

# Memorandum

## City of Lawrence

### Planning & Development Services

TO: Thomas M. Markus, City Manager  
FROM: Jessica Mortinger, Senior Transportation Planner  
Ashley Myers, Transportation Planner  
Bob Nugent, Lawrence Transit Administrator  
CC: Scott McCullough, Director, Planning and Development Services  
Chuck Soules, Director of Public Works  
DATE: April 18, 2017  
RE: Transit Comprehensive Operations Analysis (COA) Acceptance

#### **Background**

The City-wide fixed-route service began in 2000 with KU and the City coordinating service beginning in 2009. Coordination efforts and restructuring of routes have led to ridership growth - 157% growth between 2008-2014. Typically transit systems are comprehensively evaluated every five to eight years, but Lawrence Transit has never conducted this type of analysis.

In late 2015 the Lawrence-Douglas County Metropolitan Planning Organization (MPO) was awarded Competitive Consolidated Planning Grant funding to conduct a Transit Comprehensive Operations Analysis (COA). The total study cost \$200,000 with \$150,000 Competitive Consolidated Planning Grant and \$50,000 local transit funding match.

#### **Project Description**

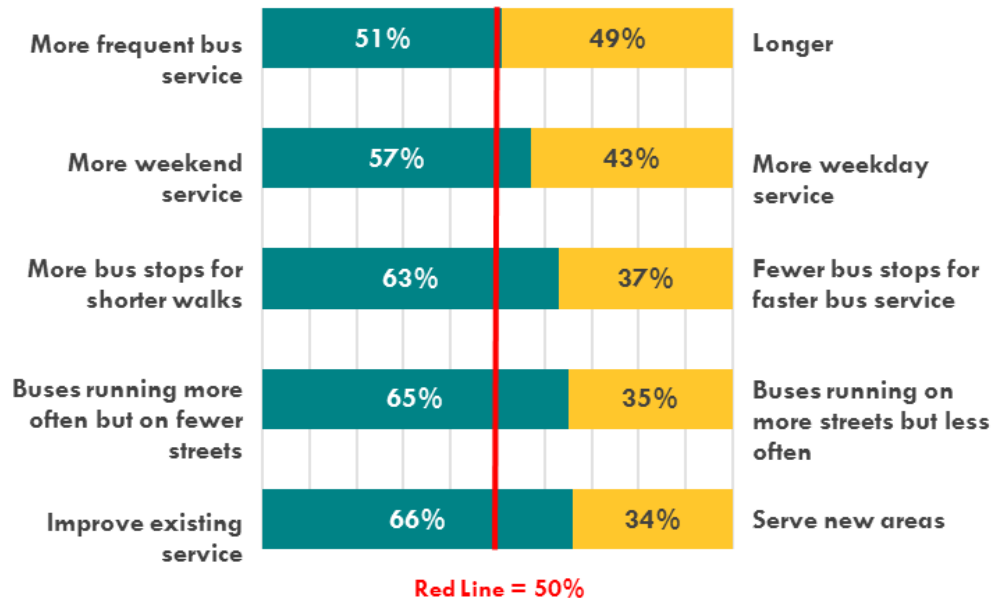
In 2016 the MPO hired Nelson\Nygaard to conduct the COA which included extensive data collection and analysis of the existing transit system to enhance service quality for existing and new customers. Using data collected in the analysis, the COA presented recommendations with the aim of increasing ridership and productivity throughout the service area, more efficient utilization of limited financial resources, and generally improving connectivity, both within and between adjacent service areas. The COA included a market/service analysis, stakeholder input, and recommendations.

#### **Market/Service Analysis**

The market analysis included an assessment of existing and potential demand for transit service based on population and employment density, socio-economic and demographic characteristics, and land use/built environment. The service analysis evaluated the overall transit system in Lawrence by conducting ridership data per stop and route, as well as evaluating route and stop productivity, and on-time performance. This data will be extremely helpful to the transfer hub location analysis and decision process.

## **Stakeholder Input**

The study had a substantial amount of stakeholder input through surveys and public meetings. Trade off type questions were asked, such as would you rather have more weekend service or more weekday service. As shown in the figure below, respondents would like more frequent bus service over longer bus service hours, more weekend service over more weekday service, more bus stops for shorter walks over fewer bus stops for faster bus service, buses running more often but on fewer streets over buses running on more streets but less often, and improving existing service over serving new areas.



## **Recommendations**

### **Service Recommendations**

Various service recommendations were made to serve existing riders better, attract new riders, and improve overall-all system productivity. The data that supports these recommendations will be utilized if the service needs to be redesigned based on a decision about the permanent location of the transfer center. It will also provide metrics for which stops receive amenities, like shelters or benches.

### **Long Term Recommendations:**

- Consider subsidizing Uber/Lyft type service for low-density areas and/or low-ridership time periods. This is a growing trend nationwide, which works well in large metro areas.
- Expand the campus circulator service to include weekends (daytime and evening).
- Expand service to growing areas including the KU Central District, Lawrence Venture Park, and Overland Drive.
- Formalize in-fill service by standardizing and publicizing the schedule for peak-periods only.
- Expand Lawrence Transit service frequency and span of service. Nearly all peer systems have some "city" service past 9:00 PM. The COA recommends moving to

at least 30-minute service frequency on all routes that could sustain this level of service.

- Improve passenger amenities to further improve the user-experience in high ridership and transfer stops. Higher service frequency makes mid-route transfers more appealing.
- Improve pedestrian treatments at existing hubs by utilizing raised crosswalks and/or motion-activated warning lights embedded in the crosswalk.
- Continue to pursue the goal of building a dedicated transit hub that improves passenger safety and has sufficient layover space.
- Update the real-time information app, as the current app is poorly-rated by users, experiences network failures, and is difficult to navigate.
- Conduct a comprehensive branding and marketing study. This type of study typically involves focus groups and substantial community outreach and result in brand integration or more effective marketing strategies for individual brands (Lawrence Transit and KU on Wheels).

#### Demand-Response Service Recommendations

- Transform JayLift into a campus-only paratransit service. Most off-campus trips are taken by University employees, who do not pay for service with student fees.
- Update Trapeze PASS software settings. Use street routing as basis for travel time estimation. This should provide more accurate scheduling than the current triangulation method. Scheduling parameters need to be tested and fine-tune based on results. Batch scheduling and single trip scheduling currently rely on same set of parameters, rather than parameters optimized for each case. Some PASS features including "Schedule Agent" and "Waitlist" are not currently being used, but could improve service productivity if utilized.
- Ensure proper performance monitoring by prompting for arrival and departure times at all stops on manifests. Record data in a consistent manner by clarifying the definition of on-time and late trips, trip denials, missed trips, and excessively long trips.
- Reduce Night Line costs. Currently it costs \$32 per trip; while it costs \$25 per T Lift trip. This may be another possible application for a subsidized Uber/Lyft type of service.
- Coordinate more closely with Human Services Providers by focusing on travel training and the potential to co-mingle trips with Senior Resource Center for Douglas County, Inc. (SRC).

#### **Fares and Funding Recommendations**

- Continue with existing fare collection policies until the funding situation becomes clearer. The local sales tax needs to be approved by voters in 2018. The current KU student fee is renewed annually.
- KU should set a floor on student fees to ensure more certainty and predictability. The current funding uncertainty limits multi-year capital and service planning. Administrators should consider transitioning from student senate-controlled fee to an administration-controlled fee to provide more funding stability. The fee should include adjustments for inflation.

- Make a compelling case to voters to extend the sales tax referendum by showing service improvements that could be funded, as well as service cuts that would be necessary without funding.

### **Procedures and Technology Recommendations**

- Strengthen revenue control and audit procedures by contracting with a specialized cash management vendor and increase staff time devoted to auditing.
- Introduce a smartphone fare payment option; however, this requires visual inspection by the bus driver upon boarding.
- It is an industry best practice to have an in-person assessment for paratransit eligibility. Currently, people are only certified by their medical professional. Lawrence Transit should transition the T Lift eligibility process to include an in-person assessment to ensure ADA paratransit service and fixed-route discounts are reserved for those who truly need it.

### **Governance Recommendations**

- The State of Kansas currently permits the regional transit authority (RTA) model in Wichita and Topeka or in communities with existing transit providers that possess the ability to tax or issue bonds. Forming an RTA in Lawrence would require action by the State Legislature.
- Rather than pursuing full consolidation, Lawrence Transit and KU on Wheels should secure long-term funding commitments and update MOUs to reflect any new funding sources, including sales tax extension and/or changes to University fees and any new major capital investments such as a new transit center. Separate MOUs for fare/operational agreements and capital agreements should be developed. Buy-out terms for capital agreement ensuring equitable terms of separation should be included (if deemed necessary).

### **Staff Recommendation**

Staff recommends accepting the Transit COA.

### **Action**

Accept the Transit COA.