Thursday, March 4, 2021
1:30-3:00 PM
Virtual meeting hosted in
Parks and Recreation Administration Building
1141 Massachusetts St

To participate or provide public comment register via zoom: Virtual Meeting Registration

Written public comment must be received by the MPO by 5:00 p.m. on the day before the meeting. Send correspondence electronically to mpo@lawrenceks.org. Comments received after the deadline will not be posted and there is no guarantee that such comments will be considered. The MPO is sensitive to members of the public who may not have access to technology. For those persons, written comments may be dropped in the Utility Billing Drop Box, located at the cut-out at 6th Street and New Hampshire Street. Comments should be marked for the **MPO ITS Plan**.

**The MPO will provide a method at the Parks and Recreation Administration Building for individuals without access to the internet or a telephone - and only such persons - to observe or participate in the meeting.*

Intelligent Transportation Systems (ITS) Steering Committee Agenda

1. **Zoom Meeting Preamble**

2. **Introductions**

3. **What is Intelligent Transportation Systems (ITS)?**
   - View our Current ITS Plan at - https://lawrenceks.org/mpo/its
   - National ITS Reference Architecture - https://local.iteris.com/arc-it/index.html
   - Edmond, Oklahoma ITS Video- https://youtu.be/_B1mRv-1qRM
   - Tennessee DOT ITS Video - https://youtu.be/aZjDftmrE28

4. **Plan Update Process (attached)**

5. **ITS Goals and Transportation 2040 Goals Discussion (attached)**

6. **ITS Needs: Discussion of needs identified in the last plan (attached)**
   - **a.** Provide comments by 5 pm on March 15

7. **Next Meetings**
   - Meeting 2 - March 29 @ 1:30
     - Prepare for the meeting by reviewing the existing projects (will send out)
   - Meeting 3 - April 13 @ 10:30
   - Meeting 4 - April 26 @ 1:30

Special Accommodations: *Please notify the Lawrence-Douglas County Metropolitan Planning Organization (L-DC MPO) at (785) 832-7700 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) 832-7700.*

Intelligent Transportation System (ITS) Plan Update

Task	March 4 @ 1:30 - 3:00	March 29 @ 1:30 - 3:00	April 13 @ 10:30 - Noon	April 26 @ 1:30 - 3:00	May	June
Development						
Steering Committee	Kickoff	Meeting 2	Meeting 3	Meeting 4		
Meeting Topic	Overview, Discuss ITS needs, & Verify goals (T2040 & ITS)	Discuss projects (new & old)	Discuss timeline, priorities & necessary agreements	Review draft plan		
Homework	Review & comment on ITS needs & Review existing projects for Meeting 2	Provide any further comments on projects	Review & comment on necessary agreements	Review & comment on draft plan		
Review						
15-day public comment period					Anticipated - May 6 - May 21*	
Document public comments & make necessary edits					X	
TAC/MPO Policy Board consideration of ITS Plan						Anticipated - June 1 & June 17*
Pending Policy Board approval post online and send to KDOT, FHWA, and FTA						X

* Anticipated dates. The final dates depend on how the planning process advances.

2.25.21

** Public participation process includes: Newspaper advertisement, email to subscription list, place document online and at public locations - Baldwin City Public Library, Eudora City Hall, Lawrence Public Library, Lecompton City Hall, and MPO Office, send to TAC and Policy Board for review

1. L-DC Regional ITS Vision and Goals

The L-DC Regional ITS Vision and Goals describe the guiding principles for how ITS should be planned, developed, and implemented in the Region. The Vision and Goals were developed to be consistent with the goals of Transportation 2040.

Lawrence-Douglas County Regional ITS Vision

The Lawrence-Douglas County Region will use Intelligent Transportation Systems to provide cost-effective and practical technologies that enhance the safety, capacity, operations, and evaluation of the area's modes of transportation.

1.1 Transportation 2040 Goals

T2040 provides a long-range vision of the Region's transportation strategies for all modes. The L-DC Regional ITS Architecture must stay consistent with the MTP to help achieve the Region's transportation goals. T2040 identifies four goals that are consistent with federal planning guidelines. They are:

1. Enhance transportation options and choices for improved system performance
2. Efficient movement of people, goods, and freight
3. Prioritize preservation, safety, and security of the transportation network
4. Minimize adverse social, economic, and environmental impacts created by transportation

1.2 L-DC Regional ITS Goals

The ITS Goals describe how the Region will achieve its vision of improved transportation through ITS. Table 1 lists the ITS goals as developed by the Project Team. Each ITS goal is mapped to the related T2040 goals. (This will be completed after the ITS goals are determined.)

Table 1: L-DC Regional ITS Goals

ITS Goal	Related MTP Goals
1. Integrate efficient and effective ITS into regional transportation planning and project development.	
2. Improve information sharing among the region's transportation agencies and with the public.	
3. Increase the safety and security of all modes of transportation through improved infrastructure monitoring and emergency management.	
4. Improve the utilization of existing facilities and infrastructure.	
5. Improve the ability to evaluate and measure the performance of the transportation network through the effective use of technology.	

Lawrence-Douglas County MPO

Intelligent Transportation Systems Architecture

Review and provide edits not made at the March 4 meeting by marking up **ITS Needs**

Return to Ashley Bryers at

abryers@lawrenceks.org

by 5 pm on March 15

Prioritized L-DC Region ITS Needs

The Appendix lists all identified ITS needs for the L-DC Region within service areas that parallel the service areas of the National ITS Architecture. The National ITS Architecture service areas are:

- Traffic Management (Arterial and Freeway)
- Public Transportation
- Public Safety (Formerly Emergency Management)
- Maintenance and Construction
- Traveler Information
- Commercial Vehicle Operations
- Data Management

New Areas Since the Last Plan

- Parking Management
- Public Safety
- Support
- Sustainable Travel
- Vehicle Safety
- Weather

Within the service areas, the needs have been prioritized as high, medium or low based on Stakeholder input. High priority needs are those that were identified by a broad cross-section of Stakeholders and were considered very important to improving the efficiency and safety of the transportation network. Medium priority needs were those that were identified by fewer Stakeholders, or were identified as less critical. Low-priority needs are those that were identified by specific Stakeholders or were considered important to the Region but not critical at the present.

1.1 Traffic Management Needs

This area addresses the management of the movement of all types of vehicles, travelers and pedestrians throughout the transportation network. It deals with information collection, dissemination, and processing for the surface transportation system. It covers both automated monitoring and control activities as well as decision-making processes (both automated and manual) that address real-time incidents and other disturbances on the transportation network, as well as managing travel demand as needed to maintain overall mobility.

Arterial / Traffic Management Needs

Examples of arterial/traffic management include: Signal Coordination; Centralized Control; Traffic Information Systems; Vehicle Detection Systems; Video Systems; Adaptive Signal Control; Traffic Management Systems/Centers; and Highway Rail Intersection Technologies.

Table B-1: L-DC Region Arterial / Traffic Management Needs

Arterial / Traffic Management Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve traffic flow at intersections through improved signal timing and control.	H	
Improve traffic information dissemination.	H	
Improve event management.	H	
Implement or improve signal coordination.	H	
Improve incident detection.	H	
Improve parking management and parking information.	M	
Improve information sharing among agencies.	M	

Arterial / Traffic Management Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve system operation monitoring.	M	
Improve arterial roadway traffic surveillance.	L	
Reduce transit vehicle delay at key intersections.	L	
Reduce emergency vehicle delays at signals.	L	

Freeway Management Needs

Examples of freeway management systems include: Vehicle Speed Detection Systems; Video Systems; Ramp Metering; Variable Message Signs; Highway Advisory Radio; and Traffic Management Systems/Centers.

Table B-2: L-DC Region Freeway Management Needs

Freeway Management Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve traffic information dissemination.	H	
Improve information sharing among agencies.	H	
Improve inter-agency coordination.	H	
Improve incident detection.	M	
Improve system operation monitoring.	M	
Improve freeway traffic surveillance.	L	
Improve incident management in urban areas.	L	

1.2 Public Transportation Needs

This area addresses the management, operations, maintenance and security of public transportation to enable them to provide transit services that operate in a timely and efficient manner, delivering operational information, including multimodal information to the operators and users. This area covers both fixed route and demand response systems, as well as those passenger rail systems operated by transit agencies.

Examples of public transportation systems include: Public Transportation Management; En-route Transit Information; Personalized Public Transit; Public Traveler Safety; Traveler Service Information; Ride Matching and Reservations; Smart Card Payment/Transaction Systems.

Table B-3: L-DC Region Public Transportation Needs

Public Transportation Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve multi-modal traveler information.	H	
Improve information sharing among agencies.	H	
Improve transit traveler information.	H	
Reduce transit vehicle delay at key intersections.	M	

Public Transportation Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Enable dissemination/display of real-time bus arrival times.	M	
Improve service planning (scheduling and run-cutting).	M	
Improve fare payment systems.	M	
Improve regional and interregional trip planning.	L	
Automate passenger counting.	L	
Improve fleet management.	L	

1.3 Public Safety (formally Emergency Management)

This area addresses the management by public safety agencies of emergencies or incidents in the transportation network including those relating to HAZMAT materials that are transported through the transportation network. It covers public safety (police, fire, and emergency medical services) agencies using emergency management services to improve their response to emergency situations. The area also addresses how emergency operations centers interact with transportation and public safety agencies to support response to disasters and for evacuations impacting the transportation network.

Examples of public safety systems include: Incident Detection; Incident Management; Hazardous Materials Response and Handling; Emergency Notification and Personal Security; Emergency Vehicle Management; Advanced Dispatching and Response Systems.

Table B-4: L-DC Region Public Safety Needs

Public Safety Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve event management.	H	
Improve incident response coordination between agencies.	H	
Improve information sharing among agencies.	H	
Improve incident detection.	M	
Improve incident response times and routing.	M	
Improve transportation system performance monitoring.	M	
Improve road/weather condition information.	M	
Improve bicycle/pedestrian warning systems.	M	
Improve ability to monitor and provide information about flooding.	M	
Improve access to regional cameras.	M	
Enable remote emergency control of signals.	L	
Monitor transit vehicle locations.	L	

1.4 Maintenance and Construction Needs

This area addresses the monitoring, maintaining, improving, and managing of the roadway physical condition and its associated infrastructure equipment, as well as the available resources necessary to conduct these activities. This area also includes work zone management and safety, and the dissemination of maintenance and construction activities to other centers.

Examples of maintenance and construction systems include: Advanced Work Zone Management and Traffic Control; Vehicle Detection Systems; Video Systems; Vehicle/Speed Detection Systems; Variable Message Signs; Highway Advisory Radio; Integration with Traffic Management Systems/Centers; Advanced Dispatching and Routing Systems; Advanced Vehicle Tracking Systems; Fleet Maintenance and Management Systems.

Table B-5: L-DC Region Maintenance and Construction Needs

Maintenance and Construction Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve coordination on construction notification and information distribution.	H	
Provide quality real time congestion related information.	H	
Provide signal preemption for some maintenance fleet vehicles.	M	
Improve/enhance work zone traffic handling plans.	M	
Increase use of portable traffic control equipment (Dynamic Message Signs, Highway Advisory Radio, etc.).	M	
Improve maintenance response to incidents and requests.	M	
Improve fleet information/management (maintenance schedules, mileage accumulations, tracking snow removal vehicles w/AVL).	L	
Interagency coordination on most advantageous placement of maintenance vehicles (prior to anticipated need).	L	

1.5 Traveler Information Needs

This area addresses the provision of both static and dynamic information about the transportation network to users both prior to and during their trips. It includes information about multi-modal options and transfers and the status of other transportation modes for use by the users. Providing static and dynamic signage information directly to drivers through in-vehicle devices is also covered by this area.

Examples of traveler information systems include: En-route Traveler Information; Pre-trip Traveler Information; Portable Event Management Systems; In-vehicle Route Guidance; Traffic Information; Variable Message Signs; Highway Advisory Radio; Internet, Media; Tourist Information Systems.

Table B-6: L-DC Region Traveler Information Needs

Traveler Information Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve multi-modal information.	H	
Improve traffic information dissemination.	H	
Provide quality real time congestion related information.	M	
Expand traveler information delivery methods.	L	
Provide better road construction information and notification.	L	
Improve weather and road condition information.	L	

1.6 Commercial Vehicle Operations Needs

This area addresses the management of the efficiency, safety, and operation of commercial vehicle fleets and the movement of freight. It includes activities that expedite the authorization process for freight to move across national and other jurisdictional boundaries, activities that expedite inter-modal transfers of freight and the operation of freight vehicles that exchange information on the motor carrier, the vehicle, the driver, and, in some cases, the cargo to enhance freight operations and management.

Examples of commercial vehicle operations systems include: Commercial Vehicle Electronic Clearance; Automated Roadside Safety Inspection; On-board Safety Monitoring; Commercial Vehicle Administration Processes; Hazardous Material Incident Response; Commercial Vehicle Fleet Management; Services to Assist Agricultural Harvesting and Migration.

B-7: L-DC Commercial Vehicle Operations Needs

Commercial Vehicle Operations Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Disseminate better information regarding limited alternative routes.	M	
Provide interstate/inter-region traveler information covering a wide area (targeted to commercial vehicle operators).	M	
Improve congestion management during seasonal/local events.	M	
Improve truck routing in rural / small-towns.	L	
Provide quality real time congestion related information.	L	
Improve truck storage/parking information (during major road closures).	L	

1.7 Integration Needs – No longer a service area – need to determine where to put these needs

Examples of Integration include: Integration of Systems; Integration with Traffic Management Centers; Determining Central vs. Distributed Control; Communications Infrastructure; Integration of Agencies; Resolution of Institutional Issues.

Table B-8: L-DC Region Integration Needs

Integration Need	Relative Priority (High, Medium, Low)	Progress/Activities
Improve information sharing among agencies.	H	
Improve fiber optic network.	M	
Develop interagency governmental agreements that would allow sharing of information, etc.	M	
Improve system compatibility.	M	
Provide central information clearinghouse.	L	

New service areas since the last plan was developed.

1.8 Parking Management Needs

This area addresses the management of parking operations including both space management and the electronic payment for parking. This area supports communication and coordination between equipped parking facilities and regional coordination between parking facilities and traffic and transit management systems. It includes monitoring and managing parking spaces and in lots, garages, and other parking areas and facilities as well as loading/unloading zones.

Table B-9: L-DC Region Parking Management Needs

Parking Management Need	Relative Priority (High, Medium, Low)	Progress/ Activities
Improve parking management and parking information.	M	

1.9 Public Safety Needs

This area addresses the management by public safety agencies of emergencies or incidents in the transportation network including those relating to HAZMAT materials that are transported through the transportation network. It covers public safety (police, fire, and emergency medical services) agencies using emergency management services to improve their response to emergency situations. The area also addresses how emergency operations centers interact with transportation and public safety agencies to support response to disasters and for evacuations impacting the transportation network.

Table B-9: L-DC Region Public Safety Needs

Public Safety Needs	Relative Priority (High, Medium, Low)	Progress/ Activities

1.10 Support Needs

This area addresses monitoring, maintaining, and managing of the connected vehicle system which includes, centers, field equipment, vehicles, and traveler devices. In addition, it covers the security and privacy of the communications in the connected vehicle environment as well as fundamental services, such as location and data distribution, that support the full range of ITS services.

Table B-10: L-DC Region Support Needs

Support Needs	Relative Priority (High, Medium, Low)	Progress/ Activities

1.11 Sustainable Travel Needs

This area addresses the operation of transportation system to minimize the environmental impact. It promotes a transportation system that balances accessibility, mobility, protection of human safety and environment. It covers all aspects of transportation system from optimizing traffic signals and ramp meters to managing HOV/HOT lanes, monitoring vehicle emissions and managing vehicle electric charging stations.

Table B-11: L-DC Sustainable Travel Needs

Sustainable Travel Needs	Relative Priority (High, Medium, Low)	Progress/ Activities

1.12 Vehicle Safety Needs

This area addresses the vehicle's safety for automated, connected and non-equipped vehicles. Its focus is on the enhancement of safety, security and efficiency in vehicle operations, by warnings and assistance to users or input to the operation of the vehicle.

Table B-12: L-DC Region Vehicle Safety Needs

Vehicle Safety Needs	Relative Priority (High, Medium, Low)	Progress/ Activities

1.13 Weather Needs

This area addresses activities that monitor and notify users and transportation network managers of weather and environmental conditions that have an impact on the road transportation network and its users.

Table B-13: L-DC Region Weather Needs

Weather Needs	Relative Priority (High, Medium, Low)	Progress/ Activities