

Warrants Summary												
<b>Information</b>												
Analyst	Patricia Wetzel					Intersection	SR 32 & Schuster Rd.					
Agency/Co	ODOT					Jurisdiction	ODOT					
Date Performed	6/14/2010					Units	U.S. Customary					
Project ID	SR 220 cul de sac					Time Period Analyzed	6 AM - 6 PM					
East/West Street	SR 32					North/South Street	Schuster Rd.					
File Name	2010-06-14 Right Turn Reduction Schuster Rd.- SR 220 RIRO. Warrants.xhy					Major Street	East-West					
Project Description <i>SR 220 cul de sac</i>												
<b>General</b>						<b>Roadway Network</b>						
Major Street Speed (mph)	60	<input type="checkbox"/>	Population < 10,000				Two Major Routes			<input type="checkbox"/>		
Nearest Signal (ft)	0	<input type="checkbox"/>	Coordinated Signal System				Weekend Count			<input type="checkbox"/>		
Crashes (per year)	0	<input type="checkbox"/>	Adequate Trials of Alternatives				5-yr Growth Factor			0		
<b>Geometry and Traffic</b>	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of lanes, N	1	2	0	1	2	0	0	1	0	0	1	0
Lane usage	L	TR		L	TR			LTR			LTR	
Vehicle Volume Averages (vph)	34	196	9	1	199	22	8	16	1	115	13	22
Peds (ped/h) / Gaps (gaps/h)	--	/	--	--	/	--	--	/	--	--	/	--
Delay (s/veh) / (veh-hr)	--	/	--	--	/	--	--	/	--	--	/	--
<b>Warrant 1: Eight-Hour Vehicular Volume</b>												<input type="checkbox"/>
1 A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--												<input type="checkbox"/>
1 B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--												<input type="checkbox"/>
1 80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)												<input type="checkbox"/>
<b>Warrant 2: Four-Hour Vehicular Volume</b>												<input type="checkbox"/>
2 A. Four-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)												<input type="checkbox"/>
<b>Warrant 3: Peak Hour</b>												<input type="checkbox"/>
3 A. Peak-Hour Conditions (Minor delay --and-- minor volume --and-- total volume ) --or--												<input type="checkbox"/>
3 B. Peak- Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)												<input type="checkbox"/>
<b>Warrant 4: Pedestrian Volume</b>												<input type="checkbox"/>
4 A. Pedestrian Volumes (Four hours --or-- one hour) --and--												<input type="checkbox"/>
4 B. Gaps Same Period (Four hours --or-- one hour)												<input type="checkbox"/>
<b>Warrant 5: School Crossing</b>												<input type="checkbox"/>
5. Student Volumes --and--												<input type="checkbox"/>
5. Gaps Same Period												<input type="checkbox"/>
<b>Warrant 6: Coordinated Signal System</b>												<input type="checkbox"/>
6. Degree of Platooning (Predominant direction or both directions)												<input type="checkbox"/>
<b>Warrant 7: Crash Experience</b>												<input type="checkbox"/>
7 A. Adequate trials of alternatives, observance and enforcement failed --and--												<input type="checkbox"/>

7 B. Reported crashes susceptible to correction by signal (12-month period) --and--	<input type="checkbox"/>
7 C. 80% Volumes for Warrants 1A, 1B --or-- 4 are satisfied	<input type="checkbox"/>

<b>Warrant 8: Roadway Network</b>	<input type="checkbox"/>
8 A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2 or 3) --or--	<input type="checkbox"/>
8 B. Weekend Volume (Five hours total)	<input type="checkbox"/>

### Warrants Volume

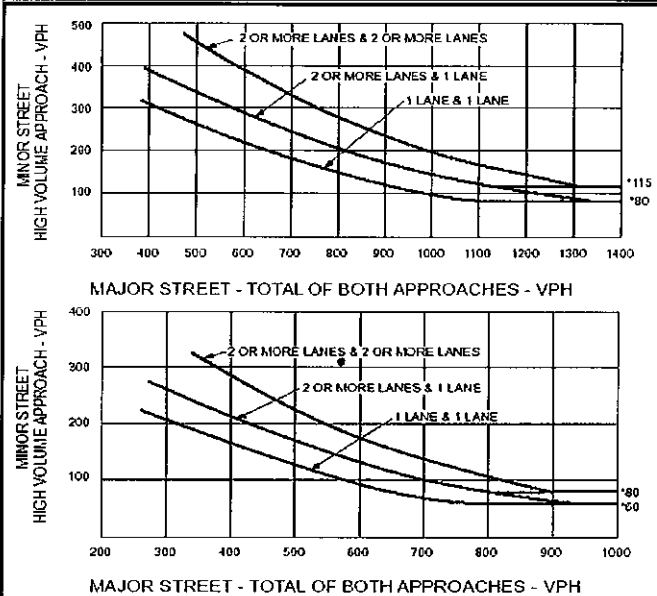
<b>Information</b>		
Analyst	Patricia Wetzel	Intersection
Agency/Co	ODOT	Jurisdiction
Date Performed	6/14/2010	Units
Project ID	SR 220 cul de sac	Time Period Analyzed
East/West Street	SR 32	North/South Street
File Name	2010-06-14 Right Turn Reduction	Schuster Rd.
	Schuster Rd.- SR 220 RIRO	Major Street
	Warrants xhy	East-West

Project Description SR 220 cul de sac

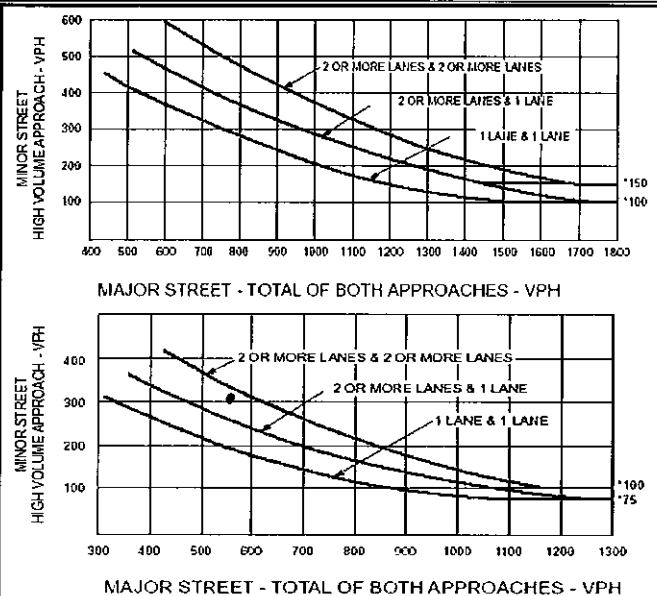
#### Warrant 1

Condition A - Minimum Vehicular Volume							Condition B - Interruption of Continuous Traffic								
Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)		Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)			Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%*	80%*	70%*	100%*	80%*	70%*	Major Street	Minor Street	100%*	80%*	70%*	100%*	80%*	70%*
1.....	1.....	500	400	350	150	120	105	1.....	1.....	750	600	525	75	60	53
2 or more...	1.....	600	480	420	150	120	105	2 or more...	1.....	900	720	630	75	60	53
2 or more...	2 or more...	600	480	420	200	160	140	2 or more...	2 or more...	900	720	630	100	80	70
1.....	2 or more...	500	400	350	200	160	140	1.....	2 or more...	750	600	525	100	80	70

#### Warrant 2



#### Warrant 3



#### Volume Summary

Hours	Major Street Lanes 2+		Minor Street Lanes 1		Speed 60		Population 10000+			
	Major Volume	Minor Volume	Total Volume	1A (70%)	1A (56%)	1B (70%)	1B (56%)	2 (70%)	3A (70%)	3B (70%)
06-07	496	91	619	No	Yes	No	No	No	No	No
07-08	642	147	840	Yes	Yes	Yes	Yes	Yes	No	No
08-09	419	74	518	No	No	No	No	No	No	No
09-10	352	61	440	No	No	No	No	No	No	No
10-11	356	90	469	No	Yes	No	No	No	No	No
11-12	360	77	454	No	No	No	No	No	No	No
12-13	334	108	459	No	No	No	No	No	No	No
13-14	420	115	559	Yes	Yes	No	No	No	No	No
14-15	495	204	732	Yes	Yes	No	No	Yes	No	No
15-16	582	267	877	Yes	Yes	No	Yes	Yes	No	Yes
16-17	568	307	904	Yes	Yes	No	Yes	Yes	No	Yes
17-18	543	282	846	Yes	Yes	No	Yes	Yes	No	Yes
<b>Totals</b>	<b>5567</b>	<b>1823</b>	<b>7717</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>3</b>

**Data Formatted for HCS+ Warrants for an East/West Major Street**

	#4			#2			#3			#1		
	S.R. 32--Eastbound Left	Thru	Right	S.R. 32--Westbound Left	Thru	Right	SchusterRd--Northbound Left	Thru	Right	SchusterRd--Southbound Left	Thru	Right
6:00 AM - 7:00 AM	60	128	2	0	275	31	11	19	2	71	6	14
7:00 AM - 8:00 AM	90	198	11	2	311	30	16	33	2	76	10	61
8:00 AM - 9:00 AM	29	174	6	0	202	8	10	13	2	55	6	13
9:00 AM - 10:00 AM	14	174	4	3	150	7	5	20	2	44	6	11
10:00 AM - 11:00 AM	20	171	4	1	155	5	6	15	2	67	9	14
11:00 AM - 12:00 PM	19	177	5	1	149	9	2	15	0	58	8	11
12:00 PM - 1:00 PM	17	141	13	2	154	7	7	10	0	79	15	14
1:00 PM - 2:00 PM	45	168	11	2	177	17	9	13	2	93	11	11
2:00 PM - 3:00 PM	27	218	16	3	219	12	15	16	2	161	12	31
3:00 PM - 4:00 PM	39	241	16	5	196	8	8	17	3	217	24	26
4:00 PM - 5:00 PM	26	341	8	1	185	7	8	19	2	239	38	30
5:00 PM - 6:00 PM	23	225	21	2	222	5	6	13	2	229	19	34