

IOWA DEPARTMENT OF TRANSPORTATION

TO OFFICE: District 3

DATE: May 14, 2026

ATTENTION: Jessica Felix

PROJECT: Calhoun County
STPN-004-3(039)--2J-13
26-13-004-030

FROM: John Bartholomew

BUREAU: Design

SUBJECT: 2026 - NR Project Concept - **FINAL**

The Draft Project Concept Statement was sent out for review and comment with concerns to be resolved by Thursday May 14, 2026. Comments received during the review period have been considered and resolved

DATE OF REVIEW: March 12, 2026 **PARTICIPANTS:** Jessica Felix, Shane Tymkowicz, Dyal Pryor, Justin Pottorff, Bethany Waltersdorf from District 3; Yanxiao Jia, Kyle Schrock, Kent Nicholson, John Bartholomew from Design.

The two alternatives considered were:

1. Foreslope flattening along IA 4 near the town of Jolley between Marengo Avenue and Marshal Avenue and the north/south sections of Marshal and Marengo Ave. connecting to 220th St. will be demolished. Estimated cost **\$692,400**
2. Foreslope flattening along IA 4 near the town of Jolley between Marengo Avenue and Marshal Avenue. The north/south sections of Marshal and Marengo Ave. connecting to 220th St. will be demolished, and 220th St. will be realigned to a 90-degree intersection with IA 4 between the reverse curves. Estimated Cost **\$1,626,200**

Alternative 1 is the selected alternative. The flattening of the outside of the IA 4 curves near Jolley and the obliteration of Marshal and Marengo Ave. will provide the most immediate solution to potential rollovers for vehicles running off the road through the curves.

PROJECT DATA:

ROUTE: IA 4 From: 1.3 mi N of US 20 north approx 1 mile

LENGTH: 0.9 miles

PLANNING CLASSIFICATION: Access Route

MAINTENANCE SERVICE LEVEL: C

TRAFFIC: 2024 --- 2,980 ADT with 27% trucks

PRESENT PAVEMENT SURFACE: AAC

PRESENT PAVEMENT WIDTH: 24 ft.

PRESENT SHOULDER WIDTH: 6 ft. Effective TYPE: Paved

MP to MP	Dir.	Type	Avg. Str. No.	80% Str. No.	Jt. Str. No.	PCI	IRI	K Value
68.53 to 69.53	1	3	5	4		71	96	

PAVEMENT HISTORY:

ORIGINAL PAVEMENT: 20 ft. wide, PC8

AGGREGATE SOURCE: Correctionvil Gravel CLASS: 2

YEAR CONSTRUCTED: 1947

RESURFACED: 1984, 3 in., 24 ft. wide ACC

2013, 3 in., 24 ft. wide ACC widening

2027, Mill 1.5 in., Fill 1.5 in. High Performance Thin Lift

EXISTING CONDITIONS AND CAUSES OF DISTRESS:

The existing roadway is a 24 ft. wide paved section with 6 ft. effective shoulders, and 2.5:1 foreslopes. Due to the high number of crashes, including 3 fatalities, it is recommended that the foreslopes through the outsides of the s-curves be flattened to 8:1 to mitigate roll-over crashes.

SAFETY CONSIDERATION:

Crash History

During the five-year study period from January 1, 2021 through December 31, 2025, there were 7 crashes including, 1 fatal crashes, and 6 personal property crashes.

PCR Level All Crashes (KABCO): Negligible

PCR Level Severe Crashes (KAB): Medium

In addition to the 1 fatality in the 5 year study period, there have been 3 addition fatalities within the project limits to date, since 2017, including the most recent fatality on February 11, 2026.

FEASIBLE ALTERNATES:

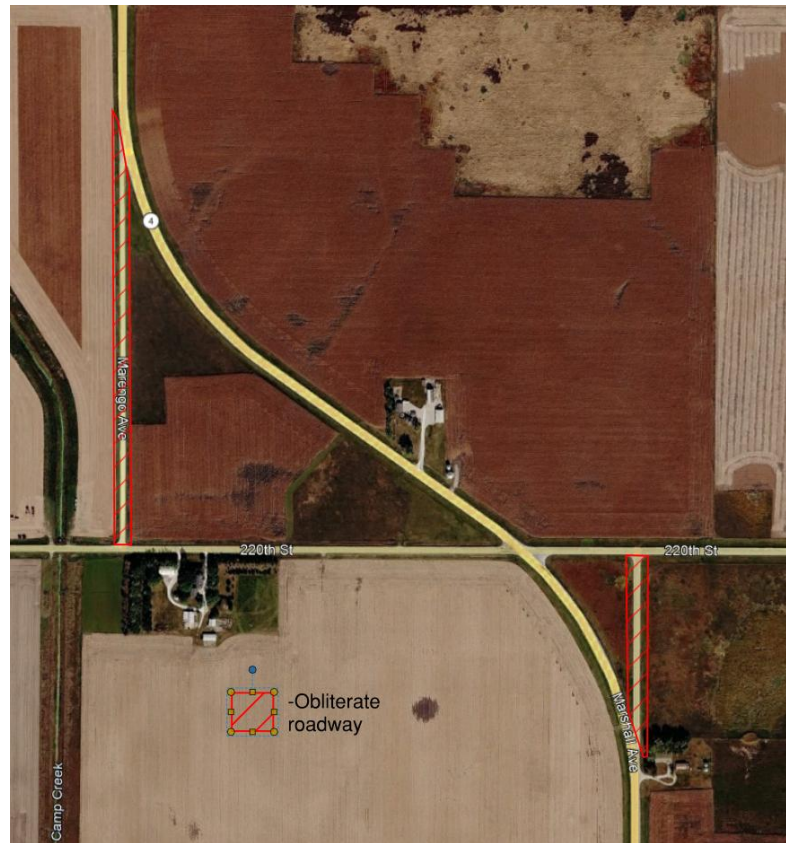
ALTERNATIVE 1 (Foreslope Flattening)

This project is on IA 4, from approximately 1.3 miles north of US 20 north 1 mile (MP 68.53-69.53), a distance of approximately 1 mile.

The existing 2.5:1 foreslopes in the project area will be re-graded and flattened out to 8:1 through the outsides of the two S-Curves, transitioning back to existing foreslope beyond the limits of the curves. There is a residential property in the southeast of the project area within the limits of outside of the southern curve that may be impacted by the flattening of the foreslope.

In addition to the foreslope flattening along IA 4, the two county road connections to 220th St. (Marshal and Marengo Ave.) will be obliterated.

With the obliteration of Marshal and Marengo Ave., the shoulder rumble strips will be extended through the two existing approximately 250 ft gaps at the NB Marshall Ave and SB Marengo Ave intersection approaches at the beginning of the curves.



Apply erosion control and rural seeding and fertilizing to all disturbed areas.

Right of way will be required.

ESTIMATED COST:

<u>Item</u>	<u>Estimated Cost</u>
Embankment in Place	\$117,300
Excavation CL 10	89,700
Roadway Obliteration	11,300
Topsoil	218,300
Seeding and Fertilizing	1,700
Erosion Control	50,000
Traffic Control (5%)	32,350
Mobilization (5%)	32,350
M & C (30%)	<u>139,400</u>
Total Alternative No. 1	\$692,400

ALTERNATIVE 2 (Foreslope Flattening with 220th St. Realignment)

This alternative is similar to Alternative 1, but in addition to the foreslope re-grading and county road obliteration, the intersection of 220th St and IA 4 will be realigned to a 90-degree intersection.



Apply erosion control and rural seeding and fertilizing to all disturbed areas.

Right of way will be required.

ESTIMATED COST:

<u>Item</u>	<u>Estimated Cost</u>
Embankment in Place	\$ 242,400
Special Backfill	78,300
PCC 9"	378,500
Obliterate old Roadbed	11,300
Removal of Pavement	49,000
Granular Shoulder	25,500

Topsoil	282,400
Seeding and Fertilizing	7,000
Erosion Control	50,000
ROW	20,000
Traffic control, 5%	80,300
Mobilization, 5%	80,300
M&C, 20%	<u>321,200</u>
Total Alternative No. 2	\$1,626,200

RECOMMENDATIONS:

It is recommended that the project proceeds with Alternative 1. The estimated cost of this project is \$692,400.

Right of way is required.

SPECIAL CONSIDERATIONS

Anticipated traffic volumes during construction do not warrant special construction scheduling.

This will not be a traffic critical project.

An Environmental Research Study Area (ERSA) has been developed for this project and can be viewed in the concept attachments.

The Location and Environment Bureau has not reviewed this project at this time. Once their review is completed, comments will be incorporated into the final concept statement.

FUNDS PROGRAMMED:

This proposed NR project is not yet in the 2026-2030 program. It has been identified by the District 3 office for construction in FY 2028. A schedule of events for plan development will be determined following approval of the Project Concept.

JEB:
cc:

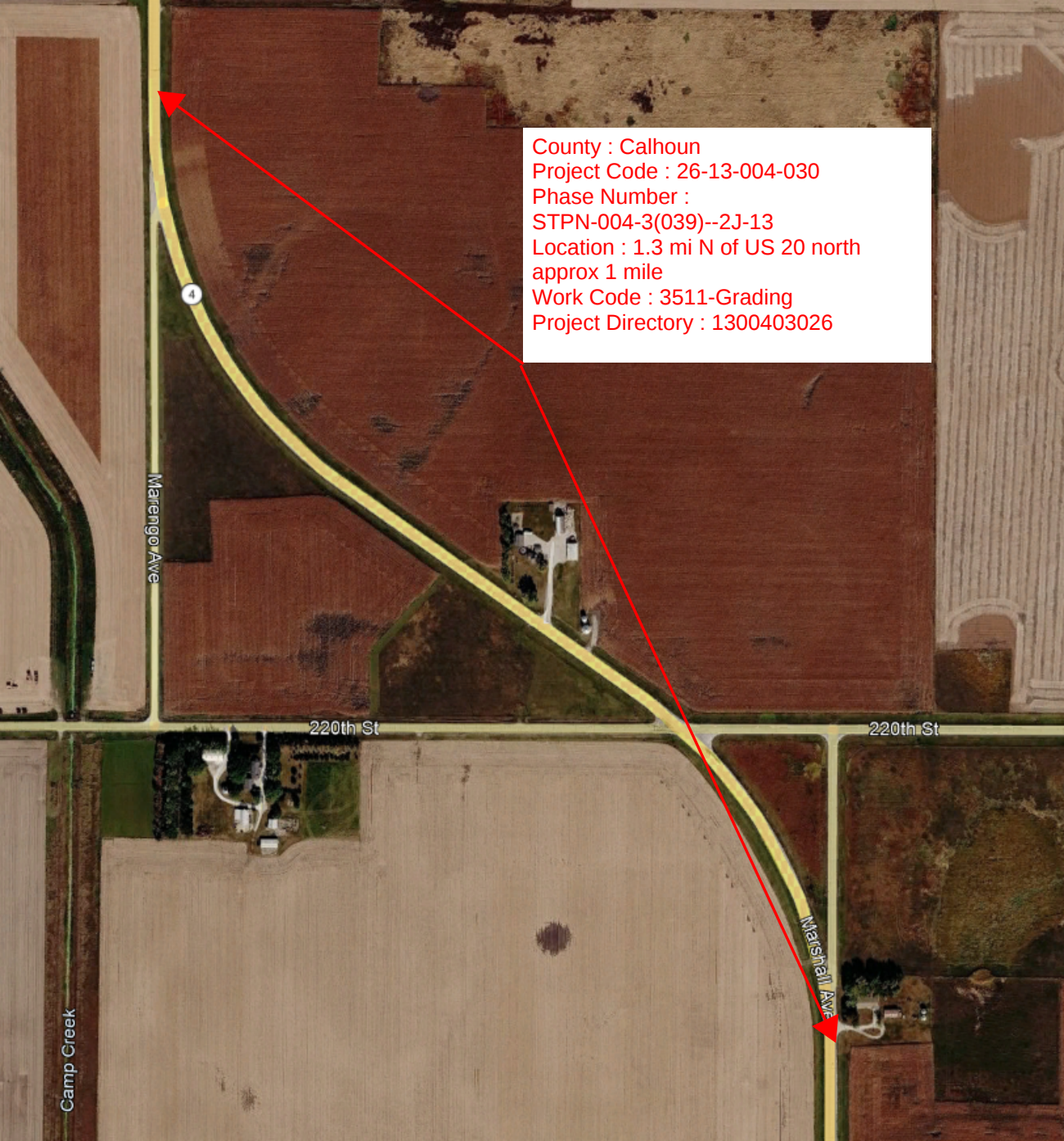
C. Purcell
M. Dell
M. A. Swenson
S. Majors
D. L. Newell
W. A. Sorenson
A. A. Welch
B. Hofer
C. Pelton
J. Holst
T. Lovan
D. Dudley
A. Knight
C. Brakke
D. Evans
J. Klemme
J. Becker
S. Tracy
B. Waltersdorf

K. D. Nicholson
C. Carter
D. E. Sprengeler
A. Poole
D. Breitbach
E. C. Wright
J. Harris
G. Karssen
S. Anderson
R. Harris
M. Solberg
L. Armstrong
A. Yates
A. Buss

S. Tymkowicz
D. Pryor
B. Strueker
C. Schwienebart

Y. Jia
M. Nop
C. C. Poole
K. Brink
J. W. Laaser-Webb
M. E. Ross
M. Van Dyke
D. Johnson
D. Stokes
B. Dolan
T. Gustafson
B. Smith
K. Schrock
D. Zeimen

M. Thayer
J. Pottorff
A. Wiertzema



County : Calhoun
Project Code : 26-13-004-030
Phase Number :
STPN-004-3(039)--2J-13
Location : 1.3 mi N of US 20 north
approx 1 mile
Work Code : 3511-Grading
Project Directory : 1300403026

Marengo Ave

220th St

220th St

Marshall Ave

Camp Creek

ERSA LIMITS:

County : Calhoun

Project Code : 26-13-004-030

Phase Number :

STPN-004-3(039)--2J-13

Location : 1.3 mi N of US 20 north
approx 1 mile



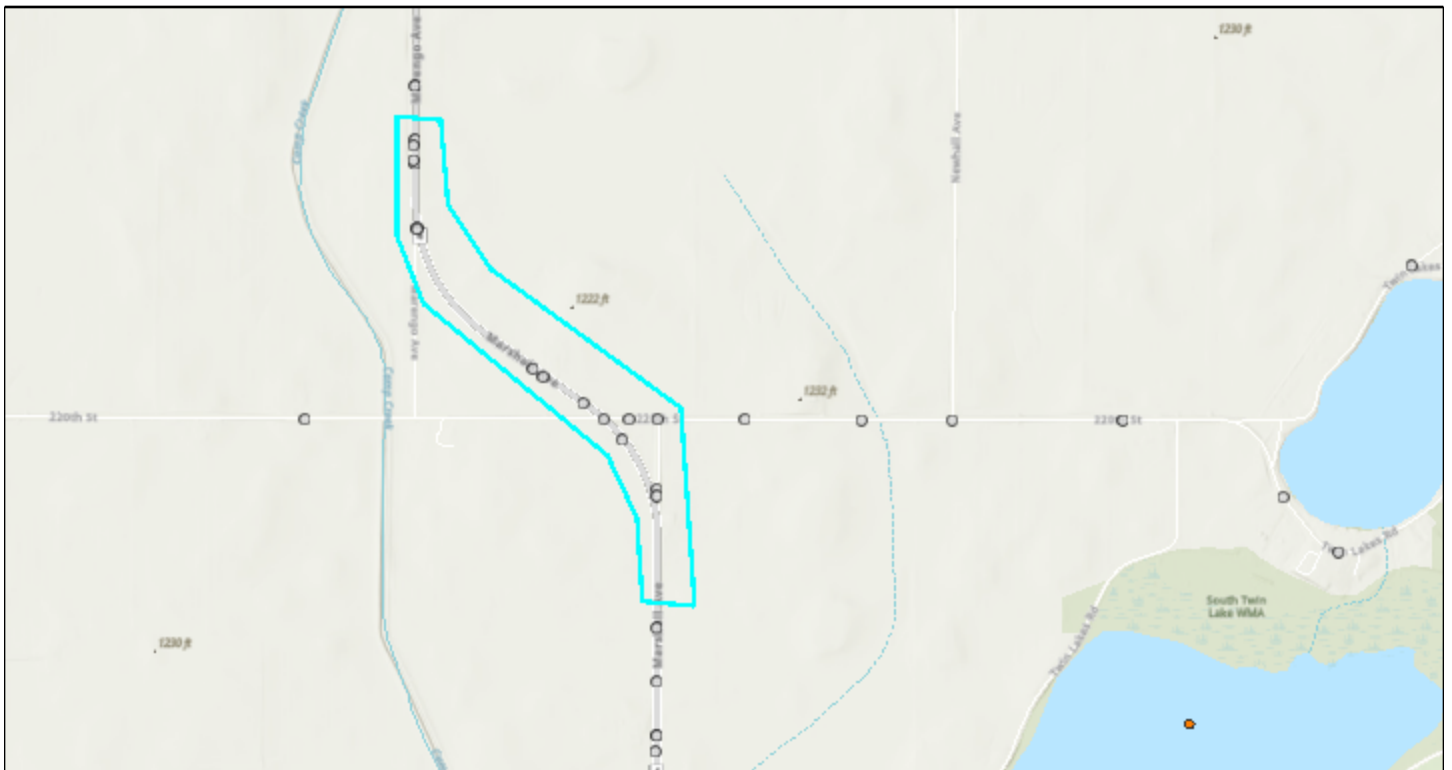
Iowa Crash Analysis Tool
Quick Report
2021-2025

Crash Severity	7
Fatal Crash	1
Suspected Serious Injury Crash	0
Suspected Minor Injury Crash	0
Possible/Unknown Injury Crash	0
Property Damage Only	6

Injury Status Summary	6
Fatalities	1
Suspected serious/incapacitating	0
Suspected minor/non-incapacitating	0
Possible (complaint of pain/injury)	2
Uninjured	0
Unknown	0
Not Reported	3

Property/Vehicles/Occupants	
Property Damage Total (dollars):	150,800.00
Average (per crash dollars):	21,542.86
Total Vehicles:	8.00
Average (per crash):	1.14
Total Occupants:	11.00
Average (per crash):	1.57

Average Severity	
Fatalities/Fatal Crash:	1.00
Fatalities/Crash:	0.14
Injuries/Crash:	0.29
Major Injuries/Crash:	0.00
Minor Injuries/Crash:	0.00
Possible/Unknown Injuries/Crash:	0.29





Iowa Crash Analysis Tool
Quick Report
2021-2025

Major Cause			7
Animal	3	Ran traffic signal	0
Ran stop sign	0	Failed to yield to emergency vehicle	0
FTYROW: At uncontrolled intersection	0	FTYROW: Making right turn on red signal	0
FTYROW: From stop sign	0	FTYROW: From yield sign	0
FTYROW: Making left turn	0	FTYROW: From driveway	0
FTYROW: From parked position	0	FTYROW: To pedestrian	0
FTYROW: Other	0	Drove around RR grade crossing gates	0
Disregarded RR Signal	0	Crossed centerline (undivided)	0
Crossed median (divided)	0	Traveling wrong way or on wrong side of road	0
Aggressive driving/road rage	0	Driving too fast for conditions	0
Exceeded authorized speed	0	Improper or erratic lane changing	0
Operating vehicle in an reckless/erratic/care...	0	Followed too close	0
Passing: On wrong side	0	Passing: Where prohibited by signs/markings	0
Passing: With insufficient distance/inadequa...	0	Passing: Through/around barrier	0
Passing: Other passing	0	Made improper turn	0
Driver Distraction: Manual operation of an e...	0	Driver Distraction: Talking on a hand-held d...	0
Driver Distraction: Talking on a hands free ...	0	Driver Distraction: Adjusting devices (radio...	0
Driver Distraction: Other electronic device ...	0	Driver Distraction: Passenger	0
Driver Distraction: Unrestrained animal	0	Driver Distraction: Reaching for object(s)/f...	0
Driver Distraction: Inattentive/lost in thou...	0	Driver Distraction: Other interior distracti...	0
Driver Distraction: Exterior distraction	0	Ran off road - right	2
Ran off road - straight	0	Ran off road - left	1
Lost control	1	Swerving/Evasive Action	0
Over correcting/over steering	0	Failed to keep in proper lane	0
Failure to signal intentions	0	Traveling on prohibited traffic way	0
Vehicle stopped on railroad tracks	0	Other: Vision obstructed	0
Other: Improper operation	0	Other: Disregarded warning sign	0
Other: Disregarded signs/road markings	0	Other: Illegal off-road driving	0
Downhill runaway	0	Separation of units	0
Towing improperly	0	Cargo/equipment loss or shift	0
Equipment failure	0	Oversized load/vehicle	0
Other: Getting off/out of vehicle	0	Failure to dim lights/have lights on	0
Improper backing	0	Improper starting	0
Illegally parked/unattended	0	Driving less than the posted speed limit	0
Operator inexperience	0	Other	0
Unknown	0	Not reported	0
Other: No improper action	0		



**Iowa Crash Analysis Tool
Quick Report
2021-2025**

Time of Day/Day of Week														
Day of Week	12 AM to 2 AM	2 AM to 4 AM	4 AM to 6 AM	6 AM to 8 AM	8 AM to 10 AM	10 AM to Noon	Noon to 2 PM	2 PM to 4 PM	4 PM to 6 PM	6 PM to 8 PM	8 PM to 10 PM	10 PM to 12 AM	Not reported	Total
Sunday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tuesday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wednesday	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Thursday	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Friday	0	0	0	0	1	0	0	0	0	1	2	1	0	5
Saturday	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	1	0	0	0	0	1	3	1	0	7

Manner of Crash Collision	7	Surface Conditions	7
Non-collision (single vehicle)	6	Dry	0
Head-on (front to front)	1	Wet	3
Rear-end (front to rear)	0	Ice/frost	1
Angle (oncoming left turn)	0	Snow	0
Broadside (front to side)	0	Slush	0
Sideswipe (same direction)	0	Mud/dirt	0
Sideswipe (opposite direction)	0	Water (standing or moving)	0
Rear to rear	0	Sand	0
Rear to side	0	Oil	0
Not reported	0	Gravel	0
Other	0	Not reported	3
Unknown	0	Other	0
		Unknown	0

Fixed Object Struck	8
Bridge overhead structure	0
Bridge/bridge rail parapet	0
Ditch	0
Ground	0
Guardrail - face	0
Concrete traffic barrier (median or right sid...	0
Cable barrier	0
Utility pole/light support	0
Traffic signal support	0
Fire hydrant	0
Tree	0
Snow bank	0
Wall	0
Other fixed object	0
Bridge pier or support	0
Curb/island/raised median	0
Embankment	0
Culvert/pipe opening	0
Guardrail - end	0
Other traffic barrier	0
Impact attenuator/crash cushion	0
Traffic sign support	0
Other post/pole/support	0
Mailbox	0
Landscape/shrubbery	0
Fence	0
Building	0
None (no fixed object struck)	8



Iowa Crash Analysis Tool
Quick Report
2021-2025

Driver Age/Driver Gender					
Driver Age - 5 year Bins	Female	Male	Not reported	Unknown	Total
< 14	0	0	0	0	0
= 14	0	0	0	0	0
= 15	0	0	0	0	0
= 16	0	0	0	0	0
= 17	0	0	0	0	0
= 18	0	0	0	0	0
= 19	1	0	0	0	1
= 20	0	0	0	0	0
>= 21 and <= 24	1	0	0	0	1
>= 25 and <= 29	0	1	0	0	1
>= 30 and <= 34	0	1	0	0	1
>= 35 and <= 39	0	0	0	0	0
>= 40 and <= 44	0	0	0	0	0
>= 45 and <= 49	0	0	0	0	0
>= 50 and <= 54	0	0	0	0	0
>= 55 and <= 59	0	0	0	0	0
>= 60 and <= 64	0	2	0	0	2
>= 65 and <= 69	1	0	0	0	1
>= 70 and <= 74	0	0	0	0	0
>= 75 and <= 79	0	0	0	0	0
>= 80 and <= 84	0	0	0	0	0
>= 85 and <= 89	0	1	0	0	1
>= 90 and <= 94	0	0	0	0	0
>= 95	0	0	0	0	0
Not reported	0	0	0	0	0
Unknown	0	0	0	0	0
Total	3	5	0	0	8

Alcohol Test Given	8
None	7
Blood	1
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	0

Drug Test Given	8
None	7
Blood	1
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	0

Drug Test Result	8
Negative	0
Cannabis	0
Central Nervous System depressants	0
Central Nervous System stimulants	0
Hallucinogens	0
Inhalants	0
Narcotic Analgesics	0
Dissociative Anesthetic (PCP)	0
Prescription Drug	0
Not reported	8
Other	0

Drug/Alcohol Related	7
Drug	1
Alcohol (< Statutory)	0
Alcohol (Statutory)	0
Drug and Alcohol (< Statutory)	0
Drug and Alcohol (Statutory)	0
Refused	0
Under Influence of Alcohol/Drugs/Medications	0
None Indicated	6