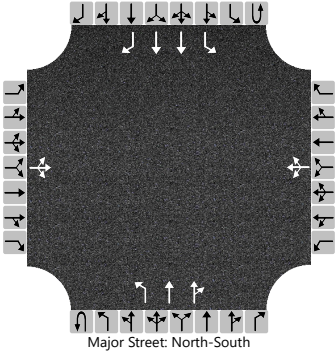


HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DBZ	Intersection	Bardstown Road at Fairmount Rd
Agency/Co.	Diane B. Zimmerman Traffic Engineering LLC	Jurisdiction	
Date Performed	4/9/26	East/West Street	Fairmount Road
Analysis Year	2026	North/South Street	Bardstown Road
Time Analyzed	AM Peak Build	Peak Hour Factor	0.95
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Goodwill Old Bardstown		

Lanes



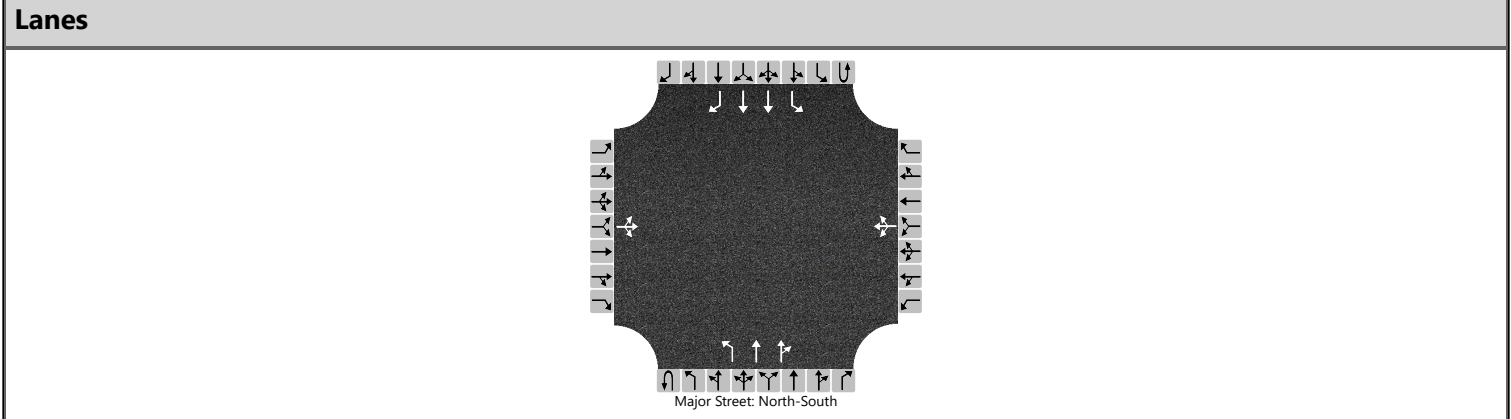
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		16	0	25		1	2	4	0	83	1382	7	0	10	719	36
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	5			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways																
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.50	6.50	6.90		4.20				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.25				2.20		

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)			43			7				87				11		
Capacity, c (veh/h)			289			160				803				468		
v/c Ratio			0.15			0.05				0.11				0.02		
95% Queue Length, Q ₉₅ (veh)			0.5			0.1				0.4				0.1		
95% Queue Length, Q ₉₅ (ft)			12.5			2.5				10.4				2.5		
Control Delay (s/veh)			19.6			28.5				10.0				12.9		
Level of Service (LOS)			C			D				B				B		
Approach Delay (s/veh)	19.6				28.5				0.6				0.2			
Approach LOS	C				D				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	DBZ	Intersection	Bardstown Road at Fairmount Rd
Agency/Co.	Diane B. Zimmerman Traffic Engineering LLC	Jurisdiction	
Date Performed	4/9/26	East/West Street	Fairmount Road
Analysis Year	2026	North/South Street	Bardstown Road
Time Analyzed	PM Peak Build	Peak Hour Factor	0.98
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Goodwill Old Bardstown		



Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	2	0	0	1	2	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		25	1	206		2	0	7	0	44	1231	1	0	9	1683	45
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	5			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways																
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.50	6.50	6.90		7.50	6.50	6.90		4.20				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.50	4.00	3.30		3.50	4.00	3.30		2.25				2.20		

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)			237				9			45				9		
Capacity, c (veh/h)			300				120			337				560		
v/c Ratio			0.79				0.08			0.13				0.02		
95% Queue Length, Q ₉₅ (veh)			6.3				0.2			0.5				0.0		
95% Queue Length, Q ₉₅ (ft)			157.5				5.0			13.0				0.0		
Control Delay (s/veh)			50.5				37.5			17.3				11.5		
Level of Service (LOS)			F				E			C				B		
Approach Delay (s/veh)	50.5				37.5				0.6				0.1			
Approach LOS	F				E				A				A			