



**MEETING 4 NOTES**  
 Intelligent Transportation Systems (ITS) Steering Committee  
 Monday, April 26, 2021  
 1:30 – 2:30 PM  
 Virtual meeting hosted in  
 Parks and Recreation Administration Building  
 1141 Massachusetts St

Agency		Stakeholder	Agency		Stakeholder
	FTA	Eva Steinman	X	Lawrence	Nick Hoyt
X	FHWA	David LaRoche	X		Dustin Smith
X	KDOT	Michael Flory, Taylor McHenry, Garry Olson, Mike Floberg			Caleb Pettengill
	KTA	David Jacobsen	X		Micah Seybold
X	KC Scout	Randy Johnson	X		Rob Neff
	Baldwin City	Ed Courton	X		Kevin Fussell
	Eudora	Branden Boyd			Douglas County
			X	Lawrence Transit	Adam Weigel
			X	KU On Wheels	Aaron Quisenberry
Staff			Public		
X	L-DC MPO	Jessica Mortinger	X	DGCO Emergency Communications	Jeremy Rabb
X	L-DC MPO	Ashley Bryers	X	KDOT	Thomas Northup
X	L-DC MPO	Sarah Buford			
X	L-DC MPO	Ari Leyva			

1. **Zoom Meeting Preamble (1:30pm)**
2. **Introductions** – Introductions were made.
3. **Public Comment** – No public comments were given.
4. **Meeting 3 Notes** – Meeting notes were found satisfactory.
5. **Plan Update Process (Discussion)** – Staff presented the timeline.

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
<b>Development</b>						
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		
<b>Review</b>						
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, Leocompton City Hall, and MPO Office, send to TAC and Policy Board for review

6. **Plan Goals (Discussion)** – The Committee used Mural during the meeting to review and update project plan goals. Goals were added to the Signal Coordination Program, Traffic Signal Performance Measures Program, Electric Vehicle Infrastructure and Vehicles Program, and Dynamic Message Signs.

## Plan Goals with ITS Projects/Programs

Any edits to the goals associated with the projects?

	Access & Choices	Mobility & Prosperity	Preservation, Safety, & Security	Sustain & Enhance
1 Signal Coordination Program	•	•	♥	•
2 Traffic Detection Improvements Program	•	•	•	•
3 Traffic Signal Performance Measures Program	•	•		♥
4 Fiber Communications Expansion Program	•	•	•	
5 Camera Deployment Program			•	•
6 Emergency Signal Preemption Improvements Program		•	•	
7 Weather Monitoring Program			•	•
8 Electric Vehicle Infrastructure and Vehicles Program	•	♥	•	•
9 Work Zone Management Program		•	•	•
10 Bicycle/Pedestrian Warning Systems Program		•	•	
11 Shared Mobility Program	•	•		•
12 Dynamic Message Signs	•	•	♥	•
13 Signal Beacon Deployment		•	•	
14 Transit Traveler Information Improvements	•	•		
15 Transit Management Improvements	•	•		
16 Transit Signal Priority		•		•
17 Parking Management System	•	•		
18 Event and Incident Management Improvements	•	•	•	•
19 Regional Virtual Data Warehouse	•		•	
20 Journey Trip Planner Tool	•	•		•
21 Connected Vehicles	•	•	•	•

**Transportation 2040 Goals**

1. Access & Choices – Enhance transportation options and choices for improved system performance
2. Mobility & Prosperity – Efficient movement of people, goods, and freight
3. Preservation, Safety, & Security – Prioritize preservation, safety, and security of the transportation network
4. Sustain & Enhance – Minimize adverse social, economic, and environmental impacts created by transportation

**7. Project Estimates & Funding Sources (Discussion)** – The Committee used Mural to review and update Project Estimates and Funding Sources. The Committee corrected funding sources for the Traffic Signal Performance Measures Program, Electric Vehicle Infrastructure and Vehicles Program, Shared Mobility Program, and Connected Vehicles.

**Project Estimates**

How is this table to show there are ongoing expenses associated with the programs? It looks like we don't have to include costs, so we can remove this table, but it gives a sense of magnitude for costs.

the far right column is chipping away at the capital cost

Projects	Capital		Ongoing Expenses	
	Low Estimate	High Estimate	Low Estimate	High Estimate
1 Signal Coordination Program	\$ 740,000		\$ 50,000	to \$ 100,000
2 Traffic Detection Improvements Program	\$ 774,000	to \$ 1,444,000	\$ 100,000	to \$ 200,000
3 Traffic Signal Performance Measures Program	\$ 8,000		\$ 15,600	to \$ 31,200
4 Fiber Communications Expansion Program	\$ 839,400			
5 Camera Deployment Program	\$ 372,000	to \$ 580,000	\$ 5,000	to \$ 30,000
6 Emergency Signal Preemption Improvements Program				
7 Weather Monitoring Program	\$ 50,000		\$ 10,000	to \$ 20,000
8 Electric Vehicle Infrastructure and Vehicles Program				
8a Lawrence Public Charging Stations	\$ 75,000			
8b Private Charging Stations				
8c Transit Charging Stations	\$ 1,022,182	\$ 4,161,741		
8d Transit Vehicles	\$ 12,412,500	\$ 47,167,500		
8e Lawrence City Vehicles (Including Fleet and Operations)				
8f Other Cities/County Vehicles				
9 Work Zone Management Program	\$ 120,000	to \$ 174,000		
10 Bicycle/Pedestrian Warning Systems Program	\$ 750,000	to \$ 900,000		
<b>Total Estimated Ongoing Programs Cost</b>	<b>\$ 17,163,082</b>	<b>to \$ 54,427,241</b>	<b>\$ 180,600</b>	<b>to \$ 381,200</b>
11 Shared Mobility Program	Unknown	to Unknown		
12 Dynamic Message Signs	\$ 1,800,000	to \$ 2,400,000		
13 Signal Beacon Deployment	\$ 600,000	to \$ 14,400		
14 Transit Traveler Information Improvements	\$ 96,000	to \$ 14,400		
<b>Total Estimated Near-Term Programs Cost</b>	<b>\$ 2,496,000</b>	<b>to \$ 2,414,400</b>		
15 Transit Management Improvements	\$ 722,090			
16 Transit Signal Priority	\$ 45,200	to \$ 97,800		
17 Parking Management System	\$ 250,000	to \$ 1,000,000		
18 Event and Incident Management Improvements	\$ 800,000	to \$ 2,000,000		
<b>Total Estimated Medium-Term Cost</b>	<b>\$ 1,818,290</b>	<b>to \$ 3,097,800</b>		
19 Regional Virtual Data Warehouse	\$ 15,000	to \$ 300,000		
20 Journey Trip Planner Tool	\$ 300,000	to \$ 570,000		
21 Connected Vehicles	Unknown	to Unknown		
<b>Total Estimated Long-Term Cost</b>	<b>\$ 26,856,662</b>	<b>to \$ 67,221,641</b>		
<b>Total Cost of All Projects</b>	<b>\$ 48,334,034</b>	<b>to \$ 127,161,082</b>	<b>\$ 180,600</b>	<b>to \$ 381,200</b>

budgeted yearly expenditures - instead of ongoing expenses -

Fiber ongoing = \$135k CIP only \$15k maintenance

2 tables - budgeted expenditures to make improvements and other is specific projects

\*get new \$

<https://www.itskrs.its.dot.gov/costs>

Open link

MSO help with cost

**Funding Source**

eligible funding sources

keep

Do we think this table is new and I am not sure what funding

There are federal ITS grants available

Dept of Energy --> Other - Electric vehicles

	Locally Administered		State Administered		Federally Administered		
	Local Transportation Funds	Local Emergency Funds	KDOT	ITS Earmark Funds	Homeland Security	Federal Highway Funds	Federal Transit Funds
1 Signal Coordination Program	•		•				
2 Traffic Detection Improvements Program	•			•		•	
3 Traffic Signal Performance Measures Program	•		•				
4 Fiber Communications Expansion Program	•		•			•	
5 Camera Deployment Program	•	•	•			•	
6 Emergency Signal Preemption Improvements Program	•	•		•	•	•	
7 Weather Monitoring Program	•		•	•		•	
8 Electric Vehicle Infrastructure and Vehicles Program	•		•				•
9 Work Zone Management Program	•		•			•	
10 Bicycle/Pedestrian Warning Systems Program	•		•	•		•	
11 Shared Mobility Program	•		•			•	
12 Dynamic Message Signs	•		•			•	
13 Signal Beacon Deployment	•		•	•			
14 Transit Traveler Information Improvements	•						•
15 Transit Management Improvements	•			•			•
16 Transit Signal Priority	•			•			•
17 Parking Management System	•		•	•		•	
18 Event and Incident Management Improvements	•	•	•	•	•	•	
19 Regional Virtual Data Warehouse	•		•	•		•	
20 Journey Trip Planner Tool	•		•	•		•	
21 Connected Vehicles	•		•				

**8. Project Pages (Discussion)** – The Committee used Mural to review and update information to be displayed in the Project Pages of the plan. The Committee discussed alterations to information in the Camera Deployment Program, Parking Management Systems Project, and Regional Virtual Data Warehouse Project pages.

**Project Pages**

**5. Camera Deployment Program**

Traffic and engineering staff will work with local law enforcement agencies to specify the most effective equipment to install at each site. The project will implement improved image-sharing technology at the City of Lawrence Traffic Operations Center to improve real-time sharing of images with other agencies in the Region. **This will allow the Traffic Operations Center to view images from KTA's hot cameras on the Turnpike in Douglas County, and be able to share real-time images to the Region's emergency responders and traffic management agencies via the Internet. The City of Lawrence will be able to share camera images but will not share control of City cameras. Only the Traffic Operations Center will be able to control their pan-tilt-zoom functions.**

**Timeline:** Ongoing

**Planned 2021 Project Areas:** South Iowa

**Estimated Cost:**  
The project cost is approximately \$3,000 to \$5,000 per intersection depending on required equipment. The City anticipates budgeting between \$5,000 and \$30,000 per year to continue to improve the camera system.  
The project cost is related only to new control software for existing cameras. The estimated cost for implementation of image sharing technology is \$60,000.

**37**

**Nick Hoyt**  
Are there any plans to do this? Who is going to do this?

**Nick Hoyt**  
I don't think we are doing this. I don't know who or how we are getting access to KTA or KDOT's cameras. Spending \$50k to get access to KTA's cameras gets us nothing.

**Nick Hoyt**  
Who's \$50k is this. I don't think we are doing this.

working on it - discussion

**14. Parking Management Systems Project**

**13.4.18 Parking Management Systems Project**

**Description:**  
This project will improve the management of parking in the City of Lawrence and on the KU campus through the use of advanced technologies to track usage and space availability. Vehicle count systems will monitor the usage of parking at City and KU lots. The information will be shared with the public to help them travel directly to where parking is located. The system may also be able to dynamically control parking pricing to encourage travel patterns to parking lots with the most availability. The parking management system will collect data to help parking management agencies develop parking plans. Information generated by the Parking Management Systems can also be shared by trip planning tools and through regional traveler information systems. KU Transportation Services will most likely move to the same smart phone parking app the City of Lawrence recently deployed. KU Transportation Services is selecting a new parking management software and is moving to a different system for when people do not pay their parking tickets. The City of Lawrence Parking is implementing the 10 Year Operational & Development Plan submitted by Deeman Design Management in June 2017 - <http://www.msoi.com/parking>.

**Timeline:** Medium-term (three to six years)

**Project Areas:**  
• City of Lawrence parking structures and lots  
• KU parking structures and lots

**Related Programs:**  
• Journey Trip Planner Project  
• Dynamic Message Sign Project

**Lead Stakeholders:**  
• City of Lawrence Parking (Co-Lead)  
• KU Transportation Services (Co-Lead)

**Assumptions:**  
MSO: The MSO should outline the roles and responsibilities of the City and KU in collecting and sharing parking information. The MSO should also provide basic guidelines that define the types of parking management systems to be implemented to ensure interoperability and similar data collection.  
Interagency Agreement: This is should establish how information will be exchanged between the parking systems and the Traffic Operations Center, or with traveler information systems and a virtual regional data warehouse. This is should also describe how data will be used by each stakeholder, and emergency operations of parking facilities during events.

**Needs Addressed:**  
• improve parking management and parking information

**ITS Service Packages:**  
PM01: Parking Space Management  
PM03: Parking Electronic Payment  
PM04: Regional Parking Management

**Estimated Cost:**  
The estimated cost of this project is between \$20,000 and \$1,000,000. The cost is based on up to five parking structures participating and is dependent upon the technology deployed at each facility. The estimated cost is based on the range of costs for similar recent deployments reported in the federal ITS knowledge database.

**Performance Measures:**  
The effectiveness of this project can be measured through the following measures:  
• Parking usage  
• Parking revenue  
• Traffic congestion during events.

**remove selecting parking management software**

**20. Regional Virtual Data Warehouse Project**

**13.4.20 Regional Virtual Data Warehouse Project**

**Description:**  
This project will develop a virtual method for agencies to share traffic, maintenance, transit, emergency and incident information. The Virtual Data Warehouse does not create a centralized location for data storage. Instead, each agency maintains its own data, but is able to share the data it chooses with other agencies through a Regional integration system. Data may include both archives and real-time data such as signal timing, incident responses and video images. Authorized agencies will be able to use the information and images for managing traffic and incidents, and for maintenance planning. Key functions of the virtual warehouse will be to provide a standardized format for sharing and retrieving Regional data in order to make it usable and to ensure that all regional Stakeholders are using the same information for their operations. The data will also have the potential for sharing with the general public. While this project is important, its value is limited until the Region increases its ability to collect information through other ITS Projects identified in the near-, medium- and long-term. As the project is built out it will be split into a Statewide Data Warehouse maintained by KDOT and a Lawrence-Douglas County version maintained by City of Lawrence Municipal Services and Operations department.

**Timeline:** Long-term (six to ten years)

**Project Areas:**  
• Lawrence-Douglas County Region

**AShley Bryers**  
Mike Floberg, from KDOT, suggested splitting this into two projects. I added this line and said it would be co-lead between KDOT and MSO.  
**MSO, is this okay?**

ask MSO - melinda and dave cronin

- 9. Draft RAD-IT Website (Discussion)** – The Committee reviewed the industry standard ITS plan software and website, RAD-IT. The Committee was updated on the status of the Lawrence-Douglas County 2021 ITS RAD-IT webpage.

**Draft RAD-IT Website**

<https://assets.lawrenceks.org/assets/mpo/ITS/2021/web/web/index.htm>

Open link 

<https://assets.lawrenceks.org/mpo/its/2021/20210426-ITS-SC-Agenda.pdf>

Open link 

**10. Next Steps – Meeting adjourned at 2:24 pm**

- Provide any final comments by 5 pm on April 30.
- Anticipated 15-day public comment period – May 6 to May 21.
- Technical Advisory Committee and MPO Policy Board – June consideration for approval.