Project Background

- Transit has evolved very quickly in Lawrence
  - City-wide fixed-route service began in 2000
  - City and KU began coordinating service in 2009
  - Routes have been tweaked incrementally over the years

- Coordination efforts and restructuring of routes have led to ridership growth
  - 157% growth between 2008-2014
  - Ridership growth has helped demonstrate the value of transit to the community

- Time is right to take a comprehensive look at transit in Lawrence for the first time in 15 years
  - 10-year funding authorization expires in 2018
Study Goals

- Identify strengths and weaknesses of existing system
  - Review travel patterns
  - Assess system efficiency
  - Identify unmet transit needs

- Recommend service improvements
  - Serve existing riders better
  - Attract new riders
  - Improve over-all system productivity
Guiding Principles

- **Service Should be Simple:**
  - For people to use transit, service should be designed so that it is easy to use and intuitive to understand.

- **Service Should Operate at Regular Intervals:**
  - In general, people can easily remember repeating patterns, but have difficulty remembering irregular sequences.

- **Routes Should Operate Along a Direct Path:**
  - The fewer directional changes a route makes, the easier it is to understand. Circuitous alignments are disorienting and difficult to remember.

- **Routes Should be Symmetrical:**
  - Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from.

- **Routes Should Serve Well Defined Markets:**
  - Routes should include strong anchors, and a mix of origins and destinations.

- **Service Should be Well Coordinated:**
  - At major transfer locations, schedules should be coordinated to the greatest extent possible to minimize connection times for the predominant transfer flows.
Guiding Principles

Service Should Operate at Regular Intervals:
- In general, people can easily remember repeating patterns, but have difficulty remembering irregular sequences.
Guiding Principles

Routes Should Operate Along a Direct Path:
- The fewer directional changes a route makes, the easier it is to understand. Circuitous alignments are disorienting and difficult to remember.
Guiding Principles

Routes Should Operate Along a Direct Path:
- The fewer directional changes a route makes, the easier it is to understand. Circuitous alignments are disorienting and difficult to remember.
Guiding Principles

Routes Should be Symmetrical:

- Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from.
Guiding Principles

Routes Should be Symmetrical:

- Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from.
Guiding Principles

Routes Should Serve Well Defined Markets:
- Routes should include strong anchors, and a mix of origins and destinations.
Guiding Principles

Service Should be Well Coordinated:
- At major transfer locations, schedules should be coordinated to the greatest extent possible to minimize connection times for the predominant transfer flows.
Guiding Principles

Service Should be Simple:
- For people to use transit, service should be designed so that it is easy to use and intuitive to understand.

Service Should Operate at Regular Intervals:
- In general, people can easily remember repeating patterns, but have difficulty remembering irregular sequences.

Routes Should Operate Along a Direct Path:
- The fewer directional changes a route makes, the easier it is to understand. Circuitous alignments are disorienting and difficult to remember.

Routes Should be Symmetrical:
- Routes should operate along the same alignment in both directions to make it easy for riders to know how to get back to where they came from.

Routes Should Serve Well Defined Markets:
- Routes should include strong anchors, but should avoid unintended service duplication.

Service Should be Well Coordinated:
- At major transfer locations, schedules should be coordinated to the greatest extent possible to minimize connection times for the predominant transfer flows.
Other Factors Considered

- **Market Analysis**
  - Population and employment density
  - Population characteristics
  - Land-use and the built environment
  - Regional travel patterns

- **Service Analysis**
  - Ridership
  - Productivity
  - On-time Performance

- **Stakeholder Input**
  - Riders
  - Non-riders
  - Staff
  - Stakeholders
Market Analysis
Service Analysis
Stakeholder Input

- **More frequent bus service**: 49% for longer service hours, 51% for more frequent bus service.
- **More weekend service**: 59% for longer service hours, 41% for more weekend service.
- **More bus stops for shorter walks**: 64% for longer service hours, 36% for fewer bus stops for faster service.
- **Buses running more frequently but on fewer streets**: 66% for longer service hours, 34% for buses running on more streets but less frequently.
- **Improve existing service**: 66% for longer service hours, 34% for serve new areas.

Red Line = 50%
Service Scenarios

- Approach:
  - Follow guiding principles
  - Incorporate technical findings and stakeholder input
  - Provide options
Scenario 1
Scenario 1

- Bi-directional Service
- Streamlined Service
- Improved Origins/Destinations Mix
- Simplified Alignments
- Improved Origins/Destinations Mix
- Service Consolidation
- Pre-invested Resources
- Re-invested Resources
- Streamlined Service
- Streamlined Service
- Service Consolidation
- Prepare for Future Service
- Re-invested Resources
Scenario 2

- Improved productivity
- More Direct Access to Retail
- Alternative Alignment
- Improved Productivity
- Simplified Alignment
Scenario 2: Lawrence Transit/KU on Wheels Proposed Schedule and Frequency

Route 1
Route 2/3
Route 6
Route 7
Route 15
Route 29
Route 30
Route 36
Route 38
Route 41
Route 43
Route 10
Route 27

Span of Service (Based on Departures in One Direction):
- Lawrence Transit
- KU on Wheels
- Coordinated Routes

Route time points are approximate.
Subsidized TNC Service

- Transit agencies are beginning to explore innovative ways to provide first/last mile connections in lower-density areas

- Flex service is a more cost-effective approach than fixed-route service, but it is still inherently inefficient

- Transportation Network Companies (TNC) such as Uber and Lyft have proven their ability to provide timely service at affordable prices in metro areas

- TNCs have recently begun partnering with public and private partners to facilitate subsidized service, making trip costs comparable to transit fares
Subsidized TNC Service

- **Case Study – St. Petersburg, FL**
  - Alternative Uber/taxi service to neighborhoods underserved by fixed-route transit
  - Transit agency pays half the Uber/taxi fare up to $3 per ride between designated bus stops and the neighborhood service zone
  - Customers enter code in Uber app to receive subsidy OR call taxi provider to request a subsidized trip
Thank you!
Please visit www.lawrencetransitstudy.com for more information.