PLANNING COMMISSION REPORT
Regular Agenda – Action Item

PC Staff Report
1/26/15

ITEM NO. 3: COMPREHENSIVE PLAN AMENDMENT TO HORIZON 2020 CHAPTER 14 (JSC)

CPA-14-00516: Consider a Comprehensive Plan Amendment to *Horizon 2020:* Chapter 14 (*An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive*) to revise the maximum retail cap of the northwest corner of the intersection from 127,487 square feet to 143,637 square feet to permit a commercial/retail development, located at 525 Wakarusa Drive. Submitted by Schwerdt Design Group, Inc., for CPC Ventures, Inc., property owner of record.

STAFF RECOMMENDATION: Staff recommends approval of this Comprehensive Plan Amendment to *Horizon 2020,* Chapter 14: Specific Plans, and *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* to revise the retail/commercial square-footage cap from 127,487 square feet to 143,637 square feet, and recommends forwarding this Comprehensive Plan Amendment to the Lawrence City Commission with a recommendation for approval.

STAFF RECOMMENDATION: If appropriate, approve and sign Planning Commission Resolution PCR-14-00546.

KEY POINTS

1. The request does not increase the amount of permitted retail/commercial square footage above the node designation.
2. The request would permit for the construction of a 16,150 square foot retail/commercial building.
3. This application does not modify the current boundary of the adopted CC600 node.
4. The proposal would leave intact the currently allocated 21,500 square feet of commercial/retail planned to be developed on the out lots of the Wal-Mart project property.
5. Additional corrections of minor scrivener's errors are also included in *Horizon 2020* Chapter 6: Commercial Land Use, and Chapter 14: Specific Plans. Corrections are for typographical errors and do not change the substance of *Horizon 2020.*

SUMMARY

The applicant has requested an amendment to *Horizon 2020:* Chapter 6, Commercial Land Use, and Chapter 14, Specific Plans, amending the *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* to revise the retail cap for retail development at the northwest quadrant of the intersection of W. 6th Street and Wakarusa Drive. The reason for this Comprehensive Plan Amendment is to request an expansion of the commercial center at the northwest quadrant by increasing the retail cap for this portion of the intersection from 127,487 square feet to 143,637 square feet.

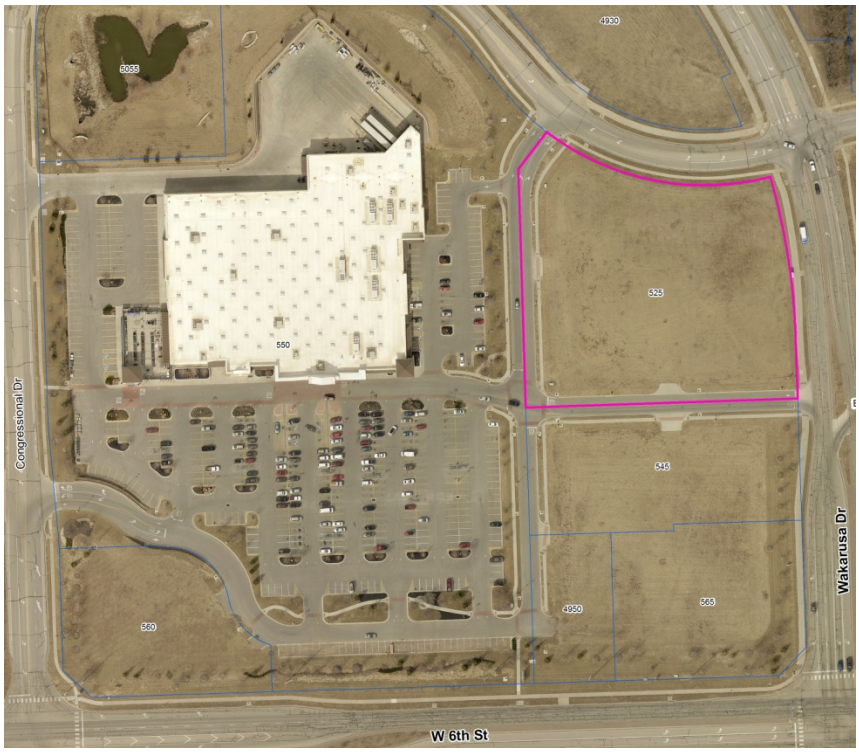


Figure 1: Subject Parcel and Surrounding Context (Aerial: 2014)

Items related to this Comprehensive Plan Amendment include:

- **Z-14-00515:** Consider a request to rezone approximately 2.982 acres from CO (Office Commercial) District to CC600-PD (Community Commercial with Planned Development Overlay) District, located at 525 Wakarusa Drive. Submitted by Schwerdt Design Group, Inc. for CPC Ventures, Inc., property owner of record.

- **PDP-14-00517:** Consider a Preliminary Development Plan for a Restaurant and Retail use located on approximately 2.982 acres at 525 Wakarusa Dr. Submitted by Schwerdt Design Group, Inc., for CPC Ventures, Inc., property owner of record.

STAFF REVIEW

The applicant is requesting to expand the existing retail cap from the present 127,487 square feet to 143,637 square feet. The proposal would allow for the development of two restaurants, totaling 8,800 square feet, and a 3,600 square foot retail space. At present, the proposal would not comply with the existing retail cap within *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive*. Due to this limitation, the applicant is requesting an amendment to the adopted area plan aligning the policy with the requested rezoning and preliminary development plan proposal requests.



Figure 2: Existing Retail Cap per Quadrant of Entire Node



Figure 3: Northwest of Node: Existing Construction & Designated Spaces

Staff reviewed this amendment based upon the Comprehensive Plan Amendment review criteria listed below, as identified in Chapter 17 (Implementation) of *Horizon 2020*. The applicant's responses are also provided below:

COMPREHENSIVE PLAN AMENDMENT REVIEW

1. Does the proposed amendment result from changed circumstances or unforeseen conditions not understood or addressed at the time the Plan was adopted?

Applicant's response: As the 6th and Wakarusa intersection has developed since the Plan was adopted this request will only increase the amount of retail / commercial square footage minimally on the NW corner.

Staff's response: *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* was created to help guide and oversee the expansion and development at this intersection. Similar to other applications seeking to amend this plan, there have been refinements in the prevailing commercial real estate market environment within this portion of Lawrence, and within the city as a whole, the overall spatial conditions related to this location have not seen a significant change in recent history. This plan was adopted anticipating that this quadrant of the intersection would be "recommended as most appropriate for commercial development of a retail focus." (p. 18)

2. Does the proposed amendment advance a clear public purpose?

Applicant's response: The request for a minor increase in the allow retail/commercial square footage previously approved and adopted will assist in developing the currently vacant lots for retail/restaurant uses that are consistent with surrounding uses. The public will benefit by having a high quality development consisting of restaurant / retail that isn't currently offered in Lawrence.

Staff's response: The proposed amendment is consistent with the zoning, size, and location of the node indicated in *Horizon 2020:* Chapter 6 (p. 6-21). The proposed amendment constitutes a 3.3% expansion to the existing commercial/retail cap for this particular area plan. This expansion would permit for the construction of a commercial/retail building and making use of existing infrastructure, while maintaining the spatial integrity of the existing node. This expansion in the existing cap also ensures that the site can make full and adequate use of the site in a manner that is consistent with the present surrounding uses.

3. Is the proposed amendment consistent with the long-range goals and policies of the plan?

Applicant's response: The proposed development of a high quality sit down casual restaurant / boutique retail center is consistent with the current Plan and surrounding land uses.

Northwest Quadrant of W. 6th Street & Wakarusa Drive	Square Footage
Quadrant Total	**127,487**
Wal-Mart Site	105,987
Planned 545 Wakarusa, 565 Wakarusa, 4950 W. 6th	21,500
Remaining Square Footage	0
CPA-14-00516 Request	16,150
New Requested Total	16,150
525 Wakarusa Dr. Proposed Development	16,150
Remaining Square Footage	*0*

Staff's response: The proposal for the increase of the commercial/retail cap would not exceed the node's CC600 designation as presently adopted in Map 6-1, "Existing and Potential Commercial Land Use Locations" (*Horizon 2020*, p. 6-45), though it was not anticipated at the time of receiving the CC600 designation that this node would approach 600,000 square feet of retail/commercial. The request would incrementally increase the existing limit to permit a development of adequate scale for this particular parcel, while leaving the presently allocated 21,500 square feet for the four parcels adjacent south and southwest of this location. This requested increase would set the limitation at this intersection 99,250 square feet below the limit of the CC600 node designation. The proposal requesting this amendment is consistent with the original mandate of the *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive*, as the plan was directed to ensure that new development is compatible with existing development located within and adjacent to the intersection area.

This would also leave the presently allocated 21,500 square feet intact for the other remaining open parcels at this quadrant of the intersection. Any additional expansion of the commercial/retail square footage at this quadrant of the intersection will require an additional amendment to the *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive.*

In researching the history and case files for this quadrant of the intersection, an error was identified in the calculations previously used for the tables containing the "Total Approved Retail/Commercial Square Footage." In the presently adopted version of *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* the table indicated 6,147 square feet was remaining at this northwest quadrant of the intersection. Upon review, it was found that the 6,147 square feet had been allocated for and constructed as the outdoor garden center for the Wal-Mart development and was not deducted from the table accordingly. The existing total for this quadrant should have reflected 105,987 square feet, with a planned amount of 21,500 square feet.

In the tables below, staff has included the presently adopted table (Figure 4), a revised table showing the total as it should have been recorded (Figure 5), and a third table showing the alterations requested under this Comprehensive Plan Amendment (Figure 6).

Total Approved Retail/Commercial Square Footage					
Corner of 6th St. & Wakarusa Dr.	**Allowed**	Existing	Planned	Total	Remaining
Northwest	**127,487**	99,840	21,500	121,340	6,147
Southwest	**78,096**	75,349	0	75,349	2,747
Southeast	**157,017**	122,818	0	122,818	34,199
Northeast	**122,000**	37,752	83,740	121,492	508
Totals	**484,600**	335,759	105,240	440,999	43,601

Figure 4: Presently Adopted Retail/Commercial Square Footages

Total Approved Retail/Commercial Square Footage					
Corner of 6th St. & Wakarusa Dr.	**Allowed**	Existing	Planned	Existing/ Planned Total	Remaining
Northwest	**127,487**	**105,987**	21,500	**127,487**	**0**
Southwest	**78,096**	75,349	0	75,349	2,747
Southeast	**157,017**	122,818	0	122,818	34,199
Northeast	**122,000**	37,752	83,740	121,492	508
Totals	**484,600**	**341,906**	105,240	**447,146**	**37,454**

Figure 5: Table Corrected to Show Accurate Existing Square Footages Constructed

Total Approved Retail/Commercial Square Footage					
Corner of 6th St. & Wakarusa Dr.	**Allowed**	Existing	Planned	Existing/ Planned Total	Remaining
Northwest	**143,637**	105,987	**37,650**	**143,637**	**0**
Southwest	**78,096**	75,349	0	75,349	2,747
Southeast	**157,017**	122,818	0	122,818	34,199
Northeast	**122,000**	37,752	83,740	121,492	508
Totals	**500,750**	341,906	**121,390**	**463,296**	37,454

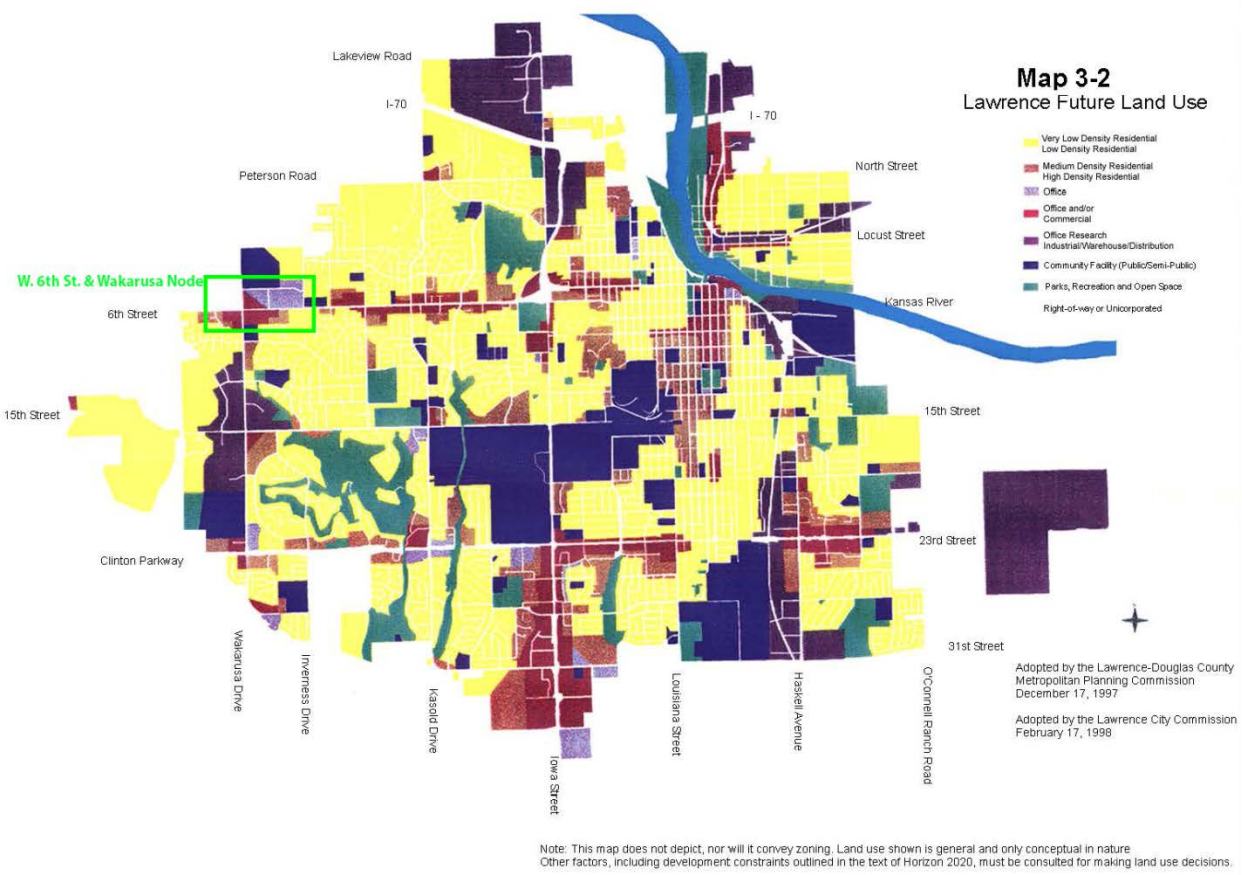
Figure 6: Revised Retail/Commercial Square Footages as Requested by Applicant

Given the recent projects within the adjacent vicinity, the amendment is more suited for the development pattern that is present today than the one previously envisioned during the creation and adoption of *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive.*

A brief history on the development timeframes and evolution are provided below:

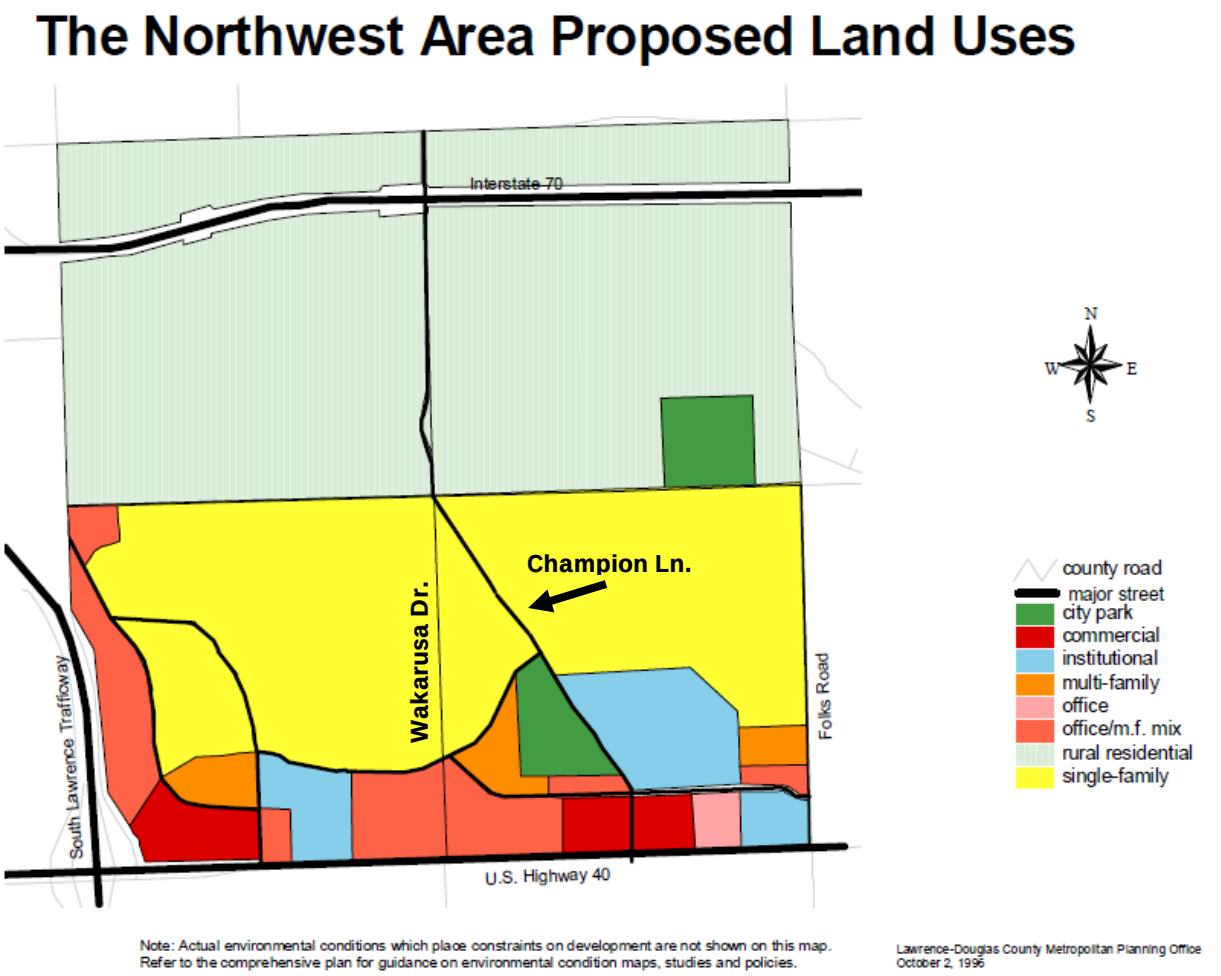
Timeline for 6th and Wakarusa Area Plan (North of W. 6th Street)

- **Mid/Late 1990s**
  - *Horizon 2020*, Map 3-2 designates commercial on northeast corner of W. 6th Street and Wakarusa Drive and the rest of the Bauer Farm site for office on the future land use map. The northwest corner of W. 6th Street and Wakarusa Drive was not included at that time.



- **1996**
  - **Ordinance 6677** is approved adding the Bauer Farm property to the City of Lawrence.

- **1997**
  - **Northwest Plan** designated for office/commercial north of W. 6th Street and Wakarusa Drive, office for what would be the middle of Bauer Farm, and institutional on northwest corner of W. 6th Street and Folks Road.



- **1998**
  - Property at the northwest corner of W. 6th Street and Wakarusa Drive annexed into the City of Lawrence (**A-05-06-98** and **A-05-07-98**), totaling 49.57 acres.
  - World Company request: **Z-05-08-98** & **Z-05-09-98**: consider rezoning from A (county) to PCD2 (city). Planning Commission voted 8-1 to approve the rezoning as requested with three conditions, one condition being the approval of a Preliminary Development Plan for the entire site. The City Commission at their August 25, 1998 meeting voted 3-1 to concur with the Planning Commission's recommendations.

- **2000**
  - Dial Realty request: **Z-12-56-00** & **PDP-12-20-00**: request to rezone 52 acres from A to PCD-2 was received by the Planning Department for the same subject property at the intersection of W. 6th Street and Wakarusa Drive. The plan proposed a total of 211,732 gross square feet, and was withdrawn prior to the public hearing.

- **2001**
  - 6Wak request: **Z-08-31-01**, **PDP-08-07-01** & **FDP-11-14-01**: On October 3, 2001, the Planning Commission recommended approval of proposed rezoning and the Preliminary Development Plan, with use restrictions, including deletion of department store uses and with a maximum gross square footage of 155,092. The City Commission voted 3 -2 on October 26, 2001 to approved the proposal for a mixed-use development at the northwest corner of the intersection. That proposal included a number of rezoning requests; 19.19 acres of PCD-2, 8.44 acres of POD-1, 20.18 acres of PRD-2, and 5.65 acres of O-1. Subsequently, on December 19, 2001, the Planning Commission approved the Final Development Plan that proposed three commercial buildings with 132,100, 15,000 and 7,000 gross square feet, totaling 154,100 gross square feet.
  - 6Wak request: **Z-07-23-01** & **PDP-07-07-02**: In the fall of 2002, the property owner proposed to increase the amount of commercial zoning at the northwest corner to allow for the construction of a 199,847 square foot commercial building. The Planning Commission recommended denial (6-3-1) for both the rezoning requests and the Preliminary Development Plan on October 23, 2002. The applicant withdrew the rezoning requests and the Preliminary Development Plan before they were considered by the City Commission.
  - Bauer Farm request: **Z-02-08-01** thru **Z-02-11-01**: Rezone property from A (county) to RO-1A (5.538 acres), RS-1 (1.940 acres), PCD-2 (32.443 acres), and PRD-2 (13.560 acres). City Commission denied **Z-02-10-01** on June 12th, 2001; the remaining 3 applications were withdrawn by the applicant.
  - 6WAK request: **Z-08-29-01**: A (Agricultural) to POD-1 (Planned Office Development) District. The rezoning approval was conditioned on the submittal and approval of a Preliminary Development Plan. A Preliminary Development Plan for the subject properties was not submitted and the rezoning ordinance was never published.

- **2002**
  - Wakarusa Place Addition: Final Plat: A Tract of Land in the Southwest Quarter and in the South Half of the Southeast Quarter of Section 28, Township 12 South, Range 19 East of the Sixth PM in Douglas County, Kansas
  - 6Wak request: **Z-07-22-02** & **Z-07-23-02**: POD-1 (0.5919 acres) and PRD-2 (2.4945 acres) to PCD-2 of the property is generally described as being located north of West Sixth Street and west of Wakarusa Drive. Request was to facilitate the development of approximately 22 acres at the northwest corner of 6th and Wakarusa for commercial purposes. Planning Commission voted 6-3 to deny the requests, and the applicant withdrew the requests prior to the City Commission hearing.

- **2003**
  - *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* designates commercial (non-retail focus, mixed-use, pedestrian friendly, 62,000 square foot cap) for northeast corner of W. 6th Street and Wakarusa Drive, and the rest of Bauer Farm for multi-family residential development.
  - 6Wak request/**Z-01-02-03** thru **Z-01-05-03** & **PDP-01-01-03**: On March 5, 2003, the Planning Commission approved (6-3-1) a request by the property owner to decrease the amount of commercial zoning on the subject property. In addition to the rezoning request, the Planning Commission approved a Preliminary Development Plan for a 157,966 gross square foot building with a single user. On March 25, 2003, the City Commission denied (4-1) the rezoning requests and corresponding Preliminary Development Plan.
  - Bauer Farm: **Z-06-19-03** and **Ordinance 7756**: The original commercial rezoning included only 18.93 acres in 2003. Original restrictions included, "no one building shall be larger than 50,000 square feet of space"; "there be no more than 62,000 square feet of retail commercial space," and, "uses listed be included as part of the zoning ordinance".
  - Bauer Farm: **Z-06-08-07** and **Ordinance 7757**: The original residential rezoning from A to PRD-2 (25.214 acres.)

- **2003–2004**
  - *Horizon 2020*, Chapter 6: "Commercial Land Use" amended to reflect the land use designations from the **Area Plan for the W. 6th Street & Wakarusa Drive Intersection Area**; this also included a full chapter re-write.
  - City-initiated Area Plan & Rezoning: **Z-06-18-03**: On June 3, 2003, the City Commission adopted Ordinance 7651 establishing a temporary building permit moratorium for an area north of W. 6th Street, including both northern halves of the intersection. Part of the Ordinance directed that the commercial chapter of the zoning code be revised and initiated the rezoning of three properties north of W. 6th Street. Section 3, subpart B of **Ordinance 7651** stated: "Rezoning amendments that will focus on, but not be limited to, the aggregate amount of square footage allowed at both the northwest and northeast corners, the uses allowed at both the northwest and northeast corners, and the square footage amounts allowed within the four walls of a permitted use in each structure at both the northwest and northeast corners." At their June 3, 2003, meeting the City Commission also directed Planning staff to develop an area plan for the W. 6th Street and Wakarusa Drive intersection. The Planning Commission, on October 1, 2003, voted 7-0-2 to recommend approval of the **Area Plan for the W. 6th Street & Wakarusa Drive Intersection Area**. The City Commission adopted the area plan on December 2, 2003. The plan recommendations for the NW corner included: retention of existing PCD-2 zoning designation with additional restrictions including that the retail development be limited to 154,000

gross square feet, and that a single building footprint not exceed 80,000 gross square feet. The plan included an additional recommendation that the total allowable retail commercial square footage at the entire intersection be limited to 440,000 gross square feet with the caveat that if the approved development plan for 154,000 gross square feet expires, the total intersection should be limited to 420,000 gross square feet. At their meeting on January 28, 2004, the Planning Commission considered the City-initiated rezoning [**Z-06-18-03** – 19.19 acres PCD-2 to PCD-2 with restrictions]. The rezoning proposed to limit building size; revise the total amount of retail commercial square footage on the property; revise permitted uses; and stipulate that no building permit would be issued until the W. 6th Street project was substantially completed. The staff report indicated that the proposal to eliminate 'variety stores' and 'home improvement store' uses, together with the limitation on the total center size and size of individual stores, was recommended to facilitate the center's Community Commercial focus (rather than regional focus). 'Department store' was included as a permitted use due to the single building size restriction. The report indicated that the recommendation limited a single-user retail commercial building to 80,000 gross square feet to address big box concerns and established a maximum of 154,100 gross square feet for the total property which was the amount shown on the approved 2001 Final Development Plan. The Planning Commission voted 5-5 on this recommendation. The failure to recommend was then forwarded to the City Commission as a recommendation for denial. On March 16, 2004, the City Commission overturned the Planning Commission's recommendation by approving the rezoning on a 4-1 vote. **Ordinance 7755** rezoning the property with the above restrictions was published on April 21, 2004.

- Five lawsuits filed concerning this quadrant of the intersection regarding development and building sizes:
  - **6Wak Land Investments, L.L.C. v. The City of Lawrence, Kansas Board of Zoning Appeals and The City of Lawrence, Kansas**, Case No. 03C596 (Filed: October 2003)
  - **Wal-Mart Real Estate Business Trust and 6Wak Land Investments, L.L.C. v. The City of Lawrence, Kansas Board of Zoning Appeals and The City of Lawrence, Kansas**, Case No. 03C595 (Filed: November 2003)
  - **6Wak Land Investments, L.L.C. v. Victor Q. Torres and City of Lawrence, Kansas**, Case No. 03CV275 (Filed: May 2003)
  - **6Wak Land Investments, L.L.C. and Wal-Mart Real Estate Business Trust v. Victor Q. Torres and City of Lawrence, Kansas**, Case No. 03C339 (Filed: June 2003)
  - **6Wak Land Investments, L.L.C. v. City of Lawrence, Kansas**, Case No. 04C216 (Filed: April 2004)

- Bauer Farm: **Z-06-20-03**: Rezoning of the west side of Champion Lane from A to PCD-2 initiated by the City with approval by the City Commission on March 16, 2004, **Ordinance 7756**.

- **2005**
  - Bauer Farm: **Z-07-48-05**: Rezoning PCD-2 (with restrictions) to PCD-2 (with modified restrictions) conditionally approved by the City Commission on January 10, 2006.
  - Bauer Farm: **Z-03-16-05**: 2.59 acres, PRD-2 to POD-1, southeast portion of project at W. 6th Street and Folks Road. Unpublished at that time.
  - Bauer Farm: **Z-03-17-05** & **Z-07-48-05**: Commercial boundary was expanded to include an additional 8.23 acres east of Champion Lane and uses were revised. Multi-Family Residential uses were added as well as uses in Use Group 12, Retail Sales and Use Group 13 Automotive Service, Retail Sales Other with some uses in each Use Group specifically prohibited. The related Preliminary Development Plan, **PDP-03-02-05,** was eventually approved by the City Commission on March 4, 2008.
  - Bauer Farm: Preliminary Development Plan **PDP-03-02-05**: conditionally approved by the City Commission on January 10, 2006 with direction that a revised Preliminary Development Plan meeting the conditions of approval be brought back before them for their review.

- **2006**
  - 6Wak request: Consent Order handed down by Douglas Co. District Court which restricts the feature building of the site to be no larger than 99,990 square feet, and development of the subject site shall not exceed 128,000 square feet. The remainder of the square footage for the total site after deduction for the feature building and garden center square footage (remaining 21,500 square feet) shall be apportioned in pad site development. 525 Wakarusa Drive was not a part of this order.
  - 6Wak request: **Z-06-16A&16B-06** & **PDP-06-06-06**: The property owner submitted rezoning requests from PRD-2 & PCD-2 to PCD-2 with revised restrictions and a new Preliminary Development Plan which proposed to limit the total retail commercial square footage on the property to 128,000 gross square feet with a single building not to exceed 99,990 gross square feet. On August 30, 2006, the Planning Commission voted 6-4 to recommend the proposed rezoning. The Planning Commission voted 5-5 on the Preliminary Development Plan which was deemed a recommendation for denial. At their meeting on October 24, 2006, the City Commission voted 3-2 to deny the development plan request and voted 3-2 to table the rezoning requests until an alternate plan was presented for consideration.

- **2007**
  - Bauer Farm: **Z-06-07-07** & **Ordinance 8359**: Uses within the 25.97 acres of the PCD portion of the development were again revised in 2007. Through the approval of **Z-06-07-07**, the cap at this quadrant of the intersection was increased form 62,000 square feet to 72,000 square feet by the Lawrence-Douglas County Metropolitan Planning Commission. This ordinance is the currently applicable regulation for use of this property today. A modification was made in late 2010 to accommodate a revision to the lots along W. 6th Street east of Champion Lane for the Burger King site at 4671 Bauer Farm Drive. The 2010 approval did not change the uses, limitation on drive-thru's for restaurant uses, or otherwise impact the number of lots or total retail square footage. It did amend the interior lot lines of three lots. Two of the lots along W. 6th Street east of Champion Lane remain vacant.

- **2008**
  - Final Plat: 6WAK Addition Plat completed – A Replat of Lots 1, 2A, 2B, 3 and 4, Block 2 Wakarusa Place Addition in the City of Lawrence, Douglas County, Kansas
  - Bauer Farm: Final Plan: Bauer Farms First Plat **PF-05-04-08**, Portion of PCD, and corresponding with **MS-12-10-10**, Champion Addition (two lots east of Champion Lane)
  - Bauer Farm: **FDP-05-07-08**: Bauer Farm Phase I Commercial approved.

- **2009**
  - Bauer Farm: **PDP-06-01-09**: The Preliminary Development Plan was revised to accommodate the tunnel car wash. The uses were not altered by that development plan change. Approval of a revised Preliminary Development Plan included reconsideration and re-approvals of several waivers/variances.
  - Bauer Farm: **PF-07-03-09**: Bauer Farm Second Plat (PRD and POD); Planning Commission approved with conditions. (Placed on hold at applicant's request.)
  - Bauer Farm: **PF-09-07-09**: Bauer Farm Bauer Farm Third Plat (Portion of PCD – tunnel car wash)
  - Bauer Farm: **FDP-09-08-09**: Phase III Commercial approved.
  - Bauer Farm: **FDP-01-02-09**: Phase I Residential approved.
  - 6Wak: **Z-11-20-09**: UR to CO (The County- A Zoning Designation was revised to UR (Urban Reserve) District with the adoption of the 2006 Development Code). Rezoning approved by the City Commission with adoption of **Ordinance 8490**.

- **2010**
  - Bauer Farm: **CPA-05-06-10**: An amendment to change the designate land use form residential/office to commercial for a portion of the Bauer Farm

Development location along W. 6th Street between Folks Road and Champion Lane denied.

- Bauer Farm: revised Preliminary Development Plan in 2010 amended the residential portion of the Bauer Farm development. This request removed the residential uses from the commercial portion and reallocated them to the residential portion PD-[Bauer Farm PRD].
- Bauer Farm: **PF-4-3-10**; Bauer Farm Fourth Plat (PRD portion – retirement housing)
- Bauer Farm: **FDP-09-08-09**: Bauer Farm Lawrence Tunnel Car Wash approved.
- Bauer Farm: **FDP-01-01-10**: Modification to Final Development Plan Phase I approved (Smashburger).
- Bauer Farm: **FDP-04-06-10**: Final Development Plan Phase IV Residential approved (Meadowlark Retirement).

- **2011**
  - **CPA-08-07-11**: Amendment to consider Comprehensive Plan Amendment to Chapter 6 and Chapter 14 of *Horizon 2020* to consider creating a CC600 commercial category in the Comprehensive Plan and revising the *Area Plan for the Intersection Area of West 6th Street and Wakarusa Drive* and to designate this node as a CC600 commercial node. Deferred prior to Planning Commission meeting.

- **2012**
  - **CPA-04-03-12**: Amendment approved to revise the western boundary of the Existing Commercial Area at W. 6th Street and Wakarusa Drive, and to similarly amend the *Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* approved.
  - Bauer Farm: **FDP-12-05-11**: Bauer Farm Phase VI Commercial approved (Starbucks)
  - Bauer Farm: **FDP-01-01-12**: Bauer Farm Phase VII Commercial approved (Theatre Lawrence)
  - Bauer Farm: **FDP-12-00093**: Bauer Farm Phase VIII Commercial approved (Discount Tire)

- **2014**
  - Bauer Farm: **CPA-14-00059**: Amendment to *Horizon 2020* Chapter 6: "Commercial Land Use" to designate the node as a CC600, and to Chapter 14: Specific Plans and the *Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* to revise the retail/commercial gross square-footage cap from 72,000 gross square feet to 122,000 gross square feet at the northeast quadrant

of the intersection. (Area had previously exceeded earlier CC200 node designation.)

- Bauer Farm: **Z-14-00057**, **PDP-14-00055**, **PF-14-00054**: Application to rezone approximately 8 acres from PCD-[Bauer Farm] to PCD-[Bauer Farm Northwest], located at 4700 Overland Drive. The zoning application proposes modifying the uses in the PD (Planned Development) from a mix of residential, office, with 14,440 square feet of retail space to 45,048 square feet retail space, 6,150 SF office space, and no residential use.

4. Does the proposed amendment result from a clear change in public policy?

Applicant's response: The request is very clear to the public policy by only requesting a minor increase in allowed retail / Commercial square footage at the NW corner of 6th and Wakarusa Drive.

Staff's response: There has not been change in public policy. The proposal does not require an amendment to Chapter 6 of *Horizon 2020*, nor does it require the reclassification of an adopted node. The proposal is to modify the existing commercial center's development mixture and permit a minor increase the amount of retail space at the node in comparison to what is approved today. The proposal maintains the existing node by staying within the existing anticipated commercial area, and does not directly perpetuate commercial strip development along W. 6th Street, as long as the boundaries of the planned retail area are not expanded.

In addition, the following shall be considered for any map amendments:

5. Will the proposed amendment affect the adequacy of existing or planned facilities and services?

Applicant's response: No affect is anticipated to existing or planned facilities if this minor increase in square footage is approved.

Staff's response: Infrastructure in this area is adequate to support this commercial development. Further analysis regarding the specifics related to traffic impacts and infrastructure capacity will be addressed in the subsequent rezoning (Z-14-00515), preliminary development plan proposal (PDP-14-00517), and approval of a final development plan.

6. Will the proposed change result in reasonably compatible land use relationships?

Applicant's response: Current surrounding uses of retail, restaurant and commercial are similar and compatible to the uses proposed at this site if the allowable square footage is increased above the previously approved limit.

Staff's response: The proposed development pattern and use is consistent with the patterns and uses present at the other three corners of this node. As further development occurs within the surrounding vicinity of this proposal, it will likely also be primarily commercial in form. Free State High School is located northeast of this site; the development will remain commercial in nature and has always been envisioned at this node. This amendment does not seek to change the boundary, only to allow more retail square footage than presently adopted.

7. Will the proposed change advance the interests of the citizens of Lawrence and Douglas County as a whole, not solely those having immediate interest in the affected area?

Applicant's response: This development will offer restaurant and retail opportunities that aren't currently offered in Lawrence. The retail businesses are new to Lawrence and not relocating from another part of Lawrence leaving vacant building waiting to be leased or purchased.

Staff's response: This proposed amendment does not necessarily advance the interests of the citizens of Lawrence and Douglas County as a whole, but neither does it harm them. This change seeks to increase the existing retail/commercial cap applicable to this particular corner of the area plan, and subsequently the corresponding zoning for this area. This application does not seek to modify the boundary of the existing node, nor introduce a variant to the land/development pattern. Potential development at this node may shorten their shopping trips to other various shopping destinations throughout Lawrence.

PROFESSIONAL STAFF RECOMMENDATION

The expansion of this amount would permit construction of a consistent building and land use that is currently the predominant form at this intersection. The increase requested in this application is consistent with the intent and development pattern present in the area, while also preserving the square footage totals planned for the land south of this site at 545 Wakarusa Drive, 565 Wakarusa Drive, 560 Congressional Drive, and 4950 W. 6th Street.

Staff recommends approval of this Comprehensive Plan Amendment to *Horizon 2020: Chapter 14: Specific Plans*, and the *An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive* to revise the retail square-footage cap from 127,487 square feet to 143,637 square feet, and recommends forwarding this Comprehensive Plan Amendment to the Lawrence City Commission with a recommendation for approval.

An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive

City of Lawrence, Kansas

December 2003
Amended <DATE PENDING>

Approved by the Lawrence City Commission on December 2, 2003
Amended by the Lawrence City Commission on July 10, 2012
Amended by the Lawrence City Commission on May 13, 2014
Amended by the Lawrence City Commission on <DATE PENDING>

AREA PLAN
West 6th Street & Wakarusa Drive

Introduction.....3
Background & Purpose
Description of Study Area

Existing Conditions.....5
Existing Land Uses
Existing Zoning Patterns
Future Land Use/UGA Designation
Environmental Conditions
Public Services
Circulation & Access

Envisioned Future.....14
Horizon 2020
Northwest Area Plan
West 6th Street Access Management Plan

Recommendation.....19

Introduction

Background & Purpose

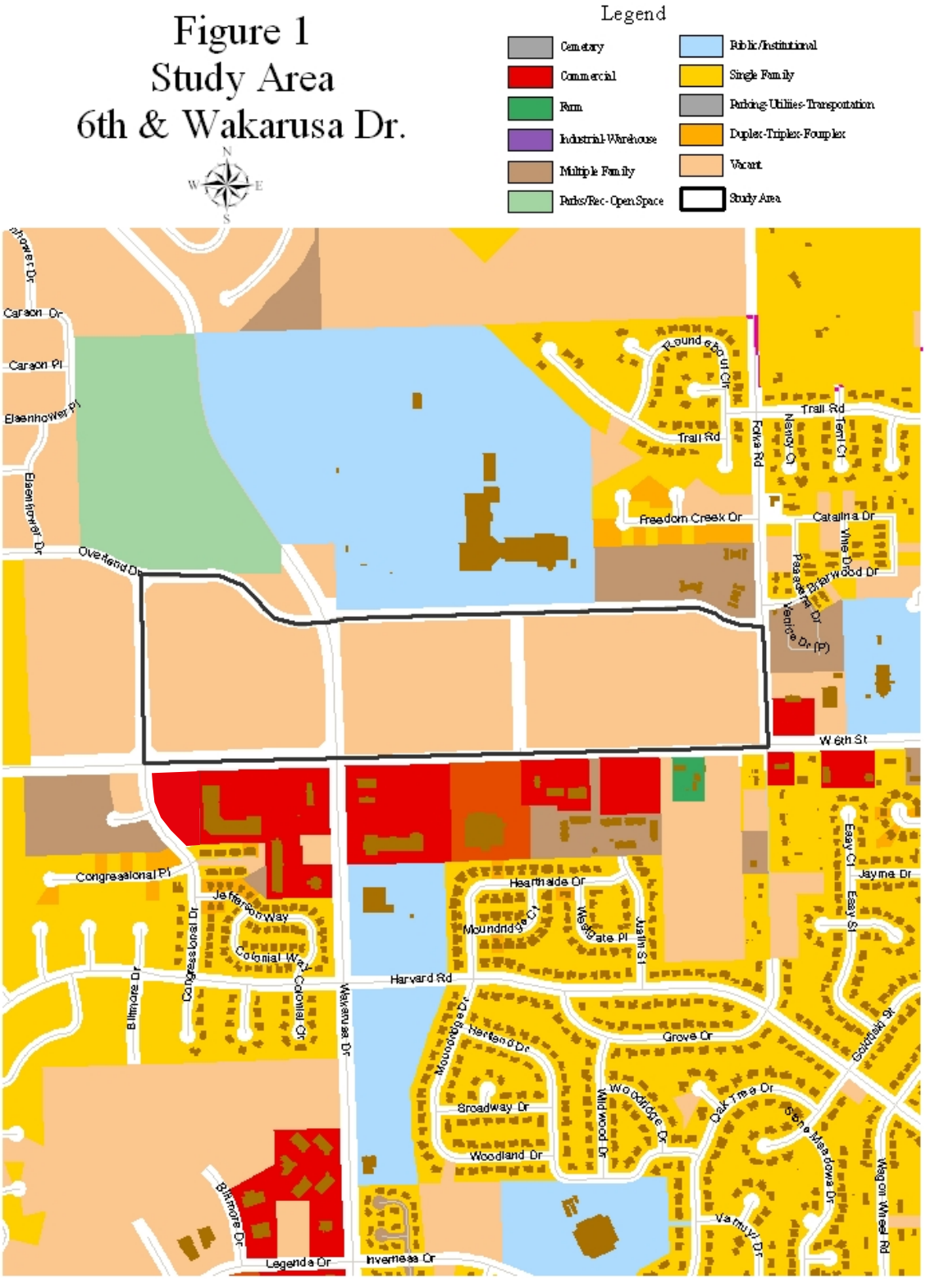
The purpose of this small area plan is to help ensure appropriate and compatible development of the West 6th Street/Wakarusa Drive intersection. This intersection is currently designated appropriate as a Community Commercial Center in Horizon 2020, the comprehensive, long-range plan for the City of Lawrence and unincorporated Douglas County. The south side of the intersection has developed into a commercial node and the Lawrence City Commission has directed Planning staff to develop a plan ensuring the north side of the intersection does not become oversaturated with commercial, primary retail, development.

An area plan is a useful planning tool intended as a furtherance of a more generalized long-range plan, such as Horizon 2020. Area plans are site-specific plans of an area whose purpose is to ensure appropriate and compatible development of an area. This area plan also intends to encourage development that is consistent with the goals and policies found in Horizon 2020 and that development is non-intrusive to surrounding neighborhoods.

Description of Study Area

The study area for this plan is an area bounded to the west by Congressional Drive; to the north by Overland Drive; to the east by Folks Road; and to the south by West 6th Street. The study area includes the north half of the West 6th Street/Wakarusa Drive intersection. The study area is located in Township 12 S, Range 19 E, Section 28, which is located in northwest Lawrence. The study area encompasses approximately eighty (80) acres (one-eighth of a mile). Refer to Figure 1 for the location of the West 6th Street/Wakarusa Drive intersection. The study area is currently undeveloped, but is surrounded on three sides by urban development. The western portion of the study area lies within the West Lawrence Neighborhood Association.

Figure 1
Study Area
6th & Wakarusa Dr.



Date: July 10, 2012

Existing Conditions

The first step in development of this area plan was an inventory of existing conditions at the West 6th Street/Wakarusa Drive study area. An analysis of those conditions as they relate to the future development of this study area was conducted by Planning staff. The inventory and analysis of existing conditions in this plan are intended to serve as a guide and to act as a support mechanism for the recommendations outlined at the end of this plan.

Existing Land Uses

As mentioned previously, the West 6th Street/Wakarusa Drive study area is currently undeveloped but is surrounded by urban development to the north, east, and south. The study area is surrounded by a variety of land uses in various stages of development: to the north is the Free State High School campus and Indoor Aquatic Center; to the northeast is residential, comprising of single- and multiple-family dwellings; to the east are banks and offices; to the southeast is residential, primarily single-family dwellings; to the south and southwest is commercial retail; to the west is vacant, undeveloped land with proposals for multiple-family residential development; and to the northwest is parkland and a developing single-family residential neighborhood.

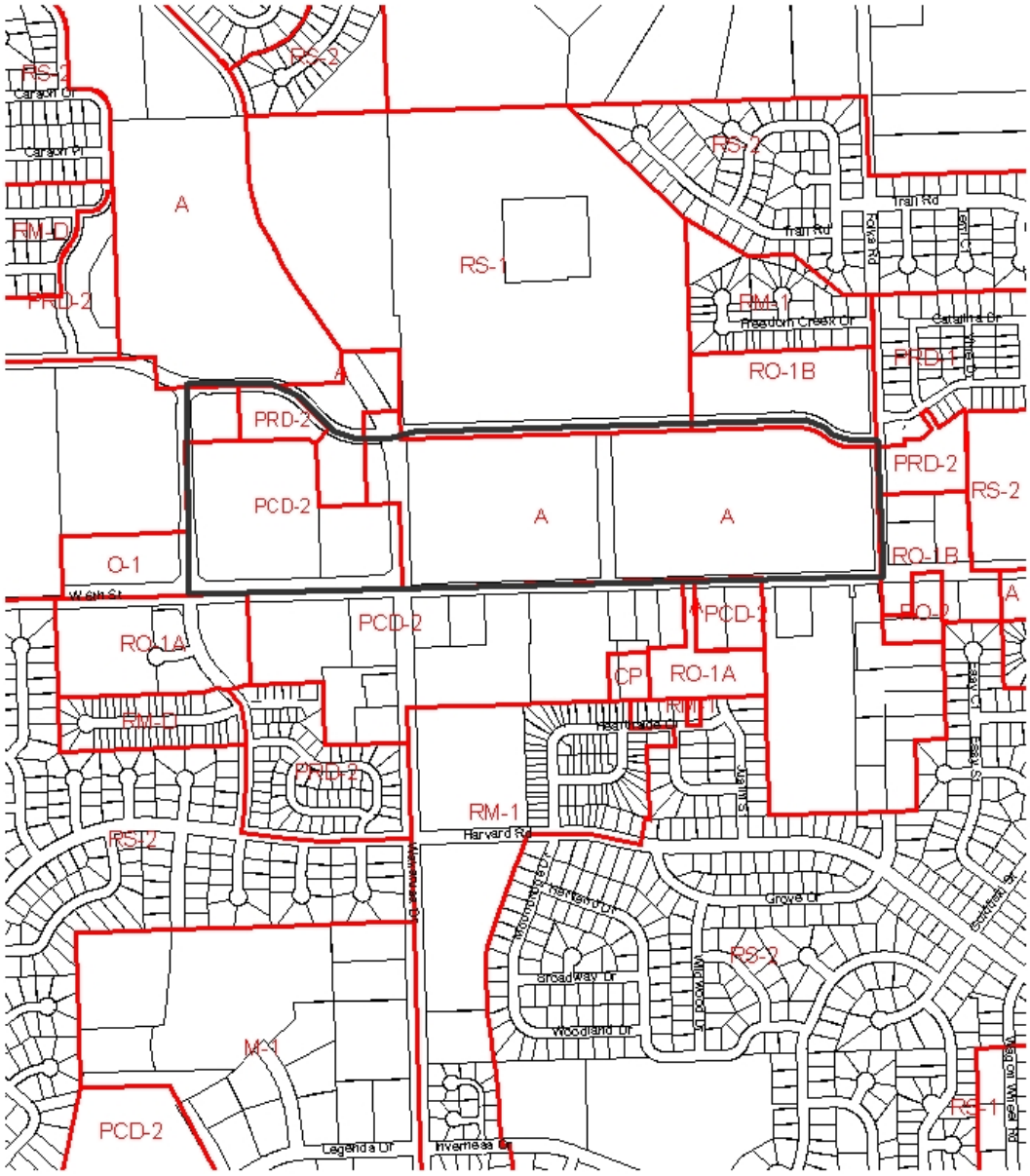
Existing Zoning Patterns

The entire study area lies within the corporate limits of the City of Lawrence. The land east of Wakarusa Drive is currently zoned A, Agricultural, and encompasses approximately fifty-three (53) acres. This is a Douglas County zoning district, which was retained upon annexation into the City. The land west of Wakarusa Drive has multiple zoning designations and encompasses approximately twenty-seven (27) acres. The majority of the western portion is zoned PCD-2, Planned Commercial Development, and the remaining portions zoned PRD-2, Planned Residential Development, and A, Agricultural.

There are a variety of zoning designations surrounding the study area. The areas to the north and northeast have primarily residential zoning designations, including RS-1 (Single-Family), RS-2, RM-1 (Multiple-Family), RO-1B (Residential-Office), and PRD-1. The areas to the east and southeast have primarily residential-office zoning designations, including RO-1B, RO-2, PRD-2, and A. The areas to the south and southwest have commercial and office zoning designations, including O-1 (Office), RO-1A, and PCD-2. The areas to the west and northwest have primarily residential designations, including RS-2, RM-D (Duplex), PRD-2, and A.

Zoning classifications for the study area and its surroundings are illustrated in Figure 2.

Figure 2
City Zoning Classifications



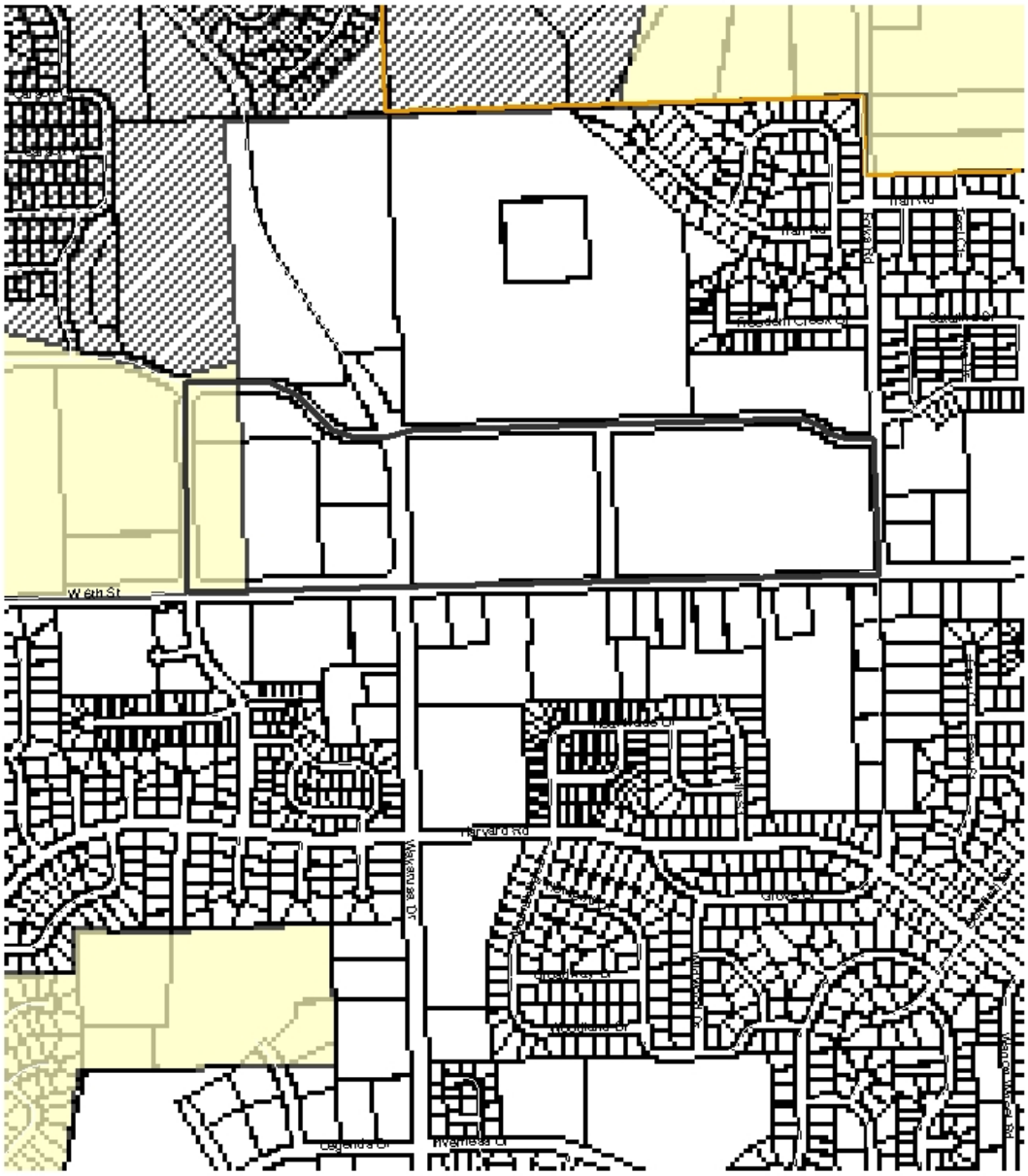
Date: June 26, 2003

Future Land Use / UGA Designation

The following is a brief summary of the future land uses for this area as they were initially generated. Two land use plans have been developed that influence the future development of the West 6th Street/Wakarusa Drive study area: Horizon 2020 and the Northwest Plan. Horizon 2020 identifies that portions of the West 6th Street/Wakarusa Drive intersection are appropriate for a Community Commercial Center. In the areas east of Wakarusa Drive, the majority has been designated appropriate for office uses. A small portion of this area has been designated appropriate for office or commercial uses. In the areas west of Wakarusa Drive, low-density residential uses are designated to be appropriate. Land use designations come from Figure 9 (Lawrence Urban Growth Area, Service Areas, and Future Land Use) and Figure 9.Inset (Lawrence Future Land Use).

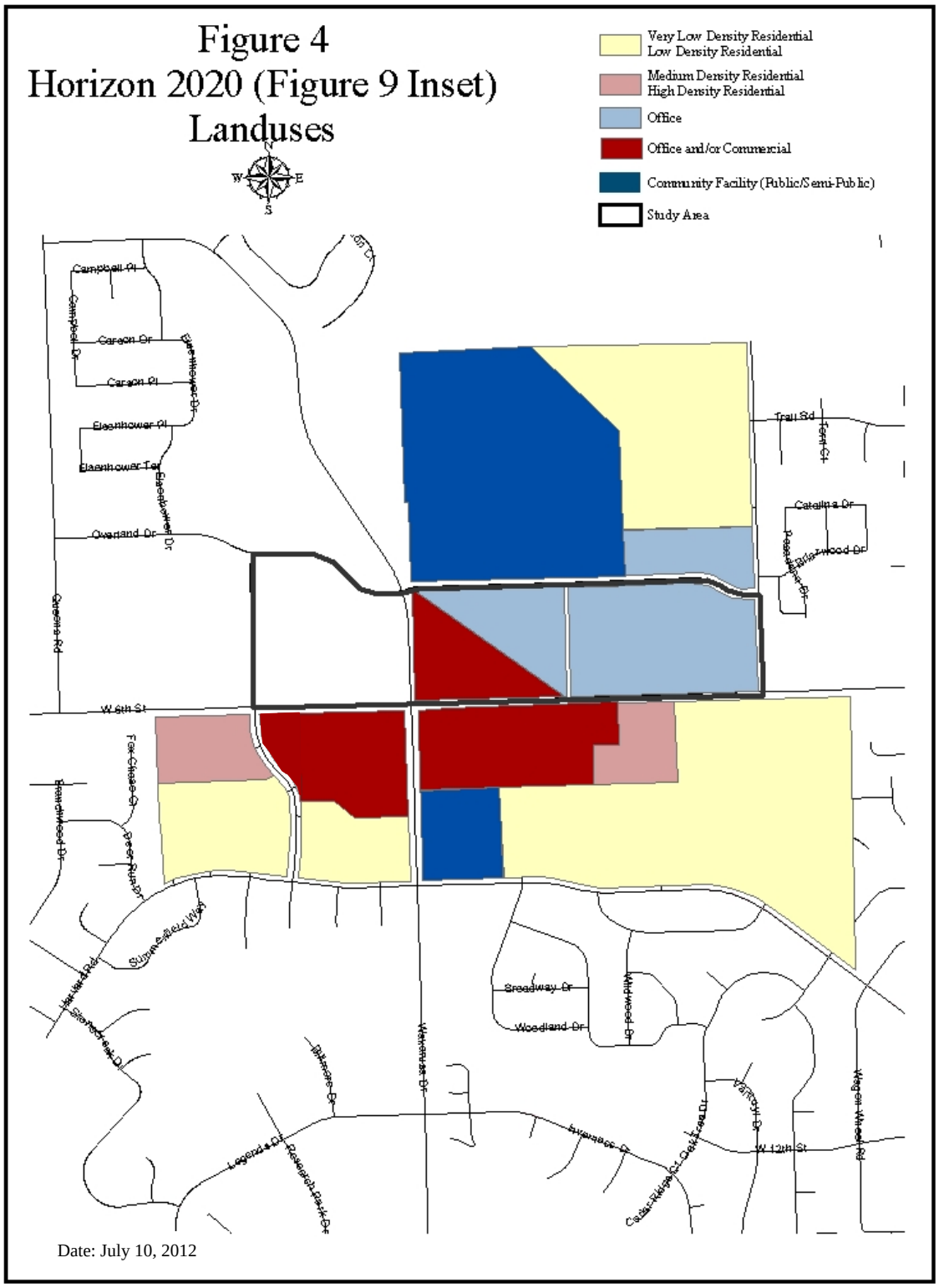
Land use designations from Horizon 2020 for the study area are illustrated in Figures 3 and 4.

Figure 3
Horizon 2020 (Figure 9) Landuses



Date: June 23, 2003

Figure 4
Horizon 2020 (Figure 9 Inset)
Landuses

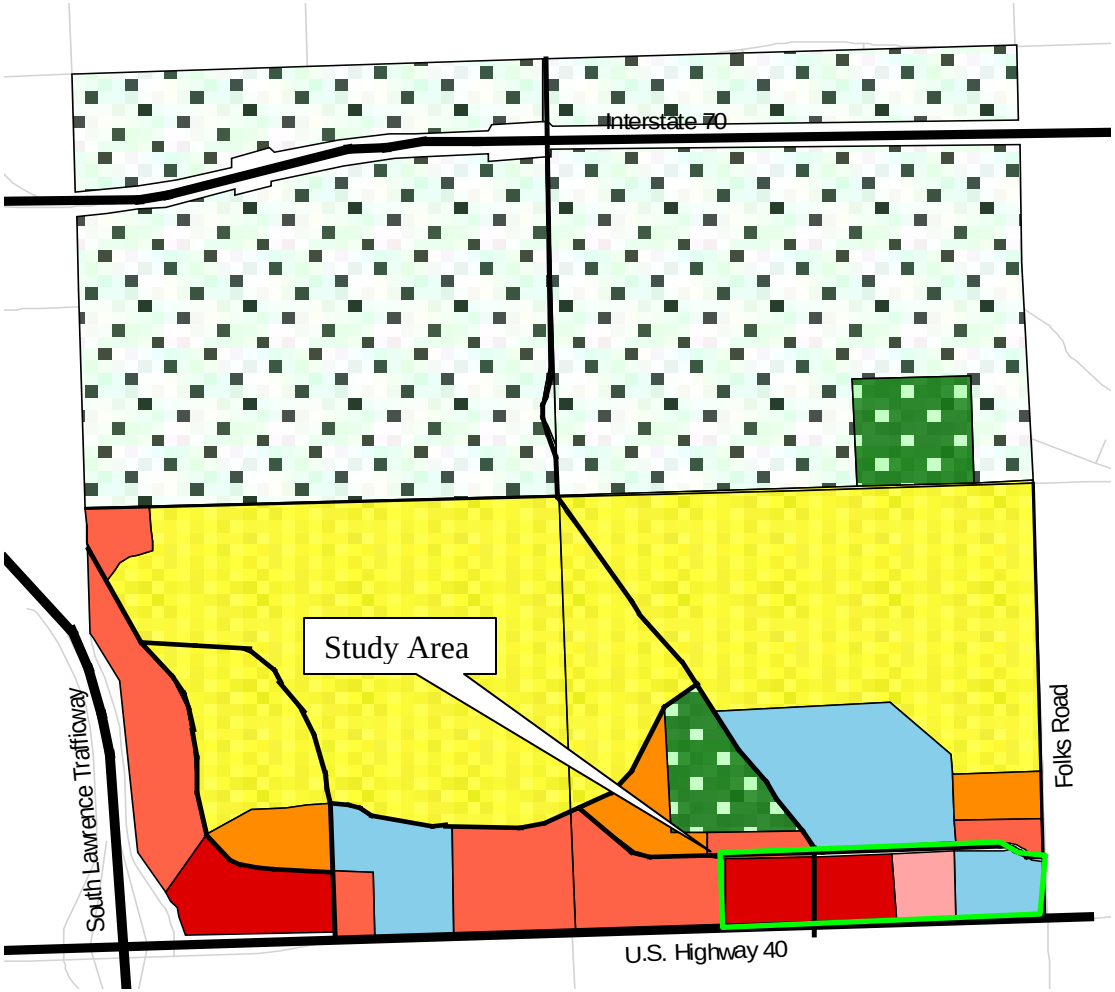


Date: July 10, 2012

The Northwest Plan is the most recent, detailed guide for the future land use and development for the West 6th Street/Wakarusa Drive study area. While the study area only represents a small portion of the Northwest Plan study area, the Northwest Plan has a direct influence on recommended land uses for the West 6th Street/Wakarusa Drive study area. Both the northwest and northeast corners of the intersection are designated appropriate for commercial uses. The remaining area between Wakarusa Drive and Folks Road has been designated appropriate for office and institutional uses, with institutional uses at the northwest intersection of West 6th Street and Folks Road.

Land use designations from the Northwest Plan for the study area are illustrated in Figure 5.

The Northwest Area Proposed Land Uses



Note: Actual environmental conditions which place constraints on development are not shown on this map. Refer to the comprehensive plan for guidance on environmental condition maps, studies and policies.

Lawrence-Douglas County Metropolitan Planning Office
October 2, 1996

Environmental Conditions

The entire West 6th Street/Wakarusa Drive study area is, or previously had been, agricultural pasture and range land. The study area is relatively flat, moderately sloping downhill to the north and west from its highest point at the northwest corner of the West 6th Street/Folks Road intersection. Along the western edge of the study area lie the upper reaches of a naturally occurring drainage channel, which is part of the Baldwin Creek Drainage Basin. This drainage channel flows into naturally maintained parkland located northwest of the study area. Since the study area is situated already within an increasingly urbanizing area of the city, no other major environmental features are present.

Public Services

The West 6th Street/Wakarusa Drive study area is currently served by city infrastructure and services. Sanitary sewer service is available to all areas of the study area. In those areas east of Wakarusa Drive, sewer service is available from the north, east, and southwest. In those areas west of Wakarusa Drive, sewer service is available from the Baldwin Creek Sewer Benefit District located to the north. Water service is also readily available. In those areas east of Wakarusa Drive, water service is available from all sides. In those areas west of Wakarusa Drive, water service is available from the east and south.

Improvements are planned for West 6th Street beginning in 2004, west of Folks Road, which will widen the street from two-lanes to four-lanes with a separated recreational path. As part of these improvements, water lines will be extended making water service available to the western portion of the study area more accessible on its southern and western edges. The improvements to West 6th Street are anticipated to be completed in 2006. In conjunction with the West 6th Street improvements, Wakarusa Drive is also being improved between West 6th Street and Overland Drive.

Circulation & Access

West 6th Street and Wakarusa Drive are the arterial streets providing primary access to the study area: West 6th Street, along the southern edge of the study area, provides east-west access; Wakarusa Drive, cutting through the study area, provides north-south access. Secondary access is also provided to the study area from secondary arterial and/or collector streets: Congressional Drive, along the western edge, provides access from the south; Folks Road, along the eastern edge, provides access from the north; Overland Drive, along the northern edge, provides east-west access. Champion Lane is anticipated to provide access to the properties between Wakarusa Drive and Folks Road.

West 6th Street also serves as US Highway 40 and connects to Kansas Highway 10 (K-10) (also referred to as the South Lawrence Trafficway or SLT), which is located within two miles of the study area. This close proximity makes the West 6th Street/Wakarusa Drive study area easily accessible to the community's regional transportation network, including the Kansas Turnpike/Interstate 70 and US Highway 59.

Bike paths, sidewalks, and multiple-use recreational trails are located throughout the West 6th Street/Wakarusa Drive study area. A ten-foot (10') wide recreation path on the south side of

West 6th Street is planned with the road improvement/widening project. The study area is also served by Lawrence Public Transit.

Envisioned Future

This section of the plan involves a summary of the existing plans and improvement projects of the City's future specifically as they relate to the West 6th Street/Wakarusa Drive intersection and its future development. This summary of the future visions and improvements is intended to serve as a guide and act as a support mechanism for the recommendations outlined in this area plan.

Horizon 2020

Horizon 2020 is the long-range plan for Douglas County and the City of Lawrence, outlining future land use growth and development over the next twenty years. This plan was developed during the mid-1990s utilizing a community-wide public participation process allowing the residents of the community to envision what they would like their hometown to be in the future. This part of the study looks at the existing intent of Horizon 2020, specifically Chapter 6, Commercial Land Use, as it relates to development at the West 6th Street/Wakarusa Drive intersection. Also identified are those relevant goals found in the other chapters of Horizon 2020 related to the planned development of the West 6th Street/Wakarusa Drive intersection.

Existing Chapter 6, Commercial Land Use in Horizon 2020

The current commercial land use element in Horizon 2020 identifies the West 6th Street/Wakarusa Drive intersection as appropriate for a Community Commercial Center since such centers should be located at arterial street intersections. These centers typically require ten to thirty acre sites to accommodate buildings, parking areas, and open spaces. They generally contain leasable space of 150,000 gross square feet (gsf) but may range from 100,000gsf to 450,000gsf, and can include a food/drug store along with a mix of retail and other uses and usually anchored with a small retail sales store type tenant.

There is approximately 440,999 gsf of retail space currently approved at the intersection of West 6th Street and Wakarusa Drive. This includes existing and proposed developments. This is 130,000gsf more than the "typical" amount of retail square footage and 70,000gsf below the "typical" amount recommended by Horizon 2020 for a Community Commercial Center. Areas that are designated Community Commercial Centers do not necessarily infer a large-scale commercial development. These areas are intended to concentrate commercial development of the community, however, "*leapfrog*" development from the contiguous urbanized area of the community is discouraged. Centers are intended to be easily accessible from surrounding neighborhoods.

Relevant goals and policies related to the development of the West 6th Street/Wakarusa Drive nodal study area come from Chapter 6, Commercial Land Use and include the following. For a more detailed look at the goals and policies, refer to Horizon 2020.

- ***Goal 2: Compatible Transition from Commercial Development to Less Intensive Uses.***
  Ensure compatible transition from commercial development to residential neighborhoods & other less intensive land uses.
  - ***Policy 2.1: Use Appropriate Transitional Methods.***
  - ***Policy 2.3: Higher-Density Residential Development as Transitional Use.***

- *Policy 2.5: Office, Research & Semi-Public Development as Transitional Use.*
- *Policy 2.6: Parks, Recreation & Open Space as Transitional Use.*

- *Goal 3: Criteria for Location of Commercial Development.* *Provide regional, community & neighborhood shopping opportunities to meet the commercial & retail needs of the community.*
  - *Policy 3.1: Utilize Locational Criteria for Commercial Development.*
  - *Policy 3.3: Utilize Locational Criteria for Community Centers.*
  - *Policy 3.7: Require an Impact Analysis.*
- *Goal 4: Transportation Considerations.* *Promote a multi-modal transportation system which provides or improves access & circulation within and adjacent to commercial areas.*
  - *Policy 4.1: Levels of Service.*
  - *Policy 4.2: Evaluate Traffic Impacts.*
  - *Policy 4.3: Minimize Traffic Diversion.*
  - *Policy 4.4: Ensure Adequate Ingress & Egress.*
  - *Policy 4.5: Limit Access.*
  - *Policy 4.7: Provide Pedestrian Access.*
  - *Policy 4.8: Provide Bicycle Access.*
  - *Policy 4.9: Encourage Convenient Parking within Commercial Areas.*

Additional Goals from Horizon 2020

Additional relevant goal statements from Horizon 2020 that support the recommendations of this plan help guide the future development of the study area so that it is consistent with the intent of the City's long-range vision of its future are highlighted below.

Chapter 5, Residential Land Use (low-density)

- *Goal 3: Neighborhood Conservation.* *The character & appearance of existing low-density residential neighborhoods should be protected & improvements made where necessary to maintain the values of properties & enhance the quality of life.*
- *Goal 5: Create a Functional & Aesthetic Living Environment.* *Create & maintain neighborhoods that are aesthetically pleasing & functionally efficient & practical.*
- *Goal 6: Compatible Transition from Low-Density Residential Development to More Intensive Land Uses.* *Ensure transition from low-density residential neighborhoods is compatible with more intensive residential & nonresidential land uses.*

Chapter 5, Residential Land Use (medium- & higher-density)

- *Goal 1: Criteria for Location of Medium- & Higher-Density Residential Development.* *Adopt criteria which will ensure that livability, property values, open space, safety & the general welfare are sustained.*
- *Goal 2: Create a Functional & Aesthetic Living Environment.* *Create & maintain medium- & higher-density residential developments that are aesthetically pleasing & functionally efficient & practical.*
- *Goal 3: Compatible Transition from Medium- & Higher-Density Residential Development to Both More Intensive & Less Intensive Land Uses.* *Ensure transition from medium- & higher-density residential neighborhoods is compatible with nonresidential land uses or low-density residential land uses.*
- *Goal 4: Transportation Considerations.* *Promote a transportation system which provides or improves access & circulation within & adjacent to medium- & higher-density residential areas.*

.

Chapter 7, Industrial & Employment Related Land Use

- *Goal 2: Compatible Transition from Industrial/Employment-Related Development to Less Intensive Uses.* *Ensure a compatible transition between industrial & employment-related developments & less intensive land uses.*

- ***Goal 3: Criteria for Location of Industrial or Employment-Related Development.*** *Provide industrial & employment areas to meet the economic needs of the community.*
- ***Goal 4: Transportation Considerations.*** *Promote a multi-modal transportation system which provides or improves access & circulation within & adjacent to industrial areas.*

Chapter 8, Transportation

- ***Goal 1: Transportation Considerations.*** *Promote a multi-modal transportation system which provides or improves access & circulation throughout the city & county.*
- ***Goal 2: Street System Goal.*** *Provide an efficient & effective network of streets & roads which access all appropriate areas, provide continuity & connections into & beyond the City of Lawrence & Douglas County, & support the arrangements of various land uses within the urbanized area.*
- ***Goal 3: Access Management Goal.*** *Promote the mixture of planning, design, traffic operations, & administrative actions to coordinate roadway access in order to maximize safety & mobility while reducing delays to travel.*
- ***Goal 4: Public Transportation System Goal.*** *Implement a coordinated public transportation system that offers a viable choice of travel which addresses the needs of individuals & the community as a whole. Public transportation should be viewed as an alternative mode of transportation to reduce localized traffic congestion, improve air quality, conserve energy, & provide better transportation for those who choose not to or are unable to drive.*
- ***Goal 5: Pedestrian & Bicycle Transportation System Goal.*** *Establish an integrated system of bicycle & pedestrian improvements which provide for safe & efficient connections throughout the community, & offers viable choices of travel. Walking is a form of transportation. Recognize that walking is an important form of transportation especially for children, the elderly, & those who cannot afford other transportation modes.*

Chapter 9, Parks, Recreation, & Open Space

- ***Goal 1: Balance Between Natural & Man-Made Environments.*** *A balance between the natural & man-made environments is needed to conserve & protect natural features while allowing new development.*
- ***Goal 2: Protect & Expand the System of Park, Recreation & Open Space.***
- ***Goal 3: Criteria for the Location of Parks & Open Space.*** *Create a park, recreation & open space system that is sensitive to both the recreational needs & the environmental/ecological needs of the community.*
- ***Goal 4: Compatible Transition from Recreation Facilities to Residential Land Uses.*** *Ensure compatible transition from recreational facilities whether public or private to residential land uses.*

Chapter 10, Community Facilities

- ***Goal 1: Provide Facilities & Services to Meet the Needs of the Community.*** *Provide quality public & semi-public facilities equitably distributed throughout the community.*
- ***Goal 2: Criteria for the Location of Community Facilities.*** *Adopt criteria which will ensure that community facilities are located, designed & operated in a manner compatible with neighboring uses.*
- ***Goal 3: Transportation Considerations.*** *Promote a multi-modal transportation system which provides or improves access & circulation within & adjacent to community facilities.*

Chapter 12, Economic Development

- ***Goal 1: Increase Job Growth.*** *Increase job growth at a rate equal to or above that of population & housing to maintain a separate community identity.*
- ***Goal 2: Increase Tax Base.*** *Ensure tax base growth equals or exceeds population & housing growth.*

The Northwest Plan

The Northwest Plan is the most recent, detailed guide (completed in 1997) for the future land use and development for the West 6th Street/Wakarusa Drive study area. The Northwest Plan covers approximately four square miles (Sections 20, 21, 28, 29) in northwest Lawrence bounded by West 6th Street to the south, Folks/E 1100 Road to the east, Douglas County Road 438/Farmers Turnpike to the north, and E 900 Road to the west. While the study area only represents a small portion (approximately eighty acres) of the Northwest Plan study area, the Northwest Plan has a direct influence on recommended land uses for the West 6th Street/Wakarusa Drive study area.

The Northwest Plan indicates the West 6th Street/Wakarusa Drive study area should be urbanized calling for high intensity land uses to be located within the study area and that land uses "step-down," or decrease, in intensity as activities move north and west away from the intersection. Any new development occurring in this area needs to be compatible with the adopted policies and regulations of the City. The Plan also stresses the importance of maintaining any unique environmental features and conditions, perhaps by incorporating them into development.

As mentioned previously in this area plan, the Northwest Plan envisions commercial, office, and institutional land uses within the West 6th Street/Wakarusa Drive study area. The Northwest Plan identifies both the northwest and northeast corners of the West 6th Street/Wakarusa Drive intersection appropriate for commercial uses. It identifies the northwest corner of the West 6th Street/Folks Road intersection appropriate for institutional uses. It identifies that the area between the commercial and institutional uses appropriate for office activities. The Northwest Plan also states that industrial uses are not appropriate for the Northwest Plan study area, but office and office-research activities are. Residential development is also recommended in the Northwest Plan as an appropriate transitional use between the high-intensive uses recommended along West 6th street and the less-intensive uses as development "steps-down" to the north of West 6th Street. The Plan sets a maximum residential density of 15 dwelling units per acre (15du/ac) within the entire Northwest Plan study area.

West 6th Street Access Management Plan

Access from West 6th Street will be limited in accordance to the provisions of City Ordinance #7465 (adopted in 2002), based on the West 6th Street Access Management Plan completed in 1998. While improvements to West 6th Street west of Folks Road are a priority, access into activities of the West 6th Street/Wakarusa Drive study area will also be generated by developed and developing neighborhoods surrounding the study area. The development of a multi-modal circulation pattern is highly encouraged. Pedestrian accessibility is a priority of the City and the provision of bike paths and sidewalks connecting internal and external neighborhoods are emphasized. It is also recommended that the development of multiple-use recreational trails be included as part of the development of this study area. Consideration of public transit is also important in the study area. Planning for public transit includes, but is not limited to, bus turnaround areas, bus loading areas, and bus routing.

Recommendation

The West 6th Street/Wakarusa Drive study area is anticipated to evolve into one of the more prominent commercial centers of the community. The Lawrence City Commission has directed City staff to ensure new development at this intersection area is appropriate for the surrounding neighborhoods and also within the context of the entire community. The City Commission has also directed City staff to ensure that new development is compatible with existing development located within and adjacent to the intersection area. Any development proposals for this intersection will come under close scrutiny to ensure this direction is abided by. The following land use recommendations regarding the development of the West 6th Street/Wakarusa Drive study area are based on the analysis of the above identified existing conditions and envisioned future of this intersection area. In addition to the recommendations below, it is recommended that no building permits be issued for the study area until the West 6th Street Improvement Project is substantially completed.

The Area West of Wakarusa Drive

The area located west of Wakarusa Drive (the northwest corner of the West 6th Street/Wakarusa Drive intersection) is recommended as most appropriate for commercial development of a retail focus. Given the amount of existing commercial retail development located south of West 6th Street, it is recommended the existing zoning designation of PCD-2 be retained with additional restrictions placed upon it. The restriction being that retail development located at this corner is limited to 154,000gsf. This is the amount of retail gross square footage that was approved by the Planning and City Commissions. An additional restriction is that a single building footprint shall not exceed 80,000gsf. Such a footprint is typical of a grocery store "anchor" having additional service-oriented commercial development. It is also recommended the remaining zoning designations remain intact without additional restrictions.

The Area East of Wakarusa Drive

The area located east of Wakarusa Drive (the northeast corner of the West 6th Street/Wakarusa Drive intersection) is recommended as most appropriate for commercial development. As three (3) corners of this intersection are likely to develop as retail centers, it is recommended the remaining corner incorporate less-intensive commercial development. This corner is in closest proximity to the high school complex and indoor aquatic center to the north and adjacent residential neighborhoods to the northeast. It is recommended the existing A, Agricultural, zoning designation be rezoned to PCD-2 with restrictions. It is also recommended that up to 122,000gsf would be permissible for retail commercial use if planned as part of an overall development plan incorporating a design to be pedestrian-friendly.

The Area West of Folks Road

The area located west of Folks Road (the northwest corner of the West 6th Street/Folks Road intersection) is recommended as most appropriate for medium- to high- density residential development. This area could also serve well as a mixed office-residential development or public/semi-public/institutional use. It is recommended no commercial, retail or otherwise, be located at this intersection as such activity would disrupt the residential character and feel of

adjacent land use activities and residential neighborhoods. Commercial activity at this intersection would also expand the commercial center at West 6th Street and Wakarusa Drive from a center into a strip development, which is in conflict with the goals and policies of Horizon 2020 and the Northwest Plan. It is recommended the existing A, Agricultural, zoning designation be rezoned to PRD-2 with the intent of encouraging a mixed-use office-residential development that would be complimentary to existing and future developments and neighborhoods.

Additional Recommendations

It is also recommended that the total approved retail commercial square footage be limited to 484,600gsf for the four corners of the West 6th Street/Wakarusa Drive intersection. A breakdown of square footage allocation is illustrated in the table below.

Total Approved Retail/Commercial Square Footage

Corner of 6th St. & Wakarusa Dr.	**Allowed**	Existing	Planned	Total	Remaining
Northwest	**143,637**	105,987	37,650	143,637	0
Southwest	**78,096**	75,349	0	75,349	2,747
Southeast	**157,017**	122,818	0	122,818	34,199
Northeast	**122,000**	37,752	83,740	121,492	508
Totals	**500,750**	341,906	121,390	463,296	37,454

2012 Plan Update Notes:

The 2012 modifications to this Plan designate the southeast corner of the W. 6th Street and Congressional Drive as a commercial use. The changes also make Congressional Drive the western boundary of the W. 6th Street and Wakarusa Drive commercial center.

The approved retail commercial square footage updates to the Additional Recommendations section are derived from the most recent approved development plans for the four corners of the intersection. Non-retail square footage numbers from the development plans are not included in the approved retail commercial square footage numbers. The table on page 19 was revised to reflect the existing approvals and to provide information for all four corners.

The revision to Figure 4 will also mean a revision to Map 3-2 Lawrence Future Land Use in *Horizon 2020*. An amendment has been initiated previously for Map 3-2 and this revision will be included with that amendment.

2014 Plan Update Notes:

The 2014 modification is to expand the allowable retail/commercial space for the northeast quadrant of West 6th Street and Wakarusa Drive from a limitation of no more than 72,000 gross square feet to a new cap of no more than 122,000 gross square feet.

2015 Plan Update Notes:

The 2015 modification is to expand the allowable retail/commercial space for the northwest quadrant of the West 6th Street and Wakarusa Drive from a limitation of 127,487 square feet to a new cap of no more than 143,637 square feet.

HORIZON 2020

The Comprehensive Plan for Lawrence and Unincorporated Douglas County

January 26, 2015
Amendment

Plan prepared by the Lawrence/Douglas County Metropolitan Planning Office based upon recommendations from the HORIZON 2020 Steering Committee.
Adopted by the Planning Commission on May 22, 1996.
Adopted by the City Commission January 28, 1997.
Douglas County Board of County Commissioners May 18, 1998.

HORIZON 2020

The Comprehensive Plan
for Lawrence and
Unincorporated Douglas County

1998 Revised Edition

HORIZON 2020 ADOPTED:

Lawrence/Douglas County Metropolitan Planning Commission	May 22, 1996
Lawrence City Commission	January 28, 1997
Douglas County Board of County Commissioners	May 18, 1998

AMENDMENTS SINCE ADOPTION:

1. Map 3-2-Inset, Future Land Use - City of Lawrence
   Lawrence-Douglas County Metropolitan Planning Commission - December 17, 1997
   Lawrence City Commission - February 17, 1998

2. Regarding Rural Development Issues and the Urban Growth Area Boundary (including a revised format)
   Lawrence-Douglas County Metropolitan Planning Commission - April 29, 1998
   Douglas County Board of County Commissioners - May 18, 1998
   Lawrence City Commission - June 9, 1998

3. Extend the Urban Growth Area east of Noria (E1750) Rd
   Lawrence-Douglas County Metropolitan Planning Commission - March 15, 2000
   Douglas County Board of County Commissioners - March 22, 2000
   Lawrence City Commission - April 11, 2000

4. Adding public health facilities text to Chapter Ten, Section Twelve concerning "Municipal Buildings and Facilities, Health Services
   Lawrence-Douglas County Metropolitan Planning Commission - February 28, 2001
   Douglas County Board of County Commissioners - March 28, 2001
   Lawrence City Commission - March 27, 2001

5. Updating of population projections in Chapter Two and modification of Table of Contents and Table and Figure listing
   Lawrence-Douglas County Metropolitan Planning Commission - May 23, 2001
   Douglas County Board of County Commissioners - August 15, 2001
   Lawrence City Commission - June 12, 2001

6. Update to Chapter Twelve – Economic Development
   Lawrence-Douglas County Metropolitan Planning Commission – October 22, 2003
   Douglas County Board of County Commissioners - November 19, 2003
   Lawrence City Commission - November 18, 2003
   Effective date - December 1, 2003

7. Adoption of Revised Major Thoroughfares Maps - (Pages 8-5 and 8-6)
   Lawrence-Douglas County Metropolitan Planning Commission – November 19, 2003
   Douglas County Board of County Commissioners - December 15, 2003
   Lawrence City Commission - December 30, 2003
   Effective date - January 4, 2004

8. Expansion of the Urban Growth Area - (Pages 3-3, 3-5, and 4-3)
   Lawrence-Douglas County Metropolitan Planning Commission – December 17, 2003
   Douglas County Board of County Commissioners - November 19, 2003
   Lawrence City Commission - January 20, 2004
   Effective date - January 31, 2004

9. Update to Chapter Six – Commercial Land Use
   Lawrence-Douglas County Metropolitan Planning Commission – October 22, 2003
   Douglas County Board of County Commissioners - November 19, 2003
   Lawrence City Commission - November 18, 2003
   Effective date - March 16, 2004

10. Amendment to Chapter Six – Commercial Land Use
    Lawrence-Douglas County Metropolitan Planning Commission – March 15, 2006
    Douglas County Board of County Commissioners – September 11, 2006
    Lawrence City Commission – August 8, 2006
    Effective date – December 15, 2006

11. Update to Chapter Nine – Parks, Recreation and Open Space
    Lawrence-Douglas County Metropolitan Planning Commission – September 25, 2006
    Douglas County Board of County Commissioners – October 9, 2006
    Lawrence City Commission - October 10, 2006
    Effective date – January 5, 2007

12. Amendments to Chapters Four – Growth Management and Chapter Five – Residential Land Use
    Lawrence-Douglas County Metropolitan Planning Commission – August 21, 2006
    Douglas County Board of County Commissioners – October 18, 2006
    Lawrence City Commission - December 19, 2006
    Effective date – January 19, 2007

13. Amendments to Chapters Five –Residential Land Use (Figure 5-1)
    Lawrence-Douglas County Metropolitan Planning Commission – February 26, 2007
    Douglas County Board of County Commissioners – April 18, 2007
    Lawrence City Commission – April 4, 2007
    Effective date – May 4, 2007

14. Addition of Chapter Fourteen –Specific Plans
    Lawrence-Douglas County Metropolitan Planning Commission – June 27, 2007
    Douglas County Board of County Commissioners – August 20, 2007
    Lawrence City Commission – August 14, 2007
    Effective date – September 14, 2007

15. Amendment to Chapter Fourteen – Revised Southern Development Plan
    Lawrence-Douglas County Metropolitan Planning Commission – November 28, 2007
    Douglas County Board of County Commissioners – January 7, 2008
    Lawrence City Commission – December 18, 2007
    Effective date – January 18, 2008

16. Amendment to Chapter Fourteen – Southeast Area Plan
    Lawrence-Douglas County Metropolitan Planning Commission – November 28, 2007
    Douglas County Board of County Commissioners – January 28, 2008
    Lawrence City Commission – January 15, 2008
    Effective date – February 12, 2008

17. Amendment to Chapter Fourteen - Farmland Industries Redevelopment Plan
    Lawrence-Douglas County Metropolitan Planning Commission – November 28, 2007
    Douglas County Board of County Commissioners – March 31, 2008
    Lawrence City Commission – March 11, 2008
    Effective date – April 5, 2008

18. Amendments to Chapter Six – Commercial Land Use
    Lawrence-Douglas County Metropolitan Planning Commission – February 27, 2008
    Douglas County Board of County Commissioners – April 28, 2008
    Lawrence City Commission – April 1, 2008
    Effective date – May 21, 2008

19. Amendments to Chapter Six – Mixed Use District
    Lawrence-Douglas County Metropolitan Planning Commission – April 23, 2008
    Douglas County Board of County Commissioners – June 16, 2008
    Lawrence City Commission – May 13, 2008
    Effective date – July 9, 2008

20. Amendment to Chapter Fourteen – Amend the Southeast Area Plan
    Lawrence-Douglas County Metropolitan Planning Commission – May 21, 2008
    Douglas County Board of County Commissioners – July 14, 2008
    Lawrence City Commission – June 24, 2008
    Effective date – July 21, 2008

21. Amendment to Chapter Fourteen – Amend the Southeast Area Plan
    Lawrence-Douglas County Metropolitan Planning Commission – September 22, 2008
    Douglas County Board of County Commissioners – November 10, 2008
    Lawrence City Commission – October 7, 2008
    Effective date – December 1, 2008

22. Amendment to Chapter Six – Neighborhood Commercial Centers
    Lawrence-Douglas County Metropolitan Planning Commission – October 20, 2008
    Douglas County Board of County Commissioners – December 8, 2008
    Lawrence City Commission – November 11, 2008
    Effective date – December 18, 2008

23. Amendment to Chapter Six – Renumber Goal 3
    Lawrence-Douglas County Metropolitan Planning Commission – October 20, 2008
    Douglas County Board of County Commissioners – December 8, 2008
    Lawrence City Commission – November 11, 2008
    Effective date – December 18, 2008

24. Amendment to Chapter Fourteen – K-10 & Farmer's Turnpike Plan
    Lawrence-Douglas County Metropolitan Planning Commission – November 17, 2008
    Douglas County Board of County Commissioners – January 7, 2009
    Lawrence City Commission – December 9, 2008
    Effective date – January 11, 2009

25. Amendment to Chapter Six – Inner-Neighborhood Commercial Centers
    Lawrence-Douglas County Metropolitan Planning Commission – November 17, 2008
    Douglas County Board of County Commissioners – February 9, 2009
    Lawrence City Commission – December 2, 2008
    Effective date – March 1, 2009

26. Addition of Chapter Fifteen – Place Making Elements
    Lawrence-Douglas County Metropolitan Planning Commission – May 21, 2008
    Douglas County Board of County Commissioners – February 23, 2009
    Lawrence City Commission – January 27, 2009
    Effective date – March 17, 2009

27. Amendment to Chapter Fourteen – Lawrence SmartCode Infill Plan
    Lawrence-Douglas County Metropolitan Planning Commission – May 21, 2008
    Douglas County Board of County Commissioners – February 23, 2009
    Lawrence City Commission – January 27, 2009
    Effective date – March 17, 2009

28. Amendment to Chapter Fourteen – West of K-10 Plan
    Lawrence-Douglas County Metropolitan Planning Commission – March 25, 2009
    Douglas County Board of County Commissioners – May 6, 2009
    Lawrence City Commission – June 9, 2009
    Effective date – June 21, 2009

29. Update to Chapter Seven – Industrial and Employment-Related Land Use
    Lawrence-Douglas County Metropolitan Planning Commission – April 22, 2009
    Douglas County Board of County Commissioners – August 5, 2009
    Lawrence City Commission – June 9, 2009
    Effective date – August 15, 2009

30. Amendment to Chapter Four- Growth Management & Chapter Six – Rural Tourism Facilities
    Lawrence-Douglas County Metropolitan Planning Commission – May 18, 2009
    Douglas County Board of County Commissioners – June 24, 2009
    Lawrence City Commission – August 18, 2009
    Effective date – August 29, 2009

31. Amendment to Chapter Three – General Plan Overview-Remove Land Use Categories Table
    Lawrence-Douglas County Metropolitan Planning Commission – September 21, 2009
    Douglas County Board of County Commissioners – November 18, 2009
    Lawrence City Commission – October 27, 2009
    Effective date – November 25, 2009

32. Renumber the Implementation Chapter to Chapter Seventeen
    Lawrence-Douglas County Metropolitan Planning Commission – September 21, 2009
    Douglas County Board of County Commissioners – November 18, 2009
    Lawrence City Commission – October 27, 2009
    Effective date – November 25, 2009

33. Amendment to Chapter Fourteen – Oread Neighborhood Plan
    Lawrence-Douglas County Metropolitan Planning Commission – January 27, 2010
    Lawrence City Commission – September 21, 2010
    Effective date – October 1, 2010

34. Amendment to Chapter to Chapter Fourteen – Chapter 13 reference
    Lawrence-Douglas County Metropolitan Planning Commission – June 23, 2010
    Douglas County Board of County Commissioners – October 27, 2010
    Lawrence City Commission – October 19, 2010
    Effective date – November 1, 2010

35. Amendment to Chapter to Chapter Seven – Add reference to K-10 & Farmer's Turnpike Plan
    Lawrence-Douglas County Metropolitan Planning Commission – July 26, 2010
    Douglas County Board of County Commissioners – October 27, 2010
    Lawrence City Commission – October 19, 2010
    Effective date – November 1, 2010

36. Update to Chapter Eight - Transportation
    Lawrence-Douglas County Metropolitan Planning Commission – September 20, 2010
    Douglas County Board of County Commissioners – January 26, 2011
    Lawrence City Commission – December 21, 2010
    Effective date – February 7, 2011

37. Addition of Chapter Sixteen - Environment
    Lawrence-Douglas County Metropolitan Planning Commission – August 23, 2010
    Douglas County Board of County Commissioners – April 13, 2011
    Lawrence City Commission – June 7, 2011
    Effective date – June 23, 2011

38. Amendment to Chapter Fourteen – Southeast Area Plan Update
    Lawrence-Douglas County Metropolitan Planning Commission – August 24, 2011
    Lawrence City Commission – September 27, 2011
    Douglas County Board of County Commissioners – November 19, 2011
    Effective date – October 22, 2011

39. Amendment to Chapter Fourteen – Inverness Park District Plan
    Lawrence-Douglas County Metropolitan Planning Commission – July 27, 2011
    Lawrence City Commission – September 20, 2011
    Douglas County Board of County Commissioners – November 12, 2011
    Effective date – October 22, 2011

40. Amendment to Chapter Fourteen – Inverness Park District Plan
    Lawrence-Douglas County Metropolitan Planning Commission – April 23, 2012
    Lawrence City Commission – May 15, 2012
    Douglas County Board of County Commissioners – June 13, 2012
    Effective date – June 22, 2012

41. Amendment to Chapter Fourteen – 6th and Wakarusa Area Plan & Chapter Six – Commercial Land Use
    Lawrence-Douglas County Metropolitan Planning Commission – June 25, 2012
    Lawrence City Commission – July 10, 2012
    Effective date – July 20, 2012

42. Amendment to Chapter Fourteen – Northeast Sector Plan
    Lawrence-Douglas County Metropolitan Planning Commission – May 21, 2012
    Lawrence City Commission – September 11, 2012
    Douglas County Board of County Commissioners – June 13, 2012
    Effective date – September 21, 2012

43. Amendment to Chapter Six – Auto Related Commercial Center Policies
    Lawrence-Douglas County Metropolitan Planning Commission – January 28, 201
    Lawrence City Commission – March 12, 2013
    Douglas County Board of County Commissioners – April 10, 2013
    Effective date – April 26, 2013

44. Amendment to Chapter Fourteen – West of K-10 Amendment & Remove 6th & SLT Nodal Plan, & Chapter Six – CC600
    Lawrence-Douglas County Metropolitan Planning Commission – February 27, 2013
    Lawrence City Commission – March 26, 2013
    Douglas County Board of County Commissioners – April 10, 2013
    Effective date – May 10, 2013

45. Amendment to Chapter Six – Lawrence Existing Commercial Areas, S. Iowa Street (23rd Street to K-10) & Chapter Fourteen – Revised Southern Development Plan
    Lawrence-Douglas County Metropolitan Planning Commission – May 20, 2013
    Lawrence City Commission – June 18, 2013
    Douglas County Board of County Commissioners – June 12, 2013
    Effective date – June 28, 2013

46. Update to Chapter Eight – Transportation
    Lawrence-Douglas County Metropolitan Planning Commission – August 26, 2013
    Lawrence City Commission – October 8, 2013
    Douglas County Board of County Commissioners – September 25, 2013
    Effective date – October 28, 2013

47. Amendment to Chapter Six – Lawrence Existing Commercial Areas, W. 6th Street and Wakarusa Drive & Chapter Fourteen – An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive
    Lawrence-Douglas County Metropolitan Planning Commission – April 21, 2014
    Lawrence City Commission – May 13, 2014
    Effective date – May 16, 2014

48. Amendment to Chapter Fourteen – An Area Plan for the Intersection Area of West 6th Street & Wakarusa Drive
    Lawrence-Douglas County Metropolitan Planning Commission – <DATE PENDING>
    Lawrence City Commission – <DATE PENDING>
    Effective date – <DATE PENDING>

LAWRENCE/DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION
1998 Adoption

Philip Bradley, Chair
Jean Milstead
Mike Heck
Mary Giese
Frank Male
Leila Leary*
Joe Baker
Bobbie Flory
Cynthia Lartigue-Eubanks
Dennis Snodgrass
Max Entrikin
Andrew Ramirez*

* Appointed to the Planning Commission in June 1996

LAWRENCE /DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION
2004 Update

2004 LAWRENCE CITY COMMISSION

Mike Rundle, Mayor

Sue Hack
David Dunfield
Dennis “Boog” Highberger
David Schauner

2004 DOUGLAS COUNTY COMMISSION

Charles Jones, Chairman

Jere McElhaney
Bob Johnson

LAWRENCE-DOUGLAS COUNTY METROPOLITAN PLANNING COMMISSION
2006 Update

2006 LAWRENCE CITY COMMISSION

Mike Amyx, Mayor

Sue Hack
Mike Rundle
Dennis “Boog” Highberger
David Schauner

2006 DOUGLAS COUNTY COMMISSION

Bob Johnson, Chairman

Jere McElhaney
Charles Jones

HORIZON 2020 STEERING COMMITTEE

Jean Milstead, Chair

Pat Ross
Trudy Rice
Steve Glass
Stan Zaremba
Arthur Anderson
Bobbie Flory
Philip Bradley
Carolyn Church
Martin Moore
Bob Georgeson
Anita Larson
Mark Wulfkuhle
Max Entrikin
Cynthia Lartigue-Eubanks

LAWRENCE/DOUGLAS COUNTY METROPOLITAN PLANNING OFFICE 2004

Linda Finger, Director
Sheila Stogsdill, Assistant Director

David Guntert
Bryan Dyer
Bill Ahrens
Brad Hauschild
Jeff Tully
Amy Saker
Sandra Day
Renee Stains
Paul Patterson
Lynne Zollner
Carol Folkmann

Special thanks is due to the many other staff members, governmental jurisdictions, and interested citizens who made substantial contributions to this project.

TABLE OF CONTENTS

CHAPTER ONE - INTRODUCTION 1-1
- Why Does a Community Have a Comprehensive Plan?
- What is a Comprehensive Plan?
- How is the Comprehensive Plan Used?
- HORIZON 2020 Planning Process
- Overall HORIZON 2020 Planning Goals
- Assumptions of the Plan and the Plan's Maps

CHAPTER TWO - SUMMARY OF BACKGROUND STUDIES 2-1
- Planning Area
- Population
- Households and Housing Units
- Employment Trends
- Land Use
- Land Forms
- Development Patterns
- Environmental Features
- Utilities

CHAPTER THREE - GENERAL PLAN OVERVIEW 3-1
- Key Features of the Plan
- Lawrence Urban Growth Area and Future Land Use Map
- Douglas County Urban Growth Area Map

CHAPTER FOUR - GROWTH MANAGEMENT 4-1
- Strategies
- City of Lawrence Urban Growth Area
- Rural Service Area
- Annexation Policies
- Goals and Policies

CHAPTER FIVE - RESIDENTIAL LAND USE 5-1
- Strategies
- City of Lawrence
- Lawrence Urban Growth Area
- Unincorporated Douglas County
- Specific Recommendations for Select Areas
- Goals and Policies

CHAPTER SIX - COMMERCIAL LAND USE 6-1
- Strategies
- Commercial Center Categories
- Lawrence-Existing Commercial Areas
- Lawrence-New Commercial Areas
- Unincorporated Douglas County-Existing Commercial Areas
- Unincorporated Douglas County-New Commercial Areas
- Goals and Policies

CHAPTER SEVEN - INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE 7-1
- Strategies
- Industrial and Employment-Related Land Use Categories
- Lawrence-Existing Industrial and Employment-Related Areas
- Lawrence-New Industrial and Employment-Related Areas
- Douglas County-Existing Industrial and Employment-Related Areas
- Douglas County-New Industrial and Employment-Related Areas
- Goals and Policies

CHAPTER EIGHT - TRANSPORTATION 8-1
- Metropolitan Transportation Plan
- Transportation Goals and Objectives
- MPO Planning Process
- Summary

CHAPTER NINE - PARKS, RECREATION AND OPEN SPACE 9-1
- Strategies
- City of Lawrence
- Douglas County
- Park Standards and Other Criteria
- Park, Recreation and Open Lands Acquisition Methods
- Goals and Policies

CHAPTER TEN - COMMUNITY FACILITIES 10-1
- Educational Facilities
  - Strategies: Education
  - Local Primary School Districts
  - Universities
- Municipal Buildings and Facilities
  - Strategies: Municipal Buildings and Facilities
  - City of Lawrence
  - Douglas County
- Utilities
  - Strategies: Utilities
  - City of Lawrence
  - Douglas County
- Goals and Policies

CHAPTER ELEVEN - HISTORIC RESOURCES 11-1
- Strategies
- Preservation Plan for Lawrence and Douglas County
- Development Review Process
- Goals and Policies

CHAPTER TWELVE - ECONOMIC DEVELOPMENT 12-1
- Strategies
- Policies and Action Priorities
- Goals and Policies

CHAPTER THIRTEEN - RESERVED 13-1

CHAPTER FOURTEEN – SPECIFIC PLANS 14-1
- Specific Plans
- Hierarchy of Plans

CHAPTER FIFTEEN – PLACE MAKING ELEMENTS 15-1
- Strategies
- Goals and Policies

CHAPTER SIXTEEN – ENVIRONMENT 16-1
- Strategies
- Water Resources and Management
- Land Resources and Management
- Air Resources and Management
- Resource Management
- Waste Management
- Human and Built Environment

CHAPTER SEVENTEEN –IMPLEMENTATION 17-1

APPENDIX A-1

GLOSSARY G-1

LIST OF MAPS, TABLES, AND FIGURES

MAPS **PAGE**

Map 2-1	Planning Area	2-3
Map 2-2	Urban Area Boundary	2-4
Map 2-3	Lawrence Area Drainage Basins	2-21
Map 3-1	Lawrence Urban Growth Area - Service Areas & Future Land Use	3-3
Map 3-2	Lawrence Future Land Use	3-4
Map 3-3	Douglas County Urban Growth Areas	3-5
Map 4-1	Lawrence UGA-Land Use Assessment Criteria-Land Use Attributes and Road Classifications	4-12
Map 4-2	Rural Area (Outside UGA): Land Use Assessment Criteria-Land Use Attributes and Road Classifications	4-13
Map 6-1	Existing and Potential Commercial Nodes	6-45
Map 7-1	Existing Industrial & Employment-Related Land Use	7-23
Map 7-2	Potential Locations for Future Industrial and Employment Related Land Use	7-24
Map 9-1	Urban Growth Areas and Potential Future Park Zones for Lawrence, Kansas	9-25
Map 9-2	Primary Flood Hazard Area and Potential Future Park Zones in the Urban Growth Area for Lawrence, Kansas	9-26
Map 15-1	Lawrence SmartCode Sector Plan	15-7
Map 16-1	Drainage Areas	16-9
Map 16-2	Floodplain	16-10
Map 16-3	Slopes	16-16
Map 16-4	High Quality Agricultural Land	16-17

TABLES

Table 2-1	Population Growth, 1950 - 2000	2-5
Table 2-2	Percentage as a Total of Douglas County Population	2-5
Table 2-3	City of Lawrence Population Projections	2-7
Table 2-4	Douglas County Population Projections	2-8
Table 2-5	Population Projections for Unincorporated Douglas County and Incorporated Areas	2-9
Table 2-6	Household Growth, 1970 - 2020	2-9
Table 2-7	Employment Growth, 1970 - 2020	2-13
Table 2-8	Land Area, Households and Employment	2-16

FIGURES

Figure 2-1	City of Lawrence Population Projections	2-7
Figure 2-2	Douglas County Population Projections	2-8
Figure 2-3	New Residential Units, Lawrence	2-11
Figure 2-4	New Housing Units	2-12
Figure 2-5	Unincorporated Douglas County Growth by Township, 1970 - 1995	2-12
Figure 2-6	Lawrence Area Employment Distribution	2-14
Figure 2-7	Existing Land Use (1992)	2-15
Figure 2-8	Land Area, Households and Employment Distribution	2-17
Figure 14-1	Hierarchy of Plans	14-13

Introduction

CHAPTER ONE - INTRODUCTION

WHY DOES A COMMUNITY HAVE A COMPREHENSIVE PLAN?

A Comprehensive Plan expresses a community's desires about the future image of the community. It provides the foundation and framework for making physical development and policy decisions in the future.

WHAT IS A COMPREHENSIVE PLAN?

The Comprehensive Plan is a policy guide which describes in text and displays in graphics the community's vision for directing future land development. A Plan includes several components:

* It is a policy plan, stating the community's desires for directing land use decisions through the identified goals and policies.

* It provides a physical plan component by mapping generalized land uses and describing in policies the relationships between different land uses.

* It is long-range, considering Lawrence and Douglas County's expected growth in the future. Future land use maps graphically display the potential development of the community.

* It is comprehensive, considering issues such as demographic, economic and transportation factors which have shaped and will continue to influence land development in Lawrence and the unincorporated areas of Douglas County.

HOW IS THE COMPREHENSIVE PLAN USED?

The Comprehensive Plan provides a vision for the community. It is used as a policy guide that identifies the community's goals for directing future land use decisions. The Plan is also used by property owners to identify where and how development should occur; by residents to understand what the city and county anticipates for future land uses within the community; and by the city, county and other public agencies to plan for future improvements to serve the growing population of the community.

Specifically, the city and county use the Comprehensive Plan to evaluate development proposals; to coordinate development at the fringes of the county's cities; to form the foundation for specific area plans; to project future service and facilities needs; and to meet the requirements for federal and state grant programs. The Comprehensive Plan is used most often as a tool to assist the community's decision makers in evaluating the appropriateness of land development proposals. The Comprehensive Plan allows the decision makers to look at the entire community and the effects of land use decisions on the community as a whole to determine whether individual proposals are consistent with the overall goals of the community.

HORIZON 2020 PLANNING PROCESS

The Lawrence/Douglas County Metropolitan Planning Commission provides land use recommendations to both the City and County Commissions for land development decisions within Lawrence and the unincorporated areas of Douglas County. Currently, the Planning Commission utilizes the guidance provided in Plan '95, the Douglas County Guide Plan and the Clinton Reservoir Mini-Comprehensive Plan to make their recommendations to the governing bodies.

The Planning Commission initiated the Comprehensive Planning process in 1992 with the support of the Lawrence City Commission and the Douglas County Board of Commissioners by appointing a 15-member HORIZON 2020 Steering Committee to oversee the process. It was determined earlier in the process that the new Comprehensive Plan should be a policy guide for both the city and the unincorporated areas of the county. A county-wide economic development component [to include the incorporated cities of Baldwin City, Eudora and Lecompton] was specifically included in the HORIZON 2020 process.

The program for preparing the new Comprehensive Plan entailed a three-phase process:

- The first phase consisted of extensive public participation and analysis of economic and physical development trends and conditions in Lawrence and Douglas County.
- The second phase included focusing the citizen participation process on more specific planning issues and completing inventories and assessments of community facilities, transportation, natural areas and other aspects of Lawrence and Douglas County.
- The third phase of the planning program included the preparation of goals and objectives; preparation of alternative concepts for future development and improvement, including the selection of a preferred concept for future land-use and refinement of the long-range plans for the city and unincorporated county.

From its inception, HORIZON 2020 has been a citizen-based plan. It is guided by the interests and needs of the citizens of Lawrence and Douglas County. The future success of the community is measured not only by the resulting plan, but by the community-wide participation generated by this process, and the level of participation which continues in the plan implementation. Therefore, the Plan is based upon goals and policies which the citizens of Lawrence and Douglas County have defined. These have been developed through extensive citizen participation. Early in the planning process the HORIZON 2020 Steering Committee adopted the following Mission statement:

"HORIZON 2020 is the citizen-driven process of creating a plan to provide policy and strategic direction to guide Lawrence/Douglas County to the year 2020."

OVERALL HORIZON 2020 PLANNING GOALS

Goals, policies and strategies each have a distinct meaning and purpose in the planning program:

- *Goals* articulate long-range aspirations of the community. They are stated in terms that can promote agreement on major needs within the community. They represent an end to be sought, although some may never be fully realized.

- *Policies* identify specific courses of action required to achieve stated goals. Policies are intended to be finite, measurable actions which can be undertaken by various interests of the community in plan implementation.

- *Strategies* provide a direction or approach to accomplish specific goals or policies.

Through the planning process, the Steering Committee developed the following set of overall HORIZON 2020 planning goals which provides the foundation on which the plan was developed:

General Goal
The overall community goal for planning is to provide, within the range of democratic and constitutional processes, for the optimum in public health, safety, convenience, general social and physical environment and individual opportunities for all the residents of the community, regardless of racial, ethnic, social or economic origin. It is the goal of the planning process to achieve a maximum of individual freedom, but public welfare must prevail. It is the intent to meet and safeguard individual rights and vested interests in a manner which will create the minimum disruption in individual freedoms and life values.

Planned and Managed Growth
Douglas County will experience growth. We will remain a separate and identifiable community, and face the challenge of encouraging growth in a planned and responsible manner.

Diversity
We will strive to increase the diversity of employment, housing, cultural, economic and educational opportunities for the community.

Pursuit of Quality
We will govern our city and county with an emphasis on increased efficiency, improved service and stronger interrelationships among public and private organizations.

Compatibility
We will work to ensure that development is compatible with its surroundings and the community.

Sustainability
We will strive to ensure the sustainability of our physical environment, both natural and built, the health of our economy and the efficient and effective functioning of our community.

ASSUMPTIONS OF THE PLAN AND THE PLAN'S MAPS

The plan maps are a supportive part of the Comprehensive Plan. The foundation of the plan is the Goals and Policies. The maps provide a graphic representation of the community's land use

goals and policies. The maps, together with the text, will help decision makers understand how the community envisions future development.

A spatial arrangement of land uses is shown on the Plan maps. These land use patterns are based, in part, on an assumption that future development trends will be similar to past trends and will be consistent with adopted goals for the community. Additional factors that were considered in the development of the plan maps include:

- The compatibility of land uses based upon the relationships between land uses, the transportation network, population projections, expected community facilities, services and utilities capacities, and environmental features of the land;
- The needs and desires of the community as identified in surveys and public forums conducted throughout the planning process; and
- The proposed goals and policies.

Background Studies

CHAPTER TWO - SUMMARY OF BACKGROUND STUDIES

PLANNING AREA

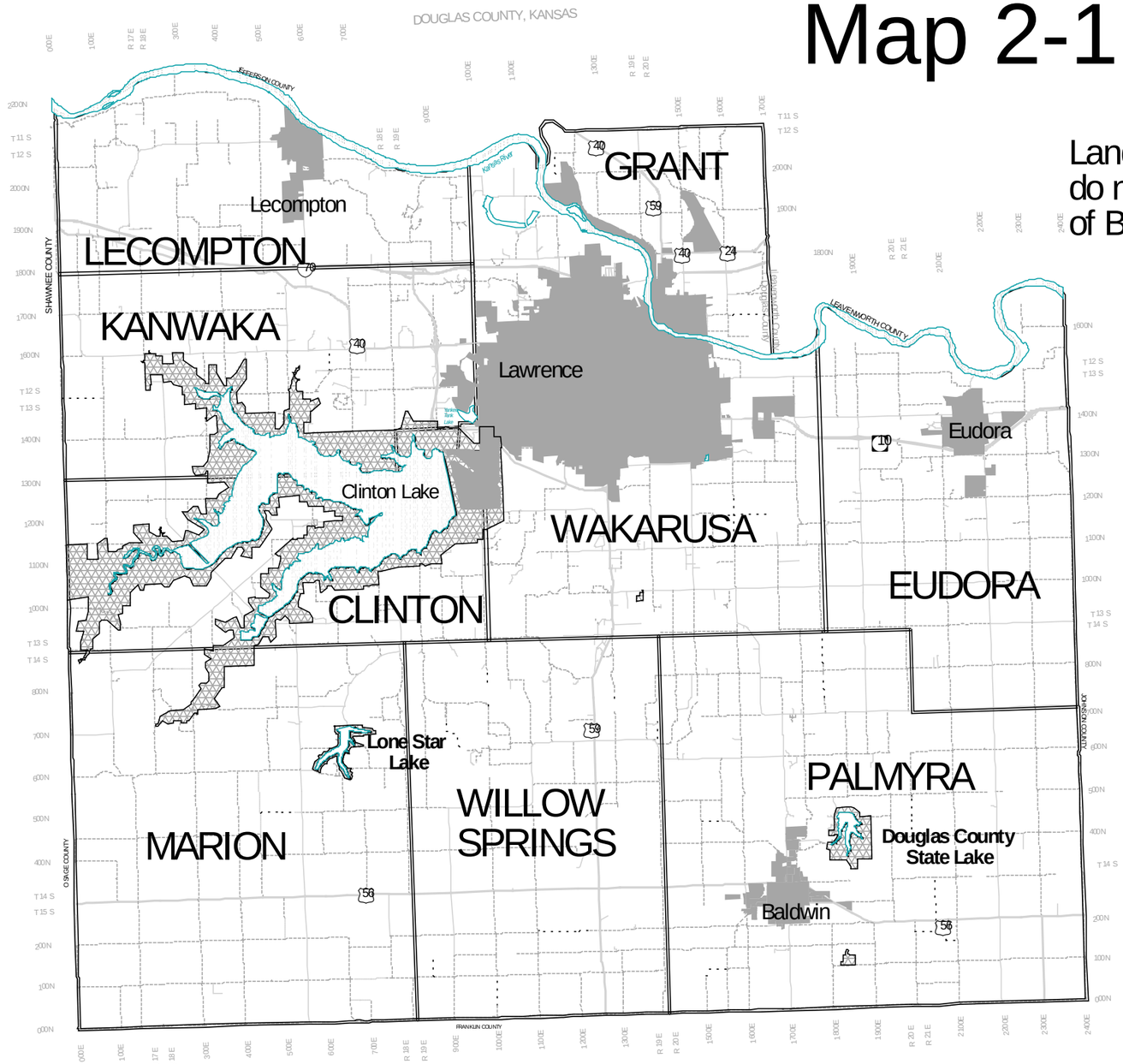
The land use component of the plan includes Lawrence and the unincorporated areas of Douglas County; the economic development component of the Plan has a countywide focus that also includes the incorporated cities of Eudora, Baldwin and Lecompton. The planning area is illustrated in *Map 2-1, HORIZON 2020 Planning Area*.

The area expected to become urbanized in the next 20 years is illustrated in *Map 2-2, Urban Area Boundary*. This urban area boundary is based on development trends and other factors, including physical constraints (e.g., floodplains) and the projected availability of urban services such as sewer and water. As with any plan, the urban area boundary is subject to change as conditions change. The Lawrence/Douglas County Metropolitan Planning Commission designated the current urban area boundary with the concurrence of the Kansas Department of Transportation (KDOT), in 2003. The urban area, as defined by KDOT standards, encompasses approximately 40 square miles and includes the proposed alignment of the South Lawrence Trafficway (SLT). Changes in the assumed alignment of this circumferential route could affect the urban area boundary and assumptions in the Plan.

In addition to this urbanized area, the Plan identifies the Urban Growth Areas (UGA's) for the incorporated cities within the county. The UGA encompasses more area than the delineated urbanized area, so that *'an area of influence'* is identified in which additional standards for development are established because of the area's proximity to an urban area and the impacts development along the fringe may have on future development.

Page purposely left blank.

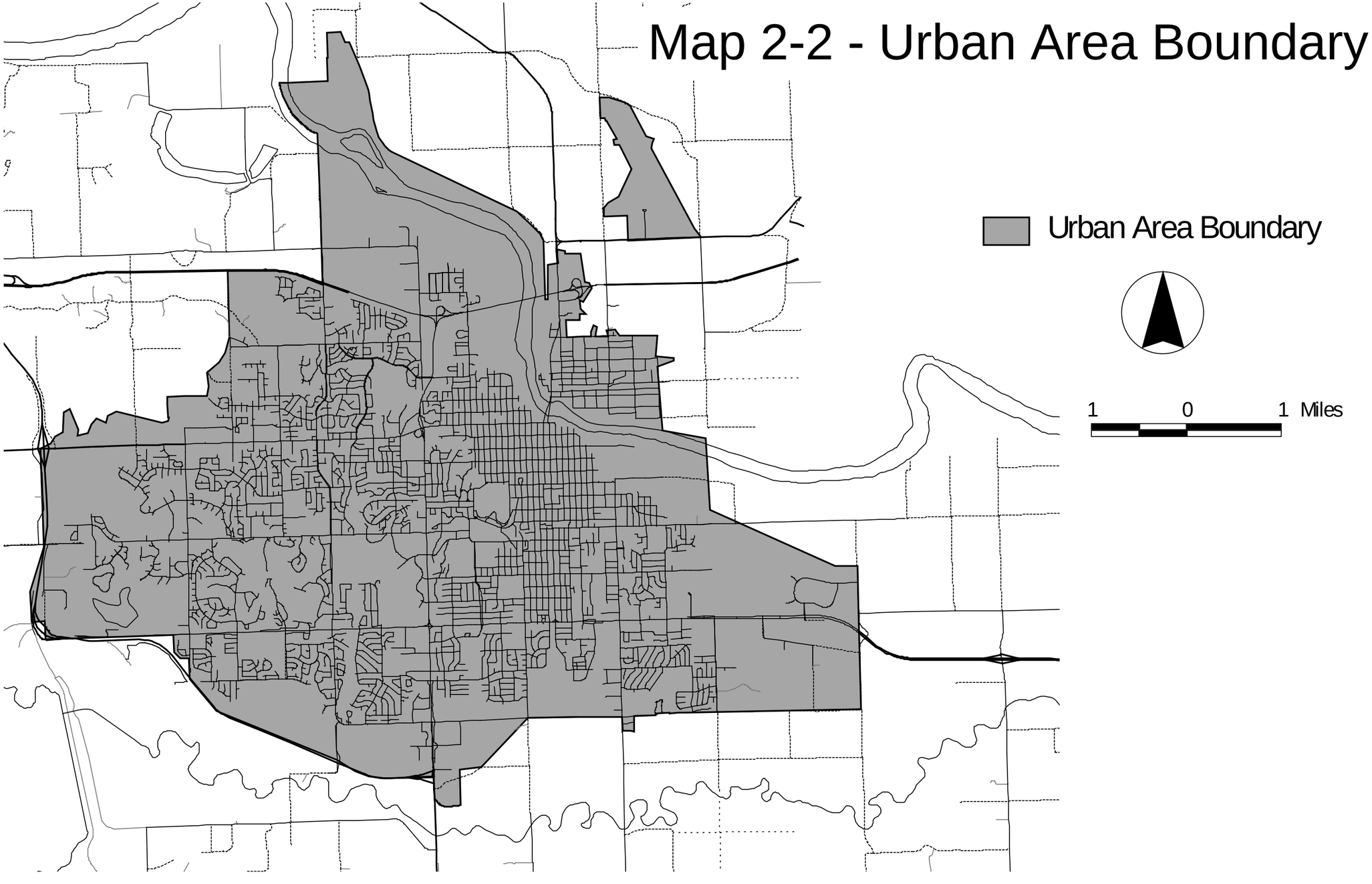
Map 2-1 - Planning Area



Land Use Recommendations in the plan do not apply to the incorporated cities of Baldwin, Eudora, and Lecompton.

2 0 2 4 Miles

Map 2-2 - Urban Area Boundary



Lawrence and Douglas County have experienced substantial growth since 1950, as shown in Table 2-1.

- Lawrence experienced a 243 percent increase in population between 1950 and 2000, and the unincorporated areas of Douglas County had an increase of almost 48 percent in this 50-year period.
- The unincorporated areas of Douglas County experienced an 8 percent decrease in population from 1950 to 1960. From 1960 to 2000 the same area experienced a 61 percent increase in population.
- Lawrence has consistently increased its population each decade, with an increase of 41 percent occurring from 1950 to 1960. Lawrence grew at a rate of 15 percent from 1970 to 1980.

Table 2-1: Population Growth, 1950 - 2000

	Lawrence		Eudora		Baldwin		Lecompton		Balance of County		Douglas County	
Year	Pop	% Δ	Pop	% Δ	Pop	% Δ	Pop	% Δ	Pop	% Δ	Pop	% Δ
1950	23,351		929		1,741		263		7,802		34,086	
1960	32,858	41	1,526	64	1,877	8	304	16	7,155	-8	43,720	28
1970	45,698	39	2,071	36	2,520	34	434	43	7,209	1	57,932	33
1980	52,738	15	2,934	42	2,829	12	566	30	8,573	19	67,640	17
1990	65,608	24	3,006	2	2,961	2	619	9	9,604	12	81,798	21
2000	80,098	22	4,307	43	3,400	15	608	-2	11,549	20	99,962	22

Source: US Census and Lawrence/Douglas County Planning Department

- Since 1970, the population distribution has been consistent, with Lawrence containing 78 to 80 percent of the county's population.

Table 2-2: Percentage as a Total of Douglas County Population

Year	Lawrence	Eudora	Baldwin	Lecompton	Balance of County	Douglas County
1950	69%	3%	5%	1%	23%	100%
1960	75	4	4	1	16	100
1970	79	4	4	1	12	100
1980	78	4	4	1	13	100
1990	80	4	4	1	12	100
2000	80	4	3	1	12	100

Source: US Census and Lawrence/Douglas County Planning Department

POPULATION PROJECTIONS

In making population projections the community must look back to analyze past trends in population growth, while also looking forward to assess factors that may limit the community's future population growth. Projecting the future population growth of a community is an inexact science and the population projections in this Plan are presented as ranges for Lawrence and Douglas County to reflect the possibility of variation in that growth rate.

Tables 2-3 and 2-4 and Figures 2-3 and 2-4 are the population projections for Lawrence and Douglas County. Both tables have High, Middle, and Low population projections for the years 2010, 2020, and 2030. A range of population projections was created to reflect the difficulty in predicting an exact population for a specific point in the future. Using a population projection range gives the plan flexibility address different growth scenarios over time, for example the provision of sewage treatment. If the city grows at the slower projected rate, increased sewage treatment capacity may not be required for a number of years. However, if the city grows at the faster rate, sewage treatment capacity may need to be increased in the very near future.

Lawrence and Douglas County have experienced a stable population growth rate since 1960 making the creation of population projections somewhat simpler. However, the most important component of any population projection model is the establishment of the basic assumptions that will be used in building a projection. In making the projections for both Lawrence and Douglas County the following assumptions were made:

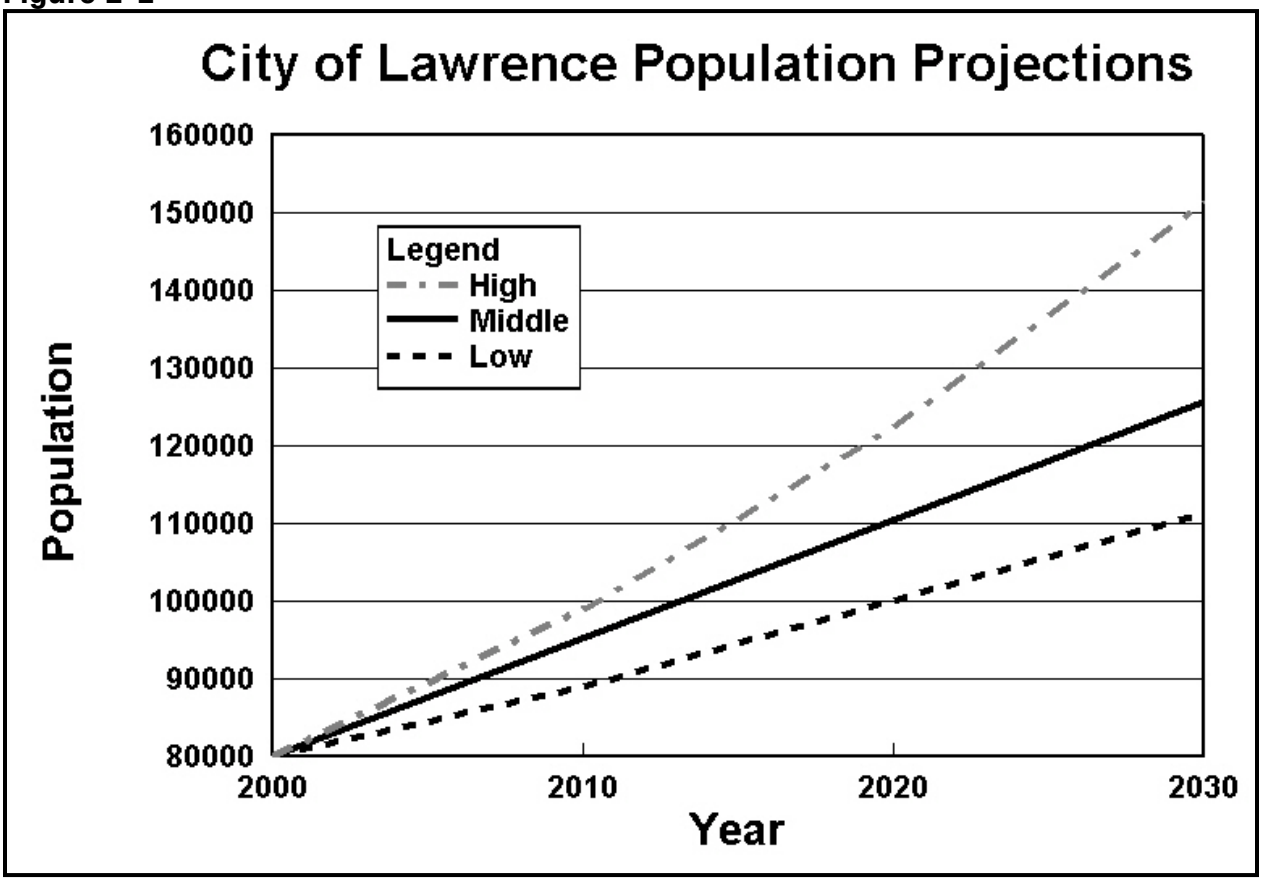
- Lawrence and Douglas County will continue to be a desirable place for new businesses to locate and existing businesses to expand.
- This area will continue to experience a positive net in-migration.
- Lawrence and Douglas County will continue to extend and expand the necessary infrastructure (water treatment, sewer treatment, water and sewer lines, roads, fire, medical, and police protection, etc.) to support the projected population growth. If the necessary infrastructure is not built, the population growth for Lawrence will slow.
- The area's rate of population growth for the next three decades will be similar to the population growth rate the area has experienced in the last five decades.

The same method was use to create both Lawrence and Douglas County population projections. The Low projection model uses a simple linear regression with decennial census data from 1950 to 2000. The Middle projection model uses a simple linear regression with data from the Census estimates for the years 1990 to 1999. The High estimate model uses the average decade growth rate from 1950-2000 of 24 percent.

- For 2020 the Middle range population projection for Lawrence is 110,406, an increase of 38 percent from year 2000.
- The previous population projection in this plan for Lawrence for the year 2020 was 87,479, which is 22,927 **less** than the new projections for the year 2020.

- All of Lawrence and Douglas County Master Plans should be reviewed and, if necessary, revised to reflect these new population projections.
- As the population in Douglas County increases, the rural areas will become more suburbanized.

Figure 2-1



SOURCE: US CENSUS BUREAU AND LAWRENCE/DOUGLAS COUNTY PLANNING DEPARTMENT

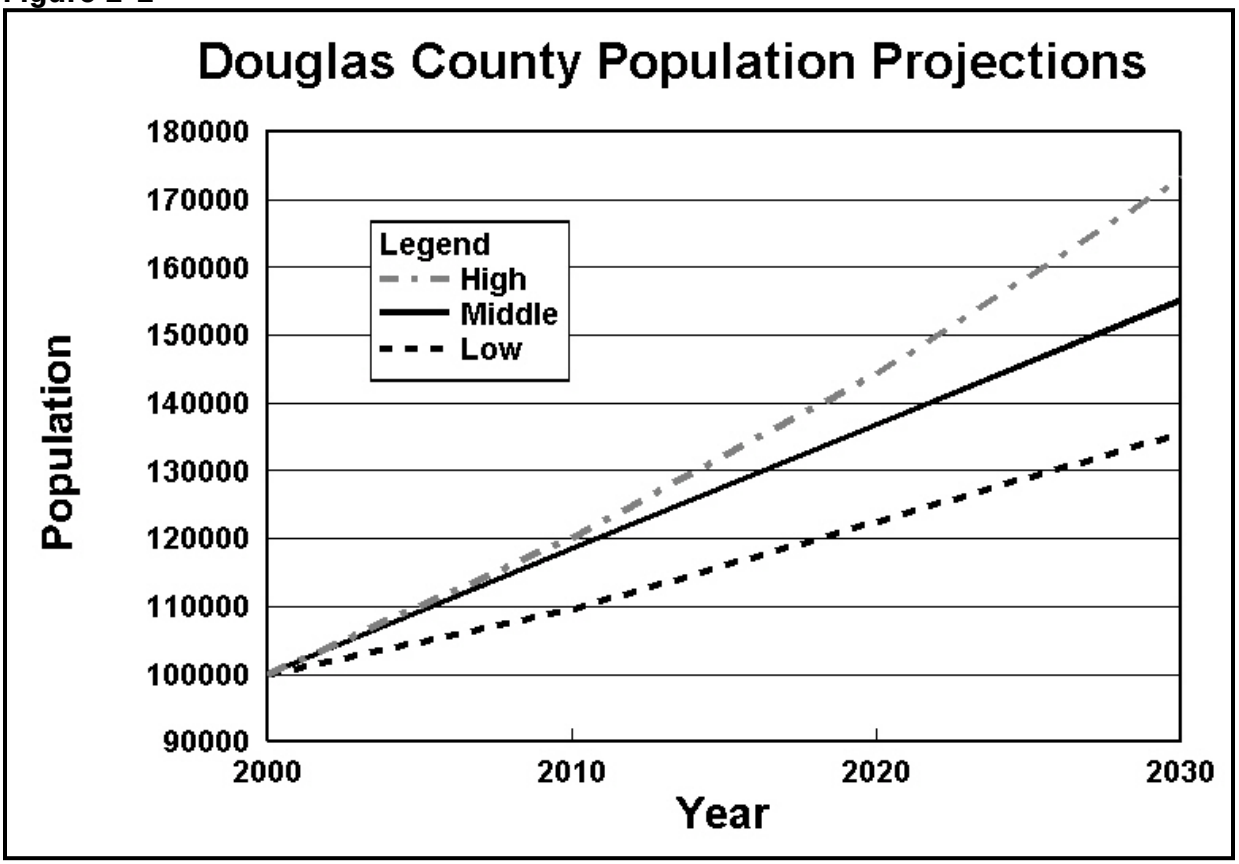
TABLE 2-3: CITY OF LAWRENCE POPULATION PROJECTIONS

YEAR	2000*	2010	2020	2030
LOW	80,098	88,961	100,076	111,191
MIDDLE	80,098	95,178	110,406	125,635
HIGH	80,098	99,013	122,394	151,296

*Census 2000 figures

Source: US Census Bureau and Lawrence/Douglas County Planning Department

Figure 2-2



Source: US Census Bureau and Lawrence/Douglas County Planning Department

Table 2-4: Douglas County Population Projections

Year	2000*	2010	2020	2030
Low	99,962	109,522	122,474	135,426
Middle	99,962	118,501	136,826	155,152
High	99,962	120,065	144,212	173,214

*Census 2000 figures

Source: US Census Bureau and Lawrence/Douglas County Planning Department

The projections in Table 2-5 for Eudora, Baldwin City and Lecompton were generated with a simple linear regression, using data from 1970 to 2000. These projections are based on the assumption these cities will continue to grow at the same pace that they have for the past 30 years.

The projections for the Unincorporated Area were generated by a simple linear regression, using US Census population estimates for 1990 to 1999.

Table 2-5: Population Projections for Unincorporated Douglas County and Incorporated Areas

Year	2000*	2010	2020	2030
Eudora	4,307	4,775	5,507	6,239
Baldwin City	3,400	3,621	3,898	4,175
Lecompton	608	701	758	816
Unincorporated Area	11,549	13,407	15,148	16,889

*Census 2000 figures

Source: US Census Bureau and Lawrence Douglas/County Planning Department

HOUSEHOLDS AND HOUSING UNITS

Substantial growth in households, as illustrated in Table 2-6, has also occurred within Lawrence and Douglas County since 1970.

- Lawrence experienced an approximately 68% increase in households between 1970 and 1990. The unincorporated areas of Douglas County had an increase of about 14% in the 10-year period between 1980 and 1990 [individual counts were not available from the 1970 census].
- Household projections for Lawrence anticipate an increase of 49% between 1990 and 2020. Projections for the unincorporated areas indicate an increase of approximately 39% by 2020.

Table 2-6: Household Growth, 1970 - 2020

	Lawrence		Eudora		Baldwin		Lecompton		Balance of County		Douglas County	
Year	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1970	13615		681		675		NA		NA		17398	
1980	18818	38.2	979	43.7	858	27.1	197		3001		23852	37.1
1990	24513	30.2	1083	10.6	902	5.1	212	8.1	3428	14.2	30138	26.3
2000*	28362	15.7	1322	22.1	974	8.0	261	23.1	3880	13.2	34800	15.5
2010*	33048	16.5	1618	22.4	1052	7.9	320	22.4	4413	13.7	40450	16.2
2020*	36190	9.5	1871	15.6	1069	1.6	356	11.2	4766	8.0	44540	10.1

***** Projections prepared by TPAP and the University of Kansas Institute for Public Policy and

Business Research as part of the HORIZON 2020, Phase I Report.

- The number of building permits issued by Lawrence has been influenced over the years by national economic trends. The number of new single-family residences has been constant over the past 40 years, while the number of new multi-family units has varied greatly from year to year. Only recently has the rate of single-family building permit activity increased in both Lawrence and in unincorporated parts of Douglas County. Figures 2-3 and 2-4 illustrate past building trends in the city and county. Figure 2-7, Residential Growth by Township, illustrates the distribution of new residential growth within the unincorporated areas of Douglas County over the past 25 years.

- Households, as counted through the census process, typically equate to the number of occupied housing units within a community. The average household size (measured in the 1990 census as 2.35 for Lawrence and 2.42 for the entire county) is projected to decrease over time. As population within the community grows and the average household size decreases, more housing units will be needed to accommodate growth.

Figure 2-3

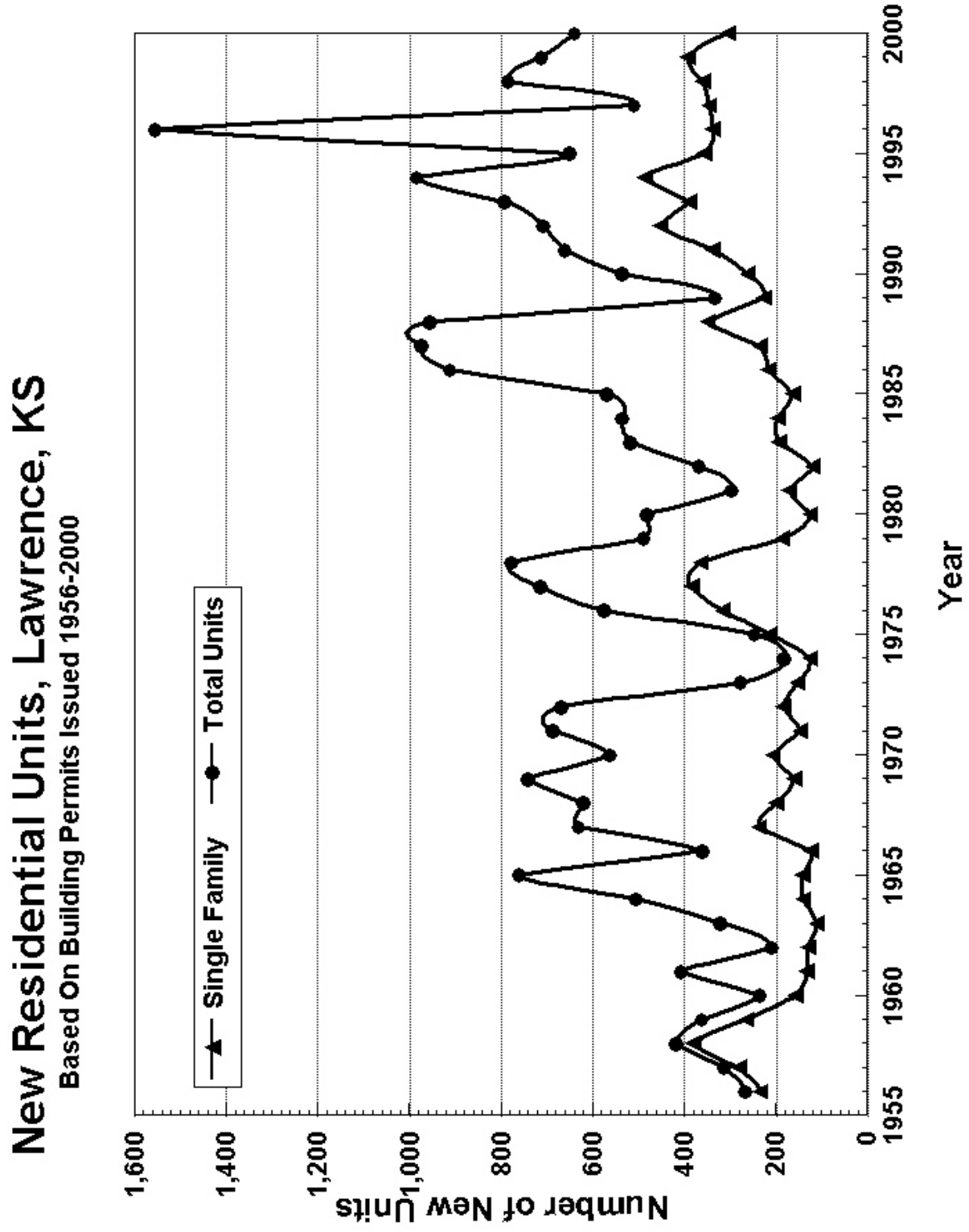

New Residential Units, Lawrence, KS
Based On Building Permits Issued 1956-2000
Single Family
Total Units
Number of New Units
Year
0
200
400
600
800
1,000
1,200
1,400
1,600
1955
1960
1965
1970
1975
1980
1985
1990
1995
2000

Figure 2-4

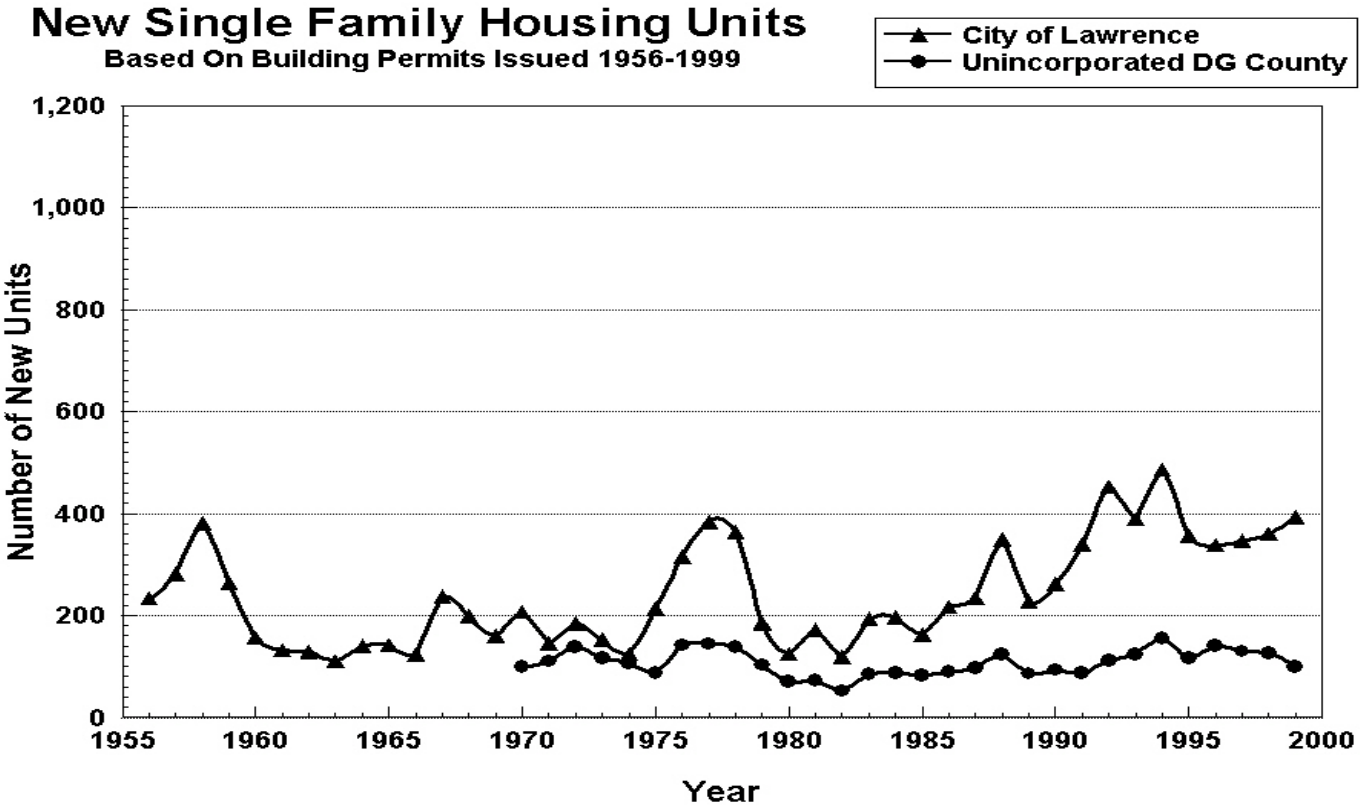
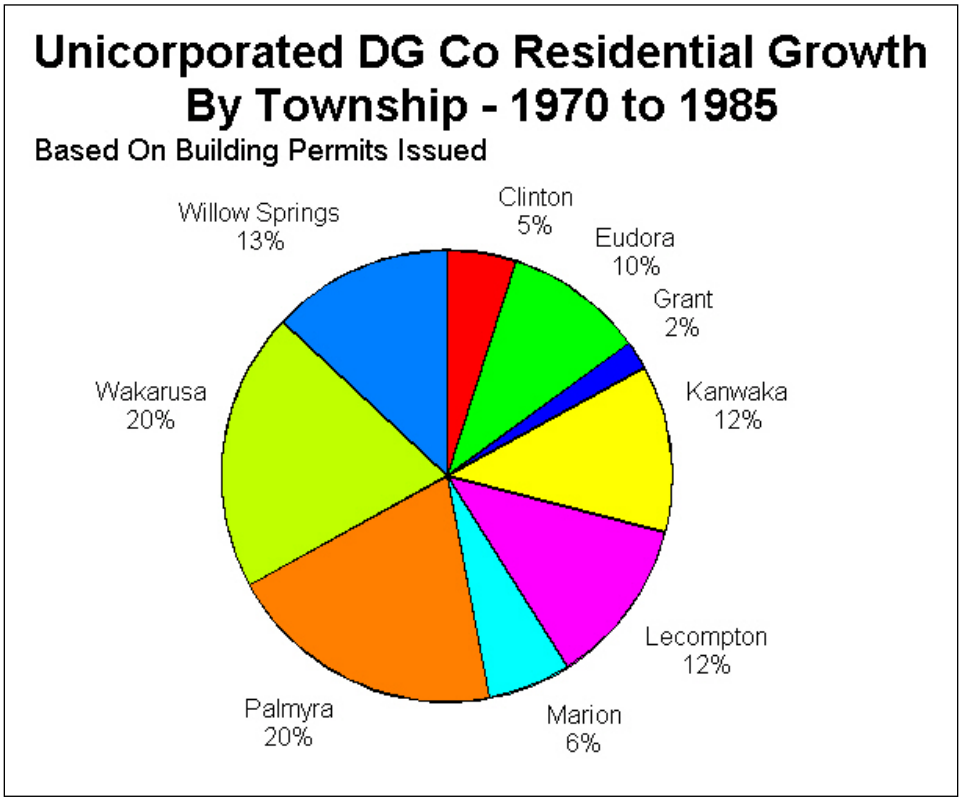


Figure 2-5



EMPLOYMENT TRENDS

Employment growth has also increased substantially between 1970 and 1990 and it is anticipated to continue to grow throughout the planning period.

- In 1990, over 32,600 Lawrence residents were employed, an increase of nearly 82% over 1970. This was nearly 50% of all those living in the city. The fastest growing sectors were finance/insurance/real estate, retail trade and transportation/communications/public utilities.

- Within Douglas County as a whole, the number of employed residents rose by 82.6% during this 20 year period. These 40,186 workers represented approximately 49% of all those living in the County in 1990.

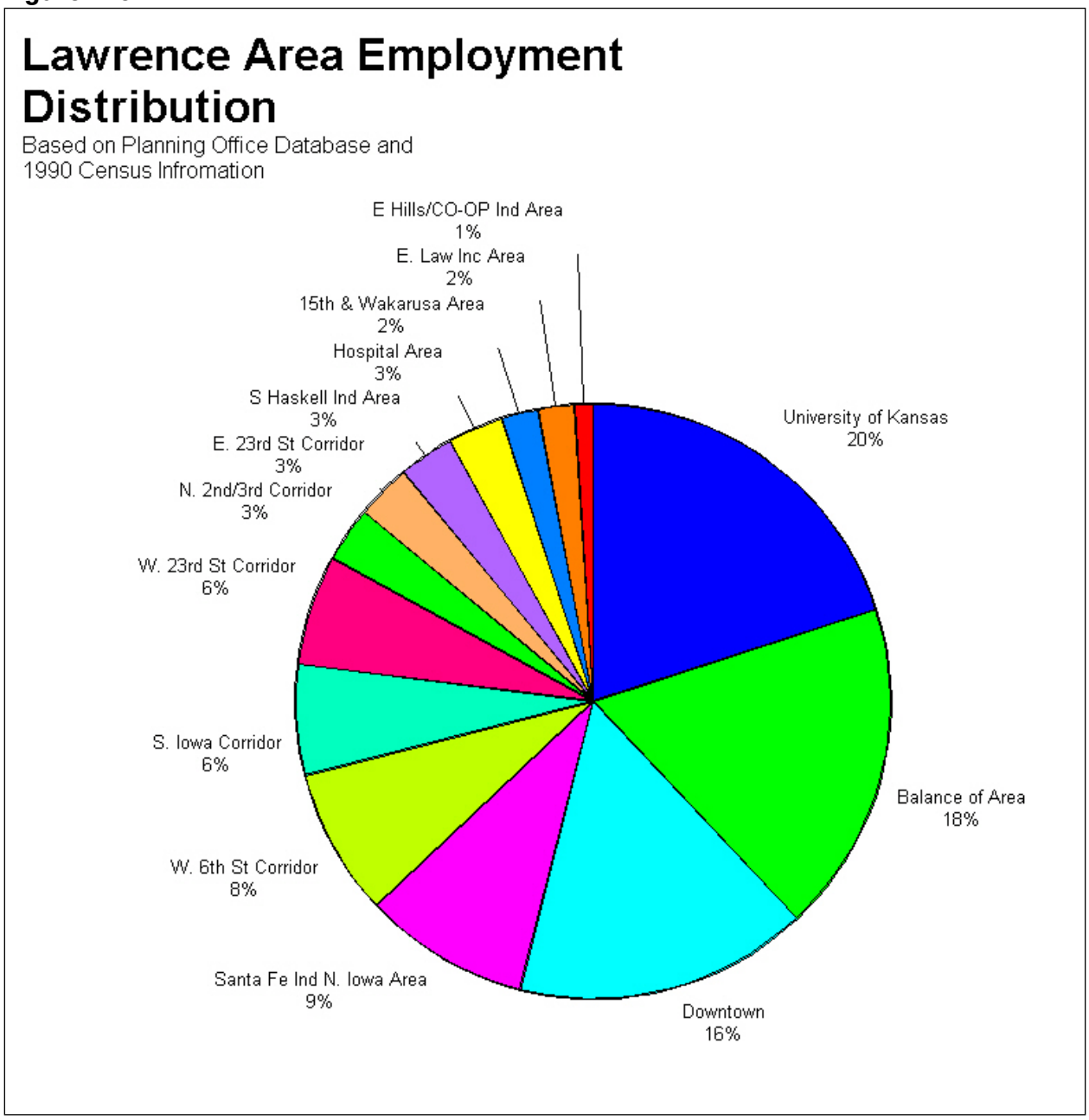
- The area's job growth rate is anticipated to outpace the local population and household growth rate. Table 2-7 indicates employment growth projections prepared by Trkla, Pettigrew, Allen & Payne (TPAP) [Phase I Report, Part II, Page 74]. Projections were prepared for Lawrence and Douglas County as a whole; employment projections for the cities of Eudora, Baldwin and Lecompton were not included in the Phase I Report (as indicated by --- in the following table). These forecasts will be exceeded if the economic development goal of adding over 20,000 new jobs in the County by the year 2020 is met.

Table 2-7: Employment Growth, 1970 - 2020

	Lawrence		Eudora		Baldwin		Lecompton		Balance of County		Douglas County	
Year	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ	No.	% Δ
1970	17942	NA	NA	NA	942	NA	NA	NA	NA	NA	22008	NA
1980	25279	40.9	1203	NA	1307	38.7	281	NA	3514	NA	31584	43.5
1990	32603	28.9	1402	16.5	1413	7.5	276	-1.8	4492	21.8	40186	27.2
2000*	---	---	---	---	---	---	---	---	---	---	**45450	13.1
2010*	---	---	---	---	---	---	---	---	---	---	**49314	8.5
2020*	---	---	---	---	---	---	---	---	---	---	**52272	6.0

****** Projections prepared by TPAP and the University of Kansas Institute for Public Policy and Business Research as part of the HORIZON 2020, Phase I Report.

Figure 2-6



- 20% of the Lawrence area's employment base works at the University of Kansas, while about 16% work in Downtown Lawrence. Combined, these two employment centers represent over one-third of the urban area's total work force.

- According to the 1990 US Census, about 18% of the county work force is employed outside Douglas County. This percentage is presented to address the perceived threat that the Lawrence area is becoming a bedroom community for workers in the Kansas City and Topeka areas. The census also indicated that an approximately equal number of the county's workers lived outside Douglas County and commuted to work.

LAND USE

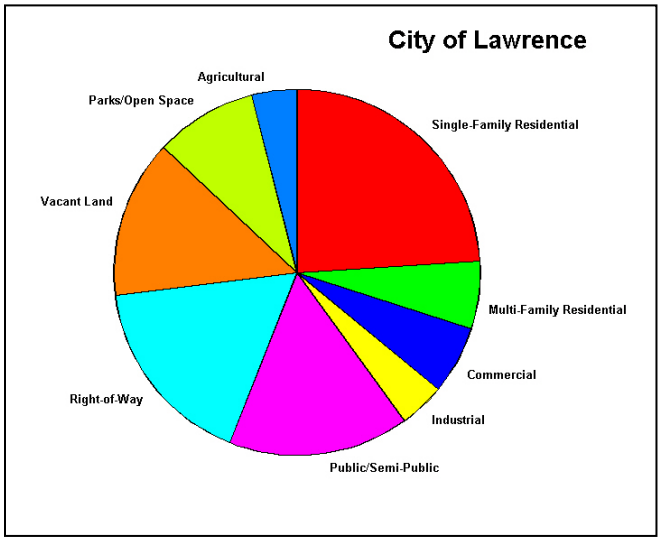
Existing land use development [as surveyed in 1992] within Lawrence and the unincorporated areas of Douglas County is illustrated in Figure 2-7 below:

- Single-family residential uses account for approximately 24% of the city and 5% of the unincorporated area of the county.
- Substantial land area is devoted to public/semi-public uses [16%] and right-of-way [17%] within the city; approximately 14% is vacant.
- Multiple-family, commercial and industrial uses account for nearly equal land areas within the city.
- The majority of the unincorporated area, approximately 43%, is devoted to nonresidential agricultural uses, followed closely at 38% by Farm Ranch uses with residential dwellings.

Figure 2-7 - Existing Land Use (1992)

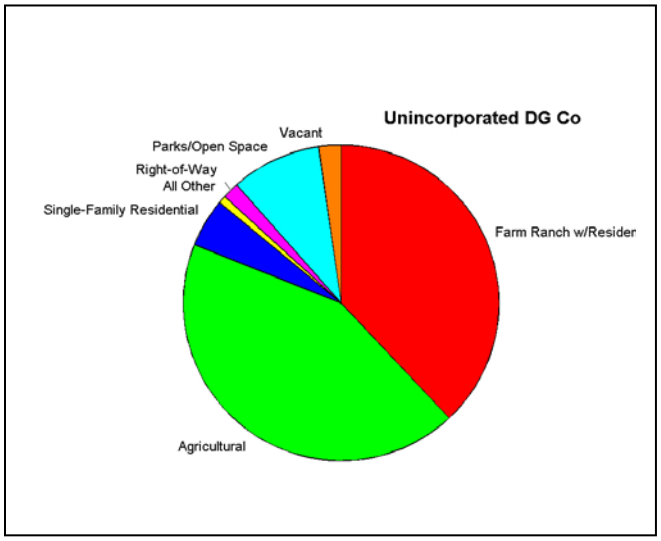
Existing Land Use – Lawrence (1992 Study)

Single-Family Residential	24%
Multi-Family Residential	6%
Commercial	6%
Industrial	4%
Public/Semi-Public	16%
Right-of-Way	17%
Vacant Land	14%
Parks/Open Space	9%
Agricultural	4%



Existing Land Use – Unincorporated DG Co

Farm Ranch w/Residence	38.0%
Single-Family Residential	5.0%
Commercial	0.1%
Industrial	0.2%
Public/Semi-Public	0.3%
Right-of-Way	1.7%
Vacant Land	2.3%
Parks/Open Space	9.2%
Extraction	0.2%
Agricultural	43.0%



LAND FORMS

Physical development and transportation facilities in Lawrence and Douglas County have been influenced by several geographic features:

- Mt. Oread and the University of Kansas campus are located in the middle of the Lawrence urban area, and form a physical barrier to continuous street patterns. The area has significant slopes (15% or greater in some areas). As a result, 23rd Street/Clinton Parkway is the only east-west street that extends completely from one side of the city to the other.

- The Kansas and Wakarusa Rivers and their floodplains form barriers to development on the north, south and northeast sides of the city, and inhibit north-south street extensions.

- The Kansas River, the larger of the two rivers, has a particularly limiting effect on access from east Lawrence to North Lawrence and Grant Township.

- Clinton Lake and the area below the dam limit urban development and the extension of east-west streets in the area west of Wakarusa Drive, south of 27th Street.

DEVELOPMENT PATTERNS

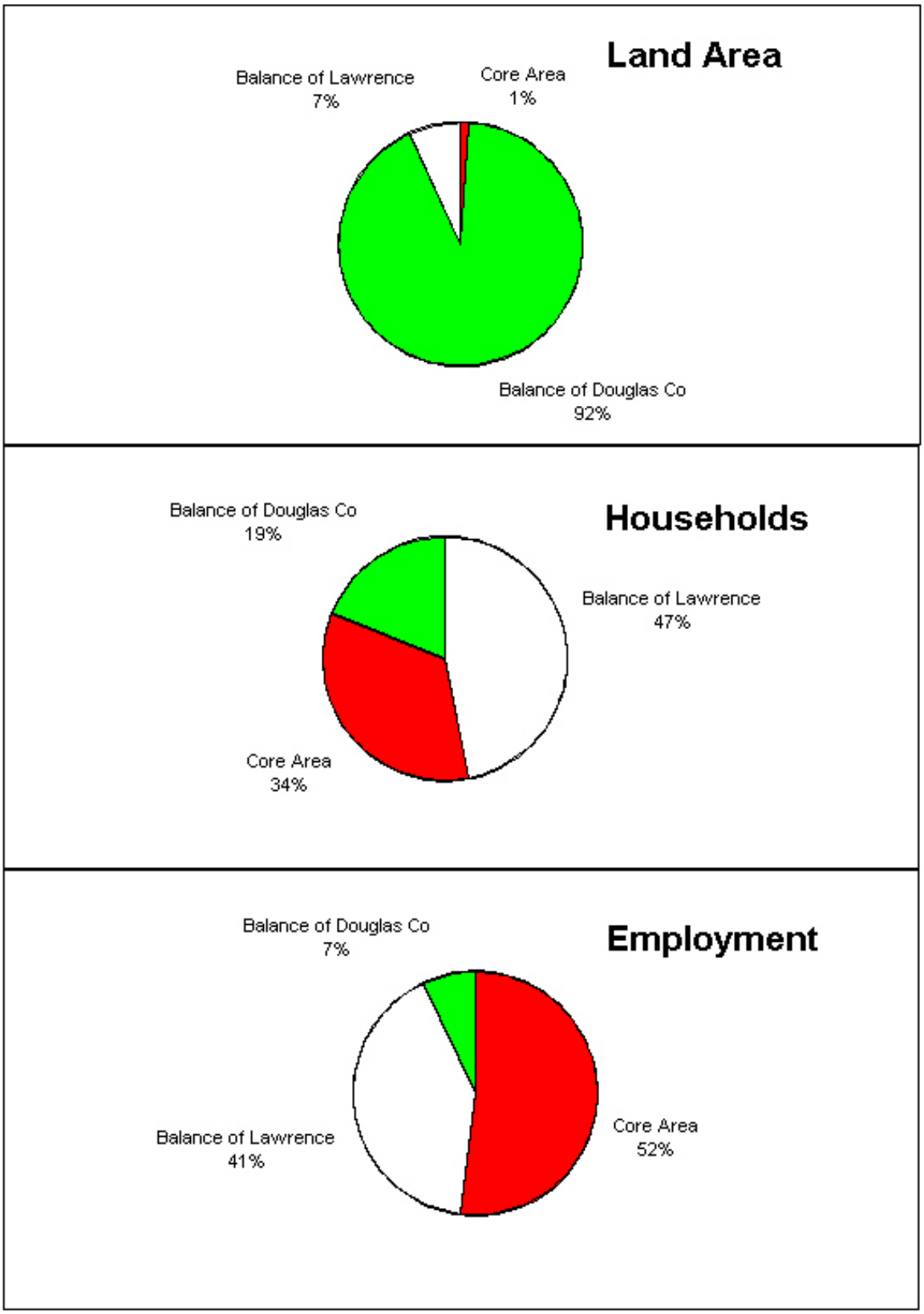
Historically, the majority of development within Douglas County has occurred within Lawrence. The "core area" of Lawrence, which was mostly developed before 1960, is characterized by higher density land uses, a grid street pattern, and a concentration of several employment centers. The core area of Lawrence is generally south of the Kansas River and north of 23rd Street, between Iowa Street and Haskell Avenue. Although this area represents only one percent of the land area of Douglas County, the core area includes more than one-third of the County's household total, and over half of Douglas County's total work force. These patterns are illustrated in Table 2-8 and Figure 2-8, Land Area, Households and Employment.

Table 2-8: Land Area, Households and Employment

	Land Area [Sq. Miles]	Households	Employment
Douglas County (total)	458.0	30,138	37,318
City of Lawrence	24.0	24,513	34,809
Core Area	4.7	10,374	19,460

Table information based upon 1990 US Census counts and the Lawrence/Douglas County Planning Office Database.

Figure 2-8 - Land Area, Households, and Employment Distribution



Streets in Lawrence can be divided into two distinct patterns, based upon the time in which development of the area occurred. These different patterns present different problems for the community and often require different solutions.

- A "grid" street pattern, in which streets are oriented in straight lines, typifies the older "core area" of the city, which was developed between the late 1800s and the 1960s. The core area is dissected by numerous streets, with approximately 8-10 east-west streets and 10-12 north-south streets in each mile. The straight streets encourage higher traffic speeds.

- Curvilinear and cul-de-sac residential streets, which discourage through traffic, typify the newer development areas of the city. In some areas where only a portion of a section has been developed, the street system is discontinuous.

Roads within the unincorporated areas of the county are laid out on a rectilinear grid pattern primarily on section lines. Roadway separations generally occur every half-mile or mile on a north-south and east-west axis.

Gateways are transportation facilities that serve as entrances, or transitions between land uses and transportation corridors. Major gateways are entrances to the county and city from other transportation facilities, and often form a visitor's first impression of the community. Gateways to the county are subtle; major entrances occur along the major highways: I-70 from the east and west; K-10 from the east; US-40 from the west; US-56 from the east and west; US-59/24/40 from the north and US-59 from the south.

Gateways to the city are more distinct. Major gateways include:

- N. 2nd/3rd Street - US 59/24/40 from the north and east via the east toll plaza of the Kansas Turnpike;

- McDonald Drive via the west toll plaza of the Kansas Turnpike from the north;

- Iowa Street/US-59 from the south;

- W. 6th Street/US-40 from the west, including new access via the Lecompton interchange at the Kansas Turnpike and the SLT;

- 23rd Street/K-10 from the east; and

- Clinton Parkway from the west

Minor gateways into the city include:

- 15th Street from the east and west;

- Haskell Avenue from the south; and

- Louisiana Street from the south.

ENVIRONMENTAL FEATURES

Douglas County is characterized by a variety of environmental and natural conditions that will influence physical development and preservation potentials. These include soils, hydrologic conditions, slopes, and natural areas.

Soils

Soil types within Douglas County are directly related to the underlying geology and natural climactic conditions of the region. The USDA Soil Conservation Service 1976 Soil Survey of Douglas County identifies five basic soil associations that incorporate classes or series of soils throughout the County. Most of these soils have some limitations for construction due either to unstable slopes or shrink-swell characteristics. Soil conditions on steep slopes, most often found near major water bodies and drainage tributaries, may be severe enough to preclude development. Major portions of Douglas County also contain soils that are productive for pasture, range and agricultural uses.

Drainage Basins

A long-range Wastewater Master Plan for the Lawrence area was completed in the summer of 1995 by Black & Veatch. The study area for this report is generally bounded by the Kansas River and the North Lawrence area on the north, County Route 1057 on the east, the Wakarusa River on the south as far west as Clinton Dam, and north from the Clinton Lake along the western ridgeline of the study area to the Kansas River. The study area contains approximately 61 square miles and is divided into two distinct watersheds. The northern half of the study area is located in the Kansas River Watershed and drains north to the Kansas River. The southern half of the study area is located in the Wakarusa River Watershed and drains south to the Wakarusa River. The two watersheds are further divided into eight drainage basins for wastewater planning purposes: Kansas River, North Lawrence, Central, East Lawrence, Wakarusa River, Yankee Tank Creek, Baldwin Creek, and Lake View Lake. These basins, established for wastewater planning purposes, are illustrated in the 1995 Black & Veatch study.

A long-range Stormwater Management Master Plan was also developed during 1995 by Burns & McDonnell Engineers. The study included 17 principal drainage basins, covering approximately 26 square miles of Kansas and Wakarusa River tributaries. *Map 2-3, Lawrence Area Drainage Basins* illustrates the following drainage basins: Yankee Tank West [756 acres/ 1.18 sq. mi.]; Hidden Valley [1,788 acres/ 2.79 sq. mi.]; Quail Creek [1,028 acres]; Yankee Tank East [1,747 acres]; Naismith [1,036 acres]; KLWN [486 acres]; Belle Haven [260 acres]; Broken Arrow [235 acres]; Haskell [824 acres]; Deerfield [898 acres]; Riverside [337 acres]; Country Club [1,217 acres]; Downtown [1,095 acres]; East Lawrence [830 acres]; Brook Street [397 acres]; Sunflower [189 acres]; and North Lawrence [934 acres].

UTILITIES

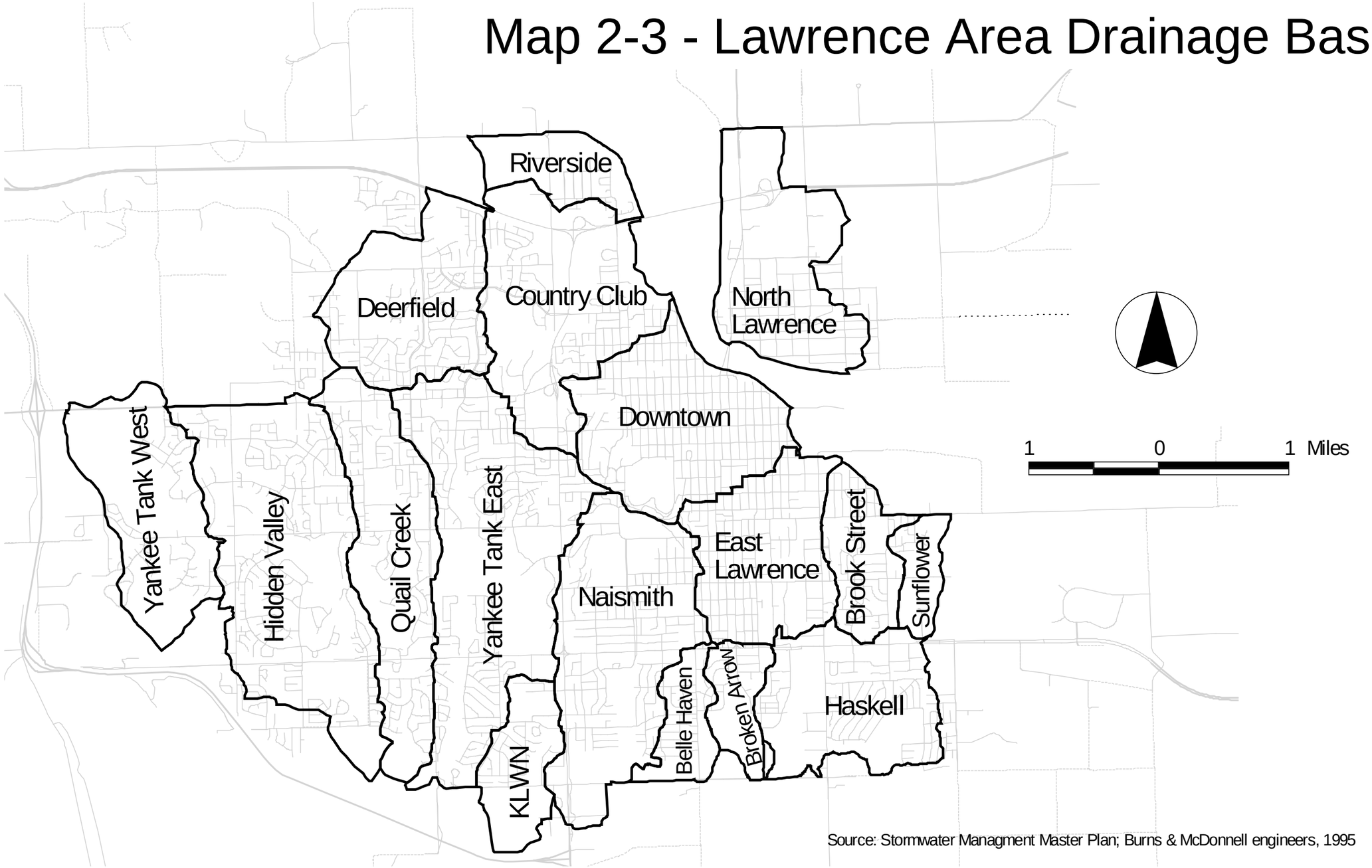
Existing utility provision systems are described in the HORIZON 2020 Background Studies. Water treatment and distribution facilities owned and operated by Lawrence provide water service from Clinton Lake and the Kansas River to water users within the city. The city also maintains contracts for treatment services for Baldwin City and several Rural Water Districts that provide service to unincorporated areas of Douglas County. A long-range Water Master Plan Update for Lawrence has recently been completed by Black and Veatch that outlines system improvements to serve Lawrence and growth areas through the year 2010.

Wastewater treatment facilities are operated by Lawrence by a treatment facility located along

the south side of the Kansas River at Eighth Street. Services are provided to properties within the city limits and an area west of the city located within a county sewer benefit district. As noted above, Black and Veatch has recently completed a long-range Wastewater Master Plan Update for Lawrence that identifies system improvements to serve the city and growth areas through the year 2020. The update of the Wastewater Master Plan utilized the original population projections contained in HORIZON 2020. These projections were underestimated, so it is advisable that the Wastewater Master Plan, and all other relevant city master plans that relied on the original HORIZON 2020 population projections, be updated based on the new population growth information.

Wastewater treatment for property located in the majority of the unincorporated areas of the county is provided by on-site septic disposal systems that are regulated by the Douglas County Health Department. As the county becomes more urbanized, the county may wish to reassess the widespread use of individual septic disposal systems in the county.

Map 2-3 - Lawrence Area Drainage Basins



Source: Stormwater Managment Master Plan; Burns & McDonnell engineers, 1995

General Plan Overview

CHAPTER THREE - GENERAL PLAN OVERVIEW

A Comprehensive Plan provides a guide for future land development decisions within the community. It identifies which areas should be utilized for residential, commercial, industrial, open space and public land use activities. The Plan also describes interrelationships between various land use areas, and the types of projects and improvements desirable within each area.

KEY FEATURES OF THE PLAN

Key features of the Plan are listed below. They provide the basic framework for specific land use recommendations found in the plan.

- The Plan supports infill development and redevelopment which provides a range of residential, commercial, office, industrial and public uses within these parcels, consistent and compatible with the established land use pattern in surrounding areas.

- The Plan encompasses goals and policies which are representative of the community's desires for the future. It recognizes the numerous plans and projects that are either underway or pending and anticipates that the Plan will be reviewed when significant land use changes occur within the community.

- The Plan promotes development in the UGA through an adopted annexation policy which anticipates well-planned development of fringe areas.

- The Plan defines the urbanizing areas of the county and directs development to these areas.

- The Plan encourages the development of neighborhoods in a range of densities to provide a sense of community and to complement and preserve natural features in the area.

- The Plan proposes the progression of land uses to help achieve a transition in land use and intensity levels, and to help avoid major or abrupt changes in density and building type.

- The Plan recommends the protection and preservation of the extensive floodplains and riparian ways throughout the planning area. These resources often are a constraint to urban development.

- The Plan encourages the identification, protection and adaptive reuse of the wide diversity of historic buildings, structures, sites and archeological sites that can be found in Lawrence and Douglas County. Considering historic preservation issues in combination with other land use decisions assures the preservation of historic resources but also fosters the image, identity and economic development goals in the Comprehensive Plan.

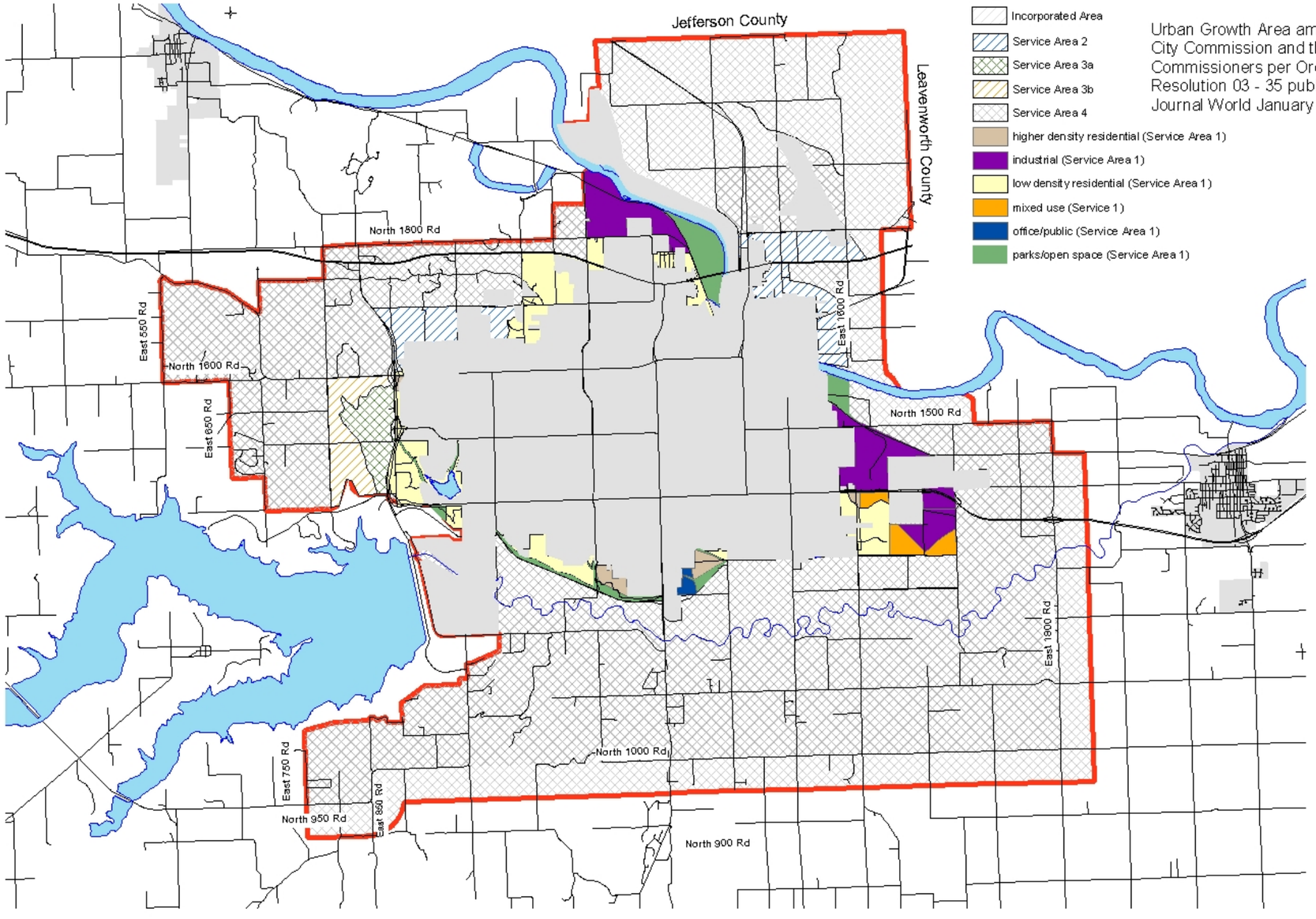
- The Plan promotes the maintenance of a strong and clear distinction between the urban and rural characters of Lawrence/Douglas County. The Plan defines areas anticipated to receive new urban growth near existing urban areas and establishes parameters for non-farm development in Douglas County.

- The Plan encourages the conservation of sensitive natural and environmental features and discourages development where two or more features exist in combination or would result in costly public improvement projects.

- The Plan defines the limits of the UGA for the planning period. Through adoption of an annexation policy, development can be anticipated to occur in areas most easily served by public facilities and services and future development can be scheduled in concert with planned infrastructure improvements.

- The Plan recommends that the city and county consider utilizing development/performance standards for all major land development projects. Standards would give the community reasonable control over design and development, and provide developers incentives for creative and quality new development.

Map 3 - 1 - Lawrence Urban Growth Area
Service Areas & Future Land Use



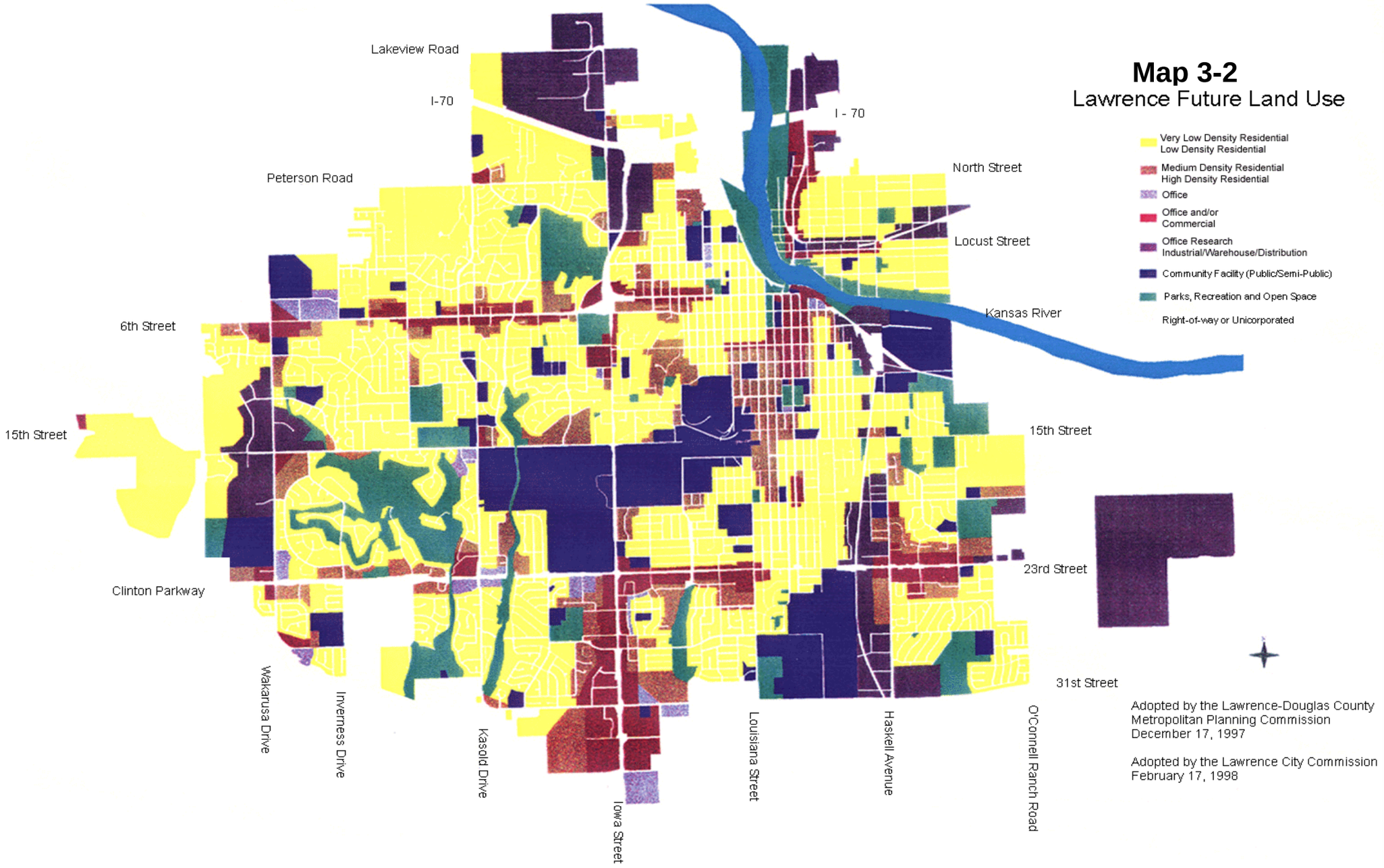
Legend

- Incorporated Area
- Service Area 2
- Service Area 3a
- Service Area 3b
- Service Area 4
- higher density residential (Service Area 1)
- industrial (Service Area 1)
- low density residential (Service Area 1)
- mixed use (Service 1)
- office/public (Service Area 1)
- parks/open space (Service Area 1)

Urban Growth Area amended by the Lawrence City Commission and the Douglas County Board of Commissioners per Ordinance 7731 and Resolution 03 - 35 published in the Lawrence Journal World January 31, 2004

0 0.5 1 2 Miles

Map 3-2
Lawrence Future Land Use

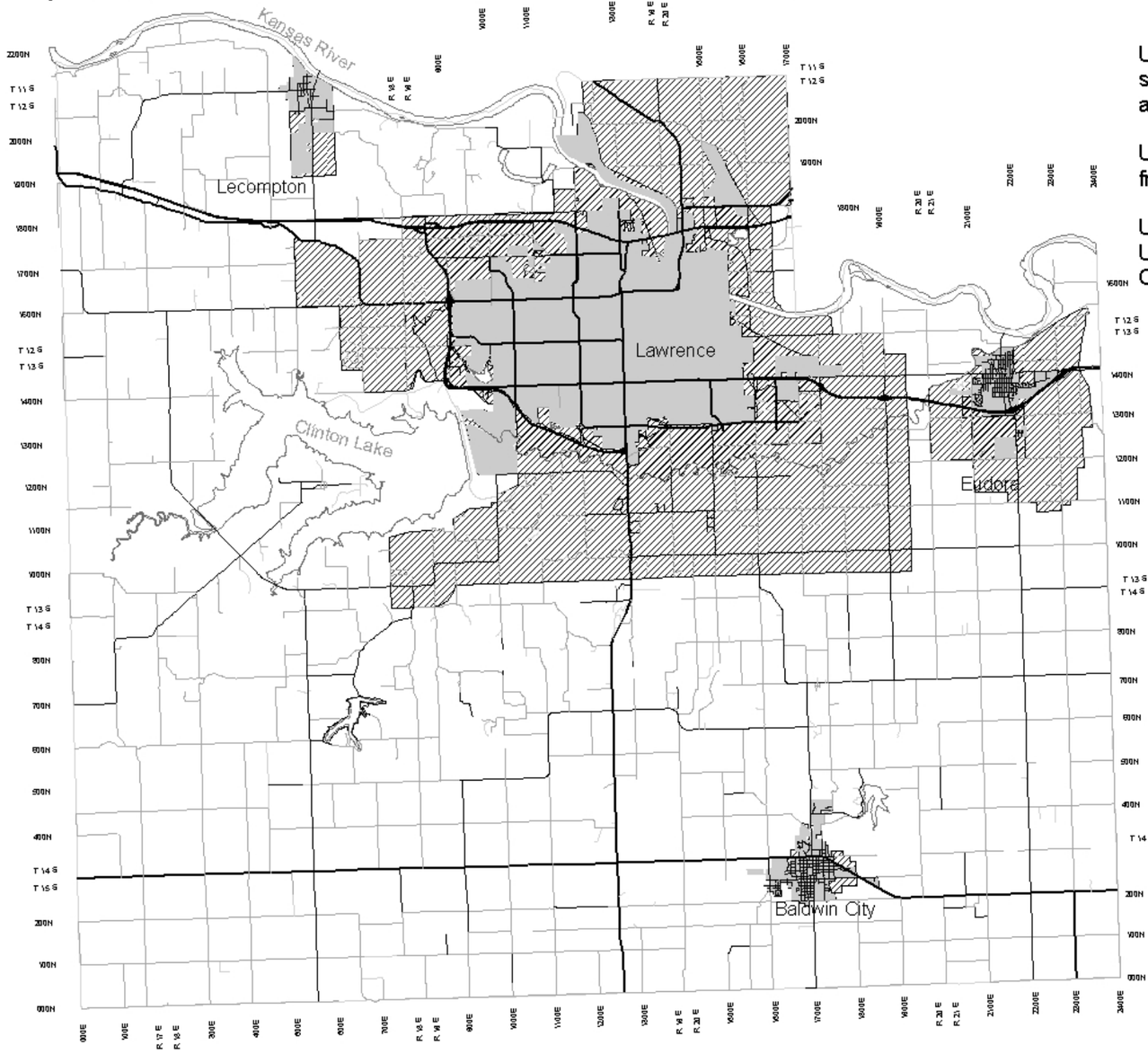


Adopted by the Lawrence-Douglas County
Metropolitan Planning Commission
December 17, 1997

Adopted by the Lawrence City Commission
February 17, 1998

Note: This map does not depict, nor will it convey zoning. Land use shown is general and only conceptual in nature
Other factors, including development constraints outlined in the text of Horizon 2020, must be consulted for making land use decisions.

Map 3 - 3 - Douglas County Urban Growth Areas



Urban Growth Area for Eudora from Map 10 - Future Land Use shown in the City of Eudora Comprehensive Plan 2003 adopted December 22, 2003

Urban Growth Area for Baldwin City from Comprehensive Plan adopted 1996

Urban Growth Area for Lecompton from Figure 7 - Future Land Use Plan shown in Community Comprehensive Plan for the City of Lecompton adopted Februray 24, 2003

Legend

Urban Growth Areas

Incorporated area

Lawrence Urban Growth Area amended by the Lawrence City Commission and Douglas County Board of Commissioners per Ordinance 7731 and Resolution 03-35 published in the Lawrence Journal World January 31, 2004

0 1 2 4 6 Miles

Growth Management

CHAPTER FOUR - GROWTH MANAGEMENT

Growth management is a fundamental tool for ensuring timely and orderly growth of Lawrence and unincorporated Douglas County. The recommended growth management policies do not seek to limit the amount of land for future development. Rather, the Plan directs development to growth areas and suggests that development occur where necessary infrastructure is in place or planned to serve proposed uses, subject to the policies of the Plan.

The growth management policies seek to ensure that adequate facilities and services are provided or assured in connection with development. The policies also continue to require new development to bear its share of the costs for the extension and improvement of required facilities and services and to assure that the residents of Lawrence and unincorporated Douglas County are not unreasonably burdened by these costs.

STRATEGIES: GROWTH MANAGEMENT

The principal strategies for guiding and serving future growth and development are:

- Establish UGA's for all Douglas County cities. In the Lawrence UGA, ensure that staging, density and intensity of development corresponds with the availability of facilities and services.

- For Lawrence, establish urban service areas where adequate facilities and services already exist.

- For the Lawrence UGA, define conditions which development must meet to conform with the overall intent of the plan as identified in the Growth Management Element.

CITY OF LAWRENCE URBAN GROWTH AREA

Land within the Lawrence UGA is encouraged, over the planning period, to be annexed into Lawrence prior to urban densities of development, subject to the goals and policies for Growth Management indicated above and the Plan in general. *Map 3-1, Lawrence Urban Growth Area - Service Areas & Future Land Use*, identifies four service areas of the overall UGA which have specific recommendations for growth and development. The Plan suggests establishing a range of development standards within these service areas.

Maps 4-1 & 4-2 illustrate graphically the different land use assessment criteria that are to be used in the evaluation of development requests for rural residential land divisions within the unincorporated areas of the County. Map 4-1 illustrates these criteria within the Urban Growth Area of the City of Lawrence. Prior to annexation, only development for agricultural purposes is permitted within Service Area 1. Rural residential development and other non-agricultural types of uses within Service Area 1 shall not proceed until the property: is annexed into the city; has access to public utilities and services, is platted and [zoned] to a city zoning category.

Service Areas 2, 3 and 4 make up the remainder of the Urban Growth Area (UGA) shown on Map 4-1. Within these three Service Areas, some rural residential types of uses may be permitted if they meet the criteria for development established for land divisions within the unincorporated area of the County. The land use assessment criteria presented on this map include both land use attributes and functional road classifications. Criteria to be used for review of land divisions for rural residential uses shall include: minimum acreage requirements; availability of a rural water meter; access to a paved road; compliance with minimum road frontage and entrance spacing requirements; and the presence of developable area that is unencumbered by: regulatory floodways, hydric soils, steep slopes (greater than 15%), or historic landmarks or features. The information shown on this map shall be used in the determination of when a specific parcel or tract of land meets the criteria established by the Subdivision Regulations for land divisions for rural residential purposes.

Map 4-2 covers the entire County and identifies some land use attributes (regulatory floodplain, hydric soils, rural water district service areas, and parcel size) and the road classifications criteria that are to be used in the assessment of rural development requests in the Rural Area. Standards related to road and utility requirements are more restrictive within the UGA because urban services are more readily available there. Less restrictive standards should be established for development outside the UGA where urban development is not anticipated within the planning period. The timing of development and any conditions necessary prior to development in each of the service areas is described below.

- ***Service Area 1.*** This area includes lands which are proximate to the existing city limits and can be readily served by community facilities and services. Future land uses for property within Service Area 1 are depicted in color on Map 3-1. The city should actively seek annexation and development of these areas prior to the significant development of the remaining service areas. Development within Service Area 1 shall be preceded by annexation and will be subject to the recommendations contained in the Comprehensive Plan.

- ***Service Area 2.*** A portion of this area is within Sections 28 & 29 in the Northwest Lawrence area which includes portions of the Baldwin Creek watershed drainage area. This area is generally south of Peterson Road extended between E 1100 Road and the SLT/K10 Highway. Other areas identified as a part of Service Area 2 include areas adjacent to North Lawrence. The City's 2003 Wastewater Master Plan anticipates development of a force main and pump station in 2010 to serve the airport but does not indicate when this collection system will be developed to serve other areas in North Lawrence.

  Urban development should not be allowed in the Northwest Lawrence area until the city adopts a policy that establishes a process to provide wastewater collection and treatment for the entire Baldwin Creek drainage basin or a phased approach for wastewater collection on a sub-basin approach for this area. The entire area cannot be served with gravity flow sewers. Should a system be designed to serve these areas, a plan for the entire Northwest Lawrence Area within the Baldwin Creek drainage basin will need to be developed and approved to identify specific land use policies for the area.

Until these areas, are served by the extension of municipal services, residential urban densities of development or non-residential urban development will not be permitted. Divisions of land for rural residential development shall be permitted only when the following criteria exist: access to paved roads, conformance with minimum road frontage requirements, and availability of rural water meters. Development shall not be permitted on steep slopes (15% or greater), regulatory floodplains or other environmentally sensitive areas, and state or federally designated historic sites or landmarks. The pattern and lot layout of rural residential developments shall provide, through early planning, dedications or reservations for the logical extension of public roads and infrastructure.

Development of these areas to urban densities should be allowed only after coordination with the phasing of municipal services and public infrastructure improvements to serve these new urban densities of development.

- ***Service Area 3.*** Service Area 3 is planned primarily for residential development. It currently lays far west of the existing city limits. Map 3-1 depicts this Service Area in two parts, 3A and 3B, based on a natural ridgeline that divides the Service Area. Sanitary sewer services have been planned and will be more readily available in Service Area 3A before they will be extended beyond the ridgeline to Service Area 3B.

  Development of this area should be conditioned upon substantial development of comparable property (generally bounded by Wakarusa Drive on the east) located in Service Area 1 to ensure the proper extension of utilities and the efficient provision of other public services. Developing Service Area 3 is not dependent upon the entire build out of Service Areas 1 or 2. The Plan provides guidance in the development of comparable properties to reduce the likelihood of leapfrog development and premature utility extensions. Additionally, the SLT/K-10 Highway separates this area from the remainder of Lawrence. Ideally, Service Area 3 should be planned as a unified development based on watershed or sub-basin plans, with consideration given to the benefit of access derived from its proximity to the SLT/K-10 Highway.

  Until this area, is served by the extension of municipal services, residential urban densities of development or non-residential urban development will not be permitted. Divisions of land for rural residential development shall be permitted only when the following criteria exist: access to paved roads, conformance with minimum road frontage requirements, and availability of rural water meters. Development shall not be permitted on steep slopes (15% or greater), regulatory floodplains or other environmentally sensitive areas, and state or federally designated historic sites or landmarks. The pattern and lot layout of rural residential developments shall provide, through early planning, dedications or reservations for the logical extension of public roads and infrastructure.

  Urban development in Service Areas 2, 3, and 4 is anticipated in the implementation plan of the City's 2003 Wastewater Master Plan.

- ***Service Area 4.*** The boundaries of Service Area 4 are those depicted in *Map 3-1 - Lawrence Urban Growth Area, Service Areas & Future Land Use*.

Where the boundaries of Service Area 4 coincide with a street/road shown on the adopted Major Thoroughfares Maps for Lawrence and Douglas County, the UGA for Lawrence shall include the entire width of the road easement and any required setback (as established in the Zoning Regulations for Unincorporated Territory of Douglas County, Kansas) on both sides of the road.

- Street/road access shall be provided based on the County's adopted Access Management Standards and minimum frontage and entrance spacing requirements. Arterial and collector roads should be extended across the Wakarusa River to serve the area to the south as illustrated in the adopted Major Thoroughfares Maps.

- Land that has been FEMA designated as regulatory floodplain should not be included in the buildable area of rural residential divisions. FEMA designated regulatory floodway fringe should not be residentially developed unless the development complies with the city's floodplain freeboard requirements. Uses appropriate for floodplain areas are agricultural uses, public or private open spaces, public or private utilities and recreational uses such as bike/walking trails, recreational paths and field sports.

- The land uses north of US-24/40 shall be primarily non-residential uses such as industrial, warehouse and office.

- Urban development in Service Area 4 north of the Kansas River shall not occur until after an extensive drainage study for the area north of the Kansas River has been completed.

RURAL AREA

The Rural Area is the land that lies outside the designated Urban Growth Areas of the incorporated cities. Lands in the Rural Area are not planned to develop or to support urban densities of development during the planning period. Rural development shall be subject to the overall policies, recommendations and standards of the Comprehensive Plan. There are a few locations, however, in the Rural Area which may be expected to receive some significant level of urban development consistent with the Plan, these include commercial areas to serve county residents and, potentially, to provide (i) conference and recreation facilities at Clinton Lake, and (ii) conference, recreation, or tourism facilities that benefit from or integrate with the rural setting, at such other locations that substantially satisfy the following criteria: (a) direct access to an improved arterial roadway; (b) public water supply available; (c) separated from existing conference, recreation, or tourism facilities by at least 3 miles or other appropriate distance as determined by the Board of County Commissioners; and (d) designed to preserve and/or integrate natural resources and the rural environment through appropriate land use, site design, buffering, or other methods. Otherwise, urban uses are not planned within the Rural Area.

Map 4-2 depicts the criteria for development that are to be used in the land use assessment of requests for rural residential land divisions within the unincorporated areas of the County that

lie beyond the Urban Growth Areas of the incorporated cities in the County. The land use assessment criteria presented on this map include both land use attributes and functional road classifications. Criteria to be used for review of land divisions for rural residential uses shall include: minimum acreage requirements; access to rural water or a publicly treated water source; access to hard surfaced roads; compliance with minimum road frontage and entrance spacing requirements; and the presence of developable area that is unencumbered by: regulatory floodway, hydric soils, steep slopes (greater than 15%), or historic landmarks or features. The information shown on this map shall be used in the determination of when a specific parcel or tract of land meets the criteria established by the Subdivision Regulations for land divisions for rural residential purposes.

ANNEXATION POLICIES

The following policies apply to the annexation of lands to Lawrence:

1. Lawrence will actively seek voluntary annexation of land within the UGA as development is proposed.
2. Annexation shall be required prior to development in Service Area 1 of the Lawrence Urban Growth Area.
3. Non-contiguous parcels of land may be developed subject to the policies of the Comprehensive Plan and upon agreement by the owner to annex at the time the parcel of land becomes contiguous to the city.

GROWTH MANAGEMENT GOALS AND POLICIES

Guidelines are needed to ensure that adequate facilities and services are provided, or are planned, in connection with development.

GOAL 1: Establish Urban Growth Areas

Urban Growth Areas are needed surrounding the cities of Lawrence, Eudora, Baldwin City and Lecompton to direct and guide new development.

Policy 1.1: Establish Residential and Commercial/Industrial Development Standards for Growth within Urban Growth Areas [based on adopted development policies of each incorporated community in Douglas County]

a. Direct development to the corporate limits of municipalities and develop a process for the division of land for rural residences within the Urban Growth Area.

b. Impact studies can be provided by the proponent to demonstrate the community benefit and associated community costs for development proposals within the UGA's.

c. Site layout and design of developments shall be planned with attention: to natural topography and drainage, adjacent land uses, road classifications, minimum frontage and entrance spacing requirements, availability of rural water and other public services, and the future integration of the rural residential parcels within the urban subdivision patterns and design standards.

d. Priority should be given to developments proposed in conformance with adopted Plans for infrastructure extensions.

e. Placement of developments should comply with the intent of Locational Criteria Policies for residential and non-residential land uses as identified in the Plan. *[Locational Criteria are found in Low-Density Residential Land Use, Goal 1; Commercial Land Use, Goal 3; and Industrial and Employment-Related Land Use, Goal 1]*

Policy 1.2: Evaluate Traffic Impact

An evaluation of the traffic impacts of a development on the surrounding area should consider the existing and projected traffic conditions and their impact on the existing transportation system. This evaluation should be based on planned improvements identified in the *Capital Improvement Plan (CIP), the Comprehensive Plan, or the Long-Range Transportation Plan.* These documents shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 1.3: Limit Premature Development

a. Encourage the gradual expansion of urbanization outward from corporate limits. Require annexation or agreements to annex for developments in the UGA which are not contiguous to the city limits.

b. Require property in Service Area 1 to annex prior to development.

Policy 1.3.1: Residential Land Uses

a. Identify land areas of adequate size to accommodate residential subdivisions in order to facilitate well-planned, orderly development (including phased development) with coordination of public services and facilities.

b. Require developments within the UGA's to undergo an administrative review procedure.

c. Prohibit on-site wastewater management [septic] systems within Service Area 1 of the UGA.

d. Within Service Areas 2, 3 and 4 of the UGA, require agreements to hook into the public sewer system when property is within 1000' of existing sewer facilities.

e. Within Service Areas 2, 3 and 4 of the UGA, require agreements to annex at time of municipal utility service provision.

f. Environmentally sensitive areas within the UGA should be protected, conserved and incorporated within the design context of a proposed development.

g. Within Service Areas 2, 3 and 4 of the UGA, establish standards related to minimum road frontage and entrance spacing requirements for rural parcels based on road classifications, sidewalks, sewage disposal systems, water supply and other public improvements which have a range of development requirements.

Policy 1.3.2: Nonresidential Land Uses

a. Require proponents of commercial and/or industrial development beyond the corporate limits to provide reasonable documentation to substantiate that similar competitive sites are not available within the municipalities.

b. Non-residential developments should be developed in a planned manner with respect to adjacent uses, common access and integration of uses with the surrounding neighborhood.

c. Location of non-residential uses should occur only at designated nodes of intersecting street/roads.

d. Require developments within the UGA's to be platted.

e. Environmentally sensitive areas within the UGA should be protected, conserved and incorporated within the design context of a proposed development.

Policy 1.4: Establish Utility Extension Policy for Newly Annexed Areas

a. Develop a utilities extension policy for Lawrence which ensures phasing for connection of all development in its UGA to water and wastewater services as property is annexed into the city.

b. Proposed developments based on planned growth areas will be given priority over proposals inconsistent with utility plans.

Policy 1.5: Encourage Annexation

a. Adopt an overall annexation policy and plan.

b. Require property in Service Area 1 to annex prior to development.

c. Require developers of property not contiguous to the city limits, but within the UGA, to execute agreements to annex (upon availability of city water and sewer services) to ensure the unencumbered extension of municipal services to properties within the UGA.

Guidelines are needed to protect and maintain the rural character of Douglas County and to ensure adequate facilities and services are provided or planned in connection with limited development.

GOAL 2: Conserve the Rural Character of Douglas County

The pattern of rural residential development should be to cluster residences to minimize impacts on the rural character of Douglas County and to protect existing agricultural and natural uses in those areas beyond the UGA of Lawrence, and the other incorporated cities of Eudora, Baldwin City and Lecompton.

Policy 2.1: Limit Development beyond the Planned Growth Areas

Direct rural residential development to group or cluster residential parcels in or adjacent to existing subdivisions, growth centers and to be in near proximity to transportation corridors to consolidate and reduce the costs associated with the extension of public services.

Policy 2.2: Rural Residential Development

Non-farm residential development should be directed to urban areas. Rural residential development should be encouraged to locate within the Urban Growth Areas; and smaller lot, urban density residential development should be directed to the municipalities.

Policy 2.3: Rural Commercial Development

a. Commercial development beyond the UGA's shall be limited and carefully reviewed based on the intensity of use; impact on surrounding land uses; and impact on public services and transportation systems.

b. Commercial development should be platted and shall comply with the intent of the Locational Criteria Policies for commercial land uses as identified in this Plan. *[Locational Criteria are found in Commercial Land Use, Goal 3]*

A proactive annexation plan is needed to ensure that adequate facilities and services are provided or planned in connection with development and that sufficient land is available for growth of the community.

GOAL 3: Annexation Policy

To implement the goals of the Comprehensive Plan, to provide for the orderly development of the community and to provide areas of land which will receive municipal services that can accommodate the residential, commercial and industrial growth of the community, it will be necessary to annex additional land into the incorporated municipal boundaries of Lawrence, Eudora, Baldwin City and Lecompton.

Policy 3.1: Areas Immediately Adjacent to the City Limits

a. Areas immediately adjacent to municipalities (Lawrence, Eudora, Baldwin City and Lecompton) should be encouraged to annex voluntarily if utility services are available to them.

b. Developments in need of the extension of city utilities or city services shall first be required to annex.

c. Properties within the UGA's should be encouraged to annex consistent with a service delivery plan.

Policy 3.2: Proposed Annexation Areas

a. Unilateral annexation should be initiated to include those areas which are needed to complete sewer or water line extensions for a closed (looped) system.

b. To ensure stormwater quality control, to avoid increasing the incidence of flooding due to development, and to provide land needed for residential, commercial and industrial development, the long-range annexation program of Lawrence should cover entire watershed areas. *[See Map 2-3]*

c. A broad mosaic for future land uses proposed for near-term annexation areas are set forth in the Plan's land use maps. *[See Map 3-1]*

Policy 3.3: Specific Annexation Policies

a. Lawrence will proceed with annexation of 'unincorporated islands' which are completely surrounded by the city in the immediate future.

b. Whenever an opportunity arises to annex portions of the immediate growth areas, such annexation should be executed by the City Commission.

c. To encourage requests for annexation, Lawrence shall deny extensions of utility services (primarily sanitary sewers) beyond the incorporated limits of the city.

d. Lawrence and Douglas County should cooperate in management of non-farm land uses and development within the identified annexation areas (UGA). This cooperation should specifically address four planning concepts:

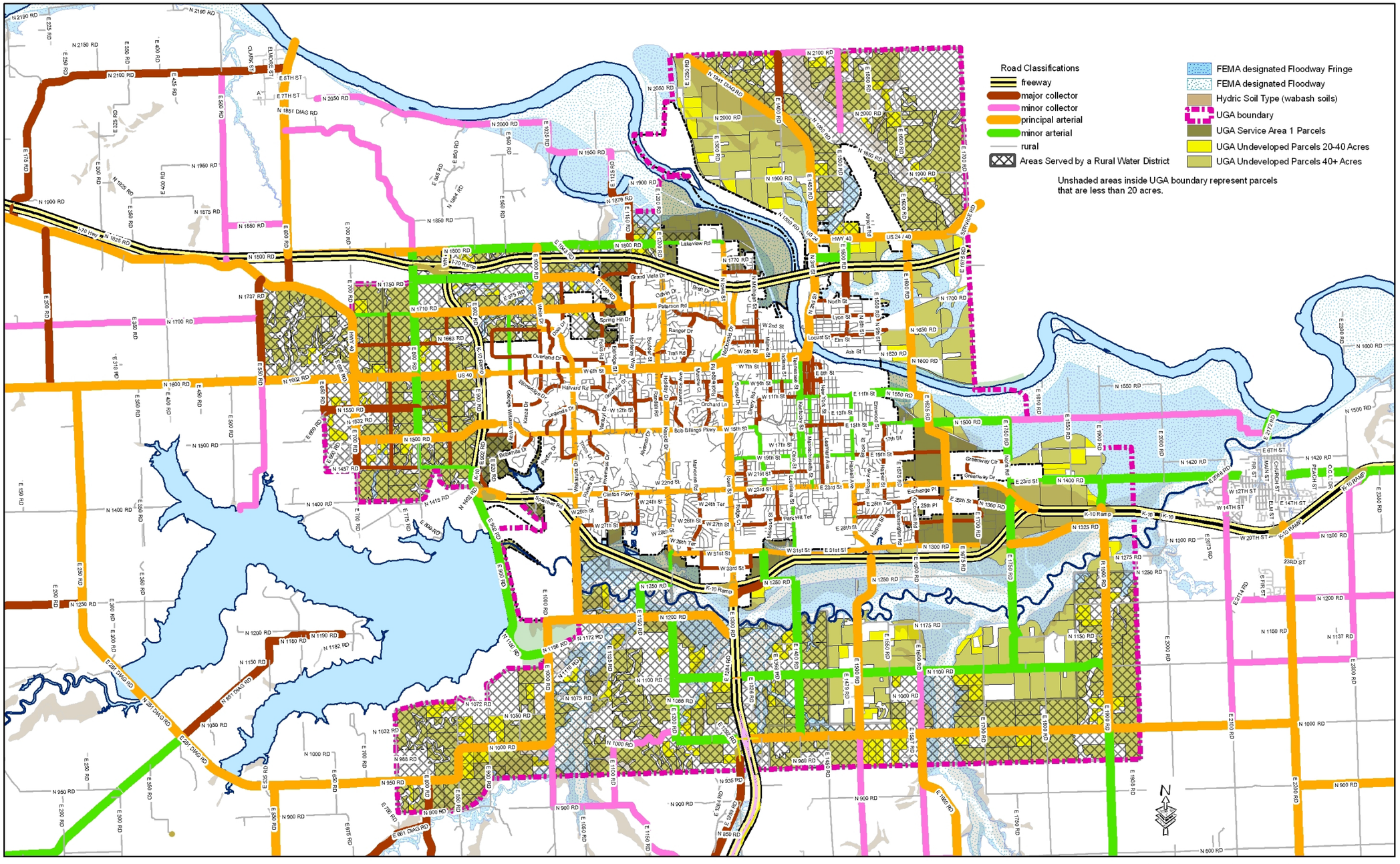
   i. The recognition that watershed basins are natural boundaries for defining and regulating future expansion(s) of Lawrence.

   ii. County approval of development in the UGA should not occur without on-site wastewater management systems, rural water service, hard surfaced roads, and the ability to develop the land without encroachment into floodways, steep slopes (15% or greater), other environmentally sensitive lands, or sites of historic landmarks or historic features.

   iii. Road rights-of-way widths for county subdivisions and for land divisions for rural residential purposes should be required to comply with the adopted Access Management Standards, that establish minimum frontage and entrance spacing requirements as land is divided within the UGA.

   iv. Subdivisions within the city or county should not be approved when lots front directly onto future arterial street/roads. Access should be permitted only to dedicated street/roads which intersect arterial street/roads.

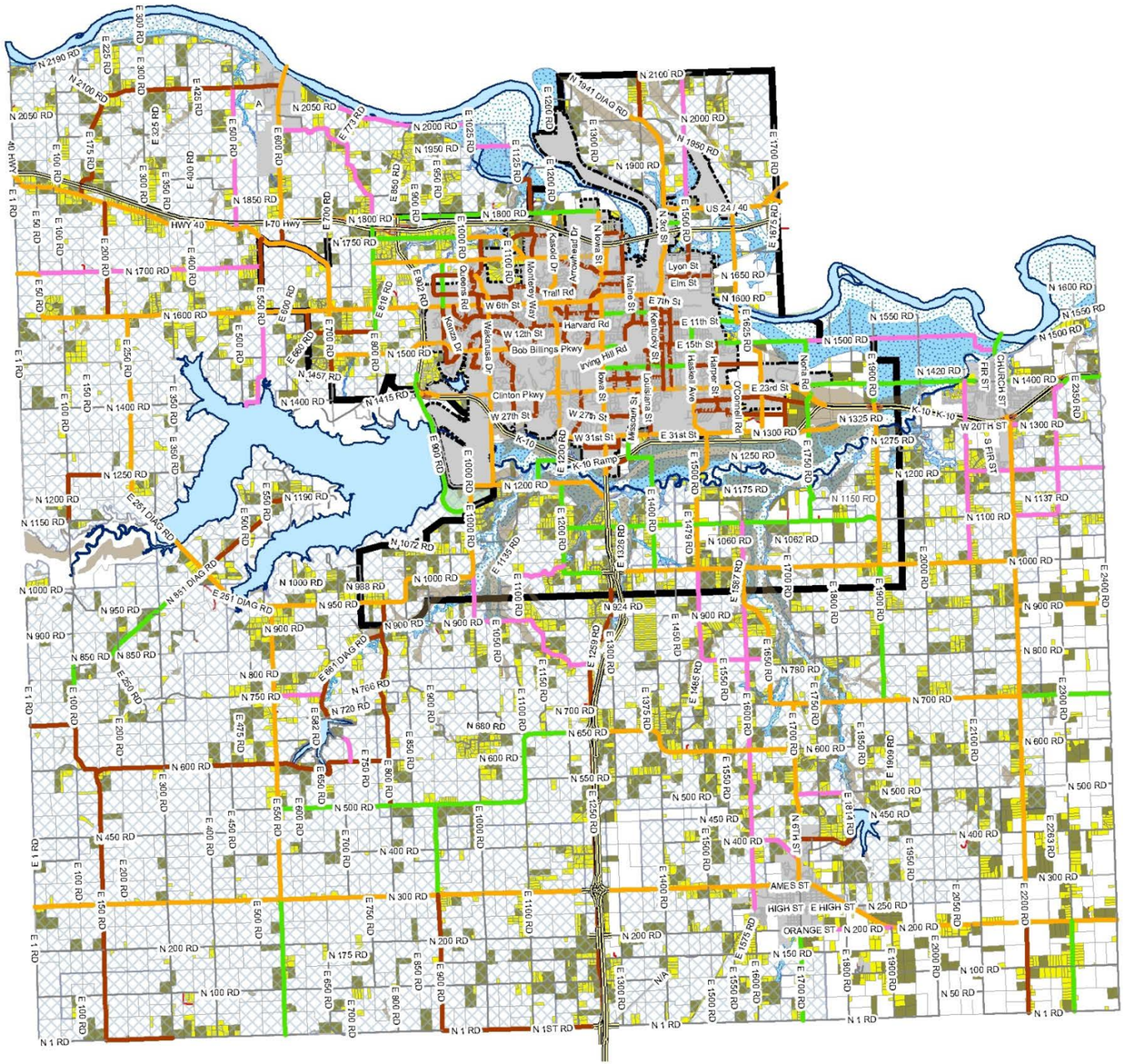
Map 4-1 Lawrence UGA: Land Use Assessment Criteria - Land Use Attributes and Road Classifications



DISCLAIMER NOTICE The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

Lawrence-Douglas County Metropolitan Planning Office
January 26, 2006

Map 4-2 Rural Area (Outside UGA): Land Use Assessment Criteria - Land Use Attributes and Road Classifications



DISCLAIMER NOTICE The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

Lawrence-Douglas County Metropolitan Planning Office
January 26, 2006

Residential Land Use

CHAPTER FIVE - RESIDENTIAL LAND USE

Lawrence and Douglas County have traditionally been strong and desirable residential communities. The Comprehensive Plan strives to strengthen and reinforce existing residential areas and promote quality new residential development in select areas. It includes strategies and general development policies for guiding improvement and development within residential areas, and specific recommendations for the type and location of new residential development.

STRATEGIES: RESIDENTIAL DEVELOPMENT

The principal strategies for approaching residential land use areas are:

- Requests for annexation shall be consistent with approved watershed/sub-basin, sector, neighborhood, nodal, corridor, specific issue/district plans.

- Infill residential development should be considered prior to annexation of new residential areas.

- A mixture of housing types, styles and economic levels should be encouraged for new residential and infill developments.

- Compatible densities and housing types should be encouraged in residential neighborhoods by providing appropriate transition zones between low density residential land uses and more intensive residential development, and between higher density residential uses and non-residential land uses.

- The character and appearance of existing residential neighborhoods should be protected and enhanced. Infill development, rehabilitation or reconstruction should reflect architectural qualities and styles of existing neighborhoods.

- Neighborhood plans, area development plans and sector plans should be developed or amended to reflect the Comprehensive Plan's goals and policies for residential development.

- Design, site improvements and infrastructure shall be consistent with adopted neighborhood plans, with the development of a neighborhood concept and with area plans and sector plans.

- New residential development in Douglas County should protect and enhance the rural character and quality of unincorporated portions of the County.

- Clustering of development shall be encouraged when considering residential development in the unincorporated portions of the county to preserve the rural character, protect environmentally sensitive areas and to more efficiently provide services.

NEIGHBORHOOD CONCEPT

Neighborhoods are the building blocks of strong communities both physically and socially. Consequently, neighborhoods should be designed to promote social interaction, efficient use of automobiles, and encourage pedestrian and non-motorized activity. To enable this, neighborhoods should provide residents with a functional and aesthetic environment where a sense of identity is created, historic features and cultural traditions are respected, choices are offered, basic services are provided, and connections to a common past maintained.

The physical elements that support strong neighborhoods include:

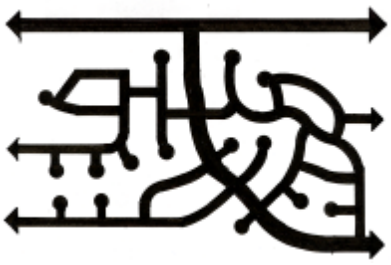
1. Clearly Defined Edges
   Neighborhoods should have clearly defined edges which may be natural or man-made.
   - Man-made edges can include: arterial streets; rights-of-way, utilities, or drainage easements; industrial, employment, or commercial areas; public spaces, schools, parks, hospitals, or airports.
   - Natural space edges can include: parks, water, wildlife corridors, agriculture, prairie, or floodplain.
   - A neighborhood should be limited in size to create walkability, ideally 2 miles by perimeter but no larger than 4 miles by perimeter.

2. Identifiable Hub
   The identifiable hub of a neighborhood is a multifunctional area that offers a mix of uses, including a neighborhood commercial area and interspersed public and civic spaces including parks, greenspace, and schools. These spaces should be designed to human scale to promote social activity and offer basic daily needs and services.

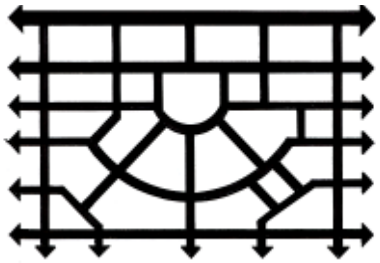
3. Mixed Housing Types
   Different types, styles, sizes, densities, and price ranges should be incorporated. Where possible, rehabilitation of existing structures is encouraged. Live/work opportunities should be explored.

4. Human Scale
   Human scale is how people perceive the size and comfort of their surroundings relative to their own size. These elements encourage walking and make it an attractive experience. Elements that should be considered to create human scale are:
   - On-street parking and traffic calming for pedestrian safety.
   - Building setbacks, height, windows, and other features and characteristics to enhance building exteriors at pedestrian levels.
   - Direct, non-motorized routes to local destinations.

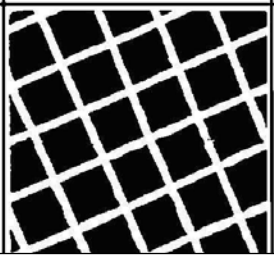
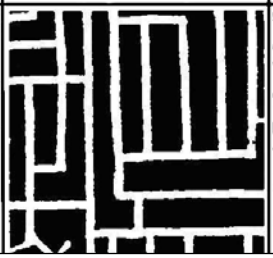
5. Connectivity
   Connectivity should be included within neighborhoods as well as to the surrounding neighborhoods wherever possible. These provide alternative routes to ease traffic congestion and help limit the use of cul-de-sacs. Alleys and short blocks maximize connectivity. Pedestrian/non-motorized access and alternate modes of transportation including public transit should be incorporated wherever possible. Open space, greenbelts, and trails can provide linkages throughout the neighborhood.



Street systems that do not permit connections isolate neighbors and force traffic to concentrate on collectors. This type of street circulation should be avoided.



The preference is for interconnected street systems which offer pedestrians and vehicles many choices in navigating through their neighborhood.

	Gridiron	Fragmented Parallel	Warped Parallel
Street Patterns			

Street pattern examples that promote connectivity.

CITY OF LAWRENCE

The Comprehensive Plan promotes a balanced mix of housing within the community which would allow for a wide range of housing types and residential densities. The Plan includes four residential area designations, as described below.

☐ *Very Low-Density Residential Development*

Very low-density residential development, with densities of one or fewer dwelling units per acre, may occur in various parts of the UGA. One acre minimum development sites should be utilized in areas to be annexed into the city which may have natural features that pose development challenges but do not preclude the delivery of urban services. This category could have applications in several fringe areas of the city. In this category, development standards may be modified to reflect the very low-density character of the area.

☐ *Low-Density Residential Development*

Low-density residential development, reflecting a density of six or fewer dwelling units per acre, would continue to be the predominant land use in the city. While this classification includes densities that would encompass duplex and some townhouse development, emphasis is placed on single-family detached development.

While existing single-family neighborhoods are essentially built-up, several vacant parcels are scattered throughout the existing community where new low-density residential development should occur in the future. In general, new development should be of a scale and character, including building type, the same as and compatible with existing or planned homes in the immediate area. New low-density residential areas are located generally in the southern and western portions of the community and in the UGA.

New large-scale, low-density, single-family residential development is recommended to the west of the city. These new neighborhood areas should be designed and located to preserve and enhance the natural and environmental features existing within the area. In general, the area west of the planned SLT should not develop until comparable areas east of the trafficway are largely developed. For example, areas planned for residential development east of the trafficway (generally between Wakarusa Drive on the east and the SLT on the west) should be substantially complete prior to additional residential areas west of the trafficway being developed. In addition, the South Lawrence Trafficway should be completed prior to development to the west to ensure proper functioning of the planned street/road network. The staging of development in the area is discussed in greater detail in Growth Management.

☐ *Medium-Density Residential Development*

Medium-density residential development, reflecting an overall density of 7 to 15 dwelling units per acre, is recommended as clustered development at selected locations along major roadways, near high-intensity activity areas, and when adjacent to important natural amenities. This type of land use may be a likely choice for cluster development where density can be

transferred from the natural area to the remainder of the property to creatively retain natural features which will enhance the overall development.

Medium-density residential areas are intended to promote a mix of housing types within planned development areas. Medium-density areas should include a mix of single-family detached and attached homes, cluster homes, townhouses and similar housing types, designed and arranged to create compatible and attractive new residential environments. Extensive concentrations of the same housing type or development pattern should be avoided.

Most of the sites recommended for new medium-density residential development occupy transitional locations between single-family neighborhoods and office/commercial areas. Some sites are recommended near large open space or natural areas. In addition to providing attractive new housing options within the city, these areas should be designed to help avoid major and abrupt changes in density or use. Existing and planned medium-density residential development is widely scattered throughout the city.

☐ *High-Density Residential Development*

High-density residential development, reflecting an overall density of 16 to 21 dwelling units per acre, is recommended at selected locations near high-intensity activity areas or near existing high density residential developments.

A variety of locations for high-density residential development are recommended. These include sites primarily along the SLT and Eastern Parkway.

Large concentrations of high-density housing are not compatible with the overall character and development pattern of the city and should not be permitted. As with medium-density housing, a range of densities and housing types should be encouraged. The design and development of all new high-density residential development should be carefully controlled to ensure compatibility with surrounding uses, adequate screening and buffering, an attractive appearance from nearby roadways, and a high-quality living environment.

LAWRENCE URBAN GROWTH AREA

A key element of the Plan is the designation of urban growth or "service" areas and the adoption of policies pertaining to future growth and development of Lawrence. The urban service approach to guiding growth and development relies on establishing future areas where municipal facilities are planned and can be provided. These requirements are a primary land use planning consideration and should be used in conjunction with the other land use planning considerations discussed in other sections of this Plan. In the Plan, land within the city is part of the "existing service area" and is deemed to meet the test of adequate facilities and services.

The Plan identifies four service areas in the overall UGA which have specific recommendations for growth and development. All land divisions within the Lawrence UGA will have an administrative review procedure. The timing of development, and any conditions prerequisite to development in each of the service areas, are described in Growth Management.

UNINCORPORATED DOUGLAS COUNTY

Douglas County plans to continue to receive new non-farm rural residential development in the future. New growth is anticipated to include a range of residential development options, including limited divisions for rural residential purposes. All development shall be designed for safe access to roads and with building areas that are defined to avoid encroachment in to environmentally or geographically sensitive lands, FEMA designated floodplains, or sites of historic landmarks or other historic features. Locations appropriate for each of these developments are described below.

☐ *Rural Area*

The Rural Area covers the vast majority of unincorporated Douglas County. It includes all areas outside the UGA's of Douglas County cities. The minimum residential parcel size in the Rural Area is based on the minimum lot frontage required for the road classification the parcel abuts or takes access from but in no case shall it be less than three (3) acres. The Rural Area encompasses Douglas County farms, ranches, agricultural uses, and natural and environmentally sensitive areas. The basic zoning district standards in the Rural Area shall be designed to permit non-farm residential development in a manner that is consistent with conservation of the rural character and pattern of land use in Douglas County.

Residential subdivisions in unincorporated Douglas County are discouraged in the Rural Area. An individual on-site sewage management system may be constructed upon any parcel, tract, or lot which is three acres or greater when a public water supply is provided, and the on–site wastewater management system site is entirely outside the regulatory floodplain.

Rural subdivisions should be directed to the designated UGA of incorporated cities and should not be scattered throughout the Rural Area. Criteria which could support the location of a subdivision within the UGA areas would be: the presence & access to a paved road, availability of rural water meters, and the significant existence of other rural residential subdivisions or groupings of dwellings. The developable portion of the residential parcels or lots shall not include: steep slopes (15% or greater), FEMA designated regulatory floodways, other environmentally sensitive features, or sites of historic landmarks or historic features. When land appropriate for rural residential uses is proposed for residential development adjacent to the UGAs of incorporated cities, the development shall be designed, and parcel divisions created, in anticipation of annexation by the city so that the parcels created can be further subdivided into lots that fit the urban development pattern of the annexing city, thereby minimizing disruption of the urban development pattern and reduction in the total acreage removed from agricultural uses.

Agricultural uses should continue to be the predominant land use within the areas of the county beyond the designated urban growth/service areas (rural area). Uses permitted in the rural area should continue to be limited to those which are compatible with agricultural production and uses. Uses which allow farmers to sell directly to the consumer, such as seasonal farm stands and pick-your-own farm operations, provide flexibility and incentives to retain agricultural land in production. Residential development should be limited in these areas so that new development does not unnecessarily remove productive land from agricultural use.

☐ *Urban Growth Areas and Planning Areas*

Map 3-3, Douglas County Urban Growth Areas illustrates the UGA boundaries for Lawrence and each of the other incorporated cities in Douglas County, with the recognition that these boundaries will change over the planning period. The Planning Commission shall utilize the Comprehensive Plan for the unincorporated areas with overlapping UGA's in the communities of Baldwin City, Eudora and Lecompton, unless lands are lawfully annexed. The change in individual growth boundaries of the communities of Baldwin City, Eudora and Lecompton shall not require amendment to this Plan. However, future planning efforts of all these incorporated communities are encouraged to coordinate with the Douglas County Commission.

The Plan suggests the use of Cluster Rural Residential development with a minimum residential development parcel size of 3 acres in/near sensitive areas within the Urban Growth Areas of the incorporated cities in Douglas County. Development in this manner is intended to create a cluster type of pattern that is respectful of the conservation of natural and historic resources and other sensitive lands. This development pattern should also anticipate the future extension of urban services, and the potential for resubdivision for more urban densities of development after annexation by a city. Modified development standards are recommended to permit integration with minimal disruption to the natural features and the character of the area. Zoning and Subdivision Regulations should be amended to create the flexibility needed for modifying standards where it would reflect the low-density character of the area and not be harmful to the public interest.

Development and growth within Lawrence UGA shall be governed by this Plan.

SPECIFIC RECOMMENDATIONS FOR SELECT AREAS

- *North Lawrence Infill Residential Development*

The North Lawrence neighborhood, located northeast of the Kansas River, is one of the least intensely developed residential areas. It includes a number of larger, vacant parcels potentially subject to infill development in the future.

While portions of this area maintain a more intense, or at least a mixed-density character, the area lying east of 8th Street/road includes larger, vacant sites. This area should be maintained for larger lot single-family detached development.

- *Riverridge Residential Area*

Unlike most other neighborhood areas of the city, the Riverridge neighborhood includes substantial portions which are currently unincorporated and are not served with municipal sewer and water facilities. In order to permit continued and orderly development of the greater neighborhood area, it is desirable that the Riverridge area be serviced with utilities and improved street/roads to enable the extension of the systems to adjoining areas.

- *Alternative Residential Land Use Areas*

There are two locations identified within the Lawrence UGA which may receive urban development in the future, but which are subject to special approval due to conditions which currently exist or which will influence the area in the future.

1. Far South Lawrence Residential Reserve

Because this area is part of the Lawrence school system and is reasonably close to existing employment centers, it has experienced renewed residential development in recent years. If wastewater treatment is provided to this area, the area will experience significant pressure for additional development. While development is not undesirable, there are a number of conditions which should be demonstrated prior to endorsing the area for urban development.

The city has planned for an adequate amount of available land suitable for future development in other portions of the urban area, excluding the area south of the Wakarusa River. Therefore, development of the far south area is not directly tied to meeting the land use objectives of the Comprehensive Plan. Opening the area to urban development creates a number of transportation access and community facilities considerations. It is intended that the area will be considered part of the Douglas County Rural Area unless a number of conditions are met for development as described in Growth Management.

Should the area be opened to development in the future, the dominant land uses planned for this area include low-density or very low-density residential uses and extensive public and private open spaces due to the presence of the Wakarusa River and its tributaries' floodplains. The sensitive nature of this area and the location of extensive wetlands throughout it should be considered a deterrent to urban development of the

area. Any development proposals which occur in this general vicinity should consider the existing riparian corridor.

2. Northwest Lawrence Alternative Land Use Area

The Northwest Lawrence area is viewed as a potential location for residential and non-residential development premised upon the provision of adequate wastewater treatment facilities. This area includes approximately 900 acres north and west of US-40 and E 1100 Rd. As described in more detail in the Utilities section of the Plan, this area has wastewater service limitations due to slope conditions and a division of stormwater watersheds. Policy should be developed to phase growth in the area and consider the availability of sanitary sewers prior to approval of development in this location.

Because of this area's location on the fringe of Lawrence, it is also appropriate for low-density and very low-density residential development, with a density of one or fewer dwellings per acre. This type of very low-density residential development is intended for use in areas to be annexed to the city and served by urban services but which, due to the presence of forest, slopes and natural drainageways, may not be capable of sustaining residential densities planned in other locations of the community. Development is recommended for this area only upon meeting the conditions described in Growth Management.

The very low-density residential development of this area is anticipated to be provided with full urban facilities and services, although development improvement standards may be modified to reflect the low-density character. In particular, development and design standards for street/roads should recognize the very low-density character of this area. Decisions to permit alternative development standards within the city should include consideration of potential costs to the community at large when these areas are encompassed by urban development and existing infrastructure needs to be improved or upgraded. Alternative development standards might include different street/road construction standards or the acceptance of agreements to participate in the financing of future improvements (such as street/roads, sidewalks or certain utility improvements) when development is eventually annexed into the city. Residential lots shall be a minimum of three to five acres in the area and non-residential development will not be permitted until the Northwest Lawrence area is endorsed for urban development (through a commitment to extend municipal utilities and services to the area).

- ***Unincorporated Douglas County Natural and Environmentally Sensitive Areas***

There are many areas of unincorporated Douglas County which are naturally or environmentally sensitive due to the presence of severe slopes, floodplains, lakes, streams, ponds, forestation, or natural and wildlife habitat areas. While the Comprehensive Plan does not preclude development of land within these areas, it does discourage it. The Plan recommends that non-residential development in naturally or environmentally sensitive areas be subject to site plan review to ensure development is designed in a manner which least impacts these features. Property within the area proposed for development must be specifically identified as having one

or more of the above features present on the site before site plan review will be required. Criteria for site plan review in these areas should include:

1. Conformance with the policies and regulations controlling flood prone areas;

2. The site layout for proposed development and site improvements (including buildings, parking, access drives, street/roads, utilities, etc.) which least impacts the environmentally sensitive features;

3. Adherence to a riparian corridor along floodplains and streams in which no development can occur; and

4. Where feasible, the incorporation and voluntary preservation of natural areas and wildlife habitats into the development's design concept.

In general, large-lot development or appropriately designed cluster development is more suitable in natural and environmentally sensitive locations than traditional subdivisions because of the flexibility both provide in the control and limitation of disruption to the landscape.

Page purposely left blank.

RESIDENTIAL LAND USE GOALS AND POLICIES
Low-Density Residential Land Use

Non-farm residential development in the unincorporated areas is anticipated to continue as a desirable housing alternative for community residents. Guidelines are needed to ensure that future development is consistent with and sensitive to the rural character of the area. This document recognizes the need for different degrees of regulation of development in Urban Growth Areas and the Rural Area.

GOAL 1: Criteria for Low-Density Residential Development within the Unincorporated Areas

Adopt criteria which will provide housing opportunities while conserving the overall open character of the County. Residential development beyond any incorporated city limits should be directed to areas designated as future Urban Growth Areas.

* Urban Growth Area (UGA) is defined as that area adjacent to existing city limits for which city services may be easily extended over a given period of time, and which are specifically related to capital improvement project(s) or service delivery plan(s).

Policy 1.1: Consider Land Use Relationships within the Urban Growth Area

a. Require development contiguous to the city limits to annex and develop to city standards.

b. Direct development to the corporate limits of municipalities and develop a process for rural residential division of land within the Urban Growth Area.

c. Encourage the clustering of new residential development which maximizes open space and protects natural and environmentally sensitive areas.

d. Continue to support and recognize the importance of conserving the environmentally sensitive areas identified within the UGA.

e. Minimum lot sizes in subdivisions should generally be three acres or larger and clustered or grouped based on an urban density of development plan that can economically, at the time of development and in the future, be served by utilities. Require identification of building envelopes on each development site within large-lot subdivisions to pre-plan housing locations to allow for future resubdivision and development.

f. Consider proposed development in the context of the neighborhood concept, supporting plans which are compatible with the creation of neighborhoods.

Policy 1.2: Protect Areas Planned for Low-Density Development

a. Require an administrative review procedure or platting for residential development within the UGA's.

b. Prohibit the installation of new on-site wastewater management systems on property within Service Area 1 of the UGA.

c. Develop a utilities extension policy for Lawrence which ensures the phased connection of all development in its UGA to water and wastewater services as property is annexed into the city.

d. Use the development review process to seek the preservation of natural features through sensitive site planning and design.

Policy 1.3: Identify Suitable Sites

a. Lawrence, Eudora, Baldwin City and Lecompton should establish UGA's to ensure optimum utilization of facilities and services.

b. Identify suitable land areas of adequate size to accommodate residential development in order to facilitate well-planned, orderly development with increased coordination of public services and facilities.

Policy 1.4: Limit Premature Development

a. Encourage the gradual expansion of urbanization outward from corporate limits to avoid leapfrog development. Require annexation agreements for developments in the Urban Growth Areas of a city.

b. Require subdivisions contiguous to the city limits to annex and develop to city standards.

c. Adopt an annexation plan and policy consistent with Growth Management techniques described in this document.

Policy 1.5: Ensure Adequate Infrastructure Facilities

Develop a utilities extension policy for Lawrence which ensures the phased connection of all development in its UGA to water and wastewater services.

Policy 1.6: Provide for Small-Lot Subdivisions

Create standards for clustering developments that achieve the conservation of natural features and which minimize the impact of development in environmentally sensitive areas.

Rural and agricultural residential development in the unincorporated areas (beyond the Urban Growth Areas) is anticipated to continue. Guidelines are needed to ensure that future development of land and division of property is consistent with, and sensitive to, the character of unincorporated Douglas County.

GOAL 2: Criteria for Rural Residential Development within the Unincorporated Areas - beyond the designated Urban Growth Areas.

The Rural Area is defined as that area beyond the designated UGA's for which city services cannot easily be extended over a given period of time, and which are unrelated to any capital improvement project(s) or service delivery plan(s).

Policy 2.1: Consider Land Use Relationships

a. Continue to support and recognize the importance of preserving the agricultural use of land in unincorporated areas of Douglas County.

b. Encourage the clustering of new residential lots to consolidate utility and public services and to conserve large, contiguous acreage for agricultural purposes.

Policy 2.2: Protect Areas Planned for Agricultural Uses

Discourage development of land for urban density residential purposes in the unincorporated rural area beyond the designated UGA's in so far as such division would conflict with or inhibit agricultural use of the land.

Policy 2.3: Limit Premature Development of Unincorporated Douglas County

Encourage non-farm residential development to locate within the UGA's.

Lawrence is made up of many distinct neighborhoods, each with differing physical characteristics. Much of the community's overall image and appearance is related to the unique character of its neighborhoods, and these features should be preserved.

GOAL 3: Neighborhood Conservation

The character and appearance of existing low-density residential neighborhoods should be protected and improvements made where necessary to maintain the values of properties and enhance the quality of life.

Policy 3.1: Maintain Public Improvements

a. Utilize community-wide capital improvements planning to update and improve facilities and services within existing neighborhoods.

b. Promote new community-wide beautification improvements within public and private areas.

Policy 3.2: Protect Existing Housing Stock

a. Encourage the improvement and upgrading of housing units through the consistent enforcement of housing and property maintenance codes in a timely manner.

b. Preserve existing dwelling units.

c. Use innovative planning and financing to minimize or eliminate conditions causing decline.

d. Consider the development of alternate standards for the rehabilitation of existing residential structures.

e. Consider the development of minimum maintenance standards to prevent/discourage "demolition by neglect" of existing housing stock.

Policy 3.3: Encourage Compatible Infill Development

a. Encourage redevelopment and infill as a means of providing a variety of compatible housing types within neighborhoods.

b. Utilize development regulations to ensure compatibility of different housing types within neighborhoods.

c. Infill development should conform to lot size, housing type, scale and general architectural style of the area in which it is proposed.

d. Discourage the conversion of existing single-family residences to multiple-family use unless the existing zoning of the property permits multiple-family development.

e. Discourage concentrations of high-density multiple-family infill within neighborhoods.

f. Maintain the physical form and pattern of existing, established neighborhoods to the extent possible by incorporating the following principles:

1. Building orientation should reflect the predominant neighborhood pattern and existing street/roadscape.

2. Continuity of vehicular and pedestrian circulation patterns should be considered.

3. Open space patterns and front, side and rear yards characteristic of the neighborhood should be maintained.

4. Building height should be compatible with the average height of homes in the neighborhood, especially adjacent residences.

Policy 3.4: Minimize Traffic Impact through Neighborhoods

a. The street/road network should be designed and enhanced to discourage non-local traffic through neighborhoods.

b. The site design of a residential development should accommodate multiple points of access (direct and indirect) with attention to directing vehicular traffic to and from a development to collector and/or arterial street/roads.

Policy 3.5: Minimize Encroachment of Nonresidential Uses

Carefully consider and evaluate transition areas between different land uses with differing densities, building types and intensities of use to ensure compatibility of uses.

Policy 3.6: Promote Neighborhood Identity

Preserve and enhance the visual and environmental character of existing neighborhoods.

Policy 3.7: Involve Neighborhood Residents

Encourage the participation and organized involvement of neighborhoods in the planning of and development process for their neighborhoods.

A framework is needed to provide direction related to the location and scale of new low-density residential developments.

GOAL 4: Criteria for Location of Low-Density Residential Development

Adopt criteria to guide the placement and design of stable, safe and pleasant neighborhoods.

Policy 4.1: Consider Land Use Relationships

Development proposals should be reviewed for compatibility with existing land uses, including any neighborhood plan. This review should include use, building type, density, intensity of use, scale, access and its relationship to the existing or planned circulation patterns of the surrounding neighborhood, and the amount and treatment of screening and open space.

Policy 4.2: Protect Areas Planned for Low-Density Development

Avoid concentrations of medium- or higher-density residential development within the interior of a neighborhood.

Policy 4.3: Identify Suitable Sites

Identify suitable land areas of adequate size to accommodate residential subdivisions in order to facilitate well-planned orderly development with improved coordination of public services and facilities.

Policy 4.4: Limit Development beyond Growth Service Areas

a. Encourage development only in or adjacent to existing growth centers and corridors in order to reduce the cost and extension of public services.

b. Priority should be given to developments proposed in conformance with adopted Plans for infrastructure extensions.

Policy 4.5: Ensure Adequate Infrastructure Facilities

Encourage the development of housing located to maximize the use of existing infrastructure and minimize the cost of expanding community facilities and services.

Policy 4.6: Provide for Small-Lot Subdivisions

a. Provide affordable housing options throughout the city through the adoption of residential zoning classifications with modified minimum lot sizes and setbacks.

b. Allow the use of small-lot subdivisions in low-density residential areas where flexibility in subdivision design is necessary to preserve natural features, provide open space linkages or avoid floodplains.

Guidelines are needed to allow for the provision of low-density development which is safe, attractive and accessible to necessary facilities and services.

GOAL 5: Create a Functional and Aesthetic Living Environment

Create and maintain neighborhoods that are aesthetically pleasing and functionally efficient and practical.

Policy 5.1: Preserve and Protect the Environment

Natural environmental features within residential areas should be preserved and protected. Natural vegetation and large mature trees in residential areas add greatly to the appearance of the community as a whole and should be maintained. Changes to the natural topography should be minimal.

Policy 5.2: Encourage Proper Lot Orientation

a. Encourage subdivision design in which residential lots are oriented towards, and take access from the neighborhood of which they are a part.

b. Residential developments should be sited so an individual residential dwelling does not take direct driveway access from an arterial or section line road. Existing urban residences with direct access to arterial street/roads, or suburban and rural residences that take direct access from a section line road or future arterial street/roads should be allowed to create a circular driveway so residents do not have to back out onto arterial street/roads.

c. Fronting low-density residential lots on collector street/roads should be discouraged. Driveway access to individual residential lots should be from a local street/road.

Policy 5.3: Provide for Extra Buffering in Special Circumstances

Encourage subdivision design which provides additional buffering between homes and adjacent arterial street/roads. Extra buffering can be provided by any of the following: additional lot depth, berms, landscape screening and/or fences.

Policy 5.4: Ensure Adequate Ingress and Egress

a. The site design of a residential development should accommodate multiple points of access (direct and indirect), with attention to directing vehicular traffic to and from a development to collector and/or arterial street/roads.

b. Provide sidewalks on one side of local street/roads (public and private) and both sides of collector and arterial street/roads.

Policy 5.5: Ensure Convenient and Logical Street/Road System Design

Design internal street/road systems in new neighborhoods so that collector street/roads will not encourage through traffic.

Policy 5.6: Provide Access to Park Land

Integrate the design of subdivisions to provide planned access to parks and open space.

Guidelines are needed to provide for a compatible transition from low-density residential neighborhoods to other more intensive land uses. These guidelines are necessary in both established and new neighborhood areas.

GOAL 6: Compatible Transition from Low-Density Residential Development to More Intensive Land Uses

Ensure transition from low-density residential neighborhoods is compatible with more intensive residential and non-residential land uses.

Policy 6.1: Use Appropriate Transitional Methods

a. Careful attention should be given to areas which, by location, function as buffers between different housing types and different densities and intensities of use so as to ensure compatibility of uses.

b. Lower-density residential areas should be screened from higher-density developments. Natural barriers and dense vegetation and/or berms shall be used where possible

c. Compatible transition from non-residential or higher-density residential uses to lower-density residential uses should consider:

1. Building Relationships

    a. A back-to-back relationship is preferable between variable intensities of uses.

    b. More intensive residential uses should have perimeter setbacks that are equal to or greater than the perimeter setbacks of the abutting low-density residential uses.

2. Land Features

    a. Promote the integration of mature trees, natural vegetation, natural and environmentally sensitive areas whenever possible to buffer low-density developments from more intensive land uses.

    b. Where possible, use existing topography to separate low-density developments and more intensive land uses.

3. Screening and Landscaping

    a. Encourage creative and extensive use of landscaping and berming techniques for natural transitions from low-density residential uses.

b. Fences shall not be used as a sole method of providing screening and buffering.

c. Promote site design that uses existing vegetation, such as stands of mature trees, as natural buffers or focal points.

d. Encourage the use of high quality materials in the construction of screening and landscape areas to decrease long-term maintenance costs.

Policy 6.2: Higher-Density Residential Development as Transitional Use

Encourage the integration of higher-density residential development through compatible design with non-residential developments and surrounding low-density residential neighborhoods.

RESIDENTIAL LAND USE GOALS AND POLICIES
Medium- and Higher- Density Residential Land Use

Guidelines are needed to provide direction on where and at what scale medium- and higher-density residential developments are appropriate.

GOAL 1: Criteria for Location of Medium- and Higher-Density Residential Development

Adopt criteria which will ensure that livability, property values, open space, safety and the general welfare are sustained.

Policy 1.1: Consider Land Use Relationships

a. Development proposals shall be reviewed for compatibility with existing land uses. The review should include use, building type, density and intensity of use, architectural style, scale, access and its relationship to the neighborhood, and the amount and treatment of screening and open space.

b. Careful attention shall be given to the transition areas between different housing types and different densities and intensities of use so as to ensure compatibility of uses.

c. Encourage integrated compatible community facilities such as schools and churches within neighborhoods.

Policy 1.2: Protect Areas Planned for Medium- and Higher-Density Development

a. In newly developing areas, special attention shall be given to integrating housing types so that uses are of compatible density and scale and are appropriately mixed in a given area.

b. Avoid reducing medium- and higher-density residential areas designated on the Future Land Use Map (as depicted on *Map 3-1*) by allowing encroachment of non-residential land uses which are not typically allowed in residential districts.

c. Avoid reducing medium- and higher-density residential areas designated on the Future Land Use Map (as depicted on *Map 3-1*) by allowing encroachment of low-density residential land uses within these planned transition areas.

Policy 1.3: Identify Suitable Sites

Medium- and higher-density developments should be arranged in small clusters as transitions from more intensive land uses, or located at the intersection of major street/roads.

Policy 1.4: Limit Development beyond Growth Service Areas

Encourage the development of housing to be located in areas to maximize the use of existing infrastructure and minimize the cost of expanding community facilities and services.

Policy 1.5: Ensure Adequate Infrastructure

Ensure that medium- and higher-density development occurs in areas which can be adequately and efficiently served by infrastructure facilities.

Policy 1.6: Consider Access

a. Ensure adequate vehicular circulation within medium- and higher-density residential developments.

b. Higher-density residential developments shall be located adjacent to arterial, access or frontage roads.

c. Provide sidewalks on one side of local street/roads (public and private) and both sides of collector and arterial street/roads.

Policy 1.7: Adhere to Designated Land Uses

Require a traffic impact study for development proposals which increase the amount of medium- and higher-density residential areas beyond areas designated on the Future Land Use Map (as depicted on *Map 3-1*).

Guidelines are needed to allow for the provision of medium- and higher-density residential developments which are safe, attractive and accessible to necessary facilities and services.

GOAL 2: Create a Functional and Aesthetic Living Environment

Create and maintain medium- and higher-density residential developments that are aesthetically pleasing and functionally efficient and practical.

Policy 2.1: Preserve and Protect the Environment

Preserve natural features such as natural drainageways, ridgelines and stands of mature trees through sensitive site layout and design.

Policy 2.2: Ensure Quality Development

a. Encourage pedestrian use and neighborhood interaction through inclusion of pedestrian easements and sidewalks in subdivision design.

b. Provide pedestrian and/or bicycle paths to provide access to all parts of a neighborhood and beyond.

Policy 2.3: Provide for Extra Screening in Special Circumstances

a. Higher-density residential areas shall be screened from lower-density areas. Where possible, natural barriers and dense vegetation and/or berms shall be used.

b. Encourage subdivision design which provides additional buffering between homes and adjacent arterial street/roads. Extra buffering can be provided by a combination of additional lot depth, berms, landscape screening, fences or walls, clubhouses, recreation areas, and/or carports and garages.

Policy 2.4: Provide Open Space

a. Encourage the provision of usable open space on site by clustering buildings to minimize the creation of narrow, marginal-use areas in front of and between buildings.

b. Open space recreation areas shall be located within walking distance of all residential areas within a neighborhood.

Policy 2.5: Provide Access to Park Land

Provide pedestrian and/or bicycle access to nearby parks through the subdivision design process.

Policy 2.6: Consider Residential Density and Intensity of Use

a. The number of dwelling units per acre in any residential category should be viewed as representing a potential density range rather than a guaranteed maximum density. Potential development should be approved based upon consideration of natural features, public facilities, street/roads and traffic patterns, neighborhood character, and surrounding zoning and land use patterns.

b. Develop standards for density and intensity of uses.

Policy 2.7: Provide for a Variety of Housing Types

a. Intersperse low- to moderate-income housing throughout the city.

b. Encourage the use of a variety of housing types, including townhomes, patio homes, zero lot line homes, cluster housing, garden apartments and retirement housing.

Guidelines are needed to allow for compatible transition from medium- and higher-density residential developments to both more intensive and less intensive land uses. These guidelines are necessary in both established and new neighborhood areas.

GOAL 3: Compatible Transition from Medium-Density and Higher-Density Residential Development to both More Intensive and Less Intensive Land Uses

Ensure transition from medium- and higher-density residential neighborhoods is compatible with non-residential land uses or low-density residential land uses.

Policy 3.1: Use Appropriate Transitional Methods

a. Careful attention should be given to areas which may serve as a buffer between different housing types and different densities and intensities of use to ensure compatibility of uses.

b. Lower-density residential areas should be screened from higher-density developments. Natural barriers and dense vegetation and/or berms shall be used where possible.

c. Compatible transition from medium- or higher-density residential uses to either more or less intensive land uses should consider:

1. Site Orientation

    a. Site design should be oriented so that less compatible uses such as trash, loading and parking areas are located in the interior of the development and not adjacent to or in close proximity to low-density residential neighborhoods.

    b. The site design of a residential development should accommodate multiple points of access (direct and indirect) with attention to directing vehicular traffic to and from a development to collector and/or arterial street/roads.

    c. Street/roads which are designed with elements to provide visual or physical buffering may serve as boundaries between different intensities of land uses.

2. Building Relationships

    a. A back-to-back relationship is preferable between variable intensities of uses.

b. More intensive residential uses should have perimeter setbacks that are equal to or greater than the perimeter setbacks of the abutting low-density residential uses.

c. The height and massing of medium- and higher-density residential buildings and accessory structures should be oriented away from low-density residential neighborhoods to avoid creating a negative visual appearance.

d. Where medium-density development adjoins or is across the street/road from a low-density residential area, the medium-density development should be designed to maintain or continue the visual appearance of the street/roadscape through building massing, height and orientation of structures.

3. Land Features

a. Promote the integration of mature trees, natural vegetation, natural and environmentally sensitive areas whenever feasible to buffer medium- or higher-density developments from more or less intensive land uses.

b. Where feasible, use existing topography to separate medium- or higher-density developments and other more or less intensive land uses.

4. Screening and Landscaping

a. Encourage creative and extensive use of landscaping and berming techniques for natural transitions between differing intensities of land uses.

b. Fences shall not be used as a sole method of providing screening and buffering between differing intensities of land uses.

c. Promote site design that uses existing vegetation, such as stands of mature trees, as natural buffers or focal points.

d. Encourage the use of high quality materials in the construction of screening and landscape areas to decrease long-term maintenance costs.

5. Lighting

a. Lighting used to illuminate parking areas, signs or structures should be placed to deflect light away from adjoining property or public street/roads through fixture type, height and location.

Policy 3.2: Medium-Density Residential Development as Transitional Use

Encourage the integration of medium-density residential development through compatible design with low-density residential areas and more intensive land uses.

Policy 3.3: Parks, Recreation and Open Space as Transitional Use

Promote the use of medium- to low-intensity recreational facilities such as neighborhood parks, bike/hike trails and natural areas as transitional areas.

Policy 3.4: Encourage Compatible Infill Development

Encourage new and existing medium- and higher-density residential development which is compatible in size, architectural design, orientation, and intensity with the surrounding land uses in established areas.

Traffic impacts continue to be a major concern in multiple-family developments.

GOAL 4: Transportation Considerations

Promote a transportation system which provides or improves access and circulation within and adjacent to medium- and higher-density residential areas.

Policy 4.1: Levels of Service

The construction of new medium- or high-density residential development or the expansion of existing medium- or higher-density residential development shall not be approved until the surrounding street/road system can provide an acceptable level of service.

Policy 4.2: Evaluate Traffic Impacts

An evaluation of the traffic impacts of a development on the surrounding area should consider the existing and projected traffic conditions and their impact on the existing transportation system. This evaluation should be based on planned improvements identified in the *Capital Improvement Plan (CIP),* the *Comprehensive Plan,* and/or the *Long-Range Transportation Plan.* These plans shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 4.3: Minimize Traffic Diversion

Discourage the diversion of traffic to or from medium- and higher-density residential developments onto local residential street/roads through low-density residential neighborhoods.

Policy 4.4: Ensure Adequate Ingress and Egress

Adequate ingress and egress for residential developments should strive to provide a minimum of two access points.

Policy 4.5: Limit Access

Lot access and street/road configurations should be designed to avoid curb cuts and local street/road intersections on arterial street/roads and coordinate access with adjacent developments.

Policy 4.6: Provide Vehicular Circulation

Medium- and higher-density residential developments should provide internal vehicular circulation.

Policy 4.7: Provide Pedestrian Access

a. Provide sidewalks on one side of local street/roads (public and private) and both sides of collector and arterial street/roads.

b. Provide pedestrian access linking dwelling units to neighborhood facilities while ensuring physical separation from vehicles along both public and private street/roads and within parking areas.

Policy 4.8: Provide Bicycle Access

a. Include bicycle access within medium- and higher-density developments.

b. Provide bicycle links between major activity generators within the community

Commercial Land Use

CHAPTER SIX - COMMERCIAL LAND USE

The Plan's goal is to strengthen and reinforce the role and function of existing commercial areas within Lawrence and Douglas County and promote economically sound and architecturally attractive new commercial development and redevelopment in selected locations.

STRATEGIES: COMMERCIAL DEVELOPMENT

The principal strategies for the development and maintenance of commercial land use areas are:

- Support downtown Lawrence as the Regional Retail/Commercial/Office/Cultural Center with associated residential uses through the careful analysis of the number, scale, and location of other mixed-use commercial/retail developments in the community. Downtown Lawrence is the cultural and historical center for the community and shall be actively maintained through implementation of the adopted design guidelines that regulate the architectural and urban design character of this regional center.

- Establish and maintain a system of commercial development nodes at selected intersections which provide for the anticipated neighborhood, community and regional commercial development needs of the community throughout the planning period.

- Require commercial development to occur in "nodes", by avoiding continuous lineal and shallow lot depth commercial development along the city's street corridors and Douglas County roads.

- Encourage infill development and/or redevelopment of existing commercial areas with an emphasis on Downtown Lawrence and existing commercial gateways. Sensitivity in the form of site layout and design considerations shall be given to important architectural or historical elements in the review of development proposals.

- Improve the overall community image through development of site layout and accessibility plans that are compatible with the community's commercial and retail areas.

- Require new Commercial Centers in the unincorporated portion of Douglas County to be located at the intersection of two hard surfaced County Routes or the intersection of a hard surfaced county route and a state or federally designated highway and no closer than four miles to another Commercial Center in the unincorporated portion of Douglas County.

NODAL DEVELOPMENT

The Goals and Strategies in this chapter center on the Nodal Development Concept for new commercial development and the definitions of the four different categories of commercial nodes: Neighborhood, CC200, CC400, CC600, and Regional Commercial. The Nodal Development Concept encompasses all four corners of an intersection, although all four corners do not need to be commercially developed. The concept of nodal development shall also be applied to the redevelopment of existing commercial areas when the redevelopment proposal enlarges the existing commercial area. The following text provides a detailed description of the appropriate uses and development patterns for each respective category of commercial development.

Nodal Development is the antithesis of "Strip Development". "Strip Development" is characterized by high-intensity, auto-oriented uses, shallow in depth and extending linearly along a street corridor, with little consideration given to access management and site aesthetics. The Nodal Development concept requires the clear termination of commercial development within near proximity of an intersection. Commercial development that does not occur directly at the corner of an intersection must be integrated, through development plan design and platting with the property that is directly at the intersection's corner. Termination of commercial development can be accomplished through a number of methods, including: 1) Placement of transitional uses, such as office and multi-family to buffer the adjoining neighborhood from the commercial area; 2) restricting the extension of new commercial uses past established commercial areas; and 3) defining the boundaries of the development through the use of "reverse frontage" roads to contain the commercial uses.

DESIGN STANDARDS

The city shall strive to improve the design of shopping areas. The objective will be to work with commercial developers to achieve compact, pedestrian-oriented centers versus conventional strip malls. The overall goal of these standards is to improve community aesthetics, encourage more shopping per trip, facilitate neighborhood identification and support, and make shopping an enjoyable event.

New design standards shall be developed and adopted which better integrate the centers into the surrounding neighborhoods and create a focal point for those that live nearby. They should include elements that reflect appropriate and compatible site design patterns and architectural features of neighboring areas. Site design and building features shall be reflective of the quality and character of the overall community and incorporate elements familiar to the local landscape. Using a variety of building incentives to encourage mixed use development will bring consumers closer to the businesses

Design elements of particular interest that will receive close scrutiny include:

1. Site design features, such as building placement, open space and public areas, outdoor lighting, landscaping, pedestrian and bicycle amenities, interfacings with adjacent properties, site grading and stormwater management, parking areas and vehicular circulation (including access management).

2 Building design features, such as architectural compatibility, massing, rooflines, detailing, materials, colors, entryways, window and door treatments, backsides

of buildings, service/mechanical/utility features and human-scale relationships.

COMMERCIAL CENTER CATEGORIES

The Comprehensive Plan includes recommendations for the improvement of existing commercial areas and the development of compatible new commercial areas. It establishes a system of commercial and retail development that applies to both existing and new development locations. This system involves the designation of different types of commercial areas to distinguish between the basic role and types of land uses and the scale of development. These include the neighborhood, community and regional commercial classifications. The following descriptions are based upon recognized standards formulated by the Urban Land Institute (ULI) and knowledge gathered by the community through past experiences.

An integral component in the description of each commercial center category is the designation of an amount of commercial gross square footage deemed appropriate for each center classification. However, this plan recognizes that there will be instances in which a rezoning request for a commercial district will not be accompanied by a development plan showing the total amount of gross square footage associated with the rezoning request. In such circumstances, part of the commercial rezoning request shall include a statement regarding the maximum amount of commercial square footage that will be permitted with each particular commercial rezoning request.

■ *Commercial Uses*

For the purposes of this section of the Plan, the term "commercial" means retail businesses as defined as one whose primary coding under the North American Industrial Classification System (NAICS) falls into at least one of the following sectors:

1. Sector 44-45: Retail Trade;
2. Subsector 722: Food Services and Drinking Places;
3. Subsector 811: Repair and Maintenance; and
4. Subsector 812: Personal and Laundry Services

■ *Downtown Commercial Center*

The Downtown Commercial Center is the historic core of governmental, commercial, institutional, social and cultural activity. Transitions to adjacent neighborhoods are traditionally provided through alleyways or landscaping improvements rather than a change in use or density. The Downtown Commercial Center is restricted to the historic commercial core of Lawrence. The boundaries of Downtown Lawrence correspond with the boundaries outlined in the "Comprehensive Downtown Plan", and are described as: *starting at the Kansas River, south along Kentucky Street to just south of Vermont Towers, then east to Vermont Street, south along Vermont Street to North Park Street, east along North Park Street to Rhode Island Street, north along Rhode Island Street to 11th Street, west along 11th Street to the alley east of New Hampshire Street, north along the New Hampshire Street alley to 9th Street, east on 9th Street to Rhode Island Street, then north on Rhode Island Street to the Kansas River*.

The Downtown Commercial Center is the Regional Retail/Commercial/Office/Cultural Center for the community and is considered a destination driver that attracts and serves the area beyond that of the local community. The Downtown Commercial Center has an established

development and architectural/urban design pattern. Unique among commercial centers in Lawrence, the Downtown Commercial Center combines a variety of land uses, including governmental, retail, office, public facilities, institutions, churches, and residential. Linear in design, the Downtown Commercial Center is focused along Massachusetts Street with New Hampshire and Vermont Streets serving as secondary activity areas. General building patterns are urban. Mixed-use, multi-story buildings are the most common building form and parking is provided on-street and through community parking lots and parking structures.
Building designs and public improvements are focused on providing a pedestrian-oriented commercial experience. Massachusetts Street has a distinct streetscape with sawtooth parking and a focus on first floor (pedestrian oriented) retail use. Vermont and New Hampshire Streets provide the major vehicular movement patterns and provide access to the majority of the community parking areas. Alleyways, which provide service access, are one of the main character-defining elements that distinguish the Downtown Commercial Center from other commercial centers. To ensure there are a variety of commercial uses, the maximum footprint for an individual store is limited to approximately 25,000 gross square feet. One of the keys to the success of the Downtown Commercial Center is the ability to provide a wide range of leasable square footage that is both flexible and capable of being tailored to a specific use. Construction within the Downtown Commercial Center is regulated by a set of design guidelines administered through an Urban Conservation Overlay Zoning District.

An important ingredient to ensuring the continued viability of Downtown is keeping it the center of the city's social and institutional activities. To maintain downtown as the city and County's hub of governmental functions; uses and buildings such as City Hall, the County Courthouse, Municipal Library, Douglas County Senior Center, Fire/Medical Department's Main Office, Police and Sheriff Offices, the Municipal Pool and the Municipal and District Courts shall remain located in Downtown.

■ *Neighborhood Commercial Centers*

The typical nodal development concept for Neighborhood Commercial Centers includes commercial on only one corner of an arterial/collector street intersection or arterial/arterial street intersection. The remaining corners are appropriate for a variety of other land uses, including office, public facilities and high density residential. Commercial development shall not be the dominant land use at the intersection or extend into the surrounding lower-density residential portions of the neighborhood. The surrounding residential area shall be provided adequate buffering from the commercial uses through transitional zoning or lower-intensity developments. Transitions shall be accomplished by using a number of methods, such as intensive landscaping and berming, grouping of lower-intensity developments, incorporation of existing natural land features into site layout and design (ex. open space along a creek), or a combination of these methods.

Neighborhood Commercial Centers may contain a variety of commercial uses, including a grocery store, convenience store, and other smaller retail shops and services such as a barbershop or beauty salon. To insure there are a variety of commercial uses and that no one use dominates a Neighborhood Commercial Center, no one store shall occupy an area larger than 40,000 gross square feet. The only exception is a grocery store, which may occupy an area up to 80,000 gross square feet.

A Neighborhood Commercial Center provides for the sale of goods and services at the neighborhood level. Neighborhood Commercial Centers shall contain no more than a total of

100,000 gross square feet of commercial space with the exception of Neighborhood Commercial Centers that include a grocery store. Neighborhood Commercial Centers that have a grocery store larger than 60,001 gross square feet may have up to a total of 125,000 gross square feet of commercial space.

To ensure that the commercial area in a new Neighborhood Commercial Center has adequate lot size and depth, any proposal for a commercial development shall have a length-to-depth ratio between 1:1 and 3:2.

In order to facilitate the orderly development of future commercial nodes, Lawrence shall attempt to complete "nodal plans" for each future commercial center in advance of development proposals.

If a nodal plan had not been created by the city, the need to create a nodal plan for a specific intersection shall be "triggered" by the first development request (rezoning, plat, preliminary development plan, etc.) submitted to the Planning Department for any portion of the node. The creation of the nodal plan may involve input from landowners within the nodal area, adjoining neighborhoods and property owners, and appropriate local and state entities. The appropriate governing body (City or County Commission) shall approve the nodal plan before development approval within the nodal area can move forward.

- ***Mixed-Use Redevelopment Center***

The City of Lawrence includes areas where existing structures that have not been utilized for their original purposes for an extended period of time, have experienced a high turnover rate, or have remained vacant for an extended period of time and, therefore, are suitable for redevelopment. Such areas present potential opportunities for redevelopment into mixed-use centers, offering a mix of residential, civic, office, small-scale commercial, and open space uses. This mixed use is encouraged in individual structures as well as throughout the area.

Mixed-use redevelopment centers shall include a mix of uses designed to maintain the character of the surrounding neighborhood, achieve integration with adjacent land uses, and be no larger than six acres in size. As such, retail uses within mixed-use redevelopment centers shall not exceed 25% of the net floor area within the subject area, and a single retail shop or tenant shall not occupy more than 16,000 square feet of a ground-floor level, net floor area. Neighborhood integration shall also be accomplished by providing transitions through alleyways and use and landscaping buffers, and by ensuring existing structures are incorporated into the new center where possible. New development shall respect the general spacing, mass, scale, and street frontage relationships of existing structures and surrounding neighborhoods. The City's Historic Resources Administrator shall be contacted if it is likely that historic structures exist within or near the project area.

Centers shall provide multi-modal services, allowing bicycle, pedestrian, vehicular, and, if available, transit options. Pedestrians should be able to navigate the site safely and efficiently, and travel to and from the site with ease. Pedestrian-scaled street furnishings, plantings, and gathering places shall be utilized to allow for social activity in public places. Bicycle parking shall be provided when required by the Zoning Regulations, and transit services shall be incorporated into the design where necessary.

■ *Mixed-Use Districts*

The City of Lawrence includes areas where infill and new development opportunities exist that would appropriately be developed or redeveloped as a mixed-use district. Such areas present potential opportunities for development and redevelopment as mixed-use districts, offering a mix of residential and non-residential uses. This mixed use is encouraged in individual structures as well as throughout the area. There are also areas that are currently mixed use in nature that should be preserved.

Mixed-use districts shall include a mix of uses designed to maintain the character of the surrounding neighborhood, achieve integration with adjacent land uses, and be no larger than 20 acres in size. Neighborhood integration may also be accomplished by providing transitions through alleyways, variation among development intensity, implementation of landscaping buffers, or by ensuring existing structures are incorporated into the development where possible. New development shall respect the general spacing, mass, scale, and street frontage relationships of existing structures and surrounding neighborhoods. The City's Historic Resources Administrator shall be included in the review process if it is likely that historic structures exist within or near the project area.

Mixed use districts shall provide multi-modal services, allowing bicycle, pedestrian, vehicular, and transit options. Pedestrians should be able to navigate the site safely and efficiently, and travel to and from the site with ease. Pedestrian-scaled street furnishings, plantings, and public spaces shall be planned to be utilized to allow for social activity. Bicycle parking shall be provided when required by the Zoning Regulations, and transit services shall be incorporated into the design where necessary.

■ *Inner-Neighborhood Commercial Centers*

A subcategory of this section is Inner-Neighborhood Commercial Centers. Typically, this is an existing commercial area within an established neighborhood. Existing Inner-Neighborhood Commercial Centers are located at:

- Southeast corner of 12th Street and Connecticut Street
- West side of the intersection of 14th Street and Massachusetts Street
- Intersection of N. 7th Street and Locust Street
- 6th Street between Indiana Street and Mississippi Street
- E. 9th Street corridor starting at Rhode Island and going east
- Northeast corner of Barker Street and 23rd Street
- 7th Street and Michigan Street.
- Northeast corner of 13th and Haskell

Redevelopment of these existing Inner-Neighborhood Commercial Centers should be facilitated through the use of alternative development standards that allow for reductions in required parking, open space, setbacks, lot dimensions and other requirements that make it difficult to redevelop existing commercial areas

■ *Community Commercial Center*

A Community Commercial Center provides goods and services to several different neighborhood areas. It requires a site of sufficient size to accommodate buildings, parking, stormwater detention and open space areas. Although it may include a food or drug store, it is likely to provide a broad range of retail uses and services that typically generate more traffic and require larger lot sizes then found in a Neighborhood Commercial Center. Community Commercial Center uses may include hardware stores, video outlets, clothing stores, furniture stores, grocery store, movie theaters, home improvement stores, auto supply and services, athletic and fitness centers, indoor entertainment centers, etc.

Community Commercial Center (under 200,000 square feet): CC200

The primary purpose of the CC200 category is to provide for the expansion and redevelopment of existing Community Commercial Centers. However, a new CC200 Center can be designated. Expansion of an existing CC200 Center shall not intrude into surrounding residential areas or lower-intensity land uses. Any proposal for commercial expansion or redevelopment occurring in an area designated as a CC200 Center shall include a plan for reducing curb cuts, improving pedestrian connections, providing cross access easements to adjacent properties, and creating and/or maintaining buffering for any adjacent non-commercial uses.

All corners of CC200 Center intersections should not be devoted to commercial uses. CC200 Centers should have a variety of uses such as office, employment-related uses, public and semi-public uses, parks and recreation, multi-family residential, etc.

To insure that there are a variety of commercial uses and that no single store front dominates the CC200 Center, no individual or single store shall occupy more than 100,000 gross square feet. A general merchandise store (including discount and apparel stores) that does not exceed 65,000 gross square feet in size may be located in a CC200 Center. The sum of the gross square footage for all stores that occupy space between 40,000 and 100,000 cannot exceed 50 percent of the gross commercial square footage for the corner of the intersection where it is located. To provide adequate access and adequate circulation, CC200 Centers shall be located at an arterial/collector street intersection or arterial/arterial street intersection.

CC200 Centers shall be located with primary access designed to occur from arterial or collector streets, with secondary access occurring from neighborhood feeder streets or reverse frontage roads. The purpose of the secondary access is to collect internal neighborhood traffic so that accessibility from the adjoining neighborhoods does not require exiting the neighborhood to access community shopping. These secondary access points are intended only for neighborhood traffic. The surrounding street design shall be done in a manner to discourage access to the Commercial Center by non-neighborhood traffic. Pedestrian and bike connection to the neighborhood shall be emphasized along the secondary routes.

In order to facilitate the orderly development of future commercial nodes, Lawrence shall attempt to complete “nodal plans” for each future commercial center in advance of development proposals.

In the absence of a city created nodal plan, the need to create a nodal plan for a specific

intersection will be "triggered" by the first development request (rezoning, plat, preliminary development plan, etc.) submitted to the Planning Department for any portion of the node. The creation of the nodal plan may involve input from landowners within the nodal area, adjoining neighborhoods and property owners, and appropriate local and state entities. The appropriate governing body (City or County Commission) shall approve the nodal plan before approval of the development within the nodal area can move forward.

Community Commercial Center (under 400,000 square feet): CC400

The second category of Community Commercial Centers is the CC400 Center. Although these centers usually average 150,000 gross square feet, they may be as large as 400,000 gross square feet of retail commercial space if justified by an independent market study. CC400 Centers shall be located at the intersection of two arterial streets that have at least a four-lane cross-section or the intersection of a four-lane arterial with a state or federally designated highway.

CC400 Centers shall be located with primary access designed to occur from arterial or collector streets, with secondary access occurring from neighborhood feeder streets or reverse frontage roads. The purpose of the secondary access is to collect internal neighborhood traffic so that accessibility from the adjoining neighborhoods does not require exiting the neighborhood to access community shopping. These secondary access points are intended only for neighborhood traffic. The surround street design shall be done in a manner to discourage access to the Commercial Center by non-neighborhood traffic. Pedestrian and bike connection to the neighborhood shall be emphasized along the secondary routes.

The nodal development concept for CC400 Centers includes the possibility of commercial development on more than one corner of an intersection. The non-commercial corners of a community commercial node are appropriate for a variety of non-commercial retail uses including office, public or religious facilities, health care, and medium- to high-density residential development. Community Commercial development shall not extend into the surrounding lower-density residential portions of neighborhoods. The adjoining residential area shall be provided adequate buffering from the commercial uses through transitional zoning or development. Transitions may be accomplished by using a number of methods, including extensive landscaping and berming, grouping of lower-intensity uses, incorporation of existing natural land features into site layout and design (ex. open space along a creek), or a combination of these methods.

To insure that a specific intersection complies with the CC400 Center nodal standards, a nodal plan for each new CC400 Center must be created. The nodal plan will define the area of the node and provide details including: 1) existing natural features; 2) appropriate transitional uses; 3) appropriate uses for each specific corner of the intersection; 4) access points for each corner; 5) necessary infrastructure improvements; 6) overall flow of traffic in and around the node and the surrounding area; and 7) any other necessary information.

A key element to a nodal plan is the designation of the appropriate uses for each corner of the node, which shall be governed by the above-listed details. Those details will be used to analyze a potential node. The analysis of the node may readily reveal the appropriate use for each specific corner. However, the analysis may reveal that no one use is appropriate for each specific corner, but instead a variety of uses may be considered appropriate for a specific

corner. In a situation where all the corners maybe considered appropriate for commercial uses, the location of the commercial space will be dictated by the timing of the development application and the development standards located in this chapter.

In order to facilitate the orderly development of future commercial nodes; Lawrence shall attempt to complete "nodal plans" for each future commercial center in advance of development proposals.

If the city has not created a nodal plan, the need to create a nodal plan for a specific intersection will be "triggered" by the first development request (rezoning, plat, preliminary development plan, etc.) submitted to the Planning Department for any portion of the node. The creation of the nodal plan may involve input from landowners within the nodal area, adjoining neighborhoods and property owners, and appropriate local and state entities. The appropriate governing body (City or County Commission) shall approve the nodal plan before approval of the development within the nodal area can move forward.

At least 95 percent of the commercial gross square footage in a new CC400 Center shall be located on two corners of the intersection. The remaining five percent shall be located on one of the remaining two corners. To comply with the square footage maximum for a CC400 Center and to ensure that the commercial area has adequate lot size and depth, any commercial development proposal for a single corner shall have a length-to- depth ratio between 1:1 and 3:2 and be a minimum of 20 acres in size. Proposals in which the commercial gross square footage is less than ten percent of the total square footage of the proposal do not have to meet the minimum acreage and lot length-to-depth ratio requirements.

No one store in a CC400 Center shall occupy more than 175,000 gross square feet. The sum of the gross square footage for all stores that occupy space between 100,000 gross square feet and 175,000 gross square feet shall not exceed 70 percent of the gross commercial square footage for the corner of the intersection. If a proposal for a corner of the intersection includes more than 100,000 gross square feet of commercial space, the proposal shall include a single store building that has at least 40,000 gross square feet of commercial space.

Community Commercial Center (under 600,000 square feet): CC600

The third category of Community Commercial Centers is the CC600 Center. The primary purpose of the CC600 center is to provide opportunities for development of new Community Commercial Centers for fringe areas as neighborhoods grow and develop,

These centers allow a maximum of 600,000 square feet of commercial retail space and shall be located at the intersection of two state or federally designated highways. Other uses of a non-retail nature do not have a space limitation. A maximum of 90 percent of the commercial retail square footage in a CC600 center shall be located on two corners of the intersection. The remaining 10 percent shall be located on one or both of the remaining two corners.

CC600 centers should be developed in a nodal development pattern and be part of a specific land use plan that includes the node. The nodal plan shall also address surrounding land uses and provide for adequate transitioning of uses.

■ *Regional Commercial Centers*

A Regional Commercial Center may provide the same services as a Community Commercial Center but should provide a greater variety and number of general merchandise, apparel and furniture stores, among other tenants. Because of the overall scale and mix of uses, a regional retail commercial center attracts and serves a population greater than and beyond that of the community.

The minimum area for a commercial development plan on any corner is 40 acres and the minimum street frontage is 1,400 linear feet. This will ensure a new Regional Commercial Center is capable of development with the critical mass mixture, including sites for multiple big box buildings, required parking, stormwater detention, and open space areas. A Regional Commercial Center node shall not contain more than 1.5 million gross square feet of retail commercial space. The only location for the next Regional Commercial Center is at the intersection of either two state or federal highways, or the intersection of a street identified on the Major Thoroughfares Map as an arterial street and a state or federal highway.

Development of another Regional Commercial Center will have significant impacts on the Lawrence/Douglas County community and its existing retail centers, and will place increased service demands on the community's infrastructure system. Due to these impacts, consideration of a Regional Commercial Center by the Planning and City Commissions shall utilize the best available information in the analysis, public hearing and decision making process. Therefore, when the next Regional Commercial Center is proposed, an independent market analysis shall be required at the review and analysis stage and prior to public hearing. The entity proposing the Regional Commercial Center shall provide the funds necessary for the city to hire an independent consultant, selected by the applicant from a list of approved consultants established by the city, to perform the market analysis study.

The market analysis study shall be required, at a minimum, to analyze the proposed Regional Commercial Center based on the following criteria: 1) the overall viability of the commercial proposal and the impact of the proposal on the economic vitality and health of the community in the form of impacts on existing commercial centers; 2) the appropriate phasing or timing of development of the ultimate center size based on the community's ability to absorb additional commercial square footage over a three year period; 3) a comparison of the private costs versus public infrastructure and services costs to develop the commercial center proposed; and 4) other factors identified as relevant impacts on the market by either the developer or the city. The three year time period is a typical cycle for a commercial development to go from a concept to the opening of a store.

As with the Community Commercial Center, in order to insure that a specific intersection complies with the Regional Commercial Center nodal standards, a nodal plan for a new Regional Commercial Center shall be created. The nodal plan shall define the area of the node and provide details, including: 1) existing natural features; 2) appropriate transitional uses; 3) appropriate uses for each specific corner of the intersection; 4) access points for each corner; 5) necessary infrastructure improvements; 6) overall flow of traffic in and around the node and the surrounding area; and 7) any other necessary information.

A key element to a nodal plan is the designation of the appropriate uses for each corner of the node, which shall be greatly governed by the above-listed details. Those details will be used to

analyze a potential node. The analysis of the node may readily reveal the appropriate use for each specific corner. However, the analysis may reveal that no one use is appropriate for each specific corner, but instead a variety of uses may be considered appropriate for a specific corner. In a situation where all the corners may be considered appropriate for commercial uses, the location of the commercial space will be dictated by the timing of the development application and the development standards located in this chapter.

If the city has not created a nodal plan, the need to create a nodal plan for a specific intersection shall be "triggered" by the first development request (rezoning, plat, preliminary development plan, etc.) submitted to the Planning Department for any portion of the node. The creation of the nodal plan may involve input from landowners within the nodal area, adjoining neighborhoods and property owners, and appropriate local and state entities. The appropriate governing body (City or County Commission) shall approve the nodal plan before development approval within the nodal area can move forward.

■ *Existing Strip Commercial Developments*

Existing strip commercial development areas are characterized by developments that do not meet current standards for lot dimensions and area, lot frontage, curb cut location(s), or the presence of internal frontage roads for cross access. These areas developed at a time when development standards permitted smaller lots, shallower lot depth, minimum spacing between curb cuts and multiple access points from a site to an arterial street; traffic studies were also not required prior to development at that time. These strip commercial development areas have become obsolete as a result of their inability to adjust to increased traffic volumes and congestion, current needs for site area and depth for redevelopment, and the changing patterns of shopping of the motoring public. As these strip areas become less desirable locations, the ability to redevelop individual lots becomes a matter of both property owner and community concern. The community concern is primarily with the creation of vacant, undeveloped or underdeveloped commercial areas that have the potential to blight the city's gateways.

A combination of innovative tools should be developed to assist owners of lots within the existing strip development areas to redevelop. These tools need to include regulations that provide accommodations for shallow lot depth, the combination of lots and access points, and the creation of cross access between lots to minimize the need for individual lot access to arterial streets. In addition, other tools of a policy nature which would be helpful to redevelopment need to be considered and, where appropriate, adopted by the appropriate governing bodies. These tools may include the ability for establishment of public/private partnerships, special overlay districts, modified development standards for redevelopment based on an adopted redevelopment plan, tools to assist in lot consolidation and purchase, adopted access management plans and access point relocations, special benefit districts for sidewalks and public transportation stops, assistance in acquiring cross access easements, and similar tools providing community benefit.

Existing Strip Commercial Development areas shall not be permitted to expand or redevelop into the surrounding lower-intensity areas. Redevelopment within Strip Commercial Development areas shall be approved only when the redevelopment complies with any adopted redevelopment plan or access management plan for the area. Cross access easements and curb cut consolidation should be considered a standard element of any redevelopment plan, as shall a solid screen or buffer along all property lines that adjoin residentially zoned or developed

areas.

■ *Auto-Related Commercial Centers*

A unique type of commercial development is an Auto-Related Commercial Center. These centers include a wide variety of uses such as auto sales and repair, restaurants, hotels, and other similar uses that attract a large amount of the traveling public. However, these uses are not limited to Auto-Related Commercial Centers. A common feature of all these uses is that they typically have a small amount of commercial square footage under roof, but require a large amount of acreage for parking or sales display.

Because these centers have a limited variety of uses and a relatively small amount of commercial square footage, Auto-Related Commercial Centers do not fit within the definition of a Community or Regional Commercial Center. These types of centers are very intensive and therefore need to be directed to areas that have an ability to handle the intensive nature of an Auto-Related Commercial Center.

Auto-Related Commercial Centers shall be located at the intersection of two state or federally designated highways. To ensure that the Auto-Related Commercial Centers develop in a planned manner that provides a positive benefit to the community, Auto-Related Commercial Centers shall have a lot length-to-depth ratio between 1:1 and 3:2 and must be a minimum of 20 acres in size.

All the potential locations of an Auto-Related Commercial Center are in areas that serve as "gateways" into the city. Since they are in "gateway" areas, any proposal for an Auto-Related Commercial Center shall be closely scrutinized for architectural appearance, landscaping, signage, etc.

■ *Recreational Uses*

Commercial uses that are primarily physical recreation in nature (uses such as go-karts, skating rinks, bowling alleys, basketball arenas, soccer arenas, miniature golf, pitch and putt golf, etc.) may be located in the appropriate Commercial Center classification. High levels of noise and light can be generated by Recreational Uses. Because of this high level of noise and light, Recreational Uses shall be compatible with the surrounding existing or planned uses. Proposals for such uses do not need to meet the size or ratio requirements stated in the respective Commercial Center definitions. Proposals for Recreational Uses shall provide adequate buffering for adjacent non-commercial uses, shall use a minimal number of curb cuts, and provide cross access easements to adjoining properties.

If a Recreational Use is proposed in a Neighborhood or CC200 Center, the amount of commercial gross square footage occupied by the Recreational Use shall be counted toward the maximum amount of commercial gross square footage allowed. A Recreational Use located in a CC200 can occupy up to 50,000 gross square feet. The purpose of regulating the size of Recreational Uses in Neighborhood and CC200 Centers is to preserve and protect the smaller, neighborhood scale associated with these types of Centers.

The amount of commercial gross square footage occupied by Recreational Uses located in a CC400 or a Regional Commercial Center shall not be counted toward the maximum amount of

gross commercial square footage allowed in the respective Commercial Center. The square footage of a Recreational Use is not included in the total commercial square footage because CC400 and Regional Commercial Centers are typically larger-scale commercial developments. This reduces the impact of the Recreational Use on the scale and massing of the CC400 or Regional Center.

The acreage used to accommodate a Recreational Use may be used to meet the minimum acreage requirements for a respective Commercial Center, if the Recreational Use and additional commercial uses at the corner of the node are integrated together.

Community facility-type recreational facilities can be located in non-commercial areas if given the extra scrutiny that is associated with the issuance of a special permit such as a Special Use Permit.

LAWRENCE - EXISTING COMMERCIAL AREAS

Lawrence currently has a number of commercial and retail development areas:

- Downtown Lawrence
- N. 2nd Street and N. 3rd Street
- Iowa Street (Harvard Street to W. 6th Street)
- S. Iowa Street (23rd Street to the South Lawrence Trafficway)
- W. 23rd Street (Iowa Street to the existing commercial development east of Louisiana Street)
- E. 23rd Street (Learnard Street to Harper Street)
- W. 6th Street (Alabama Street to Iowa Street)
- W. 6th Street (Iowa Street to Kasold Drive)
- W. 6th Street and Monterey Drive
- W. 6th Street and Wakarusa Drive
- Clinton Parkway and Kasold Drive
- Clinton Parkway and Wakarusa Drive
- 19th Street and Massachusetts Street
- 19th Street and Haskell Drive
- 15th Street and Kasold Drive
- 15th Street and Wakarusa Drive
- 9th Street (Kentucky Street to Mississippi Street)

Existing commercial areas in Lawrence will need to be upgraded in the future to remain viable in the marketplace. The Plan calls for the incremental improvement of these existing developments through the addition of landscaping and aesthetic improvements as uses change. Some existing developments may be converted to other uses as needs change within the community. Specific land use recommendations for the existing commercial development areas are provided below.

- *Downtown Lawrence*

Throughout the development of this Plan, the need to preserve, improve and enhance Downtown Lawrence has been shown to have broad community support. Goals and policies in

the Plan are written to ensure Downtown Lawrence remains competitive and viable as a Regional Retail Commercial Center. Downtown Lawrence shall remain the Regional Retail/Commercial/Office/Cultural Center because it is: 1) a physical and cultural symbol of the strength of the community; 2) a gathering point for many civic and cultural functions; 3) the "historic core" of the community which establishes a vital continuity between the past and the present community; and 4) the site of major public and private investment.

The Comprehensive Downtown Plan reiterates the specific functions of a downtown. These functions include provisions for a retail core, office space, entertainment services, peripheral residential development, cultural facilities (including performing arts, museums and libraries) community social needs (including club and organizational meeting facilities), government offices and facilities, health services, convention and hotel facilities. The Comprehensive Downtown Plan also states this area should provide, "the economic, physical and aesthetic environment around which the populace can develop an intense pride in the community, a focal point for identification and drawing together for common interests, a meeting place where people can communicate and relax -- the heart of the city".

To distinguish Downtown Lawrence from other commercial and retail areas, and to preserve and enhance its role in the community, Downtown Lawrence is designated as the Regional Retail/Commercial/Office/Cultural Center and shall be the only location within the planning area developed for such use. Gateways to Downtown Lawrence should be emphasized and enhanced to contribute to the "sense of place" of this unique area of the community.

The distinction as the Regional Retail/Commercial/Office/Cultural Center, above and beyond other commercial areas within the community, is significant. Downtown Lawrence serves the greater needs of the community as a focal point for social, community and governmental activities. The Plan's goals and policies encourage the continued development of a broad mix of uses in downtown Lawrence with an emphasis on retail as a major land use. It is vital to the community's well-being that Downtown Lawrence remain the viable Regional Retail Commercial Center.

For Downtown Lawrence to remain economically stable and vital there is a need to expand the boundaries beyond the current configuration illustrated in the adopted Comprehensive Downtown Plan. This anticipates the need to provide additional parking areas and locations for commercial and public-related development in the future. At this time, the Comprehensive Plan does not recommend areas for downtown expansion, but opportunities for expansion and redevelopment do exist within the current boundaries of Downtown Lawrence. Action to expand Downtown Lawrence can only be reasonably undertaken following a comprehensive re-evaluation of downtown needs, assets, growth potentials, use mix, and preferred locations for conservation and development. Re-study of the Comprehensive Downtown Plan should explore the following options to improve Downtown Lawrence: development of a comprehensive parking plan and implementation schedule, evaluation of transportation options, improvement of access to downtown from the east, west and south, and inclusion of more uses along the river and integration of these developments into downtown.

- ***N. 2nd Street and N. 3rd Street***

The Comprehensive Plan recommends that N. 2nd Street and N. 3rd Street play an enhanced role in the community as a commercial corridor, acting as an important entryway/gateway to

Lawrence. This corridor is considered to be an Existing Strip Commercial area. The Comprehensive Plan identifies the intersection of the N. 3rd Street and I-70 as a possible location for an Auto-Related Commercial Center.

Marginal, obsolete and underutilized sites and incompatible uses along this corridor should be redeveloped or reconstructed. For example, existing heavy industrial uses along the northern portion of the corridor should be relocated within the planning area and the sites redeveloped with compatible commercial, service or retail uses. New development and redevelopment shall include improved parking, signage and landscaping improvements that enhance the overall aesthetic and environmental conditions along the corridor. The city should encourage and work with land owners to undertake property improvement within the area. The city should consider special financing mechanisms, such as benefit districts or tax increment financing to assist in private and public improvement projects for the area.

Historically, the North Lawrence area including the N. 2nd and N. 3rd Street corridor has had repeated floodwater and stormwater problems. The Comprehensive Plan recommends that a comprehensive drainage study be completed as soon as possible and before any additional new development occurs along the N. 2nd Street and N. 3rd Street corridor. The study shall be a joint project between the city and private property owners. The drainage study shall provide a plan for addressing existing flooding and stormwater problems, as well as devising a plan for dealing with additional runoff from future development in the area.

- ***N. Iowa Street (Harvard Road to W. 6th Street)***

N. Iowa Street is considered an existing Community Commercial Center limited to 200,000 square feet of commercial gross square footage (CC200 Center). The N. Iowa Street area includes a variety of independent developments and the Hillcrest Shopping Center. Most parcels within the northern segment are already developed. Future development and redevelopment shall occur within the existing commercially zoned areas and shall emphasize coordinated access control and transition yard improvements with adjoining residential areas.

- ***S. Iowa Street (23rd Street to K-10)***

S. Iowa Street is considered an existing Regional Commercial Center. S. Iowa is a strip development that is intensely development between 23rd Street and K-10. The corridor connects with existing commercial development along 23rd Street. With recent development at the northeast corner of 31st Street and Iowa Street, and the location of several discount stores in close proximity to one another, this commercial corridor has evolved into a Regional Commercial Center, serving regional shopping and entertainment needs.

K-10 provides a physical barrier and edge to the commercial corridor that has developed. Additional retail commercial uses shall not occur south of the highway, except for the possible location of an Auto-Related Commercial Center. Two of the four corners of the intersection have existing auto-related uses. Located at the northwest corner is a hotel and an automobile dealership is located on the northeast corner. Because of access to two major highways (K-10 and US-59) the area south of K-10 could be a location for an Auto-Related Commercial Center. Both corners are an appropriate location for an Auto-Related Commercial Center, provided that the floodplain issues for the southwest corner can be addressed.

In general, development and redevelopment along the Iowa Street segment shall emphasize consolidated access, frontage roads, coordinated site planning and design, and high quality development. Development signage should be in scale with sites and should complement and not compete with signage of adjoining parcels. Improved landscaping would enhance the visual appeal of the corridor. Landscaped transition yards should be established between residential and non-residential uses.

- ***W. 23rd Street (Iowa Street to the existing commercial development east of Louisiana Street)***

The W. 23rd Street corridor is an Existing Strip Commercial area. The commercial development along W. 23rd Street is the prototypical "strip development" that is centered on the automobile. This area was once considered to be one of Lawrence's most desirable locations for a retail business. However, the status of the W. 23rd Street corridor as a highly desirable retail location has been supplanted by retail developments at South Iowa and in the western portion of the city.

The 23rd Street corridor will remain an important commercial location in the city. For the segment of the corridor between S. Iowa Street and Tennessee Street, the Plan emphasizes visual site improvements related to signage, landscaping and development design. A key factor in the long-term stability of this area is the improvement of traffic access and operations as properties along this corridor redevelop. If access and circulation are not simplified and the area made comfortable to the motorist, shoppers may seek other portions of the community in which to do business. In cooperation with property owners, the city should undertake parkway landscaping improvements. This action, coupled with placing utility lines underground (wherever practical), will help to improve the physical image of the area. All new development or redevelopment occurring along this corridor shall be required to consolidate curb cuts and provide access easements to adjoining properties.

Landscape and screening improvements between commercial and residential areas are particularly important along this segment where development is compact and differing land uses are situated in close proximity.

- ***E. 23rd Street (Learnard Street to Harper Street)***

E. 23rd Street is an Existing Strip Commercial Development. Redevelopment and infill opportunities are available along the entire corridor and are emphasized along the older commercial segment of 23rd Street, east of the Santa Fe Railroad. This area has historically been a "fringe location" and has not been developed as intensively as the western section of 23rd Street. The Comprehensive Plan recommends the area maintain a community commercial focus. A substantial amount of property exists between Haskell Avenue and Harper Street that should be redeveloped to geographically balance commercial development occurring in other areas of the community. The area should become more retail and office in orientation. Future development and redevelopment shall include parcel consolidation and re-subdivision to establish properly sized and configured commercial sites to encourage a coordinated and unified development pattern.

Like the Iowa Street corridor, emphasis is also placed on improved and coordinated signage in

scale with development, as well as on minimizing curb cuts on 23rd Street.

- ***W. 6th Street (Alabama Street to Iowa Street)***

This is the oldest section of the W. 6th Street corridor and is an Existing Strip Commercial Development. There are a variety of uses along this corridor, but the primary two are fast food restaurants and medical offices and supplies. This section is typical strip development with small individual lots, each with a curb cut onto W. 6th Street. The Comprehensive Plan does not recommend the expansion of this area beyond the property currently zoned commercial or office. All new development or redevelopment occurring along this corridor shall be required to consolidate curb cuts and provide access easements to adjoining properties.

- ***W. 6th Street (Iowa Street to Kasold Street)***

This portion of the W. 6th Street corridor is an Existing Strip Commercial Development. The development patterns along this section of W. 6th Street are newer than eastern portion of W. 6th Street. However, the commercial area is still a "strip development", characterized by numerous curb cuts and intensive retail development fronting the majority of W. 6th Street. The Comprehensive Plan does not recommend the expansion of this area beyond the property currently zoned commercial or office. All new development or redevelopment occurring along this corridor shall be required to consolidate curb cuts and provide access easements to adjoining properties.

- ***W. 6th Street and Monterey Way***

The intersection of W. 6th Street and Monterey Way is an existing Neighborhood Commercial Center with a nodal development pattern. The Comprehensive Plan does not recommend expanding the commercial uses beyond the existing commercially zoned property.

- ***W. 6th Street and Wakarusa Drive***

The intersection of W. 6th Street and Wakarusa Drive is an existing Community Commercial Center limited to 600,000 square feet of commercial gross square footage (CC600 Center) with a nodal development pattern.

Portions of the intersection of W. 6th Street and Wakarusa Drive are still developing. However, the southern half of the intersection is almost completely developed and shall not be expanded beyond Congressional Drive to the west. The northern half of the intersection is undeveloped. Commercial development of this portion of the intersection shall not extend beyond Overland Drive (extended) to the north, Congressional Drive (extended) to the west; and Champion Lane (extended) to the east.

- ***Clinton Parkway and Kasold Drive***

The intersection of Clinton Parkway and Kasold Drive is an existing Neighborhood Commercial Center with a nodal development pattern. The Comprehensive Plan does not recommend expanding the commercial uses beyond the existing commercially zoned property.

- *Clinton Parkway and Wakarusa Drive*

The intersection of Clinton Parkway and Wakarusa Drive is an existing Neighborhood Commercial Center with a nodal development pattern. The Comprehensive Plan does not recommend expanding the commercial uses beyond the existing commercially zoned property.

- *E. 19th Street and Massachusetts Street*

The intersection of 19th Street and Massachusetts Street is an existing Neighborhood Commercial Center with a nodal development pattern. The Comprehensive Plan does not recommend expanding the commercial uses beyond the existing commercially zoned property. New development and redevelopment proposals for this area shall include plans for the consolidation of curb cuts and provision of cross access easements to adjoining properties.

- *E. 19th Street and Haskell Avenue*

The southeast corner of the intersection of E. 19th Street and Haskell Avenue is an existing Neighborhood Commercial Center with a nodal development pattern. The commercial zoning at this intersection includes the city park property on the southwest corner of the intersection. The Comprehensive Plan does not recommend expanding the commercial uses beyond the current commercial zoning at the southeast corner. Enhancement of the corner's existing retail space is highly encouraged. Like the Inner-Neighborhood Commercial Centers, this area would benefit from a reduction in development standards that would increase the potential for redevelopment.

- *W. 15th Street and Wakarusa Drive*

The intersection of W. 15th Street and Wakarusa Drive is an existing Neighborhood Commercial Center with a nodal development pattern. The southeast corner is commercially zoned. The current uses at this corner are a bank and small shopping center. The Comprehensive Plan does not recommend expanding the commercial uses beyond the existing commercially zoned property.

- *W. 15th Street and Kasold Drive*

The northeast corner of the intersection of W. 15th Street and Kasold Drive is an existing Neighborhood Commercial Center with a nodal development pattern. The commercial zoning at this intersection includes the southwest corner. The Comprehensive Plan does not recommend the expansion of commercial uses beyond the footprint of the existing retail uses on the northeast corner.

- *W. 9th Street (Kentucky Street to Illinois Street)*

This area is an existing Neighborhood Commercial Center with a strip development pattern that serves as a gateway into Downtown Lawrence. The group of buildings at the northeast corner of W. 9th Street and Indiana Street has a scale and configuration of structures similar to Downtown Lawrence. The majority of the development along this corridor is characterized by stand-alone structures with multiple curb cuts. New development and redevelopment proposals along this corridor shall include consolidation of curb cuts and cross access easements to adjoining properties. Because the corridor serves as a gateway to Downtown Lawrence, the Downtown Architectural Design Guidelines should be amended to specifically address this area.

Existing Commercial Areas	Strip	Nodal	Approximate Built Square Footage*	Neighborhood Commercial	Existing Strip Commercial	CC200	CC400	CC600	Regional Commercial
Downtown	X		1.3 million						X
N. 2nd St and N. 3rd St	X		225,000		X				
Iowa (Harvard Rd to W. 6th St)		X	190,000			X			
S. Iowa (23rd St to K-10)	X		1.3 million						X
W. 23rd St (Iowa St to Louisiana St)	X		660,000		X				
E. 23rd St (Learnard St. to Harper St.)	X		190,000		X				
6th St (Alabama to Iowa St)	X		140,000		X				
W. 6th St (Iowa to Kasold)	X		209,000		X				
W. 6th St & Monterey Way		X	100,000	X					
W. 6th St &Wakarusa Dr		X	480,000					X	
Clinton Pkwy & Kasold Dr		X	110,000	X					
Clinton Pkwy & Wakarusa Dr		X	28,000	X					
E. 19th St & Massachusetts St		X	95,000	X					
E. 19th St & Haskell Ave		X	27,000	X					
W. 15th St & Kasold Dr		X	50,000	X					
W. 15th St & Wakarusa Dr		X	19,000	X					
9th St (Kentucky St to Illinois St)	X		40,000	X					

* This column includes all approved gross square footage of commercial space.

Linear and Nodal development definitions follow the definitions found on page 6-2.

The definitions of Neighborhood, Existing Strip Commercial, CC200, CC400, CC600 and Regional Commercial Centers are on pages 6-3 through 6-12.

A list of existing Inner-Neighborhood Commercial Centers is found on page 6-7.

LAWRENCE - NEW COMMERCIAL AREAS

All new commercial and office development shall occur in accordance with the plan recommendations. New commercial, retail and related uses shall be developed as a node with shared parking areas, common access drives, and related design and appearance. Nodes shall be positioned and oriented to the primary street intersections where they are located, avoiding a "strip" pattern as a result of extension of commercial uses along the streets from where the node originated.

Commercial nodes include other important community services and facilities, such as satellite post offices, police, fire and emergency services, religious facilities, community centers and other services and institutions. Inclusion of these uses assists the integration of the commercial area into the overall neighborhood, serving multiple communities and service needs in a single location, and creating physically distinctive use areas apart from traditional commercial areas.

The Comprehensive Plan includes recommendations for the location of new commercial development. As the community grows, it may be necessary to change the recommended location of a Commercial Center(s) or not use a designated intersection for a commercial uses. If there is a need to move the recommended location of a Commercial Center or downgrade the recommended size of a center, the Comprehensive Plan shall be amended. Through the amendment process, the proposed location and/or change in size of the Commercial Center will be reviewed based on the effects the change will have on infrastructure systems, the surrounding land uses, the neighborhood and the community-at-large.

The Comprehensive Plan does not support increasing the size or number of new Commercial Centers, however small, new inner-neighborhood centers are possible and/or anticipated as part of an overall new planned neighborhoods.

- *Inner-Neighborhood Commercial Centers*

New Inner-Neighborhood Commercial Centers shall be allowed in very unique situations, such as when Center is part of an overall planned neighborhood development or can be easily integrated into an existing neighborhood. Inner-Neighborhood Commercial Centers are to be an amenity to the adjacent residents and serve only the immediate neighborhood.

A new Inner-Neighborhood Commercial Center shall have no gas pumps, drive-thru or drive-up facilities. The Center shall be pedestrian oriented and have no more than 3,000 gross square feet of commercial space. The Center shall be located on a local, collector or arterial street. It may also take access from an alley. Inner-Neighborhood Commercial Center uses may include book stores, dry cleaning services, food stores, beauty salons, etc. Inner-Neighborhood Commercial Centers may also include residential uses.

New Inner-Neighborhood Commercial Centers shall be designed as an integrated part of the surrounding neighborhood so that appearance of the commercial area does not detract from the character of the neighborhood.

Horizon 2020 does not specifically indicate the location of new Inner-Neighborhood Commercial Centers due to their unique situations.

- *Neighborhood Commercial Centers*

The Comprehensive Plan recommends the following intersections as potential locations for new Neighborhood Commercial Centers.

1. Franklin Road extended and E. 28th Street extended
2. E 1500 Rd and N 1100 Rd
3. E 1000 Rd and N 1000 Rd
4. E 1000 Rd and N 1200 Rd
5. Clinton Parkway and K-10
6. W. 15th Street and K-10
7. E 800 Rd and at the potential east/west arterial 1 mile north of US-40
8. E 700 Rd and US-40
9. E 800 Rd and N 1500 Rd
10. E 1000 Rd and N 1750 Rd
11. E 1500 Rd and US Highway 24/40

These areas are all intended for development as small, compact commercial nodes that provide goods and services to the immediately adjoining neighborhood areas. They shall be developed in a manner that is consistent with the goals, policies and recommendations of the Comprehensive Plan.

- *Community Commercial Centers (CC200)*

The Comprehensive Plan recommends the following intersection as potential location for a new CC200 Centers.

1. E. 23rd Street and O'Connell Road

- *Community Commercial Centers (CC400)*

The Comprehensive Plan recommends the following intersections as potential locations for new CC400 Centers.

1. Eastern leg of the SLT and K-10 (southeast of the intersection of E 1750 Rd and K-10)
2. US-59 and N 1000 Rd

The development of these nodes shall carefully follow the commercial goals and policies. Commercial development shall not occur in advance of market conditions that would support such development, nor shall it be permitted to occur in a manner that is contrary to adopted city infrastructure plans.

- *Community Commercial Centers (CC600)*

The Comprehensive Plan recommends the following intersection as potential location for a new CC600 Center.

1. W. 6th Street and K-10

- *Auto-Related Commercial Centers*

The Comprehensive Plan recommends the following intersections as potential locations for new Auto-Related Centers.

1. I-70 and K-10
2. US-59/40 and I-70
3. US-59 and K-10

- *Regional Commercial Centers*

The need for development of a new Regional Commercial Center within the community is not anticipated within the planning period. Consideration of requests to expand existing commercial areas shall include the potential for development of additional Regional Commercial Centers and the impact of such expansion and development on the existing commercial inventory. The need for additional regional commercial development within the community shall be evaluated on a regular basis, based upon updated land use and population data. Before a new Regional Commercial Center is considered, the Comprehensive Plan shall be amended to include the possibility of a new Regional Commercial Center.

UNINCORPORATED DOUGLAS COUNTY - EXISTING COMMERCIAL AREAS

Unincorporated Douglas County currently maintains a variety of commercial areas. Each of these areas provides neighborhood level retail goods and services to both farm and non-farm residents. As the rural areas of Douglas County continue to receive new non-farm residential development, demands will increase for retail goods and services.

It is recommended that these commercial locations be developed as small convenience service nodes, providing products to meet the day-to-day requirements of rural residents. The development of these nodes shall follow the basic principles described for commercial development or redevelopment. It is important that these commercial locations provide for adequate wastewater treatment facilities in the future. Any new or expanded developments shall utilize treatment systems that minimize potential environmental impacts.

The design of these locations should be consistent with the rural character of Douglas County. Therefore, design and development standards should promote larger, more spacious settings and encourage building and site design reflective of the unique characteristics surrounding each location.

UNINCORPORATED DOUGLAS COUNTY - NEW COMMERCIAL AREAS

Commercial locations in both unincorporated Douglas County and Douglas County communities together provide reasonable accessibility in terms of distance and the type of goods and services available. As Douglas County continues to urbanize, the need for additional commercial space in the unincorporated portions of Douglas County will increase. New commercial areas shall not be located within a four mile radius of any existing commercial area. There are already a number of existing commercially zoned areas in the unincorporated portions of Douglas County. Most of these locations are well placed at the intersection of a

hard surfaced County Route and a state or federally designated highway.

Areas that are already zoned commercially and are located at the intersection of a hard surfaced county route and state or federally designated highway should be expanded to serve any increased demand for commercial space in the county. The Comprehensive Plan recommends that only one new commercial area be created in the unincorporated portion of the county. The southeastern area of the county does not have any commercially zoned areas. To serve this area a commercial development could be located at the intersection of US-56 and K-33 or US-56 and County Route 1061.

A limiting factor to the size of any commercial development in unincorporated Douglas County will be the availability of utilities, particularly water and sanitary sewer. Any on-site treatment system shall be designed to minimize its impacts on the environment. The amount of gross square footage of a commercial development shall be limited to a total of 15,000 gross square feet to serve the surrounding rural area.

Commercial activities related to conference, recreational, or tourism uses associated with Clinton Lake, Lone Star Lake, or Douglas County Lake shall be exempt from the locational criteria applied to new commercial areas or expansions of existing commercial areas. A commercial area serving the recreational needs (boat rental, bait shop, lodging, etc.) of persons using the county's lake facilities may be located at an entrance point to a lake.

Conference, recreational, or tourism uses located in the Rural Area, and which include some significant level of urban development, shall satisfy the criteria listed in Chapter Four. Such uses shall also include a mandatory minimum 200' natural buffer area or other appropriate distance as determined by the Board of County Commissioners. Proposed conference, recreational, or tourism facilities shall include a site specific site plan with rezoning applications to demonstrate that the criteria listed in Chapter 4, and the 200' buffer area, have been met.

COMMERCIAL LAND USE GOALS AND POLICIES

Guidelines are needed to allow for the retention and expansion of the established commercial areas of the community.

GOAL 1: Established Commercial Area Development

Encourage the retention, redevelopment and expansion of established commercial areas of the community.

Policy 1.1: Recognize and Emphasize Downtown Lawrence as the Regional Retail/Commercial/Office/Cultural Center

A. Encourage and support the development of a broad mix of land uses, with an emphasis on retail as a major land use, the provision of parking facilities, improved accessibility, and the expansion of Downtown Lawrence while maintaining the integrity of surrounding neighborhoods.

B. Strengthen, define and support neighborhood residential areas adjacent to Downtown Lawrence in order to reinforce the safety, image and identity of Downtown Lawrence.

C. Closely analyze (through Policies 1.7, 3.7 G, 3.9 E, and any other relevant Policies) the impact of requests for development of community and/or regional shopping areas to ensure that such development does not have a negative impact on the Regional Retail/Commercial/Office/Cultural Center. This analysis would be used to evaluate the potential impact on the future viability of the Regional Retail/Commercial/Office/Cultural Center as a whole and not the potential impact on individual businesses or properties.

Policy 1.2: Sustain Downtown Lawrence as a Mixed Use Activity Center

Continue to encourage a broad mix of uses in Downtown Lawrence, including retail, office, residential, entertainment, lodging, unique visitor attractions, expanded conference facilities, a core concentration of governmental, cultural and social facilities and services, as well as recreation, leisure and community events.

Policy 1.3: Assure Compatibility of Development

A. Encourage new development and redevelopment to consider horizontal and vertical proportions, building forms, roof types, and exterior materials and details existing in the surrounding area.

B. New development and redevelopment shall conform to the applicable adopted design guidelines.

Policy 1.4: Redevelopment of Existing Commercial Areas

A. Existing commercial areas should be improved and upgraded. Particular emphasis should be given to existing commercial gateways. Overall storm water management, vehicular and pedestrian access, and site maintenance shall be undertaken.

B. Upgrade the image and appearance of existing developments with new lighting, landscaping, signage and pedestrian access.

C. Encourage public and/or private partnerships for redevelopment.

D. Consider financial and development incentives to encourage re-use (renovation or redevelopment) of commercial properties.

Policy 1.5: Provide Opportunities for Limited Commercial Development in the Unincorporated Areas of Douglas County

A. Encourage redevelopment and limited expansion of existing commercial areas in the unincorporated areas of Douglas County.

B. No new commercial development shall occur within the UGA.

Policy 1.6: Maintain an Inventory of Commercial Land

Maintain an appropriate supply of commercially zoned land so that site choices are available and infrastructure expansion can occur in an efficient and orderly manner. Annually evaluate current and approved planned land uses and land availability. The evaluation shall consider, but not be limited to: approved planned development not yet constructed, compatibility with existing nearby development, parcel size and infrastructure service delivery and phasing plans.

Policy 1.7: Monitor Economic Impact of Commercial Growth

A. The amount of commercial space, the quality of commercial space, commercial space vacancy rates, and the size of commercial space shall be monitored for each quadrant of the city (15^{th} Street shall be the north-south dividing line and Iowa Street the east-west dividing line). Each matrix cell shall include the total gross square footage of all the buildings in each respective size range and condition grade. Each cell shall also include the vacancy rate for buildings of each respective size and condition.

B. These variables shall be placed in a matrix and used in analyzing any commercial rezoning request and/or development plan.

C. The matrix shall be updated annually.

D. Planning Staff shall be responsible for maintaining and revising the matrix. However some of the data for some of the variables, particularly vacancy rates,

may have to be provided by outside sources.

E. Planning Staff will provide an annual sales tax per square foot ratio. This data will be provided for different sectors within the city limits.

F. Establish and implement a methodology for the annual collection of business use data in support of economic impact analyses.

Matrix

	Condition of the Commercial Space				
	Excellent	**Good**	**Fair**	**Poor**	**Total**
0-2,500 Sq. Ft.	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
2,501-5,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
5,001-15,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
15,001-30,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
30,001-60,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
60,001- 20,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
120,001- 00,000	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
200,001+	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate
Total	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate	total sq. ft./vacancy rate

The above matrix will be completed for each quadrant of the city, plus an additional table summarizing the totals for the entire city.

Guidelines are needed to allow for a compatible transition from commercial development to residential neighborhoods and other less intensive land uses. These guidelines are needed throughout the community, including both established commercial areas and anticipated development areas.

GOAL 2: Compatible Transition from Commercial Development to Less Intensive Uses

Ensure compatible transition from commercial development to residential neighborhoods and other less intensive land uses.

Policy 2.1: Use Appropriate Transitional Methods

A. Commercial areas shall minimize adverse impacts on adjacent residential areas. Screening and buffering shall be provided which may include landscaped setbacks, berms and open space areas. Traffic and parking shall not adversely affect neighborhood quality. Noise, safety and overall maintenance of commercial properties shall be carefully monitored.

B. Use landscaped transition yards between residential and non-residential uses that include additional lot depth, berms, landscape screening, and/or fences and walls to provide additional buffering between differing land use intensities.

C. Compatible transition from commercial uses to less intensive land uses shall consider:

1. Site Orientation

   a. Vehicular access shall be from collector, arterial or access streets.

   b. Pedestrian access shall be designed to provide internal and external circulation from adjacent neighborhoods.

   c. Streets designed with elements to provide visual or physical buffering may serve as boundaries between different intensities of land uses.

2. Building Relationships

   a. A back-to-back relationship is preferable between uses.

   b. Commercial buildings and parking lots shall not have lesser setbacks than those required of abutting residential uses.

   c. The height and massing of commercial buildings and accessory structures shall be oriented to avoid creating a negative visual effect on residential neighborhoods.

d. Vehicular access to commercial activities should be separated from pedestrian access.

3. Land Features

a. Encourage the integration of mature trees, natural vegetation, and natural and environmentally sensitive areas whenever feasible to buffer commercial developments from other more or less intensive land uses.

b. Encourage the use of existing topography to separate commercial developments and other more or less intensive land uses.

4. Screening and Landscaping

a. Encourage creative and extensive use of landscaping and berming techniques for natural transitions between differing intensities of land uses.

b. Fences shall not be used as a sole method of providing screening and buffering between differing intensities of land uses.

c. Encourage site design that uses existing vegetation, such as stands of mature trees, as natural buffers or focal points.

d. Encourage the use of high quality materials in the construction of screening and landscape areas to decrease long-term maintenance costs.

5. Lighting

a. Lighting used to illuminate parking areas, signs or structures should be placed to deflect light away from adjoining properties or public streets through fixture type, height and location.

Policy 2.2: Locate Less Compatible Uses Toward the Interior of Commercial Areas

A. The overall design and arrangement of commercial development shall be compatible with adjacent residential uses.

B. Ensure adequate screening of unsightly views of commercial developments (such as loading docks, rooftop equipment, service entrances, trash containers, parking areas, exterior storage) through the extensive use of elements such as landscaping, berms, fencing, architectural design, open space, setbacks, and/or building orientation.

C. In order to ensure that parking lots are not the dominant visual feature associated with commercial areas, buildings shall be located adjacent to the public rights-of-way and parking located toward the interior of the development.

Policy 2.3: Higher-Density Residential Development as Transitional Use

Use higher-density residential development as a transitional land use between commercial developments and the surrounding low-density residential neighborhoods.

Policy 2.4: Provide Sufficient Site Area for the Design of Transitional Elements

Site improvements within commercial areas such as lighting, signage and landscaping shall be designed and coordinated in order to create a positive identity and visual image throughout the development area.

Policy 2.5: Office, Research and Semi-Public Development as Transitional Use

A. Encourage using low-intensity office, research and semi-public development as a transition between commercial development and low-density residential neighborhood. The development shall include:

1. Design elements such as height, massing, and scale compatible with the surrounding low-density residential uses;

2. Site design that is compatible with surrounding residential neighborhoods with consideration given to extensive screening, building and parking orientation, and preservation of natural site amenities; and

3. Site access provided from arterial, collector or access streets, with traffic directed away from surrounding residential areas.

Policy 2.6: Parks, Recreation and Open Space as Transitional Use

Encourage the use of medium- to low-intensity recreational facilities such as neighborhood parks, bike/hike trails and natural areas as transitional areas.

Guidelines are needed to provide direction on how much, where and at what scale commercial development is appropriate for the market it is intended to serve.

GOAL 3: Criteria for Commercial Development

Provide regional, community and neighborhood shopping opportunities to meet the commercial and retail needs of the community.

Policy 3.1: Utilize Locational Criteria for Commercial Development

A. **Commercial Nodes:** Nodes shall occur at arterial/collector or arterial/arterial intersections depending on the type of commercial center.

B. **Strip Commercial Development:** Stop the formation or expansion of Strip Commercial Development by directing new development in a more clustered pattern.

C. **Assembling of Land:** Encourage the assembling of small tracts to form larger, more cohesive parcels to enable well-planned and orderly development to occur.

D. **Vehicular Access:** Limit the principal vehicular access of commercial development to arterial, collector or frontage (access) streets.

E. **Site Layout:** Commercial development shall be located to avoid substantial disruption of natural drainage and vegetation.

F. **Compatibility with Adjacent Land Uses:** Encourage the location of commercial nodes where they can efficiently utilize local resources, where their adverse impacts on adjacent uses are minimized, and where they will effectively provide the community with desired products, services and employment opportunities.

G. **Public Improvements:** Construction of a new commercial center cannot begin until all infrastructure improvements serving the center have been completed.

Policy 3.2: Establish Design Standards for Commercial Development

A. The city shall develop reasonable design standards for new and redeveloped commercial areas which improve:

1. Integration with the surrounding neighborhoods;
2. Pedestrian movement to and within the commercial areas;
3. The aesthetics of the districts from the surrounding street system; and
4. The design to create attractive focal points for the surrounding populations.

B. Incentive systems shall be developed to encourage commercial areas to provide

mixed use projects that include residential and office uses integral to the design.

C. These design standards and incentives shall be adopted into HORIZON 2020 and implemented through zoning, subdivision and the Capital Improvements Plan.

Policy 3.3: Criteria for Inner-Neighborhood Commercial Centers

A. Encourage redevelopment of existing Inner-Neighborhood Commercial Centers through alternative standards for:

1. Required parking;
2. Open space requirements;
3. Required setbacks; and
4. Required lot size.

B. Do not encourage the expansion of existing Inner-Neighborhood Commercial Centers.

C. Inner-Neighborhood Commercial Centers may be located on local, collector, or arterial streets. They may also take access from an alley.

D. Standards for New Inner-Neighborhood Commercial Centers:

1. Inner-Neighborhood Commercial Centers shall be allowed only in those situations where the center is an integral part of an overall planned neighborhood or if the Center can be integrated into an existing neighborhood;
2. Centers shall not have gas pumps, drive-thru or drive-up facilities;
3. Centers may include residential uses;
4. Centers shall no more than 3,000 gross square feet of commercial space; and
5. Centers shall be designed as an integrated part of the surrounding neighborhood so that their appearance does not detract from the character of the neighborhood.

Policy 3.4: Criteria for Mixed-Use Redevelopment Centers

A. Encourage redevelopment of areas where existing structures are underutilized, have experienced a high turnover rate, or have remained vacant for an extended period of time.

B. Mixed-Use Redevelopment Centers shall be no larger than six acres in size.

C. Mixed-Use Redevelopment Centers shall include a mix of the following uses within the subject area and where possible, include mixed-use structures:

1. Residential;
2. Civic;
3. Office;

4. Small-scale commercial:
    a. Total commercial spaces shall not exceed 25% of the net floor area within the subject area, and
    b. A single retail space shall not occupy more than 16,000 square feet of ground-floor level, net floor area of a structure; and
5. Open space.

D. Mixed-Use Redevelopment Centers shall maintain the character of the surrounding neighborhood*s* by:

1. Achieving integration with adjacent land uses by providing transitions between uses through alleyways and use and landscape buffers;
2. Incorporating existing structures wherever possible;
3. Maintaining general structure spacing, massing, scale, and street frontage relationship when incorporating new structures.

E. Mixed-Use Redevelopment Centers shall provide multi-modal services to include the following options:

1. Pedestrian, including pedestrian-scaled street furnishings, plantings and gathering spaces;
2. Bicycle, including bicycle parking;
3. Vehicular; and
4. Transit, if available.

Policy 3.5: Criteria for Mixed-Use Districts

A. Encourage preservation of areas that are mixed use in nature, as well as development and redevelopment of areas with vacant land, or where existing structures are underutilized, have experienced a high turnover rate, or have remained vacant for an extended period of time.

B. Mixed-Use Districts shall be no larger than 20 acres in size.

C. Mixed-Use Districts shall include a mix of the following uses within the subject area and where possible, in mixed-use structures:
    a. Residential;
    b. Non-residential.

D. Mixed-Use Districts shall maintain the character of the surrounding neighborhoods by:
    a. Achieving integration with adjacent land uses by providing transitions through alleyways, variation among development intensity, and implementation of landscape buffers;
    b. Incorporating existing structures wherever possible;
    c. Maintaining general structure spacing, massing, scale, and street frontage relationship when incorporating new structures.

E. Mixed-Use Districts shall provide multi-modal services to include the following options:

a. Pedestrian oriented public spaces, which shall include pedestrian-scaled street furnishings, and plantings;
b. Bicycle, including bicycle parking;
c. Vehicular; and
d. Transit.

Policy 3.6: Criteria for Neighborhood Commercial Centers

A. Neighborhood Commercial Centers shall be located at the arterial/arterial or arterial/collector street intersections.

B. Limit the commercial uses in neighborhood centers to one corner of the intersection.

C. New Neighborhood Commercial Centers shall be at least one (1) mile from any existing or new Commercial Center.

D. Neighborhood Commercial Centers shall contain no more than 100,000 gross square feet of commercial space with the exception of Neighborhood Commercial Centers that include a grocery store. Neighborhood Commercial Centers with a grocery store of 60,001 or more gross square feet may have up to a total of 125,000 gross square feet of commercial space.

E. No one commercial use in a Neighborhood Commercial Center shall occupy an area larger than 40,000 gross square feet. The only exception is a grocery store, which may occupy an area up to 80,000 gross square feet.

F. A nodal plan shall be completed before a proposal for a Neighborhood Commercial Center goes before the Planning Commission.

G. Locate office, public, semi-public, parks and recreation or medium- and higher-density residential developments on remaining corners of intersection to avoid excessive concentrations of commercial traffic and unnecessary duplication of commercial services.

H. Low-density residential uses may be located at the remaining corners of the intersection if sufficient screening measures are provided to offset noise and views of the intersection are provided.

I. Integrate neighborhood commercial centers into the surrounding residential neighborhoods by including pedestrian access, appropriate transitional elements and, if possible, the location of public or semi-public uses or parks and recreation uses adjacent to the commercial development.

J. Neighborhood Commercial Centers shall be designed with pedestrian mobility as a top priority.

1. Pedestrians shall be able to easily walk to all stores in a neighborhood center without using a vehicle.

2. Parking lots shall provide pedestrian accessways to reduce the potential of pedestrian/vehicle conflicts.

K. Facades shall have a variety of textures, colors, shapes, etc. such that the buildings in a Neighborhood Center do not have a single uniform appearance.

L. Neighborhood Centers should have dedicated open space areas that useable by the Center's employees and shoppers.

M. Neighborhood Commercial Centers shall not expand into the surrounding portions of the neighborhood.

N. Any commercial development proposal for a corner in a new Neighborhood Commercial Center shall have a length-to-depth ratio between 1:1 and 3:2.

O. Neighborhood Commercial Centers shall develop in a manner that is consistent with the city's adopted design guidelines.

Policy 3.7: Criteria for Existing Strip Commercial areas

A. A redevelopment plan should be made for each existing Strip Commercial Center

B. Tools such as public/private partnerships, special overlay districts, reduced development standards, lot consolidation and purchase, access management plans, cross access easements, etc. should be used to enhance redevelopment opportunities for existing Strip Commercial areas.

C. Existing Strip Commercial areas shall not expand into surrounding lower-intensity zoning areas.

D. Curb cut consolidation and cross access easements shall be included when an existing site plan is revised or a new site plan proposed.

E. Existing Strip Commercial areas shall develop or redevelop in a manner consistent with the city's adopted design guidelines.

Policy 3.8: Criteria for Community Commercial Centers (under 200,000 square feet) CC200

A. CC200 Centers shall be located at the intersection of arterial/arterial streets.

B. CC200 Centers shall have no more than 200,000 gross square feet of commercial space.

C. No single store shall occupy more than 100,000 gross square feet.

D. A general merchandise store (including discount and apparel stores) shall not exceed 65,000 gross square feet.

E. The sum of the gross square footage for all stores occupying space between 40,000 and 125,000 shall not be more than 75 percent of gross commercial square footage for the corner of the intersection.

F. Corners of the node not developed with commercial uses shall have extensive on-site screening and shall be utilized for office, employment-related, public and semi-public, parks and recreation, and higher-density residential uses. Encourage the development of mixed-use centers (office, employment-related uses, public and semi-public uses) adjacent to community commercial development to provide mutual attraction to employees and retailers and to enhance the visual image of the area.

G. New or existing CC200 Centers shall not encroach or expand into the surrounding residential or lower-intensity uses.

H. A proposal requiring a revised or new site plan for property in a CC200 Center shall include plan for reducing curb cuts, providing cross access easements to adjacent properties, and buffering for adjacent non-commercial uses.

I. A nodal plan shall be completed before proposals for the redevelopment or expansion of an existing CC200 Center that include more than 50 percent of the existing gross commercial square footage or plans to expand the center by more than 20 percent go before the Planning Commission.

J. Proposals for the redevelopment or expansion of an existing CC200 Center that include more than 50 percent of the existing gross commercial square footage or plans to expand the center by more than 20 percent shall include a building with at least 40,000 gross square feet of commercial space.

K. A nodal plan shall be completed before a proposal for a new CC200 Center goes before the Planning Commission.

L. Proposals for a new CC200 Center shall include a building with at least 40,000 gross square feet of commercial space.

M. CC200 Centers shall develop or redevelop in a manner that is consistent with the city's adopted design guidelines.

Policy 3.9: Criteria for Community Commercial Centers (under 400,000 square feet) CC400

A. CC400 Centers shall be located at the intersection of two arterial streets that both have at least a four lane cross-section or the intersection of a four-lane arterial and a state or federally designated highway.

B. CC400 Centers must be a minimum of 3.75 miles apart.

C CC400 Centers shall have a maximum of 400,000 gross square feet of commercial space.

D. At least 95 percent of the commercial gross square footage in a new CC400 Center shall be located on two corners of the intersection. The remaining five percent shall be located on one of the remaining two corners.

E. No single store in a CC400 Center shall occupy more than 175,000 gross square feet.

F. The sum of the gross square footage for all stores occupying between 100,000 and 175,000 cannot be more than 70 percent of the gross commercial square footage for the corner of the intersection.

G. If the proposal for a corner of the intersection includes more than 100,000 gross square feet of commercial space, the proposal shall include a single building that has at least 40,000 gross square feet of commercial space.

H. Proposals in which the commercial gross square footage is less than ten percent of the total square footage of the project do not have to meet the minimum acreage and lot depth.

I. Any commercial development proposal for a single corner in a new CC400 Center shall be a minimum of 20 acres in size.

J. Any commercial development proposal for a single corner in a new CC400 Center shall have a length-to-depth ratio between 1:1 and 3:2.

K. Access points into a new CC400 Center shall be from the two points furthest from the intersection.

L. CC400 Centers shall be designed with feeder and/or reverse frontage streets to collect internal traffic and for easy access from the surrounding community.

M. CC400 Centers shall be designed with pedestrian mobility as a top priority.

1. Centers shall be designed to facilitate the movement of pedestrians from store to store and building to building.

2. Parking lots shall provide pedestrian accessways to reduce the potential of pedestrian/vehicle conflicts.

O. Facades shall have a variety of textures, colors, shapes, etc. such that the buildings in a CC400 Center do not have a single uniform appearance.

P. CC400 Centers should have dedicated open space areas that useable are by the center's employees and shoppers.

Q. Buildings shall not be separated from adjacent street rights-of-way by large expanses of parking.

R. Corners of the node that are not developed with commercial uses should be utilized for office, employment-related, public and semi-public, parks and recreation, and higher-density residential uses with extensive on-site screening. Encourage the development of mixed-use centers (office, employment-related uses, public and semi-public uses) adjacent to community commercial development to provide mutual attraction to employees and retailers and to enhance the visual image of the area.

S. Existing CC400 Centers shall not expand into areas with existing less intensive uses (low-intensity residential, institutional uses, office, multi-family residential, etc.).

T. A nodal plan must be completed before a development proposal for any corner of CC400 Center is forwarded to the Planning Commission.

U. CC400 Centers shall develop in a manner that is consistent with the city's adopted design guidelines.

Policy 3.10: Criteria for Community Commercial Centers (under 600,000 square feet) CC600

A. CC600 Centers shall be located at the intersection of two state or federally designated highways.

B. CC600 Centers shall have a maximum of 600,000 gross square feet of commercial retail space as defined in this chapter. Other uses of a non-retail nature shall not have a space limitation.

C. A maximum of 90 percent of the commercial square footage, as defined in this chapter, in a new CC600 Center shall be located on two corners of the intersection. The remaining commercial square footage, as defined in this chapter, shall be located on one or both of the remaining corners.

D. No more than two commercial buildings over 100,000 gross square feet each may be located on a single corner of the node.

E. Corners of the node that are not developed with commercial uses should be utilized for office, employment-related, public and semi-public, parks and recreation, and higher-density residential uses with extensive on-site screening. Encourage the development of mixed-use centers (office, employment-related uses, public and semi-public uses) adjacent to community commercial development to provide mutual attraction to employees and retailers and to enhance the visual image of the area.

F. A nodal or area plan must be completed before a development proposal for any corner of a CC600 Center is forwarded to the Planning Commission. Expansion of

the CC600 center shall require amendment of the nodal or area plan.

G. CC600 Centers shall develop in a manner that is consistent with the city's adopted design guidelines.

Policy 3.11: Nodal Plan Criteria

A. The city should attempt to complete a nodal plan for newly designated Commercial Center before there is pressure to develop the node.

B. A nodal plan shall be completed for any new Commercial Center before a development proposal for the node can go before the Planning Commission.

C. A nodal plan shall include the following information:

1. Existing natural features;
2. Appropriate transitional uses;
3. Appropriate use for each specific corner of the intersection;
4. Access points from each location;
5. Necessary infrastructure improvements;
6. Overall traffic flow in and around the node and the surrounding area;
7. The "ultimate geometric design" for the intersection based on the proposed land uses for the intersection; and
8. Any and all other necessary information needed to create the nodal plan.

Policy 3.12: Criteria for the Regional Retail/Commercial/Office/Cultural Center

A. Recognize and emphasize Downtown Lawrence as the Regional Retail/Commercial/Office/Cultural Center -- which is an intensely developed, large-scale, mixed use location that serves as an activity center for the community.

B. Continue to encourage a broad mix of uses in downtown Lawrence, including retail, office, residential, entertainment, lodging, unique visitor attractions, expanded conference facilities. Maintain the core concentration of governmental, cultural/social facilities and services and recreation, leisure and community events in this area.

C. Encourage the continuation of community social activities (Art in the Park, holiday parades, etc.) to occur in Downtown Lawrence.

D. Continue to support the building design criteria set forth in the "Downtown Architectural Design Guidelines".

E. The "Downtown Architectural Design Guidelines" should be amended to include the W. 9th Street area that serves as a gateway into Downtown Lawrence.

F. Maintaining and protecting the vitality of Downtown Lawrence is important to the

citizens of Lawrence. Because of its high importance as an asset to the community, any new proposal for a new Regional Commercial Center must demonstrate that it will not have a substantial impact on Downtown Lawrence.

Policy 3.13: Criteria for Regional Commercial Centers

A. The Comprehensive Plan does not anticipate the need for a new Regional Commercial Center within the planning period.

B. Designating a new Regional Commercial Center will require an amendment to the Comprehensive Plan.

C. Design Criteria

1. The commercial development plan for a corner shall have a minimum of 40 acres;
2. The development shall have a minimum of 1,400 linear feet of frontage on a public street;
3. A Regional Commercial Center shall not have more than 1.5 million gross square feet of commercial space; and
4. A Regional Commercial Center shall be located at the intersection of two state or federally designated highways or the intersection of an arterial street and a state or federally designated highway.

D. A nodal plan shall be completed before a development proposal for a Regional Commercial Center is forwarded to the Planning Commission.

F. Parking lots shall be designed to minimize conflicts between pedestrians and vehicles.

G. Centers shall be designed to facilitate the movement of pedestrians from store to store and building to building.

H. Buildings shall be placed near adjacent street right-of-way.

I. The majority of parking for the center shall be behind the front building line.

J. A proposal requiring a revised or new site plan for property in an existing Regional Commercial Center shall include a plan for reducing curb cuts, providing cross access easements to adjacent properties, and buffering for adjacent non-commercial uses.

K. New or existing Regional Commercial Centers shall not intrude or expand into the surrounding residential or lower-intensity uses.

L. CC400 Centers shall develop in a manner that is consistent with the city's adopted design guidelines.

Policy 3.14: Criteria for Commercial Development in Unincorporated Areas

A. Existing commercial areas that are located at the intersection of a hard surfaced County Route and a state or federally designated highway should be allowed to expand if the necessary infrastructure (water, road, approved wastewater treatment facility, etc.) is available.

B. Encourage new commercial development at key access points on major corridors only if served by adequate infrastructure, community facilities and services.

C. The commercial gross square footage of a development shall be limited to a total of 15,000 gross square feet.

D. The only new commercial area shall be located at the intersection of either US-56 and K-33 or US-56 and County Route 1061.

Policy 3.15: Require a Market Impact Analysis

A. Proposals to create any shopping district that, when considering the entire node, will result in greater than 150,000 gross square feet of commercial building space shall include an independent market analysis. Initial development proposals of 50,000 gross square feet or less on any single corner are exempt from this market analysis requirement, but will be limited to one exemption per corner of the intersection. The market analysis shall adhere to all of the following criteria:

1. The entity proposing the commercial project shall provide the funding of the study.

2. The independent consultant that performs the market study shall be chosen by the city and agreed upon by the entity submitting the proposal for the shopping center.

3. The study shall analyze the commercial proposal and provide at least the following information:

    a. The overall viability of the proposal;
    b. The validity of the proposal considering any community retail vacancy, sales/square foot and square footage/capita data as outlined in Policy 1.7;
    c. How the proposal will impact existing commercial development in the community;
    d. How the mix and sizes of proposed uses of the development will impact the viability of Downtown Lawrence;
    e. A building phasing schedule based upon the community's ability to absorb the additional commercial square footage; and
    f. Any other additional information required by the Planning Commission.

B. The project shall not be approved if the market study indicates the commercial project or any proposed phase cannot be absorbed into the community within three years from the date of its estimated completion, or that it would result in a community-wide retail vacancy rate of greater than eight percent.

Policy 3.16: Criteria for Auto-Related Commercial Centers

A. Auto-Related Centers shall be located at the intersection of two state or federally designated highways.

B. Auto-Related Centers shall have a lot length-to-depth ratio between 1:1 and 3:2 and shall be a minimum of 20 acres in size.

C. As Auto-Related Centers are located in areas that serve as “gateways” to the city, any proposal shall be closely scrutinized for architectural appearance, landscaping, signage, etc.

Traffic impacts continue to be a major concern in commercial developments. Ensure safe and efficient access and circulation within and around commercial areas.

GOAL 4: Transportation Considerations

Promote a multi-modal transportation system that provides or improves access and circulation within and adjacent to commercial areas.

Policy 4.1: Levels of Service

The expansion of existing or new commercial development shall not occur until the surrounding street system can provide an acceptable level of service.

Policy 4.2: Evaluate Traffic Impacts

An evaluation of the traffic impacts of a development on the surrounding area shall consider the existing and projected traffic conditions in relation to the existing transportation system. This evaluation should be based on planned improvements identified in the *Capital Improvement Plan (CIP),* the *Comprehensive Plan,* and/or the *Long-Range Transportation Plan.* These plans shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 4.3: Minimize Traffic Diversion

A. Prohibit direct vehicular access from commercial developments to local residential streets.

B. Discourage commercial traffic through residential neighborhoods.

Policy 4.4: Ensure Adequate Ingress and Egress

A. Limit the principal access of commercial development to arterial, collector or access/frontage streets.

B. Develop ways to improve access to downtown and other commercial centers within the community through improved bike and pedestrian paths, bus access (loading/unloading) and parking areas, public transportation, and vehicular access.

Policy 4.5: Limit Access

A. Minimize curb cuts along arterial and collector streets.

B. Encourage shared access between adjacent commercial developments and coordinated traffic circulation within proposed development areas.

C. Lot access and street configurations shall be designed to avoid curb cuts and local street intersections on arterial streets and to coordinate access with adjacent developments.

Policy 4.6: Provide Vehicular Circulation

A. Development proposals shall provide adequate internal circulation within commercial developments that allows access to adjacent commercial buildings and commercial or mixed-use centers.

B. Development proposals shall ensure that vehicular circulation related to a specific proposal does not rely on public streets for internal traffic circulation needs but provides circulation within the development.

Policy 4.7: Provide Pedestrian Access

A. The city should develop a pedestrian/bicycle pathway system that provides access from the University of Kansas campus to Downtown Lawrence.

B. Development proposals should provide safe, convenient pedestrian access to concentrated retail areas from parking areas.

C. Development proposals should include sidewalks on one side of local streets (public and private) and both sides of collector and arterial streets.

D. Development proposals should include pedestrian access linking developments to neighborhoods while ensuring physical separation from vehicles along both public and private streets and within parking areas.

E. Development proposals shall give consideration to providing a safe, reasonable method for pedestrian access across major intersections.

Policy 4.8: Provide Bicycle Access

A. Commercial development proposals should provide for interior bicycle access.

B. The city should develop a plan to provide bicycle links between major activity generators within the community.

Policy 4.9: Encourage Convenient Parking within Commercial Areas

A. Development proposals shall provide convenient parking for retail areas.

B. The city and property owners should work together to develop convenient parking for short-term visitors and long-term parking areas for employees.

Policy 4.10: Utilize Outlying Parking Lots

Identify potential parking areas which can serve mass transit and carpooling.

Policy 4.11: Ensure Adequate Truck Loading and Maneuvering Areas

Development proposals shall provide adequate loading space within a building or a side or rear yard, designed in such a way that all storage, standing and maneuvering of trucks will take place solely on private property.

Map 6-1
Existing and Potential Commercial Land Use Locations

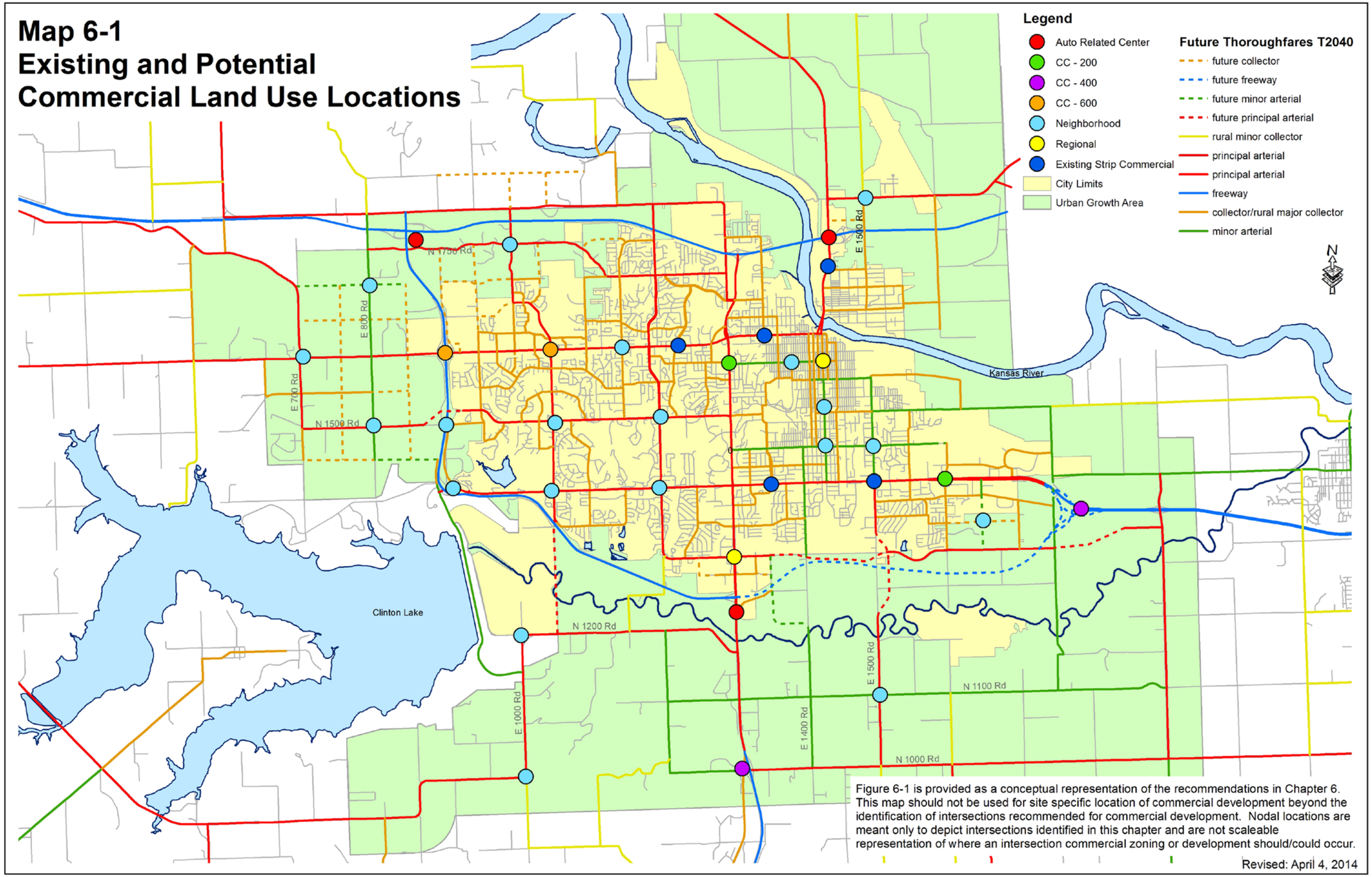


Figure 6-1 is provided as a conceptual representation of the recommendations in Chapter 6. This map should not be used for site specific location of commercial development beyond the identification of intersections recommended for commercial development. Nodal locations are meant only to depict intersections identified in this chapter and are not scaleable representation of where an intersection commercial zoning or development should/could occur.

Revised: April 4, 2014

Industrial and Employment-Related Land Use

this page intentionally left blank

CHAPTER SEVEN
INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE

Over time, the City of Lawrence and portions of unincorporated Douglas County have experienced business and industrial development and growth. In recent years, this growth and development has taken the form of new industrial and business development, as well as expansion of existing industries and businesses. As Douglas County continues to grow, and with more residents expected to commute outside of the community for employment, there is a recognized need that more industrial and business development is necessary to provide local job opportunities. Of particular interest to the community is the attraction of industries and employment-related uses that are based in biosciences, agriculture and natural resources, technology, and telecommunications.

Both Douglas County and the City of Lawrence consider a healthy natural environment, a diversified economy, and a fiscally stable government as being interdependent and further recognize that new industrial and employment-related land uses contribute to the local tax base and the creation of a full-service community where residents can live and work. Douglas County and the City of Lawrence are in the unique position of being able to fulfill this vision by tying into the needs and services related to the various University of Kansas research programs and technological developments. It is also recognized that growth in the greater Kansas City and Topeka metropolitan areas indicate the potential for substantial new future job opportunities and industrial development within Douglas County.

The ECO^2 Commission presented their report to both the City and County Commissions in 2007 that develops a long term plan of a public/private partnership for the advancement of industrial/business parks and open space preservation in Douglas County. This Comprehensive Plan, in conjunction with the ECO^2 report, provides a methodology to weigh specific criteria to identify and recommend a number of new business and industrial development locations in the City of Lawrence and unincorporated Douglas County.

While industrial land uses and employment-related land uses share some similar characteristics, such as the need for large areas of land and the ability to provide employment opportunities, they also each have distinct characteristics, such as locational requirements within the community in terms of compatibility with other land uses, as well as co-locational criteria with the specific types of services/industries provided. For this reason, this chapter has been divided into two sections. The first section deals with industrial land uses and the second section deals with employment-related land uses.

STRATEGIES: INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE

The principal strategies for the identification, development, and maintenance of industrial and employment-related areas are:

- Increase the number and diversity of jobs available to the citizens of Douglas County to stabilize the future employment base and generate additional wealth in the community.

- Identify an adequate amount of available land in a number of locations in Douglas County to meet diverse industrial and business related development needs.

- Increase community involvement in economic development activities, by partnering with the local business community and area educational institutions to bring new technology and investment to the region for the purpose of meeting the economic development job growth goal of securing twenty thousand new jobs in Douglas County by 2020.

- Protect, enhance, and retain existing industrial-related land use areas serving the community.

- Continue to address the needs of existing businesses and industries to ensure their retention in the community and to help facilitate expansion plans of those businesses and industries for the future.

- Encourage site availability, site improvements, and community amenities which best respond to the market demands for industrial and business development while maintaining the community objectives for the type and quality of such development.

- Encourage bicycle, pedestrian and public transit access from neighborhoods to industrial and business employment centers.

- Minimize impacts to the natural environment in the identification of new industrial and business development areas or in the redevelopment of existing areas. Whenever possible, industrial and business development should encourage the retention of open space to serve a variety of purposes, including stormwater management, preservation of wildlife habitat and ecological functions, recreational opportunities, and reduction of visual impacts on surrounding areas.

- As new areas evolve, encourage development proposals to employ sound site planning and design principles. Interfacings with surrounding properties and neighborhoods are also encouraged to minimize negative impacts and employ appropriate and compatible industrial and business activities.

1. INDUSTRIAL LAND USE

INDUSTRIAL LAND USE CATEGORIES

Industrial development in Douglas County has taken on many shapes and forms in the past. This Comprehensive Plan recognizes this variety in development and establishes the following categories of industrial-related land use:

- **Warehouse and Distribution** - an area generally characterized by businesses involved in the warehousing and distribution of wholesale goods and supplies.

- **Industrial** - an area generally characterized by business activities that include manufacturing, assembly, processing, and similar operations.
- **Work-live Campus-type Center** – an area that is a campus-like setting with a mix of uses that are compatible which may include industrial, business, retail commercial and residential developments. These areas will be held to a higher standard of design that accents and complements the natural environment and provides a comfortable environment for a live-work relationship where pedestrian activity is planned for and encouraged.

- **Industrial/Business/Research Park** - an area generally characterized by a predominance of office, office research, warehouse and distribution, and/or industrial business activities that typically encompass a large area of land and are designed in a "campus" setting.

LAWRENCE - EXISTING INDUSTRIAL AREAS

The City of Lawrence has several major industrial areas providing employment opportunities to the community. These larger areas include: 1) Santa Fe Industrial Area; 2) East Hills Business Park; 3) Santa Fe Railroad corridor; 4) Union Pacific Railroad corridor; 5) Lawrence Municipal Airport; and 6) Southeast Industrial Area. A description and plan recommendations for these areas are discussed below. In addition to these primary industrial areas, the City of Lawrence also has a number of smaller industrial locations throughout the city. While not specifically addressed in this section, these smaller industrial areas play an important role in the overall industrial and business development composition of the community as a whole. Refer to Map 7-1, Map of Existing Industrial and Employment-Related Land Uses.

- **Santa Fe Industrial Area**

The Santa Fe Industrial Area, located north of the Kansas Turnpike/I-70 and south of the Kansas River in north central Lawrence, has developed as a large warehouse and distribution location. This Comprehensive Plan recommends an expanded role for this area in the future. The *K-10 & Farmer's Turnpike Plan* identifies 130 acres of industrial and office/research uses along the western side of this area. It is also recommended that as additional industrial-related uses develop, impacts on nearby residential development along Riverridge Road will need to be minimized. Additionally, street improvements may be needed and land use transition areas are recommended to protect residential uses in the area.

- **East Hills Business Park**

East Hills Business Park is located on the eastern edge of Lawrence on the north side of Kansas Highway 10. Planned and developed in the late 1980s and early 1990s, this is one of the community's first true industrial park developments. As this area reaches capacity, the closure of the Farmland Industries site (immediately to the west) makes expansion of East Hills Business Park a possibility and should be closely examined for such a purpose. East Hills Business Park serves as the eastern gateway to the community and the City should continue to examine future development plans for this area to ensure they reflect the image and quality the community seeks in gateway development.

- **Burroughs Creek Corridor**

The Burroughs Creek Corridor (the former Santa Fe Railroad Corridor) stretches from East 31st Street to the Kansas River in East Lawrence and includes a south and north segment. Parts of the corridor area offer smaller land parcels and provides opportunities for small business owners to coexist with neighboring residential uses. Future development of this area should be in accordance with the Burroughs Creek Corridor Plan.

- **Union Pacific Railroad Corridor**

The Union Pacific Railroad Corridor serves North Lawrence and has historically been the site of a variety of industrial uses. Industrial development patterns along the corridor are somewhat fragmented with interspersed residential and commercial land uses. Many industrially zoned sites have been developed with residential structures or represent vacant lots originally divided for residential purposes. This corridor may also offer opportunities for small business owners to establish smaller industrial operations within the community.

New development and redevelopment in the area should be encouraged to improve the appearance and image of the area. In general, Locust Street, Maple Street, and Lincoln Street west of North 7th Street should continue to serve as industrial collector streets in the neighborhood. Efforts to discourage non-residential traffic in other parts of the neighborhood are highly encouraged. It is also recommended that consolidation of industrial sites occur whenever possible to remove those residential and incompatible commercial uses located within predominantly industrial development land use patterns in a concentrated effort to minimize those impacts and conflicts between incompatible land uses. When the industrial usage of a particular property ceases and is no longer practical, it is recommended those properties be converted to residential and/or neighborhood commercial uses.

LAWRENCE - NEW INDUSTRIAL AREAS

This chapter sets out goals and policies to guide present and future industrial and employment development within Douglas County. A key part of the chapter is deciding where Industrial and Employment related development should be located. To assist in the identification of general locations throughout the City of Lawrence, its Urban Growth Area, and unincorporated Douglas County appropriate for industrial and employment park development, there are some basic locational criteria characteristics that should be considered. The following criteria strike a balance between industrial user needs and community interests, as well as being aligned with criteria developed through the ECO^2 process.

LOCATIONAL CRITERIA FOR INDUSTRIAL DEVELOPMENTS

A given site, whether located within City limits, in the UGA, or in unincorporated areas of Douglas County, should *substantially* meet the following **general** locational criteria:

- have feasible access to Federal and State transportation networks;
- be of adequate parcel size, generally over forty acres;

- lie primarily outside of the regulatory floodplain;
- have minimal average slopes.

After identifying a general location for potential industrial and employment park development, further site analysis and environmental suitability should be conducted considering site-specific criteria. Sites should *substantially* meet the following **specific** criteria on a site plan or development plan level:

- preserve environmentally sensitive areas, including vegetative cover and wildlife habitat, to act as buffers and site amenities;
- encourage natural stormwater management, including locations that permit direct discharge to the floodplain;
- have available and adequate utilities, infrastructure and services (i.e. police and fire protection) for the proposed use;
- be compatible with existing and future zoning/land use patterns, including the use of appropriate buffers between land uses;
- be annexed before development if adjacent to municipal boundaries.

Initial applications for site considerations should first be weighted against the general locational criteria, and then against the specific criteria as individual proposals move through the development process. A non-exclusive list of sites that substantially meet the general criteria are illustrated in Map 7-2, Map of Potential Locations for Future Industrial and Employment Related Land Use, and are detailed in descriptions below. Locations initiated through the planning process that are not on Map 7-2 will be weighted against the general locational criteria above.

INDIVIDUAL SITE ANALYSIS:

- **Farmland Industries**

  Transportation: State Highway and Rail access
  Parcel Size: 275+ acres
  Floodplain: None
  Slope: Mostly minimal (0-3%) with some 3-7% and higher

  Generally this area is located north of K-10, west of East Hills Business Park, south of N 1500 Road, and west of E 1575 Road. While the entire site contains roughly 400+ acres, the proposed Farmland Industries Redevelopment Plan, currently working through the approval process, identifies approximately 275 acres of land for industrial uses. The site has access to K-10 Highway, as well as possible future connections to East Hills Business Park. In addition the site has direct access to rail lines that exist on the north end of the property. The site lies outside of the 100-year floodplain and is generally covered by minimal (0-3%) slopes, with a few areas having 3-7% and higher slopes. Portions of the site pose some challenges related to environmental clean-up from the prior use that needs to be addressed before re-development, but would be a good site for Warehouse and Distribution, Office Research and Industrial uses, especially when combined in a collaborative park setting.

- **Southeast Area**

Transportation: State Highway access
Parcel Size: 200+ acres (with an additional 30 identified for Warehouse)
Floodplain: None
Slope: Minimal (0-3%)

The Southeast Industrial Area is located on the south side of East 23rd Street/Kansas Highway 10, south of East Hills Business Park. This area consists of general industrial land uses and it is anticipated this area will experience increased industrial development as noted in the Southeast Area Plan. That plan recommends less intense Industrial uses, such as Warehouse and Distribution and Office Research for approximately 30 acres south of N 1360 Road between E 1700 Road and E 1750 Road. The plan recommends more intense industrial uses for the roughly 200 acres for the area northwest of the intersection of 25th Terrace and Franklin Road, the area east of Franklin Road, north of E. 25th Street and N. 1360 Road, west of E. 1750 Road (Noria Road), and south of E. 23rd Street/K-10 Highway and the area north and south of Franklin Park Circle. Like East Hills Business Park, the Southeast Industrial Area will serve as the eastern gateway to the community. This site has access to Kansas Highway 10 and lies outside of the 100-year floodplain. The area is generally covered by minimal (0-3%) slopes.

- **Airport**

  Transportation: Federal Interstate, State Highway, Air access
  Parcel Size: 230+ acres
  Floodplain: Approximately 10% of those 230 acres
  Slope: Minimal; 0-3%

  The Lawrence Municipal Airport, located in North Lawrence along US-24/40/59, is a newly developing industrial area of the community. Aviation enterprises are present and there is the potential for additional aviation and related enterprises. Currently, the airport is an island surrounded by some county industrial land use, but mostly agricultural land uses. As development continues to occur in neighboring Leavenworth County, the US-24/40/59 corridor will become a major thoroughfare. As the City begins initiating long-range planning activities for improved municipal services to and stormwater management within this area, development pressures will increase for this area. It is recommended by this Comprehensive Plan that annexation be a part of any industrial development proposed for this area. As this area evolves into a community gateway, development proposals are also encouraged to employ sound site planning and design principles to make this area an attractive one. Interfacings with surrounding properties and neighborhoods are also encouraged to minimize negative impacts and employ appropriate and compatible industrial and business activities.

  The area around the Lawrence Municipal Airport best suited for industrial development generally lies southwest of the airport and North of I-70 and encompasses roughly 230 acres. This site has access to I-70, Highways 24 and 40, and the Lawrence Municipal Airport. The majority of the site lies outside of the regulatory floodplain; however, this site has unique challenges related to stormwater management that would need to be addressed during the development process. Slopes in this area are minimal (0-3%).

- **I-70 and K-10**

Transportation: Federal Interstate and State Highway access
Parcel Size: 540 acres, with possibility of more
Floodplain: None
Slope: Mainly 0-3%

The I-70 and K-10 area lies generally north of N 1800 Road (Farmer's Turnpike) near the intersection of Kansas Highway 10 and I-70. The proposed area contains roughly 540 acres of industrial and office/research uses as identified in the *K-10 & Farmer's Turnpike Plan*. The area contains land of minimal slope (0-3%) and also lies outside of the 100-year floodplain. This area substantially meets the general locational criteria and will be an important future economic development area for the Lawrence community because of its prime location near the I-70 interchange, which also acts as the primary access point for the City of Lecompton. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that the land is annexed and urban services are able to be provided. Over time, as this area develops, it will serve as a gateway to the City of Lawrence and would best be suited for Warehouse and Distribution uses, Industrial uses, Work-live Campus type centers and Industrial/Business/Research parks.

- **K-10 and Highway 40**

Transportation: State Highways (access to Federal Interstate within 2 miles)
Parcel Size: 300 Acres (split north and south of Highway 40)
Floodplain: None
Slope: Mainly 0-3%, with some 3-7%

This area generally lies to the west of K-10 Highway on both the north and south sides of Highway 40 and is detailed in the West 6th Street/K-10 Nodal Plan. The area contains approximately 300 acres and lies outside of the 100-year floodplain. The area is located adjacent to both Highway 40 and K-10 Highway, as well as being in close proximity to I-70. The site has mostly minimal slopes (0-3%) with some 3-7% slopes. Over time, as this area develops, it will serve as a gateway to the City of Lawrence and would be best suited for Warehouse and Distribution uses, Industrial uses, Work-live Campus type centers and Industrial/Business/Research parks.

- **Eudora North & Eudora South**

Areas have been generally identified on the east side of Eudora, both north and south of K-10 Highway that would be appropriate for Industrial development. It is recommended that Eudora annex both areas prior to development.

- **Baldwin City**

The Comprehensive Plan already identifies that a general area to the west of the current Baldwin City limits would be ideal for industrial development at such time that the City of Baldwin is able to provide utilities to the site. Baldwin City is currently in the process of drafting and adopting a comprehensive plan and therefore any decisions regarding specific locations for this site should wait until that process is complete.

- **Highway 56 and Highway 59**

The Comprehensive Plan identifies that a general area near the proposed intersection of Highways 56 and 59 would be ideal for industrial development in the future. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that urban services are able to be provided.

- **Midland Junction**

  This area generally lies near the intersection of N 2000 Road and Highway 24/59 north of Lawrence. While the area is located within the Urban Growth Area for the City of Lawrence, development is not anticipated for more than 30 years. This area is located in proximity to transportation networks and meets the general location criteria making it ideal for industrial development in the future. Intense development should wait until such time that urban services are able to be provided, and transportation infrastructure is upgraded to ensure safe access.

- **Highway 56 and K-33**

  The Comprehensive Plan identifies that a general area near the intersection of Highways 56 and K-33 would be ideal for industrial development in the future due to its proximity to the proposed Gardner Intermodal Facility. It may be possible to develop the site to a limited extent prior to the availability of urban services; however, intense development should wait until such time that urban services are able to be provided.

The preservation of high-quality agricultural land, which has been recognized as a finite resource that is important to the regional economy, is of important value to the community. High-quality agricultural land is generally defined as available land that has good soil quality and produces high yields of crops. Within Douglas County these are *capability class* (non-irrigated) I and II, as identified by the National Resources Conservation Service.

At least one of the sites identified above (Airport) has some amount of high-quality agricultural land. Soil conserving agri-industry businesses that will protect the quality of existing high-quality agricultural land either through agricultural use or preservation for future agricultural use should be encouraged to locate in these areas. Future Industrial and Employment land use sites not included on Map 7-2, Potential Locations for Future Industrial and Employment Related Development, should balance the agricultural significance on the site against the need for industrial and employment related development."

2. EMPLOYMENT-RELATED LAND USE

EMPLOYMENT-RELATED LAND USE CATEGORIES

Employment-related and business park development in Douglas County has taken on many shapes and forms in the past. This Comprehensive Plan recognizes this variety in development and establishes the following categories of employment-related land use:

- **Office** - an area generally characterized by a predominance of professional offices and service uses that are typically located in commercial areas.

- **Office Research** - an area generally characterized by businesses involved in technology, research, and scientific-related activities, although it may also include traditional light industrial uses, such as manufacturing or assembly.

- **Work-live Campus-type Center** – an area that is a campus-like setting with a mix of uses that are compatible which may include industrial, business, retail commercial and residential developments. These areas will be held to a higher standard of design that accents and complements the natural environment and provides a comfortable environment for a live-work relationship where pedestrian activity is planned for and encouraged.

- **Industrial/Business/Research Park** - an area generally characterized by a predominance of office, office research, warehouse and distribution, and/or industrial business activities that typically encompass a large area of land and are designed in a "campus" setting.

LAWRENCE - EXISTING EMPLOYMENT-RELATED AREAS

The City of Lawrence has several business areas providing employment opportunities to the community. Three of the larger areas include: 1) the University of Kansas; 2) downtown Lawrence; and 3) Oread West Research Park. A description and plan recommendations for these areas are discussed below. In addition to these primary employment-related areas, the City of Lawrence also has a number of smaller business locations throughout the city. While not specifically addressed in this section, these smaller business centers play an important role in the overall employment and business development composition of the community as a whole. Refer to Map 7-1, Map of Existing Industrial and Employment-Related Land Uses.

• The University of Kansas

The University of Kansas, with its main campus on the east side and its west campus on the west side of US-59/Iowa Street, serves as a major employment center for the City of Lawrence and Douglas County. As the university continues to grow and expand its research and technological abilities, opportunities for new and expanded related industrial and business development are a possibility and highly encouraged.

• Downtown Lawrence

Downtown Lawrence encompasses a significant number of non-retail employees and geographically represents a major employment area for the community as well. A substantial number of office and service employees are located in this area. The development of new major office employment centers within the community needs to be evaluated to determine the potential effect on downtown Lawrence. A critical assessment should be made to determine that such proposed development will not have a significant negative impact on the Downtown.

- **Oread West Research Park**

The Oread West Research Park, located at the intersection of Wakarusa Drive and Bob Billings Parkway (formerly West 15th Street) in West Lawrence, is one of the City's newest employment areas offering a high-quality development setting. Although this area has experienced continued development, vacant land still exists and this Comprehensive Plan recommends continued emphasis on office and research use for this area. The location has strong potential for new technology-related industries and should be the focus of an "industrial cluster" as described in the Economic Development element. This park has ties to the University of Kansas and a continued partnership in technological and research-based industrial and business opportunities is encouraged.

LAWRENCE - NEW EMPLOYMENT-RELATED AREAS

This Comprehensive Plan recognizes the need for smaller scale business development opportunities. The following discussion relates to the office and office/research uses of the employment-related land use classifications mentioned earlier.

- **Office**

  New office uses will generally be restricted to existing areas of the city, or new areas that are appropriately identified on future land use maps. Future office uses should only locate in new industrial areas in partnership with office research areas, so that office uses independent of industrial uses do not take up valuable industrial land.

  It is desirable that a mix of uses be established for these areas in a planned and unified manner. Like other locations visible from major street corridors, development of these areas should express a high quality living and working environment. Consideration of good site planning and design principles that minimize unnecessary impacts to surrounding neighborhoods and promote compatible land use activities and appropriate neighborhood connections and interfacings are encouraged for any development proposed for this area.

- **Office Research**

  Office research uses have been recommended as an appropriate land use activity at gateways into the community. Developments occurring at gateways to the community are required to be of high-quality design and visual character utilizing best management practices for site planning and design. Such developments are intended to promote an integrated and contextual design approach that minimizes unnecessary impacts, such as noise, odor, glare, or other similar intrusions to the community and surrounding neighborhoods.

  For information related to Work-Live Campus-type Centers and Industrial/Business/Research Park refer to the text in Section 1 - Industrial Land Use for recommendations relating to this type of land use.

INDUSTRIAL AND EMPLOYMENT-RELATED LAND USE GOALS AND POLICIES

Guidelines and incentives are needed to allow for the retention and expansion of development in established industrial and employment-related areas of the City of Lawrence and unincorporated Douglas County.

GOAL 1: Development in Established Industrial and Employment-Related Areas

Encourage the retention, redevelopment and expansion of established industrial and employment-related areas.

Policy 1.1: Retain Established Development and Encourage New Development in Existing Industrial and Employment-Related Areas

a. Work with the Lawrence Chamber of Commerce to actively market undeveloped sites in a manner which will stabilize long-term development patterns.

b. Encourage parcel consolidation to provide infill sites for redevelopment and expansion opportunities.

c. Provide incentives for expansion of existing facilities and redevelopment of vacant facilities and/or land.

Policy 1.2: Ensure Compatibility of Development

a. Establish design guidelines and standards for redevelopment of existing sites and facilities to ensure high quality development.

b. Encourage best management practices for site planning and design that include, but are not limited to, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacings with adjacent neighborhoods and development, and appropriate accommodation of the design to the site's natural features.

c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.

Policy 1.3: Concentrate Industrial and Employment-Related Development

a. Maintain an appropriate supply of industrially zoned land so that site choices are available and infrastructure expansion can occur in an efficient and orderly manner.

b. Services to existing industrial and employment-related areas should be improved and upgraded as required to support redevelopment opportunities. Overall

stormwater management, vehicular and pedestrian access, water and wastewater abilities, and site maintenance should be undertaken where necessary. Encourage partnerships for redevelopment and improvements.

Policy 1.4: Provide Opportunities for Limited Industrial and Employment-Related Development in the Unincorporated Areas of Douglas County

Encourage redevelopment and limited expansion of existing industrial and employment-related areas where specific criteria (p. 7-5) can be met.

Guidelines are needed to provide direction on how much, where and at what scale industrial and employment-related development is appropriate for the market it is intended to serve.

GOAL 2: Criteria for Location of New Industrial and Employment-Related Development

Provide industrial and employment-related areas to meet the economic needs of the community.

Policy 2.1: Utilize Locational Criteria for All Industrial and Employment-Related Development

1. A given site, whether located within City limits, in the UGA, or in unincorporated areas of Douglas County, should *substantially* meet the following **general** locational criteria:
    a. have feasible access to Federal and State transportation networks;
    b. be of adequate parcel size, generally over forty acres;
    c. lie primarily outside of the regulatory floodplain;
    d. have minimal average slopes.

2. After identifying a general location for potential industrial and employment park development, further site analysis and environmental suitability should be conducted considering site-specific criteria. Sites should *substantially* meet the following **specific** criteria on a site plan or development plan level:
    a. preserve environmentally sensitive areas, including vegetative cover and wildlife habitat, to act as buffers and site amenities;
    b. encourage natural stormwater management, including locations that permit direct discharge to the floodplain;
    c. have available and adequate utilities, infrastructure and services for the proposed use;
    d. be compatible with existing and future zoning/land use patterns, including the use of appropriate buffers between land uses;
    e. be annexed before development if adjacent to municipal boundaries.
    f. utilize the following general locational criteria in reviewing industrial and employment-related development request.

Policy 2.2: Review Public Incentive Requests for Compliance with City Adopted Policies

Review public incentive requests to ensure compliance with city adopted policies.

Policy 2.3: Adhere to Designated Land Uses

a. Locate the development of planned industrial, office research and warehouse distribution facilities in accordance with the general locational criteria listed on p. 7-5. Additionally, sites that meet those criteria are identified on Map 7-2. Require annexation of sites that are adjacent to the City of Lawrence limits.

b. Designate new industrial, office research and warehouse distribution areas to support job creation. Ensure that new industrial, office research and warehouse distribution developments are concentrated in areas with similar compatible uses.

c. Large-scale industrial and employment-related development should be located in planned parks to help ensure coordination of circulation systems, lot configuration, site layout [building, parking and access facilities], and environmental amenities.

Policy 2.4: Maintain an Inventory of Industrial and Employment-Related Land Uses and Develop a Method to Monitor Related Growth

a. Maintain a methodology for site selection that takes into consideration industrial user's needs and the best interests of the community.

b. Identify and plan for an appropriate supply of industrially zoned land.

c. Develop a technique to monitor the aggregate size of industrial and employment-related developments within the community.

Policy 2.5: Ensure Compatibility of Development

a. Establish design guidelines and standards for new industrial and employment-related development.

b. Encourage best management practices for site planning and design that include, but are not limited to, the consideration of natural site features, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacings with adjacent neighborhoods and development.

c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.

d. Major entrances into industrial and business parks should be identified by attractive "gateway" features. Gateways should include special signage, landscaping and accent lighting, and/or a common sculptural feature and should be located outside the public street rights-of-way.

e. Access to individual building sites within industrial and business parks should be from an internal circulation system. Site access from peripheral arterial and collector streets should be limited to major entrances serving the overall development area. However, industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes. Industrial and employment-related

traffic and related conditions should not adversely affect other nearby land use areas.

Guidelines are needed to allow for compatible transition from industrial and employment-related development to other less intensive land uses. This framework is needed both in existing areas and new development areas.

GOAL 3: Compatible Transition from Industrial and Employment-Related Development to Less Intensive Uses

Ensure a compatible transition between industrial and employment-related developments and less intensive land uses.

Policy 3.1: Use Appropriate Transitional Methods

a. Encourage industrial, office research and warehouse distribution facilities to have a positive impact on neighboring land uses through the use of natural area separations, broad landscaped yards or other means of buffering.

b. New industrial, office research and warehouse distribution facilities should be designed and developed so that offices, showrooms, and similar uses occupy high-visibility locations around park peripheries.

c. Less compatible development should be located to the interior of industrial and employment-related development sites or adjacent to arterial streets rather than adjacent or in close proximity to residential neighborhoods or incompatible commercial uses. A use may be considered less compatible because of height, massing, parking, and light, noise, traffic generation or hours of operation.

d. Compatible transition and appropriate interfacings from industrial and employment-related development to less intensive land uses should consider:

1. Site Orientation

a. Site design should be oriented toward major streets.

b. Site access should be from collector or access/frontage streets to arterials. However, industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes.

c. Streets which are designed with elements to provide visual or physical buffering may be used as boundaries between industrial

and employment-related development and commercial or higher-density residential land uses.

d. Encourage the consolidation of access and driveways serving two or more uses within the industrial/business park development.

2. Building Relationships

a. A back-to-back relationship is preferable between industrial-related and residential uses, and may require substantial screening to provide compatibility. A front-to-front relationship is encouraged for all non-residential uses.

b. Industrial and employment-related buildings and parking areas should have greater setbacks than the required setbacks of abutting residential uses.

c. The height and massing of industrial and employment-related buildings and accessory structures should be oriented away from residential neighborhoods to avoid creating a negative visual effect. Industrial building height and massing should be complementary and reflect the residential architecture and neighborhood character when adjacent to such development.

3. Land Features

a. Retain mature trees, natural vegetation, natural and environmentally sensitive areas to naturally separate industrial and employment-related developments from residential land uses.

b. Use existing topography to naturally separate industrial and employment-related developments and other less intensive land uses.

4. Screening and Landscaping

a. Encourage the creative and extensive use of landscaping and berming techniques for effective buffering between differing intensities of land uses.

b. Fences shall not be used as a sole method of providing screening and buffering. Where fencing is proposed, additional landscaping may be required to soften the monotonous effect of a fenceline.

c. Encourage the use of existing vegetation, such as stands of mature trees, and other natural site features into the landscape design as natural buffers or focal points.

d. Use high quality materials in the construction of screening and landscaping to decrease long-term maintenance costs. Quality of site landscaping shall mirror the quality of the overall development.

e. Unsightly views and light trespass should be screened from neighboring properties and the public right-of-way. Building materials or structures incompatible with the image of a high-quality development, such as chain-link fences, outdoor storage facilities, etc., should not be the means of screening areas visible from public streets or adjacent parcels.

5. Lighting

Any lighting used to illuminate parking areas, signs or structures shall be placed to deflect light away from any adjoining property or from public streets through fixture type, height and location.

Policy 3.2: Consideration of Transitional Uses

a. Consider low-intensity commercial or office development as a transition between industrial and employment-related development and low-density residential neighborhoods. The low-intensity commercial or office development should include:

1. Design elements such as: height, massing, and scale compatible with the surrounding low-density residential uses;

2. Site design compatible with surrounding residential neighborhoods with consideration given to extensive screening, building and parking orientation, and preservation of natural site amenities; and

3. Site access provided from arterial, collector or access/frontage streets and traffic directed away from surrounding residential areas.

b. Encourage the integration of higher-density residential development through compatible design with industrial and employment-related developments and the surrounding low-density residential neighborhoods. Compatible design includes proper building transition and buffers.

c. Utilize medium- or high-intensity recreational facilities as a transitional use to lesser-intensity uses. Encourage the joint use of parking facilities to serve the recreational uses.

d. Incorporate open spaces and natural site features as a transitional use between industrial and employment-related development and low-density residential development.

Policy 3.3: Consider Image and Appearance in Site Layout

a. Establish design guidelines and standards for new industrial and employment-related development.

b. Encourage best management practices for site planning and design that include, but are not limited to, the consideration of natural site features, building placement and orientation, vehicular and pedestrian circulation patterns, open space, landscaping, lighting, stormwater management, and interfacings with adjacent neighborhoods and development.

c. Encourage building design techniques that include, but are not limited to, the consideration of facade and exterior wall articulation, materials and colors, rooflines, entryways, signage, and energy and resource conservation.

Traffic impacts continue to be a major concern in industrial and employment-related developments, with much of the concern related to ensuring safe and efficient access and circulation within and around industrial and employment-related areas.

GOAL 4: Transportation Considerations

Promote a multi-modal transportation system which provides or improves access and circulation within and adjacent to industrial and employment-related areas.

Policy 4.1: Level of Service

Permit the expansion of existing or construction of new industrial and employment-related development in areas where the additional traffic generated by such development would result in an acceptable Level of Service.

Policy 4.2: Evaluate Traffic Impacts

An evaluation of the traffic impacts of a development on the surrounding area should consider the existing and projected traffic conditions and their impact on the existing transportation system and should be based on planned improvements which are identified in the Capital Improvement Plan (CIP), the Comprehensive Plan, or the Long-Range Transportation Plan. The Capital Improvement Plan, the Comprehensive Plan, and the Long-Range Transportation Plan shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 4.3: Vehicular Circulation and Access

a. Require, wherever possible, vehicular circulation within compatible developments that allows internal access to adjacent industrial and employment-related buildings and developments.

b. Prohibit direct vehicular access from industrial and employment-related developments to local residential streets. Industrial and employment-related traffic through residential areas is strongly discouraged.

c. Limit the principal access for industrial and employment-related centers to arterial, collector or access/frontage roads. Industrial users on large lots that are significant generators of traffic may directly access arterial roads if the size of the site is such that it allows internal circulation without the necessity of constructing local roads to direct that circulation to the arterial road. Such access shall be based on sound traffic engineering principles and shall be properly controlled with appropriate signalization and turn lanes.

d. Adequate ingress and egress from industrial and employment-related centers should strive to provide a minimum of two access points.

e. Encourage shared access between adjacent industrial and employment-related developments. Plan for coordinated traffic circulation within and adjacent to proposed development areas.

Policy 4.4: Pedestrian Access and Circulation

a. Provide sidewalks on both sides of all streets (public and private).

b. Provide safe, convenient pedestrian access from parking areas and avoid pedestrian and vehicular conflicts within these industrial and employment-related developments.

c. Include bicycle access, or the potential for such access, within industrial and employment-related developments, between major employment areas within the community, and with the community's overall bicycle network.

d. Strongly consider public transit facilities and pedestrian-related facilities as a requirement of industrial and business park development.

e. Encourage public transit.

Policy 4.5: Parking and Loading

a. Develop parking areas in convenient locations to support industrial and employment-related traffic.

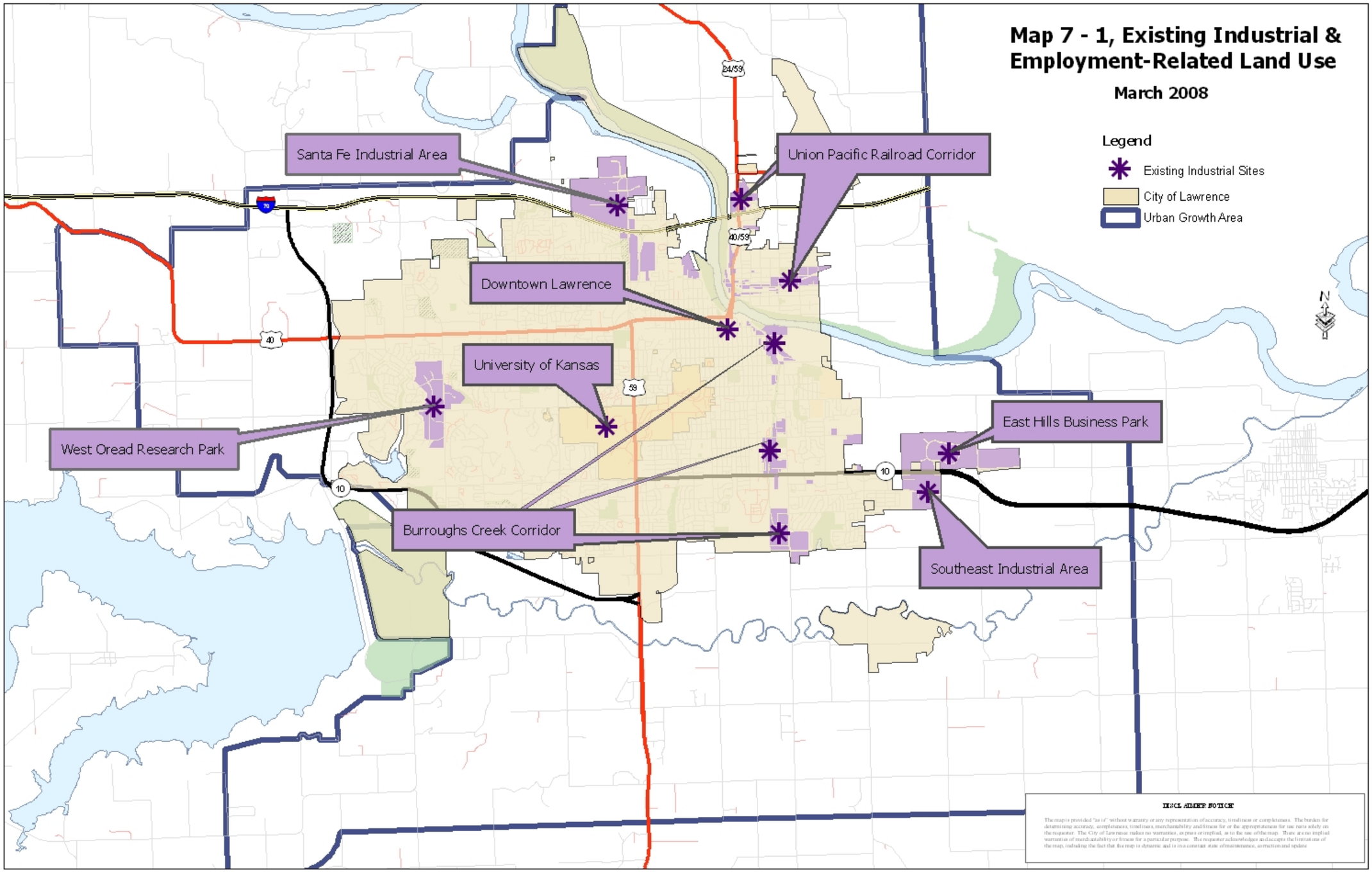
b. Identify potential parking areas which will serve mass transit and carpooling.

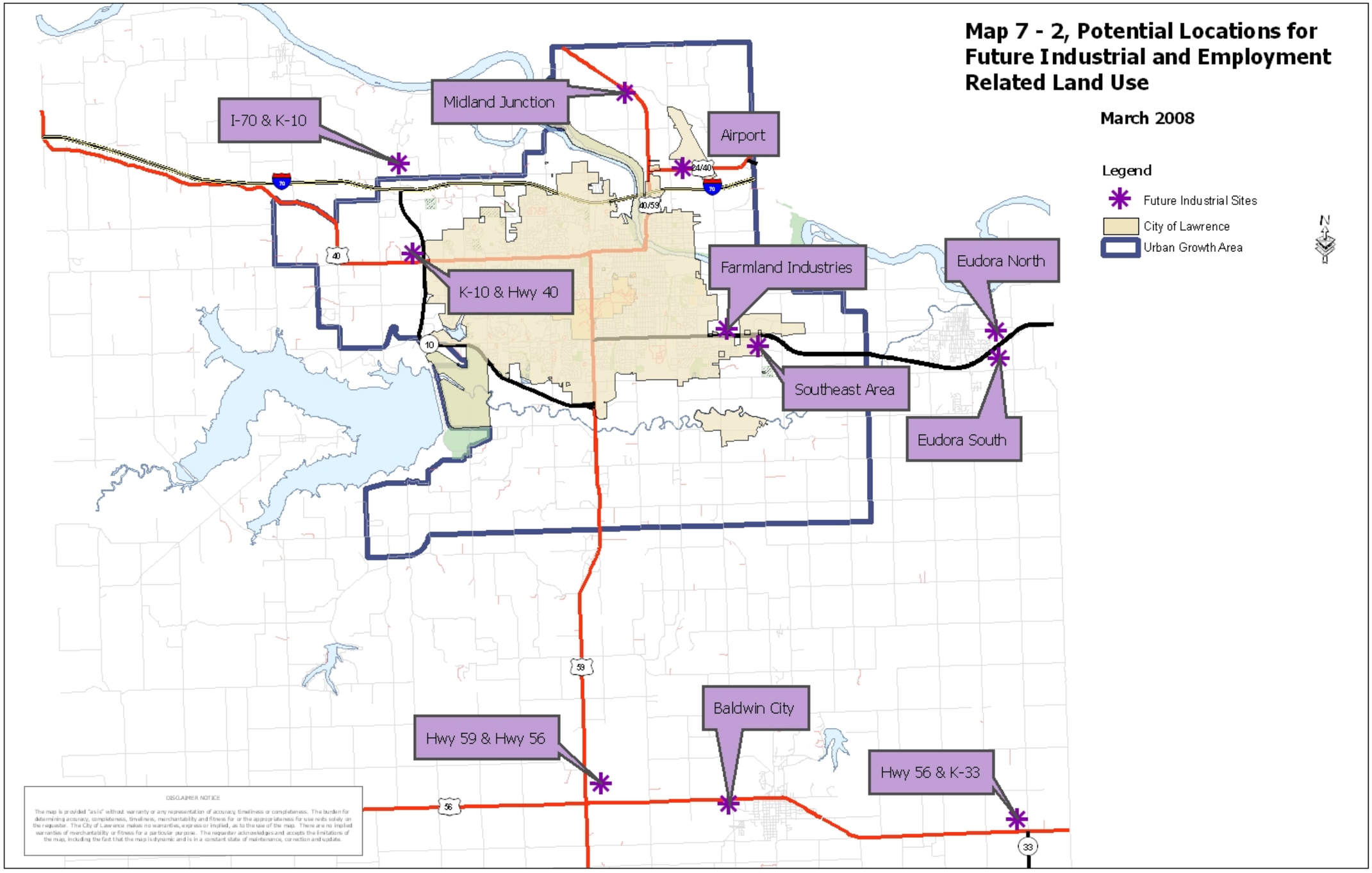
c. Ensure adequate loading space, within a building or a side or rear yard, in such a way that all storage, standing and maneuvering of trucks will take place solely on private property and be screened or buffered from adjacent lower-intensity uses.

this page intentionally left blank

APPENDICES FOR SUPPLEMENTAL REPORTS

This page intentionally left blank.


Map 7 - 1, Existing Industrial & Employment-Related Land Use
March 2008
Legend
Existing Industrial Sites
City of Lawrence
Urban Growth Area
Santa Fe Industrial Area
Union Pacific Railroad Corridor
Downtown Lawrence
University of Kansas
West Oread Research Park
East Hills Business Park
Burroughs Creek Corridor
Southeast Industrial Area
24/59
40/59
70
40
59
10
N


Map 7 - 2, Potential Locations for Future Industrial and Employment Related Land Use
March 2008
Legend
Future Industrial Sites
City of Lawrence
Urban Growth Area
N
Midland Junction
I-70 & K-10
Airport
K-10 & Hwy 40
Farmland Industries
Eudora North
Southeast Area
Eudora South
Baldwin City
Hwy 59 & Hwy 56
Hwy 56 & K-33
24/40
40/59
70
40
10
59
56
33
DISCLAIMER NOTICE
The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

this page intentionally left blank

Transportation

this page intentionally left blank

CHAPTER EIGHT - TRANSPORTATION

This chapter references the Metropolitan Transportation Plan (MTP) as the Transportation Chapter of Horizon 2020, reflects the goals of the MTP as adopted, and presents a brief explanation of the regional transportation planning process conducted in Douglas County by the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) and how that regional transportation planning program relates to the land use planning activities conducted by the Lawrence-Douglas County Metropolitan Planning Commission. This chapter also explains how both transportation planning and land use planning for the area are documented in the regional comprehensive plan.

METROPOLITAN TRANSPORTATION PLAN

The MTP, currently titled Transportation 2040 or T2040 is a document produced and approved by the L-DC MPO. The MTP sets regional transportation policies and it articulates goals and objectives for the creation of a multi-modal transportation system that complements land use plans, economic development plans, environmental plans, and other comprehensive plan elements for the region. The MTP assists state and local government agencies in improving the quality of life for area residents by developing a safe and efficient transportation system. The library of L-DC MPO documents, including the MTP, along with a description of the MPO process can be found on the web at http://www.lawrenceks.org/mpo/.

In addition to the regional scale planning policies found in the MTP which show major transportation corridors and services in a systematic way, there are smaller scale planning and design issues that are also important to the safe and efficient development of a multi-modal transportation system. Although many of these detailed items are more traffic engineering concerns than planning level issues, it is important to note that some items that need to be included in the transportation element of a comprehensive plan are not always included in the MTP. However, the MTP does reference the need for corridor and access management and other traffic engineering items designed to protect the operational integrity of the major roads in the region. This is important to support system planning for the regional multi-modal transportation system that is described in the MTP. For this reason, the state and local policies that address traffic engineering and transportation planning need to be used along with this chapter and the MTP in the review of proposed developments and infrastructure improvements. Local development codes should be supportive of the transportation planning policies set forth in this Comprehensive Plan Chapter and in the MTP.

MPO PLANNING PROCESS

The MPO transportation planning process is designed to provide a regional forum for decision-making for the development and operation of a multi-modal transportation system designed to provide safe and efficient mobility for all of the region's residents and businesses. Coordination and information sharing among jurisdictions are important elements of MPO activities. The L-DC MPO covers the entirety of Douglas County including the three smaller cities (Baldwin City, Eudora, and Lecompton) which are not included in or approving bodies for this comprehensive plan and may produce their own comprehensive plans.

The MPO planning process is called the 3 C (Continuing, Comprehensive, Cooperative) process. It is a continuing process that does not end when a new transportation plan document is approved. The MPO produces a new transportation plan at least once every five years (may change to every four years in the foreseeable future due to air quality issues), but as soon as a new plan is approved the MPO begins to work on related documents and improvements to put in the next edition of the transportation plan. The MPO process is comprehensive in that it views transportation system planning as one part of a larger planning process where various types of planning (transportation, land use, environmental, economic, etc.) work together to improve the quality of life for all people in the region. Transportation planning is intricately tied together with land use planning since much of the planning for mobility corridors is predicated on the types and intensities of land uses planned along those routes. Likewise, the land uses planned for an area depend on the access afforded by the transportation network. Transportation and land use planning have a symbiotic relationship. MPO activities are also part of a cooperative process involving several different government agencies and an ample amount of public review. Two federal agencies (Federal Highway Administration and Federal Transit Agency), the Kansas Department of Transportation, Douglas County, and the four city governments in Douglas County all participate in the MPO process and its committee meetings. This regional transportation planning process is open to the public which is welcome to attend meetings and encouraged to send comments about transportation planning issues to the MPO staff.

TRANSPORTATION 2040 GOALS, OBJECTIVES AND STRATEGIES

(copied from Chapter 3 of the Transportation 2040 Metropolitan Transportation Plan)

The goals and objectives of this Transportation 2040 (T2040) – Metropolitan Transportation Plan (MTP) for the Lawrence-Douglas County Metropolitan Planning Area (MPA) are based in part on the overarching goal of creating a shared regional vision for how the Lawrence-Douglas County Region will grow and what the community will look like in the future as depicted in the Lawrence-Douglas County Comprehensive Plan. The goals and objectives in this T2040 Plan are based on the following considerations:

- Public Participation from meetings and interviews with transportation stakeholders, various advisory committees, and written comments from the public
- The previous MTP; Transportation 2030 – Lawrence-Douglas County Long Range Transportation Plan
- Horizon 2020 – Lawrence-Douglas County Comprehensive Plan
- Planning Factors from the Federal surface transportation act - Moving Ahead for Progress in the 21st Century (MAP-21) and Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)
- Comprehensive multimodal nature of the MTP which is outlined in the MPO Policy Board Bylaws
- Knowledge and experience of numerous transportation professionals involved in our region's MPO process
-

- Guidance from the Kansas Department of Transportation and State emphasis areas outlined in the Transportation Works for Kansas (T-WORKS) program
- Federal transportation planning regulations for MPOs

The creation of this T2040 Plan was supported by an open public participation process and the willingness of the local, state, and federal officials involved in developing and approving this document to chart a comprehensive vision for a regional transportation system. This vision considers the region´s short- and long-term needs; land use patterns; planning decisions impacting transportation systems; the desire to provide mobility for all users; and the relationships between the transportation system, the environment and the economy. That comprehensive view of regional transportation planning and the recognition that transportation planning does not take place in its own universe, but that it is intricately related to several other forms of planning is an important part of the MTP development process. The T2040 vision, goals, and objectives also consider and reflect on the federal requirements of the SAFETEA-LU and MAP-21 planning factors listed below.

The MPO has provided the forum for the planning process to create this regional multimodal plan. The T2040 Plan relies on the understanding that a Continuing, Comprehensive, and Cooperative (3C) process will be required to carry out the vision, goals and actions addressed in this plan. That will require the MPO, local governments, KDOT, FHWA and any other invested parties to work together to implement the policies and programs recognized in this document.

FEDERAL PLANNING FACTORS

The new MAP-21 planning factors are similar to the previous SAFETEA-LU planning factors and both address several important issues related to mobility, equity, economic viability, safety, security, environmental stewardship, intermodal coordination, system preservation, operations and maintenance, and sustainability. Simply put – these factors represent comprehensive transportation system planning that is done for all users. The T2040 Plan addresses these Planning Factors by incorporating the ideas expressed in these factors in the T2040 Goals and Objectives and throughout the text of this document.

MAP-21 PLANNING FACTORS

The metropolitan planning process for a metropolitan planning area shall provide for consideration of projects and strategies that will:

- support the economic vitality of the United States, the States, non-metropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- increase the safety of the transportation system for motorized and non-motorized users;
- increase the security of the transportation system for motorized and non-motorized users;
- increase the accessibility and mobility of people and freight;

- protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
- promote efficient system management and operation; and
- emphasize the preservation of the existing transportation system.

SAFETEA-LU PLANNING FACTORS

The metropolitan planning process for a metropolitan planning area shall provide for consideration of projects and strategies that will:

- support the economic vitality of the United States, the States, non-metropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
- increase the safety of the transportation system for motorized and non-motorized users;
- increase the security of the transportation system for motorized and non-motorized users;
- increase the accessibility and mobility of people and for freight;
- protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
- promote efficient system management and operation; and
- emphasize the preservation of the existing transportation system.

ORGANIZATION OF THE T2040 PLAN AROUND A VISION STATEMENT, GOALS, OBJECTIVES, IMPROVEMENT STRATEGIES AND ACTION STEPS

This T2040 Plan is organized with generally worded goals meant to expand on and clarify the vision statement followed by several goal related objectives and then followed by improvement strategies and action steps. The objectives form the transition between the good ideas and the work at hand that needs to be done to improve transportation in the plan region. This plan also includes an evaluation system in the form of measures of progress.

In later chapters of this document as each part of the transportation system is discussed in more detail, this plan adds action steps that address specific modal concerns and adds measures of progress to chart advancement in addressing those concerns. The goals, objectives, improvement strategies and measures of progress are all related. They are designed to encourage overall transportation system improvements as well as to help track the changes in performance for each part of the multimodal transportation system.

Funding constraints, technical problems, interagency coordination issues, political considerations, and other factors will make some action steps in this plan difficult to perform. For those reasons, and not the lack of good intentions, some actions to improve our region's transportation system will not occur soon and may not take place during the expiration period covered by this T2040 document or may just get started during that time. Some projects, that are needed and much desired, take more time than one five year transportation plan update cycle to complete. This timing does not alter the importance of integrity of a specify project or action.

DEFINING GOALS, OBJECTIVES, STRATEGIES, ACTION STEPS AND MEASURES OF PROGRESS FOR T2040

It is important to ensure that we define Goals, Objectives, Strategies, Action Steps and Measures of Progress for the T2040 Plan. The definitions below guided the creation of this document and are a tool to help the users of this plan.

Goals are long range approaches to articulate the vision of the community. They represent an improvement to the status quo that can be generally supported by the community.

Objectives are defined approaches to attain the identified goals. An objective is more specific than a goal and is consistent with both the goal and strategies it is related to. Objectives outline the "who, what, when, where, and how" of reaching the goal. Many objectives can fall under each goal. For many objectives the timeline for completion will be the plan's duration (5 years), and for others it will be a shorter or longer term.

Strategies are statements that point out ways in which goals and objectives can be addressed and suggest groups of things to do that can be spelled out with greater detail in the following Action Steps. Strategies can be used to group several action steps around a common theme or general course of action. Not all goals and/or objectives will have Strategies.

**The following elements are included in the specific multimodal chapters where applicable.

Action Steps are specific paths that the organization has chosen to take for completing objectives and realizing goals. They establish specific future actions that should be done and should reflect reasoned choices among all of the available alternatives. Many action steps can fall under a goal, objective and a strategy. Action steps are often very specific and can reference other policies, guidelines and standards.

Measures of Progress are things or accomplishments that can be delineated as being completed using a simple yes/no measure or something measured using a graduated scale or score. These things are used to document the condition and status of the transportation system and the progress towards meeting T2040 goals and objectives. Measures of Progress are a way to annually assess performance of the multimodal transportation system to determine the success of the action steps. These performance measures are used to evaluate the T2040 Plan and the progress made on recommended projects.

Example of Goal, Objective, Strategy, Action Step and Measure of Progress

Goal - Goal 2: Focus on System Preservation and Economic Efficiency

Objective – Objective 2.1: Maximize the useful life of the streets, highways, bridges, and related transportation structures through the following strategies

Strategy– Maintain the existing road and bridge assets by adequately maintaining transportation facilities to preserve their intended function and maintain their useful life.

Action Step – Inspect bridges on a routine schedule related to the acceptable professional best practices and create a bridge condition inventory that identifies bridges that need improvements soon. Bridges that are in danger of having low weight limits imposed that will impede truck traffic that is expected to use that facility will be identified and scheduled for repairs and/or replacements.

Measures of Progress – Number of bridges identified to impede truck traffic (≤10 ton and ≤40 ton) compared to those bridges scheduled for upgrades this year. Number of bridges that were upgraded or repaired before lower weight limits were placed on them. The percent of all bridges maintained by the government agency having a low posted weight limit that could hamper efficient freight traffic.

The following Vision Statement and set of goals along with the rest of this document are intended to create and instill a shared regional vision for the future multimodal transportation system that will serve all residents of and visitors to Douglas County and depict a realistic view for how we can achieve that future transportation vision for our community. Action steps and measures of progress are included in each modal chapter.

TRANSPORTATION 2040 – MOVING FORWARD TOGETHER VISION STATEMENT

Develop a multimodal transport system that safely, efficiently and equitably serves all users whom travel to, from and within the region; and develop a regional transport network of facilities and services that complements the region's economy and enhances the region's livability.

The vision emphasizes the importance of multimodal system planning and the value of the transportation network as an asset to the community. The plan supports an accessible environment that serves to improve the quality of life and prosperity in the region.

GOAL 1: Improve Safety & Security

Objective 1.1: Reduce the occurrences of fatalities and injuries to transportation system users through design techniques and the application of the "4 E's" --engineering, education, enforcement, and emergency response through the following strategies:

> Strategy 1.1.1: Develop criteria that focus on the safety aspect of transportation projects and require that the safety element of projects be addressed properly before project approval is considered

Strategy 1.1.2: Scrutinize safety issues related to land development projects early in the review process at plan review meetings and at times when projects are still in the conceptual plan stage

Strategy 1.1.3: Participate in the development of the Kansas Strategic Highway Safety Plan

Strategy 1.1.4: Collect and analyze crash, injury and fatality data to set high priority areas for safety improvements

Strategy 1.1.5: Facilitate and support the development and distribution of safety education materials

Strategy 1.1.6: Encourage enforcement of traffic laws for all traffic system users by local police departments

Strategy 1.1.7: Support efforts to provide faster emergency responses through transportation system changes like the installation of signal pre-emption devices for EMS vehicles

Strategy 1.1.8: Support development of policies for using Crime Prevention Through Environmental Design (CPTED) elements in the design of transportation projects so that natural surveillance can be increased.

Strategy 1.1.9: Respond to weather incidents in a timely and effective manner

Strategy 1.1.10: Secure support from the public and its elected representatives through education and advocacy for safer transportation facilities and services.

Objective 1.2: Coordinate with local, state and federal agencies and transportation providers to respond during times of natural disasters, extreme accidents, or other emergencies through the following strategies:

Strategy 1.2.1: Develop a continuity of operations and emergency operations plans

Strategy 1.2.2: Create and maintain an up-to-date contact lists for emergency operations management

Strategy 1.2.3: Develop opportunities for local, state and federal level agencies along with transportation providers to jointly plan and conduct training exercises to test their emergency response plans and abilities

Objective 1.3: Increase the ability of the transportation system to support homeland security and to safeguard the personal security of all motorized users, non-motorized system users, and vital transportation facilities.

GOAL 2: Focus On System Preservation And Economic Efficiency

Objective 2.1: Maximize the useful life of the streets, highways, bridges, and related transportation structures through the following strategies:

Strategy 2.1.1: Maintain the existing road and bridge assets by adequately maintaining transportation facilities to preserve their intended function and maintain their useful life.

Strategy 2.1.2: Develop a process to inventory the size of the regional transportation system and monitor its condition

Objective 2.2: Utilize management techniques and technologies to maximize the capacity of the network and improve the operational efficiencies of the transport system through the following strategies:

Strategy 2.2.1: Develop acceptable critical Level of Service (LOS) standards for all regionally significant transportation facilities, services and modes in Douglas County, and the development of programs to maintain and improve service levels throughout the region's transportation network

Strategy 2.2.2: Prioritize traffic flow improvements to strategically reduce congestion and delay

Strategy 2.2.3: Use Access Management Standards to place access points along major roads at locations where the access will not significantly degrade the operations of the major road and will allow the major road to fulfill its main role of mobility. This will include the development of access management standards by local governments in the region and the coordination of those local standards with KDOT standards, especially for projects located on state system roads.

Strategy 2.2.4: Implement Intelligent Transportation Systems (ITS) and upgrade traffic signal equipment and communications and other technology to improve traffic flow with existing roadway capacity

Strategy 2.2.5: Enhance the efficient movement of freight through the identification of bottleneck locations for truck traffic, the implementation of improvement projects designed to make truck movements safer and more efficient, the enhancement of intermodal facilities (e.g., rail-truck) that will facilitate freight handling between modes, and any other projects planned to improve freight mobility to enhance the region's economy.

Objective 2.3: Incorporate and coordinate transportation improvements with existing and planned future land uses to minimize infrastructure costs through the use of the following strategies:

Strategy 2.3.1: Conduct transportation-related studies and projects such as traffic signal coordination or safety studies on a multi-jurisdictional or regional basis to more efficiently use resources

Strategy 2.3.2: Develop and/or review existing standards for Traffic Impact Studies (TIS) for each local government in the region. Those TIS standards will be used to determine the traffic impacts of major land developments and to recommend transportation system improvements needed to mitigate those impacts. This may include public-private partnerships for funding and building improvements recommended by the TIS.

Objective 2.4: Efficiently utilize existing financial resources to reduce duplication of services and/or other inefficiencies and investigate potential new revenue sources through the use of the following strategies:

Strategy 2.4.1: Explore alternate financing options for transportation funding (e.g., vehicle mileage road user fees, toll roads, private financing, user fees, fuel taxes, etc.)

Strategy 2.4.2: Improve project development processes and services between local, regional, state and federal agencies to reduce costs and increase the speed of project delivery

Strategy 2.4.3: Coordinate service providers and development groups to reduce duplicative services and inefficiencies

GOAL 3: Maximize Accessibility And Mobility

Objective 3.1: Minimize delay and congestion to improve travel times through identifying and upgrading traffic signal technology and communications to improve traffic flow.

Objective 3.2: Provide viable transportation alternatives (transit, bicycle, pedestrian) with better interconnectivity for people and goods by considering transit, bikeway and pedestrian facility details in all new development site planning, and adhering to local Complete Streets policies.

Objective 3.3: Assure all users are provided access to the regional transportation system and planning process through the use of the following strategies:

Strategy 3.3.1: Encourage land development patterns and transportation system designs that allow and encourage people to use all transportation modes, especially those that are human powered and support healthy lifestyles

Strategy 3.3.2: Coordinate multimodal review of maintenance plans and transportation facility plans

Strategy 3.3.3: Improve the linkages between transportation planning and public health planning

Strategy 3.3.4: Enhance and maintain a coordinated transit system including special services for senior citizens and persons with disabilities, and connections to regional commuter services

GOAL 4: Consider The Environment And Quality Of Life

Objective 4.1: Minimize adverse social, economic, and environmental impacts created by the transportation system through the use of the following strategies:

> Strategy 4.1.1: Encourage land development patterns that promote transportation efficiency, sustainability and livability through the ongoing coordinated review of land use plans by MPO staff and the ongoing review of transportation plans by land use planners
>
> Strategy 4.1.2: Improve the linkages between transportation planning and environmental planning
>
> Strategy 4.1.3: Maintain and improve air quality to meet or exceed the National Ambient Air Quality Standards and minimize the air pollutant emissions from the use of fossil fuels for transportation by encouraging the improvement of the multimodal transportation system
>
> Strategy 4.1.4: Promote alternative-fueled vehicles that reduce emissions and support the development of needed infrastructure (e.g., charging stations, etc.) that will make the use of those vehicles feasible
>
> Strategy 4.1.5: Encourage the use of alternative modes of transportation and encourage development that minimizes reliance on the automobile, especially the single occupant car

Objective 4.2: Consider transportation impacts when making land use decisions, and consider land use impacts (in terms of land use patterns, densities, and designated uses) when making transportation-related decisions through the use of the following strategies:

> Strategy 4.2.1: Improve connectivity between existing employment centers, retail activity areas, and regional destinations as feasible to foster the continued growth and vitality of those areas
>
> Strategy 4.2.2: Study traffic impacts and develop traffic impact mitigation standards so that land use decisions do not endanger the primary mobility function of arterial roadways

SUMMARY

This chapter of the Lawrence-Douglas County Comprehensive Plan establishes the current version of the MTP as the transportation element of the Comprehensive Plan for the City of Lawrence and Douglas County. The MTP is the transportation policy guide for comprehensive planning activities to be used in the local and regional policy decision-making process.

this page intentionally left blank

Park, Recreation, Open Space Areas and Facilities

CHAPTER NINE – PARK, RECREATION, OPEN SPACE AREAS AND FACILITIES

Park, recreation, and open space areas and facilities play an important role in the everyday life of individuals and help increase the overall quality of life in a community. By addressing parks, recreation, and open space in a comprehensive plan, specific goals for meeting the outdoor and recreational needs of a community are identified. This Chapter complements the Lawrence Parks and Recreation Department's Parks and Recreation Comprehensive Master Plan, or PRCMP (adopted 2000, next revision due in 2005), which helps plan for future parks and recreational opportunities for the residents of Lawrence and unincorporated Douglas County.

This Comprehensive Plan also encourages the development of a comprehensive network of open spaces that connects neighborhoods together, provides increased recreational opportunities, preserves natural ecological functions, and promotes an improved quality of life for the community. It is also important to note that drainageways or undevelopable land can be used as connections (i.e., greenways) to and from park, recreational, and open space facilities, but such areas may not be credited towards land dedication requirements if they do not meet the criteria for such facilities as set forth in this chapter, the PRCMP, and in the city/county land subdivision regulations.

This Comprehensive Plan recognizes that the City of Lawrence has four cornerstone natural areas in each quadrant of the community. This Plan further recognizes a need to emphasize these existing facilities and the connections to them by way of a greenbelt/greenway system, such as, along the Kaw, the Wakarusa, and the South Lawrence Trafficway. An example of such a greenway is the Wakarusa River floodplain and the Burroughs Creek Area Plan trail area. Specifically, these four showcase facilities include:

- Clinton Lake property, leased from the US Corps of Engineers (southwest);
- Haskell and Baker Wetlands (southeast);
- Riverfront Park and the Kansas River (northeast);
- Martin Park and undeveloped parklands (northwest).

This Comprehensive Plan further recognizes that opportunities exist in unincorporated Douglas County for parks, recreation, and open spaces. It is important that the County take an active role in preserving unique landscapes, open spaces, and historic sites that present recreational opportunities. It is also important that the County work in partnership with the communities of Baldwin City, Eudora, Lawrence, and Lecompton to help create a regional park, recreation, and open system that ties the communities together and furthers the intent of each community's desire to provide quality services to its residents and visitors.

STRATEGIES: PARK, RECREATION, OPEN SPACE AREAS AND FACILITIES

The principal strategies for the development and maintenance of park, recreation, and open space areas and facilities are:

- Continue to develop and improve the community's park, recreation, and open space system, building upon the existing system and integrating recommendations and direction from the PRCMP, this Comprehensive Plan, and relevant area and neighborhood plans.

- Preserve, protect and utilize natural and environmental features as focal points for new development areas and to the extent possible, new parks and recreational facilities should extend and enhance the existing and/or future open space system.

- Coordinate parks, recreation, and open space planning and development between the City of Lawrence and unincorporated Douglas County to provide overlapping and connecting park and recreation opportunities. Additionally, the City and County should more carefully coordinate park and open space acquisition in the Lawrence Urban Growth Area.

- Development of the park, recreation, and open space system for the City of Lawrence should be based on priorities contained within the PRCMP.

- Improve coordinated planning efforts between the Park and Recreation Department/Advisory Board and the Lawrence/Douglas County Metropolitan Planning Office/Commission in recommendations involving the location and features of future park, recreation, and open space sites.

- Develop a communication network between all city and county departments, the partners who aide in parks and recreation, and the community to increase awareness, understanding, and advocacy.

- Create a better understanding and support of operational costs and funding with key city and county leaders during the design of all capital projects to ensure the operational and maintenance dollars are available prior to construction.

- Develop regional parks that create a strong sense of community pride and livability.

- Coordinate with private property owners to provide additional opportunities for open space preservation beyond publicly owned parks, such as, through agricultural use, land trusts, buffers, and easements.

This Comprehensive Plan recommends that the existing system be maintained and improved in the future, but also recognizes the importance of selecting new park, recreation, and open space areas and facilities. Selected future locations must relate to existing and planned neighborhood, natural features, and the major street system. The ultimate size, number and location of these parks will vary depending upon the type and intensity of development, the presence of existing facilities and the recreational needs identified for the area. The PRCMP shall serve as the guide for identifying specific improvements for any identified future park, recreation, or open space site or facility.

This Comprehensive Plan encourages open space areas be used as greenways, creating a greenbelt network that connects the community together and provides bicycle and pedestrian access along these corridors. It is also recommended that areas of the City and the Urban Growth Area (UGA) of unincorporated County subject to extensive and/or frequent flooding be a part of this open space network. These areas not only serve as key natural areas of the community, but also serve as ideal and reasonable linkages within and beyond the City of Lawrence and unincorporated Douglas County. Some greenways may be simply for the movement of wildlife and the maintenance of habitat without trails or paths. Areas to be used for recreational activities must be acceptable to the Lawrence Parks and Recreation Department.

- *Existing Conditions (updated 2005)*

The residents of the City of Lawrence enjoy numerous opportunities for active and passive recreation and leisure activities. The Parks and Recreation Department currently maintains over 50 parks, recreational, and open space facilities encompassing over 3,400 acres, over 25 miles of recreational trails, and over 50 miles of both on- and off-street bike routes. The community also enjoys a number of community recreation centers and special use facilities, including the Indoor and Outdoor Aquatic Centers, the Prairie Park Nature Center, Eagle Bend Golf Course, and the YSI Sports Complex. In addition to providing various park, recreation, and open space opportunities, the Lawrence Parks and Recreation Department is also responsible for community beautification efforts including numerous street rights-of-way and street trees, gateways into the community, and other public/civic spaces, such as City Hall.

- *Public Involvement*

In the development of the City's PRCMP, an extensive public participation process was undertaken. Included in this process was a survey of 1,200 random households, a survey of 373 randomly-selected fourth through eleventh graders in the community's 27 public and private schools, follow-up citizen interviews of those not returning surveys, and public meetings. Of the household surveys, 573 were returned (including 145 by phone). All 373 student surveys were returned.

As it pertains to land use, the major findings of the household survey showed the majority would like to see an emphasis on improving existing parks. This includes linking neighborhood parks with walking and biking trails, enhancing the landscape, expanding open spaces, and improving playgrounds. The survey further showed interest in emphasizing improvements to the existing parks, recreation, and open space system over the next ten years, acquiring new land for parks and open spaces, and emphasize the construction of new park and recreation facilities. The student survey showed that over two-thirds of the youngsters have a park within

walking distance of their home. One-third of those surveyed visit those parks at least once a week and more than half visit those parks at least once a month. Nearly three-quarters of those surveyed indicated they visit other city parks and facilities in addition to the park closest to their home.

For more detailed information on the public participation process, refer to the PRCMP.

- *Demand and Needs Assessment*

The residents (current and future) of the community determine the demand for parks and recreational opportunities in the community. As demonstrated through the public involvement process in developing the City's PRCMP, the current demand is primarily for maintaining and improving the existing parks, recreation, and open space system. However, the acquisition of new land for such purposes is consistent with the strategies and goals of this Comprehensive Plan and the City's PRCMP. The preservation of the community's natural, scenic, and open space areas should also play a role in the identification, acquisition, and development of future parks, recreation, and open space areas of the community.

- **Park Standards –** the City of Lawrence Parks and Recreation Department has identified the following classifications for its parks. These standards are used to quantify program mix, visitor drawing range and assets in each park.

Facility Type	Description
Neighborhood Playlots/Mini-Parks	Locations occur within neighborhoods that are highly walkable residential situations (smaller single-family lots and/or a mix of housing types), generally serving a one-quarter (¼) mile radius; sizes generally range between 2,500 square feet & one (1) acre.
Neighborhood Parks & Playgrounds	Represent the basic unit of the park system & serves as the recreational & social focus of the neighborhood, focusing on informal active & passive recreational opportunities; location is determined by uninterrupted non-residential road patterns & other physical barriers, generally serving a single neighborhood & a one-half (½) mile radius; a size of five (5) acres is considered minimum while an area between five (5) & ten (10) acres is considered optimum.
Community Parks	Serve a broader purpose than a neighborhood park, where the focus is on meeting community based recreational needs & preserving unique landscapes & open spaces; location is determined by the quality & suitability of the site, generally serves two (2) or more neighborhoods & a one (1) to three (3) mile radius; size varies as needed to accommodate desired uses, usually between thirty (30) & fifty (50) acres.
Regional Parks	Areas that serve an entire city or region having natural or man-made qualities for outdoor recreation, such as picnicking, boating, fishing, swimming, camping, & trail uses, or with unique qualities or historical significance; play areas may also be included; size varies as needed to accommodate desired uses, generally fifty (50) acres or greater.
Special Use Facility	Typically located & developed to serve one (1) or more recreational, historical, cultural, environmental, or educational activities; may be located independently, or within a community park, regional park, or other park area; intended to serve both immediate neighborhoods & the overall community.
Trails & Pathways	Locations should follow logical alignments that serve to connect the community

Facility Type	Description
	in a holistic manner (this may include riparian areas & stream corridors as well as the street network); generally eight to ten feet (8'-10') wide.
Open Space & Greenways	Generally the criteria listed above for community parks are applicable for open space areas; areas can be used by the public but the purpose is to preserve unique areas such as floodplains, wetlands, wildlife habitat, steep slopes & rock outcroppings, native prairie remnants, historic sites, agricultural lands, & other environmentally sensitive areas.

- **Level-of-Service –** the Parks and Recreation Department, as identified in its PRCMP, has established twelve (12) to fifteen (15) acres of parkland and open space areas per one thousand residents as its acceptable benchmark standard for level-of-service (LOS). This standard applies to the overall parks, recreation, and open space system.

Facility Type	Description of Need
Neighborhood Playlots/Mini-Parks	Future or existing neighborhoods that are highly walkable residential situations (smaller single-family lots and/or a mix of housing types) would be considered as candidates for mini-parks.
Neighborhood Parks & Playgrounds	Maintaining existing & providing new neighborhood parks for the residents of the community is a primary objective of the Parks & Recreation Department; it is the preference of the Parks & Recreation Department that future neighborhood parks be located in a manner that ensures residents of adjacent neighborhoods the ability to enjoy them; coordinated planning efforts with property owners, developers, & other public service agencies are encouraged in planning future neighborhoods.
Community Parks	As with neighborhood parks, maintaining existing & providing new community parks is a priority of the Parks & Recreation Department; community parks also serve as neighborhood parks & coordinated planning efforts with property owners, developers, & other public service agencies is encouraged to promote connectivity and easy accessibility to such parks.
Regional Parks	Maintaining & enhancing existing regional parks is a primary objective of the Parks & Recreation Department; new regional parks are not anticipated but may be acquired when the opportunity presents itself; regional parks may also serve as neighborhood parks & coordinated planning efforts with property owners, developers, & other public service agencies is encouraged to promote connectivity and easy accessibility to such parks.
Special Use Facility	Maintaining & enhancing existing special use facilities is a primary objective of the Parks & Recreation Department; new special use facilities will be considered on an as-needed basis, determined by a community input & visioning process.
Trails & Pathways	Connectivity with & between parks, recreational facilities, & open space areas is critical & a high priority of the community; riparian areas & stream corridors offer the greatest potential for providing connections throughout the community (by way of greenways &/or greenbelts) and into developing areas; sidewalks, bikeways, & easements are encouraged for infill & redevelopment of the community's established neighborhoods.
Open Space & Greenways	Natural areas are desired, especially through the establishment of greenbelts & greenways, as the community continues to grow outward into the unincorporated areas of Douglas County; an open space network is envisioned to provide ecological & recreational connections throughout Douglas County preserving the community's floodplains, wetlands, wildlife habitat, steep slopes & rock outcroppings, native prairie remnants, historic sites, agricultural lands, &

	other environmentally sensitive areas; greenways would in particular connect people to the Wakarusa and Kansas rivers, and the Clinton Reservoir; a major greenbelt around the city would connect the four cornerstone natural areas.

UNINCORPORATED DOUGLAS COUNTY

This Comprehensive Plan recommends emphasis on the continued development, improvement, and maintenance of the county's existing regional recreation areas. This Comprehensive Plan also recommends the continued improvement and development of active recreational facilities at school sites and other Douglas County and Township locations. Population density in unincorporated Douglas County is planned to be very low and dispersed making these locations important rural community activity centers. The development of school sites and other public facility sites which provide recreation opportunities would maximize the public's investment in these facilities and be most consistent with the rural character intended for unincorporated Douglas County.

Additionally, this Comprehensive Plan recommends increased preservation of natural areas and open spaces, including floodplains, wooded areas, and prime agricultural lands, in unincorporated Douglas County. Preservation of such areas would serve multiple purposes, including maintaining the rural character of unincorporated Douglas County, providing regional recreational opportunities for trails and community connections, encouraging sustainable agricultural practices, increasing stormwater and floodwater management capabilities, improving wildlife habitat quality, and enhancing overall ecological function of the natural environment. It is recommended that the work of the ECO^2 Commission be considered in identifying areas appropriate to meet both the community's preservation and recreation needs.

- **Public Involvement**

Through the initial development of this Comprehensive Plan a number of priority natural areas in Douglas County were identified which should be protected or acquired due to their unique environmental and natural contributions to the County. These areas include:

1. Natural corridors along the Kansas River, the Wakarusa River and a corridor between Douglas County State Lake, Lone Star Lake and Clinton Reservoir.

2. Clusters of undisturbed tallgrass prairies in northwest and southeast Douglas County.

3. Additionally, there are a number of historic sites in unincorporated Douglas County that hold opportunities for preserving open space and becoming part of the overall park, recreation, and open space system.

- *Existing Conditions (updated 2005)*

Douglas County is responsible for over 250 acres of park land and open spaces and an extensive trail network that includes recreational trails and on- and off-road bike routes. These areas include Lone Star Lake, Boyd Prairie Preserve (Black Jack/Prairie Park), a portion of

Broken Arrow Park, and Wells Overlook. These facilities are primarily regional in nature and include one lake and an abundance of natural open spaces.

- *Demand and Needs Assessment*

The parks and recreation system of unincorporated Douglas County responds to local and regional interests and demand for park, recreation, and open space opportunities are driven by both residents and non-residents of Douglas County. As indicated in the development and recommendations of this Comprehensive Plan, the County's focus on parks, recreation, and open spaces is centered on maintaining and improving existing facilities. Especially important is the enhancement of rural school sites to serve as rural community centers and provide for additional recreation opportunities that mirror the functions of a neighborhood or community park in an urban environment.

- *Park Standards* – Douglas County has not identified specific standards it utilizes in identifying and developing its parklands and open spaces.

- *Level-of-Service* – Douglas County has not identified any benchmark standards for its park and open space areas and does not appear to have a deficiency of parkland in its overall system. Where a deficiency might occur, however, is within the County's inventory of natural open space. By having this established park and open space system in place, it allows the County to focus on maintenance and improvements of existing areas. Additionally, it allows the County to be more proactive in acquiring future parklands and open spaces in a thoughtful and planned manner that furthers the intent of this Comprehensive Plan and meets the needs of future residents.

PARKLAND AND OPEN SPACE ACQUISITION METHODS

Creative and innovative techniques should be considered, and even encouraged, as direct purchase of land becomes more and more difficult. By utilizing responsible land use planning and development policies, the City of Lawrence and Douglas County should acquire land when opportunities for park, recreation, and open space areas arise in public facilities and capital improvement projects. In all instances of land acquisition, potential sites must be consistent with the provisions and recommendations of the PRCMP, this Comprehensive Plan, and any relevant area or neighborhood plans.

There are several acquisition techniques and strategies available to assist the City of Lawrence and Douglas County in their efforts of providing park, recreational, and open space opportunities to its residents. The following have been identified to provide a range of methods available and to promote innovative and creative thinking for purchase and acquisition of parkland and open space areas.

Technique	Description
Acquisition by Purchase	Methods include installment purchase; purchase or leaseback; purchase of tax delinquent land; or excess condemnation. These mechanisms offer financing

Technique	Description
	methods for outright purchase; leaseback without tax payment; the opportunity to bank land until needed or for trade; & the opportunity to acquire excess land when property is condemned for parks & open space purposes.
Acquisition by Regulatory Techniques	Methods include subdivision regulations; zoning regulations; & floodplain management regulations. Subdivision regulations may require a development to set aside areas within a subdivision for parks & open space or, when sufficient land is not available, may require a payment in lieu of land dedication which can be used for purchase of sites elsewhere. Zoning regulations can be used to reserve land for parks & open space; through clustering & planned unit developments, a developer can be encouraged to set aside a portion of development for park & recreational areas in exchange for increased density. Floodplain management regulations restrict development of land located in floodplains &/or along intermittent stream corridors subject to flooding to reduce flood damage to people & property & encourages the retention of natural open space for stormwater & floodwater management.
Special Use Acquisition Techniques	Methods include scenic easements; historic easements; conservation easements; & licenses. Acquisition of scenic easements permits the community to acquire the landowner's ability to construct buildings or billboards on a portion of the property. Historic easements can be acquired which restrict the property owners' ability to make visible alterations to an historic site thus allowing the site to remain in private use while preserving historic benefits to the community. Through the use of conservation easements, the community compensates the property owner for not altering his land, thus preserving it in its natural state. This technique can be used in conjunction with taxing measures to insure that the property is taxed at its current use rather than a market land value based on adjacent property uses. Purchase of a license on behalf of the public can allow the right to fish, hunt or the establishment of riding & hiking trails on private lands.
Taxing Techniques	Methods include assessment of land designated for open space according to existing use rather than market value to encourage maintenance as open space & tax deferral to encourage preservation of open space. This method would need to be researched to determine provisions which minimize misuse & compatibility with state law restrictions.
Financing	Methods include federal assistance programs; low-interest loans; & revenue sharing funds for planning, acquisition & development of recreational & open space areas. Given the reduction of federal assistance to local government units in recent years, these programs are less likely to be viable alternatives.
Governmental Indebtedness	The city may incur indebtedness to finance park & open space acquisition, development, maintenance, & operation. This indebtedness can be repaid by sales tax revenues, general obligation bonds, or revenue bonds.
Gifts and Trusts	Voluntary transfer of land for parks & open space is encouraged throughout Lawrence & unincorporated Douglas County. Voluntary acquisition is frequently most effective when directed to sites that are naturally sensitive & contain limitations to urban development. Methods for voluntary protection or acquisition of more naturally sensitive areas in Douglas County include, but are not limited to: donations, conservation easements, & acquisition assistance through the Douglas County Natural Areas Programs.

Technique	Description
Sales Tax and Impact Fees	Funds from sales tax & impact fees can be earmarked for park land & open space acquisition. The Lawrence Parks & Recreation Department currently has a dedicated portion of the local sales tax (one cent) for this purpose. Impact fees provide another funding source for park, recreation, & open space opportunities. Although not currently in use by the City or County, impact fees are paid when a proposed development increases the demand on existing and for new park, recreation, & open space facilities &/or are paid in lieu of actual land dedication for such purposes where the development proposal does not warrant the dedication of land.
Grants	Grants provide a non-repayable funding source to the community for land acquisition of new park land, recreation facilities, or open spaces & for redevelopment & maintenance of existing park lands, recreation facilities, or open spaces. Grants typically require some kind of community match, generally funds or in-kind services. Grants are available from both public & private funding sources, each having their own set of requirements that need to be met prior to receiving funds. In some instances, funds may be available prior to the undertaking of a project. In other instances, funds may be a reimbursement upon a project's completion. Over the past few years, grant funding has become more difficult to obtain as competition for those funds has increased.

PARK, RECREATION, AND OPEN SPACE TERMINOLOGY

The following represents a list of terms commonly used in describing park, recreation, and open space areas and facilities as found in this chapter and Comprehensive Plan. Please note that not all terms listed may be reflected in this Plan.

Term	Definition
Bikeway	a general term for any path, lane or route, designated for bicycle use.
Bike Lane	a separate space designated with striping, signage, or pavement markings for exclusive use by bicycles within a street or road; generally four feet (4') wide; also known as a Class II bikeway.
Bike Route	a network of streets to enable direct, safe, & convenient access for bicyclists; bike routes are designated with signs that indicate shared-use for automobiles & bicycles; also known as a Class III bikeway.
Easement, Access	allows pedestrian access, including bicycles, through private property to parkland or open spaces from public property or right-of-way; may include pedestrian walkways &/or bikeways; routine maintenance, such as mowing & trash pick-up, is the responsibility of the property owner(s) for which the easement is dedicated; generally fifteen (15') wide.
Easement, Maintenance	allows access for park maintenance vehicles & equipment & pedestrian access, including bicycles, through private property to parkland or open spaces from public property or right-of-way; may include pedestrian walkways &/or bikeways; routine maintenance, such as mowing & trash pick-up, is the responsibility of the property owner(s) for which the easement is dedicated; generally twenty-five feet (25') wide.
Pedestrian Walkway or Sidewalk	a walkway within a public right-of-way or easement intended for pedestrian travel; generally six to twelve feet (6'-12') wide and includes a minimum of five feet (5') of landscaping on both sides.
Greenbelt	a system or network of greenways & open space areas.

Term	Definition
Greenway	long, relatively narrow lands which follow roads, creeks, ridges, ravines, & other natural or transportation corridors; greenways serve various functions, including protection of environmentally sensitive areas & wildlife habitat, wildlife viewing, environmental education, trails, connectivity, & other passive recreational amenities.
Natural Area	describes any area with critical environmental resources such as, native ecosystems including those historically unaltered by man since 1800, riparian forest, wildlife habitat, floodplains & drainageways, steep slopes & rock outcroppings, wetlands, & mature woodlands like the corridor that runs from Baldwin Woods to Clinton lake.
Open Space Area	provides visual & psychological relief from the built environment; public access via trails & walkways to these areas is important to provide passive recreational opportunities where it is compatible with resource protection & environmental regulations; open space areas may or may not be improved, but can include playfields, trails, greenbelts/greenways, community gardens, farmed areas, buffers between land uses of differing intensities, such as residential & commercial or industrial activity, areas within community or neighborhood parks which are left in their natural state, & other environmentally sensitive areas.
Riparian Corridor	wetland & terrestrial areas within the influence area of the adjacent stream; can also be defined as an area measured horizontally from the top of the bank, or if that cannot be determined, from the ordinary high water mark of the watercourse & water body, or a 100-year floodplain as mapped by FEMA, whichever is greater.
Recreation, Active	includes playgrounds, sportfields, trails, camping facilities, or other programmed activities.
Recreation, Passive	includes scenic overlooks or areas, seating areas, botanical gardens, arboretums, historic sites, or other self-directed activities.
Recreational Path	a separate, shared-use path adjacent to & independent of the street; intended solely for non-motorized travel; generally eight to ten feet (8'-10') wide; also known as a Class I bikeway.
Wildlife Habitat	areas composed of land, water, vegetation, & other natural resources necessary to support fish & wildlife populations.

PARKS, RECREATION, AND OPEN SPACE GOALS AND POLICIES

Guidelines are needed to establish partnerships for the planning and development of the community's park, recreation, and open space system to maximize resources and to meet the community's expectations for quality.

GOAL 1: Coordinated and Cooperative Planning and Development

Establish and maintain between city, county, school districts and other public agencies coordinated and cooperative planning and development activities, including funding and capital improvements, for park, recreation, and open space areas and facilities.

Policy 1.1: Avoid Duplication of Services and Facilities

a. For park, recreation, and open space opportunities, encourage cooperation between city and county departments, school districts, and other public agencies in the planning stages of development to avoid duplication of recreational services and facilities and to maximize resources and minimize expenses to the community.

b. Establish and strengthen the partnership between the Lawrence School District/Board, the Lawrence Parks and Recreation Department/Advisory Board, and the Lawrence/Douglas County Metropolitan Planning Office/Commission in planning for future school and park sites.

c. Maintain and strengthen the partnership between the Lawrence School District and the Lawrence Parks and Recreation Department in acquiring and developing land for future school and park sites.

d. Prepare a coordinated capital improvements program for the City of Lawrence and unincorporated Douglas County to acquire needed open space on an ongoing basis.

e. Establish parks and open space standards for unincorporated Douglas County.

f. Coordinate parks and open space standards between the City of Lawrence and unincorporated Douglas County

g. Designate the Parks and Recreation Comprehensive Master Plan, or PRCMP, as the primary document of reference for planning, development, and maintenance of the community's parks, recreation, and open space system.

h. Update the PRCMP on a five-year cycle beginning in 2006. Maps and plans for park improvement projects should be updated annually to reflect the changes in community growth and development patterns.

i. Encourage coordination between city and county public work departments for crosswalks and signage locations at park, recreation, and open space facilities and further coordinate the location of drainage easements for possible greenway linkages.

j. Encourage coordination between city and county utility and public work departments on infrastructure improvement projects for possible greenway linkages or community beautification projects.

Policy 1.2: Encourage Private/Public Partnerships and Innovative Techniques for Land Acquisition and Open Space Preservation

a. Identify, encourage, and provide incentives for land dedication or other voluntary mechanisms that protect natural and/or historic areas of Lawrence and unincorporated Douglas County for ecological or recreational purposes.

b. Encourage the use of easements, landowner agreements, and deed restrictions across private property for multiple-use trails and open space areas, especially natural and/or historic areas.

c. Establish a public education and awareness program on the benefits of a park, recreation, and open space system, especially those with natural and/or historic areas.

d. Encourage the further evaluation and use of the "Parkland and Open Space Acquisition Methods" outlined in this Chapter (pages 9-7 – 9-9).

Policy 1.3: Provide Funding Mechanisms for Maintenance and Acquisition

a. Establish a dedicated funding source for parkland and open space acquisition in the annual city and county budget to be used for land purchase, purchase of conservation and public access easements, and other applicable acquisition opportunities.

b. Establish a dedicated funding source for park and open space maintenance and community beautification efforts in the annual city and county budget to cover ongoing expenses associated with maintaining and enhancing the community's parks, recreation, and open space system.

c. Establish a creative and diversified financial program for the park, recreation, and open space system that fully captures potential funding from private, local, state and federal sources.

d. Actively seek out grants, low-interest loans, and other financial assistance mechanisms devoted to the acquisition, planning, development, enhancement, and maintenance of parks, recreation, and open space areas and facilities.

e. Investigate feasibility of utilizing impact or development fees for financing land acquisition of new park, recreation, and open space areas and facilities and development and/or enhancement of existing or new park, recreation, and open space areas and facilities.

f. Investigate feasibility of utilizing sales tax revenues for financing maintenance and improvements to existing park, recreation, and open space areas and facilities.

g. Coordinate funding mechanisms for maintenance and acquisition of park, recreation, and open space areas and facilities with the land dedication and payment in lieu of requirements of the city/county joint subdivision regulation.

Guidelines are needed to allow for and encourage the retention and expansion of the parks, recreation, and open space system throughout the community.

GOAL 2: Protect the Existing Parks, Recreation, and Open Space System

Maintain and enhance the existing parks, recreation, and open space system to meet an expressed community need for improvements to this system and to improve the overall community image.

Policy 2.1: Protect Existing Parkland and Open Space Areas

a. Existing parklands and open space areas should be permanently dedicated for perpetuity and conversion of such areas to non-recreational uses is strongly discouraged.

b. Emphasize within the PRCMP the importance of protecting and maintaining existing parklands and open space areas and identify mechanisms to ensure these areas can be protected and maintained.

Policy 2.2: Maintain and Enhance Existing Park, Recreation, and Open Space Areas and Facilities

a. Invest in improvements to and maintenance of existing park, recreation, and open space areas and facilities.

b. Establish within the PRCMP a Parks Improvement Program that identifies priority enhancement projects.

c. Establish a mechanism for evaluating and updating completed maintenance and improvement projects.

d. Establish performance measures that promote a high level-of-service and increased quality of life in order to meet community demands and expectations.

Policy 2.3: Continue Community Beautification Efforts

a. Enhance the community's public image by identifying projects through the Parks Improvement Program that support new landscaping, signage, and other amenities throughout the community.

b. Expand the street tree and landscape planting programs on public property and rights-of-way and work with appropriate city and county departments to establish standards for different project types, i.e., arterial versus collector streets; community gateways versus government buildings.

c. Maintain and enhance landscaping efforts at gateways into the community and identify priority gateway locations for future consideration and planning.

c. Incorporate the use of native plant materials and naturalistic landscaping to promote educational awareness of ecological diversity and water conservation techniques.

Guidelines are needed to provide direction on where and how the parks, recreation, and open space system should be located.

GOAL 3: Expand the Existing Parks, Recreation, and Open Space System

Acquire new parkland and open space areas to stay ahead of growth and to meet anticipated community demand and locate such areas in a manner that is consistent with the coordinated planning and development efforts of the community. Within urban areas, work towards providing public green spaces within ¼ mile of each residence.

Policy 3.1: Identify Future Parklands and Open Space Areas

a. Encourage the location and development of park, recreation, and open space areas and facilities that are consistent with the development standards and design criteria identified in the PRCMP, this Comprehensive Plan, and any relevant neighborhood or area plan. Such areas must reflect Map 9.1 (Priority Areas for Parks and Open Space).

b. Facilitate the development of new park, recreation, and open space areas and facilities as necessary to stay ahead of anticipated growth and to meet community demand or as unique opportunities arise to do so.

c. Locate parklands and open space areas near other community facilities, such as schools, whenever possible to maximize community resources and minimize community expenses.

d. Encourage use of the recommendations of the ECO^2 Commission in identifying areas appropriate to meet the community's preservation and recreation needs.

e. Encourage open space uses in the community's privately or publicly owned floodplains and drainageways. Such uses could be for playfields, trails, passive recreation, greenbelts/greenways, wildlife habitat, agriculture, or similar uses compatible with intermittent flooding and the ecological functioning of these areas.

f. Establish a greenbelt/greenway system that connects the community's parks, recreation, and open space system and provides increased recreational opportunities, promotes the natural character of the area, and preserves ecological integrity of natural systems.

g. Establish a greenbelt/greenway system encircling the community that connects the four cornerstone natural areas including Clinton Reservoir, the Wakarusa River, and the Kansas River.

h. Reach out to agricultural property owners to facilitate farmland and open space preservation.

i. Use research on historic sites to locate and establish parks and open space that preserve and promote the history of the community.

Policy 3.2: Ensure Adequate Access to New Park, Recreation, and Open Space Areas and Facilities

a. In addition to the site selection criteria below, Map 9.1 (Priority Areas for Parks and Open Space) should be used in determining where new parkland and open space areas are desired. All land proposed to be dedicated through the platting process must be approved by the Lawrence Parks and Recreation Department. Where land is not appropriate or acceptable for park use, payment in lieu of land dedication shall be required.

b. Locate new parkland and open space areas in accordance to the following site selection criteria and in a way so that they are readily accessible and can be reached in a safe and convenient manner by pedestrians, bicycles, public transit, and vehicles.

1. Neighborhood Parks

a) Locate to provide a high level of accessibility within the residential neighborhood, ideally adjacent to minor residential streets.

b) Locate close to the center of the neighborhood and within walking distance of the majority of the residents.

c) Locate adjacent to elementary schools or other public facilities, if possible.

2. Community Parks

a) Locate on arterial, collector, or access/frontage street to accommodate vehicular parking and access.

b) Provide pedestrian and bicycle access to park areas.

c) Provide a buffer between a community park and adjacent residential areas to minimize traffic and noise intrusion.

3. Site Selection Criteria

a) Site Suitability - topography, soils, vegetation, wetlands, and other site conditions should be compatible with the intended use of the park or open space. For example, active recreation sites should be relatively flat and free of natural constraints in order to permit recreation improvements.

b) Utilities - types of activities proposed should consider utility requirements. For example, recreation and community centers will likely have greater utility needs than passive or natural sites.

c) Access and Service - scale and intensity of recreation sites will create special demands for access and service. Large active facilities require vehicle parking and building service areas. Site selection should also consider and maximize opportunities for bicycle and pedestrian connections to areas surrounding the site. Facilities intended to serve the community should be located along, or develop strong connections to, these transportation links.

c. Establish and require, as part of the subdivision process, land dedication standards and/or payment in lieu of land dedication consistent with the policies and guidelines of the PRCMP and this Comprehensive Plan.

d. Coordinate locations of park, recreation, and open space areas and facilities with the community's long-range transportation plan to ensure adequate and appropriate access and to minimize potential conflicts.

Guidelines are needed to establish accessible community connections to and from existing and future parks, recreation, and open space areas and facilities.

GOAL 4: Connectivity To, From, and Between Park, Recreation, and Open Space Areas and Facilities

Provide linkages to the parks, recreation, and open space system that improve community accessibility to such areas and that take into consideration the variety of linkage types available for active and passive recreational needs.

Policy 4.1: Provide Connections for Pedestrian Accessibility

a. Develop parkways and boulevards, greenbelts/greenways, riparian corridors, and movement corridors utilizing existing vegetation and unique landscape features to provide open space areas and connections throughout the community.

b. Use street and utility improvement projects as opportunities to include the addition and/or improvement of sidewalks and trails.

c. Coordinate connections with the community's Pedestrian Plan and with the community's public transit services.

d. Consider linkages internal to, or within, the City of Lawrence that provide connections to and from existing areas and newly developing areas.

e. Consider linkages external to, or beyond, the City of Lawrence that provide connections to other communities and regional recreational areas.

Policy 4.2: Provide Connections for Bicycle Accessibility

a. Develop parkways and boulevards, greenbelts/greenways, riparian corridors, and movement corridors utilizing existing vegetation and unique landscape features to provide open space areas and connections throughout the community.

b. Use street and utility improvement projects as opportunities to include the addition and/or improvement of sidewalks, trails, and bike lanes.

c. Coordinate connections with the community's Bicycle Plan and with the community's public transit services.

d. Consider linkages internal to, or within, the City of Lawrence that provide connections to and from existing areas and newly developing areas.

d. Consider linkages external to, or beyond, the City of Lawrence that provide connections to other communities and regional recreational areas.

Policy 4.3: Provide Connections for Vehicle Accessibility

a. Develop parkways and boulevards to provide open space areas and connections throughout the community.

b. Consider the access requirements of maintenance vehicles and equipment to parklands and open space areas.

c. Coordinate connections with the community's Transportation Plan and with the community's public transit services.

d. Consider linkages internal to, or within, the City of Lawrence that provide connections to and from existing areas and newly developing areas.

e. Consider linkages external to, or beyond, the City of Lawrence that provide connections to other communities and regional recreational areas.

Policy 4.4: Provide Connections for Ecological Processes

a. Establish a greenbelt/greenway system along the Kansas River, Wakarusa River, and local stream corridors and drainageways to encourage community connectivity and to preserve the natural processes of floodplains, drainageways, and wildlife.

b. Integrate natural areas, such as steep slopes, woodlands, natural prairies, wetlands, lakes/ponds, groundwater recharge, prominent ridgelines, and other environmentally sensitive areas into the parks, recreation, and open space system, wherever possible, to encourage community connectivity and to preserve the natural processes of such areas.

Guidelines are needed to facilitate the compatible transition between residential and/or non-residential land uses.

GOAL 5: Park, Recreation, and Open Space Areas and Facilities as Transitions

Utilize park, recreation, and open space areas and facilities as transitions to and between adjacent residential and non-residential development as a way of ensuring compatible and integrated patterns of development.

Policy 5.1: Use Traditional Transitioning Techniques

a. Promote compatible and integrated transitions between land uses of different intensities that are gradual and that consider the following:

1. Building Relationships

a) A back-to-back building relationship is preferable between land uses whenever possible.

b) Recreational buildings, facilities, and parking areas should have greater setbacks when abutting residential uses when such buildings or facilities pose adverse impacts on residential uses. A buffer and/or increased setback may be necessary beyond what is otherwise required.

c) The height and massing of recreational buildings and accessory structures should be oriented away from residential neighborhoods to avoid creating a negative visual effect. Height and massing should be complementary and reflect the residential architecture and neighborhood character.

d) Building entrances and pedestrian access should be oriented to the street. Access from the surrounding neighborhood is also strongly encouraged.

2. Screening and Landscaping

a) Encourage the creative and extensive use of landscaping and berming techniques for effective buffering when necessary to separate incompatible recreational and non-recreational uses.

b) Avoid the use of fences as a sole means of providing screening and buffering. Where fencing is proposed, additional landscaping may be required to soften the monotonous effect of a fence line.

c) Use existing vegetation, such as stands of mature trees, as natural buffers.

d) Use high quality materials in the construction of fencing and landscaping to decrease long-term maintenance costs.

3. Lighting

a) Any lighting used to illuminate parking areas, signs or structures shall be placed to deflect light away from any adjoining property or from public streets through fixture type, height and location.

Policy 5.2: Consider Alternative Transitioning Techniques

a. Encourage and incorporate open space areas, especially natural areas, into development to serve as buffers and/or transitions between incompatible land uses.

b. Retain mature trees and natural vegetation to naturally separate incompatible land uses and to serve as amenities for the development.

Guidelines are needed for the preservation of open space and natural features that will enhance the character of the built environment, promote public health and safety, provide for outdoor recreation, provide visual enjoyment, preserve natural ecological functions, and improve the overall quality of life for the community.

GOAL 6: Maintain a Balance Between Natural and Built Environments

Conserve and protect natural features and functions while accommodating new development that is sensitive to both the recreational needs and the environmental/ecological needs of the community.

Policy 6.1: Preserve and Enhance Natural Areas of the Community

a. Incorporate floodplains and drainageways into the park, recreation, and open space system whenever possible to preserve and enhance the hydrological functions, such as flood control and stormwater runoff filtration, and ecological functions, such as air purification and climate control.

b. Incorporate wetlands into the park, recreation, and open space system wherever possible to preserve and enhance the hydrological and ecological function of such areas.

c. Incorporate wildlife habitat into the park, recreation, and open space system wherever possible to preserve and enhance the quality of habitat for the community's wildlife populations and migratory wildlife.

d. Incorporate steep slopes, rock outcroppings, and other unique landscape features into the park, recreation, and open space system wherever possible to preserve and enhance the character of the community's physical landscape.

e. Incorporate historic sites and ecosystems historically unaltered by man since 1800, such as, prairies, into the park, recreation, and open space system as the community's legacy to future generations.

Policy 6.2: Encourage and Maintain a Relationship between Natural Areas and Development

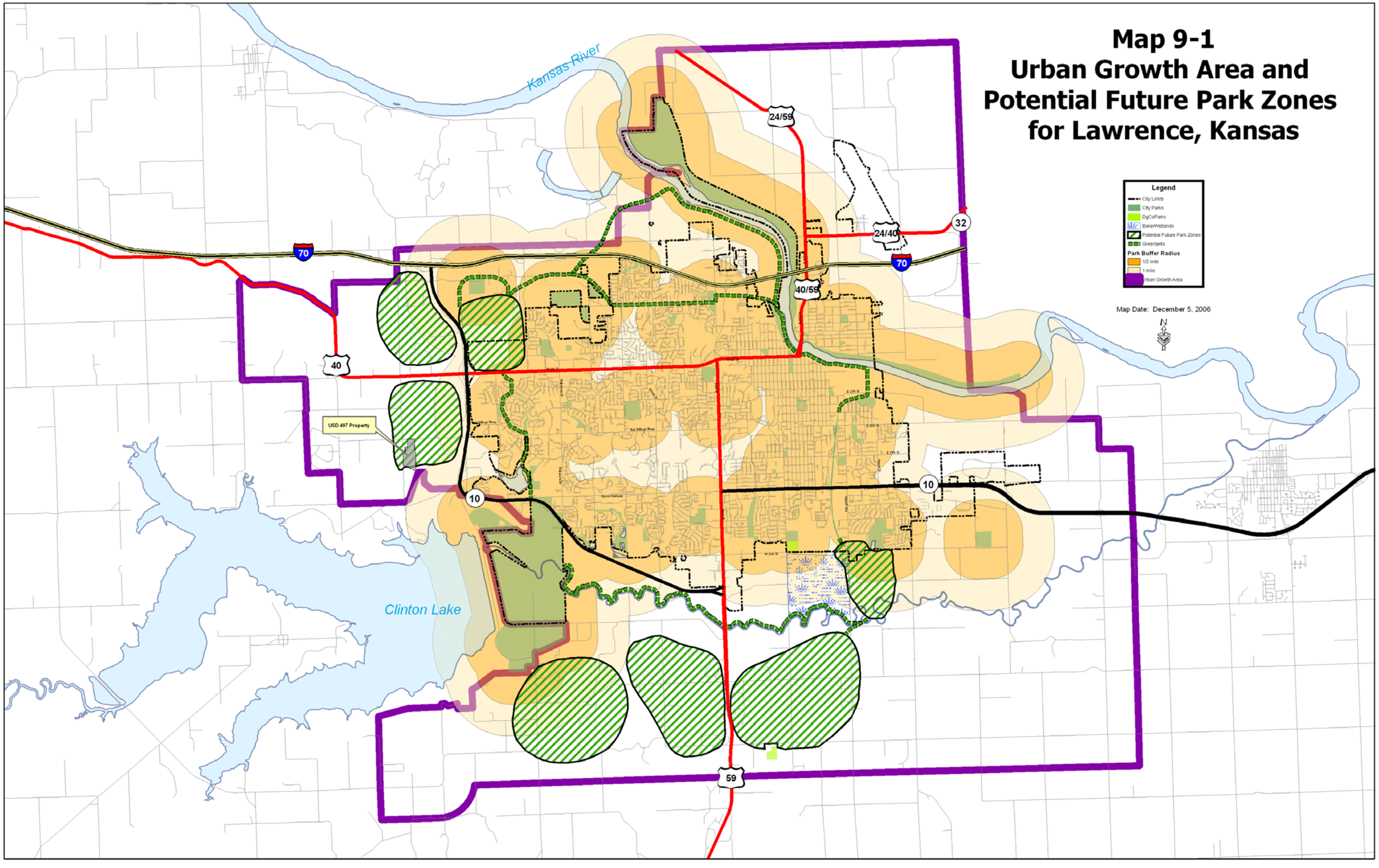
a. Discourage development-related intrusions in natural areas whenever possible to preserve the natural ecological processes of such areas and to maintain the natural character of the community.

b. Encourage and incorporate open space areas, especially natural areas, into development of neighborhood linkages to promote community connectivity and to increase recreational opportunities for adjacent development.

c. Encourage and incorporate open space areas, especially natural areas, into development to increase the overall quality of life for residents of the City of Lawrence and unincorporated Douglas County.

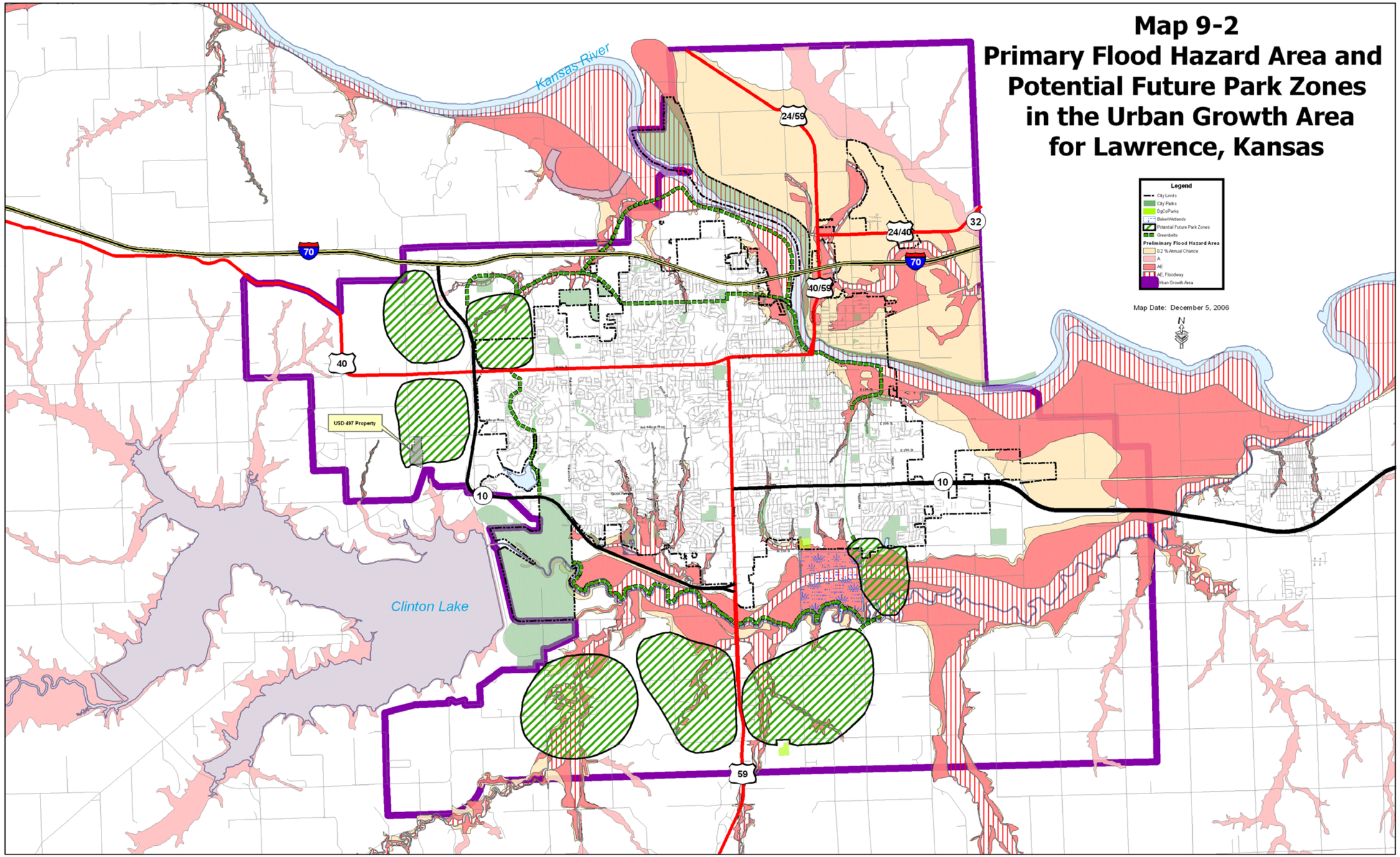
DISCLAIMER NOTICE The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

Map 9-1
Urban Growth Area and Potential Future Park Zones for Lawrence, Kansas



DISCLAIMER NOTICE The map is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The City of Lawrence makes no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the map, including the fact that the map is dynamic and is in a constant state of maintenance, correction and update.

Map 9-2
Primary Flood Hazard Area and Potential Future Park Zones in the Urban Growth Area for Lawrence, Kansas



Community Facilities

CHAPTER TEN - COMMUNITY FACILITIES

The Comprehensive Plan includes a number of recommendations for new and existing public land uses. Public and semi-public land uses include municipal facilities, schools, universities, parks, recreation and open space, and a range of institutions. Specific recommendations are provided below.

The need for public and semi-public land uses is difficult to project. One difficulty is that such facilities are often monitored by jurisdictions over which the city and/or county has limited (or no) control. These entities are encouraged, through the Plan, to work with the city and county in identifying possible sites for their facilities.

The nature of public and semi-public uses and the fact that they are permitted in residential areas makes it difficult to identify all appropriate sites. The Plan therefore regards areas shown for the various residential categories as appropriate for many public and semi-public uses, provided access and buffering are considered in their location.

This section discusses public and semi-public land uses and facilities under three categories: 1) Educational Facilities; 2) Municipal Buildings and Facilities; and 3) Utilities.

1. EDUCATIONAL FACILITIES

Schools, universities and other educational facilities are among the most important facilities in a predominantly residential community such as Lawrence and unincorporated Douglas County. They not only provide educational services, but also play an important cultural, recreational and social role as well.

STRATEGIES: EDUCATION

The following strategies express key elements of the Lawrence and unincorporated Douglas County approach to education:

- The Plan seeks cooperation by independent entities, such as local school districts, universities and municipalities, at all levels of decision-making and acknowledgement that actions of all agencies influence the overall character of the community.

- Educational and governmental institutions should meet regularly to discuss current needs and issues as well as pending plans and projects, with the intent to collaborate on joint solutions which meet the widest range of jurisdictional needs.

LOCAL PRIMARY SCHOOL DISTRICTS

- *Future School Facility Needs*

The Comprehensive Plan anticipates the need for at least one additional elementary school in the Lawrence UGA. As the community grows into the UGA, a substantial concentration of new households is anticipated, as is the creation of one or more new neighborhoods. Depending on the ultimate density and scale of development in these areas, one or more elementary schools may be needed. At this time, one elementary school site has been designated along the north side of W. 15th Street, east of the planned SLT.

Depending on the density and level of residential development west of the SLT, an additional site may be desirable. Upon its completion, the SLT will form a substantial physical barrier and divide the area. For reasons of convenience, safety, neighborhood composition and identity, it may be necessary to develop an additional school site west of the planned SLT. The school district and city should carefully monitor growth and change in this portion of the UGA.

Recent elementary schools have been planned and/or constructed as three-section schools, thereby serving larger attendance areas than many of the earlier schools accommodated. The city and county will need to continue to work cooperatively with the school district to anticipate needs as residential growth occurs throughout the community. The Comprehensive Plan anticipates the potential for additional school expansion and improvements as existing facilities age.

The highest quality of public improvements should be emphasized. Wherever feasible, new school facilities should be considered for joint development with other compatible public or private facilities including recreation, library and related facilities.

- *Unincorporated Douglas County School Districts*

Unincorporated Douglas County is served by eight school districts. These districts include USD #497 which serves both Lawrence and a large portion of unincorporated Douglas County. The majority of the county is served by the Lawrence, Eudora, Baldwin and Perry-Lecompton districts. Additional facilities within the unincorporated areas of the county are not anticipated in any districts. Elementary school facilities may create additional pressure for residential development and should not be located beyond the city limits.

- *School District Boundaries*

The Comprehensive Plan has identified only one location where there may be a potential conflict of school district boundaries in the future. The Lawrence UGA and the Plan suggest the possibility of development and incorporation of the Northwest Lawrence area north of W. 6th Street and west of Folks Road as development pressures increase around the site of the Lawrence Free State High School. Part of this area is within the Perry-Lecompton School District. The city and county should work closely with both the Lawrence and Perry-Lecompton School Districts to anticipate impacts on the schools as a result of increased growth in this general area.

- *Related Educational Needs*

The HORIZON 2020 process identified a number of other needs related to education which should be addressed to ensure the greatest level of service to the community. These include:

- The need for expanded early childhood daycare to provide parents greater schedule and employment flexibility. Increased daycare and preschool services are encouraged for age one through kindergarten.

- A county-wide high school diploma program should be developed for non-traditional students.

- A need to develop a county-wide vocational and technical training center and/or programs in Douglas County, as identified early in the process and recommended in the Economic Development Element. This center would fill an educational and employment void in Douglas County.

- As noted under the Parks, Recreation and Open Space section, unincorporated Douglas County school facilities present ideal opportunity sites for active recreation. These facilities could not only serve school programming needs but could be expanded and utilized for a range of recreational needs for unincorporated Douglas County residents.

While Lawrence and Douglas County do not have direct responsibility for education, the city and county can assist in facilitating solutions to these needs through coordination and cooperation with those agencies responsible for education. The city and county have a vital interest in education as it relates to the overall health, economy and well being of the county's citizens.

UNIVERSITIES

- *The University of Kansas*

The Comprehensive Plan has identified a number of opportunities and issues which require the collaboration of the University of Kansas and the city and county to be effectively resolved in the future. These are identified below. Over time, new needs or opportunities may arise which require active collaboration. The Plan emphasizes the obvious importance for this process to continue.

1. The Plan encourages the creation of a certified housing program. The program is intended to encourage conformance of off-campus student housing units with the city's occupancy and building code requirements. Structures approved under the program would be maintained on a list of approved university housing. For the program to be effectively implemented, it must involve both the University and Lawrence.

2. Off-street parking continues to be a concern within and near the university campus. Continued joint planning and cooperation between the university and the city will be needed to address impacts related to parking issues. In the future, a joint parking study

should be undertaken between the city and university to arrive at an integrated program to address on-campus and off-campus parking needs.

3. An enhanced bicycle and pedestrian access system may help alleviate some of the vehicle congestion in the neighborhoods surrounding the campus. The city, university and surrounding neighborhoods should continue to plan for improved bicycle and pedestrian access to serve the greater area.

4. An important component of the Economic Development Plan is the development of the university itself, and the potential for research and development enterprise as an extension of University activity. With the involvement of the Chamber of Commerce, potential for advancing the economic development objectives for the university and city should be explored.

- *Haskell Indian Nations University*

Collaboration between the Haskell Indian Nations University and the city will be important to address a variety of issues and opportunities. Over time, new needs or opportunities will arise which require active collaboration. Again, the Plan emphasizes the obvious importance for this process to continue in the future.

1. The Haskell University and the city should explore ways to provide improved bicycle and pedestrian access from the campus to other parts of the community. Unlike the University of Kansas, the Haskell campus is situated in a "perimeter" location in the city. Because the majority of students reside on campus, there would be a benefit to providing improved bicycle and pedestrian access.

2. Haskell Indian Nations University continues to actively seek visible and diverse roles within the greater Lawrence community. These positive initiatives have been supported by the community at large and should continue in the future. The city and county should continue to assist the efforts of the University wherever appropriate to fulfill its mission and broaden the appreciation of the cultural diversity Haskell Indian Nations University offers the Lawrence community.

2. MUNICIPAL BUILDINGS AND FACILITIES

In addition to parks and schools, other public buildings and facilities in Lawrence and unincorporated Douglas County require future planning; these include fire protection, emergency services, police and sheriff facilities, municipal offices, public works facilities, libraries and museums. A number of improvement projects are planned for Lawrence and unincorporated Douglas County over the planning period and are listed below. After the section on 'Strategies', the listing begins with plans for Lawrence and then describes recommendations for Douglas County. The *HORIZON 2020 Background Studies Report* includes documentation of existing conditions, requirements and probable future needs.

STRATEGIES: MUNICIPAL BUILDINGS AND FACILITIES

The following strategies identify elements of Lawrence and unincorporated Douglas County municipal buildings and facilities needs:

- Close intergovernmental cooperation is recommended to ensure, to the greatest degree possible, facilities and services are maximized while minimizing duplication.

- The potential for privatization of municipal services should continue to be explored. The city and county objective is to maximize desired services for residents while providing service delivery at the lowest possible cost. The strategy also includes the consolidation of service providers and entities wherever possible.

- The city and county should capitalize on the visual and image potentials which are presented by community facilities. At a minimum, all facilities should be well-maintained and be located on attractively landscaped sites. New public buildings represent unique opportunities to develop new civic landmarks and focal points.

- The city and county should undertake a comprehensive self-assessment of accessibility needs. The criteria for this assessment should be based upon the provisions of the Americans with Disabilities Act. A complete inventory and prioritization of improvements should be completed as soon as possible. These requirements will affect Capital Improvements Planning and the scheduling of development of new facilities in the future.

CITY OF LAWRENCE

- *Fire Protection*

Lawrence currently carries a Class 2 fire insurance rating. This overall rating is important to residents as it relates to fire insurance costs and the overall attractiveness of Lawrence as a quality service community. Lawrence also provides protective services to Grant Township. The last *Public Safety Report* was completed in 1989. This study should be updated in the future.

The Plan identifies a number of fire protection improvements:

1. A new fire station will be required in the western portion of the city to serve planned development to and beyond the SLT. Ideally, this site would be jointly developed with a police substation to serve the entire western portion of the city.

2. A second new fire station may be required to serve planned development along the E. 23rd Street and K-10 corridor extension. Ideally, this site would be situated near the intersection of E. 23rd Street and the SLT.

3. Relocation of existing fire stations or the addition of new sites within the existing city limits has been discussed to improve service capabilities to the developed portions of the city. Considered sites include the city property located along the west side of Wakarusa Drive, north of Clinton Parkway; the University of Kansas property located along the west side of Iowa Street, north of 23rd Street; and several sites located along E. 23rd Street. Replacement of existing fire stations could potentially result in the adaptive reuse of existing fire stations with other public or semi-public land uses.

4. A variety of personnel and equipment will be required to staff and support these new stations.

- *Police Department*

Lawrence Police Department is currently located within the Judicial and Law Enforcement Center. The department has identified a number of personnel, vehicle and related needs. The Plan recommends a law enforcement study be undertaken in combination with Douglas County for the unincorporated areas to best determine county-wide needs in the future.

Additionally, residential development planned for the western portion of the city near the SLT would benefit from a new police substation. As population growth continues to shift somewhat west, the area could be better served by a satellite facility which could be jointly developed with a new fire station planned for the area.

- *Public Works Department*

The Lawrence Public Works Department anticipates the need for a new public works garage. The current maintenance facility located at 11th Street and Haskell Avenue has become too small to effectively accommodate operations. The Plan recommends the former city landfill site located along the west side of Wakarusa Drive, north of Clinton Parkway, be used for this purpose. Development of this site may permit auxiliary services from several municipal departments to occur in one area.

Because the recommended site will likely adjoin low density residential uses, extra care should be taken in the design of the new facility to minimize the effect of noise, light and other impacts on the residential area.

- *Administrative Facilities*

The Lawrence City Hall will likely need to be expanded in the next 10-15 years if centralized administrative facilities are to be maintained. Maintaining municipal government offices is important to the vitality of Downtown Lawrence as a mixed-use activity center. Additional office space will likely be needed to accommodate administrative services and functions.

- *Lawrence Library and Museums*

Lawrence Public Library. The public library is currently 46,000 square feet in area and contains a collection of over 200,000 volumes. For the future, the Plan recommends satellite locations to provide more efficient service to the growing areas of the city.

Museums. Lawrence is home to a variety of museums reflecting the cultural diversity of the community and region. The following facilities, while programmed for some level of expansion in the future, are not anticipated to require new or expanded sites: Elizabeth M. Watkins Community Museum, Lawrence Arts Center, University of Kansas Museum of Natural History, Spencer Museum of Art and the University of Kansas Anthropology Museum.

- *Health Services*

The city and county are currently working to provide new facilities for health agencies to serve the city and county population. As the community continues to grow, additional facilities may be needed to meet health and medical demands. These facilities should be provided within the incorporated cities in the county.

The Douglas County community is currently served by a General Hospital. This is defined as an establishment with an organized medical staff of physicians, with permanent facilities including in-patient beds and acute care facilities, and with medical services - including physician services and continuous registered professional nursing services - for not less than 24 hours of every day, for the purpose of providing diagnosis and treatment for patients who have a variety of medical conditions.
The General Hospital provides the community and surrounding area with an adequate level of medical care and service.

The General Hospital is charged in its charter with the responsibility of providing care to all persons, regardless of their ability to pay. For this reason, it is in the overall best interest of the Douglas County community to ensure the continued economic viability of its General Hospital by ensuring that an adequate, but not excessive supply, of General Hospital facilities are available. Unlike most other commercial businesses, an increase in General Hospital competition has been shown to have a negative impact upon the quality of care and the cost of care offered in a community. Increased competition in General Hospital facilities often results in the reduction in economic viability and services provided by an existing facility. Additionally, unprofitable General Hospital facilities work a hardship upon local communities by becoming a significantly underutilized public asset. In light of the public ownership of the community's current General Hospital, such underutilization could become a burden upon the taxpayers of the Douglas County community as a whole.

To ensure that the Douglas County community is not harmed by an excessive supply of General Hospital facilities, development proposals for any new General Hospital shall be carefully examined. The review of any such proposal shall include an examination of the short-term and long-term economic impact the proposed facility will have on the existing General Hospital and the community need for additional general hospital facilities. To protect the public interest in its General Hospital, the review of any proposal for additional general hospital facilities shall include, but not be limited to the foregoing land use factors in addition to the land use factors set forth in the zoning regulations.

DOUGLAS COUNTY

- *Fire Protection*

In unincorporated Douglas County, each township provides its own fire protection services. Separate fire departments are located in Baldwin City, Eudora, Lecompton, Clinton Township, Eudora Township, Willow Springs Township, Wakarusa Township and Palmyra Township. Lawrence provides fire protection service to Grant Township.

In general, the optimum service radius for fire stations in rural areas is four miles. However, applying this standard to unincorporated Douglas County leaves large areas "underserved" due to the locations of the existing stations. The Plan recommends the Douglas County townships collaborate on the future location of fire service facilities to help ensure improved response times.

Another issue for the unincorporated townships is the lack of water supply. While some areas are served by rural water districts, the vast majority of unincorporated Douglas County does not have access to a public water supply. The townships should work with the Planning Commission to find new ways to access water resources. For instance, larger rural subdivisions might be required to provide some form of stormwater detention which may be drawn upon for fire suppression purposes.

A new fire station is planned in Marion Township to be located south of Lone Star Lake. Conditions should be monitored in the service area of the Wakarusa Fire Station, located near Louisiana Street and 31st Street. Upon completion of the South Lawrence Trafficway, access to areas south of the station could be impeded. If required, a study should be undertaken to determine the need for a new station, and the preferred location.

- *Sheriff's Department*

The Douglas County Sheriff's Department serves the unincorporated areas of Douglas County. The county does not foresee the need for any new facilities within the unincorporated area in the immediate future. However, related to space needs in the Judicial and Law Enforcement Center, Douglas County has recently completed construction of a new juvenile detention center to serve a multi-county region. It is located near the east Lawrence exit of the Kansas Turnpike. Plans are underway to expand the existing County Jail facilities located at the Judicial and Law Enforcement Center.

- *Public Works Department*

In addition to the need to expand administrative facilities, the Public Works Department plans to improve and upgrade existing facilities. Site acquisition for a new salt storage site is planned along Route 6, west of Clinton Lake.

- *Administrative Facilities*

The Douglas County Courthouse, located at 11th and Massachusetts Streets, represents an important historic focal point in Douglas County. Its location in Downtown Lawrence makes it easily accessible to city and county residents and provides an anchor to the southern end of the downtown area. The retention of government offices is important to the vitality of Downtown Lawrence as a mixed-use activity center. Additional facilities may be needed in the future to accommodate growing space demands.

- *Other Facilities*

The Douglas County Ambulance Service is anticipated to need additional sites to serve the county population. Sites with access to major transportation routes within the area will likely be needed to provide rapid response to all parts of the county.

A number of other facilities exist within Douglas County which are scheduled for expansion and improvement, but do not anticipate additional land acquisition. These include the Douglas County Fairgrounds, Douglas County Public Health Department, Douglas County Senior Services and the Township Maintenance Facilities.

Lawrence and Douglas County are also served by the Hamm, Jefferson-Douglas County Landfill located in Jefferson County. The landfill operators have indicated that capacity exists to accommodate county needs well beyond the planning period.

- *Libraries*

Access to library service in unincorporated Douglas County is limited. The Baldwin City Library provides service to Baldwin City and the Baldwin School District. The Eudora Library provides service to both the city and Township of Eudora. Because of the need for numerous other basic community facilities and services, including roads and fire protection, the Plan does not recommend any new library facility improvements specifically directed to the unincorporated areas of the County.

- *Museums*

The Clinton Lake Historical Society Museum is located within the unincorporated area of the county south of Clinton Lake. A number of historical sites and markers are also scattered throughout the county.

3. PUBLIC UTILITIES

While public utilities are important from the standpoint of sustaining day-to-day needs of the community, the presence or absence of major utilities will directly influence the locations and pace of future development. The Plan recognizes the need to carefully plan for the continued service to existing areas of Lawrence and unincorporated Douglas County and select locations for new and expanded utilities.

STRATEGIES: UTILITIES

The following strategies for utilities are critical to achieving a number of the Plan's goals and policies for Lawrence and unincorporated Douglas County:

- Plans should emphasize utility improvements and extensions that provide the highest level of service within existing service areas, particularly public water and wastewater treatment and collection. Costs which are associated with the accelerated timing of the extension of utilities into new development areas should ultimately be borne by the developments requiring these facilities.

- Adoption and implementation of a utility extension policy for Lawrence will guide the sequencing of appropriate future development areas within the UGA.

- As an ongoing planning priority, the city will continue to search for ways to secure additional raw water rights to serve the community.

- The visual appearance of utility improvements will be addressed to ensure compatibility with existing and planned land use areas.

- Wherever possible, the location of new major utility corridors should be preplanned to ensure land use compatibility and minimal disruption to existing development areas.

CITY OF LAWRENCE

- *Stormwater Management*

At present, the city does not have a comprehensive stormwater management system, however a study is currently underway. The city currently requires on-site stormwater detention facilities for some multiple-family and non-residential development. As the city continues to physically expand, the potential for periodic flooding will increase. A community-wide stormwater management study covering the entire planning area should provide the city with the following information:

- Developed areas in the community which may be at risk of flooding as a result of continued development under current policies.

- Any remedial actions and improvements to correct existing conditions should be identified. This should include a re-evaluation of conditions in North Lawrence.

- Recommended stormwater improvements throughout the planning area should be incorporated into the development review process.

- The study should include recommendations for the management of existing wetlands areas as part of the stormwater system.

- Specific recommendations regarding the preparation of stormwater run-off regulations for the city. This would include, at a minimum, storage design standards and facility design standards. Consideration should be given to appropriate regulations for all types of development.

- The study should recommend the possibilities for centralized stormwater facilities. Centralized facilities are positioned within drainage areas and serve as a combined detention or retention facility serving multiple developments. Shared financing options, either public/private or private/private partnerships should be explored.

The city seeks to utilize a "nonstructural" approach to stormwater system design and improvement. A nonstructural approach seeks to minimize the use of underground structures or other forms of enclosure to convey stormwater. It encourages the use of natural drainage corridors, or possibly relocated drainage corridors, minimizing disruption to natural drainage patterns. There are situations which will unavoidably require the enclosure of the drainage system, particularly for much of the existing community. However, new development areas offer the opportunity to use a nonstructural approach.

It is also important that the city continue to enforce its regulations in flood-prone areas to prevent inappropriate development which would cause risk to human life or property.

- ***Wastewater Collection and Treatment***

Most existing developed areas of Lawrence are adequately served with wastewater collection and treatment facilities. The few remaining areas that are unserved are expected to be connected to the treatment system over the planning period. The city currently maintains a single wastewater treatment plant located along the south side of the Kansas River at E. 8th Street. The treatment plant's current capacity of nine million gallons per day (gpd) will be upgraded to include another 4.5 million gallons (total of 13.5 gpd) in the next few years to accommodate some level of new development and stabilize service to existing developed areas.

These improvements alone, however, will not provide the sewage treatment capacity required to meet the development needs over the planning period. Service Area 1, as identified in *Map 3-1, Lawrence Urban Growth Area*, indicates the potential increase in the size of the UGA from the existing wastewater treatment boundaries. In the long-term there appears to be a need for a second wastewater treatment plant. Two possible locations have recently been considered: south of the Wakarusa River near US-59, and east of the city near the Kansas River. The

relationship between potential plant locations and land use is described in greater detail in the Land Use element and the Growth Management element.

The Baldwin Creek drainage area in the far northwest portion of the growth area cannot be easily served under current wastewater treatment expansion plans. This is due to the Baldwin Creek drainage divide, which changes the natural flow of water from the south to the north. The ridgeline runs just north and roughly parallel to W. 6th Street for the areas lying west of E1100 Road [Folks Road]. While portions of this area near existing streets may be served with gravity flow sewers, the majority of the area will require forced main sewers to transmit waste to existing and planned wastewater treatment plant locations. Additional system improvements will be needed downstream to increase capacity to accommodate the flow pumped over the ridge. Alternatively, a new wastewater treatment plant could be developed at the Kansas River and provide a gravity flow collection system to serve the area.

The Plan recommends permitting development in areas near roadways where gravity flow wastewater collection facilities can be improved. Through further study, the city should determine the manner in which the remaining portions of the Lawrence UGA within the Baldwin Creek drainage area should be served. Ideally, the city would reach a definitive policy to ensure the installation of desired permanent collection and treatment facilities prior to permitting private development in the larger Baldwin Creek drainage area.

- ***Water Supply and Distribution Facilities***

Lawrence owns and maintains water treatment and distribution facilities which serve the city and a variety of areas within the county. The city's water comes from the Kansas River at the 3rd and Indiana Street water plant and at the Clinton Lake water plant. Together, these plants have a capacity to provide a total of 27.5 million gpd. The capacity of these plants is deemed adequate to serve the needs of the city over the planning period. The water distribution system within existing developed areas of the city is also generally considered adequate at this time. The system can be expanded to undeveloped portions of the UGA in the future.

The city also extends its water facilities and services to a number of unincorporated areas of Douglas County and to the City of Baldwin. The city contracts to treat water it draws through its treatment facilities with Rural Water Districts (Douglas County RWD's 1, 2, 4, 5 & 6, and Jefferson County RWD 13) operating in the county. The boundaries of these districts and major facilities are illustrated in the *Rural Water Districts Map* in the *HORIZON 2020 Background Studies*.

For the future, continued access to raw water resources poses a threat and challenge for the city. Water rights claims by other public and private interests "upstream" on the Kansas River may have an influence on the quantities of water available to the city in the future. Because these issues are tied to water rights issues throughout the State of Kansas and adjoining states, it is difficult to plan for local solutions at this time. The recommended strategy is to continue involvement in state level discussions concerning the interests of Douglas County and to pursue other additional regional water resources including Perry Lake.

A number of other recommendations and policies relating to utilities are contained in the Growth Management Element.

- *Electric and Telephone*

Electric and telephone lines continue to have a visual presence in the older areas of Lawrence. Underground placement of these utilities is required in conjunction with new development and in redevelopment projects where feasible. Overhead lines have been relocated over time, improving the appearance of several corridors throughout the city. Major electric transmission lines cannot feasibly be placed underground and will continue to be a visual presence within the community.

DOUGLAS COUNTY

- *Stormwater Management*

Because of the very low density of most development planned for the county, stormwater management practices should be developed to apply to more intensive development locations. These would include larger residential subdivisions, non-residential developments and planned developments. These developments should be subject to review under a set of threshold standards to determine the need for any on-site stormwater drainage, detention or retention improvements.

The Plan additionally recommends that development policies should be enforced which require review by the County Engineer during the site planning or preliminary platting process of proposed alterations in the course of surface drainageways. When development plans are proposed, the location of field tiles previously used for agricultural purposes should be considered. Tiles which are not capped or plugged can often dramatically affect how septic laterals function, as well as impacting drainage conditions on adjacent properties or.

Finally, it is important that the county continue to enforce regulations in flood prone areas to prevent inappropriate development which would cause risk to human life or property.

- *Wastewater Collection and Treatment*

Wastewater collection and treatment in Douglas County is provided through on-site treatment and disposal systems. Currently, there are no public wastewater collection or treatment facilities in operation in the County. Population forecasts for the unincorporated areas of Douglas County have not justified a change in this policy. The vast majority of residential growth is expected to continue at very low densities making public systems financially impractical. However, improperly installed or maintained on-site septic wastewater treatment systems may contribute to contamination of stormwater run-off, ground water, and soils. Therefore, the Plan encourages a number of approaches to on-site wastewater treatment facilities:

  - Encourage the use of environmentally sensitive wastewater treatment and disposal systems which eliminate or control the quality of on-site effluent.

- Encourage larger-scale developments, including subdivisions, to utilize innovative treatment systems which may be more sensitive to long-term changes in the surrounding environment.

The Clinton Lake area maintains special regulations administered by the Kansas State Secretary of Health. Any land split into tracts of less than three acres must be platted under the joint city/county subdivision regulations. If a subdivision of ten or more lots is proposed, any of which is less than three acres, then engineering plans for water and wastewater treatment must be filed with the state for approval.

- ***Water Supply and Distribution Facilities***

Douglas County will continue to be served by private wells and rural water districts. This includes Douglas County RWD's 1, 2, 3, 4, 5 & 6; Jefferson County RWD's 5 & 13; and Osage County RWD 5. Because most of these districts rely on raw water resources through contracts with Lawrence, the districts will also be concerned with the continued provision of raw water resources in the future. The rural water districts and Lawrence should collaborate in efforts to maintain adequate accessibility to this important resource.

- ***Natural Gas, Electric, and Telephone***

Telephone and electric utilities have a strong visual presence in the unincorporated Douglas County landscape, and aboveground placement of major transmission lines is likely to continue. For the future, the planned location of major transmission lines and easements should be carefully coordinated between the city, county and appropriate utilities to minimize environmental and aesthetic impacts to the rural landscape. Because of concerns relating to high-power electromagnetic fields, the city and county should work with utilities to site facilities in locations which are most removed from existing employment and residential areas.

The development of natural gas and telephone utility corridors presents opportunities for the development of the county trail system. The Planning Commission and Douglas County should explore the use of these corridors for pedestrian use generally consistent with the recommendations of the Transportation element for Douglas County.

COMMUNITY FACILITIES GOALS AND POLICIES

Community Facilities, both public and semi-public uses, serve to enhance the quality of life in a community. Guidelines are needed to direct the efficient provision of these services and facilities.

GOAL 1: Provide Facilities and Services to Meet the Needs of the Community

Provide quality public and semi-public facilities equitably distributed throughout the community.

Policy 1.1: Maintain Existing Facilities

a. Encourage the adaptive reuse or redevelopment of excess community facilities and sites.

b. Maintain or upgrade existing facilities and services where necessary to serve existing development.

Policy 1.2: Identify Suitable Sites

Cooperate with other agencies in identifying appropriate sites for future community facilities.

Policy 1.3: Coordinate the Delivery of Services

a. Plan cooperative use of facilities, services and land to optimize use of resources and avoid duplication.

b. Encourage the coordination of services and facilities among those municipal service providers engaged in similar services in the county.

Policy 1.4: Combine Facilities

a. Encourage multiple uses of educational facilities for recreation and/or other service programs.

b. Promote combined public facilities such as school/community centers, police/fire stations, or library/community centers in several locations throughout the community to improve accessibility and promote efficient delivery of services.

Guidelines are needed to provide direction on where and at what scale public or semi-public facilities are appropriate.

GOAL 2: Criteria for the Location of Community Facilities

Adopt criteria which will ensure that community facilities are located, designed and operated in a manner compatible with neighboring uses.

Policy 2.1: General Locational Criteria

Public facilities that serve community or regional populations and are used directly by the general public should be located on arterial, collector or access/frontage streets in non-residential areas.

Policy 2.2: Utilize Locational Criteria for Churches and Other Religious Facilities

a. Locate churches and other high-traffic uses at the periphery of neighborhoods to facilitate compatible uses and provide direct access to arterial, collector or access/frontage streets.

b. Encourage the shared use of parking facilities/open space with neighborhood uses.

Policy 2.3: Utilize Locational Criteria for Public and Private School Facilities

a. Locate schools to facilitate pedestrian access.

b. Locate secondary schools to provide direct vehicular access to arterial or collector streets.

c. Locate elementary and junior high schools to provide direct vehicular access to collector streets.

d. Coordinate site locations with park land or open space.

Policy 2.4: Utilize Locational Criteria for Utility Structures

a. Choose locations and design sites in a manner which minimizes the impact on adjacent properties.

b. Ensure that new public sites and buildings are well-designed to enhance the appearance and image of the city and unincorporated Douglas County.

c. Public uses that are potential nuisances should be buffered by screening, distance and/or landscaping.

Traffic impacts continue to be a major concern in large-scale community facility developments.

GOAL 3: Transportation Considerations

Promote a multi-modal transportation system which provides or improves access and circulation within and adjacent to community facilities.

Policy 3.1: Levels of Service

The development of new community facilities or the expansion of existing community facilities shall not be approved until the surrounding street system can provide an acceptable level of service.

Policy 3.2: Evaluate Traffic Impacts

An evaluation of the traffic impacts of a development on the surrounding area should consider the existing and projected traffic conditions and their impact on the existing transportation system. This evaluation should be based on planned improvements identified in the *Capital Improvement Plan,* the *Comprehensive Plan,* and/or the *Long-Range Transportation Plan.* These plans shall be updated periodically to recognize changes in priorities and to add new projects with designated priorities.

Policy 3.3: Minimize Traffic Diversion

Discourage the diversion of traffic to or from community facility developments onto local residential streets through low-density residential neighborhoods.

Policy 3.4: Ensure Adequate Ingress and Egress

Adequate ingress and egress for large-scale developments should strive to provide a minimum of two access points.

Policy 3.5: Limit Access

Lot access and street configurations should be designed to avoid curb cuts and local street intersections on arterial streets and coordinate access with adjacent developments.

Policy 3.6: Provide Vehicular Circulation

Large-scale community facility developments should provide internal vehicular circulation.

Policy 3.7: Provide Pedestrian Access

Provide sidewalks on one side of local streets (public and private) and both sides of collector and arterial streets.

Policy 3.8: Provide Bicycle Access

Provide bicycle links between major activity generators within the community.

Historic Resources

CHAPTER ELEVEN - HISTORIC RESOURCES

Citizens of Lawrence and Douglas County recognize the importance of historic resources in the county. Understanding and preserving the past not only helps define a community's sense of place but provides a sense of direction for future development and growth. Citizens view historic resources with a sense of pride, community identity, and a respect for the physical and cultural heritage of the community.

The Comprehensive Plan encourages identification, protection, preservation and adaptive reuse of the wide diversity of historic buildings, structures, sites and archeological sites that can be found in Lawrence and Douglas County. The Plan seeks to balance historic preservation and land use issues when making planning decisions.

STRATEGIES: HISTORIC RESOURCES

The following statements summarize the goals and objectives of the city and county's overall approach for the protection, development and utilization of historic resources:

- Facilitate the identification, evaluation, designation and preservation of historic and archeological resources by developing and implementing a Comprehensive Historic Preservation Plan for Lawrence and the unincorporated portions of Douglas County. When practical, the plan should seek the involvement and cooperation of all municipalities within Douglas County.

- Integrate the identification, evaluation and designation of Lawrence's and Douglas County's significant historical and archeological resources into the planning process, including the funding of a comprehensive resources inventory program.

- Develop appropriate mechanisms for the identification, evaluation, designation and preservation of historic and archeological resources at all levels of municipal government. Efforts to maintain and strengthen preservation efforts among municipal, county, state and federal entities are strongly encouraged.

- Establish traditional and non-traditional economic incentives and adaptive reuse alternatives for historic resources.

- Increase awareness of historic preservation through development of public education programs, technical assistance programs and heritage tourism. Information regarding historic preservation and historic resources should be readily accessible in a variety of locations and mediums.

- Develop appropriate zoning and building code regulations to facilitate the preservation, renovation and rehabilitation of historic resources.

PRESERVATION PLAN FOR LAWRENCE AND DOUGLAS COUNTY

A *Comprehensive Historic Preservation Plan* should form the basis of specific goals and policies which guide historic preservation efforts in the community. There are many agencies and organizations involved with preservation efforts in Douglas County including local volunteer, state and federal agencies. The new historic preservation plan must strive to coordinate the efforts and actions of the various groups involved in order to provide a unified and effective plan of action.

The historic preservation plan should contain a survey plan which outlines and prioritizes historic inventory survey tasks for Lawrence and unincorporated Douglas County. It should first focus on sites and areas which are potentially vulnerable to change. The inventory should include historically and culturally significant buildings, sites and areas as well as archeological resources. Where archeological resources may be involved, the inventory and evaluation process should be coordinated with the Kansas State Historical Society and the State Archeologist. Additionally, the inventory should be well organized and maintained in electronic computer records, as well as being accessible to the public in general.

When completed, the *Comprehensive Historic Preservation Plan* should be amended into the Comprehensive Plan.

DEVELOPMENT REVIEW PROCESS

Local historic preservation organizations should continue to be aware of projects and programs pending in the city and unincorporated Douglas County which may impact historic resources. Like Lawrence, Douglas County should prepare and adopt a historic preservation ordinance to help protect important historic resources. Upon adoption of the new *Comprehensive Historic Preservation Plan*, these ordinances would be reviewed, updated and expanded as appropriate.

HISTORIC RESOURCES GOALS AND POLICIES

Historic Resources in Lawrence and Douglas County enhance the quality of life within the community and are integral in defining the character of the community. Guidelines are needed to ensure consideration of these resources in land use decisions.

GOAL 1: Develop and Implement a Comprehensive Historic Preservation Plan

Policy 1.1: Develop a Comprehensive Historic Resources Survey Plan

Develop a plan for and conduct a survey of historic resources throughout the city and county.

Policy 1.2: Develop Appropriate Mechanisms for the Identification, Evaluation, Designation and Preservation of Historic Structures

a. Develop and adopt an historic preservation ordinance for the unincorporated areas of Douglas County.

b. Develop alternate protection mechanisms such as design guidelines and conservation district zoning overlays.

c. Encourage interdepartmental and intergovernmental cooperation in using existing resources and programs to facilitate the preservation of historic resources.

Mechanisms are needed to integrate historic preservation efforts in all planning processes.

GOAL 2: Integrate the Identification, Evaluation and Designation of Significant Historic and Archeological Resources into the Planning Process

Policy 2.1: Develop Appropriate Regulations

Develop appropriate zoning and building code regulations to facilitate the preservation, renovation and rehabilitation of historic resources.

Policy 2.2: Require Historic Preservation Elements

Require historic preservation elements as part of neighborhood plans, area plans and sector plans.

Policy 2.3: Review Impacts

Review all new ordinances for their impact on historic resources and historic preservation efforts.

Economic incentives are needed to help facilitate historic preservation.

GOAL 3: Encourage the Development of Traditional and Nontraditional Economic Incentives and Adaptive Reuse Alternatives for Historic Structures

Policy 3.1: Facilitate Adaptive Reuse

Develop additional zoning regulations which facilitate the adaptive reuse of historic structures.

Policy 3.2: Develop Incentives

Develop additional economic incentives such as modified tax structures, grants, etc. for the rehabilitation of historic structures.

Public awareness of Historic Resources is needed to encourage heritage tourism and education about historic preservation.

GOAL 4: Increase Awareness of Historic Preservation

Policy 4.1: Promote Public Education

Develop and promote public education programs and technical assistance programs.

Policy 4.2: Encourage Heritage Tourism Efforts

Encourage and expand heritage tourism efforts as part of the overall economic development program.

Policy 4.3: Increase Information Access

Provide information regarding historic preservation and historic resources in a variety of locations and mediums.

Economic Development

CHAPTER TWELVE - ECONOMIC DEVELOPMENT

According to the International Economic Development Council, the definition of economic development is creating wealth in a community through job creation, job retention, quality of life improvement and tax base enhancement.

In order to understand the shared vision of the residents of Douglas County with regard to economic development, public hearings were conducted in Baldwin City, Eudora, Lawrence and Lecompton for the purpose of updating the Economic Development Element of the HORIZON 2020 Strategic Plan for Douglas County. The results of the public hearings are encompassed in the body of this document.

Douglas County has engaged in traditional marketing and business attraction as its primary tool for economic development. These efforts have been successful in the past, but differ little from those of competing communities. If the County is to maintain its distinctive and unique identity, a new and innovative approach for marketing and business attractions must be adopted. We must build on opportunities created by economic change and the need for value-added businesses with growing wages and employment.

This element of the Strategic Economic Development Plan has a countywide scope and includes the incorporated cities of Eudora, Baldwin City, Lawrence, and Lecompton in the overall recommendations, along with the unincorporated areas of Douglas County. In order to adhere to the format of HORIZON 2020, the strategies of the Economic Development Plan element are called “policies”, and the priorities are called “action priorities”.

GOALS: ECONOMIC DEVELOPMENT

The following goals express key elements of the overall city and county approach to economic development.

1. Employment Growth

   Jobs will grow at a rate greater than or above that of population and housing in pursuit of enhanced quality of life. Quality jobs with desirable incomes, benefits and career opportunities will be targeted.

2. Tax Base Growth

   Increase tax base at a rate equal to or greater than the rate of population and housing growth in pursuit of an enhanced quality of life. The tax base will increase at a rate equal to or above the rate of tax-funded service demand. To achieve this goal, industrial and non-retail commercial growth must at least keep pace with population growth.

3. Income Growth

Increase the career opportunities and income of Douglas County citizens through attraction of high-skilled jobs in expanding industries in pursuit of an enhanced quality of life.

ECONOMIC DEVELOPMENT POLICIES AND PRIORITIES

The following policies and action priorities represent a seven-part strategy recommended as the overall approach to economic development in Lawrence and Douglas County:

POLICY 1: Business Retention and Expansion

Business retention and expansion of existing businesses has become the core foundation of economic development efforts for Douglas County. Nationally and locally, over 80% of new jobs and investment growth in a community come from the expansion of existing businesses.

Priority 1.1: Continue Existing Business Program

Continue business retention program through the utilization of the Business Synchronist Software system. An annual business retention plan will be developed to identify key strategies for creating an environment for businesses to flourish in this community.

Priority 1.2: Develop Business Recognition Program

Through the development of a new recognition program, establish an initiative designed to encourage retention of businesses. The program should include (an) annual event(s) to recognize excellence in business for local companies. The program will provide two main benefits:

- Broaden awareness of businesses located in Douglas County
- Encourage the Lawrence Chamber to recognize local businesses that are excelling, making it more likely the county will retain those companies.

Priority 1.3: Formation of Industry Sector Networks

Formation of various industry sector networks to ensure business leadership is vested in the community and to showcase the best local practices among the business sectors. Such networks as Manufacturers, Kansas International and/or Agribusiness are examples.

Priority 1.4: Business Growth Assistance

Business growth assistance will be provided free of charge to local companies that fit the SBA definition of “small.”

POLICY 2: Workforce Development

Although Douglas County has a highly educated workforce, existing businesses in Douglas County have conveyed a concern about a lack of technical skills and workforce available in the area. Efforts to assess current and future workforce skill gaps will be vital to the future success of existing businesses.

Priority 2.1: Develop Workforce Development Committee

Create a forum for business and educational resources to work collaboratively to enhance the workforce in Douglas County. Initiatives include workforce assessment and identification of workforce needs in Douglas County.

Priority 2.2: Develop Community Workforce Development Plan

Develop and implement a comprehensive community workforce development plan based upon current and future skill gaps of the Douglas County workforce, as identified by the Workforce Development Committee.

Priority 2.3: Develop Plan to Address Early Childhood Development Issues

In partnership with the Lawrence Success by 6 organization, monitor early childhood development issues and create strategies to encourage a "family-friendly" work environment among employers.

POLICY 3: Entrepreneurial Development

An entrepreneurial environment is characterized by the following:

Innovative (new) technologies
Innovative technologies within industry sectors that are fostered by the area's higher education institutions and industries, such as life sciences, information technology, software and communications.

Business support services
Business support services provided by the Lawrence Regional Technology Center (LRTC), high technology business incubator, as well as other local resources. LRTC provides services such as low-cost office space, business plan development, market research and analysis, corporate formation, strategic planning and capital fundraising assistance.

High-risk seed and venture capital
Seed and venture capital can be difficult to secure in Douglas County. Without seed and venture capital, high technology, start-up companies may not establish operations in our region. Opportunities for spin-off companies based upon the technologies developed by the University of Kansas may also be lost.

Priority 3.1: Improve Access to Capital for Entrepreneurs

Other communities that provide capital will lure technologies out of Douglas County. Those communities will become home to the new start-up companies and high-paying jobs as a result of their capital support. If we can provide capital to support commercialization efforts, we can keep new companies and jobs in Douglas County.

- Develop a local "angel" investment group to provide seed investments.
- Pursue creation of a local private and/or public sector seed and incubator capital fund.
- Partner aggressively with established area "angels" and venture capitalists to expand the network of contacts.
- Obtain state and federal investment funds.

Priority 3.2: Enhance the coordination of services offered to small and/or start-up businesses.

Local resources such as the University of Kansas Small Business Development Center (SBDC) and the Lawrence Regional Technology Center (LRTC) have been successful in providing business counseling to small and start-up businesses. Create a forum for small business service providers to meet to coordinate services provided to small businesses and develop a SBDC seminar series to support small businesses.

Priority 3.3: Create Entrepreneurial Mentorship Program

Foster the development of entrepreneurial skills and the sense of small business community through an entrepreneurial mentorship program.

POLICY 4: Targeted Business Attraction

Targeted career business attraction that builds on the existing economic and educational base of Douglas County includes the following:

- Life sciences/research
- Information technology
- Aviation/aerospace
- Value-added agriculture
- Light manufacturing/distribution

Priority 4.1: Update Community Business Attraction Marketing Efforts

Develop a program to aggressively market Douglas County as a prime location for new industry through targeted advertisements, trade show participation, direct mail, consultant events, promotional brochure development, website enhancement and other strategies aimed at building effective relationships with site selectors and prospects.

Priority 4.2: Update Targeted Business Opportunities Study

Update the targeted business opportunities study to identify and to recruit companies to Douglas County.

Priority 4.3: Business Attraction of Area University Alumni

Create a program to bring businesses owned by university alumnae back home to Douglas County. Strategies will include targeted marketing and coordination with alumni relations.

POLICY 5: Visitor Industry Development

Visitors play a vitally important role in economic development. Douglas County is attractive because of its higher-education resources and activities, its arts, its unique heritage, and its authentically historic downtown with locally-owned retail businesses. The extraordinary quality of life that attracts residents and businesses also attracts high-quality visitors. The rolling, tree-lined hills of northeast Kansas are a surprise to those unfamiliar with the Kansas landscape, and proximity to the Kansas City International Airport is a decided asset.

Priority 5.1: Aggressively Market the Image and Amenities of the County

Make Downtown Lawrence and other destinations throughout Douglas County an integral part of the visitor experience; target high value visitors by marketing to the meetings and retirees markets. High-value visitors are people who stay in Douglas County overnight, spending money on items ranging from art to golf to full service hotels.

Priority 5.2: Take the Lead in a Strategy to Create a National Heritage Area

Assist in creating a National Heritage Area focused on the theme of the "Bleeding Kansas" pre-civil war story including, all area cities and/or counties with the potential to interpret component parts of the theme.

Write legislation for designation to be carried successfully through Congress and develop a management plan for the area.

Priority 5.3: Work in Partnership with Educational Institutions and Arts & History Organizations to Provide Cultural Offerings that Attract High-Value Visitors and Contribute to the Local Quality of Life

Key approaches:

Themed product development such as the Lawrence Indian Arts Show, Langston Hughes February Festival and Art Gallery Walks.

Education product development such as "value added events" (i.e., a behind-the-scenes tour of the Lied Center before attending a performance) and educational events held in conjunction with themed commercial activities (i.e., a workshop held in conjunction with the Indian Art Show) and as stand-alone education events (i.e., artist-in-residence opportunities at area museums.)

Tourism marketing development working together to enhance the renown of Lawrence and Douglas County for their wide diversity of high quality arts.

Communication and infrastructure development to enhance and strengthen communication among arts and tourism organizations and to facilitate event planning.

Priority 5.4: Offer Appropriate Incentives for Desired Tourism Development

Target projects such as high value hotels and attractions that would be considered destination drivers. A destination driver is the type of attraction or amenity that motivates or "drives" large numbers of visitors to travel to the community.

POLICY 6: Business Infrastructure

Priority 6.1: Business Park Development

Douglas County must identify land for future business and corporate business parks that takes advantage of the airport, the interstate/highway system, and the westward growth of Johnson County. Within the next few years, the City and County Commissions shall identify and designate at least 1000 acres of land for industrial expansion over the next 25 years. The commissions shall also put in motion the capitalization and infrastructure development needed to bring those 1000 acres into productive use. This area shall be identified in the HORIZON 2020 strategic plan for future opportunities in Lawrence and Douglas County.

Douglas County and its communities (Baldwin City, Eudora, Lawrence, and Lecompton) should initiate plans for business park development and each respective Planning Commission should work proactively in identifying areas for future business park development.

Priority 6.2: Build Technology Infrastructure

Implement strategies to enhance the availability and quality of technical infrastructure needed to support existing and to attract new technology based companies such as assessment of telecommunications infrastructure needed, including advanced video, data, and voice services; workforce training needs; and/or funding programs needed to support the technology industry.

POLICY 7: Douglas County Economic Development Board

The success of the community's economic development efforts depends upon the expertise and enthusiasm of citizens who serve on the Douglas County Economic Development Board, as well as the commitment of human and financial resources from the county, the cities, the universities, the chambers and organizing citizens.

Priority 7.1: Continue Role of the Douglas County Economic Development Board

The Douglas County Economic Development Board was created in 1994, consisting of 12-15 individuals interested in economic progress and the rural economy, such as the Chambers of Commerce and other associations, labor, city and county government and the school districts and the rural economy.

The Douglas County Economic Development Board, in partnership with Lawrence, Douglas County, and the Lawrence Chamber of Commerce, is responsible for the following:

- Managing the contract for economic development services.
- Assisting in the development and recommending approval of the annual economic development budget to the City and County Commissions.
- Overseeing compliance with the HORIZON 2020 Economic Development Element and providing updates as deemed appropriate by the Board. The Board will communicate to elected officials and the public regarding results and successes achieved of this Plan.
- Convening a broad-based community forum as needed to review programs, to share expectations and to revise the strategic plan.
- Educating city and county commissioners, school board members, and the community-at-large on the economic goals of the community and for providing regular progress reports to these groups.

- Serving as a catalyst to cities within Douglas County to work with Planning Commissions to identify and structure resources for the development for future business parks.

Priority 7.2: Formalize Role of the Douglas County Economic Development Board

Work with Lawrence and Douglas County to draft and adopt an ordinance stipulating the role of the Douglas County Economic Development Board. By-laws will be developed by the Board.

A complete copy of the Strategic Economic Development Plan can be obtained by contacting the Lawrence Chamber of Commerce Economic Development Department, the Lawrence/Douglas County Metropolitan Planning Office, or the Lawrence Public Library Reference Desk.

RESPONSIBLE ORGANIZATIONS FOR IMPLEMENTING THE STRATEGIC ECONOMIC DEVELOPMENT PLAN:

- Douglas County Economic Development Board
- Cities of Douglas County
- Douglas County
- City and County Commissions
- Douglas County Planning Commissions
- Convention and Visitors Bureau
- Kansas Congressional Delegation
- Small Business Development Center
- Business/Education Partnership
- Lawrence Workforce Center
- Success by 6
- Area Education Institutions
- Area Higher Education Institutions
- Lawrence Regional Technology Center (LRTC)
- Lawrence Technology Association (LTA)

- Douglas County businesses
- Private sector employment agencies
- Other small business service providers
- Art and history organizations
- Historians with regional cities and counties

Page purposely left blank

Reserved

CHAPTER THIRTEEN – RESERVED

Page purposely left blank

SPECIFIC PLANS

CHAPTER FOURTEEN – SPECIFIC PLANS

Purpose

Long-range planning in an area specific manner is an important aspect of the overall community planning process. Specific plans provide the focused guidance necessary for proper decision making regarding an area's future. Chapter 14 references adopted specific plans and provides guidance, through the Hierarchy of Plans, for completing the proper type of plan for an area.

The plans referenced below have been adopted through a Comprehensive Plan process, as described on pages 17-8 and 17-9. As such, these plans are considered Comprehensive Plan policy and are an element of *Horizon 2020*. The plans are separate documents from *Horizon 2020* and can be accessed online at http://www.lawrenceks.org/pds or copies can be obtained by contacting the Lawrence-Douglas County Planning Department.

Plans prepared for specific areas, whether they are areas within the City of Lawrence or areas within unincorporated Douglas County contain detailed policy guidance for those areas. The plans, when adopted through a Comprehensive Plan process, and referenced in this chapter, become the official Comprehensive Plan policy for the respective areas. The policy contained in the plans take precedence over other policy found in *Horizon 2020*, unless specifically stated otherwise in the Plans.

Plan Review

Plans can eventually lose their relevance to a specific area. Additionally, some plans will require review to confirm if policies are being followed, goals are being met, and implementation is occurring.

Therefore, it is necessary to ensure plans are reviewed on a regular basis to update them or to rotate them out of the Comprehensive Plan if they have lost their relevance. Each plan listed below has a date which will trigger a review of that plan. Planning Staff will review the plan to determine if it meets one of the following criteria and needs the required action:

1. Plan remains relevant - no action necessary.

2. Plan has been superseded by another plan - remove from Chapter 14.

3. Plan is out of date and no longer relevant – remove from Chapter 14.

4. Plan requires updating – staff will update and forward recommendations for Commission consideration.

Staff will report on the review of a specific plan to the Planning Commission along with a recommendation for action, if necessary. If an update is required, staff will provide the Planning Commission a plan to complete the update. A Comprehensive Plan Amendment will be required to remove a specific plan from Chapter 14 or to update a specific plan.

Specific Plans

- **6th and Wakarusa Area Plan**
  Location: The intersection of 6th Street and Wakarusa Drive
  Adoption Date: December 2, 2003 by Lawrence City Commission
  REVISED
  July 10, 2012 by Lawrence City Commission
  REVISED
  May 13, 2014 by Lawrence City Commission
  REVISED
  <DATE PENDING> by Lawrence City Commission

  Review Date: 2017

- **HOP District Plan**
  Location: Bordered by W. 5th St. on the north, California St. on the west, W. 7th St. on the south and Alabama St. on the east.
  Adoption Date: May 10, 2005 by Lawrence City Commission
  Review Date: 2010

- **Burroughs Creek Corridor Plan**
  Location: Area around the former BNSF railroad corridor between E. 9th St. and E 31st St.
  Adoption Date: February 14, 2006 by Lawrence City Commission
  Review Date: 2011

- **East Lawrence Neighborhood Revitalization Plan**
  Location: Bordered by the Kansas River on the North; Rhode Island Street from the Kansas River to E. 9th Street, New Hampshire Street from E. 9th Street to approximately E. 11th Street, Massachusetts Street from approximately E. 11th Street to E. 15th Street on the west; E. 15th Street on the south; BNSF railroad on the east.
  Adoption Date: November 21, 2000 by Lawrence City Commission
  Review Date: 2010

- **Revised Southern Development Plan**
  Location: Bounded roughly to the north by W. 31st Street and the properties north of W. 31st Street between Ousdahl Road and Louisiana Street; to the west by E. 1150 Road extended(Kasold Drive); to the south by the north side of the Wakarusa River; and to the east by E. 1500 Road (Haskell Avenue).
  Adoption Date: December 18, 2007 by Lawrence City Commission
  January 7, 2008 by Douglas County Board of Commissioners
  REVISED
  June 18, 2013 by Lawrence City Commission
  June 12, 2013 by Douglas County Board of Commissioners
  Review Date: 2017

- **Southeast Area Plan**

  Location: Bounded roughly to the north by E. 23rd Street/K-10 Highway; to the west by O'Connell Road; to the south by the northern boundary of the FEMA designated floodplain for the Wakarusa River; and to the east by E. 1750 Road (Noria Road).

  Adoption Date: January 8, 2008 by Lawrence City Commission
  January 28, 2008 by the Douglas County Board of Commissioners
  REVISED
  June 14, 2008 by Lawrence City Commission
  July 24, 2008 by Douglas County Board of Commissioners
  REVISED
  October 7, 2008 by Lawrence City Commission
  November 10, 2008 by Douglas County Board of Commissioners
  UPDATED
  September 27, 2011 by Lawrence City Commission
  November 11, 2011 by Douglas County Board of Commissioners

  Review Date: 2021

- **Farmland Industries Redevelopment Plan**

  Location: The former Farmland Industries property is located east of Lawrence along K-10 Highway and just west of the East Hills Business Park. It is approximately one half mile south of the Kansas River.

  Adoption Date: March 11, 2008 by Lawrence City Commission
  March 31, 2008 by Douglas County Board of Commissioners

  Review Date: 2013

- **K-10 & Farmer's Turnpike Plan**

  Location: Generally located around the intersection of I-70 and K-10 and to the east approximately four miles.

  Adoption Date: December 9, 2008 by Lawrence City Commission
  January 7, 2009 by Douglas County Board of Commissioners

  Review Date: 2019

- **Lawrence SmartCode Infill Plan**

  Location: General areas are: 19th St. and Haskell Ave., 23rd St. and Louisiana St.

  Adoption Date: January 27, 2009 by Lawrence City Commission
  February 23, 2009 by Douglas County Board of Commissioners

  Review Date: 2019

- **West of K-10 Plan**
  Location: Generally located north and south of Highway 40 and west of K-10 Highway. It does contain some land east of K-10 Highway
  Adoption Date: June 9, 2009 by Lawrence City Commission
  May 6, 2009 by Douglas County Board of Commissioners
  REVISED
  March 26, 2013 by Lawrence City Commission
  April 10, 2013 by Douglas County Board of Commissioners
  Review Date: 2019

- **Oread Neighborhood Plan**
  Location: Generally located between W. 9th Street and W. 17th Street and between the KU campus and Massachusetts Street.
  Adoption Date: September 28, 2010 by Lawrence City Commission
  Review Date: 2020

- **Inverness Park District Plan**
  Location: Generally located south of Clinton Parkway between Inverness and Crossgate Drives, and north of K-10 Highway.
  Adoption Date: September 20, 2011 by Lawrence City Commission
  November 12, 2011 by Douglas County Board of Commissioners
  REVISED
  May 15, 2012 by Lawrence City Commission
  June 13, 2012 by Douglas County Board of Commissioners
  Review Date: 2021

- **Northeast Sector Plan**
  Location: Generally located north and east of Lawrence and north of the Kansas River to the Douglas County line.
  Adoption Date: September 11, 2012 by Lawrence City Commission
  June 13, 2012 by Douglas County Board of Commissioners
  Review Date: 2022

Hierarchy of Plans

The following Hierarchy of Plans describes the types of plans that can be used for the long-range planning of the community. The Hierarchy also provides guidance as to when it is appropriate to use each type of plan and the typical process used to complete a type of plan. The Hierarchy of Plans was adopted by the Lawrence-Douglas County Planning Commission on June 26, 2006, by the Lawrence City Commission on August 15, 2006, and by the Board of County Commissioners on September 11, 2006. Figure 14-1 provides an abbreviated description of each type of plan.

Comprehensive Plan

A Comprehensive Plan expresses a community's desires about the future image of the community. It provides the foundation and framework for making physical development and policy decisions in the future. The Comprehensive Plan is a policy guide which describes in text and displays in graphics the community's vision for directing future land development. A Plan includes several components:

- It is a policy plan, stating the community's desires for directing land use decisions through the identified goals and policies.
- It provides a physical plan component by mapping generalized land uses and describing in policies the relationships between different land uses.
- It is long-range, considering a community's expected growth in the future. Future land use maps graphically display the potential development of the community.
- It is comprehensive, considering issues such as demographic, economic and transportation factors which have shaped and will continue to influence land development in a community.

How is the comprehensive plan used?

The Comprehensive Plan provides a vision for the community. It is used as a policy guide that identifies the community's goals for directing future land use decisions. The Plan is also used by property owners to identify where and how development should occur; by residents to understand what the city and county anticipates for future land uses within the community; and by the city, county and other public agencies to plan for future improvements to serve the growing population of the community.

Specifically, the city and county use the Comprehensive Plan to evaluate development proposals; to coordinate development at the fringes of the county's cities; to form the foundation for specific area plans; to project future service and facilities needs; and to meet the requirements for federal and state grant programs. The Comprehensive Plan is used most often as a tool to assist the community's decision makers in evaluating the appropriateness of land development proposals. The Comprehensive Plan allows the decision makers to look at the entire community and the effects of land use decisions on the community as a whole to determine whether individual proposals are consistent with the overall goals of the community.

Typical Process

The typical process of a comprehensive plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Watershed or Sub-basin Plan

A watershed or sub-basin plan is a document that studies stormwater runoff and the potential for flooding and environmental impact of a particular watershed or sub-basin, before and after potential development, which drains into a river or other body of water. This plan has boundaries defined by the natural watershed basin or sub-basin of the area. It uses multiple layers of information pertaining to the natural and built environment to develop a comprehensive picture of the carrying capacity of the land for urban densities of development.

This is the second largest and most challenging type of plan to develop. A watershed or sub-basin plan is similar to the development of a comprehensive land use plan in its level and intensity of work. This type of plan could take 24 to 36 months to complete.

When is a watershed or sub-basin plan appropriate?

This type of plan is commonly used to study greenfield, undeveloped, natural, or agriculturally used areas on the fringe of urban development. A watershed or sub-basin plan is used to determine the long-term future (potential) for urban densities of development and their impact on the natural environment.

Purpose or reasons to use a watershed or sub-basin plan are to:

1. Provide information regarding the impact of the natural environment on the potential for future development.
2. Determine any environmental constraints and hazards for future development.
3. Provide a shared vision for area's residents/owners and local government entities.
4. Provide information regarding the area's needs, priorities, and proposed projects.
5. Provide guidance on matters of land use, development, and site layout to possible area residents or investors.
6. Determine if development proposals and land use changes are in accordance with the community's long term vision.
7. Provide implementation recommendations for coordination of development with adequate public facility's goals.
8. Provide a framework to guide an area's development efforts and track development trends and progress.
9. Provide maps showing existing information and proposed information.

Typical Process of a Watershed Plan

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process

Sector Plan

A sector plan covers one or more sections of land and uses geographic and demographic information to develop a detailed land use vision for future development or redevelopment of the study area. Boundaries are generally based on physical features such as arterial thoroughfares, rivers, or other natural geographic elements.

In the hierarchy of plans, a sector or area plan is the third tier. Based on the size of the area being studied, one or more sections of land, it could take between 18 and 24 months to develop.

When is a sector plan appropriate?

This type of plan is used to forecast development trends or future development patterns for building out or redeveloping an area. This planning tool is most useful when an area is largely undeveloped and/or on the edges of current development.

Purpose or reasons to use a sector plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a sector plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Neighborhood Plan

A neighborhood plan is a document that studies the issues of a specific, established neighborhood association, or an area that could be covered by a neighborhood association. If a neighborhood association exists, the boundaries of the neighborhood plan shall conform to those of the neighborhood association. If no neighborhood association exists, the boundaries of the neighborhood plan shall be defined using other methods such as natural features and/ or streets. Neighborhood plans use geographic and demographic information to develop a detailed land use vision for the future development or redevelopment of the neighborhood.

A neighborhood plan is the fourth tier in the hierarchy of plans. Depending on the amount of current development, a neighborhood plan could take from 9 to 12 months to develop.

When is a neighborhood plan appropriate?

A neighborhood plan is appropriate when there are traffic issues or significant development, redevelopment, or infill development in a neighborhood.

Purpose or reasons to use a neighborhood plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a neighborhood plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Nodal Plan

A nodal plan is a document based on a prescribed radius around the intersection of two or more major thoroughfares. This plan studies specifically defined criteria such as vehicular and pedestrian circulation and connectivity in association with the density and intensity of proposed land uses.

In the hierarchy of plans, a nodal plan is under the category of "special area" plans. This plan's level of study and detail is restricted because the boundaries are restricted. The process could take 6 to 12 months.

When is a nodal plan appropriate?

Examples when this type of plan is useful are:

- The study of major road intersections where large-scale commercial developments are proposed.
- A siting study is requested for a public facility, branch libraries or community building, where the service area radiates outward from the site.

Purpose or reasons to use a nodal plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a nodal plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Traffic counts
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Corridor Plan

A corridor plan is a document that studies a linear development, natural or man-made, and the adjacent area bounding this feature. A corridor plan is used to develop an integrated vision that coordinates multiple planning disciplines such as transportation, environmental, and/or land use.

The corridor plan is a type of a "specific issue" plan because it is predominately used to assess transportation and land use planning issues. The timeline of completion of this type of plan varies depending on the length of the corridor and the level of development that have already occurred along the corridor. This process could take 9 to 24 months.

When is a corridor plan appropriate?

Examples when this type of plan is useful are:

- Along major arterial streets
- When studying access management
- When studying riverine, riparian, and wildlife habitat areas
- Along abandoned railroad corridors for rails-to-trails applications

Purpose or reasons to use a corridor plan are to:

1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a corridor plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Specific Issue/District Plan

A specific issue or district plan is a document that is developed to address a defined geographic area, development proposal, the coordination of the extension of public services, or infrastructures as part of a unilateral annexation, or land use issue that does not clearly fall in one of the other plan categories.

In the hierarchy of plans, a specific issue/district plan falls under "special area" plans. The level of detail in this plan is concentrated on a specific subject based on the study issues identified. This type of plan could take 6 to 12 months to develop.

When is a specific issue or district plan appropriate? Examples where these types of plan are useful are:

- When the study of a sub-area of a neighborhood is needed to evaluate a rise in housing types [rental housing vs. owner-occupied]
- When there is significant redevelopment in an established neighborhood
- When there is a request for a predominate change in land use
- When a major redevelopment plan is proposed
- When there is a conflict between land use and zoning
- Where there is concern that an area is underserved by parks or other public facilities

Purpose or reasons to use a specific issue or district plan are to:

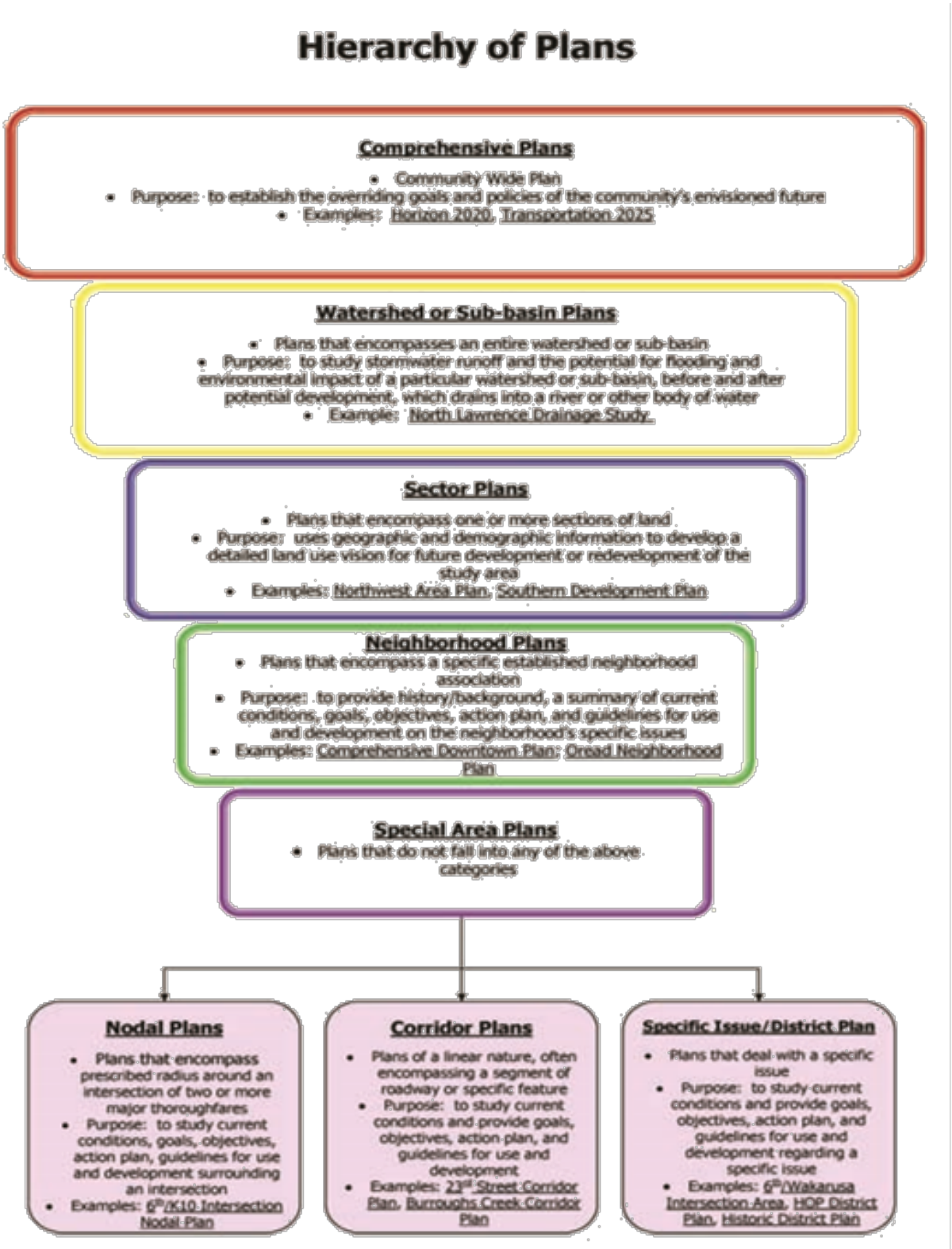
1. Provide guidance on matters of land use, development and site layout to possible area residents or investors.
2. Provide implementation recommendations for coordination of development with adequate public facility's goals.
3. Provide information regarding the area's needs, priorities, and proposed projects.
4. Determine if development proposals and land use changes are in accordance with the community's long term vision.
5. Provide a shared vision for area's residents/owners and local government entities.
6. Provide a framework to guide an area's development efforts and track development trends and progress.

Typical Process

The typical process of a specific issue/district plan and the plan itself could include any of the following:

- Identify the study area boundary
- Identify key stakeholders
- Public meetings
- Inventory survey and data analysis
- Goals, visions, policies, and objectives
- Plan drafts
- Adoption process
- Maps of existing and proposed land use

Figure 14-1


Hierarchy of Plans
Comprehensive Plans
Community Wide Plan
Purpose: to establish the overriding goals and policies of the community's envisioned future
Examples: Horizon 2020, Transportation 2025
Watershed or Sub-basin Plans
Plans that encompasses an entire watershed or sub-basin
Purpose: to study stormwater runoff and the potential for flooding and environmental impact of a particular watershed or sub-basin, before and after potential development, which drains into a river or other body of water
Example: North Lawrence Drainage Study
Sector Plans
Plans that encompass one or more sections of land
Purpose: uses geographic and demographic information to develop a detailed land use vision for future development or redevelopment of the study area
Examples: Northwest Area Plan, Southern Development Plan
Neighborhood Plans
Plans that encompass a specific established neighborhood association
Purpose: to provide history/background, a summary of current conditions, goals, objectives, action plan, and guidelines for use and development on the neighborhood's specific issues
Examples: Comprehensive Downtown Plan; Oread Neighborhood Plan
Special Area Plans
Plans that do not fall into any of the above categories
Nodal Plans
Plans that encompass prescribed radius around an intersection of two or more major thoroughfares
Purpose: to study current conditions, goals, objectives, action plan, guidelines for use and development surrounding an intersection
Examples: 6th/K10 Intersection Nodal Plan
Corridor Plans
Plans of a linear nature, often encompassing a segment of roadway or specific feature
Purpose: to study current conditions and provide goals, objectives, action plan, and guidelines for use and development
Examples: 23rd Street Corridor Plan, Burroughs Creek Corridor Plan
Specific Issue/District Plan
Plans that deal with a specific issue
Purpose: to study current conditions and provide goals, objectives, action plan, and guidelines for use and development regarding a specific issue
Examples: 6th/Wakarusa Intersection Area, HOP District Plan, Historic District Plan

Place Making Elements

CHAPTER FIFTEEN – PLACE MAKING

Complete neighborhoods require a mix of land uses (residential, retail, office, civic uses, etc.) and a mix of housing types and prices (single-family detached, townhouses, duplexes, apartments, etc.) arranged to provide a variety of living and working options within walking distance of each other. Current zoning codes segregate uses, prohibiting the creation of complete neighborhoods. The SmartCode, a transect-based form-based code, is a tool that guides the form of greenfield or infill development into complete neighborhoods.

Complete neighborhoods depend on having a consistently good pedestrian experience. The prime determinant of the pedestrian experience is the quality of the streetscape: walkable streets are visually stimulating, while environments that are hostile or uninteresting immediately turn pedestrians away. Specifically, the most important element of a good streetscape is quality frontage – the manner in which the public realm of the street and sidewalk meet the private line of the building face. The SmartCode prioritizes the pedestrian experience and creates a harmonious urban streetscape by closely regulating building frontages.

STRATEGIES: PLACE MAKING

The Place Making Chapter adds the following Land Use Categories to the Comprehensive Plan that are only applicable for land annexed by the City and for use with the Lawrence SmartCode. (see Sector Plan Map on page 15-7 for locations):

GENERAL LOCATIONAL & RELATIONAL INFORMATION PER LAND USE AS REQUIRED BY KSA 12-747		
LAND USE CATEGORY	**GENERAL LOCATION**	**EXTENT & RELATIONSHIP OF LAND USES**
(O-1) PRESERVED OPEN SECTOR:	The Preserved Open Sector shall be assigned to open space that is protected from development in perpetuity. The Preserved Open Sector includes areas under environmental protection by law or regulation, as well as land acquired for conservation through purchase, by easement, or by past transfer of development rights.	The Preserved Open Sector shall consist of the aggregate of the following categories: a. Surface Water bodies b Protected Wetlands c. Protected Habitat d. Riparian Corridors e. Purchased Open Space f. Conservation Easements g. Transportation Corridors h. Residual to Clustered Land Developments (CLD)

GENERAL LOCATIONAL & RELATIONAL INFORMATION PER LAND USE AS REQUIRED BY KSA 12-747		
LAND USE CATEGORY	**GENERAL LOCATION**	**EXTENT & RELATIONSHIP OF LAND USES**
(O-2) RESERVED OPEN SECTOR	The Reserved Open Sector shall be assigned to open space that should be, but is not yet, protected from development.	The Reserved Open Sector shall consist of the aggregate of the following categories: a. Flood Way and Flood Fringe b. Steep Slopes c. Open Space to be Acquired d. Corridors to be Acquired e. Buffers to be Acquired f. Legacy Woodland g. Legacy Farmland and High-Value Agricultural Soils h. Legacy Viewsheds
(G-1) RESTRICTED GROWTH SECTOR	The Restricted Growth Sector shall be assigned to areas that have value as open space but nevertheless are subject to development, either because the zoning has already been granted or because there is no legally defensible reason, in the long term, to deny it.	Within the Restricted Growth Sector, Clustered Land Developments (CLD) shall be permitted By Right. CLDs shall consist of no more than one Standard Pedestrian Shed with that portion of its site assigned to the T1 Natural or T2 Rural Zones
(G-2) CONTROLLED GROWTH SECTOR	The Controlled Growth Sector shall be assigned to those locations where development is encouraged, as it can support mixed-use by virtue of proximity to a Thoroughfare or Fixed Transit Route.	Within the Controlled Growth Sector, Traditional Neighborhood Developments (TND) shall be permitted By Right, as well as CLDs. TNDs shall consist of at least one partial or entire Standard Pedestrian Sheds.

GENERAL LOCATIONAL & RELATIONAL INFORMATION PER LAND USE AS REQUIRED BY KSA 12-747		
LAND USE CATEGORY	**GENERAL LOCATION**	**EXTENT & RELATIONSHIP OF LAND USES**
(G-4) INFILL GROWTH SECTOR	The Infill Growth Sector shall be assigned to areas already developed. Such areas may include conventional suburban developments, greyfield and brownfield sites, and historic urban areas.	Infill Community Plans shall be based on conserving, completing or creating Transect-based urban structure. Infill Community Plans may be Infill TNDs (at least 30 contiguous acres). For any Infill sites comprising at least 30 contiguous acres, the Developer or the Lawrence-Douglas County Planning Department ("Planning Department") may prepare an Infill Community Plan. For sites comprising less than 30 contiguous acres, only the Planning Department may prepare an Infill Community Plan.

The following Community Types are allowed within the new Growth Sector Land Use Categories:

	Clustered Land Development (CLD)	**Traditional Neighborhood Development (TND)**
(G-1) RESTRICTED GROWTH SECTOR	X	
(G-2) CONTROLLED GROWTH SECTOR	X	X
(G-4) INFILL GROWTH SECTOR		X

Each Community Types shall include the range of Transect Zones (T-Zones):

	Natural Zone (T1)	**Rural Zone (T2)**	**Sub-Urban Zone (T3)**	**General Urban Zone (T4)**	**Urban Center Zone (T5)**	**Special Urban Center Zone (T5.5)**
	THE NATURAL ZONE consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.	THE RURAL ZONE consists of lands in open or cultivated state or sparsely settled. These include woodland, agricultural lands, grasslands and irrigable deserts.	THE SUB-URBAN ZONE consists of low-density suburban residential areas, differing by allowing home occupations. Planting is naturalistic with setbacks relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.	THE GENERAL URBAN ZONE consists of a mixed-use but primarily residential urban fabric. It has a wide range of building types: single, side yard, and rowhouses. Setbacks and landscaping are variable. Streets typically define medium-sized blocks.	THE URBAN CENTER ZONE consists of higher density mixed-use building types that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the frontages.	THE SPECIAL URBAN CENTER ZONE consists of the highest density, with the greatest variety of uses, and civic buildings of regional importance. It may have larger blocks; streets have steady street tree planting and buildings set close to the frontages.
CLD	no minimum	50% MIN	10 - 30%	20 - 50%	prohibited	prohibited
TND	no minimum	no minimum	10 - 30%	30 - 60 %	10 - 30%	prohibited

PLACE MAKING GOALS AND POLICIES

Guidelines are needed to guide the development of greenfield or infill complete neighborhoods (mixed-use neighborhoods) within the city limits of Lawrence.

Mixed-Use Neighborhood Land Uses

GOAL 1: Establish Mixed-Use Neighborhood Growth Areas (Sectors)

Mixed-Use Neighborhood Growth Areas are needed in key locations throughout the City of Lawrence. The character of each mixed-use neighborhood should be determined by its Growth Sector and its Community Type.

Policy 1.1: Establish Growth Sectors

a. Define Growth Sector types and requirements (G1 Restricted Growth, G2 Controlled Growth, G4 Infill Growth).

b. Direct more intense development to areas with existing infrastructure.

c. Limit development in areas with natural and agricultural resources.

d. Maintaining and protecting the vitality of Downtown Lawrence is important to the citizens of Lawrence. No G3 Intended Growth Area shall be permitted by right since a secondary Regional Commercial District is not planned to compete with Downtown Lawrence.

Policy 1.2: Establish Community Types and Development Standards for each type.

a. Define Community Types and requirements (Cluster Land Development, Traditional Neighborhood Development,).

b. Direct higher intensity Community Types to areas with existing infrastructure.

c. Maintaining and protecting the vitality of Downtown Lawrence is important to the citizens of Lawrence. No Regional Commercial District shall be permitted by right since a secondary Regional Commercial District is not planned to compete with Downtown Lawrence.

d. Direct lower intensity Community Types to areas with natural and agricultural resources.

Policy 1.3 Establish mixed-use zoning categories as the building blocks for Community Types

a. Establish mixed-use zoning categories based on the rural-urban transect to provide the elements for Community Types (T1: Natural, T2: Rural, T3: Sub-Urban, T4: General Urban, T5: Urban Center, T5.5: Special Urban Center).

b. Maintaining and protecting the vitality of Downtown Lawrence is important to the citizens of Lawrence. The most intense mixed-use zoning category (T5.5: Special Urban Center)) is reserved for downtown.

Policy 1.4 Establish the Lawrence SmartCode as a development option in the city limits of Lawrence.

GOAL 2: Establish Open Lands Areas (Sectors)

Open Lands Areas are needed in key locations throughout the community to preserve natural and agricultural land.

Policy 2.1: Establish Open Lands Sectors

a. Define Open Lands Sector types and requirements (O1 Preserved, O2 Reserved).

b. Direct more intense development to areas with existing infrastructure.

c. Limit development in areas with natural and agricultural resources.

GOAL 3: Establish street and thoroughfare types that support the development of mixed-use neighborhoods.

Streets should be designed to support the land use that the community articulates in its vision.

Policy 3.1: Define requirements for various street and thoroughfare types, including consideration of multiple travel modes (auto, pedestrian, bicycle, transit).

a. Utilize thoroughfare types identified in the Lawrence SmartCode.

b. Identify opportunities for additional connectivity on the east side of Lawrence. Look for options to add more two-lane streets.

c. Limit expansion of existing roads.

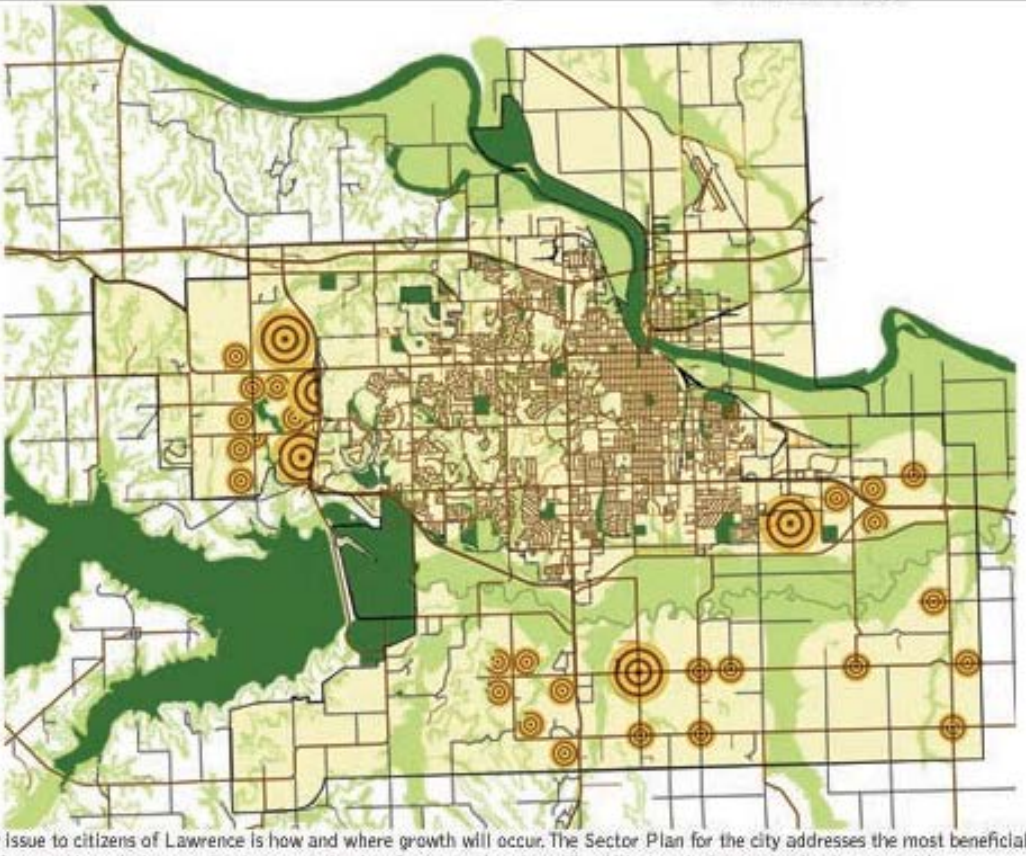
d. Encourage shared use of roads. Target bicycle lanes to only those roads that do not allow for shared use (speeds over 35 mph, grades above 6% for extended lengths, long blocks, or very high-volume traffic).

Lawrence SmartCode Sector Plan

The following Lawrence SmartCode Sector Plan is applicable only to property that has been annexed by the City of Lawrence.

Map 15-1

LAWRENCE, KANSAS
SMARTCODE CALIBRATION
SECTOR PLAN



A key issue to citizens of Lawrence is how and where growth will occur. The Sector Plan for the city addresses the most beneficial locations for growth, and also puts in place a mechanism for protecting the rolling hills, key drainages, wetlands and prairie.

In the SmartCode there are six specific Sectors that establish where development is allowed. Two Sectors (O-1, O-2) are for open lands (Preserve and Reserve) and the other four (G-1, G-2, G-3, G-4) are for urban growth of varying intensity (Restricted, Controlled, and Intended Growth Sectors for new communities, and the Infill Growth Sector for existing urbanized areas.)

- O1 Preserved Open Areas that consists of areas protected from development in perpetuity. This Sector includes areas under environmental protection by law or regulation, as well as land acquired for conservation through purchase or by easement.
- O2 Reserved Open Areas that consist of open space that should be, but is not yet, protected from development.
- G1 Restricted Growth Areas that have value as open space but are subject to development
- G2 Controlled Growth Areas where development is encouraged, as it can support mixed-use by virtue of proximity to a thoroughfare.
- G4 Infill Growth Areas consisting of traditional urbanism and/or conventional suburban developments. Both subject to revitalization or infill according to Article 4.

No G3 is permitted by right since a secondary Regional Commercial District is not planned to compete with Downtown Lawrence. The target size within G2 indicates a cluster development or traditional neighborhood development.

Page purposely left blank

Environment

this page intentionally left blank

CHAPTER SIXTEEN - ENVIRONMENT

"The nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value."
—Theodore Roosevelt, 1907

OVERVIEW

Douglas County has a rich and valuable heritage that is characterized by a variety of environmental and natural conditions. Prairies, rivers, forests, wetlands, agricultural soils, and other natural features provide scenic beauty, recreation, natural habitats, flood protection, and opportunities for interpretation, appreciation, and education.

Protecting and enhancing Douglas County's environment, including its built environment, is the focus of this chapter. The recommendations are intended to foster a healthy environment that contributes to a growing economy and a livable community. This concept is in line with an overall goal of Horizon 2020 (see Chapter 1) regarding sustainability that states: *"We will strive to ensure the sustainability of our physical environment, both natural and built, the health of our economy and the efficient and effective functioning of our community."*

Environmental quality and appropriate use of natural resources are essential elements of an area's livability and greatly enhance the quality of life for Douglas County residents. Protection of natural resources is an important component in planning for growth and development in Douglas County since all development activities create some level of impact on the air, water and land resources mentioned in this chapter. While land development is important to economic vitality, natural resources and climate protection are increasingly recognized as equally important to the health and vitality of the community and must be protected for future generations. The responsible way to achieve the mutual goals of environmental protection and planned growth is to develop in a sustainable manner, one that is capable of being continued with minimal long term effects on the environment.

There are already a few programs in place that aim to achieve some of the sustainability goals of this chapter, such as the county-wide ECO^2 program which is a tool used to promote the dual goal of open space preservation and economic development. The program uses a concept of net equity that states an amount equal to a portion of the investment of public funds for industrial development be used for open space preservation. In addition, the City of Lawrence adopted a Land Development Code in 2006 which addresses some recommendations of this chapter, including standards for impervious surface coverage, open space requirements, and landscaping. The City and Douglas County also have recently revised the subdivision regulations which include provisions for land divisions which contain environmentally sensitive features. The City of Lawrence also has multiple efforts currently underway with similar goals as presented in this chapter, including work by the Sustainability Advisory Board, the Mayor's Climate Protection Task Force, and the Peak Oil Task Force. These advisory boards review issues and make recommendations to the Lawrence City Commission. Douglas County has recently established a

Local Food Policy Council to work with stakeholders in creating and maintaining a healthy local food system. This chapter takes into account recommendations that have been made by all advisory boards related to topics discussed. It is important that work on these programs be ongoing in order to further the goals of this chapter. Also, the City and County are committing to internalizing sustainability principles within their operations in order to take the lead in creating a sustainable and livable community.

A variety of management practices are recommended in this chapter, including education of the public and government officials, development of incentives and regulations, and incorporation of green infrastructure strategies. "Green infrastructure strategies actively seek to understand, leverage, and value the different ecological, social, and economic functions provided by natural systems in order to guide more efficient and sustainable land use and development patterns as well as protect ecosystems."1

The recommendations in this chapter focus on integrating the natural and built environments in order to create a healthy, sustainable community for current and future generations to live, work and play. The City of Lawrence and Douglas County are committed to protecting and enhancing the environment while meeting other community, economic development, housing and infrastructure goals.

Strategies:

Strategies provide a direction or approach to accomplish specific goals or policies of this chapter:

- Identify and protect important environmental features in a manner that also:
    - Accommodates planned urban and rural growth,
    - Discourages urban sprawl,
    - Provides for efficient transportation systems,
    - Partners with economic development activities,
    - Considers private property rights,
    - Allows adequate open space for preservation and recreation,
    - Establishes a contiguous network of open space, and
    - Creates a sustainable community.

- Consider the impact upon environmental and natural resources in planning and development efforts.

- Establish effective incentives and regulations that promote sustainable and efficient management of environmental resources.

- Develop educational programs to foster community awareness of and support for the protection and enhancement of natural areas, efficient use of natural resources and appropriate waste management.

1 *Towards a Sustainable America: Advancing Prosperity, Opportunity, and a Healthy Environment for the 21st Century, May 1999 (The President's Council on Sustainable Development.)*

- Encourage environmental policies and programs to secure the community's future economic, ecological, animal, plant and human health.

Chapter Organization:

This chapter covers a wide range of subjects and is divided into sections for different environmental categories, such as Water or Land Resources. Each section contains:

1) **Introduction:** *Presents a broad overview of each category.*
2) **Summary of Issues:** *Provides brief discussion of topics.*
3) **Goals and Policies:** *Presents long-range goals of the community and identifies specific courses of action to achieve those goals.*

Chapter Utilization

This chapter presents a comprehensive overview of environmental issues as they relate to land use. Actions steps are contained in many of the goals and policies presented in this chapter. Those action steps may involve other agencies or may take time to complete. Development proposals shall be evaluated using the goals and policies contained in this chapter to promote sustainable development that is aligned with the strategies above. Doing so will ensure that there is a balance between environmental and developmental concerns.

- This chapter is meant as a guide that will supplement goals and policies discussed in other chapters in Horizon 2020. This chapter is meant to integrate with other chapters in the comprehensive plan.

- Code regulations shall be developed to achieve the policies discussed in this chapter.

- Goals and policies discussed in this chapter shall be used in the long-range planning process, as well as long range plans for other city and county departments, such as Parks and Recreation, Utilities, Public Works, etc.

- Development proposals will be reviewed for general conformance with the goals and policies in this chapter to promote sustainable development.

WATER RESOURCES AND MANAGEMENT

This section discusses the variety of water resources in Douglas County, which includes creeks, rivers, streams, lakes, wetlands and groundwater. Each type of water resource can be viewed individually or as a comprehensive, interconnected network to understand their importance and function in the natural environment. They can also be evaluated to determine how actions taken as part of the planning and development process may impact or influence their ability to provide good water quality for human consumption and aquatic habitat, reduce flooding, and provide recreational opportunities.

Summary of Issues:

1) **Water quality.** *Protection of watersheds, particularly those above public water supply reservoirs, is critical to ensuring that public water quality is maintained at its highest level. Minimizing pollutants that can contaminate ground and surface water and controlling erosion will also help to protect the water quality and help provide high quality aquatic habitats. Minimizing soil erosion helps protect water supply reservoirs from premature siltation, thereby protecting water quantity as well.*

2) **Flooding.** *Protecting floodplain areas maintains the carrying capacity of the floodplain, improves water quality, provides wildlife habitat, reduces threats to human life, and minimizes damage to property. In the past, Douglas County has experienced flooding, most notably with the 1951 and 1993 floods. The 1951 flood caused an excess of $3 million in damage to the City of Lawrence alone, compared with only $1.2 million in damage after the 1993 flood. The damage in 1993 in the City of Lawrence was significantly lower than the damage in 1951 because the local levee system was completed in 1980, before the 1993 flood. It is important to note that the majority of the damage from the 1993 flood occurred in unprotected areas of Douglas County therefore causing more than $5.8 million in damage county-wide. Efforts associated with the National Flood Insurance Program (NFIP), including compliance with regulatory standards and the City of Lawrence's participation in the Community Rating System (CRS) program, also led to a decreased vulnerability to flood damage as a result of the 1993 flood. Flooding is considered a serious public hazard and approximately 16% of all of the land in Douglas County is located in the 100-year floodplain.*

3) **Recreation.** Douglas County contains numerous water resources that provide recreational benefits, such as fishing, boating, and swimming. Clinton Lake, the Kansas River and the Wakarusa River are just a few of the water bodies that contribute to the healthy outdoor lifestyle of residents.

Goals and Policies:

Goal 1: Properly manage all water resources, including Drainage Areas, Surface Watercourses, Wetlands, Sub-surface Waterways, Floodplain areas, and Stormwater runoff, in order to protect natural habitats, mitigate hazards, and ensure water quality.

Policy 1.1 Planning at the watershed level should be implemented to mitigate development impacts on a large scale. This could include development of a county wide drainage area plan that would identify the drainage areas and set out goals and policies specific to each area.

Policy 1.2 Preserve and protect natural surface watercourses.

a. Develop stream setback regulations for both the City of Lawrence and Douglas County to establish stream corridors which provide a buffer that stabilizes stream banks, reduces erosion, preserves riparian areas, mitigates flood hazards, and ensures water quality.

b. Encourage uses of riparian areas that are low-impact, which may include recreational uses and also serve as connectors to other non-water recreational areas.

c. Water structures, including dams, shall be permitted and maintained in accordance with applicable Federal, State and local regulations.

d. Encourage continued alignment with the Kansas Water Plan, which lists the following measures:

d.1 Use native plants in yards and gardens; they need fewer chemicals and water.

d.2 Use fewer chemicals on lawn, gardens, fields and forests to protect water quality.

d.3 Separate livestock operations from streams with a vegetated filter and adequate distance.

Policy 1.3 Improve and maintain water quality, particularly sources of public drinking water, through watershed protection measures.

a. The City and County shall participate in applicable Watershed Restoration and Protection Strategy (WRAPS) programs, focusing on the protection of the Upper Wakarusa and Lower Kansas Watersheds.

b. The City and County shall identify and map priority wetlands, surface water buffer areas, and riparian areas within each watershed.

c. Develop regulations and incentives for the protection of the inventoried features discussed above with emphasis on protection of public drinking water supply, habitat preservation, stream stability and erosion control.

Policy 1.4 Preserve and protect wetlands and the various functions they serve.

a. Inventory and map wetlands in the county; identifying them based on the priority criteria listed in The Wetland Federal Regulations 33 CFR Part 320.4, as amended.

b. Develop a wetland policy which promotes protection, enhancement and restoration of existing high priority wetlands and effective mitigation of wetlands when disturbed.

c. Develop regulations and incentives for the retention and protection of the wetlands identified through the inventory focusing on impacts from both on-site and off-site development activity that affects the wetlands in question.

d. Provide education and outreach programs to inform citizens and government employees of the function and values of wetlands and the measures that protect them.

Policy 1.5 Protect sub-surface water resources.

a. Conduct an inventory of Douglas County and identify any significant areas of groundwater recharge to maximize opportunities for protection of water quality.

b. Develop programs and regulations, such as pesticide-free park programs and further stormwater regulations, to minimize pollutants leaching into underlying groundwater systems to help ensure the quality of our groundwater resources.

c. If important areas of groundwater recharge are identified through the inventory, prepare a wellhead protection plan.

d. Provide education and outreach programs to inform citizens and government employees of the function and values of sub-surface water resources and the measures that protect them.

Policy 1.6 Protect floodplain areas to maintain the carrying capacity of the floodplain and mitigate potential hazards to human life.

a. The City and County shall maintain floodplain regulations that meet or exceed National and State regulations. Exceeding National and State regulations benefits the community by reducing the threat to human life, reducing property loss and ensuring water quality. Consider further limiting new development from encroaching into the regulatory floodplain by adopting regulations that promote no adverse impact in flood hazard areas.

b. Communities shall continue participation in the National Flood Insurance Program (NFIP).

c. The City of Lawrence should continue participation in the Community Rating System (CRS) program and increase their level of participation in order to achieve a greater discount to citizens on their flood insurance rates. Douglas County should investigate participating in the program as well.

d. Encourage all property owners living in flood prone areas to purchase flood insurance.

e. Continue to educate citizens on flood related hazards, floodplain regulations, and other flood related topics to comply with national programs and reduce the flood hazard.

Policy 1.7 Develop stormwater management policies and programs in a manner that ensures water quality and properly controls runoff.

a. Encourage minimal and appropriate use of fertilizers, pesticides and other chemicals to reduce stormwater pollutants.

b. Encourage minimal and appropriate use of fertilizers, pesticides and other chemicals to reduce stormwater pollutants.

c. As part of the City of Lawrence's overall stormwater management strategy, maintain regulations and policies that are consistent with the provisions and goals of the Clean Water Act, including its National Pollutant Discharge Elimination System (NPDES) Program, and other federal, state and local requirements for water quality and environmental preservation.

d. Maintain an inventory of stormwater structures for ongoing inspection, compliance and maintenance procedures. Establish an inspection and maintenance plan with property owners as part of Best Management Practices (BMPs).

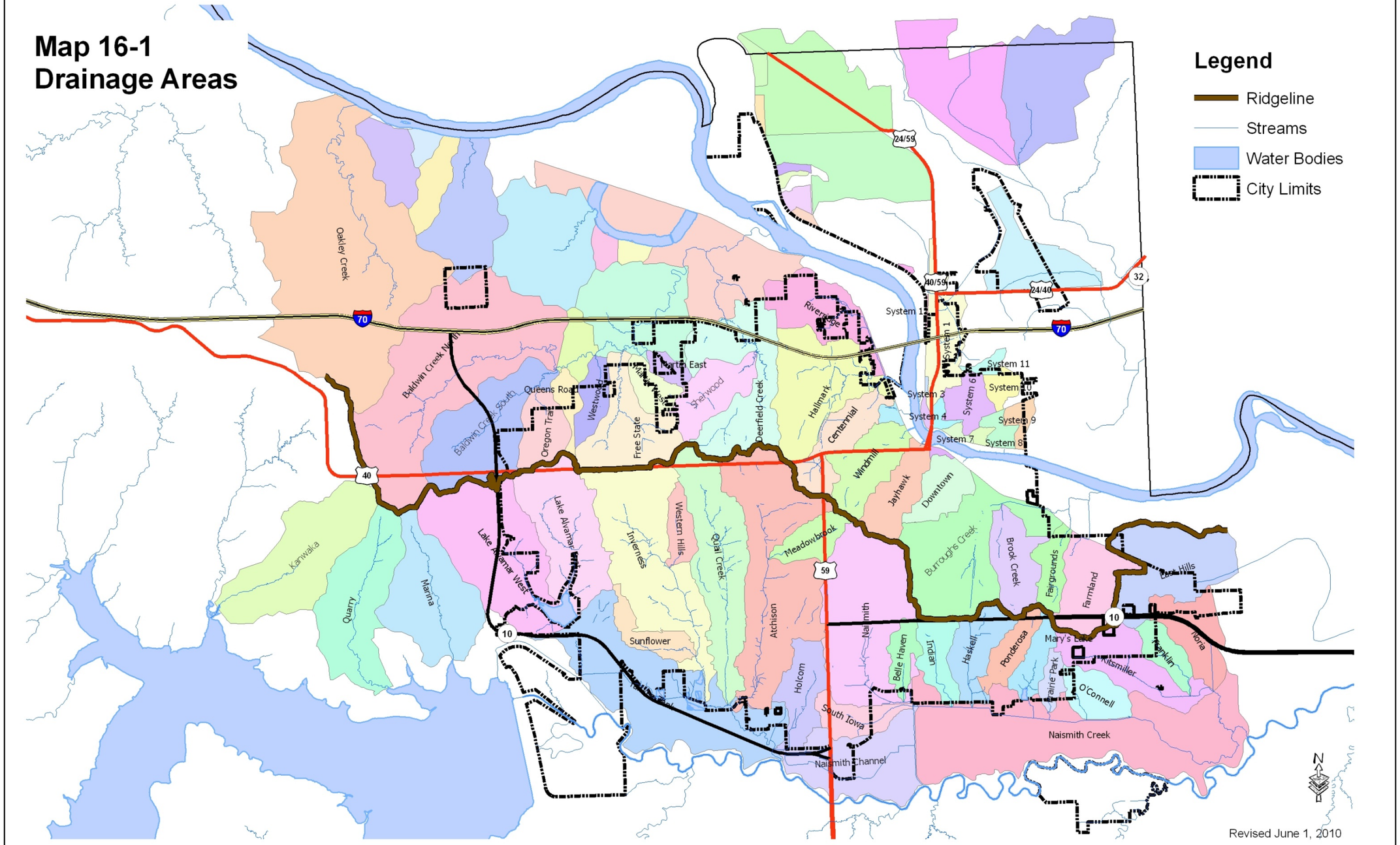
e. Use nonstructural or natural approaches to stormwater system design and management. Encourage stormwater management that uses natural features, rain barrels, rain gardens, bio-retention swales, pervious paving materials, and limits the use of impervious surfaces, etc.

f. Provide educational opportunities regarding natural stormwater management features, Best Management Practices (BMPs) for stormwater structures and pollutant discharge, erosion and sediment control, and water quality.

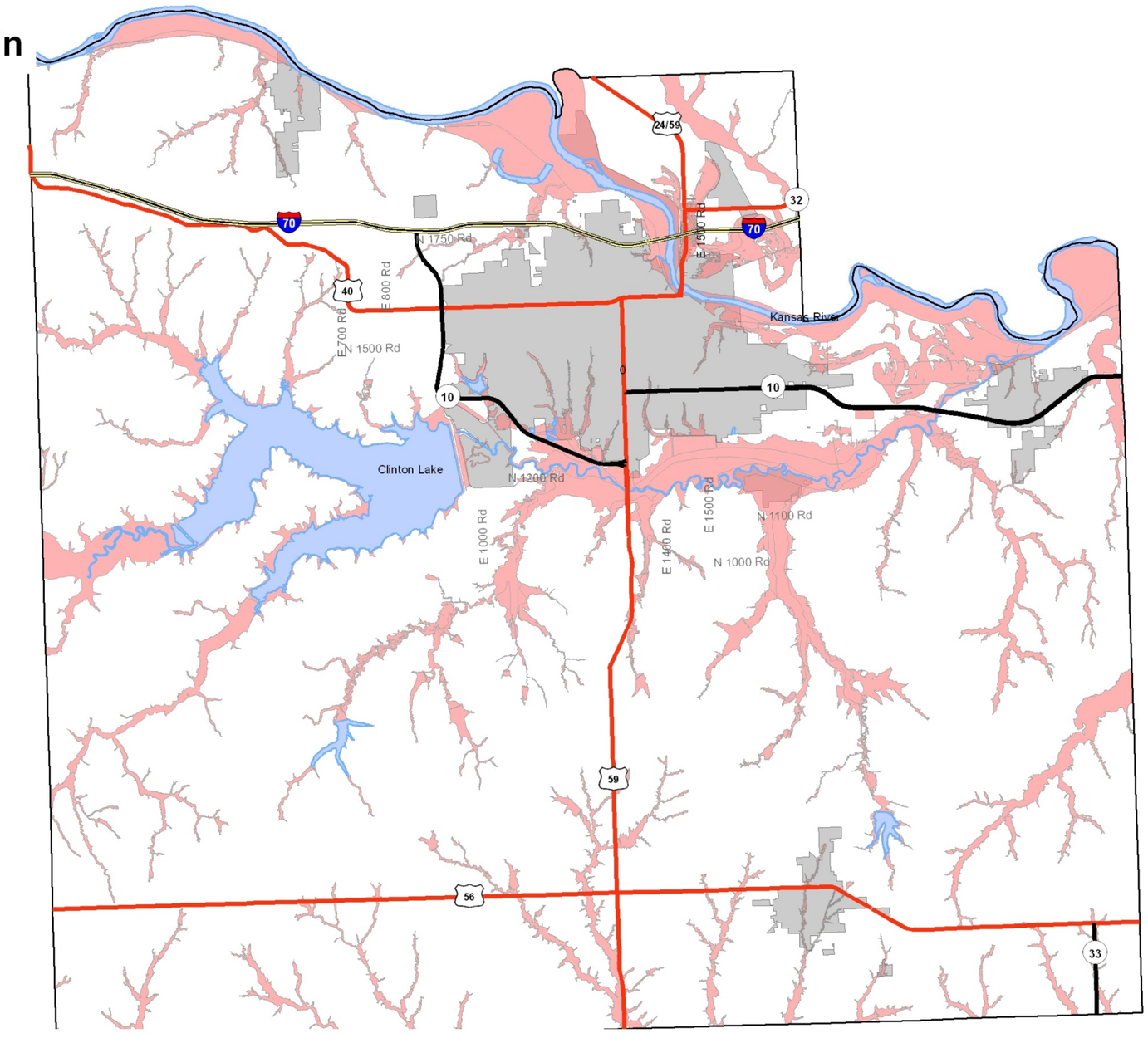
g. Encourage environmentally sensitive farming methods, such as terracing, buffering, the use of no-till farming practices, etc., near surface watercourses to reduce pollution, stabilize streambanks and prevent erosion.

h. Douglas County shall adopt stormwater regulations that include submittal of drainage plans and regulations for on-site detention, particularly for properties located in Urban Growth Area's (UGAs) throughout the County.

Map 16-1
Drainage Areas



Map 16-2
Floodplain



Legend

- CountyLimits
- City Limits
- Water Bodies
- **100-year Floodplain**

N

Revised Juy 30, 2010

LAND RESOURCES AND MANAGEMENT

This section discusses Douglas County's various land resources, which consist of rural woodlands and urban forests, native prairies, and agricultural soils. These resources provide wildlife habitats, viewsheds, and open spaces, as well as, serving as 'Green Infrastructure', as they provide benefits to the natural and built environments. Like many other parts of the country, land resources within Douglas County are being impacted by development pressures and agricultural practices. Benefits of preserving and managing land resources include growth management, flood control, improved water quality, protection of wildlife habitat, and economic advantages to the community, such as a lower cost to the community for development.

Summary of Issues:

1) **Open space network.** *The creation of an open space network or green infrastructure system minimizes the fragmentation of natural areas and benefits the community by protecting natural habitats, providing appropriate stormwater management, providing open-air recreation areas and promoting sustainable development practices. Open space networks can include:*

   Topography: *Developing on steep slopes can be costly and permanently alters the natural slope of the land which may have detrimental effects on other natural features, stormwater runoff and habitats.*

   Rural Woodlands and Urban Forests: *The trees in rural woodlands and urban forests provide many valuable benefits ranging from:*
   - ***Ecological*** *(improving air and water quality),*
   - ***Biological*** *(providing wildlife habitat),*
   - ***Physical*** *(serving as 'green infrastructure' by providing shade and screening),*
   - ***Social*** *(providing areas of scenic beauty and areas for recreation), and*
   - ***Cultural*** *(establishing and maintaining the character of the area).*

   Native Prairies: *The tallgrass prairie has an intrinsic value as an endangered ecosystem which is a feature of our national heritage. The prairies provide recreational and educational opportunities, as well as providing habitats for wildlife and plant species. In addition, native prairies play a valuable role in controlling sedimentation, aiding groundwater recharge, and absorbing stormwater runoff.*

   Endangered Species and Wildlife Habitats: *The protection of critical habitats is a principal means of protecting rare and endangered species and also serves to protect other species that use the same habitat. Because development has resulted in fragmentation of wildlife habitats, corridors connecting them should be maintained. The Kansas Wildlife Conservation Plan2 includes protection measures for rare and endangered species and is geared toward practices and policies that would help keep common species*

2 http://www.kdwp.state.ks.us/news/Other-Services/Wildlife-Conservation-Plan

from becoming endangered.

2) **Agricultural soils.** *High Quality Agricultural Land is recognized as having exceptional quality and fertility, and in Douglas County is generally described as having Capability Class (non-irrigated) I and II soils as defined by the National Resources Conservation Service. This High Quality Agricultural Land is a finite resource that is important to the regional economy. This land requires less intervention to produce high yields of crops with high nutrition and should be protected, preferably for food production.*

Goals and Policies:

Goal 2: Properly manage all land resources, including soils, woodlands, native prairies, wildlife habitats, viewsheds and open spaces, to maintain the functions they provide, ensure the sustainability of the resources, and improve the environmental quality of the City of Lawrence and unincorporated Douglas County.

Policy 2.1 Development should maintain the natural benefits of existing topography. Development on steep slopes (above 15%) should be done in a manner that encourages the use of the existing topography with minimal grading to minimize adverse effects.

Policy 2.2 Preserve and sustain woodlands within Douglas County.

a. The City and County shall partner with other agencies and institutions to inventory and map woodlands within the county. The inventory and map should identify the different types of woodlands ('high quality natural areas', woodlands which form, or could form, corridors or greenways and riparian woodlands) and provide a ranking system in priority order for protection.

a.1 Develop regulations and incentives that provide different levels of protection for the different types of woodlands.

a.2 Encourage environmentally sensitive site design practices which minimize the unnecessary physical and visual impacts upon the surrounding landscape caused by removal of woodlands.

a.3 Develop regulations and incentives for the protection, maintenance, and improvement of riparian woodlands which include an ordinance defining the stream setbacks and the activity which may occur in the riparian area.

a.4 Develop public outreach and educational programs to increase public awareness concerning the importance of woodlands.

b. Protect and increase the urban forest in Lawrence.

b.1 The City shall conduct an inventory of the Urban Forest.

b.2 Adopt an Urban Forestry Master Plan and associated policies, programs, and incentives for the preservation and enhancement of Lawrence's urban forest on both public and private property, through development and zoning codes, emphasizing the use of trees appropriate to the climate of this region.

b.3 Adopt standards for tree care activities and the regulation of tree maintenance contractors that will prevent the serious damage that inappropriate pruning practices cause to Lawrence's trees. Partner with utility agencies regarding appropriate tree location and pruning practices.

b.4 Establish educational programs to foster public/community awareness of, support for, and contribution to Lawrence's urban forestry initiatives, which are directed at establishing the maximum urban tree canopy, maintaining it in a healthy condition and promoting its conservation.

Policy 2.3 Preserve and protect native prairie.

a. Partner with the Kansas Biological Survey, other agencies, and individuals to inventory and map the remaining native prairie remnants within Douglas County.

b. Develop regulations, planning guidelines, management techniques, and incentives for preserving native prairies. The native prairie should be preserved and used as parks and/or open space either through purchase or the use of conservation easements.

Policy 2.4 Preserve and protect natural habitats.

a. Identify and map areas of 'critical habitat', key habitats, and wildlife corridors, including areas that could link together to increase connectivity throughout the City and County.

b. Develop incentives to encourage on-site and off-site habitat connections and/or enhancement of natural areas as part of development projects.

c. Develop regulations that permit only low-impact development with environmentally sensitive design in areas of 'critical habitat'.

d. Increase awareness of the species and loss of habitat through educational and outreach programs.

e. Treat areas identified as key habitats as high priority areas for preservation and protection in the development of regulations, protection standards, and incentives.

f. Develop regulations and incentive programs for the protection and maintenance of wildlife corridors and key habitat areas.

g. Regulate the placement of roads, trails and utilities with development or infrastructure projects to minimize creation of fragmented natural areas.

h. Develop a program to encourage and incentivize the connectivity of natural areas whether they are on a particular development site or off-site.

i. Develop a combination of educational programs, incentives, and development standards that recognize and promote sound management practices by private land owners to maintain the health of natural habitats on private property.

Policy 2.5 Along with community members in Douglas County, identify and define important features that contribute to viewsheds, as well as establish possible protections for viewsheds. At such time, further policies relating to viewsheds may need to be addressed.

Policy 2.6 Preserve existing open space and create new open space areas to preserve and expand a sustainable green infrastructure system.

a. To maximize the advantages to the community that the natural and built environments provide, open space preservation shall remain a goal especially as it relates to protecting and preserving natural features discussed in the comprehensive plan. This should be done through:

a.1 Maintaining and enhancing existing open space.

a.2 Creating new designated open space areas.

a.3 Creating a large interconnected network of open space.

b. Incorporate open space evaluation into long range plans to determine in advance of development proposals what areas are suitable for development and what areas would serve better as open space.

c. The acquisition and continued maintenance of open space that is publicly accessible shall be strongly encouraged.

d. Promote and encourage eco-tourism to sustain open space and natural areas.

Policy 2.7 Encourage the protection of High Quality Agricultural Land in Douglas County for current and future agricultural use.

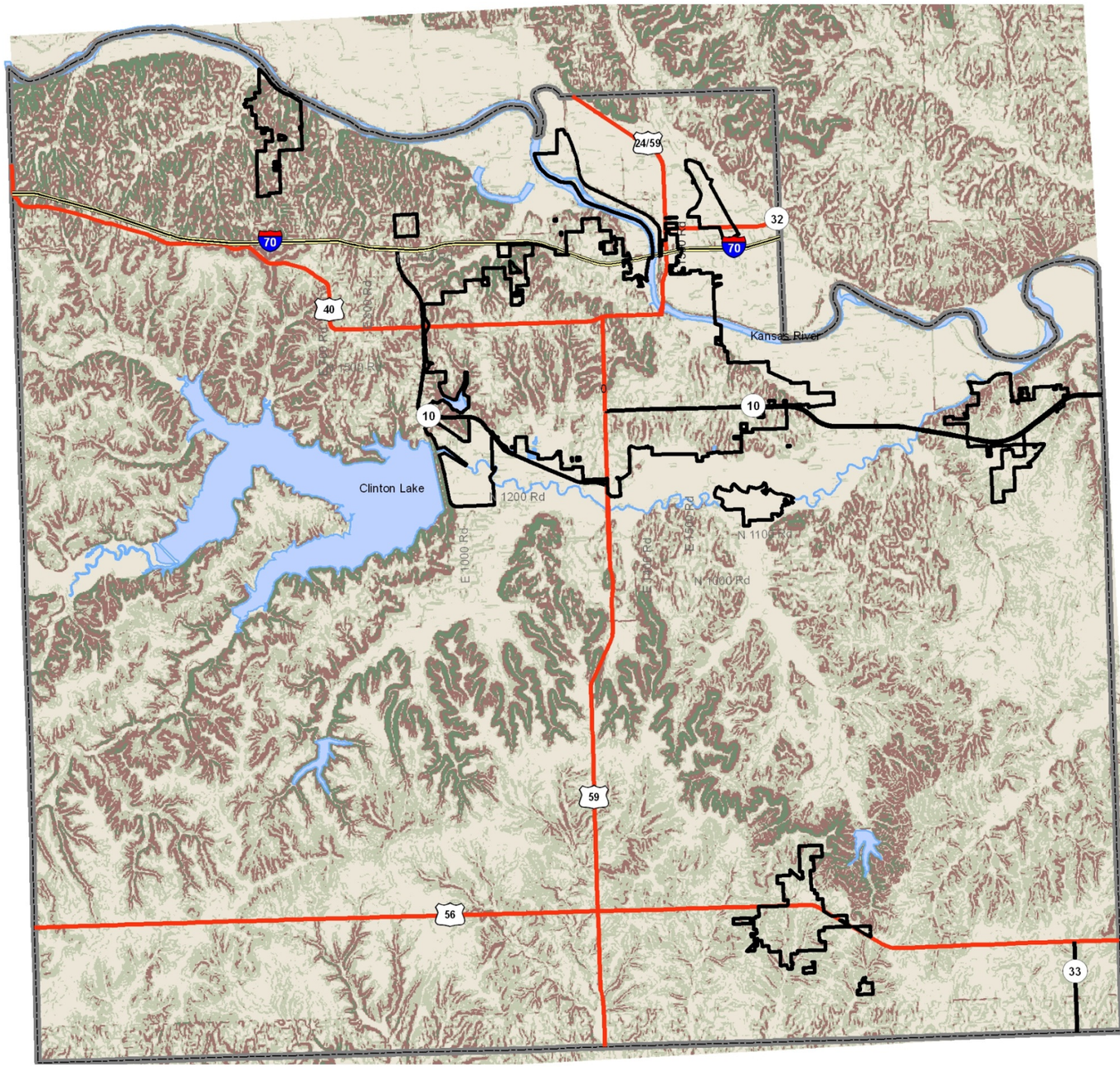
a. The protection of High Quality Agricultural Land shall be used as a key assumption in the sector planning process.

b. Establish tools to protect High Quality Agricultural Land for farming and make its protection economically feasible for the land owner, such as an agricultural easement program, development incentives that encourage the protection of this resource, public/private partnerships, or other funding mechanisms.

c. Maintain an inventory of High Quality Agricultural Land in Douglas County and track the amount lost to urbanization.

d. Encourage and develop policies that support agri- and eco-tourism, as well as a sustainable local/regional food system.

Map 16-3
Slopes



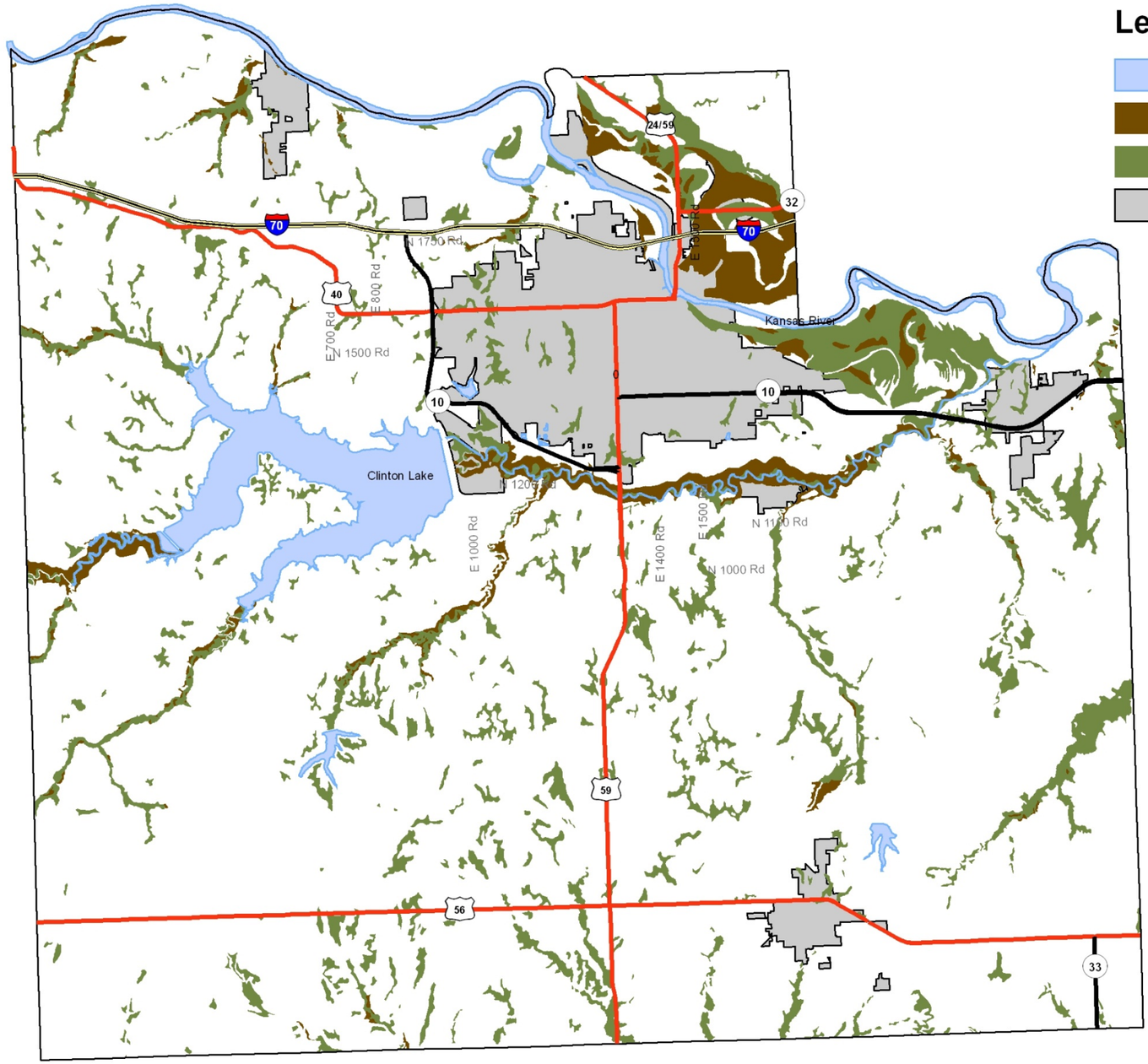
Legend

- City Limits
- CountyLimits
- Water Bodies
- 0 - 3%
- 3 - 7%
- 7- 15%
- 15% & above

N

Revised June 1, 2010

Map 16-4
High Quality Agricultural Land



Revised August 30, 2010

AIR RESOURCES AND MANAGEMENT

This section focuses on air quality, which is impacted by the amounts of pollutants present, such as sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, radon, particulate matter, mercury and lead. Air pollution has a profound impact on the environment and can lead to water contamination, soil contamination and impact the health of humans, animals and plants.

Excess greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and fluorinated gases, are a form of air pollution that may lead to global warming. The *Climate Protection Plan: Climate Protection Task Force Report* to the Lawrence City Commission provides recommendations for the reduction of greenhouse gas emissions in the community.

Summary of Issues:

1) **Air quality.** *The quality of air impacts human, plant and animal health.*
    a. **Outdoor air pollution.** *Minimizing pollutants is critical to maintaining outdoor air quality. Outdoor air pollution can lead to negative health impacts.*
    b. **Excessive greenhouse gases.** *Reducing greenhouse gases is necessary to limit their negative impacts on the climate.*
    c. **Indoor air pollution.** *Pollutants, such as radon, second-hand smoke, carbon monoxide and VOCs (volatile organic compounds) affect indoor air quality and have a negative impact on human health.*

Goals and Policies:

Goal 3: Improve indoor and outdoor air quality in order to mitigate impacts to human, animal and plant life in Douglas County.

Policy 3.1 Improve air quality through reduction in emissions from vehicle exhaust by reducing the number of vehicle miles traveled.

a. Recommend land use and transportation design standards that encourage the use of alternative forms of transportation (other than private vehicle), encourage development in areas that are served or could be served by transit facilities, and provide efficient connections from one mode of transporation to another.

b. Encourage and provide incentives for mixed use districts which provide live/work/shop opportunities within walkable distance.

c. Encourage redevelopment and infill where adequate infrastructure currently exists.

d. Encourage and provide incentives for carpooling or use of mass transit and alternative forms of transportation.

e. The City and County Governments, in addition to other employers within Douglas County, should develop and implement incentive programs to promote and increase

public transit use or forms of alternative transportation (non-vehicular) among their employees.

f. Provide education to the general public, businesses and government officials regarding the cause and effects of air pollution, focusing on steps everyone can take to reduce air pollution and the intended benefits of local regulations designed to reduce air pollution.

g. Develop a walkable, complete street program stressing connectivity and street design that safely accommodates all users including non-motorized vehicular traffic.

Policy 3.2 Reduce emissions from vehicle exhaust and encourage the use of more energy efficient vehicles.

a. Provide education to the general public, businesses and government officials regarding the cause and effects of air pollution focusing on steps everyone can take to reduce air pollution.

b. The City and County should take a leadership role in reducing emissions from the city/county vehicles and public transit vehicles, purchasing more energy efficient vehicles, and reducing the number of miles traveled when possible.

Policy 3.3 Reduce emissions of non-vehicular air toxics as listed by the EPA.

a. The City and County should strive to minimize power usage, promote alternate fuel sources, and use environmentally friendly building design and mechanical systems (often referred to as 'green building') in their government buildings to serve as a model to the community.

b. Encourage education and outreach programs which explain the need for improvement and provide information on steps individuals, businesses, institutions, the City and the County can take to reduce their contribution to emissions in Douglas County.

Policy 3.4 Adopt and implement the standards in the Federal Clean Air Mercury Rule to reduce the mercury emissions in the area.

Policy 3.5 Develop Land Use Planning regulations and incentives to reduce greenhouse gas emissions to acceptable levels.

a. Develop and implement policies to inventory and increase the amount of urban forest that will help reduce the amount of CO2 in the air.

b. Develop a Douglas County inventory of greenhouse gas emissions using the guidance materials available from the EPA and use this inventory to monitor success of implemented programs.

c. Develop a program to accommodate and encourage the increased use of bicycling as a form of transportation. The program should include the following features:

c.1 Bicycle/pedestrian level of service standards and guidelines for new developments.

c.2 Incentives for provision of additional bicycle parking at existing facilities.

c.3 Plans for the retrofit of existing streets where bicycle facilities are needed.

c.4 The implementation of a comprehensive network of bicycle facilities identified in the bikeway system map.

d. Encourage and incentivize energy efficient building design.

e. Encourage and incentivize transit and forms of non-motorized transportation.

f. City and County governments should serve as a model for the community by setting goals for reduction of greenhouse gas emissions from construction and operation of government buildings.

Policy 3.6 Improve indoor air quality to maintain and improve the health of our community.

a. Inform and educate the public to the causes and effects of indoor air pollution as well as the measures to reduce the pollution.

b. Maintain current building codes aimed at reducing indoor pollutants and consider codes to further improve indoor air quality.

Policy 3.7 Work with agencies to implement the above policies in order to keep Douglas County from becoming a non-attainment area as defined by the Environmental Protection Agency.

RESOURCE MANAGEMENT

This section encourages the responsible use of marketable natural resources within Douglas County through proper extraction and reclamation methods. They are essential to sustainable development activity, primarily in the form of low cost raw materials, such as sand, gravel, timber, oil, gas, and stone, etc.

Summary of Issues:

1) **Resources.** *The improper extraction of marketable natural resources can create environmental problems such as erosion, negative impacts on water quality, and degradation of wildlife habitats.*

Goals and Policies:

Goal 4: Properly manage marketable resources to ensure the sustainability of the resources and improve the environmental quality of the City of Lawrence and unincorporated Douglas County.

Policy 4.1 Identify and properly manage marketable natural resources.

a. To minimize negative environmental impacts, the City and County shall work with applicable state agencies to develop appropriate operation standards for harvesting, collecting, recovery and extraction of marketable natural resources, and provide for effective reclamation of land.

b. Document and map all operating and non-operating quarries. Document any quarries and sand/gravel operations which were in operation prior to the establishment of zoning regulations and work with the operators to minimize negative impacts of operations.

c. Identify and map marketable mineral deposits to assist in future land use/planning decisions.

WASTE MANAGEMENT

This section provides a general discussion of the proper disposal methods of waste, including solid waste and hazardous waste. In addition, the section also addresses ways to reduce waste production through reuse and recycling. Proper disposal of waste reduces pollution of land, water, air and other natural resources.

Summary of Issues:

1) **Waste management.** *As part of our daily lives, significant amounts of solid waste are generated and the majority of that solid waste is then diverted to landfills. Disposing of waste in this manner is costly, and can create water, air and land pollution, as well as wasting resources that might otherwise be reused. It is important to reduce, reuse, and recycle waste material.*

Goals and Policies:

Goal 5: Properly manage all waste, including solid and hazardous waste, in order to reduce, reuse and recycle the majority of the waste that is produced in Douglas County.

Policy 5.1 Manage solid waste through a program that emphasizes the principles of Reduce, Reuse, and Recycle.

a. Encourage recycling efforts, both existing and new, in Douglas County in order to reduce the amount of material being disposed of in landfills.

b. Encourage waste reduction, reuse and recycling through educational outreach efforts to residents and businesses.

c. Encourage the recycling of construction and demolition debris.

d. Encourage and expand the yard waste collection programs to divert more material from landfills and to provide mulch and compost from sustainable sources.

e. Establish standards for provision of recycling receptacles on multi-family residential and non-residential development proposals.

Policy 5.2 Maintain support for and improve the Lawrence-Douglas County Household Hazardous Waste Program to ensure that household hazardous waste is disposed of properly.

HUMAN AND BUILT ENVIRONMENT

> *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development integrates the three pillars of environmental protection, economic development, and social development in decision making. It is not the tradeoff between these pillars, but the synergy between them."*[3]

The majority of this chapter discusses protection of certain environmental and natural features in order to preserve them for the future. This final section of the chapter takes those ideas a step further by identifying how those environmental protection efforts impact the human and built environment to create a sustainable and livable community.

Summary of Issues:

1) **Sustainability**. *Creating a sustainable community protects and preserves the environment, natural and built, for future generations. This can include minimizing negative impacts from development on the environment and promoting sustainable building and land use practices.*

2) **Healthy and active lifestyles.** *How the physical environment of Douglas County is built has a direct impact on the lifestyles and health of its residents. Making cities and neighborhoods pedestrian and bicycle friendly, creating a system of interconnecting greenspaces, reducing air and water pollution, creating appropriately designed transportation systems, and providing recreation spaces help enhance the health of our citizens. As an example, the Safe Routes to Schools program, sponsored by the State of Kansas Department of Transportation, provides safe zones which make it safer for children to bike or walk to schools.*

3) **Local/Regional Food.** *Local and regional food programs provide health benefits by encouraging healthy diets made up of adequate amounts of locally grown fresh food and may produce air quality benefits by reducing fossil fuel emissions associated with food-related transportation. In Douglas County, there are approximately 98,000 harvested acres of active farmland. A report, "Eastern Kaw River Region's Local Farm and Food Economy", studied seven counties in eastern Kansas and found that the region loses $2.1 billion of potential revenue by buying food supplies from outside of the region. This money can be potentially recaptured by implementing a local food program and the Douglas County Local Food Policy Council is developing strategies to achieve this. Not only does a local and regional food program encourage the preservation of agricultural lands, but it also encourages diverse forms of food production, such as community gardens and other urban forms of food production, and provides economic benefits to the community.*

3 A portion of this definition is taken from Brundtland Report: World Commission on Environment and Development (WCED). *Our common future.* Oxford: Oxford University Press, 1987 p. 43.

Goals and Policies:

Goal 6: Mitigate negative impacts to the human and built environment caused by noise pollution, light pollution and development activities in order to promote a sustainable, healthy, and active lifestyle for the residents of Douglas County.

Policy 6.1 Mitigate noise pollution by using appropriate land use buffers, limits on noise levels, and limits on operating hours.

Policy 6.2 Continue to develop and implement standards that will limit light trespass, glare and sky glow, by establishing design guidelines for the type and placement of industrial, commercial and residential lighting.

Policy 6.3 The City of Lawrence and Douglas County should encourage the promotion of healthy and active lifestyles for its residents through the use of standards regarding transit options, pedestrian connectivity, multi-use recreational paths, increased open space preservation, etc. Those standards should also include tools, such as Health Impact Assessment, that measure the long-term health effects of projects.

Policy 6.4 Develop a sustainable transportation system.

a. Encourage land development patterns that utilize transit options and provide for connectivity of pedestrian walkways, bicycle routes, and multi-use recreational paths while providing for appropriate vehicular access options.

b. In a fiscally responsible manner, the City and County shall use the most environmentally friendly (i.e. fuel efficient) vehicles available on the market for government vehicles, including the publicly-owned transit fleet.

c. Encourage Travel Demand Management techniques, such as carpooling, vanpooling, signal coordination, etc. to reduce vehicular travel and energy consumption.

d. Encourage alternative transportation options, such as bus service, van pools, bike paths, etc., for regional commutes.

Policy 6.5 Promote sustainable building practices.

a. The City of Lawrence and Douglas County should lead the way by requiring that all new public facilities and substantial remodels of existing public facilities be built according to sustainable or "green" industry accepted standards and programs.

b. Development and building codes should permit and encourage "green" industry accepted standards and programs.

Policy 6.6 Promote the responsible use and conservation of energy, water and other natural resources.

a. Encourage the use of drought-tolerant native species in public and private landscaping.

b. Encourage water conservation through the use of alternative irrigation methods such as the use of rain barrels and rain gardens.

c. Provide education on the use of mulch, drip irrigation, and other features which would reduce water consumption for landscaping.

d. Provide incentives for building and facility design which minimizes water usage such as water efficient plumbing fixtures, and reuse of gray water for irrigation.

e. Develop an education and outreach program to inform the public and government officials on the various means to reduce energy consumption.

f. The City and County governments shall take the lead and set an example of reducing energy consumption for the community in a fiscally responsible manner, and examples may include:

    f.1 Providing incentive programs for employees to use mass transit or alternative forms of transportation,

    f.2 Considering travel miles when locating new facilities,

    f.3 Making energy consumption a major factor when purchasing new vehicles and equipment,

    f.4 Taking steps to reduce energy consumption in governmental buildings (using an energy audit system), and

    f.5 Utilizing energy efficient building materials and designs on new facilities.

g. Develop regulations and incentives for the use of renewable energy sources.

h. Encourage land use patterns that result in reduced energy usage, such as mixed use development.

i. The City shall adopt a Complete Street Policy so all road rights-of-way are developed in a manner to ensure the safety and accommodation of all users.

Policy 6.7 As the community develops a local/regional food program, the City of Lawrence and Douglas County should work with stakeholders (local merchants, farmers, landowners, institutions, consumers, etc.) to assist in developing that program.

a. As a local food program is developed, further policies relating to land use may need to be addressed in this chapter, as well as Chapter 12 – Economic Development.

b. Encourage zoning laws to permit community gardens, farmer's markets and other uses to promote growing and marketing local food in an urban setting.

c. The City and County governments should consider establishing local food programs in their operations.

GLOSSARY:

Complete Streets	*Streets that are designed and operated to safely accommodate all users, including but not limited to: motorists, pedestrians, bicyclists, transit, and people of all ages and abilities. The entire right-of-way is designed to encompass users of all types and enable users to safely move along and across the road.*
Critical Habitats	*Habitat that has been designated as essential for the conservation of species that are listed as threatened or endangered.*
Drainage Areas	*Land areas that contribute surface water to a given location delineated by surface topography. They vary in size and are made up of five interconnected sub-features: Basins, Subbasins, Watersheds, Subwatersheds, and Catchment areas.*
Endangered Species	*Any species of wildlife whose continued existence as a viable component of the state's wild fauna is determined to be in jeopardy. That term shall also include any species of wildlife determined to be an endangered species pursuant to Pub. L. No. 93-205 (December 28, 1973), the Endangered Species Act of 1973, and amendments thereto.*
Energy audit system	*An energy audit is an inspection, survey and analysis of energy flows for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s).*
Floodplain	*The land inundated by a flood of a given magnitude as determined by the FEMA Flood Insurance Study or by an approved Hydrologic and Hydraulic Study.*
Glare	*The sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which eyes are adapted, which causes annoyance, discomfort, or loss in visual performance and visibility.*
Green Infrastructure	*A strategically planned and managed network of natural lands, working landscapes and other open spaces that conserve ecosystem values and functions and provide associated benefits to human populations. 4*
Greenhouse Gases	*Gases that trap heat in the atmosphere are often called greenhouse gases. Some greenhouse gases such as carbon dioxide occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The principal greenhouse gases that enter the atmosphere because of human activities are: Carbon Dioxide (CO_2), Methane (CH_4),*

4 *Green Infrastructure: Smart Conservation for the 21st Century, www.sprawlwatch.org*

	Nitrous Oxide (N_2O), and Fluorinated Gases such as hydrofluorocarbons or perfluorocarbons which are usually emitted from a variety of industrial processes.
Groundwater Recharge	*Water that infiltrates the land surface and percolates downward to the underlying groundwater system.*
Health Impact Assesment	*A combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population.5*
High Quality Agricultural Land	*Land with good soil quality that is rated as Capability Class (non-irrigated) I and II as defined by the National Resources Conservation Service.*
Key Habitat	*Habitat for wildlife that are not listed as endangered or threatened, but that have declined over the last 50 years to the point that they are in danger of being listed as such.*
Level of service standards	*A qualitative rating of the effectiveness of a highway or highway facility in serving traffic, in terms of operating conditions (speed, travel time, comfort, convenience, traffic interruptions, freedom to maneuver). The Highway Capacity Manual identifies operating conditions ranging from A, for best operations (low volume, high speed) to F, for worst conditions.*
Light Pollution	*The adverse effect of artificial light including sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste.*
Light Trespass	*When light is directed outside of the given property.*
Native Prairies	*A prairie is an ecosystem native to central North America, with fire as its primary periodic disturbance. Prairie areas that have remained relatively untouched on undeveloped, untilled portions of properties are 'native prairies'. Native prairies have remained primarily a mixture of native grasses interspersed with native flowering plants. (These areas have not been planted, but are original prairies.)*
Open Space Area	*An area which provide visual & psychological relief from the built environment; public access via trails & walkways to these areas is important to provide passive recreational opportunities where it is compatible with resource protection & environmental regulations; open space areas may or may not be improved, but can include playfields, trails, greenbelts/greenways, community gardens, farmed areas, buffers between land uses of differing intensities, such as residential & commercial or industrial activity, areas within community or neighborhood*

5 http://www.cdc.gov/healthyplaces/hia.htm

	parks which are left in their natural state, & other environmentally sensitive areas.6
Riparian Areas	*The part of the watershed that flanks surface watercourses. These areas provide benefits, such as storage of flood waters, storm water conveyance, pollutant filtration, wildlife habitat, shaded areas, recreational areas, and aesthetic amenities.*
Sky Glow	*An artificial brightening of the night sky.*
Slope	*Slope is the rate of change in elevation between two points in a given area and is one of the main components of the topography or surface features of a given site.*
Steep Slopes	*Slopes that are 15% or above. 7*
Stormwater	*Water runoff from precipitation events.*
Stream Corridor	*A strip of land which is centered on the centerline of the stream; including intermittent, perennial and ephemeral streams. The width of the stream corridor is dependent upon various factors including: vegetation, topography, drainage area, soil type and streambed slope.*
Stream Setback	*An area within the stream corridor in which activity is limited. There may be various types of setbacks which permit differing degrees of activity.*
Sub-surface Watercourses	*Water that occurs below the surface of the Earth, that moves slowly, and ultimately discharges to streams, lakes, wetlands, and the oceans.*
Surface Watercourses	*Above ground waterways such as rivers, lakes and streams.*
Sustainability	*Meeting needs of present generation without compromising the ability of future generations to meet their needs.*
Sustainable Development	*Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development integrates the three pillars of environmental protection, economic development, and social development in decision making. It is not the tradeoff between these pillars, but the synergy between them.*8
Tallgrass Prairies	*Prairies are distinguished by the types of grasses they contain. Tallgrass prairies flourish in areas with rich soils and moderate rainfall of around 30 to 35 inches per year. The major grasses of the tallgrass prairie are the big bluestem, the little bluestem, indiangrass and switchgrass.*
Threatened Species	*Any species of wildlife which appears likely, within the foreseeable future, to become an endangered species. That*

6 From Horizon 2020, Chapter 9: Parks, Recreation, and Open Space

7 Marsh, William M., Landscape Planning: Environmental Applications, 2005.

8 A portion of this definition is taken from Brundtland Report: World Commission on Environment and Development (WCED). *Our common future.* Oxford: Oxford University Press, 1987 p. 43.

	term shall also include any species of wildlife determined to be a threatened species pursuant to Pub. L. No. 93-205 (December 28, 1973), the Endangered Species Act of 1973, and amendments thereto.
Tree Canopy	*The layer of leaves, branches, and stems of trees that cover the ground when viewed from above.*
Urban Forest	*Trees in the urban and near-urban areas including, but not limited to, street trees, park trees, residential trees, natural riparian habitats, and trees on other private and public properties.*
Viewsheds	*Viewsheds are areas visible from certain locations that are scenic vistas that are important to a given community. They are generally correlated with other environmental features and can include views of water bodies, significant topography, structures, vegetation or other physical things.*
Watershed	*Typically between ten and a hundred square miles in area, and defined as areas that drain to a particular watercourse or body of water or the total area above a given point on a stream that contributes water to that flow at that point. The top of each watershed is delineated by ridgelines that naturally control the direction of water.*
Wetlands	*Any area of predominantly hydric soils where standing water or wet soil conditions exists for a significant part of the growing season of most years.9*
Wildlife corridor	*Habitat pathways or linkages that connect areas of natural open space otherwise separated or fragmented. A wildlife corridor allows wildlife to move between separated habitats, providing an escape route from fire, predators, and human disturbances, and serving as a travel path for individual animals as they wander throughout their home ranges in search of food, water, mates, and other needs.*

9 Kansas Water Plan

Page purposely left blank

Implementation

CHAPTER SEVENTEEN - IMPLEMENTATION

This phase of the planning process in Lawrence and Douglas County is ongoing. In many ways, formal adoption of the Comprehensive Plan is the first step, not the last. Without continuing action to implement and update the Plan, efforts up to this point will have little lasting impact.

The Comprehensive Plan sets forth an agreed-upon "road map" for the next 20-25 years. It is the product of considerable effort on the part of the citizens of Lawrence and Douglas County, the HORIZON 2020 Steering Committee, city and county governing bodies and staff. The Plan presents a strategy for retaining and enhancing those characteristics seen as most important to the community, including sound neighborhoods, a strong and vital downtown, a quality park and recreational system, continued economic development, good schools and a strong, positive physical identity. The Plan also promotes responsible growth and development to protect the city's investment in high quality community facilities and services.

This section presents several key actions which the city, county and others should undertake to implement the Plan. It should be noted that no attempt was made to document all actions that might be undertaken to implement the Plan. Since the “community” is not static and conditions will change over time, the Plan should be amended as needed to respond to changes in the local community, public policy, and citizen attitudes and intentions.

There are a number of actions which should be undertaken to implement the plan. Many of these actions are the responsibility of or require the leadership of Lawrence and Douglas County.

ADMINISTRATIVE ACTIONS

1. Continue to fund and support the Planning Commission and the Lawrence/Douglas County Metropolitan Planning Office as a joint planning agency for the city and unincorporated Douglas County. The implementation and success of the Comprehensive Plan relies on this governing structure.

2. Seek informal agreements and cooperation between Lawrence, Baldwin City, Eudora, Lecompton and Douglas County to utilize a standard budgetary format.

3. Provide funding for additional technical, professional and enforcement personnel. Specifically, there is a need to:

   - ☐ Develop and implement a geographic information system.

   - ☐ Support the planning process in a manner that allows the Lawrence/Douglas County Metropolitan Planning staff and other local governmental agencies to be proactive, not reactive, with a constant focus on the long-range goals of this plan.

   - ☐ Develop a land use inventory and data base to be maintained by the Planning Office which should include:

- Existing acreage zoned for residential, commercial, and industrial uses;
- Gross square feet of existing residential, commercial, and industrial space, by location; and
- Vacant acreage zoned for residential, commercial, and industrial use.

☐ Maintain an inventory and database to assist the community in monitoring changes and patterns related to land use development. An information system, continually updated, will provide a mechanism to evaluate the economic health of the community and assist citizens and community leaders in making decisions related to land use issues.

☐ Undertake an impact study of requests for development of community and/or regional commercial centers to ensure that such development does not have a negative impact on the primary Regional Retail Commercial Center (Downtown Lawrence). This analysis would be used to evaluate the potential impact on the future viability of Downtown Lawrence as a whole and not the potential impact on individual businesses or properties.

☐ Develop measurement techniques to gauge the community's ability to absorb and support new commercial development. Evaluate the need to amend the Comprehensive Plan to include adopted measurement techniques.

☐ Implement a "certified" housing program in collaboration with local universities. Certification would provide a voluntary incentive for property owners to maintain a specified minimum level of maintenance in exchange for inclusion in lists of certified properties provided to new residents in the community.

☐ Increase enforcement efforts throughout the community to ensure that developments are constructed and maintained as planned.

DEVELOPMENT CONTROLS UPDATE

The city and the county's development regulations represent important tools for the implementation of many recommendations contained in the Plan. While the regulations should be frequently reviewed to respond to changing conditions, unforeseen needs, or new policies, the Plan has identified a variety of actions required to implement the new Plan which should be undertaken in the early years of Plan implementation. These are briefly summarized in this section.

City of Lawrence

- *Zoning Regulations*

1. Throughout the planning process, public comment has sought improved landscaping and site development requirements, particularity in non-residential areas of the city. Site development plan and landscape plan approval, procedures and standards should be formally incorporated into the Zoning regulations. Site

plan requirements should encompass all site development features and improvements, and require site designs to demonstrate proper access and circulation, pedestrian access, and relationship to buildings and adjoining sites. Public sector and private sector projects should be developed to similar standards.

2. The structure of the current zoning districts should be reviewed to reflect the general intent of the Land Use Plan. For example, the Plan calls for the creation of an office-research district of a low-density "campus-like" setting, as well as a new very low-density (large-lot) residential classification. These new distinctions are required to carry out the intent of the Land Use Plan.

3. The zoning regulations should establish transition yard requirements where non-residential uses adjoin low-density residential areas. A transition yard would require increased yard depths and landscaping and screening improvements to soften the potential negative effects of development.

4. The planned unit development standards and procedures should be amended to clarify development plan requirements, update development standards, and streamline procedures.

5. The city should review and update its development performance standards, as appropriate.

6. The zoning regulations should be modified to include clustered development regulations as a voluntary option to development permitted by right within the residential zoning districts.

7. In the site development review process, new development or redevelopment should require architectural elevations illustrating spacing and massing to assist in determining the compatibility of the project design with surrounding land uses, the neighborhood plan and the Comprehensive Plan.

8. For large non-residential developments, an impact analysis should be required. The city should develop a tailor-made analysis model and require it be uniformly applied to all developments.

9. Over time, land should be rezoned to achieve consistency with the land use plan. The Planning Commission should initiate cases where rezoning is needed.

10. An Original Townsite Ordinance should be adopted which recognizes the development pattern existing on platted lots in many of the older areas of the city. Setback and development regulations should be considered which permits the continuation of established patterns.

- *Subdivision Regulations*

1. The city should develop park and school land dedication provisions, with options for land acquisition and development, for incorporation in the subdivision

regulations consistent with the recommendations for parks and recreation in the Plan.

2. The city should establish requirements consistent with the sidewalk improvement policy.

3. The city should amend its subdivision regulations to apply within the UGA. These would include the public improvement standards and dedication requirements normally imposed within the corporate limits (or modified standards as appropriate), except it would provide for public water and wastewater extensions consistent with the policies established in the utilities section of this plan.

- *Building Regulations*

1. The city should update its minimum property maintenance code for residential, commercial and industrial areas.

2. The city's building codes should be reviewed to:

   ☐ Meet objectives in allowing the economical conversion of existing historic buildings through special building code provisions for the adaptation of existing structures.

   ☐ Respond to technological advances in new types of building construction materials which reduce construction costs and yet maintain the overall quality and safety in construction and design.

The city should compile all separate codes and ordinances relating to development into a single unified development code. This could include regulations regarding subdivision, zoning, housing, building, traffic and access and other related codes.

Douglas County

- *Zoning Regulations*

1. The regulations should be amended to provide for minimum lot size and frontage requirements recommended in the Plan.

2. New site plan regulations should be prepared for the review of development applications in natural or environmentally sensitive locations and for all non-residential development in the county.

3. The zoning regulations should include a system using land evaluation and site assessment as evaluation tools to identify prime agricultural lands.

FOLLOW-UP STUDIES

Through the planning process, many issues/topics have been discussed which need additional in-depth study. As studies are prepared, additional emphasis should be given to the accessibility of information in a variety of formats to meet the changing needs of the community. This section provides an overview of key projects which could significantly augment the ongoing planning program.

Joint Lawrence/Douglas County Studies

While the following studies need not necessarily be completed as joint studies, conducting a combined effort would provide a more coordinated and comprehensive strategy to deal with long-term needs important to both Lawrence and Douglas County.

Historic Resources Survey and Plan. The Plan has identified the need to complete a historic resources inventory and prepare a historic preservation plan for Douglas County. This preservation plan should include a number of governmental agencies. Because of overlapping jurisdictions, this project should be organized through the Lawrence/Douglas County Metropolitan Planning Commission and the Planning Office.

Intergovernmental Services and Facilities Study. Citizens of Lawrence and Douglas County recommended a county-wide study be undertaken to identify services which could be consolidated, reorganized, or eliminated because of duplication. A study group should be formed to investigate, analyze and recommend actions which might be undertaken to increase efficiency and reduce service costs.

Law Enforcement and Fire Protection Study. The potential for coordinated and combined emergency and public safety services has been identified as an area of further study. The potential to enhance urban and rural services through combined resources would be one objective of the study.

City and County Bicycle and Pedestrian Facilities. Once needs are identified on a neighborhood level within Lawrence, plans for these facilities on a county-wide basis should be re-evaluated and confirmed. Because the improvements represent substantial capital investments, they should be carefully coordinated.

Stormwater Management Study. As the city and unincorporated Douglas County continue to grow in the future, proper stormwater improvements will be required to minimize flood hazards in existing developed portions of the county and to provide for proper improvements to new areas. These include the management of natural stream corridors, wetlands and floodplains. In order to provide properly sized and located stormwater drainage improvements, a stormwater management study of all drainage basins within the Lawrence UGA should be undertaken and include select areas of unincorporated Douglas County. Based on the study, the city and county should evaluate its engineering, zoning and other requirements to ensure system implementation in the future. *[This study is underway and a draft report was presented to the City Commission in November 1995.]*

Growth and Industries Opportunity Study. This study will provide an understanding of those prospective firms which will have a natural fit in the Lawrence/Douglas County community. Specific anchor firms will be identified to help strengthen industry and employment "clusters". *[The draft Strengths and Weaknesses Report, the first product of this study, was released in October 1995.]*

Create an Economic Development Board. The primary purpose of this board is to implement the economic development recommendations of the Comprehensive Plan. The ongoing work of this board is critical to continued momentum in the business community to carry out the Plan. *[The Economic Development Board was created in 1994.]*

City of Lawrence

Major Street Corridor Studies. Throughout the HORIZON 2020 process many concerns and improvement needs of the community have been raised which, directly or indirectly, relate to key land use and transportation corridors. These corridors include, but are not limited to: Iowa Street, 23rd Street, 6th Street, N. 2nd Street and 9th Street. A much more specific improvement program should be developed, uniquely tailored to each corridor to specifically address land use and density, environmental conditions, traffic circulation improvements, parking improvements, gateway areas, pedestrian and open space improvements, site and building development and urban design.

Urban Design Guidelines. Lawrence maintains a variety of architectural styles within its neighborhoods. Locations which may be subject to change or new development in the future would benefit from urban design guidelines reflecting existing neighborhood conditions. Guidelines would serve to enhance the values of both historic and non-historically significant areas of the community. Design guidelines could also address other site improvement or public facilities improvement features as well.

Update and Complete Neighborhood Plans. The adoption of the Comprehensive Plan has put in place a new planning framework that represents an ideal time to re-examine existing neighborhood plans and prepare plans for new or developing areas.

Amend Transportation 2025. The more specific transportation plan should be included as an amendment to the Comprehensive Plan. Because land use and transportation are inextricably intertwined, Transportation 2025 should be included in the Comprehensive Plan to ensure consistency in major land use and transportation policy decisions.

Review and Update the Downtown Lawrence Comprehensive Plan. The Comprehensive Plan identifies the need for a strong and vital downtown. However, more specific needs and potentials of Downtown Lawrence should be examined. The Plan has identified the need to examine the potential for new development and redevelopment, including the potential expansion of the downtown boundaries, the location of new and reorganized off-street parking and many other factors. A focused study should consider these needs in the context of plans for the greater Lawrence community.

Douglas County

Undertake a Transportation Improvement Program for the County and its Townships. The planning and program needs of the county road system would be better understood if a comprehensive transportation plan was prepared for the unincorporated county. Initially, this could include the collection of current traffic operational data for county and township roads to better grasp the functional operations of the existing system.

Study the Potential for a County Unit Road System. The Plan identifies the need to study the feasibility of a County Unit Road system. The potential costs and benefits of such a system should be evaluated with respect to the current individual township road systems and the impacts such a system would have for Douglas County residents.

CAPITAL IMPROVEMENTS PLAN

A Capital Improvements Plan (CIP) is a critically important mechanism to implement key aspects of the Plan. Lawrence/Douglas County's fiscal resources will always be limited, and public dollars must be spent wisely. An important recommendation of the Comprehensive Plan is to include plan recommendations as part of the city and county's long-range capital improvements programs. A CIP which annually evaluates all of the community's needs, including establishing priorities and determining funding sources, will enable the city and county to systematically appraise, coordinate and monitor improvement needs. Even though the Comprehensive Plan recommends a number of improvement needs, the CIP should include and prioritize all anticipated capital improvements for the budget period. The CIP can then become an important tool in the annual budget process and the allocation of local funds.

IMPLEMENTATION PRIORITIES

The implementation of the Comprehensive Plan will involve many Douglas County citizens and organizations. Initially, among the many projects and programs planned, there are a few projects which should be considered priorities and acted upon within the very near future for the Plan to influence desired change. While all projects and programs are important, the following actions and projects (in no rank or specific order) should be pursued in advance of all other recommendations contained in the plan.

- ***Amend Transportation 2025.*** Transportation 2025 should be integrated into the Comprehensive Plan to firmly establish the most fundamental program elements of the new plan.

- ***Development Controls Regulations Update.*** This will embrace important land use and development aspects of the new plan. Because the update is a legislative act directly under the control of the governing bodies, this process should begin immediately.

- ***Historic Resources Comprehensive Plan***. Many strategies in the Plan relate to the historic resources of the city and unincorporated county. These include tourism, image and identity. Because the resources are many, and will continue

to be threatened by development and the lack of a focused policy, these studies should be undertaken as soon as possible.

- *Update the Downtown Lawrence Comprehensive Plan.* Continued preservation and enhancement of Downtown Lawrence is a commonly shared goal in the community.

- *Examine the Roadway Improvement Needs of Unincorporated Douglas County.* As growth and development continues in unincorporated Douglas County, it will be important to properly plan for the most extensive and expensive facilities - the road system.

- *Implementation Resources*. Plan implementation is broadly shared and will require many citizens and organizations to collaborate for successful change in the community. As an early step in plan implementation, it will be important for the city and county to identify and mobilize as many resources as possible toward realization of plan goals and policies.

COMPREHENSIVE PLAN REVIEW AND AMENDMENT PROCESS

The Comprehensive Plan is not a static document; the planning process must be continuous. The Plan should be monitored and updated on a regular basis. The need for Plan amendments is the result of many community influences. Most frequently these are brought about by changes in attitudes, assumptions or emerging needs not foreseen at the time of Plan adoption. The following procedures would apply to any amendment of the Comprehensive Plan.

- *Timing of Plan Review*

Although a proposal to amend the Plan can be brought forth by petition at any time, the Lawrence/Douglas County Metropolitan Planning Commission should undertake a thorough review of the Plan on a regular basis. The continuous nature of the Comprehensive Planning process should be emphasized so that substantial plan review and update occurs at least once every five years. Ideally, the review would coincide with the annual review of anticipated capital improvements planning for both the city and county.

- *Plan Amendment Procedures and Criteria*

I. Amendments

All proposed amendments shall be subject to public hearing by the Lawrence/Douglas County Metropolitan Planning Commission and approved by the appropriate governing body/bodies according to the nature of the amendment:

1. Map amendments for Lawrence and its UGA shall require the approval of the Lawrence City Commission.

2. Map amendments for unincorporated Douglas County and changes to the UGA's shall require approval by the County Commission.

3. All other amendments which clearly affect either the city or unincorporated Douglas County shall require approval by the appropriate governing body. Any other portion of the amendment relating to both the city and county shall require the approval of both the City and County Commissions.

4. In cases where only one of the two governing bodies is required to take action on a proposed amendment, the other governing body may forward comment or make a recommendation to approve, deny or approve with conditions the proposed amendment.

II. All proposed amendments to the Plan shall consider the following:

A. The proposed amendment results from changed circumstances or unforeseen conditions not understood or addressed at the time the Plan was adopted.

B. The proposed amendment advances a clear public purpose and is consistent with the long-range goals and policies of the Plan.

C. The proposed amendment results from a clear change in public policy.

III. Map Amendments

Subject to hearing, review and recommendation of the Planning Commission, the governing bodies may adopt proposed amendments to Lawrence or unincorporated Douglas County Plan Maps upon findings that each of the following additional criteria are met:

A. The proposed amendment does not affect the adequacy of existing or planned facilities and services;

B. The proposed change results in reasonably compatible land use relationships; and

C. The proposed change advances the interests of the citizens of Lawrence and Douglas County as a whole, not solely those having immediate interest in the affected area.

In the Plan review and update process, the Planning Commission may maintain a list of agencies and organizations to be notified of the annual Comprehensive Plan review and the topics subject to discussion and hearing. The Planning Commission should also maintain a list of active projects and accomplishments under the direction of the plan to report on the progress of these implementation steps. This is a useful exercise to continue to test the reasonableness of the Plan and the aggressiveness with which Plan implementation is pursued. This review can be used as a vehicle to engage other agencies and organizations in the implementation of the new Plan.

Page purposely left blank

Appendix

APPENDIX

REFERENCE BIBLIOGRAPHY

The preparation of the Lawrence/Douglas County HORIZON 2020 Comprehensive Plan involved the gathering and analysis of a wide variety of data and the preparation of a number of reports. This bibliography includes a list of documents and reports compiled during the planning process. The table of contents of each document is provided for content reference.

Copies of these documents are available for inspection at the Lawrence/Douglas County Metropolitan Planning Office. For information and accessibility to these reports, please contact the Planning Office.

Phase I HORIZON 2020 Framework, Trkla, Pettigrew, Allen and Payne (TPAP), Stratplan and KU Institute for Public Policy and Business Research (IPPBR), October 1992.

Contents: Part 1: Business Survey; Citizen Survey; Impromptu Survey; Media Search; Institutional Survey; Key Person Interviews; Summary of August 13, 1992 Community Forum; Planning Goal Themes; and Review of Existing Plans, Studies and Reports. Part II: Winds of Change; Economic and Demographic Trends; and Economic Health Assessment. Part III: Strategic Planning and Data Analysis. Part IV: Strengths, Weaknesses, Opportunities and Threats. Part V: Strategic Overview.

Background Studies, TPAP, February 1993.

Contents: Delineation of the HORIZON 2020 Planning Area; Preliminary HORIZON 2020 Vision Statement; Existing Land Use, Development Patterns and Trends; City of Lawrence Neighborhoods; Residential Building Conditions; Natural and Environmental Features; Community Facilities; Utilities; Transportation; Visual Features; Historic Resources; and Synthesis.

Supplemental information provided by the planning consultants included: 1) Final Report on the Natural Areas Inventory of Douglas County, Kansas by Chris L. Lauver (funded by Kansas Biological Survey, The Nature Conservancy and Oppenheimer Industries); and 2) Inventory of Potential Wetland Restoration Sites in Lawrence, Kansas -- Wakarusa River Valley Area by Kelly Kindscher (funded by the U.S. Environmental Protection Agency, Region VII, Wetlands Protection Section through the National Network for Environmental Management Studies). These reports were conducted in 1988 & 1989 and were utilized in the HORIZON 2020 process to compile the Combined Natural and Environmental Features Map which is included in the Background Studies. This map illustrates the generalized locations of natural features which should be considered in the development of property within the community.

HORIZON 2020 Task Group Reports, Citizen Committees, Spring 1993.

Contents: Citizen studies and recommendations for: Economic Development; Education; Environmental Quality and Natural Resources; Future; Governmental and Institutional Cooperation; Historic Resources and Preservation; Land Use; Neighborhoods; Retail and Commercial Development; and Transportation.

Non-Residential Land Use Projections, TPAP, June 1993.

Contents: Land use projections for retail/commercial service, office, and industrial development potential.

Synthesis Statement, TPAP, October 1993.

Contents: Overview of Phase II Activities and a Synthesis of Issues and Potentials regarding: Economic Development; Education; Environmental Quality and Natural Resources; Governmental and Institutional Cooperation; Historic Resources; Land Use and Development; Neighborhoods; Retail and Commercial Development; and Transportation.

Strategic Strawman Element, Stratplan, October 1993.

Contents: Our Community; Our Vision; Our Goals; Our Strategy; Guiding Principles; and Physical Highlights of the Plan.

HORIZON 2020 Economic Development Element, Stratplan, March 1994.

Contents: Action Summary; HORIZON 2020 Vision; Economic and Social Assumptions Underlying this Economic Development Strategy; Vision and Goals for Economic Development; Strategies and Action Steps; Economic Development Organization; Land Availability; and Conclusion.

HORIZON 2020 Goals and Objectives, TPAP and HORIZON 2020 Steering Committee, 1994.

Contents: Overall HORIZON 2020 Planning Goals; Appearance and Identity; Neighborhoods, Housing and Residential Areas; Commercial Development; Employment Land Use; Economic Development; Parks, Recreation and Open Space; Community Facilities and Services; Utilities; Transportation; Historic Resources; Environmental Quality and Natural Resources; Intergovernmental Cooperation; and Program Administration.

Concept Plan Alternatives, TPAP, October 1994.

Contents: Land Use Classification System; Urban Area Land Use Concept; City of Lawrence Perimeter Sub-Area Alternatives; City-wide Land Use Concept; Context for County Planning; County Planning Alternative 1; County Planning Alternative 2; and Preliminary County Concept.

ADDITIONAL APPENDIX MATERIALS

Downtown Comprehensive Plan, Lawrence/Douglas County Metropolitan Planning Commission, 1984.

The Downtown Comprehensive Plan sets forth guidelines for the orderly growth and development of downtown Lawrence. The Plan provides a general frame of reference for overall downtown development.

Transportation 2020, Lawrence/Douglas County Metropolitan Planning Commission, 1995.

Transportation 2025 is the update to Transportation 2020, the long-range transportation plan for Lawrence and surrounding area. The transportation plan summarizes the public involvement processes used to identify transportation needs, and outlines the regulatory and fiscal policies which will shape strategy for meeting those needs through the year 2025.

Wastewater Service Areas Map, Overloaded Collection System Facilities for 2020 Design Conditions [City of Lawrence Wastewater Master Plan], Black and Veatch, 1995.

Page purposely left blank

Glossary

GLOSSARY

Buffer -

any object or technique which minimizes the incompatible characteristics of adjacent land uses. These would include, but not be limited to: distance, greenspace landscaping, berms and fences or a combination of these elements.

Building type (also referred to as housing type) -

residential structure defined by the number of dwelling units contained within [i.e., single-family detached dwelling, duplex dwelling, tri-plex]

Cluster development -

a method of development which allows more open space on a specific tract of land which is undergoing subdivision by reducing lot sizes while maintaining the same density and housing type permitted by the zoning district in which it is located.

Compatibility -

1. the characteristics of different uses or activities which allow them to be located near each other in harmony. Some elements affecting compatibility include intensity of occupancy as measured by building type; dwelling units per acre; floor area ratio; pedestrian or vehicular traffic. Also, complementing uses may be compatible, like residential and retail uses. 2. the characteristics of different designs which allow them to be located near each other in harmony, such as scale, height, materials and fenestration.

Community facilities -

public and semi-public land uses which include municipal facilities, schools, universities, parks, recreation and open space, and a range of institutions.

Density -

measurement of the number of units, e.g., housing, or persons per acre, which may indicate the level of activity in an area. Gross density is measured by including all land in the boundaries of an area; net density is measured by excluding streets, easements, water, open space, etc.

Development proposal -

any request to change the physical use of a property.

Drainage basin -

all of the land area that contributes stormwater runoff or natural drainage to a given point, usually the mouth of a stream or river.

Environmentally sensitive areas [sensitive to the environment] -

areas which contain overlapping natural features such as: steep slopes, woodlands, natural prairies, wetlands, hydric soils, lakes, streams and prominent ridgelines.

Floodplain (100 year) -

the land area inundated by a flood of a given magnitude as determined by the Flood Insurance Study or by an approved Hydrologic and Hydraulic Study.

Household -

all the persons who occupy a housing unit.

Housing unit -

a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters.

Infill -

a process by which vacant land in developed areas is utilized for development.

Infill development -

development which occurs on vacant parcels of land within otherwise built-up areas of a city.

Infrastructure -

streets, sidewalks, storm sewers, pumping stations, sanitary sewer lines, water lines, utilities, etc.

Large lot, single-family detached development -

development which occurs on minimum half-acre lots resulting in substantial open space within a neighborhood.

Leapfrog development -

a pattern of growth in which vacant parcels adjacent to existing development are bypassed and land farther away from existing urbanization develops instead.

Levels of service -

a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. These conditions are generally described in terms of speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.

Locational criteria policies -

policies found outlined under each of the land use goals which specifies requirements for various types of land uses in relation to surrounding land uses and the transportation system within the community.

Neighborhood -

an area with social, physical and political identity.

Neighborhood concept -

1. planning concept which suggests that least intensive land uses are located toward the interior of a neighborhood with more intensive land uses at the edges and consideration given to siting to ensure compatibility of adjacent land uses. 2. a neighborhood includes the following defining features: a) boundaries -- permanent features such as arterial street or natural barrier; b) population to support neighborhood shopping or school; c) should include at least one park within walking distance of majority of residents; d) more intense uses located at the periphery to minimize conflicts; e) pedestrian orientation; and f) through traffic is discouraged by street design.

Non-farm [residential development] -

1. rural or suburban residential development. 2. development located outside of the boundaries of an incorporated municipality which does not receive the benefit of full urban level services (i.e. water, sewer, paved streets).

Power center -

the congregation of large superstores and related commercial development in proximity which rely on shared access to the same marketing public.

Public land use -

land and facilities such as schools, city and county government buildings, public libraries, post offices and community hospitals.

Residential unit -

dwelling unit; room or suite of rooms designed to be used by one family or housekeeping unit for living and sleeping purposes and containing only one kitchen.

Riparian corridor -

areas of streamside vegetation along any perennial or intermittent stream, including the stream bank and adjoining floodplain.

Semi-public -

facilities such as churches, lodges, and clubs which are utilized by various segments of the general public.

Sewer capacity [lines and treatment] -

the ability of the public system to accommodate flows generated from development areas. System capacity is affected by the total flows within individual line segments and the overall capabilities of the treatment plant.

Strip commercial -

unplanned, vehicular-oriented retail and service development along major arterials. Such development is usually under multiple ownership and characterized by numerous curb cuts which eventually cause heavy traffic congestion.

Suburban -

development located outside the boundaries of an incorporated municipality which does not receive the benefit of full urban level services (i.e. water, sewer, paved streets, etc.)

Urban area boundary (as defined by the Kansas Department of Transportation) -

metropolitan planning area [as designated in the long-range transportation plan] which includes the existing urbanized area and a contiguous area anticipated to become urbanized over the next twenty years.

Urban growth area -

represents the area contiguous to an existing urbanized area which appears reasonable to become urbanized within the bounds of the long-range plan. This area is subdivided into different service areas to represent areas which will logically be served by urban services within the near-term, intermediate and long-term horizons of the plan. The boundaries of service areas, as well as the overall boundary, should be evaluated on a regular and continuing basis as part of the Comprehensive Plan review.

Glossary Definitions have been compiled utilizing the following sources: A Survey of Zoning Definitions, Edited by Tracy Burrows, PAS Report 421; Designing the City -- A Guide for Advocates and Public Officials, Adele Bacow; Managing Community Growth, Eric Kelly; Olathe Comprehensive Plan; Wichita-Sedgwick County Comprehensive Plan; Definitions of Subject Characteristics -- 1990 Census of Population and Housing; National Trust for Historic Preservation; and Urban Land Institute.

Page purposely left blank