TURKEYFOOT WORKING GROUPS

OCT. 27 AND 29, 2020





MEETING AGENDA & GUIDELINES

Presentation

- All participants should remain muted unless speaking
- Use "Raise Your Hand" or "Meeting Chat" for questions/comments
- Team will be monitoring
- •Q&A
- Working session



* This meeting will be recorded as part of the project record



WELCOME

Mike Bezold, P.E.

- Branch Manager Project Development, District 6, KYTC
- Turkeyfoot Project Manager



TIMELINE: NEED FOR EXPANSION





TRAFFIC: PROJECT STUDY AREA

- Traffic has increased significantly surrounding the I-275/Turkeyfoot interchange, from the 1990s to today
- Growth surrounding Crestview Hills Town Center, St. Elizabeth Hospital and Thomas More University





ROLE OF THE WORKING GROUP



- Make each alternative the best it can be from a community perspective
- Ensure the community's needs are addressed in addition to the safety and traffic requirements
- Represent your community and organization
- Identify what is needed to make this project succeed (sidewalks, multi-use path, landscaping, decorative lighting or signage, etc.)



NEXT STEPS

- Work with the Community Leaders to refine project alternatives
- Present Project Team/Working Group recommendations to the public (Spring 2021)
- Collect comments and input from the community at large
- Present final recommendations for approval and implementation





TURKEYFOOT PROJECT TEAM

KYTC, District 6

Bob Yeager, P.E. – Chief District Engineer Mike Bezold, P.E. – Project Manager Stacee Hans – Executive Staff Advisor Sharon James – Environmental Officer

Consultant Team

John Eckler, P.E – Gresham Smith, Project Manager Jim Brannon, P.E. – Gresham Smith Nikki Boden, P.E. – Gresham Smith Alison Gwynn, P.E. – Gresham Smith Anne Warnick, P.E. - WSP Laura Whitman – Rasor Haley Taylor – Rasor





WELCOME WORKING GROUP MEMBERS

SOUTH GROUP

Paul Meier Arlene Lubbe* John Link **Brian Dehner Tony Kramer** Chris Amon **Tim Williams** Larry Klein Adam Fuller* Dave Schrand* Chris Schutte* Jim Kuehne Tim McKinley Tom Wogenstahl **Christine Baltes Rick Roberts** Rob Haney* Nick Hendrix* Jeff Thelen* Pat Wilgenbusch* Robert Munson/Noah Welte Frank Busofsky*

City of Crestview Hills City of Crestview Hills City of Edgewood City of Edgewood City of Edgewood City of Edgewood City of Fort Mitchell City of Fort Mitchell City of Fort Mitchell City of Lakeside Park City of Lakeside Park / City of Crestview Hills **College** Park **College** Park **College** Park Crestview Hills Town Center / JRA Real Estate **Five Seasons Sports Club** Kenton County School District Kenton County Public Works Northern Kentucky Area Development St Elizabeth Healthcare Thomas More College Transit Authority of Northern Kentucky (TANK)

Mayor Council member Mayor City Administrative Officer Police Chief Fire Chief City Administrator Interim City Administrator Fire Chief Public Works Director Chief of Police Resident Resident Resident

Chief Club Officer Chief Operations Officer Public Works Director Transportation Planning Asst. Director Senior VP &CFO Manager of Planning

* Also serves on the NORTH group



WELCOME WORKING GROUP MEMBERS

GROU NORTH Arlene Lubbe* Adam Fuller* **David Jansing** Dave Schrand* Chris Schutte* Scott Daughtery Jenny Corken John Kramer Rob Haney* Nick Hendrix* Jeff Thelen* Pat Wilgenbusch* Frank Busofsky*

City of Crestview Hills City of Fort Mitchell City of Lakeside Park City of Lakeside Park City of Lakeside Park / City of Crestview Hills City of Lakeside Park City of Lakeside Park City of Lakeside Park Kenton County School District Kenton County Public Works Northern Kentucky Area Development St. Elizabeth Healthcare Transit Authority of Northern Kentucky (TANK) Council member **Fire Chief** Mayor Public Works Director Chief of Police Resident Resident Resident **Chief Operations Officer Public Works Director** Transportation Planning Asst. Director Manager of Planning

* Also serves on the SOUTH group



PROJECT GOAL

Identify and evaluate improvements to:

- Improve safety and traffic flow
- Reduce congestion and travel delays
- Improve travel options for bicyclists and pedestrians





PURPOSE & NEED

- Corridor connects residential neighborhoods, a college campus, commercial developments, and the region's largest hospital.
- More than 40,000 vehicles travel through the area every day. This number is expected to increase as the region grows.
- Drivers frequently experience long lines of traffic (queues) and travel delays.
- There were 549 crashes between 2013 and 2018:
 - -73 injuries and three fatalities
 - The majority of incidents were rear-end crashes
- Bike accommodation ends at Dudley, inconsistent sidewalks through interchange area.



SCHEDULE & TASKS



Tasks for current phase of work:

- Review existing studies
- Conduct field surveys and geotechnical studies
- Analyze and evaluate possible solutions
- Identify and evaluate possible environmental impacts
- Develop preliminary and final design, right-of-way, and roadway plans

PUBLIC FEEDBACK RECEIVED, DECEMBER 2019

- Nearly 700
 participants
- More than 90% live within 15 miles
- Nearly 72% work within 20 miles

Which of the following statements **best** represent your experience when driving on Turkeyfoot Road?

43%	I can get where I need to go pretty easily, but traffic slows me down	205
33%	Driving through the area is challenging; it can be difficult to get where I want to go	156
14%	It's tough driving through the area; I prefer to avoid it when I can	68
10%	Driving in the area is easy; I generally have no problems getting where I want to go	48

PUBLIC FEEDBACK RECEIVED, DECEMBER 2019

How concerned are you with the following problems that have been identified in the project area?

89% Traffic congestion, particularly during a.m. and p.m. rush hour	217
80% Queues that form behind vehicles turning left	194
74% Backups on I-275 due to vehicles exiting at Turkeyfoot	180
67% Travel delays caused by traffic incidents	164
58% Sidewalks are not consistent	141
55% No dedicated bike paths	134



PUBLIC COMMENTS RECEIVED, DECEMBER 2019

Speed Issues

Aggressive driving, high speed in north section, school traffic, lane-assignment confusion

Interchange Reconstruction

Add new access from I-275 to St. Elizabeth/ Thomas More Parkway, widen ramps; congested intersections caused by traffic blocking intersection

Turn Lanes/Ramps

Add turn lane to Thomas More in northbound direction; left turn northbound to mall is too short; College Park turns are difficult

Multi-modal Considerations

Make safer for bikes and peds, street crossings are uncomfortable and unsafe, pedestrian bridge to cross Turkeyfoot

College Park Subdivision

Review city proposal, do not impact any homes, access will be difficult if Fraternity Court closes

Signal Coordination

Traffic lights are too long, people running red lights, blocking intersections, poor timing



TRAFFIC STUDY OUTCOMES

Seven alternatives analyzed for future year 2040

- A. No Build
- B. Diamond interchange, Alt B Conventional Intersection with improvements to Turkeyfoot Road, Thomas More and Dudley Road
- C. Diverging Diamond Interchange (DDI), Alt B Modified with improvements to Turkeyfoot Road, Thomas More and Dudley Road
- D. DDI, Alt B Modified Conventional Intersection, plus a northbound exclusive right turn lane at Thomas More
- E. Conventional interchange, plus Displaced Left Turn option at Thomas More
- F. Diamond interchange, Alt B Modified Intersection, with northbound exclusive right turn lane at Thomas More
- G. DDI with road improvements, Displaced Left Turn option at Thomas More and a northbound exclusive right turn lane at Thomas More

TRAFFIC STUDY OUTCOMES

- Model evaluated multiple measures of effectiveness (MOEs) including:
 - Average delay (sec) throughout the entire model
 - Average speed (mph) throughout the entire model
 - Average northbound and southbound travel times (min) through the model
 - Intersection delays and levels of service (LOS)
 - Average and maximum queue lengths at critical intersections



PRELIMINARY RESULTS – MODEL DELAY AND SPEEDS

Best AM MOE
Best PM MOE
Worst AM MOE
Worst PM MOE

MOE: measures of effectiveness

		Avg Model	Avg Model		
	Turkeyfoot Road Mode	l Scenarios	Delay (sec)	Speed	
			Delay (See)	(mph)	
A.	No Build	AM	182.6	11.3	
А.		PM	282.9	7.7	
Β.	Conventional	AM	95.3	17.7	
	Conventional	PM	127.2	14.2	
C.	DDI + Alt B Modified	AM	122.5	15.3	
	DDI + Alt D Moullieu	PM	118.7	14.8	
D.	DDI + Alt B Mod	AM	77.2	19.6	
υ.	+exclusive right	PM	117.4	14.9	
E.	Conventional +	AM	99.1	16.5	
	displaced left turn	PM	117.8	14.6	
F.	Alt B Mod + exclusive	AM	62.0	21.7	
	right	PM	130.1	14.0	
G.	DDI + displaced left	AM	84.4	18.0	
	+ exclusive right	PM	121.1	14.3	



PRELIMINARY RESULTS – MODEL TRAVEL TIMES

Best AM MOE
Best PM MOE
Worst AM MOE
Worst PM MOE

MOE: measures of effectiveness

		Avg NB	Avg SB	
	Turkeyfoot Road Mod	Travel Time	Travel Time	
		(min)	(min)	
A.	No Build	AM	6.7	8.3
А.		PM	7.5	22.6
B.	Conventional	AM	5.2	4.6
D.	Conventional	PM	4.3	7.7
C.	DDI + Alt B Modified	AM	5.9	5.1
C.	DDI + AIL B MOUIIIEU	PM	4.7	7.0
D.	DDI + Alt B Mod	AM	4.8	5.7
ט.	+exclusive right	PM	4.9	7.8
E.	Conventional +	AM	5.4	5.8
	displaced left turn	PM	5.2	7.9
-	Alt B Mod +	AM	4.6	4.3
F.	exclusive right turn	PM	4.5	7.8
G.	DDI + displaced left	AM	5.5	7.5
	+ exclusive right	PM	5.5	8.9



PRELIMINARY RESULTS – INTERSTATE RAMP QUEUES

Best AM MOE	
Best PM MOE	
Worst AM MOE	
Worst PM MOE	

MOE: measures of effectiveness

	Turkeyfoot Road Model Scenarios		I-275 Ramp Queues			
			WB LT	WB RT	EB LT	EB RT
Α.	No Build	AM	701.6	723.7	747.1	1007.5
		PM	1552.9	1573.2	1858.9	1885.4
В.	Conventional	AM	297.7	270.8	19.7	144.0
		PM	1210.6	1226.8	57.1	271.4
C.	DDI + Alt B Modified	AM	244.3	176.5	19.0	254.2
C.		PM	227.0	273.9	26.5	324.9
D.	DDI + Alt B Mod	AM	187.6	228.1	35.7	235.1
υ.	+exclusive right	PM	275.5	253.5	43.8	270.4
E.	Conventional +	AM	290.0	267.8	19.7	166.6
	displaced left turn	PM	617.7	409.1	43.7	194.3
F.	Alt B Mod +	AM	261.6	249.4	19.9	186.2
	exclusive right turn	PM	646.0	390.9	57.1	217.9
G.	DDI + displaced left	AM	206.9	228.0	35.7	316.1
	+ exclusive right	PM	266.6	257.7	33.7	312.0



IMPROVEMENT OPTIONS



WORKING SESSION

PEDESTRIAN ACCOMMODATIONS



PEDESTRIAN ACCOMMODATIONS

Standard curb and gutter with utility strip on left side; no utility strip on right side; 5 ft sidewalk on left side; 6 ft sidewalk on right

BIKE AND PEDESTRIAN ACCOMMODATIONS

Raised median with on-street bike lane; standard curb and gutter; 5 ft sidewalk

BIKE AND PEDESTRIAN ACCOMMODATIONS

Standard Curb and Gutter with 5 ft sidewalk on left; 10 ft shared-use path on right

BIKE AND PEDESTRIAN ACCOMMODATIONS

Standard curb and gutter with 10-foot shared-use path; no utility strip



- Minutes will be posted on the community engagement page of ImprovingTurkeyfootRoad.org.
- Send any additional questions and comments to:

John Eckler	Mike Bezold
john.eckler@greshamsmith.com	Mike.Bezold@ky.gov
(859) 469-5602	(859) 341-2700

- Project Team will review and refine project alternatives based on feedback from today's discussion
- Environmental and cost studies to be completed before the next meeting
- Updates to be presented at next meeting (January 2021)