# LEXINGTON AREA METROPOLITAN PLANNING ORGANIZATION (MPO)

# **AGENDA**

# Congestion Management Air Quality (CMAQ) Committee Linking Planning, Engineering, Operations and Safety (LPEOS) Program

"Transportation Planning for Fayette & Jessamine Counties"

Date and Time: August 11, 2021, Wednesday, 1:30 pm

**Place:** 7<sup>th</sup> Floor Planning Conference Room / Zoom

LFUCG Phoenix Building

101 East Vine Street, Lexington, KY 40507

# Or Join meeting with the Link:

 $\frac{https://us02web.zoom.us/j/83507253995?pwd=QThRL3JWcVYwTXB0UWdNbGc5NE9JZz09}{9}$ 

Meeting ID: 835 0725 3995

Passcode: 681106 Phone: 646 558 8656

- **1.** Call to order Committee Chair: Mr. Thomas Witt Co-Chair: Ms. Deepika Eyunni
- **2. Chair or Co-Chair Reads:** Opening Statement for Zoom Meetings On meeting minutes
- **3. Introduction** All attendees: Name, Affiliation, Title...
- **4. Welcome Meeting Attendees** Call for public comment
- **5. Meeting Minutes** Discussion/acceptance of previous meeting minutes
- 6. Regular Work Program:
  - a. Lexington Area Congestion Management / Bottleneck Study AECOM
  - **b.** Jessamine-Fayette Connectivity Study KYTC/Stantec
  - c. Hamburg I-75 Crossing Feasibility Study Final & Next Step?
  - d. KYTC Statewide Corridor Plan
  - e. SHIFT Kentucky Ahead 2022
  - f. ITS-CMS Projects updates Traffic Engineering
  - g. TIP Amendment of Nicholasville Road Access Management
  - **h.** New Circle Rd (KY-4) Signalized Corridor Transportation Land Use Study
  - i. Air Quality and CMAQ updates
  - **j.** Congestion reduction efforts Reports from attendees on recent or planned efforts

- 7. Other updates from MPO committees, staff, and other agencies
- 8. News, announcement, and calls for agenda items of next CMAQ meeting

> Open to all attendees.

**9. Next Meeting:** Place: MPO / Division of Planning

7<sup>th</sup> Floor Conference Room, Phoenix Building

**Date / Time:** October 13, 2021, Wed. / 1:30 pm

10. Adjournment

**Note:** If your schedule does not allow you to attend the meeting, you may assign your alternate to attend. The public is welcome to attend.

## **Lexington Area MPO**

# **Congestion Management Air Quality (CMAQ) Committee**

# Wednesday, June 9, 2021 – 1:30 PM

# **Meeting Minutes**

#### **Attendees:**

Thomas Witt – KYTC Planning, CMAQ Chair Deepika Eyunni- LFUCG Traffic, CMAQ Co-Chair

Brian Aldridge – Stantec Kenzie Gleason – MPO/LFUCG Planning

Jason Allinder – LFUCG Traffic Eng Len Harper – Stantec

Adam Bender – Saunders Sam Hu – MPO/LFUCG Planning Joe Brumley – Citizen Mark McIntosh – Vision Eng Doug Burton – LFUCG Eng Roger Mulvaney – CMT Engr Matt Carter – Vision Eng Jeff Neal – LFUCG Traffic Eng Joey David – MPO/LFUCG Vanessa Nghiem – AECOM Steve De Witte – KYTC Planning Julia Shaw – Lex Police Patrick Deming – CMW Casev Smith – KYTC D7 Jimmy Emmons – MPO/LFUCG Planning Matt Winkler – Lextran

Attendance: 22

#### Call to Order

Mr. Witt called the LexCMAQ Committee (CMAQC) Zoom meeting to order at 1:35 pm. There was a new COVID-19 Statement regarding video teleconference for Boards and Commissions. He requested Ms. Gleason to read the new COVID-19 Statement:

"Due to the COVID-19 state of emergency, this meeting is being held via live video teleconference pursuant to 2020 Senate Bill 150, and in accordance with KRS 61.826."

#### **Welcome and Introduction**

Mr. Witt welcomed all meeting attendees and gave thanks to them for making time to attend the CMAQC Zoom meeting. He introduced all meeting attendees. Everyone replied with "Yes" or "Present". He also called for public comment. No public comment was presented.

## **Discussion and Acceptance of Previous Meeting Minutes**

The previous meeting minutes of February 10<sup>th</sup>, 2020 was sent to the CMAQC members via email with the current meeting Agenda. Mr. Witt requested that all meeting attendees spent a few minutes to review the previous meeting minutes. He touched a few highlights of the previous meeting and asked if there were questions and comments on the meeting minutes. No questions and comments were presented. A motion was made to approve the meeting minutes, and the motion was seconded. The previous meeting summary was accepted.

#### **Regular Work Program**

Mr. Witt said that Stantec has prepared a presentation for us regarding Hamburg I-75 Crossing Feasibility Study. He introduced Mr. Aldridge who planned to give the presentation.

# Hamburg I-75 Crossing Feasibility Study - Stantec

Mr. Aldridge prepared a PowerPoint presentation for the committee. He began with giving a project background and history. Due to significant traffic congestion and safety issues in the growing Hamburg (Man O War/Sir Barton/I-75) area, a Man O War Small Area Study was conducted and completed in 2016. The Study recommended a congestion-relief project that would connect Sir Barton Way and Polo Club Blvd with a connector road that would run under I-75 conceptually.

We began the Feasibility Study in late summer in 2020. The Study's goals are to determine the feasibility of implementing a direct connection between Sir Barton Way and Polo Club Blvd., examine impacts to traffic patterns, and identify other project benefits, constraints, and costs.

The Study area includes corridors of Sir Barton Way, Man O War, Polo Club, Winchester Road, and I-75. The connecting road focus area is to the south of Walmart and near Sanford Way. The planned connecting road would be multi-modal with bike/pedestrian connectivity.

The KYTC pre-Covid Average Daily Traffic (ADT) estimates in Average Vehicles Per Day (AVPD) are as follows:

Polo Club Blvd at 5,600 Man O War east of I-75 at 9,100 Sir Barton Way at 18,600 Winchester Rd east of I-75 at 14,700 Winchester Rd west of I-75 at 37,200 Man O War west of I-75 at 43,900

I-75 between Man O War and Winchester Rd at 73,700

There are three known Development Plans in the Study area. We used 100% for Phase I development, and 75% for Phase II development while forecasting. The estimated 2045 Development trips per day are 2,900 trips for new Schools, 10,600 trips for Meadowcrest development, and 36,900 for Baptist Site.

With the 2045 traffic model forecasts, assuming a 4-lane facility would be built, the conceptual connector road would carry 21,000 vehicles per day (VPD). That would reduce traffic on adjacent interchanges by 12% to 20%.

We developed concepts to connect Sir Barton and Polo Club over or under I-75 based on a combination of input from the project team, a review of existing conditions, travel demand model analyses, and field evaluations.

We considered multiple horizontal and vertical alignment options over the course of the Study. We engaged and had discussions with utility companies and adjacent developments to reduce project costs and ensure compatibility with the planned developments.

Ultimately, the project team determined that it isn't feasible to construct an overpass above I-75 because of the steep roadway grades needed to get over the Interstate. In addition, conventional tunnel concepts were eliminated due to the anticipated depth of bedrock in the vicinity of I-75.

The recommended solution is to build an underpass under I-75. The recommended construction method for the underpass is to construct a bridge under the current interstate using part width construction. This type of construction involves building the bridge in three sections and shifting traffic on I-75 while each individual portion of the bridge is constructed.

There is a 12" natural gas pipeline under the project area. The TCEnergy Gas company requires that at least 8-foot soil cover above the pipeline be maintained.

The project team has recommended two connector concepts for consideration in future project phases. One connector concept is to construct a four-lane Sir Barton/Polo Club Connector including constructing a new intersection between Sanford Way and Grey Lag Way with a connection under I-75 to Polo Club Blvd. Another connector concept is to construct a two-lane connector. The planning level estimated cost would be between \$22M for the two-lane concept, and \$30M for the four lane concept in 2021 dollars.

Both two-lane and four-lane concepts should be considered in future phases of the project. If a two-lane connector were to be recommended and carried forward into the design phase, considerations should be given to construct a bridge wide enough to accommodate a four-lane corridor in the future. Final Study report can be found with the following link:

https://transportation.ky.gov/Planning/Pages/Project-Details.aspx?Project=Hamburg%20I-75%20Crossing%20Feasibility%20Study

## Jessamine / Fayette Connectivity Study – KYTC/Stantec

Mr. Casey Smith said that the Study was commissioned because the southeast Fayette and northeast Jessamine area has experienced rapid growth in recent years. The lack of safe and adequate east-west connectivity south of Man o' War Boulevard has been an increasing concern of the traveling public and residents. The Cabinet and LexMPO had retained Stantec and Rasor Communications to perform the Study.

The federal PL funds were available to conduct the Study. With the impending completion of the East Nicholasville Bypass, undesirable local rural roadways forecast to handle upwards of 17,000 vehicles per day as a "shortcut" between I-75 and City of Nicholasville. Potential options for improving connectivity and safe mobility in this area are studied.

Corridor connectivity will be evaluated thoroughly in the project area. New Kentucky River crossings are not being considered as part of this study. The Study looks into improving connections and safety improvements.

The Study went through the first public-involvement phase. Over 3,500 post cards were sent to gather public inputs. More than 200 responses were received. The project team has reviewed the responses and drafted a summary of the responses.

A project team meeting with local officials/stakeholders has been scheduled on June 24<sup>th</sup>. We'd discuss the process about the second pubic-involvement phase. The public-involvement meeting could be an in-person and virtual hybrid meeting. The meeting will be scheduled in July. The

following websites and media are used for the Study project public involvement and participation process.

http://www.jessfaystudy.com/

https://transportation.ky.gov/DistrictSeven/Pages/Jessamine-Fayette-Connectivity-Study.aspx

https://www.wtvq.com/2020/10/29/state-seeks-input-to-shape-jessamine-fayette-connectivity-study/

https://www.jessaminejournal.com/2020/10/15/transportation-cabinet-seeking-public-input-for-jessamine-fayette-connectivity-study/

# Lexington Area Congestion Management / Bottleneck Study - AECOM

Ms. Vanessa Nghiem reported that the project team had been working on analyzing data and identifying bottlenecks on the MPO's congestion management roadway networks. We are evaluating various sources of data including INRIX data, NPMRDS data, safety data and other available data sources to identify intersections and roadway segments with high rates of traffic incidents, poor travel time reliability, and the greatest duration and impact of congestion.

We've been conducting Steering Committee meetings, and having in-depth discussions about congestion performance measures/metrics. There are many performance metrics to measure level of congestion. We're using the federally-required and technically-sound performance measures/metrics, and using them as the primary congestion analysis and evaluation criteria.

As for congestion level analysis, we've primarily used INRIX, NPMRDS, Level of Service (LOS) and travel delay data for roadway segments and intersections. We've also used MPO travel demand model data of 2020, 2025 and 2030 for future congestion level analysis.

As for safety analysis, we've used LFUCG, MPO and KYTC traffic safety data available for MPO congestion management networks. We've identified 50 to 60 roadway segments and intersections that needs attention. We'll use available data to trim down the 50/60 locations to about 30 locations for in-depth evaluation and congestion mitigation alternative analysis.

The LFUCG Traffic Engineering and KYTC District 7 staffs have recommended some locations that are problematic based on their observations and complaints received from the roadway users. The bottleneck locations are listed on a spreadsheet and displayed on a map for the committee to vet on. We'll work on the alternative analysis for the bottleneck locations in the coming weeks

We're having our Steering Committee meeting next week to vet on the bottleneck locations. We'll schedule at least two Steering Committee meetings in July to work on the alternative analysis of the identified top bottlenecks.

Imagine US-27 / Nicholasville Road Corridor Transportation Land Use Study Plan

Ms. Kenzie Gleason reported that WSP Inc. had completed the Nicholasville Road Corridor Land Use Plan and Transportation Study (Plan/Study). The Planning Commission conducted its hearing on May 20<sup>th</sup>, and adopted the Plan/Study.

The Plan/Study's vision is to make Nicholasville Road a safe, efficient place where people want to be. Here is a summary of the Plan/Study's goals.

- > Increase the intensity of land uses to accommodate population growth through more efficient land use
- ➤ Improve mass transit viability through transit/pedestrian oriented design
- ➤ Enhance safety and connectivity for all transportation modes
- > Coordinate transportation improvements with future redevelopment opportunities
- > Develop a cohesive sense of place along the corridor.

The Plan/Study's process has been a multi-modal approach with a lot of community involvement and investment. It has been focusing on safety and efficiency for people travelling by car, bus, bike or on foot. The recommendations are tailored to the unique corridor segments and roadway intersections.

The Plan/Study's Action Plan details the strategies needed to achieve the vision and goals of Nicholasville Road corridor enhancement. The plan recommendations include transportation network improvements, development strategies and placemaking opportunities.

The three specific tools, which are an integral part of the recommendations, are Bus Rapid Transit (BRT), Complete Streets (CS), and Transit Oriented Development (TOD). The strategies and tools promote the transportation and land use goals that are a part of Imagine Nicholasville Road and Imagine Lexington.

The transportation network improvements includes strategies to enhance safety and mobility for all users. It identifies how incremental densification of the corridor relates to phased mass transit improvements with the ultimate goal of BRT viability.

The next step is to work towards implementation of the Plan/Study. We may form an internal group that includes staff from Planning, Traffic Engineering and Engineering to prioritize the steps to implement the Plan. More updated information can be found in the linked project website below:

#### http://imaginenicholasvilleroad.com/

#### KYTC Statewide Corridor Plan

Mr. De Witte reported that the KYTC's Consultant had been working to develop the subject Plan. The Plan is close to wrap up. The Plan is to identify current and future needs, prioritize statewide and regional corridors with the greatest potential for impact, establish practical visions for each corridor, and identify areas where new connections may be needed.

The emphasis of the plan is to study the statewide, regional and local mobility needs between and within population centers, evaluate existing corridor conditions, identify corridor improvement needs/safety improvements, predict future corridor improvement needs, and prioritize the recommended improvement projects.

The project team has been evaluating the projects by a two-tier corridor analysis. The first tier has identified 52 corridors to evaluate. The second tier will identify down to 45 corridors. We're gathering inputs from MPOs, ADDs and local leaders. The 45 projects will be prioritized down to 25 or 20 corridors to evaluate. The identified 25 or 20 corridors and improvements will go through a detailed visioning and project prioritization processes.

Mr. De Witte presented a project demonstration on the screen. He clicked on Man O War Blvd that is Corridor #5. It showed a multi-modal concept, fiscal and financial project analysis. The Plan is slated to complete by the end of this month. Detailed information is available in the following website:

http://datamart.business.transportation.ky.gov/StateWideCorridorPlan.html

#### SHIFT Kentucky Ahead 2022

Mr. Thomas Witt said that the Cabinet has been working on the Strategic Highway Investment Formula for Tomorrow (SHIFT) prioritization process to develop the 2022 Recommended Highway 6-Year Plan. The MPO, BluegrassADD and District 7 are playing key roles in this data-driven prioritization process, including sponsoring projects for consideration, scoring and boosting the highest priority projects.

The database developed during the SHIFT prioritization process will go to the Continuous Highway Analysis Framework (CHAF) database. We want to make sure that the longer sections/mile points are matched. The MPO, BADD and District 7 have met with local elected officials to discuss about projects' scoring, boosting and sponsorships. The projects will be selected later this summer.

You may learn more details about how SHIFT works on the following KYTC's website: https://transportation.ky.gov/SHIFT/Pages/default.aspx

You may find the SHIFT work activity schedule on the following KYTC's website: <a href="https://kipdatransportation.org/wp-content/uploads/2020/10/Draft-SHIFT-2022-Schedule-for-ADDs-MPOs\_word\_export.pdf">https://kipdatransportation.org/wp-content/uploads/2020/10/Draft-SHIFT-2022-Schedule-for-ADDs-MPOs\_word\_export.pdf</a>

You may also find more info about CHAF on the following KYTC's website: <a href="https://transportation.ky.gov/Planning/Pages/CHAF.aspx">https://transportation.ky.gov/Planning/Pages/CHAF.aspx</a>

## Congestion Reduction Efforts – Reports from attendees on recent or planned efforts

Mr. Jeff Neal said that Traffic Engineering is working on ITS/CMS FY2021 projects. One of the projects is New Circle Road (KY4) Signal Re-timing Plan for the non-freeway segment. The signalized segment of New Circle is one of the most routinely congested roadways in Lexington and confirmed by INRIX. The project consists of LFUCG contracting with a consultant to

improve the signal timing plan. The request for proposal was put out and Crawford, Murphy & Tilly was selected to work on the project.

Additional ITC/CMS projects that Traffic Engineering is working on include:

Mainline Detection Equipment has been purchased for seven (7) intersections for a total of a little less than \$152K.

Traffic Monitoring Network Camera Equipment is another on-going project. Locations were selected and 20 quad cameras have been purchased along with installation parts needed. We're evaluating third-party software that would allow our traffic monitoring cameras to obtain different traffic metrics, such as volumes and speeds.

School Zone Beacon Upgrade, this project involves procuring a web-based system with field controllers and wireless connectivity at each flasher assembly. There are nearly 80 flashing beacons within 53 designated school zones. With the project's efforts, staff will have the ability to program the clocks, monitor for proper operation, change scheduled start/stop times, receive warnings about power supplies, etc. to ensure the optimal operation of the beacons.

# LexMPO Year 2021 Meeting Schedule approved by TPC on 10/28/2020

The approved LexMPO Year 2021 Meeting Schedule has been posted on the LexMPO's website as linked below:

https://lexareampo.org/wp-content/uploads/2021/01/Year-2021-MPO-Meeting-Schedule.pdf

#### **Announcement and News:**

Open to all attendees. None was reported.

## **Next Meeting**

It will be on August 11, 2021 at 1:30 pm.

#### Adjournment

A motion to adjourn the meeting was made and seconded. All were in favor. The meeting adjourned at 2:55 pm.