May 17, 2021 AM May 25, 2021 PM

School Marquette Elementary			
Crossing Location Atwood + Division		POII	NTS
Elementary School Children Crossing Atwood, E Leg	_		
1) Number of elementary students crossing a.m. peak hour (7:00 to 8:00) 5 6 - 9 2 30 - 34 p.m. peak hour (2:30 to 3:30) 5 15 - 19 4 40 - 49 20 - 24 5 50 - 74	points 6 100 15 20 30	a.m. 1	p.m.
School Schedule 7:50am – 2:47pm 75 – 99	35		
2) Gap Availability crossing distance = 28	points 20 24 28 32 36	8	8
3) Motor Vehicle Speed <u>mph</u> <u>points</u> <u>mph</u>	<u>points</u>	2	2
85th percentile speed = 28 mph a.m.	7 11 15		
4) Sight Distance : design stopping d 85th %ile speed	istance feet	0	0
available sight distance: feet bound	155 200 250 305 360 425		
<u>ratio</u> feet bound 2.1 +	points 0		
1.5 - 2.0 feet bound 1.0 - 1.5 < 1.0	1 5 15		
5) Safety History - Previous Five Years	-	0	0
a) Number of reported crashes at study location involving elementary school children going to or coming from school. O reported crashes crashes 0 1 each add'l	points 0 8 20		
b) Reported crashed not involving children going to or coming from school, but		0	0
reported crashes. Type: reported crashes. Type: _	ooints 0 - 5 0 - 5 0 - 5		
For each approach in excess of four. For complex signal or crossing design. For simple signal or crossing design. Safer crossing one block out of the way. Large percentage of grades K and 1 students (over 40%). An intersection of two arterial streets where total weekday traffic approach volume exceeds 25,000 vehicles. Children crossing multiple crosswalks at an intersection. Stopped buses and/or other obstructions.	points 1 to +5 +5 5 to +10 5 to -10 -10 1 to +5 +4 1 to +10 1 to +5 1 to +5	0	0
TOTAL HAZAR	D RATING	11	11

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Non-signalized intersection.
- Crossing has continental crosswalk markings.

Recommend discontinuance of Adult School Crossing Guard since this location does not meet the criteria for minimum number of elementary students and overall hazard rating.

Study Date: May 25, 2021

School Elvjhem Elementary		
Crossing Location Buckeye + Droster	POI	NTS
Elementary School Children Crossing Buckeye, E Leg		
1) Number of elementary students crossing a.m. peak hour (7:00 to 8:00) 0 6 - 9 2 30 - 34 100 p.m. peak hour (2:30 to 3:30) 0 15 - 19 4 40 - 49 20 School Schedule 8:40am - 3:37pm 75 - 99 35	a.m. 0	p.m. 0
2) Gap Availability crossing distance = 21 feet gap time points 80 + 0 45 - 49 20 70 - 79 4 40 - 44 24 minimum safe crossing time = 6 seconds 60 - 69 8 30 - 39 28 55 - 59 12 20 - 29 32 50 - 54 16 0 - 20 36 % safe crossing time = 75 % a.m. 76 % p.m.	4	4
3) Motor Vehicle Speed	4	4
A	0	0
5) Safety History - Previous Five Years a) Number of reported crashes at study location involving elementary school children going to or coming from school. O 1 8 O reported crashes each add'l 20	0	0
b) Reported crashed not involving children going to or coming from school, but of types and/or at times that could conflict with school crossing at this location. reported crashes. Type: 0 - 5 reported crashes. Type: 0 - 5	0	0
Foreign traffic route. For each approach in excess of four. For complex signal or crossing design. For simple signal or crossing design. Safer crossing one block out of the way. Large percentage of grades K and 1 students (over 40%). An intersection of two arterial streets where total weekday traffic approach volume exceeds 25,000 vehicles. Children crossing multiple crosswalks at an intersection. Stopped buses and/or other obstructions. Volume of turning traffic not reflected in gap availability. Observations of the percent and types of trucks during the times when students are using the crossing	0	0
TOTAL HAZARD RATING	8	8

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Non-signalized intersection.
- Safe gaps calculated north of the island during AM & south of the island during PM.
- Crossing has a Rectangular Rapid Flashing Beacon.

Recommend discontinuance of Adult School Crossing Guard since this location does not meet the criteria for minimum number of elementary students and overall hazard rating.

June 8, 2021 AM

Study Date: May 20, 2021 PM

School	Thoreau Elementary -	– Wingra School							
Crossing	Location Glenway	+ Monroe						POI	NTS
Elementar	ry School Children Cros	ssing Glenwa	y, N Leg					a m	n m
,	r of elementary student	J		<u>number</u> 1 - 5	points 1	<u>number</u> 25 - 29	points 6	a.m. 1	p.m.
a.m. pe	eak hour (7:00 to 8:00))		6 - 9 10 - 14	2 3	30 - 34 35 - 39	100 15		
p.m. pe	eak hour (2:30 to 3:30))1		15 - 19 20 - 24	4 5	40 - 49 50 - 74	20 30		
	chedule 7:50am – 2:47pm			20 - 24		75 – 99	35 35		
2) Gap Av	vailability ng distance =46	feet		% safe gap time 80 +	points 0	% safe <u>gap time</u> 45 - 49	points 20	4	8
minimu	um safe crossing time	= <u>13</u> seco	onds	70 - 79 60 - 69 55 - 59 50 - 54	4 8 12 16	40 - 44 30 - 39 20 - 29 0 - 20	24 28 32 36		
% safe	e crossing time = $\frac{76}{69}$	<u> </u>	Safe go	zed intersectic ap calculatec ay Walk Phase	l during				
3) Motor	Vehicle Speed			mph	points	mph	points	4	4
85th pe	ercentile speed =	34 mph a.m		< = 20 21 - 25 26 - 30 31 - 35	0 1 2 4	36 - 40 41 - 45 46 +	7 11 15		
		<u> </u>	•	31 - 33	7				
4) Sight E	ole sight distance:	feet feet			<u>85</u>	sign stopping th %ile speed <= 25 mph 26 - 30 mph 31 - 35 mph		0	0
			P. 4			36 - 40 mph 41 - 45 mph 46 + mph	305 360 425		
ratio:	available sight distanc	e / design stoppi feet _		e bound		<u>ratio</u> 2.1 +	points 0		
		feet _		bound		1.5 - 2.0 1.0 - 1.5 < 1.0	1 5 15		
5) Safety	History - Previous Five	e Years				-		0	0
a) Nun elen	mber of reported crashe mentary school childrer	es at study locati n going to or com	on involvir ning from s	ng school.		<u>crashes</u> 0 1	<u>points</u> 0 8		
		0 report	ed crashes	8		each add'l	20		
	ported crashed not invo							1	1
of ty	ypes and/or at times tha	at could conflict	with schoo	ol crossing at	this locat		points		
2	reported crashes reported crashes.		<u>n (1</u>)AM & (1)PM			0 - 5 0 - 5		
	reported crashes.						0 - 5		
6) Other F	Factors						points		
Foreign	n traffic route. ch approach in excess of	f four					0 to +5 +5	5	5
For cor	mplex signal or crossing	design.					+5 to +10		
	nple signal or crossing de crossing one block out of						-5 to -10 -10		
Large p	percentage of grades K a	and 1 students (ove					0 to +5		
	rsection of two arterial st c approach volume excee						+4		
Childre	n crossing multiple cross	swalks at an inters					0 to +10 0 to +5		
Volume	ed buses and/or other obsection of turning traffic not refle	ected in gap availa					0 to +5		
Observ	vations of the percent and	d types of trucks d	uring the tir	nes when stu	dents are ι			15	19
I						TOTAL HAZA			ı '/

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Signalized intersection.
- Safe gaps calculated during Monroe St Green Time/Glenway St Walk phase.

Recommend discontinuance of Adult School Crossing Guard since this location does not meet the criteria for minimum number of elementary students.

June 10, 2021

Study Date:

Midvale Elementary ————————————————————————————————————		
Crossing Location Midvale – Mineral Point	POI	NTS
Elementary School Children Crossing Midvale, E Leg		
1) Number of elementary students crossing number points number points 1 - 5 1 25 - 29 6 a.m. peak hour (7:00 to 8:00) 1 6 - 9 2 30 - 34 100 10 - 14 3 35 - 39 15	a.m.	p.m. 0
p.m. peak hour (2:30 to 3:30) 0 15 - 19 4 40 - 49 20 20 - 24 5 50 - 74 30		
School Schedule 7:50am – 2:47pm 75 – 99 35 2) Gap Availability	20	28
crossing distance = 60 feet 60 feet	20	20
3) Motor Vehicle Speed	4	7
4) Sight Distance : design stopping distance available sight distance: feet bound	0	0
ratio: available sight distance / design stopping distance feet bound		
5) Safety History - Previous Five Years a) Number of reported crashes at study location involving crashes points elementary school children going to or coming from school. 0 0 1 8	0	0
0 reported crashes each add'l 20		
b) Reported crashed not involving children going to or coming from school, but of types and/or at times that could conflict with school crossing at this location. reported crashes. Type: PM: Angle crash (lights temporarily on flash)	1	1
6) Other Factors Foreign traffic route. For each approach in excess of four. For complex signal or crossing design. For simple signal or crossing design.	5	5
Safer crossing one block out of the way. Large percentage of grades K and 1 students (over 40%). An intersection of two arterial streets where total weekday traffic approach volume exceeds 25,000 vehicles. Children crossing multiple crosswalks at an intersection. Stopped buses and/or other obstructions. Volume of turning traffic not reflected in gap availability. Observations of the percent and types of trucks during the times when students are using the crossing	4	4
TOTAL HAZARD RATING	35	45

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Signalized intersection.
- Safe gaps calculated during Mineral Point Rd Green Time/Midvale Blvd Walk phase.
- Child crossed with adult; 1 middle school student crossed in afternoon

Recommend discontinuance of Adult School Crossing Guard since this location does not meet the criteria for minimum number of elementary students and has not for several years.

by	<u>Renee Callaway</u>	/	Date <u>J∪ly</u>	<u> 23,</u>	202 I
•		-			

Study Date: May 17, 2021

Sc	hool Pope Farm Elementary								
Cr	ossing Location Old Sauk + Sche	we							
Ele	mentary School Children Crossing	Old Sau	ık, W Leg					POII	
1)	Number of elementary students cros	sing		number	points	number	points	a.m. 1	p.m. 1
	a.m. peak hour (7:00 to 8:00)3			1 - 5 6 - 9	1 2	25 - 29 30 - 34	6 100		
	p.m. peak hour (2:30 to 3:30)5			10 - 14 15 - 19	3 4	35 - 39 40 - 49	15 20		
Sc	chool Schedule 7:40am – 2:40pm			20 - 24	5	50 - 74 75 - 99	30 35		
2)	Gap Availability			% safe		% safe		0	0
	crossing distance = 21 fee	et		gap time 80 +	points 0	<u>gap time</u> 45 - 49	<u>points</u> 20		
	minimum safe crossing time = 6	seco	nde	70 - 79 60 - 69	4 8	40 - 44 30 - 39	24 28		
	minimum sale crossing time - o	seco	iius	55 - 59	12	20 - 29	32		
	% safe crossing time = 93 % a	a.m.	• Non-S	50 - 54 iignalized inters	16	0 - 20	36		
	<u>92</u> %	p.m.	11011-3	iigi idiized ii iieis	ecilori				
3)	Motor Vehicle Speed			mph	points	<u>mph</u>	points	7	11
'	·			< = 20	0	36 - 40	7	,	
	85th percentile speed = 39	-		21 - 25 26 - 30	1 2	41 - 45 46 +	11 15		
	42	mph p.n	n.	31 - 35	4				
4)	Sight Distance :					sign stopping o	distance feet	0	0
	available sight distance:	feet	bo	ound	<u>00</u>	< = 25 mph	155 200		
		_ feet	b	ound		26 - 30 mph 31 - 35 mph	250		
						36 - 40 mph 41 - 45 mph	305 360		
	ratio: available sight distance / des	gn stopp	ing distan	ce		46 + mph	425		
		feet		bound		<u>ratio</u> 2.1 +	<u>points</u> 0		
		feet		bound		1.5 - 2.0 1.0 - 1.5	1 5		
5)	Safety History - Previous Five Years					< 1.0	15	0	0
'	a) Number of reported crashes at st	udy locati	on involvi	ina		crashes	points	O	O
	elementary school children going					0	0 8		
	0	report	ted crashe	es		each add'l	20		
	b) Reported crashed not involving of							0	1
	of types and/or at times that could	d conflict	with scho	ol crossing at	t this loca		<u>points</u>		
	reported crashes. Type	: Single	Vehicle G	oing Straight	(deer) PM	<u>l</u>	0 - 5		
	reported crashes. Type	: <u>-</u>					0 - 5		
	reported crashes. Type	: <u>-</u>					0 - 5		
6)	Other Factors Foreign traffic route.						<u>points</u> 0 to +5		
	For each approach in excess of four.						+5		
	For complex signal or crossing design. For simple signal or crossing design.						-5 to +10 -5 to -10		
	Safer crossing one block out of the way Large percentage of grades K and 1 str	udents (ov					-10 0 to +5		
	An intersection of two arterial streets w traffic approach volume exceeds 25,0	here total	weekday				+4		
	Children crossing multiple crosswalks a Stopped buses and/or other obstruction	it an inters					0 to +10 0 to +5	1	1
	Volume of turning traffic not reflected in Observations of the percent and types	gap avail	ability.	imaa whan atee	donto oro :		0 to +5		
	Observations of the percent and types	or trucks 0	uning the t	mes when stu	uento die l	TOTAL HAZAI		9	14
							-		

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Non-signalized intersection.
- Crossing has continental crosswalk markings.
- All students crossed with an adult.
- South leg was also used by all students+adults.

Adult School Crossing Guard is not recommended since this location does not meet the criteria for minimum number of elementary students and overall hazard rating.

May 25, 2021 AM **Study Date:**May 25, 2021 AM

June 9, 2021 PM

School Orchard Ridge Elementary							
Crossing Location Raymond + Lelar	nd						
Elementary School Children Crossing	Raymond, E l	_eg				POII	
1) Number of elementary students cross	sing	number	points	number	points	a.m.	p.m. 2
a.m. peak hour (8:00 to 9:00)5		1 - 5 6 - 9	1 2	25 - 29 30 - 34	6 100		
p.m. peak hour (3:30 to 4:30)7		10 - 14 15 - 19	3 4	35 - 39 40 - 49	15 20		
School Schedule 8:40am – 3:37pm		20 - 24	5	50 - 74 75 - 99	30 35		
2) Gap Availability		0/ 2252		0/ 2252		8	8
crossing distance = 32 fee	t	% safe <u>gap time</u> 80 +	points 0	% safe gap time 45 - 49	points 20		
minimum safe crossing time = 10	seconds	70 - 79 60 - 69 55 - 59	4 8 12	40 - 44 30 - 39 20 - 29	24 28 32		
% safe crossing time = <u>66</u> % a	ı .m.	50 - 54	16	0 - 20	36		
3) Motor Vehicle Speed		<u>mph</u>	points	mph	points	7	7
5) Motor venicle Speed		= 20	0	36 - 40	7	/	/
85th percentile speed = 39	mph a.m.	21 - 25 26 - 30	1 2	41 - 45 46 +	11 15		
40	mph p.m.	31 - 35	4	40 .	10		
4) Sight Distance :				gn stopping	distance	0	0
available sight distance:	feet	_ bound		<pre> %ile speed < = 25 mph</pre>	<u>feet</u> 155		
	feet			6 - 30 mph 1 - 35 mph	200 250		
		bound	3	6 - 40 mph	305		
				1 - 45 mph 6 + mph	360 425		
ratio: available sight distance / desi	gn stopping di	stance		ratio	points		
	feet	bound		2.1 + 1.5 - 2.0	0 1		
	feet	bound		1.0 - 1.5 < 1.0	5 15		
5) Safety History - Previous Five Years						0	0
a) Number of reported crashes at stu- elementary school children going				crashes 0	points 0		
0	reported cra	ashes		1 each add'l	8 20		
b) Reported crashed not involving country of types and/or at times that could	hildren going to	o or coming from	school, but	; :		1	0
1 reported crashes. Type			i iiiis iocali(points 0 - 5		
reported crashes. Type:		<u>aivi</u>			0 - 5		
reported crashes. Type:	_				0 - 5		
	-						
6) Other Factors Foreign traffic route.					<u>points</u> 0 to +5	0	0
For each approach in excess of four. For complex signal or crossing design.				4	+5 -5 to +10		
For simple signal or crossing design.					-5 to -10		
Safer crossing one block out of the way Large percentage of grades K and 1 stu		6)			-10 0 to +5		
An intersection of two arterial streets when	nere total weekd				0 10 10		
traffic approach volume exceeds 25,0 Children crossing multiple crosswalks a					+4 0 to +10		
Stopped buses and/or other obstruction	S.				0 to +10		
Volume of turning traffic not reflected in Observations of the percent and types of	gap availability.		dente aro uo	ing the crossin	0 to +5		
Observations of the percent and types t	n tracks duling	uio uines wiieli slu		TOTAL MAZAL		17	17

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

- Non-signalized intersection.
- Crossing has a Rectangular Rapid Flashing Beacon and continental crosswalk markings.

Adult School Crossing Guard not recommended since this location does not meet the criteria for minimum number of elementary students and overall hazard rating.

June 4, 2021

Study Date:

SCHOOL CROSSING ANALYSIS City of Madison Department of Transportation Traffic Engineering Division

School Pope Farm Elementary – Middleton Cross Plains School District Schewe + River Birch Crossing Location **POINTS Elementary School Children Crossing** Schewe, S Leg a.m p.m. 1) Number of elementary students crossing points <u>number</u> <u>number</u> <u>points</u> 2 1 - 5 1 25 - 29 6 30 - 34 a.m. peak hour (7:15 to 7:45) 3 6 - 9 2 10 10 - 14 3 35 - 39 15 p.m. peak hour (2:30 to 3:10) _____7 15 - 19 4 40 - 49 20 20 - 24 50 - 74 30 School Schedule 7:40am – 2:40pm 75 - 9935 2) Gap Availability Ω 4 % safe % safe crossing distance = 36 feet gap time <u>points</u> gap time <u>points</u> 45 - 49 70 - 79 4 40 - 44 24 minimum safe crossing time = 12 seconds 60 - 69 8 30 - 39 28 55 - 59 12 20 - 29 32 50 - 54 16 0 - 20 36 % safe crossing time = 84 % a.m. <u>72</u> % p.m. 3) Motor Vehicle Speed mph points mph points 1 1 < = 20 0 36 - 40 7 Posted (not 85th percentile speed) = _____ mph a.m. 21 - 25 1 41 - 45 11 26 - 30 2 46 + 15 _____ mph p.m. 31 - 354 4) Sight Distance: design stopping distance \cap 0 85th %ile speed feet available sight distance: _____ feet ___ _____ bound < = 25 mph 155 26 - 30 mph 200 ____ feet ____ bound 31 - 35 mph 250 36 - 40 mph 305 41 - 45 mph 360 46 + mph 425 ratio: available sight distance / design stopping distance <u>ratio</u> points _____ feet ____ bound 2.1 + 0 1.5 - 2.0 1 ____ bound ____ feet ___ 1.0 - 1.55 < 1.0 15 5) Safety History - Previous Five Years 0 0 a) Number of reported crashes at study location involving crashes **points** elementary school children going to or coming from school. 0 1 8 each add'l 20 0 reported crashes b) Reported crashed not involving children going to or coming from school, but 0 0 of types and/or at times that could conflict with school crossing at this location. points reported crashes. Type: 0 - 5 reported crashes. Type: 0 - 5 _ reported crashes. Type: _{_} 6) Other Factors points Foreign traffic route. 0 to +5 0 0 For each approach in excess of four. For complex signal or crossing design. +5 to +10 For simple signal or crossing design. -5 to -10 -10 Safer crossing one block out of the way. Large percentage of grades K and 1 students (over 40%). 0 to +5 An intersection of two arterial streets where total weekday traffic approach volume exceeds 25,000 vehicles. Children crossing multiple crosswalks at an intersection. 0 to +10 Stopped buses and/or other obstructions. 0 to +5 Volume of turning traffic not reflected in gap availability. 0 to +5 Observations of the percent and types of trucks during the times when students are using the crossing TOTAL HAZARD RATING 7 2

Using the hazard rating as a guide, the following measures are appropriate:

- 1. **Mark as a school crossing** when the hazard rating is <u>greater than 20 points</u> at a crossing used by <u>at least 25 elementary school students</u> during the peak crossing hour. The Traffic Engineer is authorized to mark such a crossing with appropriate warning signs and special crosswalk markings.
- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

Recommend discontinuance of Adult School Crossing Guard since this location does not meet the criteria for minimum number of elementary students and overall hazard rating.

by _	<u>Renee</u>	<u>Callaway</u>	<u>′</u> l	Date	<u>JUI)</u>	<u>/ 23,</u>	2021

June 4, 2021

Study Date:

School _	Pope Fa	rm Elementary – Mic	ddleton Cross Plains School District
Crossing	Location	Schewe + Shado	w Ridge
Elementa	ry School	Children Crossing	Schewe, N Leg

						POII	NTS
El	ementary School Children Crossing Schewe, N Leg					a.m.	p.m.
1)	Number of elementary students crossing	number	points	number	points	15	30
l ''	number of elementary equations of element	1 - 5	1	25 - 29	6	13	30
	a.m. peak hour (7:15 to 7:45)36	6 - 9	2	30 - 34	10		
	, , , , , , , , , , , , , , , , , , ,	10 - 14	3	35 - 39	15		
	p.m. peak hour (2:30 to 3:10)64	15 - 19	4	40 - 49	20		
	<u> </u>	20 - 24	5	50 - 74	30		
S	chool Schedule 7:40am – 2:40pm			75 – 99	35		
2)	Gap Availability					16	8
′	•	% safe		% safe			
	crossing distance = <u>36</u> feet	gap time	<u>points</u>	gap time	<u>points</u>		
	<u></u>	80 +	0	45 - 49	20		
		70 - 79	4	40 - 44	24		
	minimum safe crossing time = 12 seconds	60 - 69	8	30 - 39	28		
	<u> </u>	55 - 59	12	20 - 29	32		
		50 - 54	16	0 - 20	36		
	% safe crossing time = 52 % a.m.						
	66 % p.m.						
	<u> </u>						
3)	Motor Vehicle Speed	<u>mph</u>	<u>points</u>	<u>mph</u>	<u>points</u>		
1		< = 20	0	36 - 40	7	1	1
	Posted (not 85th percentile speed) = mph a.m.	21 - 25	1	41 - 45	11		
1	· · · · · · · · · · · · · · · · · · ·	26 - 30	2	46 +	15		
	25 mph p.m.	31 - 35	4				
L	····						
4)	Sight Distance :		desi	gn stopping	distance	0	0
			<u>85th</u>	%ile speed	<u>feet</u>		
	available sight distance: feet bour	nd	•	< = 25 mph	155		
			2	6 - 30 mph	200		
	feet bou	und	3	1 - 35 mph	250		
			3	6 - 40 mph	305		
			4	1 - 45 mph	360		
			4	6 + mph	425		
	ratio: available sight distance / design stopping distance	•					
				<u>ratio</u>	<u>points</u>		
	feet b	ound		2.1 +	0		
				1.5 - 2.0	1		
	feet b	ound		1.0 - 1.5	5		
				< 1.0	15	_	_
5)	Safety History - Previous Five Years					0	0
	a) Number of reported crashes at study location involving	n		crashes	points		
	elementary school children going to or coming from so	chool.		0	0		
	dictionally control children going to or coming from oc),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1	8		
	0 reported crashes			each add'l	_		
	reported clasiles			Jaon aud I	20		
	b) Reported crashed not involving children going to or co	mina from	school. but			0	0
	of types and/or at times that could conflict with school					J	
		•			<u>points</u>		
1	reported crashes. Type:				0 - 5		
	reported crashes. Type: _				0 - 5		
	reported crashes. Type: _				0 - 5		
C)	Other Factors				points		
(۱۹	Other Factors Foreign treffic route				<u>points</u> 0 to +5	_	_
1	Foreign traffic route. For each approach in excess of four.				+5	0	0
	For complex signal or crossing design.				+5 +5 to +10		
	For simple signal or crossing design.				-5 to -10		
1	Safer crossing one block out of the way.				-5 to -10 -10		
1	Large percentage of grades K and 1 students (over 40%).				-10 0 to +5		
1					U 1U +3		
1	An intersection of two arterial streets where total weekday				4		
	traffic approach volume exceeds 25,000 vehicles.				+4 0 to +10		
	Children crossing multiple crosswalks at an intersection				ひしてし		1
	Children crossing multiple crosswalks at an intersection.				0 to		
	Stopped buses and/or other obstructions.				0 to +5		
	Stopped buses and/or other obstructions. Volume of turning traffic not reflected in gap availability.	os whon str	donte ere	ing the organization	0 to +5		
	Stopped buses and/or other obstructions.	es when stu	dents are us	sing the crossir	0 to +5		
	Stopped buses and/or other obstructions. Volume of turning traffic not reflected in gap availability.	es when stu		sing the crossin	0 to +5 ng	32	39

Using the hazard rating as a guide, the following measures are appropriate:

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- 2. **Install flashing beacons** if any one of the following conditions is met:
- a. The 85th percentile speed is in excess of 40 mph measured at existing school crossing signs which have been in place at least 30 days.
- b. The street crossed is a U.S. or State Trunk Highway on which a significant percentage of "foreign" drivers can be expected.
 - c. The ratio of sight distance to safe stopping distance is less than 1.5.
- d. The hazard rating is greater than 30 at an unguarded location where at least 25 elementary students cross and the available safe crossing gaps are less than 50 percent.
- 3. **Recommend the assignment of an adult school crossing guard** when the hazard rating is greater than 40 points at a crossing used by at least 25 elementary school students during the peak crossing hour.

If the <u>school has only grades K through 2</u>, recommend the assignment of an adult school crossing guard in the hazard rating is <u>greater than 30 points</u> at a crossing used by <u>at least 15 elementary school students</u> during the peak crossing hour.

4. **Recommend the discontinuance of adult school crossing guard protection** at a crossing where the hazard rating <u>falls below 30 points</u> or if the number of elementary school students crossing during the peak hour in <u>less than 15</u>.

At the intersection of two arterial streets where the total weekday entering traffic volume exceed 25,000 vehicles, the total number of students crossing at the intersection will be used to compare to the minimum of 15 students required to retain an adult school crossing guard.

Remarks/Recommendations

Recommend placement of crossing guard as gaps would have been less frequent without presence of temporary crossing guard and does not meet the criteria for discontinuing crossing guard.

by Renee Callaway Date July 23, 2021

SCHOOL CROSSING ANALYSIS City of Madison Department of Transportation Traffic Engineering Division

Van Hise Elementary

School

Cr	ossing Location Segoe + Richland						
Ele	ementary School Children Crossing Segoe W Leg						NTS
1)	Number of elementary students crossing	number	points	number	points	a.m. 3	p.m.
	a.m. peak hour (8:00 to 8:45)10	1 - 5 6 - 9	1 2	25 - 29 30 - 34	6 100		
	p.m. peak hour (2:40 to 3:55) 12 in 2019	10 - 14 15 - 19	3 4	35 - 39 40 - 49	15 20		
	chool Schedule 8:40am – 3:37pm	20 - 24	5	50 - 74	30		
	Gap Availability			75 – 99	35	20	
,	crossing distance = <u>88</u> feet	% safe gap time 80 +	points 0	% safe gap time 45 - 49	points 20		
	minimum safe crossing time = 29 seconds	70 - 79 60 - 69 55 - 59 50 - 54	4 8 12 16	40 - 44 30 - 39 20 - 29 0 - 20	24 28 32 36		
	2019 % safe crossing time = <u>22</u> % a.m.	30 - 34	10	0 - 20	30		
20	% p.m. 21 % safe crossing time = 49 % a.m. (RRFB added)	l t	Segoe is a blv ime is based entire distance	on crossing			
					_		
3)	Motor Vehicle Speed	<u>mph</u>	<u>points</u>	<u>mph</u> 26 40	<u>points</u>	2	
	Posted (not 85th percentile speed) = 30 mph a.m.		0 1	36 - 40 41 - 45	7 11		
	mph p.m.	26 - 30 31 - 35	2 4	46 +	15		
4)	Sight Distance :			gn stopping		0	
	available sight distance: feet bour	nd		<pre> %ile speed < = 25 mph</pre>	<u>feet</u> 155		
	feet bou			6 - 30 mph 1 - 35 mph	200 250		
			3	6 - 40 mph 1 - 45 mph	305		
				6 + mph	360 425		
	ratio: available sight distance / design stopping distance			<u>ratio</u>	<u>points</u>		
	feet b	ound		2.1 + 1.5 - 2.0	0		
	feet b	ound		1.0 - 1.5	5		
5)	Safety History - Previous Five Years			< 1.0	15	0	
	a) Number of reported crashes at study location involving	3		<u>crashes</u>	<u>points</u>		
	elementary school children going to or coming from sc			0	0 8		
	0 reported crashes			each add'l	20		
	b) Reported crashed not involving children going to or co						
	of types and/or at times that could conflict with school	crossing a	at this location	on.	<u>points</u>		
	reported crashes. Type: _				0 - 5		
	reported crashes. Type: _				0 - 5		
	reported crashes. Type: _				0 - 5		
6)	Other Factors				<u>points</u>	-	
	For each approach in excess of four.				0 to +5 +5	5	
	For complex signal or crossing design. For simple signal or crossing design.				-5 to +10 -5 to -10		
	Safer crossing one block out of the way.				-10		
	Large percentage of grades K and 1 students (over 40%). An intersection of two arterial streets where total weekday				0 to +5		
	traffic approach volume exceeds 25,000 vehicles. Children crossing multiple crosswalks at an intersection.				+4 0 to +10		
	Stopped buses and/or other obstructions.				0 to +5		
L	Volume of turning traffic not reflected in gap availability. Observations of the percent and types of trucks during the time	es when stu	<u>udents</u> are us	ing the crossin	0 to +5 g		<u> </u>
				TOTAL HAZA		30	
1							Ī

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Remarks/Recommendations

- RRFB added in Summer 2020
- Spring 2019 U-turns at Segoe/Richland were prohibited after Crossing Guard study
 - o U-turns decreased from 40 cars in Dec 2019 to 3 cars in June 2021 during Crossing Guard study
- Usage does not meet minimum of 25 students do not recommend to add crossing guard

bv	Renee Callaway	Date July 23, 2021