

KY 3: Two-Way-Left-Turn-Lane (TWLTL)

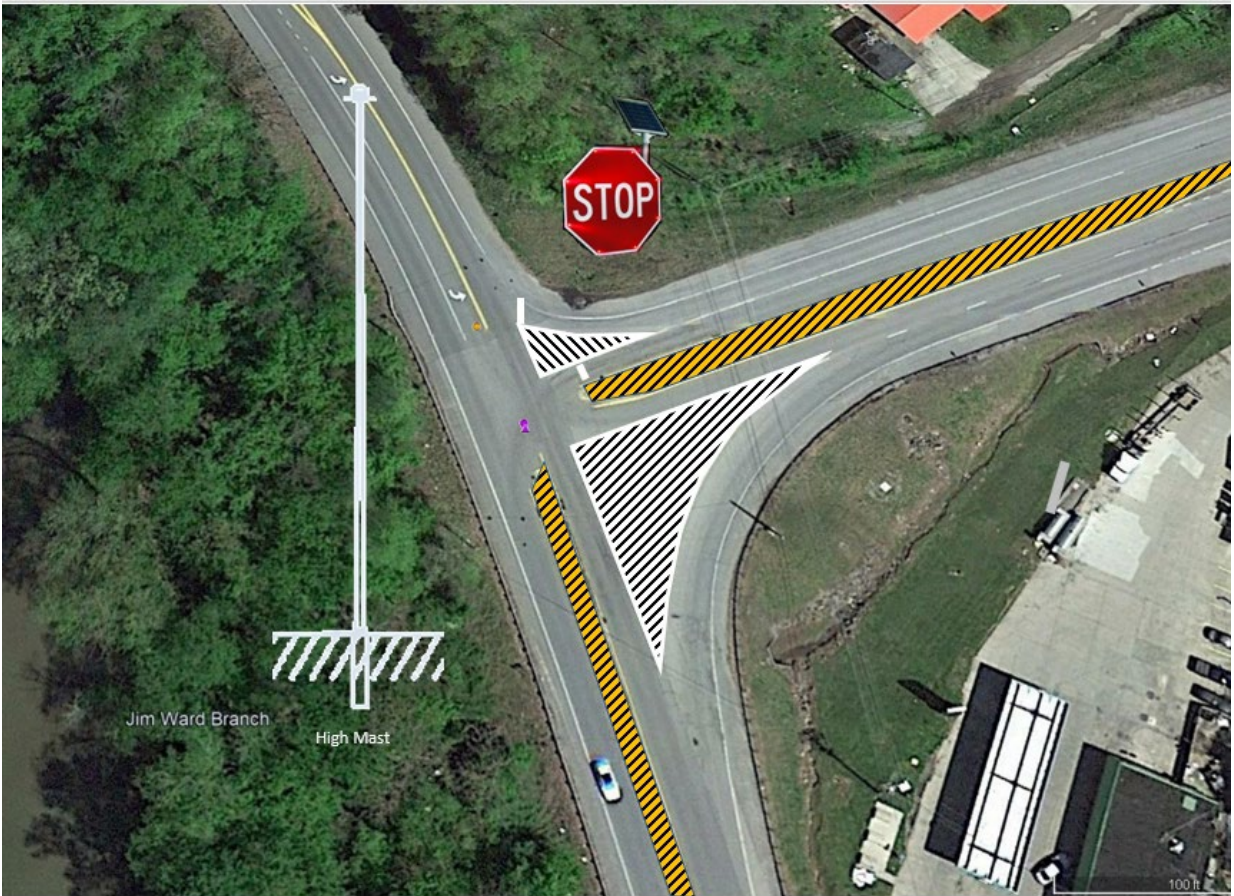
Floyd County KY 3 MP 1.30 (existing 3-Lane) to MP 1.80		W
IMPROVEMENT DESCRIPTION: Widen KY 3 to provide a 3-lane template TWLTL from existing 3-lane just south of Edgewood Lane to MP 1.80, approximately 0.5 mile. Widen Regency Park entrance (MP 1.71) and remove trees for improved sight distance.	Phase Estimate	(2022 \$'s)
	Design	\$150,000
	Right-of-Way	\$410,000
	Utilities	\$1,670,000
	Construction	\$1,440,000
	Total Cost	\$3,670,000

TRAFFIC OPERATIONS AND IDENTIFIED NEEDS:

2022 Existing Traffic:	9200 AADT with 8.9% Trucks; operates at LOS C in both peak hours; v/c is 0.24-0.31
2045 No Build Traffic:	At 1% annual growth, 11,100 AADT; operates at LOS D in both peak hours; v/c is 0.30-0.41
Safety:	This segment contained 17 of the 45 crashes occurring on KY 3 in 5 years: 47% rear end



KY 3 | KY 321 Intersection Visibility Improvement

Floyd County KY 3 MP 2.672 KY 321 MP 4.182		X
IMPROVEMENT DESCRIPTION: Improve intersection visibility by installing safety countermeasures that may include changing yielding right movement to a stop condition; adding stop bars on KY 3; installing 6-inch thermoplastic striping and cross-hatching for traffic islands; installing intersection lighting; adding retroreflective borders to flashing beacons; and installing dual, oversized solar LED stop signs.	Phase Estimate	(2022 \$'s)
	Design	\$30,000
	Right-of-Way	\$0
	Utilities	\$0
	Construction	\$220,000
Total Cost		\$250,000
TRAFFIC OPERATIONS AND IDENTIFIED NEEDS:		
2022 Existing Traffic:	KY 3—3,800 to 7,300 AADT with 7.7 to 8.9% Trucks; KY 321—5,100 AADT with 4.1% Trucks; intersection operates at LOS B/C in AM/PM peak hours	
2045 No Build Traffic:	At 1% annual growth, KY 3—5,200—8,800 AADT; KY 321—7,000 AADT; intersection operates at LOS C in both peak hours	
Safety:	9 crashes occurred at intersection in 5 years: 45% angle and 33% rearend, 56% were making left turns; CMFs predict 10–15% reduction in injury, fatal and nighttime crashes	
CONCEPT:		
		

KY 3 | US 23 Signal Visibility Improvement

Floyd County KY 3 MP 0.0 US 23 MP 20.445		Y
IMPROVEMENT DESCRIPTION: Install auxiliary signal heads on KY 3 and US 23 to increase visibility of changing signal phases to motorists.	Phase Estimate	(2022 \$'s)
	Design	\$10,000
	Right-of-Way	\$0
	Utilities	\$0
	Construction	\$50,000
Total Cost		\$60,000
TRAFFIC OPERATIONS AND IDENTIFIED NEEDS:		
2022 Existing Traffic:	KY 3—5,400 AADT with 8.9% Trucks; US 23—9,700 AADT with 16.5% Trucks; intersection operates at LOS B in both peak hours	
2045 No Build Traffic:	At 1% annual growth, KY 3—8,000 AADT; US 23—14,500 AAD; intersection operates at LOS C in both peak hours	
Safety:	12 crashes occurred at intersection in 5 years: 10 on US 23 and 2 on KY 3; 42% rearend and 33% angle collisions, 30% cited signal issues; CMFs predict 12% reduction in angle and 18% reduction in rearend crashes	
CONCEPT:		

KY 321: Targeted Left and Right Turn Bays

Johnson County KY 321 MP 0.0 – MP 1.03		Z
IMPROVEMENT DESCRIPTION: Construct left and right turn bays on Johnson County KY 321 at 4 possible locations: KY 2381, MP 0.036; Boat Ramp Road, MP 0.22; KY 2559, MP 0.72; and Airport Road, MP 1.03; and 1 possible location in Floyd County, Jockey Hollow Road, MP 4.604	Phase Estimate	(2022 \$'s)
	Design	\$40,000
	Right-of-Way	\$15,000
	Utilities	\$35,000
	Construction	\$360,000
Cost of Each Bay		\$450,000
TRAFFIC OPERATIONS AND IDENTIFIED NEEDS:		
2022 Existing Traffic:	KY 321–4,200 to 5,100 AADT with 4.1% to 6.6% Trucks; operates at LOS A-B in both peak hours	
2045 No Build Traffic:	At 1% annual growth, KY 321–7,000 AADT; operates at LOS B-C in both peak hours	
Safety:	15 crashes occurred on Johnson Co. KY 321 in 5 years: 80% rearend and 20% angle collisions. 33% of crashes were located at the KY 2381 intersection, CMFs predict 28–48% reduction in crashes for left turn lanes and 14–26% reduction for right turn lanes	
CONCEPT:		
