

CORRESPONDENCE/MEMORANDUM _____ **State of Wisconsin**

Date: November 13th, 2019

To: Brian Porter, State Traffic Safety Engineer

From: Brad Byom, Traffic Safety Engineer
Southwest Region – La Crosse office

Subject: SAFETY CERTIFICATION DOCUMENT
Project I.D. 1640-03-03
USH 14
Richland Center – Spring Green
Bohman Drive to CTH O

Having considered the safety performance of the existing corridor and any proposed improvements, we believe this document reflects the intent of the policy and guidelines described in section 11-38 of the Wisconsin Facilities Development Manual.

Concurrence:

N/A – no improvements modeled
Bureau of Traffic Operations
Traffic Engineering and Safety Section

Date

Approval:

Brad Byom, Traffic Safety Engineer

12-4-2019

Region Planning Chief

Date

SAFETY CERTIFICATION DOCUMENT

Analyst: Brad Byom
Agency: WisDOT
Date of Analysis: 11-13-2014

Design ID: 1640-03-03(73)
Highway: USH 14
Project Title: Richland Center – Spring Green (Bohman Drive to CTH O)
Improvement Concept Code: RSRF20

1. **Did the project have Sites of Promise from the system screening?** Yes ☐ No ☒
Comments: No intersection flags after crash counts verified. No segment flags.
2. **Did relevant crashes remain after the initial Crash Vetting Process?** Yes ☐ No ☒
Comments:
3. **Were possible safety mitigation alternatives identified in the CGA Process?** Yes ☐ No ☒
Comments:
4. **Were safety mitigation alternatives analyzed in this project?** Yes ☐ No ☒
 - 4.1. **Provide narrative of existing geometric conditions and any geometric features that contributed to the crashes.**
 - 4.2. **Provide narrative of crash history and crash trends that were targeted in SMCP**
 - 4.3. **Provide narrative of safety mitigation alternatives analyzed in SMCP**
 - 4.4. **Analysis Results**

The table below summarizes the safety performance, cost, and benefit-cost ratio for the total project.

Total Project Analysis	Base	Alt. A	Alt. B	Alt. C	Add 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.**

There are concrete median islands on USH 14, at Starlight Drive and Peebles Drive, in the 5-lane TWLTL section, that serve no purpose for access restrictions, and they create a negative offset for opposing left turners on USH 14. These islands have generated at least 4 single-vehicle crashes. They are likely contributing to some of the left-out crashes by prohibiting a 2-stage entry into traffic (preventing the utilization of the TWLTL as merge lane). Removal of these islands was recommended. This will produce a full TWLTL with neutral offsets for any opposing left turners. This will also provide a wider refuge for the left turners because the existing left turn lanes are around 8', which is substandard.

Safety Certification Worksheet

Analyst:

BYOM, BRADLEY S

Agency:

WISDOT

Date of Analysis:

2019-11-27

Meta Manager Version:

2019-10

Meta Manager Crash Years:

2014-2018

Design ID:

1640-03-03

Highway:

US 14 EB

Project Title:

RICHLAND CENTER - SPRING GREEN

Project Description:

BOHMANN DRIVE TO CTH O

Worksheet ID:

10143

System Screening - Sites of Promise							Crash Vetting - Sites of Promise	Contributing Geometric Analysis	
See FDM 11-38-10.2 for guidance							See FDM 11-38-10.3 for guidance	See FDM 11-38-10.4 for guidance	
Segments: Meta-Manager									
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)	Summarize the contributing factors for ALL crashes in the flagged segment.	Which geometric features contribute to the type and severity of the crashes?	Possible Countermeasures for Safety Mitigation Process
2797	014E124P029		014E125J000	0.11			no flags		NONE
2798	014E125J000		014E125M044	0.45			no flags		NONE
2799	014E125M044	SEXTONVILLE RD	014E125M067	0.23			no flags		NONE
2800	014E125M067	BOHMANN ST	014E127T000	0.43			no flags		NONE
2801	014E127T000	FOUNDRY DR	014E128G000	0.56			no flags		NONE
2802	014E128G000	STARLITE DR	014E129D000	0.53			no flags		NONE

vetted comments	Intersection Network Screening																																	Add. Cals	Results																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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INT_ID	IX_NAME	Region	County	Map Link	Area Type	Ramp Terminal	Number of Legs	Control	Median Type	Number of Lanes	Major AADT	Minor AADT	Inside Ramp AADT	Outside Ramp AADT	Off Ramp AADT	On Ramp AADT	Number of Ramps	Total AADT	Years of Crash Data	Crash Data Range																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Safety Certification Mapping (SCM) Tool

Design ID
1640-03-03

Construction ID(s)

Project Title
RICHLAND CENTER - SPRING GREEN

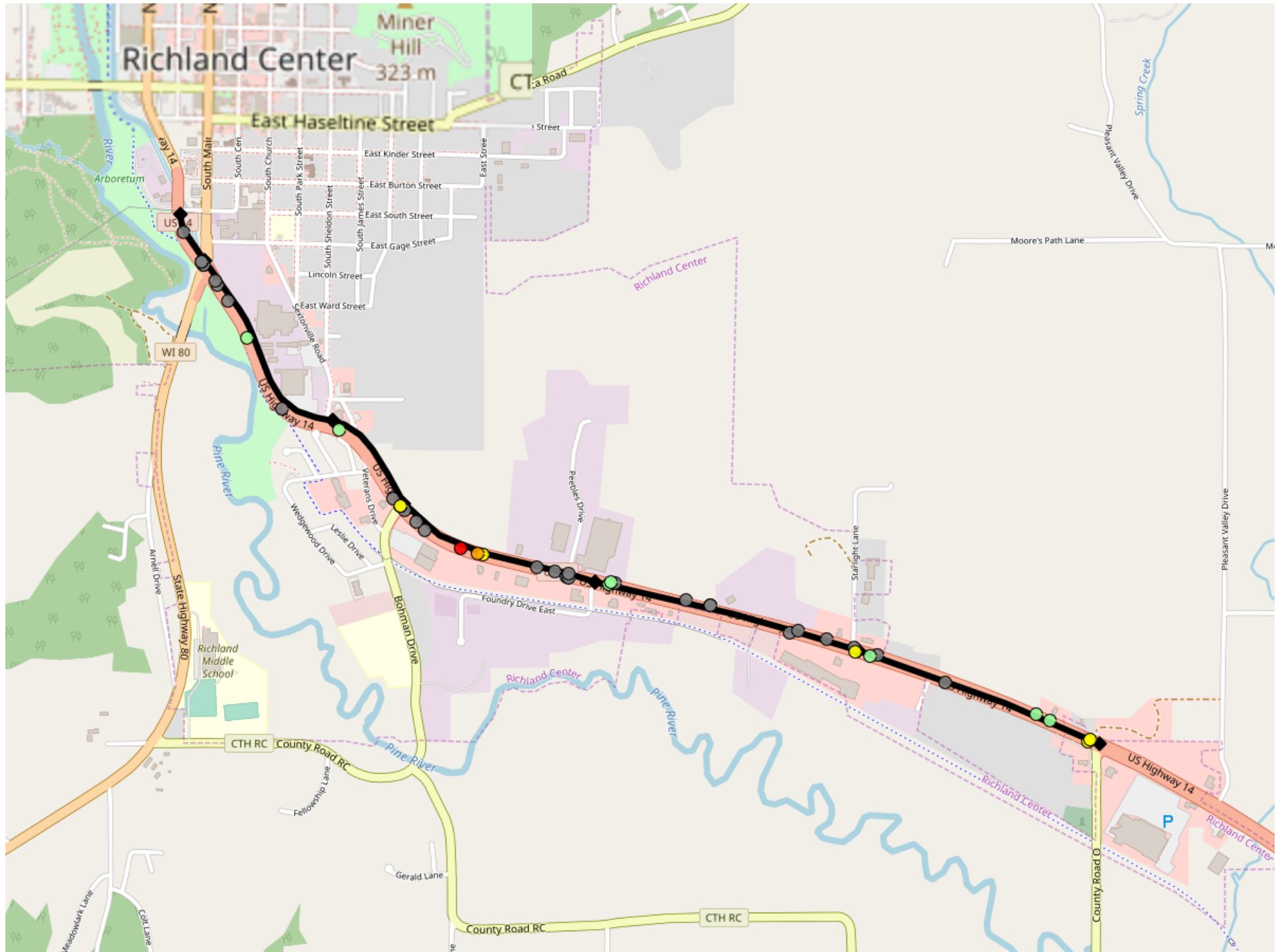
Project Description
BOHMANN DRIVE TO CTH O

SCM Comment

Meta Manager Version: 2019-10
Meta Manager Crash Years: 2014-2018
SCM Crash Years: 2014-2018

Sites of Promise

Corridor #	Highway	Start County	End County	Start RP	End RP
1	US 14 EB	RICHLAND	RICHLAND	014E124P029	014E129D000



Corridor # 1: US 14 EB - 014E124P029 - 014E129D000

Meta Manager Version: 2019-10 Crash Years: 2014-2018					SCM Crash Years: 2014-2018					
PDP ID	Crash	KAB	Int Crash	Int KAB	K	A	B	C	O	TOTAL
2797									3	3
2798								1	6	7
2799								1	1	2
2800					1	1	2		11	15
2801								2	7	9
2802							3	3	3	9
TOTAL					1	1	5	7	31	

Manner of Collision

PDP ID	NO COLLISION	REAR END	SS OPP	SS SAME	OTHER	TOTAL
2797	1	1			1	3
2798	1		1	4	1	7
2799		1	1			2
2800	3	2	1	2	7	15
2801		2		2	5	9
2802	3	2		1	3	9

CORRIDOR	CUMULMILE	PDPID	SEGLIST	DOCTNM	BACCD	DATE	NTFYHOU	FREGION	COUNTY	MUNICIPALITY	TYPE	ONHWYR	ONHWYD	II	ONHWY	ONSTR	ATHWY	ATSTR	ATNMBR	INTDIR	INTDIS	ACCDTYPE	
1	69.39	2797		LR7WT04	1/26/2015		14	SW	RICHLAND	RICHLAND	C	14	E		14	S ORANGE	80	S MAIN ST		W		9	TFSIGN
1	69.47	2797		LR7VBFF	10/15/2014		15	SW	RICHLAND	RICHLAND	C	14	E		14	S ORANGE	80	S MAIN ST		W		1	
1	69.47	2797		LR7WT0F	4/9/2015		14	SW	RICHLAND	RICHLAND	C	14	E		14		80			W		1	
1	69.48	2798		LRKRCJL	12/23/2015		21	SW	RICHLAND	RICHLAND	C	14	E		14		80					0	
1	69.49	2798		LR7WT06	3/1/2015		18	SW	RICHLAND	RICHLAND	C	14	E		14		80					0	
1	69.53	2798		LR7WT0D	4/3/2015		14	SW	RICHLAND	RICHLAND	C	14	E		14		80			E		4	
1	69.54	2798		LRKPW5Z	12/13/2016		21	SW	RICHLAND	RICHLAND	C	14	E		14		80	S MAIN ST		S		9	
1	69.58	2798		LR7VBFG	10/17/2014		15	SW	RICHLAND	RICHLAND	C	14	E		14		80	S MAIN ST		E		9	
1	69.65	2798		CHL0JKHW	2/28/2017		16	SW	RICHLAND	RICHLAND	C	14	E		14			CONNECTOR STH 80 T S				13	LTPOLE
1	69.83	2798		LRKPW2R	6/10/2015		8	SW	RICHLAND	RICHLAND	C	14	E		14			SEXTONVIL		N		10	
1	69.96	2799		LRKPW5L	10/16/2016		12	SW	RICHLAND	RICHLAND	C	14	E		14	WB		SEXTONVIL		E		3	
1	70.14	2799		CHL0JH1TL	12/1/2017		15	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN DR		N		2	
1	70.16	2800		LRF99CB	6/3/2014		15	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN				0	
1	70.16	2800		LRKQM9N	2/2/2015		18	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN				0	OTH NC
1	70.16	2800		LRKQMWB	3/17/2016		16	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN				0	
1	70.16	2800		LR7WSXW	4/25/2014		12	SW	RICHLAND	RICHLAND	C	14	E			BOHMANN	14			S		1	
1	70.17	2800		LRKRCKN	10/5/2016		14	SW	RICHLAND	RICHLAND	C	14	E		14	EB		BOHMANN		S		1	
1	70.2	2800		MB6M99J	7/16/2015		13	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN		S		4	
1	70.23	2800		D5L0T5JNC	7/25/2017		11	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN DR		E		7	
1	70.3	2800		MB41J8X	3/15/2014		5	SW	RICHLAND	RICHLAND	C	14	E		14			BOHMANN		E		14	PED
1	70.34	2800		MB40S7F	5/22/2014		20	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES A'		W		20	
1	70.35	2800		C5PH77X	8/29/2014		22	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES A'		W		19	
1	70.47	2800		MB6GV5D	9/15/2016		18	SW	RICHLAND	RICHLAND	C	14	E		14	EB		FOUNDRY		W		12	
1	70.51	2800		MB41JBP	10/12/2014		7	SW	RICHLAND	RICHLAND	T	14	E		14			PEBBLES D		W		3	TFSIGN
1	70.54	2800		D5L0SPZ7S	2/24/2017		21	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES AVE				0	
1	70.54	2800		D5L0SPZ8C	7/13/2018		19	SW	RICHLAND	RICHLAND	C	14	E		14			FOUNDRY DR E		W		5	
1	70.54	2800		MB6RQMJ	3/3/2016		11	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES A'				0	
1	70.63	2801		D5L0T6RP4	12/14/2017		12	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES AVE		E		9	
1	70.63	2801		MB7W2M6	8/22/2015		22	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES A'		E		9	
1	70.64	2801		MB6HLBW	3/23/2016		11	SW	RICHLAND	RICHLAND	C	14	E		14			PEEBLES A'		E		10	
1	70.79	2801		MB6GV2J	12/31/2015		9	SW	RICHLAND	RICHLAND	T	14	E		14			PEEBLES A'		E		25	
1	70.84	2801		MB41J90	4/7/2014		10	SW	RICHLAND	RICHLAND	T	14	E		14			FOUNDRY		E		25	
1	70.84	2801		MB6HLDD	8/10/2016		15	SW	RICHLAND	RICHLAND	T	14	E		14	EB		FOUNDRY		E		25	
1	71	2801		D5L0SR692	3/17/2018		14	SW	RICHLAND	RICHLAND	C	14	E		14			FOUNDRY DR E		E		41	
1	71.03	2801		MB6GV26	12/7/2015		15	SW	RICHLAND	RICHLAND	T	14	E		14			STARLIGHT		W		12	
1	71.09	2801		L RCS3R2	4/19/2014		9	SW	RICHLAND	RICHLAND	C	14	E		14			STARLIGHT		W		6	
1	71.15	2802		D5L0SR682	7/14/2017		15	SW	RICHLAND	RICHLAND	T	14	E		14			STARLIGHT DR				0	OBNFX
1	71.15	2802		MB6R0DT	2/16/2016		9	SW	RICHLAND	RICHLAND	C	14	E		14			STARLIGHT				0	
1	71.18	2802		CHL0JKHW	6/13/2018		10	SW	RICHLAND	RICHLAND	C	14	E		14		O			W		50	GR FAC
1	71.2	2802		MB5H73F	6/13/2014		14	SW	RICHLAND	RICHLAND	C	14	E		14			STARLIGHT		E		5	CURB
1	71.34	2802		D5L0SZCGI	2/4/2017		23	SW	RICHLAND	RICHLAND	T	14	E		14			CTH O		W		34	
1	71.54	2802		MB6N1J2	8/28/2015		12	SW	RICHLAND	RICHLAND	T	14	E		14		O			N		14	
1	71.57	2802		MB6M99F	7/2/2015		21	SW	RICHLAND	RICHLAND	T	14	E		14		O			N		11	
1	71.66	2802		D5L0SR682	8/7/2017		14	SW	RICHLAND	RICHLAND	T	14	E		14		O			W		2	
1	71.66	2802		MB40S72	4/19/2014		15	SW	RICHLAND	RICHLAND	T	14	E		14		O			W		2	

MNRCOLL	RLTNRDW	ACCDLOC	HWYCLASS	TRFCWAY	ROADCON	WTHRCON	LGTCOND	ROADHOR	ROADVERT	ACDSVR	INJSVR	INJTRNS	TOTFATL	TOTINJ	CONSZONE	ALCFLAG	BIKEFLAG	CYCLFLAG	PEDFLAG	TOTVEH	VEHTYPE1
NO	ON	N	R STH	D/B	SNOW	SNOW				PD				0	0						1 CAR
ANGL	ON	N	R STH	D/B		CLDY				PD				0	0						2 CAR
REAR	ON	I	R STH	D/B	WET	CLDY				PD				0	0						2 CAR
SSOP	ON	I	R STH	D/B	WET	RAIN	LIGT			PD				0	0						2 CAR
ANGL	ON	I	R STH	ND		CLR	LIGT			PD				0	0						2 CAR
SSS	ON	N	R STH	D/B		CLR				PD				0	0						2 CAR
SSS	ON	N	R STH	D/B		CLR	LIGT			PD				0	0						2 TRK UT
SSS	ON	N	R STH	D/B		CLDY				PD				0	0						2 CAR
NO	MED	N	R STH	D/WO	WET	FOG	DUSK	C		INJ	C			0	1						1 CAR
SSS	ON	N	R STH	D/B		CLR		C		PD				0	0						2 TRK UT
SSOP	ON	N	R STH	D/WO		CLDY		C		INJ	C			0	1						2 CAR
REAR	ON	I	R STH	D/WO		CLR			H	PD				0	0						2 CAR
ANGL	ON	I	R STH	D/B		CLDY			H	INJ	B	Y		0	1						2 TRK ST
NO	ON	I	R STH	D/B	SNOW	CLDY	LIGT			PD				0	0						1 CAR
ANGL	ON	I	R STH	D/B		CLR				PD				0	0						2 CAR
REAR	ON	I	R CITY	D/WO		CLR		C	H	PD				0	0						2 CAR
SSS	ON	N	R STH	D/WO		CLDY				PD				0	0						2 TRK UT
ANGL	ON	N	R STH	D/WO		CLDY			H	PD				0	0						2 CAR
SSS	ON	N	R STH	D/WO		CLDY				PD				0	0						2 CAR
NO	ON	N	R STH	D/WO		CLR	DARK	C		FAT	K			1	0	Y			Y		1 TRK ST
ANGL	ON	N	R STH	D/WO		CLR				INJ	A	Y		0	2						2 CAR
ANGL	ON	N	R STH	D/WO	WET	RAIN	DARK			INJ	B	Y		0	3						2 CAR
ANGL	ON	N	R STH	D/WO		CLR				PD				0	0						2 TRK UT
NO	MED	N	R STH	D/WO		CLR	DAWN			PD				0	0						1 CAR
ANGL	ON	I	R STH	D/B	SNOW	SNOW	LIGT			PD				0	0						2 TRK UT
REAR	ON	N	R STH	D/WO	WET	RAIN	DUSK			PD				0	0						2 TRK UT
SSOP	ON	I	R STH	D/WO		CLDY				PD				0	0						2 CAR
SSS	ON	N	R STH	ND		CLR				INJ	C			0	2						2 CAR
REAR	ON	N	R STH	D/WO		CLR	LIGT			INJ	C			0	1	Y					2 CAR
ANGL	ON	N	R STH	D/WO	WET	SLET				PD				0	0						2 CAR
ANGL	ON	N	R STH	D/WO		CLR				PD				0	0						2 CAR
REAR	ON	N	R STH	D/WO	WET	RAIN				PD				0	0						2 CAR
SSS	ON	N	R STH	D/WO		CLR				PD				0	0						2 CAR
ANGL	ON	I	R STH	D/WO		CLR				PD				0	0						2 CAR
ANGL	ON	N	R STH	D/WO		CLDY				PD				0	0						2 CAR
ANGL	ON	N	R STH	D/WO		CLR				PD				0	0						2 TRK UT
NO	ON	I	R STH	D/WO		CLR				INJ	B			0	1		Y				1 TRK UT
ANGL	ON	I	R STH	ND	WET	CLDY				PD				0	0						3 CAR
NO	SHLD	N	R STH	D/WO		CLR			H	INJ	C	Y		0	2						5 CAR
NO	ON	N	R STH	D/B		CLR				PD				0	0						1 CAR
SSS	ON	N	R STH	D/B		CLR	DARK		H	PD				0	0						2 TRK UT
REAR	ON	N	R STH	D/WO		CLR				INJ	C			0	1						2 CAR
REAR	ON	N	R STH	D/WO		CLR	DARK			INJ	C	Y		0	1						2 CAR
ANGL	ON	N	R STH	D/WO		CLR				INJ	B	Y		0	1						2 CAR
ANGL	ON	N	R STH	ND		CLR				INJ	B			0	1		Y				1 CAR