

# TRANSPORTATION COMMISSION East 19<sup>th</sup> St, Harper to O'Connell Thursday, March 29, 2018 6:00 PM City Commission Room, City Hall, 6 E. 6th Street

### **AGENDA**

Public comment related to the meeting topic will be allowed at the end of the discussion item. Each person will be limited to three (3) minutes. Individuals are asked to come to the microphone, sign in, and state their name and address.

1. East 19th St, Harper to O'Connell Project Scope Discussion

**Action:** Provide feedback on East 19<sup>th</sup> St, Harper to O'Connell, design scope.

# 19<sup>th</sup> Street – Harper to O'Connell

March 29, 2018

Transportation Commission

# Background

- 19<sup>th</sup> Street currently dead-ends at O'Connell
- 19<sup>th</sup> Street east of Harper was constructed in 1959
  - Not constructed to city street standards...
  - Chip and seal road
  - No curb and gutter open ditch
  - Pavement Condition Index of 24.8
  - 9 waterline breaks since 2011; 4 breaks in 2017
  - Sidewalk on portions of north side; none on south side
  - Designated for future bike lanes on bikeway plan

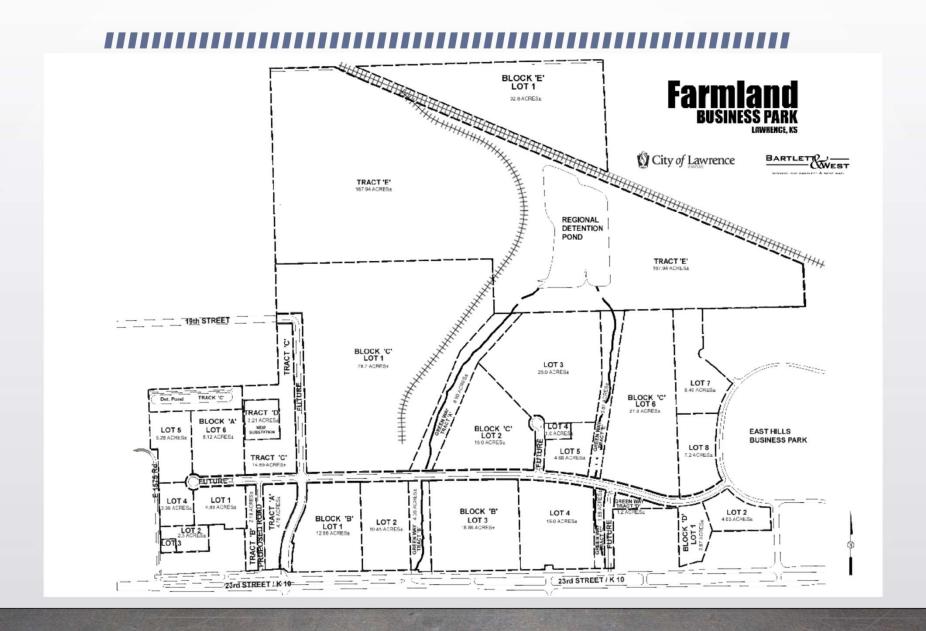


# 19th Street Planning and CIP

- 2014 City began planning to reconstruct 19<sup>th</sup>
   Street Harper to O'Connell
  - 2015 Design and 2016 Construction
- Project has been delayed and currently included in 2019 CIP
- Current Estimated Cost is \$3.625M
- There are no plans for additional projects on 19<sup>th</sup>
   Street to increase capacity.

### Venture Park

- City acquired Farmland Industries facility (450 acres) in 2010 to develop property as business park for jobs.
- 2012 City developed master plan and held meetings with neighbors and businesses to discuss master plan.
- Dec. 18, 2012 City Commission approved final plat
- 2013-2014 City invested \$7.5M on infrastructure and grading for streets, waterline, sewer, etc.
  - O'Connell from 19<sup>th</sup> Street to Venture Park Drive was constructed at a cost of \$1.2M
  - In 2014 it was decided to not connect to 19<sup>th</sup> Street until 2016 when Harper to O'Connell would be reconstructed



### Venture Park

- 19th Street connection will provide safe/efficient access for city residents that are working at Venture Park and East Hill Business Park
- VanTrust has begun work to construct first spec building with est. completion late this year.
- The connection will help in the marketability of the park to further enhance primary job creation for Lawrence residents.

# Venture Park Traffic Study

- In 2012 a Traffic Impact Study was prepared for the business park
- Assumed a 50% build out scenario and a full build out scenario
- "Industrial Park" Trip Generation estimated 12,945 daily trips at full build out.
- Study included existing and proposed intersections
  - 19<sup>th</sup> & Harper, 23<sup>rd</sup> & O'Connell, K-10 & East Hills
- Trip Distribution assumed 30% of traffic would use 19<sup>th</sup> Street; 70% would use 23<sup>rd</sup> Street.
- Peak hour trips on 19<sup>th</sup> Street AM 410 trips; PM 377 trips
- 24 hour trip count 3884 vpd (30% of full build out)

# Traffic Study Recommendations

- 19<sup>th</sup> & Harper Operate LOS A at 50% and LOS B at 100%
  - No geometric improvements necessary at full build-out (Allway stop)
- 23<sup>rd</sup> & Harper LOS C at 50% and 100%
  - No improvements required
- 23<sup>rd</sup> & O'Connell Traffic Signal warrants were recommended and a signal was installed
  - The single eastbound left turn lane was constructed to the length needed for the 50% build out.

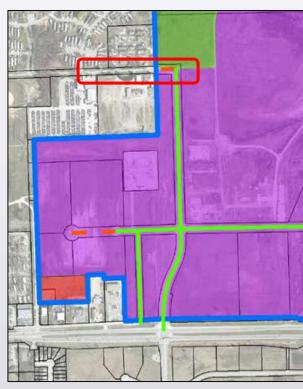
# Farmland Industries Redevelopment Plans

- 2008 Farmland Industries Redevelopment Plan
- 2009 Annexed into Lawrence by City Commission
- 2010 City of Lawrence Ownership
- 2012 Preliminary & Final Plat Adopted
- 2016 Farmland Industries Redevelopment Plan Revised

# Farmland Redevelopment Plan Street Network Maps



2008

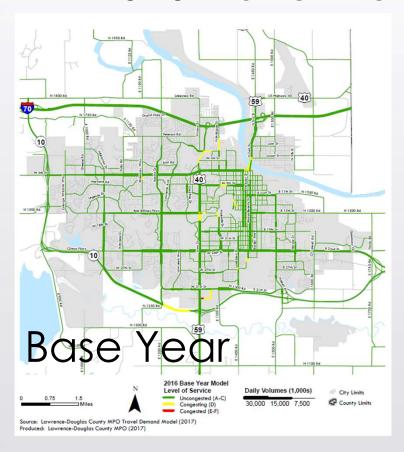


2018

# Transportation Planning

- 19th Street Connection to O'Connell/ Franklin shown in long range transportation plans for 20+ years
  - T2020, T2025, T2030, T2040(2013), T2040(2018)
- Scope of T2040(2018) Update
  - Travel Demand Model included a scenario with and without 19<sup>th</sup>
     Street & O'Connell connection

### T2040 Travel Demand Model

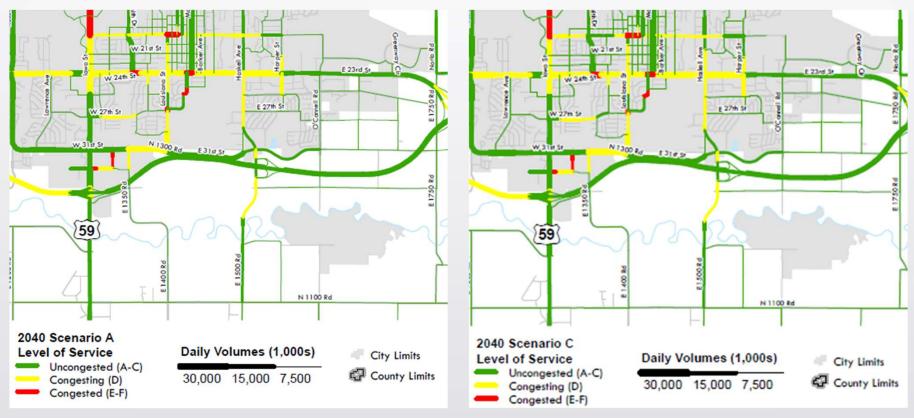




Countywide Vehicle Miles Traveled increases 143%

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### T2040 Travel Demand Model



1.8% avg. increase in trips along 19th St.- Iowa to O'Connell with connection No increase (-22 trips) between Haskell and Massachusetts Street 18.1% increase/1000 additional trips between Harper & O'Connell

### T2040 Steering Committee Recommendations/ Approved Plan

- Downgrade street classification on Major Thoroughfares from Minor Arterial to Collector for 19<sup>th</sup> Street from Haskell to O'Connell (O'Connell Rd. 19<sup>th</sup> to 31<sup>st</sup> St is a collector)
- Determined connecting 19<sup>th</sup> Street and O'Connell was appropriate to balance the street network throughout Lawrence

# **Emergency Access**

- As you are aware the need to have open and unobstructed response routes for all hazard emergencies is
  in the best interest of the public and the fire fighters being asked to perform the hazardous work. Keep in
  mind that the life expectancy of a non-breathing patient decreases 10% for every minute the patient
  goes without respiration or heart beat. A fire in its free burning state will grow exponentially. Minutes can
  make the difference between a fire contained to a room to one that involves multiple rooms.
- As part of the departments agency accreditation we have developed a Standard of Cover which
  outlines all hazards in our community now and future development. It is imperative that we manage our
  total response time to ensure that we achieve both the departments operations goals and the goals of
  the City Commissions Strategic Plan.
- It is my professional opinion and required under the International Fire Code adopted by City Ordinance that access to developed geographical areas be accessible by a minimum of two as remotely as possible access points. The need for the 19th Street and O'Connell Road is imperative to meet the emergency access needs of the community. Currently we cannot meet our agency response times of arriving within 6 minutes 90% of the time.
- In regards to traffic calming the fire department does not oppose any of the current City adopted
  construction methods. I would request that all in block traffic calming be constructed with "Speed
  Cushions." This provides an unobstructed roadway for smooth rides of a patient being transported by
  ambulance and lessens the damage to fire apparatus suspensions.
- I would also ask that the fire department be actively involved in the review of traffic calming as we have enjoyed in past practice.

### Transit Service

- Provide for a more direct access between major transfer location and employment.
- Provide for better utilization of resources (less circuitous service) and reduce travel times.
- Greatly improve transit access for low-moderate neighborhood.

### Historical Traffic Counts – Pre/Post South Lawrence Trafficway

- KDOT takes traffic counts in Lawrence every 3 year and also conducted before/after traffic counts of SLT to determine impact on K-10 and city streets.
- Traffic Volumes on 23<sup>rd</sup> Street have decreased 15%-30%
- Traffic Volumes on 19<sup>th</sup> Street have decreased approx. 5% west of Naismith to over 20% east of Haskell
- No change in North/South Traffic on Naismith or Mass St. at 21st St.; 4% increase on Haskell at 23rd St.

### **KDOT Traffic Counts**



### Staff Recommendations

- Proceed with design plans with construction in 2019
- Improve infrastructure and support sustainable transportation options
  - Reconstruct street and waterline
  - Provide multi-modal connections; Sidewalks, Bike Lanes, Transit Access
- Provide Safe/efficient access to business park for Lawrence residents working or doing business in Venture Park / East Hills.
- Provide adequate response time for emergency service

# Scope of Design

- Staff would recommend to reconstruct 19<sup>th</sup> Street to 47' back to back.
  - Two 11' through lanes (one eastbound, one westbound)
  - One 11' center turn lane/raised grass median.
  - Two 6.5' bike lanes
- Evaluate options for access management to minimize need for turn lane.
- Evaluate location for mid-block raised crosswalk
- Evaluate design for roundabout at Harper and E 19<sup>th</sup> Street
- Evaluate feasibility of completing gap sidewalk on south side of 19<sup>th</sup> Street from Haskell to Harper St. (Safe Routes to School)
- Evaluate options for traffic calming devices from Haskell to Harper St.
- Hold public meeting 50% through design
- Receive feedback from Transportation Commission on design plans
- Finalize plans end of 2018.
- Utility relocation and R/W acquisition if needed, winter/spring 2018
- Construction Summer-Fall 2019