final report

February 25, 2021 Revised March 29, 2021

Traffic Impact Study

Cedar Creek Crossings 7714 Bardstown Road Louisville, KY

Prepared for

Louisville Metro Planning Commission Kentucky Transportation Cabinet





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INTRODUCTION

The development plan for 7714 Bardstown Road in Louisville, KY shows six buildings, which are proposed as general retail (28,025 square feet), a furniture store (3,015 square feet), medical office (3,500 square feet), a fast-food restaurant (4,600 square feet), a fast casual restaurant (2,330 square feet) and a coffee shop (2,320 square feet). **Figure 1** displays a map of the site. Access to the center will be from a full access driveway and a proposed right-in/right-out on Bardstown Road, and full access driveway on Cedar Creek Road. The purpose of this study is to examine the traffic impacts of the development upon the adjacent highway system. For this study, the impact area was defined to be the intersection of Bardstown Road with Cedar Creek Road/Brentlinger Lane, and Southpointe Boulevard/Bartley Drive, and the entrances.



Figure 1. Site Map

EXISTING CONDITIONS

Bardstown Road, US 31E, is maintained by the Kentucky Transportation Cabinet (KYTC) with an estimated 2020 ADT of 48,000 vehicles per day between I 265 and Cedar Creek Road, as estimated from the turning movement count. The road is a four-lane highway with twelve-foot lanes, a center turn lane and eight-foot paved shoulders. An additional northbound lane begins near the entrance of Cedar Creek Baptist Church. The speed limit is 50 mph. There are no sidewalks. The intersection with Cedar Creek Road /Brentlinger Lane is controlled with a traffic signal. There are left turn lanes on all approaches. The northbound and westbound approaches have right turn lanes.

Peak hour traffic counts for the intersections were obtained on March 3, 2020. The a.m. peak hour occurred between 7:15 and 8:15 a.m. The p.m. peak occurred between 4:45 and 5:45 p.m. **Figure 2** illustrates the existing a.m. and p.m. peak hour traffic volumes.

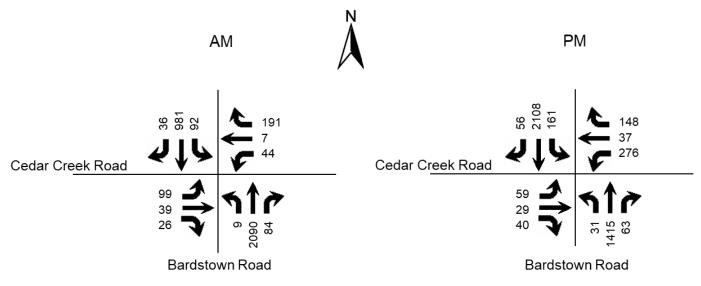


Figure 2. Existing (2020) Peak Hour Volumes

FUTURE CONDITIONS

The project completion date is 2023. An annual growth rate of 1.0 percent was applied to all 2020 volumes except Bardstown Road through traffic; 0.5 percent annual growth was used for Bardstown Road through traffic. This is determined by reviewing 2018 and 2015 counts at the intersection of Cedar Creek Road and Bardstown Road. Additionally, trip generation for 60 additional single-family homes in Cedar Creek Gardens, 88 single family homes on Heights Drive, 116 multifamily units on Brentlinger Lane, Southpointe Commons (approved development plan), Bartley Drive Credit Union, 168 apartments at 7703 Cedar Creek Drive, and 324 apartments at 8000 Cedar Creek Drive are included were included. **Figure 3** displays the 2023 No Build peak hour volumes.

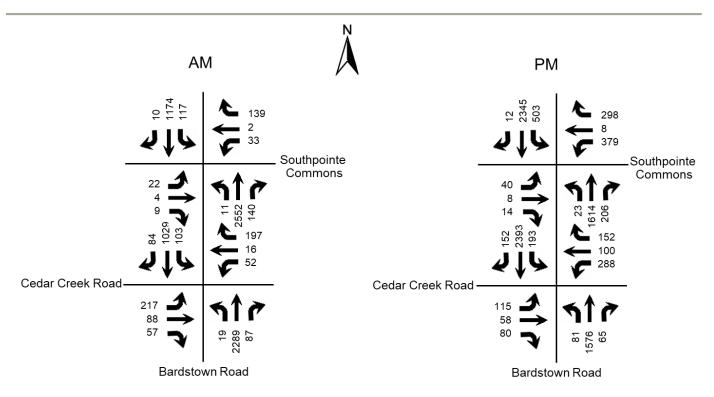


Figure 3. No Build 2023 Peak Hour Volumes

TRIP GENERATION

The Institute of Transportation Engineers <u>Trip Generation Manual</u>, 10th Edition contains trip generation rates for a wide range of land uses. The land uses of "Shopping Center (820)", "Medical Office (720)", "Furniture Store (890)", "Fast-Food Restaurant with drive-thru (934)", "Fast Casual (930)", and "Coffee Shop with Drive-Through Window (937)" were reviewed and determined to be the best match. The trip generation results are listed in **Table 1**. The new trips were assigned to the highway network with the percentages shown in **Figure 4**. Pass-by trips were assigned using the peak directional direction of the adjacent streets. The pass-by trips are shown in parenthesis. **Figure 5** shows the trips generated by this development and distributed throughout the road network during the peak hours. **Figure 6** displays the individual turning movements for the peak hours when the development is completed.

	A.M. I	Peak H	lour	P.M. I	Peak H	lour
Land Use	Trips	In	Out	Trips	In	Out
Shopping Center (28,025 sq. ft.)	26	16	10	212	102	110
Furniture Store (3,015 sq. ft.)	2	2	0	2	1	1
Medical Office (3,500 sq. ft.)	11	9	2	14	4	10
Fast-Food with drive-thru (4,600 sq. ft.)	185	94	91	150	78	72
Fast Casual (2,330 sq. ft.)	5	3	2	33	18	15
Coffee Shop w/ Drive Thru (2,320 sq. ft.)	206	105	101	101	51	50
Total	435	229	206	512	254	258
Pass-by Trips	192	98	94	212	107	105
TOTAL New Trips	243	131	112	300	147	153

Table 1. Peak nour rrips denerated by Sit	Table 1.	our Trips Generated b	v Site
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Cedar Creek Crossing 7714 Bardstown Road Traffic Impact Study



Figure 4. Trip Distribution Percentages

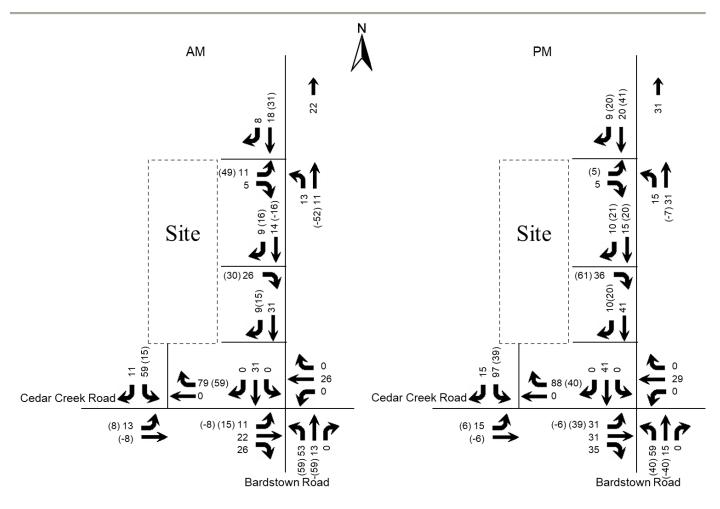


Figure 5. Peak Hour Trips Generated by Site

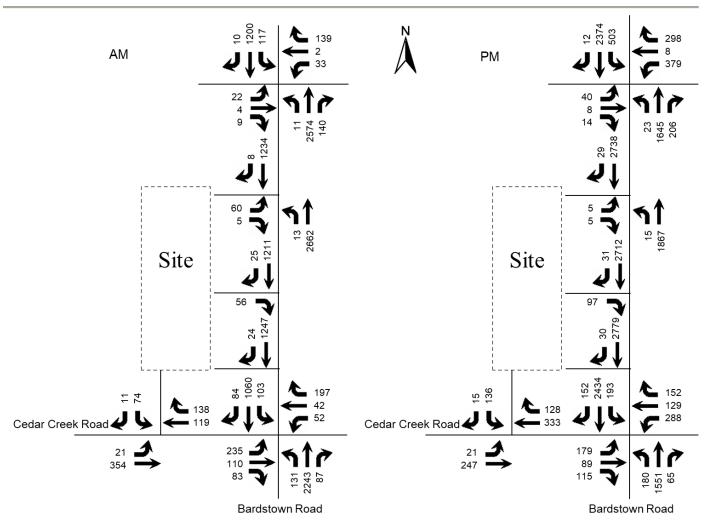


Figure 6. Build 2023 Peak Hour Volumes

ANALYSIS

The qualitative measure of operation for a roadway facility or intersection is evaluated by assigning a "Level of Service". Level of Service is a ranking scale from A through F, "A" is the best operating condition and "F" is the worst. Level of Service results depend upon the facility that is analyzed. In this case, the Level of Service is based upon the total delay experienced at an intersection.

To evaluate the impact of the proposed development, the vehicle delays at the intersections were determined using procedures detailed in the <u>Highway Capacity Manual</u>, 6th edition. Future delays and Level of Service were determined for the intersections using the HCS Streets (version 7.9) software. The delays and Level of Service are summarized in **Table 2**.

		A.M.			P.M.	
Annraach	2020	2023	2023	2020	2023	2023
Approach	Existing	No Build	Build	Existing	No Build	Build
Bardstown Road at Cedar Creek Road	C 22.7	C 32.2	C 32.8	D 46.4	D 35.2	D 46.5
Cedar Creek Road Eastbound	E 73.6	F 87.0	F 107.1	E 74.2	E 77.7	F 85.3
Brentlinger Lane Westbound	E 79.3	E 73.3	E 70.8	F 115.6	F 109.2	F 123.5
Bardstown Road Northbound	В 19.9	C 30.0	C 26.8	C 24.4	C 28.0	D 37.6
Bardstown Road Southbound	A 8.8	A 9.8	A 8.4	D 45.6	C 20.1	C 29.4
Bardstown Road at Southpointe Blvd		C 21.1	В 19.5		D 39.1	D 40.1
Bartley Drive Eastbound		F 83.3	F 88.0		F 113.4	F 113.4
Southpointe Boulevard Westbound		E 77.5	E 77.5		F 84.6	F 84.7
Bardstown Road Northbound		В 13.9	В 11.7		В 15.0	В 16.1
Bardstown Road Southbound		C 27.0	C 25.9		D 42.0	D 43.4
Bardstown Road at Entrance						
Entrance Eastbound			D 30.9			F 154.0
Bardstown Road Northbound (left)			B 10.8			F 89.7
Cedar Creek Road at Entrance						
Cedar Creek Road Eastbound (left)			A 7.8			A 8.4
Entrance Southbound			B 14.4			C 19.8

Table 2.	Peak Hour	Level of	Service
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Key: Level of Service, Delay in seconds per vehicle

The entrance was evaluated for turn lanes using the Kentucky Transportation Cabinet <u>Highway Design Guidance</u> <u>Manual</u> dated July, 2020. The traffic impact policy requires using volumes for ten years beyond build-out, or 2033. The 2033 volumes were determined by applying a 0.5 percent annual growth rate from 2023. **Figure 7** illustrates the 2033 No Build volumes. **Figure 8** illustrates the 2033 Build Volumes. Using the volumes in Figure 8, a right turn lane is required at the entrance on Bardstown Road. No turn lanes are required on Cedar Creek Road at the entrance. **Table 3** summarizes the delay and Level of Service for 2033.

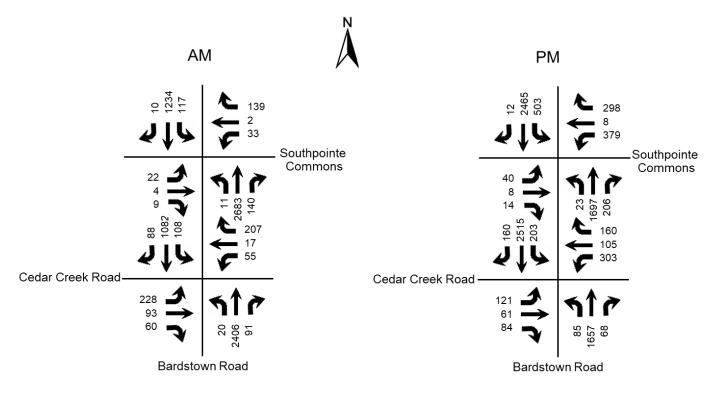


Figure 7. 2033 No Build Peak Hour Volumes

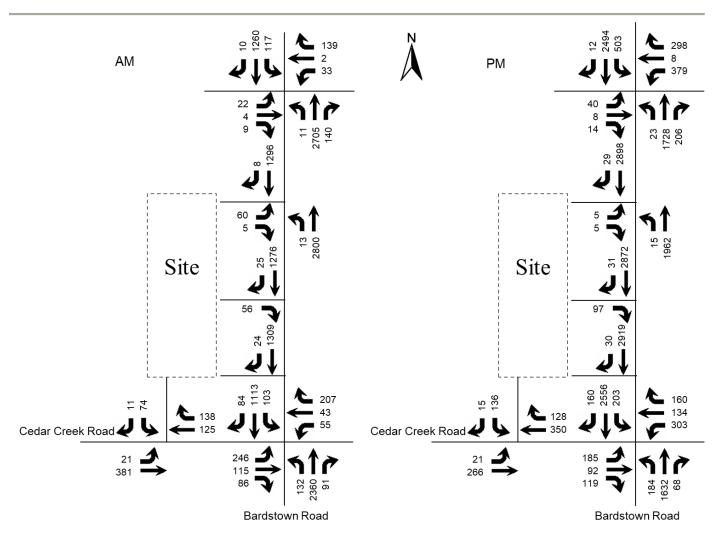


Figure 8. 2033 Build Peak Hour Volumes

		A.M.			P.M.	
Annraach	2020	2033	2033	2020	2033	2033
Approach	Existing	No Build	Build	Existing	No Build	Build
Bardstown Road at Cedar Creek Road	C 22.7	D 40.4	D 38.3	D 46.4	D 38.2	D 49.8
Cedar Creek Road Eastbound	E 73.6	F 92.4	F 115.5	E 74.2	E 78.0	F 88.2
Brentlinger Lane Westbound	E 79.3	E 72.3	E 71.5	F 115.6	F 118.7	F 135.9
Bardstown Road Northbound	В 19.9	D 42.7	C 33.9	C 24.4	C 29.8	D 39.1
Bardstown Road Southbound	A 8.8	В 10.3	A 9.3	D 45.6	C 22.1	C 31.4
Bardstown Road at Southpointe Blvd		C 21.2	В 19.8		D 39.2	D 39.8
Bartley Drive Eastbound		F 88.0	F 88.0		F 113.4	F 113.4
Southpointe Boulevard Westbound		E 77.6	E 77.7		F 85.1	F 85.2
Bardstown Road Northbound		B 14.9	В 12.7		В 14.3	В 16.2
Bardstown Road Southbound		C 25.8	C 25.7		D 43.4	D 43.4
Bardstown Road at Entrance						
Entrance Eastbound			D 34.6			F 381.6
Bardstown Road Northbound (left)			B 11.2			F 181.4
Cedar Creek Road at Entrance						
Cedar Creek Road Eastbound (left)			A 7.9			A 8.5
Entrance Southbound			B 14.9			C 21.1

Table 3. Peak Hour Level of Service

Key: Level of Service, Delay in seconds per vehicle

CONCLUSIONS

Based upon the volume of traffic generated by the development and the amount of traffic forecasted for the year 2023 and 2033, there will be an impact to the existing highway network. The delays experienced in the area will increase. A right turn lane will be required at the entrances on Bardstown Road. Proposed mitigation for the intersection of Bardstown Road at Cedar Creek Road is the construction of a southbound right turn lane on Bardstown Road.

APPENDIX

Weather

Fair 55° F

Jefferson County (Louisville), KY Classified Turn Movement Count

Site 3 of 3

US-150 Bardstown Rd (North) Brentinger Ln US-150 Bardstown Rd (South) Cedar Creek Rd

Lat/Long

38.134142°, -85.579609°

Date Tuesday, March 3, 2020



Traffic Counts

41 Peabody Street, Nashville, TN 37210 10 Glenikke Parkway, Sute 130, Atlanti, GA 30328 555 Faryetteville Street, Sute 201, Ralaejd, NC 27601 1229 South Shelby Street, Louisville, KY 4003 6565 North MacArthur Boulevard, Suite 225, Dalks, TX 75039

hello@mantraffic.com www.mantraffic.com

													-												1
			South	bound					West	bound					North	bound					East	bound			
		US-1	50 Bardst	own Rd (North)				Brentí	nger Ln				US-1	50 Bardst	own Rd (S	South)				Cedar (Creek Rd			
	U-Tum	Left	Thru	Right	Peds	Арр	U-Tum	Left	Thru	Right	Peds	Арр	U-Tum	Left	Thru	Fight	Peds	Арр	U-Tum	Left	Thru	Right	Peds	Арр	Int
0700 - 0715	0	25	184	7	0	216	0	4	1	60	0	65	0	1	522	14	0	537	0	45	10	3	0	58	876
0715 - 0730	0	14	222	7	0	243	0	6	1	50	0	57	0	1	556	14	0	571	0	34	10	13	0	57	928
0730 - 0745	0	18	239	13	0	270	0	13	3	46	0	62	0	1	521	22	0	544	0	25	12	4	0	41	917
0745 - 0800	0	36	266	11	0	313	0	11	1	51	0	63	0	2	503	27	1	533	0	23	11	4	0	38	947
0800 - 0815	0	24	254	5	0	283	0	14	2	44	0	60	0	5	510	21	0	536	0	17	6	5	0	28	907
0815 - 0830	0	38	216	9	0	263	0	9	4	35	0	48	0	1	482	21	0	504	0	18	13	4	0	35	850
0830 - 0845	0	29	190	9	0	228	0	13	5	70	0	88	0	4	447	22	0	473	0	26	10	7	0	43	832
0845 - 0900	0	69	187	9	0	265	0	17	10	77	0	104	0	2	376	18	0	396	0	15	12	3	0	30	795
1600 - 1615	0	50	468	17	0	535	0	55	16	69	0	140	0	3	298	7	0	308	0	12	3	6	0	21	1004
1615 - 1630	0	41	509	11	0	561	0	70	9	37	0	116	0	7	350	12	0	369	0	19	8	8	0	35	1081
1630 - 1645	0	38	523	14	0	575	0	57	16	41	0	114	0	5	353	13	0	371	0	20	7	10	0	37	1097
1645 - 1700	0	35	489	14	0	538	0	69	5	35	0	109	1	8	349	16	0	374	0	12	6	12	0	30	1051
1700 - 1715	0	34	536	14	0	584	0	66	9	39	0	114	0	9	362	13	0	384	0	17	9	9	0	35	1117
1715 - 1730	0	48	534	14	0	596	0	69	13	38	0	120	0	6	359	19	0	384	0	8	6	11	0	25	1125
1730 - 1745	0	44	549	14	0	607	0	72	10	36	0	118	0	7	345	15	0	367	0	22	8	8	0	38	1130
1745 - 1800	0	49	441	20	0	510	0	60	19	26	0	105	0	6	318	19	0	343	0	15	4	6	0	25	983

0715 - 0730	0	14	222	7	0	243	0	6	1	50	0	57	0	1	556	14	0	571	0	34	10	13	0	57	928
0730 - 0745	0	18	239	13	0	270	0	13	3	46	0	62	0	1	521	22	0	544	0	25	12	4	0	41	917
0745 - 0800	0	36	266	11	0	313	0	11	1	51	0	63	0	2	503	27	1	533	0	23	11	4	0	38	947
0800 - 0815	0	24	254	5	0	283	0	14	2	44	0	60	0	5	510	21	0	536	0	17	6	5	0	28	907
AM PEAK	0	92	981	36	0	1109	0	44	7	191	0	242	0	9	2090	84	1	2184	0	99	39	26	0	164	3699
1645 - 1700	0	35	489	14	0	538	0	69	5	35	0	109	1	8	349	16	0	374	0	12	6	12	0	30	1051
1700 - 1715	0	34	536	14	0	584	0	66	9	39	0	114	0	9	362	13	0	384	0	17	9	9	0	35	1117
1715 - 1730	0	48	534	14	0	596	0	69	13	38	0	120	0	6	359	19	0	384	0	8	6	11	0	25	1125
1730 - 1745	0	44	549	14	0	607	0	72	10	36	0	118	0	7	345	15	0	367	0	22	8	8	0	38	1130
PM PEAK	0	161	2108	56	0	2325	0	276	37	148	0	461	1	30	1415	63	0	1509	0	59	29	40	0	128	4423

HCS Reports

		HCS						(C3u		iiiiai j	у				
General Inform	nation								ntersec	tion Inf	ormatic	on		4.441	ыų
Agency	nation	DBZ Traffic							Duration.		0.250		┤▁	417	
Analyst		DBZ		Analys	sis Date	Feb 2	2 2021		Area Typ		Other				
Jurisdiction		002		Time F		AM P			PHF	0	0.98		→ _* +		~_ ←
Urban Street		Bardstown Road			sis Year	<u> </u>	No Build		Analysis	Period	1> 7:	15			*
Intersection		Brentlinger/Cedar C	rook	File N			town AN			Fenou	127.	15			_
	tion			File N	ame	Daius	IOWITAN	/1 23 IN	D.XUS				- 4	1111	2
Project Descrip	nion	Cedar Creek Cross	ings											1.74.14.74.11.1	e.u.
Demand Inform	mation				EB			WE	}		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Demand (v), v	/eh/h			217	88	57	52	16	197	19	2289	87	103	1029	84
						1 111	1.116	-	- 1						
Signal Informa	1		-	-	6	211	~ ./!				ι	L	-		
Cycle, s	180.0	Reference Phase	2		5		51	∎ R	e l			1	\mathbf{Y}_{2}	3	÷
Offset, s	0	Reference Point	End	Green	3.7	2.3	125.6		4 0.0	0.0					5
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	5.1	3.6	0.0	0.0	×	5 4			Z
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	1.7	3.0	0.0	0.0		5	6	7	
Timer Results				EBI		EBT	WB		WBT	NBI		NBT	SBI		SBT
Assigned Phas	e				-	4		-	8	5		2	1	-	6
Case Number	5					5.0			5.0	1.1		2	1.1		4.0
Phase Duration						35.0			35.0	10.2	_	132.4	12.6	2 /	4.0 134.8
				L		6.6	<u> </u>	-	6.6	6.5	_	6.8	6.5		6.8
Change Period		1.				5.2	<u> </u>	-	5.2	5.0		0.0	5.0	_	0.0
Max Allow Hea				<u> </u>			<u> </u>	-			_	0.0		_	0.0
Queue Clearan		1 = 7		<u> </u>	_	31.4	<u> </u>	_	23.3	2.6	_	0.0	5.9		0.0
Green Extensio		(g/e), S				0.0		_	1.7	0.0	_	0.0	0.2		0.0
	nase Call Probability ax Out Probability					1.00	<u> </u>		1.00	0.62			0.99	_	
Max Out Proba	Dility					1.00			1.00	0.00)		0.14	ł	
Movement Gro	oup Res	ults			EB			WB			NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ement			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow	Rate (v), veh/h		221	90	58	53	16	201	19	2336	89	99	542	52
,		w Rate (s), veh/h/l	n	1375	1841	1610	1255	1900	1572	1541	1781	1610	1781	1841	179
Queue Service				28.1	7.7	5.6	7.0	1.3	21.3	0.6	101.8	1.5	3.9	8.9	8.6
		e Time (g c), s		29.4	7.7	5.6	14.8	1.3	21.3	0.6	101.8	1.5	3.9	8.9	8.6
Green Ratio (g		(0 - <i>n</i> -		0.16	0.16	0.16	0.16	0.16	0.19	0.72	0.70	0.86	0.73	0.71	0.7
Capacity (c), v				254	301	263	184	300	301	369	2505	1378	121	1309	127
Volume-to-Cap		itio (X)		0.870	0.299	0.221	0.288	0.054		0.053	0.932	0.064	0.821	0.414	0.4
		(In (95 th percentile))	462.8	172.7	107	111.3	29.3	360.1	10.9	1285.	49.4	223	124.5	116
											5				
		eh/In (95 th percenti		17.9	6.7	4.3	4.2	1.2	14.1	0.4	50.6	2.0	8.8	4.8	4.6
	,	RQ) (95 th percent	tile)	3.09 76.4	0.17	0.86	0.37	0.10	1.60	0.05	1.84	0.25	1.12	0.18	0.1
	niform Delay (<i>d</i> 1), s/veh				66.2	65.4	73.6	64.4	67.4	7.4	23.4	2.0	55.7	3.2	3.1
	cremental Delay (d 2), s/veh				0.8	0.6	1.2	0.1	6.2	0.1	7.9	0.1	16.7	0.9	0.9
	tial Queue Delay (d 3), s/veh			0.0 103.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (ontrol Delay (d), s/veh				67.0	66.0	74.8	64.5	73.6	7.5	31.3	2.1	72.4	4.1	4.0
	. ,			F 88.{	E	E	E	E	E	A	С	A	E	A	A
Level of Servic	Approach Delay, s/veh / LOS					F	73.3	3	E	30.0		С	9.8		Α
Level of Servic Approach Dela						_							С		
Level of Servic Approach Dela		eh / LOS				32	2.3						<u> </u>		
Level of Servic Approach Dela Intersection De	lay, s/ve	eh / LOS			EB	32	2.3	W/P			NP			CB.	
Level of Servic	lay, s/ve sults			2.48	EB	32 B	2.3	WB	В	2.07	NB	B	2.07	SB	В

General Inform	ation								Intersec	tion Infe	ormatio	n		4444	e u
Agency		DBZ Traffic							Duration	, h	0.250			417	
Analyst		DBZ		Analys	is Date	Feb 2	2, 2021		Area Typ	e	Other		4		
Jurisdiction				Time F	Period	AM Pe	eak		PHF		0.98		* -		•_
Urban Street		Bardstown Road		Analys	is Year	2023	No Build	i i	Analysis	Period	1> 7:1	5	1		•
Intersection		Brentlinger/Cedar C	reek	File Na	ame	Bards	town AN	/I 23 N	VB.xus					5 + + 7	
Project Descript	tion	Cedar Creek Crossi												4149	2.1
					50				2		ND			0.0	
Demand Inform					EB			W			NB			SB	
Approach Move				L	T	R	L	T		L	T	R	L	T	R
Demand (<i>v</i>), v	eh/h			217	88	57	52	10	6 197	19	2289	87	103	1029	84
Signal Informa	tion				L.							†			
Cycle, s	180.0	Reference Phase	2	1	5	1642		<u> </u>	È				N		
Offset, s	0	Reference Point	End						1 25			1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow	-	2.3	125.6 5.1	3 28 3.6		0.0					ð
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	1.7	3.0		0.0		5	6	7	×
Timer Results				EBI		EBT	WB	L	WBT	NBL	. 1	NBT	SBI	-	SBT
Assigned Phase	9					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		4.0
Phase Duration	, s					35.0			35.0	10.2	1	32.4	12.6	3 1	34.8
Change Period,	(Y+R	c), S				6.6			6.6	6.5		6.8	6.5		6.8
Max Allow Head		· · ·				5.2			5.2	5.0		0.0	5.0		0.0
Queue Clearan	ueue Clearance Time (g_s), s					31.4			23.3	2.6			5.9		
Green Extensio	reen Extension Time (g e), s					0.0			1.7	0.0		0.0	0.2		0.0
Phase Call Prot	ase Call Probability					1.00			1.00	0.62			0.99)	
Max Out Probal	ax Out Probability					1.00			1.00	0.00			0.14	1	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	т	R	L	Т	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F), veh/h		221	90	58	53	16	201	19	2336	89	99	542	527
,	,	ow Rate (s), veh/h/l	n	1397	1900	1585	1255	1900	0 1572	1541	1781	1610	1781	1841	179
Queue Service		(<i>I</i> ,		28.1	7.5	5.7	7.0	1.3		0.6	101.8	1.5	3.9	8.6	8.4
Cycle Queue Cl		- /:		29.4	7.5	5.7	14.5	1.3		0.6	101.8	1.5	3.9	8.6	8.4
Green Ratio (g.		· · · · · · · · · · · · · · · · · · ·	_	0.16	0.16	0.16	0.16	0.16		0.72	0.70	0.86	0.73	0.71	0.7
Capacity (c), v	,			258	310	259	186	300		370	2505	1378	121	1309	127
Volume-to-Capa		atio (X)			0.289		0.285			0.052		0.064	0.820		
		/In (95 th percentile)		450.7	167	108.8	111.1	29.3		10.9	1285.	49.4	223.6	120.5	113.
Deale at C	(0)			477.7	0 -		4.0	4.5	4		5	0.0	0.0	4 -	
	V · <i>M</i>	eh/In (95 th percenti	,	17.7	6.7	4.3	4.2	1.2		0.4	50.6	2.0	8.8	4.7	4.5
<u> </u>		RQ) (95 th percent	ile)	3.00 76.2	0.17	0.87	0.37	0.10		0.05	1.84	0.25	1.12	0.17	0.16
	niform Delay (d 1), s/veh				66.1	65.4	73.4	64.4		7.4	23.4	2.0	55.8	3.1	3.0
	cremental Delay (d 2), s/veh				0.7	0.6	1.2	0.1	_	0.1	7.9	0.1	16.7	0.9	0.9
	tial Queue Delay (d 3), s/veh				0.0	0.0	0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
control Delay (d), s/veh				100.7 F	66.9	66.0	74.6	64.5		7.5	31.3	2.1	72.5	4.0	3.9
	evel of Service (LOS)				E	E	E	E	E	A	C	A	E	A	A
Approach Delay				87.0		F	73.3	8	E	30.0		C	9.8		Α
Intersection Del	ay, s/ve	en / LOS				32	2.2					_	С		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS		/LOS		2.48	_	В	2.32		В	2.07	_	В	2.07		В
	2.20.0					-	2.52	-	-	2.57	_	-	2.51		_

General Inform	ation								Intersec	tion Inf	ormatio	n	L L	4241	
Agency		DBZ Traffic							Duration	, h	0.250			1111	
Analyst		DBZ		Analys	sis Date	e Mar 2	9, 2021		Area Typ	e	Other		4		
Jurisdiction		İ		Time F	Period	AM Pe	eak		PHF		0.98				+
Urban Street		Bardstown Road		Analys	sis Yea	r 2023 I	Build		Analysis	Period	1> 7:1	5	1		*
Intersection		Brentlinger/Cedar C	reek	File Na	ame	Bards	town AN	/I 23 E	3.xus					5++7	· [
Project Descript	tion	Cedar Creek Crossi												4149	1
				_											
Demand Inform					EB			W			NB			SB	
Approach Move				L	Т	R	L	Т		L	Т	R	L	T	R
Demand (v), v	eh/h			235	110	83	52	4:	2 197	131	2243	87	103	1060	84
Signal Informa	tion								8			†			
Cycle, s	180.0	Reference Phase	2	1	2	۹		3	Ê.			, -	N		
Offset, s	0	Reference Point	End	L	2	<u> ^ </u>						1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green		0.3	125.5			0.0	_				A
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	3.5	0.0	5.1	3.6		0.0		5	6	7	Y
					10.0					0.0					
Timer Results				EBI	-	EBT	WB	L	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	e					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		3.0
Phase Duration	, s					35.0			35.0	12.7	' 1	32.5	12.5	5 1	132.3
Change Period,	(Y+R	c), S				6.6			6.6	6.5		6.8	6.5		6.8
Max Allow Head	dway (<i>I</i>	MAH), s				5.2			5.2	5.0		0.0	5.0		0.0
Queue Clearan	ueue Clearance Time ($m{g}$ $_{ m s}$), s					31.4			23.1	6.0			5.2		
Green Extensio	reen Extension Time (g e), s					0.0			2.0	0.3		0.0	0.2		0.0
Phase Call Prob	nase Call Probability					1.00			1.00	1.00)		0.99)	
Max Out Probal	ase Call Probability ax Out Probability					1.00			0.98	0.18	;		30.0	3	
Movement Gro		ulte			EB			WE	1		NB			SB	
Approach Move		Suits		L	T	R	L	T	R	L	T	R	L	T	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F) veh/h		240	112	85	53	43	201	134	2289	89	97	994	79
,	· ·	ow Rate (s), veh/h/l	n	1364	1900	1598	1230	1900		1767	1781	1610	1781	1752	158
Queue Service				25.9	9.5	8.0	7.3	3.5	21.1	4.0	95.8	1.5	3.2	7.9	0.8
Cycle Queue Cl				29.4	9.5	8.0	16.7	3.5	21.1	4.0	95.8	1.5	3.2	7.9	0.0
Green Ratio (g		c nine (g c), s		0.16	0.16	0.20	0.16	0.16	_	0.73	0.70	0.86	0.73	0.70	0.7
Capacity (c), v	,			236	310	325	169	300		468	2508	1379	124	2443	110
Volume-to-Capa		atio (X)				0.260			3 0.633				0.778		0.07
· ·		/In (95 th percentile)		552	<u> </u>	151.3	113	78.1		66.8	1209.	49.3	161.9	100.7	12.
Baok of Queue	(se), iu			002	200.0	101.0	110	10.	002.0	00.0	4	10.0	101.0	100.1	12.
Back of Queue	(Q), V	eh/In (95 th percenti	le)	21.7	8.3	6.0	4.3	3.1	13.8	2.6	47.6	2.0	6.4	3.9	0.
Queue Storage	Ratio (RQ) (95 th percent	ile)	3.68	0.21	1.21	0.38	0.26	3 1.57	0.33	1.73	0.25	0.81	0.14	0.0
Uniform Delay (d 1), s	/veh		79.2	67.0	60.3	75.3	65.3	65.7	7.2	22.4	2.0	51.1	3.1	2.3
Incremental De	cremental Delay (d 2), s/veh				1.0	0.6	1.5	0.3	4.7	0.5	6.4	0.1	12.8	0.5	0.
Initial Queue De	itial Queue Delay (d ȝ), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (ontrol Delay (d), s/veh				68.0	60.9	76.8	65.6	70.4	7.7	28.8	2.1	63.8	3.5	2.4
Level of Service	evel of Service (LOS)				E	E	E	E	E	Α	С	Α	E	Α	A
Approach Delay	, s/veh	/ LOS		107.	1	F	70.8	3	E	26.8		С	8.4		A
Intersection Del						32	2.8						С		
Multimodal Re		11.00			EB			WE			NB	_		SB	
Pedestrian LOS				2.48		В	2.48	_	В	2.07	_	В	2.07		В
Bicycle LOS Sc	oro /1 (20		1.21		A	0.98	3	Α	2.56		С	1.54	1	В

General Inform	nation								Intersect	tion Infe	ormatio	n	- 1	111	b L
Agency		DBZ Traffic							Duration,	h	0.250			***	
Analyst		DBZ		Analys	sis Date	Feb 2	5, 2021		Area Typ	е	Other		**		
Jurisdiction				Time F	Period	AM P	eak		PHF		0.98		*		+
Urban Street		Bardstown Road		Analys	sis Year	2033	No Build	1	Analysis	Period	1> 7:1	5	1		
Intersection		Brentlinger/Cedar C	reek	File Na	ame	Bards	town AN	/I 33 N	IB.xus					5 t t d	
Project Descript	tion	Cedar Creek Crossi	ngs										n n	11441	21
D					50			14/	P		ND			0.0	
Demand Inform					EB		<u> </u>	W			NB			SB	
Approach Move				L	T	R	L	T		L	T	R	L	T	R
Demand (<i>v</i>), v	en/h			228	93	60	55	17	7 207	20	2406	91	108	1082	88
Signal Informa	tion				L.	121			R			t I			
Cycle, s	180.0	Reference Phase	2	1	2	1642	1	3	é				V		
Offset, s	0	Reference Point	End		Ĵ		<u></u>					1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow	-	4.1	123.8 5.1	3 28. 3.6		0.0					Ð
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.5	0.0	1.7	3.6		0.0		5	6	7	
	1 Mou	ciniala oup 170	011	1100	0.0	0.0		0.0	0.0	0.0		• .			
Timer Results				EBI	-	EBT	WB	L	WBT	NBL		NBT	SBI		SBT
Assigned Phase	э					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		4.0
Phase Duration	, s					35.0			35.0	10.3	1	30.6	14.4	i 1	134.7
Change Period,	(Y+R	c), S				6.6			6.6	6.5		6.8	6.5		6.8
Max Allow Head						5.2			5.2	5.0		0.0	5.0		0.0
Queue Clearan				31.4		-	24.3	2.7			7.8				
	reen Extension Time ($g \in $), s					0.0			1.5	0.0		0.0	0.2		0.0
	hase Call Probability					1.00		+	1.00	0.64	_		0.99	_	
	ase Call Probability ax Out Probability					1.00			1.00	0.00			0.58	_	
Movement Gro	•	sults			EB			WB	_		NB	-		SB	
Approach Move				L	Т	R	L	T	R	L	T	R	L	T	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	· ·	1.		233	95	61	56	17	211	20	2455	93	99	544	530
		ow Rate (<i>s</i>), veh/h/l	n	1396	1900	1585	1249	1900		1541	1781	1610	1781	1841	179
Queue Service		. ,,		28.0	7.9	6.1	7.5	1.4	22.3	0.7	122.6	1.7	5.8	8.3	8.1
Cycle Queue C		e Time (g c), s		29.4	7.9	6.1	15.4	1.4	22.3	0.7	122.6	1.7	5.8	8.3	8.1
Green Ratio (<i>g</i>	,			0.16	0.16	0.16	0.16	0.16		0.71	0.69	0.85	0.75	0.71	0.7
Capacity (<i>c</i>), v				257	310	259	182	300		370	2469	1361	130	1308	127
Volume-to-Capa						0.236			8 0.666		0.994	0.068	0.763		0.41
Back of Queue	(Q), ft	/In (95 th percentile)		488.1	177.1	2.2	118.3	31.1	372.3	12	1608. 3	54.2	222.6	115.5	108.
Back of Queue	(Q). Vé	eh/In (95 th percenti	le)	19.2	7.1	0.1	4.5	1.2	14.5	0.4	63.3	2.2	8.8	4.5	4.3
		RQ) (95 th percent	,	3.25	0.18	0.02	0.39	0.10		0.06	2.30	0.27	1.11	0.16	0.16
Uniform Delay (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	76.9	66.3	65.5	74.0	64.4		7.8	27.6	2.3	68.0	2.9	2.8
				32.8	0.8	0.7	1.3	0.1	5.8	0.1	16.9	0.1	13.0	0.9	0.9
	cremental Delay (d ₂), s/veh itial Queue Delay (d ȝ), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	ontrol Delay (d), s/veh			0.0 109.7	67.1	66.2	75.4	64.5		7.9	44.5	2.4	81.0	3.8	3.8
Level of Service				F	E	E	E	E	E	A	D	2.4 A	F	3.0 A	0.0 A
Approach Delay	. ,			92.4		F	72.3		E	42.7		D	10.3		B
Approach Delay				92.4			72.3).4	,	E	42.1			10.3 D		D
	ay, 3/ve					-+(_		
Multimodal Re	sults				EB			WB			NB			SB	
Pedestrian LOS	Score	/LOS		2.48	3	В	2.32	2	В	2.08	;	В	2.07	/	В
Bicycle LOS Sc				1.13		A	0.96		A	2.61		С	1.56		В

General Inform	ation								Intersec	tion Inf	ormatio	on		la Jakta J↓↓↓	
Agency		DBZ Traffic							Duration	, h	0.250			5++6	
Analyst		DBZ		Analys	sis Date	Mar 2	9, 2021		Area Typ	e	Other		*		
Jurisdiction		ĺ		Time F	Period	AM P	eak	Ī	PHF		0.98		*	×	+
Urban Street		Bardstown Road		Analys	sis Year	2033	Build		Analysis	Period	1> 7:'	15	1		
Intersection		Brentlinger/Cedar C	reek	File Na	ame	Bards	town AN	/I 33 E	3.xus					5 t t r	
Project Descript	tion	Cedar Creek Cross	ings										The second se	41441	2
D	41				50			10/	P		ND			0.0	
Demand Inform					EB		<u> </u>	W		.	NB		+ -	SB	
Approach Move				L	T	R	L	T	_	L 100	T	R	L	T	R
Demand (<i>v</i>), v	en/n			246	115	86	55	43	3 207	132	2360	91	103	1113	84
Signal Informa	tion				L.				5			t I			
Cycle, s	180.0	Reference Phase	2	1	20	1243	1	∎ R	è			<u>_</u>	*	-	-4
Offset, s	0	Reference Point	End	Crass	-	0.4	105.0		4 0.0			1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow	-	0.1	125.3	3 28 3.6		0.0					Ð
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	1.7	3.0		0.0	7	5	6	7	-
Timer Results				EBI	-	EBT	WB	L	WBT	NBL		NBT	SBI	<u> </u>	SBT
Assigned Phase	9					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		3.0
Phase Duration	, s					35.0			35.0	12.8	1	132.1	12.9	Э 1	32.2
Change Period,	(Y+R	c), S				6.6			6.6	6.5		6.8	6.5	,	6.8
Max Allow Head		1.				5.2			5.2	5.0		0.0	5.0		0.0
Queue Clearan	ce Time	e (gs), s				31.4			24.2	6.0			6.3		
Green Extensio	Extension Time ($g e$), s					0.0			1.7	0.3		0.0	0.2		0.0
Phase Call Prob	oability					1.00			1.00	1.00			0.99	Э	
Max Out Probal	oility					1.00			1.00	0.19			0.18	3	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	•			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F), veh/h		251	117	88	56	44	211	135	2408	93	93	1005	76
,	,	ow Rate (s), veh/h/l	n	1362	1900	1598	1224	1900		1767	1781	1610	1781	1752	158
Queue Service		× 77		25.8	9.9	8.3	7.8	3.6		4.0	112.3	1.6	4.3	8.1	0.8
Cycle Queue Cl		- /:		29.4	9.9	8.3	17.7	3.6	_	4.0	112.3	1.6	4.3	8.1	0.8
Green Ratio (g.		5 (g c), 5		0.16	0.16	0.20	0.16	0.16		0.73	0.70	0.86	0.73	0.70	0.7
Capacity (c), v	,			235	310	326	166	300		458	2498	1374	114	2442	110
Volume-to-Capa		atio (X)			0.378				6 0.656		0.964		0.815		0.06
		/In (95 th percentile)		594.7		157	120.5	80	370	67.8	1434.	52.4	213.4	101.9	12.
	, _ ,,	(porcontino)									4				
	· · /·	eh/In (95 th percenti	,	23.4	8.6	6.2	4.6	3.2	_	2.6	56.5	2.1	8.4	4.0	0.5
Queue Storage	Ratio (RQ) (95 th percent	ile)	3.96	0.21	1.26	0.40	0.27	1.64	0.34	2.05	0.26	1.07	0.15	0.0
Uniform Delay (79.3	67.1	60.4	75.9	65.3		7.4	25.2	2.0	60.9	3.1	2.3
Incremental Del	ay (<i>d</i> 2	?), s/veh		77.3	1.1	0.6	1.7	0.3	5.4	0.5	11.4	0.1	16.8	0.5	0.1
Initial Queue De	elay (d	3), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (156.6	68.2	61.0	77.6	65.7	71.1	7.9	36.6	2.1	77.7	3.5	2.4
Level of Service	(LOS)			F	E	E	E	E	E	Α	D	A	E	A	A
Approach Delay	, s/veh	/LOS		115.	5	F	71.5	5	E	33.9		С	9.3		Α
Intersection Del	ay, s/ve	eh / LOS				38	3.3						D		
M								1.0.10			N/D			0.5	
Multimodal Re		/1.02		0.44	EB	P	0.45	WE		0.07	NB	P	0.07	SB	P
Pedestrian LOS	SCORE	1105		2.48		В	2.48	o I	В	2.07		В	2.07	/	В

			r eig						lts Sur	ai	,				
General Inform	ation								Intersec	tion Inf	ormatio	on	L. L	42411	μų
Agency	auton	DBZ Traffic							Duration		0.250			417	
Analyst		DBZ		Analys	sis Date	Feb 8	. 2021		Area Typ		Other		- 1 - 4		
Jurisdiction		002		Time F		PM P			PHF		0.98				* ←
Urban Street		Bardstown Road			sis Year		oun		Analysis	Period	1> 4:4	45	4 14		×-
Intersection		Brentlinger/Cedar C	reek	File Na			town PN	1 20.2		. onea					
Project Descript	tion	Cedar Creek Crossi		1.10.11		- Paras							1 1	41491	21
					==				_						
Demand Inform					EB		<u> </u>	W			NB			SB	
Approach Move				L	Т	R	L	Т	_	L	Т	R	L	Т	R
Demand (v), v	eh/h			59	29	40	276	3	7 148	31	1415	63	161	2108	56
Signal Informa	tion				L				5			t			
Cycle, s	225.0	Reference Phase	2	1	5	1642		₽ ₿	Ē			<u>_</u>	*	_	
Offset, s	0	Reference Point	End	0		5.0			4 0.0	- 0.0	_	1	2	3	<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		5.3 0.0	146.2 5.1	2 48 3.6		0.0	_				\rightarrow
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	1.7	3.0		0.0		5	6	7	¥
Timer Results				EBI	-	EBT	WB		WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	9					4			8	5		2	1	\rightarrow	6
Case Number						6.0	<u> </u>	\rightarrow	5.0	1.1		3.0	1.1		4.0
Phase Duration	,				_	55.0		\rightarrow	55.0	11.7		153.0	17.0		158.3
Change Period,						6.6		\rightarrow	6.6	6.5	_	6.8	6.5	_	6.8
Max Allow Head					_	5.2	<u> </u>	\rightarrow	5.2	5.0		0.0	5.0	_	0.0
	ue Clearance Time (g_s), s					13.9	<u> </u>	\rightarrow	51.4	3.3			9.9		
	n Extension Time (g e), s				_	3.9		\rightarrow	0.0	0.1		0.0	0.5	_	0.0
Phase Call Prot						1.00		\rightarrow	1.00	0.86			1.00	_	
Max Out Proba	oility					0.00			1.00	0.00)		0.13	\$	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (<i>v</i>	r), veh/h		60	70		282	38	151	32	1444	64	186	1251	125
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	1370	1680		1351	190	0 1610	1810	1781	1572	1810	1885	186
Queue Service	Time (g	g s), S		8.3	7.7		41.7	3.6	17.2	1.3	53.7	1.3	7.9	142.3	146.
Cycle Queue C		e Time (g c), s		11.9	7.7		49.4	3.6		1.3	53.7	1.3	7.9	142.3	146.
Green Ratio (g	/C)			0.22	0.22		0.22	0.22	2 0.26	0.67	0.65	0.87	0.70	0.68	0.68
Capacity (<i>c</i>), v	eh/h			305	361		282	409	421	75	2315	1360	270	1278	126
Volume-to-Capa		. ,		0.197	0.195		0.998	0.09	2 0.359	0.420	0.624	0.047	0.688	0.979	0.98
	V · //	/In (95 th percentile)		136.8	157.3		709.2	80.3		57.3	765.8	57	166.4	1843.4	
		eh/In (95 th percenti		5.4	6.1		28.4	3.2		2.3	30.2	2.2	6.7	73.2	74.8
		RQ) (95 th percent	ile)	0.91	0.16		2.36	0.27	7 1.30	0.29	1.09	0.29	0.83	2.30	2.3
Uniform Delay (75.5	72.3		94.0	70.3		59.7	23.2	2.1	23.8	32.8	32.0
Incremental De				0.4	0.4		52.9	0.1	0.7	5.2	1.3	0.1	2.8	13.5	15.3
Initial Queue De				0.0	0.0		0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (75.9	72.7		146.9	70.5	5 68.4	64.9	24.5	2.2	26.6	46.3	47.8
Level of Service	. ,			E	E		F	E	E	E	С	A	С	D	D
Approach Delay	/, s/veh	/LOS		74.2	2	E	115.	6	F	24.4		С	45.6	\$	D
Intersection Del	ay, s/ve	eh / LOS				46	3.4						D		
Multimodal Re	sulte				EB			WE	3		NB			SB	
Pedestrian LOS		/1.05		2.48	_	В	2.33		B	2.09	_	В	1.90		В
	00016	, 200			_		1.26		A		_	B	2.44	_	B
Bicycle LOS Sc	ore / L	20		0.70		A				1.76					

General Inform	nation								Intersec	tion Inf	ormatio	on		A LALL	la la
Agency		DBZ Traffic							Duration,	h	0.250			* + 4	
Analyst		DBZ		Analys	sis Date	Feb 2	2, 2021		Area Typ	е	Other		≛₹		×
Jurisdiction				Time F	Period	PM P	eak		PHF		0.98		*		+
Urban Street		Bardstown Road		Analys	sis Year	2023	No Build	k	Analysis	Period	1> 4:4	45	1		
Intersection		Brentlinger/Cedar C	reek	File Na	ame	Bards	town PN	/ 23 N	IB.xus					5 t t r	· [
Project Descrip	tion	Cedar Creek Cross	ings											1149	1 1
Dama an di Infam					50			10/1	2		ND			OD	
Demand Inform					EB		.	W		.	NB		<u> </u>	SB	
Approach Move				L	T	R	L	T		L	T	R	L	T	R
Demand (v), v	eh/h			115	58	80	288	10	0 152	81	1576	65	193	2393	15
Signal Informa	tion				L.	JUL			8			†			_
Cycle, s	225.0	Reference Phase	2	1	2	1642		R	÷		_	_	N		
Offset, s	0	Reference Point	End	<u> </u>	2							1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		3.6	147.0 5.1	_		0.0	_				Ð
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.5	0.0	1.7	3.6		0.0	-7	5	6	7	×
		Sector Cop 110			1			1 510	5.0	1010					
Timer Results				EBL	-	EBT	WB	L	WBT	NBL	-	NBT	SBI	L	SBT
Assigned Phase	е					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		4.0
Phase Duration	i, S					55.0			55.0	12.5	; 1	153.8	16.2	2 '	157.5
Change Period,	, (Y+R	c), S				6.6			6.6	6.5		6.8	6.5		6.8
Max Allow Head	dway (/	MAH), s				5.2			5.2	5.0		0.0	5.0		0.0
Queue Clearan	eue Clearance Time (g s), s					30.7			51.4	5.8			9.2		
	en Extension Time ($g \in$), s					4.5			0.0	0.2		0.0	0.5		0.0
	en Extension Time (<i>g</i> e), s ise Call Probability					1.00		-	1.00	0.99			1.00)	
Max Out Proba						0.14			1.00	0.00	, ,		0.08	3	
Movement Gro		sults			EB			WB	-		NB			SB	
Approach Move				L	T	R	L	Т	R	L	T	R	L	T	R
Assigned Move		<u> </u>		7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F				117	59	82	294	102		83	1608	66	181	1193	119
,		ow Rate (s), veh/h/l	n	1293	1856	1598	1365	1900		1810	1781	1572	1810	1885	184
Queue Service				18.6	5.8	9.2	43.6	10.0		3.8	64.2	1.3	7.2	108.6	119
Cycle Queue C		e Time (g c), s		28.7	5.8	9.2	49.4	10.0		3.8	64.2	1.3	7.2	108.6	119
Green Ratio (g	,			0.22	0.22	0.24	0.22	0.22		0.68	0.65	0.87	0.70	0.67	0.6
Capacity (c), v				252	399	387	296	409		100	2327	1366	228	1270	124
Volume-to-Capa					0.148		0.992	<u> </u>		0.827	0.691	0.049	0.794	0.939	0.95
		/In (95 th percentile)		268.7	130.6		729.4	216.8		163.9	895	58.2	205.7	892.1	940
	4 97	eh/In (95 th percenti	,	10.6	5.1	6.9	29.2	8.7	12.0	6.6	35.2	2.3	8.2	35.4	37.
*		RQ) (95 th percent	iie)	1.79	0.13	1.16	2.43	0.72		0.82	1.28	0.29	1.03	1.12	1.1
Uniform Delay (85.1	71.6	68.1	92.9	72.8		59.5	24.6	2.0	35.1	15.2	15.
Incremental De	~ ~ ~	7.		1.9	0.2	0.4	49.9	0.5	0.8	20.9	1.7	0.1	2.0	2.9	4.2
Initial Queue De		1.		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (87.0	71.8	68.5	142.8	73.3		80.4	26.4	2.1	37.1	18.2	19.
Level of Service	. ,			F	E	E	F	E	E	F	С	A	D	B	B
Approach Delay				77.7		E	109.	2	F	28.0		С	20.1		С
Intersection De	iay, s/ve	en / LOS				3	5.2						D		
Multimodel De	sulte				EB			WB			NB			SB	
	Juita			0.40	_	В	2.33	_	В	2.09	_	В	2.09		В
Multimodal Re Pedestrian LOS	Score	/1.05		2.48	s =	в	2.43	< .				в		1 .	

General Inform	nation								Intersec	tion Inf	ormatio	on	L L	14.1.4.1.	ыų
Agency		DBZ Traffic							Duration	, h	0.250			7111	•
Analyst		DBZ		Analys	sis Date	Feb 2	2, 2021		Area Typ	e	Other		4		
Jurisdiction		İ		Time F	Period	PM Pe	eak		PHF		0.98		*		+
Urban Street		Bardstown Road		Analys	sis Year	2023	Build	- i	Analysis	Period	1> 4:4	15			
Intersection		Brentlinger/Cedar (Creek	File Na	ame	Bards	town PN	/ 23 B	.xus					5 + + 4	
Project Descrip	tion	Cedar Creek Cross												1149	1 1
									_					0.0	
Demand Inform					EB			WE			NB			SB	
Approach Move				L	T	R	L	Т		L	Т	R	L	T	R
Demand (v), v	eh/h			179	89	115	288	12	9 152	180	1551	65	193	2434	15
Signal Informa	tion				L.	5	14					†			
Cycle, s	225.0	Reference Phase	2		2	~		R	£			, -	N		
Offset, s	0	Reference Point	End		2	<u> </u>	↗ <u>^</u>					1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green		1.6	138.2			0.0	_				ð
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	3.5	3.5 3.0	5.1 1.7	3.6		0.0		5	6	7	
	Tixed	official oup two	on	Ttou	0.0	0.0	1	0.0	0.0	0.0					
Timer Results				EBI	-	EBT	WB	L	WBT	NB	-	NBT	SBI	_	SBT
Assigned Phase	е					4			8	5		2	1		6
Case Number						5.0			5.0	1.1		3.0	1.1		3.0
Phase Duration	I, S					55.0			55.0	25.0) 1	53.1	16.9	. · E	145.0
Change Period	, (Y+R	c), S				6.6			6.6	6.5		6.8	6.5		6.8
Max Allow Head						5.3			5.3	5.0		0.0	5.0		0.0
						47.2			51.4	20.8	3		9.9		
	e Clearance Time (<i>g</i> s), s Extension Time (<i>g</i> e), s					0.7			0.0	0.0		0.0	0.5		0.0
Phase Call Pro						1.00			1.00	1.00)		1.00	5	
Max Out Proba	bility					1.00			1.00	1.00)		0.12	2	
	_														
Movement Gro	•	sults			EB T			WB T			NB T	D		SB T	
Approach Move						R	L	<u> </u>	R	L		R	L		R
Assigned Move		· · · ·		7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I				183	91	117	294	132	155	184	1583	66	177	2234	139
		w Rate (s), veh/h/	n	1258	1856	1598	1326	1900		1810	1781	1572	1810	1795	158
Queue Service				32.1	9.0	12.4	40.4	13.1		18.8	62.9	1.3	7.9	139.2	3.3
Cycle Queue C		e Time (<i>g</i> c), s		45.2	9.0	12.4	49.4	13.1		18.8	62.9	1.3	7.9	139.2	3.3
Green Ratio (g	,			0.22	0.22	0.31	0.22	0.22		0.71	0.65	0.87	0.66	0.62	0.62
Capacity (c), v				235	407	489	270	409	435	189	2316	1361	234	2221	981
Volume-to-Cap		()				0.240		0.322	_		0.683		0.757	1.006	0.14
	· /·	/In (95 th percentile)		436	200.8		781	269.4		494	880.2	58.8	165.9	1214	45.
	· /·	eh/In (95 th percent	,	17.2	7.8	8.9	31.2	10.8	_	19.8	34.7	2.3	6.6	48.2	1.8
		RQ) (95 th percent	tile)	2.91	0.20	1.49	2.60	0.90		2.47	1.26	0.29	0.83	1.21	0.2
Uniform Delay (92.6	72.0	58.4	94.7	74.1		89.6	24.7	2.1	32.2	21.7	6.5
Incremental De		<i></i>		16.0	0.4	0.4	80.5	0.6	0.7	57.5	1.7	0.1	1.5	8.8	0.0
Initial Queue De				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (108.7	72.4	58.8	175.2	74.7		147.1	26.4	2.2	33.7	30.5	6.5
Level of Service	. ,			F	E	E	F	E	<u> </u>	F	С	A	C	F	A
Approach Delay				85.3	5	F	123.	5	F	37.6	5	D	29.4	+	С
Intersection De	lay, s/ve	eh / LOS				46	8.5						D		
Multimodal Re	sulte				EB			WB			NB			SB	
	Suita					-		_			_	-			-
Pedestrian LOS	Score	/1.05		2.48	K	B	2.48	₹	В	2.09) II	B	2.10)	в

General Inform	nation	~							Intersec		ormatio	on	_	4441	te lu
Agency		DBZ Traffic							Duration	, h	0.250			***	
Analyst		DBZ		Analys	sis Date	Feb 2	5, 2021		Area Typ	e	Other				r_
Jurisdiction				Time F	Period	PM Pe	eak		PHF		0.98		+ →		+
Urban Street		Bardstown Road		Analys	sis Year	2033	No Build	i	Analysis	Period	1> 4:4	15	*		
Intersection		Brentlinger/Cedar C	Creek	File Na	ame	Bards	town PN	1 33 1	VB.xus					httr	
Project Descrip	tion	Cedar Creek Cross	ings										h	4149	11
Demand Inforr	nation				EB			W	B		NB			SB	
Approach Move				L	T	R	L	Т	-	L	Т	R	L	Т	R
Demand (v), v				121	61	84	303	10		85	1657		203	2515	16
Signal Informa	tion				5	215		1	2		l	Ĺ			_
Cycle, s	225.0	Reference Phase	2		28		51	∎ ₩	È				Y	_	-
Offset, s	0	Reference Point	End	Green	7.5	2.3	146.9		.4 0.0	0.0			2	3	ĸ
Uncoordinated	No	Simult. Gap E/W	On	Yellow	-	0.0	5.1	3.6		0.0		$\langle 4$			7
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	1.7	3.0	0.0	0.0	Ţ	5	6	7	
Timor Booulto				- ED		ERT	MD		W/PT	ND		NDT	C D		CPT
Timer Results	2			EBI	-	EBT 4	WB		WBT 8	NBL 5	-	NBT 2	SBI 1	-	SBT
Assigned Phase	3								-				· · · ·		6
Case Number						5.0	<u> </u>		5.0	1.1		3.0	1.1	_	4.0
Phase Duration	,	1.0				55.0		+	55.0	14.0		6.8	16.3		156.0
Change Period,		7.				6.6		-	6.6	6.5		6.8	6.5	_	6.8
	Allow Headway (<i>MAH</i>), s ue Clearance Time (<i>g s</i>), s					5.2 32.4	<u> </u>	-	5.2	5.0 7.3		0.0	5.0 9.2		0.0
	· •					32.4 4.6			51.4			0.0		_	0.0
	n Extension Time (g_e), s					4.6	<u> </u>	+	0.0	0.2		0.0	0.5		0.0
Phase Call Prol Max Out Proba						0.20		-	1.00 1.00	0.01	_		1.00	_	
Max Out Floba	Jiirty					0.20			1.00	0.01			0.08	,	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		123	62	86	309	107	163	87	1691	69	183	1202	120
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	1287	1856	1598	1361	1900	0 1610	1810	1781	1572	1810	1885	184
Queue Service				19.9	6.1	9.6	43.3	10.6		5.3	70.6	1.4	7.2	116.6	129
Cycle Queue C		e Time (<i>g</i> c), s		30.4	6.1	9.6	49.4	10.6		5.3	70.6	1.4	7.2	116.6	129
Green Ratio (g				0.22	0.22	0.25	0.22	0.22		0.69	0.65	0.87	0.70	0.67	0.6
Capacity (c), v				248	399	397	294	409		104	2326	1365	211	1258	123
Volume-to-Capa		. ,		0.497		0.216		0.26		0.837		0.051	0.866	0.956	0.97
		/In (95 th percentile)		282.2	137.6	182	792.4	225.		238.2		61.1	222.7	935.4	999
		eh/In (95 th percenti	,	11.1	5.4	7.2	31.7	9.0		9.5	38.4	2.4	8.9	37.1	39.
<u></u>	,	RQ) (95 th percent	ile)	1.88	0.14	1.21	2.64	0.75		1.19	1.39	0.31	1.11	1.17	1.2
Uniform Delay (86.1	71.7	67.1	93.2	73.1		70.1	25.8	2.0	41.0	15.8	15.
Incremental De				2.2	0.3	0.4	66.9	0.5	0.9	21.2	2.0	0.1	3.7	3.6	5.4
Initial Queue De				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (88.3	72.0	67.5	160.2	73.5	_	91.4	27.8	2.1	44.7	19.4	21.
Level of Service	. ,			F	E	E	F	E	E	F	C	A	D	B	C
Approach Delay				78.0)	E	118.	7	F	29.8		С	22.1		С
Intersection De	ay, s/ve	eh / LOS				38	3.2						D		
Multimodal Re	sulte				EB			WE			NB			SB	
		(1.00		2.48	_	В	2.33		B	2.09	_	В	2.09		В
Pedestrian LOS	Score	105													

General Informati	ion							Intersec	tion Inf	ormatio	on	1.1	42444	k L
Agency	DBZ Traffic							Duration	, h	0.250			5111	
Analyst	DBZ		Analys	sis Date	Feb 2	5, 2021		Area Typ	e	Other		4		
Jurisdiction			Time F		PM P	eak		PHF		0.98		* -		~_ ←
Urban Street	Bardstown Road		Analys	sis Year	2033	Build		Analysis	Period	1> 4:4	15	4 1		-
Intersection	Brentlinger/Cedar C	reek	File Na			town PN							5 + + 7	
Project Description	-												11491	2
Domonal Informat	lion.			E D			10/	2		ND			OP	
Demand Informat				EB		1 .	W	_	<u> </u>	NB		1 .	SB	
Approach Moveme			L	T	R	L	T		L	T	R	L	T	R
Demand (v), veh/	/h		185	92	119	303	13	4 160	184	1632	68	203	2556	160
Signal Informatio	n			L	8	11.		5_			t			
Cycle, s 22	25.0 Reference Phase	2	1	20	L SA		R	È			_	*	_	-4
Offset, s	0 Reference Point	End		10.2				1 0.0	- 0.0		1	2	3	<u> </u>
	No Simult. Gap E/W	On	Green Yellow		1.7 3.5	138.2	2 48. 3.6		0.0					\rightarrow
Force Mode Fiz	xed Simult. Gap N/S	On	Red	3.0	3.0	1.7	3.0		0.0	7	5	6	7	
Timer Results			EBI	-	EBT	WB	-	WBT	NBI	-	NBT	SB	-	SBT
Assigned Phase				_	4		\rightarrow	8	5		2	1		6
Case Number					5.0			5.0	1.1		3.0	1.1		3.0
Phase Duration, s					55.0			55.0	25.0		53.2	16.8		45.0
Change Period, ()					6.6			6.6	6.5	_	6.8	6.5		6.8
Max Allow Headwa	ay (<i>MAH</i>), s				5.3			5.3	5.0		0.0	5.0		0.0
Queue Clearance	(- <i>1</i>)				49.3			51.4	21.4	F		9.8		
Green Extension T	Гіте (<i>g</i> е), s				0.0			0.0	0.0		0.0	0.5		0.0
Phase Call Probab	bility				1.00			1.00	1.00)		1.00)	
Max Out Probabilit	ty				1.00			1.00	1.00)		0.12	2	
Movement Group	Results			EB			WB			NB			SB	
Approach Moveme			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Moveme			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate		_	189	94	121	309	137		188	1665	69	179	2252	141
,	n Flow Rate (s), veh/h/l	n	1252	1856	1598	1323	1900		1810	1781	1572	1810	1795	158
Queue Service Tim	().		33.6	9.4	12.8	40.0	13.7		19.4	69.0	1.4	7.8	139.2	3.3
	rance Time (g c), s		47.3	9.4	12.8	49.4	13.7	_	19.4	69.0	1.4	7.8	139.2	3.3
Green Ratio (g/C			0.22	0.22	0.31	0.22	0.22		0.71	0.65	0.87	0.67	0.62	0.62
Capacity (c), veh/	,		231	407	489	267	409		189	2318	1362	224	2221	981
Volume-to-Capacit					0.248			5 0.376	0.994		0.051	0.798	1.014	0.14
), ft/ln (95 th percentile)		459.7	206.4		854.2	278.4	_	512	956.4	61.6	205.9	1223.7	44.1
,), veh/ln (95 th percenti		18.1	8.1	9.1	34.2	11.1		20.5	37.7	2.4	8.2	48.6	1.7
	atio (RQ) (95 th percent		3.06	0.21	1.53	2.85	0.93		2.56	1.37	0.31	1.03	1.22	0.22
Uniform Delay (d	. ,		93.8	72.2	58.6	94.9	74.3		90.1	25.8	2.1	38.2	21.4	6.4
Incremental Delay			20.9	0.4	0.4	104.0	0.7	0.8	63.8	2.0	0.1	1.9	10.9	0.0
Initial Queue Delay			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d)			114.7	72.6	59.0	198.9	75.0	67.5	153.9	27.7	2.2	40.1	32.3	6.4
Level of Service (L	,		F	E	E	F	E	E	F	С	Α	D	F	A
Approach Delay, s	,		88.2	2	F	135.	9	F	39.1		D	31.4	4	С
Intersection Delay,						9.8						D		
													67	
Multimodal Resul			0.45	EB	P	0.44	WB		0.00	NB	P	0.44	SB	P
Pedestrian LOS So	COIE / LOS		2.48)	В	2.48	>	В	2.09	, I	В	2.10	J	В

			7 Sig												
General Inform	nation								Intersect	tion Inf	ormatio	on	1	14241	ыų
Agency		DBZ Traffic							Duration,	h	0.250		1	4177	•
Analyst		DBZ		Analys	sis Date	Feb 2	2, 2021		Area Typ	е	Other				•
Jurisdiction				Time F		AM P			PHF		0.95				~ ★
Urban Street		Bardstown Road		Analys	sis Year	2023	No Build	ł	Analysis	Period	1> 7:	15	1		ŕ
Intersection		Bartley/Southpointe	•	File Na			town AN								
Project Descrip	tion	Cedar Creek Cross		1		12 01 010							- 5	4144	11
	41				50			10		1	ND			0.0	
Demand Inform					EB		- · ·	W		<u> </u>	NB			SB	
Approach Move				L	T	R	L	1		L	Т	R	L	T	R
Demand (<i>v</i>), v	eh/h			22	4	9	33	2	2 139	11	2552	2 140	117	1174	10
Signal Informa	tion				L,	1216	» <mark>Л</mark>					†			
Cycle, s	180.0	Reference Phase	2	1	5	1642		. 3	E			_	V	\checkmark	
Offset, s	0	Reference Point	End						7			1	2	3	Y
Uncoordinated	No	Simult. Gap E/W	On	Green Yellow		5.7 0.0	124.0 5.1) 8.4 3.6		0.0	_				Ð
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	3.0	3.0		0.0		5	6	7	_
Timer Results				EBL	-	EBT	WB	L	WBT	NBI	-	NBT	SBL	-	SBT
Assigned Phase	e					4			8	5		2	1		6
Case Number						10.0			9.0	1.1		3.0	2.0		4.0
Phase Duration	, s					15.0			18.2	9.1	1	132.1	14.7		137.7
Change Period,						6.6			6.6	6.5		8.1	6.5		8.1
Max Allow Head	x Allow Headway (<i>MAH</i>), s succession of the (a_s) s					3.2			5.3	3.1		0.0	5.1		0.0
Queue Clearan	eue Clearance Time (<i>g</i>					10.4			10.8	2.3			7.8		
Green Extensio	en Extension Time (g_e), s					0.0			0.8	0.0		0.0	0.5		0.0
Phase Call Prol	bability					0.84			1.00	0.43	3		1.00)	
Max Out Proba	bility					1.00			0.02	0.00)		0.00)	
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move				L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F), veh/h		23	14		18	19	146	11	2604	143	112	568	56
,	· ·	ow Rate (s), veh/h/l	n	1781	1663		1781	179		1781	1698	1585	1702	1870	186
Queue Service				2.3	1.4		1.7	1.8		0.3	52.9	2.6	5.8	33.4	33.
Cycle Queue C				2.3	1.4		1.7	1.8		0.3	52.9	2.6	5.8	33.4	33.
Green Ratio (g		(30),0		0.05	0.05		0.06	0.06		0.70	0.69	0.75	0.83	0.72	0.7
Capacity (c), v	<i>,</i>			83	78		115	116		325	3508	1194	156	1347	134
Volume-to-Capa		atio (X)		0.279			0.157	0.16			0.742	0.120	0.719	0.421	0.42
•		/In (95 th percentile))	48.5	28.5		37.7	39.2		6.1	570.5	35.7	123.6	570	564
	· /·	eh/In (95 th percenti		1.9	1.1		1.5	1.5		0.2	22.5	1.4	4.8	22.4	22.
	· ·	RQ) (95 th percent		0.16	0.09		0.25	0.20		0.04	0.52	0.18	0.31	0.63	0.6
Uniform Delay (82.9	82.5		79.6	79.6		10.6	14.1	3.3	81.6	19.9	19.
Incremental De				0.7	0.4		0.9	0.9		0.0	0.4	0.1	8.1	0.9	0.9
Initial Queue De		1.		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (83.5	82.9		80.5	80.5		10.6	14.5	3.4	89.7	20.9	20.
Level of Service	1.			65.5 F	62.9 F		F	- 00.	E	B	14.5 B	A	- 69.7 F	20.9 C	20. C
Approach Delay	. ,			83.3		F	77.5		E	13.9		B	27.0		c
Intersection Delay				00.0			1.1		L	13.8	/		C 27.0	<u> </u>	0
Multimodal Re	sults				EB			WE	}		NB			SB	
Pedestrian LOS	Score	/LOS		2.63	3	С	2.63	3	С	2.40)	В	1.88	3	В
edebulari Loc					_			_					_		В

								1					1		
General Inform	ation								Intersec				- i	4444	24 14
Agency		DBZ Traffic							Duration		0.250		-		
Analyst		DBZ				Feb 2			Area Typ	е	Other				~
Jurisdiction				Time F		AM P			PHF		0.95		*		*
Urban Street		Bardstown Road		Analys	sis Year	2023	Build		Analysis	Period	1> 7:1	5	_* ₹		
Intersection		Bartley/Southpointe		File Na	ame	Bards	town AN	И 23 E	.xus					51111	r
Project Descript	ion	Cedar Creek Crossi	ngs										h	141441	1 1
Demand Inform	nation				EB			W	B		NB			SB	
Approach Move				L	T	R	L	Тт		L	Т	R	L	Т	R
Demand (v), ve				22	4	9	33	2		11	2574		117	1200	10
	511/11						00		100		Lori	110		1200	10
Signal Informa	tion				Ľ	. 215	< 1	1	2		l	Ĺ		_	_
Cycle, s	180.0	Reference Phase	2		5		51	₽Ŕ	2 Z				Y	∠ ⊢-	÷
Offset, s	0	Reference Point	End	Green	2.5	5.6	127.3		r	0.0					ĸ
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	5.1	3.6		0.0					7
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	3.0	3.0	3.0	0.0		5	6	7	
Timer Results				E BI		FPT			WPT	ND		NDT	CPI		ODT
Assigned Phase				EBL	-	EBT 4	WB	-	WBT 8	NBI 5		NBT 2	SBI 1	-	SBT 6
	;								-				1		
Case Number				<u> </u>		10.0		-	9.0	1.1		3.0	2.0	_	4.0
Phase Duration,	,)		<u> </u>	_	11.6	<u> </u>	_	18.3	9.0	_	35.4	14.6	_	141.0
Change Period,						6.6			6.6	6.5		8.1	6.5	_	8.1
	κ Allow Headway (<i>MAH</i>), s eue Clearance Time (<i>g</i> ε), s					3.2			5.3	3.0		0.0	5.0		0.0
	ue Clearance Time (<i>g</i> s), s en Extension Time (<i>g</i> e), s					4.3			10.8	2.3	_	0.0	7.7	_	0.0
		(g/e), S				0.0			0.9	0.0	_	0.0	0.5		0.0
Phase Call Prob						0.84			1.00	0.42	_		1.00	_	
Max Out Probab	oility					0.19			0.00	0.00			0.00)	
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Mover	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		23	14	1	18	19	146	11	2585	141	110	569	567
		w Rate (s), veh/h/l	n	1781	1663		1781	1791	1403	1781	1698	1585	1702	1870	186
Queue Service		().		2.3	1.5		1.7	1.8	8.8	0.3	47.7	2.1	5.7	33.1	32.
Cycle Queue Cl				2.3	1.5		1.7	1.8	8.8	0.3	47.7	2.1	5.7	33.1	32.
Green Ratio (g/				0.03	0.03		0.07	0.07		0.72	0.71	0.77	0.05	0.74	0.7
Capacity (c), v				50	47		116	117	310	335	3603	1224	154	1381	137
Volume-to-Capa		tio (X)		0.463			0.156			0.033	0.718	0.115	0.713	0.412	0.41
		(In (95 th percentile)		50.4	29.5		37.7	39.2		5.2	460.4	25.9	120.6	555.5	549
		eh/In (95 th percenti		2.0	1.2		1.5	1.5	5.9	0.2	18.1	1.0	4.7	21.9	21.
		RQ) (95 th percent	,	0.17	0.10		0.25	0.20		0.03	0.42	0.13	0.30	0.62	0.6
Uniform Delay (86.1	85.7		79.5	79.5		9.6	11.9	2.5	82.6	19.0	18.
Incremental Del	1.			2.5	1.3		0.9	0.9	1.6	0.0	0.3	0.1	8.0	0.9	0.9
Initial Queue De				0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (88.6	87.0		80.3	80.4	76.7	9.6	12.2	2.6	90.5	19.8	19.
Level of Service				F	F		F	F	E	A	В	A	F	В	В
Approach Delay				88.0		F	77.5	<u> </u>	E	11.7		В	25.9		C
Intersection Dela							9.5		_			_	B		
	i.														
Multimodal Res					EB			WB			NB			SB	
Pedestrian LOS	Score	/ LOS		2.63	3	С	2.63	3	С	2.39		B	1.87	7	в

.															
General Inform	nation								Intersec		_		- i	4444	24
Agency		DBZ Traffic							Duration		0.250		-		
Analyst		DBZ				Feb 2			Area Typ	e	Other		A		~
Jurisdiction				Time F		AM P			PHF		0.95		* *		*
Urban Street		Bardstown Road		<u> </u>	sis Year		No Build		Analysis	Period	1> 7:1	15	2		
Intersection		Bartley/Southpointe		File Na	ame	Bards	town AN	/ 33 N	B.xus					51111	r
Project Descript	tion	Cedar Creek Cross	ings										h	141441	1
Demand Inform	nation				EB			W	3		NB			SB	
Approach Move				L	T	R	L	Т		L	Т	R	L	Т	R
Demand (v), v				22	4	9	33	2	_	11	2683		117	1234	10
bemana (v), v	CHI/H			LL	-	0	00	2	100		2000	140	117	1204	
Signal Informa	tion				ιL	. 21			5			Ĺ			
Cycle, s	180.0	Reference Phase	2	1	2	1		₽ Ř	2			_	$\mathbf{\Psi}$		-4
Offset, s	0	Reference Point	End	Green	2.6	5.4	127.4		/ 11.7	0.0		1	2	3	<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	-	0.0	5.1	3.6		0.0				7	→
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	3.0	3.0		0.0		5	6	7	
Timer Results				EBL	-	EBT	WB		WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	9					4			8	5		2	1		6
Case Number						10.0			9.0	1.1		3.0	2.0	_	4.0
Phase Duration	,					11.6		_	18.3	9.1	_	35.5	14.5	_	140.9
Change Period,						6.6			6.6	6.5		8.1	6.5		8.1
	Allow Headway (<i>MAH</i>), s eue Clearance Time (<i>g</i> s), s					3.2		_	5.3	3.0		0.0	5.0		0.0
	eue Clearance Time (g_s), s					4.3		_	10.8	2.3	_		7.5	_	
	en Extension Time (g e), s					0.0		_	0.9	0.0		0.0	0.5		0.0
Phase Call Prot					_	0.84			1.00	0.43	_		1.00	_	
Max Out Probal	bility					0.19			0.00	0.00)		0.00)	
Movement Gro	up Res	ults			EB			WB			NB			SB	
Approach Move				L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		23	14		18	19	146	11	2745	143	107	570	568
		ow Rate (s), veh/h/l	n	1781	1663		1781	1791	1403	1781	1698	1585	1702	1870	186
Queue Service		(<i>I</i> ,		2.3	1.5		1.7	1.8	8.8	0.3	59.2	2.7	5.5	33.1	32.
Cycle Queue C		- /:		2.3	1.5		1.7	1.8	8.8	0.3	59.2	2.7	5.5	33.1	32.
Green Ratio (g				0.03	0.03		0.07	0.07	0.11	0.72	0.71	0.77	0.04	0.74	0.7
Capacity (c), v				50	47		116	117	307	334	3607	1225	151	1380	137
Volume-to-Capa		itio (X)		0.463			0.156			0.034		0.117	0.709	0.413	0.41
		/In (95 th percentile)		50.4	29.5		37.7	39.2		5.3	586.8	33.4	117.6	555.9	550
		eh/In (95 th percenti		2.0	1.2		1.5	1.5	5.9	0.2	23.1	1.3	4.6	21.9	21.
		RQ) (95 th percent	,	0.17	0.10		0.25	0.20	0.37	0.04	0.53	0.17	0.29	0.62	0.6
Uniform Delay (,, ,		86.1	85.7		79.5	79.5	75.3	9.6	15.2	3.3	82.6	19.0	18.
Incremental Del	lay (d 2), s/veh		2.5	1.3		0.9	0.9	1.6	0.0	0.3	0.0	8.0	0.9	0.9
Initial Queue De	elay (d	з), s/veh		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (88.6	87.0		80.3	80.4	76.9	9.6	15.5	3.3	90.6	19.8	19.
Level of Service	e (LOS)			F	F		F	F	E	Α	В	Α	F	В	В
Approach Delay				88.0)	F	77.6	3	E	14.9)	В	25.8	3	С
Intersection Del						2'	1.2						С		
					EB			WB			NB			SB	
Multimodal Re Pedestrian LOS		(1.0.0		2.63		С	2.63		С	2.39		В	1.87		В

General Inform	nation	~							Intersec		ormatic	on		4444	a L
Agency		DBZ Traffic							Duration	, h	0.250			4444	
Analyst		DBZ		Analys	sis Date	e Feb 2	5, 2021		Area Typ	e	Other				~
Jurisdiction				Time F		AM P			PHF		0.95		**		*
Urban Street		Bardstown Road		Analys	sis Yea	r 2033	Build		Analysis	Period	1> 7:	15	3		
Intersection		Bartley/Southpointe		File Na	ame	Bards	town AN	N 33	B.xus					<u> 1 </u>	r
Project Descrip	tion	Cedar Creek Cross	ngs										h	41441	21
Demand Inform	nation				EB			V	/B		NB			SB	
Approach Move				L	T	R	L	_	r R	L	T	R	L	T	R
Demand (v), v				22	4	9	33	_	2 139	11	2705		117	1260	10
												110			
Signal Informa	tion				7	L 21	∼ 11		2		l	Ĺ			_
Cycle, s	180.0	Reference Phase	2		5		51	'nŔ	ž Z				\mathbf{Y}	∠ ⊢.	÷
Offset, s	0	Reference Point	End	Green	2.5	5.3	127.6			0.0			2		ĸ
Uncoordinated	No	Simult. Gap E/W	On	Yellow		0.0	5.1	3.		0.0		$\langle 4$		~	Ż
Force Mode	Fixed	Simult. Gap N/S	On	Red	3.0	0.0	3.0	3.	0 3.0	0.0		5	6	7	
Timer Results				EDI		CBT	WB		WPT	NBI		NRT	C PI		SBT
Assigned Phase	<u> </u>			EBL	-	EBT 4	VVB	-	WBT 8	5		NBT 2	SBL 1		6
Case Number						4			9.0	5 1.1		3.0	2.0		4.0
Phase Duration	0					11.6		-	18.3	9.0		35.7	14.4	_	4.0
Change Period,	,	-) 0			+	6.6		\rightarrow	6.6	6.5		8.1	6.5		8.1
						3.2		-	5.3	3.0		0.0	5.0	_	0.0
	α Allow Headway (<i>MAH</i>), s eue Clearance Time (<i>g</i> s), s					4.3		-	10.8	2.3		0.0	7.4		0.0
	ue Clearance Time ($g s$), s en Extension Time ($g e$), s					0.0		-	0.9	0.0		0.0	0.5	_	0.0
Phase Call Prol		(90), 5			-	0.84		-	1.00	0.42	,	0.0	0.99		0.0
Max Out Proba						0.19		-	0.00	0.00	_		0.00	_	
Max Out 100a	onity					0.10			0.00	0.00	, I		0.00		
Movement Gro		sults			EB			W	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F				23	14		18	19		11	2714	140	105	571	56
,		ow Rate (s), veh/h/l	n	1781	1663		1781	179	1 1403	1781	1698	1585	1702	1870	186
Queue Service		- ,.		2.3	1.5		1.7	1.8		0.3	54.2	2.3	5.4	33.2	33.
Cycle Queue C		e Tíme (g c), s		2.3	1.5		1.7	1.8		0.3	54.2	2.3	5.4	33.2	33.
Green Ratio (g	,			0.03	0.03		0.07	0.0		0.72	0.71	0.77	0.04	0.74	0.7
Capacity (c), v				50	47		116	117		333	3610	1227	149	1381	137
Volume-to-Capa				0.463			0.156	<u> </u>	_	0.033		0.115	0.706	0.414	0.4
	X . <i>M</i>	/In (95 th percentile)		50.4	29.5		37.7	39.		5.2	506.1	27.6	115.4	557.3	551
		eh/In (95 th percenti		2.0	1.2		1.5	1.5	_	0.2	19.9	1.1	4.5	21.9	21.
<u> </u>		RQ) (95 th percent	ne)	0.17	0.10		0.25	0.2	_	0.03	0.46	0.14	0.29	0.62	0.6
Uniform Delay (86.1	85.7		79.5	79.		9.6	13.0	2.7	82.6	19.0	18.
Incremental De		1.		2.5	1.3		0.9	0.9		0.0	0.2	0.0	8.0	0.9	0.9
Initial Queue De				0.0	0.0		0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (88.6 F	87.0 F		80.3 F	80. F	4 77.1 E	9.6	13.2 B	2.8	90.6 F	19.8 B	19. B
Level of Service	. ,					F			_	A 12.7		A B			B
Approach Delay				88.0	,		77.7 9.8		E	12.7		-	25.7 B		С
Intersection De	ay, s/ve					18	5.0								
Multimodal Re	sults				EB			W	3		NB			SB	
Dedectrian LOS	Score	/ LOS		2.63	3	С	2.63	3	С	2.39	,	В	1.87	,	В
Pedestrian LOS													a		

sings 2 End Off On	Time F Analys File N:	sis Year ame EB T 8	PM Pe 2023		И 23 N W Т	В	h e Period	0.250 Other 0.96 1> 4:4		1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	4↓↓↓↓ ↓↓↓↓ ↓ ↓↓↓↓ ↓ ↓↓↓↓	1 1 1 1 1
2 End Off	Time f Analys File N L 40 Green Yellow	Period sis Year ame EB T 8	PM Pe 2023 I Bards R 14	eak No Builc town PN	И 23 N W Т	Area Typ PHF Analysis NB.xus B	e Period	Other 0.96 1> 4:4		1 4 M 41 4 M	-*¦ *1+++/	
2 End Off	Time f Analys File N L 40 Green Yellow	Period sis Year ame EB T 8	PM Pe 2023 I Bards R 14	eak No Builc town PN	И 23 N W Т	PHF Analysis NB.xus B	Period	0.96 1> 4:4		1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4		2 2 4 C
2 End Off	Time f Analys File N L 40 Green Yellow	Period sis Year ame EB T 8	PM Pe 2023 I Bards R 14	eak No Builc town PN	И 23 N W Т	Analysis NB.xus B		1> 4:4	45	1 * 1 * 1		بر ج ۲
2 End Off	File N L 40 Green Yellow	EB T 8	Bards R 14	town PN	И 23 N W Т	NB.xus B		NB	15			ب م 211
2 End Off	File N L 40 Green Yellow	EB T 8	Bards R 14		И 23 N W Т	NB.xus B		_		Γ,		2161
2 End Off	Green Yellow	Т 8	14	_	Т			_		1		21
End Off	Green Yellow	Т 8	14	_	Т			_			OP	
End Off	Green Yellow	Т 8	14	_	Т			_				
End Off	Green Yellow	8	14	_				I T		1 .	SB	
End Off	Green Yellow	5,		379			L	T	R	L	T	R
End Off	Yellow	5			8	298	23	1614	206	503	2345	12
End Off	Yellow	5		»]]					1			
End Off	Yellow	Ĵ	1542		- E	2			<u>_</u>	V 2		2
Off	Yellow					7 00 5			1	2	3	Y
		_	26.4	4.7	3 7.0 3.6		0.0	-			~	$\mathbf{\dot{+}}$
	1 tou	0.0	2.7	1.5	3.0		0.0		5	6	7	
	EB	-	EBT	WB	L	WBT	NBL		NBT	SB	-	SBT
			4			8	5		2	1		6
			10.0			9.0	1.1		3.0	2.0		4.0
			13.6			35.1	8.6	1	35.0	41.2	2 1	167.7
			6.6			6.6	4.0		6.2	6.2		6.2
			3.2			3.2	3.1		0.0	3.1		0.0
			7.2			26.9	3.2			33.9	3	
			0.0			1.6	0.0		0.0	1.2		0.0
			0.98			1.00	0.77			1.00)	
			1.00			0.00	0.00			0.00)	
		EB			WB	2		NB			SB	
	L	T	R	L	T	R	L	T	R	L	T	R
	7	4	14	3	8	18	5	2	12	1	6	16
	42	23		201	202		23	1647	210	497	1165	116
/ln	1795	1691		1781	1786		1795	1698	1585	1730	1885	1882
	5.2	3.0	_	24.9	24.9		1.2	31.0	3.9	31.9	108.8	109.
	5.2	3.0		24.9	24.9		1.2	31.0	3.9	31.9	108.8	109.
	0.04	0.04		0.13	0.13		0.59	0.57	0.70	0.82	0.72	0.72
	64	53		233	234		104	2917	1108	554	1361	1359
	0.650			0.862	0.86		0.226	0.565	0.190	0.897	0.856	0.85
e)	117.8	61.8		444.8	442.		24.8	392	56.1	426.6	1354.5	
tile)	4.7	2.5		17.5	17.5		1.0	15.4	2.2	16.8	53.7	53.7
ntile)	0.39	0.21		1.48	1.47		0.17	0.33	0.28	1.07	1.50	1.50
	107.1	106.4		95.8	95.8		35.7	15.6	3.7	96.0	29.6	29.1
	9.0	2.1		3.7	3.7		0.3	0.6	0.3	0.7	0.9	0.9
	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
	116.1	108.4		99.5	99.5		36.0	16.1	4.0	96.7	30.5	30.1
	F	F		F	F	E	D	В	A	F	С	С
	113.	4	F	84.6	3	F			В	42.0		D
		EB			_			NB			SB	-
		_			_			_			_	B C
	ts Resen	F 113. 2.63	F F 113.4 2.63 0.59	F F 113.4 F 38 2.63 C 0.59 A	F F F 113.4 F 84.6 SUBLE EB 2.63 C 2.64 0.59 A 1.66	F F F 113.4 F 84.6 39.1 EB 2.63 C 2.64 0.59 A 1.66	$\begin{array}{c c c c c c c c c c c c c c c c c c c $			$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

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General Inform	nation								Intersec				-1 👘	4 + 4+ 4 + 4 ↓↓↓↓	N L
Agency		DBZ Traffic							Duration	,	0.250				
Analyst		DBZ		Analys	sis Date	Feb 2	2, 2021		Area Typ	e	Other	-	A .		<u>~</u>
Jurisdiction				Time F	Period	PM P			PHF		0.96		44 T		*
Urban Street		Bardstown Road		Analys	sis Year	2023	Build		Analysis	Period	1> 4:4	45	14		
Intersection		Bartley/Wingfield		File Na	ame	Bards	town PN	vi 23 e	3.xus					<u>h</u> ttt	7
Project Descrip	tion	Cedar Creek Crossi	ngs											41491	R N
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move				L	T	R	L	1 1		L	T	R	L	T	R
Demand (v), v				40	8	14	379	8	_	23	1645		503	2374	12
Signal Informa	tion				Ĺ		~ <mark>.</mark> /	2	2		l	Ĺ			_
Cycle, s	225.0	Reference Phase	2		5		51	rŔ	2			>	Y	Ľr;-	÷
Offset, s	0	Reference Point	End	Green	4.6	26.0	129.3		28.5	0.0					 K
Uncoordinated	No	Simult. Gap E/W	Off	Yellow		3.5	4.7	3.6		0.0		\leq			7
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	2.7	1.5	3.0) 3.0	0.0		5	6	7	
Timer Results				EBI		ERT	W/B	1	W/RT	NRI		NRT	SP		CRT
	2			EBI	-	EBT 4	WB	-	WBT 8	NBI 5	-	NBT 2	SBI 1		SBT 6
Assigned Phase	5				\rightarrow		<u> </u>	\rightarrow			-				
Case Number				<u> </u>	_	10.0	<u> </u>	+	9.0	1.1		3.0	2.0		4.0
Phase Duration	,	\				13.6		-	35.1	8.6	_	135.5	40.8		67.7
Change Period,						6.6	<u> </u>	-	6.6	4.0	_	6.2	6.2		6.2
	x Allow Headway (<i>MAH</i>), s eue Clearance Time (g s), s					3.2	<u> </u>	_	3.2	3.0		0.0	3.0		0.0
	eue Clearance Time ($g s$), s					7.2		\rightarrow	26.9	3.2			33.6		
Green Extensio		(ge), s				0.0		_	1.6	0.0	_	0.0	1.1		0.0
Phase Call Prol					_	0.98			1.00	0.77	_		1.00		
Max Out Proba	bility					1.00			0.00	0.00)		0.00)	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		42	23		201	202	2 310	23	1677	210	492	1168	116
,		ow Rate (s), veh/h/lr	1	1795	1691		1781	178	_	1795	1698	1585	1730	1885	188
Queue Service				5.2	3.0		24.9	24.9		1.2	33.4	3.9	31.6	111.1	111.
Cycle Queue C		- //		5.2	3.0		24.9	24.9		1.2	33.4	3.9	31.6	111.1	111.
Green Ratio (g			_	0.04	0.04		0.13	0.13	_	0.59	0.57	0.70	0.16	0.72	0.72
Capacity (c), v	,			64	53		233	234	_	102	2927	1111	548	1361	135
Volume-to-Capa		atio (X)		0.650			0.862	0.86	_		0.573		0.899	0.858	0.86
		/In (95 th percentile)		117.8	61.8		444.8	442.		24.3	400.4	53.3	418.8	1355.5	
	V · <i>M</i>	eh/In (95 th percentil	e)	4.7	2.5		17.5	17.5	_	1.0	15.8	2.1	16.5	53.8	53.
		RQ) (95 th percent		0.39	0.21		1.48	1.47	_	0.16	0.33	0.27	1.05	1.51	1.5
Uniform Delay (,	107.1	106.4		95.8	95.8	_	36.6	16.8	3.7	96.3	31.4	31.0
Incremental De				9.0	2.1		3.7	3.7		0.3	0.6	0.3	0.7	0.9	0.9
Initial Queue De		1.		0.0	0.0		0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (116.1	108.4		99.5	99.		36.9	17.4	4.0	97.0	32.3	31.9
Level of Service				F	F		99.5 F	99.0	E	D	B	4.0 A	97.0 F	C	51.3 C
Approach Delay	. ,			- 113		F	84.7	<u> </u>	F	16.1		B	43.4		D
				113.4	7				F	10.1					U
Intersection De	ay, s/ve					4(0.1						D		
Multimodal Re	sults				EB			WE	3		NB			SB	
		/1.05		2.63	3	С	2.64	1	С	2.43		В	1.89	3	В
Pedestrian LOS	Score	1 200													

General Inform	nation								Intersec	tion Inf	ormatio	on	_	A LA LI LI LI	ЪЦ
Agency		DBZ Traffic							Duration	, h	0.250			** 5 5	
Analyst		DBZ		Analys	sis Date	e Feb 2	5, 2021		Area Typ	e	Other	-			~
Jurisdiction				Time F	Period	PM P	eak		PHF		0.96		* *		*
Urban Street		Bardstown Road		Analys	sis Yea	r 2033	No Build	k	Analysis	Period	1> 4:4	45	14		~
Intersection		Bartley/Wingfield		File Na	ame	Bards	town PN	A 33	NB.xus					5 + + +	r 🗌
Project Descrip	tion	Cedar Creek Cross	ings											141491	11
Demand Inform	nation				EB			W	'B		NB		1	SB	
Approach Move				L	T	R	L	T -	_	L	Т	R	L	T	R
Demand (v), v				40	8	14	379	8		23	1697	_	503	2465	12
Bolliana (V), V	oniin			10	0		010		200	20	1001	200	000	2100	12
Signal Informa	tion				Γ	. 21	√ 1		5			Ĺ	•		
Cycle, s	225.0	Reference Phase	2	1	2		51	r₿	2				Ψ	∠ →-	-
Offset, s	0	Reference Point	End	Green	4.6	25.0	130.2		· ·	0.0		1	2	3	N N
Uncoordinated	No	Simult. Gap E/W	Off	Yellow		3.5	4.7	3.0		0.0			,	7	\rightarrow
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	2.7	1.5	3.0		0.0		5	6	7	-
Timer Results				EBL	-	EBT	WB	L	WBT	NBI	-	NBT	SB		SBT
Assigned Phase	e					4			8	5		2	1		6
Case Number						10.0		\rightarrow	9.0	1.1		3.0	2.0	_	4.0
Phase Duration	,					13.6			35.1	8.6	·	136.4	39.8	_	167.6
Change Period,						6.6			6.6	4.0		6.2	6.2	:	6.2
Max Allow Head	dway(/	MAH), s				3.2			3.2	3.0		0.0	3.0)	0.0
Queue Clearan						7.2			26.9	3.2			32.0	3	
Green Extensio	n Time	(<i>g</i> e), s				0.0			1.6	0.0		0.0	1.0)	0.0
Phase Call Prol	bability					0.98			1.00	0.77	7		1.00	2	
Max Out Proba	bility					1.00			0.00	0.00)		0.0) <u> </u>	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move			_	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F), veh/h		42	23		201	202	2 310	24	1742	212	477	1175	117
		ow Rate (s), veh/h/l	n	1795	1691		1781	178		1795	1698	1585	1730	1885	188
Queue Service		· · · ·		5.2	3.0	-	24.9	24.	_	1.2	32.5	3.5	30.6	112.6	112.
Cycle Queue C		- /:		5.2	3.0		24.9	24.		1.2	32.5	3.5	30.6	112.6	112.
Green Ratio (g		(30),0		0.04	0.04		0.13	0.1	_	0.60	0.58	0.71	0.15	0.72	0.72
Capacity (c), v	,			64	53		233	234	_	101	2949	1118	532	1361	135
Volume-to-Capa		atio (X)		0.650					2 0.401		0.591	-	0.897	0.864	
· ·		/In (95 th percentile))	117.8	61.8	<u> </u>	444.8	442		25.6	365.8	47.6	407.2		
	V · <i>M</i>	eh/In (95 th percenti		4.7	2.5		17.5	17.		1.0	14.4	1.9	16.0	54.5	54.4
		RQ) (95 th percent		0.39	0.21	<u> </u>	1.48	1.4	_	0.17	0.30	0.24	1.02	1.53	1.5
Uniform Delay (,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		107.1	106.4		95.8	95.	_	37.5	14.7	3.2	96.9	31.6	31.2
Incremental De				9.0	2.1		3.7	3.7		0.3	0.6	0.3	0.6	1.0	1.0
Initial Queue De				0.0	0.0		0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (116.1	108.4	-	99.5	99.	_	37.8	15.3	3.5	97.5	32.6	32.2
Level of Service				F	F		F	55.	E	D	B	A	57.5 F	C	C
Approach Delay	· ,			113.4		F	85.1	<u> </u>	F	14.3		B	43.4		D
Intersection Delay				110.			9.2			14.0			D 40.		
													-		
	sults				EB			WE	3		NB			SB	
Multimodal Re				2.62		С	2.64		0	0.40	>	P	1 00		В
Multimodal Re Pedestrian LOS	Score	/LOS		2.63)	C	2.64	+	С	2.43		В	1.89	9	Б

General Inform	nation								Intersec	tion Inf	ormatio	on			
Agency		DBZ Traffic							Duration,	, h	0.250			4+44	
Analyst		DBZ		Analys	sis Date	Feb 2	5, 2021		Area Typ	е	Other		.×.		-
Jurisdiction				Time F	Period	PM P	eak		PHF		0.96		4 1 - ↓		~ *
Urban Street		Bardstown Road		Analys	sis Year	2033	Build		Analysis	Period	1> 4:4	45	1		•
Intersection		Bartley/Wingfield		File Na	ame	Bards	town PN	N 33 E	3.xus					httt:	r 🗌
Project Descript	tion	Cedar Creek Cross	ings										1	4144	21
Demand Inform	nation				EB			W	B		NB			SB	
Approach Move				L	T	R	L			L	T	R	L	Т	R
Demand (v), v				40	8	14	379	6		23	1728		503	2494	12
	on an			10			0,10		100	20	11123	200		2101	
Signal Informa	tion				L.	121		2	2		– I	Ĺ			_
Cycle, s	225.0	Reference Phase	2		5		51	٦Ŕ	ě z			>	\mathbf{Y}	∠ ⊢-	- -
Offset, s	0	Reference Point	End	Green	4.6	24.7	130.5		ſ	0.0					 K
Uncoordinated	No	Simult. Gap E/W	Off	Yellow		3.5	4.7	3.6		0.0		< 🛛		<u>~ </u>	*
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	2.7	1.5	3.0) 3.0	0.0		5	6	7	
Time on De coulte				EDI		EDT			MDT	ND		NDT	0.00		ODT
Timer Results				EBI	-	EBT	WB		WBT	NBI		NBT	SB		SBT
Assigned Phase	9				_	4		-	8	5	_	2	1	_	6
Case Number					_	10.0	<u> </u>	-	9.0	1.1	_	3.0	2.0	_	4.0
Phase Duration	,	N				13.6		-	35.1	8.6		136.7	39.8		167.6
Change Period,					_	6.6	<u> </u>	-	6.6	4.0	_	6.2	6.2	_	6.2
Max Allow Head					_	3.2		-	3.2	3.0		0.0	3.0		0.0
Queue Clearan					_	7.2		-	26.9	3.2	_	0.0	32.3		0.0
Green Extensio		(g/e), S			_	0.0		\rightarrow	1.6	0.0		0.0	1.0		0.0
Phase Call Prot					_	0.98	<u> </u>	-	1.00	0.77			1.00	_	
Max Out Proba	bility					1.00			0.00	0.00)		0.00)	
Movement Gro	up Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		42	23		201	202	310	24	1772	211	473	1178	1178
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	1795	1691		1781	178	3 1403	1795	1698	1585	1730	1885	1882
Queue Service	Time (gs), s		5.2	3.0		24.9	24.9	20.3	1.2	36.3	3.8	30.3	113.1	113.4
Cycle Queue C	learanc	e Time (g ₀), s		5.2	3.0		24.9	24.9	20.3	1.2	36.3	3.8	30.3	113.1	113.4
Green Ratio (g	/C)			0.04	0.04		0.13	0.13	3 0.28	0.60	0.58	0.71	0.15	0.72	0.72
Capacity (c), v	reh/h			64	53		233	234	771	100	2956	1120	528	1361	1359
Volume-to-Capa	acity Ra	atio (X)		0.650	0.433		0.862	0.86	2 0.403	0.235	0.600	0.189	0.895	0.865	0.86
Back of Queue	(Q), ft	/In (95 th percentile)		117.8	61.8		444.8	442.	1 300.6	25.8	424.2	51.9	404.3	1378.4	1388.
		eh/In (95 th percenti	,	4.7	2.5		17.5	17.8	_	1.0	16.7	2.0	15.9	54.7	54.7
÷		RQ) (95 th percent	ile)	0.39	0.21		1.48	1.47		0.17	0.35	0.26	1.01	1.53	1.53
Uniform Delay (107.1	106.4		95.8	95.8		37.6	16.8	3.5	97.3	31.7	31.3
Incremental De		7.		9.0	2.1		3.7	3.7		0.3	0.6	0.2	0.6	1.0	1.0
Initial Queue De		· ·		0.0	0.0		0.0	0.0	_	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (116.1	108.4		99.5	99.		37.9	17.4	3.8	97.9	32.7	32.2
Level of Service	. ,			F	F		F	F	E	D	В	A	F	C	C
Approach Delay				113.	4	F	85.2	2	F	16.2	2	В	43.4	1	D
Intersection Del	ay, s/ve	eh / LOS				39	9.8						D		
Intersection Del					EB			WE	2		NB			SB	
Intersection Del	eulte				ĽD			VVE	,		ND			30	
Multimodal Re Pedestrian LOS		/1.05		2.63	3	С	2.64	1	С	2.43	3	В	1.89	2	В

General Information							Site	Inforr	natio	n						
Analyst	DBZ							ection			North	Entrand	ce.			
Agency/Co.		B Zimm	erman 1	raffic En	aineerin	a		liction			NOTU	- Entrant				
Date Performed	3/29/		.cimun 1		gineenin	9	<u> </u>	Nest Stre	eet		Entra	nce				_
Analysis Year	2023							/South :			<u> </u>	town Ro	ad			
Time Analyzed	AM P	eak						Hour Fac			0.98					_
Intersection Orientation		n-South						sis Time		hrs)	0.25					
Project Description	+	n Bardst	own													_
Lanes	linga															_
				14 1 1 4 4 4 4 1	ภา	<u>1 † †</u>	1 1 1 1 1	4 4 2 2 4 5 5								
Vehicle Volumes and Adj	ustme				Major	Street: Nor										
Approach			ound				ound	_			bound	_			bound	
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	
Priority Number of Lanes		10 1	11 0	12 1		7	8	9 0	1U 0	1	2	3 0	4U 0	4	5	
Configuration	+	L	0	R		0	0		0	L	T		0	0	T	
Volume (veh/h)	+	60		5					0	13	2662				1234	
	+	1		1					3	1	2002				12.54	-
Percent Heavy Vehicles (%)		L '		'					3							
Percent Heavy Vehicles (%)	+	0.580		0 100						0.100						
Proportion Time Blocked	\vdash	0.580		0.190						0.190						
Proportion Time Blocked Percent Grade (%)			0	0.190						0.190				N	lo	_
Proportion Time Blocked Percent Grade (%) Right Turn Channelized			D IO		Only					0.190			2	N	lo	
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		N		0.190 Left	Only					0.190			2	N	lo	
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He	eadwa	ys		Left	Only								2	N	lo	
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec)	eadwa	N ys 6.4		Left 6.9	Only					4.1			2	N	lo	
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Ho Base Critical Headway (sec) Critical Headway (sec)	eadwa	ys 6.4 5.72		Left 6.9 6.92	Only					4.1 4.12			2	N		
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec)	eadwa	ys 6.4 5.72 3.8		Left 6.9 6.92 3.3	Only					4.1 4.12 2.2			2	N		
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)		N 95 6.4 5.72 3.8 3.81		Left 6.9 6.92 3.3 3.31	Only					4.1 4.12			2	N		
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and		N 6.4 5.72 3.8 3.81 I of Se		Left 6.9 6.92 3.3 3.31	Only					4.1 4.12 2.2 2.21			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h)		ys 6.4 5.72 3.8 3.81 I of So 61		Left 6.9 6.92 3.3 3.31	Only					4.1 4.12 2.2 2.21			2			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h)		ys 6.4 5.72 3.8 3.81 I of Se 61 190		Left 6.9 6.92 3.3 3.31 5 791	Only					4.1 4.12 2.2 2.21 13 634			2 2 3 4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio		ys 6.4 5.72 3.8 3.81 I of So 61 190 0.32		Left 6.9 6.92 3.3 3.31 5 791 0.01	Only Only					4.1 4.12 2.2 2.21 13 634 0.02			2			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio 95% Queue Length, Q ₈₅ (veh)		ys 6.4 5.72 3.8 3.81 of Sa 61 190 0.32 1.3		Left 6.9 6.92 3.3 3.31 5 791 0.01 0.0	Only Only					4.1 4.12 2.2 2.21 13 634 0.02 0.1			2			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio 95% Queue Length, Q ₉₅ (veh) Control Delay (s/veh)		ys 6.4 5.72 3.8 3.81 of So 61 190 0.32 1.3 32.7 		Left 6.9 6.92 3.3 3.31 5 791 0.01 0.0 9.6						4.1 4.12 2.2 2.21 13 634 0.02 0.1 10.8			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio 95% Queue Length, Q ₈₅ (veh)		ys 6.4 5.72 3.8 3.81 I of So 61 190 0.32 1.3 32.7 D		Left 6.9 6.92 3.3 3.31 5 791 0.01 0.0						4.1 4.12 2.2 2.21 13 634 0.02 0.1 10.8 B			Image: Constraint of the sector of			

General Information							Site	Infor	matio	n						
Analyst	DBZ						<u> </u>	ection			North	Entran	ce			
Agency/Co.		B Zimn	herman	Traffic Er	naineeri	na		liction			Tiona	- Entran				
Date Performed	3/29/2							West Str	eet		Entra	nce				
Analysis Year	2033							n/South			Bards	town Ro	bad			
Time Analyzed	AM Pe	eak					Peak	Hour Fa	ctor		0.98					_
Intersection Orientation	North	-South					Analy	sis Time	Period	(hrs)	0.25					
Project Description	Hogar	n Bardst	own													
Lanes																
				J 4 4 4 4 4 4	ባ ጉ Major	<u>ጉ ተ ተ</u> ተ ተ ጥ Street: Nor	↑ ↑ Դ ∩ th-South	4 4 3,4 5 4								
Vehicle Volumes and Ad	justme	ents														
Approach	<u> </u>		ound				bound				bound				bound	
					U							R	U			
Movement	U	L	T	R	0	L	T	R	U	L	T			L	T	R
Priority	U	10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Priority Number of Lanes		10 1		12 1						1	2 3				5 2	6
Priority Number of Lanes Configuration		10 1 L	11	12 1 R		7	8	9	1U 0	1 1 L	2 3 T	3	4U	4	5 2 T	6 1 R
Priority Number of Lanes Configuration Volume (veh/h)		10 1 L 60	11	12 1 R 5		7	8	9	1U 0 0	1 1 L 13	2 3	3	4U	4	5 2	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%)		10 1 L 60 1	11	12 1 R 5 1		7	8	9	1U 0	1 1 L 13 1	2 3 T	3	4U	4	5 2 T	6 1 F
Priority Number of Lanes Configuration Volume (veh/h)		10 1 L 60	11 0	12 1 R 5		7	8	9	1U 0 0	1 1 L 13	2 3 T	3	4U	4	5 2 T	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked		10 1 60 1 0.670	11 0	12 1 R 5 1		7	8	9	1U 0 0	1 1 L 13 1	2 3 T	3	4U	4 0	5 2 T	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)		10 1 60 1 0.670	11 0 	12 1 R 5 1 0.190	Only	7	8	9	1U 0 0	1 1 L 13 1	2 3 T	3 0	4U	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		10 1 60 1 0.670	11 0 	12 1 R 5 1 0.190		7	8	9	1U 0 0	1 1 L 13 1	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		10 1 60 1 0.670	11 0 	12 1 R 5 1 0.190		7	8	9	1U 0 0	1 1 L 13 1	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H		10 1 60 1 0.670 0 0	11 0 	12 1 R 5 1 0.190 Left		7	8	9	1U 0 0	1 L 13 1 0.190	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec)		10 1 60 1 0.670 () N N S S S 6.4	11 0 	12 1 R 5 1 0.190 Left		7	8	9	1U 0 0	1 L 13 1 0.190	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec)		10 1 60 1 0.670 0 N N S S 6.4 5.72	11 0 	12 1 R 5 1 0.190 Left		7	8	9	1U 0 0	1 L 13 1 0.190 4.1 4.12	2 3 T	3 0	4U 0	4 0	5 2 T 1296	66 11 R 8
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Gritical Headway (sec) Base Follow-Up Headway (sec)		10 1 60 1 0.670 0 N N S S S S S S S S S S S S S S S S		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31		7	8	9	1U 0 0	1 1 13 1 0.190 4.1 4.12 2.2	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Follow-Up Headway (sec)		10 1 60 1 0.670 0 N N S S S S S S S S S S S S S S S S		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31		7	8	9	1U 0 0	1 1 13 1 0.190 4.1 4.12 2.2	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)		10 1 L 60 1 0.670 (N N S S S S S S S S		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31 e		7	8	9	1U 0 0	1 1 1 1 0.190 4.1 4.12 2.2 2.21	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Gritical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)		10 1 L 60 1 0.670 (N S 5.72 3.8 3.81 1 of S 61		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31 e 5		7	8	9	1U 0 0	1 1 1 1 1 0.190 4.1 4.12 2.2 2.21 13	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Netate, v (veh/h) Capacity, c (veh/h)		10 1 60 1 0.670 (N yys 6.4 5.72 3.8 3.81 : : : : : : : :		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31 e 5 747		7	8	9	1U 0 0	1 1 1 1 1 0.190 4.1 4.12 2.2 2.21 13 593	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (se		10 1 60 1 0.670 (N yys 6.4 5.72 3.8 3.81 : I of S 61 174 0.35		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31 8 5 747 0.01		7	8	9	1U 0 0	1 1 1 1 1 0.190 4.1 4.1 2.2 2.21 13 593 0.02	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Readway Readway Readway Follow-Up Readway Readway Follow-Up Readway Readway Follow-Up Readway Readway Follow-Up Readway Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readway Follow-Up Readw		10 1 60 1 0.670 0 7 7 7 7 7 7 7 7 7 7 7 7 7		12 1 R 5 1 0.190 Left 6.9 6.92 3.3 3.31 e 5 747 0.01 0.0		7	8	9	1U 0 0	1 1 1 1 0.190 4.1 4.12 2.2 2.21 13 593 0.02 0.1 11.2 B	2 3 T	3 0	4U 0	4 0	5 2 T 1296	6 1 F

N Ent 33 AM.xtw

				Two-												
General Information							Site	Inforr	natio	n						
Analyst	DBZ						Inters	ection			North	Entrand	ce			
Agency/Co.	Diane	e B Zimm	ierman ⁻	Traffic En	gineerin	g	Jurisd	liction								
Date Performed	2/22/	2021					East/	Nest Stre	eet		Entra	nce				
Analysis Year	2023						North	n/South S	Street		Bards	town Ro	ad			
Time Analyzed	PM P	eak					Peak	Hour Fac	tor		0.98					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Hoga	n Bardst	own													
Lanes																
				J 4 4 A 4 4 4	ብግ	ר ↑ ↑ ↑ ↑ ↑ Street: Nor	† † † ŕ ŕ	4 4 4 4 4 4								
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	_
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	3	0	0	0	2	1
Configuration		L		R						L	Т				T	F
Volume (veh/h)		5		5					0	15	1867				2738	3
Percent Heavy Vehicles (%)		1		1					3	1						L_
Proportion Time Blocked		0.720		0.720						0.720						
Percent Grade (%))										<u> </u>			
Right Turn Channelized			lo	1-0										۲ 	lo	
Median Type Storage				Leπ	Only								2			
Critical and Follow-up He		-														
Base Critical Headway (sec)		6.4		6.9						4.1						
Critical Headway (sec)		5.72		6.92						4.12						
Base Follow-Up Headway (sec)		3.8		3.3						2.2						
Follow-Up Headway (sec)		3.81		3.31						2.21						
Delay, Queue Length, and	d Leve		ervice												_	_
Flow Rate, v (veh/h)		5		5						15						
Capacity, c (veh/h)		17		305						57						
v/c Ratio		0.30		0.02						0.27						
95% Queue Length, Q ₉₅ (veh)		0.8		0.1						0.9						
		291.0		17.0					1	89.7	I		1	1	1	1
Control Delay (s/veh)		<u> </u>		<u> </u>												
Control Delay (s/veh) Level of Service (LOS) Approach Delay (s/veh)		F	4.0	C						F	.7					

N Ent 23 PM.xtw

					- Cay	510			Rep							
General Information							Site	Inforr	natio	n						
Analyst	DBZ						Inters	ection			North	Entrand	e			
Agency/Co.	Diane	e B Zimm	nerman ⁻	Fraffic En	gineerin	g	Jurisd	liction								
Date Performed	2/25/	2021					East/	Nest Stre	eet		Entra	nce				
Analysis Year	2033						North	n/South S	Street		Bards	town Ro	ad			
Time Analyzed	PM P	eak					Peak	Hour Fac	tor		0.98					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	0.25					
Project Description	Hoga	n Bardst	own													
Lanes																
				1447450 16	ብግ	1 1 1 1 1 1 Street: Nor	1 1 P r th-South	4 4 4 4 4 4								
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	_
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	F
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	1	3	0	0	0	2	1
Configuration		L		R						L	T				T	F
Volume (veh/h)		5		5					0	15	1962				2898	2
Percent Heavy Vehicles (%)		1		1					3	1						
Proportion Time Blocked		0.720		0.720						0.720						
Percent Grade (%)	<u> </u>		0													
Right Turn Channelized		N	lo											١	10	
Median Type Storage				Left	Only								2			
Critical and Follow-up Ho																
Base Critical Headway (sec)		6.4		6.9						4.1						
Critical Headway (sec)		5.72		6.92						4.12						
Base Follow-Up Headway (sec)		3.8		3.3						2.2						
Follow-Up Headway (sec)		3.81		3.31						2.21						
Delay, Queue Length, and	d Leve		ervice	_						4=						_
Flow Rate, v (veh/h)		5		5						15						
Capacity, c (veh/h)		8		305						34						
v/c Ratio		0.64		0.02						0.45						
95% Queue Length, Q ₉₅ (veh)		1.2		0.1						1.5						
	1	746.2		17.0						181.4						
Control Delay (s/veh)		-														1
Level of Service (LOS)		F		С						F			<u> </u>			
		38	1.6 F	С							.4					

N Ent 33 PM.xtw

General Information							Sito	Inforr	natio	n						
									nauoi							
Analyst	DBZ							ection			Ceda	r Creek E	ntrance			
Agency/Co.			ierman I	Fraffic En	gineerin	g		liction			6.1	C) I			
Date Performed	3/29/	21						West Stre				r Creek F	load			
Analysis Year	2023							/South S			Entra	nce				
Time Analyzed	AM P							Hour Fac			0.92					
Intersection Orientation	East-						Analy	sis Time	Period (hrs)	0.25					
Project Description	Ceda	r Creek (Crossing	s												
				1 4 4 7 4 P C G				7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
Vehicle Volumes and Ad	justme		oound			Dr Street: Ea				North	bound			Courth	bound	
Approach	<u> </u>										bound					
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L 10	T	R
Priority	10	1	2	3	40	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0	<u> </u>	1	0	1
Conferentian	1	L	Т 354	<u> </u>			119	TR			<u> </u>	<u> </u>	<u> </u>	L 74		R
Configuration																1
Volume (veh/h)		21	354	<u> </u>			113	138			<u> </u>					
Volume (veh/h) Percent Heavy Vehicles (%)		21 1	354				113	138						1		1
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked			354					138						1		1
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)			354					138						1)	
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized			354					138						1)	1
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage		1	354	Undi	vided			138						1		
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized	leadwa	1 ys	354	Undi	vided			138						1 (
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage	leadwa	1	304	Undi	vided			138						1		
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H	eadwa	1 ys	334	Undi	vided									1 (6.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec)	leadwa	1 ys 4.1	334	Undi	vided									1 (N		6.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec)	eadwa	1 ys 4.1 4.11	334	Undi	vided									1 (N 7.1 6.41		6. 6.2 3.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)		1 ys 4.1 4.11 2.2 2.21			vided									7.1 6.41 3.5		6. 6.2 3.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)		1 ys 4.1 4.11 2.2 2.21			vided									7.1 6.41 3.5		6. 6.2 3.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an		1 ys 4.1 4.11 2.2 2.21 I of So			vided									1 ((N 7.1 6.41 3.5 3.51		6. 6.2 3. 3.3
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h)		1 ys 4.1 4.11 2.2 2.21 I of So 23			vided									1 (N 7.1 6.41 3.5 3.51 80		6. 6.2 3.3 3.3 12 83 0.0
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Critical Headway (sec) Follow-Up Headway (sec) Critical (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Critical (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Follow-		1 4.1 4.11 2.2 2.21 I of So 23 1289			vided									7.1 6.41 3.5 3.51 80 436		6. 6.2 3. 3.3 17 83
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h)		1 4.1 4.11 2.2 2.21 l of So 23 1289 0.02			vided									7.1 6.41 3.5 3.51 80 436 0.18		6. 6.2 3. 3.3 11 83 0.0
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Fo		1 4.1 4.11 2.2 2.21 I of So 23 1289 0.02 0.1			vided									7.1 6.41 3.5 3.51 80 436 0.18 0.7		6. 6.2 3. 3.3 3.3 11 83 0.0 0. 9.
Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Fo		1 4.1 4.11 2.2 2.21 1 of Se 23 1289 0.02 0.1 7.8 A			vided									1 7.1 6.41 3.5 3.51 80 436 0.18 0.7 15.1 C		6. 6.2 3. 3.3 3.3 1. 83 0.0 0.

General Information							Site	Inforr	natio	n						
	0.07								natio		Carda	- Caraly F	·			
Analyst	DBZ	D 7:		Fraffi - F	aina-i-	~	<u> </u>	ection			Ceda	r Creek E	intrance			
Agency/Co.			ierman i	Fraffic En	gineerin	g					Cada	r Creek F) a a d			
Date Performed	3/29/	2021					· ·	Nest Stre			Entra		koad			
Analysis Year								/South S				nce				
Time Analyzed Intersection Orientation	AM P East-							Hour Fac		h se)	0.92					
			-roccin a	-			Analy	sis Time	Period (nrs)	0.25					
Project Description	Ceda	r Creek (rossing	5												
Vehicle Volumes and Ad	justme			$J \neq J \neq J$		J L	st-West	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						Guth		
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	1
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		F
Volume (veh/h)		21	381				125	138						74		1
tolanie (tellylly														1		1
Percent Heavy Vehicles (%)		1	I													
		1														
Percent Heavy Vehicles (%)		1												()	
Percent Heavy Vehicles (%) Proportion Time Blocked		1												(N		
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)		1		Undi	vided											
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage	leadwa			Undi	vided											
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H	leadwa	ys		Undi	vided									N		6
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec)	leadwa	ys 4.1		Undi	vided									N 7.1		
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec)	leadwa	ys 4.1 4.11		Undi	vided									7.1 6.41		6.
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec)	eadwa	ys 4.1		Undi	vided									7.1 6.41 3.5		6.1 3.
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)		ys 4.1 4.11 2.2 2.21			vided									7.1 6.41		6.1 3.
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an		ys 4.1 4.11 2.2 2.21 I of So	ervice		vided									7.1 6.41 3.5 3.51		6.3 3.3
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h)		ys 4.1 4.11 2.2 2.21 I of So 23	ervice		vided									7.1 6.41 3.5 3.51 80		6. 3. 3.
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, and Flow Rate, v (veh/h) Capacity, c (veh/h)		4.1 4.11 2.2 2.21 I of So 23 1282	ervice		vided									7.1 6.41 3.5 3.51 80 416		6.2 3. 3.3
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Critical Additional (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Critical Additional (sec) Follow-Up Headway (sec) Critical Additional (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Critical (sec) Follow-Up Headway (sec)		4.1 4.11 2.2 2.21 I of So 23 1282 0.02	ervice		vided									N 7.1 6.41 3.5 3.51 80 416 0.19		6. 6.2 3.3 1 83 0.0
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Fol		4.1 4.11 2.2 2.21 I of So 23 1282 0.02 0.1	ervice		vided									N 7.1 6.41 3.5 3.51 80 416 0.19 0.7		6.2 3.3 3.3 1 83 0.0 0.0
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h) Capacity, c (veh/h) V/c Ratio 95% Queue Length, Q ₉₅ (veh) Control Delay (s/veh)		4.1 4.11 2.2 2.21 of So 23 1282 0.02 0.1 7.9	ervice		vided									N 7.1 6.41 3.5 3.51 80 416 0.19 0.7 15.7		6.2 3. 3.3 1 83 0.0 0. 9.
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Delay, Queue Length, an Flow Rate, v (veh/h) Capacity, c (veh/h) v/c Ratio 95% Queue Length, Q _{as} (veh) Control Delay (s/veh) Level of Service (LOS)		ys 4.1 4.11 2.2 2.21 I of So 23 1282 0.02 0.1 7.9 A			vided									7.1 6.41 3.5 3.51 80 416 0.19 0.7 15.7 C		6. 3 3. 1 8: 0. 0 9
Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway		ys 4.1 4.11 2.2 2.21 I of So 23 1282 0.02 0.1 7.9 A	ervice		vided									N 7.1 6.41 3.5 3.51 80 416 0.19 0.7 15.7	0	6. 3. 3. 1 83 0.0

General Information		_		_			Site	Inform	natio	n						
	1								natio	n						
Analyst	DBZ							section			Ceda	r Creek E	intrance			
Agency/Co.	+	e B Zimm	ierman T	raffic En	gineerin	g	<u> </u>	liction								
Date Performed	2/22/	2021						West Str				r Creek F	load			
Analysis Year	2023							n/South			Entra	nce				
Time Analyzed	PM P						<u> </u>	Hour Fac			0.92					
Intersection Orientation	East-						Analy	sis Time	Period (hrs)	0.25					
Project Description	Ceda	r Creek (Crossings	5												
				J + J + J + L U		<u>×↓↓</u> ↓ ↓		1 1 4 4 4 4 C								
Vehicle Volumes and Adj	ustme				Maji	or Street: Ea	ist-West									
Approach		Eastb	ound			West	bound			North	bound				bound	
											I					
Movement	U	L	Т	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	10	1	2	3	4U	4	5	6	U	7	8	9	0	10	11	1
Priority Number of Lanes		1 1	2		_		<u> </u>	6 0	U		<u> </u>			10 1		1
Priority Number of Lanes Configuration	10	1 1 L	2 1 T	3	4U	4	5	6 0 TR	U	7	8	9		10 1 L	11	1 1 F
Priority Number of Lanes Configuration Volume (veh/h)	10	1 1 L 21	2	3	4U	4	5	6 0		7	8	9		10 1 L 136	11	1 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%)	10	1 1 L	2 1 T	3	4U	4	5	6 0 TR		7	8	9		10 1 L	11	1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked	10	1 1 L 21	2 1 T	3	4U	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)	10	1 1 L 21	2 1 T	3	4U	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized	10	1 1 L 21	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage	1U 0 0	1 L 21 1	2 1 T	3	4U 0	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized	1U 0 0	1 L 21 1	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1 1 F
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage	1U 0 0	1 L 21 1	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 L 136 1	11 0	1 F 1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He	1U 0 0	1 1 21 1 ys	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1 N	11 0	11
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec)	1U 0 0	1 1 21 1 ys 4.1	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1 N	11 0	1 F 1
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec)	1U 0 0	1 1 21 1 ys 4.1 4.11	2 1 T	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 L 136 1 N 7.1	11 0	1 F 1 - - - - - - - - - - - - -
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Base Follow-Up Headway (sec)	1U 0 0	1 1 21 1 1 ys 4.1 4.11 2.2 2.21	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1	11 0	6.2 6.2
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	1U 0 0	1 1 21 1 ys 4.1 4.11 2.2 2.21 I of Se	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1	11 0	6. 3. 3.3
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Gritical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	1U 0 0	1 1 21 1 1 ys 4.1 4.11 2.2 2.21 I of Se 23	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1	11 0	6. 6. 3. 3.
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	1U 0 0	1 1 21 1 1 ys 4.1 4.11 2.21 2.21 I of So 23 1068	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 1 136 1	11 0	6. 6. 3. 3.3
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Hea	1U 0 0	1 1 21 1 1 ys 4.1 4.11 2.2 2.21 l of Se 23 1068 0.02	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1 136 1	11 0	6. 6. 3. 3.3
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Hea	1U 0 0	1 1 21 1 1 ys 4.1 4.11 2.2 2.21 I of Sc 2.3 1068 0.02 0.1	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 136 1	11 0	6 6 6 6 6 6 6 6
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Gritical Headway (sec) Follow-Up Headway	1U 0 0	1 1 21 1 1 4.1 4.11 2.2 2.21 1 of Se 2.3 1068 0.02 0.1 8.4	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 1 136 1	11 0	6. 6. 6. 3. 3. 3. 1 6. 0. 0. 0. 0. 0.
Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Hea	1U 0 0	1 1 21 1 1 21 1 1 21 1 2 2 2 1 1 2 2 2 3 1068 0.02 0.1 8.4 A	2 1 7 247	3 0	4U 0	4	5	6 0 TR		7	8	9		10 1 1 1 1 1 1 1 1 1 1 1 1 1	11 0	6 6 6 6 6 6 6 6

General Information							Site	Inforr	natio	1						
Analyst	DBZ							ection		•	Ceda	Creek F	intrance			
Agency/Co.		B Zimn	nerman T	raffic En	aineerin	a		liction			ccuu	CICCKE	intrance			
Date Performed	2/25/				9	9		West Stre	eet		Ceda	r Creek F	Road			
Analysis Year	2033							n/South S			Entra					
Time Analyzed	PM P	eak						Hour Fac			0.92					_
Intersection Orientation	East-	Nest					Analy	sis Time	Period (hrs)	0.25					
Project Description	Ceda	r Creek (Crossing	5												
Lanes																
				J + J + J + J + J + J + J + J + J + J +	n H Majo	아 Y 1 or Street: Ea	st-West	4 4 4 4 6								
Vehicle Volumes and Adj	ustme	nts														
										NI	hound			South	hound	
Approach		Eastb	ound			West	bound			North				Journ	bound	
Approach Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement Priority	10	L 1	T 2	3	4U	L 4	T 5	6	U	L 7	Т 8	9	U	L 10	T 11	12
Movement Priority Number of Lanes		L 1 1	T 2 1			L	T	6 0	U	L	T		U	L 10 1	T	12
Movement Priority Number of Lanes Configuration	10	L 1 1 L	T 2 1 T	3	4U	L 4	T 5 1	6 0 TR	U	L 7	T 8	9	U	L 10 1	T 11	12 1 R
Movement Priority Number of Lanes Configuration Volume (veh/h)	10	L 1 1 L 21	T 2 1	3	4U	L 4	T 5	6 0		L 7	T 8	9		L 10 1 L 136	T 11	1) 1 R 1:
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%)	10	L 1 1 L	T 2 1 T	3	4U	L 4	T 5 1	6 0 TR		L 7	T 8	9		L 10 1	T 11	1) 1 F
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked	10	L 1 1 L 21	T 2 1 T	3	4U	L 4	T 5 1	6 0 TR		L 7	T 8	9		L 10 1 136 1	T 11 0	1) 1 F
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%)	10	L 1 1 L 21	T 2 1 T	3	4U	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1 1 (T 11 0	1.
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized	10	L 1 1 L 21	T 2 1 T	3 0	4U	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1 1 (T 11 0	1) 1 F
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage	1U 0 	L 1 L 21 1	T 2 1 T	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	T 8	9		L 10 1 136 1 1 (T 11 0	1) 1 F
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up Heave	1U 0 	L 1 1 21 1	T 2 1 7 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	T 8	9		L 10 1 136 1 0 N	T 11 0	1. 1 F 1. 1
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up H Base Critical Headway (sec)	1U 0 	L 1 21 1 ys	T 2 1 7 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 L 136 1 N 7.1	T 11 0	1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec)	1U 0 	L 1 1 21 1	T 2 1 7 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1 0 N	T 11 0	6.a
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec)	1U 0 	L 1 21 1 ys 4.1	T 2 1 7 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	1) 1 R 1:
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec)	 1U 0 2 2 4 /ul>	L 1 21 1	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6. 6. 3.
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec)	 1U 0 2 2 4 /ul>	L 1 21 1	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6. 6. 3.
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	 1U 0 2 2 4 /ul>	L 1 21 1 ys 4.1 4.11 2.2 2.21 I of So	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	T 8	9		L 10 1 136 1	T 11 0	6. 6. 3. 3. 11
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	 1U 0 2 2 4 /ul>	L 1 21 1 ys 4.1 4.11 2.2 2.21 I of So 23	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6. 6. 3. 3.3
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec)	 1U 0 2 2 4 /ul>	L 1 21 1	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6. 6. 3. 3.3 110 100 100 100
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Keadway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Headway (sec) Follow-Up Keadway	 1U 0 2 2 4 /ul>	L 1 21 1 4.1 4.11 2.2 2.21 I of Su 23 1052 0.02	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6. 6. 3. 3.
Movement Priority Number of Lanes Configuration Volume (veh/h) Percent Heavy Vehicles (%) Proportion Time Blocked Percent Grade (%) Right Turn Channelized Median Type Storage Critical and Follow-up He Base Critical Headway (sec) Critical Headway (sec) Base Follow-Up Headway (sec) Follow-Up H	 1U 0 2 2 4 /ul>	L 1 21 1 21 1 4.1 4.11 2.2 2.21 I of S 23 1052 0.02 0.1	T 2 1 266	3 0	4U 0	L 4	T 5 1	6 0 TR		L 7	Т 8	9		L 10 1 136 1	T 11 0	6 6 3.3.3 110 61 0.00