

Chapter 5—Improvement Recommendations

TRANSPORTATION RECOMMENDATIONS

K-68, within the limits of this corridor plan area, generally provides overall good highway service. The consultant team identified some localized deficiencies, which should be addressed as time and budgets allow. The team also identified future improvement needs as a result of the expected continued increases in land use development and traffic volumes. Where possible, many improvements should be constructed as a part of the development or redevelopment that occurs along the corridor.

Table 5.A has been prepared to provide a summary of the existing and future improvement recommendations. This summary identifies locations, timeframes, triggers, and construction cost estimates for the various improvement recommendations. This summary also includes alternatives which should be considered to address capacity and / or safety concerns at some locations. Table 5.A is an overall “wish list” of improvements which need to be prioritized and implemented by the Counties, the three Cities, and KDOT as time and budgets allow.

A series of schematic improvement plan “plates” were also developed to illustrate the types and locations of the recommended improvements. These plates are included in the Appendix.

The recommended improvements and alternatives are intended to address the existing and projected future deficiencies. The improvement recommendations are, in part, a result of the technical analyses completed as part of this plan. However, members of the project Steering Committee, the public, and the Elected Officials were also instrumental in the development of the recommendations.

Access Management Tools: A variety of general access management tools have been developed for use, not only at the studied intersections, but also for other segments of the

corridor. Many of the tools have been identified as short term or long term improvement recommendations for the corridor plan. These tools are proven methods to effectively provide access to properties while maintaining high levels of traffic safety and operations of the highway. A short list of common access management tools is provided below. Each tool is illustrated in detail in Table 5.B at the end of this chapter:

- Interim intersection upgrades (traffic signals, turn-lanes, and acceleration lanes)
- Consolidate mainline driveways
- Relocate mainline driveways/side road access
- Relocate public road connections to mainline, reconnect to frontage roads
- Relocate private driveways, reconnect to frontage roads
- Intersection and drive way consolidation
- Convert major intersections to interchanges
- Advanced right-of-way acquisition
- Close median breaks

Short Term Improvements: Based on the traffic analysis and field observations, the consultant team identified improvement projects to address existing deficiencies along the corridor. The short term improvements include:

Nebraska Terrace: As development or redevelopment allows, reconstruct the north and/or south legs to align and eliminate the interlocking or overlapping left turn vehicle queues at the existing offset intersection.

Intersection Improvements: Construct left-turn and right-turn lanes along the existing two-lane K-68 pavement to increase safety and efficiency by removing vehicles slowing to turn from the high speed through lanes of K-68 at the intersections of:

- The Wal-Mart Distribution Center main access driveway
- Nevada Terrace
- K-33

- Sutherland Drive
- Metcalf Road
- Summerfield Drive / Aquatic Drive

In addition to the previously listed intersections, the left turn and right turn traffic volumes should be monitored at other intersections along K-68 to identify when the criteria for deceleration and acceleration lanes is met.

Signalized intersection improvements may soon be warranted at other intersections along K-68. The safety and capacity of the intersection of K-68 with the northbound ramps at I-35 and at US-69 should be monitored.

Summerfield Drive / Aquatic Drive: Construct pedestrian crossing with flashing beacon to provide improved school pedestrian safety along K-68 between Metcalf Road and Rockville Road.

Crestview Circle: Construct a center raised median to restrict West Crestview Circle to right-in / right-out and provide channelized left turn lanes and traffic signal control at the East Crestview Circle intersection.

Corridor Transportation System Enhancements: As soon as practical, several improvements should be implemented to provide or improve services for pedestrian and bicycle modes of transportation and to provide intermodal capability. These should include:

- Extending sidewalks in Louisburg along the south side between Crestview Circle and Summerfield Drive / Aquatic Drive
- Adding “Share the Road” signs for cyclists along appropriate sections of K-68 and adjacent routes to the corridor
- Providing Park and Ride facilities adjacent to the interchanges of K-68 with I-35, US-169, and US-69 for commuters to and from the KC Metro area.

Access Management Improvements: Currently, K-68 within the boundaries of the plan, is listed as a D Route on the Kansas State Transportation System. It has been proposed to upgrade the route classification to a C Route, increasing the spacing between access points in rural areas and limiting the number of intersections along the route. In addition to upgrading the route classification of K-68, segments with multiple, closely spaced access drives to existing developments, such as the portion of K-68 adjacent to the interchange with US-69, should be relocated or combined onto a frontage road or “reverse frontage” road.

Long Term Improvements: As indicated in Table 5.A, there are improvement projects which should be programmed to address expected future deficiencies. These long term improvements include:

General widening from 2-lane to 4-lane, median divided cross section: The analysis indicated in both the moderate and high land use growth scenarios, the anticipated 2030 traffic volumes along the K-68 corridor would require the highway be widened from 2 lanes to 4 lanes, with auxiliary turn lanes, from I-35 to Nevada Terrace and from Hospital Drive to Metcalf Road. Only during the high land used scenario is it expected that K-68 would need to be widened to a four-lane section between Nevada Terrace and Hospital Drive and between Metcalf Road and Mission Belleview Road.

Proposed Interchange: Construction of an interchange on US-69 at the existing 287th street overpass should be considered. This interchange would allow traffic to be diverted from the section of K-68 between US-69 and Metcalf Road where it is very difficult to provide the necessary widening to a five-lane cross section. Instead K-68, between US-69 and Metcalf Road, could be converted to a three lane section, requiring less right-of-way.

Intersection Improvements: As indicated in Table 5.A, there are other intersections where traffic signals will likely be warranted based on land use development along the corridor. As developments are proposed, site specific traffic impact analyses should be completed to determine the needs for traffic signals or other traffic control devices created by these developments. Left turn and right turn traffic volumes should also be monitored at intersections along K-68 to identify when the criteria for deceleration and acceleration lanes is met.

Major Intersection Traffic Control: The analysis indicated traffic control along K-68 would need to be improved to provided increased capacity and safety for future traffic demands at major intersections. A traffic signal or roundabout should be considered at the following intersections by the year 2020:

- Southbound Ramps at I-35
- Northbound Ramps at I-35
- Nebraska Terrace
- Wal-Mart Distribution Center Main drive
- Nevada Terrace
- Hospital Drive
- Old KC Road / Hedge Lane (upgrade roundabout to 2 lanes)
- Southbound Ramps at US-169
- Northbound Ramps at US-169
- Victory Road
- Wonka Drive
- Northbound Ramps at US-69
- Sutherland Drive
- Rogers Street
- Metcalf Road
- Rockville Road

Access Management Improvements: There are several locations shown on the graphic plates in the Appendix where closely spaced access drives should be combined onto a frontage road, or “reverse frontage” road where appropriate. These access roads should be constructed as part of the highway widening projects, or as part of development projects wherever possible.

Other access management improvement recommendations include constructing raised medians to reduce the conflicts to and from side roads. In high speed, rural areas of the corridor, wide medians should be considered to eliminate the need for traffic signals at higher volume intersections. Wider medians allow turning or crossing traffic volumes to move into the wide median as the first stage of their maneuver and complete the turn or cross as a second stage of their maneuver.

TABLE 5.A: IMPROVEMENT RECOMMENDATIONS SUMMARY

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated Cost*	Footnotes
I-35 to Nevada Terrace					
At SB I-35 Ramp intersection	Add Traffic Signal	< 5 years	Based on monitoring of Signal Warrants	\$150,000	
At NB I-35 Ramp intersection	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
At Nebraska Road (East frontage road) intersection	Alt 1. Combine into roundabout with NB I-35 ramps	5 to 10 years	With development	\$500,000	Preferred alternative
	Alt 2. Convert to right-in / right-out	5 to 10 years	With development	\$100,000	
Nebraska Road to Nevada Terrace	Widen K-68 to provide 4 lanes with a 22 to 34-foot urban median	10 to 15 years	ADT > 12,000 vpd	\$7,680,000	Assumes total pavement replacement
At Nebraska Terrace intersection	Add EB and WB left turn and right turn lanes	< 5 years	Needed Now	\$635,000	Add to 2-lane cross section
	Reconstruct to align north and south approaches	< 5 years	Needed Now	\$400,000	
	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
At Wal-Mart Distribution Center Main Drive intersection	Add EB right turn lane and EB and WB left turn lane	< 5 years	Needed Now	\$335,000	Add to 2-lane cross section
	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
At Nevada Terrace intersection	Add EB right turn lane and EB and WB left turn lane	< 5 years	>40 LT's; >40 RT's	\$535,000	Add to 2-lane cross section
	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	Preferred alternative
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
Nevada Terrace to BNSF Railroad (West of Hospital Drive)					
Nevada Terrace to BNSF Railroad	Widen K-68 to provide 4 lanes with a 60-foot minimum rural median; provide right-in-right-out operation at most drives; construct U-turn channelization at strategic locations for indirect left turns to and from drives.	20 to 30 years	ADT > 12,000 vpd	\$92,500,000	Assumes total pavement replacement
At Ohio Road intersection	Add EB left turn lane and WB right turn lane	10 to 15 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
At Oregon Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Tennessee Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Texas Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Utah Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated	Footnotes
Nevada Terrace to BNSF Railroad (West of Hospital Drive) (cont.)					
At Vermont Road intersection	Add EB right turn lane and WB left turn lane	< 5 years	Needed Now	\$335,000	Add to 2-lane cross section
	Widen median to 150 feet to provide 2-stage crossing traffic movements	20 to 30 years	ADT > 12,000 vpd	\$50,000	Cost is in addition to basic route widening
At K-33 (Virginia Road) intersection	Add EB and WB left and right turn lanes	< 5 years	Needed Now	\$635,000	Add to 2-lane cross section
	Widen median to 150 feet to provide 2-stage crossing traffic movements	20 to 30 years	ADT > 12,000 vpd	\$50,000	Cost is in addition to basic route widening
At Pleasant Valley Road intersection	Add EB and WB left and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
Pleasant Valley Road to 1/2 mile East	Extend frontage road south of K-68 east from Pleasant Valley Road; relocate six direct access drives on K-68 to frontage road.	20 to 30 years	ADT > 12,000 vpd	\$1,520,000	Construct as part of overall route widening
At Pressonville Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Widen median to 150 feet to provide 2-stage crossing traffic movements	20 to 30 years	ADT > 12,000 vpd	\$50,000	Cost is in addition to basic route widening
At Indianapolis Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Bethel Church Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Crescent Hill Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Plum Creek Road intersection	Add EB right turn lane and WB left turn lane	10 to 15 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
At Overbrook Road intersection with Waverly Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$670,000	Add to 2-lane cross section
	Realign north and / or south legs of Waverly Road and Overbrook Road to eliminate offset intersections	20 to 30 years	ADT > 12,000 vpd	\$400,000	Construct as part of overall route widening
	Widen median to 150 feet to provide 2-stage crossing traffic movements	20 to 30 years	ADT > 12,000 vpd	\$50,000	Construct as part of overall route widening
Overbrook Road to 1/2 mile East	Extend frontage road south of K-68 east from Overbrook Road; relocate four direct access drives on K-68 to frontage road.	20 to 30 years	ADT > 12,000 vpd	\$880,000	Construct as part of overall route widening
At Osawatomie Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Widen median to 150 feet to provide 2-stage crossing traffic movements	20 to 30 years	ADT > 12,000 vpd	\$50,000	Construct as part of overall route widening
At Lookout Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Relocate private drive to Lookout Road north of intersection	20 to 30 years	ADT > 12,000 vpd	\$160,000	Construct as part of overall route widening

*Cost estimates are construction costs for budgeting purposes only and do not include right-of-way, utility relocation, and engineering, as required.

Improvement Recommendations

TABLE 5.A: IMPROVEMENT RECOMMENDATIONS SUMMARY (COND.)

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated Cost*	Footnotes
Nevada Terrace to BNSF Railroad (West of Hospital Drive) (cont.)					
At Lone Star Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
Lone Star Road to Cedar Niles Road	Extend frontage road south of K-68 between Lone Star Road and Cedar Niles Road; relocated direct access drives on K-68 to frontage road.	20 to 30 years	ADT > 12,000 vpd	\$1,120,000	Construct as part of overall route widening
At Cedar Niles Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
Harmony Road	Add EB left & WB right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
BNSF Railroad (West of Hospital Drive) to Woodland Road					
BNSF Railroad to Woodland Road	Widen K-68 to provide 4 lanes with a 22 to 34-foot urban median	10 to 15 years	ADT > 12,000 vpd	\$16,380,000	Assumes total pavement replacement
At BNSF Railroad Overpass	As part of new highway bridges over railroad, provide for a loop collector road system that provides access to adjacent property via Hospital Road (See plate 18)	10 to 15 years	ADT > 12,000 vpd	\$2,320,000	Construct as part of overall route widening
At Hospital Drive intersection	Add EB & WB left turn and right turn lanes	< 5 years	Needed Now	\$635,000	Add to 2-lane cross section
	Alt 1. Add Traffic Signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct Roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$500,000	Alternate to traffic signal
At Old KC Road / Hedge Lane intersection	Widen Old KC Road to four lanes and expand roundabout to 2 circulating lanes	10 to 15 years	ADT > 12,000 vpd on K-68 or Old KC Road	\$1,900,000	Construct as part of overall route widening
At UP Railroad Overpass	As part of new highway bridges over railroad, provide for a loop collector road system that provides access to adjacent property via right-in / right-out access drives (See plate 20)	10 to 15 years	ADT > 12,000 vpd	\$2,400,000	Construct as part of overall route widening
At SB US-169 Ramp intersection	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
At NB US-169 Ramp intersection	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
At Victory Road intersection	Add EB left turn lane and WB right turn lane	5 to 10 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal

*Cost estimates are construction costs for budgeting purposes only and do not include right-of-way, utility relocation, and engineering, as required.

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated Cost*	Footnotes
BNSF Railroad (West of Hospital Drive) to Woodland Road (cont.)					
At Woodland Road intersection	Add EB & WB left turn and right turn lanes	5 to 10 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Alt 1. Add traffic signal	10 to 15 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	10 to 15 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
Woodland Road to Spring Valley Road					
Woodland Road to Flint Street	Widen K-68 to provide 4 lanes with a 60-foot minimum rural median; provide right-in-right-out operation at most drives; construct U-turn channelization at strategic locations for indirect left turns to and from drives.	15 to 20 years	ADT > 12,000 vpd	\$29,310,000	Assumes total pavement replacement
At Block Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Oak Grove Road intersection	Add EB right turn lane and WB left turn lane	10 to 15 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
At Somerset Road (north) intersection	Add EB left turn lane and WB right turn lane	5 to 10 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
	Realign north leg of Somerset Road with Oak Grove Road to eliminate offset intersections	15 to 20 years	ADT > 12,000 vpd	\$800,000	Construct as part of overall route widening
At Somerset Road (south) intersection	Add EB right turn lane and WB left turn lane	10 to 15 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
1/2 mile west of Beaver Creek Road	Construct frontage road north of K-68 west of Beaver Creek Road; relocate two direct access drives on K-68 to frontage road	15 to 20 years	ADT > 12,000 vpd	\$1,304,000	Construct as part of overall route widening
At Beaver Creek Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
At Private Drive intersection	Add EB right turn lane and WB left turn lane	10 to 15 years	>40 LT's; >40 RT's	\$335,000	Add to 2-lane cross section
At New Lancaster Road intersection	Add EB & WB left turn and right turn lanes	10 to 15 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
	Widen median to 150 feet to provide 2-stage crossing traffic movements	15 to 20 years	ADT > 12,000 vpd	\$50,000	Construct as part of overall route widening
New Lancaster Road to Spring Valley Road	Construct frontage north of K-68 between New Lancaster Road and Spring Valley Road	15 to 20 years	ADT > 12,000 vpd	\$2,560,000	Construct as part of overall route widening
At Flint Street intersection with Spring Valley Road intersection	Realign north leg of Spring Valley Road with Flint Street to eliminate offset intersections	15 to 20 years	ADT > 12,000 vpd	\$1,135,000	Construct as part of overall route widening

TABLE 5.A: IMPROVEMENT RECOMMENDATIONS SUMMARY (COND.)

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated Cost*	Footnotes
Spring Valley Road to Sutherland Drive					
Spring Valley Road to US-69	Widen K-68 to provide 4 lanes with a 22 to 34-foot urban median	10 to 15 years	ADT > 12,00 vpd	\$4,500,000	Assumes total pavement replacement
At Wonka Drive intersection	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
	Construct frontage road north of K-68 west of Wonka Drive; relocated direct access on K-68 to frontage road	10 to 15 years	ADT > 12,00 vpd	\$360,000	Construct as part of overall route widening
At SB US-69 Ramp intersection	Provide interconnection to coordinate with proposed adjacent traffic signals	5 to 10 years	Construct with adjacent traffic signals	\$160,000	
At NB US-69 Ramp intersection	Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
At Crestview Circle (west) intersection	Convert to right-in / right-out with center median on K-68	2010 Construction	Needed Now	\$500,000	
At Crestview Circle (east) intersection	Add traffic signal and EB & WB left turn lanes	2010 Construction	Needed Now	\$500,000	
At Sutherland Drive intersection	Add EB & WB left turn lanes and WB right turn lane	2010 Construction	Needed Now	\$635,000	Add with development of intersection
	Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
Sutherland Drive to Metcalf Road					
Sutherland Drive to Metcalf Road	Alt 1. Widen K-68 to provide 5-lane cross section with Two Way Left Turn Lane (TWLT)	5 to 10 years	ADT > 12,000 vpd	\$4,680,000	
	Alt 2. Restripe as a 3-lane road in conjunction with a new interchange on US-69 at existing 287th Street overpass	5 to 10 years	ADT > 12,000 vpd	\$7,000,000	Includes cost to add ramps at 287th Street
At Rogers Street intersection	Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
At Metcalf Road intersection	Add WB left turn lane	< 5 years	Needed Now	\$300,000	
	Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	

Route Segment / Location	Improvement	Timing	"Trigger"	Estimated Cost*	Footnotes
Metcalf Road to Rockville Road					
Metcalf Road to Rockville Road	Widen K-68 to provide 4 lanes with a 20-foot urban arterial median	15 to 20 years	ADT > 12,000	\$5,150,000	Assumes total pavement replacement
At Middle School Drive intersection	Add EB right and WB left turn lanes	< 5 years	>40 LT's; >40 RT's	\$350,000	Add to 2-lane cross section
At Summerfield Drive / Aquatic Drive intersection	Add EB & WB left turn and right turn lanes	< 5 years	>40 LT's; >40 RT's	\$650,000	Add to 2-lane cross section
	Provide school pedestrian crossing with flashing beacons	< 5 years	Needed Now	\$75,000	
At Harvest Drive intersection	Add EB right turn lanes & WB left turn	< 5 years	>40 LT's; >40 RT's	\$350,000	Add to 2-lane cross section
At Rockville Road intersection	Add EB & WB left turn and right turn lanes	< 5 years	>40 LT's; >40 RT's	\$650,000	Add to 2-lane cross section
	Alt 1. Add traffic signal	5 to 10 years	Based on monitoring of Signal Warrants	\$150,000	
	Alt 2. Construct Roundabout	5 to 10 years	Based on monitoring of Signal Warrants	\$400,000	Alternate to traffic signal
Rockville Road to Mission Belleview Road					
Rockville Road to Mission Belleview Road	Widen K-68 to provide 4 lanes with a 20-foot urban arterial median	20 to 30 years	ADT > 12,000 vpd	\$4,880,000	Assumes total pavement replacement
At Mission Belleview Road intersection	Add EB left & WB right turn lanes	5 to 10 years	>40 LT's; >40 RT's	\$635,000	Add to 2-lane cross section
Mission Belleview Road to Missouri State Line					
Mission Belleview Road to Missouri State Line	Widen and improve shoulders	10 to 15 years	ADT > 5,000	\$6,335,000	Assumes construction of new shoulders
At Cold Water Road intersection	Add EB left turn lane	15 to 20 years	>40 LTs	\$220,000	Add to 2-lane cross section

*Cost estimates are construction costs for budgeting purposes only and do not include right-of-way, utility relocation, and engineering, as required.

TABLE 5.B: ACCESS MANAGEMENT TOOLS

Tool	Description	Jurisdiction	Implementation and Compensation Requirements
Interim Intersection Upgrades	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, turn-lanes 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.
Consolidate Private Driveways	Consolidate 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 side-road, 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.
Relocate Road Connections to Mainline, Re-Connect to Frontage Road	Where local roads connect to mainline at locations other than mile roads, relocate connection between mainline and local cross-road, 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 owner submits a re-zoning or development proposal to local government, location of abutting public or private streets are subject to regulation under zoning authority without payment of compensation as condition of zoning or development plan approval.
Relocate Private Driveways, Re-Connect to Frontage Road	Where private driveways connect directly to mainline, relocate 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.
Intersection Consolidation	Consolidate redundant, at-grade local road intersections into single intersection by establishing local road network to facilitate connection to single remaining at-grade intersection.	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 consolidating redundant, at-grade 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	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.
Close Mainline Median Breaks	Eliminate existing median breaks to prohibit left turns to / from mainline and abutting properties.	KDOT	Administrative action 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.