Safety Certification Document

Analy	st: G	reg Gar	d, Jr.	

Agency: Wisconsin Department of

Transportation

Date of Analysis: April 2019

Design ID: 1360-12-00

Highway: 107th St. Bridge (over STH 145)

Project Title: Fond Du Lac, City of Milwaukee

1. Did the project have Meta-Manager Safety Flags?

Yes

No 🗵

Comments: No safety flags due to local road. All safety flags were on STH 145 and run off the road flag on ramp.

2. Did relevant crashes remain after initial Crash Vetting Process?

Yes 🗆

No ⊠

Comments: Almost all crashes were driver error or roadway conditions due to weather.

3. Are safety improvements needed to address concerns after the CGA Process? Yes \Box

No ⊠

Comments: No crashes remained after vetting process.

4. Were safety mitigation alternatives analyzed in this project?

Yes

No 🗵

- 4.1. Provide narrative of existing geometric conditions
- 4.2. Provide narrative of crash history that was used to begin the SMCP
- 4.3. Provide narrative of safety mitigation alternatives analyzed in SMCP
- 4.4. Analysis Results

The table below summarizes alternative crash forecasts, cost, and benefit/cost ratio for the total project.

Total Project Analysis	Base	Alt. A	Alt. B	Alt. C	Add
Name					
Analysis Method		as the same of		Setumenta organization	
Fatal & Injury	建议是这个证明	在 第2章 (1)	第二次的	J. B. B. B. D. D. P.	HANNE STATE
Property Damage	例为extended	K SEEKEELD	YAT BEELD TOTAL	CONTRACTOR	36450
Total	建凝胶的流流	祖公古海南沙区		AT 20 SEC A 2 LO	Was a sale
Cost					
B/C					

- 4.5. Provide narrative of reasonable and acceptable safety mitigation alternatives for consideration in the project improvement process
- 5. Approval

Dan Dedink	4-24-19
SE Region Safety Engineer	Date:
Kuba & Henrice	4/26/19
SE Region BPD Oversight Engineer	Date: /
Too Men	5/6/19
Region Flanning Chief	Date

Safety Certification Document

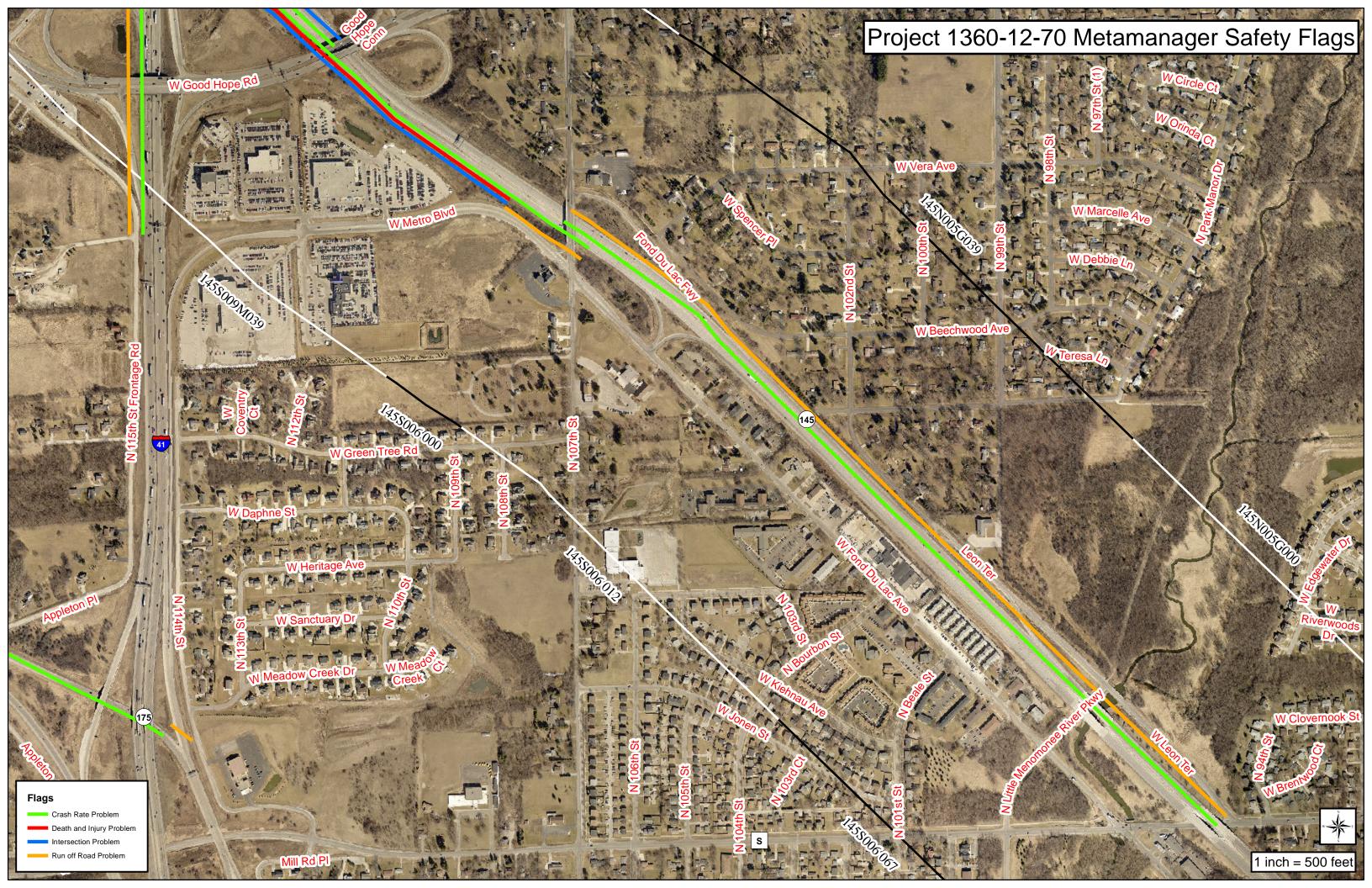
Analyst: Greg Gard, Jr. Design ID: 1360-12-00 Highway: 107th St. Bridge (over STH 145) **Agency: Wisconsin Department of Transportation** Date of Analysis: April 2019 Project Title: Fond Du Lac, City of Milwaukee 1. Did the project have Meta-Manager Safety Flags? Yes □ No ⊠ Comments: No safety flags due to local road. All safety flags were on STH 145 and run off the road flag on ramp. 2. Did relevant crashes remain after initial Crash Vetting Process? Yes □ No ⊠ Comments: Almost all crashes were driver error or roadway conditions due to weather. 3. Are safety improvements needed to address concerns after the CGA Process? Yes \Box No ⊠ Comments: No crashes remained after vetting process. 4. Were safety mitigation alternatives analyzed in this project? Yes □ No ⊠ 4.1. Provide narrative of existing geometric conditions 4.2. Provide narrative of crash history that was used to begin the SMCP 4.3. Provide narrative of safety mitigation alternatives analyzed in SMCP 4.4. Analysis Results The table below summarizes alternative crash forecasts, cost, and benefit/cost ratio for the total project. Add Total Project Analysis Base Alt. A Alt. B Alt. C columns Name Analysis Method Fatal & Injury Property Damage Total Cost B/C 4.5. Provide narrative of reasonable and acceptable safety mitigation alternatives for consideration in the project improvement process 5. Approval SE Region Safety Engineer Date: SE Region BPD Oversight Engineer Date: Region Planning Chief Date

ATTACHMENTS

- A. Project Location/Overview Map
- B. Sites of Promise Documentation
 - a. Meta-Manager file (XLS kept in electronic file)
- C. Crash Vetting Documentation
 - a. WisTransPortal crash data spreadsheet with vetting comments (PDF)
- D. Safety Certification Worksheet (PDF)
- E. Safety Mitigation Certification Documentation
 - a. IHSDM output report (PDF)
 - b. IHSDM final working files (native file format kept in electronic file)
 - c. Highway Safety Benefit Cost Analysis Tool results (PDF)



18525 123490 9114 24014525 145N005G000 145N005G039 0.39 145N 100.295 1.14 1.4 0 4 18526 123490 9115 24014525 145N005G039 145N005G039 0.67 145N 100.995 1.26 2.6 4 3	4 2	1	0
18526 123490 9115 24014525 145N005G039 145N006000 0.67 145N 100 995 1.26 2.6 4 3			U
10520 12530 5115 2101325 11511005003 11511005000 5107	3 1	. 2	3
18527 123500 9116 24014525 145N006 000 145N006 034 0.34 145N 65.881 0.00 0.8 2 2	2 0	0	0



FOND DU LAC AVE W 90	9GF3CMH	3/20/2010 3:00 PM 3/26/2010 6:10 PM	100791019	Milwaukee	NO						ACCIDENT			
FOND DU LAC AVE W 90	9GF3CMH			Milwaukee	NO					I		DRIVER ERROR/MEDICAL CONDITION. DRIVER WAS FEELING DIZZY, DIDN'T REALIZE HE RAN RED		1
NB RAMP BN		3/26/2010 6:10 PM	100851782				CLR	PD			EXCLUDE	LIGHT AND STRUCK A MAILBOX OF HOME JUST SOUTH OF WEST GRANVILLE PRESBYTERIAN CHURCH.	43.1434974	-88.0451466
	BMQ4GV8			Milwaukee	NO		CLR	INJ	С		EXCLUDE	DRIVER ERROR/VEHICLE MALFUNCTION. DRIVER WAS GOING NB ON 107TH, MADE LEFT TURN ONTO W. FDL AVE. WHEN HIS STEERING WHEEL BEGAN SHAKING. DRIVER LOST CONTROL OF VEHICLE AND HIT LIGHT POLE. BOTH DRIVERS WERE TAKEN TO HOSPITAL COMPLAINING OF NECK/BACK/LEG PAIN.		-88.0451454
107T⊔ CT NI		3/27/2010 1:27 AM	NONE	Milwaukee	NO		CLDY	INJ	С	005Y	EXCLUDE	*Must Read! DRIVER ERROR/RAMP ACCIDENT. DRIVER ACCELERATED ON RAMP AND COULDN'T NEGOTIATE THE CURVE. LOST CONTROL OF VEHICLE AND DROVE ONTO GRASS MEDIAN.		-88.0451303
10/1031N 90	9GCW2N7	5/8/2010 4:10 PM	101281157	Milwaukee	ANGL		CLDY	INJ			EXCLUDE	DRIVER ERROR. 2 CAR ACCIDENT. BOTH WERE GOING SB ON 107TH ST. UNIT 2 DECIDED TO MAKE A U-TURN AT THE W. FDL AVE. INTERSECTION WHEN UNIT 1 STRUCK VEHICLE.		-88.0451454
NB RAMP BN	BMQWFR5	10/2/2010 3:10 AM	NONE	Milwaukee	NO		CLDY	PD		005V	EXCLUDE	DRIVER ERROR/HIT AND RUN. DRIVER NEGOTIATED NB OFF RAMP TO 107TH ST. TOO FAST. CAME OFF ROADWAY ON RIGHT SIDE AND STRUCK TRAFFIC SIGN AND THEN PROCEEDED FORWARD AND STRUCK UTILITY POLE. DRIVER THEN DROVE OFF.		-88.0446701
A	A291278	12/4/2010 9:00 AM	NONE	Milwaukee	NO	SNOW	SNOW	PD		6	EXCLUDE	DRIVER ERROR. LOST CONTROL OF VEHICLE STRIKNG MEDIAN WALL DUE TO SNOW ON ROADWAY.	43.1443334	-88.044986
107TH ST N 9H	9H0GVQ1	8/26/2011 1:30 PM	WALK IN	Milwaukee	REAR		CLR	PD			EXCLUDE	DRIVER ERROR. DRIVER WAS STOPPED AT SIGNAL BY US 145 ENTANCE RAMP SOUTH OF BRIDGE, WHEN THE DRIVER BEHIND HER STRUCK HER IN THE REAR OF THE CAR. DRIVER WHO STRUCK VEHICLE CLAIMS SHE WASN'T PAYING ATTENTION.		-88.0451454
FOND DU LAC AVE W	9GTL623	10/22/2011 10:30 PM	NONE	Milwaukee	SSS		CLDY	PD			EXCLUDE	DRIVER ERROR/HIT AND RUN. DRIVER 1 SIDE-SWIPED DRIVER 2 IN LEFT-TURN LANE AT INTERSECTION OF 107TH ST./W. FOND DU LAC AVE. DRIVER 1 FLED SCENE W/OUT GIVING INSURANCE OR MEDICAL ATTENTIO. DRIVER 2 THEN FLED SCENE ON FOOT.		-88.0451454
FOND DU LAC AVE W	9GD7FTF	1/12/2012 3:45 PM	120121721	Milwaukee	NO	SNOW	SNOW	PD			EXCLUDE	DRIVER ERROR/ROAD CONDITIONS. DRIVER WAS NEGOTIATING TURN FROM SB 107TH ST. TO EB W. FOND DU LAC AVE. WHEN SHE SLID INTO THE CURB. SHE HAD FRONT AXLE DAMAGE. ROADWAY WAS FULL OF SLUSHY-LIKE SNOW.		-88.0450042
NB RAMP BI	BMQXX97	2/19/2012 8:15 AM	NONE	Milwaukee	REAR		CLR	INJ		005Y	EXCLUDE	DRIVER ERROR/HIT AND RUN. DRIVER 1 WAS STOPPED AT THE STOP SIGN ON NB EXIT RAMP WAITING TO TURN ONTO 107TH ST. WHEN VEHICLE BEHIND HER HIT HER FROM BEHIND. DRIVER 1 MOVED VEHICLE OFF ROAD/RAMP AND DRIVER 2 TOOK OFF.	43.1450117	-88.0451303
107TH ST N QI	QPRMNF6	6/8/2012 7:35 AM	121600676	Milwaukee	ANGL		CLR	INJ	В		EXCLUDE	DRIVER ERROR. LIGHT AT INTERSECTION OF 107TH ST. AND W. FOND DU LAC AVE. WAS TURNING YELLOW. DRIVER WAS MAKING A LEFT TURN AS ANOTHER DRIVER CAME THROUGH INTERSECTION COLLIDING WITH LEFT-TURN DRIVER.		-88.0451454
107TH ST N Q	QQ9STZF	6/9/2012		Milwaukee	HEAD		CLR	INJ	С			CANNOT FIND REPORT		-88.0451565
107TH ST N Q	QQL1HZN	7/30/2012		Milwaukee	HEAD		CLR	INJ	В			CANNOT FIND REPORT		-88.0451454
C	QPV30F3	10/28/2012 1:22 AM	123020168	Milwaukee	NO		CLR	INJ	С	005V	EXCLUDE	DRIVER ERROR. DRIVER NEGOTIATED NB OFF RAMP TO 107TH ST. TOO FAST. LOST CONTROLL AND STRUCK TRAFFIC SIGN AND UTILITY POLE.		-88.0449002
107TH ST N Q		12/15/2012		Milwaukee	NO		CLDY	PD				CANNOT FIND REPORT		-88.0451454
		2/14/2013		Milwaukee	NO	ICE	CLDY	PD				CANNOT FIND REPORT		-88.0451454
		5/7/2013		Milwaukee	REAR		CLR	INJ	В			CANNOT FIND REPORT		-88.0451454
		12/19/2014		Milwaukee	NO	WET	CLR	PD				CANNOT FIND REPORT		-88.0451318
		2/18/2015		Milwaukee	NO	SNOW	CLR	PD				CANNOT FIND REPORT		-88.0451454
107TH ST N Q	QQ401K5	4/18/2015		Milwaukee	NO		CLR	PD				CANNOT FIND REPORT		-88.0451565
107TH ST N Q	QPXT74F	6/20/2015 9:10 PM	151712942	Milwaukee	SSS		CLR	INJ	С		EXCLUDE	DRIVER ERROR. DRIVER FAILED TO YEILD RIGHT OF WAY AND STRUCK VEHICLE MAKING LEFT TURN ONTO W. FOND DU LAC AVE.		-88.0451454
FOND DU LAC FWY	BN0T772	10/11/2015 1:29 AM	NONE	Milwaukee	NO		CLR	PD		005Y	EXCLUDE	DRIVER ERROR/HIT AND RUN. AT NB EXIT RAMP TERMINAL AND 107TH ST. DRIVER HIT "WRONG WAY" SIGN POST AND LIGHT POLE. WIRES WERE EXPOSED SO POLICE MOVED SIGN AND POLE OUT OF WAY.	43.1450117	-88.0451303
W FOND DU LAC AVE Q	QQ23QST	4/30/2016		Milwaukee	REAR	WET	RAIN	PD				CANNOT FIND REPORT	43.1436093	-88.0451454
		1/16/2017 8:15 AM	17-006472	Milwaukee	NO	WET	SLEET	INJ	С	005V	EXCLUDE	DRIVER ERROR. DRIVER WAS COMING FROM NB 145 EXIT RAMP TO 107TH ST. SHE STARTED SLIDING AT TERMINAL AND INSTEAD OF SLIDING INTO TRAFFIC ON 107TH ST, SHE SWERVED AND SLID INTO LIGHT POLE AT RAMP TERMINAL.		-88.0447247
N 107TH ST J9L	9L00LHJN5	3/1/2017		Milwaukee	REAR	SNOW	SNOW	PD				CANNOT FIND REPORT	43.1436078	-88.0451449
	LOWNTWRQ			Milwaukee	NO	WET	RAIN	INJ	Α			CANNOT FIND REPORT	43.1456115	-88.0451235
		3/19/2017 10:08 AM	17-034808	Milwaukee	NO		CLR	PD		005Y	EXCLUDE	DRIVER ERROR. DRIVER WAS LOCKED ON BY SQUAD CAR TRAVELING AT 98 MPH ON NB US 145. DRIVER ATTEMPTED TO TURN FROM RAMP ONTO SB 107TH ST. AND HIT THE NW BRIDGE PARAPET. DRIVER THEN ATTEMPTED TO FLEE ON FOOT.	43.1449895	-88.0451302
N 107TH ST J9L0	L07HWRB5	5/11/2017		Milwaukee	SSS		CLR	PD	1	005Y		CANNOT FIND REPORT	43.1450126	-88.04513

⁼ POLICE REPORT ON FILE

⁼ RAMP. POLICE REPORT ON FILE

⁼ NO POLICE REPORT FOUND

Safety Certification Worksheet

Analyst:	Greg Gard, Jr.	Design ID:	1360-12-00/70	
Agency: _	WisDOT	Highway:	107th Street bridge over STH145	
Date of Analysis:	4/1/2019	Project Title:	Fond Du Lac, City of Milwaukee	
Meta Manager Release Date:	9/1/2018	Project Description:	107th St. bridge Replacement Project going over STH 145	
Meta Manager Crash Years:	2011-2017			

			Syste	m Screenin	g - Sites of Pro	mise	Crash Vetting - Sites of Promise				
				See FDM 11-3	8-10.2 for guidance		See FDM 11-38-10.3 for guidance	See FDM 11-38-10.4 for guidance			
PDP ID	From RP	RP Description	To RP	Length (PDP_Mile)	Crash Rate Flag (RATEFLAG) (Insert value if ≥ 1.0)	KAB Crash Rate Flag (MMGR_KAB_CRSH_RT) (Insert value if ≥ 1.00	Intersection Crash Rate Flag (MM Database Name) (Insert value if ≥ 1.0)	Intersection KAB Crash Rate Flag (MM Database Name) (Insert value if ≥ 1.0)	Summarize the contributing factors for ALL crashes in the flagged segment or intersection.	Which geometric features contribute to the type and severity of the crashes?	Possible Countermeasures for Safety Mitigation Process
None. Local Road	None. Local Road	107th St. bridge	None.	0.49 miles	None	0	0	0	All crashes were driver error. Failure to yeild, running yellow light on signal, not paying attention to stopped or turning vehicles.	None	None. Sight distance and vision triangles are all acceptable
18526	145N005G03 9	NB OFF RAMP TO 107TH ST	145N006 000	0.67	1.26	1.09	0	0	Failure to keep vehicle under control, speeding, ice snow.	None	Curve on ramp at terminal is standard and not a cause of crashes. Snow/slush is guilty in one or two of the crashes. Not a huge terned though. If crashes continue, could apply a high friction surface treatment to curve.

*NOTE: ALL META-MANAGER DATA IS FOR STH 145. BECAUSE 107TH ST. IS A LOCAL ROAD (WISDOT STRUCTURE), NO META-MANAGER DATA IS COLLECTED.
THERE ARE A TOTAL OF ONLY 27 CRASHES IN THE PAST 7 YEARS AND NONE OF THEM ARE DUE TO SUB-STANDARD GEOMETRY. ALL ARE DRIVER ERROR OR CRASHES CAUSE BY SLUSHY/SNOWY ROADS.