

TC 20-24 Rev. 8/2022 Page 1 of 4

CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 1: APPLICAN	T INFORMATION						
PROJECT TITLE							
Mason Headley - Multimodal Improvements							
SPONSOR NAME							
Lexington Fayette Urbar	n County Government						
ADDRESS			CITY				
200 East Main Street			Lexington				
ZIP		METR	OPOLITAN PLANNING ORGANIZATION (MPO)				
40507	(859) 258-3410	Lexing	ton Area MPO				
PROJECT CONTACT		EMAIL	-				
Andrew Grunwald, P.E.		agrun	wal@lexingtonky.gov				
SAI NUMBER (All applica	nts must complete the Department f	or Loca	ll Government, <u>Kentucky State Clearinghouse</u> requirements prior				
			ion of the Clearinghouse requirements must be included.)				
Pending - Project ente	red into Clearinghouse on 09/26/2	22.					
UNIQUE ENTITY IDENTI	FIER (UEI) # (all applicants must be	registe	red in the federal <u>System for Award Management (SAM</u>) before				
	se indicate the UEI assigned upon co						
3WTE6							
SECTION 2: PROJECT (CATEGORY						
INSTRUCTION: For the o	category that most fits your proje	ct, che	ck one of the boxes below. Please see the FHWA Interim				
			MAQ projects cannot add roadway capacity except for HOV				
			Q, even if the overall project does show emissions reductions.				
Traffic Control Meas	sures (TCMs)		Carpooling, Vanpooling, Car Sharing				
Alternative Fuels and	d Vehicles		Freight/Intermodal				
Congestion Reduction	on and Traffic Flow Improvements	; <u> </u>	☐ Diesel Engine Retrofits & Other Advanced Truck				
Bicycle and Pedestri	an Facilities and Programs		Idle Reduction				
Public Education and	Outreach Activities] Training				
Transportation Man	agement Associates (TMAs)		Inspection/Maintenance (I/M) Programs				
Travel Demand Man			Experimental Pilot Projects				
Transit Improvemen							
If funding is for operation	onal assistance, has this project pi	evious	sly received federal CMAQ funds? 🔲 Yes 🛛 No				
SECTION 3: PROJECT S							
			f_ d				
Have any elements of the Section 1 of t	ils project been completed using	state,	federal or local funds prior to this application for funding?				
	ne funding source and what has b	oon co	ampleted				
ii yes, piease iiiuicate ti	ie fulldling source and what has b	een cc	mpleted				



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CONGESTION MITIGATION AIR QUALITY (CWAQ) PROGRAM APPLICATION
SECTION 4: PROJECT DESCRIPTION
Provide a detailed project description, including the location and all items for which funding is being requested. A separate Project Cost Estimate should be attached as Attachment B. Keep in mind all potential costs associated with the project, including but not limited to: Design, Right-of-Way acquisition, archaeology, permits, surveys, tree removal, utilities, construction, construction inspection, etc. For operational assistance projects, include how the project will continue to be funded once the federal funds are expended.
Acquire Right-of-Way for left and right turn lanes to access proposed Fayette County School facility, curb & gutter,
street drainage, sidewalks and bike lanes on Mason Headley Road from Versailles Road to The Lane.
SECTION 5: PURPOSE AND NEED
Explain the purpose of this project and how it will improve air quality.
To reduce congestion and improve access to the Fayette County Public School facility for motorists, cyclists and pedestrians.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 6: PROJECT BUDGET

IMPORTANT: The Office of Local Programs uses the budget and estimate to determine the amount of funding awarded for a project; therefore, the amounts listed for each phase of the project must be as accurate as possible. To find out more information about cost estimates, consult the Local Public Agency (LPA) Guide.

Enter the total estimated amount for each phase of the project OR the Non-Infrastructure Project Total Cost.

PHASE FEDERAL DOLLARS LOCAL MATCH DOLLARS		TOTAL DOLLARS
		\$0.00
\$246,000.00	\$61,500.00	\$307,500.00
		\$0.00
		\$0.00
\$49,200.00	\$12,300.00	\$61.500.00
\$295,200.00	\$73,800.00	\$369,000.00
\$29,520.00	Local Match Not Required	
With a Late 2	A Part of the Wallet of the	\$0.00
	\$246,000.00 \$49,200.00 \$295,200.00	\$246,000.00 \$61,500.00 \$49,200.00 \$12,300.00 \$295,200.00 \$73,800.00

Maintenance Plan:

The roadway, including bike lanes, crosswalks, signalization, and drainage improvements will be maintained by LFUCG.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 8: EMISSION REDUCTIONS

Enter the emissions reductions for the pollutants listed below. Please note the reductions should be in kilograms per day and <u>each pollutant must have a number listed</u>. If a pollutant does not have any emission reductions, put a zero in the space. Applicants must use the <u>FHWA CMAQ Emissions Calculator Toolkit</u> when possible.

	VOC	СО	NOx	PM ₁₀	PM _{2.5}
ı	0.194	2.662	0.193	0.021	0.007
ı	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction
	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)

Describe the methodology used to determine each reduction. Do not attach additional pages to this application.

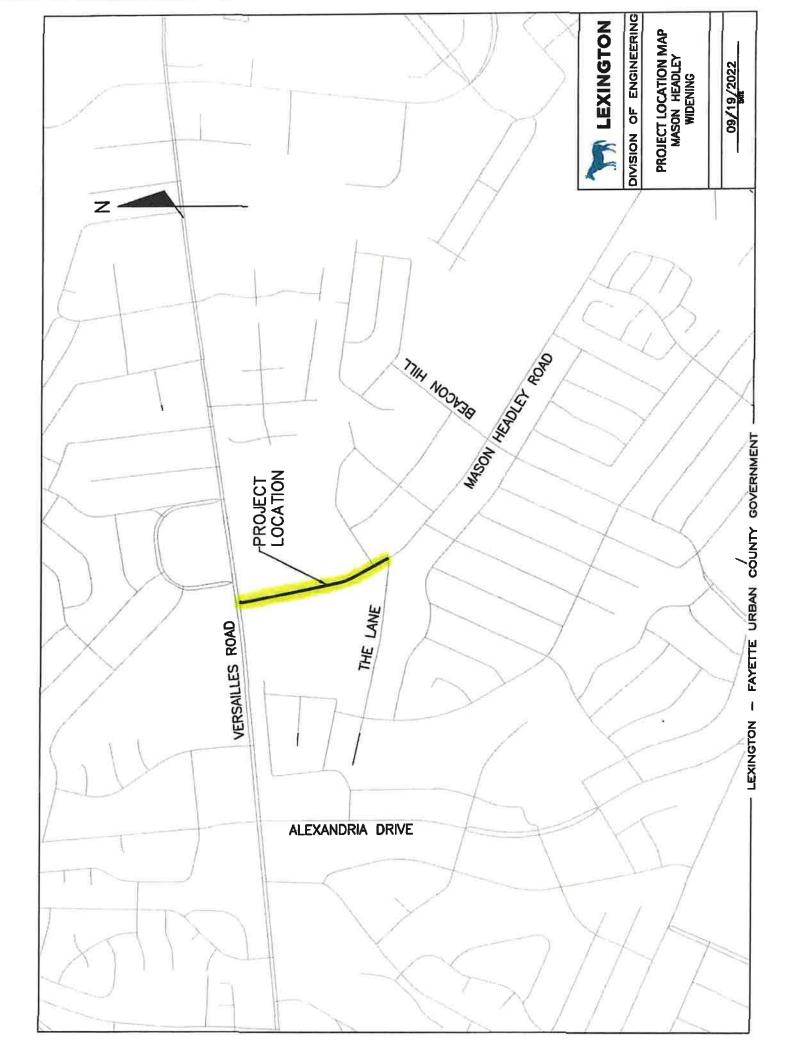
The Mason Headley Intersection Improvement project is located on Mason Headley at the intersection of Versailles Rd. The ADT of 8192 on Old Frankfort Pike (2021 Street Light Data) was multiplied by the percentage of all commuters who travel by foot or bicycle (4.3%) (from the 2020 Census). We used this information to generate a decrease in AADT of 345 over the 1.5 mile segment. Using the FHWA CMAQ Emissions Calculator.

SECTION 9: LOCAL PUBLIC AGENCY (LPA) ACKNOWLEDGEMENT

By submitting this application the applicant acknowledges, if selected for funding, the project will follow all requirements outlined in this application, the KTYC Local Public Agency Guide, Memorandum of Agreement, and all applicable federal and state laws and regulations. The applicant further acknowledges failure to follow these requirements or complete the project in the allotted time may result in cancellation of the project and repayment of federal funds.

Authorized Signature of LPA Sponsor

Date



Attachment B

DETAILED PROJECT COST ESTIMATE

PROJECT NAME	Widen West side of Mason Headley
PROJECT NUMBER	N/A - Conceptual Estimate
PROJECT LIMITS	As shown on Project Map
TYPE OF PROJECT	Major Widening of Mason Headley Versailles to The Lane
ESTIMATE DONE BY	AFG
DATE (Estimate)	Sep-22
COST ESTIMATE PHASE	CONCEPTUAL

NO.	ITEM	UNIT	QUANTITY	U	NIT PRICE	E	XTENSION
1,0,			ersailles Road				
1	Appraisal / plat / deed / closing	LS	1	\$	8,200.00	\$	8,200.00
2	ROW	SF	36,250	\$	-	\$	
3	Temporary Construction Easement	SF	17,300	\$	-	\$	<u>=</u>
					Sub-Total	\$	8,200.00
	Acc	quiring 975 M	lason Headley		***		
1	Appraisal / plat / deed / closing	LS	1	\$	8,200.00	\$	8,200.00
2	ROW	SF	10,500	\$	10.52	\$	110,454.00
3	Temporary Construction Easement	SF	3,450	\$	2.10	\$	7,258.41
	Acqui	iring 941-961	Mason Headley				
1	Appraisal / plat / deed / closing	LS	6		4,300.00	\$	25,800.00
2	ROW	SF	13,150	\$	10.52	\$	138,330.49
3	Temporary Construction Easement	SF	4,400	\$	2.10	\$	9,257.10
	Ac	quiring All Re	OW and TCE				
1	Appraisal / plat / deed / closing	LS				\$	42,200.00
2	ROW	SF				\$	248,784.50
3	Temporary Construction Easement	SF				\$	16,515.50
	Total - ROW and Easements						307,500.00
			ion of Turn Lane				
1	Mobilization / Set Up / Traffic Control	LS	1	\$	95,000.00	\$	95,000.00
2	Clear and Grub	LS	1	\$	130,000.00	\$	130,000.00
3	Excavation and Removal	CY	200	\$	100.00	\$	20,000.00
4	Erosion and Sediment Control	LS	1	\$	40,000.00	\$	40,000.00
5	Remove Existing Curb and Gutter	LF	115	\$	30.00	\$	3,450.00
6	Remove Existing Sidewalk	SY	22	\$	25.00	\$	550.00
7	Remove Existing Retaining Wall	LF	25	\$	250.00	\$	6,250.00
8	#2 Stone for Stabilization	Ton	543	\$	50.00	\$	27,150.00
9	Place Stone For Base (8" Deep)	Ton	2164	\$	50.00	\$	108,200.00
10	Place Asphalt Base (6" Deep)	Ton	1623	\$	110.00	\$	178,530.00
11	Place Asphalt Surface (1 1/2" Deep)	Ton	543	\$	110.00	\$	59,730.00
12	Install New Sidewalk	SY	2070	\$	75.00	\$	155,250.00
13	Install New Curb and Gutter	LF	4472	\$	40.00	\$	178,880.00
14	Sidewalk Ramps	EA	10	\$	1,500.00	\$	15,000.00
15	Install New Retaining Wall	LF	538	\$	250.00	\$	134,500.00
16	Move and Set Catch Basin	EA	1	\$	2,500.00	\$	2,500.00
17	Install New Catch Basin	EA	8	\$	4,500.00	\$	36,000.00

				To	otal - Utilities	\$	522,125.00
4	Relocate AT&T and Pole	LS	1	\$	20,000.00	\$	20,000.00
3	LFUCG Street Lights	EA	20	\$	1,200.00	\$	24,000.00
2	Relocate Gas	LF	1775	\$	125.00	\$	221,875.00
1	Relocate Water Line	LF	2050	\$	125.00	\$	256,250.00
		Utiliti	ies				
	<u></u>		T	otal -	Construction	\$	1,796,783.00
30	red Clossing role	,,,,,	1	Ť	2,200100	_	-30
30	Ped Crossing Pole	LS	1	\$	1,500.00	\$	1,500.00
29	New mast arm/signalization modification	LS	1	\$	75,000.00	\$	75,000.00
28	Move stone entrance - 975 Mason Headley	LS	1	\$	70,000.00	\$	70,000.00
27	Move stone entrance - The Lane	LS	1	\$	35,000.00	\$	35,000.00
26	New Drive Way Aprons	EA	2	\$	5,000.00	\$	10,000.00
25	Street Lighting conduit	LF	3000	\$	6.50	\$	19,500.00
24	Solar School Flashings	EA	2	\$	18,000.00	\$	36,000.00
23	Striping	LS	1	\$	20,000.00	\$	20,000.00
22	Remove Fence (split rail)	LF	705	\$	10.00	\$	7,050.00
21	Remove and Replace Fence (Chain link)	LF	1850	\$	35.00	\$	64,750.00
20	Seeding and protection	SY	2794	\$	2.00	\$	5,588.00
19	Sod	SY	828	\$	10.00	\$	8,280.00
18	18" RCP	LF	2025	\$	125.00	\$	253,125.00
NO.	ITEM	UNIT	QUANTITY	U	VIT PRICE	E	XTENSION

ADDITIONAL COMMENTS

For Estimating and Budgeting Purposes The Total Project Cost
This Estimate assumes dedication of ROW and Easements on 2160 Versailles Road

DETAILED PROJECT COST ESTIMATE

PROJECT NAME	Widening of Mason Headley - Versailles Road 1st Block
PROJECT NUMBER	N/A - Conceptual Estimate
PROJECT LIMITS	As shown on Project Map
TYPE OF PROJECT	Roadway
ESTIMATE DONE BY	AFG
DATE (Estimate)	Sep-22
COST ESTIMATE PHASE	CONCEPTUAL

Widen Mason Headley							
	Contingency @						
Description	Estimated Cost	20%	Rounded Cost				
Design	\$ 350,000.00	\$ 70,000.00	\$ 420,000.00				
ROW and Easement Acquisition	\$ 307,500.00	\$ 61,500.00	\$ 369,000.00				
Utilities	\$ 522,125.00	\$ 104,425.00	\$ 627,000.00				
Construction	\$ 1,796,783.00	\$ 359,356.60	\$ 2,156,000.00				
KYTC Oversight	\$ 135,000.00	\$ -	\$ 135,000.00				
TOTAL			\$ 3,707,000.00				

ADDITIONAL COMMENTS

For Estimating and Budgeting Purposes The Total Project Cost

This Estimate assumes dedication of ROW and Easements on 2160 Versailles Road



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 1: APPLICAN	T INFORMATION								
PROJECT TITLE									
Mt Tabor Road Multimodal Improvement									
SPONSOR NAME	SPONSOR NAME								
Lexington-Fayette Urbar	n County Government								
ADDRESS				CITY					
200 East Main Street				Lexington					
ZIP	PHONE	MET	ROPOLITAN PL	ANNING ORGANIZATION (MPO)					
40507	859-258-3410	Lexin	gton Area MPC)					
PROJECT CONTACT		EMA	L						
Scott Gabbard, P.E.		sgabi	pard@lexingto	nky.gov					
SAI NUMBER (All applicat	nts must complete the Department f	or Loc	al Government,	Kentucky State Clearinghouse requirements prior					
				inghouse requirements must be included.)					
KY 201609061216									
UNIQUE ENTITY IDENTIF	FIER (UEI) # (all applicants must be	regist	ered in the feder	ral <u>System for Award Management (SAM</u>) before					
	se indicate the UEI assigned upon co								
3WTE6									
SECTION 2: PROJECT O	CATEGORY								
INSTRUCTION: For the c	ategory that most fits your project	ct, ch	eck one of the	boxes below. Please see the FHWA Interim					
				annot add roadway capacity except for HOV					
lanes. Any project that incr	eases vehicle capacity is ineligible fo	r CMA	Q, even if the ov	verall project does show emissions reductions.					
Traffic Control Meas	ures (TCMs)		Carpooling, \	Vanpooling, Car Sharing					
Alternative Fuels and	l Vehicles		Freight/Intermodal						
	n and Traffic Flow Improvements	<u> </u>	Diesel Engine Retrofits & Other Advanced Truck						
	nn Facilities and Programs	ldle Reduction							
Public Education and	Outreach Activities	Training							
Transportation Mana	agement Associates (TMAs)	Inspection/Maintenance (I/M) Programs							
Travel Demand Mana	agement		Experimenta	l Pilot Projects					
Transit Improvement		na traj e diamen.							
If funding is for operatio	nal assistance, has this project pr	eviou	isly received fe	deral CMAQ funds? 🔀 Yes 📙 No					
SECTION 3: PROJECT S	TATUS								
Have any elements of th	is project been completed using	state.	federal or loca	al funds prior to this application for funding?					
Xes No	.o p. o jeec 20011 oo 111 proceed don 18 t	,							
	e funding source and what has b	een c	ompleted Loc	al funding was utilized for the design and					
the purchase of tempora	ary construction easements		•						



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 4: PROJECT DESCRIPTION

Provide a detailed project description, including the location and all items for which funding is being requested. <u>A separate Project Cost Estimate should be attached as Attachment B.</u> Keep in mind all potential costs associated with the project, including but not limited to: Design, Right-of-Way acquisition, archaeology, permits, surveys, tree removal, utilities, construction, construction inspection, etc. For operational assistance projects, include how the project will continue to be funded once the federal funds are expended.

Over half of this section of Mt. Tabor Road has never been upgraded from a rural section to an urban section. Pedestrians walking between the residential area and the commercial area and to the bus stop within the project area must walk in uneven turf just off the pavement edge, where no safety features or drainage system exist. This project will widen the pavement, construct curb, gutter and sidewalk, and provide bike lanes and a stormwater collection system. The vertical alignment will be adjusted to improve sight lines, for the benefit of all users.

Request: The Mt. Tabor Road Multimodal Improvement project has previously received CMAQ funding for Construction. This request is to fill a shortfall in construction funding due to an increase in construction prices since the original CMAQ award for construction in 2017. The amount shown in Section 6 represents the difference between the original funding and the current construction cost estimate (See Attachment B and Attachment B Part 2).

SECTION 5: PURPOSE AND NEED

Explain the purpose of this project and how it will improve air quality.

This narrow section of Mt Tabor Road will be upgraded to an urban cross section. The project will provide sidewalks, bike lanes, street lights, curbs, gutters, and storm water drainage. Pedestrians traveling between the commercial and residential areas and the bus stop located within the project limits must walk on a narrow shoulder of uneven turf along the roadway's edge. Cyclists must occupy the driving lanes on this narrow section of Mt Tabor Road or ride along the edge of pavement where there is a high volume of traffic and no street lighting. The sidewalks and bike lanes will provide an alternative means of transportation to local businesses and services. The bike lanes will also connect to a larger bike lane network that runs along Richmond Road.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 6: PROJECT BUDGET

IMPORTANT: The Office of Local Programs uses the budget and estimate to determine the amount of funding awarded for a project; therefore, the amounts listed for each phase of the project must be as accurate as possible. To find out more information about cost estimates, consult the Local Public Agency (LPA) Guide.

Enter the total estimated amount for each phase of the project **OR** the Non-Infrastructure Project Total Cost.

PHASE	FEDERAL DOLLARS	LOCAL MATCH DOLLARS	TOTAL DOLLARS
Design (All design activities including PE, Phase I and II design)			\$0.00
Right of Way			\$0.00
Utilities			\$0.00
Construction (Including construction inspection, materials testing and administration)	\$753,333.33	\$188,333.33	\$941,666.67
Contingency (20%)	\$150,666.67	\$37,666.67	\$188,333.33
TOTAL	\$904,000.00	\$226,000.00	\$1,130,000.00
State Forces (10% of the total project cost-federal and state)	\$90,400.00	Local Match Not Required	
Non-Highway infrastructure Activities			\$0.00

Maintenance Plan:

The roadway, including bike lanes and crosswalks will be maintained by LFUCG, as well as the drainage system. Where properties front on Mt. Tabor, the abutting property owners will maintain the sidewalks; where properties back up to Mt. Tabor, sidewalks will be maintained by LFUCG.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 8: EMISSION REDUCTIONS

Enter the emissions reductions for the pollutants listed below. Please note the reductions should be in kilograms per day and each pollutant must have a number listed. If a pollutant does not have any emission reductions, put a zero in the space. Applicants must use the FHWA CMAQ Emissions Calculator Toolkit when possible.

-					
	VOC	СО	NOx	PM ₁₀	PM _{2.5}
	0.101	1.338	0.098	0.010	0.003
	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction
	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)

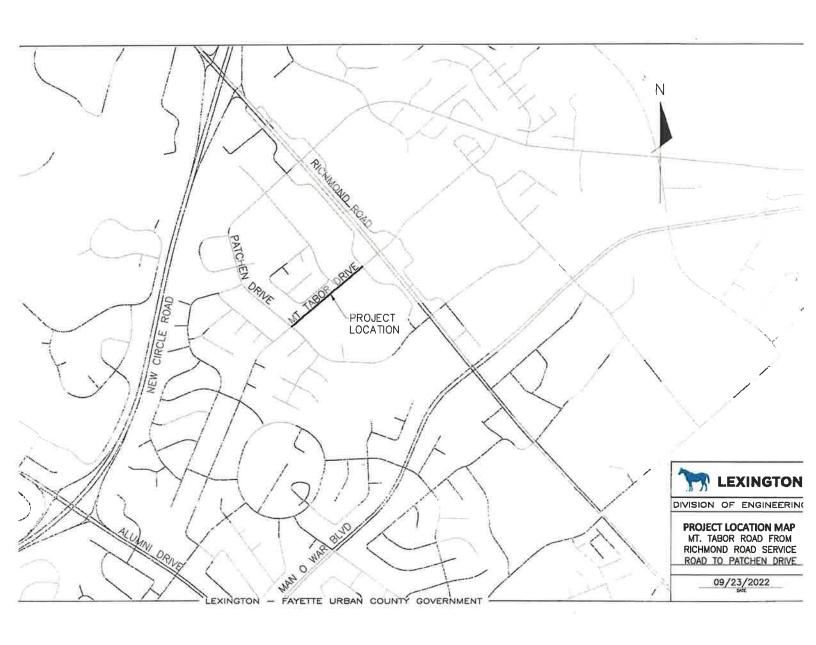
Describe the methodology used to determine each reduction. Do not attach additional pages to this application.

The Mount Tabor Rd Sidewalk project adjacent to Mount Tabor Rd has an ADT of 6243 (2021 Street Light Data) was multiplied by the percentage of all commuters who travel by foot or bicycle (3.8%) (from the 2020 Census). We used this information to generate a decrease in AADT of f 181 over the f 1.3 mile segment. Using the FHWA CMAQ Emissions Calculator.

SECTION 9: LOCAL PUBLIC AGENCY (LPA) ACKNOWLEDGEMENT

By submitting this application the applicant acknowledges, if selected for funding, the project will follow all requirements outlined in this application, the KTYC Local Public Agency Guide, Memorandum of Agreement, and all applicable federal and state laws and regulations. The applicant further acknowledges failure to follow these requirements or complete the project in the allotted time may result in cancellation of the project and repayment of federal funds.

Authorized Signature of LPA Sponsor



Attachment B

Mt Tabor Multimodal Improvements Lexington-Fayette Urban County Government September 21, 2022

September 21, 2022									
	DECONITION.	OLIANTITY.	UNIT	ENGINEER'S ESTIMATE					
ITEM #	DESCRIPTION	QUANTITY	UNII	09 06 2022					
					TOTAL COST				
1	Maintain and Control Traffic	1	LS	\$ 50,000.00					
2	Quality Control Services - Allowance	1	LS	10,000.00	\$ 10,000.00				
3	Construction Staking	1	LS	10,000.00	\$ 10,000.00				
4	Clearing and Grubbing	1	LS	25,000.00	\$ 25,000.00				
5	Unclassified Excavation and Earthwork	1	LS	175,000.00	\$ 175,000.00				
6	Remove and Replace 6 ft Wooden Fence	667	LF	57.00	\$ 38,019.00				
7	Remove and Replace Wooden Plank Fence	412	LF	57.00	\$ 23,484.00				
8	Remove and Replace 4 ft Wooden Picket Fence	106	LF	57.00	\$ 6,042.00				
9	Dense Graded Aggregate	6745	Ton	40.00	\$ 269,800.00				
10	No.2 Stone	500	Ton	45.00	\$ 22,500.00				
11	No. 57 Stone	62	Ton	56.75	\$ 3,518.50				
12	Formed Class A Concrete and Unfinished Conc.	10	CY	1,200.00	\$ 12,000.00				
13	Sidewalk 4-1/2 in. Concrete	855	SY	128.00	\$ 109,440.00				
14	8 in Concrete Entrance Pavement	146	SY	148.00	\$ 21,608.00				
15	Sidewalk Ramps	56	SY	118.00	\$ 6,608.00				
16	LFUCG Concrete Curb and Gutter, Type 1	2510	LF	38.00	\$ 95,380.00				
17	Bituminous Base	2388	Ton	120.00	\$ 286,560.00				
18	Class 1 Bituminous Surface	596	Ton	120.00	\$ 71,520.00				
19	Bituminous Material for Tack Coat	6	Ton	5.00	\$ 30.00				
20	LFUCG Curb Box Inlet - Type A	10	EA	7,825.00	\$ 78,250.00				
21	LFUCG Curb Box Inlet - Type D	1	EA	5,400.00	\$ 5,400.00				
22	Adjust Manhole	2	EA	1,764.00	\$ 3,528.00				
23	Std. Manhole Frame and Cover	1	EA	1,221.00	\$ 1,221.00				
24	LFUCG Storm Sewer Manhole Type A, 6 ft dia.	1	EA	4,725.00	\$ 4,725.00				
25	12 in. PVC Pipe	12	LF	198.00	\$ 2,376.00				
26	18 in RCP Storm Sewer	949	LF	162.50	\$ 154,212.50				
27	Sodding/Fertilizing/Limestone Application	2782	SY	19.00	\$ 52,858.00				
28	4" High Density Polyethylene Underdrain Pipe	730	LF	17.00	\$ 12,410.00				
29	Temporary Silt Fence	1261	LF	3.75	\$ 4,728.75				
30	Storm Drain Inlet Protection - Silt Trap, Type C	13	EA	265.00	\$ 3,445.00				
31	Edge Key	332	LF	66.50	\$ 22,078.00				
32	Precast Modular Block Retaining Wall	2329	SF	68.00	\$ 158,372.00				
33	Project Sign	2	EA	1,320.00	\$ 2,640.00				
34	Roadway Signage	1	LS	7,000.00	\$ 7,000.00				
35	42" High Aluminum Handrail w/ Pickets	356	LF	172.50	\$ 61,410.00				
36	Imbedded Detectable Warnings - Install	60	SF	46.00	\$ 2,760.00				
37	Broken White Line 6 in (2 ft seg, 6 ft skip)	676	LF	0.50	\$ 338.00				
38	Dotted White Line - 4 in (3 ft seg, 8 ft skip)	231	LF	1.00 \$ 231					
39	Lane Line White - 4 in Thermo	363	LF						

Mt Tabor Multimodal Improvements Lexington-Fayette Urban County Government September 21, 2022

ITCA 4.4	DESCRIPTION	QUANTITY	UNIT	ENGINEER'S ESTIMATE			
ITEM #		QOANTIT	Olili	09 06 2022			
				UNIT PRICE		OTAL COST	
40	Lane Line Yellow - 4 in Thermo	277	LF	1.50	\$	415.50	
41	Solid Yellow Line - Double 4 in Thermo	1053	LF	3.00	\$	3,159.00	
42	Pave Marking - Thermo Enhanced X-Walk	677	ŞF	8.00	\$	5,416.00	
43	Pave Striping - Perm Thermo 6 in White	2560	LF	2.00	\$	5,120.00	
44	Pave Marking - Pref Thermo Bicycle Symbol	14	EA	258.00	\$	3,612.00	
45	Pave Marking - Pref Thermo Curved Arrow	10	EA	134.00	\$	1,340.00	
46	Pave Marking - Pref Thermo "ONLY"	3	EA	325.00	\$	975.00	
47	Pave Marking - Thermo Stop Bar 24 in	91	LF	14.50	\$	1,319.50	
48	8 ft Concrete Wheel Stops	8	EA	358.00	\$	2,864.00	
49	4 ft Temporary Construction Safety Fence	139	LF	19.00	\$	2,641.00	
50	Conduit 2" (Rigid Steel)	67	LF	19.50	\$	1,306.50	
51	Conduit 2" (Schedule 40 PVC)	2485	LF	10.75	\$	26,713.75	
52	Electrical Juntion Box	2	EA	2,635.00	\$	5,270.00	
53	Lighting Base	14	EA	1,750.00	\$	24,500.00	
54	Intentionally Left Blank	=	140				
55	Intentionally Left Blank	*	790				
56	Additional 2" PVC SCH 40	50	LF	12.50	\$	625.00	
57	Coupling, Conduit, PVC 2"	28	EA	50.00	\$	1,400.00	
58	Pavement Marker V - Bidirectional Yellow	30	EA	33.00	\$	990.00	
59	MOBILIZATION (MAX 5%)	1	LS	95,135.23		95,135.23	
60	DEMOBILIZATION (MIN 1.5%)	1	LS	28,540.57		28,540.57	
61	PAYMENT AND PERFORMANCE BOND	1	LS	57,081.14		57,081.14	
	TOTAL BID (ITEMS 1 THRU 102)				\$	2,083,461.43	
7.		Contingency	,	20.00%	\$	416,692.29	
		TOTAL Roun	ded to nearest	\$1000	\$	2,500,000.00	

ATTACHMENT B Part 2 - Construction Cost Shortfall Mt. Tabor Road Multimodal Improvements September 21, 2022

ltem	1	Federal Match Required			Total
2017 CMAQ Award	\$	1,096,000.00	\$	274,000.00	\$ 1,370,000.00
Engineers Estimate - Sept. 2022	\$	2,000,000.00	\$	500,000.00	\$ 2,500,000.00
FUNDING SHORTFALL	\$	904,000.00	\$	226,000.00	\$ 1,130,000.00

NOTE: For an explanation of the shortfall spreadsheet above see SECTION 4 on the TC 20-24 CMAQ Program Application form in this submittal.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

T INFORMATION					
Block Crossing					
n County Government					
			-		
CONCENTE CON LOCACE	_		0		
	tclem	ents@lexingt	onky.gov		
	_) before	
CATEGORY					
category that most fits your proje	ct, che	ck one of the	boxes below. Please see the FHWA In	nterim	
reases vehicle capacity is ineligible fo	r CMA			tions.	
sures (TCMs)					
d Vehicles			Intermodal		
	S				
an Facilities and Programs			on		
					
agement		<u> Experimenta</u>	al Pilot Projects		
ts					
onal assistance, has this project pr	reviou	sly received fe	deral CMAQ funds? Yes No		
STATUS					
	PHONE 859-258-3441 The SAI number provided upon control of the UEI assigned upon control of the UE	PHONE 859-258-3441 EMAI tclem Ints must complete the Department for Location. The SAI number provided upon complete Isse indicate the UEI assigned upon completions in the Isse	PHONE 859-258-3441 EMAIL tclements@lexingto ints must complete the Department for Local Government, on. The SAI number provided upon completion of the Clear FIER (UEI) # (all applicants must be registered in the federal see indicate the UEI assigned upon completion of registration CATEGORY Category that most fits your project, check one of the remation on each category. Please note, CMAQ projects of reases vehicle capacity is ineligible for CMAQ, even if the originates of the control of t	PHONE Serior Se	



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 4: PROJECT DESCRIPTION

Provide a detailed project description, including the location and all items for which funding is being requested. <u>A separate Project Cost Estimate should be attached as Attachment B.</u> Keep in mind all potential costs associated with the project, including but not limited to: Design, Right-of-Way acquisition, archaeology, permits, surveys, tree removal, utilities, construction, construction inspection, etc. For operational assistance projects, include how the project will continue to be funded once the federal funds are expended.

Background: The Town Branch Trail is a shared use path that travels between Masterson Station Park and downtown Lexington. Along the way it connects various parks, neighborhoods, and commercial properties. Some of the notable connections include: Masterson Station Neighborhood (Lexington's largest neighborhood), The Distillery District (a popular nightlife destination), Townley Park Apartments, and the Melrose/Oakpark Neighborhood. Once completed it will be one of Lexington's Major Bikeways.

Description: The Town Branch Trail Crossing will provide a connection between McConnell Springs Park and the Town Branch Trail. The primary component of the project is constructing a safe bike/pedestrian crossing from the north side of Old Frankfort Pike to the south side at McConnell Springs Rd. The existing intersection has poor sight distance, heavy truck traffic, and no accommodations for bicyclist or pedestrians. This project will rebuild the intersection to improve sight distance, construct a refuge island, construct ADA compliant ramps, and add signing/striping. In addition, a shared use path will be constructed along McConnell Springs Rd.

Request: The Town Branch Trail Corssing has previously received CMAQ funding for Design, Right-of-Way, and Construction. This request is to fill a shortfall in construction funding due to an increase in construction prices since the original CMAQ award for construction. The amount shown in Section 6 represents the difference between the remaining funding LFUCG has and the current construction cost estimate (Attachment B).

SECTION 5: PURPOSE AND NEED

Explain the purpose of this project and how it will improve air quality.

Trails are an important component of the community's multimodal strategy to reduce automobile use. McConnell Springs Park is close to the planned Town Branch Trail and is currently primarily accessed by automobile. We anticipate that connecting the park to the Town Branch Trail will reduce the number of automobile trips to the park from the neighborhoods connected to the trail.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 6: PROJECT BUDGET

IMPORTANT: The Office of Local Programs uses the budget and estimate to determine the amount of funding awarded for a project; therefore, the amounts listed for each phase of the project must be as accurate as possible. To find out more information about cost estimates, consult the <u>Local Public Agency (LPA) Guide</u>.

Enter the total estimated amount for each phase of the project OR the Non-Infrastructure Project Total Cost.

PHASE	FEDERAL DOLLARS	LOCAL MATCH DOLLARS	TOTAL DOLLARS
Design (All design activities including PE, Phase I and II design)			\$0.00
Right of Way			\$0.00
Utilities			\$0.00
Construction (Including construction inspection, materials testing and administration)	\$313,333.33	\$78,333.33	\$391,666.66
Contingency (20%)	\$62,666.67	\$15,666.67	\$78,333.34
TOTAL	\$376,000.00	\$94,000.00	\$470,000.00
State Forces (10% of the total project cost-federal and state)	\$37,600.00	Local Match Not Required	
Non-Highway infrastructure Activities			\$0.00

Maintenance Plan:

The roadway, including bike lanes, crosswalks, signalization, and drainage improvements will be maintained by LFUCG.



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 8: EMISSION REDUCTIONS

Enter the emissions reductions for the pollutants listed below. Please note the reductions should be in kilograms per day and <u>each pollutant must have a number listed</u>. If a pollutant does not have any emission reductions, put a zero in the space. Applicants must use the <u>FHWA CMAQ Emissions Calculator Toolkit</u> when possible.

- 1					
	VOC	СО	NOx	PM ₁₀	PM _{2.5}
	0.136	1.803	.132	.013	.004
	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction
	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)

Describe the methodology used to determine each reduction. Do not attach additional pages to this application.

The Town Branch Trail Crossing is located on Old Frankfort Pike at McConnell Spring Rd. The ADT of 6243 on Old Frankfort Pike (2021 Street Light Data) was multiplied by the percentage of all commuters who travel by foot or bicycle (3.8%) (from the 2020 Census). We used this information to generate a decrease in AADT of 244 over the 1.3 mile segment. The FHWA CMAQ Emissions Calculator was then used to determine the numbers shown above.

SECTION 9: LOCAL PUBLIC AGENCY (LPA) ACKNOWLEDGEMENT

By submitting this application the applicant acknowledges, if selected for funding, the project will follow all requirements outlined in this application, the KTYC Local Public Agency Guide, Memorandum of Agreement, and all applicable federal and state laws and regulations. The applicant further acknowledges failure to follow these requirements or complete the project in the allotted time may result in cancellation of the project and repayment of federal funds.

Authorized Signature of LPA Sponsor

Date

Attachment B - Project Construction Cost Estimate

Town Branch Trail Crossing September 20, 2022

Item No.	Description	Quantity	Unit	Unit Price	Total Price
1	Crushed Stone Aggregate, No 2	3,504	TON	\$35.00	\$122,640
2	Perforated Pipe 4"	2,975	LF	\$15.00	\$44,625
3	Standard Curb and Gutter	2,975	LF	\$30.00	\$89,250
4	Remove Pavement	77	SY	\$20.00	\$1,540
5	Temporary Ditch	815	LF	\$1.00	\$815
6	Clean Temporary Ditch	815	LF	\$1.00	\$815
7	Roadway Excavation	3,280	CY	\$30.00	\$98,400
8	Water (for dust control)	328	M GAL	\$1.00	\$328
9	Clearing and Grubbing	3.4	AC	\$5,000.00	\$17,000
10	Edge Key	91	LF	\$35.00	\$3,185
11	Fabric Geotextile Type IV	10,522	SY	\$2.00	\$21,044
12	Maintain and Control Traffic	1	LS	\$250,000.00	\$250,000
13	Temporary Silt Fence	822	LF	\$2.00	\$1,644
14	Silt Trap C	24	EA	\$200.00	\$4,800
15	Clean Silt Trap C	24	EA	\$50.00	\$1,200
16	Clean Temporary Silt Fence	822	LF	\$1.00	\$822
17	Concrete Multi Use Path	331	SY	\$100.00	\$33,100
18	Staking	1	LS	\$35,000.00	\$35,000
19	Erosion Control Blanket	2,445	SY	\$2.00	\$4,890
20	Seeding and Protection	8,135	SY	\$1.50	\$12,203
21	Aluminum Sheet Signs 0.08 Thick	70	SF	\$25.00	\$1,744
22	Yield Markings	25	EA	\$80.00	\$2,000
23	Pavement Marking Temporary 4"	7,235	LF	\$1.00	\$7,235
24	Pavement Marking Permanent 4"	7,235	LF	\$1.00	\$7,235
25	Pavement Marking Thermo X-Walk 12"	144	LF	\$6.00	\$864
26	Pavement Marker Thermo Stop Bar 24"	25	LF	\$13.00	\$325
27	Pavement Marking Thermo Cross-Hatch	1,375	SF	\$3.50	\$4,813
28	Pavement Marking Thermo Straight Arrow	5	EA	\$200.00	\$1,000
29	Pavement Marking Thermo Turn Arrow	8	EA	\$200.00	\$1,600
30	Pavement Marking Thermo Combo Arrow	1	EA	\$200.00	\$200
31	Temporary Constuction Entrance	300	TN	\$25.00	\$7,500
32	Concrete Washout Pit	1	EA	\$750.00	\$750
33	Detectable Warning Stip	60	SF	\$4.00	\$240
34	24" Culvert Pipe	12	LF	\$120.00	\$1,440
35	15" Storm Sewer	100	LF	\$80.00	\$8,000
36	18" Storm Sewer	1,413	LF	\$95.00	\$134,235
37	24" Storm Sewer	60	LF	\$115.00	\$6,900
38	24" S & F Box Inlet/Outlet	1	EA	\$5,000.00	\$5,000
39	Curb Box Inlet Type A	13	EA	\$6,000.00	\$78,000
40	KYDOT DBI Type 3	2	EA	\$5,000.00	\$10,000
41	KYDOT DBI Type 14	1	EA	\$3,000.00	\$3,000
42	4' Diameter Manhole	2	EA	\$4,000.00	\$8,000
43	Class 3 Asphalt Surface	331	TON	\$130.00	\$43,030
44	Class 2 Asphalt Base	1,986	TON	\$120.00	\$238,320
45	Crushed Stone Base	3,672	TON	\$25.00	\$91,800
46	Rectangular Rapid Flashing Beacon	1	LS	\$65,000.00	\$65,000

Attachment B - Project Construction Cost Estimate

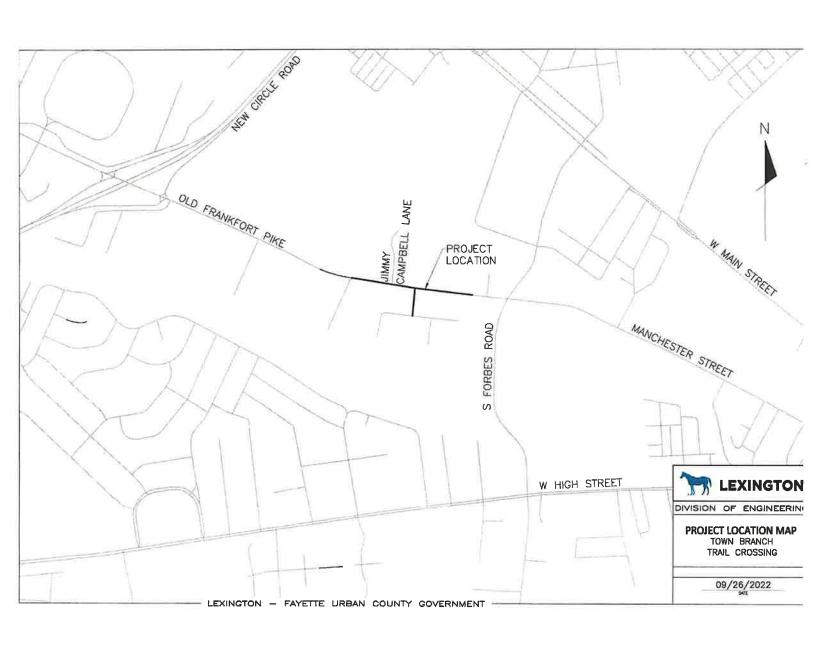
Town Branch Trail Crossing September 20, 2022

Item No.	Description	Quantity	Unit	Unit Price	Total Price
47	Mobilization (5%)	1	LS	\$73,576.54	\$73,577
48	Demobilization (1.5%)	1	LS	\$22,072.96	\$22,073
49	Payment and Performance Bond (1%)	1	LS	\$14,715.31	\$14,715
				Sub Total	\$1,581,896
		Contingency (20%)			\$316,379
		Total Estimated Project Cost			\$1,898,275

Attachment B (Part II) - Construction Cost Shortfall

Town Branch Trail Crossing September 20, 2022

Item	Federa	al	Mat	ch Required	Tot	tal
2015 CMAQ Award	\$	408,700.00	\$	102,175.00	\$	510,875.00
2019 CMAQ Award	\$	878,090.00	\$	219,522.50	\$	1,097,612.50
Total Obligated/Spent by LFUCG		N/A		N/A	\$	184,000.00
Total Construction Cost Estimate		N/A		N/A	\$	1,898,000.00
Funding Shortfall (Rounded)	\$	376,000.00	\$	94,000.00	\$	470,000.00





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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 1: APPLICAN	T INFORMATION					
PROJECT TITLE						
Fiber Optic Cable						
SPONSOR NAME						
Lexington-Fayette Urbar	n County Government					
ADDRESS				CITY		
101 East Vine Street, Sui	te 300			Lexington		
	PHONE			ANNING ORGANIZATION (M	PO)	
40507	859-258-3830	Lexing	ton Area MPC)		
PROJECT CONTACT		EMAI				
Jeffer Neal, PE		jneal(@lexingtonky.	gov		
SAI NUMBER (All application submitting an application KY201708080973	nts must complete the Department f on. The SAI number provided upon c	or Loca omplet	al Government, ion of the Clear	<u>Kentucky State Clearinghouse</u> re inghouse requirements must be	equirements prior included.)	
	FIER (UEI) # (all applicants must be se indicate the UEI assigned upon co				e <mark>nt (SAM</mark>) before	
SECTION 2: PROJECT O	CATEGORY					
INSTRUCTION: For the c	ategory that most fits your proje	ct, che	ck one of the	boxes below. Please see the	FHWA Interim	
Guidance for more infor	mation on each category. Please	note, C	MAQ projects c	annot add roadway capacity ex	cept for HOV	
lanes. Any project that incr	reases vehicle capacity is ineligible fo	r CMA			ns reductions.	
Traffic Control Meas	ures (TCMs)			Vanpooling, Car Sharing		
Alternative Fuels and		Freight/Intermodal				
Congestion Reductio	n and Traffic Flow Improvement	primary (
Bicycle and Pedestria	an Facilities and Programs	☐ Idle Reduction				
Public Education and	Outreach Activities	Training				
Transportation Mana	agement Associates (TMAs)	Inspection/Maintenance (I/M) Programs				
Travel Demand Man	agement		Experimental Pilot Projects			
Transit Improvemen						
If funding is for operatio	nal assistance, has this project p	reviou	sly received fe	ederal CMAQ funds? 🔲 Yes	☐ No	
SECTION 3: PROJECT S	STATUS					
🗌 Yes 🛛 No	is project been completed using			al funds prior to this applicati	on for funding?	



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 4: PROJECT DESCRIPTION

Provide a detailed project description, including the location and all items for which funding is being requested. <u>A separate Project Cost Estimate should be attached as Attachment B.</u> Keep in mind all potential costs associated with the project, including but not limited to: Design, Right-of-Way acquisition, archaeology, permits, surveys, tree removal, utilities, construction, construction inspection, etc. For operational assistance projects, include how the project will continue to be funded once the federal funds are expended.

This proposal is to extend the existing fiber optic network to enhance traffic signal and video monitoring capabilities along Man o' War Boulevard from Fort Harrods Drive northward to Versailles Road (U.S. 60), approximately 2.7 miles and along Versailes Road (U.S. 60) from Man o' War Boulevard to Parkers Mill Road inside New Circle Road, approximately 2.3 miles. The project further enhances the coverage in the community and helps to provide redundant communications routes for the advanced traffic management system (ATMS) network gaining a greater benefit from this technology.

All work will be within existing right-of-way and designed by in-house staff in such a way as to avoid conflicts with other underground utilities along the route. The utility infrastructure will consist of a 2" conduit with junction boxes spaced every 500-800 feet, connections to each traffic signal cabinet, a multi-strand fiber optic cable, and an assortment of digital routers.

Each end of this installation will connect to the existing fiber optic network installed with previous CMAQ funding.

SECTION 5: PURPOSE AND NEED

Explain the purpose of this project and how it will improve air quality.

The purpose of this project is to extend traffic management capabilities we have throughout the community to the last section of Man o' War Blvd and Versailles Road outside of New Circle. This will complete the last planned, physical fiber ring, providing robust communications coverage along nearly every arterial roadway in Lexington.



TC 20-24 Rev. 8/2022 Page 3 of 4

CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 6: PROJECT BUDGET

IMPORTANT: The Office of Local Programs uses the budget and estimate to determine the amount of funding awarded for a project; therefore, the amounts listed for each phase of the project must be as accurate as possible. To find out more information about cost estimates, consult the Local Public Agency (LPA) Guide.

Enter the total estimated amount for each phase of the project OR the Non-Infrastructure Project Total Cost.

PHASE	FEDERAL DOLLARS	LOCAL MATCH DOLLARS	TOTAL DOLLARS
Design (All design activities including PE, Phase I and II design)			\$0.00
Right of Way			\$0.00
Utilities			\$0.00
Construction (Including construction inspection, materials testing and administration)	\$500,000.00	\$125,000.00	\$625,000.00
Contingency (20%)	\$100,000.00	\$25,000.00	\$125,000.00
TOTAL	\$600,000.00	\$150,000.00	\$750,000.00
State Forces (10% of the total project cost-federal and state)		Local Match Not Required	
Non-Highway infrastructure Activities	TO THE LAME OF		\$0.00



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CONGESTION MITIGATION AIR QUALITY (CMAQ) PROGRAM APPLICATION

SECTION 8: EMISSION REDUCTIONS

Enter the emissions reductions for the pollutants listed below. Please note the reductions should be in kilograms per day and <u>each pollutant must have a number listed</u>. If a pollutant does not have any emission reductions, put a zero in the space. Applicants must use the <u>FHWA CMAQ Emissions Calculator Toolkit</u> when possible.

	VOC	СО	NOx	PM ₁₀	PM _{2.5}
	3.341	139.783	19.297	3.374	13.581
Regio	nal Reduction	Regional Reduction	Regional Reduction	Regional Reduction	Regional Reduction
	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)

Describe the methodology used to determine each reduction. Do not attach additional pages to this application.

The FHWA CMAQ Emissions Calculator was used to determine emissions reductions.

Baseline inputs are for the 5 mile corridor with 6 traffic signals in an urban setting with a posted speed limit of 50 mph and 5 peak hours covering both AM and PM peak periods during calendar year 2023. Traffic conditions modeled include the following:

	Average Peak Hour	Average Non- Peak Hour		
Total Volume on corridor (avg both dir)	2,688	1,335		
Existing Total Corridor Delay (avg both dir)	330	210		
Truck Percentage (avg both dir)	5%	5%		
Average Level of Service per intersection	D	C		

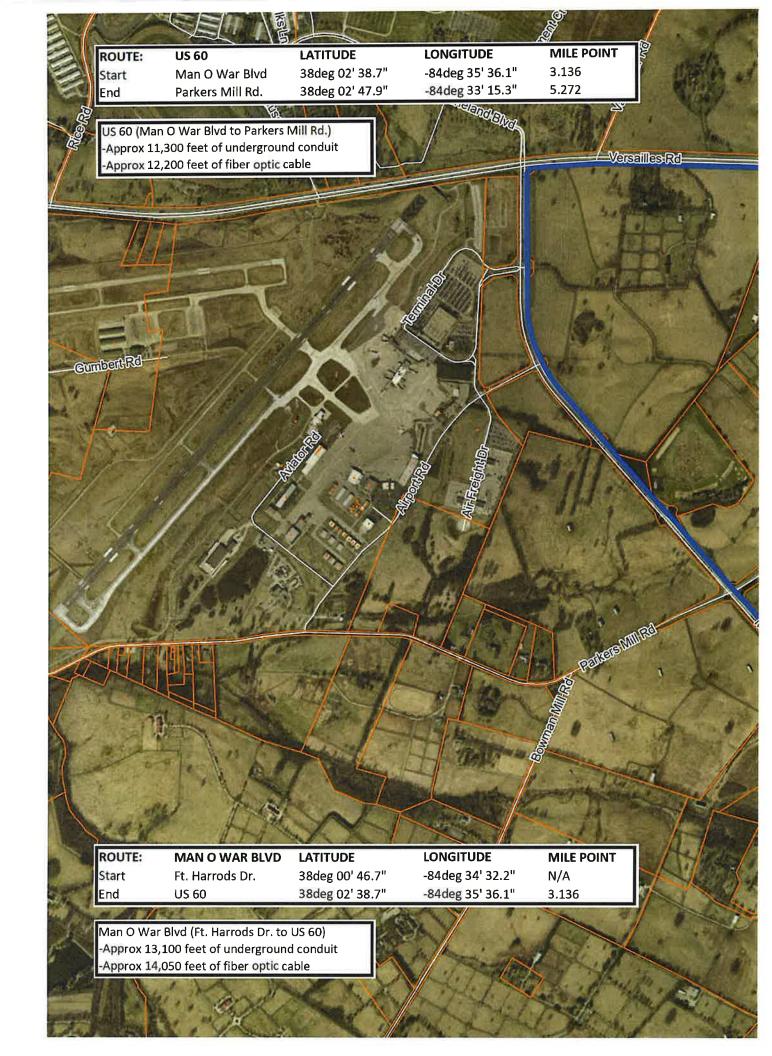
SECTION 9: LOCAL PUBLIC AGENCY (LPA) ACKNOWLEDGEMENT

By submitting this application the applicant acknowledges, if selected for funding, the project will follow all requirements outlined in this application, the KTYC Local Public Agency Guide, Memorandum of Agreement, and all applicable federal and state laws and regulations. The applicant further acknowledges failure to follow these requirements or complete the project in the allotted time may result in cancellation of the project and repayment of federal funds.

Authorized Signature of LPA Sponsor

O-30 · 20 2 2

Date



ATTACHMENT "B"									
Detailed Engineer Estimate									
MOW (Ft Harrod Drive to Versailles)									
Versailles (MOW to Parkers Mill)									
	Unit	Quantity	Cost		Total				
Conduit, Jboxes, Boring, Etc Based on Previous Projects	Ft	25,000	\$	20.93	\$	523,250			
Contractor Provide and Install Fiber (72-Count)	Ft	28,000	\$	3.25	\$	91,000			
Swtiches/Connecting Equipment	EA	6	\$	1,791.65	\$	10,750			
Total					\$	625,000			
Contingency		20%			\$	125,000			
Total with Contingency					\$	750,000			

ATTACHMENT C – MAINTENANCE PLAN

The proposed communications infrastructure will be maintained by the city as part of our municipal fiber optic network. We have two in-house personnel with primary functions of design, operation, and maintenance of approximately 95 miles of facilities. We are a member utility in the Kentucky 811 so we routinely receive locate notices through that system to ensure our underground facilities are not damaged.