## **REPORT**

11404 Taylorsville Road Apartments Louisville, KY

**Traffic Impact Study** 

Louisville Metro Planning

May 9, 2016

Revised July 11, 2016

Revised October 18, 2016



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## Introduction

The proposed apartment development in Louisville, KY is located on Taylorsville Road west of Bolling Brook Drive. The revised plan shows an apartment community will have 347 units.

Figure 1 displays a map of the site. Access to the tract will be from an entrance on Taylorsville Road and a secondary access from the adjacent Sojourn Community Church campus. The purpose of this study is to examine the traffic impacts of the proposed development upon the adjacent highway system. For this study the impact area was defined to be the intersection of Taylorsville Road at the apartment community and at Blankenbaker Parkway.

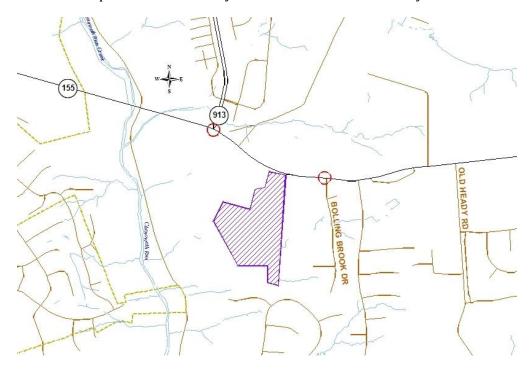


Figure 1
Site Location

### **Existing Conditions**

Taylorsville Road is maintained by the Kentucky Transportation Cabinet with an estimated 2015 ADT of 18,500 vehicles per day east of Bolling Brook Drive, as provided by a Metro Public Works count. The road is a two lane road with eleven-foot lanes with four foot shoulders. The posted speed limit is 55 mph. There are no sidewalks.

A.m. and p.m. peak hour traffic counts were obtained at the intersection on April 26, 2016 (see Appendix A). The a.m. peak hour occurred between 7:15 and 8:15 and the p.m. peak hour occurred between 4:45 and 5:45 p.m. **Figure 2** illustrates the existing peak hour traffic volumes.



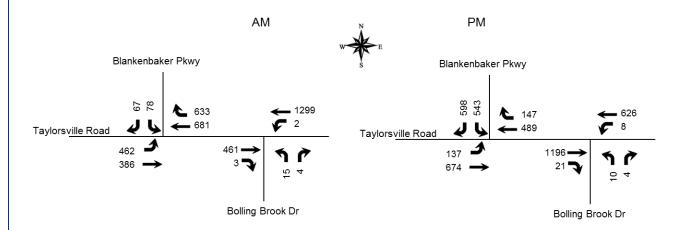


Figure 2 2016 Peak Hour Counts

### **Future Conditions**

The projected completion year for this development is 2020, so the analysis year for this study is 2020. To predict traffic conditions in 2020, two percent annual growth in traffic was added. This growth is based upon a review of the count data along Taylorsville Road. **Figure 3** displays the 2020 No Build volumes.

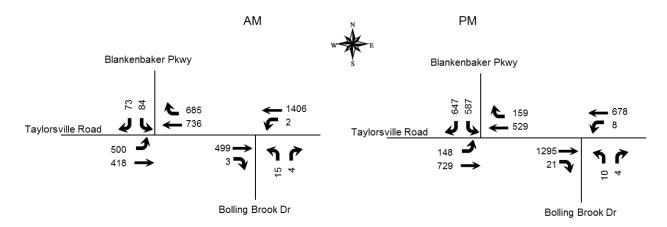


Figure 3 2020 No Build Peak Hour Volumes

### **Trip Generation**

The Institute of Transportation Engineers <u>Trip Generation Manual</u>, 9th Edition contains trip generation rates for a wide range of developments. The land uses of "Apartments (220) best describes this development. The trip generation results are listed in **Table 1**. The results of the trip generation analysis are that this development will generate 174 a.m. peak hour trips and 209 p.m. peak hour trips. The trips were assigned to the highway network with 70 percent to/from the west and 30 percent to/from the east. This is based upon the existing traffic pattern on Taylorsville Road. The trips were divided between the two entrances with 60 percent using the



main entrance. **Figure 4** shows the trips generated by this development and distributed throughout the road network for the year 2020during the peak hours. **Figure 5** displays the individual turning movements for the year 2020 for the peak hours when the development is completed.

Table 1 - Trip Generation

	AM	Peak Ho	our	PM	Peak Ho	ur
	Total	Enter	Exit	Total	Enter	Exit
Apartments (424 units)	174	35	139	209	136	73

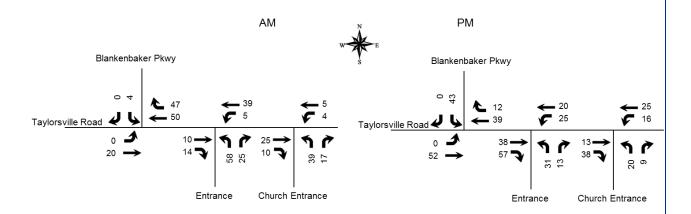


Figure 4
Trip Distribution for Site

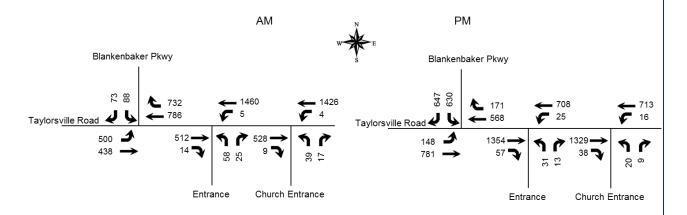


Figure 5 2020 Build Peak Hour Volumes

### **Analysis**

The qualitative measure of operation for a roadway facility or intersection is evaluated by assigning a "Level of Service" or LOS. Level of Service is a ranking scale from A through F with each level representing a range. LOS results depend upon the type of facility that is analyzed. In



this case, the LOS is based upon the average vehicle delay each movement experiences at an intersection.

To evaluate the impact of the proposed development, the vehicle delays at the intersection were determined using procedures detailed in the <u>Highway Capacity Manual</u>, 2010 edition. Future delay and Level of Service were determined for the intersection using HCS 2010 TWSC and Streets software (version 6.80). **Table 2** shows the results of the analysis for the three scenarios analyzed. The full printouts are included in Appendix B.

**Table 2 - Level of Service Results** 

	Al	M Peak Hour		PI	∕l Peak Hour	
	2016 Existing	2020 No Build	2020 Build	2016 Existing	2020 No Build	2020 Build
Taylorsville Road at Blankenbaker	В	С	С	С	D	D
Parkway	17.6	26.2	31.4	31.5	44.0	49.7
Taylorsville Road Eastbound	В	С	D	С	С	D
	17.6	30.4	41.1	23.9	24.4	36.0
Taylorsville Road Westbound	В	С	С	С	С	С
	16.0	22.1	24.2	25.0	25.1	28.7
Blankenbaker Parkway Southbound	С	D	D	D	E	Е
	32.1	39.3	42.8	40.5	68.6	71.8
Taylorsville Road at Entrance						
Taylorsville Road Westbound (left turn)			Α			В
			8.7			13.5
Entrance Northbound			Е			D
			42.1			34.7
Taylorsville Road at Church Entrance						
Taylorsville Road Westbound (left turn)			Α			Α
			8.7			8.7
Entrance Northbound			Е			D
			35.5			34.0

Note: Level of Service, delay in seconds

The 2020 PM Build conditions are achieved with an increase in the southbound (Blankenbaker Parkway) phase from 40 to 55 seconds.

Using the Kentucky Transportation Cabinet <u>Auxiliary Turn Lane</u> Policy dated 7/20/2009 and the volumes in **Figure 5**, the volumes do meet the warrants for an eastbound right turn lane and a westbound left turn lane on Taylorsville Road.

### **Conclusions**

Based upon the volume of traffic generated by the development and the amount of traffic forecasted for the year 2020, there will be an impact to the existing highway network. At the main entrance to the apartment community an eastbound right turn lane and a westbound left turn lane will be constructed. The left turn lane will be extended to create a three lane section from Blankenbaker Parkway to Boiling Brook Drive. The exit will have a dedicated left and right turn lane.



# Appendix A<br/>Traffic Counts

04.26.16

Interval	Bolling	Brook	Drive	Taylo	rsville F	Road	Taylo	rsville l	Road
Start Time	Fro	om Sout	h	F	rom Eas	it	Fr	om Wes	st
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
7:00	4		5	1	206			57	0
7:15	4		1	0	367			101	2
7:30	6		3	1	339			131	1
7:45	5		0	0	328			114	0
8:00	0		0	1	265			115	0
8:15	3		0	1	215			103	1
8:30	4		3	0	264			98	1
8:45	0		2	0	273			127	0
<b>AM TOTALS</b>	26		14	4	2257			846	5
16:00	1		2	1	122			172	2
16:15	0		3	1	123			227	4
16:30	3		0	5	128			266	2
16:45	3		1	2	134			313	4
17:00	0		3	0	154			310	2
17:15	2		0	3	149			275	6
17:30	5		0	3	189			298	9
17:45	2		0	0	125			304	4
PM TOTALS	16		9	15	1124			2165	33

	1									
Interval	Bolling	Brook	Drive	Taylo	rsville l	Road	Taylorsville Road			
Start Time	Fro	om Sout	th	F	rom Eas	st	Fr	om Wes	 st	
Start mine	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:15	4		1	0	367			101	2	
7:30	6		3	1	339			131	1	
7:45	5		0	0	328	·	·	114	0	
8:00	0		0	1	265			115	0	
TOTAL	15	0	4	2	1299	0	0	461	3	
16:45	3		1	2	134			313	4	
17:00	0		3	0	154			310	2	
17:15	2	·	0	3	149	·	·	275	6	
17:30	5		0	3	189	·	·	298	9	
TOTAL	10	0	4	8	626	0	0	1196	21	



File Name: Taylorsville Rd & Blankenbaker Pkwy

Start Date: 2/25/2014

		Blanke	nbaker	•	Ta	ylorsv	ille Roa	ad	Taylorsville Road				
		From	North			From	East		From West				
Start Time	Rght	Thru	Left	Other	Rght	Thru	Left	Other	Rght	Thru	Left	Other	
7:00 AM	12	0	10	0	115	135	0	0	0	65	72	0	
7:15 AM	16	0	17	0	104	144	0	0	0	85	91	0	
7:30 AM	17	0	17	0	152	158	0	0	0	115	98	0	
7:45 AM	13	0	15	0	151	142	0	0	0	83	136	0	
8:00 AM	15	0	22	0	130	133	0	0	0	66	93	0	
8:15 AM	15	0	17	0	102	134	0	0	0	61	83	0	
8:30 AM	14	0	15	0	70	105	0	0	0	63	55	0	
8:45 AM	29	0	20	0	60	127	0	0	0	73	49	0	
4:00 PM	63	0	70	0	25	118	0	0	0	131	18	0	
4:15 PM	60	0	74	0	18	129	0	0	0	132	27	0	
4:30 PM	93	0	95	1	42	122	0	0	0	146	24	0	
4:45 PM	89	0	103	0	24	94	0	0	0	143	24	0	
5:00 PM	115	0	112	0	33	110	0	0	0	136	25	0	
5:15 PM	150	0	95	0	40	107	0	0	0	113	34	0	
5:30 PM	113	0	114	0	35	128	0	0	0	134	24	0	
5:45 PM	71	0	93	1	31	111	0	0	0	132	29	0	

		Blanke	nbakeı	•	Ta	ylorsv	ille Roa	ad	Taylorsville Road				
		From	North			From	East			From West			
Start Time	Rght	Thru	Left	Other	Rght	Thru	Left	Other	Rght	Thru	Left	Other	
7:15 AM	16	0	17	0	104	144	0	0	0	85	91	0	
7:30 AM	17	0	17	0	152	158	0	0	0	115	98	0	
7:45 AM	13	0	15	0	151	142	0	0	0	83	136	0	
8:00 AM	15	0	22	0	130	133	0	0	0	66	93	0	
TOTAL	61	0	71	0	537	577	0	0	0	349	418	0	
4:45 PM	89	0	103	0	24	94	0	0	0	143	24	0	
5:00 PM	115	0	112	0	33	110	0	0	0	136	25	0	
5:15 PM	150	0	95	0	40	107	0	0	0	113	34	0	
5:30 PM	113	0	114	0	35	128	0	0	0	134	24	0	
TOTAL	467	0	424	0	132	439	0	0	0	526	107	0	



# Appendix B HCS Reports

		HCS 2	บาบ 5	ignali	zea II	iterse	ction	Kes	uits S	umma	агу				
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General Inform	nation	ODM Cit-						-	ntersect		_	on	- 6	JĻ	
Agency		CDM Smith DBZ		Anali	sis Date	Mario	2046	-	Ouration, Area Type		0.25 Other				
Analyst		DBZ		-		-	,	$\overline{}$		=	-			i.	
Jurisdiction		Tardamailla Daad		Time F		AM Pe	еак	-	PHF	7id	0.90	20			•
Urban Street		Taylorsville Road		_	sis Year	-			Analysis I	Period	1> 7:	JU	- 5		
Intersection	41	Blankenbaker Pkwy	/	File N	ame	Bianke	enbaker	AM 16	o.xus					বাক্স	
Project Descrip	tion	Apartments											-	4,1,4,1	(10)
Demand Infor	mation				EB			WB			NB		$\overline{}$	SB	
Approach Move				L	T	T R	L	T	R	L	T	R	L	T	R
Demand ( v ), v				462	386	+ 1	+-	681		<u> </u>	+	+ 1	78	<u> </u>	67
Demand (V),	CHAT			102	000		-	001	000				10		01
Signal Informa	ation				12	8	JJ.	rs		$\top$					1
Cycle, s	83.4	Reference Phase	2	1	$\Rightarrow$	3 ←	7 3						4		$\triangle$
Offset, s	0	Reference Point	End	Grace	10.7	42.2	6.2	0.0	0.0	0.0		1	2	3	
Uncoordinated	Yes	Simult. Gap E/W	On	Green Yellow		43.3 5.0	6.2 3.6	0.0	0.0	0.0	_	7	4		
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	1.5	0.0	0.0	0.0		5	6	7	
Timer Results				EBI	_	EBT	WBI	L	WBT	NBL	.	NBT	SBL		SBT
Assigned Phas	e			5		2			6					$\neg$	4
Case Number				1.0		4.0			7.3						9.0
Phase Duration	1. S			22.2	-	72.0		$\neg$	49.8					$\neg$	11.3
Change Period		c ). S		5.5	-	6.5			6.5						5.1
Max Allow Hea		••		4.1	-	4.4		$\neg$	4.4					$\neg$	3.2
Queue Clearan				15.1	$\overline{}$	7.4			29.9						6.0
Green Extension				1.5	-	14.1		$\overline{}$	13.2					-	0.3
Phase Call Pro		(9-71-		1.00	-	1.00			1.00				1	$\rightarrow$	0.98
Max Out Proba				0.12	-	0.01		_	0.11		_			$\overline{}$	0.00
Movement Gro	oup Res	ults			EB			WB			NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	T	R	L	Т	R
Assigned Move	ement			5	2			6	16				7		14
Adjusted Flow	Rate ( v	), veh/h		513	429			757	703				87		74
Adjusted Satur	ation Flo	ow Rate ( s ), veh/h/l	n	1757	1845			1845	1563				1757		156
Queue Service	Time (	g s ), S		13.1	5.4			27.9	27.7				4.0		3.0
Cycle Queue C	learanc	e Time ( <i>g ₀</i> ), s		13.1	5.4			27.9	27.7				4.0		3.0
Green Ratio ( g	/C)			0.75	0.79			0.52	0.59				0.07		0.28
Capacity ( c ),	veh/h			569	1451			959	930				131		431
Volume-to-Cap	acity Ra	itio (X)		0.902	0.296			0.789	0.756				0.660		0.17
Available Capa	city ( c a	), veh/h		740	2204			1653	1517				839		106
Back of Queue	(Q), ve	eh/ln ( 95 th percenti	le)	11.1	2.0			16.1	13.2				3.2		1.9
		RQ) (95 th percent		0.54	0.05			0.64	0.56				0.22		0.13
Uniform Delay	( d 1 ), s	/veh		18.3	2.5			16.3	12.5				37.7		23.1
Incremental De	lay ( d 2	), s/veh		11.9	0.1			1.6	1.4				2.1		0.1
	elay ( d	з), s/veh		0.0	0.0			0.0	0.0				0.0		0.0
Initial Queue D				30.2	2.6			18.0	13.9				39.8		23.1
				С	Α			В	В				D		С
Control Delay (				17.6		В	16.0	)	В	0.0			32.1		С
Control Delay ( Level of Servic	y, s/veh					17	7.6						В		
Control Delay ( Level of Servic Approach Dela															
Control Delay ( Level of Servic Approach Dela Intersection De	lay, s/ve				FR			\MR			NR			SB	
Initial Queue D Control Delay ( Level of Servic Approach Dela Intersection De  Multimodal Re Pedestrian LOS	lay, s/ve	h / LOS		0.6	EB	A	2.2	WB	В	2.3	NB	В	2.3	SB	В

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Signal Informa	tion				2	8	IJŧ	E .							
Cycle, s	104.9	Reference Phase	2		13	3	723	٦					<b>a</b>		$\triangle$
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Uncoordinated	Yes	Simult. Gap E/W	On	Green Yellow		55.5 5.0	7.7 3.6	0.0		0.0	_↓	,	4	Ĺ	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	1.5	0.0		0.0		5	6	<b>Y</b> 7	
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Timer Results				EBI	-	EBT	WB	L	WBT	NBL		NBT	SBL	-	SBT
Assigned Phas	е			5		2			6						4
Case Number				1.0		4.0			7.3						9.0
Phase Duration	i, s			30.0	)	92.1			62.0						12.8
Change Period	, ( Y+R	c), S		5.5		6.5			6.5						5.1
Max Allow Hea	dway ( /	MAH ), s		4.1		4.4			4.4					$\neg$	3.2
Queue Clearan	ce Time	e (g s), s		24.3	3	8.5			41.5						7.5
Green Extension	n Time	(ge), s		0.2		16.9			14.0					$\neg$	0.3
Phase Call Pro	bability			1.00	)	1.00			1.00					$\neg$	0.99
Max Out Proba	bility			1.00	)	0.02			0.28						0.00
Massaura Car	D.				- ED			WD			ND			CD	
Movement Gro		suits		L	EB			WB		, ,	NB	D		SB	T D
Approach Move				_	T 2	R	L	T 6	R 16	L	T	R	L 7	Т	R
Assigned Move		L /L		5				-							14
Adjusted Flow I		··	1	556	464			818	761				93		81
		ow Rate ( s ), veh/h/l	III	1757	1845 6.5			1845					1757 5.5		156
Queue Service Cycle Queue C		5 71		22.3	6.5			39.3 39.3	-				5.5		4.0
Green Ratio ( o		e mile (ge), s		_	0.82			0.53	$\overline{}$				0.07		_
Capacity ( c ), v				0.78 581	1505			977	943				130		0.3 48
Volume-to-Cap		atio ( Y )		0.956	0.309			0.837	-				0.719		0.16
Available Capa				589	1757			1318	-				669		961
		eh/In (95 th percent	ile)	24.5	2.6			23.3	_				4.4		2.6
		RQ) (95 th percent		1.19				0.92	-				0.30		0.1
Uniform Delay			uic)	27.4	0.07 2.4			20.9					47.6		26.
Incremental De	` ''			26.3	0.1			3.8	3.2				2.8		0.1
Initial Queue De		• •		0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (				53.7	2.5			24.7	-				50.3		26.
Level of Service				D D	Z.5			24.1 C	19.3 B				D D		26. C
Approach Delay				30.4		С	22.1		С	0.0			39.3		D
Intersection De				30.4			5.2		0	0.0			C 39.3		
mersection De	iay, S/VE	an / LOS				20	1.2								
	sults				EB			WB			NB			SB	
Multimodal Re					_			_				_	_	_	
Multimodal Re Pedestrian LOS		/LOS		0.6		A	2.3		В	2.3		В	2.3		В

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Demand Inform	nation				EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Demand ( v ), v	eh/h			500	438			786	6 732				88		73
Cianal Informa	tion				10	1 5		7		7					
Signal Informa Cycle, s	112.4	Reference Phase	2	1	Ė	3	70	~					<b>a</b>		人
Offset, s	0	Reference Point	End	<u> </u>		1	<b>_</b>	٠				1	2	3	4
Uncoordinated	Yes	Simult. Gap E/W	On	Green	-	61.8	8.4	0.0		0.0	_	,	<b>~</b>	ĮΣ	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow Red	2.0	5.0 1.5	3.6 1.5	0.0		0.0		5	6	```	8
1 Orce Mode	rixed	Gilluit. Gap 14/3	OII	Ticu	12.0	1.0	1.0	10.0	0.0	0.0			-		
Timer Results				EBI	-	EBT	WB	BL BL	WBT	NBL	-	NBT	SBL	-	SBT
Assigned Phase	е			5		2			6						4
Case Number				1.0		4.0			7.3						9.0
Phase Duration	, S			30.5	5	98.8			68.3						13.5
Change Period,	( Y+R	c), S		5.5		6.5			6.5						5.1
Max Allow Head	dway ( /	MAH ), s		4.1		4.4			4.4						3.2
Queue Clearan	ce Time	e (g ₅), s		27.0	)	9.2			47.7						8.1
Green Extensio	n Time	(ge), s		0.0		19.8			14.2						0.3
Phase Call Prob	bability			1.00	)	1.00			1.00						1.00
Max Out Probal	bility			1.00	)	0.04			0.43						0.00
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	_			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move				5	2			6	16				7		14
Adjusted Flow F		) veh/h		556	487			873	813				98		81
		ow Rate ( s ), veh/h/l	ln	1757	1845			1845	-				1757		1563
Queue Service		. , ,,		25.0	7.2			45.4	_				6.1		4.3
Cycle Queue C				25.0	7.2			45.4					6.1		4.3
Green Ratio ( g				0.79	0.82			0.55	_				0.08		0.30
Capacity ( c ), v				546	1516			1015	_				132		465
Volume-to-Capa		atio (X)		1.017	0.321			0.860	_				0.741		0.174
		/In ( 95 th percentile)	)	740.1	77.3			691.2					128.1		72.8
		eh/ln (95 th percent		28.9	3.0			27.0					5.0		2.9
		RQ) (95 th percent	· ·	1.41	0.08			1.06					0.34		0.20
Uniform Delay (		,, ,	,	32.1	2.4			21.6					50.9		29.2
Incremental Del				42.9	0.1			5.6	4.7				3.1		0.1
Initial Queue De				0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (				74.9	2.6			27.2	_				53.9		29.3
Level of Service				F	A			C	C				D		C
Approach Delay				41.1		D	24.3		С	0.0			42.8		D
Intersection Del							1.4						С		
Multimodal Re				_	EB			WB			NB			SB	
Pedestrian LOS				0.6	_	A	2.3	-	В	2.3	$\perp$	В	2.3	_	В
Bicycle LOS Sc	ore / LO	OS		2.2		В	3.3	3	С						F

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				.ga	Lou .			i ites	ults S	u	<u>y</u>				
General Inforn	ation								Intersect	ion Info	ormatio	nn .	Į.	474	) is to
Agency	lation	CDM Smith						_	Duration,		0.25	<b>711</b>	<b>│</b>	٦Ļ	
Analyst		DBZ		Analys	is Date	May 9	2016	$\overline{}$	Area Type		Other				
Jurisdiction		002		Time F		PM Pe	,	$\overline{}$	PHF		0.90		- ; -	.√ <b>1</b> F	•
Urban Street		Taylorsville Road		-	is Year	-	an	$\overline{}$	Analysis I	Poriod	1> 4:4	15	- X		•
Intersection		Blankenbaker Pkw	,	File Na		-	enbaker			renou	1/ 4.4	40			
Project Descrip	tion	Apartments		File IN	anne	Dialike	enbakei	LIM IC	J.XUS					বাকণ	280
i Toject Descrip	lion	Apartments													
Demand Inforr	nation				EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	T	R	L	Т	R	L	Т	R
Demand ( v ), v	eh/h			137	674			489	147				543		59
Signal Informa		D ( D)			2	_3 ≥	= 5 6	~					,		人
Cycle, s	102.0	Reference Phase	2		P	$\rightarrow$						1	4 2	3	
Offset, s	0	Reference Point	End	Green		37.3	40.0	0.0	0.0	0.0				I L	
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		5.0	3.6	0.0	0.0	0.0	_=	<b>/</b>	`	/_	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	1.5	0.0	0.0	0.0		5	6	7	
Timer Results				EBI		EBT	WB		WBT	NBL		NBT	SBL		SBT
Assigned Phas				5		2	VVD	-	6	NDL		IADI	SBL		4
Case Number				1.0		4.0		_	7.3				-		9.0
Phase Duration	· s			13.0	-	56.9		_	43.8		_			_	45.1
Change Period		a) s		5.5	_	6.5		_	6.5						5.1
Max Allow Hea				4.1	_	4.3		_	4.3		_			$\rightarrow$	3.3
Queue Clearan				7.2		37.3		_	29.0						42.0
Green Extension				0.4	_	8.4		_	8.3		_			_	0.0
Phase Call Pro		(ye), 3		0.99	-	1.00		_	1.00		_		-	_	1.00
Max Out Proba				0.00	_	0.00		_	0.02		_		_	_	1.00
max out 105a	y			0.00		0.00			5.52						1.00
Movement Gro	up Res	sults			EB			WB			NB			SB	
Approach Move	ement			L	T	R	L	Т	R	L	T	R	L	Т	R
Assigned Move	ment			5	2			6	16				7		14
Adjusted Flow I	Rate ( v	), veh/h		152	749			543	163				603		664
Adjusted Satura	ation Flo	ow Rate ( $s$ ), veh/h/l	n	1757	1845			1845	1563				1757		156
Queue Service				5.2	35.3			27.0	2.9				32.4		40.0
Cycle Queue C	learanc	e Time ( <i>g 。</i> ), s		5.2	35.3			27.0	2.9				32.4		40.
Green Ratio ( g				0.46	0.49			0.37	0.76				0.39		0.4
Capacity ( c ), v				287	911			675	1185				689		729
Volume-to-Cap				0.530	0.822			0.805	-				0.875		0.91
Available Capa		,,		588	1809			1357	_				689		729
		eh/ln ( 95 th percent		3.9	21.0			17.6	-				21.6		23.
		RQ) (95 th percent	tile)	0.19	0.52			0.69	0.05				1.47		1.6
Uniform Delay				21.3	22.0			29.1	3.3				28.7		25.
Incremental De				1.5	2.1			2.5	0.1				11.7		15.4
Initial Queue De		•••		0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (				22.8	24.1			31.6	3.4				40.4		40.
Level of Service				С	C			C	Α				D		D
Approach Delay				23.9	)	С	25.0	)	С	0.0			40.5		D
Intersection De	lay, s/ve	eh / LOS				31	.5						С		
								1475			NIC			65	
Marielan III					EB			WB			NB			SB	
Multimodal Re Pedestrian LOS		/1.00		0.7	_	Α	2.3	$\overline{}$	В	2.3	$\overline{}$	В	2.3	$\neg \neg$	В

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		HCS 2	010 S	ignali	zed l	nters	ection	Res	ults S	umma	ary				
General Inforn	nation							I	ntersect	ion Infe	ormati	on	_	114	
Agency		CDM Smith						$\overline{}$	Duration,		0.25			• •	
Analyst		DBZ		Analys	sis Date	e May 9	, 2016	/	Area Typ	е	Othe	r	A.		
Jurisdiction				Time F	Period	PM P	eak	F	PHF		0.90		<u></u>	w∳e	≔
Urban Street		Taylorsville Road		Analys	sis Yea	r 2020	No Build	i A	Analysis	Period	1> 4:	45	7		
Intersection		Blankenbaker Pkwy	У	File Na	ame	Blank	enbaker	PM 20	NB.xus						
Project Descrip	tion	Apartments											ħ	ৰ া পং	1111
Demand Infor	mation				EB		1	WB		ĭ	NB		1	SB	
Approach Move				L	T	□ R	L	T	R	L	T	R	L	T	R
Demand ( v ), v				148	729	+ 1	-	529		-	+ '	1	587	<u> </u>	647
Demand (V), V	CII/II			140	123		-	520	100				307		047
Signal Informa	ation				2	7 5	777	~	$\top$	$\top$					L.
Cycle, s	107.2	Reference Phase	2		$\vDash$	3 *							4		ZX
Offset, s	0	Reference Point	End	Green	2 1	42.0	40.0	0.0	0.0	0.0		1	2	1 1	
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow		5.0	3.6	0.0	0.0	0.0	_	7	4	(-	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	1.5	0.0	0.0	0.0		5	6	7	
Timer Results				EBI	-	EBT	WB	L	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phas	е			5		2			6						4
Case Number				1.0	_	4.0			7.3				_	_	9.0
Phase Duration	1, S			13.6	3	62.1			48.5						45.1
Change Period	, ( Y+R	c), S		5.5		6.5			6.5						5.1
Max Allow Hea	dway ( /	<i>МАН</i> ), s		4.1		4.3			4.3						3.3
Queue Clearan	ce Time	e (gs), s		7.7		42.4			32.5						42.0
Green Extension	n Time	(ge), s		0.5		9.7			9.5						0.0
Phase Call Pro	bability			0.99	9	1.00			1.00						1.00
Max Out Proba	bility			0.00		0.01			0.04						1.00
Movement Gro	oun Res	ults			EB			WB			NB			SB	
Approach Move				L	T	R	L	T	R	L	T	R	L	T	T R
Assigned Move				5	2	<u> </u>	_	6	16				7	_	14
Adjusted Flow		) veh/h		164	810	_		588	177				652		719
		ow Rate ( s ), veh/h/l	ln	1757	1845			1845	-				1757		1563
Queue Service		. , ,,		5.7	40.4			30.5	3.2				39.7		40.0
Cycle Queue C				5.7	40.4			30.5	3.2				39.7		40.0
Green Ratio (		(g v ), o		0.49	0.52			0.39	0.76				0.37		0.45
Capacity ( c ), v				288	956			722	1196				656		702
Volume-to-Cap		atio (X)		0.572	0.847			0.814	-				0.995		1.025
Available Capa		_ ` '		565	1721			1291	-				656		702
		eh/ln (95 th percent	ile)	4.2	23.6			19.4	-				30.0		33.5
		RQ) (95 th percent	· ·	0.21	0.59			0.77	0.06				2.05		2.29
Uniform Delay			<u>-</u>	21.8	22.1			29.1	3.3				33.5		29.5
Incremental De				1.8	2.4			2.5	0.1				33.7		40.4
Initial Queue D		• • • • • • • • • • • • • • • • • • • •		0.0	0.0			0.0	0.0				0.0		0.0
Control Delay (				23.6	24.5			31.6	3.4				67.2		69.9
Level of Service				C	C			C	A				E		F
Approach Dela				24.4		С	25.1		C	0.0			68.6	3	E
Intersection De							4.0			3.3			D		
	,, 5. 70														
Multimodal Re	sults				EB			WB			NB			SB	
				0.7	_		0.0	_			_	_		_	D
Pedestrian LOS	S Score	/LOS		0.7	- 1	Α	2.3	- 1	В	2.3		В	2.3		В

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				ignali											
General Inform	mation							1	ntersect	ion Info	rmatic	n	D.	4741	ьţ
Agency		CDM Smith						1	Ouration,	h	0.25		1	11	
Analyst		DBZ		Analys	is Date	Oct 18	, 2016	1	Area Type	;	Other		Δ.		
Jurisdiction				Time F	Period	PM Pe	ak	F	PHF		0.90		<b>≜</b> ≓	₩ĴF	÷
Urban Street		Taylorsville Road		Analys	sis Year	2020 E modifi	Build timed	ning A	Analysis f	Period	1> 4:4	<b>1</b> 5	7		_
Intersection		Blankenbaker Pkwy	,	File Na	ame	Blanke	enbaker	PM 20	B imp.x	us			N.	বাৰণ	14 (1
Project Descrip	otion	Apartments													
					- F.D.			14/5			A I I D			0.0	
Demand Infor					EB	T 5		WB			NB	T 5	+ .	SB	T 5
Approach Mov				L	T 704	R	L	T	R	L	T	R	L	T	R
Demand (v),	veh/h			148	781			568	171				630		647
Signal Inform	ation				2	8	JJ.	rs		$\overline{}$					1
Cycle, s	138.4	Reference Phase	2	1	$\Rightarrow$	3 ←	1 × 2						4		
Offset, s	0	Reference Point	End	Granz	0.2	60 E	EE O	0.0	0.0	0.0		1	2	3	
Uncoordinated	Yes	Simult. Gap E/W	On	Green Yellow		60.5 5.0	55.0 3.6	0.0	0.0	0.0		,	4	Ĺ	
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	1.5	1.5	0.0	0.0	0.0		5	6	7	
Timer Results				EBI	-	EBT	WBI	-	WBT	NBL		NBT	SBL		SBT
Assigned Phas	se			5		2			6						4
Case Number				1.0		4.0			7.3					$\perp$	9.0
Phase Duration	, -			11.3	3 .	78.3		$\perp$	67.0					$\perp$	60.1
Change Period	i, ( Y+R	; ), s		2.0		6.5		_	6.5					_	5.1
Max Allow Hea	'	**		4.1	-	4.3		$\perp$	4.3					$\perp$	3.2
Queue Clearar		10 //		8.9	_	31.2		_	42.5					_	57.0
Green Extensi		(ge), s		0.4	-	10.6		$\perp$	10.2					$\rightarrow$	0.0
Phase Call Pro				1.00	-	1.00		_	1.00					_	1.00
Max Out Proba	ability			0.00	) (	0.09		_	0.14					_	1.00
Movement Gr	oup Res	ults			EB			WB			NB			SB	
Approach Mov	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ement			5	2			6	16				7		14
Adjusted Flow	Rate (v	), veh/h		164	868			631	190				700		719
Adjusted Satur	ation Flo	w Rate ( s ), veh/h/l	n	1757	1845			1845	1563				1757		156
Aujusteu Satul	Time ( g	2 / 2		6.9	59.2			40.5	3.2				55.0		55.0
		g s J, 3		0.0	00.2			40.5					55.0		55.0
Queue Service	Clearance	e Time ( <i>g</i> ₀ ), s		6.9	59.2			40.5	3.2				55.0		
Queue Service				-					3.2 0.83				0.40		0.46
Queue Service Cycle Queue 0	g/C)			6.9	59.2			40.5	-				-		_
Queue Service Cycle Queue C Green Ratio ( c Capacity ( c ),	g/C) veh/h	e Time ( <i>g</i> ₀ ), s		6.9 0.52 283 0.580	59.2 0.52 957 0.907			40.5 0.44 806 0.783	0.83 1304 0.146				0.40 698 1.003		726 0.99
Queue Service Cycle Queue C Green Ratio ( g Capacity ( c ), Volume-to-Cap Back of Queue	g/C) veh/h pacity Ra e(Q), ft/	tio (X)		6.9 0.52 283	59.2 0.52 957 0.907			40.5 0.44 806	0.83 1304 0.146				0.40 698		0.46 726 0.99 957.
Queue Service Cycle Queue C Green Ratio ( g Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue	g/C) veh/h pacity Ra e(Q), ft/ e(Q), ve	tio (X)  In (95 th percentile)	le)	6.9 0.52 283 0.580 135.2 5.3	59.2 0.52 957 0.907 915.1 35.7			40.5 0.44 806 0.783 655.8 25.6	0.83 1304 0.146 32.5 1.3				0.40 698 1.003 998.7 39.0		726 0.99 957. 38.3
Queue Service Cycle Queue ( Green Ratio ( ( Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage	g/C) veh/h pacity Ra e (Q), ft/ e (Q), ve	tio $(g \circ)$ , s  tio $(X)$ In (95 th percentile) eh/ln (95 th percenti	le)	6.9 0.52 283 0.580 135.2 5.3 0.26	59.2 0.52 957 0.907 915.1 35.7 0.89			40.5 0.44 806 0.783 655.8 25.6 1.01	0.83 1304 0.146 32.5 1.3 0.06				0.40 698 1.003 998.7 39.0 2.66		726 0.99 957. 38.3 2.62
Queue Service Cycle Queue ( Green Ratio ( ¿ Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay	g/C) veh/h pacity Ra e (Q), ft/ e (Q), ve e Ratio (	tio (X) In (95 th percentile) ch/ln (95 th percentile) RQ) (95 th percentile)	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3	0.83 1304 0.146 32.5 1.3 0.06 2.2				0.40 698 1.003 998.7 39.0 2.66 41.7		726 0.99 957. 38.3 2.62 36.7
Queue Service Cycle Queue ( Green Ratio ( g Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay Incremental De	g/C) veh/h pacity Ra e (Q), ft/ e (Q), ve e Ratio ( (d1), selay (d2	tio (X) In (95 th percentile) ch/ln (95 th percentile) RQ) (95 th percentile) /veh ), s/veh	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1				0.40 698 1.003 998.7 39.0 2.66 41.7 34.7		726 0.99 957. 38.3 2.62 36.7 30.6
Queue Service Cycle Queue ( Green Ratio ( ) Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay Incremental De Initial Queue D	g/C) veh/h pacity Ra e (Q), ft/ e (Q), ve e Ratio ( (d1), se elay (d2)	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  represent the percentile  represent th	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1				0.40 698 1.003 998.7 39.0 2.66 41.7 34.7		726 0.99 957. 38.3 2.62 36.7 30.6
Queue Service Cycle Queue C Green Ratio (  Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay Incremental De Initial Queue D Control Delay	g/C) veh/h veh/h pacity Ra e (Q), ft/ e (Q), ve e Ratio ( (d1), si elay (d2 pelay (d (d), s/ve	tio (X)  In (95 th percentile) ch/ln (95 th percentile) ch/ln (95 th percentile) ch/ln (95 th percentile) sh/ln (95 th percentile)	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2				0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0		726 0.99 957. 38.3 2.62 36.7 30.6 0.0
Queue Service Cycle Queue C Green Ratio (  Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay Incremental De Initial Queue D Control Delay Level of Service	g/C) veh/h veh/h pacity Ra e (Q), ft/e (Q), ve e Ratio ( (d1), s/e pelay (d2) pelay (d3) pelay (d4), s/ve e (LOS)	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  system	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8 C	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5 D			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0 36.7	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2 A				0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0 76.4 F		726 0.99 957. 38.3 2.62 36.3 30.6 67.3
Queue Service Cycle Queue C Green Ratio (  Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Gueue Storage Uniform Delay Incremental De Initial Queue D Control Delay Level of Servic Approach Dela	g/C) veh/h veh/h pacity Ra e (Q), ft/e (Q), ve e Ratio ( (d1), s/e pelay (d2 pelay (d), s/ve e (LOS) ny, s/veh	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  yeh/ln (95 th percentile)  yeh  yeh  yeh  yeh  yeh  yeh  yeh  y	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5 D	D	28.7	40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0 36.7	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2	0.0			0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0 76.4 F		726 0.99 957. 38.3 2.62 36.3 30.6 67.3
Queue Service Cycle Queue C Green Ratio (  Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Queue Storage Uniform Delay Incremental De Initial Queue D Control Delay Level of Service	g/C) veh/h veh/h pacity Ra e (Q), ft/e (Q), ve e Ratio ( (d1), s/e pelay (d2 pelay (d), s/ve e (LOS) ny, s/veh	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  yeh/ln (95 th percentile)  yeh  yeh  yeh  yeh  yeh  yeh  yeh  y	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8 C	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5 D	D 49		40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0 36.7	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2 A	0.0			0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0 76.4 F		726 0.99 957. 38.3 2.62 36.3 30.6 67.3
Queue Service Cycle Queue C Green Ratio ( g Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Gueue Storage Uniform Delay Incremental De Initial Queue D Control Delay Level of Servic Approach Dela Intersection De	g/C) veh/h bacity Ra e (Q), ft/e (Q), ve e Ratio ( (d1), s/e elay (d2) elay (d3) elay (d3) elay (d3) elay (d3) elay (d3) elay (d3)	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  yeh/ln (95 th percentile)  yeh  yeh  yeh  yeh  yeh  yeh  yeh  y	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8 C	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5 D			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0 36.7 D	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2 A	0.0	NP		0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0 76.4 F		726 0.99 957. 38.3 2.62 36.7 30.6 0.0 67.3
Queue Service Cycle Queue C Green Ratio (  Capacity ( c ), Volume-to-Cap Back of Queue Back of Queue Gueue Storage Uniform Delay Incremental De Initial Queue D Control Delay Level of Servic Approach Dela	g/C) veh/h pacity Ra e (Q), ft/e e (Q), ve e Ratio ( (d1), s/e elay (d2 pelay (d), s/ve e (LOS) ny, s/veh elay, s/ve esults	tio (X)  In (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  ch/ln (95 th percentile)  yeh  yeh  yeh  yeh  LOS  ch/LOS	le)	6.9 0.52 283 0.580 135.2 5.3 0.26 25.9 1.9 0.0 27.8 C	59.2 0.52 957 0.907 915.1 35.7 0.89 30.3 7.3 0.0 37.5 D			40.5 0.44 806 0.783 655.8 25.6 1.01 33.3 3.4 0.0 36.7 D	0.83 1304 0.146 32.5 1.3 0.06 2.2 0.1 0.0 2.2 A	0.0	NB	В	0.40 698 1.003 998.7 39.0 2.66 41.7 34.7 0.0 76.4 F	SB	726 0.99 957. 38.3 2.62 36.7 30.6 0.0 67.3

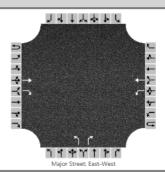
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	HCS 2010 Two-Way Stop	Control Summary R	eport
General Information		Site Information	
Analyst	DBZ	Intersection	Entrance
Agency/Co.	CDM Smith	Jurisdiction	
Date Performed	10/18/16	East/West Street	Taylorsville Road
Analysis Year	2020	North/South Street	Entrance
Time Analyzed	AM Peak Build	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Taylorsville Road Apartments		-

### Lanes



Vehicle Volumes and A	djustme	nts														
Approach		Eastb	ound			Westl	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	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			Т	R		L	Т			L		R				
Volume (veh/h)			512	14		5	1460			58		25				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized		Ν	lo			Ν	lo			N	lo			٨	10	
Median Type								Left	Only							
Median Storage									1							

Micalan Storage							 					
Delay, Queue Length, and	Leve	l of Se	ervice									
Flow Rate (veh/h)					6			64		28		
Capacity					984			133		519		
v/c Ratio					0.01			0.48		0.05		
95% Queue Length					0.0			2.2		0.2		
Control Delay (s/veh)					8.7			55.1		12.3		
Level of Service (LOS)					А			F		В		
Approach Delay (s/veh)					0	.0		42	.1			
Approach LOS												

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				~ \//	av St	ор С	ontro	ol Su	mma	ary R	epor	t				
	HCS	201	0 Tw	O-VV	.,											
General Information							Site 1	Inforn	natio	n						
Analyst	DBZ						Inters	ection			Entra	nce				
Agency/Co.	CDM	Smith					Jurisd	iction								
Date Performed	10/18	/16					East/\	West Stre	eet		Taylo	rsville Ro	ad			
Analysis Year	2020						North	/South 9	Street		Entrar	nce				
Time Analyzed	PM P	eak Build	ı				Peak	Hour Fac	ctor		0.95					
Intersection Orientation	East-\	West					Analy	sis Time	Period (	hrs)	0.25					
Project Description	Taylo	rsville Ro	ad Apar	tments												
Lanes																
				14174 14				, - <del>0</del>	<del>-</del>							
Vehicle Volumes and A	djustme	nts		→ <b>333</b>	Majo	ች ነገር er Street: Ea	<b>I I (</b>	,	-							
Vehicle Volumes and A	djustme		ound	→ <b>333</b>	n 1 Majo	or Street: Ea	st-West		•	North	bound			South	bound	
	.djustme		ound T	→ <b>333</b>	n n n	or Street: Ea		R	U	North L	bound T	R	U	South	bound T	R
Approach		Eastb				westk	oound		-			R 9	U			R 12
Approach Movement	U	Eastb	T	R	U	Westl	oound T	R	-	L	T		U	L	T	
Approach Movement Priority	U 1U	Eastb L 1	T 2	R 3	U 4U	Westl	oound T	R 6	-	L 7	T 8	9	U	L 10	T 11	12
Approach Movement Priority Number of Lanes	U 1U	Eastb L 1	T 2	R 3 1	U 4U	Westle L 4 1	T 5	R 6	-	7 1	T 8	9	U	L 10	T 11	12
Approach  Movement  Priority  Number of Lanes  Configuration	U 1U	Eastb L 1	T 2 1 T	R 3 1 R	U 4U	Westle L L L L L L L L L L L L L L L L L L L	T 5 1 T	R 6	-	1 L	T 8	9 1 R	U	L 10	T 11	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)	U 1U	Eastb L 1	T 2 1 T	R 3 1 R	U 4U	Westly L 4 1 L 25	T 5 1 T	R 6	-	1 L 31	T 8	9 1 R 13	U	L 10	T 11	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles	U 1U	Eastb L 1	T 2 1 T 1354	R 3 1 R	U 4U	Westly L 4 1 L 25	oound T 5 1 T 708	R 6	-	1 L 31	T 8 0	9 1 R 13	U	L 10 0	T 11	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles  Proportion Time Blocked	U 1U	Eastb	T 2 1 T 1354	R 3 1 R	U 4U	Westl L 4 1 L 25	oound T 5 1 T 708	R 6 0	-	1 1 1 31 3	T 8 0	9 1 R 13	U	L 10 0	T 11 0	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles  Proportion Time Blocked  Right Turn Channelized	U 1U	Eastb	T 2 1 T 1354	R 3 1 R	U 4U	Westl L 4 1 L 25	oound T 5 1 T 708	R 6 0	U	1 1 1 31 3	T 8 0	9 1 R 13	U	L 10 0	T 11 0	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles  Proportion Time Blocked  Right Turn Channelized  Median Type	U 1U 0	Eastb L 1 0	T 2 1 T 1354	R 3 1 R	U 4U	Westl L 4 1 L 25	oound T 5 1 T 708	R 6 0	U	1 1 1 31 3	T 8 0	9 1 R 13	U	L 10 0	T 11 0	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles  Proportion Time Blocked  Right Turn Channelized  Median Type  Median Storage	U 1U 0	Eastb L 1 0	T 2 1 T 1354	R 3 1 R	U 4U	Westl L 4 1 L 25	oound T 5 1 T 708	R 6 0	U	1 1 1 31 3	T 8 0	9 1 R 13	U	L 10 0	T 11 0	12
Approach  Movement  Priority  Number of Lanes  Configuration  Volume (veh/h)  Percent Heavy Vehicles  Proportion Time Blocked  Right Turn Channelized  Median Type  Median Storage  Delay, Queue Length, a	U 1U 0	Eastb L 1 0	T 2 1 T 1354	R 3 1 R	U 4U	Westl: L 4 1 L 25 3	oound T 5 1 T 708	R 6 0 0	U	L 7 1 L 31 3	T 8 0	9 1 R 13 3	U	L 10 0	T 11 0	12

95% Queue Length

Control Delay (s/veh)

Level of Service (LOS)

Approach LOS

Approach Delay (s/veh)

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0.2

13.5

В

0.5

0.8

37.2

Е

34.7

D

0.3

28.8

D

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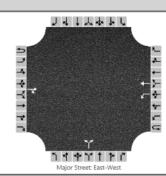


	HCS 2010 Two-Way Stop (	Control Summary R	eport
General Information		Site Information	
Analyst	DBZ	Intersection	Church Entrance
Agency/Co.	CDM Smith	Jurisdiction	
Date Performed	10/18/16	East/West Street	Taylorsville Road
Analysis Year	2020	North/South Street	Entrance
Time Analyzed	AM Peak Build	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	Taylorsville Road Apartments		

### Lanes

Median Type

Median Storage



### Eastbound Westbound Southbound Approach Northbound Movement U Т L Τ R U L R U Τ R U L R 7 12 Priority 1U 1 2 3 4U 4 5 6 9 10 11 Number of Lanes 0 0 0 0 1 0 0 0 0 0 0 1 1 0 Configuration TR L Volume (veh/h) 528 10 1426 39 17 4 Percent Heavy Vehicles 3 3 3 Proportion Time Blocked Right Turn Channelized No No No No

Left Only

Delay, Queue Length, and	l Leve	l of Se	ervice									
Flow Rate (veh/h)					4				62			
Capacity					973				179			
v/c Ratio					0.00				0.35			
95% Queue Length					0.0				1.5			
Control Delay (s/veh)					8.7				35.5			
Level of Service (LOS)					А				E			
Approach Delay (s/veh)					0	.0		35	5.5			
Approach LOS								-				

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**Vehicle Volumes and Adjustments** 

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	HCS	201	0 Tw	o-W	ay St	ор С	ontro	ol Su	mma	ary R	epor	t				
General Information							Site 1	Inforn	natio	n						_
Analyst	DBZ						Inters	ection			Churc	h Entrar	ice			
Agency/Co.	СДМ	Smith					Jurisd	liction								
Date Performed	10/18	/16					East/\	West Str	eet		Taylo	rsville Ro	ad			
Analysis Year	2020						North	/South S	Street		Entra	nce				
Time Analyzed	PM Pe	eak Build	i				Peak	Hour Fac	ctor		0.95					
Intersection Orientation	East-\	Vest					Analy	sis Time	Period (	hrs)	0.25					
Project Description	Taylo	rsville Ro	ad Apar	tments												
Lanes																
Vehicle Volumes and A	djustme	nts				・ Street: Ea	t t r	-								
Approach		Eastb	ound			Westl	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	12
Number of Lanes	0	0	1	0	0	1	1	0		0	0	0		0	0	0
Configuration				TR		L	Т				LR					
Volume (veh/h)			1329	38		16	713			20		9				
Percent Heavy Vehicles						3				3		3				
Proportion Time Blocked																
Right Turn Channelized		N	lo			٨	lo			١	lo			١	lo	
Median Type								Left	Only							
Median Storage								:	1							
Delay, Queue Length, a	nd Leve	l of Se	ervice													
Flow Rate (veh/h)					Π	17			Г	Г	30					

Convright				

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468

0.04

0.1

13.0

В

0.3

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154

0.19

0.7

34.0

D

34.0

D



Capacity v/c Ratio

95% Queue Length

Control Delay (s/veh)

Level of Service (LOS)

Approach Delay (s/veh)

Approach LOS