### BLOOMINGTON TRAFFIC COMMISSION AGENDA

### November 16, 2016 5:30 P.M. – COUNCIL CHAMBERS

- I. Call to Order
- II. Approval of Minutes October 26, 2016\*
- III. Public Comment
- IV. Communications from Commission
- V. Reports from Staff
  - A. E. 2<sup>nd</sup> Street/Swain Avenue traffic data
- VI. Old Business none
- VII. New Business -
  - A. E. 9<sup>th</sup> and Grant Streets intersection modify stop controls and on-street parking configuration\*
  - B. W. Moravec Way create no parking zones\*
  - C. E. 3<sup>rd</sup> Street/Overhill Drive turn restriction guidance
- VIII. Traffic Inquiries none
- IX. Adjournment

Next meeting – December 14, 2016

\*Action Requested/Public comment prior to any vote (limited to five minutes per speaker)

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### City of Bloomington Traffic Commission Minutes October 26, 2016 in the Council Chambers, City Hall

Traffic Commission minutes are transcribed in a summarized outline manner. Audio recordings of the meeting are available in the Planning and Transportation Department for reference.

### Attendance

<u>Traffic Commission</u>: James Batcho, Andrew Cibor, Ryan Cobine, Markeus Farrand, Judi Maki, Abigail Pietsch, and Sarah Ryterband

Others in Attendance: Evan Batcho, James Brosher, Neil Kopper (Staff), Nate Nickel (Staff) and Scott Robinson (Staff)

- I. Call to Order (~5:30 PM)
- **II. Approval of Minutes** September 28, 2016. Mr. Cibor sent several edits to staff and motioned to approve the minutes with those corrections; Mr. Farrand seconded. **The motion passed 6-0**.
- **III. Public Comment** none.
- **IV.** Communications from Commission none
- V. Reports from Staff Mr. Kopper provided an update regarding the planned Rogers Road multi-use path. The design for this is prioritized for MPO funding in Fiscal Year 2017, which has already started. A search is underway to select an engineering consultant, and once that is complete, the design process will begin. He noted that this project should address the design of the Rogers/Stands intersection, which has been a source of concern for neighbors.
- VI. Old Business None
- VII. New Business
  - A. S. Fairview Street On-Street Parking\* Mr. Nickel provided an overview of this request to eliminate on-street parking restrictions as detailed in the packet. He explained the background and the goal of cleaning up the varied regulations in Title 15. Ms. Maki asked whether this proposal would apply to just the new bump-out parking areas, or all of Fairview. Mr. Nickel said it would be for all of Fairview, but that could be changed by the Commission. Ms. Maki expressed concern about the narrow width of the street. Mr. Robinson explained that the street experiences low traffic volumes; the on-street parking could also act as a deterrent to speeding, which was originally a main concern of neighbors. Ms. Ryterband asked about traffic counts and data, plus ways to better protect pedestrians. Mr. Cibor gave several on-street parking restriction

options that could be implemented if issues did occur. Mr. Cobine asked to have the current parking regulations clarified. He felt this street would be a good area to eliminate restrictions and start fresh. Ms. Ryterband was interested in hearing more neighborhood feedback. She approved of finding ways to reduce traffic speeds for the neighborhood. Mr. Cobine motioned to make a positive recommendation to the City Council to eliminate the parking restrictions on Fairview Street and Mr. Cibor seconded. **The motion passed 6-1.** 

- B. College Avenue/8<sup>th</sup> Street Intersection parking restrictions to improve sight distance\* Mr. Kopper gave an overview of this request to eliminate two parking spaces on College Ave. He noted that it originated through a request from Monroe County Commissioner Thomas relating to the County's new parking garage, which will be opening soon. Mr. Kopper said her original request was to open 8<sup>th</sup> Street to 2-way traffic, but he felt that this parking restriction would better address the situation. He also said that the project will add bump-outs at the intersection, plus the handicap accessible space would be maintained. Ms. Ryterband encouraged looking into additional bicycle parking in this area. Mr. Cobine motioned to restrict parking as proposed, Mr. Batcho seconded. The motion passed 7-0.
- C. Bike Code Changes Mr. Robinson presented the proposed changes to Title 15 regarding bicycles. He noted that it is draft language and that he is working with the City's Legal Department to further refine. The Bicycle and Pedestrian Safety Commission already reviewed these changes. Mr. Batcho said that the current requirements for City bicycle registration and decals are not very helpful. Ms. Ryterband mentioned concern about bicyclists going the wrong way on a street when a sidewalk is available. She has often seen this on Bloomfield Road at night many times. She voiced her support for this measure. Mr. Cobine noted that bicyclists are already allowed to ride on the sidewalk if they are under a certain wheel diameter. Mr. Batcho said that kids are safer riding on sidewalks versus the street. Ms. Maki said that many sidewalks have a low pedestrian volume, like Jordan Avenue, so it would be more safe and efficient to have bicyclists use them rather than the street. Mr. Farrand noted that bicyclists are not allowed on the sidewalk on the Indiana University campus because there are so many people walking. He is an active pedestrian and is concerned about the mix of bicyclists and pedestrians being problematic. Ms. Maki asked about skate boards and roller skates being in compliance with the City Code. Mr. Robinson said that the City is trying to acknowledge all users of the transportation system. The goal is that if you are in the street, you should operate as a vehicle. This increases the safety context for all versus simply tailoring rules to the mode of travel. Mr. Kopper noted that this proposal also would bring the City's Code into better compliance with the State's Code.

Ms. Ryterband noted that lack of lights are an issue for many skateboarders and that education on the rules of the road is very important. Mr. Robinson agreed, noting the Civil Streets campaign to address this. Mr. Cobine motioned to make a positive recommendation to the City Council to approve the Title 15 changes and Mr. Farrand seconded. **The motion passed 7-0.** 

**D. Parking Code Changes** – Mr. Robinson presented the proposed changes to Title 15 regarding parking. Mr. Cibor mentioned that the changes will permit back-in angled parking, but won't identify the precise locations for these spaces. He also said there are currently 22 permitted locations for private parking spaces. Several of these no longer meet the City's criteria, plus ADA requirements now make private parking spaces more difficult for the City to provide. As a result, it is now legally a good reason to eliminate this type of parking and find other options for those needing parking spaces. Mr. Cobine motioned to make a positive recommendation to the City Council to approve the Title 15 changes and Ms. Pietsch seconded. **The motion passed 7-0.** 

### VIII. Traffic Inquiries –

A. E. 1st Street – request to reduce traffic speeds between Lincoln and Henderson Streets – Mr. Nickel described the details of this request and that it originated as a constituent concern to Councilmember Piedmont-Smith. Mr. Broshner spoke and asked the Commission to explore varios options that would lower traffic speeds. Ms. Ryterband asked about speed counts and traffic data. Mr. Cobine asked about the posted speed limit, as well if there were any bike facilities. Mr. Cibor said that it was signed 30 mph. Mr. Robinson said that this road is a signed bike route. Mr. Cobine noted that a bike lane could be added as a potential solution to lower traffic speeds. Ms. Ryterband agreed and said that this section would be a good candidate for a "road diet", but the traffic and speed data would first need to be studied. Mr. Broshner added that he would like to see a bike lane added here. Several Commissioners noted that the configuration of on-street parking could be modified to narrow the street width in order to reduce traffic speeds. Ms. Pietsch said that adding more stop signs might not be a good solution because she has noted people running the stop signs at the Henderson Street intersection. She agreed with Ms. Ryterband that more data would be needed before making a decision. Mr. Cibor said he was not convinced that simply adding a bike lane or on-street parking would reduce traffic speeds or increase the safety of bicyclists. Staff was directed to study the traffic and speed data for this section of E. 1<sup>st</sup> Street and report back to the Commission at a future date.

### IX. Adjournment (~6:40 PM)

Next meeting – November 16, 2016 \*Action requested

For: Traffic Study Counted By: PK Weather: Warm, some rain

812-349-3417

Site Code: s4451 Station ID: E. 2nd St.

S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Start	13-Ap	or-15	Τι	ie	W	ed	TI	hu	F	ri	S	at	S	un	Week A	verage
Time	Eastbound	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou	Eastboun	Westbou
12:00 AM	*	*	*	*	11	14	16	11	*	*	*	*	*	*	14	12
01:00	*	*	*	*	7	10	11	5	*	*	*	*	*	*	9	8
02:00	*	*	*	*	6	1	4	8	*	*	*	*	*	*	5	4
03:00	*	*	*	*	1	2	4	6	*	*	*	*	*	*	2	4
04:00	*	*	*	*	3	3	2	2	*	*	*	*	*	*	2	2
05:00	*	*	*	*	6	4	5	5	*	*	*	*	*	*	6	4
06:00	*	*	*	*	6	14	9	17	*	*	*	*	*	*	8	16
07:00	*	*	*	*	46	64	41	62	*	*	*	*	*	*	44	63
08:00	*	*	*	*	70	108	72	99	*	*	*	*	*	*	71	104
09:00	*	*	*	*	75	97	73	107	*	*	*	*	*	*	74	102
10:00	*	*	*	*	79	96	80	113	*	*	*	*	*	*	80	104
11:00	*	*	*	*	104	104	100	116	*	*	*	*	*	*	102	110
12:00 PM	*	*	*	*	121	139	113	155	*	*	*	*	*	*	117	147
01:00	*	*	*	*	112	140	111	147	*	*	*	*	*	*	112	144
02:00	*	*	*	*	122	150	112	148	*	*	*	*	*	*	117	149
03:00	*	*	*	*	125	147	143	167	*	*	*	*	*	*	134	157
04:00	*	*	*	*	159	190	165	177	*	*	*	*	*	*	162	184
05:00	*	*	*	*	149	176	148	193	*	*	*	*	*	*	148	184
06:00	*	*	*	*	98	139	108	147	*	*	*	*	*	*	103	143
07:00	*	*	*	*	89	145	111	116	*	*	*	*	*	*	100	130
08:00	*	*	*	*	84	94	82	116	*	*	*	*	*	*	83	105
09:00	*	*	*	*	49	76	52	102	*	*	*	*	*	*	50	89
10:00	*	*	*	*	32	52	42	59	*	*	*	*	*	*	37	56
11:00	*	*	*	*	31	19	32	18	*	*	*	*	*	*	32	18
Lane	0	0	0	0	1585	1984	1636	2096	0	0	0	0	0	0	1612	2039
Day	0		0		356		373		0	1	0		0	)	365	
AM Peak	-	-	-	-	11:00	08:00	11:00	11:00	-	-	-	-	-	-	11:00	11:00
Vol.	-	-	-	-	104	108	100	116	-	-	-	-	-	-	102	110
PM Peak	-	-	-	-	16:00	16:00	16:00	17:00	-	-	-	-	-	-	16:00	16:00
Vol.	-	-	-	-	159	190	165	193	-	-	-	-	-	-	162	184
Comb. Total	(	0		0	;	3569	;	3732		0		0		0	3	3651
ADT	А	DT 3,650	AAI	DT 3,650												

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Eastbound																0.0000	0
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	0	2	0	7	2	0	0	0	0	0	0	0	0	0	11	25-34	9
01:00	0	2	2	2	1	0	0	0	0	0	0	0	0	0	7	21-30	4
02:00	0	0	0	3	2	1	0	0	0	0	0	0	0	0	6	26-35	5
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	19-28	1
04:00	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3	20-29	2
05:00	0	0	0	4	1	1	0	0	0	0	0	0	0	0	6	26-35	5
06:00	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6	21-30	6
07:00	1	2	6	24	13	0	0	0	0	0	0	0	0	0	46	26-35	37
08:00	0	2	20	31	15	1	1	0	0	0	0	0	0	0	70	21-30	51
09:00	1	3	15	38	17	1	0	0	0	0	0	0	0	0	75	26-35	55
10:00	2	3	26	32	16	0	0	0	0	0	0	0	0	0	79	21-30	58
11:00	6	6	26	50	14	2	0	0	0	0	0	0	0	0	104	21-30	76
12 PM	5	5	25	60	23	3	0	0	0	0	0	0	0	0	121	21-30	85
13:00	4	12	29	52	14	0	0	1	0	0	0	0	0	0	112	21-30	81
14:00	2	9	36	62	10	3	0	0	0	0	0	0	0	0	122	21-30	98
15:00	8	4	34	63	14	2	0	0	0	0	0	0	0	0	125	21-30	97
16:00	3	15	49	75	17	0	0	0	0	0	0	0	0	0	159	21-30	124
17:00	2	10	35	78	23	1	0	0	0	0	0	0	0	0	149	21-30	113
18:00	5	9	22	44	15	3	0	0	0	0	0	0	0	0	98	21-30	66
19:00	5	7	18	44	14	1	0	0	0	0	0	0	0	0	89	21-30	62
20:00	3	5	26	43	7	0	0	0	0	0	0	0	0	0	84	21-30	69
21:00	3	3	14	26	3	0	0	0	0	0	0	0	0	0	49	21-30	40
22:00	3	9	6	11	3	0	0	0	0	0	0	0	0	0	32	20-29	17
23:00	0	4	11	11_	3	2	0	0	0	0	0	0	0	0	31	21-30	22
Total	53	112	402	767	227	22	1	1	0	0	0	0	0	0	1585		
Percent	3.3%	7.1%	25.4%	48.4%	14.3%	1.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	10:00	11:00	09:00	11:00	08:00								11:00		
Vol.	6	6	26	50	17	2	1	40.00							104		
PM Peak	15:00	16:00	16:00	17:00	12:00	12:00		13:00							16:00		
Vol.	8	15	49	78	23	3		1							159		

## City of Bloomington Planning and Transportation Department 401 N. Morton St., Suite 130

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Eastbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	0	1	4	9	2	0	0	0	0	0	0	0	0	0	16	21-30	13
01:00	0	1	5	3	2	0	0	0	0	0	0	0	0	0	11	20-29	8
02:00	1	0	1	1	1	0	0	0	0	0	0	0	0	0	4	19-28	2
03:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	16-25	4
04:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
05:00	0	0	0	2	1	2	0	0	0	0	0	0	0	0	5	24-33	3
06:00	1	0	3	3	2	0	0	0	0	0	0	0	0	0	9	21-30	6
07:00	1	1	10	22	7	0	0	0	0	0	0	0	0	0	41	21-30	32
08:00	0	3	19	36	11	3	0	0	0	0	0	0	0	0	72	21-30	55
09:00	3	4	24	33	9	0	0	0	0	0	0	0	0	0	73	21-30	57
10:00	5	6	19	39	10	1	0	0	0	0	0	0	0	0	80	21-30	58
11:00	6	9	32	39	13	1	0	0	0	0	0	0	0	0	100	21-30	71
12 PM	2	9	29	63	9	1	0	0	0	0	0	0	0	0	113	21-30	92
13:00	2	8	34	55	11	1	0	0	0	0	0	0	0	0	111	21-30	89
14:00	1	6	36	55	13	1	0	0	0	0	0	0	0	0	112	21-30	91
15:00	2	8	43	70	19	1	0	0	0	0	0	0	0	0	143	21-30	113
16:00	8	9	42	83	21	2	0	0	0	0	0	0	0	0	165	21-30	125
17:00	9	9	28	70	32	0	0	0	0	0	0	0	0	0	148	26-35	102
18:00	6	7	27	53	15	0	0	0	0	0	0	0	0	0	108	21-30	80
19:00	1	7	32	55	15	0	1	0	0	0	0	0	0	0	111	21-30	87
20:00	2	9	28	37	6	0	0	0	0	0	0	0	0	0	82	21-30	65
21:00	0	7	13	21	10	0	1	0	0	0	0	0	0	0	52	21-30	34
22:00	1	3	11	19	8	0	0	0	0	0	0	0	0	0	42	21-30	30
23:00	11	2	10	12	3	4	0	0	0	0	0	0	0	0	32	21-30	22
Total	52	109	454	781	221	17	2	0	0	0	0	0	0	0	1636		
Percent	3.2%	6.7%	27.8%	47.7%	13.5%	1.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	10:00	11:00	08:00									11:00		
Vol.	6	9	32	39	13	3									100		
PM Peak	17:00	12:00	15:00	16:00	17:00	23:00	19:00								16:00		
Vol.	9	9	43	83	32	4	11								165		
Total	105	221	856	1548	448	39	3	1	0	0	0	0	0	0	3221		
Percent	3.3%	6.9%	26.6%	48.1%	13.9%	1.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 20 MPH 50th Percentile: 26 MPH 85th Percentile: 30 MPH 95th Percentile: 33 MPH

Stats 10 MPH Pace Speed: 21-30 MPH

 Number in Pace :
 2404

 Percent in Pace :
 74.6%

 Number of Vehicles > 25 MPH :
 2039

 Percent of Vehicles > 25 MPH :
 63.3%

 Mean Speed(Average) :
 26 MPH

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	0	2	5	6	1	0	0	0	0	0	0	0	0	0	14	21-30	11
01:00	0	0	7	2	1	0	0	0	0	0	0	0	0	0	10	21-30	9
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	24-33	1
03:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	9-18	1
04:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	19-28	3
05:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	19-28	4
06:00	0	0	3	8	3	0	0	0	0	0	0	0	0	0	14	26-35	11
07:00	2	7	15	34	5	1	0	0	0	0	0	0	0	0	64	21-30	49
08:00	2	3	26	60	14	3	0	0	0	0	0	0	0	0	108	21-30	86
09:00	2	10	39	34	11	1	0	0	0	0	0	0	0	0	97	21-30	73
10:00	1	5	31	48	11	0	0	0	0	0	0	0	0	0	96	21-30	79
11:00	5	5	27	56	11	0	0	0	0	0	0	0	0	0	104	21-30	83
12 PM	0	4	28	86	21	0	0	0	0	0	0	0	0	0	139	21-30	114
13:00	5	7	40	71	17	0	0	0	0	0	0	0	0	0	140	21-30	111
14:00	10	13	68	50	9	0	0	0	0	0	0	0	0	0	150	21-30	118
15:00	9	5	49	72	12	0	0	0	0	0	0	0	0	0	147	21-30	121
16:00	4	10	74	89	12	0	0	1	0	0	0	0	0	0	190	21-30	163
17:00	4	5	45	102	19	1	0	0	0	0	0	0	0	0	176	21-30	147
18:00	6	6	44	68	14	1	0	0	0	0	0	0	0	0	139	21-30	112
19:00	4	7	56	65	10	1	1	0	1	0	0	0	0	0	145	21-30	121
20:00	2	5	21	62	3	1	0	0	0	0	0	0	0	0	94	21-30	83
21:00	1	4	24	36	11	0	0	0	0	0	0	0	0	0	76	21-30	60
22:00	4	3	20	20	5	0	0	0	0	0	0	0	0	0	52	21-30	40
23:00	0	0	6	10	3	0	0	0	0	0	0	0	0	0	19	21-30	16
Total	61	102	633	982	194	9	11	1	11	0	0	0	0	0	1984		
Percent	3.1%	5.1%	31.9%	49.5%	9.8%	0.5%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	09:00	08:00	08:00	08:00									08:00		
Vol.	5	10	39	60	14	3									108		
PM Peak	14:00	14:00	16:00	17:00	12:00	17:00	19:00	16:00	19:00						16:00		
Vol.	10	13	74	102	21	1	1	1	1						190		

## City of Bloomington Planning and Transportation Department 401 N. Morton St., Suite 130

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Westbound																	
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	0	0	7	4	0	0	0	0	0	0	0	0	0	0	11	21-30	11
01:00	0	0	2	2	1	0	0	0	0	0	0	0	0	0	5	21-30	4
02:00	0	4	2	1	0	0	1	0	0	0	0	0	0	0	8	16-25	6
03:00	0	1	3	2	0	0	0	0	0	0	0	0	0	0	6	19-28	5
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
05:00	0	0	2	3	0	0	0	0	0	0	0	0	0	0	5	21-30	5
06:00	2	0	4	9	2	0	0	0	0	0	0	0	0	0	17	21-30	13
07:00	3	2	21	31	5	0	0	0	0	0	0	0	0	0	62	21-30	52
08:00	0	5	36	49	8	1	0	0	0	0	0	0	0	0	99	21-30	85
09:00	3	7	30	56	10	1	0	0	0	0	0	0	0	0	107	21-30	86
10:00	3	8	45	49	6	2	0	0	0	0	0	0	0	0	113	21-30	94
11:00	3	7	41	55	10	0	0	0	0	0	0	0	0	0	116	21-30	96
12 PM	5	10	43	83	14	0	0	0	0	0	0	0	0	0	155	21-30	126
13:00	5	10	57	55	20	0	0	0	0	0	0	0	0	0	147	21-30	112
14:00	3	11	51	70	12	1	0	0	0	0	0	0	0	0	148	21-30	121
15:00	4	9	62	83	8	1	0	0	0	0	0	0	0	0	167	21-30	145
16:00	4	11	71	76	14	1	0	0	0	0	0	0	0	0	177	21-30	147
17:00	6	6	71	90	17	3	0	0	0	0	0	0	0	0	193	21-30	161
18:00	7	9	42	80	8	1	0	0	0	0	0	0	0	0	147	21-30	122
19:00	4	8	43	53	8	0	0	0	0	0	0	0	0	0	116	21-30	96
20:00	2	8	47	44	12	3	0	0	0	0	0	0	0	0	116	21-30	91
21:00	1	9	30	48	14	0	0	0	0	0	0	0	0	0	102	21-30	78
22:00	2	7	22	23	5	0	0	0	0	0	0	0	0	0	59	21-30	45
23:00	0	0	6	10	2	0	0	0	0	0	0	0	0	0	18	21-30	16
Total	57	132	740	976	176	14	1	0	0	0	0	0	0	0	2096		
Percent	2.7%	6.3%	35.3%	46.6%	8.4%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	10:00	10:00	09:00	09:00	10:00	02:00								11:00		
Vol.	3	8	45	56	10	2	1								116		
PM Peak	18:00	14:00	16:00	17:00	13:00	17:00									17:00		
Vol.	7	11	71	90	20	3									193		
Total	118	234	1373	1958	370	23	2	1	1	0	0	0	0	0	4080		
Percent	2.9%	5.7%	33.7%	48.0%	9.1%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 20 MPH 50th Percentile: 25 MPH 85th Percentile: 29 MPH 95th Percentile: 32 MPH

Stats 10 MPH Pace Speed: 21-30 MPH Number in Pace: 3331

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Eastbound, V	Vestbound															0.0000	0.1.00
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	0	4	5	13	3	0	0	0	0	0	0	0	0	0	25	21-30	18
01:00	0	2	9	4	2	0	0	0	0	0	0	0	0	0	17	21-30	13
02:00	0	0	0	3	3	1	0	0	0	0	0	0	0	0	7	26-35	6
03:00	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3	19-28	2
04:00	0	0	2	3	0	1	0	0	0	0	0	0	0	0	6	21-30	5
05:00	0	0	3	5	1	1	0	0	0	0	0	0	0	0	10	21-30	8
06:00	0	0	5	12	3	0	0	0	0	0	0	0	0	0	20	21-30	17
07:00	3	9	21	58	18	1	0	0	0	0	0	0	0	0	110	21-30	79
08:00	2	5	46	91	29	4	1	0	0	0	0	0	0	0	178	21-30	137
09:00	3	13	54	72	28	2	0	0	0	0	0	0	0	0	172	21-30	126
10:00	3	8	57	80	27	0	0	0	0	0	0	0	0	0	175	21-30	137
11:00	11	11	53	106	25	2	0	0	0	0	0	0	0	0	208	21-30	159
12 PM	5	9	53	146	44	3	0	0	0	0	0	0	0	0	260	21-30	199
13:00	9	19	69	123	31	0	0	1	0	0	0	0	0	0	252	21-30	192
14:00	12	22	104	112	19	3	0	0	0	0	0	0	0	0	272	21-30	216
15:00	17	9	83	135	26	2	0	0	0	0	0	0	0	0	272	21-30	218
16:00	7	25	123	164	29	0	0	1	0	0	0	0	0	0	349	21-30	287
17:00	6	15	80	180	42	2	0	0	0	0	0	0	0	0	325	21-30	260
18:00	11	15	66	112	29	4	0	0	0	0	0	0	0	0	237	21-30	178
19:00	9	14	74	109	24	2	1	0	1	0	0	0	0	0	234	21-30	183
20:00	5	10	47	105	10	1	0	0	0	0	0	0	0	0	178	21-30	152
21:00	4	7	38	62	14	0	0	0	0	0	0	0	0	0	125	21-30	100
22:00	7	12	26	31	8	0	0	0	0	0	0	0	0	0	84	21-30	57
23:00	0	4_	17	21	6	2	0	0	0	0	0	0	0	0	50	21-30	38
Total	114	214	1035	1749	421	31	2	2	1	0	0	0	0	0	3569		
Percent	3.2%	6.0%	29.0%	49.0%	11.8%	0.9%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	10:00	11:00	08:00	08:00	08:00								11:00		
Vol.	11	13	57	106	29	4	1 1	10.00	10.00						208		
PM Peak	15:00	16:00	16:00	17:00	12:00	18:00	19:00	13:00	19:00						16:00		
Vol.	17	25	123	180	44	4	1	1	1						349		

### City of Bloomington Planning and Transportation Department

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4451 Station ID: E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Eastbound, \	Westbound																0.1.4004
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	0	1	11	13	2	0	0	0	0	0	0	0	0	0	27	21-30	24
01:00	0	1	7	5	3	0	0	0	0	0	0	0	0	0	16	21-30	12
02:00	1	4	3	2	1	0	1	0	0	0	0	0	0	0	12	16-25	7
03:00	0	1	7	2	0	0	0	0	0	0	0	0	0	0	10	21-30	9
04:00	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4	19-28	3
05:00	0	0	2	5	1	2	0	0	0	0	0	0	0	0	10	21-30	7
06:00	3	0	7	12	4	0	0	0	0	0	0	0	0	0	26	21-30	19
07:00	4	3	31	53	12	0	0	0	0	0	0	0	0	0	103	21-30	84
08:00	0	8	55	85	19	4	0	0	0	0	0	0	0	0	171	21-30	140
09:00	6	11	54	89	19	1	0	0	0	0	0	0	0	0	180	21-30	143
10:00	8	14	64	88	16	3	0	0	0	0	0	0	0	0	193	21-30	152
11:00	9	16	73	94	23	1	0	0	0	0	0	0	0	0	216	21-30	167
12 PM	7	19	72	146	23	1	0	0	0	0	0	0	0	0	268	21-30	218
13:00	7	18	91	110	31	1	0	0	0	0	0	0	0	0	258	21-30	201
14:00	4	17	87	125	25	2	0	0	0	0	0	0	0	0	260	21-30	212
15:00	6	17	105	153	27	2	0	0	0	0	0	0	0	0	310	21-30	258
16:00	12	20	113	159	35	3	0	0	0	0	0	0	0	0	342	21-30	272
17:00	15	15	99	160	49	3	0	0	0	0	0	0	0	0	341	21-30	259
18:00	13	16	69	133	23	1	0	0	0	0	0	0	0	0	255	21-30	202
19:00	5	15	75	108	23	0	1	0	0	0	0	0	0	0	227	21-30	183
20:00	4	17	75	81	18	3	0	0	0	0	0	0	0	0	198	21-30	156
21:00	1	16	43	69	24	0	1	0	0	0	0	0	0	0	154	21-30	112
22:00	3	10	33	42	13	0	0	0	0	0	0	0	0	0	101	21-30	75
23:00	1	2	16	22	5	4	0	0	0	0	0	0	0	0	50	21-30	38
Total	109	241	1194	1757	397	31	3	0	0	0	0	0	0	0	3732		
Percent	2.9%	6.5%	32.0%	47.1%	10.6%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	11:00	11:00	08:00	02:00								11:00		
Vol.	9	16	73	94	23	4	1								216		
PM Peak	17:00	16:00	16:00	17:00	17:00	23:00	19:00								16:00		
Vol.	15	20	113	160	49	4	1								342		
Total	223	455	2229	3506	818	62	5	2	1	0	0	0	0	0	7301		
Percent	3.1%	6.2%	30.5%	48.0%	11.2%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
			COL Dance	CI.	OO MIDLI												

15th Percentile: 20 MPH 50th Percentile: 26 MPH 85th Percentile: 29 MPH 95th Percentile: 33 MPH

Stats 10 MPH Pace Speed: 21-30 MPH

 Number in Pace :
 5735

 Percent in Pace :
 78.6%

 Number of Vehicles > 25 MPH :
 4394

 Percent of Vehicles > 25 MPH :
 60.2%

 Mean Speed(Average) :
 26 MPH

For: Traffic Study Counted By: PK
Weather: Warm, some rain

Site Code: s4451 Station ID:

E. 2nd St. S. Swain Ave. to S. Mitchell St. Latitude: 0' 0.0000 Undefined

Eastbound, Westbound

Start   Time   Bikes   Trailer   2 Axle   Say   Say	Eastbound	i, vvestoc	ouna													
O4/15/15   O	Start		Cars &	2 Axle		2 Axle			<5 Axl	5 Axle	>6 AxI	<6 Axl	6 Axle	>6 Axl		
01:00 0 15 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 17 02:00 0 6 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Total
03:00 0 6 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																
03:00 0 3 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0				2	0				0	0		0	-	0	0	17
04:00 0 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																7
05:00 0 8 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		-	_		-	-		-	-	-		-	-		-	-
06:00																-
07:00		-	-		-				-	~			-		-	
08:00					0											
09:00   3					1				-	-		-	-		-	
10:00								0	0	0			0			
11:00   5   158   37   0   2   0   0   0   0   0   0   0   0	09:00	3	134	26	1	6	0	0	0	0	0	0	0	0	2	172
12 PM 6 204 41 1 4 1 0 0 0 0 0 0 0 0 0 0 3 260  13:00 9 201 38 0 2 0 0 0 0 0 0 0 0 0 0 0 2 252  14:00 7 215 34 0 4 2 1 0 0 0 0 0 0 0 0 0 0 9 272  15:00 9 212 35 1 1 0 0 0 0 2 0 0 0 0 0 0 12 272  16:00 6 284 48 1 3 0 0 0 0 0 0 0 0 0 0 0 0 7 349  17:00 4 287 26 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 7 349  17:00 6 203 21 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 3 325  18:00 6 203 21 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6 237  19:00 3 197 24 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10:00	8	133	30	0	2	1	0	0	0	0	0	0	0	1	175
13:00   9   201   38   0   2   0   0   0   0   0   0   0   0	11:00	5	158	37	0	2	0	0	0	0	0	0	0	0	6	208
13:00   9   201   38   0   2   0   0   0   0   0   0   0   0	12 PM	6	204	41	1	4	1	0	0	0	0	0	0	0	3	260
14:00       7       215       34       0       4       2       1       0       0       0       0       0       0       9       272         15:00       9       212       35       1       1       0       0       0       2       0       0       0       0       0       12       272         16:00       6       284       48       1       3       0		9	201	38	0	2	0	0	0	0		0	0	0		
15:00 9 212 35 1 1 0 0 0 0 2 0 0 0 0 0 12 272 16:00 6 284 48 1 3 0 0 0 0 0 0 0 0 0 0 0 7 349 17:00 4 287 26 0 5 0 0 0 0 0 0 0 0 0 0 0 3 325 18:00 6 203 21 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 6 237 19:00 3 197 24 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			-							-						
16:00       6       284       48       1       3       0<																
17:00         4         287         26         0         5         0<					1	•			-			-	-			
18:00       6       203       21       0       1       0<					0											
19:00 3 197 24 0 1 0 0 0 0 0 0 0 0 0 0 0 0 9 234 20:00 3 158 12 0 1 0 0 0 0 0 0 0 0 0 0 0 0 4 178 21:00 0 111 11 0 1 0 0 0 0 0 0 0 0 0 0 0										-						
20:00         3         158         12         0         1         0<																
21:00         0         111         11         0         1         0<										-					-	
22:00         3         69         9         0 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					-	-				-						
23:00   0   47   3   0   0   0   0   0   0   0   0   0					-	•			-	-		-	-			
Total         77         2930         440         5         41         4         1         0         2         0         0         0         0         69         3569           Percent         2.2%         82.1%         12.3%         0.1%         1.1%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         1.9%           AM Peak         10:00         11:00         07:00         09:00         10:00					-					-		-	•			
Percent         2.2%         82.1%         12.3%         0.1%         1.1%         0.1%         0.0%																
AM Peak         10:00         11:00         07:00         09:00         10:00         11:00         11:00         11:00         11:00         11:00         11:00         10:00         <							0.1%	0.0%	0.0%			0.0%	0.0%			
Peak         10:00         11:00         17:00         09:00         10:00         10:00         11:00																
Peak           Vol.         8         158         37         1         6         1         6         208           PM Peak         13:00         17:00         16:00         12:00         17:00         14:00         15:00         15:00         16:00	AM	10:00	11:00	11:00	07:00	00:00	10:00								11:00	11:00
PM 13:00 17:00 16:00 12:00 17:00 14:00 15:00 15:00 15:00 16:00	Peak	10.00	11.00	11.00	07.00	09.00	10.00								11.00	11.00
Peak 13:00 17:00 16:00 12:00 17:00 14:00 14:00 15:00 15:00 15:00		8	158	37	1	6	1								6	208
Peak		13:00	17:00	16:00	12:00	17:00	14:00	14.00		15:00					15:00	16:00
Vol. 9 287 48 1 5 2 1 2 12 349					12.00			17.00								
	Vol.	9	287	48	1_	5	2	1		2					12	349_

For: Traffic Study Counted By: PK
Weather: Warm, some rain

Site Code: s4451 Station ID:

E. 2nd St. S. Swain Ave. to S. Mitchell St.

Latitude: 0' 0.0000 Undefined

Eastbound, Westbound

	.,														
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 Axl	Not	
Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Total
04/16/15	0	26	1	0	0	0	0	0	0	0	0	0	0	0	27
01:00	0	16	0	0	0	0	0	0	0	0	0	0	0	0	16
02:00	0	7	4	0	0	0	0	0	0	0	0	0	0	1	12
03:00	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
06:00	1	20	2	1	0	0	0	0	0	0	0	0	0	2	26
07:00	2	89	8	0	2	0	0	0	0	0	0	0	0	2	103
08:00	1	135	28	1	4	2	0	0	0	0	0	0	0	0	171
09:00	4	145	25	0	2	0	0	0	0	0	0	0	0	4	180
10:00	2	164	20	0	1	0	0	0	0	0	0	0	0	6	193
11:00	3	168	33	0	4	0	0	0	0	0	0	0	0	8	216
12 PM	6	221	33	0	4	0	0	0	0	0	0	0	0	4	268
13:00	7	208	32	0	5	0	0	0	0	0	0	0	0	6	258
14:00	5	220	34	0	1	0	0	0	0	0	0	0	0	0	260
15:00	2	264	36	1	2	1	0	0	0	0	0	0	0	4	310
16:00	6	281	41	0	2	0	0	. 1	0	0	0	0	0	11	342
17:00	9	291	21	0	4	1	0	3	0	0	0	0	0	12	341
18:00	3	218	23	0	5	0	0	0	0	0	0	0	0	6	255
19:00	4	192	27	0	2	1	0	0	0	0	0	0	0	1	227
20:00	3	176	12	0	4	1	0	0	0	0	0	0	0	2	198
21:00	4	138	11	0	1	0	0	0	0	0	0	0	0	0	154
22:00	3	86	9 5	0	1	0	0	0	0	0	0	0	0	2	101
23:00 Total	66	3129	409	3	0 44	6	0	0 4	0	0	0	0	0	0 71	50 3732
Percent	1.8%	83.8%	11.0%	0.1%	1.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	3/32
1 Clocit	1.070	00.070	11.070	0.170	1.270	0.270	0.070	0.170	0.070	0.070	0.070	0.070	0.070	1.570	
AM															
Peak	09:00	11:00	11:00	06:00	08:00	08:00								11:00	11:00
Vol.	4	168	33	1	4	2								8	216
PM	17:00	17:00	16:00	15:00	13:00	15:00		17:00						17:00	16:00
Peak				13.00		13.00									
Vol.	9	291	41	1	5	1		3						12	342
Grand Total	143	6059	849	8	85	10	1	4	2	0	0	0	0	140	7301
Percent	2.0%	83.0%	11.6%	0.1%	1.2%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	1.9%	
reideni	2.070	03.0%	11.070	U. 170	1.270	U. 170	0.076	U. 176	0.076	0.076	0.076	0.076	0.076	1.970	

For: Traffic Study Counted By: PK Weather: Warm, some rain

ADT

ADT 3,702

AADT 3,702

Site Code: s4458 Station ID: E. 2nd St.

S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Start	13-Ap		Tu			ed		hu		ri		at		un	Week A	verage
Time	Eastbound .	Westbou	Eastboun	Westbou												
12:00 AM	*	*	*	*	13	17	16	10	*	*	*	*	*	*	14	14
01:00	*	*	*	*	9	8	8	7	*	*	*	*	*	*	8	8
02:00	*	*	*	*	2	2	4	6	*	*	*	*	*	*	3	4
03:00	*	*	*	*	2	2	2	3	*	*	*	*	*	*	2	2
04:00	*	*	*	*	3	3	2	2	*	*	*	*	*	*	2	2
05:00	*	*	*	*	8	3	5	4	*	*	*	*	*	*	6	4
06:00	*	*	*	*	12	14	13	17	*	*	*	*	*	*	12	16
07:00	*	*	*	*	41	63	37	59	*	*	*	*	*	*	39	61
08:00	*	*	*	*	69	115	67	98	*	*	*	*	*	*	68	106
09:00	*	*	*	*	82	95	67	106	*	*	*	*	*	*	74	100
10:00	*	*	*	*	81	98	78	124	*	*	*	*	*	*	80	111
11:00	*	*	*	*	115	107	84	122	*	*	*	*	*	*	100	114
12:00 PM	*	*	*	*	124	151	120	167	*	*	*	*	*	*	122	159
01:00	*	*	*	*	124	133	119	136	*	*	*	*	*	*	122	134
02:00	*	*	*	*	131	144	120	140	*	*	*	*	*	*	126	142
03:00	*	*	*	*	133	152	153	162	*	*	*	*	*	*	143	157
04:00	*	*	*	*	167	175	167	166	*	*	*	*	*	*	167	170
05:00	*	*	*	*	167	176	172	191	*	*	*	*	*	*	170	184
06:00	*	*	*	*	109	137	111	153	*	*	*	*	*	*	110	145
07:00	*	*	*	*	102	147	109	117	*	*	*	*	*	*	106	132
08:00	*	*	*	*	78	88	102	118	*	*	*	*	*	*	90	103
09:00	*	*	*	*	46	71	64	84	*	*	*	*	*	*	55	78
10:00	*	*	*	*	28	44	38	56	*	*	*	*	*	*	33	50
11:00	*	*	*	*	34	24	32	18	*	*	*	*	*	*	33	21
Lane	0	0	0	0	1680	1969	1690	2066	0	0	0	0	0	0	1685	2017
Day	0		0		364		375		0		0		0		370	
AM Peak	-	-	-	-	11:00	08:00	11:00	10:00	-	-	-	-	-	-	11:00	11:00
Vol.	-	-	-	-	115	115	84	124	-	-	-	-	-	-	100	114
PM Peak	-	-	-	-	16:00	17:00	17:00	17:00	-	-	-	-	-	-	17:00	17:00
Vol.	=	-	-	-	167	176	172	191	-	=	-	=	-	-	170	184
Comb. Total	(	)		0	;	3649	;	3756		0		0		0	3	702

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

C = =4 = =																	
Eastbound Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	0	0	8	5	0	0	0	0	0	0	0	0	0	0	13	21-30	13
01:00	2	1	2	2	2	0	0	0	0	0	0	0	0	0	9	26-35	4
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
03:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	19-28	2
04:00	0	1	0	1	0	0	1	0	0	0	0	0	0	0	3	9-18	1
05:00	0	1	3	3	1	0	0	0	0	0	0	0	0	0	8	21-30	6
06:00	0	4	3	5	0	0	0	0	0	0	0	0	0	0	12	19-28	8
07:00	0	2	8	24	7	0	0	0	0	0	0	0	0	0	41	21-30	32
08:00	8	4	20	27	7	3	0	0	0	0	0	0	0	0	69	21-30	47
09:00	2	6	24	39	8	3	0	0	0	0	0	0	0	0	82	21-30	63
10:00	7	4	29	34	6	1	0	0	0	0	0	0	0	0	81	21-30	63
11:00	13	9	49	32	12	0	0	0	0	0	0	0	0	0	115	21-30	81
12 PM	13	7	42	45	16	1	0	0	0	0	0	0	0	0	124	21-30	87
13:00	13	8	66	35	2	0	0	0	0	0	0	0	0	0	124	21-30	101
14:00	11	11	57	41	10	1	0	0	0	0	0	0	0	0	131	21-30	98
15:00	15	18	53	41	6	0	0	0	0	0	0	0	0	0	133	21-30	94
16:00	5	38	61	58	5	0	0	0	0	0	0	0	0	0	167	21-30	119
17:00	7	14	74	56	14	2	0	0	0	0	0	0	0	0	167	21-30	130
18:00	12	7	40	45	5	0	0	0	0	0	0	0	0	0	109	21-30	85
19:00	5	6	41	41	9	0	0	0	0	0	0	0	0	0	102	21-30	82
20:00	4	11	29	29	5	0	0	0	0	0	0	0	0	0	78	21-30	58
21:00	1	9	22	12	1	1	0	0	0	0	0	0	0	0	46	21-30	34
22:00	0	5	16	4	3	0	0	0	0	0	0	0	0	0	28	16-25	21
23:00	11	6	17	9	1	0	0	0	0	0	0	0	0	0	34	21-30	26
Total	119	172	665	590	121	12	1	0	0	0	0	0	0	0	1680		
Percent	7.1%	10.2%	39.6%	35.1%	7.2%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	11:00	09:00	11:00	08:00	04:00								11:00		
Vol.	13	9	49	39	12	3	11								115	-	
PM Peak	15:00	16:00	17:00	16:00	12:00	17:00									16:00		
Vol.	15	38	74	58	16	2									167		

For: Traffic Study Counted By: PK
Weather: Warm, some rain

Site Code: s4458 Station ID:

E. 2nd St.

S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Eastbound, Westbound

Eastbound	i, vvestoc	<u>ouna</u>													
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	Not	
Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Total
04/15/15	0	26	3	0	0	0	0	0	0	0	0	0	0	1	30
01:00	1	11	4	0	0	0	0	0	0	0	0	0	0	1	17
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	8	3	0	0	0	0	0	0	0	0	0	0	0	11
06:00	0	23	2	0	1	0	0	0	0	0	0	0	0	0	26
07:00	1	82	15	1	4	0	0	0	0	0	0	0	0	1	104
08:00	6	142	19	0	5	0	0	0	0	0	0	0	0	12	184
09:00	5	139	24	1	4	0	0	0	0	0	0	0	0	4	177
10:00	8	133	27	0	2	0	0	1	0	0	0	0	0	8	179
11:00	7	159	36	0	6	1	0	1	0	0	0	0	0	12	222
12 PM	8	203	45	0	9	0	0	0	0	0	0	0	0	10	275
13:00	7	200	38	0	1	1	0	0	0	0	0	0	0	10	257
14:00	9	209	31	0	6	3	0	1	0	0	0	0	0	16	275
15:00	11	224	37	1	1	0	0	0	0	0	0	0	0	11	285
16:00	6	273	45	0	4	0	0	0	1	0	0	0	0	13	342
17:00	7	298	25	0	2	0	0	0	0	0	0	0	0	11	343
18:00	4	211	23	0	1	0	0	0	0	0	0	0	0	7	246
19:00	4	212	22	0	1	1	0	1	0	0	0	0	0	8	249
20:00	5	147	10	0	0	0	0	0	0	0	0	0	0	4	166
21:00	0	107	8	0	2	0	0	0	0	0	0	0	0	0	117
22:00	1	64	5	0	0	0	0	0	0	0	0	0	0	2	72
23:00	1_	53	4	0	0	0	0	0	0	0	0	0	0	0	58
Total	91	2938	426	3	49	6	0	4	1	0	0	0	0	131	3649
Percent	2.5%	80.5%	11.7%	0.1%	1.3%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	
AM Peak	10:00	11:00	11:00	07:00	11:00	11:00		10:00						08:00	11:00
Vol.	8	159	36	1	6	1		1						12	222
PM Peak	15:00	17:00	12:00	15:00	12:00	14:00		14:00	16:00					14:00	17:00
Vol.	11	298	45	1	9	3		1	1					16	343

For: Traffic Study Counted By: PK
Weather: Warm, some rain

812-349-3417

Site Code: s4458 Station ID:

E. 2nd St.

S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Eastbound, Westbound

Eastbound	l, Westbo	bund													
Start		Cars &	2 Axle		2 Axle	3 Axle	4 Axle	<5 Axl	5 Axle	>6 AxI	<6 AxI	6 Axle	>6 AxI	Not	
Time	Bikes	Trailer	Long	Buses	6 Tire	Single	Single	Double	Double	Double	Multi	Multi	Multi	Classe	Total
04/16/15	0	20	3	0	1	0	0	0	0	0	0	0	0	2	26
01:00	0	13	0	0	0	0	0	0	0	0	0	0	0	2	15
02:00	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
06:00	0	27	2	1	0	0	0	0	0	0	0	0	0	0	30
07:00	1	85	7	0	2	0	0	0	0	0	0	0	0	1	96
08:00	0	124	30	0	4	0	0	0	0	0	0	0	0	7	165
09:00	4	131	27	0	6	0	0	1	0	0	0	0	0	4	173
10:00	4	161	21	0	2	0	0	2	0	0	0	0	0	12	202
11:00	2	158	30	0	6	0	0	0	0	0	0	0	0	10	206
12 PM	6	218	40	0	5	0	0	0	0	0	0	0	0	18	287
13:00	3	206	34	0	4	0	0	0	0	0	0	0	0	8	255
14:00	6	207	32	0	4	0	0	0	0	0	0	0	0	11	260
15:00	1	253	44	1	5	2	0	0	0	0	0	0	0	9	315
16:00	6	277	41	0	1	0	0	1	0	0	0	0	0	7	333
17:00	7	320	25	0	3	1	0	0	0	0	0	0	0	7	363
18:00	3	219	29	0	3	0	0	1	0	0	0	0	0	9	264
19:00	6	186	23	0	6	0	0	0	0	0	0	0	0	5	226
20:00	6	182	15	0	3	1	0	0	0	0	0	0	0	13	220
21:00	1	135	8	0	1	0	0	0	0	0	0	0	0	3	148
22:00	3	80	8	0	1	1	0	0	0	0	0	0	0	1	94
23:00	1_	44	5	0	0	0	0	0	0	0	0	0	0	0	50
Total	60	3069	429	2	57	5	0	5	0	0	0	0	0	129	3756
Percent	1.6%	81.7%	11.4%	0.1%	1.5%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	
AM	09:00	10:00	08:00	06:00	09:00			10:00						10:00	11:00
Peak															
Vol.	4	161	30	1	6			2						12	206_
PM	17:00	17:00	15:00	15:00	19:00	15:00		16:00						12:00	17:00
Peak Vol.	7	320	44	1	6	2		1						18	363
VUI.		320	44	1	0									10	303
Grand	151	6007	855	5	106	11	0	9	1	0	0	0	0	260	7405
Total									•						7400
Percent	2.0%	81.1%	11.5%	0.1%	1.4%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	

## City of Bloomington Planning and Transportation Department 401 N. Morton St., Suite 130

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Eastbound																0.0000	0
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	3	1	8	4	0	0	0	0	0	0	0	0	0	0	16	21-30	12
01:00	1	1	3	3	0	0	0	0	0	0	0	0	0	0	8	21-30	6
02:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4	14-23	2
03:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	9-18	1
04:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	19-28	2
05:00	0	0	3	0	0	2	0	0	0	0	0	0	0	0	5	16-25	3
06:00	0	2	7	2	2	0	0	0	0	0	0	0	0	0	13	21-30	9
07:00	1	6	9	18	3	0	0	0	0	0	0	0	0	0	37	21-30	27
08:00	3	10	25	24	5	0	0	0	0	0	0	0	0	0	67	21-30	49
09:00	1	18	29	17	2	0	0	0	0	0	0	0	0	0	67	16-25	47
10:00	11	15	29	22	1	0	0	0	0	0	0	0	0	0	78	21-30	51
11:00	7	21	38	15	3	0	0	0	0	0	0	0	0	0	84	16-25	59
12 PM	15	19	59	26	1	0	0	0	0	0	0	0	0	0	120	21-30	85
13:00	14	19	58	26	2	0	0	0	0	0	0	0	0	0	119	21-30	84
14:00	15	24	39	38	4	0	0	0	0	0	0	0	0	0	120	21-30	77
15:00	11	33	53	46	9	1	0	0	0	0	0	0	0	0	153	21-30	99
16:00	11	18	81	50	6	1	0	0	0	0	0	0	0	0	167	21-30	131
17:00	12	24	66	59	11	0	0	0	0	0	0	0	0	0	172	21-30	125
18:00	8	10	41	46	5	1	0	0	0	0	0	0	0	0	111	21-30	87
19:00	5	13	52	33	5	0	1	0	0	0	0	0	0	0	109	21-30	85
20:00	11	19	44	24	4	0	0	0	0	0	0	0	0	0	102	21-30	68
21:00	7	9	24	21	2	1	0	0	0	0	0	0	0	0	64	21-30	45
22:00	3	3	18	12	2	0	0	0	0	0	0	0	0	0	38	21-30	30
23:00	0	5	18	6	1	2	0	0	0	0	0	0	0	0	32	19-28	24
Total	139	272	706	495	69	8	1	0	0	0	0	0	0	0	1690		
Percent	8.2%	16.1%	41.8%	29.3%	4.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	10:00	11:00	11:00	08:00	08:00	05:00									11:00		
Vol.	11	21	38	24	5	2	40.00								84		
PM Peak	12:00	15:00	16:00	17:00	17:00	23:00	19:00								17:00		
Vol.	15	33	81	59	11	2	1								172		
Total	258	444	1371	1085	190	20	2	0	0	0	0	0	0	0	3370		
Percent	7.7%	13.2%	40.7%	32.2%	5.6%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 17 MPH 50th Percentile: 23 MPH 85th Percentile: 28 MPH 95th Percentile: 31 MPH

Stats 10 MPH Pace Speed: 21-30 MPH

 Number in Pace :
 2456

 Percent in Pace :
 72.9%

 Number of Vehicles > 25 MPH :
 1297

 Percent of Vehicles > 25 MPH :
 38.5%

 Mean Speed(Average) :
 23 MPH

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Westbound																0.0000	0
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	1	1	7	5	2	1	0	0	0	0	0	0	0	0	17	21-30	12
01:00	0	1	4	1	2	0	0	0	0	0	0	0	0	0	8	18-27	5
02:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	24-33	2
03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
04:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3	14-23	2
05:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3	14-23	2
06:00	0	1	7	3	3	0	0	0	0	0	0	0	0	0	14	20-29	10
07:00	5	2	20	31	5	0	0	0	0	0	0	0	0	0	63	21-30	51
08:00	9	3	43	49	10	0	1	0	0	0	0	0	0	0	115	21-30	92
09:00	4	11	38	35	7	0	0	0	0	0	0	0	0	0	95	21-30	73
10:00	6	6	43	38	5	0	0	0	0	0	0	0	0	0	98	21-30	81
11:00	7	7	44	39	9	0	1	0	0	0	0	0	0	0	107	21-30	83
12 PM	8	7	61	66	9	0	0	0	0	0	0	0	0	0	151	21-30	127
13:00	9	12	47	57	8	0	0	0	0	0	0	0	0	0	133	21-30	104
14:00	13	26	56	43	6	0	0	0	0	0	0	0	0	0	144	21-30	99
15:00	7	15	81	42	5	2	0	0	0	0	0	0	0	0	152	21-30	123
16:00	9	23	87	48	6	1	0	1	0	0	0	0	0	0	175	21-30	135
17:00	10	9	70	67	17	3	0	0	0	0	0	0	0	0	176	21-30	137
18:00	3	5	59	58	10	1	1	0	0	0	0	0	0	0	137	21-30	117
19:00	6	12	67	44	15	2	0	1	0	0	0	0	0	0	147	21-30	111
20:00	3	5	35	36	8	1	0	0	0	0	0	0	0	0	88	21-30	71
21:00	0	4	27	36	3	1	0	0	0	0	0	0	0	0	71	21-30	63
22:00	3	4	14	18	5	0	0	0	0	0	0	0	0	0	44	21-30	32
23:00	1	3	7	9	3	1	0	0	0	0	0	0	0	0	24	21-30	16
Total	104	159	821	728	139	13	3	2	0	0	0	0	0	0	1969		
Percent	5.3%	8.1%	41.7%	37.0%	7.1%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	08:00	09:00	11:00	08:00	08:00	00:00	08:00								08:00		
Vol.	9	11	44	49	10	1	1								115		
PM Peak	14:00	14:00	16:00	17:00	17:00	17:00	18:00	16:00							17:00		
Vol.	13	26	87	67	17	3	1	1							176		

## City of Bloomington Planning and Transportation Department 401 N. Morton St., Suite 130

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Westbound															Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	0	1	4	3	1	1	0	0	0	0	0	0	0	0	10	21-30	7
01:00	1	1	2	3	0	0	0	0	0	0	0	0	0	0	7	20-29	5
02:00	1	0	3	0	1	1	0	0	0	0	0	0	0	0	6	21-30	3
03:00	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3	10-19	2
04:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	15-24	2
05:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	19-28	4
06:00	0	1	9	5	2	0	0	0	0	0	0	0	0	0	17	21-30	14
07:00	2	2	11	35	9	0	0	0	0	0	0	0	0	0	59	21-30	46
08:00	7	6	53	25	6	0	1	0	0	0	0	0	0	0	98	21-30	78
09:00	4	10	53	29	10	0	0	0	0	0	0	0	0	0	106	21-30	82
10:00	3	17	62	37	5	0	0	0	0	0	0	0	0	0	124	21-30	99
11:00	11	31	48	29	2	1	0	0	0	0	0	0	0	0	122	16-25	79
12 PM	15	22	82	39	8	1	0	0	0	0	0	0	0	0	167	21-30	121
13:00	1	13	86	33	3	0	0	0	0	0	0	0	0	0	136	21-30	119
14:00	4	15	59	55	6	1	0	0	0	0	0	0	0	0	140	21-30	114
15:00	3	24	75	50	9	1	0	0	0	0	0	0	0	0	162	21-30	125
16:00	5	14	75	64	7	1	0	0	0	0	0	0	0	0	166	21-30	139
17:00	3	6	81	88	12	1	0	0	0	0	0	0	0	0	191	21-30	169
18:00	7	3	56	77	9	1	0	0	0	0	0	0	0	0	153	21-30	133
19:00	8	11	56	34	8	0	0	0	0	0	0	0	0	0	117	21-30	90
20:00	4	9	49	46	10	0	0	0	0	0	0	0	0	0	118	21-30	95
21:00	1	6	35	35	5	2	0	0	0	0	0	0	0	0	84	21-30	70
22:00	3	4	16	27	6	0	0	0	0	0	0	0	0	0	56	21-30	43
23:00	0	2	8	6	2	0	0	0	0	0	0	0	0	0	18	21-30	14
Total	83	200	928	722	121	11	1	0	0	0	0	0	0	0	2066		
Percent	4.0%	9.7%	44.9%	34.9%	5.9%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	10:00	10:00	09:00	00:00	08:00								10:00		
Vol.	11	31	62	37	10	1	1								124		
PM Peak	12:00	15:00	13:00	17:00	17:00	21:00									17:00		
Vol.	15	24	86	88	12	2									191		
Total	187	359	1749	1450	260	24	4	2	0	0	0	0	0	0	4035		
Percent	4.6%	8.9%	43.3%	35.9%	6.4%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 20 MPH 50th Percentile: 24 MPH 85th Percentile: 28 MPH 95th Percentile: 31 MPH

Stats 10 MPH Pace Speed: 21-30 MPH Number in Pace: 3199

Percent of Vehicles > 25 MPH : 43.1%

Mean Speed(Average) : 3199

79.3%

Number of Vehicles > 25 MPH : 43.1%

Mean Speed(Average) : 24 MPH

For: Traffic Study Counted By: PK Weather: Warm, some rain

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Eastbound, \	Westbound														Latitude.	0.0000	Oridonnica
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/15/15	1	1	15	10	2	1	0	0	0	0	0	0	0	0	30	21-30	25
01:00	2	2	6	3	4	0	0	0	0	0	0	0	0	0	17	19-28	9
02:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	25-34	4
03:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	19-28	4
04:00	0	2	1	2	0	0	1	0	0	0	0	0	0	0	6	21-30	3
05:00	0	2	4	4	1	0	0	0	0	0	0	0	0	0	11	21-30	8
06:00	0	5	10	8	3	0	0	0	0	0	0	0	0	0	26	21-30	18
07:00	5	4	28	55	12	0	0	0	0	0	0	0	0	0	104	21-30	83
08:00	17	7	63	76	17	3	1	0	0	0	0	0	0	0	184	21-30	139
09:00	6	17	62	74	15	3	0	0	0	0	0	0	0	0	177	21-30	136
10:00	13	10	72	72	11	1	0	0	0	0	0	0	0	0	179	21-30	144
11:00	20	16	93	71	21	0	1	0	0	0	0	0	0	0	222	21-30	164
12 PM	21	14	103	111	25	1	0	0	0	0	0	0	0	0	275	21-30	214
13:00	22	20	113	92	10	0	0	0	0	0	0	0	0	0	257	21-30	205
14:00	24	37	113	84	16	1	0	0	0	0	0	0	0	0	275	21-30	197
15:00	22	33	134	83	11	2	0	0	0	0	0	0	0	0	285	21-30	217
16:00	14	61	148	106	11	1	0	1	0	0	0	0	0	0	342	21-30	254
17:00	17	23	144	123	31	5	0	0	0	0	0	0	0	0	343	21-30	267
18:00	15	12	99	103	15	1	1	0	0	0	0	0	0	0	246	21-30	202
19:00	11	18	108	85	24	2	0	1	0	0	0	0	0	0	249	21-30	193
20:00	7	16	64	65	13	1	0	0	0	0	0	0	0	0	166	21-30	129
21:00	1	13	49	48	4	2	0	0	0	0	0	0	0	0	117	21-30	97
22:00	3	9	30	22	8	0	0	0	0	0	0	0	0	0	72	21-30	52
23:00	2	9	24	18	4	1	0	0	0	0	0	0	0	0	58	21-30	42
Total	223	331	1486	1318	260	25	4	2	0	00	00	0	0	00	3649		
Percent	6.1%	9.1%	40.7%	36.1%	7.1%	0.7%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	09:00	11:00	08:00	11:00	08:00	04:00								11:00		
Vol.	20	17	93	76	21	33	1								222		
PM Peak	14:00	16:00	16:00	17:00	17:00	17:00	18:00	16:00							17:00		
Vol.	24	61	148	123	31	5	1	1							343		

## City of Bloomington Planning and Transportation Department 401 N. Morton St., Suite 130

For: Traffic Study Counted By: PK Weather: Warm, some rain

401 N. Morton St., Suite 130 Bloomington, IN 47404 812-349-3417

Site Code: s4458 Station ID: E. 2nd St. S. Anita St. to S. Clifton Ave. Latitude: 0' 0.0000 Undefined

Eastbound, V	Nestbound														Latitude.	0.0000	Ondenned
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76		Pace	Number
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	Speed	in Pace
04/16/15	3	2	12	7	1	1	0	0	0	0	0	0	0	0	26	21-30	19
01:00	2	2	5	6	0	0	0	0	0	0	0	0	0	0	15	21-30	11
02:00	1	1	4	1	2	1	0	0	0	0	0	0	0	0	10	19-28	5
03:00	0	3	0	2	0	0	0	0	0	0	0	0	0	0	5	11-20	3
04:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	19-28	4
05:00	0	0	6	1	0	2	0	0	0	0	0	0	0	0	9	21-30	7
06:00	0	3	16	7	4	0	0	0	0	0	0	0	0	0	30	21-30	23
07:00	3	8	20	53	12	0	0	0	0	0	0	0	0	0	96	21-30	73
08:00	10	16	78	49	11	0	1	0	0	0	0	0	0	0	165	21-30	127
09:00	5	28	82	46	12	0	0	0	0	0	0	0	0	0	173	21-30	128
10:00	14	32	91	59	6	0	0	0	0	0	0	0	0	0	202	21-30	150
11:00	18	52	86	44	5	1	0	0	0	0	0	0	0	0	206	16-25	138
12 PM	30	41	141	65	9	1	0	0	0	0	0	0	0	0	287	21-30	206
13:00	15	32	144	59	5	0	0	0	0	0	0	0	0	0	255	21-30	203
14:00	19	39	98	93	10	1	0	0	0	0	0	0	0	0	260	21-30	191
15:00	14	57	128	96	18	2	0	0	0	0	0	0	0	0	315	21-30	224
16:00	16	32	156	114	13	2	0	0	0	0	0	0	0	0	333	21-30	270
17:00	15	30	147	147	23	1	0	0	0	0	0	0	0	0	363	21-30	294
18:00	15	13	97	123	14	2	0	0	0	0	0	0	0	0	264	21-30	220
19:00	13	24	108	67	13	0	1	0	0	0	0	0	0	0	226	21-30	175
20:00	15	28	93	70	14	0	0	0	0	0	0	0	0	0	220	21-30	163
21:00	8	15	59	56	7	3	0	0	0	0	0	0	0	0	148	21-30	115
22:00	6	7	34	39	8	0	0	0	0	0	0	0	0	0	94	21-30	73
23:00	0	7	26	12	3	2	0	0	0	0	0	0	0	0	50	21-30	38
Total	222	472	1634	1217	190	19	2	0	0	0	0	0	0	0	3756		
Percent	5.9%	12.6%	43.5%	32.4%	5.1%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
AM Peak	11:00	11:00	10:00	10:00	07:00	05:00	08:00								11:00		
Vol.	18	52	91	59	12	2	1								206		
PM Peak	12:00	15:00	16:00	17:00	17:00	21:00	19:00								17:00		
Vol.	30	57	156	147	23	3	1								363		
Total	445	803	3120	2535	450	44	6	2	0	0	0	0	0	0	7405		
Percent	6.0%	10.8%	42.1%	34.2%	6.1%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 19 MPH 50th Percentile: 23 MPH 85th Percentile: 28 MPH 95th Percentile: 31 MPH

Stats 10 MPH Pace Speed: 21-30 MPH

 Number in Pace :
 5655

 Percent in Pace :
 76.4%

 Number of Vehicles > 25 MPH :
 3037

 Percent of Vehicles > 25 MPH :
 41.0%

 Mean Speed(Average) :
 24 MPH



### **MEMORANDUM**

To: Traffic Commission

From: Neil Kopper, Project Engineer

Date: November 16, 2016

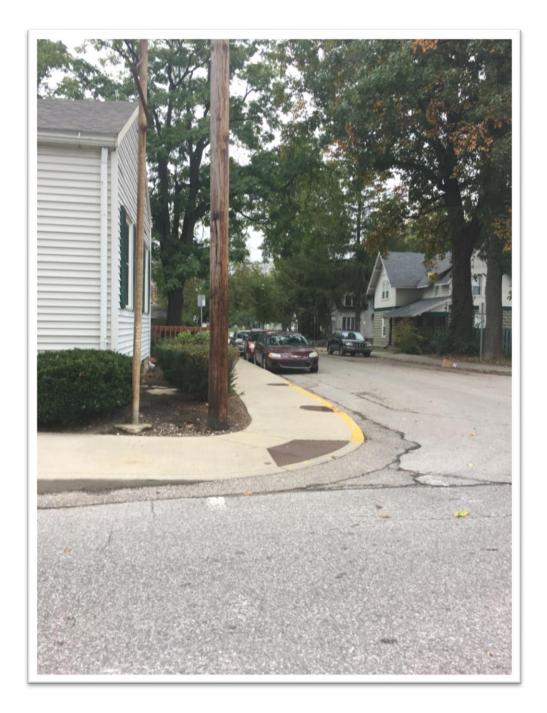
Re: E. 9th St and N. Grant St Intersection – Stop Control Options

### **Background**

This request started as a citizen's concern regarding witnessing near crashes and two actual crashes at this intersection. The citizen writes: "9th street is a one way, and there is no stop sign, so people will often speed through it and traffic on Grant cannot stop in time or they do not see the other vehicle due to vehicles parked on 9th street. I truly believe that there needs to be a stop sign installed on 9th street at this intersection to get people to be more careful."

Currently Grant Street (two-way) has stop signs and 9th Street (one-way westbound) does not. Traffic volumes on Grant Street are 1,422 vehicles per day while traffic volumes on 9th Street are only 538 vehicles per day. A review of crash data between September 2010 and September 2016 indicates 4 crashes, none in which limited sight distance appears to be a contributing factor in the crash. Onstreet parking and shrubs on the northeast corner of the intersection limit sight distance for motorists traveling south on Grant Street.

**Recommendation:** Staff recommends placing stop control on 9<sup>th</sup> Street instead of Grant Street in order to stop the lower volume street. In addition, staff recommends relocating the on-street parking on Grant Street from the west side to the east side for half of a block south of 10<sup>th</sup> Street, for speed control. The relocation of on street parking would reduce the total number from 9 to 8 on street parking spaces. A more detailed Title 15 amendment would be prepared if this request is forwarded to the Common Council for their consideration.



View of existing sight distance traveling south on Grant looking east on 9th



Looking east on 9th towards the intersection with Grant Street.



Looking west on 9th towards the intersection with Grant Street.



Looking north on Grant towards the intersection with 9th Street.



Looking south on Grant towards the intersection with 9th Street.





Proposed on street parking and Stop Control

### **Submitted by Haley Clements (11-9-2016)**

### Petition to Install a Stop Sign at the Intersection of 9th and Grant Street

Name	City	State	Zip	Country	SignedOn	Comment
Lindsey Abrams	Bloomington	IN	47406	United States	11/4/2016	Since moving in in August I have personally witnessed 2 major car accidents at this intersection, and am concerned about the safety of friends, roommates, and others driving through this intersection.
Renae Peden	Bloomington	IN	474408	United States	11/4/2016	I have witnessed an accident, and have personally felt unsafe at this corner, both as a driver and pedestrian. Drivers speed through routinely, and there is high foot traffic through the area as well.
Danielle Zigulich	Riverside	IL	60546	United States	11/4/2016	I live on this intersection and it is very dangerous because people do not realize it's only a two way stop.
Amelia Drew	Bloomington	IN	47408	United States	11/4/2016	Because it will help bloomington
Elizabeth Chandler	Bloomington	IN	47406	United States	11/7/2016	I'm signing because a stop sign would benefit this intersection by reducing the amounts of accidents and near-accidents that happen. I live next to this intersection and have witnessed so many close-calls of vehicles almost hitting other vehicles as well as vehicles almost hitting pedestrians attempting to cross the street. Many cars, as this petition says, tend to speed through the intersection, but this presents risk to those on Grant St. who have a stop sign but either (1) don't realize the stop isn't three-way or (2) don't see the car coming because they suddenly appear by speeding.

Haley Clements	Bloomington	Indiana	United States	11/4/2016
Megan Greenfield	Bloomington	Indiana	48407 United States	11/4/2016
Kathryn Irby	Gulfport	Mississippi	39507 United States	11/5/2016
Belle Chandler	Chesterton	Indiana	46304 United States	11/8/2016
Ben Rigney	Bloomington	Indiana	47408 United States	11/8/2016

The intersection of E. 9th and N. Grant street has experienced a high volume of automobile wrecks and numerous close-calls in the past few months. The problem stems from how two-way traffic on Grant street is supposed to stop, while traffic traveling on 9th street is one-way and has no stop sign. Drivers on 9th street will often speed through the intersection since they do not have to stop, while traffic on 8th street either does not see the 9th street traffic, or they do not realize that the intersection is not a 3-way stop, and therefore unknowingly proceed through the intersection after stopping. The residents living near this intersection have witnessed several of these accidents, and the consequent damage, up-close and believe the best solution is for the City of Bloomington to install a stop sign for the traffic traveling on 9th street in order to prevent these kinds of accidents from reoccurring and to prevent damage to life and property.



#### **MEMORANDUM**

To: Traffic Commission

From: Nate Nickel, Senior Long Range Planner

Date: November 9, 2016

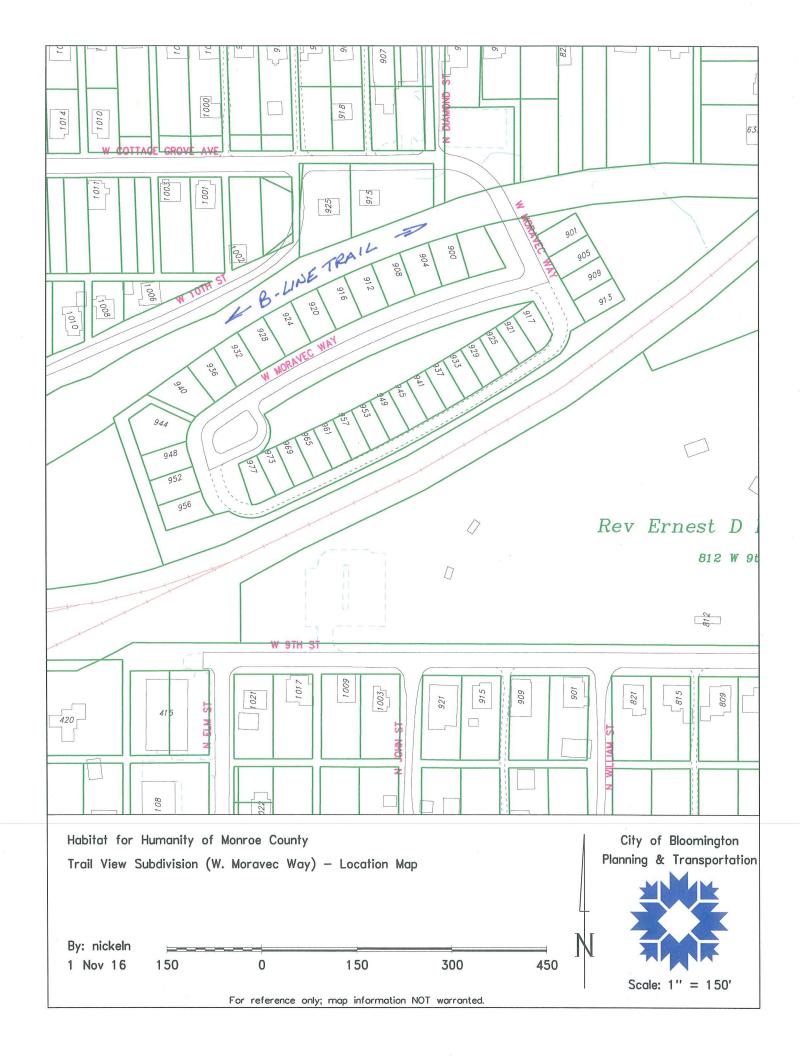
Re: W. Moravec Way No-Parking Zones

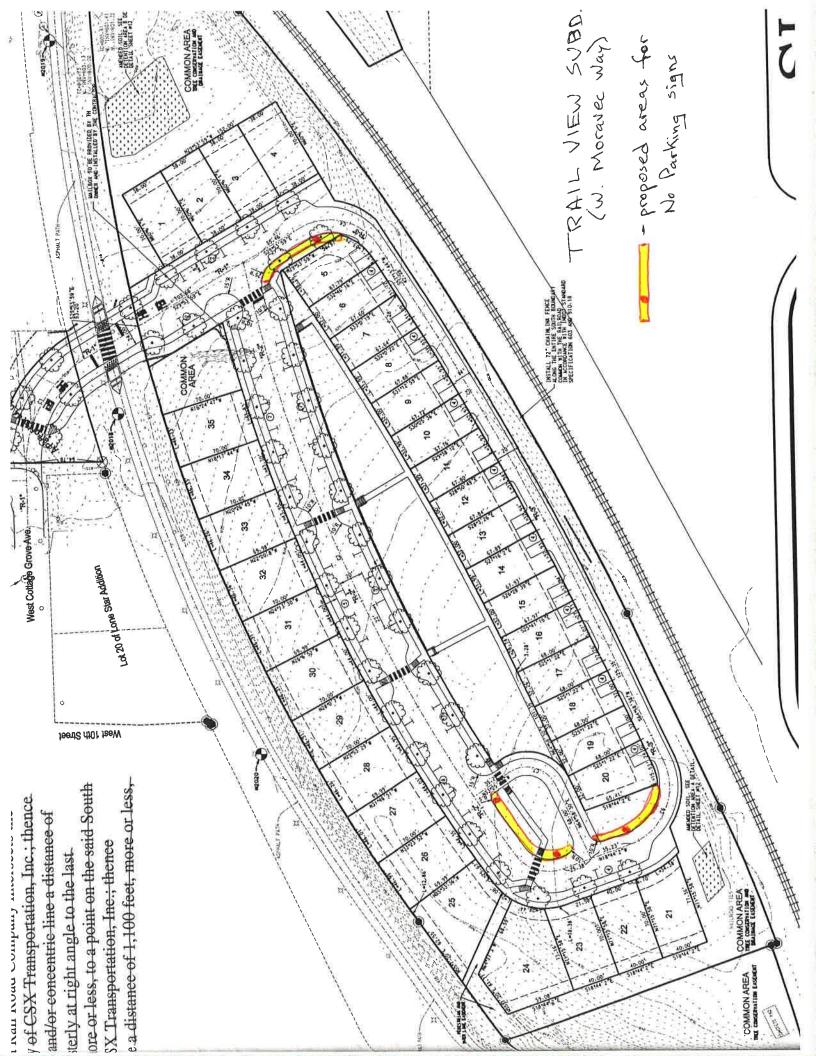
### **Background**

Habitat for Humanity of Monroe County is currently constructing a number of housing units at the Trail View Subdivision, which is located along W. Moravec Way. They have requested three new noparking zones for curves on W. Moravec Way (please see map for specific locations) to allow for better traffic flow in the subdivision. These areas are not intended for parked vehicles, but both residents and their guests have been observed parking in them. This has created constriction points in the subdivision that do not allow for delivery, service or emergency vehicles to pass through if a vehicle is parked in these locations. Habitat for Humanity of Monroe County has also received interest from residents of Trail View regarding on-street handicap accessible parking spaces. Providing onstreet marked handicapped spaces requires using certain design standards. If there is interest to provide handicapped spaces, the location(s) and other details can be considered at a future date.

### Recommendations

Staff requests that the Traffic Commission recommend that the City Council amend Title 15 and restrict parking at the locations proposed on W. Moravec Way. If approved, a more detailed amendment will be prepared once this request is forwarded to the Common Council for their consideration.





**Planning and Transportation Department** 



The east side of W. Moravec Way ( $\sim$ 22). The proposed no-parking zone would be the curve on the left side of the photo.



The first curve on the west side of W. Moravec Way ( $\sim$ 19). The proposed no parking zone is on the left side of the photo (note the parked car in this location).



The second curve on the west side of W. Moravec Way (~19). The proposed no parking zone is on the left side of the photo.



### **MEMORANDUM**

To: Traffic Commission

From: Neil Kopper, Project Engineer

Date: November 16, 2016

Re: E. 3rd St and N. Overhill Dr. Intersection – Access Management

### **Background**

This request started as a citizen's concern regarding the difficulty of left turns from Overhill onto 3<sup>rd</sup> Street. The citizen writes: "Turns onto 3rd street from Overhill Drive are very, very dangerous! It is basically a turn into a 5 lane road. I was going southbound on Overhill Drive making a left turn onto 3rd, but I was unable to see incoming traffic from eastbound 3rd street which was being blocked by cars stopped at the stoplight on westbound 3rd st....It seems like the connection between Overhill Drive and 3rd street should be blocked off because there is no traffic light onto the 5 lane road which has high traffic, and due to the stoplight at 3rd/Woodcrest, all the stopped vehicles are blocking the view of oncoming traffic."

A review of crash data between January 2011 and September 2016 indicates 10 crashes in which line of sight may have been a contributing factor. Sight distance from Overhill Drive appears to be adequate except when vehicles are backed up from the signalized intersection located one block west at Woodscrest and 3<sup>rd</sup> St. There are plans to improve the 3<sup>rd</sup>-Woodscrest intersection (with construction in the summer of 2017) which may improve conditions at the 3<sup>rd</sup> and Overhill intersection by reducing the amount and frequency of queueing vehicles.

Access management, including removal of the connection between Overhill Drive and 3<sup>rd</sup> Street, would very likely reduce the frequency of crashes. Access to the area would still be maintained for all residents, but it may be less convenient. Significant coordination with other City departments and public outreach would be necessary before this type of improvement could be implemented.

**Recommendation:** Staff recommends continuing to monitor the 3<sup>rd</sup>-Overhill intersection before and after the improvements are made at the 3<sup>rd</sup>-Woodscrest intersection to see if those updates positively affect the 3<sup>rd</sup> and Overhill intersection.



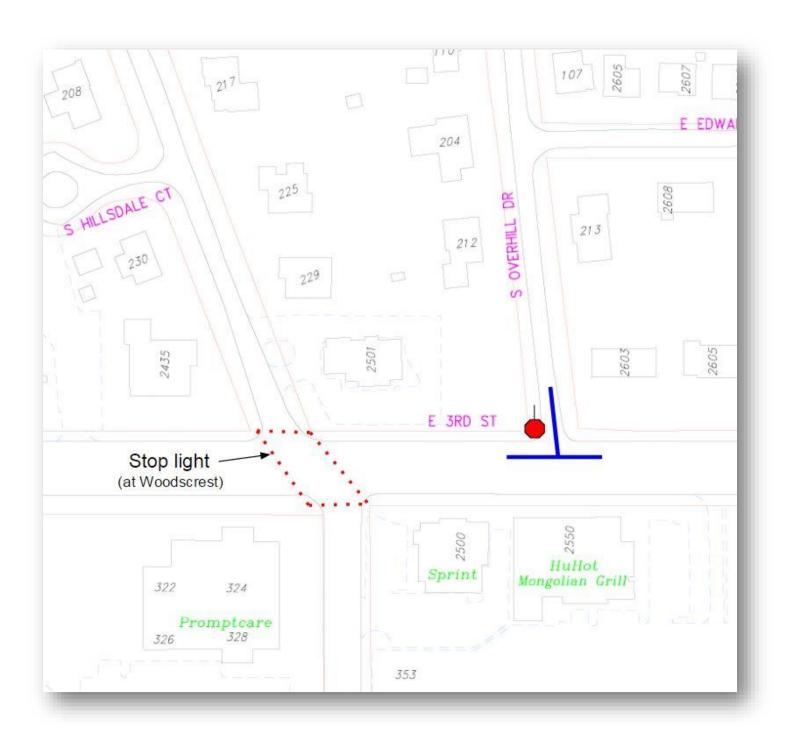
 ${\it View of existing sight distance\ traveling\ south\ on\ Overhill\ Dr.\ looking\ East\ on\ 3rd}$ 



View of traffic traveling south on Overhill Dr. looking east on 3rd St.



View of traffic traveling south on Overhill Dr. looking west on 3rd St. toward the Woodscrest and 3<sup>rd</sup> intersection



On Tue, Aug 30, 2016 at 5:17 PM, Adam Shahrani <> wrote:

Hi Neil,

A traffic island extending past Overhill Drive is absolutely needed on the east side of 3rd street at the intersection you are redesigning. I just read your plans for fixing the 3rd and Woodscrest signal. Unfortunately, as a resident living in close proximity to this intersection, I was not informed of these plans, but fortunately, I ran into them online.

As a resident on the northeast block of this intersection, I am very familiar with traffic conditions around this intersection. Occasionally, I hear car accidents on 3rd St from home. It is often someone making a left turn that crashes into oncoming traffic.

The reason behind these accidents is crystal clear. City traffic is poorly designed here. Making a left turn from Overhill Drive to 3rd St is a major problem on this strip of 3rd street. It is a very busy area with low visibility and it has five lanes with a traffic signal in close proximity: the combination spelling disaster. The line of site from Overhill Drive (southbound) to 3rd St is not clear due to hills blocking a driver's line of sight. There is an upward hill on the east property blocking drivers' sight and another downward hill on 3rd street preventing the ability to see oncoming traffic in advance. Vehicles are also frequently backed up at the traffic light, which creates an even worse line of sight, with automobiles obstructing views of oncoming traffic. To top it off, it is a 5 lane road with vehicles taking shortcuts to make left turns in the center lane towards the traffic light. It is the only residential area on this busy strip of 3rd street having a left turn onto a 5 lane road.

To resolve this problem, there a different solutions that can be implemented.

A. Overhill Drive connecting to 3rd street can be blocked off.

B. An island can be placed on east 3rd street starting from the traffic light extending past the Overhill Drive intersection.

Either of these suggestions will prevent future accidents. Option B sounds like the most feasible considering you are redesigning the intersection to make it safer. I hope you take this recommendation in good faith as you work on the 3rd and Woodcrest project. Please discuss this further with me if you need more information to implement this solution - I would be happy to demonstrate this problem in person. My cell phone number is

Sincerely, Adam Shahrani

#### Video Link Submitted by Adam Shahrani



Nate Nickel <nickeln@bloomington.in.gov>

### Re: 3rd and Woodscrest Signal Improvement Project - Traffic Island needed on east side of intersection extending past Overhill Dr

Adam Shahrani <>

Thu, Nov 10, 2016 at 5:22 AM

To: Nate Nickel <nickeln@bloomington.in.gov>

Cc: Neil Kopper <koppern@bloomington.in.gov>, Scott Robinson <robinsos@bloomington.in.gov>, "Laracuente, Enabah" <>

Hi Nate,

I sent you my accident scenarios document yesterday. I also tried sending a separate email with a video attached to it, but it appears the attachment was too big or got corrupted. I figured out a way to share it this morning though.

This video is basically what happens numerous times every single day going from Overhill to 3rd street. This was my first take recording - there is nothing special about this video in that I could have sat there and recorded this happening more than 100 times every single day. You get traffic quickly appearing and clogging up the left turn from Overhill, and stopped traffic is blocking visibility, increasing the likelihood of accidents.

This video is the precursor to many of the accident scenarios in the email I sent you yesterday.

Take a look at what happens to me and others every single day from the perspective of turning left at Overhill Drive onto 3rd:

https://www.dropbox.com/s/hvoow88918gpdri/Overhill.mp4?dl=0

Thanks, Adam

[Quoted text hidden]

1 of 1 11/10/2016 9:16 AM

## Accident Prevention

3<sup>rd</sup> & Woodcrest intersection signal and Overhill Dr accidents in Bloomington, Indiana!

### 2 major safety issues related to Overhill Dr

- Proximity to traffic light limiting visibility and increasing danger
- Landscape blocks visibility (on property and on road)



## There are frequent backups at the 3<sup>rd</sup> and Woodcrest intersection due to the traffic signal.



Extremely typical scenario: traffic blocks vehicles from turning left from Overhill Dr.

• This results in poor visibility for the Overhill and 3<sup>rd</sup> street intersection while turning onto/from the five lane road in close proximity to a stoplight. There are numerous accident scenarios that this causes. Sometimes, when vehicles swerve away to avoid these collisions, they result in other accidents nearby.

# How to read the following diagrams of a dozen potential accidents due to left turns:

• The top image is moments before the accident

The bottom image is the accident (yellow

 The red cars could be stopped, preventing them from crashing into blue cars by limiting left turns

• Keep in mind, sometimes swerving to avoid these twelve scenarios actually results in another accident nearby.

## Accident 1: Left turn from eastbound 3<sup>rd</sup> vs westbound 3<sup>rd</sup> north lane.

Before:

Blue car driving, red car wants to turn left.



After:
Vehicle stopped
at stop light
blocked vision,
resulting in
crash.

Accident 2: Left turn from eastbound 3<sup>rd</sup> vs westbound 3<sup>rd</sup> south lane switching to north.

Before:

Blue car wants to change lanes to get ahead. Red car doesn't see blue car.



#### After:

Blue car was busy looking behind to avoid oncoming traffic, and crashes into red.

Accident 3: Left turn from eastbound 3<sup>rd</sup> vs westbound 3<sup>rd</sup> left lane turning south at light.

Before:
Blue car wants
to turn left at
the light, and
red car wants to
turn left onto
Overhill.



#### After:

They crash head on in center lane as blue car wants to get into turn lane, and red gets ready to turn.

# Accident 4: Left turn from eastbound 3<sup>rd</sup> vs left turn from southbound Overhill Dr.

Before:
Red car wants
to turn left from
Overhill, and
other red car
wants to turn
left onto
Overhill.



After: Visibility blocked by vehicle results in crash. Accident 5: Left turn southbound Overhill Dr vs. left turn from Eastland plaza.

Before:
Blue car sees no traffic on eastbound 3<sup>rd</sup>, and red car wants to turn left.



#### After:

Blue car sees no traffic on westbound 3rd (after having already checked eastbound), begins turning left, but by now, red car is in lane and blue car crashes. Accident 6: Left turn southbound Overhill Dr vs. westbound 3<sup>rd</sup> turning left at light.

Before: Red car wants to turn left and blue car wants

to turn left.



After:
Visibility
blocked by
traffic, results in
crash.

Accident 7: Left turn southbound Overhill Dr vs. 3<sup>rd</sup> 5 lanes to watch.

Before:
Blue car just
driving on 3<sup>rd</sup>,
red car wants to
turn left on 5
lane road.

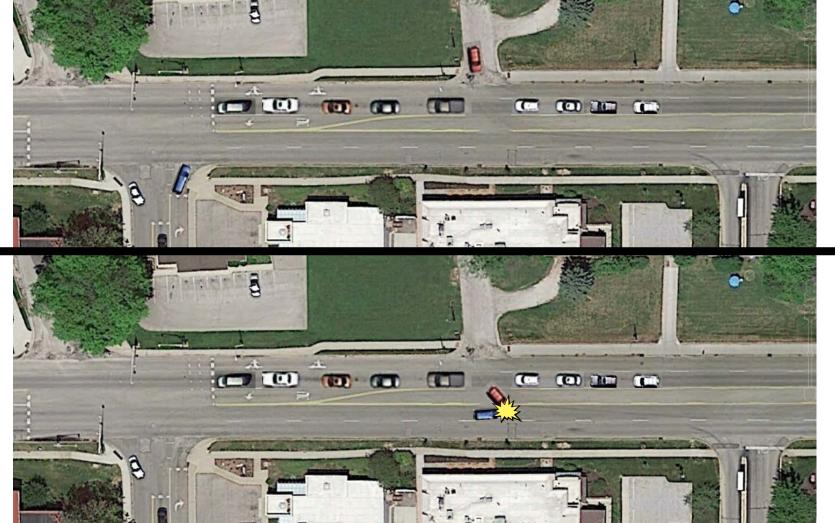


#### After:

Oncoming surprise traffic up hill rushes red car, and red car doesn't see blue due to too many lanes and other vehicles – crash.

Accident 8: Left turn southbound Overhill vs northbound Woodcrest turning right on green.

Before:
Red car thinks
road is clear,
and blue car
has green light
so they quickly
turn right.



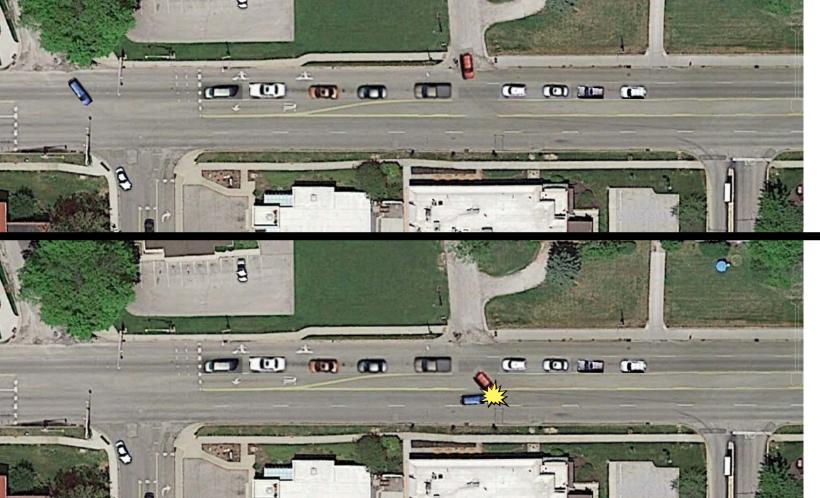
#### After:

They crash because red didn't see blue car coming, and blue was going fast because blue had a green light.

Accident 9: Left turn southbound Overhill vs southbound Hillsdale turning left on green.

Before:
Blue car turning
left and red car
turning left.
Blue car going

fast because they have green light.



#### After:

They crash because red did not see blue turning and though it was clear, and blue was going fast because they had green light.

Accident 10: Left turn southbound Overhill Drvs. westbound 3<sup>rd</sup> changing lanes.

Before:
Red car wants
to turn left,
blue car would
like to change
lanes, sees that
road is clear
ahead and
focuses on rear

oncoming traffic.



#### After:

Crash because blue was looking behind for oncoming traffic, and red didn't expect blue to change lanes.

## Accident 11: Turning left from Overhill, visibility is blocked by a hill and retaining wall on property.



Accident 11: Turning left from Overhill, visibility is blocked by a hill and retaining wall on property.

Before:

Red doesn't see blue because of hill on property and blue goes fast to catch green light.



After: Crash because lack of visibility due to landscape.

# Accident 12: Turning left from Overhill, visibility is blocked by hill street with fast-moving vehicles.





Accident 12: Turning left from Overhill, visibility is blocked by hill on 3<sup>rd</sup> with fast-moving vehicles.

#### Before:

Red doesn't see blue because of hill on 3<sup>rd</sup> street and blue goes fast to catch green light.



After:
Crash because lack of visibility due to sloping 3<sup>rd</sup> Street.

### Possible Solution A:

• Block South Overhill entrance due to proximity to traffic light and lack of visibility caused by intersection and property landscape.



### Possible Solution B:

• Install narrow island to prevent the red cars from crashing into the blue cars , which resolves all scenarios 1-12 mentioned.



## Other possible solutions?

Open to suggestions