1. Call Meeting to Order and Introductions  
   (Bryan Culver - L-DC MPO Chair)

2. Action Item: Approval of Minutes from the November 21, 2013 MPO Meeting (see attached draft minutes)  
   (Bryan Culver - L-DC MPO Chair)

3. Discussion/Action Item: Kansas Open Meetings Act (KOMA) Presentation  
   MPO Staff will present information about KOMA and describe how it pertains to the MPO Policy Board meetings.

4. Old Business and Correspondence (see attached memo and link to TAC minutes)  
   (Todd Girdler – MPO staff)
   a. Project Updates Memo  
      • 2013 Bike-Ped Count Data and Report  
      • Bicycle Advisory Committee- Safety Study  
      • MPO Pedestrian Planning  
      • Rotation of Small City Voting Member on the MPO Policy Board  
   b. Recent TAC meeting minutes  
      • November 19, 2013 – approved – to be posted online at http://www.lawrenceks.org/assets/mpo/tac/tacminNov13.pdf after TAC approval and before the MPO meeting

5. Discussion Item: Transportation Improvement Program (TIP) Project Listings  
   The MPO staff will present the TIP project table to Board members and describe all of the items in that table while explaining how complex projects that span multiple years and have multiple funding sources are listed. This walk-through of the projects table was requested by the MPO members at their last meeting in November 2013.

6. Action Item: 2012-2015 Transportation Improvement Program – Revision #2 (see attached revision changes list and tables)  
   The MPO staff will present this administrative TIP revision to the TAC for review and acceptance. This amendment was posted online on December 16, 2013 after review by the Lawrence Public Works and KDOT Planning Staffs. This administrative revision was made
to keep certain Lawrence project on schedule. This TIP revision includes minor budget changes to the following projects:

- South Lawrence Trafficway
- 9th and Kentucky Intersection Improvements
- Various Railroad safety Projects

All of these changes were requested by the City and KDOT.

7. **Action/Discussion Item: Reports for the Multimodal Studies Project**

The MPO staff may present some of the final reports from this project to the MPO for review and possible approval. This study includes the following three reports.

- Commuter Park & Ride Study
- Fixed Route Transit and Pedestrian Accessibility Study
- Countywide Bikeway System Plan

Each of these plans/studies has a full report and an executive summary report. There is also a technical appendix for this project which includes lengthy items such as a full listing of all the public comments received during the course of this project.

8. **Action Item: Review of Transportation Alternatives (TA) Program Grant Applications from Local Governments and MPO Support Resolutions (see attached project information and support resolutions)**

The MPO staff will present the projects planned for submission to KDOT for grant funding under this federal program to the Board for review. The MPO staff will ask the MPO members to approve these support resolutions now so that the applicants can receive them before the February 14th grant application submission deadline. Representatives from the agencies applying for these funds may be present to answer any MPO questions about the projects.

9. **Other Business**

10. **Public Comments**

This item is to allow brief public comments on items not listed specifically on the agenda. Comments from each individual or organization will be limited to five minutes.

11. **Adjournment**

Next Meeting: The MPO Policy Board will meet next for its regularly scheduled meeting on February 20, 2014 or another date set by the MPO if needed.

**Special Accommodations:** Please notify the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) at (785) 832-3150 at least 72 hours in advance if you require special accommodations to attend this meeting (i.e., qualified interpreter, large print, reader, hearing assistance). We will make every effort to meet reasonable requests.

The L-DC MPO programs do not discriminate against anyone on the basis of race, color or national origin, according to Title VI of the Civil Rights Act of 1964. For more information or to obtain a Title VI Complaint Form, see www.lawrenceks.org/mpo/title6 or call (785) 832-3150.
Lawrence-Douglas County Metropolitan Planning Organization (MPO)  
Policy Board

Meeting Minutes-Thursday, November 21, 2013

Attendance:

<table>
<thead>
<tr>
<th>Organization</th>
<th>Name</th>
<th>Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voting Members</td>
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<tr>
<td>Lawrence City Commission</td>
<td>Michael Dever</td>
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<td>Lawrence City Commission</td>
<td>Bob Schumm</td>
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<td>Douglas County Commission</td>
<td>Nancy Thellman</td>
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<td>L-DC Metropolitan Planning Commission</td>
<td>Jim Denney</td>
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<td>L-DC Metropolitan Planning Commission</td>
<td>Bryan Culver</td>
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<tr>
<td>City of Lecompton</td>
<td>Mary Jane Hoffer</td>
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<td>Kansas Department of Transportation</td>
<td>Davonna Moore</td>
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<tr>
<td>Federal Highway Administration</td>
<td>Paul Foundoukis</td>
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<td>Federal Transit Administration</td>
<td>Joni Roeseler</td>
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<td>University of Kansas</td>
<td>Peg Livingood</td>
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<td>City of Baldwin City</td>
<td>Ken Wagner</td>
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<td>City of Eudora</td>
<td>John Fiore</td>
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<td>Staff</td>
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<tr>
<td>Lawrence - Douglas County MPO</td>
<td>Mr. Girdler, AICP</td>
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<tr>
<td>Lawrence - Douglas County MPO</td>
<td>Ms. Mortinger</td>
<td>X</td>
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<tr>
<td>City of Lawrence-Douglas County Planning &amp; Development Services Dept.</td>
<td>Scott McCullough</td>
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<td>Others</td>
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<td>Kansas Department of Transportation</td>
<td>Allison Smith</td>
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<tr>
<td>City of Lawrence</td>
<td>Randy Larkin</td>
<td>X</td>
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1. Call Meeting to Order and Introductions
Mr. Culver called the meeting to order at 4:05 PM a quorum was assured, and introductions were made. Jim Denny noted that this was his first meeting and that he was recently appointed to the MPO by the Planning Commission.

2. Action Item: Approval of Minutes from the October 17, 2013 MPO Meeting
Mr. Culver presented the October minutes and asked if there was any discussion. There was none. Approval of the minutes from the October 17th meeting was moved by Ms. Moore, seconded by Ms. Thellman and passed unanimously.

3. Discussion Item: Old Business and Correspondence:
Mr. Girdler presented the Project Updates Memo included in the agenda packet and the TAC minutes posted online and asked if any members of the Board had additional questions. Mr. Culver asked how the MPO Policy Board should plan to approve the Multimodal Studies project. Mr. Girdler indicated that the Policy Board should first accept them as complete and then approve them individually or together for their future incorporation into a T2040 Metropolitan Transportation Plan update.
4. Action Item: 2013 Update to the L-DC MPO Title VI Program Manual
Mr. Girdler presented the technical update to the Title VI Plan to meet the FTA’s Circular 4702.1B “Title VI Requirements and Guidelines for Federal Transit Administration Recipients”. He distributed a handout to members that showed the changes that were made to the document since the MPO agenda packet was sent to members, and described each of those recent changes to the document. This update includes several minor text changes, map changes, and the addition of appendices to include a demographic profile of the region and other changes necessitated by the new FTA circular. He noted that those changes were made to respond to KDOT comments on the draft. Mr. Culver asked if there were other documents that referenced Title VI that would need updates. Mr. Girdler mentioned that two documents (Public Participation Plan and the Limited English Proficiency Plan) reference Title VI but their content does not need updating at this time. A motion to approve this Title VI Program manual update as presented was moved by Nancy Thellman, seconded by Davonna Moore, and passed unanimously.

5. Action Item: 2012-2015 Transportation Improvement Program – Revision #1
Ms. Mortinger presented the TIP revision to the MPO for approval explaining that this TIP revision was precipitated by changes to K-10 & Bob Billings Interchange funding sources and cost changes to update two Douglas County projects to actual expenditures from FY2012 in the project listings and fiscal constraint table. This revision is administrative and requires no public comment period. Ms. Mortinger also noted that in 2014 the MPO would be updating the TIP from a 2012-2015 timeframe to a 2014-2017 TIP document, and that staff was awaiting final funding changes related to the Lawrence & KDOT turn back agreement for the 1st quarter of 2014 to make that TIP update. Mr. Culver asked if this was a typical revision. Mr. Girdler indicated that the MPO rarely makes TIP revisions and usually collects all of the TIP changes into quarterly amendments, but due to these project changes falling below the threshold for an amendment and the very limited timeline the MPO was given to get this changed and not cause project delays – the MPO staff used the less time-consuming revision procedure. Mr. Culver asked the MPO staff to review the project listings and how to read them. Ms. Mortinger walked the MPO through each section of the project listing and indicated she would do this again in greater detail during the next TIP amendment, and bring the relevant listings and appendices to describe the abbreviations in the project listings. A motion to approve this TIP revision as presented was moved by Ms. Thellman, seconded by Mr. Denney and passed unanimously.

6. Other Business
Ms. Smith noted that KDOT currently has an open call for Transportation Enhancement projects under the new Transportation Alternatives funding provided under MAP-21. The deadline is February 14, 2014 and will require letters of support from the MPO per the application requirements. Mr. Girdler indicated this would require a January meeting and project sponsors should provide basic details about their applications to the MPO per the application requirements. Mr. Culver asked if the MPO Policy Board should prioritize the projects it receives. Mr. Girdler said that the MPO can do this, but historically they have chosen not to because each city’s local process generally prioritizes the project for the area.

7. Public Comments
There was none.

8. Adjournment
The MPO staff noted that there is not a current need for a December MPO meeting. A motion was made by Ms. Moore, seconded by Ms. Thellman to cancel the December MPO meeting. The November meeting was adjourned at 4:47PM.
Memorandum

TO: L-DC MPO Members
FROM: Todd Girdler, Senior Transportation Planner
CC: Scott McCullough, Lawrence-Douglas County Planning and Development Services Director and L-DC MPO Secretary
Date: January 8, 2014
Re: MPO Activity Updates

Since the last MPO meeting held on November 21, 2013 the MPO staff has been actively working on several projects. Shown below is a list of selected projects and a brief description of recent work on those items.

2013 Bike-Pedestrian Count Data and Report – the MPO staff has been working to compile and organize the data collected during the 2013 counting period in September and October. This information has recently been submitted to the National Bicycle and Pedestrian Documentation Project, and this data will be used by local governments in the region to plan and design bikeways. The 2013 report will be completed soon, distributed to the MPO, and posted online for public review.

Bicycle Advisory Committee-Safety Study - the MPO staff has been working on responding to concerns that have been raised recently by Bicycle Advisory Committee (BAC) members about the safety of cycling in the region and the need for more safety analysis of bicycle crashes. The BAC members sent a letter to local officials asking them to participate in efforts to improve bike safety and to conduct a bike safety analysis. This letter can be viewed online at: http://lawrenceks.org/assets/agendas/cc/2013/11-05-13/ldcbac_ltr_re_safety_analysis.pdf. The MPO staff met with local law enforcement and engineering staffs to discuss this issue on December 5, 2013. During that meeting the MPO staff gained a better understanding of what data is collected and how it is used to produce KDOT required reports. The MPO staff is planning to hold another meeting with this group during the first quarter of 2014.

MPO Pedestrian Planning and Pedestrian Coalition Activities – the MPO staff has been making plans for the Pedestrian Plan activity now programmed for MPO staff work as part of the 2014 Unified Planning Work Program. One of the first things in its 2014 pedestrian planning effort will be to review the recommendations from the Fixed Route Transit and Pedestrian Accessibility Study part of the Multimodal Studies Project and identify those locations (most of which will be along collector or arterial streets) as a starting list for pedestrian improvements that will make our region more pedestrian friendly and more multimodal. The rest of the scope for this MPO Pedestrian Plan will be created in early 2014 and discussed at upcoming TAC meetings.

Related to the MPO efforts to further pedestrian planning in the region is the resurgent Pedestrian Coalition that has become active recently and has expressed their concerns to the Lawrence City Commission. Those concerns were noted in a letter sent to commissioners in October. That letter can be viewed online at: http://lawrenceks.org/assets/agendas/cc/2013/11-05-13/lpc_ltr_to_cc.pdf. The MPO staff has attended meetings of this group and will work with them and others interested in pedestrian transport issues as the MPO staff develops its Regional Pedestrian Plan.

At this point it appears that the MPO plan will focus mostly on pedestrian travel as part of the regional transport network and as such will focus on pedestrian facilities along regionally significant corridors (typically collector streets and higher class roads). The Pedestrian Coalition appears to be focused on all sidewalks including those on local residential streets and sidewalk conditions in general. With that focus the coalition may study some very specific details of sidewalk conditions along particular blocks. The MPO study may focus more on filling in gaps in the sidewalk network and improving the pedestrian environments along major roadways and roads with transit
routes. The MPO staff sees these two efforts as complementary and looks forward to working more with the Pedestrian Coalition this year.

**Rotation of Small City Voting Member on the MPO Policy Board** – the MPO staff has notified the three small cities in the region that the voting member of the MPO Policy Board will rotate from Lecompton to Baldwin City in January 2014. The Baldwin City-City Council has been asked to appoint one of its members to fill this slot on the MPO Policy Board for 2014.
Project Changes/Revisions

- **MPO#:200  KDOT#:K-8392-04**
  Increase 2012 State funding for Utilities from $15,800,000 to $19,865,000. Increase 2013 State funding for CE from $11,250,000 to $14,329,000. Decrease 2013 State funding for Construction from $150,000,000 to $132,085,000. Decrease 2014 NHPP AC Conversion for Utilities from $12,640,000 to $7,760,000. Decrease 2015 NHPP AC Conversion for Construction from $60,000,000 to $27,600,000. Increase 2015 NHPP AC Conversion for Construction Engineering from $7,000,000 to $9,438,000. Add $8,131,000 2015 NHPP AC Conversion for Utilities. Add $17,973,000 2015 STP AC Conversion for Construction. Decrease overall project costs from $186,100,000 to $175,329,000.

- **MPO#221**
  Move 2012 State funding for PE to 2014. Decrease 2014 HSIP funding for Construction from $200,000 to $180,000. Decrease 2014 Local funding for Construction from $33,000 to $18,000. Decrease 2014 Local funding for Construction Engineering from $11,000 to $1,000. Add $10,000 HSIP funding for Construction Engineering in 2014. Decrease overall project costs from $244,000 to $214,000.

- **MPO#:604**

### Revision #1:

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<th>KDOT *</th>
<th>Local</th>
<th>Total Programmed Funds</th>
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<td>(82,110)</td>
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<td>37,084</td>
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<td>230,333</td>
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Note: KDOT projects undergo fiscal constraint analysis prior to submission to MPO for TIP inclusion so all KDOT projects are presumed to be fiscally constrained.
*During Advanced Construction years KDOT totals reflect funds in which KDOT initially pays for project costs using state funds. During Advanced Construction conversion years, project funding becomes federal funds and KDOT state funds are credited back.
Negative values represent a balance where AC conversion outweighs KDOT total financial commitment in the region.
** 2013 State contribution includes TWORKS commitments for the South Lawrence Trafficway.

### Revision #2:

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<th>KDOT *</th>
<th>Local</th>
<th>Total Programmed Funds</th>
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<td>25,800</td>
<td>125</td>
<td>40,750</td>
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<td>2013</td>
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<td>2015</td>
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<td>35,051</td>
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### TIP 2012 - 2015 Total Funds Programmed in 1,000's

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<th>FY</th>
<th>Federal (STP, BR &amp; NHPP)</th>
<th><em>KDOT Funds</em>*</th>
<th><strong>Local Funds</strong>*</th>
<th>***Federal Transit Funds</th>
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* During Advanced Construction years KDOT totals reflect funds in which KDOT initially pays for project costs using state funds. During Advanced Construction conversion years, project funding becomes federal funds and KDOT state funds are credited back. Negative values represent a balance where AC conversion outweighs KDOT total financial commitment in the region.

** Includes regionally significant locally funded projects, match funding for federal aid road and bridge projects, and local match for federal transit funds.

*** Includes Transportation Alternative-TA, Transportation Enhancement-TE, Safe Routes to Schools-SRTS, High Risk Rural Roads-HRRR, Highway Safety Improvement Program-HSIP, and funds from any federal economic stimulus act passed during this TIP period.

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### Revision #1:

#### City of Lawrence - Funding Estimates and Funds Programmed In The TIP in 1,000's

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<th>Year</th>
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<th>KDOT Funds **</th>
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<td>2014</td>
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<td>6,705</td>
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<td>40,266</td>
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* Includes Surface Transportation Program-STP, Highway Bridge Program-BR, and Highway Safety Improvement Program-HSIP.

** Includes geometric improvement funds.

*** Includes regionally significant locally funded projects and local match for federal funds.

### Revision #2:

#### City of Lawrence - Funding Estimates and Funds Programmed In The TIP in 1,000's

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* Includes Surface Transportation Program-STP, Highway Bridge Program-BR, and Highway Safety Improvement Program-HSIP.

** Includes geometric improvement funds.

*** Includes regionally significant locally funded projects and local match for federal funds.
### FY 2012 to FY 2015 L-DC MPO TIP Projects (Cost in 1000's)

<table>
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<tr>
<th>Project Sponsor</th>
<th>MPO#</th>
<th>KDOT#</th>
<th>Length</th>
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**Project Name:** South Lawrence Trafficway  
**Route (to/from location):** SO Junct US 59/K10 E to K10  
**Project Type:** Road  
**Work Type:** Special Work, Right of Way  
**Project Scope:** Linked to Project L-8392-01.  
**Comments:** PE in 2009. State funds to be converted to NHPP and STP funds in 2014 & 2015.

#### FY 2012
- **Fund Source**  
  - State  
  - Utilities $19,865

#### FY 2013
- **Fund Source**  
  - State  
  - CE $14,329  
  - CONST $132,085

#### FY 2014
- **Fund Source**  
  - NHPP Utilities $7,760  
  - NHPP Const $60,000  
  - NHPP CE $2,000  
  - NHPP PE $6,852

#### FY 2015
- **Fund Source**  
  - NHPP Const $27,600  
  - NHPP CE $9,438  
  - NHPP Utilities $8,131  
  - STP Const $17,973

---

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<th>Project Sponsor</th>
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<td>KDOT</td>
<td>201</td>
<td>KA-2059-01</td>
<td>.001</td>
<td>$1,040</td>
<td>Advanced Construction</td>
</tr>
</tbody>
</table>

**Project Name:** Bridge Replacement on US-59  
**Route (to/from location):** US 59 over West Fork of Tasy Creek .14 mile N of DG/FR County Line  
**Project Type:** Road  
**Work Type:** Bridge Replacement  
**Project Scope:** Bridge Replacement.  
**Comments:** PE in 2011.

#### FY 2012
- **Fund Source**  
  - State  
  - Utilities $34

#### FY 2013
- **Fund Source**  
  - State  
  - CE $13  
  - Const $170  
  - NHPP CE $51  
  - NHPP Const $681  
  - NHPP PE/Util $72/$27

#### FY 2014
- **Fund Source**  
  - NHPP Utilities

#### FY 2015
- **Fund Source**  
  - NHPP Const

Page 4 of 33
## FY 2012 to FY 2015 L-DC MPO TIP Projects (Cost in 1000's)

<table>
<thead>
<tr>
<th>Project Sponsor</th>
<th>MPO#: 220</th>
<th>KDOT#: KA-1826-01</th>
<th>Length</th>
<th>Total Project Cost</th>
<th>Fund Source Phase Obligation AC Conversion</th>
<th>Project Scope</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-10/15th St./Bob Billings Pkwy Interchange</td>
<td></td>
<td></td>
<td>.5</td>
<td>$20,695</td>
<td>State Utilities $280</td>
<td>Construct Interchange</td>
<td>PE in 2010, $800,000 AC $200,000 State</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Sponsor</th>
<th>MPO#: 221</th>
<th>KDOT#:</th>
<th>Length</th>
<th>Total Project Cost</th>
<th>Fund Source Phase Obligation AC Conversion</th>
<th>Project Scope</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>9th &amp; Kentucky Intersection Improvements</td>
<td></td>
<td></td>
<td></td>
<td>$214</td>
<td>NHPP Utilities $224, NHPP CE $1,068, NHPP Const $13,018, NHPP PE $800</td>
<td>Replace existing traffic signal pole 2 mast arm. Widen roadway to add turn lanes.</td>
<td></td>
</tr>
</tbody>
</table>

### FY 2012
- **Project Sponsor**: KDOT
- **MPO#**: 220
- **KDOT#**: KA-1826-01
- **Length**: .5
- **Total Project Cost**: $20,695
- **Project Scope**: Construct Interchange
- **Comments**: PE in 2010, $800,000 AC $200,000 State

### FY 2013
- **Fund Source**: State Utilities $280

### FY 2014
- **Fund Source Phase Obligation AC Conversion**
  - State CE $1,335
  - State Const $16,272
  - State ROW $280
  - Local Const $1,528

### FY 2015
- **Fund Source Phase Obligation AC Conversion**
  - NHPP Utilities $224
  - NHPP CE $1,068
  - NHPP Const $13,018
  - NHPP PE $800

### FY 2012
- **Project Sponsor**: Lawrence
- **MPO#**: 221
- **KDOT#**: |
- **Length**: |
- **Total Project Cost**: $214
- **Project Scope**: Replace existing traffic signal pole 2 mast arm. Widen roadway to add turn lanes.

### FY 2013
- **Fund Source Phase Obligation AC Conversion**

### FY 2014
- **Fund Source Phase Obligation AC Conversion**
  - HSIP Const $180
  - Local Const $18
  - HSIP CE $10
  - Local CE $1
  - State PE $5

### FY 2015
- **Fund Source Phase Obligation AC Conversion**
### FY 2012 to FY 2015 L-DC MPO TIP Projects (Cost in 1000's)

<table>
<thead>
<tr>
<th>Project Sponsor:</th>
<th>KDOT</th>
<th>MPO#: 604</th>
<th>KDOT#:</th>
<th>Length:</th>
<th>Total Project Cost:</th>
<th>$1,500</th>
<th>✓ Advanced Construction</th>
</tr>
</thead>
</table>

**Project Name:** Various Railroad Safety Projects in the Region  
**Route (to/from location):**

**Project Type:** Safety  
**Work Type:**

**Project Scope:** Safety improvements along railroads in region as identified by KDOT. These funds may be used to benefit the region by working to correct or improve identified safety hazards at public railway-highway crossing in a proactive manner.

**Comments:** This is a master project that would include any safety projects selected in region. Conversion of 2015 State AC funds will occur in 2016 and be 2016 HISP-KS funds.

<table>
<thead>
<tr>
<th>Fund Source Phase</th>
<th>Obligation</th>
<th>AC Conversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2012 HSIP Const</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td>FY 2013 State Const</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td>FY 2014 State Const</td>
<td>$500</td>
<td></td>
</tr>
<tr>
<td>FY 2015 State HSIP Const</td>
<td>$500</td>
<td>$500</td>
</tr>
</tbody>
</table>
WHEREAS, the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) is designated as the Metropolitan Planning Organization (MPO) to carry out the Continuing, Cooperative and Comprehensive planning program (3C Process), including regional planning for a multi-modal transportation system that is coordinated with local comprehensive planning (land use, economic development, etc.) efforts; and

WHEREAS, the L-DC MPO acting as the MPO for the Lawrence-Douglas County Region is responsible for the creation, maintenance, and implementation of a Metropolitan Transportation Plan (MTP) that covers all of Douglas County including all four incorporated cities in the county (Baldwin City, Eudora, Lawrence, Lecompton); and,

WHEREAS, the L-DC MPO in its capacity as the MPO is responsible for programming transportation improvement funds in the regional Transportation Improvement Program (TIP) and has a role in assisting the state agencies and local governments of the region with securing funds to make transportation system improvements that are consistent with the region’s Metropolitan Transportation Plan; and,

WHEREAS, the following railroad depot and vicinity enhancement project is located at the site of a historic transportation hub in Baldwin City and is designed to enhance the traveling experience in Baldwin City and to implement land use and development plans for the City; and,

WHEREAS, this project is an important and desired scenic and environmental improvement located along the City’s transportation network; and,

WHEREAS, this project is designed to help make the Baldwin City transportation network more attractive and to create a space that is an important transportation and cultural asset for the Baldwin City community.

NOW, THEREFORE BE IT RESOLVED, that the Lawrence-Douglas County Metropolitan Planning Organization strongly supports and endorses the application made by the City of Baldwin City for Federal Transportation Alternatives (TA) funding for a Transportation Enhancement (TE) project described below. This project will be administered by the Kansas Department of Transportation (KDOT), and the L-DC MPO agrees to add this project to its Transportation Improvement Program (TIP) if funding for this project is awarded.
**Baldwin City Depot Area Enhancement Project**  
(Scenic/Environmental Category)

Project Location: 1515 High Street- south and west of the Baldwin City Depot along the southeast side of the existing railroad tracks

Project Description: The existing brick platform will be extended to the southwest with a roof structure extending down the center of the existing and new brick platform. This structure will provide seating and shelter from the sun and rain for those people wishing to board one of the many excursion trains leaving from the Baldwin City Depot. Ten exterior lights will be a part of the project. Additional ADA compliant parking spaces will be added in the parking lot. Additional landscaping and a picnic shelter will be provided on the adjacent park site.

<table>
<thead>
<tr>
<th>Total TA Project Cost</th>
<th>$210,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA Funds Requested</td>
<td>$140,000</td>
</tr>
<tr>
<td>Baldwin City Cash Match</td>
<td>$ 70,000  (33%) of TA project</td>
</tr>
</tbody>
</table>

APPROVED by the Lawrence-Douglas County Metropolitan Planning Organization at their meeting on January 16, 2014.

Bryan Culver, L-DC MPO Chairperson  
Scott McCullough, L-DC MPO Secretary
RESOLUTION

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) is designated as the Metropolitan Planning Organization (MPO) to carry out the Continuing, Cooperative and Comprehensive planning program (3C Process), including regional planning for a multi-modal transportation system that is coordinated with local comprehensive planning (land use, economic development, etc.) efforts; and

WHEREAS, the L-DC MPO acting as the MPO for the Lawrence-Douglas County Region is responsible for the creation, maintenance, and implementation of a Metropolitan Transportation Plan (MTP) that covers all of Douglas County including all four incorporated cities in the county (Baldwin City, Eudora, Lawrence, Lecompton); and,

WHEREAS, the L-DC MPO in its capacity as the MPO is responsible for programming transportation improvement funds in the regional Transportation Improvement Program (TIP) and has a role in assisting the state agencies and local governments of the region with securing funds to make transportation system improvements that are consistent with the region’s Metropolitan Transportation Plan; and,

WHEREAS, the following bicycle-pedestrian facility project is located in Eudora near two regionally significant transport routes and is designed to implement recent bikeway and pedestrian facility planning for the City of Eudora and to be consistent with the Eudora land use plans as well as the recently completed parks/trails plans for the City; and,

WHEREAS, this project is an important link in the region’s growing network of bikeway facilities and an important part of the region's multi-modal transportation system; and,

WHEREAS, this project is designed to help make walking and cycling more viable modes of transportation in, through and around Eudora and to encourage those non-motorized modes of travel to be used more frequently in the Lawrence-Douglas County Region.

NOW, THEREFORE BE IT RESOLVED, that the Lawrence-Douglas County Metropolitan Planning Organization strongly supports and endorses the application made by the City of Eudora for Federal Transportation Alternatives (TA) funding for a Transportation Enhancement (TE) project described below. This project will be administered by the Kansas Department of Transportation (KDOT), and the L-DC MPO agrees to add this project to its Transportation Improvement Program (TIP) if funding for this project is awarded.
Bicyclist and Pedestrian Bridge over K-10 Highway  
(Bike/Pedestrian Category)

Project Description and Location: This project will consist of a bike-pedestrian bridge over K-10 near the Church Street crossing. This bridge will connect the Middle School, High School, and business areas south of K-10 to the bulk of Eudora’s population north of K-10. Currently the only way to cross K-10 in this area is via Church Street, which is perceived as unsafe and uncomfortable for cyclists and pedestrians to use to cross this busy highway.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total TA Project Cost</td>
<td>$1,665,000</td>
</tr>
<tr>
<td>TA Funds Requested</td>
<td>$1,324,000</td>
</tr>
<tr>
<td>City Cash Match</td>
<td>$331,000 (20%) of TA Project</td>
</tr>
<tr>
<td>Additional City Costs for Project</td>
<td>$137,000</td>
</tr>
</tbody>
</table>

APPROVED by the Lawrence-Douglas County Metropolitan Planning Organization at their meeting on January 16, 2014.

Bryan Culver, L-DC MPO Chairperson        Scott McCullough, L-DC MPO Secretary
RESOLUTION

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) is designated as the Metropolitan Planning Organization (MPO) to carry out the Continuing, Cooperative and Comprehensive planning program (3C Process), including regional planning for a multi-modal transportation system that is coordinated with local comprehensive planning (land use, economic development, etc.) efforts; and

WHEREAS, the L-DC MPO acting as the MPO for the Lawrence-Douglas County Region is responsible for the creation, maintenance, and implementation of a Metropolitan Transportation Plan (MTP) that covers all of Douglas County including all four incorporated cities in the county (Baldwin City, Eudora, Lawrence, Lecompton); and,

WHEREAS, the L-DC MPO in its capacity as the MPO is responsible for programming transportation improvement funds in the regional Transportation Improvement Program (TIP) and has a role in assisting the state agencies and local governments of the region with securing funds to make transportation system improvements that are consistent with the region’s Metropolitan Transportation Plan; and,  

WHEREAS, the following scenic/environmental, bicycle-pedestrian facility, and historic project is located in Lawrence near regionally significant transport routes as well as a major traffic generator, namely the University of Kansas campus, and is designed to implement recent bikeway and pedestrian facility planning for this important part of the Lawrence Urbanized Area; and,

WHEREAS, this project is an important link in the region’s growing network of bikeway facilities and an important part of the region's multi-modal transportation system; and,

WHEREAS, this project is designed to remove pollutants from stormwater runoff and to reduce the volume of stormwater discharged from the campus to downgradient areas of the City of Lawrence that experience flooding in and along streets during major precipitation events; and,

WHEREAS, this project is designed to help make walking and cycling more viable modes of transportation on and around the KU campus and to encourage those non-motorized modes of travel to be used more frequently in the Lawrence-Douglas County Region.

NOW, THEREFORE BE IT RESOLVED, that the Lawrence-Douglas County Metropolitan Planning Organization strongly supports and endorses the application made by the University of Kansas for Federal Transportation Alternatives (TA) funding for a Transportation Enhancement (TE) project described below. This project will be administered by the Kansas Department of Transportation
(KDOT), and the L-DC MPO agrees to add this project to its Transportation Improvement Program (TIP) if funding for this project is awarded.

Jayhawk Boulevard Reconstruction - Phases 3 and 4
Sunflower Road to 13th Street
(Primary Category: Scenic/Environmental; Secondary Categories: Bike/Pedestrian and Historic)

Project Location: This project is located in the heart of the University of Kansas Campus in Lawrence, Kansas, within the University of Kansas Historic District.

Project Description: This project will involve the reconstruction of a section of the historic main avenue on the KU campus to replace aged pavement, sidewalks, landscaping, lighting, and utilities. This project will also include enhancements to improve scenic views and beautification, treat and store storm water runoff, reduce energy use, increase accessibility and safety, encourage pedestrian and bicycling travel, and restore historic features along this roadway.

Total TA Project Cost $5,050,320
TA Funds Requested $3,419,724
KU Cash Match $1,465,596 (30%) of TA project
Additional KU Project Costs $1,232,000

APPROVED by the Lawrence-Douglas County Metropolitan Planning Organization at their meeting on January 16, 2014.

Bryan Culver, L-DC MPO Chairperson
Scott McCullough, L-DC MPO Secretary
APPLICATION FORM
2014

PRIMARY CATEGORY: Scenic & Environmental

DATE: __________________________

PROJECT AREA/LENGTH: 3 acres

REQUESTOR: The University of Kansas

GOVERNMENT AGENCY: The University of Kansas

COUNTY: Douglas

PROJECT LOCATION: Jayhawk Blvd, from Sunflower Road to 13th Street on KU's campus in Lawrence, Kansas, 66045. The project is within the University of Kansas Historic District listed in the state and national registers of historic places. The coordinates are approximately 38°57'26.5"N, 95°14'45.3"W (west end) to 38°57'36.3"N, 95°14'34.4"W (east end).

PROJECT DESCRIPTION: Jayhawk Blvd. Reconstruction - Phases 3 & 4 will replace aged pavement, sidewalks, landscaping, lighting, and utilities with enhancements to improve scenic views and beautification, treat and store stormwater runoff, reduce energy use, increase accessibility and safety, encourage pedestrian/bicycle use, and restore historic features.

COST ESTIMATE:

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Cost</th>
<th>Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Cost</td>
<td>$4,610,320</td>
<td>eligible</td>
</tr>
<tr>
<td>Right-of-Way Cost</td>
<td>$0</td>
<td>non-eligible</td>
</tr>
<tr>
<td>Utility Adjustment Cost</td>
<td>$165,000</td>
<td>non-eligible</td>
</tr>
<tr>
<td>Construction Engineering</td>
<td>$275,000</td>
<td>eligible</td>
</tr>
<tr>
<td>TOTAL PROJECT COST</td>
<td>$5,050,320</td>
<td></td>
</tr>
</tbody>
</table>

*Note: This omits an estimated $1,067,000 of other non-eligible costs for design, new water line, and wayfinding signs.

% Federal Aid Requested: 70% = $3,419,724 federal share (56% of all project costs)

% Local Match 30% = $1,465,596 30% local match + $1,232,000 100% non-eligible costs + $2,697,596 local share (44% of all project costs)

% Minimum of 20%

Please check any secondary category:

☑ Bicycle/Pedestrian
☑ Historic
☐ Scenic/Environmental

Postmark by February 14th, 2014 to:

Kansas Dept. of Transportation
Eisenhower State Office Building
Bureau of Transportation Planning
700 SW Harrison Street
Topeka, KS 66603-3754

Theresa Gordzica
Contact Person

Chief Financial Officer
Title

1450 Jayhawk Blvd., Room 225
Street Address

same
Mailing Address

Lawrence, KS 66045
City and Zip Code

Phone # 785-864-4868
Fax # 785-864-5599
email address: tgordzica@ku.edu

Signature of Contact Person
<table>
<thead>
<tr>
<th>Item #</th>
<th>Unit</th>
<th>Quantity</th>
<th>Item Description:</th>
<th>Unit Price</th>
<th>Extension</th>
<th>% of Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>LS</td>
<td>1</td>
<td>Mobilization</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>2.45%</td>
</tr>
<tr>
<td>2.</td>
<td>LS</td>
<td>1</td>
<td>Temporary Erosion Control</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
<td>0.41%</td>
</tr>
<tr>
<td>3.</td>
<td>LS</td>
<td>1</td>
<td>Temporary Construction Fence, Temporary Walkways</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
<td>1.63%</td>
</tr>
<tr>
<td>4.</td>
<td>LS</td>
<td>1</td>
<td>Temporary Traffic Control</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
<td>0.82%</td>
</tr>
<tr>
<td>5.</td>
<td>LS</td>
<td>1</td>
<td>General Demolition (Utilities, Signs, Trees, etc)</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>2.45%</td>
</tr>
<tr>
<td>6.</td>
<td>SY</td>
<td>7,600</td>
<td>Remove Existing Pavement</td>
<td>$15.00</td>
<td>$114,000.00</td>
<td>1.86%</td>
</tr>
<tr>
<td>7.</td>
<td>LF</td>
<td>4,000</td>
<td>Remove Existing Curb</td>
<td>$12.00</td>
<td>$48,000.00</td>
<td>0.78%</td>
</tr>
<tr>
<td>8.</td>
<td>SY</td>
<td>4,200</td>
<td>Remove Concrete/Brick Sidewalk &amp; Base Rock</td>
<td>$10.00</td>
<td>$42,000.00</td>
<td>0.69%</td>
</tr>
<tr>
<td>9.</td>
<td>LS</td>
<td>1</td>
<td>Excavation and Embankment</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
<td>4.90%</td>
</tr>
<tr>
<td>10.</td>
<td>SY</td>
<td>7,600</td>
<td>12&quot; KDOT AB-1 Aggregate Base Course Under PCCP</td>
<td>$16.00</td>
<td>$121,600.00</td>
<td>1.99%</td>
</tr>
<tr>
<td>11.</td>
<td>SY</td>
<td>7,600</td>
<td>8&quot; Non-Reinforced Dowel-Jointed PCCP</td>
<td>$85.00</td>
<td>$646,000.00</td>
<td>10.56%</td>
</tr>
<tr>
<td>12.</td>
<td>LF</td>
<td>4,000</td>
<td>2'-0&quot; Curb and Gutter</td>
<td>$25.00</td>
<td>$100,000.00</td>
<td>1.63%</td>
</tr>
<tr>
<td>13.</td>
<td>SY</td>
<td>4,200</td>
<td>6&quot; KDOT AB-1 Aggregate Base Under Sidewalk</td>
<td>$8.00</td>
<td>$33,600.00</td>
<td>0.55%</td>
</tr>
<tr>
<td>14.</td>
<td>SY</td>
<td>3,700</td>
<td>5.5&quot; Thick Concrete Sidewalk</td>
<td>$60.00</td>
<td>$222,000.00</td>
<td>3.63%</td>
</tr>
<tr>
<td>15.</td>
<td>SY</td>
<td>500</td>
<td>Brick Walk with Banding at Union</td>
<td>$150.00</td>
<td>$75,000.00</td>
<td>1.23%</td>
</tr>
<tr>
<td>16.</td>
<td>EA</td>
<td>30</td>
<td>Sidewalk Ramp</td>
<td>$4,000.00</td>
<td>$120,000.00</td>
<td>1.96%</td>
</tr>
<tr>
<td>17.</td>
<td>LS</td>
<td>1</td>
<td>Landscaping / Stormwater Treatment-Storage System</td>
<td>$500,000.00</td>
<td>$500,000.00</td>
<td>8.17%</td>
</tr>
<tr>
<td>18.</td>
<td>LF</td>
<td>1,400</td>
<td>Storm Sewer</td>
<td>$170.00</td>
<td>$238,000.00</td>
<td>3.89%</td>
</tr>
<tr>
<td>19.</td>
<td>EA</td>
<td>15</td>
<td>Curb Inlet</td>
<td>$6,000.00</td>
<td>$90,000.00</td>
<td>1.47%</td>
</tr>
<tr>
<td>20.</td>
<td>EA</td>
<td>10</td>
<td>Junction Box</td>
<td>$5,000.00</td>
<td>$50,000.00</td>
<td>0.82%</td>
</tr>
<tr>
<td>21.</td>
<td>LS</td>
<td>1</td>
<td>Pavement Repair (Side Street &amp; Storm Sewer Extension)</td>
<td>$180,000.00</td>
<td>$180,000.00</td>
<td>2.94%</td>
</tr>
<tr>
<td>22.</td>
<td>LS</td>
<td>1</td>
<td>Pavement Marking</td>
<td>$75,000.00</td>
<td>$75,000.00</td>
<td>1.23%</td>
</tr>
<tr>
<td>23.</td>
<td>LS</td>
<td>1</td>
<td>Permanent Signage</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>2.45%</td>
</tr>
<tr>
<td>24.</td>
<td>EA</td>
<td>25</td>
<td>Security Cameras Including Conduits and Wiring</td>
<td>$3,000.00</td>
<td>$75,000.00</td>
<td>1.23%</td>
</tr>
<tr>
<td>25.</td>
<td>LS</td>
<td>1</td>
<td>Lighting / Electrical</td>
<td>$300,000.00</td>
<td>$300,000.00</td>
<td>4.90%</td>
</tr>
<tr>
<td>26.</td>
<td>EA</td>
<td>6</td>
<td>Bus Arrival / Departure Monitors</td>
<td>$6,000.00</td>
<td>$36,000.00</td>
<td>0.59%</td>
</tr>
<tr>
<td>27.</td>
<td>LS</td>
<td>1</td>
<td>Construction Engineering (Inspections, Testing, etc)</td>
<td>$250,000.00</td>
<td>$250,000.00</td>
<td>4.09%</td>
</tr>
<tr>
<td>28.</td>
<td>LS</td>
<td>1</td>
<td>Permit/Miscellaneous Fees</td>
<td>$200,000.00</td>
<td>$200,000.00</td>
<td>3.27%</td>
</tr>
</tbody>
</table>

**Subtotal Eligible Costs** $4,441,200.00 72.60% 10% Contingency $444,120.00 7.26% **Total Eligible Costs** $4,885,320.00 79.86%

**NON-ELIGIBLE COSTS**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Unit</th>
<th>Quantity</th>
<th>Item Description:</th>
<th>Unit Price</th>
<th>Extension</th>
<th>% of Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>29.</td>
<td>LF</td>
<td>3,000</td>
<td>Water Line Replacement</td>
<td>$140.00</td>
<td>$420,000.00</td>
<td>6.87%</td>
</tr>
<tr>
<td>30.</td>
<td>LS</td>
<td>1</td>
<td>Utility Adjustments / Relocations</td>
<td>$150,000.00</td>
<td>$150,000.00</td>
<td>2.72%</td>
</tr>
<tr>
<td>31.</td>
<td>EA</td>
<td>10</td>
<td>Wayfinding Signs</td>
<td>$5,000.00</td>
<td>$50,000.00</td>
<td>0.82%</td>
</tr>
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**GRAND TOTALS**

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**Introduction: A Historic Boulevard for the 21st Century**

The University of Kansas is recognized as having one of the most beautiful campuses and dramatic settings in the country. Following the historic trails along Mount Oread, Jayhawk Boulevard is KU’s definitive organizing feature and most symbolic public space.

This booklet summarizes the Schematic Design to rebuild Jayhawk Boulevard for its second century. By combining historic preservation, multimodal transit, and sustainable design, this plan can set KU at the forefront for a new generation of campus planning that is both cost-effective and sensitive to history and ecology.

**Major Benefits and Outcomes**

This plan is both “conservative” in its relative costs and historic appropriateness yet “visionary” in its materials selection, species mixes, and water management. It combines state-of-the-art thinking in Integrated Water Management and street tree arboriculture with a full rehabilitation of Jayhawk to its approximate dimensions in 1938.

To be implemented in four phases, this Schematic Design preserves the best of Jayhawk Boulevard’s historic character while offering four major benefits:

1. Improved Transit and Pedestrian Safety
2. Safer and More Efficient Bicycle Access
3. Green Solutions for Stormwater Management and Irrigation
4. Create additional places and spaces along the boulevard where there is social and civic value to student life.
5. Revived Historic Street Tree Canopy and Surrounding Landscapes

Each of these benefits will be explained through illustrations, written guidelines, section and plan views in Chapter Three.

**A Model for Future Planning**

KU has a long history of innovation and precedent setting, and the challenge of rehabilitating Jayhawk Boulevard is a new, and potentially historic, opportunity. As a visible and model project, Jayhawk Boulevard can become a strong expression of the University's commitment to sustainability and to historic preservation. In the long-term, the full coordination of historic preservation, asset management and sustainable best practices can become a theme for design projects within the campus master planning process.

The following chapters outline how the University can achieve a sophisticated plan for Jayhawk Boulevard by building on some of its basic precedents in the campus's architectural and ecological history.

- Chapter One explores historic design precedents and the findings of KU's Campus Heritage Plan as grounding for defining essential historic character and future solutions for its stewardship
- Chapter Two reviews community input from the recent planning process and the state current conditions and challenges.
- Chapter Three illustrates design strategy through practical solutions for transit, circulation, historic preservation of building lawns, and sustainability.
Chapter One: Historic Lessons for Future Planning

Since its origins in the old campus and throughout the generations, Jayhawk Boulevard has developed its own character-defining sophistication as one of America’s greatest campus boulevards. Many of these precedents can guide us in creating a renewed street that respects the past, improves function, and serves as a pacesetting green design.

The Grand Campus Boulevard

In 1904, when they drew their majestic watercolor plan for Mount Oread, landscape architects George Kessler and Henry Wright envisioned a public space that could transform a small campus into a great university. They envisioned a curving boulevard following the historic trails of the Mount Oread ridgeline that could accommodate generations of growth and change. Framed by street trees and sweeping lawns, the boulevard would resemble the extensive parkways that Kessler planned for Dallas and Kansas City. As in Denver, where he would propose setting parks on high points offering the best views of the front range of the Rocky Mountains, Kessler sited buildings on KU’s “mountain” to capture the longest views over Lawrence and the Kaw valley.

In the 1920s and 1930s, as the street trees grew and automobiles grew in number, Jayhawk Boulevard matured into one of the grandest university streets in the country. Thousands of students walked along it everyday to experience a range of architectural styles. While the street trees framed a consistent and linear canopy, the spaces beyond them changed in size as one walked toward Chi Omega or east toward Spooner and Dyche Halls, the heart of the 19th century campus. Some buildings such as the Neo-Classical Lippincott with its columns and front porch created a tightly framed space as the Boulevard curved. In other segments, such as the forest quad in front of the library and Stauffer-Flint, there was a large park-like space beyond the sidewalk, a large, outdoor room combining architectural formality and pastoral shaded lawns. Most dramatic of all were the views eastward over Lawrence and the Kaw River Valley.

All of these experiential qualities are “character-defining” historic landscape features that remain along Boulevard today. They offer design opportunities for rehabilitating Jayhawk to meet 21st century needs. By understanding the historic spaces and scale of the Boulevard we can meet historic preservation objectives. Indeed, the design that Kessler and Wright developed at the beginning of the 20th century for the extension of campus afforded ample expansion room for today’s needs such as emergency vehicles, bus transit, and bicycles.

In the 19th century, the University of Kansas grew along the top of Hogback Ridge later, and more elegantly, renamed Mount Oread—in reference to the nymphs who inhabited the mountains in Greek mythology.

As a new home to students and professors, this linear sharp hill fostered exceptional views extending to the horizon (see figure 2), and, more importantly, it determined drainage patterns and how surface water was to move on campus.

This ridge, visible for miles, was one of the first major topographic landmarks for pioneers on the Oregon Trail after they crossed the Wakarusa River Valley. With its spreading wing-like hillsides, Mount Oread is the single most distinguishing feature of KU’s landscape and the reason that Jayhawk Boulevard is such an important organizing force for the campus.
1938 as a Baseline for Rehabilitating Jayhawk Boulevard

Throughout its history, the campus has reached certain “high periods” or points where the intentions of previous generations came to fruition and the intended qualities of campus leaders were fully apparent. Thirty years after the construction of Kessler and Wright’s Jayhawk Boulevard, the University had completed most of the grand buildings that stand today. After three decades in the ground, the elm trees that lined it were begging to mature into large plantings that nearly shaded the entire street.

“Acorn” style streetlights created soft pools of light and elegant “scored” sidewalks introduced texture and lines that paralleled the curve of Jayhawk. 1938 marked a time when the vision of the campus’s leaders to build a great university on Mount Oread had been achieved.

In this time when the country was slowly coming out of the Great Depression and had yet to enter World War 2, Jayhawk Boulevard, came to achieve a pure expression of its character-defining features. Refined by the noted Kansas City landscape architects Hare & Hare to a width of roughly 36 feet, the street was both intimate in pedestrian scale and able to accommodate many cars and people everyday. For this reason of function and character, 1938 is the time period that will best serve as model for rehabilitating Jayhawk for the future.
Building on Jayhawk’s Character-Defining Features

The wide asphalt boulevard is lined with concrete walks, planters and deciduous trees. The gentle curve of the street follows the ridge of Mount Oread and forms the central spine of the primary academic area of campus. The curving boulevard, once shaded by a canopy of American elms (Ulmus americana), is anchored by monumental buildings and woven into a whole with greenspaces and plantings. **

The character-defining patterns are key factors in the historic campus and should be maintained. These features for the basis of “historic character” - and without them, the distinct identity of Jayhawk Boulevard would be compromised. For this reason, understanding the spatial, planting, material, and circulation patterns of this historic Boulevard is essential for an historically-appropriate Schematic Design.

In April of 2013, the University of Kansas successful secured the designation of area adjacent to Jayhawk Boulevard as a Historic District on the National Register of Historic Plan as determined by the United States Department of the Interior and National Parks Service.

The District is the highly-intact campus of an institution of higher learning. The core of the University of Kansas Historic District currently retains all of the physical features that convey associations with its educational function: the design elements that communicate the influence of numerous architects and landscape architects and unifying features that illustrate the campus as an outgrowth of that specific location. It retains excellent integrity of location, setting, design, materials, and workmanship, and therefore shall be sensitively retained as such. **

To the left, this photo of Jayhawk, circa 1935 exhibits several character-defining features that can guide the rehabilitation of the boulevard today. They include: even rhythms of street trees, consistent scale, scored sidewalks, and smooth, shaded lawns.

Source: University Archives, Kenneth Spencer Research Library, University of Kansas.
1. Consistent Tree Canopy

As you walk along Jayhawk Boulevard, generations of architectural styles and varied open spaces unfold. Each day, thousands of students have this experience as they walk along this corridor. Over the generations, the Boulevard’s trees were planted, grew up, died off, and were replanted in stages, sometimes with other species. Today, the overall spatial continuity of the Boulevard’s tree canopy has declined. A unified and renewed tree canopy can heighten this pedestrian experience while also maturing into a dramatic linear space that strengthens KU’s identity.

To restore this linear spatial character, this project should:

- **Respect the heritage of formal row planting arrangements in terms of individual tree spacing and relationship to the curb line.**

- **Reflect the heritage of tree species selection in future Jayhawk Boulevard improvements.**

- **In response to the prospect of climate change, consider tree replacements with more drought tolerance but similar species to retain continuity over time.**

- **Incorporate biodiversity into the street tree planting palette to ensure species survival, and through the selection of culturally adapted, long-lived, and large street tree species.**
2. Historic Lawns and Building Entries

During the campus’s maturation in the 1930s, Jayhawk Boulevard had less concrete and more grass along its alignment. Buildings such as Strong, Bailey, and Lippencott Halls connected to Jayhawk Boulevard with front entries and steps, generally framed by symmetrical plantings. During the 1930s and 1940s, the lawns of grass between these entries and Jayhawk’s sidewalks

Over the decades, with increased bus traffic, bus stops, bike storage needs, kiosks, lighting and other elements, these lawns shrank and the verdant character of the space between buildings and the Boulevard diminished. The Campus Heritage plan identified the diverse mix of shrubs and trees chosen by landscape architects Hare & Hare for these areas. As with the restoration of the street tree canopy, there are numerous options today to restore the historic character of building entries and side lawns with sustainable and lasting varietals.

To restore this historic landscape character, this project should:

- Relocate bus stops as recommended to concentrate and celebrate waiting areas as transit gardens.
- Remove as much paved area as possible associated with former transit stops.
- Restore historically-appropriate trees, shrubs, and lawn areas.
- Use captured storm water from rain gardens for irrigation.
3. Sweeping Lawns and Ground Planes

Beyond the sidewalks and tree canopy, Jayhawk Boulevard historically looked out over broad lawns and ground planes.

To restore this historic landscape character, this project should:

- Design for smooth ground planes and grass lawn transitions between sidewalk and vegetated areas. Minimize non-historic period intrusions such as areas of expansive concrete, hedges, kiosks, over-scaled signage, and street furniture.

4. Viewsheds

As a very distinct geographic feature in the plains, Mount Oread once offered broad views that slowly grew obscured by the growth of volunteer and planted vegetation.

To restore long views and an expansive sense of space, this project should:

- Remove overgrown vegetation between buildings
- Where possible, remove intrusive objects such as barriers and signs.
- Celebrate the views and viewsheds when possible.

Source: University Archives, Kenneth Spencer Research Library, University of Kansas.
Designing Jayhawk as a Chain of Landscapes and Spaces

We recommend a design strategy that respects heritage and functional requirements, retains the maximum number of existing trees, while emphasizing areas of different character along Jayhawk.

The Heritage Plan identified treatment zones and sub-zones that respond to character-defining features during the evolution and development of Jayhawk Boulevard. These treatment zones (generally separated into visually self-contained segments or “linear outdoor rooms”) allow for the incorporation of different tree species while maintaining a historically appropriate spatial continuity and palette of trees over the full length of Jayhawk.

The planting recommendations to follow in chapter three are based on Hare & Hare’s planting palettes as well as surrounding vegetation and buildings to find acceptable species that are appropriate to specific periods of development along Jayhawk Boulevard.

Many of these species have improved cultivars that would provide a “biologically controlled” diversity. Changes in species should occur with changes in Boulevard alignment and spatial rooms. Consistent form, texture and uniform symmetry is most important along Watson Quad, Stauffer-Flint Quad, Strong Front Yard and Chi Omega Gateway.
Planting Jayhawk for long-term Uniformity in Structure, Color, and Maintenance

From the 1920s until the mid-1980s, Jayhawk Boulevard was planned as a visually distinctive tree-lined avenue that forms a series of outdoor spaces as shown to the right, circa 1935. There is a direct simplicity in the use of street trees, lawns, sidewalks, and minimal ornamental planting.

The use of American Elm reflected the era’s prevailing concerns for formalism, durability, suitability for climate and soils, structural form and interest. The KU Campus Heritage Plan advanced leading theory about the role of such cultural landscapes in complementing and adding to the architectural heritage of the campus.

Beyond the more familiar campus preservation focus on architecture alone, the landscape renewal guidelines in KU’s Heritage Plan emphasize the form-giving quality of trees as a part of the campus’s remembered character. Because of this integration of plantings with architectural form, KU’s heritage planning is now recognized nationwide in cultural landscape preservation. Spatial patterns in vegetation are a key focus of the Plan’s recommendations for Jayhawk Boulevard; and the current replanting project is an important first step in putting the Heritage Plan to work in a cost-effective demonstration project for the University.

Looking west down Jayhawk Boulevard
Source: University Archives, Kenneth Spencer Research Library, University of Kansas.
Chapter Two: Jayhawk Boulevard Today - Challenges and Opportunities

Existing Crossings and Pedestrian Control

This diagram shows existing pedestrian circulation paired with pedestrian control measures. Pedestrian control measures are lengths of the streetscape where pavement from the sidewalk does not meet the Jayhawk Boulevard curb. Significant breaks in the pedestrian control mechanisms (indicated by the blue lines) give the pedestrian more opportunities to cross at their own discretion. This results in a fairly chaotic and potentially unsafe condition.
Existing Activity Zones, Gathering, and Social Areas

The activity zones depict where circulation and social activity occur. These areas are often located adjacent to building entrances. Many of the transition zones at building entries (such as Snow Hall, Bailey Hall, and Lippincott) have been greatly compromised by bus stops.
Historic Rooms, Landscape Vestiges, and Open Space

The historic rooms are expansive spaces/quads adjacent to Jayhawk Boulevard. These spaces have been preserved from original University of Kansas Campus attributes. They serve a great function for campus gatherings, student culture, and campus aesthetics.
Outward Viewsheds and Vistas

Viewsheds arise from the profound topography surrounding Jayhawk Boulevard and are visible from most historic rooms. Far-reaching, excellent views are primarily south and east facing along Jayhawk Boulevard, and tie the University to a regional context of landform. Views to the north are primarily internal and reinforce the historic building environs, character defining landscape features, and the spatial moments along the Boulevard’s corridor.
Existing Street Parking and Potential Multi-Modal Transit Conflicts

This diagram illustrates the location of current on-street parking along the Boulevard. It shows 41 parking spaces in the core area with six additional spaces for drivers with limited mobility. Jayhawk Boulevard was planned and built before the automobile became a dominant presence in the life of American towns and campuses. Historic photos show the evolution of Jayhawk along with the makes and style of the cars that parked along it. Today, this street parking is more of a vestige of the past than a key part of the campus’s overall parking resources.

Previous planning studies have identified Jayhawk Boulevard as an important bicycle route for the campus and the City, however aside from bicycle racks (which are well utilized) there are no facilities on the boulevard that support or encourage cycling. Within the context of the corridor, and particularly the high levels of pedestrians moving in all directions both sides of the roadway, exclusive bicycle lanes within the roadway is the preferred option. These separate cyclists from the large volume of buses using Jayhawk Boulevard, thereby providing an increased level of comfort and safety. Highly visible bicycle lanes on such a prominent campus road also affirm to the campus community and visitors the value and potential of cycling as means of traveling on the campus.

The proposed transformation of the boulevard offers a unique opportunity to achieve this goal. However, exclusive bicycle lanes cannot be accommodated with the roadway width if parking remains on the road. The number of spaces that would be removed is minimal, representing about half a percent of all the parking on the campus. The few accessible spaces that would be displaced can be relocated adjacent or close to ADA accessible entrances on the rear of buildings facing the boulevard, and other permit holders can readily be absorbed in permit lots in the academic core area.
**Circulation Conflicts**

The conflicts diagram overlays existing circulation conditions with social and historical attributes. Jayhawk Boulevard does not have a strong sense of pedestrian control via designated crosswalks and defined edges. It can be noted that the existing bus stops are not viably placed when considering the pedestrian circulation patterns.

The street is trying to function as a multi-modal corridor, but conflicts between modes such as: cars, buses, parking, and pedestrians are a significant concern that need design structure in order to bring these conflicts to a resolution.
Overall Current Conditions and Historic Framework

The Historic Framework diagram overlays important attributes documented as historically significant along Jayhawk Boulevard and their preservation is strongly desired. Activity zones are found along the perimeter of the historic rooms. The historic rooms are expansive spaces/quads and can serve as activity areas as well. Viewsheds arise from the profound topography surrounding Jayhawk Boulevard and are visible from most historic rooms.
Chapter Three: Design Concepts and Strategies

In the next century, Jayhawk Boulevard will continue to be the center of the University and a defining place in the memories of students. But, with increasing campus student enrollment and emerging programs, the Boulevard will also become a corridor for many modes of transit with connections to surrounding communities, parking areas, and campus entry points. This Schematic Design creates a solution to meet these needs while retaining the 36-foot road width that dates back to 1938, the high point in campus evolution, and in this process identifies a baseline for future corridor planning and agreeing upon in previous studies - a historic district designation.
View from Chi Omega Fountain

Looking southeast from the Chi Omega Fountain, this elevated view shows the fully-realized Schematic Design for Jayhawk Boulevard. Scored sidewalks follow the corridor respecting the scale, texture, and location of historic precedents. At the center of the boulevard, two (2) 6-foot bike lanes are clearly marked with concrete tinted a light gray and delineated in a pattern reminiscent of the sidewalks. At curbside, two 12-foot lanes will serve buses, emergency and service vehicles.

Comprised of several different yet complementary species, the restored street trees will grow into maturity as a consistent and long-lasting boulevard canopy. Built of local stone used in adjacent buildings, subtle seating walls and gateways will accommodate pedestrians and accent the street while also respecting historic character.
A Dynamic Transit Corridor for the 21st Century

Looking southeast, this pedestrian view of Jayhawk shows the proposed low stone seating walls, diverse new street trees, storm water gardens beneath them along the curbs, and the mix of bike and transit lanes. Subtle "shoebot" lampposts will create pools of light at designated pedestrian crossings and along sidewalks. With its visual simplicity, efficient bus arrival and boarding, and stormwater management, this Schematic Design will create a highly-functional and beautiful transit corridor appropriate for the historic setting.
Jayhawk Boulevard with multimodal lane
Source: The offices of Hanbury Evans Wright Vlattas and Jeffrey L. Bruce & Company
Concept for the Chi Omega Gateway

This sidewalk level view of the Chi Omega gateway shows the possibility of new gatehouses in local stone and a main gateway structure at the entry to the boulevard. Although the details and extent of these new structures will be a subject for further study in design development, this Schematic Design shows the integration of stone, flowers, entry signage, and the materials that characterize much of Jayhawk’s architecture.
Chi Omega Fountain and gateway to Jayhawk Boulevard
Source: The offices of Hanbury Evans Wright Vlattas and Jeffrey L. Bruce & Company
Jayhawk Boulevard as a Complete Street

As University policy, future improvements to Jayhawk Boulevard should incorporate the concept of Complete Streets. Complete Streets is a design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods. The basic components of a Complete Street for Jayhawk Boulevard include sidewalks, bicycle lanes, crosswalks, landscaped verges (area between street curb and sidewalk), transit gardens, raised crosswalks, trees, landscaping and green stormwater features.
Pedestrian Crossing Tables

A key element of improving the pedestrian experience and safety is the introduction of raised pedestrian crosswalks. These crossings, often referred to as tables, serve a number of functions.

By elevating the roadway to the level of the sidewalk, pedestrian circulation is enhanced and clarified. The crossing tables send a message to all traveling on Jayhawk that the dominant user is the pedestrian. By eliminating the need to drop down to the level of the roadway, those on the paths have an easier time crossing Jayhawk, particularly in the winter months when ramps may be slick. The crossings also serve to clarify the crossing points along Jayhawk, reducing the inclination and ability to dart in front of traffic. For vehicles, the tables serve to elevate pedestrians, increasing their visibility. The table also serves to more clearly notify drivers of crossing locations, both through its height and differing tone and texture. The vertical deflection is well-proven to slow drivers down, reducing the likelihood of a collision with a pedestrian (by increasing reaction time) and reducing the potential for injury in the unfortunate situation should a collision occur. At the same time, the slope of the ramp will be sufficiently gentle to provide a smooth ride at the posted speed limit.
Multimodal Lanes

A central element of the Jayhawk vision is the creation of a center, multimodal lane. When complete, the lane will provide a lane exclusively for the use of bicycles. While bicycles have long shared the use of Jayhawk with others, there has not been room, until now, to provide dedicated space on the roadway by eliminating parking. Yet with increasing use of the KU and City bus system, bus frequency on Jayhawk is high and there are regular conflicts between buses and bikes. These primarily occur along the curb as buses pull in and out from stops. By creating a center lane, buses can freely and safely stop without crossing paths with a cyclist. Moreover, the center lane provides a bold statement to the university and broader community about KU’s commitment to creating a bike-friendly campus. Bicyclists will enter and exit the lanes at either end of the Boulevard as if it were any other lane of traffic, albeit one to the left of the general purpose lane. Should they need to turn right, they can either merge into a general traffic lane or stop at a crosswalk, dismount, and cross like a pedestrian. Left turns can be accomplished from the bike lane directly.

Creating a center multimodal lane is not entirely new. A great precedent can be found along Pennsylvania Avenue in Washington DC. Section 3D.02 of the Manual on Uniform Traffic Control Devices (MUTCD) shares industry standards on how to properly mark a center bike lane.
Bicycle Access and Safety

A central part of improving bicycle access and safety along Jayhawk Boulevard is the introduction of the multimodal lanes. These will provide a dedicated portion of the roadway for bicycles and separate bicycle traffic from cars and, particularly, buses. Moreover, by showing the commitment to bicycles on the campus – and in the broader community – this increases overall awareness of bicyclists and the presence of bicycles. Much of bicycle safety is ensuring the motorists, and pedestrians, are aware of the potential presence of bicycles and watch for them as they travel. The raised crosswalks along Jayhawk will also ensure that vehicle speeds along the Boulevard remain at levels that are compatible with bicycle traffic. In addition to promoting bicycles along the Boulevard, the updates to the streetscape will also ensure that bicycles are fully accommodated off the street. The plan will ensure that bicycle parking is sufficient and appropriately placed in relation to both buildings and accessible from Jayhawk.
Recognizing the Changing Role of Jayhawk Boulevard

Jayhawk Boulevard was originally conceived as a wide public street or thoroughfare for vehicular travel and parking to accommodate the increased use of automobiles by the general public. It also provided a convenient way to provide service to the buildings as they were built along the ridge. Like many of the civic boulevards that George Kessler planned, Jayhawk was lined with stately trees that provided shade and helped to separate car traffic from pedestrians on the sidewalks. This original design has remained as the foundation of the historical context of the boulevard. This urban topology is unique to the University of Kansas and should be maintained.

Over the years the core campus on Jayhawk Boulevard significantly increased classroom density that has resulted in much higher pedestrian traffic. During the same period of time vehicular traffic by student transit buses and delivery services also increased on the boulevard to the point where public access to Jayhawk Boulevard was restricted during week days. As public transportation began to route service along Jayhawk Boulevard the function of the corridor has gradually shifted from a public street to more of a transit corridor.

Corridor Design Considerations

- Removed parking.
- Retain 36-foot width.
- 12-foot lanes.
- Center bicycle lane and special scoring.
- Resolve pedestrian conflicts at transit gardens (bus stops).
Reconsidering Jayhawk Boulevard as a Transit Corridor

Our analysis of Jayhawk Boulevard attempts to look at the functionality of the corridor through the lens of a transit corridor. This focuses on the cueing and staging requirements for transit stops by applying Level of Service (LOS) criteria. The current locations of the transit stops have for the most part evolved informally over years with an emphasis on convenience and passenger comfort while waiting during inclement weather. As a result the transit stops are located in sheltered locations at the front of buildings like Snow Hall, Lippincott Hall, and Bailey Hall and Student Union. Increases of student populations and transit ridership have created corridor congestion at these building entrances.

Level of service (LOS) is a term used to qualitatively describe the operating conditions of a roadway or transit stop based on factors such as intensity of use, speed, travel time, maneuverability, delay, and safety. The LOS calculations for Jayhawk Boulevard apply to pedestrian queues, walkways, and stairwells.
Paired Transit Gardens and Improved Pedestrian Crossings

A consistent concern along Jayhawk Boulevard is the lack of pedestrian control which promotes uncontrolled crossing by pedestrians. Locating transit gardens in pairs which link east and west transit routes with a common crosswalk begins to clearly define pedestrian crossing patterns (diagram at right). This also locates crosswalks at traffic generation nodes. Successful implementation of pedestrian crosswalk control will also require strategic placement of pedestrian traffic deterrents located in the “pedestrian control” areas.

Transit Garden Queuing

Based on discussions with University Parking and Transit, peak passenger loading was defined as three buses of 80 passengers (240 total) entering and exiting at the same time. The curb length needed to accommodate three buses is 100 linear feet. Using LOS D, the queuing area required per person was between 3 to 7 square feet which translated into between 750 to 1750 square feet needed to accommodate peak transit queuing at each transit stop. The LOS D space requirement is most ideal along Jayhawk Boulevard because of the potential passenger capacity at the proposed transit gardens.

The preferred transit stop configuration is to have the passengers exit the bus and travel behind the bus to use the crosswalk, which improves transit efficiency and transportation safety. Historic context defines the width of the sidewalk passage and the active loading zone. The plan also shows a 15-foot separate between the rear of the last bus and the crosswalk which would provide some additional area to accommodate the larger buses.
Transit Garden Exiting

Using a consistent LOS D for passenger exiting of the buses at peak load requires between 15 to 24 square feet per person which results in a flow rate of 10 to 15 passengers per minute per lineal foot (figure A). This flow rate slightly exceeds the active loading area and at peak periods may slightly spill into the active sidewalk. This slight disruption to sidewalk flow is acceptable in order to maintain the historic context of Jayhawk Boulevard. Both transit queuing and exiting calculations are consistent with the Transit Capacity and Quality of Service Manual, which can be accessed online. Figure B illustrates movement patterns, flow rates and travel velocities for each of the transit gardens.

Transit Gardens as Social Spaces

Historically Jayhawk Boulevard has been a movement corridor dedicated to pedestrians and vehicles. As a result, very little development has occurred along the corridor which could be classified as social or civic space with the exception of Wescoe Beach and the Student Union. Transit stops along Jayhawk Boulevard are simply places to wait. Transit gardens are a way of getting away from this narrow perception of Jayhawk Boulevard as a conduit for movement and beginning to think of Jayhawk Boulevard as an opportunity for social or civic activities.

Transit gardens can serve more than one purpose, making them stylish and accommodating pedestrian refuges where the community interaction can occur. Designing them with benches, outdoor cafés, Wi-Fi hotspots, and public art so they can serve as gathering places, spaces for student programming, and can provide opportunities for programmed events and information sharing.

Legend:
- viewed
- historic “rooms”
- proposed transit garden
- proposed crosswalks
- pedestrian control
- jayhawk blvd.
A shade-shadow microclimate analysis at proposed transit garden locations begins to identify areas with an abundance of radiant heat. Transit gardens accommodate pedestrians and their comfort amidst the heat of summer will play an important role for a successful design. Shade-shadow studies also play a critical role in planting design when particular shade/sun tolerant species are desired.
Customized Site Design for the Transit Gardens

Each of the new transit gardens should be designed for minimal visual intrusion and sensitivity to existing views and topographic conditions.

A case example is the transit garden proposed for the west side of Lippincott Hall where the Boulevard curves and the ground slopes dramatically down toward Marvin Grove. This is a location where the campus of the 19th century and the vision of George Kessler come together in a point of transition. The ridge of Mount Oread is expressed at the point where two of the main roads planned by Kessler come together. By doing so, the integrity of the hillside, maximizing access to the spectacular views, and the volume of the space are thus all essential to preserve.

For this reason, the proposed transit garden for this location should not alter topography or introduce new retaining walls. This location may be a case where the transit garden should remain closer to the front of the building itself but with a smaller visual footprint and with more appropriate materials than current conditions. Each of the proposed sites should be studied with such questions of original character-defining features in mind.
A transit garden is comprised of several layers of infrastructure. The natural system is most visible, taking into account climate and drainage patterns. The hardscape system defines spatial patterns and usability. “Green” infrastructure may or may not be visible but does allow for educational opportunities.

Source: The offices of Jeffrey L. Bruce & Company and Hanbury Evans Wright Vlattas
Jayhawk Boulevard, its transit gardens, and sidewalks can become a functioning green system that captures, cleanses, stores and resuses rainwater and snowmelt. The agronomic cells function as stormwater retention, act as a natural soil media filter, and are a key component in the water polishing process.

Source: The offices of Jeffrey L. Bruce & Company and Hensley Evans Wright Vlattas
Restoring a Diverse and Lasting Tree Canopy

A new planting plan for Jayhawk Boulevard can restore historic spatial consistency and scale while also minimizing the long-term risk of catastrophic blights and poor arboriculture impeding growth.

A rich history of ecological and design precedents on Mount Oread offers important insights for the restoration of such a resilient tree canopy. Color, texture, structure and form are critical in the wise selection of species for the restoration of the canopy along Jayhawk. The restoration plan for Jayhawk Boulevard should re-establish visual symmetry, maximizing the continuity of the vista along the boulevard, within the constraints of security setbacks from the traveled way.

Planning for visual integrity must respond to the future health and viability of the tree while acknowledging areas of different ecology and urban character promotes a sustainable ethic for the campus in its most visible public space.

The intervening years from the 1920s have seen the development of a new standard for establishment of longevity and health in urban street tree populations. Advancements in rootzone soil volumes, growing media, maintenance protocols, irrigation and drainage techniques should be incorporated to ensure maximum viability and longevity of the canopy along Jayhawk. Utilizing these principles will accelerate canopy closure and ecological health.

For optimal long-term value for the University, species selection should respond to local character with consistent growth rates and tolerances.
1. Jayhawk Boulevard can be subdivided into 6-8 street tree planting zones defined by the Heritage Plan treatment zones and sub-zones. Street tree selection can vary in accordance with historical appropriateness of the adjacent building yards or spaces, but tree selection should reflect the tree heritage of Jayhawk.

2. Using the Santamour recommendations (Trees for Urban Planting: Diversity Uniformity, and Common Sense, U.S. National Arboretum), a street tree palette should incorporate the following generic diversity using highly culturally adapted proven species or cultivars.

   - 35% maximum Ulmus Family using a maximum of 10% of three to four different hybrid species or cultivars.
     - Ulmus Americana “New Harmony” or “Valley Forge”
     - Ulmus × Morton “Triumph”
     - Ulmus parvifolia “Dynasty” or “Allee”
     - Ulmus × Patriot

   - 35% maximum Quercus Family using a maximum of 10% of three to four different hybrid species or cultivars.
     - Quercus bicolor
     - Quercus shumardii
     - Quercus × macdanielli “Heritage”
     - Quercus lyrata

   - 30% maximum of Families other than Ulmus and Quercus using a maximum of 10% of three to four different hybrid species or cultivars.
     - Gymnocladus dioicus “Expresso”
     - Tilia America “Legend”
     - Zelkova serrate “Village Green”

3. Street tree selection and placement should be organized to maximize symmetry, uniformity in size, texture, structure, form, and habit and growth rating. In situations where species with different symmetry and uniformity are adjacent, species selection should occur as to minimize visual transitions while viewing along the primary axis of Jayhawk Boulevard.

4. The ground plane along Jayhawk should maintain a clean, simple low open visual impression in keeping with the treatment zones of the Heritage Plan. The primary focus of ground plane vegetation other than natural turf should adhere to the original Hare & Hare 1930s and Thomas Alton 1950s planting palette with culturally adapted and improved cultivars. Improved evergreen Juniper varieties, 18”-24” high when mature, should be the primary material used in the tree verge. While biological diversity is desirable in the verge, we feel that limited species is less important than in the street tree canopy. Boxwood and perennials are incongruent with the 1930s and 1950s plant palette, massing, and the historic context of surrounding plantings.

5. Success of the street trees will require management of the “Landscape Disease Triangle” which states that a disease will not occur until all of these parameters happen at once; virulent pathogen, susceptible host and stable environment. The recommended species and tree selection are targeted at reducing the susceptible host. It is necessary that the landscape support infrastructure (growing media, drainage and irrigation) provide as stable of environment as possible.

Urban street conditions add significant stress to stable plant environments that can lead to disease vectors. The street tree profiles along Jayhawk Boulevard should incorporate a modern understanding of agronomy, soil volumes, soil biology and porosity in order to maximize the environmental stability of the street trees. Implementation of a modern understanding of cultural requirements can significantly reduce the time required to achieve canopy closure in the range of 20%-40% while increasing longevity.
Proposed street tree species distribution pie chart

Source: The offices of Jeffrey L. Bruce & Company and Harbury Evans Wright Vallas
Ulmus (Elm) Family

- 35% maximum Ulmus Family using a maximum of 10% of three to four different hybrid species or cultivars.
  - *Ulmus americana* “New Harmony” or “Valley Forge”
  - *Ulmus × Morton* “Triumph”
  - *Ulmus parvifolia* “Dynasty” or “Allee”
  - *Ulmus × Patriot*

Quercus (Oak) Family

- 35% maximum Quercus Family using a maximum of 10% of three to four different hybrid species or cultivars.
  - *Quercus bicolor*
  - *Quercus shumardii*
  - *Quercus × macdanielli* “Heritage”
  - *Quercus lyrata*

Additional Family Diversity

- 30% maximum of Families other than Ulmus and Quercus using a maximum of 10% of three to four different hybrid species or cultivars.
  - *Gymnocladus dioicus* “Expresso”
  - *Tilia americana* “Legend”
  - *Zelkova serrata* “Village Green”
  - *Maclura pomifera*
A Green Corridor with Integrated Water Management

Jayhawk Boulevard can become a model for designing “green” and “blue” systems on an historic campus.

Sound water management is one of the best tools to promote rapid and healthy growth of the restored street canopy. We propose to study pervious materials and larger planting beds that can act as bio-swales.

Bio-swales, rainwater retention and ample tree planting beds, when designed in accordance with the curving street geometry and minimal ground plane of the 1938 era, can improve and sustain tree growth. This combination of sound arboriculture with the minimal introduction of new visual elements such as hedges, curbs, or fencing is the most conservative and likely approach to succeed over time.

Sustainability is a strategic objective of the University. As sustainability increases in public awareness it is also being driven by changes in the regulatory environment.

The University will be subject to the changing regulatory requirements especially in regards to stormwater. In order to comply with the Clean Water Act, the Environmental Protection Agency has expanded the rules for Non-Point Source Stormwater under the National Pollutant Discharge Elimination System (NPDES) permit program. As these rules are implemented the University with be required to address water quality from stormwater discharge. This project is an ideal place to begin.

Stormwater treatment-train diagram.
Source: The offices of Jeffrey L. Bruce & Company and Harbury Evans Wright Varble
Creating a New Model for Stormwater Management

Future improvements to Jayhawk Boulevard can incorporate sustainable stormwater strategies that respect the historic context of the boulevard. Furthermore, Jayhawk Boulevard represents a highly visible showcase to demonstrate the University’s core commitment to sustainability. As the University’s vision expands to protect and enhance the campus watersheds by managing stormwater runoff with innovative green stormwater infrastructure, these practices can be incorporated to supplement the existing stormwater infrastructure to achieve the regulatory compliance.

Green stormwater infrastructure includes a range of soil-water-plant systems that intercept stormwater, infiltrate a portion of it into the ground, evaporate a portion of it into the air, and in some cases release a portion of it slowly back into the storm sewer system.

Respecting its varied ecological, topographic, and historic character, the plan for Jayhawk Boulevard creates “Ecozones” as areas along the corridor to incorporate green stormwater techniques. As the Boulevard is renovated, the planted linear verges between the street and pedestrian walkways can be adapted to infiltrate the water generated from the adjacent impervious surfaces. These new verges will allow stormwater to soak into the soil, filter it, and reduce the amount of stormwater, often contaminated with oil and other pollutants, making its way into storm sewer pipes. This approach will passively “harvest” rainwater to water and irrigate the landscape trees and plantings, thereby further reducing campus utility costs.
Rehabilitating Building Lawns and Historic Landscapes

In addition to improving the functionality of Jayhawk Boulevard, the relocation of transit stops will also return many of its buildings’ historic “front lawns” and landscapes to their verdant appearance during the 1930s. The existing transit stops in front of the Memorial Union, Bailey Hall, Wescoe Hall, and Snow Hall grew over time into assemblages of pavers, kiosks, signs, benches and lighting where once there were much softer and less cluttered lawns and plantings.

Because the spatial volumes of Jayhawk’s tree canopy and nearby open lawns are so important to its historic character, removing the existing transit stops will be a major step in rehabilitating the Boulevard for 21st century needs while renewing its essence.

By referring to the Campus Heritage Plan and Hare & Hare’s sophisticated planting plans from the 1920s and 1930s, the University can begin to replant these re-opened lawns with appropriate and sustainable flowers, shrubs, and trees, perhaps as an opportunity for donors.
Long-Lasting Materials and Elements with Historic Character

Mount Oread and the Kansas region offer rich geologic precedents for the use of Oread and Cottonwood limestone and other materials for low walls, seating, and other character defining features.

- In no case should precast paver blocks be used for retaining walls, seating walls or other vertical elements.
- Use traditional materials in a contemporary way.
- Paver/paving/scoring option images (contemporary application, cool grey color).
- Benches. (could be stand-alone furniture)
- Seating walls. (preferable locally available, native limestone - oread and cottonwood limestone)
Epilogue: Design Innovation for a Leading University

The University of Kansas has long been a leader in innovation, outreach, teaching and research. Recognized as one of the nation’s most beautiful campuses, KU is taking steps to preserve its heritage as it plans and sites new buildings and restores Jayhawk Boulevard.

This schematic plan is both practical and visionary in its integration of cost, universal access, historic landscape preservation, and sustainability - and it could become a national model for campus planning. As mentioned at the outset, this vision for Jayhawk Boulevard preserves its spatial and architectural character while offering:

1. Improved transit and pedestrian safety.
2. Safer and more efficient bicycle access.
3. Green solutions for stormwater management and irrigation.
4. Transit gardens for heightened and improved social, civic and student life.
5. Revived historic street tree canopy and surrounding landscapes.

This plan is a three-dimensional vision that embraces: sidewalks, bicycle lanes, crosswalks, planted verges (area between street curb and sidewalk), special transit lanes, raised crosswalks, and green stormwater features above and below ground. It restores the spatial continuity and structure of Jayhawk’s tree canopy while making it more hardy and blight-tolerant with a carefully-planned segmentation of varied species.

By emphasizing the concept of the “Complete Street,” this design offers equality of access for people of all ages and abilities. It will accommodate pedestrians, bicyclists, service and emergency vehicles and public transit from the University and the City. With designated transit lanes, there is the opportunity to accommodate other operators of buses and shuttles as needed over time.

Most importantly, this plan responds to new opportunities and change while respecting KU’s heritage. Over the generations, great universities evolve - and not everything can remain static. Sensitive campus stewardship requires making informed decisions about trade-offs - knowing which key features to preserve and how to incorporate new “best practices” such as drought-tolerant arboriculture, integrated water management, and multi-modal transit.

Stewardship planning also means eliminating some campus features that may have been useful in the past. In this case, the plan calls for eliminating the on-street parking along Jayhawk to improve the safety and efficiency of increased public transit, and to allow dimensional space for bicycle lane integration. Strongly supported by regional transportation partners, this removal of roughly fifty parking spaces can easily be offset by making better use of surrounding parking ramps. The plan will also control times when private cars can use the Boulevard, offering flexibility to adapt access as needed.

Over the last year, this schematic plan grew out of numerous meetings with public and University groups including KU staff and officials from regional transit and planning agencies. Their input informs everything presented herein. In coordination with the larger Campus Master Plan now underway, this plan exemplifies its principles of Integrated Water Management and multi-modal transit in a single, highly-visible project that can benefit the University for generations to come.
RESOLUTION

WHEREAS, the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) is designated as the Metropolitan Planning Organization (MPO) to carry out the Continuing, Cooperative and Comprehensive planning program (3C Process), including regional planning for a multi-modal transportation system that is coordinated with local comprehensive planning (land use, economic development, etc.) efforts; and

WHEREAS, the L-DC MPO acting as the MPO for the Lawrence-Douglas County Region is responsible for the creation, maintenance, and implementation of a Metropolitan Transportation Plan (MTP) that covers all of Douglas County including all four incorporated cities in the county (Baldwin City, Eudora, Lawrence, Lecompton); and,

WHEREAS, the L-DC MPO in its capacity as the MPO is responsible for programming transportation improvement funds in the regional Transportation Improvement Program (TIP) and has a role in assisting the state agencies and local governments of the region with securing funds to make transportation system improvements that are consistent with the region’s Metropolitan Transportation Plan; and,

WHEREAS, this proposed shared use path construction is consistent with Lawrence parks and trails plans, is designed to implement bikeway and pedestrian facility planning for the City of Lawrence, and will complement Lawrence land use plans; and,

WHEREAS, this project is an important link in the region’s growing network of bikeway facilities and an important part of the region's multi-modal transportation system; and,

WHEREAS, this project is designed to help make walking and cycling more viable modes of transportation in, through and around Lawrence and to encourage those non-motorized modes of travel to be used more frequently in the Lawrence-Douglas County Region.

WHEREAS, this shared use pathway project will help to connect the Burrough’s Creek Rail Trail, several City parks, the Warehouse and Cultural Arts District, the Amtrak Train Station, and Downtown and East Lawrence streets to the regional bikeway system; and,

WHEREAS, this shared use pathway project is jointly being submitted and funded in part by the City of Lawrence and Douglas County.
NOW, THEREFORE BE IT RESOLVED, that the Lawrence-Douglas County Metropolitan Planning Organization strongly supports and endorses the application made by the City of Lawrence and Douglas County for Federal Transportation Alternatives (TA) funding for a Transportation Enhancement (TE) project described below. This project will be administered by the Kansas Department of Transportation (KDOT), and the L-DC MPO agrees to add this project to its Transportation Improvement Program (TIP) if funding for this project is awarded.

**Hobbs Park to Constant Park Trail**  
(Bike/Pedestrian Category)

Project Description and Location: This project will consist of a shared use path beginning at the northern terminus of the Burroughs Creek Rail Trail extending north through Hobbs Park, then adjacent to the Warehouse/Cultural Arts District to a trail head at the Amtrak Train Station, then continuing northwesterly to City Hall and Downtown with its termination at Robinson Park.

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<th>Description</th>
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Additionally, the City of Lawrence will complete the PE and provide Construction Engineering (CE) @ an estimated cost of $126,000.

APPROVED by the Lawrence-Douglas County Metropolitan Planning Organization at their meeting on January 16, 2014.

Bryan Culver, L-DC MPO Chairperson  
Scott McCullough, L-DC MPO Secretary