US 24 Corridor
Access Management, Circulation, and Land Use Plan

Project No: (US) 24-89 KA-0978-01

Highway 24 Corridor Study
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July 2009

US-24 Corridor
Access Management, Circulation, and Land Use Plan

Final Report

PREPARED FOR

Metropolitan Topeka Planning Organization
Kansas Department of Transportation
City of Topeka, KS
Shawnee County, KS

SUBMITTED BY

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Project No: (US) 24-89 KA-0978-01

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NOTE:

The Metropolitan Topeka Planning Organization Policy Board voted to "receive" this Plan without endorsing any of the illustrated backage road or access closure concepts. The Policy Board thinks further discussions with users of the corridor; additional public comment; design details and consideration of potential impacts, especially on existing property owners and businesses, are needed prior to accepting or adopting, any corridor plan. As such, the Policy Board supports KDOT's efforts to contract with a consultant for a Phase II Highway 24 Corridor study.

This document summarizes the results of a year long study process to complete the US-24 Access Management, Circulation, and Land Use Plan. The Metropolitan Topeka Planning Organization (MTPO), Kansas Department of Transportation (KDOT), City of Topeka and Shawnee County have all taken a proactive approach to the long-range study of transportation and land use issues within the US-24 Corridor study area. The plan was developed to evaluate potential future growth patterns in both travel demand and land development along the corridor and provide direction on how best to mitigate expected impacts within the study area.

The intent of this document is to support agency staff and officials with the decision making process regarding future developments that move forward along the corridor, the access to those land areas, and provide guidance on the planning of new or improved facilities. The study is planning level in nature, and is not intended to address specific existing parcel issues, nor be restrictive and absolute in limiting dynamic changes in the future. The document should be utilized by public officials to aid in the permitting process and development review. Likewise, the information should be utilized by developers and other private entities to assist with the planning of new or redeveloped areas so that expectations on access and safety improvements to US-24 are clear.

It is important to note that this plan represents a vision for the future. Based on the land use and transportation analyses conducted, many transportation recommendations are identified including new roadways, a service road concept, new roadway connections, and various roadway and driveway relocation, consolidation or closure strategies. While the timing and specific details of implementation strategies need to be developed, as part of further work to improve this corridor, the plan forms the basis to develop these strategies. Further, the plan and its associated transportation improvements is not intended to suggest the closure or relocation of businesses, but rather to define a blueprint for the future as land uses evolve and the corridor continues to develop. It provides current land owners and potential developers with a framework from which to evaluate future growth and development opportunities based on an improved transportation system and approved land use concepts. Similarly, it provides stakeholder agencies with a mechanism to begin to evaluate development proposals, judging their consistency with the US 24 Corridor Vision, while more detailed implementation strategies are defined.

Figure 1.1: US 24 Study Area

The study area encompassed US-24 and adjacent land uses from Huxman Road on the west, to Kansas Highway 4 on the east. Upon the initial review of this study area, it was evident that the character of the corridor was segmented into distinct areas from both a land use and transportation viewpoint. This theme became an integral part of the study process as these natural transition zones were defined based on existing conditions, and became even more pronounced during development of land use scenarios and transportation alternatives. The sub areas defined for the corridor throughout the project included the West, West Central, East Central, and East areas. The attributes of these areas are further described in detail throughout the report. An illustration of the study corridor and these sub areas is shown in **Figure 1.1.**

Through the development of future land use scenarios, market analysis, transportation alternatives, and the gathering of valuable input from the North Topeka community, recommendations were formed to assist in the planning of improvements for US-24. These were based on analyses conducted within both the land use and transportation planning components of the overall project.

A detailed process of developing two separate future land use scenarios was conducted for the study area to allow agency staff and stakeholders to comment on preferences of each. In addition, a market analysis task was completed to gain a better understanding of current and potential future market trends of development and land use characteristics. This provided additional information regarding realistic land use assumptions for the scenarios in magnitude, type and location. Upon final analyses and stakeholder feedback, a preferred growth scenario was developed that included a combination of each of the two land use scenarios.
Transportation planning elements of the project focused on existing conditions review, further development of a travel demand model for the study area based on future land uses, and evaluation of access management strategies along the corridor. Traffic volume projections along the corridor, based on the future land use scenarios, did not indicate growth levels to warrant expenditures for a limited access freeway facility with interchange access only. Rather, a number of access management considerations, roadway extensions and continuity improvements were developed to maintain the integrity of the corridor, while providing opportunity for reasonable access to adjacent development.

Through on-going stakeholder feedback collected as part of the project, the existing

interchange location at Topeka Boulevard and US-24 was noted as an important element in the future concepts. Several comments regarding replacement of the interchange, the proposed KDOT roundabout alternative, and standard at-grade intersection control were received during public meetings and on project surveys. Additional operational analyses were conducted for alternative traffic control options at this junction. Ultimately, an at-grade intersection option was recommended by the study team.

In addition to the Topeka Boulevard location, several recommendations regarding circulation improvements along the corridor were finalized. These included a new 25th Street extension, and several service road locations to replace the current frontage road system that contributes to many of the access deficiencies today. The recommendations coincide with several redevelopment opportunities highlighted in the land use planning tasks and provide for improved long-term aesthetics, pedestrian activity, and transit options within the study area.

1.0 Introduction

The US-24 Access Management, Circulation, and Land Use Plan has been developed by the Iteris project team in partnership with the Metropolitan Topeka Planning Organization (MTPO), Kansas Department of Transportation (KDOT) and Shawnee County. This document is a summary of the approximate one year project to analyze data, gather input, and develop long-range recommendations for future land use and transportation planning improvements along the corridor.

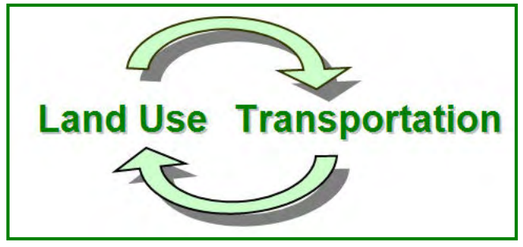
The US-24 Corridor is one of the major entranceways to the Capitol City of Topeka. It has continued to provide a vital link to commuters and business travel with connection to Manhattan further west and Lawrence to the east. The segment of US-24 through Topeka also plays an important role to local development and travel. As the City of Topeka and Shawnee County continue to grow, one of the areas that show worthy potential for economic development is the US-24 Corridor. This study focuses on the planning of how to direct this growth to help guide land use and transportation investment decisions in the future.

1.1 Project Purpose

The US-24 Corridor is a location that has been discussed for several years by the MTPO for completion of a transportation and land use planning study. With the continued aging of portions of the transportation facilities and development areas along this corridor, a plan is needed to address the future as new developments are already moving forward. The purpose of this study was to evaluate potential future growth patterns in both travel demand and land development along the corridor and provide direction on how best to mitigate expected impacts within the study area.

1.2 Project Approach

The approach to the US-24 Access Management, Circulation, and Land Use Plan was data driven in the collection of technical information and also the gathering of local stakeholder information through public involvement. Most aspects of this plan are based on the reciprocal relationship between land use and transportation. A large focus was placed on realistic future land use assumptions that would guide needed transportation improvements. In turn, those transportation alternatives help provide guidance on where specific land use types are best located in the future so that safe and efficient operations of the surrounding roadway network can be realized.



Through the analysis of alternatives and gathering of stakeholder feedback, the on-going refinement of both land use and transportation improvements was completed. As part of the plan, several tasks were conducted to provide a summary of existing conditions along the corridor. This provided a baseline of both land use and transportation issues that were documented and utilized as a framework for development of future conditions along the corridor. Several of the study tasks that were completed for development of the final plan included the following:

- Project management and study initiation
- Assembly and review of existing information
- Field review and data collection
- Existing land use conditions analysis
- Existing transportation conditions analysis
- Market analysis
- Future land use scenario development
- Future transportation conditions analysis
- Access management evaluation
- Context sensitive design review
- Public involvement
- Development of Partnership Agreement
- Draft and final study documentation
- Presentations to agency officials / governing bodies

1.3 Report Organization

The remainder of this document has been organized to summarize information from several of the study tasks in sequential order from a view of the existing state of the corridor, through the development and analyses of future conditions. Final land use and transportation recommendations based on the overall study results are located near the end of the document. In addition, several supplemental references and study data is included in the Appendices for record.

2.0 Existing Land Use and Development Conditions

This section of the report is intended to provide an overview of historic and existing land use characteristics in the US-24 study area. This analysis serves as the foundation for developing future land use scenarios that are integrated with the transportation analysis for the corridor.

The US-24 study area includes one mile on either side of US-24 from Huxman Road on the west to the K-4 (northbound interchange) on the east. For the purpose of the land use analysis, an area including all of the traffic analysis zones (TAZs) from the Metropolitan Topeka Planning Organization Regional Travel Demand Model that impact the US-24 Study Area was considered.

This analysis is based on field review by study team members and on synthesis from a variety of planning documents prepared for the region including:

- 2025 Topeka Land Use and Growth Management Plan
- 2020 Topeka Parks and Open Space Plan
- 2020 Topeka - Shawnee County Regional Trails and Greenways Plan
- Historic North Topeka Revitalization Plan
- Metropolitan Topeka Planning Organization 2035 Long Range Transportation Plan
- North Topeka Business Alliance 5-Year Strategic Plan
- State of Neighborhoods Discussion from 2025 Topeka/Shawnee County Metropolitan Plan
- Topeka Neighborhood Revitalization Plan

Copies of brief abstracts of the information from these plans that is pertinent to the US-24 Study Area are included in **Appendix A**.

2.1 History of the US-24 Corridor

US-24 was originally extended from Kansas City west toward Manhattan in the 1930s. The corridor had some of the original cloverleaf interchanges in the region, one of which remains at US-24 and Topeka Boulevard. By the time of the 1951 flood, substantial development existed along the corridor which included the Goodyear Tire complex built during World War II. Many of the older homes and business properties adjacent to US-24 date back to the 1940s and 1950s or earlier. Much of the major retail development in the central part of the Study Area dates to the 1980s. Much of the industrial development located near US-75 and US-24 was built from the 1960s to the 1980s. The most recent major developments include the retail complex with Wal-Mart and Dillons built between 2001 and 2006.

2.2 Existing Land Uses and Development

Land use data was provided by the city of Topeka and edited by the study team based on field observations to develop an overall picture of the existing land use conditions in the study area. The study team conducted a windshield survey of all of the land uses in the corridor including preparing an inventory of existing land uses, businesses, and public facilities. Maps showing the land use inventory are contained in **Appendix A**.

The existing land use and development in the US-24 study area varies greatly along the corridor and can best be understood by breaking the corridor down into subareas as discussed below:

West Area Agricultural: This area is predominantly rural farm fields with scattered developed uses. There is a small residential subdivision on the north side of US-24 near Huxman Road and a television station (KSNT) on the south side of US-24.

West Central Area Industrial: Industrial uses dominate this area including Goodyear Tire and Payless Shoes. These are two of the area's largest existing employers. Several other industrial properties surround the US-75/US-24 interchange. This area also includes rural farm fields and scattered residential and commercial properties. There are a series of commercial properties along US-24 with access off of the frontage road east of US-75. These include farm equipment, construction businesses, and storage sites among others. South of US-24 and west of the Union Pacific Rail Line there are some residential properties including two mobile home communities.

East Central Area Commercial: This is the most densely developed part of the study area and is dominated by commercial/retail properties that best serve automobile traffic and not those traveling by other modes. Few of the retail properties are clustered with a defined identity as a retail center.

The north side of US-24 at Rochester Road includes relatively new large retail stores including Dillons and Wal-Mart. On the south side of US-24 along Tyler Road there is an older center consisting of K-Mart and a former Price Chopper location now closed. Smaller retail outlets including banks and restaurants fill-in around these larger retail destinations.

At Topeka Boulevard and US-24 there are a variety of commercial uses including services, banks, and restaurants. South of Topeka Boulevard there is a strip of older commercial properties on both sides of the street including several fast food restaurants, a large strip plaza, and services such as banks, a car wash, and other small service establishments.

Along US-24 from Kansas Avenue to the east there are a series of commercial establishments on either side of US-24 with access from the frontage road. These include auto parts stores, western wear, body shops, equipment dealers, trailers and campers, and a driving range/golf facility.

This portion of the study area also includes scattered small industrial/commercial properties including a bottling plant, a quarry, and a small service provider (electric and gas installation etc.). The Kansas Juvenile detention facility is also located north of US-24 and west of Rochester Road. Even though this portion of the study area has the highest development densities there are still scattered open parcels that could be developed in the future.

East Central Area Residential: The central portion of the study area also includes several residential clusters and neighborhoods. These are predominantly further off of US-24 behind commercial uses that front the highway. South of US-24 most of the housing is more than 50 years old and follows a more classic grid-like residential pattern. There are scattered small apartment complexes or planned multi-family developments including the cottages of Topeka and

a couple of mobile home communities. North of US-24 and Soldier Creek, there are newer residential developments including a large apartment complex under construction. There are several single-family residential subdivisions of various ages as you head north along Rochester Road or Kansas Avenue.

There are a number of community facilities within this portion of the study area including Logan Junior High School (which is currently being converted to an elementary school), East Indianola Grade School, Lyman Alternative School, and the Seamen School District Offices. There is also a post office, a couple of churches, a YMCA, and a few civic club buildings. Parks and recreation space is limited.

East Area Natural: This portion of the study area is predominantly rural floodplain with some higher elevation rural properties and scattered single-family homes. The topography north of US-24 is steep and provides few development opportunities. Near the K-4 interchange there are a couple of businesses and a small apartment complex.

Aggregated together, the land use types in the study area include agricultural, industrial, commercial, hotel/motel, office, multi-family residential, two-family residential, single-family residential, public/quasi public, transport/utility, recreational, and open space/empty buildings. **Table 2.1** lists each land use type in the Study Area by acreage.

Table 2.1: Study Area Land Use Acreage

Land Use	Total Acres
Agricultural	2,916.94
Industrial	568.32
Commercial	435.90
Hotel/Motel	6.91
Office	39.93
Multi-Family	108.07
Two-Family	0.62
Single-Family	699.68
Public/Quasi Public	178.34
Recreational	148.81
Transport/Utility	3.47
Open Space	574.39
Non-Codified	205.42
Total	**5,886.80**

Source: City of Topeka, edited

The study area encompasses nearly 6,000 acres and approximately half of the study area is agricultural land. After agricultural land use, the next largest land use is single-family with approximately 700 acres followed by open space, industrial, and commercial.

2.3 Population and Growth Trends

The study team conducted an analysis of the population and population projections for the study area, the city of Topeka, Shawnee County, Jefferson County, and the Topeka Metropolitan Statistical Area. Information was collected from the U.S. Census Bureau, www.census.gov, the Metropolitan Topeka Planning Organization 2034 Long Range Transportation Plan, The Economic Development Plan for Topeka/Shawnee County, Kansas, and The Topeka Land Use and Growth Management Plan.

Census Data**:** According to the 2000 Census, the study area consists of seven block groups with 13,619 residents. In 1990 the study area consisted of 11 block groups with a population of 9,826. This is a percentage change of approximately 38.6 percent over the ten year period from 1990 to 2000. **Table 2.2** shows the 1990 and 2000 population for the study area and the surrounding jurisdictions, as well as 2004 population estimates.

Table 2.2: Population

	1990	2000	Percent Change 1990-2000	2004	Percent Change 2000-2004
Study Area Block Groups	9,826	13,619	38.6%	NA	NA
Shawnee County	160,976	169,871	5.5%	171,393	0.9%
Jefferson County	15,905	18,426	15.9%	18,913	2.6%
Topeka MSA	160,976	169,871	5.5%	162,114	-4.6%
City of Topeka	119,883	122,045	1.8%	121,735	-0.3%

Projections for future population varied somewhat between the sources that the study team collected data from.

Topeka-Shawnee County Economic Development Plan: The Topeka-Shawnee County Economic Development Plan focused on population projections for Shawnee County. This plan gave four population projections for Shawnee County. The first was solely based on a natural increase in population or births minus deaths. This produced a population projection for 2030 of approximately 200,000 persons. The second population projection referenced was the "Kansas Population Projections, 1995-2030" published by the Kansas Division of Budget. This produced a population projection for 2030 of 167,000, which is a decrease in residents from 2000. The third population projection discussed was from the Kansas Water Office, which projected a population of 230,563 in the year 2030 for Shawnee County. The fourth population projection referenced was from The Economic Development Strategy for Topeka and Shawnee County, 1999 by Richard Caplan and Associates, which is the adopted economic development strategy of the Topeka City Council and the Shawnee County Commission. The Caplan report recommends a growth target of 1.5 percent annual population increase. At that rate the 2030 Shawnee County population would be 273,000.

Topeka Land Use and Grown Management Plan: The Topeka Land Use and Growth Management Plan also references the growth target of 1.5 percent annual population increase from The

Economic Development Strategy for Topeka and Shawnee County, 1999 by Richard Caplan and Associates.

Long Range Transportation Plan/Travel Demand Model: The Metropolitan Topeka Planning Organization 2034 Long Range Transportation Plan projected a 2034 population of 178,608 for the MTPO planning area. From the travel demand model used for the LRTP, the majority of the Study Area traffic analysis zones (TAZs) are projected to have a population increase of one to 250 persons. One TAZ east of US-75 and north of US-24 is expected to grow by 251 to 500 persons. There are nine TAZs projected to have a population decrease of one to 250 persons within the Study Area. These TAZs are located along the river and along US-24 east of Topeka Boulevard. **Figure 2.1** shows the TAZs and projected growth levels from the LRTP. As part of updating the traffic and land use analysis and projections for the US-24 Corridor Studies, TAZs within the study area will be split and/or modified to better reflect future projections and traffic growth connected with the land use scenarios developed for the study.

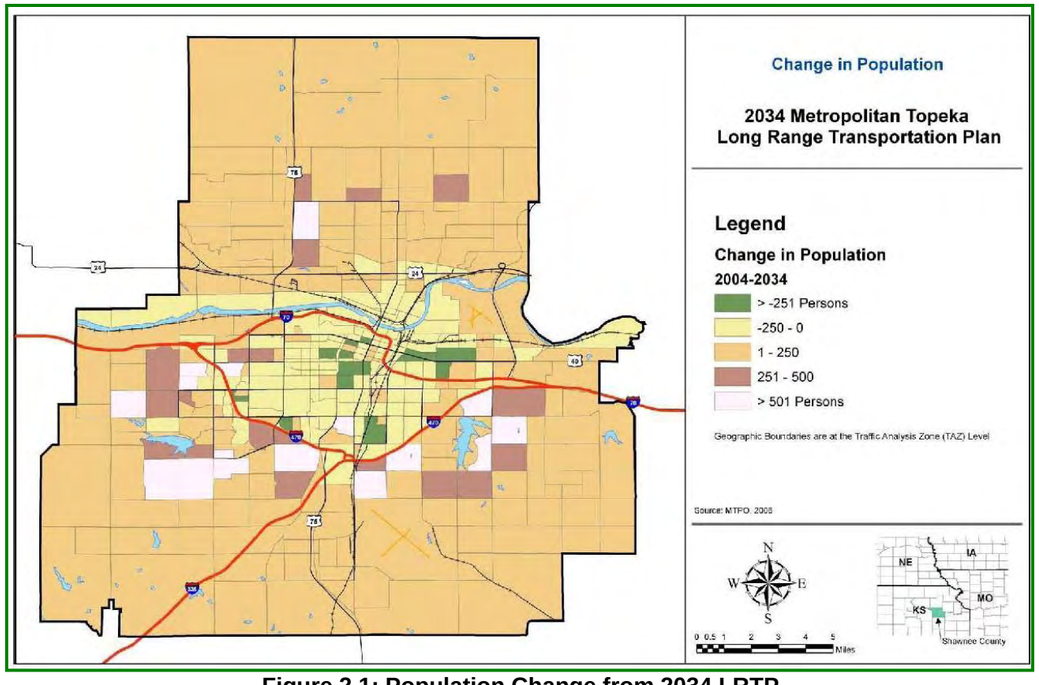


Figure 2.1: Population Change from 2034 LRTP

2.4 Public and Stakeholder Land Use Comments

The study team held a public meeting on June 18, 2008. At this meeting, members of the public were invited to comment on existing land uses in the corridor and needed and/or desired changes. The study team conducted a survey as part of the public meeting efforts and also held a series of stakeholder interviews as part of the Regional/Urban Design Action Team (R/UDAT) process. The following points provide a snapshot of some of the key land use related comments received as part of the outreach activities:

Residential:

- Some homes and residential communities are not being taken care of. Add restrictions and zoning to clean up the look
- Housing is good/reasonably priced, however lack of affordable housing could be a concern for the future
- Concern that the corridor is not going to further develop without proper sewer extensions The current apartment development north of US-24 could be the last for a while

Retail and Commercial:

- Want to see sit down restaurants
- Concern over business closures
- From survey, 82 percent of the public believe business is growing in the corridor, 86 percent believe there is a need for additional shopping opportunities, and 60 percent do not believe there are adequate professional services
- From R/UDAT, 69 percent of stakeholders do not feel there are enough shopping opportunities in the corridor and 63 percent do no believe there are adequate professional services
- Want more upscale retail centers and entertainment destinations
- Don't want another Wanamaker Road development pattern
- More adequate shopping opportunities are still needed

Industrial:

- Need a reuse for the Payless warehouse

Rural Areas:

- Desire to discourage development, leave as rural as possible
- Don't take any more land than necessary out of the good Kaw Valley land
- Concern over converting valuable farmland to industrial uses
- Preserve the cliffs (east end) and incorporate them as part of a gateway
- Natural landscaping if it is involved with the highway

2.5 Potential Missing Assets

Through the outreach activities discussed above, the study team was able to develop a list of potential "missing assets" in the US-24 study area. Missing assets would be types of developments or services that local residents and business owners would like to see in the area. **Table 2.3** provides a list of identified missing assets along with discussion of the nearest locations

for these assets and challenges to having these assets located in the study area. Provision of these missing assets are considered in the land use scenarios developed for the study.

Table 2.3: Missing or Underserved Assets

Asset	Current Locations in Project Area	Nearest Location Outside Project Area	Challenges
Shopping Opportunities:			
Retail/Strip Mall	Small retail and strip mall locations around the Topeka Boulevard Interchange.	N/A	Demand.
Upscale Stores/Retail	N/A	West Ridge Mall at 1801 SW Wannamaker Road	Demand. Suitable locations. Retailers willing to locate in the area.
Entertainment	N/A	Topeka Performing Arts Center at 241 SE 8th Avenue	Willingness to locate entertainment venues outside of downtown or Wanamaker Road.
Family sit-down Restaurants	N/A	El Mezcal Restaurant at 511 SW Topeka Boulevard	Restaurants willing to locate in the area.
Grocery Stores	Dillons on Rochester Road.	N/A	Is there enough demand living in the area to warrant another store?
Professional Services:			
Doctors/Private Practices	N/A	St. Francis Hospital and Medical Center at 1700 SW 7th Street	Is there enough population for medical facilities in the area? Doctors willing to locate offices in the area.
Accountants	N/A	Mize, Houser and Co., P.A. at 534 S Kansas Avenue	Demand. Accountants willing to locate in the area. Suitable office space.
Office Development	Small offices near Topeka Boulevard and Reo Road.	N/A	Demand. Developers willing to build office space.
Attorneys	N/A	Fisher, Patterson, Sayler, and Smith, LLP at 3550 SW 5th Street	Demand. Attorneys willing to locate in the area. Suitable office space.
Barber/Stylists	Hollywood Hair Design at Lyman Rd / Topeka Blvd, American Style Salon and Spa at Lyman Rd and Kansas Avenue.	N/A	Demand for additional services.
Pedestrian/Bicycle Facilities:			
Trails	Solider Trail runs along the northern edge of the Study Area.	N/A	Funding.
Sidewalks	Along Topeka Boulevard and Kansas Avenue south of U.S. 24, Tyler Street, Lyman Road	N/A	Funding.
Pedestrian/Bicycle Crossings of US-24	Tyler Street	N/A	Safety concerns. Appropriate facilities.
Biking on Service Roads	N/A	N/A	Safety concerns. Demand. Appropriate facilities.
Greenbelt	N/A	N/A	Development pressures. Getting landowners and city leaders to buy off on the idea of a greenbelt or preservation measures.
Other Ideas			
Retirement Home	N/A	Lexington Park at 1011 SW Cottonwood Court	Appropriate site. Willingness to locate.
Police Station	N/A	Topeka City Police Department at 1600 NE Quincy Street	Are enough people living in the area and a need to warrant a police station in the area?
Recreational Opportunities	Iliff Commons Cross Country Ski Trails, the Fred J & Julia C Keahne Family YMCA, and North Topeka Golf Center located east of Topeka Blvd	N/A	Suitable locations.

The information contained within this section provided much of the foundation for the development of Future Land Use scenarios. Two future land scenarios were initially developed and are discussed later in the Market Analysis and Future Land Use chapters of the report.

3.0 Existing Transportation Conditions

To fully understand the transportation elements of the study area, a detailed review and analysis of existing transportation conditions was conducted. As part of this task, a number of key traffic and transportation system characteristics were documented for the study area roadways. The work effort included field review, data collection and a general analysis of operational and safety conditions at key locations. In addition, parameters were reviewed to update the existing conditions travel demand model utilized as part of the project. The following sections summarize the existing study area transportation conditions.

3.1 Field Review

Upon the assembly and review of existing information, a drive-through field review was conducted of US-24, and several other segments including: Tyler Street, Rochester Road, Topeka Boulevard, Kansas Avenue, Lyman Road, Menninger Road, and other supplemental study area roadways. Several roadway segments and intersection characteristics were reviewed, in addition to general study area roadway continuity and circulation patterns. Key network segments included in the travel demand model were reviewed for consistency in number of lanes, speed limits, and capacities. The US-24 corridor was reviewed to also denote access locations, spacing of access points and any typical deficiencies noted with private driveways or frontage road operations. As part of the field review, several digital photos were collected and field notes were documented on aerial mapping of the study area. Speed limits, average daily traffic volumes, and access point locations are illustrated on **Figure 3.1** through **Figure 3.5**. Existing average daily traffic (24-hour) volumes were obtained from KDOT.

3.2 Data Collection

Traffic volume information was also assembled for the study corridor to assist in the review of existing operations. To supplement existing information, peak hour (7 - 9 am and 4 - 6 pm) intersection turning movement volumes were collected (February/March 2008) by Iteris and City of Topeka staff at the following intersections:

- US Highway 24 and Tyler St/Rochester Rd
- US Highway 24 and Topeka Blvd
- US Highway 24 and Kansas Ave
- Rochester Rd and 25th St
- Tyler St and Lyman Rd
- Rochester Rd and Menninger Rd
- Topeka Blvd and Lyman Rd
- Topeka Blvd and Menninger Rd
- Kansas Ave and Lyman Rd

The turning movement volumes for these intersections, along with the intersections traffic control and roadway geometrics are illustrated on **Figure 3.3** and **Figure 3.4**.

3.3 Traffic Operations Analysis

Traffic operations in the proposed project vicinity were analyzed using procedures described in the Highway Capacity Manual (HCM 2000). The efficiency of traffic operations is measured in terms of Level Of Service (LOS). The LOS concept is a measure of the average operating conditions along a roadway segment or at an intersection during a specified time period. Depending on the type of facility or traffic control in question, it is based on vehicle-delay, density or speed and is defined by a range of letter grades from A to F. As expected, LOS A represents free flow conditions with little or no delay whereas a LOS F characterizes unstable flow conditions with congestion and high volumes at or above the design capacity of an intersection or roadway. **Table 3.1** describes the LOS concept and the operating conditions expected under each LOS for the varying facilities. Roadway segment LOS are illustrated on the Existing Transportation Conditions figures.

Table 3.1: Level of Service Criteria *(HCM)*

Intersections			
LOS	Description	Average Control Delay (sec/veh)	
		Signalized	Unsignalized
A	Excellent operation. All approaches to the intersection appear clear, turning movements are easily made, freedom of operation	≤ 10	≤ 10
B	Very good operation. An approach to an intersection may occasionally be fully utilized and traffic queues start to form	>10 and ≤ 20	>10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles	>20 and ≤ 35	>15 and ≤ 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. Not long-standing traffic queues	>35 and ≤ 55	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays up to several minutes	>55 and ≤ 80	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street restrict movement	>80	>50

Arterial Roadways			
LOS	Description	ADT (vehicles)	
		2 Lanes	4 Lanes
A	Free flow with individual vehicles virtually unaffected by others in the traffic stream	NA	NA
B	Stable flow with a high degree of freedom to select speed and operating conditions but with some influence from other users	NA	28,000
C	Restricted flow which remains stable but with significant interactions with others in the traffic stream. Level of comfort declines	9,100	30,300
D	High-density flow in which speed and freedom to maneuver are severely restricted and comfort and convenience have declined	14,600	33,100
E	Unstable flow at or near capacity levels with poor levels of comfort and convenience	15,600	37,100
F	Forced flow in which the amount of traffic approaching a point exceeds the amount that can be served, and queues form	>15,600	>37,100

Freeways				
LOS	Description	Maximum Density (veh/mile/lane)		
		Mainline	Weave	Ramp
A	Free flow with individual users virtually unaffected by the presence of others in the traffic stream.	11	10	10
B	Slight restrictions to free flow	18	20	20
C	Restrictions to free flow. Noticeable interactions with others in the traffic stream	26	28	28
D	High-density flow in which speed and flow are restricted	35	35	35
E	Unstable flow, no gaps in traffic and volatile speeds	45	43	>35
F	Breakdown of forced flow, poor travel times, very large queues	>45	>43	demand> capacity

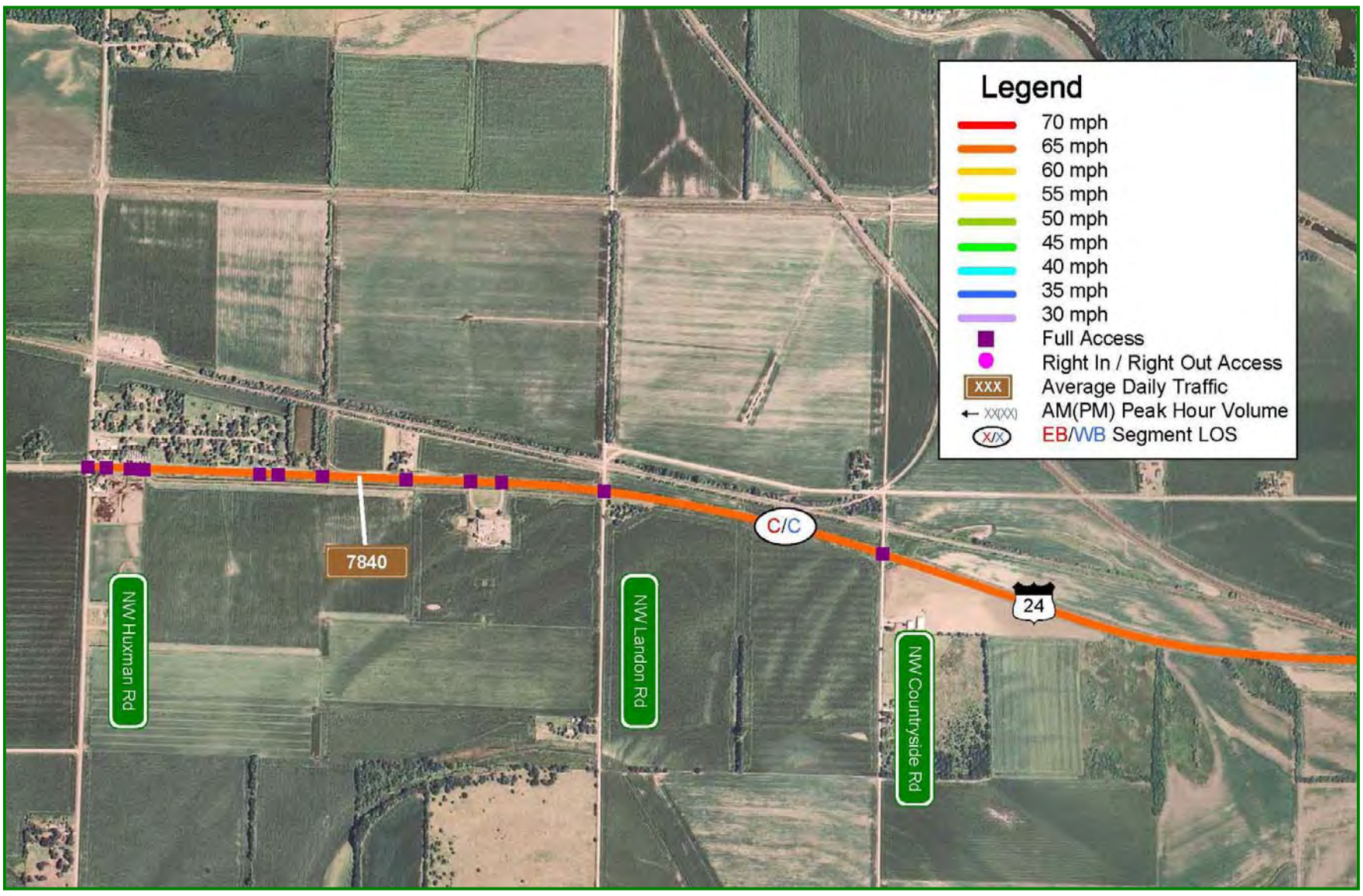


Figure 3.1: Existing Transportation Conditions

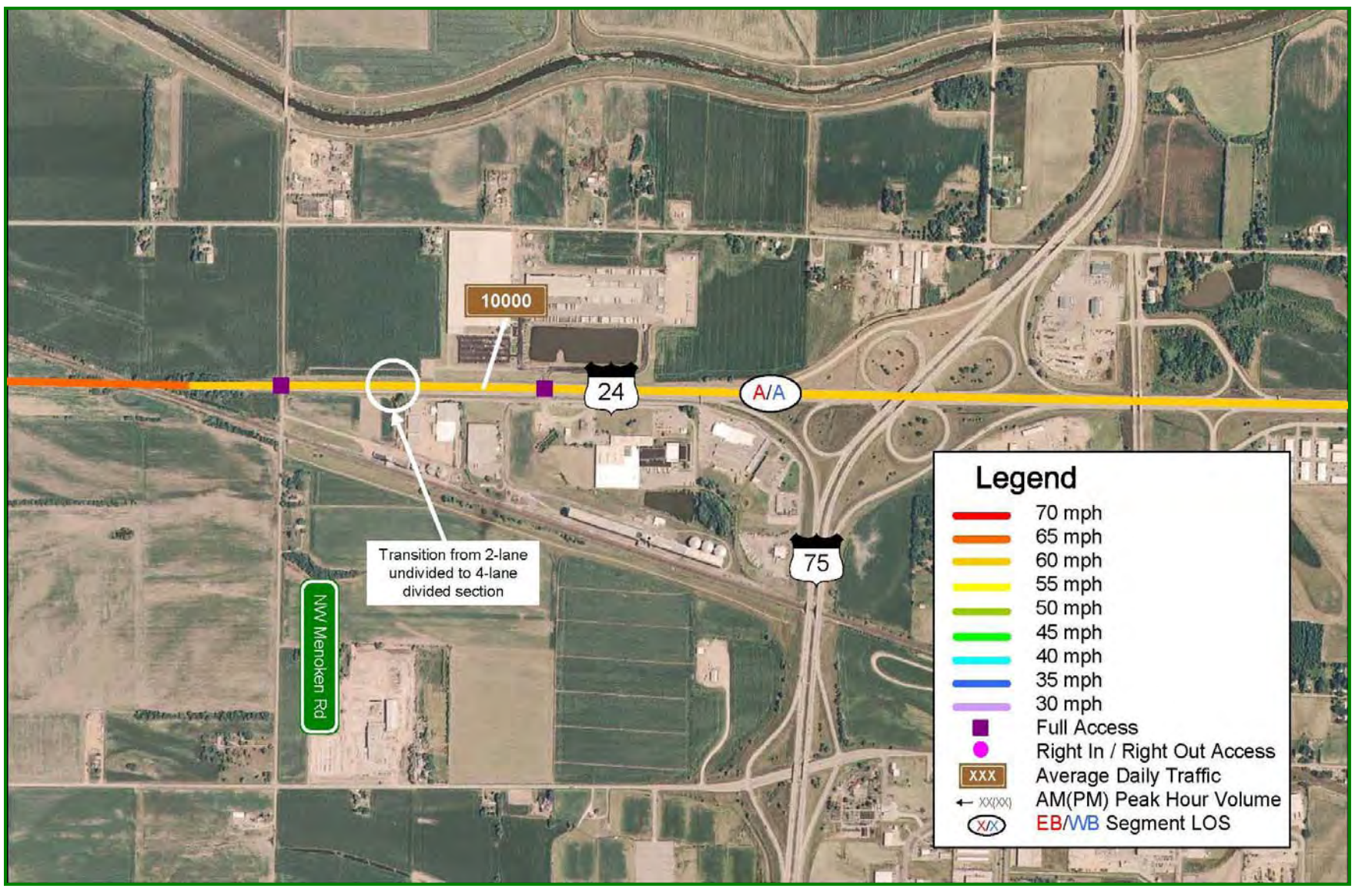


Figure 3.2: Existing Transportation Conditions

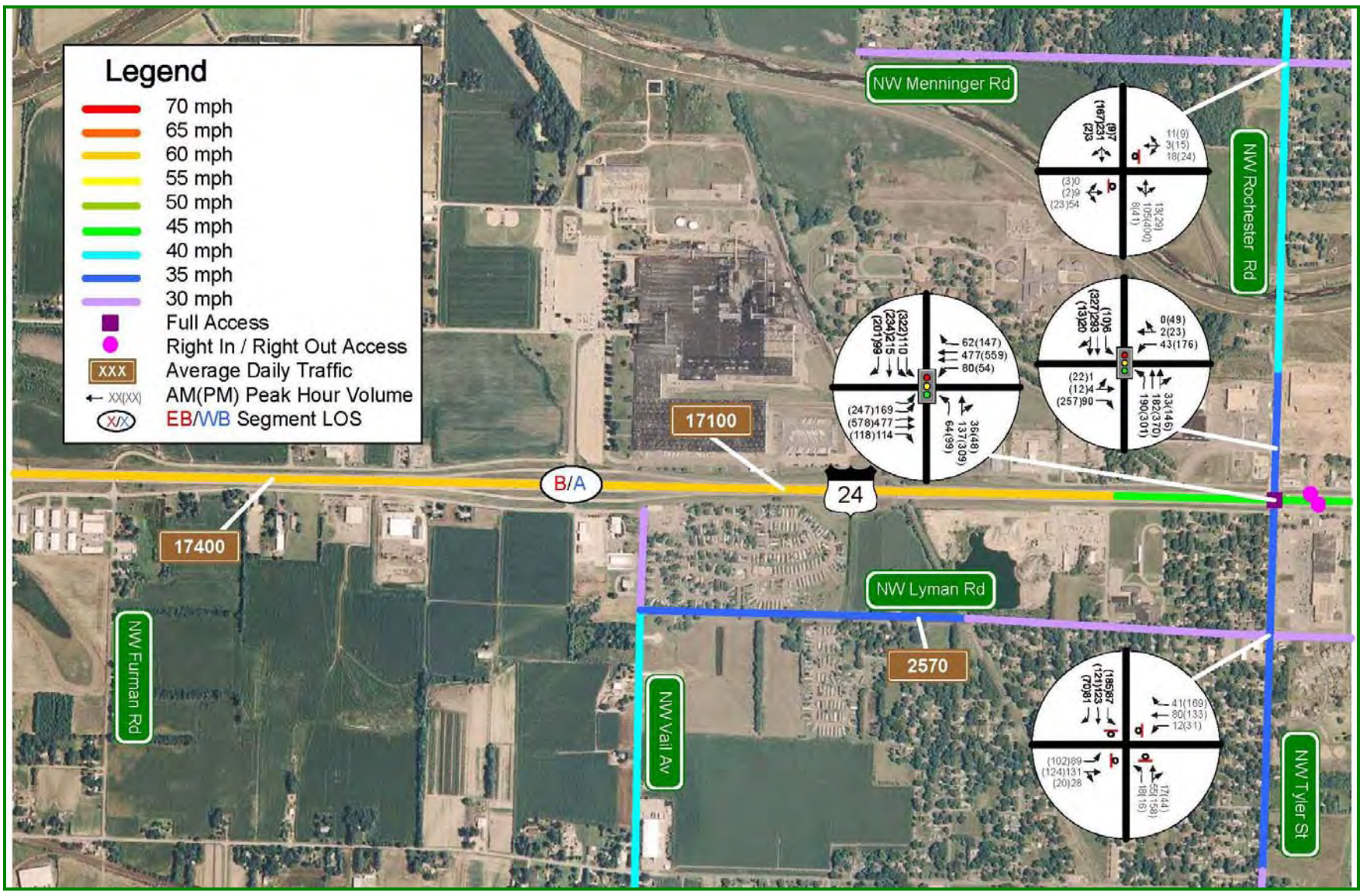


Figure 3.3: Existing Transportation Conditions

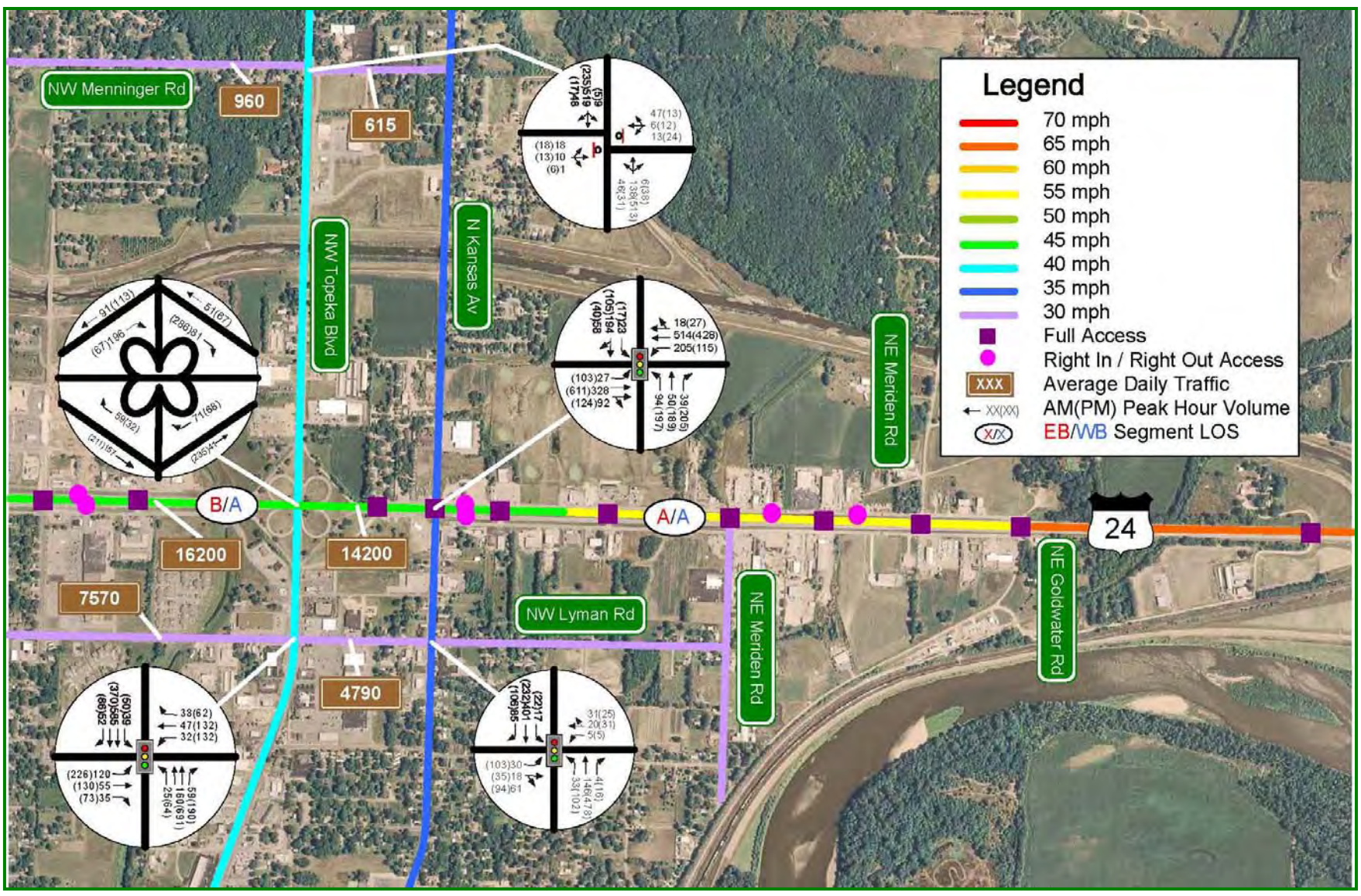


Figure 3.4: Existing Transportation Conditions

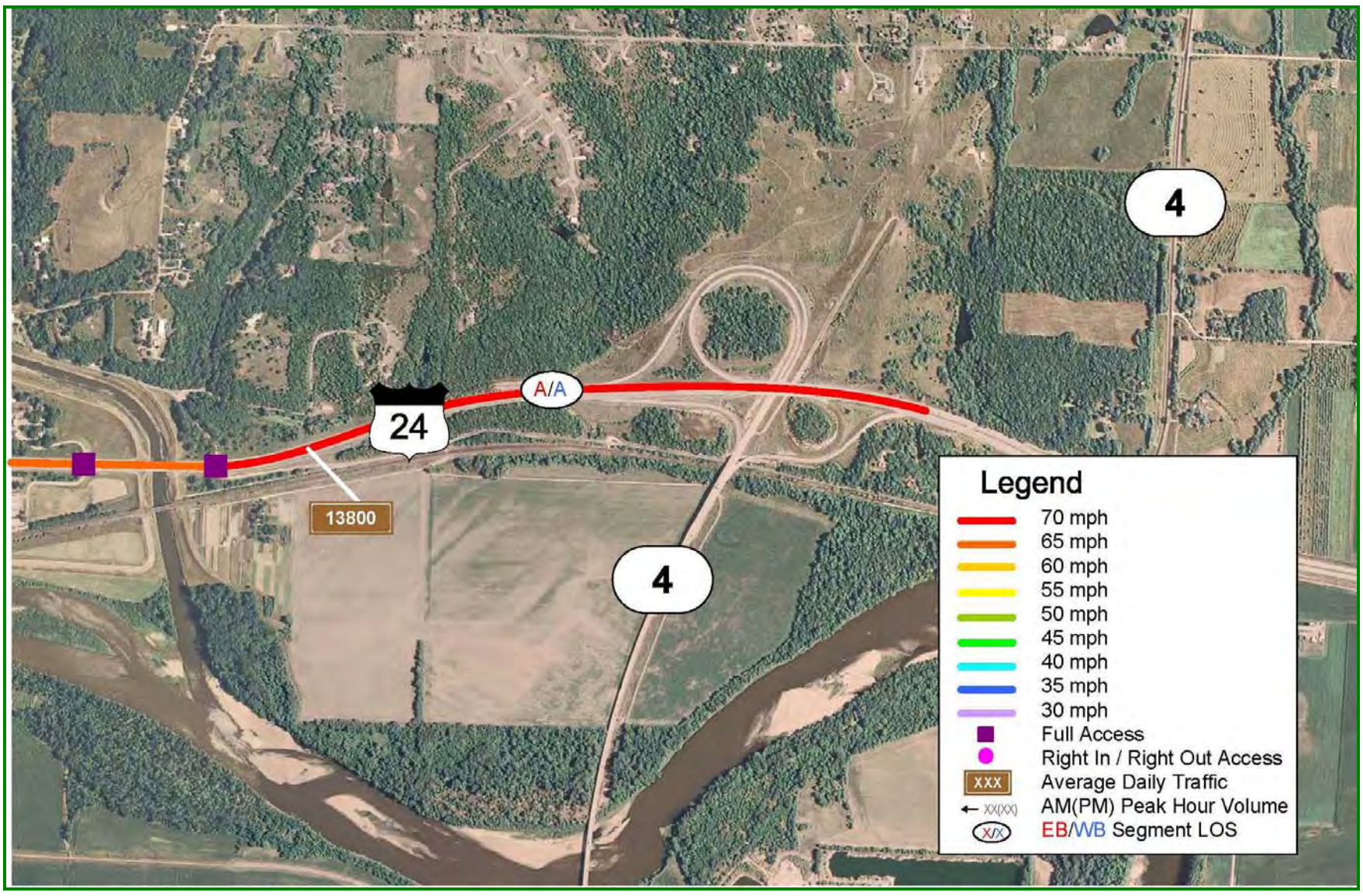


Figure 3.5: Existing Transportation Conditions

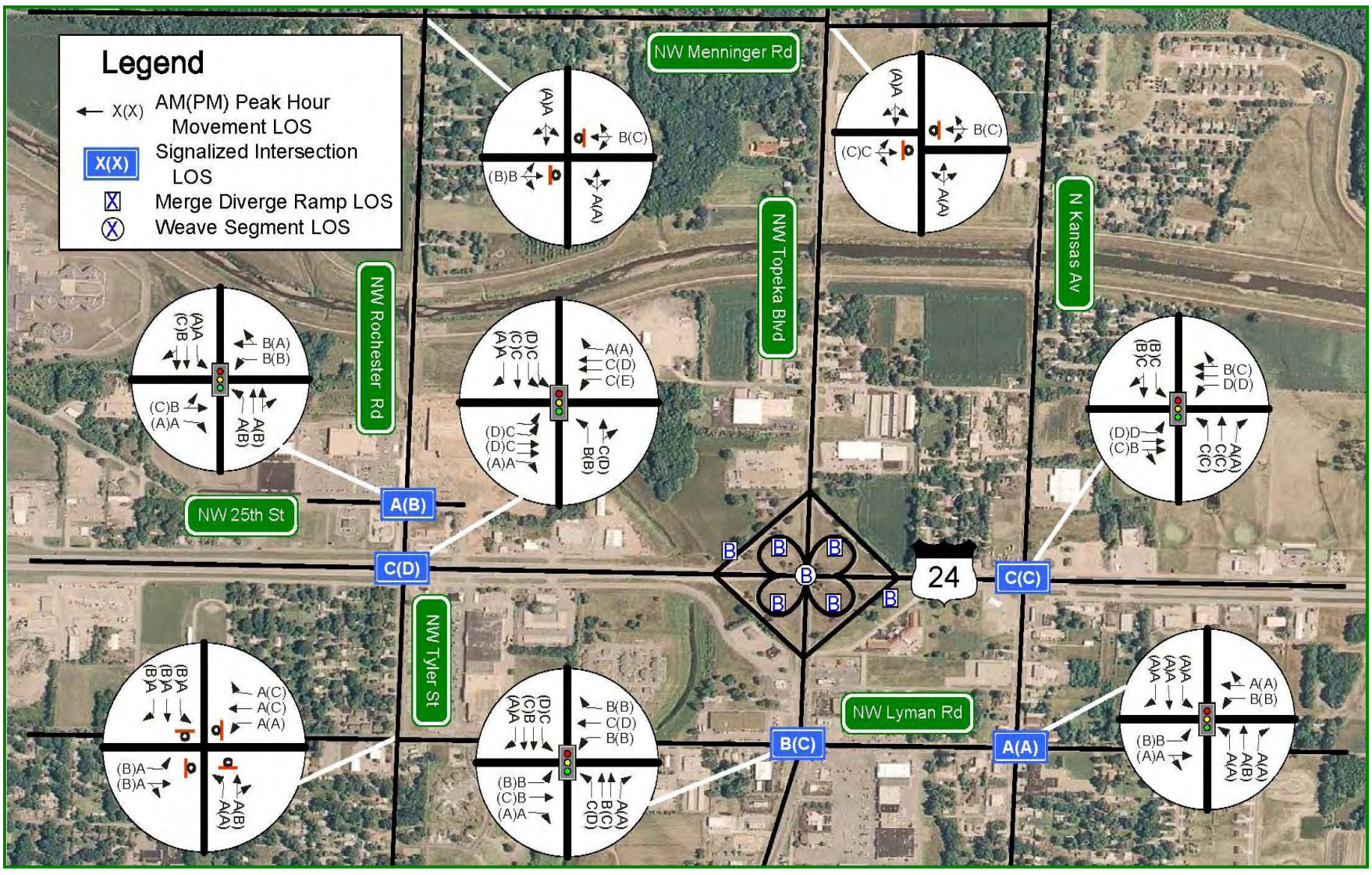


Figure 3.6: Existing Transportation Conditions

As illustrated in the previous **Figures 3.1** through **Figure 3.6**, capacity analyses were conducted to assess existing traffic conditions during both the AM and PM peak periods of operation along US-24 roadway segments and at select study area intersections. Segment level capacity analyses were conducted utilizing the *Highway Capacity Software (HCS)*. In addition, ramp merge/diverge and weave segment analyses were performed using *HCS* for the US-24 and Topeka Boulevard interchange area. Intersection capacity analyses were conducted for standard, at-grade intersections with signalized and unsignalized traffic control using *Synchro, version 7.0*, which is based on the HCM delay methodology.

Based on the results of the analyses, most all of the US-24 roadway segments and study area intersections have adequate operations during peak hour periods. Specific left-turn movements at select signalized intersections experience higher delays during brief cycles of the peak period. This is primarily due to the larger turn movements both to and from the commercial areas adjacent US-24 at Tyler/Rochester, Topeka Boulevard, and Kansas Avenue. In addition, turning traffic at multiple commercial access driveways in this same vicinity adds to the delays and vehicle queuing. The existing interchange operations at the US-24 and Topeka Boulevard junction were also shown to be adequate based on the analysis software, however, field review of this location noted increased vehicle conflicts during peak periods due the minimal on/off ramp acceleration and deceleration lengths. The decreased availability of gaps in the mainline traffic during peak operations promoted on-ramp vehicle braking and increased difference in relative speeds among vehicles within the operational area of the interchange.

3.4 Circulation Analysis

Upon completion of the initial field review and analysis, a series of general observations, were merged to facilitate the evaluation of other qualitative study area circulation issues. These issues included additional transportation characteristics for the US-24 Corridor including access spacing, roadway continuity, and current frontage roads. Additional evaluation of existing pedestrian and transit modes is included in the Context Sensitive Design section of this report. A summary of this information is condensed by the US-24 sub areas and highlighted below:

West Area: On the west end of the US-24 corridor, near Huxman Road, there are several private driveways to homes and businesses with direct access to the highway. There is a lack of turn lanes in this higher speed, two-lane section of US-24 through this area at both public road and private drive locations. These characteristic carry through the Menoken Road intersection to the east.

West Central Area: Immediately to the east of Menoken Road, US-24 transitions to a four-lane facility serving large industrial users. Traveling east, US-24 provides a full cloverleaf interchange at the junction with US-75. Just east of the US-75 junction, there is a modified two-quadrant partial clover interchange that provides access to the existing south Frontage Road and Old Highway 75. The distance between these on/off ramps and the US-75 ramps is less than a quarter mile along US-24. In addition, the ramps to this interchange serving Old Highway 75 provide minimal acceleration/deceleration length. Access to frontage roads are provided in this area up to the Goodyear Road interchange with US-24. Four tightly spaced intersections are stacked along Goodyear Road including the ramp junctions and frontage road intersections. Sight distance is somewhat limited from vehicles on the minor approaches due to the bridge structure.

East Central Area: To the east of the Goodyear Road interchange, the frontage roads stop and access is not provided to US-24 until the Rochester/Tyler intersection. This area of US-24 contains a higher mix of commercial and retail activity, lower speed traffic and signalized intersections. In addition, the Topeka Boulevard interchange is located between the signalized intersections of US-24 with Rochester and Kansas Avenue. Multiple access drives are provided in this area, including one located off of the northbound to eastbound US-24 on ramp as illustrated in **Figure 3.7**.

Figure 3.7 US-24 Eastbound On-Ramp From Topeka Boulevard

Frontage roads are again provided through this segment running parallel to US-24 with poor offset spacing. Typically, the separation between US-24 mainline and the frontage roads allows no more than one vehicle storage length. There is a lack of mainline turn lanes at nearly all median breaks and access locations to US-24 in this area.

East Area: Headed east toward Kaw Valley Road, US-24 has increased speeds and still lacks auxiliary turn lanes in the mainline at median breaks including Happy Hollow Road. Land uses transition back to rural agricultural and residential. The remainder of US-24 within the study area continues east through the grade-separated junctions with K-4.

3.5 Safety Review

A cursory safety review was conducted as part of the existing conditions analysis task. In addition to items of note during the field review, crash data for the most recent three year period was evaluated to summarize the crash history along US-24 through the study area. Crash data was provided by KDOT staff during the assembly of existing information for the project. **Tables 3.2** and **3.3** summarize this data.

Table 3.2: US-24 Segment Crash Rates

Segment	Total Crashes	Segment Length	ADT	Crash Rate (crash/MVM)
Huxman to Menoken	6	2.7	8400	0.24
Menoken to Rochester	37	4.04	15000	0.56
Rochester to Meriden	104	1.23	15500	4.98
Meriden to Goldwater	13	0.52	13800	1.65
Goldwater to K-4	20	1.72	11900	0.89

Table 3.3: US-24 Intersection Crash Rates

Cross Street	Total Crashes	Crash Type										Crash Rate (crash/MEV)
		Rear end	%	Sideswipe	%	Angle	%	Headon	%	Other	%	
US 75	18	1	6%	1	6%	2	11%	0	0%	14	78%	0.34
Rochester	43	21	49%	2	5%	10	23%	3	7%	7	16%	1.29
Topeka	32	17	53%	5	16%	5	16%	1	3%	4	13%	1.05
Kansas	29	13	45%	2	7%	9	31%	5	17%	0	0%	1.09
Meriden	10	2	20%	1	10%	2	20%	1	10%	4	40%	0.64
Goldwater	2	1	50%	1	50%	0	0%	0	0%	0	0%	0.15
Totals	**134**	**55**	**41%**	**12**	**9%**	**28**	**21%**	**10**	**7%**	**29**	**22%**	

As illustrated in **Table 3.2** above, the largest concentration of crashes occur in the segment from Rochester to Meriden. This segment is characterized by access management deficiencies including lack of turn lanes, closely-spaced driveway locations, and poor spacing between US-24 and frontage road intersections. Individual intersection crash rates are illustrated in Table 3.3. As expected, the intersections located within the higher rate segments also contained the highest number of individual crashes. It is interesting to note that even though the junction of Topeka Boulevard is grade-separated, over half of the crashes were of the rear end type, confirming field observations with vehicle braking due to the lack of adequate accel/decel tapers for the ramp areas.

3.6 Travel Demand Modeling

As part of the study effort, the Iteris project team was provided the most recent TransCAD travel demand model for use on the project. Travel demand modeling was a major component of the project and provided a means to further analyze trends in traffic growth and test roadway network alternatives. A base year (2004) model was provided and assumed to be calibrated and validated to acceptable standards for planning studies. This model included "Existing plus Committed" projects in the network, as referenced in the current MTPO Long Range Transportation Plan. In order to run the model, a detailed step-by-step process had to be followed as outlined in the four page instructions provided to the study team. While the process was not complicated, it was determined to be time consuming over the course of testing multiple alternatives. As a result, Iteris staff developed script within the model to allow a user-friendly interface to accomplish the modeling tasks efficiently. Once the model was ran to ensure accuracy and functionality of the script, the existing conditions were plotted so that further review of existing network and daily traffic volumes could be analyzed. A sample of the existing TransCAD model network is illustrated in **Figure 3.8**.

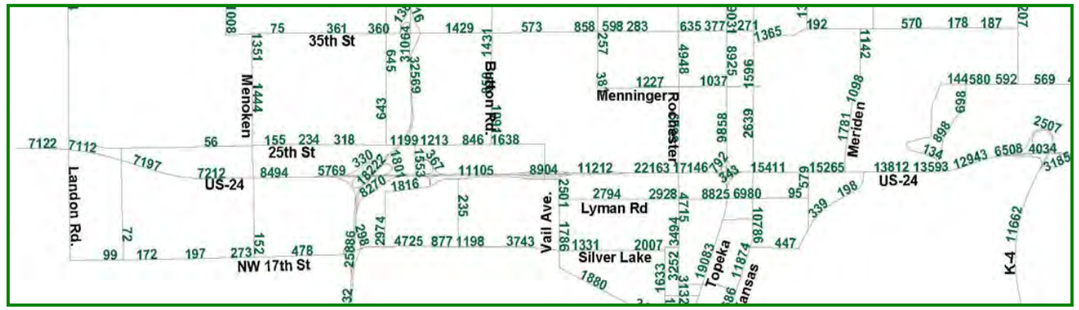


Figure 3.8: US-24 Existing Model Volumes

Based upon the daily volumes depicted by the model, graphical representations of traffic magnitudes along the US-24 corridor were developed to more easily compare network alternatives in subsequent tasks. **Figure 3.9** illustrates the graph of US-24 existing model volumes.

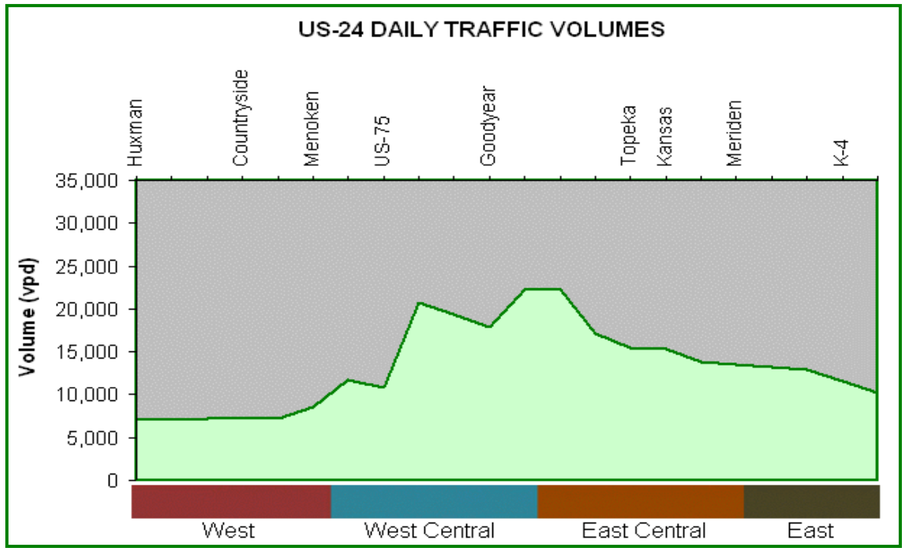


Figure 3.9: US-24 Existing Model Volumes (2)

4.0 Context Sensitive Design

The purpose of Context Sensitive Design is to insure that design fits the social and physical context of a project and provides flexibility for realizing the community's vision for development. The US-24 Corridor "Context" is a physical, economic and social framework influencing the character of a future facility. Although the context is a constraint, it is also an opportunity.

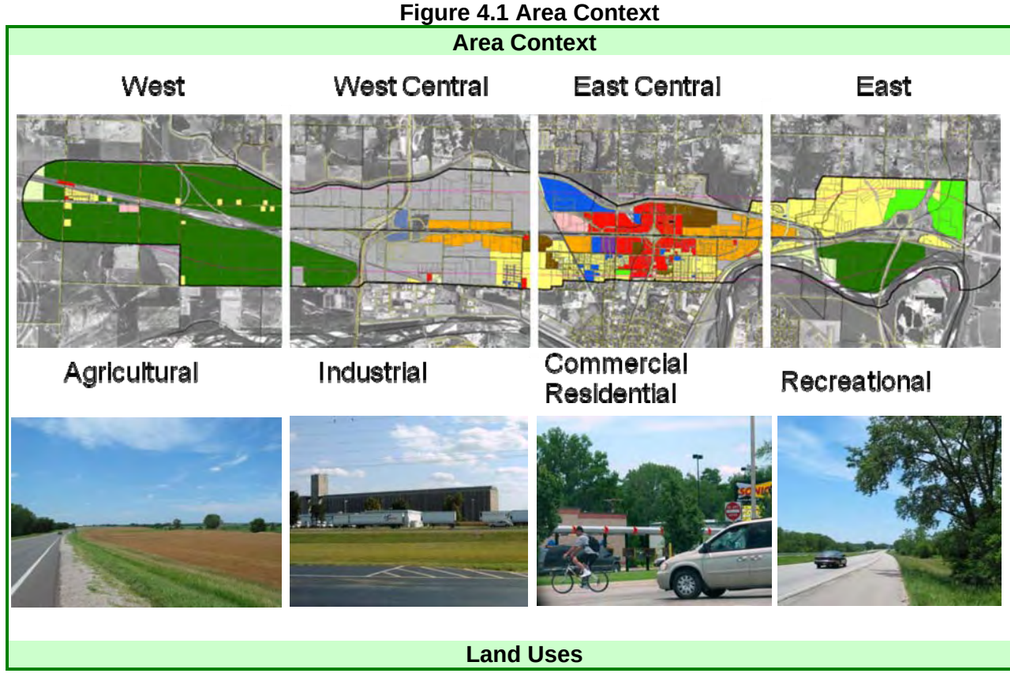
4.1 Introduction

Context Sensitive Design is an important aspect of planning projects. The benefits of Context Sensitive Design are that it:

- Can "help a project be in harmony with the community and preserve resources that otherwise might be lost or harmed."
- Can "help frame the role that a transportation project can play in enhancing that place." (Excerpted from Context Sensitive Solutions.org)

The context of the US-24 Corridor varies from west to east. The four distinct sub areas where land uses, density of development, physical character, and use of different transportation modes vary significantly as illustrated in **Figure 4.1**:

Figure 4.1 Area Context



Because of the different context of each of these areas, each must be evaluated separately, in relation to both the current situation and any transportation alternatives. The study team utilized this information to better understand the existing context of the corridor and what the public acknowledges is important about aspects of that context.

4.2 Project Goals

The goals of the US-24 Access Management, Circulation, and Land Use Plan are a foundation for context sensitive objectives. These major context considerations are listed below.

1. Safety/Efficiency Goal: To keep the corridor operating in a safe and efficient manner.
The current context of the corridor includes primarily automobile and truck traffic. The safety and efficiency of operating these vehicles is addressed by other sections of this report. For transit provisions however, the current context includes no transit route on US-24, though there is a route that crosses the highway and stops just north at Wal-Mart on Rochester. There is another route that travels within a couple of blocks of the US-24 Corridor. There are multiple potential destinations including major industry and job clusters, major retail including Wal-Mart, and local shopping and restaurants. There are also potential origins including apartments and mobile home parks, and single family residential and transit-dependent populations.

Some of these same origins and destinations provide a market for bicycling and walking. The current context includes some bicycle traffic crossing the highway at intersections and reportedly some traveling regionally along the highway. There is little pedestrian traffic crossing US-24 at intersections. US-24 currently makes little accommodations for transit, bicyclists or pedestrians.

Surveys, interviews and input at public meetings revealed strong feeling that there is not safe access for bicyclists and pedestrians in the corridor. The problem appears to be greatest in the East Central area where there are major destinations for bicyclists and pedestrians that would require crossing of US-24. There are also concentrated job locations in the West Central Industrial area that could require pedestrian and bicycle crossings.

Should more extensive transit service be initiated on or across US-24, safe pedestrian and bicycle crossings, potential pull-outs for buses and potential bus stop and shelter locations will be important on adjacent collector or service roads.

2. Mobility Goal: To increase the mobility of all users.
As was stated under Goal 1, mobility along the corridor is confined primarily to automobiles and trucks. Other users including transit users, bicyclists and pedestrians have limited mobility.

Although current transit only crosses Highway 24, with the major destination of Wal-Mart, there is a growing perception among the public interviewed and surveyed of the importance of transit to serve a growing job base and because of increased demand due to high gas prices. There is a bus route within 1-2 blocks of US-24 centered around NW Topeka Blvd traveling on N Kansas Avenue and NW Tyler Street. Jobs are expanding primarily in the West Central Area, but are not served by transit.

The current context also includes potential multi-use trails that would travel under US-24. According to the Topeka-Shawnee County Regional Trails and Greenways Plan, Kaw Reserve Trail would cross under US-24 with a potential trail head at Happy Hollow Road. Soldier Creek Trail would cross under US-24 between Rochester Road and NW Topeka Boulevard. In addition, Topeka Boulevard and Kansas Avenue lead to two of the most likely future possible river crossings for hike and bike. Providing crossings accessible for bicyclists and pedestrians at these locations could help complete connections to Topeka neighborhoods north of the US-24 Corridor.

The East Central Area has the greatest density of potential walking and bicycle destinations in the US-24 Corridor, including restaurants, drug stores, post office, banks, retail shops and a YMCA. It also has the greatest concentration of residential uses, particularly south of US-24. Improving select intersections to accommodate pedestrians and bicycles in this area would greatly improve mobility.

Almost 90% of those interviewed and surveyed did not believe there was safe access for pedestrians and bicyclists in the corridor. The community thought off-road options for pedestrian and bicycle circulation, such as trails, should be considered.

3. Economic Goal: To strengthen the economic vibrancy of the US-24 Corridor for existing and future commerce.
Industrial jobs in the corridor are concentrated in the West Central Area and retail and heavy commercial/light industrial uses are concentrated in the East Central Area. The anticipated 3,600 new jobs in next 25 years means increased need for access by all means of transportation to job locations.

The East Area of the Corridor is almost exclusively agricultural with a few scattered residential uses and a residential cluster at Kiro. According to input at the first public meeting, the roadway should not be designed to encourage commercial and industrial development of the Western Area agricultural land. On the other hand, commercial growth and infill in the East Central area was strongly supported.

There was strong feeling at the public meeting that economic viability meant maintaining and improving access to businesses, including support for businesses working together to share access.

4. Improvement Goal: To improve the entire US-24 Corridor area.
The current environmental context includes a large area of floodplain from the Kansas River. The 100 and 500 year flood plain covers a large part of the Western Area Agricultural and also south of US-24 in the East Area. There has been public discussion of drainage problems in the East Central Area that are in the process of being corrected. The public's most frequently mentioned environmental issue was flooding and poor drainage and some concern was expressed as to how the current roadway affected it.

The largest forested area is in the East Area, where there are also steep slopes and bluffs. At the first public meeting there was support for preserving trees and incorporating natural landscaping. As one person put it, "Work on a sense of place and design to make it special. It looks like every other strip of highway in the country."

Historic and visual elements of the Hwy 24 context that several thought were important to preserve included:

- Calhoun Bluffs (East Area)
- Townsite of Calhoun (East Area)
- Tall grass prairie remnant (East Area)
- Oakwood Farm prairie (Western Area)

A 2007 City of Topeka Neighborhood Health Map prepared by the Planning Department showed a neighborhood on the south side of US-24 between approximately Tyler Street and Topeka Boulevard classified as "At Risk". The public has expressed their concern about property maintenance. Among the top responses to interviews was a desire to clean up the corridor and make it more aesthetically pleasing.

The "Topeka/Shawnee by Design, the Future Vision" prepared for the Metropolitan Planning Authority of Topeka/Shawnee County by A. Nelessen Associates, Inc. included a Visual Preference Survey and Community Questionnaire for Topeka that looked at four areas including the Central Business District, In-Town Neighborhoods, Older Strip Commercial Areas, and the Urban Periphery. The latter two are relevant to the US-24 Corridor Study. The study recommends the following for "older strip commercial areas", which are also characteristic of the US-24 Corridor:

- Prepare a plan for massive planting of trees in older strip commercial areas. These can be street trees, planting nurseries on vacant under-utilized lots, and creating gateway parks with water features.
- Design for a pleasant walking experience in and along older strip commercial areas and corridors.

Improvements that are recommended include: better pavement surfaces, making sidewalks continuous between store fronts and through crosswalks, planting of street trees, and developing a phased plan for conversion of older strip commercial arterials to urban boulevards. There were also recommendations for locations, landscaping and screening of parking lots. The study recommended providing transit stops and appropriate shelters for connections between neighborhood housing and jobs, recreation, and shopping located along retrofitted older commercial arterials.

The first recommendation for the Urban Periphery was to preserve green space from additional encroachment of suburban development. The second recommendation was to design for a pleasant walking experience by linking the area with walking and bike paths.

All of these aforementioned Context Sensitive Design issues were utilized, along with stakeholder feedback to help shape opinions regarding future land use and transportations issues and alternatives within the US-24 Corridor.

5.0 Market Analysis

As part of additional land use planning conducted for the study, a market analysis was completed to assess the factors that inform various development opportunities. To ensure that land use scenarios and related traffic improvements proposed for the study area are realistic, market trends for the near-term and the long-term were evaluated.

5.1 Existing Economic Conditions

The project team evaluated the existing economic conditions of the US-24 study area and surrounding jurisdictions. The evaluation included business establishments, civilian employment, labor force, retail pull factor, household income, education, commercial real estate, and property tax rates. The following sections discuss the results of the existing economic conditions evaluation.

Existing Business Types and Square Feet

The western portion of the study area (west of Menoken Road) is dominated by agricultural land with only a few businesses, including a day care center and a local television station. The portion of the study area from Menoken Road to the Union Pacific Rail Line is dominated by large industrial businesses, including U.S. Foodservice, Delmonte Pet Products, McCray Components, and Goodyear Tire Distribution Center. The portion of the study area near the Topeka Boulevard interchange is a mix of commercial businesses. The commercial businesses near the interchange range from Wal-Mart and Dillon's to Payless Shoes, and L & J Cafe. East of Kansas Avenue the businesses are more light industrial type businesses, such as Tractor Supply Company, Midwest Crane and Rigging, and Green Acres Trucking. The portion of the study area east of Kaw Valley Road currently has no businesses in it. The team selected a sample list of businesses, and based on Shawnee County Appraisal data, determined the square footage of typical businesses in the study area. **Table 5.1** provides the results of that analysis.

Business Growth in Study Area by Zip Code

To analyze business growth in the study area, historic data was utilized from the U.S. Census Bureau's County Business Patterns. This source of data was evaluated for Shawnee County, the city of Topeka, and for the zip codes within the study area. The most recent data available was from the year 2006. **Figure 5.1** illustrates the zip code boundaries.

Business growth along the US-24 Corridor from 1998 to 2006 has been varied and inconsistent. The study area as a whole has experienced little growth in comparison to the city of Topeka; but it has experienced more growth than Shawnee County. The zip codes that did experience the positive business growth within the study area are large and include a substantial rural area outside the US-24 Corridor study area limits.

Table 5.1: Square Footage of Selected Businesses

Land Use Type	Business	Building Square Feet
Commercial	Jax Sports Pub & Grill	4,617
	Walgreens	12,481
	L & J Café	768
	FedEx	7,344
	Wal-Mart	187,790
	Dillon's Food	52,338
	K-Mart	76,583
	Price Chopper	41,845
	Payless Shoe Source	10,160
	Scotch Cleaners	1,176
Office	Wallace Photography	3,984
	Eyeball Engineering	3,750
	Rubber Works Credit Union	2,938
	Tennant Chiropractic Clinic	2,455
	Silver Lake Bank	15,881
	American Style Salon and Spa	2,064
	Seaman School District	12,077
	Kaw Valley Bank	3,241
	Lamar Outdoor Advertising	3,200
Industrial	Payless Shoe Source	321,858
	U.S. Food Service	217,510
	Southwest Publishing	99,430
	McCray Components	54,000
	Crown Distributors	30,400
	Vanguard Products	14,172
	Goodyear Tire	407,108
	Arrow Stage Lines	8,680
	Kendall Construction	5,256
	Midwest Tire	11,912
	Delmonte Pet Products	84,450
	Pepsi-Cola	21,396

Source: Shawnee County Appraiser, www.co.shawnee.ks.us

US-24 Corridor

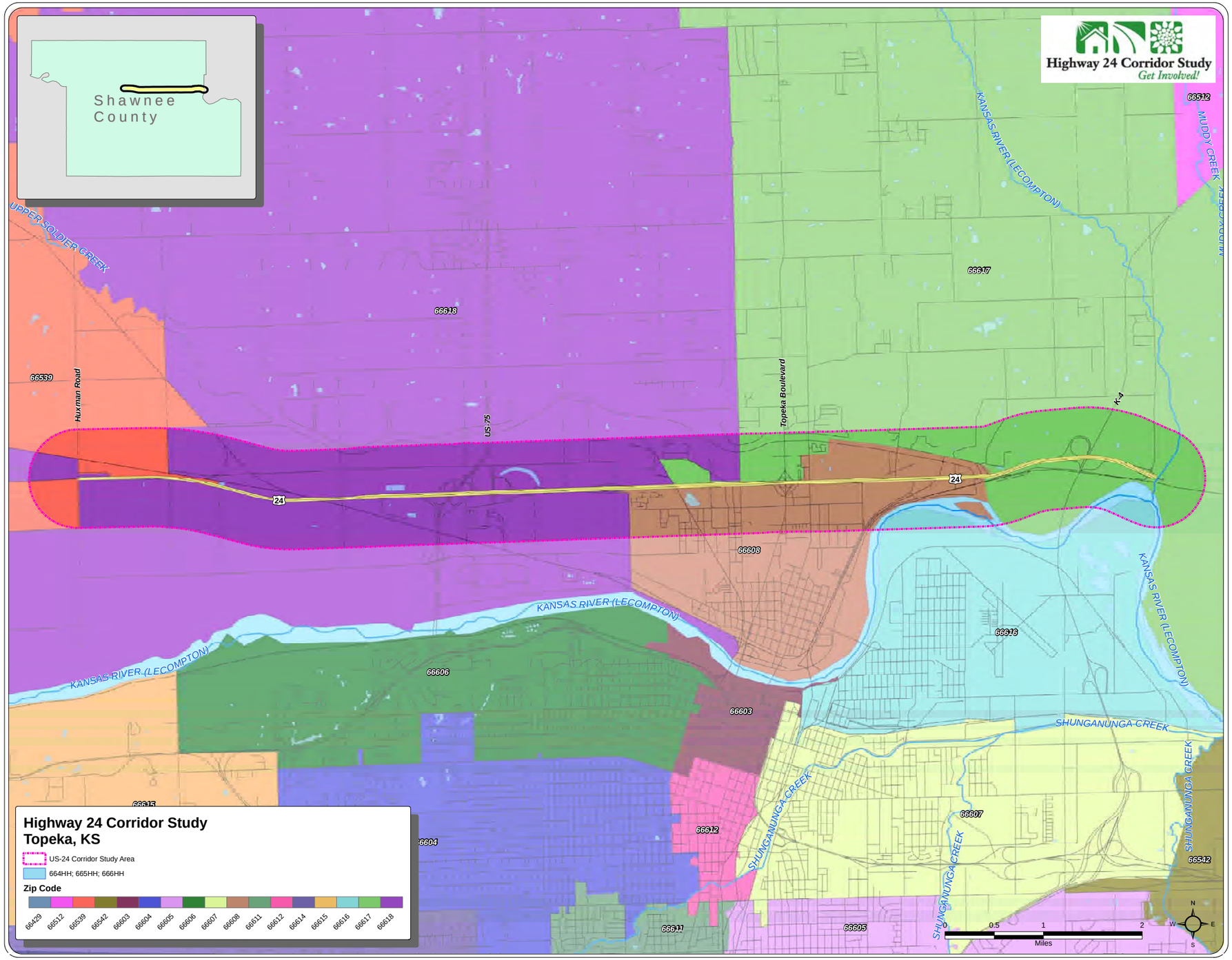


Figure 5.1: Zip Code Boundaries

The associated business establishment data by zip code is summarized in **Table 5.2**

Table 5.2: Total Business Establishments by Zip Code

	1998	2002	2006	1998 - 2006
66539	37	38	42	13.5%
66608	298	275	279	-6.4%
66617	132	126	135	2.3%
66618	141	192	208	47.5%
Study Area Total	**608**	**631**	**664**	**9.2%**
City of Topeka	4,609	4,636	5,771	25.2%
Study Area Share of City of Topeka	13.2%	13.6%	11.5%	-1.7%
Shawnee County	4,609	4,636	4,716	2.3%
Study Area Share of Shawnee County	13.2%	13.6%	14.1%	0.9%
Source: U.S. Census Bureau, County Business Patterns, www.census.gov				

Civilian Employment

While the number of businesses in the corridor increased from 1998 to 2006 the number of jobs decreased, as shown in **Table 5.3**. According to the U.S. Census Bureau's County Business Patterns the Study Area experienced a 2.7 percent decrease in jobs from 1998 to 2006, while the city of Topeka experienced a six percent increase and Shawnee County experienced a 7.3 percent decrease. The study area's share of jobs in the city of Topeka also decreased slightly.

Table 5.3: Local Civilian Employment by Zip Code

	1998	2002	2006	1998 - 2006
66539	144	124	156	8.3%
66608	3,801	3,346	3,392	-10.8%
66617	1,189	1,146	952	-19.9%
66618	4,644	4,790	5,014	8.0%
Study Area Total	9,778	9,406	9,514	-2.7%
City of Topeka	81,210	77,392	86,115	6.0%
Study Area Share of City of Topeka	12.0%	12.2%	11.0%	-1.0%
Shawnee County	81,210	77,392	75,299	-7.3%
Study Area Share of Shawnee County	12.0%	12.2%	12.6%	0.6%
Source: U.S. Census Bureau, County Business Patterns, www.census.gov				

Labor Force

Although the number of jobs in the study area (reported by zip code) declined from 1998 to 2006, the number of persons in the labor force in the study area (reported for block groups) increased by 24 percent from 1990 to 2000. Labor force data is not reported by the U.S. Census Bureau's County Business Patterns, so the Study Team used the most recent data available from the U.S. Census Bureau's Census 2000. **Table 5.4** summarizes the labor force (employed) characteristics of the study area, the city of Topeka, and Shawnee County from the years 1990 to 2000. The growth of labor force in the study area was significantly greater than the city of Topeka and Shawnee County. Two employment sectors in the study area did not grow over the ten year period, the agricultural sector and the retail sector. The agricultural sector experienced a 31 percent decrease and the retail sector experienced an 11.6 percent decrease from 1990 to 2000.

Table 5.4 Labor Force (Employed) Characteristics

	Employment Sector	1990	2000	1990 - 2000
Study Area (Block Groups)	Agricultural	55	42	-23.6%
	Industrial	828	1,147	38.5%
	Manufacturing	828	918	10.9%
	Services	2,645	3,918	48.1%
	Retail	705	632	-10.4%
	Total	5,061	6,657	31.5%
City of Topeka	Agricultural	365	241	-34.0%
	Industrial	7,854	8,090	3.0%
	Manufacturing	5,979	5,334	-10.8%
	Services	32,489	35,430	9.1%
	Retail	9,452	6,786	-28.2%
	Total	56,139	55,881	-0.5%
Shawnee County	Agricultural	823	493	-40.1%
	Industrial	11,505	12,205	6.1%
	Manufacturing	8,614	7,739	-10.2%
	Services	43,355	49,864	15.0%
	Retail	12,721	9,681	-23.9%
	Total	77,018	79,982	3.8%
Source: U.S. Census Bureau, 1990 Census, Census 2000, www.census.gov				

According to the Kansas Department of Labor's June 2008 labor force estimates, www.dol.ks.gov, the employed civilian labor force in the city of Topeka has risen to 60,773 or eight percent. The employed civilian labor force in Shawnee County has increased to 87,193 or nine percent since 2000.

Figure 5.2 summarizes the economic indicators for the study area, the city of Topeka and Shawnee County. The city of Topeka experienced the largest growth in the number of business and jobs from 1998 to 2006; however it experienced the smallest growth in the number of persons in the labor force from 1990 to 2000. The study area experienced the largest growth in the number of persons in the labor force.

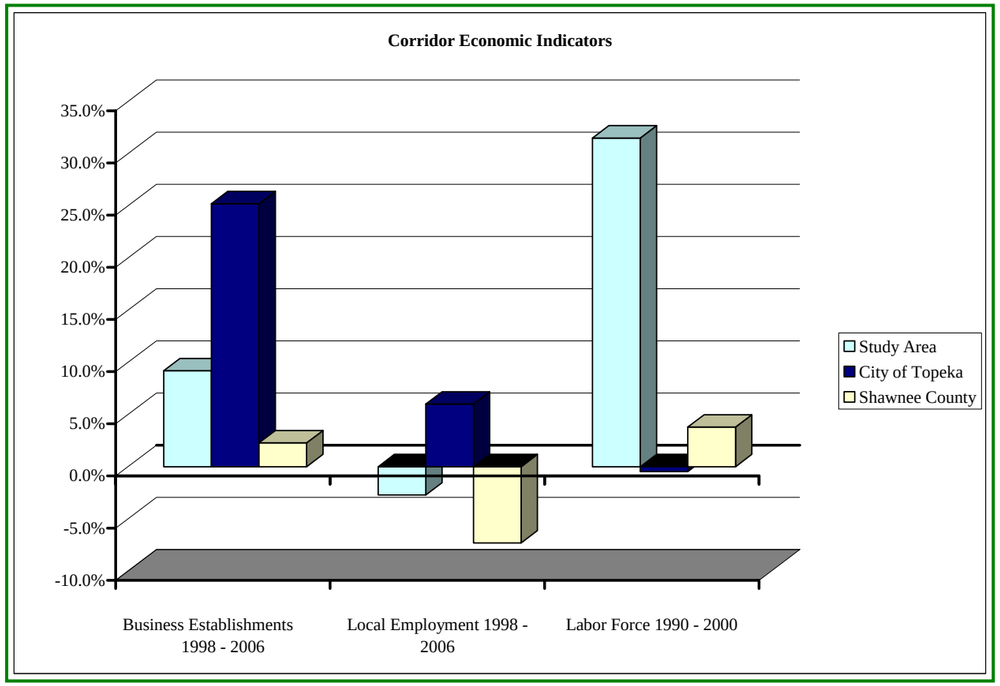


Figure 5.2 Corridor Economic Characteristics

Sales Tax Collections

The project team analyzed sales tax data generated by the Kansas Department of Revenue from sales tax returns filed by the state's retailers. The sales tax collections were reported as part of the annual reports of trade pull factors and trade area captures for fiscal year 2007; A Study of Retail Trade in Cities Across Kansas and County Trade Pull Factors. Both reports are available on the Kansas Department of Revenue website, www.ksrevenue.org. Sales tax collections are an important measure of how a community's retail market is performing and it helps determined the communities' retail pull factor, discussed further in the next section.

The data was used to compare the city of Topeka and Shawnee County's sales tax collections to surrounding jurisdictions. **Table 5.5** summarizes this comparison. The city of Topeka had the third highest sales tax collections in 2007, behind the cities of Wichita and Overland Park. However, it has the second highest per capita sales tax collections, behind only Overland Park. Shawnee County had the third highest sales tax collections and per capita collections behind Johnson and Sedgwick Counties. The city of Topeka's sales tax collections represent 93 percent of all of Shawnee County's collections. However, Shawnee County's sales tax collections represent approximately seven percent of the state of Kansas' total collections.

Table 5.5: Sales Tax Collections

City/County	Sales Tax Collections	Per Capita Sales Tax Collections	Percent of County/State Sales Tax
Overland Park	182,160,905	1,102.08	38.4%
Topeka	**120,341,147**	**1,011.63**	**93.0%**
Olathe	100,300,306	880.45	21.1%
Wichita	296,665,015	836.85	79.3%
Lawrence	61,894,678	702.01	92.4%
Kansas City	87,728,868	613.79	88.8%
Johnson County	474,670,022	925.36	25.4%
Sedgwick County	374,215,605	801.39	20.0%
Shawnee County	**129,455,218**	**766.93**	6.9%
Wyandotte County	98,766,155	639.71	5.3%
Douglas County	66,984,615	600.54	3.6%

Source: Kansas Department of Revenue, 2007, www.ksrevenue.org

Retail Pull Factor, Household Income, and Household Size

A city or county's retail pull factor indicates how a city or county's retail market is performing by measuring the strength of the retail market by the market share captured in a community. The retail pull factor is computed by dividing the per capita sales tax of a city or county by the statewide per capita sales tax. A retail pull factor of 1.00 indicates a perfect balance of trade. A retail pull factor above 1.00 indicates that a community is attracting trade from other places. A retail pull factor below 1.00 indicates that a community is losing trade to other places. The retail pull factor is computed by dividing the per capita sales tax of the city or county by the statewide per capita sales tax. Median household income and average household size influences the amount spent by households for retail purposes.

Again, the study team used data from A Study of Retail Trade in Cities Across Kansas, County Trade Pull Factors, and also the U.S. Census Bureau's American Community Survey to compare the retail pull factor, median household income, and average household size of the city of Topeka and Shawnee County to surrounding cities and counties. The most recent data available is from 2007. **Table 5.6** shows the results of the evaluation. All of the cities, except Kansas City, have a retail pull factor above 1.00. Of the cities analyzed, the city of Topeka has the second highest retail pull factor at 1.47. The measure indicates that for every resident of Topeka, the retail market in Topeka serves almost 1-½ persons. This means that the city of Topeka is a market center drawing people from other communities to shop in Topeka. Because the city of Topeka already has such a high retail pull factor, there is not much room for it to increase meaning that if North Topeka wanted to capitalize on this it would not be bringing in new retail, but pulling in existing retail from other parts of the city of Topeka. Of the cities analyzed, Topeka's median household income ranked fourth behind Overland Park, Olathe, and Wichita. Topeka's average household size is the smallest of the cities analyzed. This means that although the median household income

is lower for Topeka than for several other cities, this level of income is supporting fewer people on average.

Of the five counties analyzed, Shawnee County has the third largest retail pull factor at 1.11, which is lower than the city of Topeka's retail pull factor. Shawnee County also has the third highest median household income behind Johnson County and Sedgwick County. Like the city of Topeka, Shawnee County has the smallest average household size, tied with Douglas County, of the counties analyzed.

Table 5.6: Retail Pull Factor, Median Household Income, and Average Household Size Comparison

City/County	Pull Factor FY 2007	Median Household Income 2007	Average Household Size 2007
Overland Park	1.60	$70,513	2.44
Topeka	**1.47**	**$41,662**	**2.22**
Olathe	1.28	$69,366	2.80
Wichita	1.22	$42,696	2.44
Lawrence	1.02	$38,826	2.23
Kansas City	0.89	$36,211	2.59
Johnson County	1.35	$71,658	2.59
Sedgwick County	1.17	$46,976	2.52
Shawnee County	**1.11**	**$46,566**	**2.34**
Wyandotte County	0.93	$37,233	2.61
Douglas County	0.87	$42,772	2.34

Source: Kansas Department of Revenue, 2007, www.ksrevenue.org; U.S. Census Bureau, American Community Survey, 2007, www.census.gov

Education Attainment

The level of education of the labor force is an important determinate for businesses looking to locate in a community. If the labor force is highly educated in a community it makes that community more appealing to businesses. The study team used data from the U.S. Census Bureau's Census 2000 for the evaluation of educational attainment.

Summarized in **Table 5.7** is the percentage of the population 25 years old or older that is a high school graduate and college graduate in the study area, the city of Topeka, and Shawnee County. The percent of the study area population that is a high school graduate, is higher than that of the city of Topeka and Shawnee County; however, the percent of the study area population that is a college graduate is lower than the surrounding jurisdictions.

Table 5.7: Education Attainment

	Study Area (Block Groups)	City of Topeka	Shawnee County
Percent High School Graduate or Higher (includes equivalency)	89.8%	85.9%	88.1%
Percent College Graduate or Higher	18.5%	25.3%	26.0%

Source: U.S. Census Bureau, Census 2000, www.census.gov

Commercial Real Estate

The study area is located in the portion of the city of Topeka known as North Topeka; this does not include the western most end of the study area outside the Topeka Metropolitan Planning Organization Area. **Figure 5.3** illustrates the boundaries of North Topeka. According to market reports completed by KS Commercial Real Estate Services, Inc., North Topeka's average rent per square foot of commercial space is $8.10, total square feet of commercial space is approximately 9.5 million, and occupancy rate is almost 98 percent. **Tables 5.8** and **5.9** compares the commercial real estate market in North Topeka, Downtown Topeka, and the city of Topeka in 2002 and 2008. In 2002, North Topeka's average rent per square foot was lower than Downtown Topeka and the city of Topeka; however, since 2005 its average rent has been increasing (**Figure 5.4**) and is currently higher than Downtown Topeka. This increase in average rent can most likely be attributed to the increase occupancy from 2004 to 2008 (**Figure 5.5**). North Topeka's current occupancy is higher than both Downtown Topeka and the city of Topeka. The highest occupancy rate in North Topeka is for industrial real estate which is approximately 99 percent occupied. This accounts for approximately 7.4 million square feet of occupied industrial space, approximately one third of all industrial space in the city of Topeka.

Table 5.8: Commercial Real Estate Market Characteristics

		Average Rent per Square Feet		Total Square Feet		Occupancy	
		2002	2008	2002	2008	2002	2008
North Topeka	Office	$10.88	$11.18	392,041	432,109	93.58%	96.37%
	Retail	$6.96	$8.91	1,384,776	1,596,771	94.70%	98.07%
	Industrial	$3.98	$4.20	6,997,687	7,471,051	97.59%	99.42%
	Total	$7.27	$8.10	8,774,504	9,499,931	95.29%	97.95%
Downtown Topeka	Office	$13.31	$12.78	5,035,728	5,030,718	94.81%	87.94%
	Retail	$5.54	$4.92	747,129	754,323	94.97%	92.07%
	Industrial	$3.05	$2.85	3,300,089	3,362,251	97.92%	98.43%
	Total	$7.30	$6.85	9,082,946	9,147,292	95.90%	92.81%
Topeka	Office	$12.91	$12.82	10,728,665	11,543,426	94.78%	90.62%
	Retail	$7.00	$8.50	12,104,284	12,591,787	92.94%	93.46%
	Industrial	$3.42	$4.09	18,668,413	21,205,935	97.25%	93.44%
	Total	$7.78	$8.47	41,501,362	45,341,148	94.99%	92.51%

Source: KS Commercial Real Estate Services, Inc., Market Report 2008, Topeka, KS

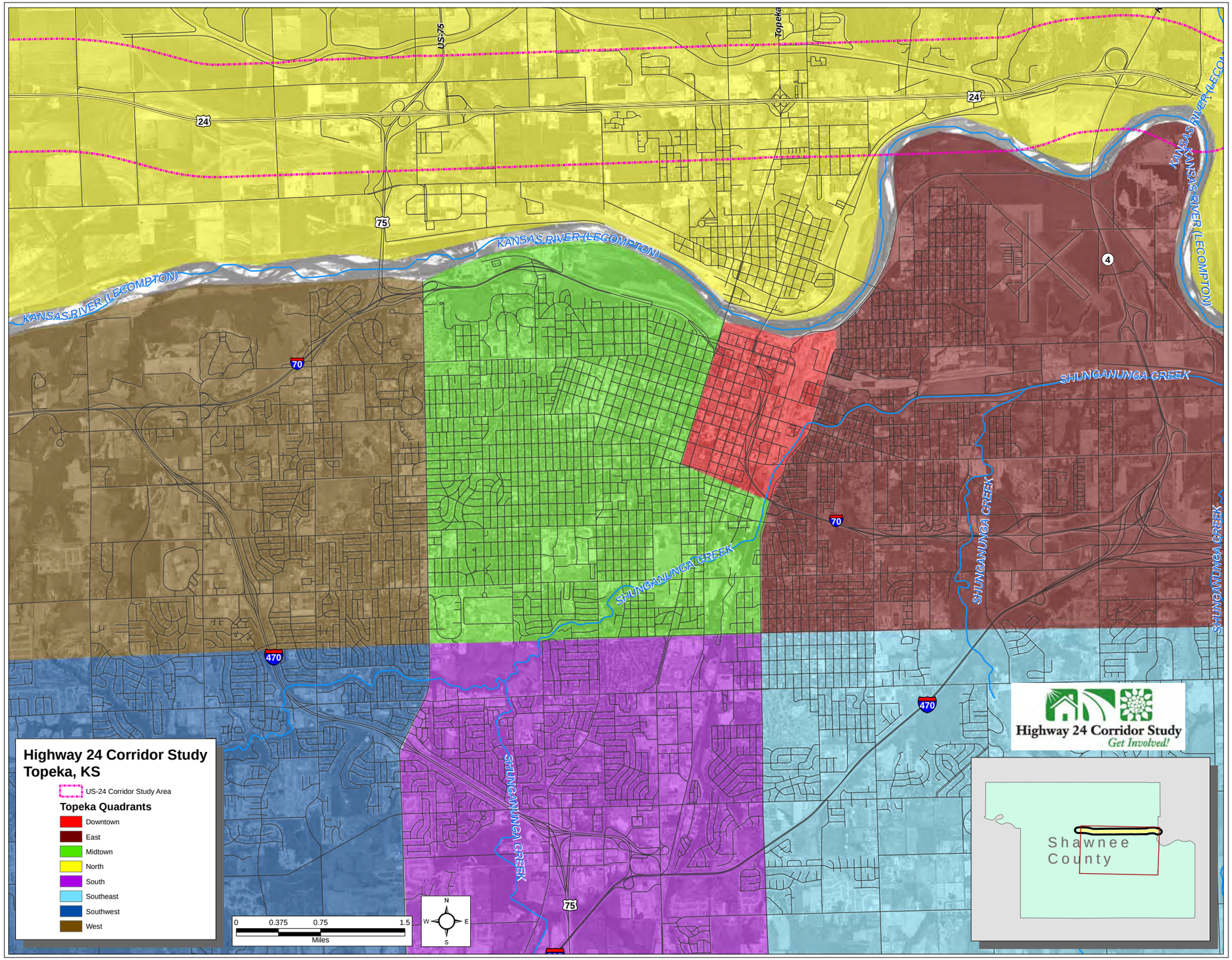


Figure 5.3:North Topeka Boundary Map

Table 5.9: Additional Commercial Real Estate Market Characteristics

		Absorption (Net Sq Ft)	Absorption Rate
North Topeka	Office	49,551	13.50%
	Retail	254,570	19.40%
	Industrial	598,676	8.80%
	Total	944,274	11.30%
Downtown Topeka	Office	-350,360	-7.30%
	Retail	-15,043	-2.10%
	Industrial	78,017	2.40%
	Total	-220,639	-2.50%
Topeka	Office	292,024	2.90%
	Retail	518,563	4.60%
	Industrial	1,659,794	9.10%
	Total	2,521,441	6.40%

Source: KS Commercial Real Estate Services, Inc., Market Report 2008, Topeka, KS

Figure 5.4: North Topeka Total Commercial Average Rents per Square Foot

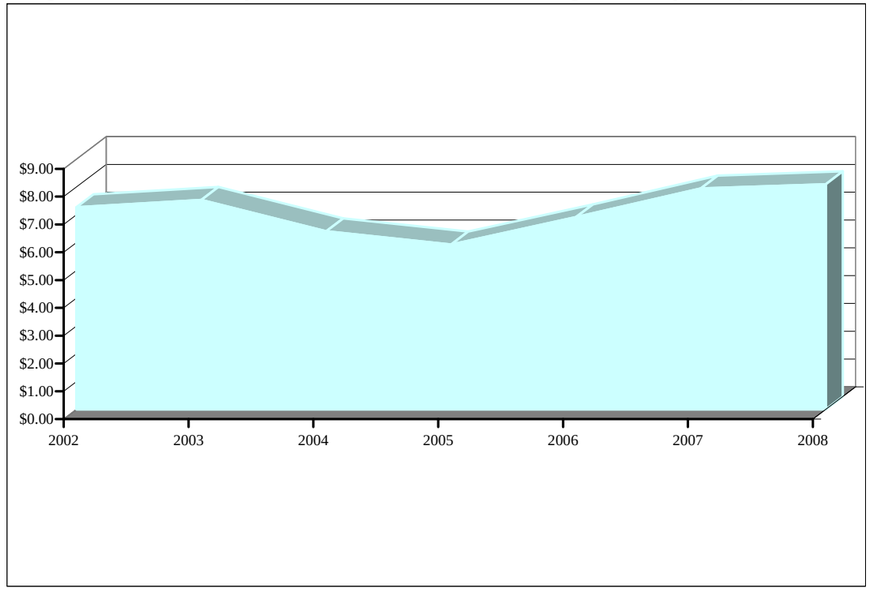
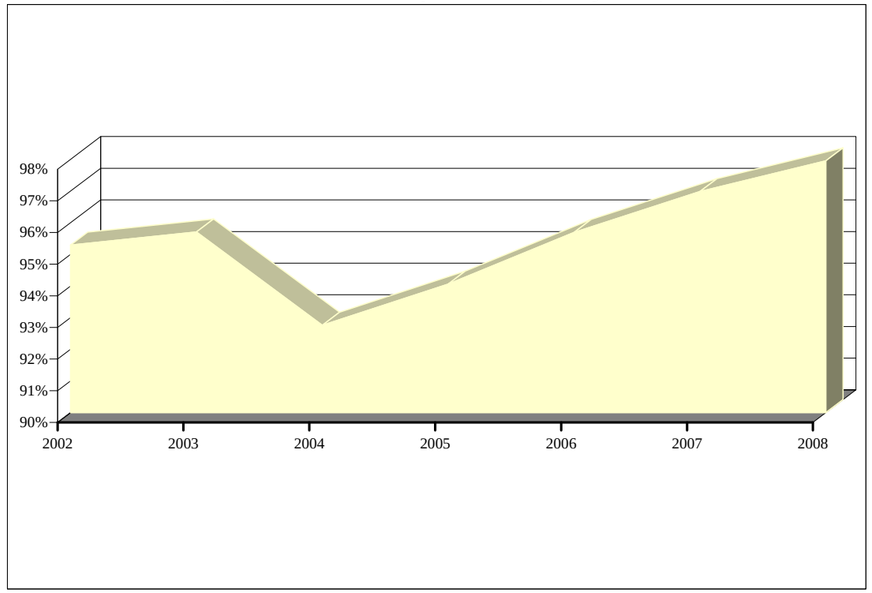


Figure 5.5: North Topeka Occupancy Rates



Property Tax Rates

Property tax rates vary widely among cities and are another important determinate for businesses looking to locate in a community. The study team used data from the League of Kansas Municipalities' Tax Rate Book 2008 to compare the total property tax rates for the city of Topeka to surrounding cities. The results of this evaluation are shown in **Table 5.10**. Compared to surrounding cities, Topeka has the second highest property tax rate, behind only Kansas City, KS. The city of Topeka's property tax rate is approximately 13 percent higher than the combined average.

Table 5.10 Area Cities Total Property Tax Rates for 2008

City	Total Tax Rate	City vs. Average
Lawrence	115.993	-9.1%
Olathe	122.442	-4.0%
Overland Park	105.183	-17.6%
Topeka	**144.326**	**13.1%**
Kansas City	157.300	23.3%
Wichita	120.237	-5.8%
Combined Average	127.580	100.0%

Source: League of Kansas Municipalities, Tax Rate Book 2008

5.2 Regional/Urban Design Action Team Results

Key local stakeholders interviewed as part of the Regional/Urban Design Action Team (R/UDAT) process identified numerous ideas regarding the future business/market growth in the US-24 corridor. The majority of stakeholders interviewed believe that business is growing in the corridor; however, it is still lacking retail and office development. Those interviewed would like to see an increase in family sit-down restaurants, entertainment, professional services, and upscale retail. While stakeholders indicated that they want to see continued business growth in the US-24 Corridor, they do not want the corridor to become another Wanamaker Road corridor. They want a destination area with businesses that will stay in the community. Stakeholders identified the major problem stopping businesses from coming to the US-24 corridor is the lack of good infrastructure and access, particularly the frontage roads.

5.3 Short-to-Mid-Term Market Effects

The immediate future of the North Topeka market area will be dominated by two key factors: the existing economic downturn occurring in late 2008 and the potential vacating of a large scale site by Payless along with other potential smaller closures. In the short-term, the higher than average occupancy rates will be reduced due to these factors alone. This in turn means only a limited market for new short-term growth, likely to consist of specific projects such as the new motel near Topeka Boulevard.

The mid-term (5 to 7 year) forecast for North Topeka should be brighter. North Topeka and the Study Area have benefited from a moderate growth in the number of businesses and currently have high occupancy rates for office, retail, and industrial uses. In the mid-term, the high occupancy rates indicate potential for growth in commercial development as the market comes back and as one would expect overall occupancy to sink below 95 percent and closer to the regional average due to development. In addition, North Topeka population growth has trended above regional averages and with new housing developments currently under construction north of the Study Area, this should continue as the overall housing market stabilizes. Retail growth has already occurred to help serve this population growth in the form of such properties as Wal-Mart and Dillons and moderate growth can be expected to continue. Developers have indicated that provision of sewer and water infrastructure is a concern preventing widespread growth in some areas north of the central part of the US-24 Study Area.

The retail pull factor for the overall Topeka market is 1.47, substantially above an average of 1.00. This means that as a whole, Topeka is already serving as a regional retail center, drawing in substantial extra revenue from well beyond its borders. It also means that most retail growth within Topeka, and therefore within the study area, will need to focus on serving existing population growth. The opportunities to provide facilities to further attract shoppers from outside the city are limited because they are already shopping in Topeka. Major efforts to develop regional retail destinations in the study area would likely come at the expense of existing retail areas already in the Topeka area. This provides some limit to mid-term retail growth.

The conclusion on the short-to-mid-term effects of the Topeka market on land use will likely be a down then up pattern. The next couple years may see more closings than openings for commercial land uses but in the mid-term more opportunity for growth in both commercial and residential properties exists.

5.4 Long-Term Market Effects

The long-term market growth within the US-24 study area and North Topeka will be most strongly governed by regional economic factors, population growth, and extension of services. There is the potential for residential growth in North Topeka to outpace other parts of the region as long as utility services are extended to support that growth. At the same time, local officials may want to direct the locations of residential growth to the most cost effective locations through decisions about where utilities should be extended.

Although parts of Kansas are struggling with population decline, the Topeka region appears to have a relatively strong local economy, is anchored by the state government, and is forecast to have moderate growth in a variety of population forecasts examined as part of this analysis. The affordability of housing and low cost of living when compared to much of the country is an asset that Topeka and much of the Midwest have for attracting growth in the next 30 years. At the same time, there is no evident external regional stimulus forecast to occur that would result in unusually high growth populations and economic levels in the region or the Study Area as a long-term trend.

Thus, the long-term market effects forecast used in this analysis is one of moderate growth. It anticipates two to three cycles of commercial and industrial growth and absorption similar to the higher growth 2002 to 2006 period over the next 25 years. It also anticipates some readjustment as some existing industrial and retail establishments reach the end of their life cycle or viability and become vacant, requiring redevelopment as well as a couple of periods of regional/national economic slow down. The particular growth levels forecast are discussed for the land use scenarios below.

5.5 Market Effects on Land Use Scenarios

The future economic development opportunities in the US-24 study area will depend on public policies, transportation improvements, and the market's ability to absorb new development. The study team developed two future (2034) land scenarios for the study area. The two future land use scenarios are:

- Future Scenario 1, Existing Policies – This scenario assumes the Study Area will continue to develop based on the existing land use policies of the city of Topeka and Shawnee County.

- Future Scenario 2 – This scenario builds on the previous scenario, but also assumes the Study Area will develop based on the wants and needs identified by stakeholders and transportation improvements recommended as part of the US-24 Study.

The development of each of these future land use scenarios is detailed in the following Chapter 6 of this report.

5.6 Overall Results

To be responsive to the future market demands of the Study Area's economy, land use scenarios should plan for between 400,000 and 500,000 square feet of new industrial development, between 200,000 and 300,000 square feet of new commercial/retail development, and up to 80,000 square feet of new office development. This would consume approximately 70 to 80 acres of new developed land.

The land use scenarios should also plan for 6,000 to 7,000 new households occupying approximately 400 to 500 acres of undeveloped or redeveloped land. Some of this residential development may occur in areas immediately north or south of the Study Area but included in part of the traffic analysis zones considered for the study.

The Study Area's economic strengths include higher occupancy rates and absorption rates, and higher number of residents in the labor force compared to other parts of the Topeka/Shawnee County area. However, the lower average educational levels of its labor force may also influence the type and amount of businesses attracted to the Study Area. The future business and market growth in the Study Area will be influenced by the availability of infrastructure, proactive community marketing, improved local transportation systems, access management, and good land use planning.

6.0 Future Land Use Scenarios

This section discusses the 2034 land use scenarios developed for the US-24 Access Management, Circulation, and Land Use Plan. The purpose of developing land use scenarios was to provide the basis for future transportation and circulation needs and to identify likely traffic growth. The land use scenarios were developed in an integrated manner during discussions of potential transportation improvements and solutions in order to assess the effects of transportation changes on land use and vice versa. Per the scope of work, the Study Team developed two initial land use scenarios with the assistance of planning staff and planning board members from the City of Topeka and Shawnee County. The following information is provided in this section:

- Background on how the land use scenarios were developed.
- Descriptions of the land use scenarios.
- Descriptions of the growth management strategies that could be connected with the land use scenarios.
- The process for defining a preferred land use scenario.
- Potential locations for gateways, nodes, districts, and landmarks.
- How the land use scenarios are linked to transportation.

6.1 Methodology

The Study Team conducted the following steps in developing the land use scenarios for the US-24 Corridor:

1. *Examination of Existing Land Use Conditions and Inventory.* This included a windshield tour and data collection of all of the land uses in the Study Area. The study team mapped the existing land uses and features in a GIS database.
2. *Examination of Existing Plans and Intent.* The study team collected and examined existing land use plans for the area and prepared abstracts on how these plans affect the US-24 corridor.
3. *Public and Stakeholder Comment on Existing Conditions.* The existing land use map was presented at the first public meeting for the study. Members of the public were encouraged to comment on changes they would like to see in the study area. Stakeholders were also surveyed on land use and missing land use assets as part of the R/UDAT stakeholder interview process.
4. *Development of Land Use Scenario 1 - Existing Plans.* The study team developed Land Use Scenario 1 based on a synthesis of existing plans for the study area.
5. *Review of Land Use Scenario 1 - Existing Plans.* The study team reviewed Scenario 1 with local land use planners and stakeholders and made adjustments to better reflect the intent of the existing plans.
6. *Preliminary Market Analysis.* After compiling Land Use Scenario 1, the Study Team conducted some preliminary market analysis to assist with the refinement of Scenario 1 and the development of Land Use Scenario 2. This included collecting existing market and demographic data for the study area and identifying "missing assets" including businesses and services.

7. *Development of Land Use Scenario 2.* The Study Team developed Land Use Scenario 2 based on adjusting Scenario 1 to incorporate ideas from the stakeholder and public involvement process and by using the results of the preliminary market analysis.
8. *Completion of Market Analysis to Assess Build Out of Both Scenarios.* The study team completed the Market Analysis of the study area and the land use scenarios including absorption and growth analysis.
9. *Review of Land Use Scenario 2.* The study team reviewed Scenario 2 with local land use planners and stakeholders and made adjustments as a result of comments.
10. *Public Comments on Land Use Scenarios.* Both land use scenarios were presented at a public meeting on October 14, 2008 and posted on the project web site.
11. *Presentation of Both Scenarios to Planning Bodies.* The study team presented both land use scenarios to the planning bodies of the City of Topeka and Shawnee County for development and selection of a Preferred Scenario.

Both scenarios show an increase in designated commercial, industrial, and residential land uses; however, not all can be developed and absorbed. To determine the actual growth in population and employment based on each land use scenario, the study team used a set of assumptions based on existing conditions and trends. The following assumptions were used to determine the actual growth associated with each land use scenario. The growth was assigned based on the traffic analysis zones (TAZs) in the regional travel demand model.

- For individual TAZs, if no major land use changes occur from the existing conditions to the future scenario the baseline projection from the travel demand model was used.
- If major long-term land use changes were forecast for a TAZ, but could not be absorbed based on market trends, the baseline projection from the travel demand model was used.
- The study area was forecast to absorb approximately five acres of new office space, 22 acres of commercial space, and 48 acres of industrial space, based on historic absorption rates shown in Table 5.9 and a cyclical projection that accounts for anticipated closure of some existing retail and industrial facilities.
- The population was forecast to grow at 1.5 percent each year. This was based on a combination of trends that shows low growth in the overall Topeka Metropolitan Area but higher residential growth trends in North Topeka.
- The study team identified common floor-to-area ratios (FAR) for major land uses types along with net square foot averages per employee based on similar land uses in the area. For industrial uses the net square feet per employee is 472.63 and the FAR is 0.2217. For commercial uses the net square feet per employee is 637.5 and the FAR is 0.2630. For office uses the net square feet per employee is 329.41 and the FAR is 0.3515.
- Agricultural uses were forecast to average one employee per acre.
- For single-family residential the study team estimate an average of five units per acre and an average household size of 2.75 based on existing conditions. For multi-family residential the units per acre were forecast at 25 and the average household size at 2.25.

The study team used the following formulas to determine the growth in employment, households, and household population:

- Commercial, industrial, and office employment: {[(FAR × Acres) × (43,560)] ÷ (Net square feet per employee)}
- Households: [(Acres) × (Average Units per Acre)]
- Household population: [(Households) × (Average Household Size)]

6.2 Land Use Scenario 1

Land Scenario 1, Existing Policies, was based on discussion with representatives from the City of Topeka and Shawnee County and policies outlined in the 2025 Topeka Land Use and Growth Management Plan, the 2030 Shawnee County Regional Land Use Plan Map, and the 2034 Metropolitan Topeka Planning Organization Long Range Transportation Plan. Key policies as they relate to the U.S. 24 Study Area are:

- The area between Huxman Road and Menoken Road should be preserved as agricultural land use with limited large lot residential allowed.
- In the area around the US-75 Interchange, agricultural and residential land uses transition into industrial land use.
- In the portion of the study area within the Topeka city limits, commercial land uses will be encouraged along US-24 radiating out from the Topeka Boulevard Interchange. As you move away from the Topeka Boulevard Interchange, highway commercial land uses will be encouraged along US-24 instead of commercial land uses.

Land Use Scenario 1 is illustrated in **Figure 6.1** on the following page. In putting together Land Use Scenario 1, the study team attempted to eliminate spot zoning locations where feasible. The study team also wished to encourage "back to back" locations for transitions in land uses and suggested where types of commercial properties could be most appropriate. The study team added a distinction between "Commercial" and "Highway Commercial" areas. Commercial areas are intended to include mostly retail uses focusing on shopping centers and shopping strips. Highway commercial areas are intended to include a mix of retail, wholesale, and other commercial uses requiring larger lots.

Based on these policies and the assumption discussed above, the study team projected that the study area's employment would increase to approximately 18,300 by 2034. The number of households would increase to approximately 6,700 and the population would increase to approximately 16,000 persons by 2034.

6.3 Land Use Scenario 2

While Land Use Scenario 1 is based primarily on existing policies, Land Use Scenario 2 incorporates achievable missing land use assets, needs, and changes identified through the public meetings and stakeholder involvement process. The key differences for Future Scenario 2 are:

- A further emphasis on agricultural preservation. This is particularly seen at the east and west ends of the Study Area, where land once considered potential industrial or other mixed use is designated agricultural. This is especially the case in floodplain areas where industrial land uses are less likely to develop.

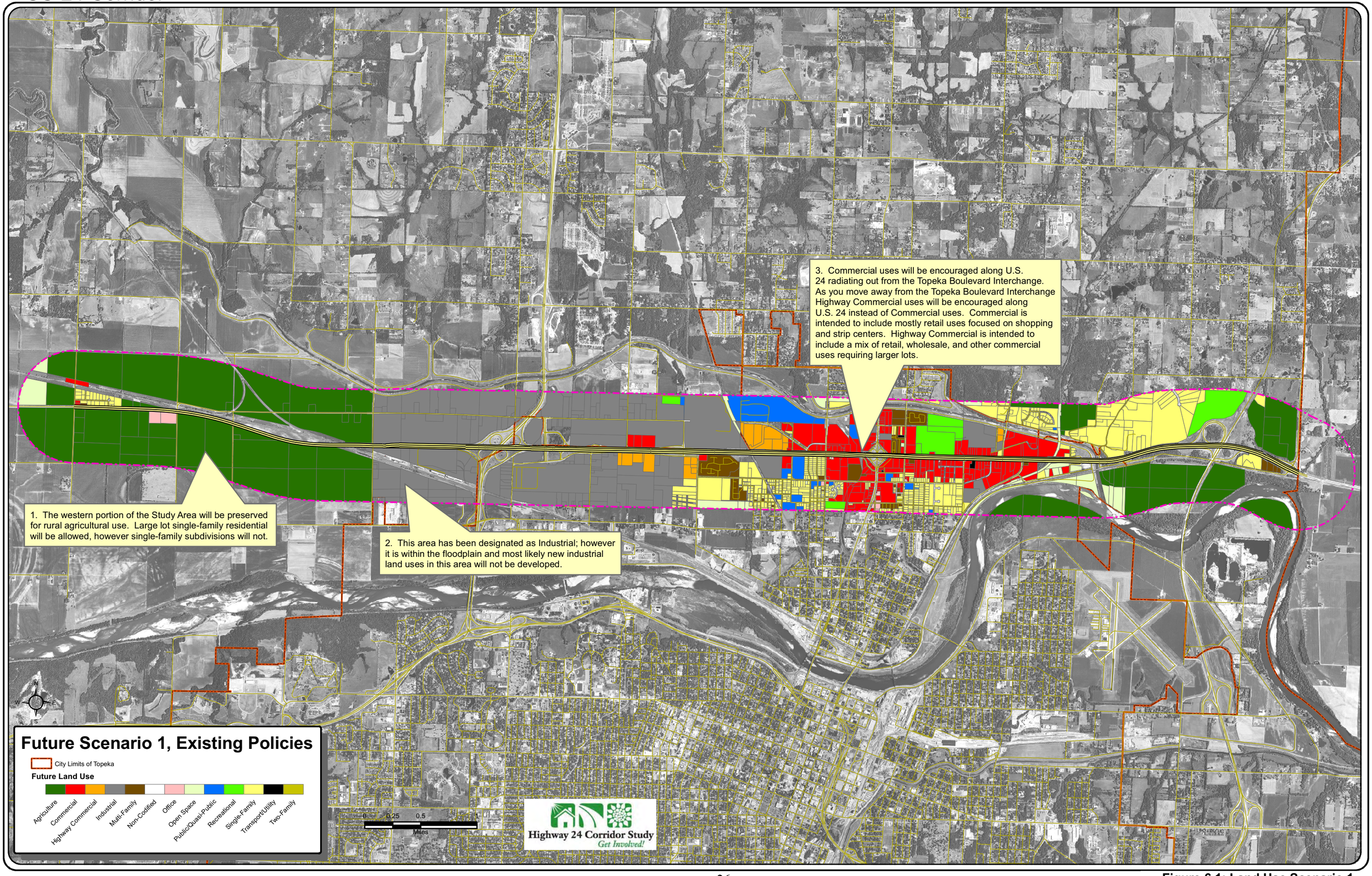


Figure 6.1: Land Use Scenario 1

- Potential office development between Clay Street and the Goodyear Plant. This is an underused area that will need connectivity improvements to support future development.
- A focus on retail clusters in each quadrant of the current Topeka Boulevard Interchange and the Tyler Street/Rochester Road intersection with US-24. In other words, each quadrant would provide a single, unified retail/commercial center (although with multiple land owners) allowing patrons to access multiple businesses on foot from central parking locations.
- A couple of transition zones. A few parcels just east of the US-75 interchange are designated for an industrial/commercial mix to provide services to adjacent industrial properties and because of their visible location near US-75. A neighborhood south of US-24 and west of Tyler Street/Rochester Road has been designated as residential/commercial as there have been applications for conversion in that area.
- A designated recreation and potential historic preservation/tourism area near the K-4 Interchange. A property owner in this area has indicated a desire to preserve their land for long-term historic/recreation purposes. In addition, the Calhoun Bluffs in the area could provide an opportunity for a couple of rural type tourism opportunities such as a restaurant in the hills overlooking the city and a country store to compliment Rees Fruit Market.
- Additional multi-family residential uses.

Land Use Scenario 2 is shown in **Figure 6.2** on the following page. Similar to Land Use Scenario 1, the study team attempted to eliminate spot zoning locations where feasible and wished to encourage "back to back" locations for transitions in land uses and suggested where types of commercial properties could be most appropriate. The distinction between "Commercial" and "Highway Commercial" discussed above for Land Use Scenario 1 also applies to Land Use Scenario 2. The study team acknowledges that the transitions, retail clustering, and new proposed land uses will occur over time as parcels become vacant and new uses emerge in the interim.

Using similar forecast assumptions and factors as the Land Use Scenario 1, the Study Team projected that the Land Use Scenario 2 would result in employment increasing to approximately 19,200 by 2034. The number of households would increase to approximately 6,600 and the population would increase to approximately 16,000 persons by 2034.

6.4 Public Input

The Study Team held a second public meeting on October 14, 2008. At this meeting, members of the public were asked to comment on the two future land use scenarios. The following points summarize the key land use related comments received as part of the outreach activities:

Retail and Commercial:

- The bowling, putt putt and golf course area shouts family. I think that is more important than money.
- The area needs restaurants and shopping, maybe a Super Target.
- Restaurants are really needed.
- No more fast food restaurants.
- Have another grocery store-like Aldi's.
- Need another store besides Wal-Mart.

Industrial:

- Scenario 1 is more accurate than Scenario 2; (referring to an area east of the US-75 interchange that is shown as industrial on Scenario 1 and Highway Commercial on Scenario 2).

Rural Areas:

- Rail spur provides opportunity for manufacturing or large commodity processing plant.
- We do not want manufacturing here.

Other Issues:

- Park space is needed.
- Develop empty areas first.
- Infrastructure needs to be designed to promote commercial and residential uses.
- We need businesses so there will be more jobs.

Most of the comments at the public meeting were similar to those heard at the first public meeting held for the project. These comments have been reviewed and many have been incorporated into the land use scenarios where feasible. As discussed in the analysis, market conditions along with direction from the Planning Commissions and Economic Development Agencies will likely dictate whether or not certain retail or industrial facilities locate on specific sites.

6.5 Definition of Preferred Scenario

On Friday, November 7, 2008 the Study Team presented the two land scenarios to a joint meeting of the City of Topeka and Shawnee County Planning Boards. The Planning Boards reviewed the scenarios and had some minor changes to Scenario 2 including changing a few parcels near the Goodyear Plant to Industrial and better defining the proposed long-term recreation uses at the east end of the Study Area. The City of Topeka Planning Board accepted Scenario 2 (with the minor changes) as the Preferred Scenario. The map for Scenario 2 reflects the changes requested by the City of Topeka Planning Board.

The Shawnee County Planning Board later voted on Scenario 1 as the Preferred Scenario for the County. The land use scenario maps were updated to reflect a Preferred Scenario which incorporated Scenario 2 in the portions of the corridor within the City of Topeka and Scenario 1 for the portions of the corridor in Shawnee County, outside the city limits. The potential future rural tourism and recreation uses that are part of Land Use Scenario 2 but within the county are still encouraged as part of the Preferred Scenario. **Figure 6.3** shows the combined Preferred Scenario map. The Preferred Scenario would include employment of approximately 19,000, a population of approximately 16,000, and approximately 6,600 households in the Study Area by 2034.

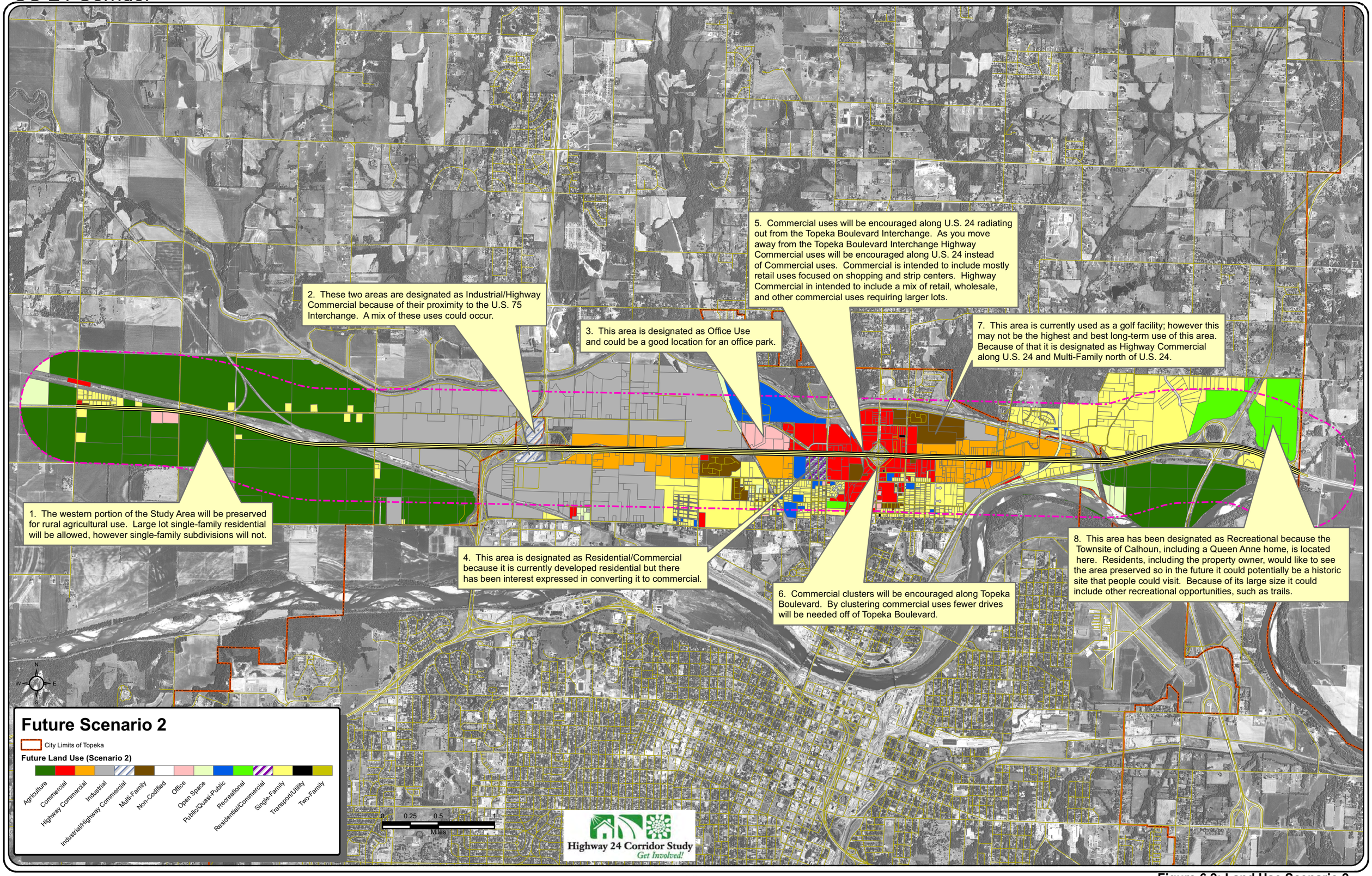


Figure 6.2: Land Use Scenario 2

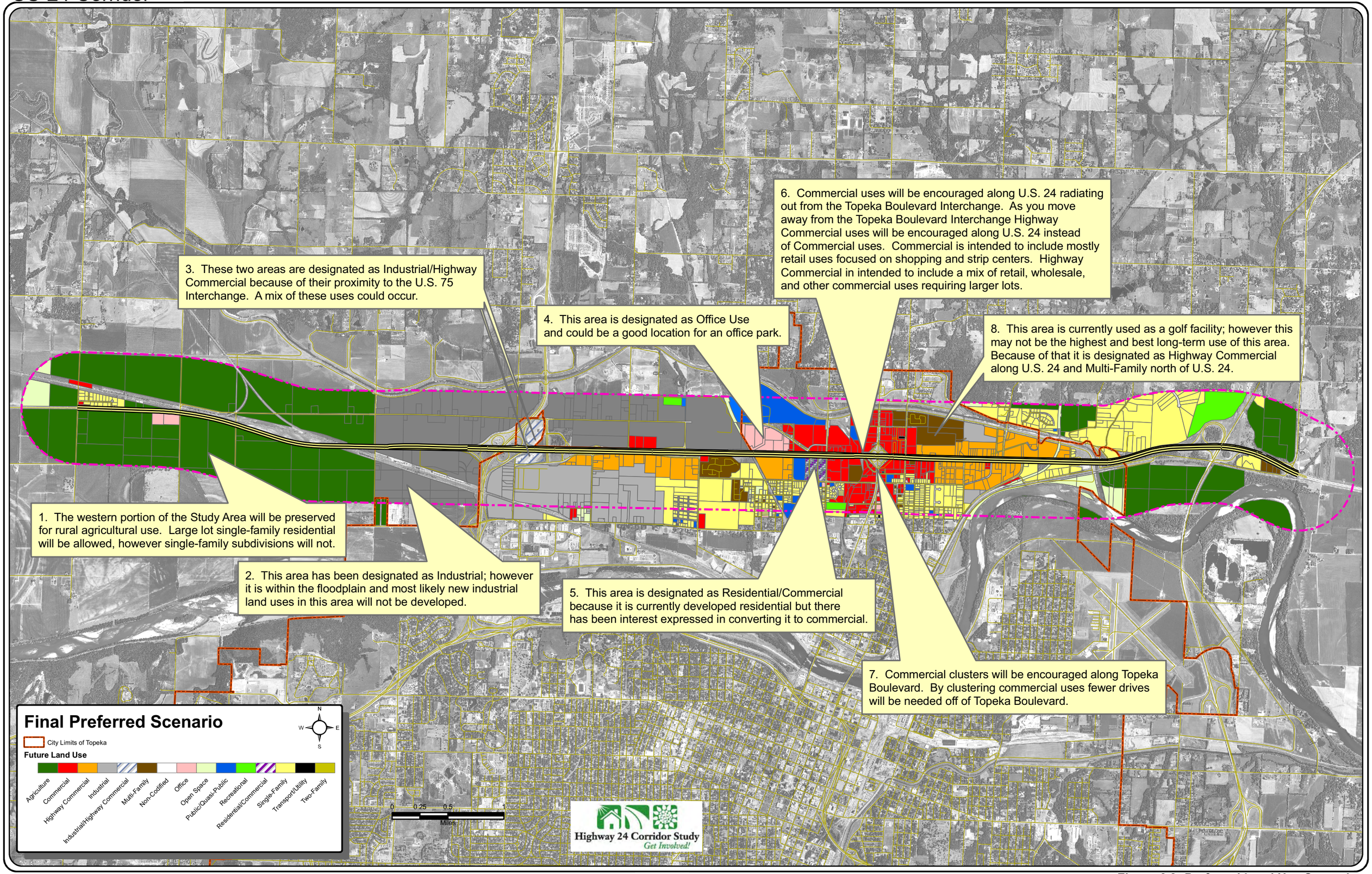


Figure 6.3: Preferred Land Use Scenario

6.6 Districts, Gateways, Nodes, and Landmarks

As part of developing the Preferred Scenario, the study team also identified locations for districts, gateways, nodes, and landmarks. This was completed as part of the context sensitive design analysis for the project.

The context sensitive design analysis for the project was about developing a corridor that fits with the following:

- Existing and proposed land uses
- Physical and visual character of the surrounding area
- History of the area
- All transportation modes including vehicles, pedestrian, transit, and bicycles

Context sensitive design of roadways should reflect community values and add lasting value to the community.

The context sensitive design analysis divided the corridor into four districts that reflect the current and anticipated land uses. As the character and function of the land uses change between these four districts, the roadway should also reflect these changes. The following paragraphs discuss each of the four districts along with any identified gateways, nodes, and landmarks within them (see **Figures 6.4-6.7**).

West Area - Agricultural: US-24 in this area predominantly serves through traffic along with access to rural properties and rural residential areas. There is one node in this area, the Kiro residential subdivision at Huxman Road and US-24. A potential gateway marking the transition between the rural areas and more developed parts of the corridor could be placed between Countryside Road and Menoken Road. This could be a landscape or hardscape feature that reflects or frames the grain elevators in the distance. Other than a potential gateway feature, no particular landmarks were identified in this district although the KSNT television station tower is a notable feature.

Figure 6.4: View of US-24 Near Countryside Road Looking East

West Central Area - Industrial: US-24 in this area serves both through traffic and access to industrial and some residential properties. The key node in this district is the ramps providing access to the Goodyear Plant and other properties in that vicinity. The Goodyear Plant is a notable long-term part of this district, providing substantial employment and is a key landmark for those familiar with North Topeka. The other dominant landmarks are the grain elevators south of US-24 on the Union Pacific rail line. A potential gateway marker for this industrial area could be located just east of the US- 75 interchange. Given the long-term presence of the Goodyear Plant in this district, some form of tire art feature is one option that could be incorporated into this gateway.

Figure 6.5: Grain Terminals and Tracks South of US-24

East Central Area - Commercial and Residential: This portion of US-24 is urbanized, serving a mix of commercial and residential land uses as well as through traffic. There are several key nodes in this area which are important for both vehicular and pedestrian traffic. The key nodes include:

- Rochester Road/Tyler Street at US-24
- Topeka Boulevard at US-24
- Kansas Boulevard at US-24

These locations are key intersections/interchanges which provide access to adjacent land uses, particularly commercial properties. Access for pedestrians and other non-motorized uses to the services at these nodes as well as vehicles is important. They are also potential future landmark locations. A potential eastern gateway to the commercial areas along US-24 could be located at the US-24 Crossing of Soldier Creek. This could take the form of a landscape/hardscape type feature along with distinctive signage. Landscaping could reflect the plants/grasses and tall hanging trees that exist in the area. The signage pattern could be repeated at the key nodes and at locations marking trail crossings of US-24.

Figure 6.6: US-24 at Tyler/Rochester Looking East

East Area - Recreational: This portion of US-24 is predominantly rural and limited access, primarily serving through traffic. Nodes include the access point at Happy Hollow Road/Calhoun Bluff Road which provides access for residents and to the trails in the area. The Calhoun Bluffs are a distinctive, landmark feature of the rolling terrain in this area. A gateway feature could be placed between Calhoun Bluff Road and Highway 4 that would reflect the bluffs and the transition between rural and urban land uses.

Figure 6.7: US-24 Looking West Near Calhoun Bluffs

6.7 Linking Land Use and Transportation

The study team has pursued an integrated approach to land use and transportation analysis for this plan. The Iteris project team held numerous discussions regarding the transportation needs that would fit with certain land uses and how land use may change with transportation changes. There were three major outputs of the land use analysis that relate specifically to the transportation analysis.

1. *Travel Demand Model Input:* Both land use scenarios helped feed the travel demand model for future transportation needs in the Study Area. The Study Team developed population, household, and employment projections for the land use scenarios and adjusted the traffic analysis zones in the travel demand model to better reflect the proposed land use changes. As a result the traffic volumes forecast for US-24 and adjacent local roads are reflective of the land use forecasts.

2. *Need for Service Roads at Key Locations:* Several of the recommendations from the land use analysis support the need for expansion of connections and service roads at key locations in the study area. The following are locations where these facilities would help support future land use:

    - Improved access through more continuous frontage or service roads between US-75 and the access to the Goodyear Plant would support the existing and desired industrial developments in this area.
    - Enhanced connectivity between the Goodyear Plant and Rochester Road via roadway connections would enhance access and support further development in this area where potential office park use has been identified.
    - Use of service and connector roads (25th Street) between Tyler Street/Rochester Road and Kansas Avenue would enhance opportunities to create clusters of commercial development in these areas while reducing the traffic impacts on US-24.

3. *Need to Enhance Access at Key Sites While Managing Access on US-24:* Achievement of several recommendations of the Preferred Scenario will require access enhancements for various modes of transportation including cars, trucks, transit, bicycles and pedestrians. Access improvements must be balanced with traffic and safety on US-24. The following are key points where access improvements would support land use recommendations.

    - In rural areas, reducing direct driveways on US-24 while providing access to key parcels through limited service roads will assist the goals of maintaining agricultural uses.
    - The parcels north of US-24 between the Goodyear Plant and Rochester Road could use enhanced access through service or connector roads discussed above and one well-placed US-24 access point.
    - Access for pedestrians, cyclists and transit needs to be improved throughout the central commercial areas along US-24. This would include the possible use of tunnels or pedestrian bridges to connect across US-24 near Tyler Street/Rochester Road and near Kansas Avenue. New service and connector roads should all have sidewalks on both sides and provide connections to existing and proposed trails in the study area.
    - Access to the rural residential and potential future recreation/tourism areas near the Calhoun Bluffs should be enhanced at Happy Hollow Road through a clearer, safer access point with clear markings that indicate the Soldier Creek Trail access in this area.

7.0 Access Management

This section of the report was prepared to document the existing access management conditions along US-24 through the study area and identify strategies for improvement options. The development and implementation of sound access management practices can have a profound, positive effect on the safety, operational and economic development characteristics along a corridor. Conducting an access management evaluation through the transportation planning process along a corridor provides a clear understanding about future expectations regarding roadway functional classification. As illustrated in **Figure 7.1**, it is the intent that primary facilities maintain a high level of mobility. Access management guidelines become even more important along roadways that are expected to provide safe and efficient through movement, in addition to well-balanced land access.

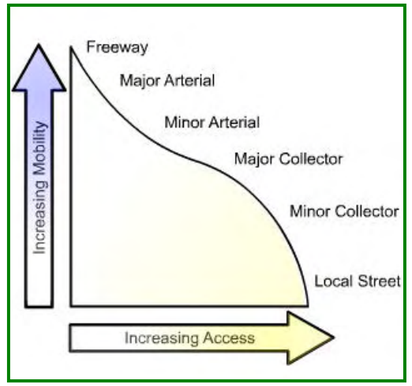


Figure 7.1: Conceptual Hierarchy

7.1 Background

Access management is the strategic provision of access along streets and it should be a priority along all principal and arterial roadways. Facilities such as US-24 are an important public resource and the necessary costs to build new, or even maintain existing corridors such as this have continued to increase dramatically. In addition, obtaining funding for roadway improvements has become an even greater challenge for public agencies.

Previous sections of the report highlighted the reciprocal relationship between land use and transportation. While this positive relationship often helps to drive improvements in each area, careful consideration should be taken to avoid the often cyclical ties between roadway improvements and land use changes. This is illustrated in **Figure 7.2**. The figure demonstrates that upon completion of new improvements, often times land value increases due to new exposure and increased mobility. Over time, developers may subdivide lots, political decisions may allow for zoning changes and increased access locations may be granted. This happens until eventually, there is deterioration in safety and operations of a facility once again warranting costly improvements.

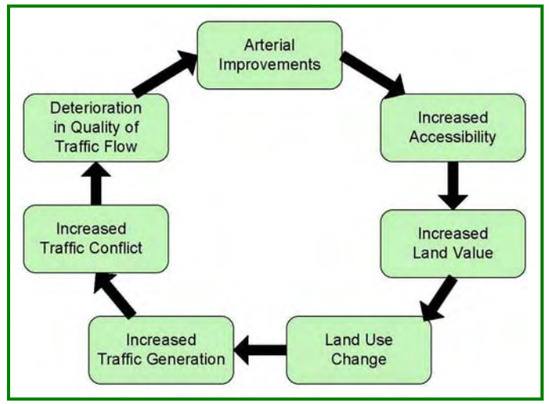


Figure 7.2: Transportation / Land Use Cycle

It is important to note that differing governmental agencies should continue to work together upon completion of access management planning activities for a given corridor. This on-going coordination is important so that information can periodically be reviewed and the plan be updated as needed when (not if) dynamic changes in land use or roadway facilities occur into the future.

7.2 US-24 Characteristics

The KDOT Corridor Management Policy (CMP) provides guidelines for access spacing criteria to encourage statewide uniformity in the management of transportation corridors. The access spacing depends on the access type, area type, route classification, and posted speed limit. KDOT classifies the highways and interstates into five different route categories. These routes are labeled A through E, with A routes allowing the least amount of access and E routes allowing the most. The existing US-24 Corridor is shown as a C route through the study limits on the current District 1 map included in the CMP. However, due to the majority of the corridor designated on the National Highway System (NHS), it is to be managed as a class B route. (NHS designation is from US-75 to K-4). The minimum access spacing for B routes is shown in **Table 7.1**.

Table 7.1: KDOT Access Spacing Criteria

Access Type	Area Type	Posted Speed - Access Spacing in feet				
		45 mph	50 mph	55 mph	60 mph	65 mph
1, 2, 3, & 4	Developed	205	230	250	275	300
5 & 6	Developed	340	375	415	455	495
1, 2, 3, &4	Undeveloped	2640	2640	2640	2640	2640
5 & 6	Undeveloped	430	480	520	565	610

The US-24 Corridor has the following characteristics regarding access considerations through the study area:

West Area: This section of US-24 travels from Huxman Road on the west, through the Menoken Road intersection and is a two-lane undivided, rural roadway approximately three miles in length. The speed limit on this section is 70 mph and transitions to 60 mph just west of Menoken Road. There are approximately 13 full access intersection locations along this section of US-24, of which four are public road intersections. The remaining access locations are private access drives and are all located within a one mile stretch from Huxman Road to Landon Road.

West Central Area: East of Menoken Road, US-24 transitions into a four-lane divided roadway and continues to the east past the Goodyear Road interchange, approximately four miles. This section has a speed limit of 60 mph and contains only one full access intersection and three grade separated interchanges. The full access location is a private drive to the Payless industrial site.

East Central Area: This segment of US-24 transitions to 45 mph through the Kansas Avenue intersection and then increases to 55mph to just east of Meriden Road. This four-lane section of roadway approximately two miles in length travels through the commercial area of the US-24 Corridor and is characterized by multiple access points. It has two signalized intersection locations, the current Topeka Boulevard interchange, and seven additional full access intersection

locations. In addition, this section contains nine additional right-in/right-out access drives to primarily businesses and frontage road connections.

East Area: This segment of US-24 transitions to 65 mph near Goldwater Road, through the K-4 interchange area. This segment contains three, full access locations at public road intersections and is characterized by higher speeds and a transition to more rural land use.

Many of the operational and safety deficiencies noted for the corridor can be attributed to the proliferation of access drives within specific segments, lack of turn lanes at multiple locations, and the minimal separation provided between mainline US-24 and the current frontage road system. It is evident that significant improvements to the operational integrity of the corridor and a reduction in crash exposure can be realized with the systematic application of basic access management strategies. The existing East Central area along the US-24 corridor contains the largest number of access drives. Several of these locations are full access intersections with basic stop control on the minor approaches and have no turn lane provisions. Strategies to phase out direct access driveways through their removal and/or consolidation, and construction of new collector roadways in the future should be a priority within this segment as redevelopment occurs. **Figure 7.3** depicts this existing situation and potential future concept of US-24.

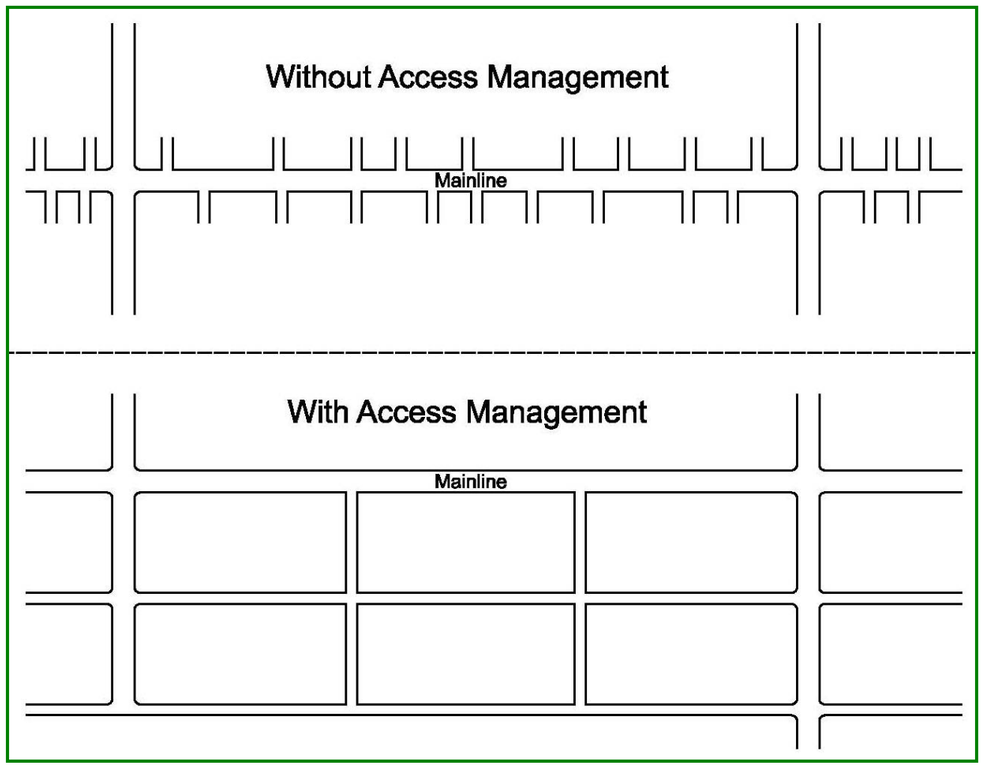


Figure 7.3: Comparison of Access Locations Serving Development

Several sections of US-24 are currently served by discontinuous frontage roads. This existing system promotes vehicle access to and from US-24 by lacking connectivity to adjacent land use areas. A current deficiency of the frontage road system is the minimal spacing provided between the parallel US-24 alignment. Limited vehicle stacking is available on the minor approaches to the frontage roads at intersections with US-24. An improved system of service roads to serve future development along the corridor should be promoted. Service roads provide ingress and egress to land development with greater offset from the mainline corridor. A comparison of frontage roads and service roads is illustrated in **Figure 7.4** below. For purposes of this report, the term “Service Road” and “Reverse Frontage Road” may be considered interchangeable. The term Service Road is utilized in the report as referenced by the Transportation Research Board (TRB) Access Management Manual, which is the accepted reference document utilized by practitioners and contributed to by the US DOT, Federal Highway Administration and multiple State DOT’s including KDOT. The term Reverse Frontage Road is not explicitly defined.

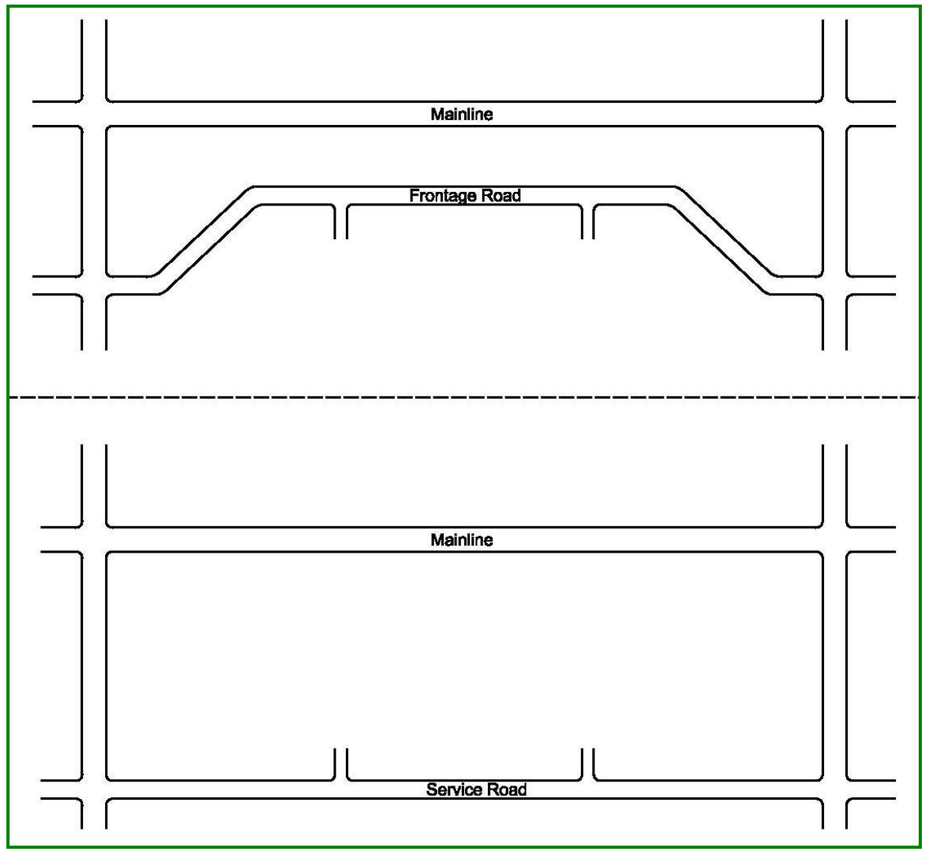


Figure 7.4: Comparison of Frontage Roads and Service Roads

As illustrated in the figure above, there are inherent operational differences between frontage roads and service roads. Frontage road alignments run between the mainline corridor and development tracts. Service road alignments run behind the development tracts and therefore provide greater separation from the mainline to accommodate turning traffic and vehicle queuing. A brief comparison of the two access road strategies is provided in **Table 7.2**.

Table 7.2: Comparison of Frontage Roads and Service Roads

	Characteristics	
	Advantages	**Disadvantages**
Frontage Roads	Businesses still very visible from mainline Provide good one-way traffic operations	Limited separation from mainline Development potential on only one side of road Contribute to strip development centers
Service Roads	Good separation from mainline Development on both sides of road Can be less costly to retrofit Greater allowances for pedestrians / transit	Heavier reliance on new or re-development Typically more aesthetic treatment costs (2 sides)

Several of the study area locations along the US-24 Corridor would benefit from implementation of consistent and interconnected service roads that allow for both positive redevelopment potential, and improved access operations to existing uses. The potential to promote long-term redevelopment parcels on either side of extended service road alignments would have a positive impact on both the economic viability of land uses, and the preferable operations of traffic movements. In addition to these benefits, service roads would help to facilitate additional pedestrian walkway or bikeway alignments along their segment length, and provide increased opportunity for transit circulation and new routes through improved development areas.

Multiple avenues are available to promote the use of access management along corridors. Several techniques are utilized by agencies to coordinate both existing and future access management issues along corridors. Many of these are most likely already conducted at various stages of review and project implementation by the agency partners in the study. A summary table of several access management strategies is included in **Table 7.3** on the following page of this document to provide reference to additional stakeholders in the US-24 Corridor.

It should be noted that the “Service Road” concept or necessary improvements to the existing frontage road system were discussed at length with agency stakeholders prior to transportation recommendations being developed. There was consensus that the service road concept would provide superior safety and traffic operations characteristics along with other access management improvements.

8.0 Future Transportation Conditions

Future transportation conditions were evaluated for the US-24 Corridor based on the iterative analysis of future land use scenarios and impacts to travel demand along the US-24 Corridor. The previously mentioned TransCAD model for the study area was utilized as the primary tool in the forecasting of year 2034 traffic volumes for the study area roadway network. The following sections summarize this analysis of future transportation conditions.

8.1 Travel Demand Modeling

In addition to the base year model, the study team was also provided the most recent year 2034 model from the MTPO Long Range Transportation Plan. As with the previous existing conditions travel demand model, assumptions were noted that the model was calibrated and validated to acceptable standards for planning studies and included the “Existing Plus Committed” projects in the model network, as referenced in the LRTP. As a result, no initial modifications were made to the model prior to running the base scenario (2034 without US-24/Topeka Interchange). Upon completion of the baseline evaluation of the year 2034 traffic volumes, additional model runs were conducted. The scenarios included in the future travel demand modeling effort are listed and discussed below. Model scenario network plots are included in the Appendix of this report.

- 2034 Without US-24/Topeka Interchange
- 2034 With US-24/Topeka Interchange
- 2034 Land Use Scenario 1
- 2034 Land Use Scenario 2
- 2034 Land Use Scenario 2 with 25th Street Extension
- 2034 Land Used Scenario 2 with Final Recommendations

2034 without US-24/Topeka Interchange:

This scenario utilized the second of two models provided to the project team. In this scenario planned changes to the Topeka area to occur by year 2034, including land use and roadway improvements, were assumed to be programmed into the model. The project team made no modifications prior to running the model. As with the previous base model provided to the project team, this scenario was ran using the step-by-step process, and then again with the user interface and script developed for the model. The comparison between the two processes again showed nearly identical results. The results from this scenario were used to establish a baseline scenario for the 2034 planning horizon without an interchange at the US-24 and Topeka Boulevard junction. An at-grade intersection was modeled at the US 24/Topeka Boulevard junction.

2034 with US-24/Topeka Interchange:

Utilizing the year 2034 model provided, an interchange (cloverleaf) was constructed in the model network at US-24 and Topeka Boulevard based on more detailed inquiry by the project team regarding this location. Upon completion of this network change, comparing the model results for the 2034 scenarios with and without the interchange indicated relatively minor changes in volumes throughout the study area. Typical variations in the forecasted traffic volumes were within 100-200 vehicles along both major and minor streets in the network, with a few exceptions on some major road segments where there was a difference of 1,000-1,500 vpd.

Table 7.3: Access Management Strategies

Access Management Strategy	Description	Advantages	Disadvantages
Acquisition of Access Rights	State or city/town taking ownership (i.e., purchasing access control) of property along a major route.	Access restriction runs with the land and provides assurance of long-term access control. Negotiated dedication avoids the expense of purchase or condemnation. Compensating property owners for access rights avoids concerns over individual property rights.	Cost may be prohibitive. May be difficult to dedicate a funding source with competing needs. An effective tracking mechanism is required for enforcement. Condemnation is required when a negotiated purchase fails.
Joint and Cross Access	Circulatory system that is shared by two or more adjacent lots or developments that includes shared driveways and internal cross access between abutting properties.	Reduces number of individual driveways and therefore increases driveway spacing. Increased customer convenience. Gets people out of their cars and encourages walking. Access helps remove a portion of short local trips. Amount of corridor frontage is increased and available for landscaping. May improve internal circulation. Reduction in vehicular and pedestrian conflict paints.	Existing properties cannot be forced to interconnect with developing properties. Closure of temporary driveways can be contentious. It is difficult to establish without coordination between local and state agencies. Typically must be created as a permit condition during subdivision proceedings.
Internal Access to Outparcels	Outparcels are on the perimeter of a larger parcel that break its frontage along the abutting roadway. Access to these outparcels can be achieved through internal access instead of driveways on the main roadway.	Regulation promotes unified access and circulation systems for major developments. Reduces the number of driveway connections on major roadways. Number of turning movements onto roadway are reduced. Area available for landscaping is increased.	Property owners may avoid regulation by incrementally splitting off and selling outparcels. Regulation is controversial, often owners of outparcels lobby intensely for direct thoroughfare access on the basis that direct access is essential to their business (common with fast-food chains.)
Shared driveways	More than one property accessing a driveway.	Shared driveway maintenance. Fewer conflict points on main roadway. Less snow plowed across main roadway.	Requires coordination between property owners and likely property deed changes
Access Management Overlay District	Special access management requirements added to existing zoning districts through smaller overlay districts that would be applied along a thoroughfare or near a major intersection.	Versatile tool that can be tailored to an area's unique circumstances. Can be applied as needed in local areas or along segments of roadways to prevent access problems. Typically does not require changes to underlying zoning or an overhaul of existing ordinances.	May be difficult to get local support for this. If overused, overlay district can lead to overly complex regulations and administrative procedures. Would need to follow same approval process as zoning ordinance amendments.
Land Division and Subdivision Regulations	Regulations that manage the division or subdivision of lots which ensures proper access and street layout in relation to existing or planned roadways.	Most local governments have the authority to regulate land sub-division. Attention to access management in subdivision review helps ensure that street systems and access connections are safe and properly designed.	After a subdivision is approved and lots have been sold, it is difficult to correct inappropriate access to public roadways. Minor land division is difficult to regulate and requires interagency coordination.
Vehicular Use Limitations	Vehicular use restrictions can be applied for nonconforming access connections. Visa versa, properly designed connections can have greater vehicular use.	Vehicular use limitation serves as an incentive for lot reassembly, alternative access, and shared access. Provides agencies with a mechanism for addressing land use problems. Helps mitigate the adverse impacts of nonconforming access connections.	Such limitations may require a more complex traffic impact study than would otherwise be necessary. More complex approach requires a skilled staff to administer.
Service Road	Public or private road auxiliary to an arterial that provides access to parcels adjacent to the arterial (typically for non-residential development).	Allow development of small tracks adjacent to major roadway. Separation between service road and major road is adequate for good traffic operations and safety. Businesses are visible from major roadway. Often less costly and more functional than frontage roads .	Rely heavily on new development or redevelopment where implemented through land development process. Conflicts can occur between state and local agencies where coordination is lacking.
Uniform Signal Spacing	Signalized intersections and those that might be signalized are spaced at long, uniform intervals.	Decreased travel time and delay. Improved safety. Improved fuel economy and decreased vehicular emissions.	Difficulties in resolving terrain conflicts, existing development and street patterns. High planning level involvement determining which roadways/developments are to be signalized. Funding.
Upstream Corner Clearance on Major Road	Upstream access points are located a sufficient distance away from an intersection such that access is not blocked by queuing and drivers only have to think and react to one intersection at a time.	Enhanced safety because through traffic is allowed to maneuver through the intersection without conflicts from turning vehicles at the access point. Improved intersection capacity.	May be difficult to implement in areas with small isolated corner lots, short block spacing, and/or small property frontages.
Downstream Corner Clearance on Major Road	Downstream access points are located a sufficient distance away from an intersection such that a driver can pass through the intersection without having to react to an event taking place at the access point.	Improved safety because conflicts occurring at the intersection are separated from those occurring at the access point.	May be difficult to implement in areas with small isolated corner lots, short block spacing, and/or small property frontages.
Driveway Channelizing Islands	Channelizing in the driveway to restrict left turn maneuvers into or out of the driveway.	Driveway channelization islands are less controversial than construction of a median. The islands provide a refuge for pedestrians.	Violations are common because drivers can make the prohibited movements with relative ease.
Nontraversable Medians	A divider separates opposing traffic streams with a design that actively discourages or prevents crossing the divider.	Increased safety. Space for left turn bays. The islands provide a refuge for pedestrians. Space for landscaping. Number and complexity of conflicts are reduced.	Difficult to implement in developed areas due to right-of-way constraints. Opposition to left-turn restrictions from business proprietors or other effected parties.
Directional Median Openings for Left Turns and U-Turns	An opening in a median for left turn or U-turns and discourages/prevents all other movements.	Improves safety. Can be signalized without interfering with traffic progression.	Cross-median movements are limited to specific locations and to specific turns. Not always practical to design for large vehicles
Isolated Left Turn Bay on Undivided Roadways	An auxiliary lane which removes left-turning vehicles from the through-traffic lane.	Rear-end and left-turn collisions are reduced. Capacity is increased. Left-turning vehicle can clear opposing gap with sufficient speed.	May require considerable construction to attain additional pavement width. Alternatively achieving the lane by paint striping results in loss of shoulder. A transition by through traffic is required.
Paved Shoulder Bypass at Three-way Intersection	Allows through vehicles to bypass a stopped turning vehicle using the shoulder.	Reduces rear-end collisions. Reduces through traffic delays. Inexpensive especially if paved shoulder already exists. Takes less space than an isolated left-turn bay.	A transition by through traffic is required. Less safe than isolated left-turn lane. Driver expectancy is violated. Additional right-of-way and construction may be needed to widen roadway.
Continuous Two-way Left Turn Lane	Flush painted median lane intended for vehicles that are making left turns from both directions on a roadway.	Safer than undivided roadways. Increased capacity. Reduces delay. Less controversial than nontraversable median.	Less safe than nontraversable medians. Promotes strip development. No pedestrian refuge. Potential for conflicting left turns. Left turns from abutting properties are difficult when roadway is operating at high volumes.
Left-Turn Bay at Median Opening	Median opening large enough for deceleration and storage of left turn movements.	Refuge for drivers making left turns. Left turn lane may help maintain an acceptable speed on the through lane. Reduced crash rates. Increased capacity. Delay to through traffic is reduced.	Cannot be used if median is too narrow. Proximity of the bay to any other median opening may limit the length of the turn lane.
Indirect Left Turn and U-Turn	Often referred to as "Jug handle ". Forces traffic for left turns and U-turns to the outside of the roadway and crosses both directions of traffic at a signal.	Can accommodate left/U- turns where the median is too narrow for a turn bay. Multiple lanes can be provided for the redirected left/ U- turn traffic. Allows two phase traffic signal control. Can be easily designed to accommodate trucks.	Right-of-way can be costly if property needed for construction of the indirect left turn is developed.
Right-Turn Bay	An auxiliary lane which removes high volumes of right-turning vehicles from the through-traffic lane.	Improved safety. Right turning vehicles can leave through traffic at an acceptable speed. Increased capacity. Reduced delay.	Require roadway widening. Longer pedestrian crossing length
Agency coordination	Coordination between state and local agencies to encourage better decision making.	Education of local entities on access management strategies for a specific roadway. Better final decisions.	Challenging to coordinate.
Appropriate residential and commercial driveway design	Driveways are designed with a proper slope, angle, width, turning radii, sight distance, and adequate drainage.	Reduce flood damage, erosion, maintenance costs, and crashes. Improved snow removal.	Cost to property owner. Has to be managed/regulated by officials.
Ensure adequate sight distance at driveway	Adequate stopping or intersection sight distances at driveways and intersections. Require signs if sight distance is not adequate.	Improved safety.	May not be feasible for all roadways/properties.

2034 Land Use Scenario 1:
Based on previous future land use alternatives developed by the project team, the model network was modified to evaluate Land Use Scenario 1, which was developed in accordance with existing City and County zoning regulations. In order to update the model to reflect the land use scenario, several Traffic Analysis Zones (TAZs) within the study area had to be split, which resulted in 11 new TAZs. Splitting the TAZ also required the addition of centroid connectors to the new TAZs, which were connected to the travel demand model roadway network consistent with the existing study area roadway network. Once the roadway network changes were complete the Socio-Economic Data in the model was updated to reflect the land use plan and the model was ran to evaluate the impact on the future roadway network. Traffic volume forecasts from this scenario were plotted and are illustrated in **Figure 8.1** below.

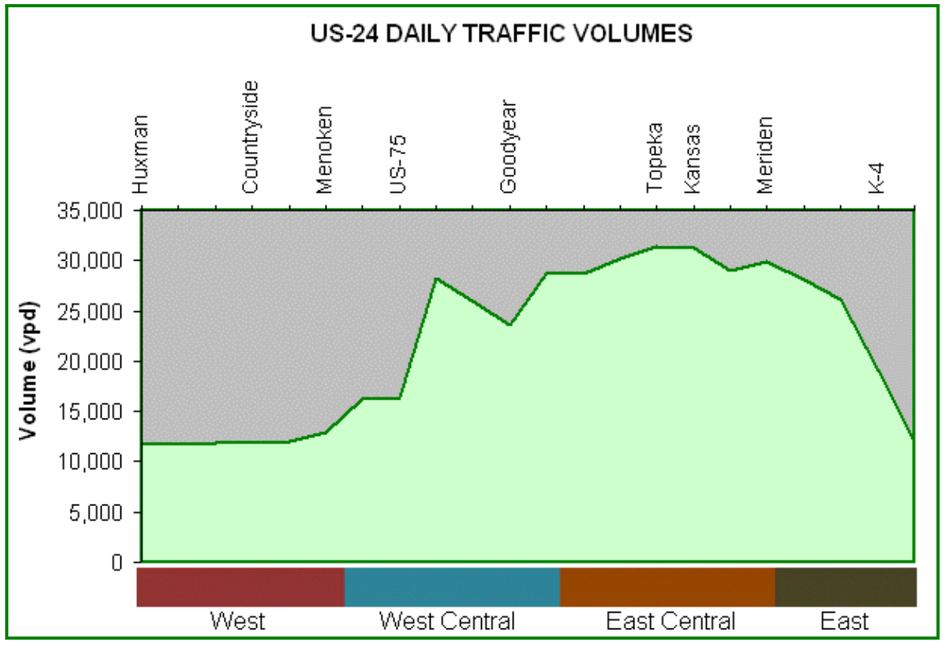


Figure 8.1: 2034 Land Use Scenario 1 Traffic Forecasts

2034 Land Use Scenario 2:
Utilizing the model from the Land Use Scenario 1 as mentioned above, a second land use plan was evaluated. The second land use plan was developed by the project team without the restraints of current zoning regulations as discussed in the previous Future Land Use chapter of this report. The Socio-Economic Data in the model was updated to reflect the differences in the land use plans and the model was again run for the year 2034 Land Use Scenario 2. Comparing 2034 Land Use Scenarios 1 and 2 revealed similar, uniform growth patterns. Scenario 2 had slightly higher overall traffic volume forecasts, as the land uses included slightly higher magnitudes, thus resulted in more trips being generated in the model. For comparison purposes, this scenario was plotted in a similar fashion and is illustrated in **Figure 8.2**.

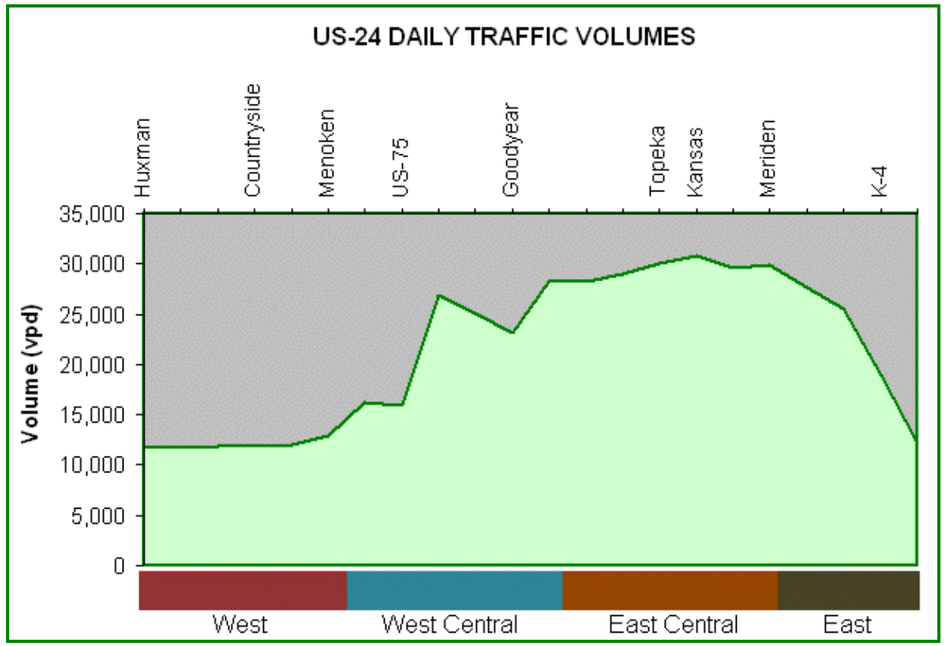


Figure 8.2: 2034 Land Use Scenario 2 Traffic Forecasts

2034 Land Use Scenario 2 With 25th Street Extension:
Based on traffic forecasts developed as part of the modeling effort and additional transportation planning tasks previously conducted, long-range volume forecasts along the US-24 Corridor did rise above thresholds to warrant a full freeway facility with grade-separated interchanges throughout the study area. While traffic volumes were higher at specific corridor segments, significant through-capacity improvements were not required. Rather, strategies to alleviate access management concerns, and reduce US-24 Corridor volumes through connectivity within the study area development became a focus. The higher volume Land Use Scenario 2 model network was modified to test a "25th Street" collector roadway alignment north of the US-24 Corridor. When this preliminary improvement alternative was modeled, it was noted that along US-24 between the Goodyear Plant interchange and Meriden Road, traffic volumes along US-24 were reduced by 4,000-11,000 vehicles depending on the individual roadway segment.

2034 Land Use Scenario 2 With Final Recommendations:
Through additional transportation planning work and development of concepts which are discussed in more detail in Chapter 10 of this report, final modeling runs were conducted of a recommended network for the US-24 Corridor area. This network included additional roadway continuity connections, implementation of service roads, and the above-mentioned 25th Street Collector roadway. Utilizing the more conservative 2034 Land Use Scenario 2, this modified network was modeled. The revised future traffic forecasts were plotted and compared to the previous 2034 Land

Use Scenario 2. Based on the improved roadway network modeled, several of the US-24 segment forecasts indicated a significant reduction as illustrated in **Figure 8.3**.

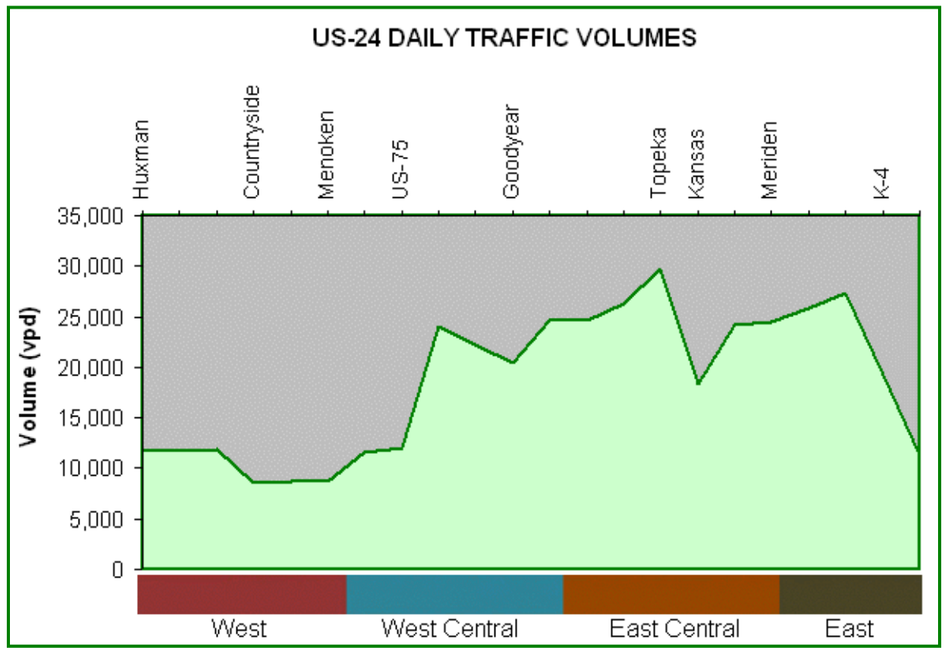


Figure 8.3: 2034 Land Use Scenario 2 Traffic Forecasts with Final Recommendations

8.2 Traffic Operations Analysis

Due to the overwhelming discussion regarding the future status of the US-24 and Topeka Boulevard interchange, additional operational analyses were conducted for the corridor to evaluate expected peak hour operations at this location, and impacts to adjacent intersections. Several stakeholder comments and public involvement survey information indicated that the interchange location was a focal point of the study and potential transportation improvement alternatives should be carefully evaluated. The Iteris project team developed additional peak hour traffic projections based on year 2034 Land Use Scenario 2 forecasts. These traffic projections were then analyzed for multiple, alternatives in terms of traffic control. The options analyzed included the current, functionally obsolete interchange, a standard diamond interchange, an at-grade signalized intersection, and an at-grade roundabout intersection.

The peak hour traffic volume forecasts and operational analyses results for each of the US-24 and Topeka Boulevard alternatives is illustrated in **Figure 8.4** and **Figure 8.5**.

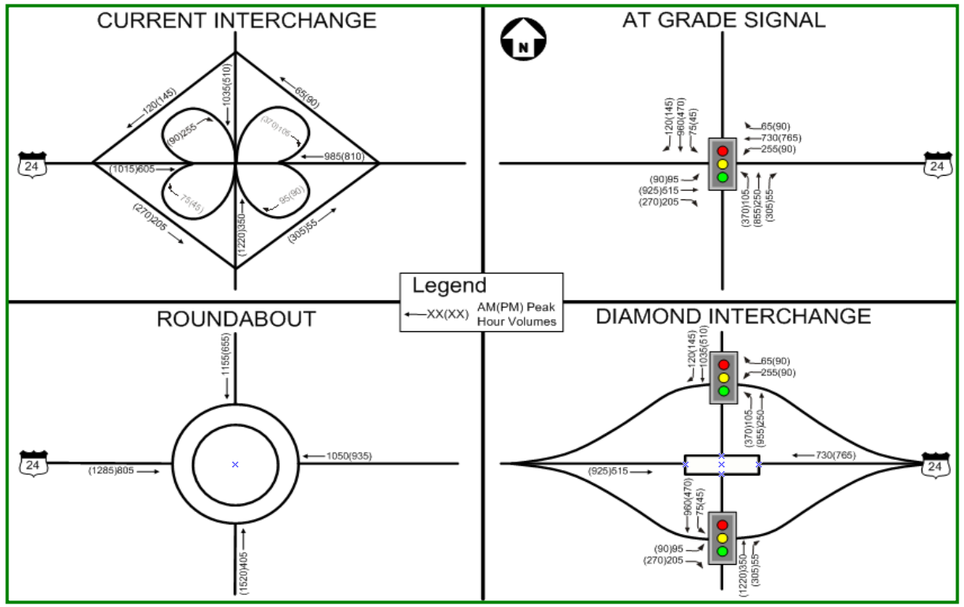


Figure 8.4: 2034 Peak Hour Volumes at US-24 and Topeka

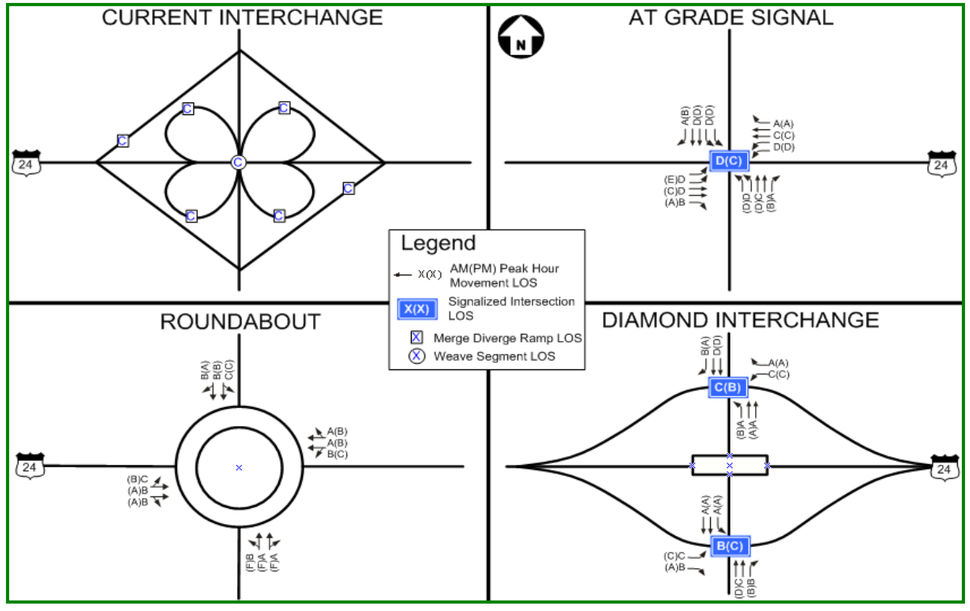


Figure 8.5: 2034 Peak Hour LOS at US-24 and Topeka

Based on the traffic volume projections, and results of the capacity analyses, multiple options would serve traffic demand for several years into the future. The existing functionally obsolete interchange is not an acceptable solution long term as the current ramps and overall configuration do not satisfy current design standards. A footprint of a new cloverleaf interchange configuration at this location would be much larger.

A typical diamond interchange with signalized ramp junctions indicated acceptable operations but would require significant property impacts compared to other options. Several positive public comments regarding the single point interchange with roundabout control similar to the US-75 and NW 46th Street interchange were received. While an option of this nature would also have favorable operations at US-24 and Topeka Boulevard, significant funding concerns exist regarding interchange replacement at this location, and such a facility is not warranted.

The previous KDOT multi-lane roundabout concepts were also re-visited for the intersection. Analyses results indicate that a basic, two-lane roundabout will serve traffic for several years into the future. To facilitate ultimate year 2034 traffic forecasts, however, several geometric additions would be necessary to the roundabout including a third lane in the east/west approaches and separate, right-turn fly-by lanes. This was presented in previous KDOT studies and concepts for the intersection. The analyses results in Figure 8.5 depict a basic two-lane roundabout as the project team felt the ultimate configuration was somewhat a-typical. Discussions with agency partners and the public also indicated concern regarding driver familiarity and acceptance with this complex roundabout concept.

An at-grade signalized intersection was also evaluated for this location and is expected to serve traffic well into the future. The intersection analyses assumed geometric improvements including dual left-turns when warranted, and exclusive right-turn lanes on each approach. LOS results at specific individual movements would experience some increased delays during peak hour operations (left-turns); however, overall intersection operations indicated LOS D or better for year 2034 projections. A request for additional analyses and impacts to adjacent intersections was requested by City of Topeka and KDOT staff. In response, the Iteris project team conducted planning level operational analyses of adjacent intersections and provided simulation of these operations as part of public information displays. A sample snapshot of this is illustrated in **Figure 8.6**.

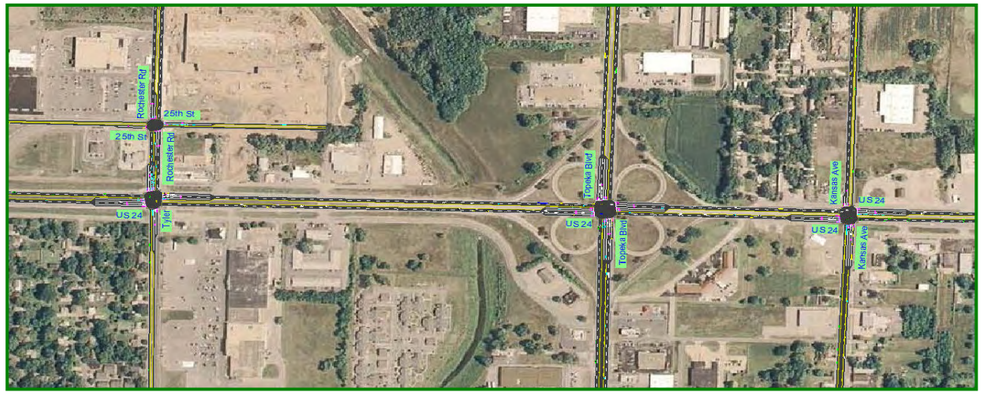


Figure 8.6: Sample Simulation of US-24 Signalized Intersections

Based on the results of the future transportation conditions analyses, the project team recommended an at-grade intersection option should be planned for the US-24 and Topeka Boulevard junction. Additional detailed operations and concepts for this location will need to be evaluated to develop a phased implementation.

The project team also reviewed land use parameters including magnitude and location along the US-24 Corridor to assist with the evaluation of mitigation options to serve future traffic. Vehicle trips generated by various TAZs and their corresponding loading points to study area roadways were analyzed. This information was utilized to develop additional recommendations regarding future roadway connections and access management strategies to reduce travel demand on US-24 and improve overall circulation within the study area. The results of these final transportation recommendations are illustrated in additional detail in Chapter 10 of this document.

9.0 Public Involvement

A public involvement phase of the project was conducted to coordinate community engagement activities throughout the course of the study. The effort was aimed at having a diverse mix of corridor residents, business representatives, and other public stakeholders participate in these activities. Information gathering and several outreach activities were conducted throughout the duration of the project to help solicit key audiences within the community. Through open houses, tailored surveys, website information (See **Figure 9.1**), and the Regional/Urban Design Action Team (R/UDAT) process, several stakeholders and their thoughts on the project were utilized to help guide the project team.

Figure 9.1: US 24 Website

9.1 Project Plan

The public involvement approach for the US-24 Access Management, Circulation, and Land Use Plan was comprised of several components. These included:

- Development of a project logo
- Project website with both public side, and internal project team side
- Contact database
- Media relations including briefings, press releases, and talking points
- Collateral materials including letters, and meeting announcements
- R/UDAT Meetings with key stakeholders
- Public open house meetings to share information and gather feedback
- Updates and presentations to governing bodies

Key components of the plan were information gathering from the R/UDAT meetings and public open house meetings held at Seaman High School. The consultant team utilized Regional/Urban Design Action Team (R/UDAT) principles, including results-driven community participation based on the interdisciplinary solution, objectivity and public participation to supplement the public meeting process. Early on in the study process, local stakeholders were identified and invited to short meetings with the consultant team to provide input regarding what is good in the corridor, that can be improved, and what needs to be eliminated to make the area more livable and sustainable. Later in the process, the same stakeholders were re-invited and shown the results of combining the values associated with the community with the expertise of the interdisciplinary team and what possibilities are available. The R/UDAT process combined local resources with the expertise of a multidisciplinary team of professionals, to efficiently identify ways to encourage desirable change in a community. Social, economic, and political issues as well as potential land use, circulation and access strategies were explored.

The series of R/UDAT meetings involved meeting with key stakeholders including business owners and public officials regarding the corridor. As part of the R/UDAT process, short session meetings were held to elicit community values through questions relating to feelings about current land use issues, transportation options, and other physical or social issues in the US-24 corridor. Follow up questions were posed regarding opinions on services, development, safety, and elements that could be used to improve the corridor.

Two separate public open house format meetings were held during the course of the study. These meetings allowed for presentation of land use, transportation, and context sensitive design issues along the corridor and the gathering of survey information from stakeholders. Several in-depth discussions were held with interested community members on key components of the project. The exchange of information allowed the project team to further improve elements of the final plan.

A timeline of several key tasks included as part of the on-going public involvement effort are listed in **Figure 9.2**:

Figure 9.2 Public Involvement Timeline

2008

April on –	**Present & respond to emails regarding the study**
May/June –	**R/UDAT meetings with 23 business owners & public officials**
June 2 –	**KDOT interview on 1440 AM Radio**
June 17 –	**Project Team radio interview**
June 17 –	**Follow-up with press regarding 1st Public Meeting press release**
June 18 –	**1st Public Meeting**
June 18 –	**Project Team interview with WIBW, KTKA & KSNT**
June 18 –	**Project Team interview w/ Topeka Metro News**
June 18 –	**Project Team interview w/ Topeka Capital Journal**
June 18 –	**Conducted first round public surveys**
August –	**Project Team presentation to North Topeka Business Association**
October 1 –	**Project Team interview with KMAJ AM Radio**
October 9 –	**Project Team interview with KTKA Morning News**
October 10 –	**Press release to media**
October 13 –	**Project Team interview with KSNT and WIBW**
October 14 –	**94.5 Radio interview**
October 14 –	**2nd Public Meeting**
October 14 –	**Conducted second round public surveys**
December 15 –	**Final MTPO meeting prior to presenting completed plan**

9.2 Summary Information

Detailed survey results of the R/UDAT meetings and public open house meetings are included in Appendix D of this report. The list below highlights overall similar comments received throughout the duration of the project.

US-24 Corridor

- Improve US-24 & Topeka Boulevard intersection
- No roundabout at US-24 & Topeka Boulevard intersection
- If improving US-24 & Topeka interchange not possible, then signal is most preferred.
- Utilize frontage roads / service roads better
- Sit down/family restaurants are needed in the area
- Safety for pedestrians and bicyclists is a top concern
- Do not want another “Wanamaker”
- Improve operations at Rochester and US–24
- Clean the area up and make more it aesthetically appealing
- Maximize green space/agricultural space

10.0 Recommendations

NOTE:

The Metropolitan Topeka Planning Organization Policy Board voted to "receive" this Plan without endorsing any of the illustrated backage road or access closure concepts. The Policy Board thinks further discussions with users of the corridor; additional public comment; design details and consideration of potential impacts, especially on existing property owners and businesses, are needed prior to accepting or adopting, any corridor plan. As such, the Policy Board supports KDOT's efforts to contract with a consultant for a Phase II Highway 24 Corridor study.

Based upon the results of an integrated study process, recommendations for improvements to the US-24 Corridor have been highlighted throughout several sections of the report. A summary of these recommendations is presented for Land Use, Transportation, and Context Sensitive Design issues in the following sections.

10.1 Land Use

An important part of the reason for developing land use scenarios and plans for the US-24 Corridor study area is to encourage more cost effective future growth management. By having a land use and growth management strategy, local planners will be more effective at identifying future infrastructure and community needs in the area and will be able to better anticipate and accommodate growth. Using basic growth management techniques will lead to more cost efficient provision of infrastructure so that sewer, water, road, and other infrastructure is not unnecessarily extended, and it is not extended past useable vacant land to parcels well beyond the current areas of development. Strong growth management will also lead to better community amenities, by having community facilities and non-motorized transportation options centrally located and able to serve the widest population possible.

The recommended land use scenario identified for the US-24 Corridor is the Preferred Land Use Scenario identified on **Figure 6.3** on page 29 of this report. The study team recommends that the following basic strategies guide the implementation of the Preferred Land Use Scenario:

1. The Preferred Land Use Scenario should be considered as a guide in future development. Although not formally adopted as an ordinance, the scenario could be adopted over time as parcels become vacant or candidates for redevelopment. In assessing new development applications, local planners should consider the extent to which the new applications fit the context of the Preferred Land Use Scenario.
2. The Preferred Land Use Scenario places an emphasis on redevelopment and focusing growth inward. Commercial land use clustering is encouraged at the key commercial nodes in the corridor (Tyler Street/Rochester Road, Topeka Boulevard, Kansas Avenue). Industrial uses are encouraged to expand on existing or adjacent to existing industrial areas. Preservation of rural land for agricultural and/or recreational purposes is encouraged on the edges of the study area. In making development decisions, planners and developers are encouraged to focus on flexibility and possibilities for redevelopment of existing or potential future vacant sites in the central portions of the Study Area. Widespread greenfield development is discouraged. Local planning assistance, zoning flexibility, and willingness to provide infrastructure support are among the techniques that local officials can use to encourage redevelopment.
3. In assessing the locations of any new access points along US-24 and the types of access to provide, planners and engineers should avoid access changes that do not support the Preferred Land Use Scenario. For example, applications for any new drives and access points on US-24 should be strongly discouraged in locations where land is designated for agricultural or recreational purposes. The use of service roads to service future development and encourage redevelopment by enhancing access is encouraged.
4. Decisions on extending water and sewer infrastructure can strongly influence where new development occurs. Before agreeing to extend water and sewer to greenfield sites at the edges of the study area, local officials should strongly consider what service improvements could be made to better service land closer to the center of the corridor and encourage infill or redevelopment.
5. Local officials should work with property owners, developers, and development/business agencies such as the North Topeka Business Alliance and the Greater Topeka Chamber of Commerce to develop strategies around key sites in the corridor. This would include developing specific plans to address future retail cluster redevelopment over time such as the block south of US-24 including the block with K-Mart south of US-24 and the blocks along Topeka Boulevard near the Topeka Boulevard/US-24 interchange. When large sites become vacant, the economic development agencies should have high level contingency re-use plans in place for focusing redevelopment that is compatible with the Preferred Land Use Scenario.
6. In making land use decisions, walkability should be among the key criteria. By asking the question: can residents walk to this development or from this development and make use of key services, stores, and recreation amenities, denser, cost effective, and community oriented development will be encouraged.

10.2 Transportation

Through the completion of several transportation planning and analyses tasks conducted as part of the project, long-term recommendations have been developed to accommodate the future transportation characteristics of the US-24 Corridor. The recommendations are based on serving the Preferred Land Use Scenario in a safe and efficient manner, while enhancing access management and overall connectivity within the study area. The recommendations are summarized in **Table 10.1** (page 44) including a brief description of the improvement and how it helps achieve goals established for the corridor as part of this project. The recommendations are also illustrated in more detail on **Plan Sheets 1 – 14** which begin on page 45 of this document. A brief discussion of these recommendations is summarized by the US-24 Corridor sub areas below.

It is important to note that this plan represents a vision for the future. Based on the land use and transportation analyses conducted, many transportation recommendations are identified including new roadways, a service road concept, new roadway connections, and various roadway and driveway relocation, consolidation or closure strategies. While the timing and specific details of implementation strategies need to be developed, as part of further work to improve this corridor, the plan forms the basis to develop these strategies. Further, the plan and its associated transportation improvements is not intended to suggest the closure or relocation of businesses, but rather to define a blueprint for the future as land uses evolve and the corridor continues to develop. It provides current land owners and potential developers with a framework from which to evaluate future growth and development opportunities based on an improved transportation system and approved land use concepts. Similarly, it provides stakeholders agencies with a mechanism to begin to evaluate development proposals, judging their consistency with the US 24 Corridor Vision, while more detailed implementation strategies are defined.

Concern has been raised regarding the recommended transportation improvements. The consultant team believes the recommended improvements are both technically and economically feasible based on development of detailed implementation strategies. The current service road concept, while a significant improvement over the existing condition, is not an "ideal" and/or unrealistic concept. Such changes are required if substantial improvement in traffic operations and safety are to be achieved as traffic volumes continue to increase in the future. It is as implementable, economically feasible and satisfactory to a majority of the property owners in the corridor as other improvement options would be. Frontage road improvements, if done properly, will likely impact as many, if not more, adjacent property owners with a less-effective traffic operations solution. It is also important for all stakeholders and agency partners to understand, that while closure or relocation of business is not the goal of the plan, that reality exists with implementation of any major corridor improvement strategy.

West Area: Within this segment of the corridor, it is recommended to phase the closure of multiple direct access driveways to US-24 between Huxman Road and Landon Road. Accommodation of future access to these land areas should be provided from side roads and an access located midway between Huxman Road and Landon Road to fulfill KDOT intersection spacing requirements for this facility. The proposed Menoken Road interchange will provide for grade-separation of US-24 over Menoken Road, and frontage road access would be extended to land areas south of US-24. In addition, the current full access intersection at the Payless entrance would be closed, and alternative circulation would be provided to 25th Street to the north. This is depicted in Sheets 1 through 3.

West Central Area: Immediately east of the US-24 / US-75 interchange area, it is recommended to begin the implementation of a service road system on both sides of the US-24 Corridor to promote access along these service roads for future development. The service roads would connect the Old Highway 75 road segment to Goodyear Road on the east. As part of the service road extensions, frontage roads would be eliminated in addition to the Old Highway 75 access ramps. Due to these closures, it is recommended to improve the segments of Brickyard Road up to and including the intersection with Silver Lake Road to facilitate potential increased commercial traffic. It is recommended that the future south service road be implemented to tie into the east/west alignment of Lyman Road to facilitate further east/west circulation. It is recommended to implement a re-alignment and extension of 25th Street north of the Goodyear facility. This collector roadway would provide improved east/west connectivity and provide circulation to multiple, future development areas while relieving pressure on the US-24 Corridor. In addition, it is recommended to extend Goodyear Road from 25th Street on the north and tie into the Vail Avenue alignment to the south. These recommendations are displayed on Sheets 4 – 6A, and Sheet 11.

East Central Area: Transitioning east of the Goodyear facility, the Preferred Land Use Scenario identifies future commercial uses and potential large-scale office park space along the US-24 Corridor. To facilitate access to these land areas, it is recommended to provide a full-access intersection with US-24 and implement a north/south collector road extension between 25th Street on the north and Lyman Road on the south. The spacing of this location should provide standards for minimum signal separation (minimum: ¼ mile, ideal: ½ mile) to Rochester Road along mainline US-24. An additional option to providing access to the future office park area along the north side of US-24 would be to provide right-in/right-out access only at this location, and utilize a connecting road east to Rochester road. This option, while viable, would most likely place additional turning traffic at the intersection of US-24 and Rochester Road. These concepts are illustrated on Sheets 6A – 7A, and Sheets 6B – 7B.

Several commercial driveway locations and frontage road intersections with direct access to US-24 should be closed in the future for segments from Rochester Road through Kansas Avenue. Service road extensions should be implemented to provide opportunity for improved access and circulation to future development through much of this segment. As a result, frontage roads should be eliminated. Turn lanes and improved geometrics should be provided at intersections that have direct access to US-24. In addition to providing an at-grade intersection at Topeka Boulevard, the continued extension of the 25th Street collector should be implemented through this segment. These concepts are illustrated on Sheets 6 – 8.

Additional roadway continuity recommendations were made to facilitate improved east/west connectivity for both vehicular and pedestrian travel. These include an extension of Menninger Road between Kansas Avenue and Happy Hollow Road. This segment would tie into the existing 31st Street east/west alignment near Kaw Valley Road. This is illustrated on Sheets 13 and 14.

Final recommendations for the East Central Area include connecting segments of Lower Silver Lake Road to Burgess Street in the south part of the study area to again facilitate lacking east/west travel opportunity for vehicle and pedestrian travel. This is illustrated on Sheet 12.

East Area: This final segment of US-24 is illustrated in Sheets 9 – 10 and includes recommendations for the extension of the 25th Street collector roadway to Kaw Valley Road. In addition, the north/south alignment extension of Kaw Valley Road and elimination of the Happy Hollow Road full access intersection are included in this segment.

Additional Considerations: Several recommendations regarding access removal and modifications, service road extensions, and general roadway continuity have been identified for the US-24 Corridor. In addition to these specific recommendations, the following elements should be included in the plan for the future corridor:

- **Pedestrian / Bicycle Needs:** With long term development and changes in both land use and transportation characteristics, there will be multiple opportunities to improve the pedestrian and bicycle facilities within the corridor. The LRTP already contains useful guidance on these facilities. In addition, sidewalk and trail extensions should be included where feasible along many of the service road and future collector roadway extensions that are identified in the recommendations. This will provide for improved character of these facilities and allow better access to development options.

- **Transit:** In similar fashion to providing pedestrian connectivity, future transit opportunities exist within the corridor as well. The service road locations that could provide access to development on both sides of their alignment are important locations to provide transit as it is anticipated that employment uses and primary destinations would be located within these segments. Options for east/west transit routes along these improved connections could be more easily managed than along US-24. Detailed transit analysis was not conducted as part of this project. Additional analysis of transit improvements, including transit routes and the potential for transfer centers and park and ride facilities should be conducted as transportation and roadway improvements implementation strategies are developed as part of future planning studies for the US 24 corridor.

These items are discussed further in Section 10.3

Table 10.1: Transportation Recommendations Summary

Plan Sheet No.	Improvement Concept Description	Consistency with Corridor Vision
1, 2	Potential private driveway closures and consolidation between Huxman Road and Landon Road. New full movement access intersection (including left-turn lanes) located with desirable spacing and public connector road extensions for improved circulation.	Improved operational and safety characteristics through access management. Improves circulation to adjacent future land use areas.
2,3	Proposed KDOT interchange project at Menoken Road intersection. Potential alignment modifications, access closures and modified frontage road access to adjacent parcels. Access to north side of US-24 parcels provided from 25th Street.	Improved operational and safety characteristics through grade separation and access management.
4, 5	Potential removal of Old Highway 75 interchange ramps and phased removal of frontage road connectivity. Portions of frontage roads to remain as relevant for local parcel circulation upon future redevelopment. Implementation of new connections to service roads running east/west. 25th Street connector traversing east and north. Improvements to Brickyard Road/Lower Silver Lake Road intersection to facilitate truck movements and access to US-75	Improved operational and safety characteristics with removal of short acceleration/deceleration ramps. Improved redevelopment potential long-term with service road improvements.
6A	Potential realigned extension of Goodyear Road / Vail Avenue north/south connecting to service roads east/west and 25th Street. Provides extension and connectivity to Lyman Road. Potential new full-movement intersection with desirable spacing east of Goodyear for access to future redevelopment.	Improved circulation and roadway continuity to promote future land use redevelopment. Connectivity and access to allow for traffic circulation off of US-24 and the potential for enhanced pedestrian facilities.
7A	Potential implementation of further 25th Street connector roadway. Multiple private drive access closures that do not meet minimum spacing requirements. Implementation of at-grade intersection control at Topeka Boulevard and further development of east/west service road concepts to provide improved access and reduced delays for commercial development traffic.	Improved operational and safety characteristics through access management. Improves roadway continuity and circulation to adjacent future land use areas. Improves redevelopment potential, reduced traffic on US-24 and the opportunity for pedestrian facilities and multi-mode travel.
6B	Similar to sheet 6A with the exception of right-in/right-out limited access at the new intersection east of Goodyear. Requires potential east connection to Rochester for southbound exiting traffic	Improved circulation and roadway continuity to promote future land use redevelopment. Connectivity and access to allow for traffic circulation off of US-24 and the potential for enhanced pedestrian facilities.
7B	Similar to sheet 7A with the exception of potential east connection to Rochester for southbound exiting traffic	Improved operational and safety characteristics through access management. Improves roadway continuity and circulation to adjacent future land use areas. Improves redevelopment potential, reduced traffic on US-24 and the opportunity for pedestrian facilities and multi-mode travel.
8	Potential 25th Street connector road extension east through the study area. Phased removal of access drives and frontage roads and potential implementation of service roads for redevelopment. Meriden Road realignment south of US-24 to promote improved, full-movement intersection at Meriden and limited right-in/right-out access to the east.	Improved operational and safety characteristics through access management. Improves east/west roadway continuity and local circulation to reduce volumes and delay along US-24. Improves access to adjacent future land use areas. Improves redevelopment potential, and the opportunity for pedestrian facilities and multi-mode travel.
9	Potential implementation of Kaw Valley Road connector to the north and terminus of 25th Street improvement. Closure of access point east of the levee.	Improved operational and safety characteristics through access management and connector roads
10	Potential gateway area context improvements. Trail connection opportunities. Roadway transitions back to rural facility and out of study area	Preservation of natural areas, and transitional zones.
11	Potential continuation of 25th Street connector roadway north of Goodyear and connections to redevelopment areas east of Goodyear.	Improved operations and connectivity for local circulation. Opportunities for pedestrian facilities, improved future land use access and multi-mode travel.
12	Potential connections of Lower Silver Lake Road east/west in the southern study area including connectivity to Kansas Avenue and Burgess Street	Improved circulation and collector road improvements allowing for continuous east/west travel and providing additional pedestrian facilities.
13, 14	Implementation of potential Menninger Road Extension to 31st Street in the northern study area. Provides further east/west roadway continuity and connection to Meriden Road	Improved circulation and east/west roadway continuity in addition to providing opportunities for improved pedestrian circulation.

Highway 24 Corridor Study
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ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	1

N

0 200 400

24

Huxman Rd

Phased access provided to adjacent development via existing side roads or future road connections

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study *Get Involved!*	ITERIS	PROJECT NO.	SHEET NO.
		(US) 24-89 KA-0978-01	2

N

0 200 400

24

25th St

Proposed KDOT Interchange Improvement

Landon Rd

Countryside Rd

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

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PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	3

25th St

Sheet Location

Menoken Rd

Proposed KDOT Interchange Improvement

24

N

0 200 400

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

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PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	4

25th St

Sheet Location

24

75

0 200 400

Improve Brickyard Road / Lower Silver Lake Road Intersection for increased Commercial Traffic

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

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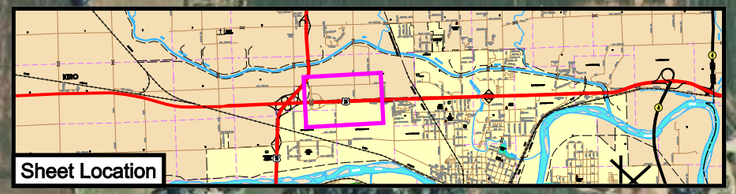

25th St

0 200 400

Phased access provided to adjacent development via existing side roads or future road connections

Button Rd

24

Furman Rd

Phased access provided to adjacent development via existing side roads or future road connections

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

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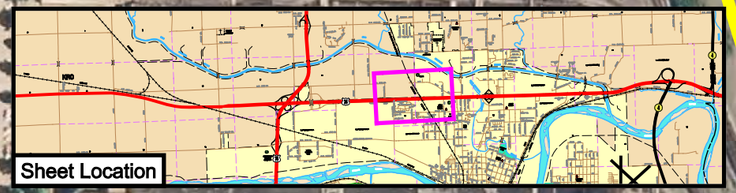
PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	6A



N

0 200 400

Consensus has not been reached regarding the inclusion of a full/partial access intersection at this location in the US-24 Plan. It should be considered an "optional" improvement until such time that the agency stakeholders reach a final decision.

24

Lyman Rd

Vail Ave

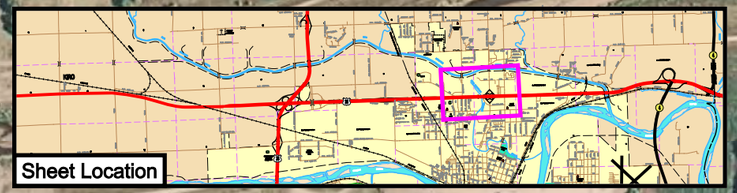
LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
Get Involved!

ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	7A



Rochester Rd

25th St

Topeka Blvd

Kansas Ave

0 200 400

To be implemented by KDOT in Summer 2009.

US-24 / Topeka Blvd At-Grade Intersection

24

Tyler St

Lyman Rd

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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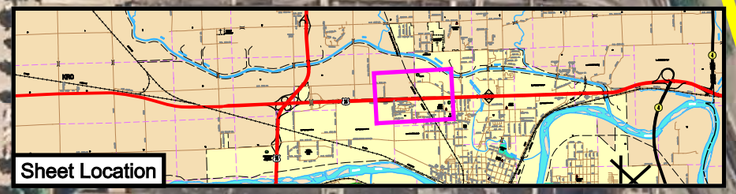
ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	6B



0 200 400

Optional Connector Extension with Right-in / Right-out Access on US-24

Consensus has not been reached regarding the inclusion of a full/partial access intersection at this location in the US-24 Plan. It should be considered an "optional" improvement until such time that the agency stakeholders reach a final decision.

24

Lyman Rd

Vail Ave

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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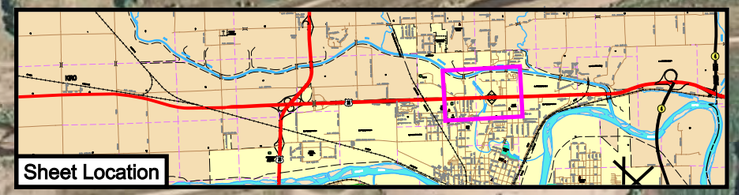
ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	7B



Rochester Rd

25th St

Topeka Blvd

Kansas Ave

0 200 400

Optional Connector Extension
will increase turn movements at
US-24 / Rochester intersection

24

To be implemented by
KDOT in Summer 2009.

US-24 / Topeka Blvd
At-Grade Intersection

Tyler St

Lyman Rd

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	8

Kansas Ave

25th St

Meriden Rd

0 200 400

Consensus has not been reached regarding the inclusion of a partial access intersection at this location in the US-24 Plan. It should be considered an "optional" improvement until such time that the agency stakeholders reach a final decision.

24

Lyman Rd

Meriden Rd

54

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
Get Involved!

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PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	9

N

0 200 400

25th St

24

55

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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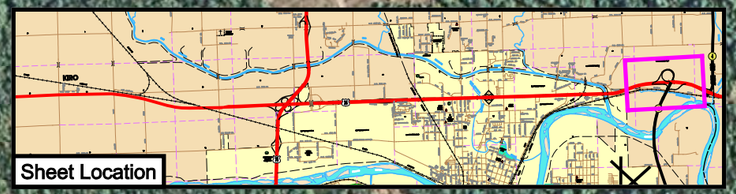
ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	10



N

0 200 400

24

4

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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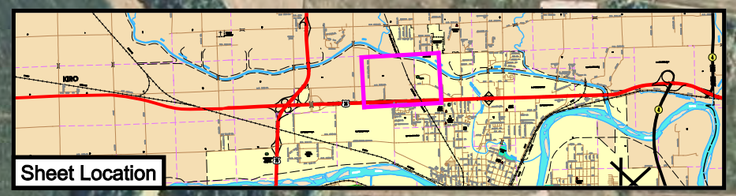
ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	11



25th St

N

0 200 400

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

24

Highway 24 Corridor Study
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PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	12

0 200 400

Tyler St

Kansas Ave

Burgess St

Lower Silver Lake Rd

Topeka Blvd

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study *Get Involved!*	ITERIS	PROJECT NO.	SHEET NO.
		(US) 24-89 KA-0978-01	13

Menninger Rd

0 200 400

Consensus has not been reached regarding the inclusion of the Menninger Road extension in the US-24 Plan. It should be considered an "optional" improvement until such time that the agency stakeholders reach a final decision.

Topeka Blvd

59

Meriden Rd

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

Highway 24 Corridor Study
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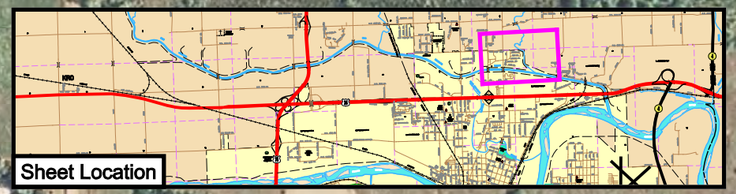
ITERIS

PROJECT NO.	SHEET NO.
(US) 24-89 KA-0978-01	14



N

0 200 400

31st St

Happy Hollow Rd

Meriden Rd

Consensus has not been reached regarding the inclusion of the Menninger Road extension in the US-24 Plan. It should be considered an "optional" improvement until such time that the agency stakeholders reach a final decision.

LEGEND

- Service Road
- Connector Improvement
- Potential Road Removal
- Potential Access Closure
- Right-In / Right-Out Access
- Left-In / Right-In / Right-Out Access
- Future Full Access

10.3 Context Sensitive Design

Because of the different context of each of the four areas along the corridor, each has been evaluated separately in relation to the future land use and transportation recommendations. These recommendations provide general direction with the details of how the roadway and its intersections will look and function left to future designs studies. This evaluation of the roadway, therefore, is not definitive, but only a point in time. It is an excellent point in time, however, to make decisions that will assure the best fit in the future between the roadway and its context. The following bullet points summarizes recommendations for roadway character, bicycle, pedestrian and transit access, gateway features, and right-of-way landscaping along the future US-24 Corridor (see **Figures 10.1-10.4**).

West Area – Agricultural District :

Roadway Character
- Rural; must serve agricultural uses

Bicycle/Pedestrian Access
- Continue off-road multi-use trail along Soldier Creek; develop tail connector to Kiro, such as via 35th Street and Huxman Rd.

Transit
- Further evaluation of transit opportunities as transportation strategies are implemented.

Gateway feature
- Emphasize skyline with landscape/hardscape feature

Right-of-way Landscape
- Use native plants/wildflowers/crops
- Punctuate with specimen trees

Other
- City of Topeka “Welcome” sign with landscaping just east of Menoken Rd. for eastbound traffic

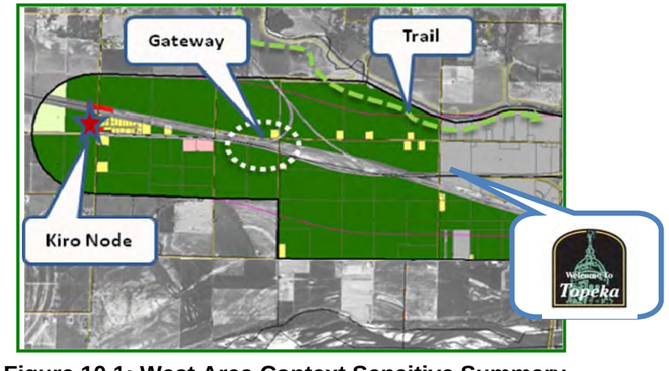


Figure 10.1: West Area Context Sensitive Summary

West Central Area – Industrial District:

Roadway Character
- Interstate-like; serve industrial uses

Bicycle/Pedestrian/Transit Access & Node
- Improve Goodyear Road underpass for bicycle and pedestrian access
- Consider future transit access to Goodyear Road intersection (jobs and residences) with potential transit stop locations along service roads as they are redesigned on both the north and south side of US-24.
- Continue multi-use trail along Soldier Creek

Transit
- Further evaluation of transit opportunities as transportation strategies are implemented.

Gateway Feature
- Potential Tire Art

Right-of-way Landscape
- Emphasize utility, sculptural quality, such as wind farm

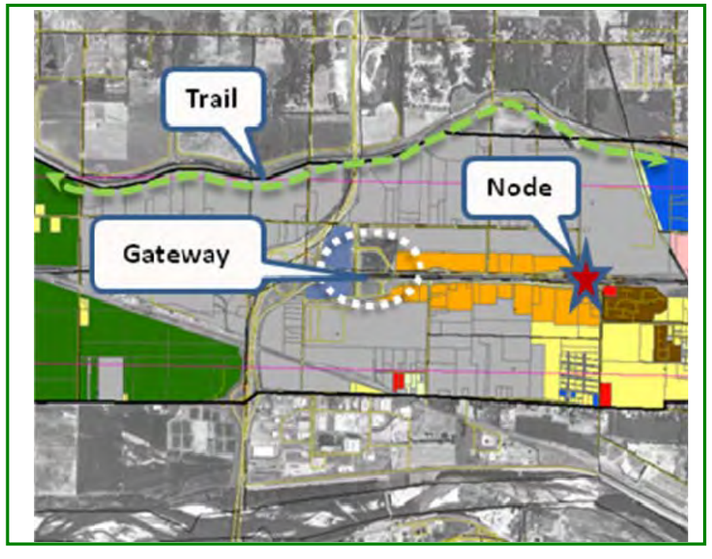


Figure 10.2: West Central Area Context Sensitive Summary

East Central Area – Commercial Residential District:

Roadway Character
- Urban

Bicycle/Pedestrian Access Nodes
- Rochester Rd. /Tyler Blvd., Topeka Blvd, Kansas Blvd. for access between residential and retail/office destinations
- Multi-use trail crossings under US-24 between Rochester Rd./Tyler St. and Topeka Blvd. for Soldier Creek Trail, and west of Happy Hollow Rd. at the Soldier Creek crossing for the Kaw Reserve Trail

Transit
- Further evaluation of transit opportunities as transportation strategies are implemented.

Gateway feature
- North side Soldier Creek crossing at Hwy 24, combination landscape, hardscape and signage

Right-of-way Landscape
- Tie into Topeka Blvd. landscaping, tree clusters, native plants in more formal arrangement
- Incorporate a major landscape/hardscape feature at the redesigned Topeka Boulevard intersection

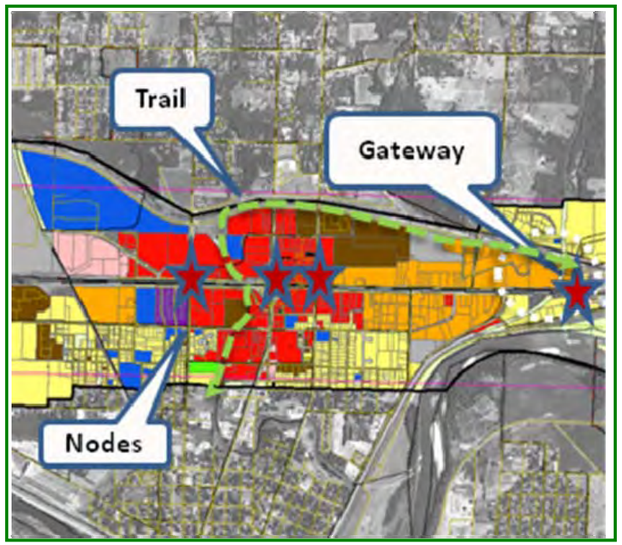


Figure 10.3: East Central Area Context Sensitive Summary

East Area – Recreational District

Roadway Character
- Limited access, design considerations for historic/natural

Bike/Pedestrian Access Nodes
- Maintain access for Trailhead for Kaw Reserve Trail at proposed relocation of Happy Hollow Rd/Calhoun Bluff Rd. exit from 24 Highway.
- Continue trail to east on south side.

Transit
- Further evaluation of transit opportunities as transportation strategies are implemented.

Gateway feature
- Incorporate Calhoun Bluffs on north side with native plantings and signage

Right-of-way Landscape
- Keep natural; protect and frame views.

Other
- City of Topeka “Welcome” sign with landscaping just west of K-4 for west-bound traffic

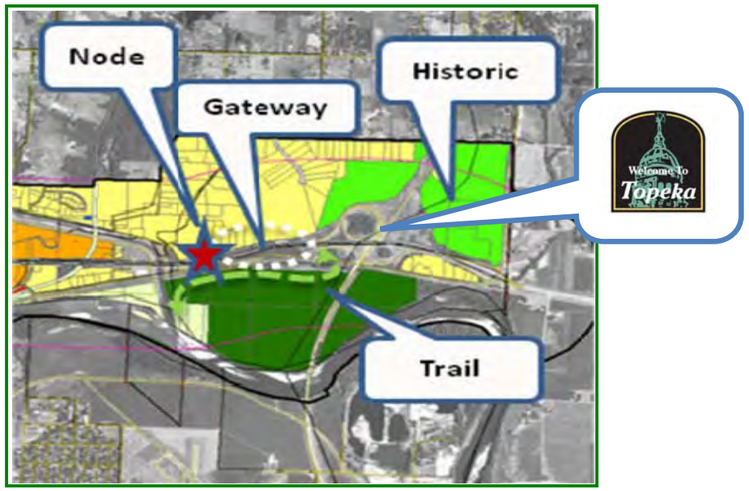


Figure 10.4: East Central Area Context Sensitive Summary

10.4 Next Steps

As part of the work effort, a partnership agreement was developed and executed by the agency partners including KDOT, City of Topeka, MTPO, and Shawnee County. Through this partnership agreement, the agencies recognize the mutual desire to uphold the integrity of the US-24 Corridor and enhance opportunities for economic development with the underlying motivation to benefit the traveling public. Future steps recommended to be taken include the development of an implementation and coordination strategy including the following elements:

- Inter-Local Agreement
- Implementation Action Plan
- Greenway Trail System Acquisition and Implementation Options
- On-going Evaluation and Identification of Funding Resources

In addition, the agencies should continue to work together to review and update the plan as needed as activity continues along the corridor.

APPENDICIES

- Appendix A – Land Use
- Appendix B – Transportation
- Appendix C – Context Sensitive Design
- Appendix D – Public Involvement

APPENDIX A – LAND USE

- Existing Land Use Inventory Maps
- February 12, 2008 Land Use Growth Management Abstract
- February 12, 2008 Park and Open Space Abstract
- February 12, 2008 Trails Abstract
- February 12, 2008 Long Range Transportation Plan Abstract
- February 12, 2008 State of Neighbors from 2025 Topeka/Shawnee County Plan
- May 5, 2008 Historic North Topeka
- May 5, 2008 North Topeka Business Alliance 5-Year Strategic Plan
- May 5, 2008 Topeka Neighborhood Revitalization Plan

Inventory Maps - Exisiting Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
Light Industrial
Medical Office
Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.125 0.25 0.5
Miles

N
W E
S

Highway 24 Corridor Study
Get Involved!

A

Inventory Maps - Existing Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
Light Industrial
Medical Office
Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.125 0.25 0.5
Miles

Highway 24 Corridor Study
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B

Inventory Maps - Existing Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
Light Industrial
Medical Office
Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.125 0.25 0.5
Miles

N
W E
S

Highway 24 Corridor Study
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C

Inventory Maps - Existing Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
Light Industrial
Medical Office
Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.125 0.25 0.5
Miles

N
W E
S

Highway 24 Corridor Study
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D

Inventory Maps - Existing Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
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Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.05 0.1 0.2
Miles

N
W E
S

Highway 24 Corridor Study
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North Topeka Boulevard

Inventory Maps - Existing Land Use

Category

Agriculture
Animal Clinic
Bank
Car Dealership
Church
Commercial
Community
Community Housing
Environmental
Fire Station
For Lease
For Sale
Gas Station
Golf Course
Government
Grain Storage
Hotel
Housing
Industrial
Light Industrial
Medical Office
Multi-Family Residential
News Station
Office
Open Space/Empty Building
Park
Restaurant
Retail
School
Single-Family Residential
Storage Facility
Under Construction
Utilities

Land Use - edited from data provided by the City of Topeka

Agriculture
Commercial
Hotel/Motel
Industrial
Multi-Family
Non-Codified
Office
Open Space/Empty Building
Public/Quasi-Public
Recreational
Single-Family
Transport/Utility
Two-Family

TAZ Boundaries
City Limits of Topeka

0 0.05 0.1 0.2
Miles

N
W E
S

Highway 24 Corridor Study
Get Involved!

South Topeka Boulevard

MEMO **To:** US 24 Corridor Topeka File

C:

Date: February 12, 2008

From: Randy Rowson

Subject: **Land Use Growth Management Abstract**

2025 Topeka Land Use and Growth Management Plan - City of Topeka

Policies

1. Population increase should be within urbanized area or identified growth zones.
2. Urban density developments should be where urban services are or will be available.
3. Low-density sprawl should be discouraged.
4. Manage infrastructure to encourage compact development within growth area boundary.
5. City and County develop a common annexation strategy.

Major businesses – Goodyear, Hill's Pet Food, Frito Lay, BNSF, Westar, AmerUs, Payless Shoes, etc.

Planning Objectives

- Population Growth (1.5% over 30 years)
- In-fill Housing
- Planned Developments
- Efficient Urban Services and Redevelopment
- CIP and Comp plan Coordination
- Quality of Life Improvements
- Employment Area Developments
- Annexation and Regional Land Use Planning

The report defines - Residential commercial, Strip commercial, regional commercial, etc.

New employment area expected to develop in future at east interchange of Oakland Expressway (K-4).

Industrial zones encouraged along US 24, K-4 Oakland Exp., and US 75.

Retail centers along Topeka Blvd. and US 24 have diminished and are secondary retail centers generally attracts customers from about a ten mile radius. US 24 Corridor is nearing commercial capacity, however have significant vacancies in existing retail space.

North Area US Highway 24 Corridor (page 94) -

Employment Growth Areas - Industrial development, US 24 Corridor (west side) near the US 24 and US 75 interchange. Several large manufacturers, distribution centers and agribusiness operations have already built in this area and more development is expected. Existing businesses include: Payless Shoe Source Distribution Center, Goodyear Tire and Rubber Manufacturing and Distribution Center, and the Heinz Pet Food Factory. Several tracts are still available in the area.

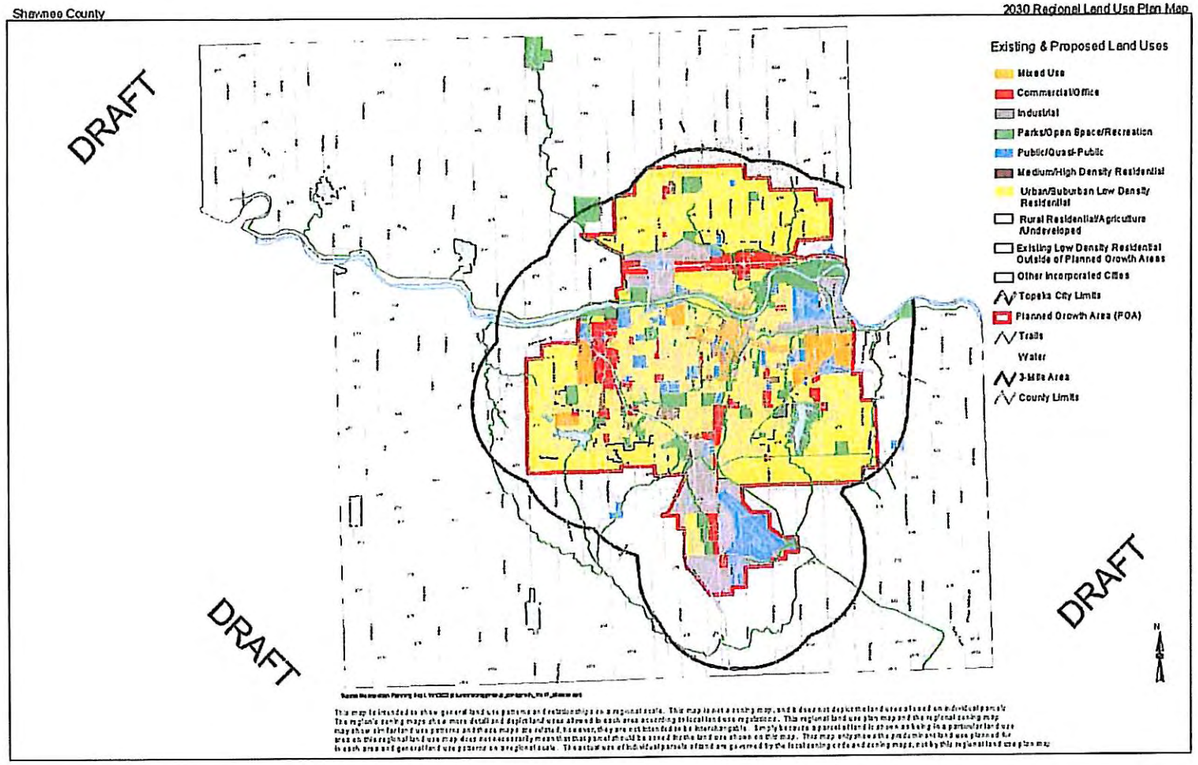
Commercial Development – Most likely new development will take place along US 24 near major intersections. "However, the area overall should be planned for new industrial development since commercial needs can be filled at other, more appropriate locations."

East Area – Highway K-4/Oakland Expressway/ I-70 Corridor (page 95)

Industrial - There are several large parcels in the area that are well suited for industrial. However, water and sewer lines needed to support intense industrial activity is not yet in place and will be expensive to install.

Commercial Development – This area has potential for limited commercial development to serve the growing population of the growth area to the south.

2030 land use map page 104.



MEMO **To:** US 24 Corridor Topeka File

C:

Date: February 12, 2008

From: Randy Rowson

Subject: **Park and Open Space Abstract**

2020 Topeka Parks and Open Space Plan

Figure 2 - Parks Map

North Topeka Planning area is served be Garfield Park (community level park) consisting of 37.5 acres. This park doubles as a neighborhood park for those east of Topeka Blvd. Meadowood Park is a secondary park associated with the Meadowood Mobile Home Park on NW Lyman Road. McKinley Park (mini-park) is located on NW Gordon Street, west of N. Topeka Blvd.

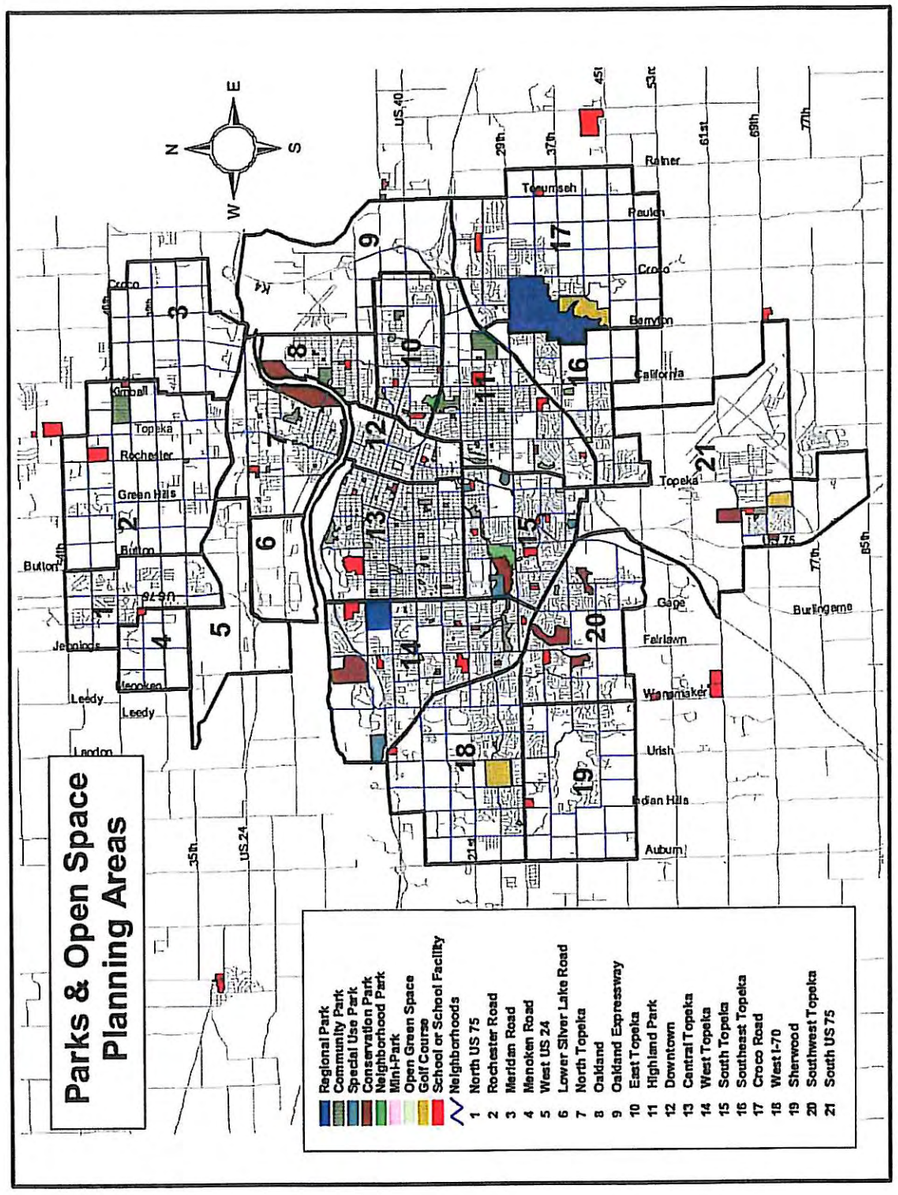
The Charles Curtis Greenway is approximately ten acres and lies along either side of N. Topeka Blvd. from Gordon Street to the south branch of Soldier Creek. Veteran's Park lies at the base of the Kansas Avenue Bridge.

Conservation Parkland exists along north side of the Kansas River. The city owns 206 acres along the Kansas River levee system which could be as park space. It is currently undeveloped and listed in the report as conservation land. There is a proposal for a baseball stadium and riverfront park between the Kansas Avenue and Topeka Avenue Bridges.

Planning Area: North Topeka

	Existing Conditions	Existing Surplus/ Deficiency	Projected 2030	Balance Need
Area (Acres)	3,310		3,310	--
Population	6,237		7,328	1,089
Housing Density (units per acre)	1.28		1.50	0.22
Neighborhood Parks (Acres)	3.2	-28	36.63	33.43
Community Parks (Acres)	23.7	-7	36.63	12.93
Mini-Parks/Open Space (Acres)	10.87	-2	14.65	3.98

Figure 2



MEMO

To: US 24 Corridor Topeka File

C:

Date: February 12, 2008

From: Randy Rowson

Subject: **Trails Abstract**

2020 Topeka – Shawnee County Regional Trails and Greenways Plan

The Kaw Reserve Trail - The seven mile trail runs along the north side of the Kansas River from US 75 east to US 24 and Happy Hollow Road. Trailheads could be located at US 75 at the Sunflower Soccer fields, Tyler Street, Quincy Street, Sardou Avenue, and US 24 near Happy Hollow Road. There is a map on page 55 of the PDF report.

Soldier Creek Trail would start at Garfield Park and follow Old Soldier Creek through North Topeka under US 24, north to Soldier Creek following the creek levee east to the Kansas River. This would be a five mile trail. The trail map is located on page 68 of the PDF Trail Report.

Both of these trails were scheduled to be completed by 2005.

MEMO **To:** US 24 Corridor Topeka File

C:

Date: February 12, 2008

From: Randy Rowson

Subject: **LRTP Abstract**

2035 LRTP – Topeka MPO

Chapter 2 – Community Structure

Population - Trends indicate an outward migration of persons from the central areas to suburban portions of the MTPO area. Total Population is 162,114 in 2004 and estimated at 178,608 in 2034 which is a 10 percent over the 30 years. The majority of the study area is displaying slight population growth (1 to 250 persons). One area east of US 75 and north of US 24 is expected to grow by 251 – 500 persons by 2034. The areas of slight population decline (-250 to 0) are along the River and along US 24 east of Topeka Boulevard.

65 and older Population – Shawnee County has 13.7 percent population in the 65+ years cohort. Ninety percent of this population lives within the MTPO area. The study area 65+ population generally resides in the North Topeka neighborhood located south of Silver Lake Road. There is a small concentration in the SW quadrant of Rochester Road and US 24.

Households – 68,862 (2004) to 75,799 (2034) which matches the 10 percent population growth. The study area expected to see growth in density along US 24 between Vail Road and Topeka Boulevard. There is also some decrease in density expected west of Topeka Boulevard as well as in North Topeka neighborhood.

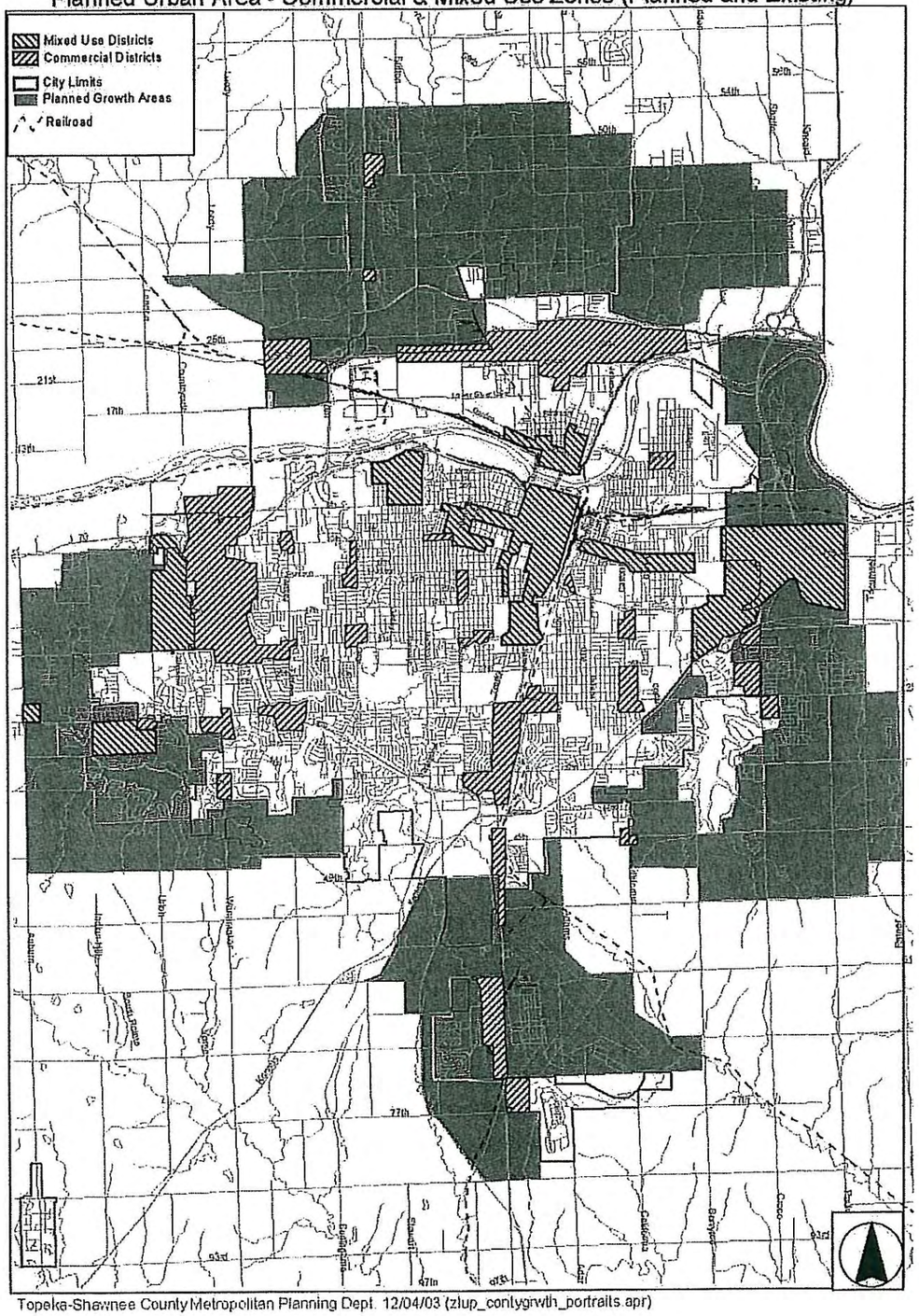
Employment Trends – Today (2004) service and retail account for 50 percent of jobs within the MTPO. Manufacturing has remained flat from 1980 to 2000. A forecasted job growth of 27 percent from 102,000 in 2004 to 130,514 in 2034 is expected in the LRTP. US 24 will see its fair share of increased employment opportunities from Kansas Avenue to Button Road. Government employment is third largest within the MTPO area. Topeka's designation as the state capitol, county seat, federal courthouse, Nation Guard Armory, and Air National Guard Refueling Unit account for the large government employment numbers.

Land Use – In the City of Topeka, the predominate land use is residential. The MTPO area consists of 50 percent agricultural land uses. However, the steady influx of residential developments into the outlaying areas has and is expected to continue to change these areas from rural to suburban. The largest concentrations of employment are found Downtown Topeka, along Wannamaker Road, along the South Topeka/South Kansas avenue, near Forbes Field, along US 75 north of the Kansas River, and US 24 along the north edge of Topeka. US

24 is beginning to see a renewed increase in commercial retail developments. The retail centers along Topeka Boulevard and US 24 attract customers from a ten mile radius. Future land use plans for the MTPO area support expansion of industrial development along US 75 corridor. Growth Boundaries – See Growth Management Plan

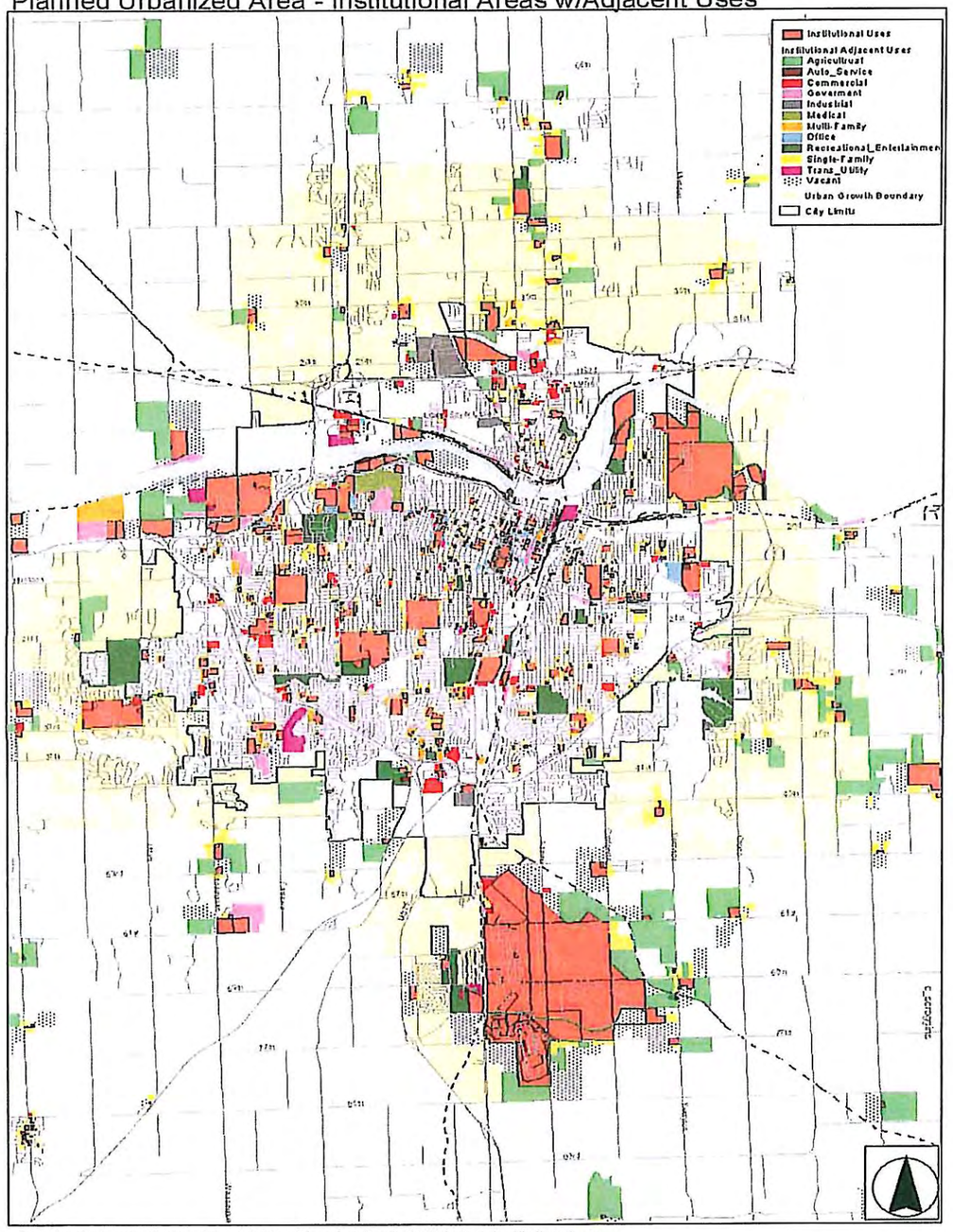
Natural and Cultural – This section is very vague and the mapping is difficult to discern. There appears to be wetlands along the Kansas River from the Grantville/US 24 intersection towards the east to the county line. There appears to be a couple of historic structures in the North Topeka neighborhood.

Planned Urban Area - Commercial & Mixed Use Zones (Planned and Existing)



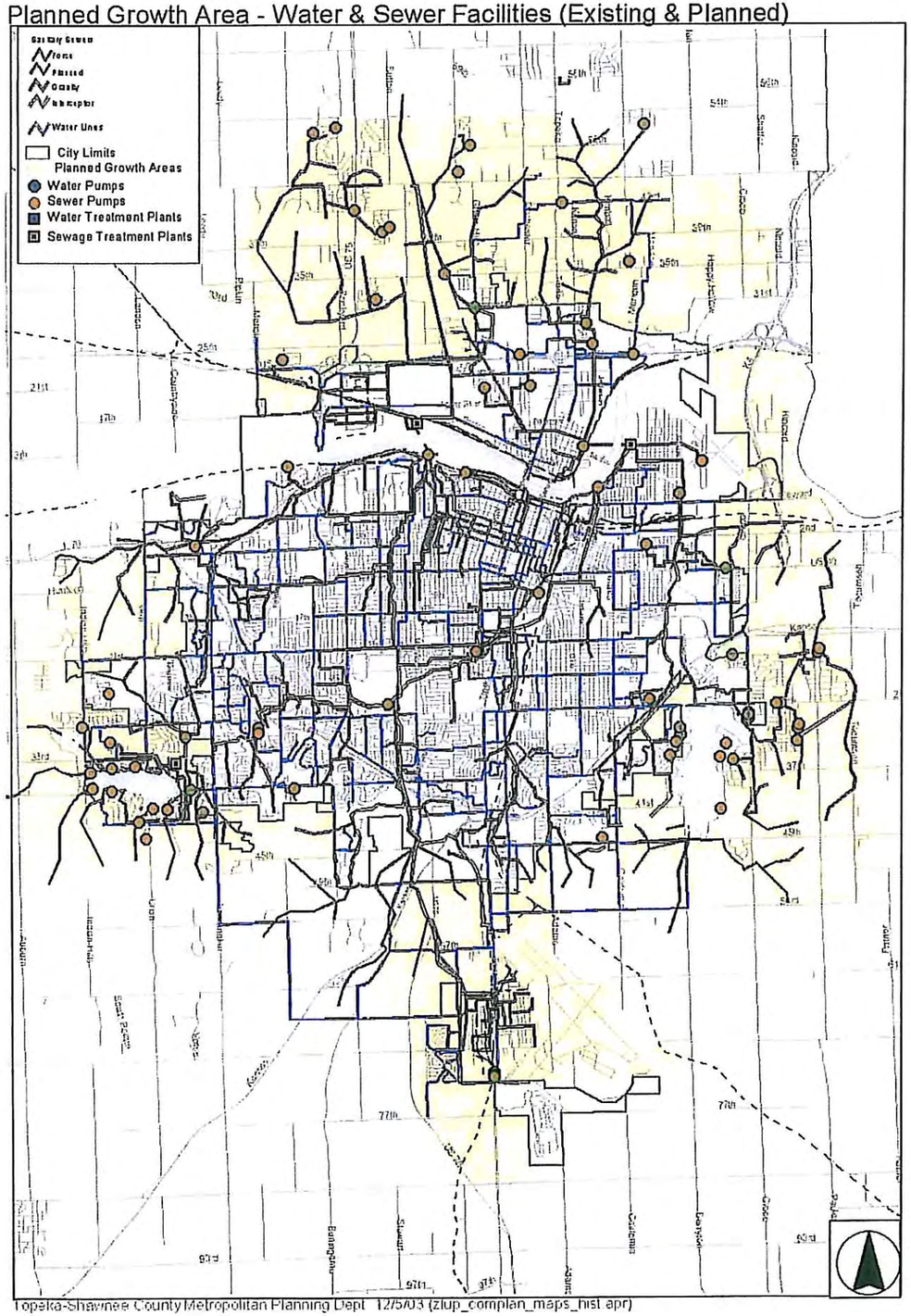
Topeka-Shawnee County Metropolitan Planning Dept. 12/04/03 (zlup_conlygrwth_portraits.apr)

Planned Urbanized Area - Institutional Areas w/Adjacent Uses



Topeka-Shawnee County Metropolitan Planning Dept. 5/2/01 zlup_institutional.apr

Planned Growth Area - Water & Sewer Facilities (Existing & Planned)



Topeka-Shawnee County Metropolitan Planning Dept 12/5/03 (zlup_complan_maps_hist apr)

MEMO

To: US 24 Corridor Topeka File

C:

Date: February 12, 2008

From: Randy Rowson

Subject: **State of Neighborhoods from 2025 Topeka/Shawnee County Plan**

2025 Topeka/Shawnee County Comprehensive Metropolitan Plan – City of Topeka (based on 1990 census data).

The State of Neighborhoods use three types of measures to rate the relative health of each neighborhood. The measures include Vital Signs, stability indicators, and revitalization potential.

Vital signs are a composite of these five measures – Poverty, Public Safety, Residential Property Values, Single Family Housing Tenure, and Boarded Houses. Each vital sign has a rating of most desirable (4 points) to least desirable (1 points). The total the points were averaged (divided by five) and broken into the following health classifications.

Healthy (3.3 to 4.0 averages) – Optimal condition
Out Patient (2.7 to 3.2 averages) – Favorable condition
At Risk (1.9 to 2.6 averages) – emerging negative condition
Intensive Care (1.0 to 1.8 averages) – seriously distressed condition

Stability Indicators measure whether or not a neighborhood is getting better of worse. The stability measures are: Population Change, New residential/Demolition Ratio, Median Residential Sale Price, School Attendance Rates, School Enrollment.

Revitalization Potential identifies the neighborhood's strengths, opportunities, and assets.

Neighborhood Diagnoses is a compilation of the above elements.

The US 24 study area has four neighborhoods identified. They are Shorey (east of Topeka Blvd.), Historic North Topeka (north), Historic North Topeka (south), and North Topeka East Neighborhoods.

At Risk – Shorey and Historic North Topeka (South), Historic North Topeka (north)
Out Patient - North Topeka East. The US 24 areas surrounding these neighborhoods are rated either Healthy or Out Patient.

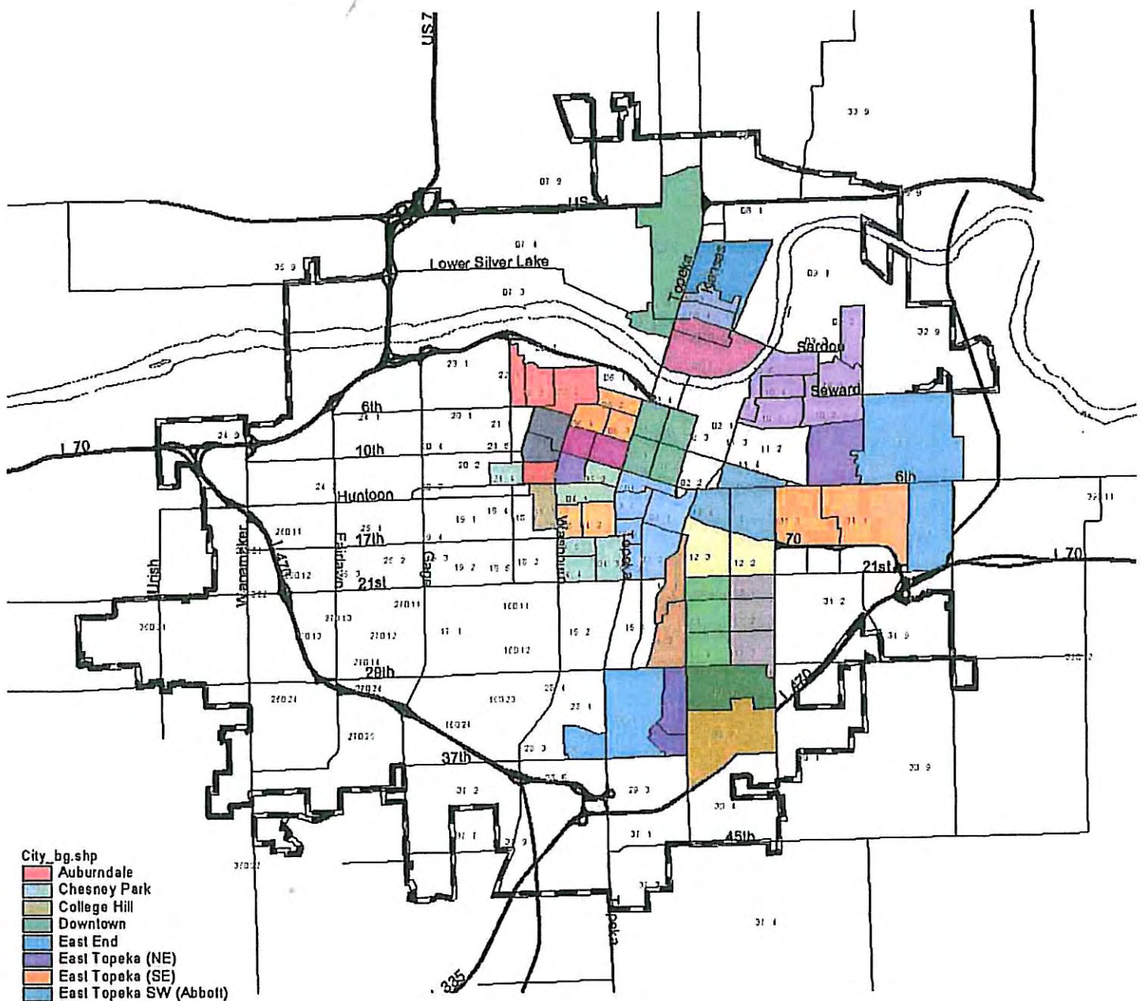
10401 Holmes Road, Suite 210, Kansas City, MO 64131
p 816.942.3570 f 816.942.3577 www.WilburSmith.com

Historic North Topeka (South) does have a section rated Intensive Care. The area is from Morse Street south about two blocks between Topeka Blvd. and Russ Avenue.

Shorey Estates is identified as a success story. A former public housing complex was redeveloped into 24 units of mixed income single family homes.

The plan also identifies numerous goals and action plan items.

Map #7
Neighborhood Areas



City_bg.shp
- Auburndale
- Chesney Park
- College Hill
- Downtown
- East End
- East Topeka (NE)
- East Topeka (SE)
- East Topeka SW (Abbott)
- Elmhurst
- Hi-Crest (NE)
- Hi-Crest (SE)
- Hi-Crest (West)
- Highland Park (East)
- Highland Park (North)
- Highland Park (West)
- Historic North Topeka (North)
- Historic North Topeka (South)
- Holliday Park (North)
- Holliday Park (South)
- Jefferson Square
- Monroe
- North Topeka East
- Oakland
- Old Town (East)
- Old Town (West)
- Potwin/Kenwood
- Randolph
- Scott
- Shorey
- South Topeka
- Tennessee Town
- Ward Meade

N
W E
S

Kansas River
City Limits

1" = 9,000'

Topeka - Shawnee County Metropolitan Planning Department, 2000

MEMO **To:** US 24 Corridor Topeka File

C:

Date: May 5, 2008

From: Chris Nazar

Subject: **Historic North Topeka Revitalization Plan Abstract**

Historic North Topeka Revitalization Plan, 1999

This is a neighborhood plan that focuses on the area bordering the south part of the US-24 Highway Corridor Study Area. As such, notes are focused on those features of the plan that could pertain to US-24, Kansas Avenue, and Topeka Boulevard. Document provides some good history on North Topeka.

North Topeka on the Move Association (NOTOMA) completed a Strategic Action Plan in 1996 to revitalize north Topeka - focused on a larger area.

Goals of the Revitalization Plan and key points potentially pertinent to US-24:

1. To establish a predictable pattern of land use that preserves the viability of residential neighborhoods and promotes a destination oriented mixed use center and riverfront.
    - Identify single-family residential preserves and protect them from encroachment of incompatible land uses
    - Condense industrial districts and lessen negative impacts
    - Neighborhood friendly nodes and limit strip development
    - Encourage mobile home development as part of planned unit developments
2. Develop an urban entertainment, dining, retail, cultural, and living district that utilizes assets of N. Kansas Avenue business district, Great Overland Station, riverfront, and historic buildings.
    - Promote a walkable setting and pedestrian oriented development
3. To provide a safer, greater, and more efficient means of access to, from, and within Historic North Topeka that will connect a diverse mix of land users.
    - Eliminate heavy truck traffic from the entertainment district and establish alternate heavy truck routes without unreasonably impacting residential areas.
4. Increase density of population and quality of housing options, both market-rate and affordable, that stabilizes the housing market.

    - Target larger strategic blocks for in-fill housing compatible with the neighborhood and concentrate rehabilitation improvements around them.
5. Communicate a notable image and unique experience of place within Focus Area by building off its physical and cultural heritage.
    - Establish gateways, edges, and streetscapes that reflect a positive first image and compliments the area's historic character.

Border areas closest to the US-24 Corridor are mixed use low intensity, mixed use medium intensity, and open space. See attached exhibit for proposed zoning.

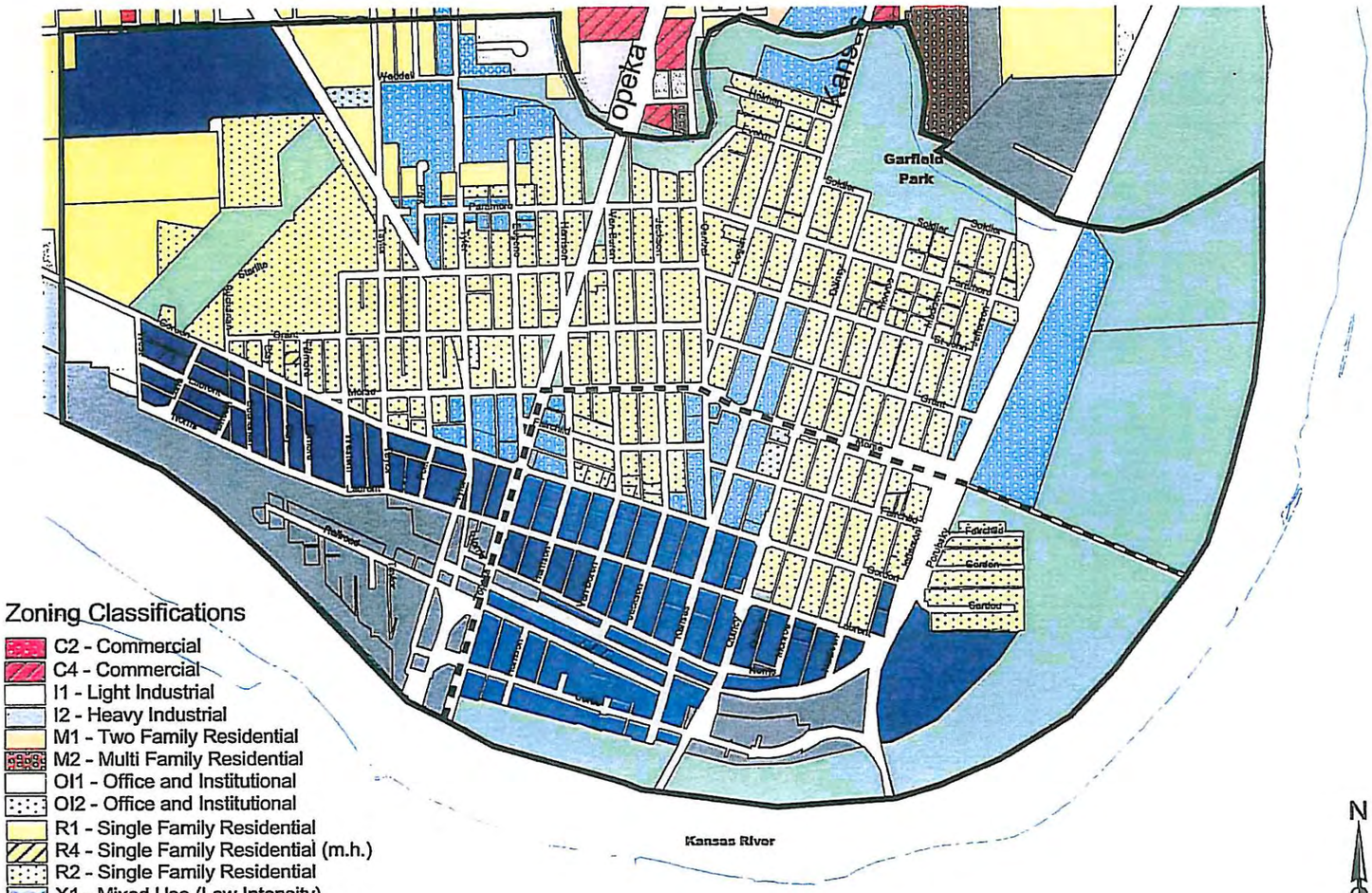
Topeka and Paramore is the Major Gateway point identified nearest to the US-24 Corridor Study Area.

Plan includes streetscape design guidelines. See attached exhibit.

Key recommendations for neighboring parks include:

- Garfield Park (23.7 acres) - Make part of regional trail system along old Soldier Creek channel. Maintain and upgrade as part of premier community park in North Topeka.
- Charles Curtis Greenway (linear) - Acquire properties as opportunities arise and complete greenway as buffer on highly traveled image corridor.

Proposed Zoning
Map #16



Zoning Classifications

- C2 - Commercial
- C4 - Commercial
- I1 - Light Industrial
- I2 - Heavy Industrial
- M1 - Two Family Residential
- M2 - Multi Family Residential
- OI1 - Office and Institutional
- OI2 - Office and Institutional
- R1 - Single Family Residential
- R4 - Single Family Residential (m.h.)
- R2 - Single Family Residential
- X1 - Mixed Use (Low Intensity)
- X2 - Mixed Use (Medium Intensity)
- X3 - Mixed Use (North Crossings)
- OS - Open Space

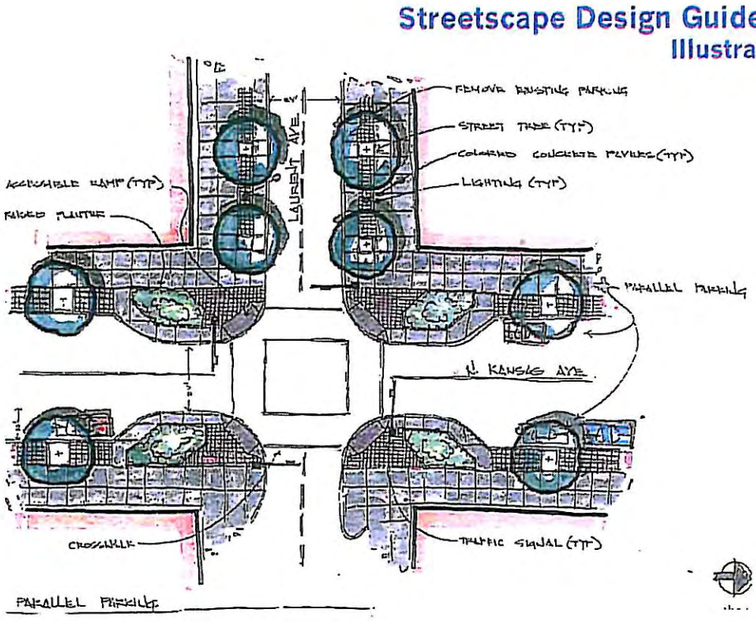
N

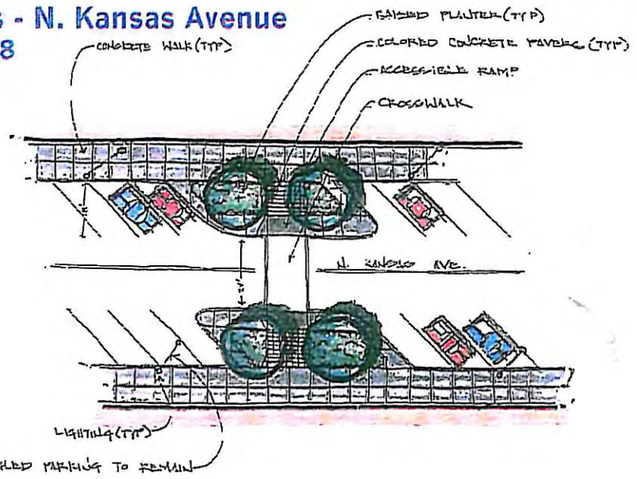
1"=1200'

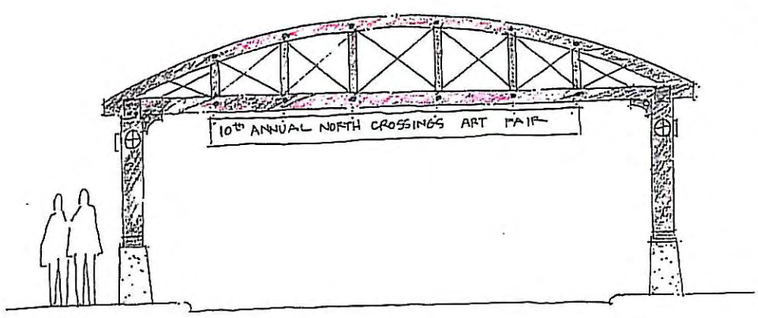
Topeka - Shawnee County Metropolitan Planning Department 1999

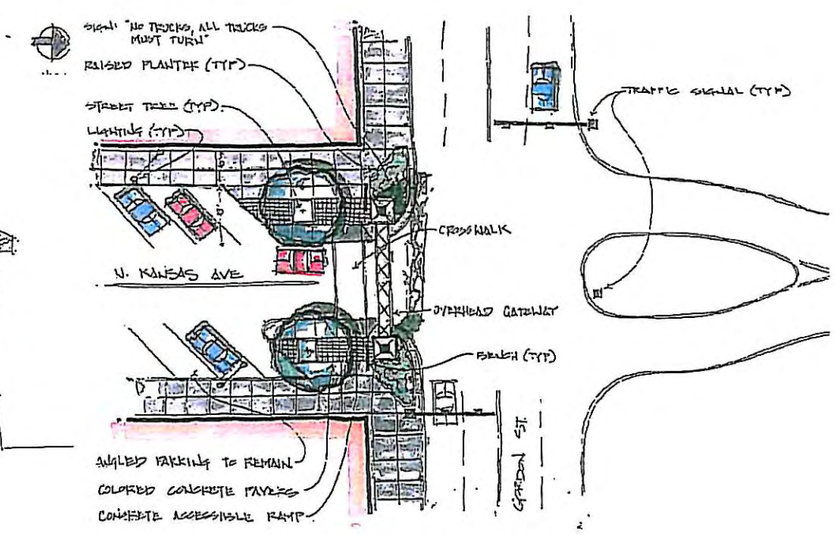
Historic North Topeka Revitalization Plan

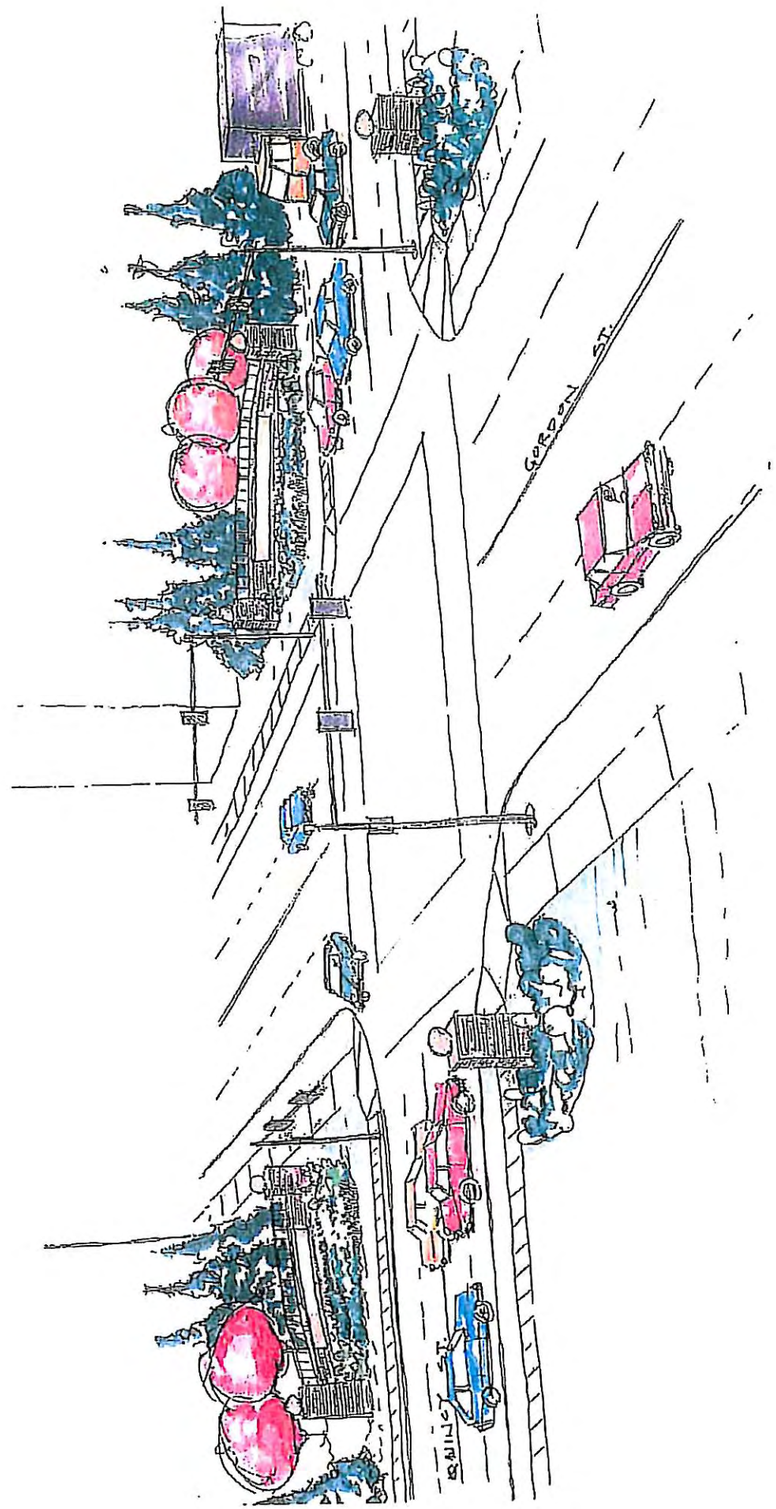
Streetscape Design Guidelines - N. Kansas Avenue
Illustration #8











Streetscape Design Guidelines - Major Gateway
Illustration #9

MEMO

To: US 24 Corridor Topeka File

C:

Date: May 5, 2008

From: Chris Nazar

Subject: **North Topeka Business Alliance 5-Year Strategic Plan**

North Topeka Business Alliance 5-Year Strategic Plan - August 1, 2006

The North Topeka Business Alliance, Inc. 5-Year Strategic Plan is responsible for creating and measuring economic development policies, plans, and priorities in North Topeka. The Plan will charter the future of North Topeka with an emphasis on business development (new and existing), land use, heritage, and image improvement.

The North Topeka Business Alliance envisions the business community north of the Kansas River, known as "North Topeka," as a vibrant business venue that will be a destination point for individuals who reside or are employed in Shawnee County and those who visit the Capital City of Kansas.

Plan identifies four distinctive sectors with strengths, weaknesses, opportunities and threats. The three sectors and associated points that apply to the US-24 Corridor Study are as follows:

1. Topeka Boulevard Corridor

    - Strengths: existing long term businesses; major traffic artery; streetscapes
    - Weaknesses: code and zoning - mixed use; non-aesthetic properties
    - Threats: disinterested property owners; lack of specific project funding
    - Opportunities: development - dining and entertainment
    - Objectives: funding; infrastructure improvements including widening from US-24 to North 94th Street.

2. US-24 Corridor

    - Strengths: core development; transportation system; existing anchors
    - Weaknesses: code and zoning restrictions; land speculation
    - Threats: lack of national family dining facilities; disinterested property owners; infrastructure funding
    - Opportunities: economic development funds; new businesses
    - Objectives: US-24 is in the middle of expanded retail growth, which should enhance the market appeal of anchors that could generate economic activity. Wal-Mart as an initial and critical draw for customers. Signature restaurants with mass appeal should become viable. Entertainment attractions such as movie theaters, game-based emporiums, and family entertainment centers will enhance

market appeal while increasing retail shopping opportunities. Another priority is to coordinate with the Greater Topeka Chamber of Commerce to search out signature restaurants, retailers and entertainment attractions.

3. North Kansas Avenue Corridor

- Strengths: major traffic artery; existing long-term businesses; direct access to US-24
- Weaknesses: code and zoning - mixed use; non-aesthetic properties; limited land for development
- Threats: disinterested property owners; lack of specific project funding; lack of interest in corridor development
- Opportunities: business development extension from US-24 corridor
- Objectives: existing business expansion; while this area is part of the down zoning plan, consideration is given for potential for new business applications as a result of economic development of the Historic-Riverfront and US-24 Corridors.

MEMO

To: US 24 Corridor Topeka File

C:

Date: May 5, 2008

From: Chris Nazar

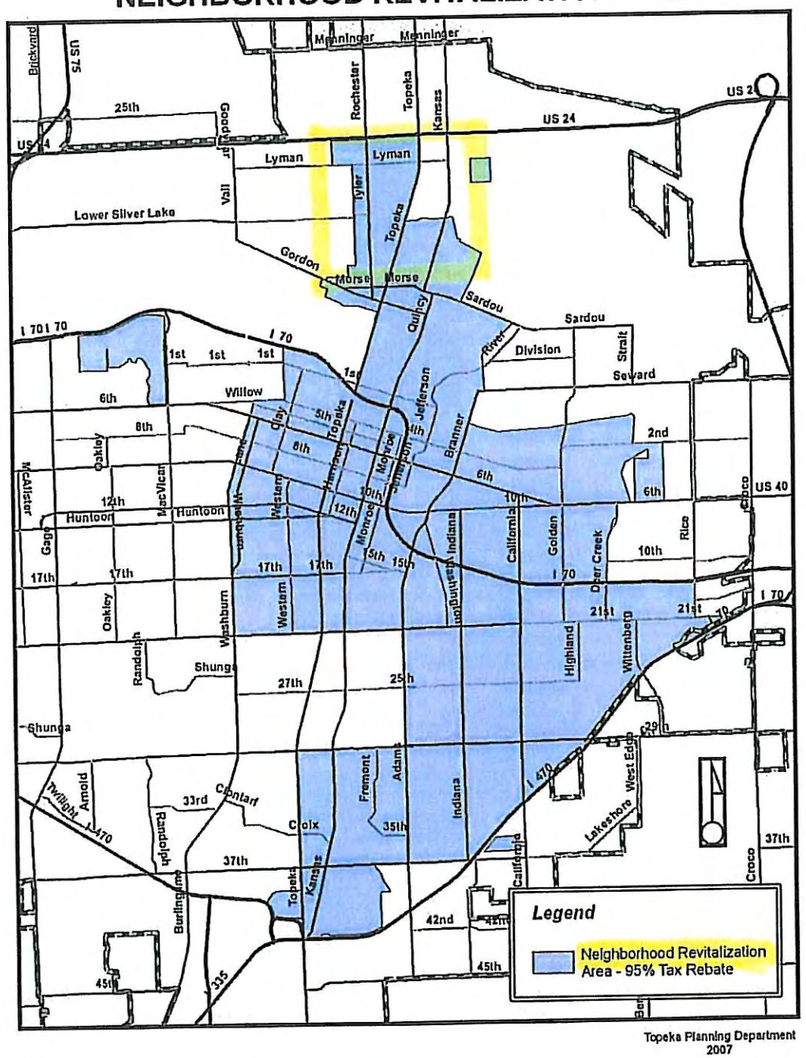
Subject: **Topeka Neighborhood Revitalization Plan**

Topeka Neighborhood Revitalization Plan - January 1, 2007

The plan is intended to promote the revitalization of the inner urban area - referred to as the "Neighborhood Revitalization Area" of the City of Topeka through the rehabilitation, conservation, and redevelopment of the area. Plan is ordinance driven and includes a property tax rebate up to 95% for certain improvements that raise the appraised value of residential property by 10% or appraised value of commercial property by 20%.

Small portion of the area is in or adjacent to the US-24 Corridor Study Area. See attached map.

MAP #1
NEIGHBORHOOD REVITALIZATION AREA

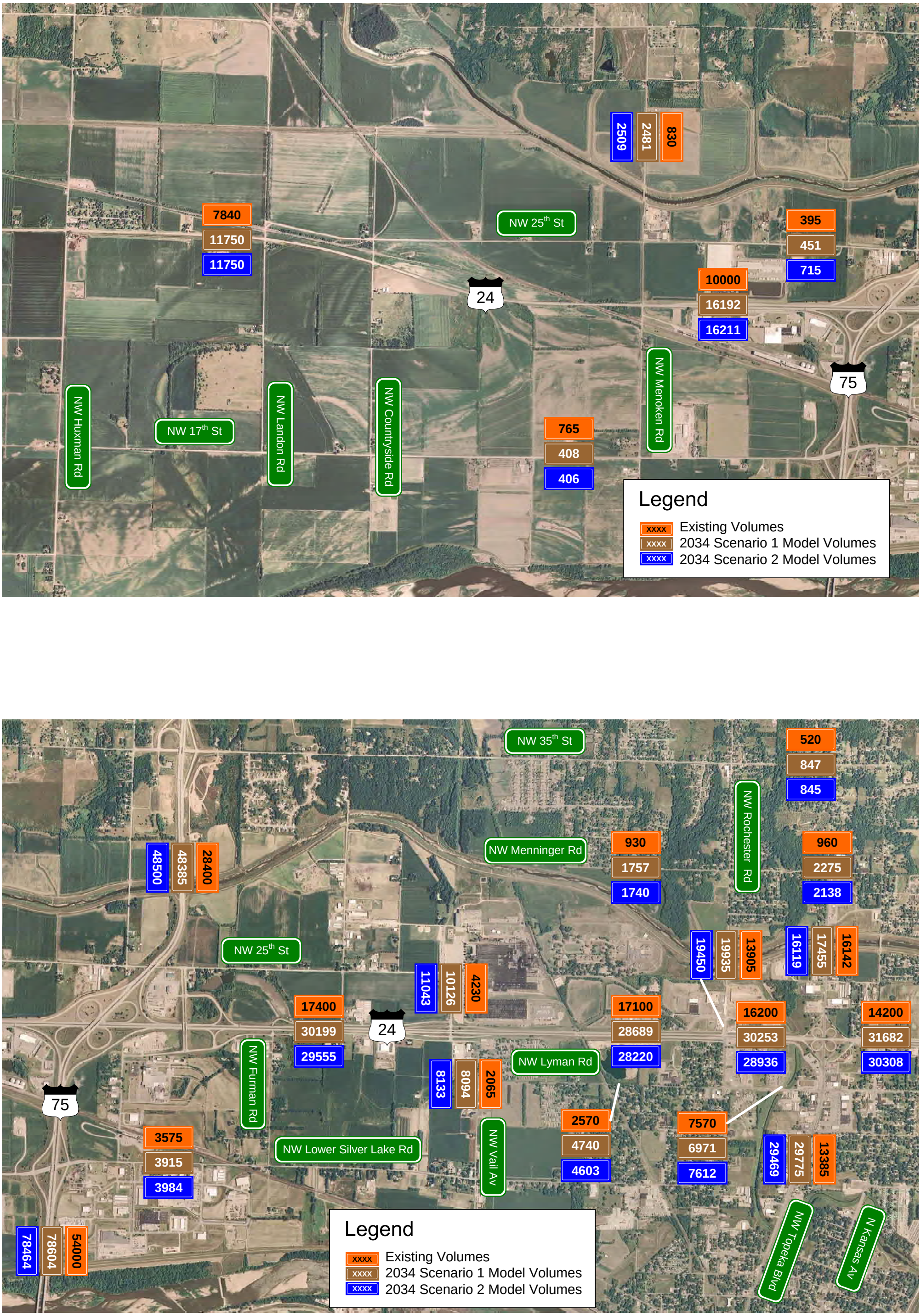


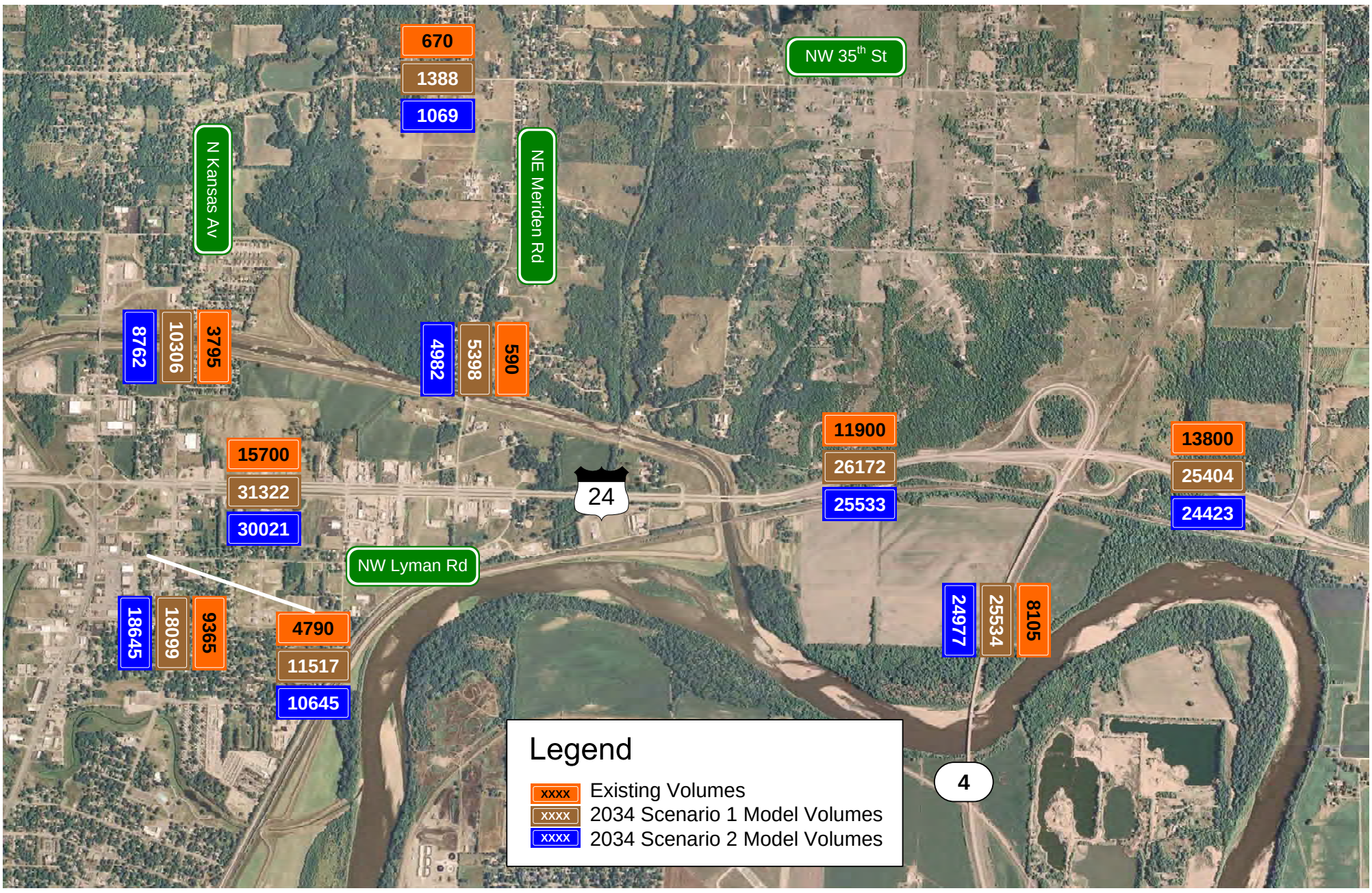
Topeka Planning Department
2007

APPENDIX B – TRANSPORTATION

- Corridor Existing and Projected Traffic Volume Summary
- Existing Traffic Volume Data
- Existing and Projected Traffic Volume Assignment Plots
- Corridor Partnership Agreement

Corridor Existing and Projected Traffic Volume Summary





Existing Traffic Volume Data

CITY OF TOPEKA
Public Works Department
Engineering Division - Traffic Section
NW Lyman Rd. & NW Topeka Blvd.

Weather:
Counted By: CDR
Counter #: 1
Other: Turning Movement Count

File Name : LYMAN & TOPEKA(08)
Site Code : 00000001
Start Date : 2/26/2008
Page No : 1

Groups Printed- Total Vehicles

	NW Topeka Blvd. From North				NW Lyman Rd. From East				NW Topeka Blvd. From South				NW Lyman Rd. From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	9	123	7	139	11	7	9	27	4	24	7	35	27	12	5	44	245
07:15 AM	9	135	10	154	9	13	7	29	4	37	10	51	22	8	5	35	269
07:30 AM	15	172	18	205	4	16	11	31	10	49	23	82	41	18	17	76	394
07:45 AM	6	155	17	178	8	11	11	30	7	50	19	76	30	17	8	55	339
Total	39	585	52	676	32	47	38	117	25	160	59	244	120	55	35	210	1247
08:00 AM	10	97	11	118	3	13	1	17	3	49	12	64	17	11	10	38	237
08:15 AM	4	68	13	85	8	14	8	30	4	56	22	82	21	10	5	36	233
08:30 AM	7	69	16	92	17	15	12	44	5	49	18	72	27	21	9	57	265
08:45 AM	7	78	13	98	15	11	12	38	3	44	18	65	25	14	12	51	252
Total	28	312	53	393	43	53	33	129	15	198	70	283	90	56	36	182	987
04:00 PM	11	70	17	98	28	42	9	79	15	122	48	185	47	34	15	96	458
04:15 PM	7	87	23	117	29	32	9	70	11	148	48	207	32	36	17	85	479
04:30 PM	10	103	27	140	34	28	14	76	14	166	57	237	57	25	25	107	560
04:45 PM	12	81	14	107	35	26	13	74	23	178	50	251	59	26	15	100	532
Total	40	341	81	462	126	128	45	299	63	614	203	880	195	121	72	388	2029
05:00 PM	19	95	21	135	33	32	15	80	15	185	41	241	47	41	15	103	559
05:15 PM	9	91	24	124	30	46	20	96	12	162	42	216	63	38	18	119	555
05:30 PM	6	84	15	105	32	24	9	65	6	157	32	195	38	35	16	89	454
05:45 PM	14	80	15	109	28	27	10	65	7	122	44	173	31	27	16	74	421
Total	48	350	75	473	123	129	54	306	40	626	159	825	179	141	65	385	1989
Grand Total	155	1588	261	2004	324	357	170	851	143	1598	491	2232	584	373	208	1165	6252
Apprch %	7.7	79.2	13		38.1	42	20		6.4	71.6	22		50.1	32	17.9		
Total %	2.5	25.4	4.2	32.1	5.2	5.7	2.7	13.6	2.3	25.6	7.9	35.7	9.3	6	3.3	18.6	

CITY OF TOPEKA

Public Works Department
Engineering Division - Traffic Section
NW Menninger Rd. & NW Topeka Blvd.

Weather: Partly Cloudy, Dry
Counted By: CDR
Counter #: 1
Other: Manual Turning Movement Count

File Name : MENNINGER & TOPEKA_08
Site Code : 00000001
Start Date : 2/28/2008
Page No : 1

Groups Printed- Total Vehicles

	From North					From East					From South					From West					
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07:30 AM	1	174	9	0	184	0	1	16	0	17	11	48	0	0	59	3	0	0	0	3	263
07:45 AM	3	142	8	0	153	4	1	11	0	16	9	31	3	0	43	5	5	0	0	10	222
Total	7	545	35	0	587	12	5	37	0	54	32	138	5	0	175	20	10	1	0	31	847
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08:30 AM	4	57	4	0	65	0	1	4	0	5	0	35	2	0	37	3	7	1	0	11	118
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Total	8	298	31	0	337	13	8	26	0	47	19	116	10	0	145	14	13	5	0	32	561
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04:30 PM	1	68	4	0	73	4	2	3	0	9	4	101	3	0	108	3	3	1	0	7	197
04:45 PM	1	68	4	0	73	5	2	1	0	8	6	129	7	0	142	6	1	0	0	7	230
Total	10	244	18	0	272	25	17	32	0	74	25	429	28	0	482	13	11	5	0	29	857
05:00 PM	1	50	9	0	60	5	3	6	0	14	7	126	11	0	144	2	7	4	0	13	231
05:15 PM	0	55	3	0	58	5	4	3	0	12	10	147	9	0	166	4	2	1	0	7	243
05:30 PM	3	62	1	0	66	9	3	3	0	15	8	111	11	0	130	6	3	1	0	10	221
05:45 PM	4	64	0	0	68	0	0	0	0	0	4	99	7	0	110	6	5	1	0	12	190
Total	8	231	13	0	252	19	10	12	0	41	29	483	38	0	550	18	17	7	0	42	885
Grand Total	33	1318	97	0	1448	69	40	107	0	216	105	1166	81	0	1352	65	51	18	0	134	3150
Apprch %	2.3	91	6.7	0		31.9	18.5	49.5	0		7.8	86.2	6	0		48.5	38.1	13.4	0		
Total %	1	41.8	3.1	0	46	2.2	1.3	3.4	0	6.9	3.3	37	2.6	0	42.9	2.1	1.6	0.6	0	4.3	

City of Topeka

Public Works Department
Engineering Division - Traffic Section
N Kansas Ave & NW Lyman Rd Turning Movement

Weather:
Counted By: Kent Pelton
Counter #: 2
Other: TM

File Name : Kansas & Lyman TM
Site Code : 00000000
Start Date : 2/26/2008
Page No : 1

Groups Printed- Unshifted

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07:30 AM	1	137	27	165	3	7	9	19	5	43	1	49	9	6	19	34	267
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08:00 AM	5	68	6	79	1	3	4	8	9	33	2	44	2	8	20	30	161
08:15 AM	8	62	16	86	1	5	3	9	6	46	2	54	8	9	13	30	179
08:30 AM	2	62	18	82	4	11	8	23	9	37	3	49	7	14	19	40	194
08:45 AM	6	51	16	73	3	9	3	15	9	30	3	42	7	4	17	28	158
Total	21	243	56	320	9	28	18	55	33	146	10	189	24	35	69	128	692

*** BREAK ***

04:00 PM	3	54	21	78	3	14	9	26	29	89	7	125	22	12	24	58	287
04:15 PM	5	52	26	83	0	6	8	14	23	97	4	124	24	5	26	55	276
04:30 PM	7	48	18	73	1	5	7	13	26	93	0	119	14	7	23	44	249
04:45 PM	5	62	29	96	1	10	3	14	16	115	8	139	25	8	18	51	300
Total	20	216	94	330	5	35	27	67	94	394	19	507	85	32	91	208	1112
05:00 PM	5	53	33	91	2	10	7	19	20	117	1	138	30	8	26	64	312
05:15 PM	5	69	26	100	1	6	8	15	40	153	7	200	34	12	27	73	388
05:30 PM	2	52	17	71	4	7	2	13	17	83	1	101	18	8	26	52	237
05:45 PM	6	51	19	76	5	12	5	22	21	84	2	107	20	7	15	42	247
Total	18	225	95	338	12	35	22	69	98	437	11	546	102	35	94	231	1184
Grand Total	76	1085	330	1491	31	118	98	247	258	1123	44	1425	241	120	315	676	3839
Apprch %	5.1	72.8	22.1		12.6	47.8	39.7		18.1	78.8	3.1		35.7	17.8	46.6		
Total %	2	28.3	8.6	38.8	0.8	3.1	2.6	6.4	6.7	29.3	1.1	37.1	6.3	3.1	8.2	17.6	

City of Topeka

Public Works Department
Engineering Division - Traffic Section
N Kansas Ave & NW Lyman Rd Turning Movement

Weather:
Counted By: Kent Pelton
Counter #: 2
Other: TM

File Name : Lyman & Tyler TM
Site Code : 00000000
Start Date : 2/27/2008
Page No : 1

Groups Printed- Unshifted

	TYLER From North				LYMAN From East				TYLER From South				LYMAN From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	25	14	51	0	18	6	24	3	9	2	14	11	18	3	32	121
07:15 AM	16	27	22	65	3	18	9	30	2	10	5	17	12	32	3	47	159
07:30 AM	23	33	26	82	3	32	16	51	11	21	8	40	33	51	12	96	269
07:45 AM	32	36	23	91	2	13	7	22	4	13	3	20	22	20	12	54	187
Total	83	121	85	289	8	81	38	127	20	53	18	91	78	121	30	229	736
08:00 AM	16	27	10	53	4	17	9	30	1	11	1	13	22	28	1	51	147
08:15 AM	17	21	9	47	4	16	10	30	2	10	6	18	11	17	4	32	127
08:30 AM	24	15	10	49	5	17	20	42	2	12	7	21	17	35	1	53	165
08:45 AM	25	26	9	60	4	15	17	36	3	13	5	21	18	33	4	55	172
Total	82	89	38	209	17	65	56	138	8	46	19	73	68	113	10	191	611
*** BREAK ***																	
04:00 PM	48	12	15	75	7	30	38	75	3	19	8	30	27	46	5	78	258
04:15 PM	44	29	21	94	7	29	39	75	6	29	10	45	22	33	6	61	275
04:30 PM	35	35	16	86	9	27	59	95	1	35	11	47	25	30	7	62	290
04:45 PM	49	25	20	94	4	32	27	63	5	47	9	61	24	23	2	49	267
Total	176	101	72	349	27	118	163	308	15	130	38	183	98	132	20	250	1090
05:00 PM	50	27	15	92	9	38	35	82	6	27	9	42	30	36	3	69	285
05:15 PM	51	34	19	104	9	36	48	93	4	49	15	68	23	35	8	66	331
05:30 PM	42	17	24	83	2	35	34	71	2	32	13	47	15	41	4	60	261
05:45 PM	38	23	19	80	3	24	38	65	3	28	9	40	20	28	7	55	240
Total	181	101	77	359	23	133	155	311	15	136	46	197	88	140	22	250	1117
Grand Total	522	412	272	1206	75	397	412	884	58	365	121	544	332	506	82	920	3554
Apprch %	43.3	34.2	22.6		8.5	44.9	46.6		10.7	67.1	22.2		36.1	55	8.9		
Total %	14.7	11.6	7.7	33.9	2.1	11.2	11.6	24.9	1.6	10.3	3.4	15.3	9.3	14.2	2.3	25.9	

City of Topeka

Public Works Department
Engineering Division - Traffic Section
N Kansas Ave & NW Lyman Rd Turning Movement

Weather:
Counted By: Kent Pelton
Counter #: 2
Other: TM

File Name : menninger & Rochester1 TM
Site Code : 00000000
Start Date : 2/28/2008
Page No : 1

Groups Printed- Unshifted

	ROCHESTER From North				MENNIGER From East				ROCHESTER From South				MENNIGER From West				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	41	1	43	3	0	1	4	3	16	2	21	0	5	15	20	88
07:15 AM	2	59	0	61	8	2	2	12	1	29	3	33	0	3	10	13	119
07:30 AM	1	66	1	68	3	0	2	5	3	38	2	43	0	0	21	21	137
07:45 AM	3	65	1	69	4	1	6	11	1	22	6	29	0	1	8	9	118
Total	7	231	3	241	18	3	11	32	8	105	13	126	0	9	54	63	462
08:00 AM	1	42	2	45	6	1	1	8	4	15	3	22	0	3	1	4	79
08:15 AM	2	28	0	30	3	1	5	9	1	21	0	22	1	3	8	12	73
08:30 AM	3	29	0	32	4	2	4	10	3	17	4	24	0	3	4	7	73
08:45 AM	1	25	0	26	4	1	0	5	0	15	0	15	0	0	5	5	51
Total	7	124	2	133	17	5	10	32	8	68	7	83	1	9	18	28	276
*** BREAK ***																	
04:00 PM	2	33	1	36	3	2	2	7	12	89	7	108	1	1	6	8	159
04:15 PM	1	49	0	50	12	3	5	20	6	83	7	96	0	0	8	8	174
04:30 PM	2	43	2	47	2	2	0	4	11	54	5	70	2	0	4	6	127
04:45 PM	2	42	1	45	6	2	3	11	6	111	7	124	1	0	9	10	190
Total	7	167	4	178	23	9	10	42	35	337	26	398	4	1	27	32	650
05:00 PM	3	36	0	39	5	3	1	9	10	112	12	134	2	0	3	5	187
05:15 PM	1	44	1	46	7	1	3	11	15	88	4	107	0	0	5	5	169
05:30 PM	3	45	0	48	6	9	2	17	10	89	6	105	0	2	6	8	178
05:45 PM	1	44	0	45	4	2	0	6	9	65	8	82	1	2	6	9	142
Total	8	169	1	178	22	15	6	43	44	354	30	428	3	4	20	27	676
Grand Total	29	691	10	730	80	32	37	149	95	864	76	1035	8	23	119	150	2064
Apprch %	4	94.7	1.4		53.7	21.5	24.8		9.2	83.5	7.3		5.3	15.3	79.3		
Total %	1.4	33.5	0.5	35.4	3.9	1.6	1.8	7.2	4.6	41.9	3.7	50.1	0.4	1.1	5.8	7.3	

701 P Street, Suite 302
Lincoln, NE 68508
(402) 476-5101

File Name : 25th and Rochester
Site Code : 00000000
Start Date : 3/6/2008
Page No : 1

Groups Printed- Unshifted

	ROCHESTER From North					25 From East					ROCHESTER From South					25 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	45	2	1	48	10	0	1	1	12	24	26	7	2	59	1	1	20	6	28	147
07:15 AM	1	78	9	7	95	8	0	0	0	8	39	46	7	3	95	1	0	19	1	21	219
07:30 AM	0	97	3	5	105	9	1	0	2	12	59	61	10	4	134	0	0	19	1	20	271
07:45 AM	3	67	6	1	77	19	0	0	1	20	52	44	10	3	109	0	3	25	2	30	236
Total	4	287	20	14	325	46	1	1	4	52	174	177	34	12	397	2	4	83	10	99	873
08:00 AM	2	51	2	1	56	7	1	0	1	9	40	31	6	4	81	0	1	27	0	28	174
08:15 AM	2	49	5	0	56	11	0	1	2	14	29	29	8	3	69	0	1	23	2	26	165
08:30 AM	0	46	5	2	53	15	1	2	2	20	26	24	23	2	75	0	0	27	1	28	176
08:45 AM	0	44	2	0	46	9	2	0	0	11	34	25	15	5	79	0	2	16	0	18	154
Total	4	190	14	3	211	42	4	3	5	54	129	109	52	14	304	0	4	93	3	100	669
04:00 PM	3	69	2	1	75	48	2	5	1	56	63	79	31	2	175	5	3	42	0	50	356
04:15 PM	0	73	1	2	76	32	5	4	0	41	62	83	28	3	176	6	2	55	0	63	356
04:30 PM	1	69	2	0	72	36	3	11	1	51	64	80	24	2	170	6	3	41	0	50	343
04:45 PM	3	80	1	0	84	47	4	10	1	62	97	100	31	2	230	8	3	47	1	59	435
Total	7	291	6	3	307	163	14	30	3	210	286	342	114	9	751	25	11	185	1	222	1490
05:00 PM	2	93	3	2	100	52	9	16	1	78	66	88	36	3	193	2	2	95	1	100	471
05:15 PM	3	78	5	0	86	37	5	14	0	56	86	102	48	0	236	7	4	58	0	69	447
05:30 PM	2	76	4	1	83	40	5	9	1	55	52	80	31	0	163	5	3	57	0	65	366
05:45 PM	2	65	4	0	71	43	3	14	0	60	65	65	27	1	158	5	2	39	0	46	335
Total	9	312	16	3	340	172	22	53	2	249	269	335	142	4	750	19	11	249	1	280	1619
Grand Total	24	1080	56	23	1183	423	41	87	14	565	858	963	342	39	2202	46	30	610	15	701	4651
Apprch %	2	91.3	4.7	1.9		74.9	7.3	15.4	2.5		39	43.7	15.5	1.8		6.6	4.3	87	2.1		
Total %	0.5	23.2	1.2	0.5	25.4	9.1	0.9	1.9	0.3	12.1	18.4	20.7	7.4	0.8	47.3	1	0.6	13.1	0.3	15.1	

701 P Street, Suite 302
Lincoln, NE 68508
(402) 476-5101

File Name : Us Hwy 24 and Kansas
Site Code : 00000000
Start Date : 3/5/2008
Page No : 1

Groups Printed- Unshifted

	KANSAS From North					HWY 24 From East					KANSAS From South					HWY 24 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	4	42	16	0	62	36	101	1	0	138	27	9	6	0	42	5	67	21	0	93	335
07:15 AM	1	51	6	0	58	52	120	6	0	178	24	16	5	0	45	7	86	18	0	111	392
07:30 AM	9	55	26	0	90	62	171	4	0	237	23	11	9	0	43	7	93	16	0	116	486
07:45 AM	9	46	10	0	65	55	122	7	0	184	20	14	19	0	53	8	82	37	0	127	429
Total	23	194	58	0	275	205	514	18	0	737	94	50	39	0	183	27	328	92	0	447	1642
08:00 AM	8	28	13	0	49	36	99	11	0	146	15	8	18	0	41	9	52	13	0	74	310
08:15 AM	3	33	10	0	46	32	90	1	0	123	23	8	10	0	41	2	59	23	0	84	294
08:30 AM	1	27	6	0	34	23	86	2	0	111	27	12	13	0	52	8	65	19	0	92	289
08:45 AM	3	18	5	0	26	37	96	0	0	133	29	17	14	0	60	3	64	8	0	75	294
Total	15	106	34	0	155	128	371	14	0	513	94	45	55	0	194	22	240	63	0	325	1187
04:00 PM	10	17	13	0	40	34	105	2	0	141	45	30	46	0	121	19	134	30	0	183	485
04:15 PM	2	20	8	0	30	31	103	5	0	139	42	36	44	0	122	11	145	28	0	184	475
04:30 PM	5	33	11	0	49	30	115	6	0	151	38	36	37	0	111	40	144	29	0	213	524
04:45 PM	2	24	7	0	33	31	91	8	0	130	46	39	54	0	139	18	139	31	0	188	490
Total	19	94	39	0	152	126	414	21	0	561	171	141	181	0	493	88	562	118	0	768	1974
05:00 PM	5	29	13	0	47	28	116	7	0	151	56	59	55	0	170	19	169	28	0	216	584
05:15 PM	5	19	9	0	33	26	106	6	1	139	57	55	59	0	171	26	159	36	0	221	564
05:30 PM	11	24	17	0	52	29	96	8	0	133	45	46	47	0	138	15	153	29	0	197	520
05:45 PM	2	16	7	0	25	26	79	9	0	114	40	23	24	0	87	17	140	22	0	179	405
Total	23	88	46	0	157	109	397	30	1	537	198	183	185	0	566	77	621	115	0	813	2073
Grand Total	80	482	177	0	739	568	1696	83	1	2348	557	419	460	0	1436	214	1751	388	0	2353	6876
Apprch %	10.8	65.2	24	0		24.2	72.2	3.5	0		38.8	29.2	32	0		9.1	74.4	16.5	0		
Total %	1.2	7	2.6	0	10.7	8.3	24.7	1.2	0	34.1	8.1	6.1	6.7	0	20.9	3.1	25.5	5.6	0	34.2	

701 P Street, Suite 302
Lincoln, NE 68508
(402) 476-5101

File Name : US Hwy 24 and Rochester(Tyler)
Site Code : 00000000
Start Date : 3/5/2008
Page No : 1

Groups Printed- Unshifted

	TYLER From North					US24 From East					TYLER From South					US24 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	30	37	23	6	96	16	97	11	2	126	14	19	3	3	39	40	110	18	5	173	434
07:15 AM	20	53	25	12	110	20	84	16	7	127	12	34	8	7	61	49	109	25	11	194	492
07:30 AM	26	64	26	4	120	25	175	13	12	225	23	53	16	5	97	36	125	34	11	206	648
07:45 AM	34	61	25	3	123	19	121	22	4	166	15	31	9	2	57	44	133	37	11	225	571
Total	110	215	99	25	449	80	477	62	25	644	64	137	36	17	254	169	477	114	38	798	2145
08:00 AM	21	33	17	4	75	7	107	17	9	140	15	27	6	4	52	32	78	18	8	136	403
08:15 AM	29	29	16	1	75	5	103	18	14	140	13	24	14	8	59	22	68	23	8	121	395
08:30 AM	25	39	27	2	93	7	96	19	9	131	18	22	7	2	49	21	78	20	13	132	405
08:45 AM	17	29	11	4	61	13	107	29	12	161	12	19	1	4	36	16	80	18	8	122	380
Total	92	130	71	11	304	32	413	83	44	572	58	92	28	18	196	91	304	79	37	511	1583
04:00 PM	82	65	43	3	193	12	120	40	9	181	26	71	7	0	104	57	127	31	14	229	707
04:15 PM	69	30	42	3	144	13	132	30	9	184	20	59	7	1	87	76	135	32	8	251	666
04:30 PM	74	48	55	3	180	11	135	40	4	190	29	87	7	0	123	52	141	30	9	232	725
04:45 PM	95	60	42	0	197	13	147	32	7	199	24	79	13	1	117	71	131	28	6	236	749
Total	320	203	182	9	714	49	534	142	29	754	99	296	34	2	431	256	534	121	37	948	2847
05:00 PM	85	78	60	1	224	13	129	42	5	189	27	74	13	1	115	62	154	32	9	257	785
05:15 PM	68	48	53	0	169	17	148	33	3	201	19	69	15	0	103	62	152	28	9	251	724
05:30 PM	74	57	53	4	188	12	128	49	6	195	16	79	13	0	108	50	122	33	4	209	700
05:45 PM	69	51	41	0	161	18	89	36	1	144	27	66	13	1	107	46	125	27	4	202	614
Total	296	234	207	5	742	60	494	160	15	729	89	288	54	2	433	220	553	120	26	919	2823
Grand Total	818	782	559	50	2209	221	1918	447	113	2699	310	813	152	39	1314	736	1868	434	138	3176	9398
Apprch %	37	35.4	25.3	2.3		8.2	71.1	16.6	4.2		23.6	61.9	11.6	3		23.2	58.8	13.7	4.3		
Total %	8.7	8.3	5.9	0.5	23.5	2.4	20.4	4.8	1.2	28.7	3.3	8.7	1.6	0.4	14	7.8	19.9	4.6	1.5	33.8	

701 P Street, Suite 302
Lincoln, NE 68508
(402) 476-5101

File Name : Us Hwy 24 and Topeka
Site Code : 00000000
Start Date : 3/6/2008
Page No : 1

Groups Printed- Unshifted

	TOPFKA From North					HWY 24 From East					TOPFKA From South					HWY 24 From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	10	106	0	0	116	0	0	0	0	0	22	24	8	0	54	15	0	27	0	42	212
07:15 AM	8	120	0	0	128	0	0	0	0	0	16	32	10	0	58	18	0	28	0	46	232
07:30 AM	12	189	0	0	201	0	0	0	0	0	24	36	9	0	69	22	0	24	0	46	316
07:45 AM	9	121	0	0	130	0	0	0	0	0	22	40	10	0	72	26	0	46	0	72	274
Total	39	536	0	0	575	0	0	0	0	0	84	132	37	0	253	81	0	125	0	206	1034
08:00 AM	11	89	0	0	100	0	0	0	0	0	22	33	16	0	71	24	0	31	0	55	226
08:15 AM	10	75	0	0	85	0	0	0	0	0	22	33	10	0	65	15	0	29	0	44	194
08:30 AM	8	74	0	0	82	0	0	0	0	0	29	50	8	0	87	7	0	20	0	27	196
08:45 AM	3	70	0	0	73	0	0	0	0	0	21	41	8	0	70	6	0	23	0	29	172
Total	32	308	0	0	340	0	0	0	0	0	94	157	42	0	293	52	0	103	0	155	788
04:00 PM	8	55	0	0	63	0	0	0	0	0	59	77	18	0	154	9	0	27	0	36	253
04:15 PM	14	69	0	0	83	0	0	0	0	0	67	108	27	0	202	21	0	64	0	85	370
04:30 PM	4	73	0	0	77	0	0	0	0	0	87	107	22	0	216	14	0	44	0	58	351
04:45 PM	13	70	0	0	83	0	0	0	0	0	75	114	21	0	210	13	0	42	0	55	348
Total	39	267	0	0	306	0	0	0	0	0	288	406	88	0	782	57	0	177	0	234	1322
05:00 PM	13	70	0	0	83	0	0	0	0	0	64	124	18	0	206	16	0	47	0	63	352
05:15 PM	6	80	0	0	86	0	0	0	0	0	61	121	27	0	209	15	0	57	0	72	367
05:30 PM	5	108	0	0	113	0	0	0	0	0	61	115	25	0	201	12	0	53	0	65	379
05:45 PM	11	66	0	0	77	0	0	0	0	0	59	98	32	0	189	9	0	55	0	64	330
Total	35	324	0	0	359	0	0	0	0	0	245	458	102	0	805	52	0	212	0	264	1428
Grand Total	145	1435	0	0	1580	0	0	0	0	0	711	1153	269	0	2133	242	0	617	0	859	4572
Apprch %	9.2	90.8	0	0		0	0	0	0		33.3	54.1	12.6	0		28.2	0	71.8	0		
Total %	3.2	31.4	0	0	34.6	0	0	0	0	0	15.6	25.2	5.9	0	46.7	5.3	0	13.5	0	18.8	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 18629
Hose Set #: 7

Site Code: 443
Station ID:
NW US Hwy 24
NW Topeka Blvd.

Start Time	10-Sep-08 Wed	EB to SB Ramp Morning	EB to SB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		0	62		
12:15		1	56		
12:30		3	54		
12:45		3	50	7	222
01:00		1	47		
01:15		0	45		
01:30		0	41		
01:45		4	44	5	177
02:00		4	36		
02:15		1	39		
02:30		7	56		
02:45		2	38	14	169
03:00		7	55		
03:15		1	48		
03:30		1	56		
03:45		2	52	11	211
04:00		4	44		
04:15		3	61		
04:30		1	50		
04:45		5	56	13	211
05:00		3	40		
05:15		7	60		
05:30		12	50		
05:45		9	38	31	188
06:00		18	35		
06:15		17	62		
06:30		23	33		
06:45		18	35	76	165
07:00		29	35		
07:15		47	27		
07:30		37	34		
07:45		44	32	157	128
08:00		38	27		
08:15		38	21		
08:30		25	28		
08:45		29	14	130	90
09:00		32	14		
09:15		36	8		
09:30		28	11		
09:45		45	1	141	34
10:00		30	13		
10:15		25	2		
10:30		28	12		
10:45		43	9	126	36
11:00		47	18		
11:15		52	7		
11:30		50	5		
11:45		53	3	202	33
Total		913	1664		
Percent		35.4%	64.6%		
Grand Total		913	1664		
Percent		35.4%	64.6%		
ADT		ADT 2,577		AADT 2,577	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 03770
Hose Set #: 22

Site Code: 000000000041
Station ID:
NW US Hwy 24
NW Topeka Blvd.

Start Time	10-Sep-08 Wed	EB to NB Ramp Morning	EB to NB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		0	9		
12:15		0	12		
12:30		0	12		
12:45		1	14	1	47
01:00		0	16		
01:15		0	12		
01:30		0	3		
01:45		0	14	0	45
02:00		0	14		
02:15		0	12		
02:30		1	8		
02:45		2	10	3	44
03:00		2	18		
03:15		0	22		
03:30		0	18		
03:45		0	34	2	92
04:00		0	16		
04:15		1	14		
04:30		0	16		
04:45		2	18	3	64
05:00		3	20		
05:15		2	12		
05:30		4	14		
05:45		6	22	15	68
06:00		2	10		
06:15		4	9		
06:30		8	4		
06:45		12	11	26	34
07:00		10	2		
07:15		15	8		
07:30		16	4		
07:45		30	5	71	19
08:00		22	6		
08:15		9	4		
08:30		20	4		
08:45		14	4	65	18
09:00		17	6		
09:15		6	1		
09:30		6	2		
09:45		5	0	34	9
10:00		8	2		
10:15		4	0		
10:30		12	0		
10:45		6	2	30	4
11:00		13	8		
11:15		8	2		
11:30		7	1		
11:45		14	0	42	11
Total		292	455		
Percent		39.1%	60.9%		
Grand Total		292	455		
Percent		39.1%	60.9%		
ADT		ADT 747		AADT 747	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 04393
Hose Set #: 14

Site Code: 000000001113
Station ID:
NW Topeka Blvd.
NW US Hwy 24

Start Time	10-Sep-08 Wed	NB to WB Ramp Morning	NB to WB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	62		
12:15		5	68		
12:30		0	57		
12:45		2	50	9	237
01:00		1	56		
01:15		0	64		
01:30		5	58		
01:45		0	62	6	240
02:00		0	35		
02:15		2	54		
02:30		1	58		
02:45		0	42	3	189
03:00		2	47		
03:15		0	54		
03:30		2	57		
03:45		1	59	5	217
04:00		0	77		
04:15		3	74		
04:30		6	73		
04:45		4	62	13	286
05:00		4	66		
05:15		6	80		
05:30		16	75		
05:45		19	61	45	282
06:00		8	54		
06:15		18	39		
06:30		28	49		
06:45		22	41	76	183
07:00		14	31		
07:15		16	20		
07:30		26	29		
07:45		25	25	81	105
08:00		32	35		
08:15		31	22		
08:30		24	33		
08:45		21	24	108	114
09:00		43	18		
09:15		22	26		
09:30		26	14		
09:45		54	10	145	68
10:00		30	14		
10:15		36	20		
10:30		42	12		
10:45		31	10	139	56
11:00		46	8		
11:15		52	2		
11:30		48	5		
11:45		56	4	202	19
Total		832	1996		
Percent		29.4%	70.6%		
Grand Total		832	1996		
Percent		29.4%	70.6%		
ADT		ADT 2,828		AADT 2,828	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 04391
Hose Set #: 1

Site Code: 000000000113
Station ID:
NW Topeka Blvd.
NW US Hwy 24

Start Time	10-Sep-08 Wed	NB to EB Ramp Morning	NB to EB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	36		
12:15		2	34		
12:30		1	38		
12:45		1	28	10	136
01:00		1	22		
01:15		1	25		
01:30		3	22		
01:45		1	24	6	93
02:00		3	38		
02:15		2	26		
02:30		1	48		
02:45		1	24	7	136
03:00		2	42		
03:15		1	33		
03:30		0	44		
03:45		2	59	5	178
04:00		1	50		
04:15		7	58		
04:30		0	56		
04:45		2	64	10	228
05:00		3	57		
05:15		4	54		
05:30		6	36		
05:45		2	52	15	199
06:00		7	32		
06:15		5	28		
06:30		6	31		
06:45		12	17	30	108
07:00		9	26		
07:15		8	35		
07:30		9	24		
07:45		15	22	41	107
08:00		18	16		
08:15		16	18		
08:30		28	17		
08:45		15	18	77	69
09:00		13	25		
09:15		18	9		
09:30		16	6		
09:45		20	5	67	45
10:00		22	2		
10:15		8	4		
10:30		15	2		
10:45		24	6	69	14
11:00		21	2		
11:15		32	10		
11:30		20	8		
11:45		26	4	99	24
Total		436	1337		
Percent		24.6%	75.4%		
Grand Total		436	1337		
Percent		24.6%	75.4%		
ADT		ADT 1,773		AADT 1,773	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 02072
Hose Set #: 18

Site Code: 000000000011
Station ID:
NW Topeka Blvd.
NW US Hwy 24

Start Time	10-Sep-08 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	99		
12:15		9	86		
12:30		1	94		
12:45		0	105	16	384
01:00		2	84		
01:15		2	69		
01:30		1	84		
01:45		2	83	7	320
02:00		6	90		
02:15		2	84		
02:30		4	80		
02:45		1	56	13	310
03:00		3	81		
03:15		6	130		
03:30		2	142		
03:45		4	125	15	478
04:00		1	103		
04:15		5	125		
04:30		14	106		
04:45		14	122	34	456
05:00		24	143		
05:15		47	120		
05:30		48	119		
05:45		57	128	176	510
06:00		78	96		
06:15		107	82		
06:30		142	88		
06:45		144	60	471	326
07:00		196	41		
07:15		193	64		
07:30		274	78		
07:45		237	51	900	234
08:00		162	46		
08:15		118	36		
08:30		106	36		
08:45		139	34	525	152
09:00		108	30		
09:15		86	24		
09:30		100	19		
09:45		82	20	376	93
10:00		68	34		
10:15		90	26		
10:30		83	23		
10:45		76	5	317	88
11:00		132	8		
11:15		90	6		
11:30		95	1		
11:45		102	4	419	19
Total		3269	3370		
Percent		49.2%	50.8%		
Grand Total		3269	3370		
Percent		49.2%	50.8%		
	ADT	ADT 6,639		AADT 6,639	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg: East
Counted By: KAP & CDR
Counter #: 18630
Hose Set #: 10

Site Code: 12
Station ID:
NW US Hwy 24 & NW Topeka Blvd.

Start Time	10-Sep-08 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	145		
12:15		12	127		
12:30		10	121		
12:45		2	122	30	515
01:00		4	118		
01:15		4	114		
01:30		12	122		
01:45		8	104	28	458
02:00		6	116		
02:15		12	139		
02:30		12	140		
02:45		13	129	43	524
03:00		6	116		
03:15		13	124		
03:30		11	143		
03:45		16	163	46	546
04:00		8	136		
04:15		12	158		
04:30		14	172		
04:45		16	198	50	664
05:00		25	196		
05:15		34	164		
05:30		80	152		
05:45		88	130	227	642
06:00		81	140		
06:15		124	132		
06:30		191	106		
06:45		188	82	584	460
07:00		152	92		
07:15		200	73		
07:30		232	68		
07:45		234	78	818	311
08:00		175	53		
08:15		173	72		
08:30		175	44		
08:45		131	46	654	215
09:00		142	74		
09:15		118	41		
09:30		124	75		
09:45		118	41	502	231
10:00		136	26		
10:15		129	57		
10:30		122	46		
10:45		130	28	517	157
11:00		122	10		
11:15		107	22		
11:30		139	13		
11:45		117	18	485	63
Total		3984	4786		
Percent		45.4%	54.6%		
Grand Total		3984	4786		
Percent		45.4%	54.6%		
	ADT	ADT 8,770		AADT 8,770	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #:
Hose Set #: 11

Site Code: 000000000044
Station ID:
NW US Hwy 24
NW Topeka Blvd.

Start Time	10-Sep-08 Wed	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		18	144		
12:15		10	162		
12:30		10	142		
12:45		11	158	49	606
01:00		8	150		
01:15		4	149		
01:30		10	164		
01:45		8	141	30	604
02:00		13	142		
02:15		5	130		
02:30		14	168		
02:45		15	155	47	595
03:00		20	218		
03:15		5	203		
03:30		10	210		
03:45		8	207	43	838
04:00		10	208		
04:15		10	222		
04:30		9	222		
04:45		14	272	43	924
05:00		20	253		
05:15		30	255		
05:30		53	217		
05:45		50	202	153	927
06:00		74	190		
06:15		84	186		
06:30		87	136		
06:45		114	140	359	652
07:00		154	144		
07:15		150	106		
07:30		150	100		
07:45		174	98	628	448
08:00		148	88		
08:15		128	94		
08:30		122	85		
08:45		124	58	522	325
09:00		124	84		
09:15		113	55		
09:30		120	50		
09:45		112	44	469	233
10:00		110	38		
10:15		92	34		
10:30		100	25		
10:45		134	36	436	133
11:00		144	82		
11:15		162	28		
11:30		140	26		
11:45		138	10	584	146
Total		3363	6431		
Percent		34.3%	65.7%		
Grand Total		3363	6431		
Percent		34.3%	65.7%		
ADT		ADT 9,794		AADT 9,794	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 18632
Hose Set #: 7

Site Code: 441
Station ID:

Start Time	10-Sep-08 Wed	SB to EB Ramp Morning	SB to EB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		2	7		
12:15		0	8		
12:30		0	4		
12:45		0	4	2	23
01:00		0	3		
01:15		0	4		
01:30		0	6		
01:45		0	8	0	21
02:00		0	2		
02:15		0	6		
02:30		0	10		
02:45		0	4	0	22
03:00		1	10		
03:15		1	8		
03:30		0	10		
03:45		0	5	2	33
04:00		0	10		
04:15		0	6		
04:30		1	6		
04:45		1	5	2	27
05:00		4	8		
05:15		6	6		
05:30		4	10		
05:45		6	8	20	32
06:00		10	2		
06:15		5	5		
06:30		2	4		
06:45		10	4	27	15
07:00		18	0		
07:15		6	4		
07:30		21	2		
07:45		14	3	59	9
08:00		6	3		
08:15		9	2		
08:30		8	3		
08:45		6	0	29	8
09:00		7	0		
09:15		9	0		
09:30		8	3		
09:45		13	0	37	3
10:00		4	0		
10:15		10	0		
10:30		10	2		
10:45		1	0	25	2
11:00		5	1		
11:15		5	1		
11:30		2	*		
11:45		11	*	23	2
Total		226	197		
Percent		53.4%	46.6%		
Grand Total		226	197		
Percent		53.4%	46.6%		
ADT		ADT 423		AADT 423	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: JT-113s
Hose Set #: 15

Site Code: 000000000111
Station ID:
NW Topeka Blvd.
NW US Hwy 24

Start Time	10-Sep-08 Wed	SB to WB Ramp		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		0	18		
12:15		2	10		
12:30		1	16		
12:45		0	17	3	61
01:00		1	12		
01:15		0	12		
01:30		0	10		
01:45		2	13	3	47
02:00		2	26		
02:15		1	13		
02:30		2	18		
02:45		0	16	5	73
03:00		1	16		
03:15		2	28		
03:30		0	20		
03:45		1	39	4	103
04:00		0	34		
04:15		1	25		
04:30		4	24		
04:45		3	30	8	113
05:00		4	27		
05:15		4	27		
05:30		2	34		
05:45		10	19	20	107
06:00		6	26		
06:15		18	9		
06:30		17	9		
06:45		15	5	56	49
07:00		18	8		
07:15		29	14		
07:30		22	26		
07:45		22	14	91	62
08:00		22	9		
08:15		15	9		
08:30		10	10		
08:45		16	10	63	38
09:00		18	6		
09:15		16	5		
09:30		8	1		
09:45		23	3	65	15
10:00		8	8		
10:15		17	4		
10:30		14	5		
10:45		16	1	55	18
11:00		29	1		
11:15		22	1		
11:30		20	1		
11:45		17	0	88	3
Total		461	689		
Percent		40.1%	59.9%		
Grand Total		461	689		
Percent		40.1%	59.9%		
ADT		ADT 1,150		AADT 1,150	

CITY OF TOPEKA

Dept. of Public Works

Engineering Division - Traffic Section

Intersection Leg: South
Counted By: KAP & CDR
Counter #: 04395
Hose Set #: 1

Site Code: 000000000013
Station ID:
NW Topeka Blvd.
NW US Hwy 24

Start Time	10-Sep-08 Wed	NB		Hour Totals	
		Morning	Afternoon	Morning	Afternoon
12:00		16	176		
12:15		11	184		
12:30		6	157		
12:45		7	140	40	657
01:00		6	146		
01:15		7	176		
01:30		9	132		
01:45		3	148	25	602
02:00		5	144		
02:15		6	132		
02:30		3	180		
02:45		1	146	15	602
03:00		7	186		
03:15		4	191		
03:30		4	233		
03:45		3	243	18	853
04:00		2	254		
04:15		14	256		
04:30		10	274		
04:45		14	308	40	1092
05:00		9	290		
05:15		18	314		
05:30		35	248		
05:45		42	250	104	1102
06:00		38	183		
06:15		42	162		
06:30		64	165		
06:45		68	122	212	632
07:00		54	128		
07:15		74	109		
07:30		102	116		
07:45		84	114	314	467
08:00		109	110		
08:15		118	91		
08:30		104	93		
08:45		92	84	423	378
09:00		116	83		
09:15		68	70		
09:30		103	49		
09:45		119	40	406	242
10:00		104	42		
10:15		98	42		
10:30		117	29		
10:45		122	34	441	147
11:00		142	32		
11:15		164	18		
11:30		146	23		
11:45		150	16	602	89
Total		2640	6863		
Percent		27.8%	72.2%		
Grand Total		2640	6863		
Percent		27.8%	72.2%		
ADT		ADT 9,503		AADT 9,503	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 03769
Hose Set #: 18

Site Code: 000000000021
Station ID:
NW US Hwy 24
NW Topeka Blvd.

Start Time	10-Sep-08 Wed	WB to NB Ramp Morning	WB to NB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		0	16		
12:15		1	8		
12:30		1	4		
12:45		0	10	2	38
01:00		1	9		
01:15		1	8		
01:30		0	4		
01:45		0	10	2	31
02:00		2	11		
02:15		0	13		
02:30		0	11		
02:45		0	12	2	47
03:00		1	10		
03:15		0	8		
03:30		2	14		
03:45		0	10	3	42
04:00		0	12		
04:15		0	22		
04:30		0	14		
04:45		2	17	2	65
05:00		2	18		
05:15		0	22		
05:30		4	15		
05:45		4	12	10	67
06:00		0	10		
06:15		6	7		
06:30		12	9		
06:45		9	7	27	33
07:00		11	6		
07:15		16	3		
07:30		12	6		
07:45		12	7	51	22
08:00		8	2		
08:15		14	10		
08:30		11	2		
08:45		7	1	40	15
09:00		8	6		
09:15		4	6		
09:30		3	1		
09:45		10	3	25	16
10:00		9	3		
10:15		9	2		
10:30		18	0		
10:45		7	3	43	8
11:00		8	2		
11:15		7	2		
11:30		8	2		
11:45		6	1	29	7
Total		236	391		
Percent		37.6%	62.4%		
Grand Total		236	391		
Percent		37.6%	62.4%		
ADT		ADT 627		AADT 627	

CITY OF TOPEKA
Dept. of Public Works
Engineering Division - Traffic Section

Intersection Leg:
Counted By: KAP & CDR
Counter #: 03767
Hose Set #: 15

Site Code: 000000000114
Station ID:
NW US Hwy 24
NW Topeka Blvd.

Start Time	10-Sep-08 Wed	WB to SB Ramp Morning	WB to SB Ramp Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		1	24		
12:15		2	20		
12:30		0	14		
12:45		0	20	3	78
01:00		0	18		
01:15		0	21		
01:30		1	15		
01:45		3	8	4	62
02:00		0	10		
02:15		2	16		
02:30		4	19		
02:45		1	18	7	63
03:00		0	7		
03:15		0	9		
03:30		0	8		
03:45		6	18	6	42
04:00		1	12		
04:15		3	22		
04:30		2	16		
04:45		2	17	8	67
05:00		2	12		
05:15		8	19		
05:30		12	18		
05:45		18	11	40	60
06:00		18	11		
06:15		20	14		
06:30		40	14		
06:45		38	12	116	51
07:00		34	5		
07:15		52	9		
07:30		58	11		
07:45		52	4	196	29
08:00		32	10		
08:15		34	12		
08:30		28	7		
08:45		19	6	113	35
09:00		18	10		
09:15		20	4		
09:30		18	11		
09:45		14	2	70	27
10:00		20	6		
10:15		13	3		
10:30		20	3		
10:45		10	3	63	15
11:00		16	1		
11:15		16	0		
11:30		10	1		
11:45		15	5	57	7
Total		683	536		
Percent		56.0%	44.0%		
Grand Total		683	536		
Percent		56.0%	44.0%		
ADT		ADT 1,219		AADT 1,219	

Iteris, Inc.
4200 Pioneer Woods Drive. Suite A
Lincoln, NE 68506

Goodyear Rd
N. Frontage Rd

Start Time	09-Sep Tue	Channel 1 A.M.	Channel 1 P.M.	Channel 2 A.M.	Channel 2 P.M.	Combined A.M.	Combined P.M.	10-Sep Wed	Channel 1 A.M.	Channel 1 P.M.	Channel 2 A.M.	Channel 2 P.M.	Combined A.M.	Combined P.M.
12:00		*	*	*	*	*	*		1	43	0	41	1	84
12:15		*	*	*	*	*	*		1	37	0	33	1	70
12:30		*	*	*	*	*	*		1	44	0	38	1	82
12:45		*	*	*	*	*	*		2	37	0	31	2	68
01:00		*	*	*	*	*	*		3	30	0	22	3	52
01:15		*	*	*	*	*	*		2	33	2	18	4	51
01:30		*	*	*	*	*	*		1	33	1	35	2	68
01:45		*	*	*	*	*	*		1	29	0	29	1	58
02:00		*	*	*	*	*	*		0	47	0	50	0	97
02:15		*	*	*	*	*	*		2	30	0	35	2	65
02:30		*	*	*	*	*	*		9	48	2	61	11	109
02:45		*	*	*	*	*	*		2	52	3	29	5	81
03:00		*	*	*	*	*	*		37	***284***	1	***64***	38	***348***
03:15		*	*	*	*	*	*		2	***143***	0	***47***	2	***190***
03:30		*	*	*	*	*	*		0	***70***	2	***46***	2	***116***
03:45		*	*	*	*	*	*		1	***74***	2	***64***	3	***138***
04:00		*	*	*	*	*	*		4	54	3	45	7	99
04:15		*	*	*	*	*	*		0	*	0	*	0	*
04:30		*	*	*	*	*	*		1	*	0	*	1	*
04:45		*	*	*	*	*	*		2	*	0	*	2	*
05:00		*	*	*	*	*	*		2	*	0	*	2	*
05:15		*	*	*	*	*	*		4	*	0	*	4	*
05:30		*	*	*	*	*	*		4	*	3	*	7	*
05:45		*	*	*	*	*	*		6	*	6	*	12	*
06:00		*	*	*	*	*	*		6	*	0	*	6	*
06:15		*	*	*	*	*	*		9	*	5	*	14	*
06:30		*	21	*	***12***	*	33		10	*	4	*	14	*
06:45		*	19	*	***0***	*	19		26	*	9	*	35	*
07:00		*	47	*	***4***	*	51		***179***	*	28	*	***207***	*
07:15		*	9	*	***6***	*	15		***54***	*	16	*	***70***	*
07:30		*	8	*	3	*	11		***48***	*	15	*	***63***	*
07:45		*	14	*	6	*	20		***29***	*	17	*	***46***	*
08:00		*	13	*	5	*	18		29	*	34	*	63	*
08:15		*	3	*	3	*	6		38	*	27	*	65	*
08:30		*	9	*	3	*	12		38	*	23	*	61	*
08:45		*	4	*	0	*	4		33	*	20	*	53	*
09:00		*	5	*	0	*	5		26	*	18	*	44	*
09:15		*	5	*	2	*	7		15	*	14	*	29	*
09:30		*	5	*	3	*	8		24	*	14	*	38	*
09:45		*	10	*	4	*	14		42	*	22	*	64	*
10:00		*	2	*	1	*	3		26	*	25	*	51	*
10:15		*	2	*	0	*	2		21	*	15	*	36	*
10:30		*	8	*	0	*	8		33	*	19	*	52	*
10:45		*	***18***	*	0	*	***18***		43	*	27	*	70	*
11:00		*	***175***	*	4	*	***179***		62	*	***23***	*	85	*
11:15		*	***24***	*	2	*	***26***		46	*	***20***	*	66	*
11:30		*	***16***	*	0	*	***16***		38	*	***35***	*	73	*
11:45		*	3	*	0	*	3		45	*	***31***	*	76	*
Total		0	420	0	58	0	478		1008	1088	486	688	1494	1776
Day Total		420		58		478			2096		1174		3270	
% Total		0.0%	87.9%	0.0%	12.1%				30.8%	33.3%	14.9%	21.0%		
Peak			10:45		06:30		10:45		07:00	03:00	11:00	03:00	07:00	03:00
Vol.			233		22		239		310	571	109	221	386	792
P.H.F.			0.333		0.458		0.334		0.433	0.503	0.779	0.863	0.466	0.569

ADT	Not Calculated

Iteris, Inc.
4200 Pioneer Woods Drive. Suite A
Lincoln, NE 68506

Goodyear Rd
S. Frontage Rd

Start Time	Tue A.M.	09-Sep-08 P.M.	Wed A.M.	10-Sep-08 P.M.	Thu A.M.	11-Sep-08 P.M.	Daily Average A.M.	Daily Average P.M.
12:00	*	*	4	112	*	*	4	112
12:15	*	*	4	113	*	*	4	113
12:30	*	*	2	90	*	*	2	90
12:45	*	*	10	109	*	*	10	109
01:00	*	*	6	93	*	*	6	93
01:15	*	*	0	68	*	*	0	68
01:30	*	*	2	124	*	*	2	124
01:45	*	*	0	81	*	*	0	81
02:00	*	*	0	126	*	*	0	126
02:15	*	*	14	110	*	*	14	110
02:30	*	*	2	139	*	*	2	139
02:45	*	*	4	**166**	*	*	4	**166**
03:00	*	*	6	**124**	*	*	6	**124**
03:15	*	*	2	**166**	*	*	2	**166**
03:30	*	*	7	**157**	*	*	7	**157**
03:45	*	*	4	137	*	*	4	137
04:00	*	*	9	*	*	*	9	*
04:15	*	*	5	*	*	*	5	*
04:30	*	*	6	*	*	*	6	*
04:45	*	*	6	*	*	*	6	*
05:00	*	*	10	*	*	*	10	*
05:15	*	*	6	*	*	*	6	*
05:30	*	*	16	*	*	*	16	*
05:45	*	*	44	*	*	*	44	*
06:00	*	*	27	*	*	*	27	*
06:15	*	**62**	57	*	*	*	57	62
06:30	*	**64**	111	*	*	*	111	64
06:45	*	**44**	106	*	*	*	106	44
07:00	*	**59**	107	*	*	*	107	59
07:15	*	40	127	*	*	*	127	40
07:30	*	33	**120**	*	*	*	**120**	33
07:45	*	36	**130**	*	*	*	**130**	36
08:00	*	39	**100**	*	*	*	**100**	39
08:15	*	32	**136**	*	*	*	**136**	32
08:30	*	26	114	*	*	*	114	26
08:45	*	35	105	*	*	*	105	35
09:00	*	22	103	*	*	*	103	22
09:15	*	22	117	*	*	*	117	22
09:30	*	42	95	*	*	*	95	42
09:45	*	15	117	*	*	*	117	15
10:00	*	21	82	*	*	*	82	21
10:15	*	17	89	*	*	*	89	17
10:30	*	32	99	*	*	*	99	32
10:45	*	28	122	*	*	*	122	28
11:00	*	36	112	*	*	*	112	36
11:15	*	15	120	*	*	*	120	15
11:30	*	8	113	*	*	*	113	8
11:45	*	8	108	*	*	*	108	8
Total	0	736	2686	1915	0	0	2686	2651
Combined Total	736		4601		0		5337	
Peak		06:15	07:30	02:45			07:30	02:45
Vol.		229	486	613			486	613
P.H.F.		0.895	0.893	0.923			0.893	0.923

ADT	Not Calculated

Iteris, Inc.
4200 Pioneer Woods Drive. Suite A
Lincoln, NE 68506

US-24 East Ramps
Old Highway 75

Start Time	09-Sep Tue	Off Ramp A.M.	Off Ramp P.M.	On Ramp A.M.	On Ramp P.M.	Combined A.M.	Combined P.M.	10-Sep Wed	Off Ramp A.M.	Off Ramp P.M.	On Ramp A.M.	On Ramp P.M.	Combined A.M.	Combined P.M.
12:00		*	*	*	*	*	*		0	41	0	8	0	49
12:15		*	*	*	*	*	*		0	20	0	8	0	28
12:30		*	*	*	*	*	*		0	23	0	14	0	37
12:45		*	*	*	*	*	*		0	10	0	7	0	17
01:00		*	*	*	*	*	*		2	16	0	2	2	18
01:15		*	*	*	*	*	*		0	28	1	6	1	34
01:30		*	*	*	*	*	*		0	14	0	13	0	27
01:45		*	*	*	*	*	*		3	***18***	4	10	7	28
02:00		*	*	*	*	*	*		2	***30***	1	14	3	***44***
02:15		*	*	*	*	*	*		4	***20***	2	***22***	6	***42***
02:30		*	*	*	*	*	*		5	***30***	1	***26***	6	***56***
02:45		*	*	*	*	*	*		1	13	0	***16***	1	***29***
03:00		*	*	*	*	*	*		2	13	2	***16***	4	29
03:15		*	18	*	14	*	32		0	2	0	4	0	6
03:30		*	15	*	***14***	*	29		0	*	0	*	0	*
03:45		*	10	*	***8***	*	18		2	*	0	*	2	*
04:00		*	14	*	***10***	*	24		7	*	2	*	9	*
04:15		*	12	*	***18***	*	30		4	*	0	*	4	*
04:30		*	24	*	9	*	33		8	*	0	*	8	*
04:45		*	8	*	6	*	14		42	*	2	*	44	*
05:00		*	6	*	6	*	12		33	*	2	*	35	*
05:15		*	6	*	11	*	17		16	*	3	*	19	*
05:30		*	8	*	4	*	12		***52***	*	3	*	***55***	*
05:45		*	7	*	4	*	11		***74***	*	1	*	***75***	*
06:00		*	6	*	2	*	8		***58***	*	***9***	*	***67***	*
06:15		*	12	*	8	*	20		***37***	*	***28***	*	***65***	*
06:30		*	0	*	2	*	2		37	*	***15***	*	52	*
06:45		*	7	*	7	*	14		29	*	***8***	*	37	*
07:00		*	2	*	4	*	6		43	*	8	*	51	*
07:15		*	4	*	1	*	5		30	*	9	*	39	*
07:30		*	2	*	0	*	2		12	*	6	*	18	*
07:45		*	2	*	0	*	2		26	*	6	*	32	*
08:00		*	0	*	0	*	0		18	*	6	*	24	*
08:15		*	1	*	2	*	3		9	*	6	*	15	*
08:30		*	0	*	1	*	1		14	*	1	*	15	*
08:45		*	4	*	0	*	4		12	*	2	*	14	*
09:00		*	12	*	0	*	12		12	*	4	*	16	*
09:15		*	***14***	*	6	*	***20***		18	*	1	*	19	*
09:30		*	***42***	*	0	*	***42***		18	*	1	*	19	*
09:45		*	***30***	*	0	*	***30***		12	*	6	*	18	*
10:00		*	***24***	*	10	*	***34***		21	*	12	*	33	*
10:15		*	4	*	12	*	16		14	*	18	*	32	*
10:30		*	5	*	10	*	15		8	*	14	*	22	*
10:45		*	4	*	3	*	7		19	*	8	*	27	*
11:00		*	0	*	1	*	1		24	*	16	*	40	*
11:15		*	0	*	1	*	1		12	*	6	*	18	*
11:30		*	0	*	0	*	0		32	*	8	*	40	*
11:45		*	0	*	0	*	0		36	*	6	*	42	*
Total		0	303	0	174	0	477		808	278	228	166	1036	444
Day Total			303		174		477			1086		394		1480
% Total		0.0%	63.5%	0.0%	36.5%				54.6%	18.8%	15.4%	11.2%		
Peak			09:15		03:30		09:15		05:30	01:45	06:00	02:15	05:30	02:00
Vol.			110		50		126		221	98	60	80	262	171
P.H.F.			0.655		0.694		0.750		0.747	0.598	0.536	0.769	0.873	0.763

ADT Not Calculated

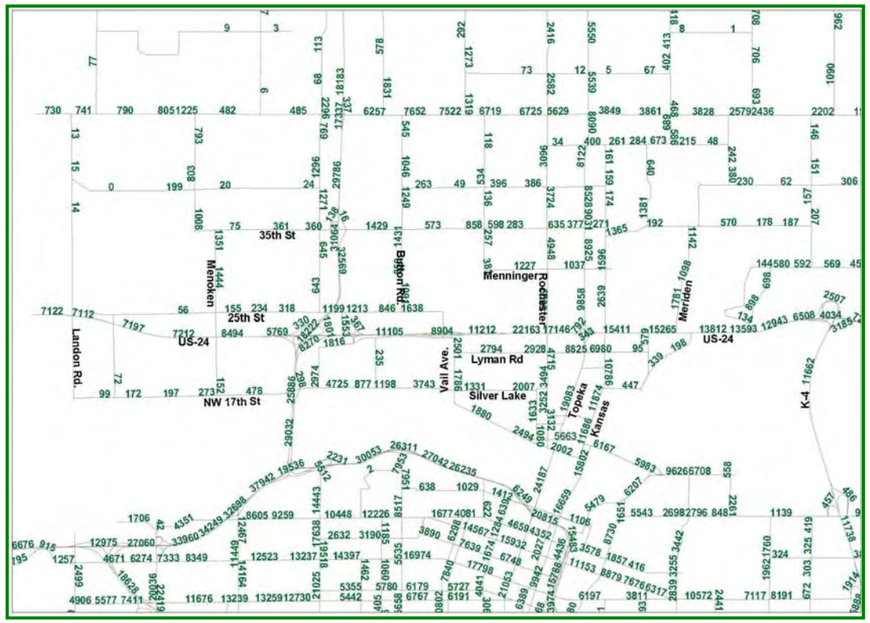
Iteris, Inc.
4200 Pioneer Woods Drive. Suite A
Lincoln, NE 68506

US-24 West Ramps
Old Highway 75

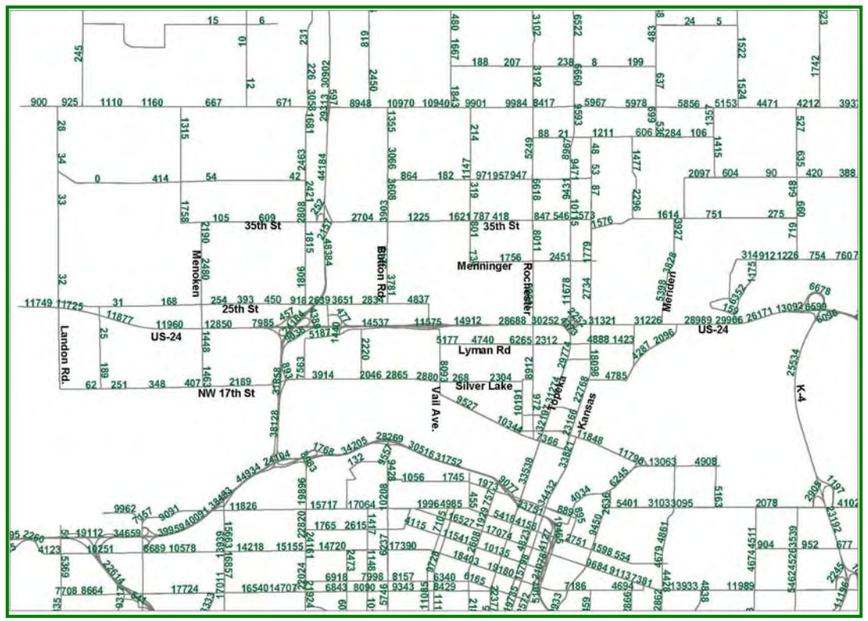
Start Time	09-Sep Tue	On Ramp A.M.	On Ramp P.M.	Off Ramp A.M.	Off Ramp P.M.	Combined A.M.	Combined P.M.	10-Sep Wed	On Ramp A.M.	On Ramp P.M.	Off Ramp A.M.	Off Ramp P.M.	Combined A.M.	Combined P.M.
12:00		*	*	*	*	*	*		0	10	0	***11***	0	21
12:15		*	*	*	*	*	*		0	11	0	***16***	0	27
12:30		*	*	*	*	*	*		0	6	1	***6***	1	12
12:45		*	*	*	*	*	*		0	2	0	***7***	0	9
01:00		*	*	*	*	*	*		1	11	0	11	1	22
01:15		*	*	*	*	*	*		0	8	0	8	0	16
01:30		*	*	*	*	*	*		0	7	0	8	0	15
01:45		*	*	*	*	*	*		2	1	1	8	3	9
02:00		*	*	*	*	*	*		8	8	0	10	8	18
02:15		*	*	*	*	*	*		2	5	2	6	4	11
02:30		*	*	*	*	*	*		0	***22***	0	6	0	***28***
02:45		*	*	*	*	*	*		0	***16***	1	14	1	***30***
03:00		*	*	*	*	*	*		2	***34***	0	4	2	***38***
03:15		*	*	*	*	*	*		2	***20***	2	11	4	***31***
03:30		*	*	*	*	*	*		3	4	0	0	3	4
03:45		*	*	*	*	*	*		1	*	0	*	1	*
04:00		*	***20***	*	***11***	*	***31***		0	*	1	*	1	*
04:15		*	***22***	*	***10***	*	***32***		0	*	1	*	1	*
04:30		*	***26***	*	***11***	*	***37***		3	*	2	*	5	*
04:45		*	***22***	*	***6***	*	***28***		3	*	0	*	3	*
05:00		*	10	*	4	*	14		0	*	8	*	8	*
05:15		*	3	*	6	*	9		2	*	12	*	14	*
05:30		*	10	*	6	*	16		5	*	***12***	*	17	*
05:45		*	6	*	5	*	11		0	*	***12***	*	12	*
06:00		*	5	*	5	*	10		4	*	***24***	*	28	*
06:15		*	4	*	6	*	10		4	*	***30***	*	34	*
06:30		*	13	*	8	*	21		18	*	10	*	28	*
06:45		*	2	*	1	*	3		10	*	8	*	18	*
07:00		*	5	*	2	*	7		8	*	6	*	14	*
07:15		*	3	*	2	*	5		2	*	4	*	6	*
07:30		*	5	*	2	*	7		8	*	9	*	17	*
07:45		*	2	*	4	*	6		14	*	12	*	26	*
08:00		*	0	*	1	*	1		9	*	4	*	13	*
08:15		*	2	*	0	*	2		6	*	6	*	12	*
08:30		*	1	*	1	*	2		6	*	2	*	8	*
08:45		*	0	*	0	*	0		8	*	6	*	14	*
09:00		*	0	*	2	*	2		3	*	6	*	9	*
09:15		*	0	*	3	*	3		20	*	8	*	28	*
09:30		*	6	*	1	*	7		7	*	2	*	9	*
09:45		*	1	*	7	*	8		8	*	7	*	15	*
10:00		*	2	*	6	*	8		16	*	9	*	25	*
10:15		*	4	*	4	*	8		6	*	2	*	8	*
10:30		*	27	*	1	*	28		12	*	8	*	20	*
10:45		*	19	*	4	*	23		***13***	*	19	*	***32***	*
11:00		*	3	*	0	*	3		***11***	*	8	*	***19***	*
11:15		*	3	*	1	*	4		***18***	*	14	*	***32***	*
11:30		*	1	*	1	*	2		***20***	*	12	*	***32***	*
11:45		*	0	*	0	*	0		10	*	8	*	18	*
Total		0	227	0	121	0	348		275	165	279	126	554	291
Day Total			227		121		348			440		405		845
% Total		0.0%	65.2%	0.0%	34.8%				32.5%	19.5%	33.0%	14.9%		
Peak			04:00		04:00		04:00		10:45	02:30	05:30	12:00	10:45	02:30
Vol.			90		38		128		62	92	78	40	115	127
P.H.F.			0.833		0.864		0.865		0.775	0.676	0.650	0.625	0.846	0.836

ADT Not Calculated

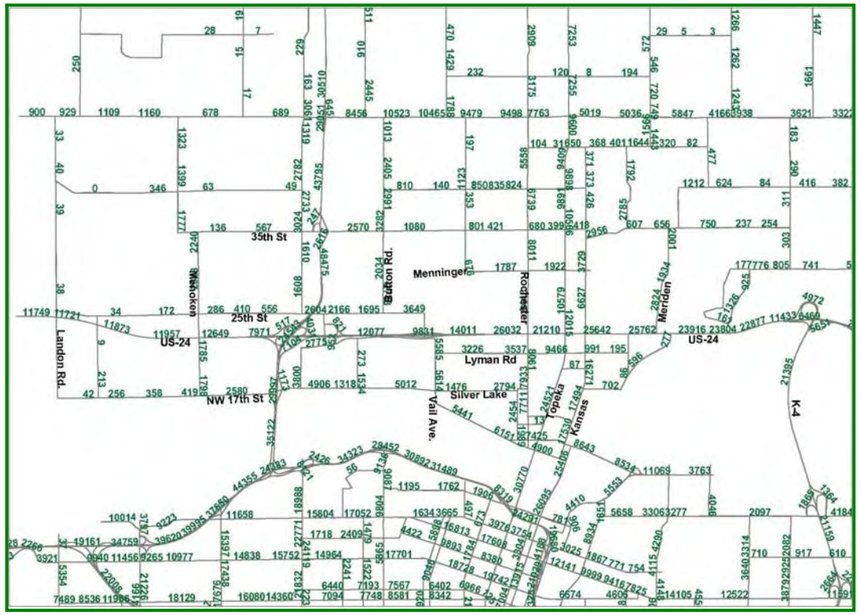
Existing and Projected Traffic Volume Assignment Plots



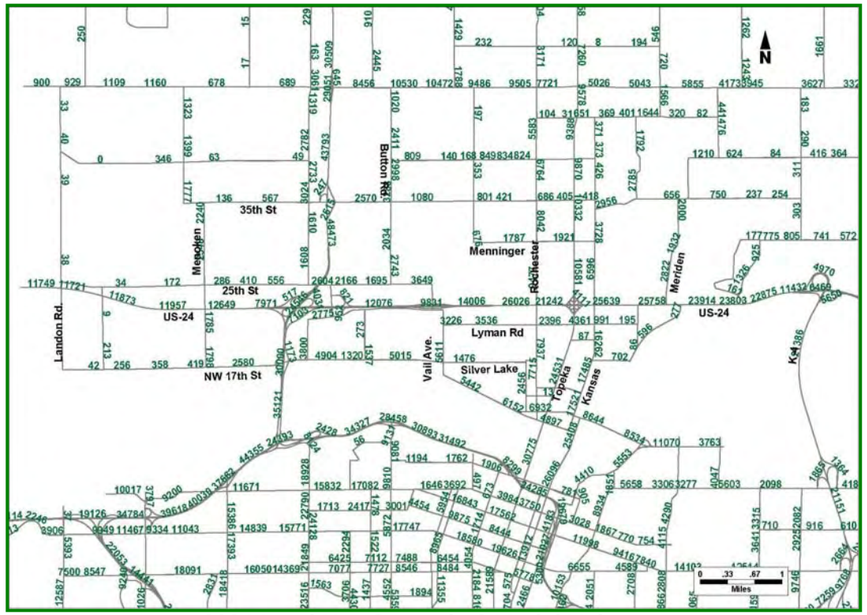
2004 Model Volumes



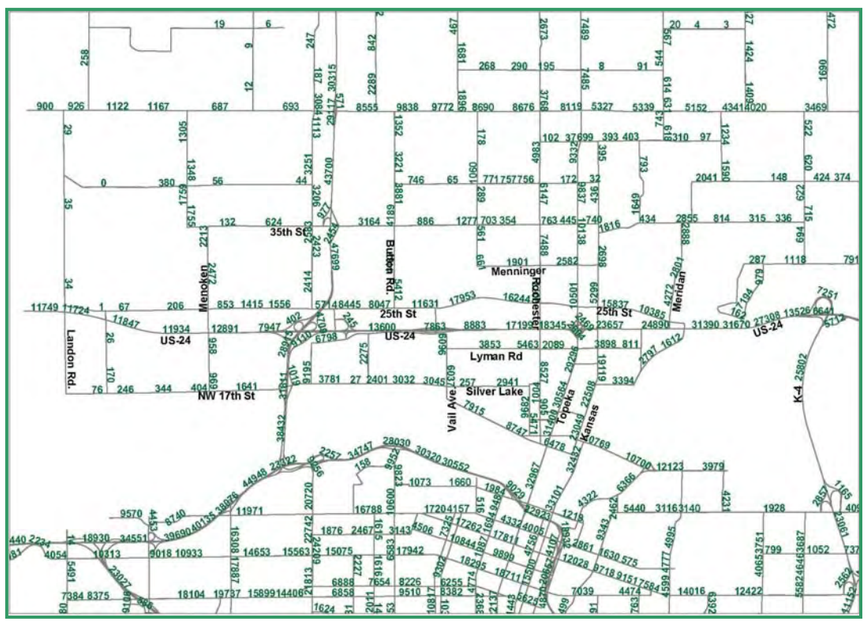
2034 Land Use Scenario 1 Model Volumes



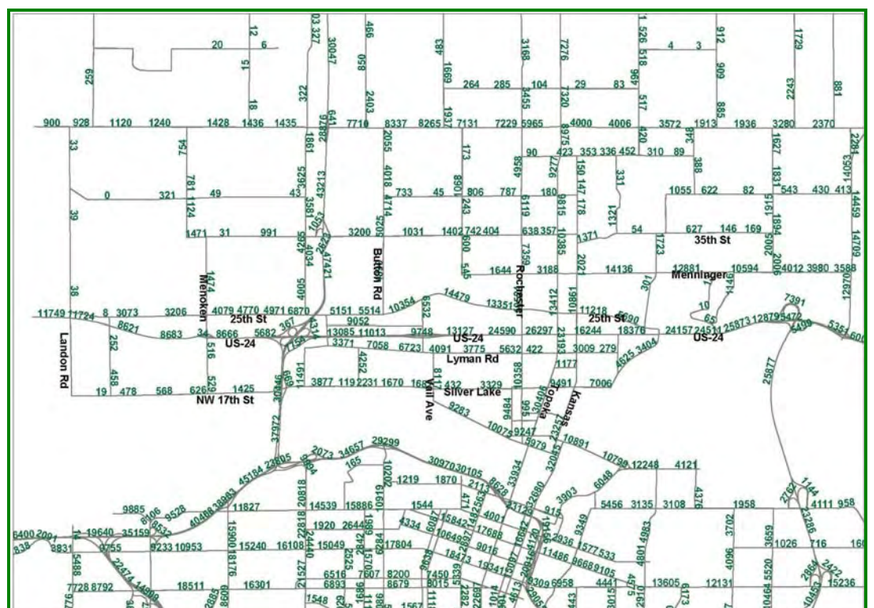
2034 Base Model Volumes



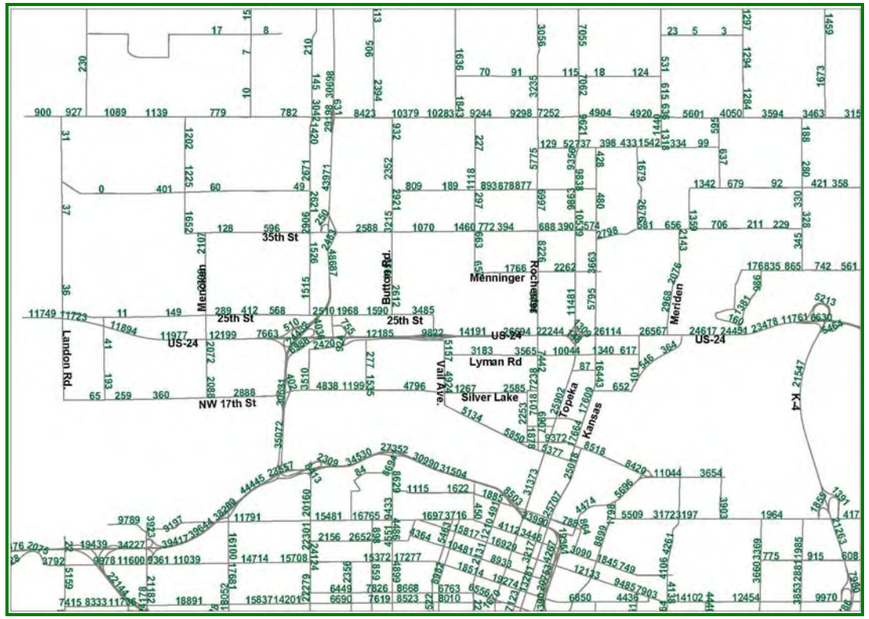
2034 Land Use Scenario 2 Model Volumes



2034 Model Volumes with 25th Street Extension



2034 Model Volumes with Final Recommendations



2034 Model Volumes with Topeka Interchange

Corridor Partnership Agreement

CITY OF TOPEKA
Contract No. 38368

PARTNERSHIP AGREEMENT

PARTIES: **The Kansas Department of Transportation** hereinafter referred to as the "KDOT."

The County of Shawnee, Kansas, hereinafter referred to as "County."

The City of Topeka, Kansas, hereinafter referred to as "City."

Metropolitan Topeka Planning Organization, hereinafter referred to as "MTPO."

COLLECTIVELY referred to as the "Parties."

PURPOSE: Recognizing the mutual desire of the Parties for orderly, quality and sustainable development within the US-24 corridor, which permits safe and efficient access to the mainline of the highway by establishing an appropriate balance between efficient mobility along the highway and the nature, location and density and intensity of adjacent land uses, the Parties desire to cooperatively participate to undertake a study (hereinafter referred to as the "Study") of the identified corridor, and through the course of that Study, prepare a corridor management plan that will: serve as a framework for future potential highway enhancements; identify and preserve right-of-way that may be necessary to accommodate any projected enhancements; describe and identify access management objectives for the transportation corridor; and promote effective inter-connectivity of the local street/road network with the highway. The Parties further expect the corridor management plan, once complete, to set forth the roles each of the Parties agrees to undertake, both individually and jointly, to preserve this corridor's integrity and enhance opportunities for economic development within the corridor for all Parties. The underlying motivation for partnering to reach these goals is to benefit the traveling public.

AUTHORITY:

The authority of the Parties to enter into this agreement to jointly undertake the Study includes, but is not limited by K.S.A. 68-404(j) and 68-407, Article 12, § 5 of the Kansas Constitution, K.S.A. 19-101a *et seq.* and K.S.A. 12-2901 *et seq.*

EFFECTIVE DATE:

The Parties, in consideration of the premises, and to secure the approval of the Partnership Agreement, shall mutually agree to perform in accordance with this agreement as of the 29th day of May, 2008.

ARTICLE I

DEFINITIONS

1. Corridor – An area that is generally within one mile of the center line on both sides of the segment of US Highway 24, beginning in the east at the intersection of US-24 and K-4, at the Jefferson and Shawnee County Line, and terminating in the west at the intersection of US-24 and Huxman Road.

2. Corridor Management Committee – A group of designees, each representing a Party, who hereby agree to collaborate on the preparation of the Management Plan and the management and administration of the Study.

3. Highway – US Highway 24, beginning in the east at the intersection of US-24 and K-4, at the Jefferson and Shawnee County Line, and terminating in the west at the intersection of US-24 and Huxman Road.

4. Management Plan – The Parties' guide for managing access and land use jointly within the Corridor's limits.

ARTICLE II

THE PARTIES AGREE TO THE FOLLOWING

1. To share the following interests:
   - enhancing the safety of the traveling public;
   - maintaining a functional transportation corridor; and
   - generating economic growth along the Corridor.

2. To share the following goals:
   - enhance the management of the Corridor by improving safety and traffic operations, and by encouraging uniformity in the management of the Corridor;
   - protect the integrity of the Corridor, support overall economic development, and balance the needs of the public highway system with the interests of individual property owners; and
   - promote safe and efficient access to the Highway and encourage orderly land, utility, and roadway development.

3. To reasonably expect the mutually identified interests and goals as defined in this Partnership Agreement to be upheld and implemented by one another.

4. To collaborate to prepare a Management Plan for the Corridor.

5. To satisfy the interests and accomplish the goals of the Parties, it may be necessary to:
   - eliminate or remove access;

- consolidate access points;
- utilize alternate access; and/or
- require private construction of access roads off the public right-of-way.

6. To support this collaboration of the Parties, as mutually deemed necessary, by entering into agreements for projects to study, retrofit, or otherwise improve the Highway.

7. When conditions are identified which indicate the need for corridor preservation, to consider, when determining the most appropriate course of action, the:
   - rate of development;
   - travel demand;
   - environmental factors;
   - efficient use of resources; and
   - preservation of right-of-way.

8. To share information, resources, and decision making in the management of the Corridor.

9. To designate a representative to participate on the Corridor Management Committee, so that each Party is represented at each meeting of the Parties during the Study held to prepare the Management Plan and/or to manage and administer the Study.

ARTICLE III

1. The interests of individual property owners are recognized under law. These interests are not, however, paramount. The traveling public has rights to a safe and efficient public highway system and to efficient expenditure of public funds. Thus, the Parties have a responsibility to regulate access and preserve corridors, which arises from their duty to administer and maintain the public highway system.

2. It is mutually understood and agreed that nothing contained in this Agreement is intended or shall be construed in any manner or under any circumstances whatsoever as creating or establishing the relationship of co-partners or creating or establishing the relationship of a joint venture between the Parties.

3. This Agreement may be executed at different times and in any number of counterparts, each of which, when so executed, shall be deemed to be an original, and all of which taken together shall constitute one and the same agreement.

(The signature page immediately follows this paragraph)

IN WITNESS WHEREOF the Parties hereto have caused this Agreement to be signed by their duly authorized officers on the day and year first above written.

Debra L. Miller, Secretary of Transportation,
Kansas Dept. of Transportation

By: _____
Jerome T. Younger, P.E.
Deputy Secretary for Engineering and
State Transportation Engineer

FORM APPROVED BY
8/5/08
Legal Dept. KDOT

The County of Shawnee, Kansas
ATTEST:

_____
Cyndi Beck, County Clerk
(SEAL)

Approved as to Legality and Form: Date 6/26/08
_____
ASST. CO. COUNSELOR

SEAL OF TOPEKA CAPITAL CITY INCORPORATED FEB. 14, 1857 KANSAS

_____
Michele A. Buhler, Chair
County Commission

_____
Vic Miller, Vice Chair
County Commission

_____
Theodore D. Ensley, Member
County Commission

The City of Topeka, Kansas
ATTEST:

_____
Brenda Younger, City Clerk
(SEAL)

_____
Norton N. Bonaparte, Jr., City Manager

APPROVED AS TO FORM & LEGALITY
RBC
MAY 15 2008
CITY ATTORNEY'S OFFICE

Metropolitan Topeka Planning Organization
ATTEST:

_____
David Thurbon, MTPO Secretary

_____
Jeff Preisner, MTPO Chair

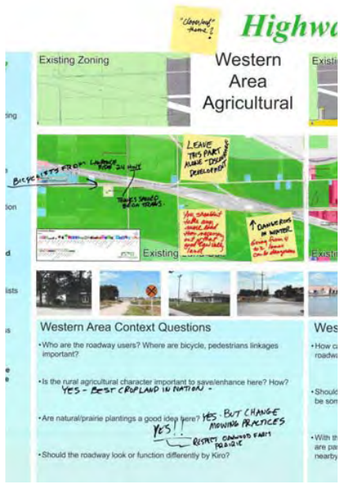
APPENDIX C – CONTEXT SENSITIVE DESIGN

- June 18, 2008 Public Open House – Summary of Context Sensitive Design Board Responses
- October 14, 2008 Public Open House – Summary of Context Sensitive Design Board Responses
- Context Sensitive Design Evaluation Matrices

US Highway 24 Corridor Study-Topeka
Public Open House June 18, 2008
Summary of Context Sensitive Design Board Responses
DRAFT

Introduction
At the US Highway 24 Corridor Study Public Open House held Wednesday June 18, 2008 at the Seaman High School, 4850 NW Rochester Rd, Topeka, Kansas, participants were asked to comment on questions addressing four sections of the corridor, and write or have their comments written on the map.

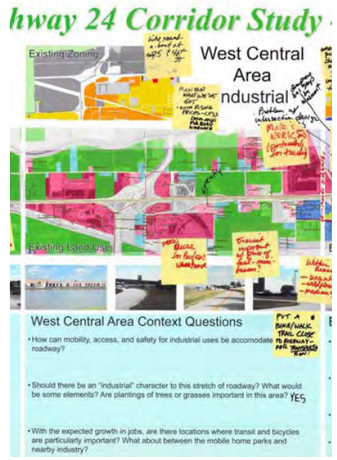
Western Area Agricultural: From Huxman Road to Menoken Road



Western Area Context Questions and Responses

- *Who are the roadway users? Where are bicycle, pedestrian linkages important?*
  - Bicyclists from Lawrence ride 24 highway—think they should be on trails.
- *Is the rural agricultural character important to save/enhance here? How?*
  - Yes—best cropland in nation
  - You shouldn't take any more land than necessary out of that good Kaw Valley Land
  - Leave this part alone—discourage development
- *Are natural/prairie plantings a good idea here?*
  - Yes. But change mowing practices
  - Yes!! Respect Oakwood Farm prairie
- *Should the roadway look or function differently by Kiro?*
- *Comments on map*
  - "Cloverleaf" theme?
  - Dangerous in winter. Going from 4 lanes to 2 can be dangerous. (where US Hwy 24 crosses railroad tracks)

West Central Area Industrial: From Menoken Road to the Goodyear Distribution Center



West Central Area Industrial Context Questions and Responses

- *How can mobility, access, and safety for industrial uses accommodate the roadway?*
- *Should there be an "industrial" character to this stretch of roadway? What would be some elements? Are plantings of trees or grasses important in this area?*
  - Yes
  - Within reason
    - Beautification
    - Wildflowers
    - Medians
- *With the expected growth in jobs, are there locations where transit and bicycles are particularly important? What about between the mobile home parks and nearby industry?*
  - Transit important with price of fuel—mini buses?
  - Put a bike/walk trail close to highway for transportation
- *Comments on map*
  - Like round-a-bout at Hwy 75 and 46th street
    - Ditto
    - I don't!
  - Maintain what we've got—with rising prices—less demand for road widening
  - Make it [Hwy 24] work (particularly for trucks)
  - Need reuse for Payless warehouse

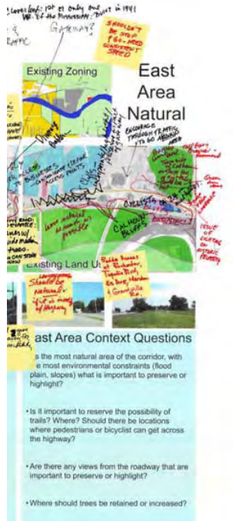
East Central Area Commercial/Residential:
From the Goodyear Distribution Center to Happy Hollow Road

East Central Commercial/Residential Area Context Questions and Responses

- *This area has the greatest density of housing, retail and services. How can roads reflect a "sense of community"? Should the roadway character change here?*
- *Between what residential and retail locations on both sides of the highway does there need to be safe connections for bicyclists and pedestrians?*
    - Bike crossing needed [at Hwy 24 and Rochester Road and Hwy 24 and Topeka Boulevard]
    - Topeka could be on cutting edge of providing bicycle transportation—would be exciting
    - Need bicycle facilities throughout
    - Sidewalks needed [at Rochester]
    - If groceries are on north side of Hwy 24, people on south side need to get there, may walk or bike
    - Have seen people pushing wheel chairs to K-Mart; if it goes, more important to [be able to] get to Wal-Mart
    - Sidewalks needed on at least one side of the road
    - Consider encouraging biking on service roads
- *Where might transit stops be needed in the future?*
    - Improve bus stop by Wal-mart
    - Need a bus on Hwy 24
- *Where are the opportunities to plant more trees that the community said it wanted in recent surveys?*
    - More trees the better—don't cut down
    - [Kansas Avenue to Kaw Valley Road] Consider median in this section (East Central)
    - Need to establish priorities
        - Nice to have landscaping
        - Need to have roads and interchanges

    - Lack of landscaping encourages speed
    - Would give up beauty for accessibility
    - Trees, greenway, flowers. Landscape—other parts of the country can do it, why can't Topeka? Save as many trees as you can; green space.
    - Pretty road—good example: 4 lanes with wide a wide median with trees. Can also store snow.
- *Is there a way to give the flavor of a small town by the roadway design in this area?*
- *Other comments on map*
    - Problem with intersection design [at Hwy 24 and Rochester Road]
        - Lights and painting
    - [Area south of Lyman] Low/mod income and elderly and disabled
    - Like Topeka Boulevard—new landscaping and berms
        - Ditto
    - Encourage more density of businesses—too much unused space is less convenient—make more walkable
    - East of Topeka [Boulevard] need repair maintenance
    - Cloverleaf: 1st or only one west of the Mississippi—built in 1941
    - No Round-a-bout
    - Businesses closing—why?
    - Clean up apartments. Tax breaks for cleaning up businesses
    - Holding area—tear down bad building and put green as holding area
    - This section of Hwy 24 may not be speedy because of all the users, unless there are more service roads
    - Keep frontage roads but repair; set [buildings] back
    - Need access in East Central Area
    - Separate through and local traffic
    - Clean up Bowling Alley
    - ACCESS IMPORTANT—service roads improved
    - Work hard at getting existing area working (before we start with commercial development further out)
    - Ugly [vicinity of NE Meriden Rd], poor access to businesses
    - Consolidate and define access points
    - Gateway
    - Drainage problem

East Area Natural: From Happy Hollow Road to Granville Road



East Area Natural Context Questions and Responses

- *As the most natural area of the corridor, with the most environmental constraints (flood plain, slopes) what is important to preserve or highlight?*
  - Calhoun Bluffs
  - Leave natural as much as possible
  - Cliffs—incorporate/highlight/preserve as part of gateway
  - Preserve/limit development. Townsite of Calhoun on State Register of Historic Places. Queen Anne Home. Could be natural.
  - Tall grass prairie remnant
- *Is it important to reserve the possibility of trails? Where? Should there be locations where pedestrians or bicyclists can cross the highway?*
- *Are there any views from the roadway that are important to preserve or highlight?*
- *Where should trees be retained or increase?*
- *Comments on map*
  - Landscaping should be natural if it is involved with the highway
  - Provide access at Rochester, Topeka Boulevard, Kansas Avenue, Meriden and Grantville Road
  - Issue of [highway type] lighting [at K-4 and Hwy 24 shining] on historic property
  - Encourage through traffic to go around area
  - Cyclists on Hwy 24 - multiples
    - Some from Lawrence
  - Shouldn't be stop and go [traffic on Hwy 24]—need consistent speed

US Highway 24 Corridor Study-Topeka
Public Open House October 14, 2008
Summary of Context Sensitive Design Board Responses
DRAFT

Introduction
At the US Highway 24 Corridor Study Public Open House held Tuesday, October 14, 2008 at the Seaman High School, 4850 NW Rochester Rd, Topeka, Kansas, participants were asked to comment on draft context sensitive design objectives and recommendations addressing four sections of the corridor, and write or have their comments written on the map.

Themes
Comments from the October, 2008 Public Open House on the Context Sensitive Design Board had several major themes:

- Keep Hwy 24 functioning as a smooth running highway but at the same time provide good access for businesses and provide good crossings for bicyclists and pedestrians. There were strong feelings on both sides of this question.
- Provide accommodation for bicyclists and pedestrians off the main highway.
- Provide a better way to minimize travel on/across Hwy 24 at Rochester/Tyler near Wal-Mart. Wal-Mart is a major destination that draws cars, pedestrians, transit and bicyclists.
- There is strong feeling against industrial development in the Western agricultural area but it has major assets (railroad spur, flat land and presence of utilities relatively near-by) that could make it highly desirable to industry
- Strong feeling remained against roundabouts but there was some support for the US 75/45th St. modified roundabout.
- There was support for aesthetic improvements as long as they don't reduce safety and access features. People brought up the new Topeka Boulevard Bridge as an example of a bridge that looks good, serves different modes of transportation including bicycles and pedestrians and adds lasting value to the community.
- There was strong support for preserving the natural and historic character of the east end of the Corridor.

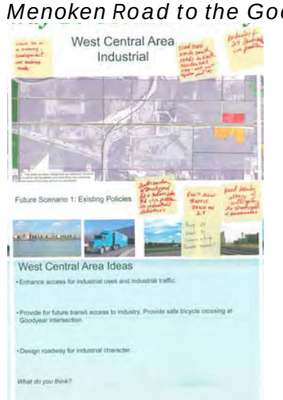
Western Area Agricultural: From Huxman Road to Menoken Road

Western Area Context Specific Public Comments

- Rail line [is] high traffic and high volume – suitable for industrial. [This] Spur is where you can get rail service.

- Don't want industrial here. Leave it farm land.
- Don't like taking farm land out of production – [cities are] losing farm land to development.
- Would like to see 4-lanes full length [on Hwy 24] – [should] bypass Silver Lake

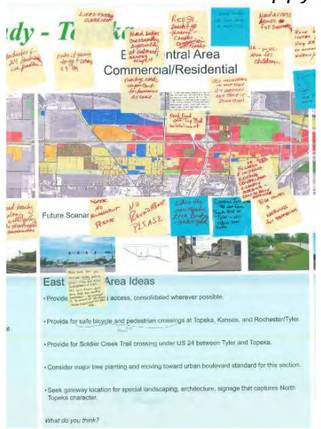
West Central Area Industrial: From Menoken Road to the Goodyear Distribution Center



West Central Area Industrial Context Specific Public Comments

- Don't slow traffic down on [Hwy] 24.
- Highway 24 needs to remain a highway. Remove signals?
- Leave 24 as a Highway. Development [should] use backage roads.
- Need more north/south roads to north residential [area] not just Topeka [Boulevard] and [Hwy] 75
- Intersection of Brickyard Road and Silver Lake Road is a problem for industrial [area]
- Need beauty along with getting the streets good and [more] businesses

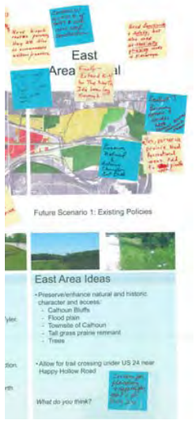
East Central Area Commercial/Residential:
From the Goodyear Distribution Center to Happy Hollow Road



East Central Commercial/Residential Area Context Specific Public Comments

- Rochester [Rd.] and 24 intersection is a problem
- Need better crosswalks, especially at Wal-Mart, across 24
- Make it easier to get across 24 Hwy
- Bike routes & walkways for pedestrians
- Likes the new Topeka Boulevard Bridge – Looks good.
- Likes existing cloverleaf
- No! At Grade Roundabout! Interchange Roundabout is the way to go!
- No Roundabout Please
- Agree No Roundabout Please
- No Roundabout – Enlarge and improve existing cloverleaf. 6 lanes + merging could be easily obtained
- Make sure that you consider safety before dollars when you allow development – limit left turn access—don't turn this into another Wanamaker – be cognizant of the amount of new drivers (Seaman students) that will drive here.
- Need better left turn lanes in medians
- Frontage roads [are] important for business access
- Need access roads for business
- Need road off [north of] Topeka Blvd. to [connect to] Wal-Mart
- Reo St. doesn't go through – causes congestion at Topeka [Blvd.]
- Continue Independence Road [Ave.] west from Topeka Blvd. to Tyler – will relieve some traffic.
- Try monorail in the Hwy 24 median and take it Downtown
- Need park area for children

East Area Natural: From Happy Hollow Road to Granville Road



East Area Natural Context Specific Public Comments

- Don't create a lot of traffic lights. Keep traffic moving.
- Need bicycle routes paralleling Hwy 24. Also to accommodate walkers/runners.
- Need functionality & safety, but also need aesthetically pleasing roads & sideways.
- Concern with access east of Hwy 4 with new road construction.
- Finally – extend K-4 to the north. It's been long enough.
- Excellent! Preserve Historic and Natural Area, Calhoun Bluffs, Oakwood Farm.
- Yes preserve prairie. Need recreational areas. Add to visible appeal.
- Preserve Natural and Historic Character East End.
- Concern for flooding and safety for trail and for Hwy 24 [where it crosses Soldier Creek]

Other Public Comments about the Context Display or Context Sensitive handouts:

- Redirect traffic to parallel access roads. Spend as few dollars on the 24 Highway improvements as possible and put as much as possible into corridor development and parallel access roads. Do the roundabout. A bridge is very expensive. Traffic is already slowed down. Slow traffic is not bad for development. If you want development and to keep restaurants and businesses, put restrictions on visuals, add more green space and require high end facades on buildings. River Hill development was supposed to be high end Overland Park type development, but now they only mow the weeds.
- The traffic runs smoothly now. If it slows down in one spot, it will slow down on down the road.
- If it ain't broke don't fix it.
- Please No Roundabout – Yes North Topeka needs road improvements. But we do not need another Wanamaker in Topeka. Topeka cannot support it now. And I (we) do not want Wanamaker's problems. Not saying Wanamaker's bad. Just one in Topeka is enough. Thank you for your time.

- I am against roundabouts period. Topeka Blvd. and US 24 should be upgraded in its existing configuration with 6 lanes on 24 and Topeka Blvd. Additional lanes for braking and acceleration. Focus should be on moving max traffic safely. Highways are no place for bicycles or pedestrians.
- No roundabout! Keep up the planning and community involvement.
- In Scenario # 2, multifamily residences not really needed. You would do better with more businesses that have a higher pay w/ benefits. Almost all multi-Residential Housing in North Topeka is an eyesore after a few years. Most jobs are not in this area and the transit situation is almost nonexistent.

Context Sensitive Handout Questions

People who stopped by the Context Sensitive Design Display were given a list of questions to be used to evaluate different scenarios from a context sensitive design perspective. They were told they did not have to fill them out, since they would not yet have enough information to do so, but to use them to think about different alternatives and their good and bad points. Eight people, however, did fill out the questionnaires. Their written comments are listed above. A tally of their responses to the questions is below, with the responses with the highest scores (including ties) in bold. Since there is not a way to know what designs the responders were reviewing, the meaning of responses is not clear.

1. Would this scenario make the roadway safer for Transit users?
   Probably: 4 No Definitely: 3 Don't Know: 1

2. Does this scenario make the roadway safer for Bicyclists?
   Probably: 2 Probably Not: 1 No Definitely: 2 Don't Know: 3

3. Does this scenario make the roadway safer for Pedestrians?
   Probably: 2 Probably Not: 1 No Definitely: 3 Don't Know: 2

4. Does this scenario make access better for Transit users?
   Probably: 4 Probably Not: 1 No Definitely: 2

5. Does this scenario make access better for Bicyclists?
   Probably: 2 Probably Not: 1 No Definitely: 2 Don't Know: 2

6. Does this scenario make access better for Pedestrians?
   Probably: 2 Probably Not: 1 No Definitely: 3 Don't Know: 1

7. Does this roadway design improve access to jobs and retail?
   Probably: 3 Probably Not: 2 No Definitely: 2

8. Does this roadway design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?

Yes Definitely: 2 Probably Not: 1 No Definitely: 2 Don't Know: 1

9. Do you believe that the design of this roadway will add lasting value to the community?

Yes Definitely: 1 Probably: 2 Probably Not: 1 No Definitely: 2

Context Sensitive Design Evaluation Matrices

CONTEXT SENSITIVE DESIGN EVALUATION MATRIX FOR OVERALL PROJECT

CONTEXT SENSITIVE DESIGN CRITERIA	EXISTING ROADWAY EVALUATION	TRANSPORTATION CONCEPT EVALUATION
Safety and Increased Mobility – Can commercial vehicles operate safely with improved access on this facility?		The transportation concept will improve access and safety overall.
Safety and Increased Mobility - Can non-commercial vehicles operate safely with improved access on this facility?		The transportation concept will improve access and safety overall.
Safety and Increased Mobility - Can transit users access transit safely on this facility?	NA	Transit operates near Hwy 24 in some segments and also crosses it. Because of the concentrations and estimated growth of jobs, roadway improvements should include enhanced accommodation of transit.
Safety and Increased Mobility - Can bicyclists access this facility and be accommodated safely on and across it?		Potential for bicycle lanes or paved shoulders and improved crossings could increase access and safety for bicyclists.
Safety and Mobility – Can pedestrians be accommodated safely along and across this facility?		Improved crossings for pedestrians, particularly at key intersections in the East Central Commercial and Residential area, will improve access and safety. This should be combined with the addition of sidewalks on the side away from the highway for frontage roads, on Back Roads and on Connectors, and multi-user trail connections under Hwy 24 for best pedestrian accommodation.
Strengthen Economic Vibrancy – Does this design improve access to jobs and retail?	NA	The combination of frontage, back and connector roads, cleaning up access points and eliminating duplicative ramps should greatly improve access to jobs and retail.
Strengthen Economic Vibrancy – Does this design contribute to a positive image of business and industry along this facility?		This design will help eliminate visual clutter, may help encourage the movement of outdoor storage away from the Highway frontage, and should add landscaping, all of which should contribute to the positive image of business and industry.
Strengthen Economic Vibrancy – Does this design contribute to the sense of place for the facility?		The roadway design, including number of lanes, presence of a median, as well as landscaping and gateway design can contribute to improved sense of place.
Improve Highway 24 Area – Does this design contribute to ease of maintenance in this area?		Eliminating duplicative ramps, cleaning up access points and adding back roads may all add to increased ease of maintenance.
Improve Highway 24 Area – Does this design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?		There are proposed improvements in each segment that will do this.
Improve Highway 24 Area – Does the community believe that this facility adds lasting value to the community?		This will only be determined as the final designs are shared with the community and they respond.

Yes, Very Much = Yes, somewhat = Neutral/No Change = Not much, not often = No, Not At All = Not Applicable= NA

CONTEXT SENSITIVE DESIGN EVALUATION MATRIX FOR WEST CENTRAL AREA INDUSTRIAL: FROM MENOKEN ROAD TO THE GOODYEAR DISTRIBUTION CENTER

CONTEXT SENSITIVE DESIGN CRITERIA	EXISTING ROADWAY EVALUATION	TRANSPORTATION CONCEPT EVALUATION
Safety and Increased Mobility – Can commercial vehicles operate safely with improved access on this facility?		Reducing access points and increasing frontage/back roads and connector improvements will improve both access and safety.
Safety and Increased Mobility - Can non-commercial vehicles operate safely with improved access on this facility?		Reducing access points and increasing frontage/back roads and connector improvements with improve both access and safety.
Safety and Increased Mobility - Can transit users access transit safely on this facility?	NA	Transit does not operate in this segment but given existing and potential job concentrations and existing housing, there should be future transit access and stops at Goodyear Road intersection (see p.13)
Safety and Mobility – Can pedestrians be accommodated safely along and across this facility?		Recommend improving Goodyear Rd. underpass to accommodate bicyclists and pedestrians. Connector Improvements should include sidewalk or trail between residential neighborhood and jobs/transit stops.
Strengthen Economic Vibrancy – Does this design improve access to jobs and retail?		Frontage road and Connector improvements, transit extension, and bike/ped improvements would significantly improve access to jobs and retail.
Strengthen Economic Vibrancy – Does this design contribute to a positive image of business and industry in this segment of the facility?		The visual impact of the roadway would not change significantly other than between the US 75 interchange and Furman Rd., where removing ramps and redundant access points will simplify the view.
Strengthen Economic Vibrancy – Does this design contribute to the sense of place for this segment of the facility?		The US 75 interchange/Furman Rd. location could be a good location for a gateway feature (see p. 13) in coordination with ramp removal.
Improve Highway 24 Area – Does this design contribute to ease of maintenance in this area		This design removes a number of ramps and so could contribute to ease of maintenance.
Improve Highway 24 Area – Does this design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?		The biggest opportunity to highlight the unique qualities of the area would be through art or sculpture at prominent locations, such as a gateway feature (see p.13)

Yes, Very Much = Yes, somewhat = Neutral/No Change = Not much, not often = No, Not At All = Not Applicable= NA

CONTEXT SENSITIVE DESIGN EVALUATION MATRIX FOR WEST AREA AGRICULTURAL: FROM HUXMAN ROAD TO MENOKEN ROAD

CONTEXT SENSITIVE DESIGN CRITERIA	EXISTING ROADWAY EVALUATION	TRANSPORTATION CONCEPT EVALUATION
Safety and Increased Mobility – Can commercial vehicles operate safely with improved access on this facility?		Reduction and better spacing of access points should improve safety.
Safety and Increased Mobility - Can non-commercial vehicles operate safely with improved access on this facility?		Reduction and better spacing of access points should improve safety. Providing alternative access through a collector system will benefit non-commercial vehicles.
Safety and Increased Mobility - Can transit users access transit safely on this facility?	NA	Transit does not operate in this segment and is not likely to do so.
Safety and Increased Mobility - Can bicyclists access this facility and be accommodated safely on and across it?		Providing potential bicycle lanes or wide paved shoulders for bicyclists would allow them good access away from blow-back from large high-speed trucks.
Safety and Mobility – Can pedestrians be accommodated safely along and across this facility?		In this very low density part of the roadway, sidewalks on the Kiro Collector, and a trail connection to the Soldier Creek Trail could be the best pedestrian access. Paved shoulders could be used in an emergency.
Strengthen Economic Vibrancy – Does this design improve access to jobs and retail?	NA	This is an existing and planned agricultural area.
Strengthen Economic Vibrancy – Does this design contribute to a positive image of business and industry in this segment of the facility?		A two-lane roadway, as planned would maintain the rural character of the area.
Strengthen Economic Vibrancy – Does this design contribute to the sense of place for this segment of the facility?		Design of a gateway can incorporate agricultural references such as positioning so that grain silos and large agricultural buildings are part of the background, and landscaping includes grasses and plants in forms that are connected to agricultural uses (see p. 11)
Improve Highway 24 Area – Does this design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?		Design of gateway could do that. Improved access would be good for the Oakwood Farm prairie remnant. Maintaining the two-lane cross section would minimize impact on the environment.
Improve Highway 24 Area – Does the community believe that this facility adds lasting value to the community?		The community at public meetings stated a preference for maintaining this area as agricultural. The design of this roadway in a way sensitive to the agricultural context would help add lasting value.

Yes, Very Much = Yes, somewhat = Neutral/No Change = Not much, not often = No, Not At All = Not Applicable= NA

CONTEXT SENSITIVE DESIGN EVALUATION MATRIX FOR EAST CENTRAL AREA COMMERCIAL/RESIDENTIAL: FROM GOODYEAR DISTRIBUTION CENTER TO HAPPY HOLLOW ROAD

CONTEXT SENSITIVE DESIGN CRITERIA	EXISTING ROADWAY EVALUATION	TRANSPORTATION CONCEPT EVALUATION
Safety and Increased Mobility – Can commercial vehicles operate safely with improved access on this facility?		Better access management combined with Frontage/Back Roads and Connector Improvements will improve both access and safety.
Safety and Increased Mobility - Can non-commercial vehicles operate safely with improved access on this facility?		Better access management combined with Frontage/Back Roads and Connector Improvements will improve both access and safety.
Safety and Increased Mobility - Can transit users access transit safely on this facility?	NA	Transit, which operates near and crosses Hwy 24, would be important to connect major job and retail destinations with nearby housing in the Corridor. Accommodation for turning movements and pullouts for bus stops will be important at major intersections particularly with frontage roads.
Safety and Increased Mobility - Can bicyclists access this facility and be accommodated safely on and across it?		Providing potential bicycle lanes, allowing minimum 6 ft separation for trucks would provide good access away from blow-back from large high-speed trucks. Must give attention to pavement markings for safe turning movements for bicyclists. Provide access under Hwy 24 between Rochester Rd./Tyler St. and Topeka Blvd. for Soldier Creek Trail Crossing.
Safety and Mobility – Can pedestrians be accommodated safely along and across this facility?		Safe crossings are crucial for pedestrians at major intersections and would require signalization, designated cross walks and pedestrian refuges, lighting and signage. Sidewalks are needed along new Back Roads and Connectors and on the business side of frontage roads whenever they are reconstructed.
Strengthen Economic Vibrancy – Does this design improve access to jobs and retail?		Frontage and Back roads and Connector improvements, transit extension, and bike/ped improvements would significantly improve access to jobs and retail.
Strengthen Economic Vibrancy – Does this design contribute to a positive image of business and industry in this segment of the facility?		The addition of Back Roads and Connector Improvements may encourage parking lots and storage to move away from highway frontage in some cases, which would improve the image of the area.
Strengthen Economic Vibrancy – Does this design contribute to the sense of place for this segment of the facility?		A major landscape feature at the new Topeka Boulevard intersection and a Gateway feature at the Soldier Creek crossing could contribute to the sense of place.
Improve Highway 24 Area – Does this design contribute to ease of maintenance in this area		This design removes a number of ramps and so could contribute to ease of maintenance.
Improve Highway 24 Area – Does this design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?		Addition of tree clusters at key locations at the sides of the roadway and native landscaping in the medians, along with area identity signage could contribute to enhancing and highlighting the character of the area.

Yes, Very Much = Yes, somewhat = Neutral/No Change = Not much, not often = No, Not At All = Not Applicable= NA

CONTEXT SENSITIVE DESIGN EVALUATION MATRIX FOR EAST AREA NATURAL: FROM HAPPY HOLLOW ROAD TO GRANVILLE ROAD

CONTEXT SENSITIVE DESIGN CRITERIA	EXISTING ROADWAY EVALUATION	TRANSPORTATION CONCEPT EVALUATION
Safety and Increased Mobility - Can commercial and non-commercial vehicles operate safely with improved access on this facility?		This stretch of the Corridor would remain essentially unchanged except for the relocation of the Happy Hollow Road intersection, which should result in safer access for both commercial and non-commercial vehicles.
Safety and Increased Mobility - Can transit users access transit safely on this facility?	NA	Transit does not operate in this segment and is not likely to do so.
Safety and Increased Mobility - Can bicyclists access this facility and be accommodated safely on and across it?		Providing potential bicycle lanes, allowing minimum 6 ft separation for trucks would provide good access away from blow-back from large high-speed trucks. Must give attention to safe bicycle turning movements at proposed relocated Happy Hollow Road intersection.
Safety and Mobility – Can pedestrians be accommodated safely along and across this facility?		Most pedestrian movement in this area is expected to be on trails. Must accommodate a trail crossing under the Soldier Creek bridge to connect to trail head at Happy Hollow Road.
Strengthen Economic Vibrancy – Does this design improve access to jobs and retail?	NA	This area is not now nor expected to be a jobs/retail area. Access to historic area for future tourism is likely to be off K-4.
Strengthen Economic Vibrancy – Does this design contribute to a positive image of business and industry in this segment of the facility?		The major business in this area is likely to be tourism and recreation. The Transportation Concept does not call for roadway changes that would directly affect tourism and recreation.
Strengthen Economic Vibrancy – Does this design contribute to the sense of place for this segment of the facility?		A gateway feature incorporating the Calhoun bluffs and appropriate signage could contribute to the sense of place for this segment.
Improve Highway 24 Area – Does this design spotlight, preserve and enhance unique natural, historic, and character aspects of this segment?		Appropriate signage, lighting, and a gateway feature could spotlight the natural and historic character of the area. Preservation of trees in and near the right of way would contribute to maintaining the character.

Yes, Very Much =

Yes, somewhat =

Neutral/No Change =

Not much, not often =

No, Not At All =

Not Applicable= NA

APPENDIX D – PUBLIC INVOLVEMENT

- April 16, 2008 Project Public Information Letter
- April 16, 2008 Media Release
- June 11, 2008 Press Release
- October 14, 2008 Public Open House Summary Information
- Public Meeting Survey Summary
- Public Input Summary

Highway 24 Corridor Study
Get Involved!

April 16, 2008

We want to hear from YOU!

As Topeka continues to grow, changes to the US Highway 24 Corridor will be necessary. **We want your input on this road and its surroundings.** The Metropolitan Topeka Planning Organization is funding a corridor-access management-circulation-land use study that will **examine land use** and **growth**, **flow of traffic**, **general mobility**, **accessibility to property** and **aesthetic appeal**. Partnered with the Kansas Department of Transportation and working closely with Shawnee County and Topeka officials, the study will cover almost ten miles of US Highway 24 from the K-4 Highway interchange on the east to Huxman Road on the west.

Your Future – Your Plan

The Highway 24 Corridor Study consultant team will use your input to **formulate a recommendation for the corridor's future.** We want this effort to produce a plan that is your plan, that you helped shape and that you had valuable input into creating.

Talk to Us!

To become involved in shaping the future of the US Highway 24 Corridor, you can voice your opinions and concerns several ways:

Communication Options
- One-on-one Meeting
- Open Public Meeting
- Letter or email
- Phone Call

Bottom Line

This decision affects you so your wants and needs for the corridor are a necessity in formulating this recommendation! We encourage you to go to the website at www.hwy24corridorstudy.com and get more information on this study.

But most of all, we thank you in advance for your input and assistance in making this a better experience as we all work together to create a shared vision for a great future along the US Highway 24 Corridor.

Sincerely,

Jake Huyett
Executive Vice President

"Gathering community input and encouraging involvement to create recommendations to keep the corridor a safe, efficient and vibrant place for transportation and commerce."

P.O. Box 4512 • Topeka, Kansas 66604 • info@hwy24corridorstudy.com • Toll Free: 1.866.478.5271

Highway 24 Corridor Study
Get Involved!

Do you know someone who may have opinions and concerns regarding the Highway 24 Corridor? We want to hear from them too! We will be contacting you in the near future for your recommendations.

In the mean time if you would like to contact us please call us toll free at 866.478.5271 between 9 a.m. and 5 p.m. weekdays.

To send us your recommendations in writing mail your letter to:

Highway 24 Corridor Study
PO Box 4512
Topeka, KS 66604

To send us your comments electronically send us an email at:

info@hwy24corridorstudy.com

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Highway 24 Corridor Study
Get Involved!

MEDIA RELEASE

For Immediate Release

Contact: Fred Schwartz
Phone: 816.366.0460

Neighborhood Opinions Needed in Highway 24 Corridor Study

Topeka, Kan. (April 16, 2008) – As the City of Topeka continues to grow, area residents and businesses of the Highway 24 Corridor will be asked to voice their opinions and concerns for the Corridor. A study of the Highway 24 Corridor will be conducted to examine land use and growth, flow of traffic, general mobility, accessibility to property and aesthetic appeal. The purpose of the study is to gather community input and encourage involvement to create recommendations to keep the corridor a safe, efficient, and vibrant place for transportation and commerce around the Highway 24 Corridor. To make detailed recommendations, Iteris, Inc., the firm commissioned to lead the study, will consider public opinions and concerns regarding the corridor developments.

"Our goal is to have the community be a significant part of this process. Ultimately, it is the one affected by changes made to the Corridor and community members are the ones who will use the Corridor when the recommendations are implemented. Their opinions and concerns are a top priority in this study," states Fred Schwartz, Project Manager at Iteris, Inc.

Public opinion, along with a series of growth scenarios based on Topeka's Comprehensive Plan, Shawnee County's Plan and the Metropolitan Topeka

Highway 24 Corridor Study
Get Involved!

Planning Organization's (MTPO) Long Range Transportation Plan will be taken into account for Iteris, Inc. to create a proposal for future corridor improvements.

Travel improvements are needed in the future because, with growth, existing intersections and roads will become stressed and issues can arise with current and future access to property along US Highway 24. In addition, access to transit, the location and condition of sidewalks and bicycle facilities are also important mobility issues that need to be considered. The study will cover almost ten miles of US Highway 24 from the East K-4 highway interchange to West Huxman Road. It is managed and funded by the MTPO, in partnership with the Kansas Department of Transportation (KDOT).

For more information on the Highway 24 Corridor Study go to www.hwy24corridorstudy.com.

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Highway 24 Corridor Study
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Press Release

Topeka, Kan. (June 11, 2008) – Topeka residents are being encouraged to join members of the Highway 24 Corridor Study consulting team to voice their opinions and make suggestions for the Highway 24 Corridor. A public forum will be held on Wednesday, June 18, 2008 at Seaman High School, 4850 Rochester Rd. The meeting will be open to area residents and business representatives to stop by at their convenience to sit and speak candidly with team members.

“We have finished the first phase of one-on-one interviews which began with area businesses and now we are reaching out to the residents in North Topeka. Ultimately, the residents and employees are the ones affected by changes made to the Corridor so their opinions and suggestions will be vital to the recommendation being created around the consultant team’s findings,” states Fred Schwartz, Project Manager at Iteris, Inc.

Public Open House

Want to know what the corridor might look like in the year 2034? Stop by at your convenience to view and comment on scenarios for the future of the Highway 24 Corridor.

Seaman High School Commons, 4850 Rochester Road.

October 14, 2008

4pm–8pm

Highway 24 Corridor Study
Get Involved!

“Gathering community input and encouraging involvement in order to create a recommendation that will foster safety, efficiency and operational integrity.”

US 24 Corridor Land Use, Circulation and Access Management Study

The City of Topeka, Shawnee County, the Metropolitan Planning Authority and the Kansas Department of Transportation are conducting a study of the corridor centered on US 24 from east K-4 (Jefferson County and Ree's Fruit Farm) to west Huxman Road (near KSNT 27-News). The area of the study also includes the area approximately one mile north and one mile south of US 24.

The study is examining current land use, traffic functions and physical constraints impacting development (rivers, streams, cemeteries, schools, wetlands, parks etc). The study is also collecting input from businesses, residents and individuals in the area. Following review of current positives and negatives, areas of success and areas for improvement, a report will be made to the public for review and comment.

After public input is gathered, the existing transportation system will be tested to review the sustainability of the current transportation system for future conditions of the corridor. Based on the test results, recommendations will be made on changes to various aspects of the model.

Finally the options chosen will be tied to financial capability (both state and local) and to a timeline. Some recommendations for change will be almost immediate and some can be postponed until the future development occurs.

This is the start of a process that can positively impact the community. The more input that the community provides and the wider the diversity of that input, the better the results. Thanks for being a part of it.

Phase I
Individual Interviews
Area Business Representatives

Participants were asked to respond to each of the statements below and indicate the extent of their agreement or disagreement	Strongly Agree	Neither Agree nor Disagree	Strongly Disagree
1. Highway 24 Corridor is a great place to live.	**88 %**	6%	6%
2. Highway 24 Corridor has a great sense of community.	**83%**	6%	11%
3. There are many shopping opportunities along the Highway 24 Corridor.	32%	0%	**68%**
4. The corridor is easy to access along many entrance points.	35%	12%	**53%**
5. There are many professional services in the corridor area.	26%	11%	**63%**
6. The corridor area has a great school district.	**100%**	0%	0%
7. There is great access for pedestrians and bicyclists.	6%	6%	**89%**
8. Business is growing in the corridor area.	**71%**	11%	18%
9. Few improvements are needed to the Highway 24 Corridor area.	5%	11%	**84%**
10. There are few transportation problems along the corridor.	26 %	11%	**63%**
11. People often do not move away from the corridor area.	**88%**	12%	0%
12. Walking or bicycling around the corridor area is safe.	6%	13%	**81%**

1. For what purposes do you use to corridor?	**Work** **Home** **Shopping** **School** **To get to and from** **Professional Services**
2. What are the best things about working/living in the corridor area?	Most Frequent Responses: - Good, loyal people and customers - School district - Quality of life/small town atmosphere - Quick easy access to other areas of Topeka Unique Responses: - "We have good recreational opportunities – but we are still lacking."
3. What are the worst things about working/living in the corridor area?	Most Frequent Responses: - There is poor infrastructure and the roads are not well planned out. - There is poor perception of the area. - Lack of family sit-down restaurants - Frontage roads – utilize more/fix infrastructure • Poor drainage along frontage roads Unique Responses: - "Lower income housing has become trashy. Rental homes aren't being taken care of. We need to regulate the area and then I think we will see things cleaned up and eventually the drug and crime problems will go away." - "There's no incentive for people/businesses to come here." - "We pay the same taxes as other areas, but we don't receive the same level of service."

4. What improvements would you like to see within the corridor area?	Most Frequent Responses: - Make the area more aesthetically appealing - Access from frontage roads - Fix the infrastructure and allow it to support future development - Fix drainage/sewer issues Unique Responses: - "People who live here understand the frontage roads but others don't." - "Menoken & Huxman roads are very dangerous and they need major improvements." - "We lack a good retirement home in the area. People want to stay here and often live alone in their homes long after they should because they don't want to leave North Topeka and there's nowhere in North Topeka for them to go." - "We need to widen Hwy 24 from Wamego to Perry." - "Need more police protection in the area."

5. Is access for pedestrians and bicyclists important?	Yes 70 % No 33 %	Most Frequent Responses: - It's very important – didn't think so until we built the walking paths, but people are always using them. - It's extremely dangerous to walk or bike on 24 or the frontage roads. - School kids have to walk in the middle of the street or in a ditch from lack of sidewalks. - Thriving communities have sidewalks – why don't we? Unique Responses: - "Kids going to school walk in the streets or ditch and it's dangerous with the trucks that drive around there." - "Trails are a bad idea. If we do something why not sidewalks?"
6. How do you feel about the school district?	Most Frequent Responses: - Great district. Their successes make people want to relocate out here. - Great district. I'll send my kids there. - That's why people move here. Unique Responses: - 'Very well managed & maintained. Best in the city. People move here for it." - "Great vision, good strategic plan and they are putting the district in a position of growth and good things to happen in the future. They always find a way to work through the politics for the good of the school."	

7. Is there a strong sense of community in the area?	Yes 100% No	Most Frequent Responses: - The sense of community is great. I have never seen a sense of community like they have in North Topeka. - Strong sense of community - Great sense of community. It's like a small town community separate from Topeka. Unique Responses: - "Organizations here help this – they fund it themselves and make things happen when the city won't. Businesses in the area are BIG supporters of supporting what's around them. We have business in every part of the city and it's always the best here."
8. What would you do to improve the sense of community?	Unique Responses: - "Add restrictions and zoning to help with up keep and clean up the look. This would bring good people to the area." - "Stay away from temporary living quarters." - "We need neighborhood improvement groups to help with follow through on projects."	

9. What shopping opportunities would you like to see within the corridor area?	Most Frequent Responses: - Family/sit down restaurants - Retail/strip mall - Entertainment - We don't want a Wanamaker - Walmart has helped to bring more adequate shopping opportunities but we still need more. - We want businesses that will stick with the community. - Unique Responses: - "We won't attract people from west Topeka no matter what's done on US 24." - "People don't want to deal with another Wanamaker. We need to develop the infrastructure and then bring in business." - "One problem we have with economic development is that people won't go in here because of the frontage roads and no access to them."
10. What professional services are lacking in the corridor area?	Most Frequent Responses: - Doctors/private practices - There aren't many professional services, but we're pretty well covered. Unique Responses: - Accountants - Office Development - Attorneys - Barber/Stylists - "We need to become a destination area and we also need something that will bring jobs to the area – not transfer jobs (such as closing Price Choppers and opening a Hy-Vee) – you're just transferring employment.)"

11. What transportation issues need to be addressed?	Most Frequent Responses: - Menoken Road is a mess - Utilize the frontage roads so it doesn't turn into another Wanamaker. - Finish Topeka Blvd bridge - Fix the Cloverleaf and make a decision about the roundabouts. - No roundabout - Rochester and 24 is a nightmare - 2-lane is a concern - While not against roundabouts – we don't want one at Topeka Blvd/24. Unique Responses: - "We need reliable access for tractors and large trucks." - "No easy access for emergency vehicles." - "Lower Silver Lake Road needs work." - "No roundabout – with all the large trucks that go through the area they are hard on the tires which costs more money for businesses in maintenance." - "Don't want a roundabout, however one benefit is that while there may still be wrecks not many people are killed in those." - "The speed limit off of Menoken is too high and makes it dangerous."
12. For what reasons do people stay/move to the corridor area	Most Frequent Responses: - They are from here - Great schools - Good quality of life - Small community feeling Unique Responses: - Lower taxes - "Housing is economically good/reasonably priced." - "The lack of affordable housing (closer to the corridor) could be a concern for crime in the future."

13. If you could change anything about the corridor area what would it be?	Most Frequent Responses: - Clean up the area - Make is aesthetically appealing - Eliminate trailer courts and old run down motel - Improve the infrastructure. - Bring in family oriented restaurants and entertainment. Unique Responses: - Upscale stores/retail development - Add restrictions to keep the area looking nice - Add paths/sidewalks to area
13. Continued -	Other Frequent Comments: - Fix the sewer/drainage issues. We pay for it, let's do something about it. - We don't want the roundabout here – but we need something that is still cost effective, safe and makes sense for the area. - If we do construction we need to make sure access is still available to area businesses.

Highway 24 Corridor Study
Get Involved!

Public Meeting Survey

Question	Yes/Agree	No/Disagree
I believe that North Topeka and the surrounding Corridor Area is a great place to live and work.	YES 93% NA 2%	NO 5 %
I believe that there is no need for additional shopping opportunities in the Corridor Area.	YES 11% NA 3%	NO 86%
I believe that the corridor area is easy to access along many entrance points.	YES 54% NA 3%	NO 43%
I believe there are adequate professional services (lawyers, doctors, accountants, etc.) within the Corridor Area.	YES 31% NA 9%	NO 60%
I believe the Corridor Area has a good school district.	YES 95%	NO 5%
I believe there is safe access for pedestrians and bicyclist	YES 7% NA 4%	NO 89%
I believe that business is growing in the corridor area.	YES 82%	NO 18%
I believe that infrastructure improvements are unnecessary.	YES 21 %	NO 79%
I believe that a roundabout at Highway 24 & Topeka Blvd is a good option.	YES 18% NA 5 %	NO 77%
I believe that there is adequate transportation in the corridor area.	NA 12% YES 24%	NO 64%
I believe that traffic congestion is NOT an issue in the Corridor area.	NA 4% YES 34%	NO 62%

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If you could change anything about the corridor area what would it be?

Most Frequent Responses:
- No Roundabout.
- Improve the cloverleaf, but no roundabout.
- Improve access roads on each side of 24 with limited access.
- 4-lane (multi) and new bridges.
- Less congestion at Rochester and US 24.
- Plan and build infrastructure that works for everyone, not just motorist.
- Make it bicycle and pedestrian friendly.
- We need sit down restaurants.
- Keep E-W and N-S traffic pace unobstructed as it is today.
- Raise and widen roadway if necessary.

Unique Responses:
- Have to keep 24 & Topeka intersection open during construction. Traffic has t be able to move N & S on Topeka to access businesses north of Hwy 24 on Topeka Blvd.
- Green belt – walking biking trail. No new billboards.
- Work on a sense of place and design to make it special. It looks like every o strip of highway in the country.
- Utilize Roundabouts to manage speed and decrease delay.
- We do not need an ethanol plant on good farm land. Put it in an industrial a – east on Hwy 40 or by Cargill.
- Build a new bridge at the cloverleaf if and when it is necessary to replace th existing bridge. This is a historical landmark in North Topeka.
- Mow the grass in the medians more often.
- No roundabout unless it is like 75 &th46
- Tax breaks for remodeling established businesses and tax breaks for new businesses.
- Try to connect shopping areas. Either with same structure or covered.

US–24 Corridor Study
Public Input Summary

Overall Public Input Summary:

- No Roundabout.
- Fix/update cloverleaf.
- If fixing the cloverleaf is not possible then a stoplight is most preferred.
- Utilize frontage roads more.
- Sit down/family restaurants are needed in the area.
- Safety for pedestrians and bicyclists is a top concern.
- Do not want another "Wanamaker".
- Something needs to be done that will alleviate stress and congestion at the intersection of Rochester and US–24.
- Clean the area up and make more it aesthetically appealing.
- Maximize green space/agricultural space.

Phase 1: One on one interviews with area business owners and managers, residents and stakeholders.

- 88% believed that the Corridor area is a great place to live while 6% disagreed and the remaining 6% neither agreed or disagreed.
- 83 % believe the Corridor has a great sense of community.
- 68% believe there are not many shopping opportunities.
- 53% believe the corridor is not easy to access along many entrance points and 12% had no opinion on the entrance points.
- 63% believed there were few professional services in the area.
- 89% believed there was poor access for pedestrians and bicyclists, 6% had no opinion.
- 71% believed that business in the corridor area is growing.
- 84% believed there are many improvements needed to the Corridor area.
- 63% believed there are transportation problems along the corridor.
- 88% believed that people do not move away from the corridor area.

US–24 Corridor Study
Public Input Summary

- 81% believed that it is unsafe to walk or bicycle around the corridor area.

- The corridor area is most frequently used for:
  - Work
  - Home
  - Shopping
  - School
  - To get to and from point a and b
  - Professional Services

- Most frequent responses:
  - Best things about Living in Topeka:
    - Good, loyal people
    - School district
    - Quality of life and small town atmosphere
    - Quick and easy access to other areas of Topeka

  - Worst things about living in North Topeka:
    - Poor infrastructure and poor planned roads
    - Poor area perception
    - Lack of family, sit-down restaurants
    - Poor drainage along frontage roads

  - Improvements preferred:
    - Aesthetic appeal
    - Access from frontage roads
    - Infrastructure fixes to support development
    - Drainage/sewer fixes

  - Pedestrian & Bicyclists access
    - 70% believed it was important
    - Extremely dangerous
    - School kids have to walk in street or the ditches
    - Lack of sidewalks

  - School District
    - This is why we moved here.
    - Great

  - Sense of Community
    - 100% believed it was strong

  - Shopping Opportunities:

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    - Family/sit down restaurants needed
    - Retail/strip mall
    - Entertainment
    - Don't make the area another "Wanamaker"
    - Businesses that will stick with the community

  - Professional Services:
    - Need Doctors/private practices
    - Pretty well covered, but not much option

  - Transportation issues:
    - Menoken Road is a mess
    - Utilize the frontage roads so the Corridor doesn't turn into a "Wanamaker"
    - Fix the Cloverleaf
    - No Roundabout
    - Fix the intersection of US 24 and Rochester
    - 2–lane is a concern with future development

  - Why people stay in the area:
    - Originally from here
    - Great Schools
    - Good quality of Life
    - Small community feel

  - What one thing would they change about the Corridor area?
    - Clean the area up.
    - Make it aesthetically appealing.
    - Improve infrastructure.
    - Bring in Family oriented restaurants and entertainment.

Phase 2: Public Meeting 1 Survey

- 93% believe North Topeka is a great place to live and work.

- 86% believe there is a need for additional shopping opportunities.

- 54% believe the corridor area is easy to access along many entrance points and 43% disagreed.

- 60% believed there are not adequate professional services (lawyers, doctors, accountants, etc) within the Corridor area.

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- 95% believed the Corridor Area has a great school district.
- 89% believed that it is dangerous for pedestrians and bicyclist.
- 82% believe business is growing in the Corridor area,
- 79% believe infrastructure improvements are necessary.
- 77% believe a roundabout at US 24 and Topeka Blvd is a bad option.
- 64% believe there is inadequate transportation in the corridor area.
- 62% believe that traffic congestion is an issue in the Corridor area.
- Most frequent comments:
  - No Roundabout.
  - Improve the cloverleaf.
  - Improve access roads on each side of US 24 with limited access.
  - 4–lane the corridor and put in new bridges.
  - Fix congestion at the intersection of Rochester and US 24.
  - Plan and build infrastructure that works for everyone, not just motorists.
  - Make the area bicycle and pedestrian friendly.
  - Bring in sit down restaurants.
  - Keep East – West and North – South traffic pace unobstructed as it is today.
  - Raise and widen roadway if necessary.

Phase 3: Public Meeting 2 Survey

- Most Common Comments:
  - No Roundabout.
  - Keep a steady traffic flow along Corridor with minimal delay.
  - Update North/South streets from US 24 & 46th Street in order to help alleviate burden on the intersection of Rochester and US 24.
  - There is a need for family/sit-down restaurants.
  - Fix/update cloverleaf; but okay with a stoplight should this be impossible.
  - Prefer Land Use Scenario 2.
  - Prefer a scenario that maximizes green space/agricultural land.
  - Improve safety for pedestrians and bicyclists.

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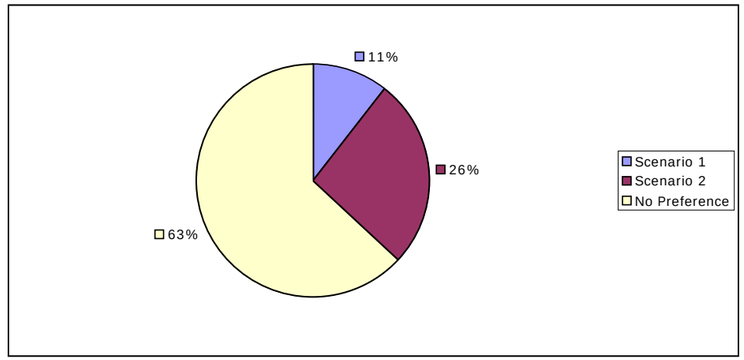
- What changes would you make to either of the future 2034 land use scenarios?
  - No Roundabout.
  - Keep a steady flow of traffic.
  - More North/South streets between US 24 and 46th Street.
  - Family/Sit-down restaurants.
  - Protect historical landmarks.
  - Preserve farmland. Beautify land along roads/parks.
  - Pedestrian & bicyclist access.

- 26% preferred Scenario 2.
- 11% preferred Scenario 1.
- 63% do not have a specific preference on the scenarios.



- To answer the question: In your opinion, what transportation improvements best serve the future traffic, safety and land use characteristics along the corridor?

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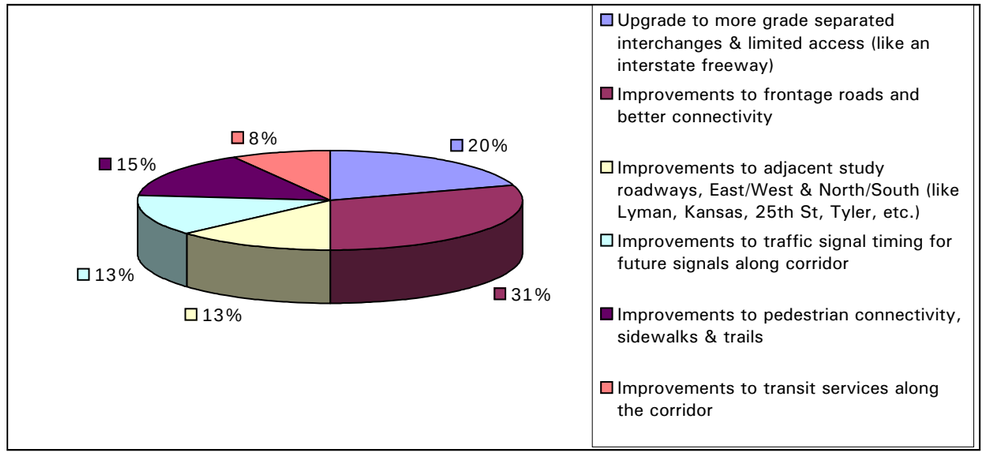

1. 31% believe that improvements to frontage roads and better connectivity are most important.

2. 20% believe that upgrades to more grade separated interchanges & limited access (like an interstate freeway) are most important.

3. 15% believe improvements to pedestrian connectivity, sidewalks & trails are most important.

4. 13% believe that improvements to adjacent study roadways, East/West & North/South (like Lyman, Kansas, 25th Street, Tyler, etc.) are most important.

5. 13% believe improvements to traffic signal timing for future signals along the corridor are most important.

6. 8% believe that improvements to Transit services along the corridor are most important.

- In a fiscally constrained budget, what is the single most important transportation improvement that should be funded for the US-24 corridor?
  - Cloverleaf
  - Access roads/frontage roads
  - Pedestrian access