant variances from the specific terms of the zoning restriction whenever doing so is not contrary to the public interest and where, due to special conditions, local enforcement of the provisions of the regulations in an individual case results in unnecessary hardship. K.S.A. 12-759. The board of zoning appeals has the authority to grant a variance to area and setback regulations applicable to that property. The grant of a variance from district restrictions, such as parking requirements and impervious cover requirements, may be an effective way to allow an important development proposal to proceed with minor modifications that keep it out of necessary rightsof-way and behind setback lines. At the same time, the grant of some variances could adversely impact the recommendations of the Plan. Therefore, it is recommended that the board of zoning appeals consult the Corridor Management Plan, as incorporated into its comprehensive plan, when considering any request for a variance to ensure that the variance decision supports the recommendations of the Plan. In addition, if the variance proposed is determined to have the potential of adversely impacting the Corridor, copies of the application, along with the staff report, should be provided to KDOT for input, at the same time any other affected party is provided notice of the hearing on the application. Jurisdiction: Local.

C. Administrative Tools

1. Accessibility of the Comprehensive Plan - The goal of a comprehensive plan is not only to serve as a guide to development for the planning commission and the governing body but also to owners and potential owners of property within the

community's jurisdictional boundaries. That being the case, it is recommended that the amended comprehensive plan be posted on the city's website and at all other appropriate locations to assist in assuring that all interested parties are informed of the recommendations of the Corridor Management Plan for areas included in its footprint map. Jurisdiction: Local.

2. Notice of Applicability of Plan - One tool to help ensure that individuals who own property within the Corridor and who are considering purchase and/or development of that property are aware that the land is included in the area covered by the Corridor Management Plan is for all counties and cities that are partners in the development of a Corridor Management Plan to require that all plats approved by them contain a statement, similar to the following, placed in the dedication section of each approved plat.

"The property	shown on and desc	ribed in this plat is and shal	I hereinafter
perpetually be	e subject to that cert	tain [INSERT CORRIDOR NAI	ME] Corridor
Management	Plan, adopted by the	e Kansas Department of Tra	ansportation
on	, the City of	, Kansas on	,
and	County, Ka	ınsas on,	, recorded
in the Registe	rof Deeds for	County, Kansas, in B	Book,
at Page	." ·		

Another way to help ensure that those interested in developing areas of land covered by the Management Plan are aware of the Plan, is for communities within the Corridor to amend all their development applications to highlight the existence of special planning areas in the city or county, including the areas covered by the Corridor Management Plan. This could be handled informally through an internal process established wherein all individuals who request a development application are routinely asked by staff the location of the property that will be the subject of the application to allow the staff member to inform the potential applicant when the area to be developed is included in an area covered by a special area plan. Alternately, it could be handled more formally by inserting a line on all applications with a space to be filled in identifying parcels covered by special plan areas. The latter is the recommended approach, as it avoids reliance on, what could be, revolving staff to ensure that knowledge of the relevance of areas plans is consistently imparted to applicants. That being said, development application forms cannot always be changed immediately, so the informal process may be employed until the opportunity arises to make the formal change.

Entities or persons interested in developing at locations within the Corridor may also become informed of the existence of the Plan as a result of the requisite filing of the Interlocal Cooperation Agreement (entered into among all parties to the Study that resulted in the Corridor Management Plan) in the register of deeds office in the county where that property is located. It should be noted that upon its filing the Interlocal Agreement will not be filed in the grantor/grantee index, so it would typically not show up on a title search. The agreement is filed under the names of the parties to the agreement See Section IV of this Chapter for details on filing of the interlocal agreements. *Jurisdiction: Local*.

- 3. Notice and Opportunity to Provide Input - Since the Corridor Management Plan is a joint cooperative effort between the Kansas Department of Transportation and communities along the corridor to create a vision for development of that Corridor and provide a guide to development decisions made by each community within that Corridor, all parties with an interest in potential development along the Corridor should be afforded an opportunity to provide input on that decisionmaking process during the requisite application and consideration procedures utilized by that community. Accordingly, each community should provide KDOT with appropriate notice of any development application (including rezoning and associated preliminary development plan applications, special or conditional use applications, site plan applications and preliminary plat applications and hearings on an amendment to that community's comprehensive plan), that could reasonably be expected to have the potential to adversely impact the Corridor. In addition, each community should provide KDOT with advance copies of all such proposed plan amendments or development applications and any related staff reports. Jurisdiction: KDOT/Local.
- 4. Notice of Land Marketed for Sale Success in being able to acquire property necessary for right-of- way for the mainline highway at the earliest time possible is critical to the successful implementation of the Corridor Management Plan. The ability to act quickly when an opportunity arises is key to this success. If KDOT has prompt notice of properties that become available for purchase within areas shown as future right-of-way in the Corridor Management Plan, it will be in a better position to timely coordinate with local governments on the acquisition of necessary rights-of-way. Cities and counties within the Corridor should employ whatever means are available and identify additional means by which they can keep apprised of land purchase opportunities as they arise within the Corridor. *Jurisdiction: KDOT/Local*.
- 5. Economic Incentive Policy As discussed below, city and county economic incentives can effectively be focused to increase the amount of revenues they generate to pay for the cost of acquisition of land needed for transportation facilities and for the actual construction of the facilities shown on the Plan, as well as to encourage dedications of land for facility rights-of way. Many cities and counties have adopted policies to guide governing body decisions on when to grant incentives and the level of incentives that will be available. If a community along the Corridor has adopted or is considering the adoption of an economic incentive policy, that policy should be revised or adopted to encourage the use of

economic incentives to implement the recommendations of the Corridor Management Plan. Jurisdiction: Local.

Acquisition Tools D.

- 1. Land Acquisition - Public sector entities have the authority to acquire land for public improvements, including state highways and local roads and streets by gift, purchase, or condemnation. (K.S.A. 19-101 et seq., K.S.A. 26-201, et seq., Article 12, Section 5 of the Kansas Constitution, K.S.A. 68-404) Sufficient land may be acquired to accommodate immediate construction needs, as well as for future needs. In appropriate circumstances, public sector entities can acquire interests in land for public improvements in advance of the date of the start of construction. Timely acquisition of necessary rights-of-way preserves opportunities to fully implement the goals of the Corridor Plan and helps reduce the cost of full implementation. The primary objective of all the partners in implementing the Plan must be to continually coordinate with one another to identify opportunities to acquire the interests in land necessary to construct the transportation improvements envisioned by the Plan. Continuing coordination is critical, but it means nothing if the partners are not equally devoted to cooperation with one another in the identification of traditional and innovative new sources of revenue and in creative partnering on acquisition strategies. Jurisdiction: KDOT/Local.
- 2. Access Acquisition – As discussed in Section II. A below, existing access points that are not consistent with the Corridor Management Plan can often be eliminated though the KDOT's, city's or county's exercise of their police power. For that exercise to be appropriate however, adjacent landowners must be left with "reasonable" access after the inconsistent access point is removed. A private property owner does not have a legal right to direct access to the highway or to a particular local street. It is only required that a reasonable access is available to a property owner through some alternative means, such as access to a frontage or reverse frontage road, in the case of a highway or from some other adjacent street. That being said, situations will arise where this objective of reasonable access cannot be achieved solely though exercise of a public entity's police power. Situations will also exist where it is desirable to eliminate one or more existing access points to a particular parcel to achieve the access management objectives of the Plan, while still leaving that property owner with a point of direct access that is consistent with the Plan. In those, and in other instances, it may be advisable or even necessary to acquire inconsistent points of access through traditional negotiation or condemnation processes. The authority to acquire land referenced in Section I.D.1 above is also the source of KDOT's, cities' and counties' authority to acquire access. Acquisition of access rights can be applied to:
 - limit access to designated locations or side streets;

- control access and sight distance at intersections or interchanges;
- introduce long term or permanent access control; and/or
- control traffic and turning movements at locations where high numbers of conflicting movements occur.
- 3. Land Dedication and In-Lieu Fees One of the most, if not the most, critical recommendation of the Corridor Management Plan is that both KDOT and the communities along the Corridor do everything within their power to preserve and acquire the right-of-way necessary to construct the enhancements to the highway mainline and to the adjacent and interfacing local street network. One of the goals of the plan is to maximize economic opportunities for both landowners and communities along the corridor while, at the same time, minimizing development of land at locations of a nature, and of an intensity that impedes the partners' ability to ensure that the mainline highway and the local street network function as envisioned by the Corridor Management Plan. New development that takes place within the corridor, in most instances, will create a need for new transportation network facilities to accommodate the vehicle trips it generates.

Both federal and state law authorize the communities along the corridor to require, as a condition of development approval, that the landowner dedicate rights-of-way needed for network improvements in an amount that is roughly proportionate to the need for facilities generated by that development. A carefully calculated system of fees in lieu of dedication also can be effectively utilized to ensure the timely purchase of sufficient rights-of-way. These in lieu fees are authorized by K.S.A. 12-749. If each community along the corridor adopts a well-designed, legally defensible right-of-way dedication and/or in-lieu fee program, the significant costs of acquiring the right-of-way contemplated by the Corridor Management Plan can be greatly minimized, thereby helping to ensure successful implementation of the Plan. *Jurisdiction: Local*.

II. Access Management Strategies

KDOT and local communities can undertake access management activities through their "governmental police powers," which is the authority to take action to protect the well-being, safety and health of the public, and through its authority to acquire interests in land. These management strategies can be designed to apply equally to all parts of the transportation network within the Corridor. Alternatively, access management tools and regulations can be imposed as an overlay district and don't have to be city or county-wide, but can be tailored to accomplish specific objectives in defined areas. A component of access management is known as regulation of traffic flow. Regulation of traffic flow could include several actions listed in the access management tools described below or be as simple as prohibiting left turns, prescribing one-way traffic, or restricting speed. Managing access is complicated and requires careful consideration, but it can be done while still allowing the property owner reasonable access to their property and to the surrounding street network. It is important to understand the

differences between access (connection with surrounding roadways) and routing (direction of flows between properties and surrounding roadways).

The following are several action steps the Corridor partners can take in the area of access management to help assure successful implementation of this Management Plan.

A. Closing of Access

While the ultimate objective of conversion of an existing route to an access controlled facility generally may not be realized immediately, KDOT and the communities need to constantly be looking for and acting on opportunities to eliminate access at locations other than those interchanges and access locations designated in the Plan. Access management is necessary to protect safety for the motoring public and the operational efficiency of the Corridor. Effective access management also protects public investments and facilitates the continued economic vitality of the corridor. In contrast, uncontrolled access, generally impedes development and produces high costs when and if retrofits are needed. *Jurisdiction: KDOT/Local*.

B. Approval of Access

As stated above, the authority to allow access to a state highway or city connecting links is vested in KDOT. See The Kansas Department of Transportation Corridor Management Policy, http://www.ksdot.org:9080/BurTrafficEng/cmpworking/Index.asp. A request for access is approved and controlled through issuance of a Highway Permit. The Permit is the legal document that establishes the relationship between the landowner and KDOT. All points of access to the state highway system must be the subject of a Highway Permit. This includes when access connections or local streets and intersections are installed, relocated, improved, removed, or replaced on or along state highway system right-of-way. The permit will specify such things as the location of the point of access, issues related to the construction of the access, type of use allowed at the access point and other conditions and limitations of access at that point. The KDOT District Engineer has been delegated the authority to approve Highway Permits. A request for a Highway Permit must be made with the appropriate KDOT Area Office. With respect to access to local streets within the Corridor, the authority to approve that access is vested in either the city or county that has jurisdiction at the requested location. This authority is derived from the government's inherent police power. The actual procedure for obtaining access will vary from community to community. Some communities may have adopted an access management policy that governs the location and other aspects of access to the public streets and road. In other instances, regulations governing access points may be located in the community's zoning district regulations or its subdivision regulations. Provisions on access should be included in any overlay district created for an area within the Corridor. On City Connecting Links, a Highway Permit must be obtained for work in the right-of-way. Executed copies of the permit, approved by KDOT and the city or county will be provided to the property owner.

C. Input to KDOT on Access/ Coordination of Access Management

Because of the importance of access management on the mainline highway, and on the road And street network within the Corridor, and because the authority to permit and close access to the state highway system and its connecting links is vested exclusively in KDOT, (K.S.A. 68-413 and K.S.A. 68-404(a)), it is critical that communities along the Corridor confer with KDOT respecting development applications that propose access points on the mainline highway and on portions of the local street network that are included in the Corridor Management Plan, particularly if that access is not consistent with points shown on the Corridor Management Plan as future points of access. *Jurisdiction: KDOT/Local*.

D. Coordination with KDOT

The Corridor Management Plan identifies existing access points on the highway that should be closed over time, as appropriate circumstances present themselves, to achieve access management objectives. Accordingly, each community along the Corridor should cooperate with KDOT in identifying existing access points along the mainline and in closing those points, where doing so, will implement the access management goals of the Corridor Management Plan. Each local government partner should establish points of contact with KDOT to facilitate the ability to quickly capitalize on opportunities as they arise. Early coordination with KDOT at the site plan and preliminary plat stages is important. *Jurisdiction: KDOT/Local*.

E. Shared Access

One meaningful way to help ensure that all property owners are afforded reasonable access to the mainline and to the local street network consistent with the full functionality of that network, is to encourage that joint access to that network by adjacent property owners be utilized to the maximum extent possible. Therefore, communities, when reviewing development applications should consider, as a condition of approval of that application, the grant of a recorded easement by the applicant to adjoining property owners or such other conditions as are appropriate to further the Corridor access management objectives. *Jurisdiction: Local*.

A list of common access management tools is provided below. Each tool is illustrated in the Table that follows.

Access Management Tools:

- 1. Close median breaks
- 2. Consolidate mainline driveways
- 3. Eliminate mainline driveways/side road access
- 4. Eliminate public road connections to mainline, reconnect to frontage roads
- 5. Eliminate private driveways, reconnect to frontage roads
- 6. Intersection consolidation
- 7. Convert major intersections to interchanges
- 8. Advanced right-of-way acquisition
- 9. Interim intersection upgrades (traffic signals, turn-lanes and acceleration lanes)

Tool	Description	Jurisdiction	Implementation and Compensation Requirements
Close Mainline Median Breaks	Eliminate existing median breaks to prohibit left turns to/from mainline and abutting properties.	КРОТ	KDOT/LOCAL Administrative active under police power to regulate traffic flow. No private property right exists in traffic flow (turning movements) and therefore no compensation due abutting property owners.
Consolidate Private Driveways	Eliminate redundant driveway connections to mainline into single driveway connection, either within an individual tract or at property line of contiguous tracts.	KDOT/LOCAL	If "reasonable" access to the property will remain after consolidation, consolidation can potentially be accomplished by KDOT regulation of driveway permits under police power without payment of compensation to affected property owners. More typically, existing access control breaks allowing private driveways to mainline are acquired through traditional negotiation or condemnation processes. If abutting property owner submits a re-zoning or development proposal to local government, driveway locations are subject to regulation under zoning authority without payment of compensation as condition of zoning or development plan approval
Eliminate Private Driveways/ Side- Road Access	Where property owner has frontage on both mainline and sideroad, eliminate mainline driveway and restrict access to side-road.	KDOT/LOCAL	If "reasonable" access to the property will remain after consolidation, elimination can potentially be accomplished by KDOT regulation of driveway permits under police power without payment of compensation to affected property owners. More typically, existing access control breaks allowing private driveways to mainline are acquired through traditional negotiation or condemnation processes. If abutting property owner submits a re-zoning or development proposal to local government, driveway locations are subject to regulation under zoning authority without payment of compensation as condition of zoning or development plan approval.
Eliminate Public Road Connections to Mainline, Re- Connect to Frontage Road	Where local roads connect to mainline at locations other than mile roads, eliminate connection between mainline and local crossroad, re-connecting cross-road to newly installed frontage or reverse frontage road.	KDOT/LOCAL	KDOT may regulate location where public roads connect to mainline under general statutory authority to establish and maintain state system and its police power. No public "property right" in location where local roads connect to mainline. Therefore, local governments cannot enjoin closure of mainline connections nor can abutting property owners seek compensation for resulting re-routing along local roads to mainline. More typically, KDOT and local governments will jointly undertake coordinated road improvement projects pursuant to their respective general statutory powers to establish and maintain public roadways. Such a project would include closing cross-road intersections with mainline and reconnecting cross-roads to frontage or reverse-frontage roads which connect to mile-roads and mainline interchanges. If abutting property
Eliminate Private Driveways, Re- Connect to Frontage Road	Where private driveways connect directly to mainline, eliminate private driveways and re-connect to newly installed frontage or reverse road.	KDOT/LOCAL	Acquire existing access control breaks through negotiation or condemnation, stipulating property remaining will be connected to a newly installed frontage or reverse frontage road. If abutting property owner submits a re-zoning or development proposal to local government, driveway locations are subject to regulation under zoning authority without payment of compensation as condition of zoning or development plan approval.

Tool	Description	Jurisdiction	Implementation and Compensation Requirements
Intersection	Consolidate redundant, at-grade local road intersections into single intersection by establishing local road network to facilitate connection to single remaining at-grade intersection.	КВОТ	KDOT may regulate location where public roads connect to mainline under general statutory authority to establish and maintain state system and its police power. No public "property right" in location where local roads connect to mainline. Therefore, local governments cannot enjoin closure of mainline connections nor can abutting property owners seek compensation for resulting re-routing along local roads to mainline. More typically, KDOT and local governments will jointly undertake coordinated road improvement projects pursuant to their respective general statutory powers to establish and maintain public roadways. Such a project would include consolidating redundant, atgrade local road intersections with local road network to facilitate connection to single remaining at-grade intersection. If abutting property owner submits a re-zoning or development proposal to local government, intersection location is subject to regulation under zoning authority without payment of compensation as condition of zoning or development plan approval.
Interchanges at Major Roads	Replace major road at-grade intersections with grade separated interchanges	KDOT/LOCAL	KDOT may install interchanges under general statutory authority to establish and maintain state system. Acquire necessary right of way through traditional negotiation and condemnation processes.
Advance ROW Acquisition	Identify and prioritize critical parcels most vulnerable to development or other market forces.	KDOT/LOCAL	After identifying and prioritizing critical parcels most vulnerable to development or other market forces which would make acquisition at time of future project physically impossible or unnecessarily expensive. KDOT or local government may acquire necessary right of way as funding is available through traditional negotiation and condemnation processes.
Interim Intersection Upgrades Road	Identify at-grade intersections where traffic volumes or accident rates require interim improvement until the corridor is complete.	KDOT/LOCAL	KDOT may authorize interim intersection improvements including traffic signals, turnlanes and acceleration/deceleration lanes under general statutory authority to establish and maintain state system. Though KDOT must ultimately authorize these upgrades, the evaluations undertaken to determine if they are warranted, their timing, their nature and the source of funding for the upgrades is often initiated by local governments. It is also common for these upgrades to be provided, in whole or in part, by private landowner as a part of an exaction negotiated during the development approval process, based on the extent to which the demand for the upgrade is generated by the proposed development.

III. Financing Strategies

The Corridor Management Plan has been developed to maximize economic opportunity and to provide a fully functional highway and street network for property owners within the Corridor. The full costs of the improvements to the mainline highway and adjacent street network necessary to achieve these Plan objectives are significant. Monies needed to complete these enhancements may not be available from KDOT or from the local communities within the Corridor when the enhancements are needed.

Therefore,

- identifying all existing financing tools, both the traditional and the alternative tools;
- creatively analyzing how these tools can best be utilized individually and in concert with one another to maximize resources;
- investigating possibilities for new options using home rule and delegated powers;
- pursuing federal and state statutory and regulatory amendments to eliminate funding obstacles and provide new approaches; and
- pursuing new legislative authority for innovative funding approaches

all are all critical to the successful implementation of the Management Plan.

To achieve this sought-after success, it is imperative that all Corridor partners carefully and constantly coordinate with one another to identify potential sources of funds and work diligently, once sources are identified, to make certain that available funds are utilized in the most effective and efficient way to the benefit of all parties to this endeavor.

That having been said, there is a wide array of financing options available to cities and counties to finance infrastructure improvements. Notably, many of these same financing options can be used as economic incentives to encourage development to occur at a certain location, in a certain form, and/or in specified densities or intensities. These financing options include the traditional mechanisms used by cities and counties to raise revenues and to pay for both the capital and operational expenses of government and other alternative financing strategies.

A. Traditional Funding

Traditional funding mechanisms include federal and state funds, real and personal property taxation (Article 12, Section 5 of the Kansas Constitution, K.S.A. 19.101 et seq. and K.S.A. 79.1801 et seq.), sales taxation (K.S.A. 12.187 et seq.), economic development tax exemptions (Article 11, Section 13, Kansas Constitution), special assessments (K.S.A. 12.6a01 et seq., and K.S.A. 12.601), and the Main Trafficway Act (K.S.A. 12.685). The latter two are both discussed in some detail immediately below.

1. K.S.A 12.6a Improvement Districts - Improvement Districts are the Kansas form or a traditional benefit district; a financing and development tool whereby cities and counties can establish a district, construct improvements and then issue general obligation bonds for construction of public improvements and assess the cost to those properties that are specifically benefited by the improvement. The bonds are then retired through payment of special assessments that are paid along with the benefited property owneri 's ad valorem property taxes by these benefiting properties. There is a very specific statutory process that must be followed to effectively utilize this strategy.

Improvement Districts are used by the city and county to assist in development of arterial roadways (usually associated with section line roads), water lines and sanitary sewers, among other public improvements. It is a responsible and fair method available to communities in Kansas to pay for the roads and infrastructure associated with new development, though its use is not limited to improvements to support only new development. For example it is often used as the financing mechanism for the construction of new sidewalks in existing developments. However, the method can be effectively used to ensure existing property owners do not pay for improvements from which they do not receive a special benefit.

With the number of roadway, sanitary sewers and water line improvements throughout a community, if the community did not utilize improvement districts, either the improvements would not be made or property owneri's ad valorem property taxes would need to be raised to allow for the construction of these necessary improvements. Developers have the option to build the improvements in front of their land to meet city specifications, but in so doing, a hodge.podge of improvements would occur, and the improvements could be under construction at different times and cause much more disruption than the orderly process afforded by the creation and administration of Improvement Districts.

2. Main Trafficways - K.S.A. 12.685 et seq. authorizes cities to designate by ordinance any existing or proposed street, boulevard, avenue or part thereof, within its jurisdictional boundaries as a main trafficway, if the primary function of the street is the movement of traffic between areas of concentrated activity within or outside the city. Once designated a main trafficway, the city is authorized to acquire by purchase or condemnation the land necessary for that facility and to improve or reimprove that trafficway. Virtually all aspects of the construction of these trafficways is authorized, including bridges, viaducts, overpasses, underpasses, culverts and drainage, trafficway illumination, traffic control devices

and pedestrian ways. The cost for these improvements, including acquisition, can be paid for from the cities general improvement fund, internal improvement fund or any other available funds or by the issuance of general obligation bonds. No vote of the public is required for issuance of bonds for these purposes. This method is often used in conjunction with the improvement district statute for street improvements.

All of these financing mechanisms are available to fund improvements contemplated by the Corridor Management Plan and their use, as the situation dictates, should not be ignored.

Because the traditional mechanisms are regularly utilized by KDOT, cities and counties to pay for capital projects, they will not be discussed in further detail in this Chapter; rather this portion of this Chapter is devoted to an explanation of several of the less-traditional mechanisms available to cities and counties to pay for improvements contemplated by the Plan and to incent Corridor development that is consistent with the Plan's recommendations.

Although not actually a source of additional revenue, the bonding authority of cities and counties is worthy of mention. Each is authorized to issue long-term debt to finance projects, with that debt to be repaid from a variety of traditional and some alternative revenue sources. Bonding authority is important for many reasons, but one key advantage of issuing bonds to finance public improvements is that it allows the issuing entity to pay for an improvement up front (before total project costs are available in hand) to get a project started or even completed in those instances where timing is critical in terms of events in the community and/or to take advantage of favorable financial markets. These improvements can then be paid for over time, generally up to 20 years, as tax revenues or other dedicated sources become available. This can be a huge advantage and can help the partners in their efforts to acquire land for and make the improvements contemplated by the Plan when actual situations in the Corridor dictate those actions occur.

Cities and counties are authorized to issue general obligation bonds payable from a general tax levy on all taxable property within the city (K.S.A. 10.101 et seq.). These GO Bonds are backed by the full faith and credit of the issuing entity. As an alternate, the city may issue revenue bonds (K.S.A. 10.1201 et seq.). Revenue bonds are repaid from a pledge of the revenue from a specified income-generating facility or source. Revenue bonds are not guaranteed by the full faith and credit of the issuer. A city may issue special assessment bonds to be repaid, in whole or in part, from the revenues received from special assessments imposed on properties that are specially benefited by the improvement(s) constructed within an assessment district (K.S.A. 12.615). Special assessment bonds are actually general obligations of the issuer, which, in addition to the pledge of the revenues from the special assessment, are backed by the full faith and credit of the city. The final category of traditional municipal bonds is special obligation bonds. These are bonds issued under the authority of Kansas statute, specifically, K.S.A. 12.1770 et seq. and 12.17, 160, et seq., to finance the undertaking of redevelopment projects. These bonds are payable from incremental property tax increases resulting from the redevelopment in an established redevelopment district, a pledge of a portion of the revenues received by the issuer from transient guest, sales and use taxes collected from taxpayers doing business in a redevelopment district, franchise fees, private, state or federal assistance or any combination thereof.

B. Alternative Funding Mechanisms

Most alternative funding techniques are devised by one local government to meet a local need and their use than spreads from community to community. The techniques are refined based on trial-and-error. Many of these approaches do not have specific legislative authority, but are enabled through home rule, local police powers, or a broad reading of authority from another source, such as local planning.

State highway, road and street projects required to support new development, may be constructed utilizing economic incentives, such as tax increment financing, Star Bonds, sales tax reimbursement agreements, tax abatement, special assessment districts and transportation development districts, to name only several of the options. It is important that, wherever possible, local communities along the Corridor be cognizant of their ability to require that revenues from the grant of these incentives to developers be used to offset the cost of the construction of mainline highway improvements and related improvements to the local street network, as shown on the Corridor Management Plan. But, even more importantly, they must actually make the grant of these incentives conditional on a reasonable portion of these monies being used to pay the cost of Corridor Management Plan identified improvements.

These incentives also can be effectively used to influence the location, type/uses, form, architectural quality, configuration and density/intensity of development. It is important to utilize these incentives, not only to offset traditional public costs for these facilities, but also as incentives to shape development proposals, so they further Plan recommendations and achieve quality design and sustainable development in the Corridor.

- 1. Impact Fees Impact fees are one-time regulatory fees assessed against new development to cover the costs for necessary capital facilities proportionate to the demand generated by the new development. The fee is imposed by a public sector entity on development activity as a condition of granting development approval, and generally is calculated at the platting stage and collected at the time a building permit is issued. Kansas has no impact fee statutory authority. Nevertheless, cities and counties can establish a system of impact fees using their home rule authority. This system of fees requires the development of a local legislative adopted scheme that includes the calculation methodology for the fee, and a system of credits, exemptions and appeals. The system would be adopted by ordinance or resolution, as the case would require. Impact fees must be used to add capacity attributable to new development; they cannot be used to pay for improvements necessitated by existing development. An impact fee must meet three requirements:
 - The new facilities are a consequence of new development;
 - There must be a proportionate relationship between the fee and the infrastructure demand; and
 - The funds collected must be used to provide a substantial benefit to the new development.

In Kansas, impact fees may be collected either across the entire jurisdiction or in a designated geographic area. While they may be assessed at platting, impact fees are typically collected upon building permit issuance. A detailed calculation is necessary to ensure that the system, and particularly the fee charged property owners, is proportionate to the demand for new facilities that each unit of new development generates, i.e., its impact, in terms of facility capacity consumed. In funding transportation network facility improvements, the measuring stick for each development's impacts is the number of vehicle trips it will generate. Since streets are generally designed to accommodate the PM Peak trips, that is generally the time interval used. The Kansas Supreme Court has recognized the legitimate use of impact fees in McCarthy v. City of Leawood.1 In that case, the City of Leawood assessed the payment of impact fees on the issuance of building permits and plat approvals for properties within the K.150 (135th Street) Corridor. The purpose of the fee was to finance a portion of the improvements of K.150. Back when first established in 1988, the fee was calculated based upon trip generation, at a rate of \$26.45 per trip. This rate was then multiplied by the average number of trips generated by a use to determine the individual fee. For

- example, residential uses were projected to generate 10 trips per day, multiplied by \$26.45 for a fee of \$264.50 per unit. Jurisdiction: Local.
- 2. Excise Tax - Technically, an excise tax is a broad term that covers every type of tax, except a property tax. As with all taxes, it is a method of raising revenue. It is distinguished by the fact that rather than being based on the value of property, it is levied on a certain activity or the exercise of a privilege ¡V more accurately described as business done, income received, or privilege enjoyed. Typical examples of excise taxes include taxes on the purchase of gasoline, alcohol or cigarettes, business license taxes and on the rental of hotel rooms. In recent past, local governments in Kansas have innovatively used an excise tax to fund transportation network improvements that are required to support development. It is structured as a tax on activity of platting lots. The rate of the tax is based on the amount of square footage proposed to be constructed or on the number of vehicle trips the proposed development will generate on the street network. The key reason for its use has been that because it is a tax and not a regulatory fee, the rate is not required to satisfy the constitutional benefit or nexus requirements of regulatory fees imposed by local governments, such as impact fees discussed above. Kansas courts had upheld this financing approach.

In 2006, however, the Kansas Legislature amended K.S.A. 12.194 to make it uniformly applicable to all cities. By doing so, this provision became no longer subject to a charter ordinance or resolution whereby cities and counties could make its provisions inapplicable to that city or county and adopt supplemental provisions on the subject. This charter approach was the one that cities and had used to eliminate the legal impediment in K.S.A. 12.194 and use their ordinary home rule power to establish an excise tax system of this type. It had become known as a "development excise tax." That amendment, in addition to precluding local governments that did not have a development excise tax in place from adopting one, also included a provision that prevented cities and counties that had levied or imposed a development excise from increasing the rate of the tax without a majority vote of the electors, after July 1, 2006. Accordingly, this technique is only available to local governments that had a development excise tax in place before that date, and those that did have one in place cannot increase the rate charged without a vote. Jurisdiction: Local.

3. Transportation Development Districts - A Transportation Development District (TDD) (K.S.A. 12. 17,140 at seq.) is a form of a special district enacted specifically to facilitate the construction, maintenance and financing of a broad array of

transportation projects, ranging from streets, roads, highway access roads, interchanges and bridges to light rail and mass transit facilities. Most improvements related thereto, such as streetscape, utility relocations and other necessary associated infrastructure, can also be funded using this technique. While a regular special district can be used to address transportation issues, transportation development districts allow greater funding flexibility, including authority to impose a transportation development district sales tax of up to 1% (K.S.A. 12.17,145), in addition to the authority to levy special assessments. If a transportation development district is sought to be imposed, the governing body must hold a duly noticed public hearing in advance of adopting the resolution or ordinance creating the district and approving the method of financing projects within the district. The district may issue bonds backed by the revenues received from properties in the district from the imposed sales tax or special assessment.

One significant difficulty in utilizing this mechanism for improvements covering a larger area is that the district can only be formed through a petition signed by owners of all of the land area within the proposed district. So, if the improvement is adjacent to lands owned by different owners, it may be difficult to obtain the consent of all necessary owners. It may have its greatest utility for distinct segments of the improvements proposed by the Management Plan, such as mainline highway interchanges and access roads located within one tract of land that is designated in the Plan for more dense or intense development. This technique can also be used effectively to assist in the financing of key portions of the adjacent local street network. The statutory scheme allows for a good deal of flexibility in how the boundaries of the district are established, so long as all included property owners agree. For that reason, the community partners should keep this tool on the list of the ones that should be considered for funding, particularly in those instances where a property owner or several property owners want to develop an area of land at an access point with sales tax generating properties. Jurisdiction: Local.

4. Transportation Utility Fee - A transportation utility fee is a fee collected on residences and businesses within a city's or countyi's corporate limits tied to the use and consumption of the transportation system. While this approach has only recently been applied to transportation services, utility charges have been used for years "to finance not only public water and wastewater systems but also such diverse facilities and services as electricity, telephone or telegraph services, gas, and a cotton gin."2 There are a number of benefits to TUFs:

Utility rates and fees provide a steady revenue stream that may be used for maintenance and operations costs, as well as facilities construction and are not required to meet the direct benefit test applicable to special assessments. Also, utility charges are generally not subject to voter approval, as are many taxes.3

And perhaps most applicable to the current circumstances, "[t]he development of a transportation utility is a particularly attractive option in states with strong home rule powers, such as Colorado, Florida, and California."4

Utility fees are collected from all development, both existing and new (as it "hooks.in" to the existing system). Charges are based on usage estimates of trips by land use and project budgets. The transportation utility fee is typically included on an existing county or utility collected tax or rate bill.

The uses to which revenues from a utility can be used are limited only by the restrictions placed on their use in the home rule authority. Generally, however, the revenues would be placed into a separate fund and earmarked or dedicated to the purposes stated in the enabling authority and to no other purpose.

There is no specific legislative authority for transportation utility fees in Kansas. Local governments will need to look to home rule to authorize this financing mechanism. The key to the successful employment of this technique is crafting an ordinary ordinance or resolution that establishes a system of charges that will not be found to be a "tax," while at the same time ensuring that the ordinance or resolution is not in conflict with existing state statutes, such as, by example, K.S.A. 12.6a01 et seq., authorizing special assessment districts. In the leading case on transportation utility fees, Bloom v. City of Fort Collins5, the Colorado Supreme Court reached the following conclusion:

We hold that a transportation utility fee is not a property tax but rather is a special fee imposed upon owners or occupants of developed lots fronting city streets and that such fee is reasonably related to the expenses incurred by the city in carrying out its legitimate goal of maintaining an effective network of city streets.

The Fort Collins transportation utility fee was adopted to address maintenance issues. Nothing, however, would prohibit the utility fee from being designed to fund construction-related costs. The Fort Collins fee was calculated based on: "the amount of frontage in linear feet that each lot or parcel has on the right-of-way of an accepted street; the base rate maintenance cost of each foot of frontage; and

the developed use of the property (which includes the amount of vehicular traffic generated by the property)".6 The fee was billed monthly. The Colorado Supreme Court found that the transportation utility fee qualified as a fee and not a direct tax. "Unlike a tax, a special fee is not designed to raise revenues to defray the general expenses of government, but rather is a charge imposed upon persons or property for the purpose of defraying the cost of a particular governmental service."

Although this technique has a lot of potential as a viable alternative funding strategy, careful coordination with legal counsel will be necessary to ensure the precise structure developed is legally defensible. Jurisdiction: Local.

5. Tax Increment Financing - Tax increment financing (K.S.A. 12.1770 et seq.) is a tool used by local governments to capture the future increases in property tax and all or a portion of the revenues received from transient guest, use, local sales taxes collected from taxpayers doing business within the district, and available as an incentive to development, by using the revenue to pay for, generally, public infrastructure necessary to implement a redevelopment project plan (K.S.A. 12.1770a (o)). Project costs may not include costs related to a structure to be owned by or leased to a developer.

TIF funding can provide funds either as collected (pay-as-you-go) or through special obligation tax increment bonds repaid over twenty years.

While there is specific enabling authority for the use of TIF, it is limited to "eligible" areas that fall within one of the following categories and the boundaries of which are designated by the local government as a redevelopment district:

- blighted;
- blighted and in a 100.year flood-plain;
- intermodal transportation area;
- major commercial entertainment and tourism area Conservation (becoming blighted);
- major tourism area;
- historic theater;
- enterprise zone, or
- environmentally contaminated area.

Therefore, not all property within a local government's jurisdictional boundaries may qualify to be included in a redevelopment area.

- Eligible project costs most certainly will include all transportation network public infrastructure identified in the Corridor Management Plan. Jurisdiction: Local.
- 6. Sales Tax and Revenue Bond Districts - This mechanism (K.S.A. 12.17, 160 et seq.) is the big brother/sister of tax increment financing. It's "Super TIF," if you will. The entire mechanism works almost exactly like tax increment financing, except the districts are called STAR bond project districts and the individual projects in the district are called STAR bond projects. Each project must be approved by the Secretary of Commerce and include at least a \$50,000,000 of capital investment and evidence \$50,000,000 in project gross annual sales or, if outside a MSA, met the requirements of K.S.A 12.17,162 (w). It is the heightened level of incentives authorized in these districts that is key. Once a district is established and a project plan is approved, the approving city may issue special obligation bonds. Importantly, those bonds may be repaid from the portion of the city and county sales and use tax collected from taxpayers within the city portion of the district AND the sales tax increment revenues received from any state sales taxes collected from taxpayers in that district. This is in addition to the property tax increment local sales, use and franchise fee that can be pledged to repayment of the special obligation bonds issued in a traditional tax increment financing project. The Secretary can set a limit on the amount of bonds that may be issued to pay eligible project costs.
- Community Improvement Districts K.S.A 12.6a26, et seq., authorize cities and 7. counties to establish community improvement districts. These districts, like the other financing strategies discussed in this Section, can be used effectively to finance improvements and services contemplated by the Corridor Management Plan. The array of projects that may be financed in a district is very broad. It includes:
 - structures and facilities:
 - streets, roads, interchanges, highway access roads, intersections, bridges, over and underpasses, traffic signs and signals, pedestrian amenities, drainage, water, storm and sewer systems and other site improvements;
 - parking lots and garages;
 - streetscapes and lighting;
 - parks and landscape;
 - art and cultural amenities;
 - airports, railroad and mass transit;
 - lakes, wharfs, ports and levies;

- contracts for music, news, childcare, transportation;
- security;
- promotion of tourism and cultural activities;
- promotion of business activity or economic development;
- personnel training programs; and
- impact, marketing and planning studies.

These projects may be funded with:

- installment or front-end paid special assessments (levied in accordance with Chapter 12. 6a01 discussed above, except no city at large levy is allowed);
- a community improvement district retailer's sales tax in an amount not to exceed 2%(must sunset in 22 years if the project is financed with sales tax revenues as they are received [pay-as-you-go] or when the bonds are retired, if the revenues from a sales tax are pledged for that purpose);
- ad valorem taxes;
- other funds appropriated by the city or county.

Special obligation and full faith and credit bonds may be issued to facilitate the financing of a project; provided that, if a petition signed by 5% of the qualified voters of the city or county is filed with the clerk within 60 days of the public hearing held on the establishment of the district, no bonds may be issued unless and until approved by a majority of the voters voting at that election. The amount of any full faith and credit bonds issued that exceeds 3% of the assessed value of the issuing city or county shall be considered to be within that community's bonded debt limit.

Costs that can be paid for with revenues generated from sources above include: preliminary reports, plans and specifications; publication and ordinance or resolution preparation costs; necessary fees of consultants; bond issuance and interest costs; plus not to exceed 5% of total project cost for administration and supervision of the project by the city or county. The process to establish a district with respect to which project costs both will be paid for only with special assessments and which is not seeking to issue full faith and credit bonds must be initiated by the filing of a petition signed by the owners of all the land area within the proposed district. Once the petition is filed, the governing body may proceed without notice or hearing to make findings by resolution or ordinance on the nature, advisability, estimated cost of the project, its boundaries, and the amount

and method of assessment. Once these findings are made, the governing body, by majority vote, may by ordinance or resolution, authorize that project. All properties that are benefitted by the project(s) need not be included in the district.

On the other hand, the process to establish a district funded in any other authorized manner, may be initiated by the filing of a petition signed by landowners owning more than 55% of the land area AND by owners owning more than 55% of the assessed value of the land within the proposed district. In this instance, once a petition is filed, a resolution providing notice of a public hearing on the advisability of creating the district must be adopted. The resolution must be published as required by this enactment and certified mail notice to all owners provided. Upon the completion of the hearing, the governing body may create the district, approve the estimated cost of the project and the legal description of the district boundaries, contain a map, levy the sales tax, approve the maximum amount and method of the assessment, if applicable and approve the method of financing, including the issuance of full faith and credit bonds, if applicable.

The contents of the petition in each of the above circumstances is also set forth in the enactment.

7. General Contract Authority - It is important to recognize that local governments have significant powers pursuant to the Constitutional home rule amendment and Chapter 19 of the Kansas Statutes. These powers include all powers of local legislation and administration that they deem appropriate, with really only minor exceptions. This Chapter extensively discusses state, county and city powers, such as the power to regulate through exercise of the police power, the power to zone, the power to tax, the power to charge fees, the power to impose special assessments and the power to purchase, hold, sell and convey land, including exercise of the power of eminent domain . The one power that really has not yet received that much analysis is the power to contract. It would be a mistake not to also highlight this power which all the parties share. In addition to finding the source of the power to contract in the home rule provisions, K.S.A.12.101 contains a specific statutory delegation of power to cities to contract. K.S.A. 19.101 contains a similar grant to counties; and, among others, K.S.A. 75.5004 vests power to contract in the KDOTi¦s Secretary of Transportation.

The limits on the power of the participants to the preparation of this Plan to contract are minimal. The two major limitations are: (1) whether the contract is within the scope of the delegated power: and (2) whether it is entered into and

executed in accordance with statutory requirements. As to the first limitation, since the delegation in each instance is along the lines of ¡§to make contracts in relation to the property and concerns of the city and necessary to the exercise of its corporate powers, ¡§ as is readily apparent, the power to contract is quite broad. Generally, it is only limited by whether the contract is in conflict with statute or the constitution. A contract that violates the first limitation is ultra vires and void. For example, a contract that violates the Cash-Basis Law (K.S.A. 10.11.1 et seq.) because it obligated the public entity to pay monies that are not budgeted and encumbered is completely void. Legally, it is as if it never existed.

It goes without saying that monies paid pursuant to a contractual obligation, like any other payment of monies by a public entity, must be for a public purpose. Courts, however, are clear on the broad scope of what constitutes a public purpose. Courts will presume that facts declared in support of a legislative determination of public purpose to be true and adequate. A good rule is that a public entity is permitted to enter into all contracts that are reasonable and proper and which are reasonably necessary to allow it to fully perform the functions expressly conferred on it, as well as those that are essential to enable it to perform the duties of government for the benefit of its citizens.

The other main limitation on the contract power of which public entities should be wary is the prohibition on contractually bargaining away its duty to make reasonable laws and exercise their other legislative powers whenever doing so is necessary to preserve or protect the public health, safely and general welfare. As an example, a public entity could not agree by contract to approve a rezoning or impose or not impose some tax or fee at some later point in time

The beauty of the contracting power is that it is so comparatively unfettered by limitation, particularly by those of the constitutional variety, such as the 5th Amendmenti's constraints on exercise of the zoning and police power to require the dedication of land as a condition. As noted above, for good and valid reasons, any dedication of land required in that instance must be roughly proportionate, in its nature and in its extent, to the impacts created by development. (See Sec. I.D.3)

In situations where the public entity is exercising its contract power, the parties are negotiating their own contractual duties and obligations. Ostensively, the ultimate objective of both parties is to achieve a win-win situation, where both receive the benefit of the bargain struck. The traditional elements of a contract must exist for the agreement to be binding, of course. There must be an offer, acceptance of the offer, mutuality and delivery. As an example of use of the

contract power to implement the Plan, an entity or individual contracting with a community within the Corridor may be willing to agree to convey more land than the community could legally require them to dedicate when exercising its police or zoning power. So, there may well be benefits the community can and is willing to provide to a developer that are more valuable to them than retaining that portion of the land which exceeds what ¡§rough proportionality¡" would allow the community to require, as a part of the development approval process. Based on the mutual interests of both parties, a deal can be struck that helps implement the Plan , while at the same time enhancing the developer¡ s business objectives. The fact that a contracting party voluntarily agrees to an obligation to which it could not be required to commit as a part of the development application process does not make the contractual obligation illegal.

The opportunities to utilize public entity contract powers to help implement this Plan are numerous and should not be ignored. In fact, each community along the Corridor and KDOT should be ever vigilant about identifying situations where this power can be used beneficially.

Virtually every time public incentives are provided to a developer, a contract is employed to memorialize the duties and obligations of the parties. The recipient of the incentives will expect that it will be asked to provide benefits to the community in exchange for being provided development incentives. There is no absolute right to develop land. Each party to the contract, however, must receive compensation (mutuality). Communities should be constantly watchful for opportunities to negotiate for the inclusion of provisions into agreements with developers and landowners along the Corridor that obligate them to take whichever appropriate actions they may be able to take to help implement this Corridor Management Plan.

IV. Interlocal Cooperation

Through the exercise of home rule, by entering into an interlocal cooperation agreement, pursuant to K.S.A. 12.2901 et seq., and by utilizing powers granted to cities and counties by Kansas statutes, significant opportunities exist for cities and counties to cooperate with each other in the creation of corridor-wide financing strategies for the mainline highway enhancements and city connectors and local road projects within the corridor. There is potential for such cooperation in the use of both the traditional and the alternative financing mechanisms described above.

K.S.A. 12.2901 et seq. authorizes all public agencies of the state (including KDOT) to jointly cooperate in the exercise of any power, or privileges, or authority exercised or capable of exercise by such agency, including economic development and public improvements, pursuant to an agreement in the form therein provided. See also, K.S.A. 75.5023.

K.S.A 12.2904 (f) dictates that each interlocal agreement, prior to it taking effect, shall be submitted to the attorney general for a determination of whether or not the agreement is in proper form and compatible with the laws of the state. The Office of the Attorney General has made this determination on other interlocal agreements related to implementation of Corridor Management Plans, so obtaining approval of interlocal agreements, which are based on the KDOT approved template Interlocal Cooperation Agreement, is not daunting.

In addition, K.S.A. 12.2905 requires that, also prior to the interlocal agreement taking effect, it be filed with the register of deeds of every county in which each political subdivision or agency of the state that is a signator to the agreement is located. The agreement also must be filed with the Office of Secretary of State.

Wherever possible, these opportunities should be investigated by KDOT and each local community to ascertain if a multi-jurisdictional approach will be beneficial to all parties, by providing better opportunities to successfully implement the goals of the Management Plan. Jurisdiction: KDOT/Local.