TIGER GRANT APPLICATION

31ST STREET -
HASKELL AVENUE TO COUNTY ROUTE 1057

City of Lawrence

THE CITY OF LAWRENCE PUBLIC WORKS DEPARTMENT

City of Lawrence
Douglas County
PLANNING & DEVELOPMENT SERVICES

6 East 6th St.
P.O. Box 708
Lawrence, KS 66044

www.lawrenceplanning.org

Phone 785-832-3150
Tdd 785-832-3205
Fax 785-832-3160

September 14, 2009

Charles Soules, Public Works Director
City of Lawrence
6 East 6th Street
Lawrence, KS 66044

Dear Mr. Soules:

This letter is being sent to you from the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) Staff to inform you that the improvement and extension of 31st Street between Haskell Avenue and Douglas County Route 1057 (E 1900 Road) is identified in our region's Metropolitan Transportation Plan (MTP) as a Principal Arterial and the portion of this roadway extension from Haskell Avenue to Noria Road (E 1750 Road) is specifically identified as a recommended project in the fiscally constrained list of system improvements to be constructed within the next twenty years.

Our MTP called the Transportation 2030-Lawrence/Douglas County Long Range Transportation Plan identifies several road improvements that are needed to improve connectivity and mobility in Douglas County, and this connection is one of the most important connections needed to facilitate the smooth flow of local traffic in the southeast corner of the Lawrence urban area. The completion of this road connection between Haskell Avenue and County Route 1057 would significantly improve the system connectivity in this part of the urban area, and this project is consistent with the long range planning policies of the MPO.

All of the L-DC MPO's current regional transportation planning efforts support enhancements to east-west mobility along this corridor. The funding and construction of this roadway extension project within the near future is consistent with our area's transportation plans. The L-DC MPO Staff supports the efforts by the City of Lawrence to seek outside funds from the federal TIGER Grant program to build this needed roadway connection.

The L-DC MPO Staff hopes that you can review this request for federal road building assistance and support our efforts to implement our metropolitan transportation plan, and specifically support our efforts to obtain needed funds for this 31st Street Extension Project.

Sincerely,

Todd Girdler, AICP
Senior Transportation Planner
Lawrence-Douglas County MPO

NARRATIVE

Community

The City of Lawrence, Douglas County, Kansas is located in northeast Kansas approximately 20 miles west of Kansas City and 25 miles east of Topeka. With a population of 90,000± residents, Lawrence is home to the University of Kansas with a student enrollment of approximately 25,000.

Population/Employment

Both the City of Lawrence and Douglas County experienced a sizeable population growth rate since 1960 with the exception of the last couple of years (2008 and 2009). The City of Lawrence is the fastest growing community in Kansas. Prior to the current economic downturn, property values had been increasing at a rate of 6%± /year for more than a decade. Population projections for the future year of 2020 are anticipated at 110,406.

The number of Lawrence/Douglas County employed residents had also seen positive growth in the late 1990's and early 2000's. Again, recent economic declines have significantly affected employment rates

Transportation Network

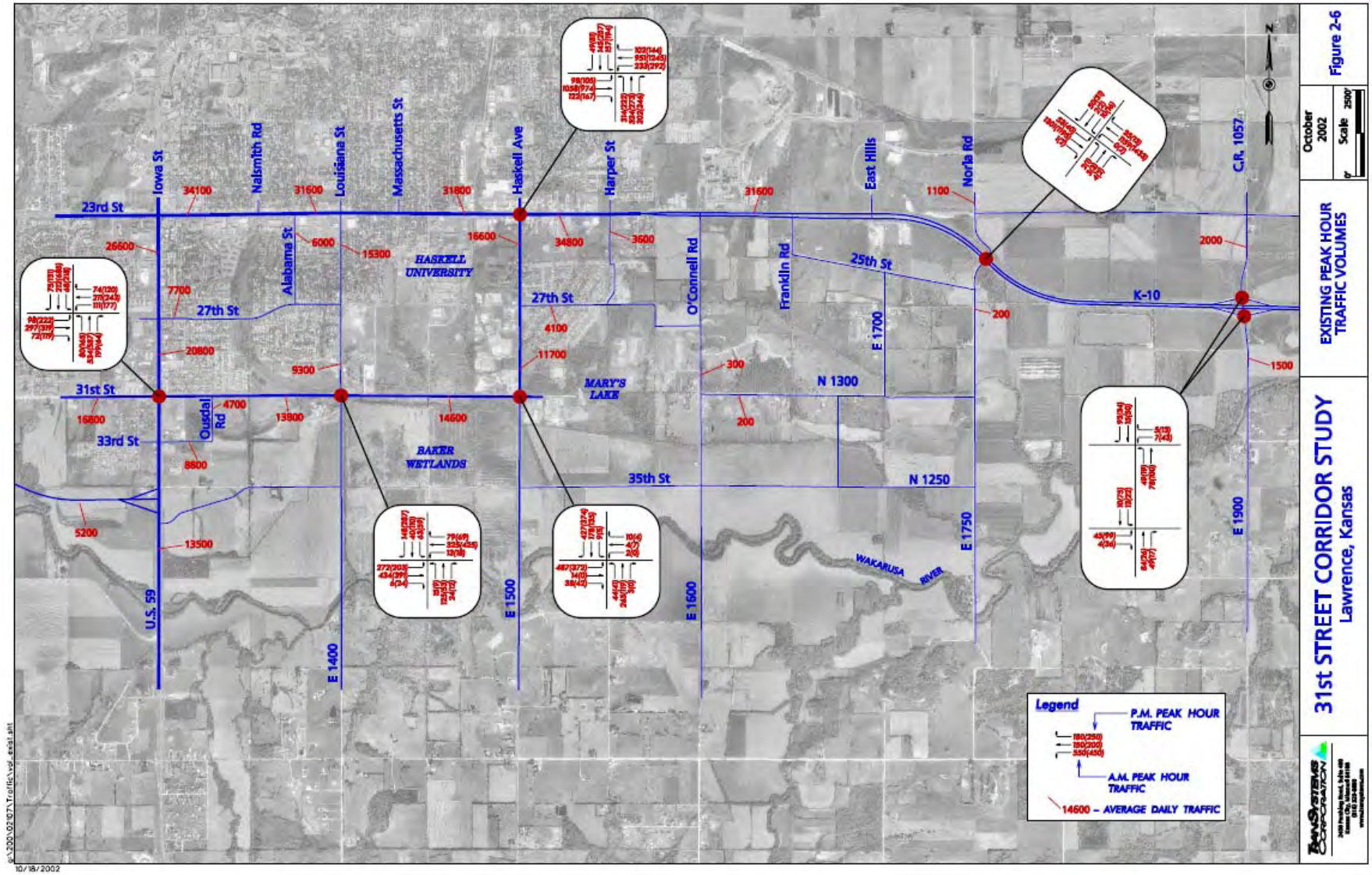
- The City of Lawrence is serviced by I-70 which lies on the north edge of the City,
- U.S. Highway 40 enters from the west,
- U.S. Highway 59 enters the City from the south,
- State Highway K-10 approaches from the east.

State Highway K-10 (23rd Street) is a highly developed commercial area which connects to U.S. Highway 59 (Iowa Street). This roadway is a major arterial street that carries significant traffic through the City.

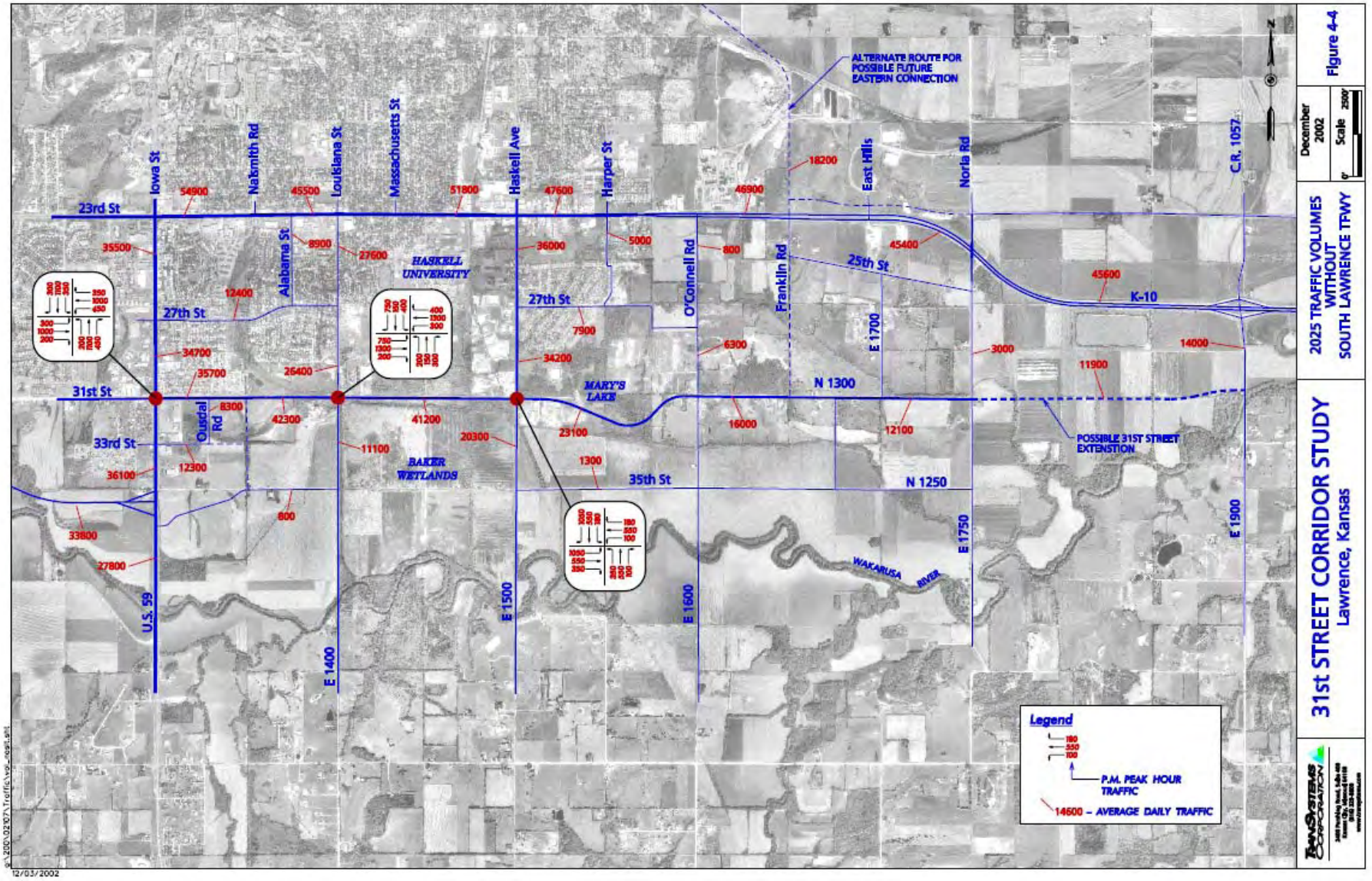
The construction of 31st Street would allow access to K-10 that would significantly alleviate congestion and improve safety on 23rd Street.

T2030 – http://www.lawrenceks.org/pds/t2030

31st Street Alignment



Existing Traffic Volumes



2025 Traffic Volumes

Contact Information

Applicant: City of Lawrence, Kansas
6 E. 6th Street
Lawrence, Kansas 66044

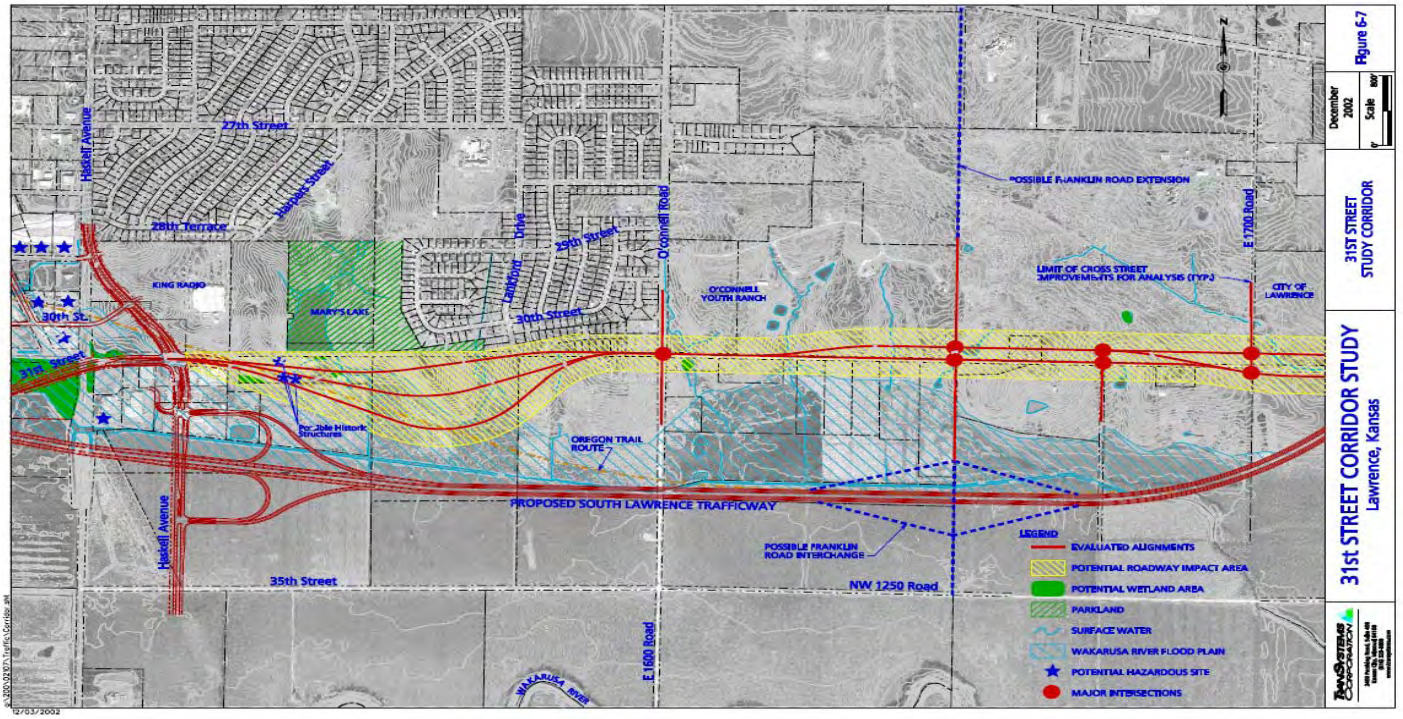
Contact: Charles F. Soules, P.E., Public Works Director
Public Works Department
P.O. Box 708
Lawrence, KS 66044-0708
Office (785) 832-3123 | Fax (785) 832-3398
csoules@ci.lawrence.ks.us

Todd Girdler, Senior Transportation Planner
Lawrence – Douglas County Planning & Development Services
P.O. Box 708
Lawrence, KS 66044-0708
Office (785) 832-3155 | Fax (785) 832-3160
tgirdler@ci.lawrence.ks.us

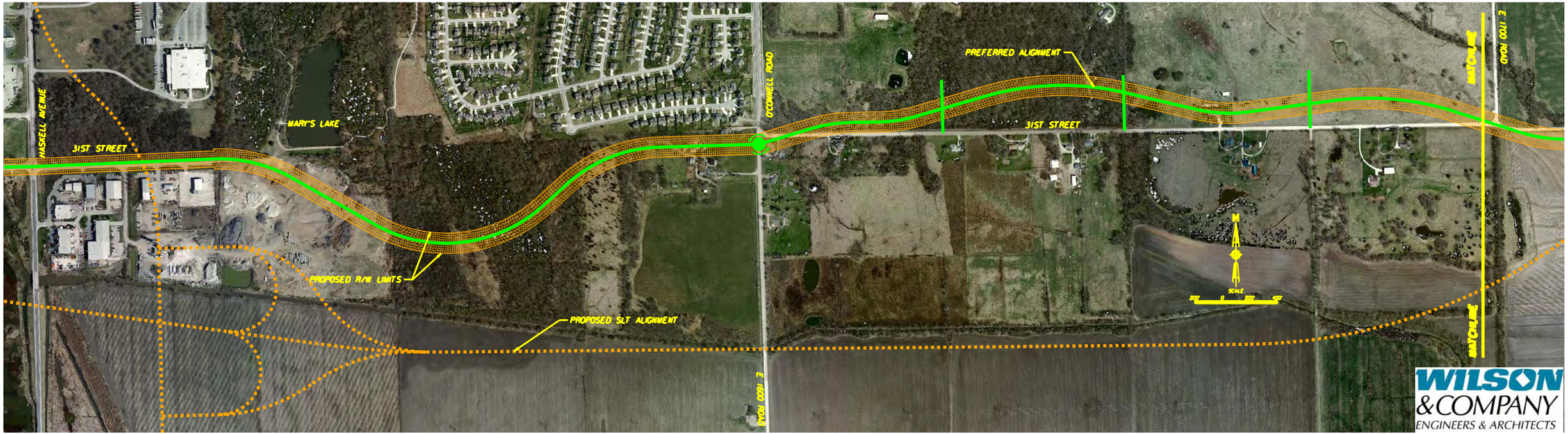
PROJECT DESCRIPTION

The project includes the construction of 31st Street from Haskell Avenue to County Route 1057 (E 1900 Rd.) then north on E. 1900 Road to Kansas Highway 10 (K-10). The project would include:

- Two lane arterial street
- Open ditches / bioswales for stormwater management and treatment
- 10 ft. wide multi-modal path parallel to the roadway
- Unusable/surplus property will need to be acquired south of Mary's Lake. This area will become a wildlife/conservation area.



31st Street Corridor Study –
http://www.douglas-county.com/depts/pw/pw_31corridorstudy.aspx


HASKELL AVENUE
31ST STREET
MARY'S LAKE
PROPOSED R/W LIMITS
PROPOSED SLT ALIGNMENT
E 160 ROAD
O'DONNELL ROAD
PREFERRED ALIGNMENT
31ST STREET
E 170 ROAD
SCALE
WILSON
&COMPANY
ENGINEERS & ARCHITECTS


MATCHLINE
MATCHLINE
E 1700 ROAD
INDIANA ROAD
E 1750 ROAD
CR 1000
PROPOSED SLT ALIGNMENT
PREFERRED ALIGNMENT
PROPOSED R/W LIMITS
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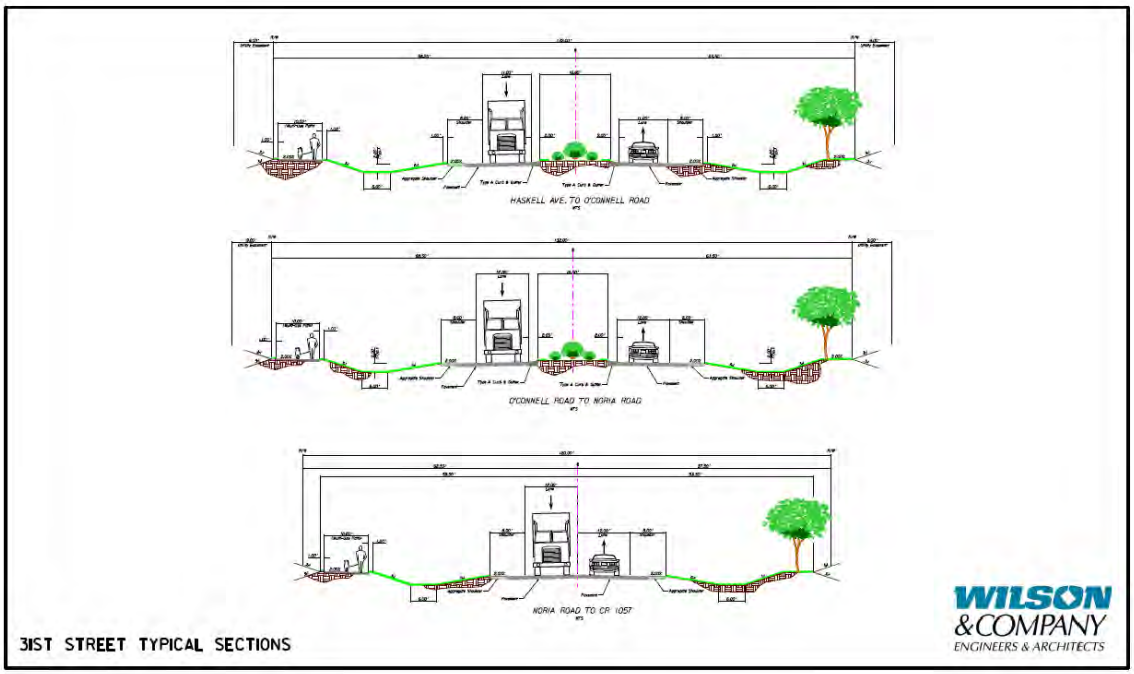
SCALE
200' 0 200' 400'
WILSON
&COMPANY
ENGINEERS & ARCHITECTS



Project Status

The section of 31st Street between Haskell Avenue and O'Connell Road is currently in final plan design phase. The section of 31st Street from O'Connell Road to E 1900 Road is in preliminary design phase.

Schedule

Plans/specifications complete	November 2010
Right of Way Acquisition	May – December 2010
Project Bid	End of 2010
Project Construction	2011
Project Complete	December 2011

PROJECT ESTIMATE

Two-Lane Divided Highway – Haskell Avenue to O'Connell Road	
Right of Way	$ 1,500,000
Roadway	$ 6,500,000
Bridge	$ 1,000,000
Multi-modal facility	$ 500,000
Two-Lane Undivided Arterial – O'Connell to K-19	
Right of Way	$ 800,000
Roadway	$ 6,000,000
Multi-modal facility	$ 1,200,000
TOTAL	$17,500,000
10% Contingency	$ 1,750,000
TOTAL PROJECT COST	$19,250,000

FUNDING

The City of Lawrence received an earmark from Congressman Dennis Moore in the amount of $800,000 for preliminary engineering. The City is requesting funding for right-of-way acquisition and construction in an amount of $19.25 million.

FEDERAL WAGE RATE REQUIREMENT

The City of Lawrence will comply with the requirements of SubChapter IV of Chapter 31 of Title 40, United State Code (Federal Wage Rate Requirements) as required by the Recovery Act.

David L. Corliss
City Manager

9.14.09
Date

ENVIRONMENTAL & HISTORICAL

The project will be reviewed by the following agencies:

	Status
Division of Water Resources	Need to submit plans/application
Kansas State Historical Society	Complete – Attached
Environmental	Complete – Attached
404 Permit from Corps	Need to submit plans/application

Transportation Links

Transportation Plan (pages 104-197)	http://www.lawrenceplanning.org/documents/TIP_Amend5.pdf
Transportation Improvement Program (page 15 of project table)	http://www.lawrenceplanning.org/t2030/Complete2030.pdf

KANSAS

KSR&C No. 09-02-082

Kansas State Historical Society
Jennie Chinn, *Executive Director*

KATHLEEN SEBELIUS, GOVERNOR

April 24, 2009

RECEIVED
MAY 04 2009
Bureau of Local Projects

Marsha King
Environmental Services Section, Bureau of Design
Kansas Department of Transportation
Eisenhower Office Building, 700 SW Harrison
Topeka, KS 66603

Re: Activity III Report for Charles L. Shirar Farmstead – Douglas County
Project # 23 U-2117-01
31st Street Extension from Haskell to O'Connell

Dear Ms. King:

We have reviewed the materials received on April 23, 2009 regarding the above-referenced project in accordance with 36 CFR Part 800. In reviews of this nature, the SHPO determines whether a federally funded project will adversely affect properties that are listed or determined eligible for listing in the National Register of Historic Places. The SHPO concurs that the Charles L. Shirar Farmstead is not eligible for listing in the National Register. As far as this office is concerned the project may proceed.

Please refer to the Kansas State Review & Compliance number (KSR&C#) listed above on all future correspondence. Thank you for giving us the opportunity to comment on this proposal. Please submit any comments or questions regarding this review to Kim Norton at 785-272-8681, ext 225.

Sincerely,
Jennie Chinn
State Historic Preservation Officer

Patrick Zollner
Director, Cultural Resources Division
Deputy State Historic Preservation Officer

RECEIVED
APR 28 2009
BUREAU OF DESIGN
ADMINISTRATION

6425 SW Sixth Avenue • Topeka, KS 66615-1099
Phone 785-272-8681 Ext. 205 • Fax 785-272-8682 • Email jchinn@kshs.org • TTY 785-272-8683
www.kshs.org

KANSAS

Kansas State Historical Society
Cultural Resources Division

KATHLEEN SEBELIUS, GOVERNOR

June 10, 2009

Scott Vogel, Chief
Environmental Services Section
Kansas Department of Transportation
Eisenhower State Office Building
Topeka KS 66612

Re: 23 U-2117-01
STP-U211(701)
Douglas County

Dear Sir:

Staff review of the above referenced project has been completed. Pursuant to 36 CFR 800.4, we concur with the finding of no historic properties affected for the above referenced undertaking. We therefore have no objection to implementation of the project.

Sincerely yours,

Jennie Chinn
State Historic Preservation Officer

Timothy Weston for

Patrick Zollner
Deputy State Historic Preservation Officer

tw

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June 10, 2009

Scott Vogel, Chief
Environmental Services Section
Kansas Department of Transportation
Eisenhower State Office Building
Topeka KS 66612

Re: 23 U-2117-01
STP-U211(701)
Douglas County

Subject: Phase II completed: project clearance recommended

Dear Mr. Vogel:

In accordance with the goals and procedures of the Memorandum of Agreement between the Kansas State Historical Society and the Kansas Department of Transportation effective July 1, 2006, the KSHS Contract Archeology Program (CAP) has completed a Phase II field survey investigation of the above referenced road project. CAP's staff archeologist Tod Bevitt conducted the fieldwork on Thursday, December 4, 2008. Enclosed, you will find a report of that investigation.

In brief, no significant archeological sites were found in or immediately adjacent to the specified project area. We therefore recommend that the project proceed as planned with no further archeological investigations. A copy of the enclosed report, containing this recommendation, has been sent to the State Historic Preservation Officer for review.

Of course, due to the nature of archeological manifestations, it is always possible that buried cultural deposits could be encountered during the course of the project. If that occurs the remains should be left in place and the State Archeologist contacted immediately so that the appropriate measures can be carried out as soon as possible.

Thank you for your cooperation in helping to preserve the State's archeological resources.

Sincerely,
For the State Archeologist:

Tod Bevitt, Archeologist

6425 SW Sixth Avenue • Topeka, KS 66615-1099
Phone 785-272-8681 Ext. 267 • Fax 785-272-8682 • Email rthies@kshs.org • TTY 785-272-8683
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KANSAS

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June 10, 2009

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State Historic Preservation Officer

Timothy Weston for

Patrick Zollner
Deputy State Historic Preservation Officer

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For the State Archeologist:

Tod Bevitt, Archeologist

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www.kshs.org

ARCHEOLOGICAL SURVEY OF KDOT PROJECT 23 U-2117-01 DOUGLAS COUNTY, KANSAS

Report submitted to the Kansas Department of Transportation
in accordance with the provisions of the
Memorandum of Agreement between the Kansas Historical Society and the Kansas Department of Transportation, effective July 1, 2006

by Tod Bevitt
Contract Archeology Program, Cultural Resources Division
Kansas Historical Society
June 10, 2009

ARCHEOLOGICAL SURVEY OF KDOT PROJECT 23 U-2117-01, DOUGLAS COUNTY, KANSAS

by Tod Bevitt
Contract Archeology Program, Cultural Resources Division
Kansas Historical Society
June 10, 2009

INTRODUCTION

In accordance with the goals and procedures of the Memorandum of Agreement (MOA) between the Kansas Historical Society and the Kansas Department of Transportation (KDOT), effective July 1, 2006, and as requested by the KDOT, the Contract Archeology Program (CAP) of the Kansas Historical Society recently completed a Phase II archeological field survey investigation of KDOT project number 23 U-2117-01. The purpose of the investigation was to determine whether any significant archeological resources would be affected by the proposed project. More specifically, the investigation was conducted to ensure compliance with various laws governing the treatment of cultural resources, particularly Section 106 of the National Historic Preservation Act and its implementing regulations, 36 CFR 800.

As required by the terms of the MOA, a Phase II survey must result in a report submitted to KDOT and the State Historic Preservation Officer (SHPO) wherein the investigation is described and recommendations are made for clearance or for further work to be done. This report was prepared to comply with that requirement. In accordance with the SHPO's request that site location information be left out of the text of reports such as these, and to enable the easy removal of such data from copies of reports so as to guarantee confidentiality, all of the maps and figures pertaining to this investigation are contained within Appendix I.

As currently planned, the project will consist of an extension of 31st Street from Haskell Avenue east to O'Connell Road in the southeast portion of the City of Lawrence (Figure 1 and Figure 2). Two potential alignments were provided for consideration, one "preferred" and one "southern", portions of which overlapped (Figure 3).

The Phase II investigation was initiated by earlier correspondence between CAP and KDOT relating to the potential impact of the project on cultural resources. A Phase I investigation (archival research) was requested by KDOT on January 13, 2009. After reviewing the available documentation and consulting with the SHPO, CAP submitted a Phase I report dated January 16, 2009 recommending that a Phase II field survey investigation be performed. CAP's staff archeologists Tricia Waggoner and Tod Bevitt thereby carried out the recommended fieldwork as weather and scheduling permitted in late February and early March 2009.

ENVIRONMENTAL SETTING

In physiographic terms, the project area is located within the Osage Cuestas division of

the Osage Plains section of the Central Lowland province of the Interior Plains division of North America (Schoewe 1949:283-286). The bedrock of the region consists of interbedded limestone, shale, and sandstone formations of Pennsylvanian age. Exposure and differential erosion of the unequally resistant, westward sloping strata at the ground surface has created a series of low parallel ridges. These "cuestas" have steep, rugged, east facing escarpments that front on broad, gently inclined, westward sloping vales. Thus, the topography consists of long, low rolling hills and wide, shallow valleys. In general, the escarpments exhibit an irregular northeast-southwest trend. The major stream courses, however, flow to the east and southeast, transverse to the direction of the escarpments and against the westward dip of the rock formations.

The prehistoric vegetation of the Osage Cuestas was open prairie penetrated by thin ribbons of riverine forest. Kuchler (1974) lists the Cuestas as part of the tall grass bluestem prairies, described more specifically as an area with extensive interspersion of forest and prairie. Soil survey data and early historical accounts indicate that the wooded areas were confined to the floodplains and valley edges of the major stream courses and their tributaries. The timber consisted of medium tall to tall broadleaf deciduous forests, often with dense undergrowth and many lianas. Oak, black walnut, hickory, hackberry, cottonwood, willow, and elm were common along with a variety of smaller species such as persimmon, papaw, elderberry, serviceberry, chokecherry, and wild grape. Forests were not pervasive even in bottomland locations, however, since many of the common stream course soils have characteristics indicating that they developed under a native vegetation of both tall grasses and hardwood trees. In any case the forest belts and nearby prairies of the Osage Plains provided shelter and food for plentiful mammalian fauna, including bison, elk, deer, antelope, and bear, while the streams yielded an abundance of edible fish and shellfish. Wild turkey, prairie chicken, ruffed grouse, and quail were also available, and ducks and geese were present on a seasonal basis (Wedel 1959:14).

The natural ecology of the region has been greatly altered by modern land-use practices. Today, most of the lands adjacent to the urban area of Lawrence are used for agricultural purposes, primarily the pasturing of livestock and the cultivation of crops such as milo and soybeans. Portions of the east end of the survey corridor consisted of pasture, however the majority of the surveyed area consisted of undeveloped/unimproved woods crossing a low, wet area below Mary's Lake and an area of general waste/spoil storage in the central and western portions of the project area respectively (Figure 3).

PREVIOUS INVESTIGATIONS

The general vicinity of the project area has been subject to numerous surveys in the past, primarily as part of the South Lawrence Trafficway project. Portions of the current project corridor coincide with some of this earlier work (Figure 3). In consideration of this, a brief review of past work is included in order to place the current investigations within the context from previous investigations in the vicinity.

The University of Kansas conducted some of the earliest large-scale survey in the area when undertaking a study of the then proposed Clinton Reservoir. Covering portions of Douglas and adjoining areas of Osage and Shawnee Counties within the Wakarusa River drainage, the

survey identified 61 archeological sites with components dating to the Archaic through Historic periods (Chism 1966). This survey was important as its scale allowed for a better understanding of the local cultural sequence as well as allowing for some determination to be made of where archeological sites might be expected in the local landscape. Later work by the University of Kansas revisited these and other sites at Clinton Reservoir (Johnson 1968, Logan 1987). The results of these investigations have helped place the archeology of the Wakarusa River valley in a wider regional context, particularly with respect to the Early Ceramic/Plains Woodland period.

Consideration of a K-10 South Lawrence Trafficway project began in the 1980s. The original archeological survey was conducted by the Kansas State Historical Society (Lees 1986). Additional survey was carried out in an area for which a final alignment had not been determined at the time of the initial survey work (Williams 1987a). Together, these early KSHS surveys included survey of a number of parcels along the study corridor, including areas within and immediately adjacent to the current project area. A total of four sites were recorded (14DO317-320) and one previously recorded site (14DO99) was revisited. Test excavations on 14DO99 were conducted shortly after the completion of the Phase II survey with a finding that the site lacked those qualities of integrity and significance necessary for NRHP listing. No further work was recommended for site 14DO99 (Williams 1987b). Site 14DO317, was tested by Weston (1993a, 1993b) in advance of construction of the bypass west of US-59 highway. Further investigations were not recommended at 14DO317 and the site has subsequently been destroyed by construction.

In anticipation of construction east of US-59 highway, KSHS conducted additional survey in the vicinity of a planned interchange of US-59 and the K-10 bypass (Hawley 1994a). Sites 14DO322 and 14DO323 were recorded as a result of this investigation. Recommended Phase III testing at each site was conducted by Weston (1995) with no further work recommended at either site. Both sites have subsequently been destroyed by construction. A second report presented the results of survey in the South Lawrence Trafficway corridor that yielded negative results (Hawley 1994b). Additional survey was conducted along proposed 35th and 38th Street alignments yielding a total of three sites (14DO325-327), each recommended for Phase III testing (Weston and King 1995). Most recently, survey conducted south of the Wakarusa River resulted in the recordation of 15 previously unrecorded sites (Weston 2001). Of these, five prehistoric sites were recommended for Phase III testing and five historic sites were recommended to have Phase IIIa (archival) research conducted to determine if further archeological investigations were warranted.

A recent study of the Haskell Indian Nations University and the adjacent Baker Wetlands, once collectively known as the Haskell Institute, sought to determine the eligibility of these locales for listing on the NRHP (Brockington and Harvey 2001). This important work focuses on determining the significance of the school and associated farm, the modern campus, and the nearby wetlands through archival research, oral history interviews, and a reconnaissance level architectural survey. The result was a recommendation that the modern Haskell campus together with the Baker Wetlands should be considered a NRHP eligible historic district.

CULTURAL-HISTORICAL SETTING

Archeologically, research in this region of Kansas has yielded evidence of prehistoric human occupation dating from around 11,000 years ago and extending up to the modern era, and certainly has the potential for yielding more such evidence. Sites in the region usually represent habitation areas or small workshops and more rarely occur as villages or burials. While the full extent of the area's archeological resources has yet to be determined, it is clear that the region contains materials deriving from all of the major cultural periods thus far identified in Kansas, i.e.,

Paleoindian	circa 9,000 B.C. to 7,000 B.C.
Archaic	circa 7,000 B.C. to A.D. 1
Early Ceramic	circa A.D. 1 to A.D. 1000
Middle Ceramic	circa A.D. 1000 to A.D. 1500
Late Ceramic	circa A.D. 1500 to A.D. 1800
Historic	A.D. 1541 to present

The list consists of broad and somewhat artificial categories, and there is some temporal overlap between periods. As might be expected, more is known about the most recent inhabitants than is known about the earliest (Brown and Simmons 1987; Hoard and Banks 2006; Lees 1989; Thies 1987; Wedel 1959).

With regard to the project that is the subject of this report, documentation consulted during the Phase I investigation indicated that no archeological sites had been reported in the survey corridor and only one (14DO99) was located in the immediate vicinity of the corridor. General Land Office survey notes and maps (General Land Office 1857) indicate the presence of a house and associated field in the survey area. The topographic setting suggested that there was some potential for prehistoric sites to be present and the nearby occurrence of homesteads and improvements related to the early settlement of the area during the territorial period suggested potentially significant historic sites might be found in the area as well. While portions of the project corridor had been surveyed in the past, other portions had never been professionally inspected for archeological remains. A Phase II field survey was recommended for those portions of the project corridor that had not been surveyed previously.

RESEARCH METHODOLOGY

The Phase II investigation consisted of a field inspection of the proposed project area including an intensive pedestrian survey of that area and a reconnaissance survey of the surrounding area. The amount of land covered in this survey amounted to approximately 9.5 ha (23.5 ac) (see Figure 3). Ground conditions within the proposed project area varied considerably from relatively undisturbed pasture on the east end of the survey area to portions with open

woods and patchy brush with occasionally dense woods and brush through the central portion of the survey area. Much of this wooded area was low and subject to flooding. Areas of standing water were common throughout the wooded area at the time of survey. The western portions of the survey area was moderately to heavily disturbed by various activities related to nearby development and use of the area as a landfill/waste area for debris. Ground visibility within the proposed project area varied accordingly from ranged from 10-90 % with most areas exhibiting 25-50% ground surface visibility. Pedestrian survey of areas of perceived high archeological potential with corresponding low surface visibility were supplemented with shovel tests placed at standard 15-30 m (49.2-98.4 ft) intervals.

Shovel tests were excavated to depths of 30 to 50 cm (11.8-19.7 in) as conditions allowed with all excavated material being screened through ¼ inch mesh hardware cloth. While soils varied across the terrain of the eastern end of the project area, a general soil profile consisted of a 20-30 cm (7.9-11.8 in) thick A-horizon of very dark grayish brown to dark brown (10YR 3/2-3/3) silt loam to clayey silt loam with a brown to yellowish brown (10YR 4/3-5/4) clayey silt loam subsoil that occasionally contained isolated gravels below that. As shovel tests approached the low wet area in the central portion of the project area, soils generally darkened (10YR 2/1-3/1) and became much more clayey, perhaps exacerbated by the locally wet conditions.

SURVEY FINDINGS AND CONCLUSIONS

Despite the intensity of the survey and the perceived potential of the area to contain cultural remains, no significant cultural resources were found within the project area. Much of the project area falls within existing ROW and the small portions that may be affected adjacent to the existing road and crossing all exhibited signs of past disturbance, namely push piles containing soil, decaying portions of trees, and native stone. In terms of 36 CFR 800.4, the investigation produced a finding of "no historic properties affected." We therefore recommend that the proposed project proceed as planned, with no additional investigations unless archeological discoveries are made during the course of the project.

It is always possible due to the nature of archeological manifestations that unidentified, buried cultural deposits could be encountered. If that occurs, the remains should be left in place and the State Archeologist contacted immediately so that appropriate actions can be carried out as soon as possible.

Tod Bevitt

Archeology Office, Cultural Resources Division
Kansas Historical Society
June 10, 2009

REFERENCES CITED

Brockington, Paul E. and Bruce G. Harvey
2001 Determination of Eligibility for the National Register of Historic Places of Haskell Indian Nations University and the Baker Wetlands Douglas County, Kansas. Brockington and Associates, Inc., Norcross, Georgia. Submitted to U.S. Army Corps of Engineers. Copies available from the Kansas SHPO, Topeka.

Brown, Kenneth L. and Alan H. Simmons, editors
1987 Kansas Prehistoric Archeological Preservation Plan. Unpublished report prepared for the Historic Preservation Department, Kansas State Historical Society, by the Office of Archeological Research, Museum of Anthropology, University of Kansas, Lawrence. Ms. on file, Kansas State Historical Society, Topeka.

Hawley, Marlin F.
1994a A Phase II Survey of a High Potential Area in the South Lawrence Trafficway, Douglas County, Kansas. Archeology Department, KSHS, Topeka. Submitted to KDOT. Copies available from the Kansas SHPO, Topeka.

1994b A Survey of a High Potential Area of the South Lawrence Trafficway with Negative Results. Archeology Department, KSHS, Topeka. Submitted to KDOT. Copies available from the Kansas SHPO, Topeka.

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APPENDIX I.

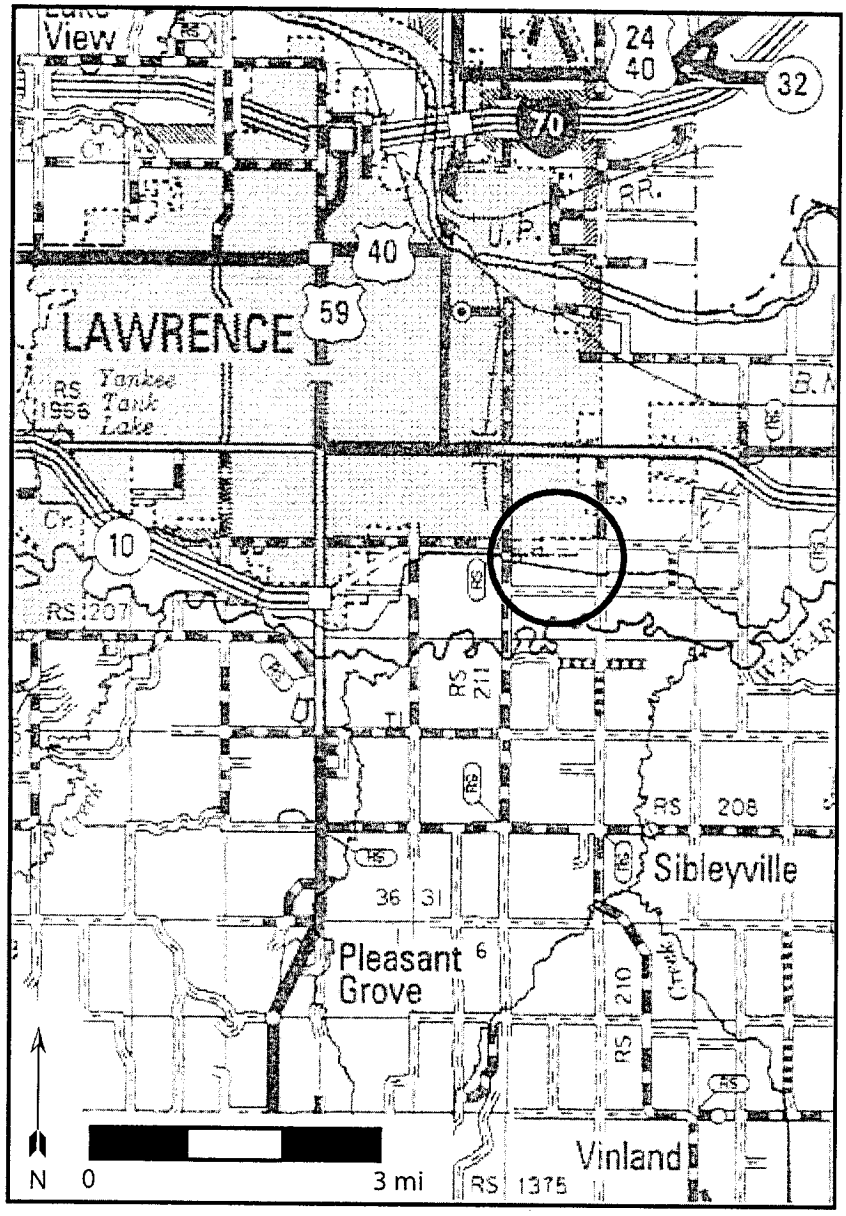


FIGURE 1. Section of Douglas County highway map, showing the location of KDOT project 23 U2117-01, as indicated by circle.

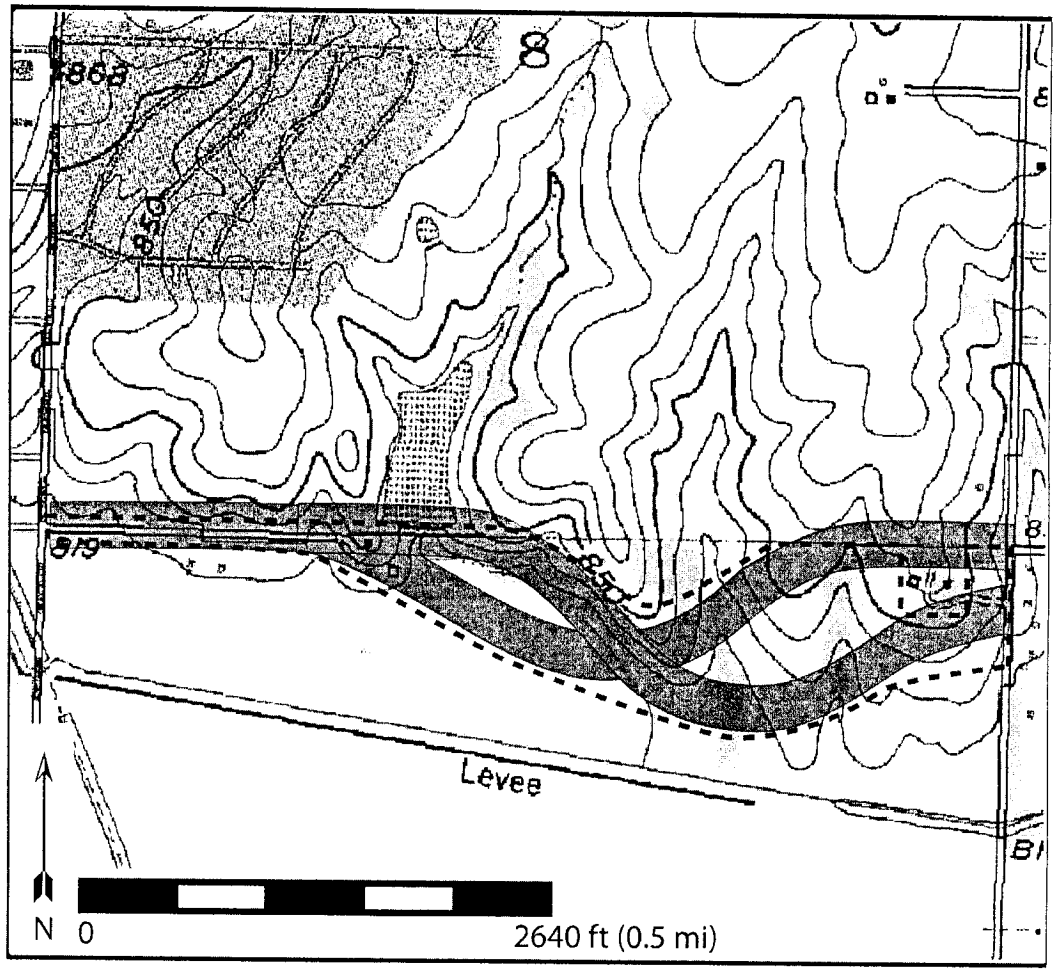


FIGURE 2. Section of U.S.G.S. topographic map (Lawrence East quadrangle), showing the location and general extent of the proposed project area, as indicated by shading and the areas subjected to pedestrian inspection during the Phase II survey as indicated by dotted line.

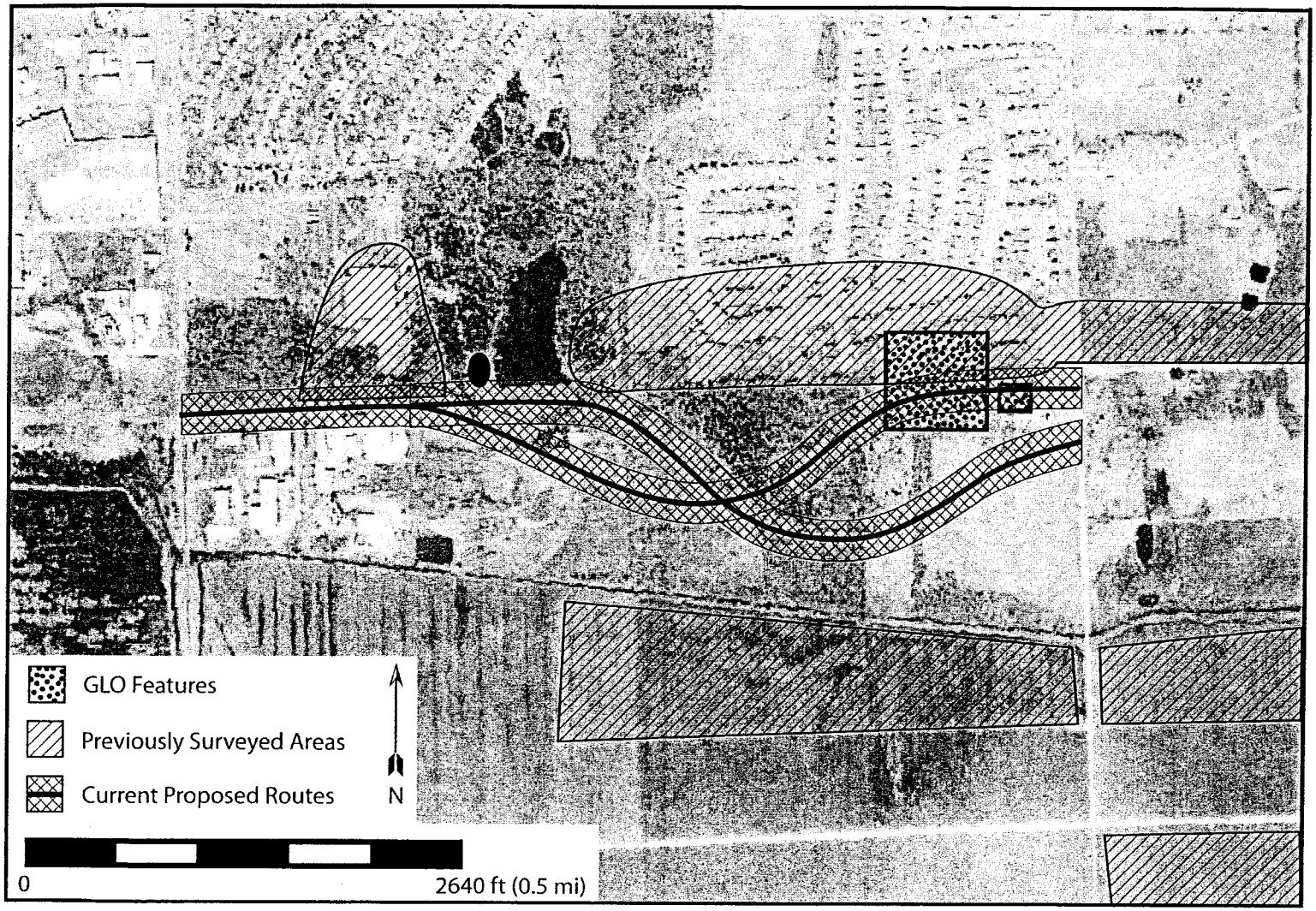


FIGURE 3. Aerial photo of project vicinity showing current survey corridors, previous survey areas in the immediate vicinity, and cultural features (archeological site 14DO99 [black dot] and GLO features).

SELECTION CRITERIA

Long-Term Outcome

This link is essential to the transportation network for the City of Lawrence and Douglas County. The congestion along 23rd Street/K-10 is significant causing traffic delays and safety issues.

Without the construction of 31st Street inner state commerce will be adversely affected. Quality of life issues with increasing traffic will also deteriorate as congestion on 23rd Street / K10 continues to increase.

Statement of Good Repair

The City of Lawrence and Douglas County have sufficient infrastructure maintenance budgets and staff to ensure long term maintenance and good repair.

Statement of Good Repair

The City of Lawrence and Douglas County have sufficient infrastructure maintenance budgets and staff to ensure long term maintenance and good repair.

Economic Competiveness

The construction of 31st Street will contribute to the growth of the community. The transportation network in Lawrence has limited east/west connectivity. Transportation is main factor for businesses when choosing a community/site - a safe and efficient roadway to receive and distribute products and for their customers and employees.

Livability

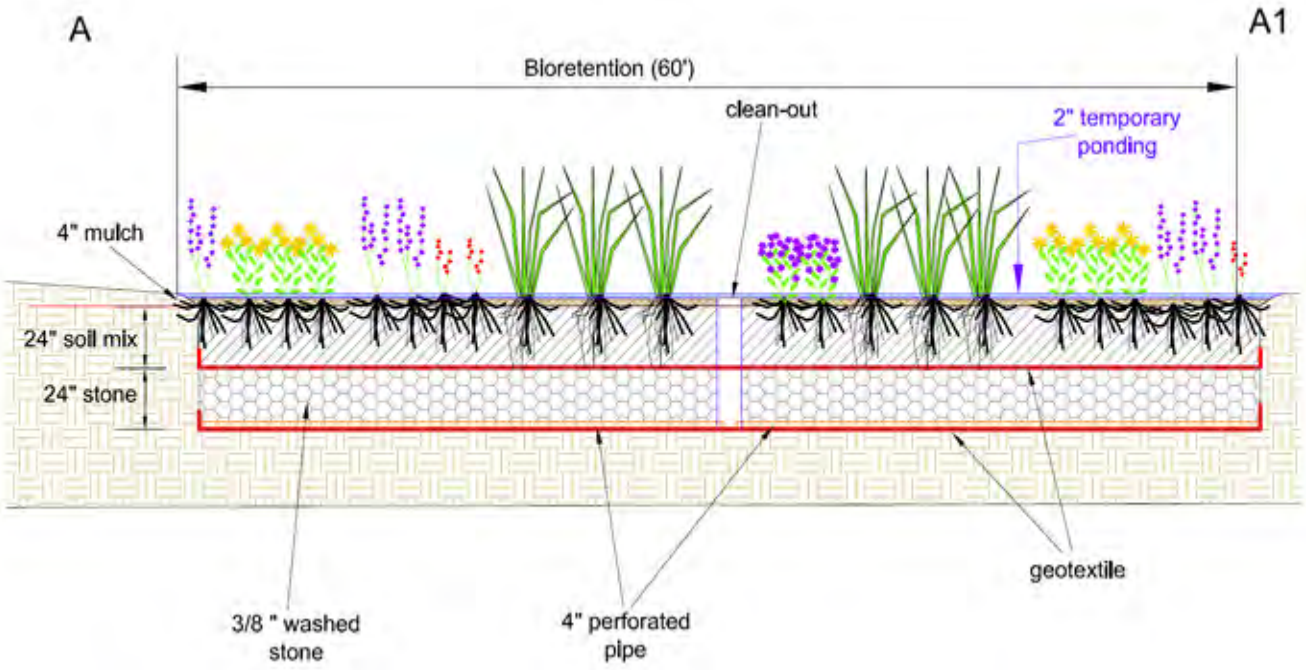
The reduction of congestion on 23rd Street would improve motorist safety and enhance access to local merchants. The connection to K-10 will allow motorists to access Hwy 59 south, Hwy 24 west, and I-70 without having to navigate city streets thus reducing through traffic and improving inner city mobility.

The improvements include a multiuse path for cyclists and pedestrians.

Sustainability

The reduction in congestion will reduce emissions. Specific reduction rates are not known.

The use of bioswales for stormwater drainage/management will provide primary treatment of storm water runoff from the facilities thus protecting the environment.

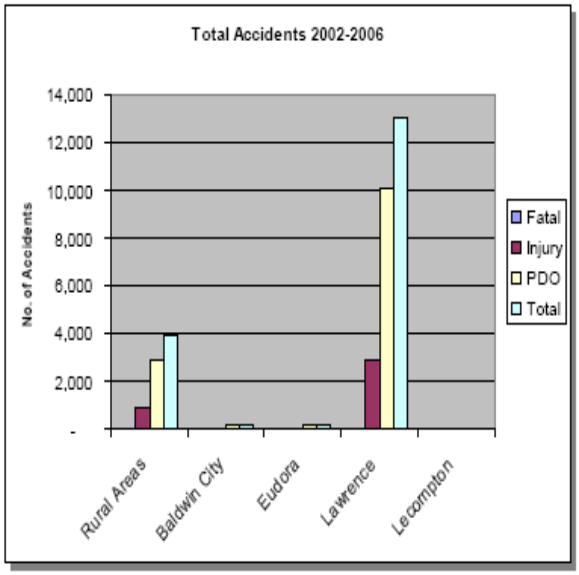


The improvements bend to the south of Mary's Lake to avoid significant cuts. The excess/surplus property can be acquired and maintained as a wildlife conservation area.

Safety

This facility will improve safety on 23rd Street by reducing the number of vehicles. The commercial 23rd Street corridor contains numerous access points which provide numerous conflict points for potential accidents.

Figure 2.8
2002-2006 Total Accidents
Source: Kansas Department of Transportation



Motor Vehicle Crashes

Each year approximately 3,500 motor vehicle crashes occur in Douglas County. Table 2.1 shows the annual number of crashes occuring in the cities of Baldwin City, Eudora, Lawrence, Lecompton, and the rural areas of Douglas County. During the five-year period 2002-2206, a total of 17,283 accidents occurred, with 48 crashes involving a fatality and 3,924 crashes involving an injury.

Figure 2.8 illustrates that the majority of motor vehicle accidents within Douglas County occur within the City of Lawrence.

Table 2.1
2002-2006 Motor Vehicle Accidents
Source: Kansas Department of Transportation

	Accidents in the Year:					Total 2002-2006 Accidents			
City	2002	2003	2004	2005	2006	Total	Fatal	Injury	PDO*
Rural Areas	863	855	813	703	654	**3,888**	32	944	2,912
Baldwin City	35	30	34	37	28	**164**	1	22	141
Eudora	47	35	42	36	37	**197**	1	37	159
Lawrence	2,677	2,713	2,619	2,427	2,586	**13,022**	14	2,920	10,088
Lecompton	4	4	2	-	2	**12**	-	1	11
Total	**3,626**	**3,637**	**3,510**	**3,203**	**3,307**	**17,283**	**48**	**3,924**	**13,311**

Job Creation
The construction of 31st Street would immediately employ a minimum of 100 road construction workers.

The Economic Barometer

A Quarterly Economic Report

Produced: June 30, 2009 — 1st Quarter 2009

IN THIS ISSUE

SUMMARY

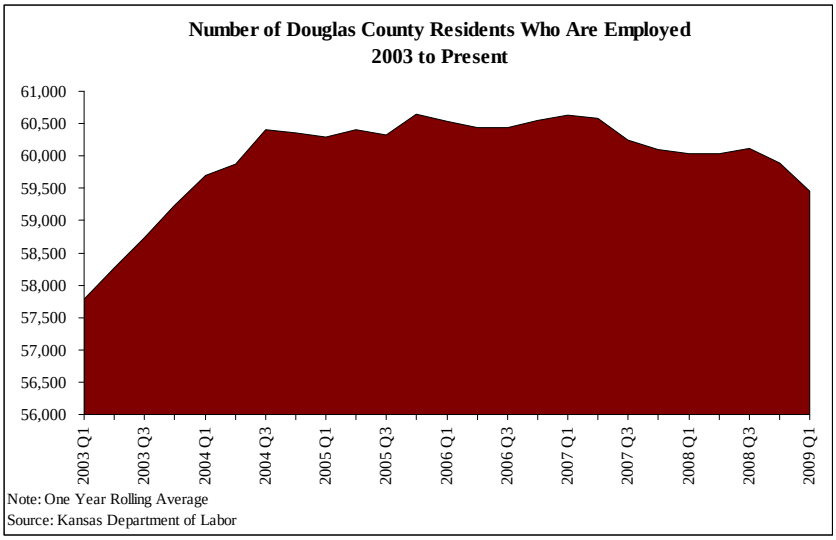
Key Changes from the Previous Quarter

Indicator	Improve (+), Worsen (-), No Change (o)
Employment	-
Building Permits	-
Home Values	-
Taxable Retail Sales	+
Inflation	+

- The unemployment rate increased to 5.5% in Douglas County, nearly 40% higher than a year ago, but still well below the national average;
- The number of building permits continues to fall, but the value of building permits is up slightly since the first quarter of 2009 due to the start of a new apartment complex;
- Median home values decreased substantially in the 1st Quarter while home sales fell to their lowest level in four years; and
- While taxable retail sales increased slightly from the 4th Quarter, they decreased from the 1st Quarter of last year.

EMPLOYMENT IN LAWRENCE AND DOUGLAS COUNTY

The number of Lawrence and Douglas County residents who are employed fell for the second straight quarter. Over the last four quarters, the number of residents who are employed has averaged about 59,500.



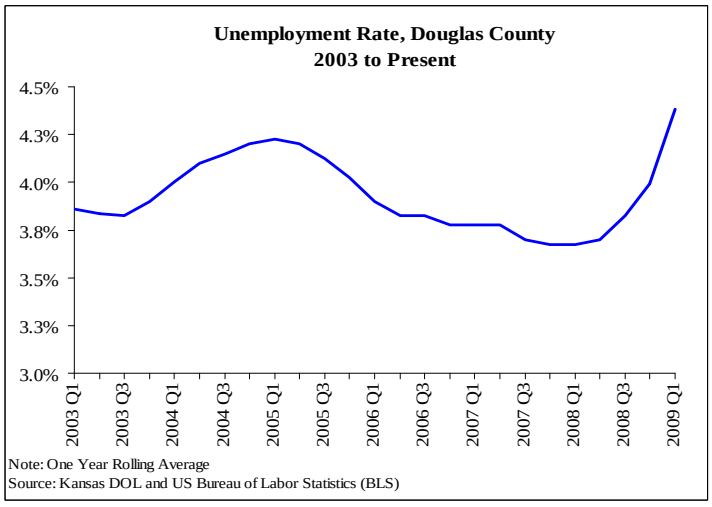
In the 1st Quarter of 2009, the number of residents employed fell to just under 58,000. This is the lowest number of people employed in the County since the summer of 2002, and is a 2.9% decrease from the 1st Quarter of 2008.

First Quarter 2009 Unemployment Data

	Civilian Employment	Unemployment Rate	Change vs. 1 Year Ago
U.S. (thousands)	140,125	8.8%	69%
Kansas	1,407,935	6.3%	52%
Kansas City, KS MSA	411,056	7.4%	56%
Lawrence MSA	57,946	5.5%	40%
Topeka MSA	114,572	6.6%	35%
Wichita MSA	302,748	6.2%	56%

Source: US Bureau of Labor Service

The declining number of residents employed has resulted in a rising unemployment rate. Unemployment in the Lawrence MSA is now at 5.5%, a 40% increase from one year ago. However, unemployment has been rising more slowly in Lawrence than in either Kansas or nationally. The national unemployment rate is almost 70% higher than a year ago, while the state unemployment rates has increased over 50%. Lawrence also continues to have very low unemployment. At 5.5%, the unemployment rate is about three-fifths of the national average.



The average unemployment rate for the previous four quarters was nearing 4.5%. Despite this relatively low unemployment rate, this is the highest rate in Douglas County in the last six years. This is also a 19% increase since the same time last year, when the unemployment rate averaged 3.8% over the same four quarter period.

REAL ESTATE

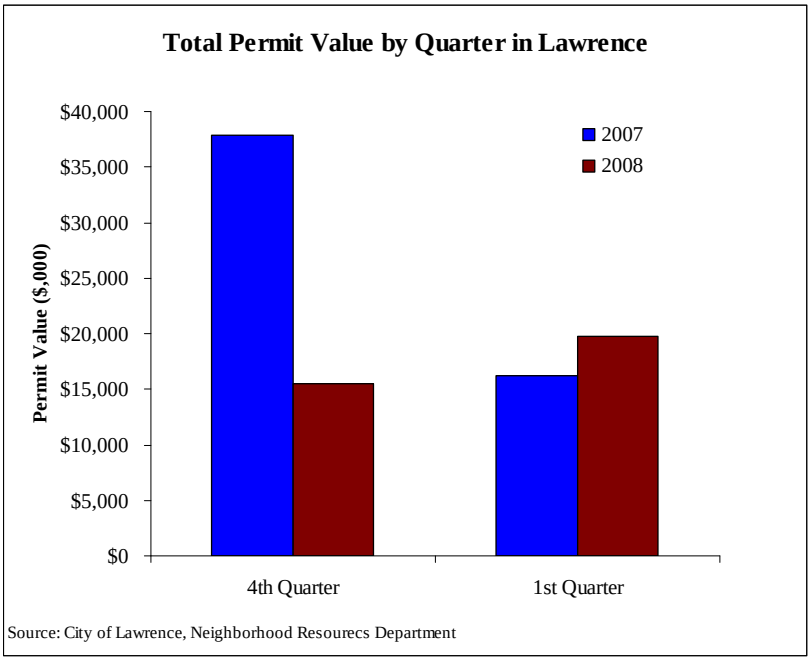
Year-over-year, building permits fell in Lawrence. There were 397 permits issued in the 1st Quarter of 2009, a 26% decrease from the same time last year. However, building permit value rose by about 18%. The change in building permit value was caused by a new apartment complex called The Grove. This apartment complex contributed $11 million of permit value. While residential permitting remained healthy because of this, non-residential building permits and building permit value were both down by roughly 50% from this time last year.

First Quarter Building Permits in Lawrence

	1st Quarter 2008	1st Quarter 2009	% Change 2008-2009
TOTAL			
Number	537	397	-26%
Valuation	$18,406,951	$21,773,930	18%
RESIDENTIAL			
Number	13	28	115%
Valuation	$3,474,586	$13,788,813	297%
NON-RESIDENTIAL			
Number	39	21	-46%
Valuation	$12,688,152	$6,006,008	-53%

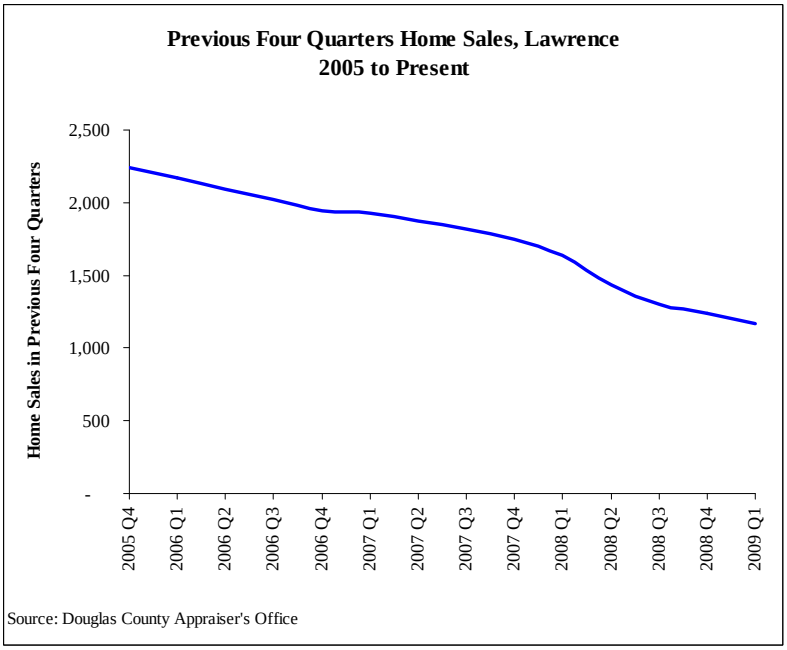
Source: City of Lawrence, Neighborhood Resources Department
Valuation of Building Permits

The chart below shows that the 1st Quarter permit value was not only an increase from the 1st Quarter of 2008, but from the 4th Quarter of 2008 as well. Both, however, were substantially below the 4th Quarter of 2007. This is in part because the Lawrence construction market is punctuated by a few large projects which come online at various times in each year. For example, the 4th Quarter of 2007 had at least two large apartment complexes initiated. These projects tend to have permit values that are as large as or larger than all other construction activity in Lawrence combined. Thus when evaluating construction activity in Lawrence it is important to note both the general activity taking place as well as the number of large projects that have been initiated. As more data becomes available, the Barometer Report will monitor both activities.

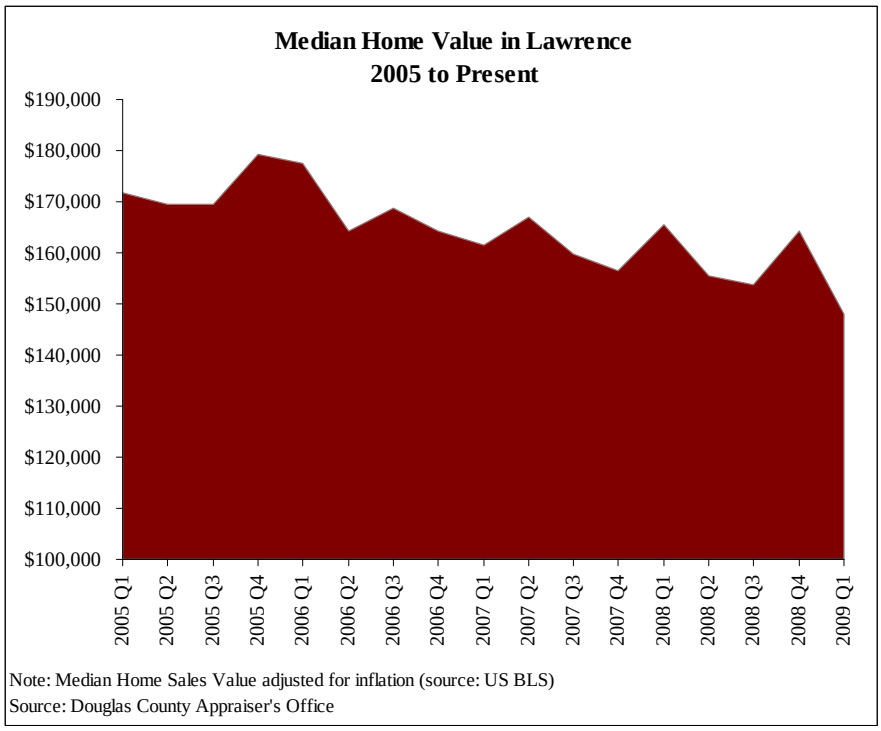


Source: City of Lawrence, Neighborhood Resourecs Department

Home sales in Lawrence continue to decline. Interestingly, the decline in home sales has been occurring since the end of 2005. There were over 2,200 sales recorded by the Douglas County Appraiser's office in Lawrence in that year. The sales over a one year period have been falling ever since, and began to decline more strongly in 2008. Most recently, there were about 1,200 home sales over the previous 12 month period. This is roughly one-half the home sales pace of late 2005.



Adjusting for inflation, the median sales price has generally been falling since 2005. In the 1st Quarter of 2009, the median home sales price was below $150,000. This is more than $30,000 lower than the peak sales price recorded in late 2005. It is a 10% decline since the 4th Quarter of 2008, and an 11% decline from the same time last year. It is the largest decline in median sales price in the housing market since the beginning of 2005. The trend in median home sales prices appears to be roughly consistent with, and may in part be caused by, the declining number of home sales.



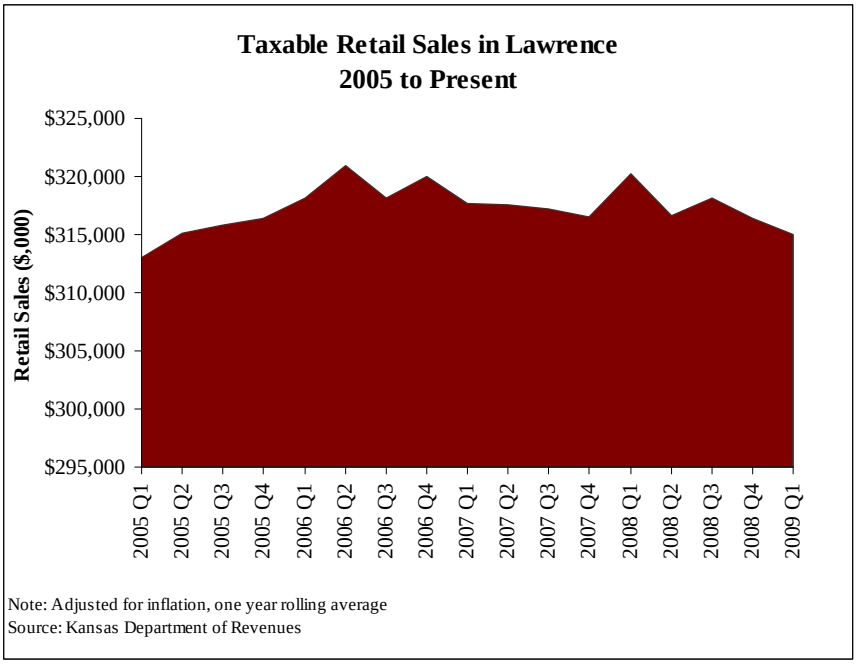
RETAIL SALES

Retail sales continue to decrease in Douglas County. From the 1st Quarter of 2008 to the 1st Quarter of 2009, taxable retail sales fell by about 2.4%. This was greater than the decline in retail sales taxes overall in the state, which was about 1.4%. Regionally, however, Johnson County saw a much more significant decline in retail sales of about 7%. Only Wichita saw sales rise, while Topeka saw retail sales fall more modestly than either the state or regionally.

County Tax Receipts*

County	Tax Rate	1st Quarter 2008	1st Quarter 2009	Change (%)
Douglas	1.0%	$3,669,409	$3,580,208	-2.4%
Johnson	1.1%	$30,473,705	$28,345,480	-7.0%
Wyandotte (Kansas City, KS)	1.0%	$5,624,081	$5,492,171	-2.3%
Shawnee (Topeka)	1.15%	$8,150,822	$8,085,139	-0.8%
Sedgwick (Wichita)	1.0%**	$20,891,982	$20,908,807	0.1%
Total, State of Kansas		$187,309,868	$184,655,315	-1.4%

Notes: *State Sales tax at County level only available through January of 2009.
** Sedgwick County and State reduced to reflect a calculation error in the Sedgwick County sales tax rate.
Source: Kansas Department of Revenue



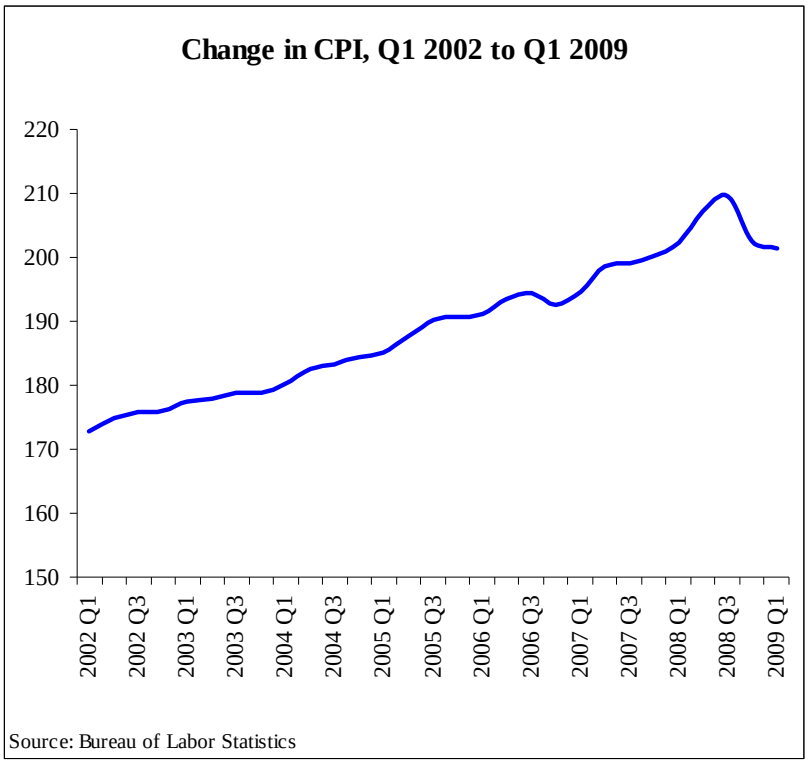
Note: Adjusted for inflation, one year rolling average
Source: Kansas Department of Revenues

Within Lawrence, average quarterly retail sales appear to be decreasing to 2005 levels. The inflation adjusted taxable retail sales in Lawrence appear to have peaked in 2006, with a secondary increase in 2008. However, the average quarterly retail sales fell both in 2007 as well as late 2008. Retail sales in Lawrence over the last four quarters have now averaged about $315 million. This is the lowest average quarterly retail sales in Lawrence since early 2005.

There are two events which may impact retail sales and retail taxes in the future in Lawrence. First, a new Wal-Mart has opened in northwest Lawrence, which might increase retail sales in the City. Second, a new .55% sales tax went into effect on April 1, 2009. This is a 10 year sales tax designed to fund public transportation and infrastructure projects. The new sales tax will be included in state reports and will be adjusted in the next Barometer Report to ensure that year-to-year comparisons measure the same market trends.

INFLATION AND THE COST OF LIVING

There was little inflation at the beginning of 2009. After a sharp rise in the middle of 2008, inflation fell rapidly with the onset of the recession. Although consumer prices fell again in early 2009, the change was much more modest than in late 2008. As noted last quarter, commodities were likely a significant driver of the rapid increase in inflation in 2008. Commodity prices have generally been increasing this year. The increase in commodity prices could potentially lead to a small increase in inflation as the year goes on.



Annual Average
Comparative Cost of Living Index

	Q1 2008	Q1 2009	Change (%)
US Average	**100.0**	**100.0**	
Lawrence, KS	92.4	93.1	0.8%
Manhattan, KS	95.5	95.7	0.2%
Topeka, KS	89.3	88.8	-0.6%
Ames, IA	93.7	97.7	4.3%
Champaign, IL	98.6	98.3	-0.3%
Columbia, MO	91.8	91.0	-0.9%
Fort Collins, CO	95.4	91.5	-4.1%

Source: ACCRA

The cost of living in Lawrence remains below the national average. In general, the relative cost of living in Lawrence increased somewhat slightly. There was also a slight rise in cost of living reported in Manhattan, Kansas. Among peer cities surveyed, Lawrence saw the second largest increase in relative cost of living, behind only Ames, Iowa. In contrast, the relative cost of living in other cities such as Champaign, Illinois and Columbia, Missouri declined over the last year. The slight increase in relative cost of living Manhattan and Lawrence, Kansas and Ames, Iowa may have occurred due to a healthier economy in those locations through most of 2008 relative to the rest of the United States.

FOCUS ON… *Labor Force and Job Occupations*

Firms routinely rank a skilled labor force as one of their most important criteria when determining whether to build or expand in a particular location. Skilled labor is also often highly paid, and the source of much of this nation's entrepreneurialism. Thus this quarter's "Focus On" will concentrate on the job skills and job occupations of the labor force of Lawrence, and particularly on the potential for additional high-skilled jobs locally.

In 2007, nearly half of all residents of the Lawrence MSA (which is Douglas County) had a Bachelor's Degree or higher:

Educational Attainment, Lawrence MSA
2000-2007

Education Level (Age 25 or Older)	Total in 2007	Total in 2000	Change in Total	Change (%)
Number of Residents Age 25 or Older	63,816	53,257	10,559	19.8%
Less than High School	3,164	4,069	-905	-22.2%
High School Diploma	12,815	11,859	956	8.1%
Some College or Associate's Degree	18,387	14,597	3,790	26.0%
Bachelor's Degree	15,889	13,007	2,882	22.2%
Master's Degree or Higher	13,561	9,725	3,836	39.4%
Share of Residents with Bachelor's Degree or Higher	46.1%	42.7%	3.5%	8.1%

source: American Community Survey, 2007

The number of residents with a Bachelor's Degree or higher increased by almost 7,000 from the beginning of the decade. In addition, the number of people with some college or an Associates degree rose by almost 4,000. The combined increase of almost 11,000 new adults with some level of higher education equaled the overall growth of residents age 25 or older, suggesting that most new adults in the Lawrence MSA are well-educated.

Despite the large share of adults with college experience, a slight majority of jobs held by residents of Lawrence and Douglas County do not appear to require advanced education:

Occupations Held by Lawrence MSA Labor Force
2000-2007

Category	Employment 2007	Employment 2000	Change in Employment	Change (%)
Occupations with College Level Training Requirements	23,437	20,523	2,914	14.2%
Occupations with Mid-Level Training Requirements	7,981	7,772	209	2.7%
Occupations Primarily Requiring Experience	31,895	26,917	4,978	18.5%
Total Job Occupations in Lawrence MSA	**63,313**	**55,212**	**8,101**	**14.7%**

Source: 2007 American Community Survey and Kansas DOL 2007 Wage Survey

This table evaluates job skill requirements as reported by the Kansas Department of Labor's annual wage survey. "College Level" occupations often require a four-year degree or higher, such as lawyers, architects, or physicians. "Mid-Level" training occupations likely require some college or Vocational or Associates degree, such as electricians, paralegals, and nurses. Finally, "Experience"-based occupations usually do not require further education after high school. These jobs include such things as entry-level cooks, retail sales, and construction laborers.

The table above shows that over 23,000 people in the Lawrence and Douglas County labor pool hold jobs requiring a college degree, while another 8,000 hold jobs requiring some college, for a total of about 31,000 jobs. This is a little less than half of the 63,000 jobs held by the local labor force. However, the first table presented showed that about 48,000 of the 63,000 adults in Lawrence and Douglas County have some

level of advanced education. The discrepancy between these totals suggests that some people may be able to work in higher-skilled jobs than they currently hold.

It also appears that an increasing share of the local labor force works outside of Douglas County. The following table shows the growth in job occupations locally from 2001 to 2007:

Job Occupations Available in the Lawrence MSA
2001 to 2007

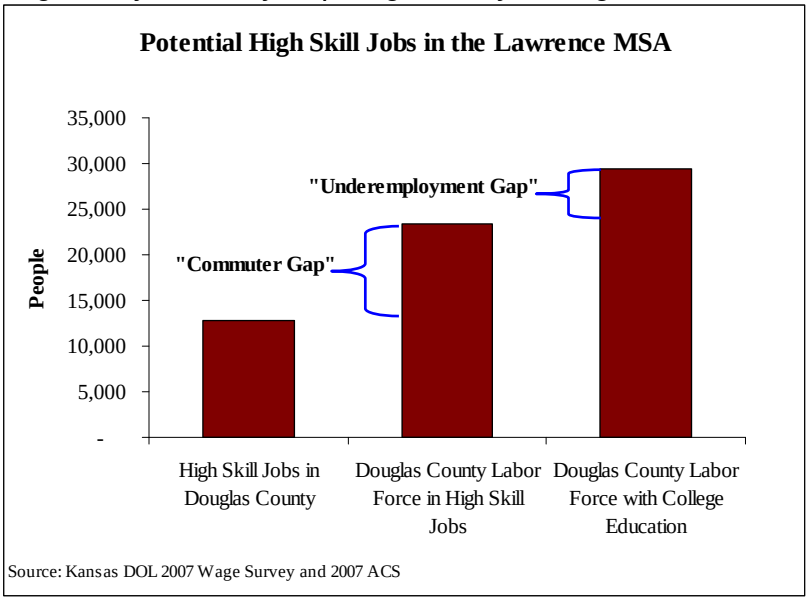
Category	Employment 2007	Employment 2001	Change in Employment	Change (%)
Occupations with College Level Training Requirements	12,860	12,490	370	3.0%
Occupations with Mid-Level Training Requirements	5,930	6,430	(500)	-7.8%
Occupations Primarily Requiring Experience	28,760	28,130	630	2.2%
Total Job Occupations in Lawrence MSA	**47,550**	**47,050**	**500**	**1.1%**

Source: Kansas DOL 2007 Wage Survey

Overall, the number of jobs available in the Lawrence MSA has increased by a little over one percent this decade. While local college-level jobs have grown faster, at about three percent, this is a little less than 400 new college-level jobs in the local economy. In contrast, the previous table showed that the number of people in the labor force holding college-level jobs increased by about 2,900 over the same time period. Therefore, many of these new jobs held by the local labor force are likely outside of Lawrence and Douglas County.

Together, this data suggests that there may be two "gaps" in the local labor force. The first is an "underemployment gap," or the difference between the number of people with college degrees and the number of jobs held that require college degrees. The second is a "commuter gap," which represents the difference between the number of jobs held by the labor force that require college degrees, and the number of college degree jobs available locally.

The following chart shows how large these two gaps might be. Lawrence and Douglas County have about 13,000 high skill jobs locally requiring a four-year degree or more. However, almost 23,000 people in the local labor force hold a job requiring a college degree. This suggests a "commuter gap" of about 10,000 jobs. Furthermore, there are almost 30,000 adults in Douglas County with a four-year degree or higher. Thus up to 7,000 people may be able to work in a higher-skilled job than they currently hold. In total, this suggests that the Lawrence labor force could accommodate up to 17,000 new high skilled jobs locally.



Questions? Comments? Please contact Roger Zalneraitis at rzalneraitis@ci.lawrence.ks.us

APPROVALS

Kansas Department of Transportation	June 15, 2006
Douglas County Commission	November 19, 2008
Lawrence City Commission	December 9, 2008