

Board of Education Regular Meeting
Monday, June 14, 2021 7:00 PM
HS CONFERENCE ROOM
705 N 9th Street
Arlington, NE 68002

1. OPENING PROCEDURES
 - 1.1. Call Meeting to Order
 - 1.2. Roll Call
 - 1.3. Pledge of Allegiance
 - 1.4. Approval of Regular Meeting Agenda
 2. WELCOME TO GUESTS AND PUBLIC FORUM
 3. CONSENT AGENDA
 - 3.1. Minutes of the Previous Board Meeting(s)
 - 3.2. Monthly Financial Reports
 4. REVIEW OF ANNUAL DISTRICT PLAN
 5. PRINCIPALS' REPORTS
 - 5.1. Mr. Shada's Activity Report for 2020-2021 School Year
 - 5.2. Mr. Pfingsten's Report
 - 5.3. Mrs. Morgan's Elementary Report
 6. SUPERINTENDENT'S REPORT
 - 6.1. Final Enrollment totals for 2020-2021 school year.
 - 6.2. Review of Building/Renovation Project progress
 - 6.3. NASB Monthly Update
 - 6.4. Review Leave Log
 - 6.5. NRCSA Report
 - 6.6. Final Legislative Report
 - 6.7. ESSER III (ARP) Information
 7. COMMITTEE AND REPRESENTATIVE REPORTS
 - 7.1. Finance Committee
 - 7.2. Grade Scale Ad Hoc Committee
 8. UNFINISHED BUSINESS
 9. NEW BUSINESS
 - 9.1. Policy Updates From Legislation--First Reading
 - 9.2. Discuss, Consider, and Take Necessary Action to Establish Substitute Teacher Rate for 2021-2022
 - 9.3. Discuss, Consider, and Take Necessary Action to Establish Activity Worker Pay Rate as Discussed
 - 9.4. Discuss, Consider, and Take Necessary Action to Approve Purchase of 30 Computers Using ARP funds
 - 9.5. Discuss, Consider, and Reaffirm Policy 5415 Anti-Bullying
 - 9.6. Discuss, Consider, and Reaffirm Policy 6400 Parental Involvement
 - 9.7. Discuss, Consider and Reaffirm Policy 5416 Students Fees and Student Fees
- Appendix

- 9.8. Discuss, Consider, and Approve Cabinets in Library
- 9.9. Discuss, Consider and Approve 2021-22 Purchase of 120 Hurdles as Discussed
- 9.10. Discuss, Consider and Approve 2021-22 Purchase of Wrestling Mat as Discussed
- 9.11. Discuss, Consider, and Approve Athletic Trainer Contract for 2021-22
- 9.12. Discuss, Consider, and Take Necessary Action to Enter into Interlocal Agreement for Occupational Therapist with Blair Community Schools
- 9.13. Resolution to adopt the Papio-Missouri River NRD Hazard Mitigation Plan 2021
10. EXECUTIVE SESSION
11. ACTION ON EXECUTIVE SESSION ITEMS
12. ADJOURNMENT

Board of Education Regular Meeting

Monday, May 10, 2021 7:00 PM Central

BLUE GYM/CAFETERIA
705 N 9th St
Arlington, Nebraska 68002

1. OPENING PROCEDURES

1.1. Call Meeting to Order

Matt O'Daniel called the meeting to order at 7:03.

1.2. Roll Call

1.3. Pledge of Allegiance

1.4. Approval of Regular Meeting Agenda

Motion to approve the regular meeting agenda as presented Passed with a motion by Bruce Scheer and a second by Chase Kratochvil.

Jason Arp: Yea, Chase Kratochvil: Yea, Matt O'Daniel: Yea, Bruce Scheer: Yea, Janet Warner: Yea, Shanon Willmott: Yea

2. WELCOME TO GUESTS AND PUBLIC FORUM

Community speakers included: Ben Misfeldt,

Jamie Smith, Kristen Widman, Mindy Misfeldt, Jerusha Franzluebbbers, Dawn Klein, Amy VonBehren, and Kara Williams.

3. CONSENT AGENDA

Motion to approve the consent agenda as presented Passed with a motion by Matt O'Daniel and a second by Bruce Scheer.

Jason Arp: Yea, Chase Kratochvil: Yea, Matt O'Daniel: Yea, Bruce Scheer: Yea, Janet Warner: Yea, Shanon Willmott: Yea

3.1. Minutes of the Previous Board Meeting(s)

3.2. Monthly Financial Reports

3.3. Approve New Teacher & Staff Contracts:

* Chrissy Rydl - Secondary English Language Arts

* Daniel Larson - Technology Director

3.4. Approve Signed Resignation Agreement as Discussed in April Marty Potter

4. UNFINISHED BUSINESS

4.1. COVID Plan Conversation/Revision

After discussion and input from each board member as well as administration, a change to the Covid Plan was passed. This will be effective Wednesday.

Motion to adopt amended 2020-2021 language as presented. Passed with a motion by Matt O'Daniel and a second by Jason Arp.

Jason Arp: Yea, Chase Kratochvil: Yea, Matt O'Daniel: Yea, Bruce Scheer: Yea, Janet Warner: Yea, Shanon Willmott: Yea

5. PRINCIPALS REPORTS

5.1. Mr. Shada's May Spotlight

5.2. Mrs. Morgan's May Elementary Spotlight

5.3. Mr. Pfingsten's May Secondary Spotlight

6. SUPERINTENDENT'S REPORT

6.1. NRCSA Member Update

6.2. NASB Member Updates

6.3. Update On Summer Projects

6.4. Groundbreaking for Addition

6.5. ESSERS II (CRRSA) and ESSERS III (ARP) Updates

6.6. Report on Special Building Fund CD

6.7. Legislative Update

7. COMMITTEE AND REPRESENTATIVE REPORTS

7.1. Finance Committee

8. NEW BUSINESS

8.1. Present Senior Students that Completed Rule 10 Requirements for Graduation

Motion to approve the presented Senior Students for Graduation from Arlington Public Schools
Passed with a motion by Shanon Willmott and a second by Janet Warner.

Jason Arp: Yea, Chase Kratochvil: Yea, Matt O'Daniel: Yea, Bruce Scheer: Yea, Janet Warner:
Yea, Shanon Willmott: Yea

8.2. Discuss, Consider and Approve Athletics General fund budget for 2021-22

Tabled until June Meeting

8.3. Discuss, Consider, and Approve District General Fund Budget for 2021-22

Tabled until June Meeting

9. ADJOURNMENT

Matt O'Daniel adjourned the meeting at 9:13pm.

Matt O'Daniel, Board President

Dawn Lewis, Board Secretary

Date

Date

Arlington Public Schools
May 31, 2021

Fund Name 2 Rivers Bank	Starting Balance	Receipts	Disbursements	Interfund Transfers	Ending Balance
General Fund - 864	\$ 211,885.54	\$ 2,033,984.14	\$ 740,802.79	\$ (1,301,961.04)	\$ 203,105.85
Activities - 109	\$ 101,159.13	\$ 23,074.61	\$ 30,082.46	\$ -	\$ 94,151.28
Activities Saving - 713	\$ 220.00	\$ -	\$ -	\$ -	\$ 220.00
Activities CD - 5826	\$ 106,405.95	\$ -	\$ -	\$ -	\$ 106,405.95
		1/30/19-7/30/21		Total Activities:	\$ 200,777.23
Sweep - 956	\$ 2,019,613.17	\$ 288.96		\$ 1,327,479.13	\$ 3,347,381.26
Hot Lunch - 487	\$ 186,325.98	\$ 45,081.03	\$ -	\$ (25,518.09)	\$ 205,888.92
Employee Benefit Fund	\$ 841.95	\$ -	\$ -	\$ -	\$ 841.95
Depreciation Fund	\$ 1,579,013.91	\$ 209.95	\$ 11,663.88	\$ -	\$ 1,567,559.98
Depreciation CD - 5826	\$ 253,807.05	\$ -	\$ -	\$ -	\$ 253,807.05
		1/15/21-4/15/22		Total Depreciation:	\$ 1,821,367.03
2017 Bond Refunding	\$ 572,061.70	\$ 148,680.12	\$ -	\$ -	\$ 720,741.82
QCPUF	\$ 222,356.43	\$ 138,588.27	\$ 6,833.75		\$ 354,110.95
Spec Bldg Fund	\$ 3,574,975.87	\$ 370,044.21	\$ -	\$ -	\$ 3,945,020.07
Sp Building CD - 5826	\$ -	\$ -	\$ -	\$ -	\$ -
				Total Spec Bldg:	\$ 3,945,020.07
Total Special Funds	\$ 6,203,056.91	\$ 657,522.54	\$ 18,497.63	\$ -	\$ 6,842,081.82

**ARLINGTON PUBLIC SCHOOLS
SPECIAL FUND
May 31, 2021**

Beginning Fund Balance	4/30/2021	\$ 6,203,056.91
Receipts		\$ 657,522.54
Disbursements		\$ (18,497.63)
Adjustments **		
 Ending Fund Balance	 5/31/2021	 \$ 6,842,081.82
 FUND BALANCE ASSETS	 5/31/2021	
Two Rivers Bank Balance	Special Funds	\$ 6,588,274.77
	CD - Spec Bldg	\$ -
	CD - Depreciation	\$ 253,807.05
		\$ 6,842,081.82

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**ARLINGTON PUBLIC SCHOOLS
GENERAL FUND
APRIL 30, 2021**

Beginning Fund Balance	4/30/2021	\$ 2,231,498.71
Receipts		\$ 2,034,273.10
Disbursements		\$ (164,942.24)
Payroll Taxes and Electronic Submissions		\$ (224,658.23)
Net Payroll		\$ (351,202.32)
Outstanding Liabilities		
Adjustments **		\$ 25,518.09
Ending Fund Balance	5/31/2021	\$ 3,550,487.11
 FUND BALANCE ASSETS	5/31/2021	
Two Rivers Bank		
General Fund Checking		\$ 203,105.85
General Fund Sweep Account		\$ 3,347,381.26
TOTAL GENERAL FUND ASSETS		\$ 3,550,487.11

**

HL transfer

CHECK REGISTER FOR JUNE 2021 BOARD MEETING

(Includes special fund checks)

PAYEE NAME	DESCRIPTION	AMOUNT
AKRS Equipment	Oil and filters for mowers	\$ 65.91
Airgas inc	Monthly tank rental	\$ 297.13
AKRS Equipment	Parts for John Deere for grounds	\$ 2,400.31
AKRS Equipment	Mower	\$ 3,900.00
Ace Hardware	Mower parts	\$ 3.98
American Broadband	Telephone service	\$ 498.96
Bomgaars Supply	Maintenance supplies	\$ 331.06
Border States Industries	Ball fields	\$ 44.11
Border States Industries	Maintenance supplies	\$ 17.93
Bomgaars Supply	Maintenance supplies	\$ 182.96
Bomgaars Supply	Maintenance supplies	\$ 259.98
Chad Christensen	Bus barn garage door	\$ 125.00
Cashwa Distributing	Food Order	\$ 2,758.79
Dietze Music House	Band supplies	\$ 129.91
Egan Supply	Maintenance Supplies	\$ 901.30
ESU #2	Psychologist 4th quarter	\$ 17,982.00
ESU #2	Ind school services for last quarter	\$ 9,825.67
Enterprise Publishing	Minutes from 5.10.21 meeting	\$ 134.10
Eagle Auto	Oil change and tire rotation	\$ 75.51
Eagle Auto	Windshield wipers mini #2	\$ 30.98
Earthgrains (Bimbo Bakeries)	Food Order	\$ 711.90
Fifth Season	Sprinkler	\$ 433.20
Follett School Solutions	Books	\$ 962.91
Fort Calhoun Community Schools	OT Services	\$ 2,133.57
Fifth Season	Grounds Maintenance	\$ 513.20
Gene Steffys	Oil change van #1	\$ 50.00
Hansen Tire LLC	Finance charge from previous invoice	\$ 4.13
Hobby Lobby	Velcro for graduation	\$ 57.93
Hobby Lobby	5th grade pioneer supplies	\$ 12.99
Hometown Leasing	Printer Copier Lease	\$ 1,723.15
Harco Athletic Reconditioning Inc	Football Helmet items	\$ 2,481.00
Huss, Jamie	Athletic Svcs May	\$ 3,000.00
Hireright	Drug test / supplies	\$ 281.40
Hiland Dairy	Milk/Dairy Order	\$ 2,040.40
Integration Partners	Maintenance supplies	\$ 3,778.01
Jackson Service	Kitchen Supplies	\$ 123.88
KSB School Law	legal services	\$ 392.00
LE Learn to Move	PT Services	\$ 220.65
Loberg, Tamara	Reimb for KG smorgasboard workshop	\$ 50.00
Lou's Sporting Goods	Tent for Track meet	\$ 2,880.00
Menards	Sped planter boxes	\$ 134.49
Max D Signs	2021-2022 Activity Passes	\$ 19.50
Menards	Maintenance supplies	\$ 50.13
Menards	Maintenance supplies	\$ 237.49
Menards	Maintenance supplies	\$ 65.52
Menards	Maintenance supplies	\$ 16.99
Menards	Maintenance supplies	\$ 84.61
Menards	Totes for teacher storage	\$ 55.94
Master Teacher	Service Year awards	\$ 975.70
NCSA	NASBO Membership meeting - Hansen	\$ 25.00
Nebr Council School Admin	NCE conference	\$ 450.00

NCSA	Membership renewals	\$ 2,045.00
NCSA	Admin days registration	\$ 1,700.00
NCSA	Business Mgr Training - Hansen	\$ 100.00
O'Reilly Auto	Bus parts	\$ 180.65
Omaha World Herald	Secondary Engl Position	\$ 890.00
OPPD	Electricity	\$ 7,489.33
One Source	Background checks	\$ 31.00
Payflex	Payflex	\$ 100.00
Plan Services	Annual Admin fee	\$ 100.00
P & H Electric	Belt for maintenance	\$ 100.60
Ralston Pub Schools	1st semester 2020-2021 hearing svcs	\$ 32,647.52
Siffing Landscaping	Sped planter boxes	\$ 218.26
Scheer, Warren	Electricity	\$ 75.93
Sign Depot	New street signs	\$ 202.08
Sysco Pegler	Food Order	\$ 2,127.05
Two Rivers Bank	Direct Deposit Payment Fee	\$ 18.00
Toebben, Karen	Electricity	\$ 69.02
Thermo King Christensen	Def for buses	\$ 72.00
US Foods	Food Order	\$ 508.32
United Private Networks	Distance Learning	\$ 559.33
USPO	Annual Box fee	\$ 342.00
Village of Arlington	Water	\$ 909.52
Varsity Brands Holding Co	Fitnessgram license renewal	\$ 199.00
VISA	Supplies	\$ 3,566.09
Winnelson	Maintenance supplies	\$ 150.00
Waste Connections	Trash Service	\$ 510.08
Walmart	supplies	\$ 535.66

Total Payables (checks not mailed until approved by the BOE) **\$119,377.72**

HANDPAYABLES (Paid and mailed after previous board meeting but before this board meeting)

Wex Bank	Shell Bill	\$ 4,363.21
Village of Arlington	Water	\$ 825.10
NE Ag Ed Association NAEA	NAEA Fees	\$ 235.00
Casey's	Fuel for mini vans	\$ 38.27

Total Handpayables **\$ 5,461.58**

Total General Fund **\$124,839.30**

SPECIAL FUNDS (Cut in previous month but may not have cleared bank yet)

DLR Group	Construction Services	\$ 1,414.36
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Total Special Funds **\$ 1,414.36**

EFINANCE - POWERSCHOOL
 DATE: 06/08/2021
 TIME: 16:12:45

ARLINGTON PUBLIC SCHOOL
 CHECK REGISTER

PAGE NUMBER: 1
 VENCHK11
 ACCOUNTING PERIOD: 10/21

FUND - 99 - DISBURSEMENT FUND

CHECK NUMBER	CASH ACCT	DATE ISSUED	VENDOR	ACCT	DESCRIPTION	AMOUNT
42116			4607 VISA		VOID: MULTI STUB CHECK	
42117	9001	06/08/21	4607 VISA	2650	142 PIECE COMPUTER REPAIR	22.99
42117	9001	06/08/21	4607 VISA	2610	AMAZON - 100 PCS JUMBO CR	4.85
42117	9001	06/08/21	4607 VISA	2610	AMAZON - 120 ASSORTED COL	7.99
42117	9001	06/08/21	4607 VISA	2330	AMAZON - 30 ESSENTIAL SKI	45.00
42117	9001	06/08/21	4607 VISA	2610	AMAZON - 50 PACK DISPOSAB	9.97
42117	9001	06/08/21	4607 VISA	2610	AMAZON - 9X12 MANILLA ENV	29.46
42117	9001	06/08/21	4607 VISA	2610	AMAZON - AAA & AA BATTERI	26.96
42117	9001	06/08/21	4607 VISA	2330	AMAZON - ALL AMERICAN YEM	6.32
42117	9001	06/08/21	4607 VISA	2610	AMAZON - PLAY-DOH 50-PACK	26.98
42117	9001	06/08/21	4607 VISA	2330	AMAZON - QUALITATIVE RESE	33.31
42117	9001	06/08/21	4607 VISA	2610	AMAZON - WHITE CARDBOARD	43.64
42117	9001	06/08/21	4607 VISA	2650	BROTHER LABEL MAKER	34.98
42117	9001	06/08/21	4607 VISA	2650	BROTHER LABEL TAPE	99.98
42117	9001	06/08/21	4607 VISA	2650	DESKTOP POWER SUPPLY	32.14
42117	9001	06/08/21	4607 VISA	2330	ESTIMATED SHIPPING/HANDLI	3.99
42117	9001	06/08/21	4607 VISA	2610	FERTILIZER FOR PLANTER BO	14.97
42117	9001	06/08/21	4607 VISA	2734	HP DESKTOP COMPUTER FOR D	859.99
42117	9001	06/08/21	4607 VISA	2610	ITEMS FOR ADMIN ASSIST DA	82.80
42117	9001	06/08/21	4607 VISA	2650	LAPTOP BATTERY	14.10
42117	9001	06/08/21	4607 VISA	2650	LAPTOP CARRYING CASE	78.64
42117	9001	06/08/21	4607 VISA	2810	NLC REGISTRATION	910.00
42117	9001	06/08/21	4607 VISA	2610	PACKING TAPE AND 2 HOLE P	32.98
42117	9001	06/08/21	4607 VISA	2530	PIONEER PHONE BILL FOR AP	109.57
42117	9001	06/08/21	4607 VISA	2610	POSTAGE TO SEND BACK MEDA	61.00
42117	9001	06/08/21	4607 VISA	2610	REGISTRATION FOR SCHOOL N	150.00
42117	9001	06/08/21	4607 VISA	2650	REPLACEMENT LAPTOP DVD DR	7.98
42117	9001	06/08/21	4607 VISA	2650	REPLACEMENT LAPTOP TOUCHS	423.08
42117	9001	06/08/21	4607 VISA	2610	REUNIFICATION SUPPLIES FO	205.57
42117	9001	06/08/21	4607 VISA	2330	SOUTHEAST COMMUNITY COLLE	40.00
42117	9001	06/08/21	4607 VISA	2610	STATE ELECTRICAL LICENSE	45.00
42117	9001	06/08/21	4607 VISA	2610	TPT - 2ND TO 3RD SUMMER P	4.43
42117	9001	06/08/21	4607 VISA	2610	TPT - BECAUSE OF WINN DIX	10.00
42117	9001	06/08/21	4607 VISA	2610	TPT - CHOCOLATE FEVER NOV	3.75
42117	9001	06/08/21	4607 VISA	2610	TPT - END OF THE YEAR ESC	5.00
42117	9001	06/08/21	4607 VISA	2610	TPT - PREFERENCE ASSESSME	2.40
42117	9001	06/08/21	4607 VISA	2610	TPT - SEQUENCING WORKSHEE	2.40
42117	9001	06/08/21	4607 VISA	2610	TPT - STONE FOX NOVEL STU	9.00
42117	9001	06/08/21	4607 VISA	2610	TPT - SUMMER KINDERGARTEN	2.40
42117	9001	06/08/21	4607 VISA	2610	TPT - SUMMER PRACTICE PAC	2.70
42117	9001	06/08/21	4607 VISA	2640	TWO " TWO OF A KIND" BOOK	21.90
					TOTAL CHECK	3,528.22
					TOTAL FUND	3,528.22
					TOTAL REPORT	3,528.22

ACTIVITY BALANCE as of 4/30/2021

Source Code:	Account	Beginning Bal	YTD Revenues	YTD Expenditures	Balance
701	One School One Team	\$ 881.20	\$0.00	\$0.00	\$ 881.20
736	Activities Interest	\$ 8,486.00	\$2,288.16	\$0.00	\$ 10,774.16
702	Always For Kids	\$ 41,079.07	\$4,609.72	\$5,866.56	\$ 39,822.23
703	Art Class	\$ 8,173.26	\$1,992.02	\$3,051.58	\$ 7,113.70
704	Art Club	\$ 2,791.26	\$99.95	\$1,561.90	\$ 1,329.31
705	Athletics	\$ (7,944.06)	\$72,296.45	\$87,630.82	\$ (23,278.43)
706	Band	\$ 5,479.32	\$3,765.75	\$5,582.03	\$ 3,663.04
789	Baseball Fund	\$ 4,896.53	\$1,404.00	\$2,434.79	\$ 3,865.74
762	Baylor/ACT	\$ 2,979.09	\$0.00	\$0.00	\$ 2,979.09
708	Book Club	\$ 270.55	\$0.00	\$0.00	\$ 270.55
790	Boys Basketball	\$ 1,323.06	\$6,016.00	\$5,548.34	\$ 1,790.72
783	Boys Golf	\$ 1,250.35	\$265.00	\$221.00	\$ 1,294.35
709	Cheerleading	\$ 317.65	\$9,826.77	\$10,234.52	\$ (90.10)
734	Class of 2018	\$ 1,453.91	\$0.00	\$0.00	\$ 1,453.91
765	Class of 2019	\$ 1,016.13	\$0.00	\$0.00	\$ 1,016.13
770	Class of 2020	\$ 646.85	\$0.00	\$218.59	\$ 428.26
771	Class of 2021	\$ 734.77	\$750.00	\$213.85	\$ 1,270.92
768	Class of 2022	\$ 4,352.77	\$4,252.33	\$3,024.39	\$ 5,580.71
772	Class of 2023	\$ 1,759.20	\$1,893.15	\$320.50	\$ 3,331.85
773	Class of 2024	\$ 481.35	\$505.90	\$0.00	\$ 987.25
720	Concessions	\$ (4,476.00)	\$21,373.56	\$24,064.86	\$ (7,167.30)
785	Cross Country	\$ 2,853.59	\$1,682.00	\$2,001.63	\$ 2,533.96
721	Dance Squad	\$ 732.05	\$4,126.84	\$3,187.07	\$ 1,671.82
722	Drama	\$ 402.73	\$85.20	\$150.77	\$ 337.16
724	Elem Lounge	\$ (55.16)	\$0.00	\$0.00	\$ (55.16)
732	Fam Cons Science	\$ 2,683.23	\$960.00	\$1,380.17	\$ 2,263.06
726	FBLA	\$ 15,654.83	\$2,072.63	\$4,787.80	\$ 12,939.66
766	FFA	\$ 10,667.39	\$5,228.46	\$2,781.23	\$ 13,114.62
758	Floor Fund	\$ 427.95	\$0.00	\$0.00	\$ 427.95
727	Football	\$ 2,500.50	\$2,924.00	\$279.68	\$ 5,144.82
791	Girls Basketball	\$ 834.74	\$4,816.90	\$2,357.92	\$ 3,293.72
784	Girls Golf	\$ 2,953.08	\$253.00	\$0.00	\$ 3,206.08
735	Honor Society	\$ 1,215.16	\$729.60	\$751.90	\$ 1,192.86
761	Honors History	\$ 0.09	\$0.00	\$0.00	\$ 0.09
744	HS Lounge	\$ 581.60	\$10.98	\$163.78	\$ 428.80
740	Industrial Tech / Woods	\$ 1,285.63	\$2,715.00	\$3,145.32	\$ 855.31
739	Library Fund Elem/HS	\$ 3,457.43	\$5,067.85	\$5,557.44	\$ 2,967.84
764	Metro	\$ 47,277.01	\$0.00	\$0.00	\$ 47,277.01
792	MS Girls Basketball	\$ 120.14	\$437.00	\$471.50	\$ 85.64
723	MS STEM	\$ 144.33	\$117.74	\$0.00	\$ 262.07
737	MS Student Council	\$ 3,871.41	\$170.90	\$500.00	\$ 3,542.31
787	MS Track	\$ 222.12	\$0.00	\$0.00	\$ 222.12
756	Pepsi	\$ 1,728.76	\$1,307.59	\$0.00	\$ 3,036.35
742	Quiz Bowl	\$ 1,139.64	\$0.00	\$90.82	\$ 1,048.82

728	Reimbursement (general	\$	6,771.00	\$102.00	\$102.00	\$	6,771.00
714	SKILLS	\$	679.48	\$0.00	\$0.00	\$	679.48
788	Softball	\$	(653.69)	\$3,339.40	\$60.00	\$	2,625.71
746	Spanish Club	\$	181.94	\$0.00	\$0.00	\$	181.94
794	Sped	\$	-	\$194.00	\$115.65	\$	78.35
747	Speech	\$	942.06	\$0.00	\$292.56	\$	649.50
748	Spring Musical	\$	4,443.86	\$7,306.09	\$8,321.78	\$	3,428.17
793	Striv	\$	150.00	\$845.00	\$595.00	\$	400.00
749	Student Council	\$	4,146.52	\$1,874.00	\$1,165.55	\$	4,854.97
750	Student Vending	\$	1,396.71	\$50.88	\$0.00	\$	1,447.59
751	Swing Choir	\$	2,091.67	\$2,428.20	\$2,220.99	\$	2,298.88
786	Track Fund	\$	1,513.82	\$1,430.44	\$492.60	\$	2,451.66
717	Transition	\$	1,613.51	\$0.00	\$0.00	\$	1,613.51
782	Volleyball	\$	2,612.28	\$2,767.02	\$2,293.17	\$	3,086.13
710	Welding	\$	(353.79)	\$0.00	\$51.62	\$	(405.41)
733	Wrestling	\$	4,404.67	\$997.99	\$1,792.68	\$	3,609.98
753	Yearbook	\$	4,757.21	\$6,095.00	\$3,472.12	\$	7,380.09
	Totals		\$211,347.76	\$191,474.47	\$198,556.48		\$204,265.75

ANNUAL DISTRICT GOALS

Sept 2020

Dec 2020

June 2020

GOAL AREA: BUDGET

GOAL: Maximize district resources to provide quality facilities and educational programs.

OBJECTIVES:

1. APS will explore innovative funding mechanisms.
2. APS will continue to develop the capacity for financial optimization.
3. APS will maintain broad concept planning based on foreseeable budget and summative needs assessment.

STRATEGIES:

1. Identify alternative funding sources including corporate sponsorship.
2. Assist the Arlington Education Foundation in developing alternative funding sources.
3. **Coordinate the financial planning with the Facility Plan that is developed.**
4. **Working with FEMA for possible additional flood damage recovery. Projected funding still uncertain, as this is a long process. Holding off on settlement with ALICAP as we await FEMA decisions**
5. **Passed Budget with Lower Levy**
6. **Inquiring with Education Foundation for some projects (FFA, Choir, etc.) Some Funding Secured, additional being considered (About \$4000 Committed currently)**
7. **Secured NDEQ Reimbursement for playground mulch (~\$17,000)**
8. **Secured Flex Funding for 2020-2021 (~\$30,000)**
9. **Secured Wind and Solar Energy Grant for \$30,900**
10. **Secured Grants for Media Productions and Ag from the AEF totaling approx \$4600**
11. **Prepared well with Depreciation, Reserves, and Special Building fund to handle a project with the possibility of little to no levy increase**
12. **Secured FEMA/NEMA Funding of ~\$38,000 for baseball dugouts**
13. **Grant Funds of \$12,000 for iPads from Foundation**
14. **Lowered levy second year w/ minimal increase to overall budget**
15. **PTO donation of \$2500 for Makerspace and AR prize cart**
16. **Music Boosters donation of \$4500 for choir robes**
17. **Two Bev Gruenke awards received by teachers**
18. **Foundation grant of approximately \$1400 to music department for “singer’s masks”**
19. **Foundation grant for microphones for musical/Booster donation for other musical items (\$6000 total)**
20. **ESSER I, II, and III funds to offset technology, additional staff, and additional tech time costs**

GOAL AREA: COMMUNITY ENGAGEMENT

GOAL: Maximize transparent communication by providing meaningful feedback and input opportunities toward continuous improvement efforts to strengthen family, school, and community partnerships.

OBJECTIVES:

1. APS will enhance our communication process to inform and engage stakeholders in our community.
2. APS will develop outreach opportunities that reinforce learning and engage the community in support of all educational and extracurricular endeavors.

STRATEGIES:

1. Examine current practices to promote periodic community engagement session(s).
2. Utilize community collaborators in the process of strategically planning for a 5-10 year facility enhancement plan.
3. Provide education and training for parents and guardians to promote school readiness.
4. Provide support for community childcare providers in their efforts to enhance quality services to children and families.
5. Increase the social media presence of the district.
6. Community Budget Workshop Held
7. Classroom Intercom adopted to streamline social media posts and involve more people
8. Elementary Newsletter using Smore.com
9. **Childcare Provider Training held 11/7/2019**
10. **TeamMates and Education Foundation Outreach**
11. **Held Community Meeting with DLR**
12. **Monthly Supt Article in the Citizen**
13. **Use of STRIV to broadcast meeting to reach more citizens**
14. **Held our Title I parent meeting**
15. **Hosted additional parent early childhood meeting for school readiness (third this year)**
16. **Daily Communication during closure via video message**
17. **Joined with Blair Area Economic Development to brainstorm ways to improve Arlington downtown “curb appeal”**
18. **Several Interviews with the Citizen to prepare the beginning of the year.**
19. **Successfully held graduation in July**
20. **Attendance of many community events by Admin Team/Board of Education**
21. **Striv of board meetings**
22. **Huddle three angle camera added to gym for games broadcast**
23. **Regular posting of guidelines, COVID reports, and health information on the website and social medias**
24. **Veterans Day video created and shared in lieu of being able to hold a traditional program**
25. **All board meetings now on striv or youtube/striv**
26. **Regular and specific articles in paper**
27. **Groundbreaking ceremony for new addition**

GOAL AREA: FACILITIES

GOAL: Provide up-to-date facilities to allow for continuous improvement and benefit to students in educational and extracurricular programs.

OBJECTIVES:

1. APS will provide a safe and secure learning environment.
2. APS will identify and prioritize existing facility needs.
3. APS will identify and prioritize a 5-10 year facility enhancement plan.
4. APS will collaborate with the Washington County Agricultural Society and the Village of Arlington **and other external entities** to most effectively use shared space(s).

STRATEGIES:

1. Evaluate and implement recommendations from the safety committee.
2. Examine existing transportation program and plan for future comprehensive needs.
3. Maximize the use of energy efficient technology to address financial challenges.
4. Develop a plan of action that is responsive to the Educational and Facility Planning Needs obtained in consort with DLR.
- 5. Obtain cost proposals from DLR and plan community engagement meeting**
- 6. Working with FEMA to restore and mitigate damages to baseball field and bus barn**
- 7. Considering additional ideas to share with DLR (Northeast corner, etc)**
- 8. Contacts with other agencies to facilitate future building projects (Boyd Jones, Hausmann Construction)**
- 9. Examine current space to gain additional educational spaces for addition of sections if needed prior to any new facility project**
- 10. Meeting with Village and Omaha MAPA to plan for future of urban sprawl and community/school readiness**
- 11. Met with Jerry McCall for possible contract services for growth**
- 12. Engaged with DLR to evolve building plan which meets current needs and fits into budget without requiring additional bonds**
- 13. Maintaining current facilities to improve parking conditions at football field**
- 14. Communication with the Village regarding street**
- 15. Selection of CM for Building/Renovation project with construction to begin Spring 2021**
- 16. Dead trees removed, gaining 4 additional parking spots**
- 17. Facilities managed with COVID-19 recommendations in place (tight but making it work)**
- 18. New baseball dugouts approved**
- 19. Progress moving along well on building addition/renovation project**
- 20. New door system working fantastic**
- 21. Renovation and addition work moving forward, coordinating with Boyd Jones going extremely well**

GOAL AREA: STUDENT PERFORMANCE

GOAL: Develop and implement plans using instructional best practices, formative and summative assessments, and student data to ensure that all students are college and career ready.

OBJECTIVES:

1. APS will consistently score above the state average and score in the top 20% of identified schools* at each grade level in reading, math, and science utilizing a 5-year average.
2. Maintain interest and increase participation in career and college ready courses. *as measured by a) number of students completing career pathways, b) number of students successfully completing college courses (dual enrollment).*
3. Maintain cohort graduation rates of 94% or higher.
4. APS will assist students in transitioning from secondary education into careers and/or post-secondary studies.
5. **Identify ways in which we can enhance students' knowledge and exposure to emerging technologies and technical career opportunities.**

*Identified schools – Arlington, Ashland-Greenwood, Bennington, Blair, DC West, Fort Calhoun, Millard, North Bend, Papillion LaVista, Raymond Central, Springfield-Platteview, Syracuse, Wahoo, Yutan

STRATEGIES:

1. Develop and articulate curriculum that is aligned with state standards and **with the Nebraska Standards for Career Ready Practice: Preparation for College and Career into all courses.**
2. Practice data-informed program and instructional planning in the implementation of Multi-Tiered Support System.
3. Continue to implement the Arlington Instructional Model based on the Marzano Framework
Fully implemented, formal observation summative tool approved by the state, teachers working on creating Student Learning Objectives (SLO).
4. Implement a revised evaluation tool aligned to the Arlington Instructional Model.
5. *Implement a district-wide (common) formative assessment system where data analysis informs instruction to ensure student achievement growth.*
6. Expand use of and access to interactive tools and technology to support and improve PK-12 learning and innovation.
7. Develop, articulate, and deliver a comprehensive secondary curriculum to assist students in transitioning from secondary education into careers and/or post-secondary studies.
8. Identify social, emotional, and behavioral support systems for students and staff.
 - a. Arbor Family Counseling Contract
9. **Research learning management systems and make a decision on system to implement across the district. (??? are we ready, do we have time, biting enough off with new evaluation system, wait a year??)**
10. **Research and add technology based courses and extra-curricular opportunities.**
New Classes: Intro to Computer Science and Applied Technology; offering more STEM type coursework and exposure to “coding”

12. Fastbridge implemented K-6, data available for teachers on Google Docs, coded according to students currently receiving services
13. New math K-8 intervention “Number Worlds”
14. Tashia LLI up and running (Leveled Literacy Intervention)
15. Exploring the use of FastBridge as a progress monitoring tool for interventions. We plan to use FastBridge during the winter term for 7th and 8th graders as another assessment screener in the areas of reading and math.
16. Work with NDE on Targeted Assistance Survey
17. Add interventions through MTSS for progress toward TSI
 - MS MTSS team has been developed
 - Intervention scheduling - dedicated time/not stealing time from courses
 - ACT Prep - providing the full John Baylor program, dedicated time/not stealing time from courses
18. Selection, Purchase, and Implementation of Aligned Science Curriculum
19. Possible collaboration on grant with Region 6 for student mental health connected to natural disaster trauma, other factors
20. Assessment of student population and class sizes for program improvement (additional staffing needs, etc.)
21. Grant to purchase PD and summative evaluation tool
22. Addition of middle school math skills program to the summer offerings.
23. Adoption of Canvas to assist with teacher/student/parent online platform consistency
24. Codes obtained from all vendors to implement curriculum online pieces with Canvas
25. Learning prioritized during COVID-19, maintaining student engagement and assisting all families/students through the learning process
26. Preparations for APS School Improvement (was NCA, was AdvancEd, now is Cognia) visit this coming spring
27. Purchase of iPads for Pk-2 for Canvas/assessment use with CARES Act funding and AEF grant
28. Requiring all seniors to take the ACT and all juniors to take the PreACT in the fall.
29. MAPS data shows slow down of anticipated growth, but not a terrible amount of loss, due to COVID-19 closure
30. Teachers repurposed to manage size due to COVID resulting in smaller class sizes which normally increase student performance and decrease office referrals (unintended natural benefit)
31. New “kickstart” college classes being taken by many students this fall
32. In communication with Blair schools regarding “Intern Omaha,” hope to develop this program here and create our own
33. Ad Hoc committee for grade scale
34. Pilot of new ELA curriculum scheduled for fall for selection/adoption in one year
35. Analysis of COVID year data driving our discussion on curriculum
36. STEAM Summer School well attended
37. Survey of parents regarding PK

GOAL AREA: BEHAVIORAL AND MENTAL HEALTH

Goal: Research, develop and implement a school-wide plan to support mental, emotional, and behavioral health concerns of all students.

Objectives:

1. APS will implement A System of Supports for staff to report behavioral, mental, and emotional concerns of students
2. APS will implement a program for safe reporting for students
3. APS will partner with area resources to support families
4. APS will identify and support students with behavioral and emotional health issues

STRATEGIES

1. Continue Partnership with Arbor Family Counseling
 - a. analysis data shows usage increased
2. Seek applicants to employ our own school psychologist to use for purposes other than SPED verifications and interventions
3. Seek resources to support student emotional health as we return to school post-pandemic and post-protest
 - a. ESU3 and ESU2 support meetings to share ideas and address concerns
4. Present opportunities to our students to help them develop character
 - a. Club/Sport Involvement with training for coaches (Inside Out Coaching book study, etc.)
 - b. Teammates
 - c. FCA
 - d. YFC (new possibility)
5. Dolores Bangert/Region 6 Mental/Behavioral Health Grant--qualified by being part of the flood disaster in 2019, now eligible for additional services. Mrs. Harris and Mr. Everitt coordinated with Dolores.
6. Advertising for FT School Psych, or will purchase extended time next year from ESU2 for our current purchased psych.
7. Dr. Lewis met with Arlington Youth Foundation to brainstorm new ways for them to reach students or provide for their families
8. Mental Health speaker for staff coming in August
9. Additional hours of on-site counseling purchased from Arbor for the coming year with ESSER Funds
10. Addition of legislated anonymous helpline for implementation in the fall
11. Fulltime School Psych hired for 2021-22 and new guidance counselors to work in tandem to help our students



705 N. 9th St. • P. O. Box 580 • Arlington, NE 68002 • Fax (402)478-4176 • www.apseagles.org • AA/EOE

Annual

Activities Report

2020-2021

Dr. Dawn Lewis
Superintendent
dawn.lewis@apseagles.org
(402)478-4173

Aaron Pflingsten
Secondary Principal
aaron.pflingsten@apseagles.org
(402)478-4171

James Shada
Assistant Secondary Principal / AD
james.shada@apseagles.org
(402)478-4171

Jacqueline Morgan
Elementary Principal
jacqueline.morgan@apseagles.org
(402)478-4121

Activity Participation

Grades 9-12

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
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# of Boys in Activities	60	74	68	63	97	65	79	73	76	88	64
# of Boys in School	120	118	110	110	108	95	112	112	119	123	113
Percentage Involved	50%	63%	61%	58%	89%	68%	70%	65%	64%	72%	57%

# of Girls in Activities	81	82	78	60	80	74	87	92	86	89	81
# of Girls in School	96	86	81	80	86	87	98	103	102	107	107
Percentage Involved	84%	95%	96%	75%	93%	85%	88%	89%	84%	83%	76%

Total # of Students in Activities	141	156	146	123	177	139	166	165	162	177	145
Total # of Students in School	216	204	191	190	194	182	210	215	221	230	220
Percentage Involved	65%	76%	76%	65%	91%	76%	79%	76%	73%	77%	66%

Total # of High School Boys in Activities

# of Boys in 7+ Activities	0	0	5	2	0	1	1	0	0	2	0
# of Boys in 5-6 Activities	1	10	5	3	6	3	9	3	4	3	3
# of Boys in 3-4 Activities	12	17	17	17	18	14	28	16	14	29	11
# of Boys in 1-2 Activities	56	47	41	41	56	47	41	54	58	54	50

Total # of High School Girls in Activities

# of Girls in 7+ Activities	1	11	5	2	1	1	4	3	1	1	1
# of Girls in 5-6 Activities	9	14	12	8	15	15	7	7	14	11	5
# of Girls in 3-4 Activities	23	31	25	19	24	23	41	46	32	26	24
# of Girls in 1-2 Activities	47	26	36	31	36	35	35	36	39	51	51

of Activities does not include Athletics

ATHLETIC PARTICIPATION

	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	2020-2021
Grades 7 & 8												
# of boys in athletics	37	38	41	53	44	44	53	46	37	37	41	38
# of boys in school	43	44	46	54	48	49	59	59	50	51	57	53
Percentage involved	86%	86%	89%	98%	92%	90%	89%	77%	74%	72%	71%	72%
# of girls in athletics	39	33	31	33	33	33	37	36	38	43	36	29
# of girls in school	41	36	34	33	38	37	45	50	52	62	50	45
Percentage involved	95%	92%	91%	100%	87%	90%	82%	72%	73%	69%	72%	64%
Total # of students in athletics	76	71	72	86	77	77	90	82	75	80	77	67
Total # of students in school	84	80	80	87	86	86	104	109	102	113	107	98
Percentage Involved	90%	89%	90%	98%	90%	90%	86%	75%	73%	70%	72%	68%

Grades 9-12

# of boys in athletics	92	94	96	93	71	78	66	86	79	86	82	78
# of boys in school	118	120	118	110	110	108	95	112	112	119	123	113
Percentage involved	78%	78%	81%	84%	65%	73%	69%	76%	70%	72%	67%	69%
# of girls in athletics	66	60	57	56	53	69	62	70	66	66	77	72
# of girls in school	93	96	86	81	80	86	87	98	103	102	107	107
Percentage involved	71%	63%	66%	69%	67%	81%	71%	71%	64%	64%	72%	67%
Total # of students in athletics	158	154	153	149	124	147	128	156	145	152	160	150
Total # of students in school	211	216	204	191	190	194	182	210	215	221	230	220
Percentage Involved	75%	71%	75%	78%	66%	76%	70%	74%	67%	68%	70%	68%

Total # of HS boys in athletics

# of boys in 3 sports	21	23	17	19	24	25	25	30	23	22	23	21
# of boys in 2 sports	34	45	45	40	25	25	22	30	34	27	22	23
# of boys in 1 sport	27	26	34	34	22	28	19	26	33	37	38	34

Total # of HS girls in athletics

# of girls in 3 sports	17	13	11	8	10	16	16	11	11	13	13	11
# of girls in 2 sports	16	22	19	23	17	23	22	20	18	18	30	28
# of girls in 1 sport	33	25	27	25	26	30	24	39	37	35	34	33

2021-2022 Activites Sponsors

2021-2022 Coaches

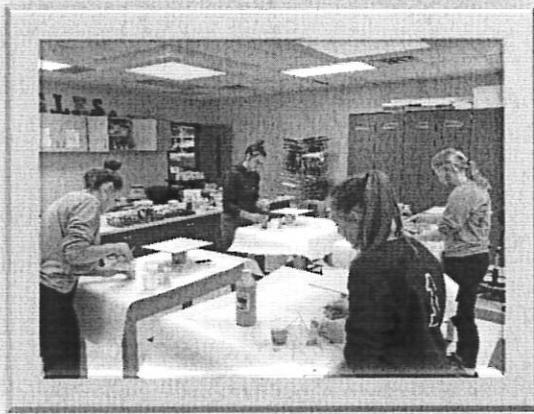
Activities Director	James Shada	Head Football	Colter Mattson
		Asst. Football	Luke Hoelsing
Head Cheerleading	Shelly Miller	Asst. Football	Connor Eurek
Asst. Cheerleading	Shawna Tierney	Asst. Football	Layne Laaker/Abe Rojas
Art Club	Erin Schaapveld	MS Football	Tyler Spitsner
Book Club	TBA	Asst. MS Football	Jake Eckhardt
		Head Girls Golf	Jason Wiese
Dance Squad	Emma Krause	Head Volleyball	Katarina Nelson
		Asst. Volleyball	Stacey Nelson
Drama Club	Sara O'Connell	Asst. Volleyball	Chrissy Rydl
Asst. Drama	Faye Kriekemeier	MS Head Volleyball	Tashia Wolf
		Asst. MS Volleyball	Katee Prenzlow
FBLA	Shawna Koger	Head Cross Country	Michaela Curran
		Asst. Cross Country	Helen Regier
Freshman Sponsor	Doug Hart	Asst. Jr. High Cross Country	Kali Agler
Sophomore Sponsor	Sara Horner		
Junior Sponsor	Shawna Tierney		
	Erin Schaapveld		
Senior Sponsor	Shelly Miller	Head Boys Basketball	Tyler Spitsner
Inst. Music	Allison Mastny	Asst. Boys Basketball	Abe Rojas
Multi. Media/Streaming	Scott Parson	Asst. Boys Basketball	Chad Sharp
		MS Boys Basketball	Jason Wiese
		Asst. MS Boys Basketball	Kenny Fuchser
MS Leadership	Dawn Klein	Head Girls Basketball	Luke Brenn
		Asst. Girls Basketball	Leslie Gubbels
Vocal Music Director	Barina Buresh Crosland	Asst. Girls Basketball	Jen Hilgenkamp
Spring Musical Director	Barina Buresh Crosland	MS Girls Basketball	Tashia Wolf
Assistant Spring Musical Director	Allison Mastny	Asst. Girls Basketball	Cailyn Johnson
Summer Band	Allison Mastny		
		Head Wrestling	Doug Hart
National Honor Society	Shawna Koger/Janelle Lorsch	Asst. Wrestling	Tyler Stender
		Asst. Wrestling/Jr. High Wrestling	Colter Mattson
Newspaper	Cailyn Johnson	Asst. Jr. High Wrestling	Jeff Kment
Quiz Bowl	Jason Wiese	Head Boys/Girls Track	Steve Gubbels
		Asst. Boys/Girls Track	Tyler Spitsner
Speech	Chrissy Rydl	Asst. Boys/Girls Track	Jake Eckhardt
		Asst. Boys/Girls Track	Madison Wakefield
Student Council	Teresa Feick	Asst. Boys/Girls Track	Carla Kaup
		Asst. Boys/Girls Track	Michaela Curran
Yearbook	Scott Parson	MS Track	Jason Wiese
		Asst. MS Track	Helen Regier
SKILLS USA	Luke Brenn	Asst. MS Track	Luke Hoelsing
Asst. SKILLS USA	Doug Hart		
		Head Boys Golf	TBA
FFA	Kali Bohling		
		Head Softball	Janelle Lorsch
		Asst. Softball	Luke Brenn
MS STEM	Dawn Klein	Asst. Softball	Alexa Brenn
		Head Baseball	Tyler Stender
		Asst. Baseball	Ed Menking
		Asst. Baseball	Rusty Hilgenkamp
		Asst. Baseball	Jacob Duhey

Art Club 2020-2021

Members: 11 high school students & 12 middle school students

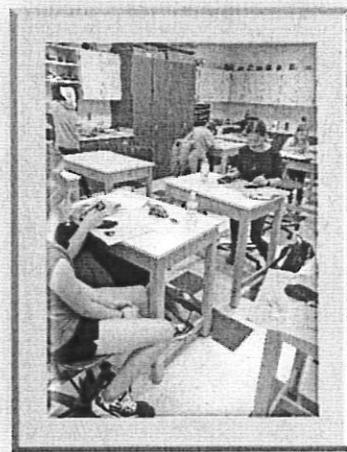
Highlights:

-Paint pouring – high schoolers experimented with paint pouring



-Puzzle Pieces – high school & middle school students created individual puzzle pieces that will be displayed together as a collaborative piece in the fall.

-Middle school created scratch board designs on a CD



Book Club

This year, book club helped review new books for the library. To meet that end, students read from a variety of categories, including YALSA Top 10 novels and nonfiction. Students selected novels from these categories, and then met twice over each category (once at the beginning and once at the end) to discuss the books. The students enjoyed reading the novels from the categories, and we discussed ways to promote these books to other students.

Additionally, students read a few novels together as a group. Students enjoyed reading and discussing it as a group.

Sponsor: Nicole Sok

Approximately 14 participants ranging 8th grade through seniors.

Future Business Leaders of America (FBLA)

Participation (Dues paid):

<u>97-98</u>	<u>98-99</u>	<u>99-00</u>	<u>00-01</u>	<u>01-02</u>	<u>02-03</u>	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>
54	56	57	64	59	63	81	73	74	74	<u>108</u>	108	105	113	100	96	96
<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>										
95	86	87	88	82	95	70										

Highlights:

- Twelve members attended the virtual National Leadership Conference
- Officers attended the Fall Leadership Conference in virtually, using the Village office area
- Approximately \$100 was collected for the March of Dimes and the Nebraska FBLA Foundation through a hat day
- Members assisted students in collecting over 4,000 canned goods for the Washington Food Pantry
- Students participated in a variety of additional community service amounting to over 3,500 hours
 - Summer Story Hour
 - Salvation Army Bell Ringing
 - Washington County Cattlemen's Ball
 - Teens in the Driver's Seat Seatbelt Safety Campaign
 - Elementary Bank in School
- Students participated virtually in Midland Business Day, UNK business day and UNO business day
 - Numerous individual awards were received
 - Middle level students were first place at UNK business day
- Thirty-seven members signed up for the State Leadership Conference held virtually at the the Arlington Auditorium
 - Dillon Kim was elected State Secretary
 - Fourteen national qualifiers were selected for a virtual conference in June

Sponsor: **Shawna Koger**

FFA Activity Report 2020-2021

Participation Numbers

2020-2021: 42 members (5 middle, 32 high, 5 Graduate)

Officers

President – Jake Bartosh
Vice President – Alaina Schwedhelm
Secretary – Cassidy Arp
Treasurer – Braden Monke
Reporter – Kayla Schwedhelm
Sentinel – Kyle Quinn
Parliamentarian – Blake Japp

Highlights

- State qualifier: 1st place team: Poultry Evaluation (Megan Green, Milee Young, Lily Hilgenkamp, Jacob Stron)
- State qualifier: 1st place team: Agricultural Technology & Mechanics (Kobe Wilkins, Connor Jurey, Blake Japp, Jon Garcia)
- State qualifier: 3rd place team: Welding (Blake Japp, Kobe Wilkins, Jon Garcia, Cole Scalf)
- State qualifier: 4th place team: Livestock Management (Megan Green, Zaena Stork, Alaina Schwedhelm, Cassidy Arp, Kobe Wilkins)
- State qualifier: Agriscience (Braden Monke, Kayla Schwedhelm, Kyle Quinn, Jessica Chappellear)

State FFA Convention Results

Local Events

Washington County Fair Tractor Pull – take tickets
TA Meetings
Dash for Trash – September Meeting – Casey's Pizza Served
HS FB Concessions
Halloween Party – Pumpkin Carving and Painting
Holiday Party – Gingerbread House Contest – Raising Cane's Served
FFA Week:

- Delivered Specialized Popcorn to Teachers
- Battle of the Brands (John Deere, CASE, Ford, Chevrolet, Nike, Under Armour etc.)
- Official Dress Day and Chapter Photo
- FFA Apparel Day
- Member Breakfast (Casey's Pizza and Blair Bakery Donuts, milk and juice)
- Tractor Day
- Guess the Officer (Baby Photos)
- FFA Emblem Hunt (3 emblems hidden in High School)
- Golden Tractor Hunt

Weekly Officer Meetings

Competitions

Dairy Judging
State Dairy Judging
Leadership Development Events
Career Development Events
Livestock Evaluation

Banquet Awards

Most Active Member:
Top Fruit Salesman: None 2020-2021

Scholarship Pins (Top GPA in their grade level, above a 3.0)

8th: Blaine Vogt
9th: Braden Monke
10th: Alaina Schwedhelm
11th: Zaena Stork
12th: Lily Hilgenkamp

Leadership Pins (Most active member in each grade)

8th: Blaine Vogt
9th: Kyle Quinn
10th: Blake Japp
11th: Zaena Stork
12th: Lily Hilgenkamp

Return Next Year -

- State FFA Degree Recipients: None 2020

Local Events

- Rumble in the Dirt Tractor Pull
- Summer Sizzle Concessions
- Ag Zone – Washington County Fair
- Set up for rodeo at fair
- Open House
- Fruit Sales
-

State Events

- Agriscience Fair

Instrumental Music

Participation:

	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10
HS	61	35	40	40	56	62	24	22	31	22	24
JH							25	30	31	28	20
5 th Grd	6	10	12	31	26	20	24	26	23	15	15
6 th Grd	18	13	48	26	21	32	22	17	20	14	9
	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
HS	22	35	29	24	16	19	21	20	18	24	26
MS	17	17	21	20	23	28	24	24	31	35	31
5 th		14	9	9	18	16	21	21	16	30	24
14											
6 th	13	12	21	14	13	14	17	21	17	21	17
St. Paul's							4	4	3	1	3

Highlights:

Band: Summer Band Lessons, (T and W, 8-4 5-weeks, 15 students received one-on-one instruction)

- Football Pep Band, Sr. High (4 games)
- High School Band Performance for Veterans Day
- Village Pointe Holiday Parade Performance, MS. and Sr. High
- Winter Music Concert 5th and 6th, MS. and Sr. High
- Band Soup Supper 5th and 6th, MS. and Sr. High - Virtual
- Virtual Clinic with Dr. Bush from UNL - High School Band
- District Music Contest, Sr. High
- Pender Elementary Honor Band
- Beginning Band Orientation and Open House – 4th Grade, interested 5th and 6th graders -
- Beginning Band Concert 5th and 6th Grade
- Graduation Performance, High School Band
- Elementary Graduation Performance, 6th Grade
- Spring Music Concert, MS High
- Spring Music Concert, Sr. High
- Memorial Day Performance, MS and HS
- High School and Middle School Jazz Band

Individual:

- Doane Virtual Honor Band - Gabbi Anzalone and Brooke Hilgenkamp
- UNK Honor Band: Julia Landauer, HS
- District Music Solos and Small Groups- 9 Solo and Ensemble Entries
 - 1: Carisa Brazelton - Flute Solo, Christian Mandagi - Clarinet Solo, Saxophone Quartet, Saxophone Duet
 - 2: Claire Allen-Clarinet Solo, Barrett Nielsen- Trumpet Solo, Saxophone Trio, Clarinet Quartet
- Outstanding Performance Honorable Mention: Gabbi Anzalone and Julia Landauer Saxophone Duet

Pender Elementary Honor Band: 21 Participants

Total Performances: 5th- 3, 6th- 4, Jr High – 5, Sr. High - 12

*** COVID restrictions limited several events during this school year.

Director: Allison Mastny

National Honor Society – 2020-2021

Participation:

	<u>98-99</u>	<u>99-00</u>	<u>00-01</u>	<u>01-02</u>	<u>02-03</u>	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>
HS	NA	24	18	27	28	27	28	20	28	29	33	27	26	43	31
	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>							
HS	24	25	25	25	20	26	22	20							

Highlights:

Coordinated and ran blood drive in the spring- collected over 60 donations
We were unable to complete a fall service project because of COVID-19 restrictions.
Participated in the recycling program through school

Goals:

The purpose of this organization shall be to create enthusiasm for scholarship, to stimulate a desire to render service, to promote leadership, and to develop character in the students of secondary schools.

Sponsor(s): **Nicole Sok**

One Act 2020

This year One Act was supposed to perform the play "The One Act Play Disaster" by Don Zolidis, and boy did it live up to that name. It was a comedy where a drama club in a small HS was given no budget, and one week to put on a 30 min version of the movie Oceans 11, and anything and everything that could go wrong, will. We had SO MUCH FUN practicing for this show and putting it all together, even with masks on the entire time. They were even completely memorized in 3.5 weeks!!! BUT, 2020 strikes again, and we never had a single practice with the entire cast due to sickness, or quarantine. We are still hoping to get a public performance in, so we can show off all the hard work they all put in.

We did not get to attend conferences or districts this year due to COVID.

I have noticed the Tech Crew doesn't usually get awarded for all the behind the scenes work that they do. We tried to limit the amount of students in the show this year, and thus, we only had one tech crew student, Elizabeth Hall. She is a gem.

Total Number of student participants: 13

Academic All-State Winner : Stella Lewis

Budget:

Beginning Balance	Expenditures- 2019	Revenues	Balance
\$402.73	\$402.73	\$85.20	\$438.60

Sara O'Connell, and Faye Kreikemeier

Skills USA Participation & Activity Report

Participation:

2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016

15 30 23 31 46 37 42

2016-2017 2017-2018 2018-2019 2019-2020 2020-2021

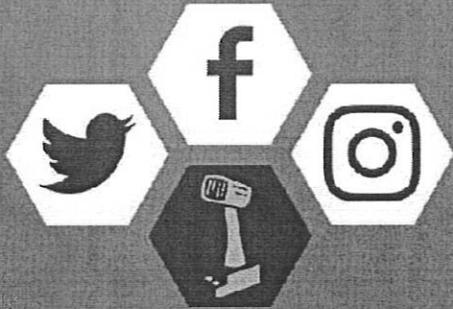
41 22 20 25 0

2020-2021 Skills USA Members (0)

Due to my health condition and Covid Skills USA did not have any members this year. Skills USA had a state competition but did not have as many events as previous years do to Covid.

Next Fall we will have the SkillsUSA chapter up and going again.

Social Media Team



The Social Media Team struggled this year with coverage and time to produce items that would promote our school and activities.

We had multiple

students interested, but due to time constraints there unfortunately was limited participation.

A majority of the work was completed by Lilly Stonehocker and Mr. Parson. We promoted athletic events, highlighted honors and student recognition, and tried to be the source of information about school changes and updates.

ARLINGTON BASEBALL

EAGLES VS. CHIEFTAINS

Today's game will be on Arlo_Striv.

Varsity at 4:30
JV follows around 6:30



**Nebraska State Colleges
Multi-Activity Student Award
Recipient List**

Seniors	Juniors
<p>Claire Allen</p> <p>Jacob Hoefs</p> <p>Josh Miller</p>	<p>Carsky Arp</p> <p>Marco Carveja</p> <p>William Epenboagh</p> <p>Isaac Foust</p> <p>Colby Greife</p> <p>Kalynn Gubels</p> <p>Halley Hill</p> <p>Dillon Kim</p> <p>Dustin Kirk</p> <p>Stella Lewis</p> <p>Jessilyn McBride</p> <p>Kate Miller</p> <p>Barratt Nielsen</p> <p>Frankie Rosenbalm</p> <p>Nick Smith</p>

Nebraska Capitol Conference

Art Show 2021

1st

Julia Landauer
Aedin Karr (2)
Christina Mandagi
Madeline Espinoza
Mackenzie O'Flaherty
Paige Shearer
Ember Tegarden
Alex Von Soggerm

2nd

Christian Mandagi
Dustin Kirk
Johna Moural (2)
Alaina Schwedhelm
Sabastyan Taylor
Charlie Hendry
Mackenzie O'Flaherty

3rd

May Marcucci
Tegarden
Foreman
Ryan Taylor
Moural
Priazo
Miller
Shearer
Venzor
Anne Green



**ORDER YOUR
BASEBALL HAT**

**Fitted
or
Flex**

\$25

Payments can be made with the office or Mr. Stender. Checks payable to APS.

All orders must be made by Friday, February 25th.

**ARLINGTON
BASEBALL**



Class Intercom

Speech

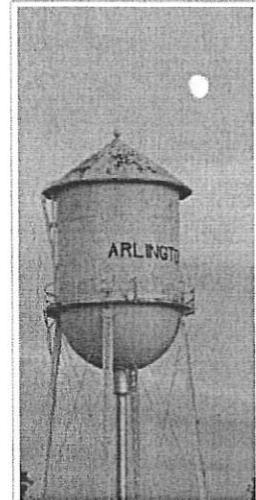
This year for speech, well, it was an interesting year for sure. We have quite a few students interested/going out for speech until they learned that it would be primarily online this year. WE ended up with Dilon Kim as our only competitor this year. It was definitely a learning curve for him, as he was used to being in front of his peers, and “live people” instead of me behind a camera. This did not go how we planned, but Dillion came out of Districts (our only in person event) with a Superior rating!

Our Academic All-State Award Winner was Dillion Kim.

ARLO_STRIV

2020-2021

Nebraska Capitol Conference Wrestling Tournament 2021



Our goal was to broadcast at least 25 events throughout the year and we also committed to always having an announcer for each event... Covid and our DHM's had other plans. We started the year with volleyball, football, and softball with typical attendance to games. Then the winter season went into full swing. The gyms were limited to 25% and Arlo_Striv gained a lot of viewers. All home events through winter were either on Arlo_Striv through Striv or on the YouTube Channel, ArloStriv. From concerts to musicals to wrestling to board meetings to spring baseball, Arlo_Striv produced almost 70 events for the home and away viewers. The students grew in their abilities and half way through the winter season, I (Mr. Parson) wasn't on the mic and it was all

student produced. That is a goal turning into a reality.



Arlo_Striv members: Claire Allen, Marco Carvajal, Dillon Kim, Millie Mitchell, and Barret Nielsen



Student Council

Participation:

High School

<u>96-97</u>	<u>97-98</u>	<u>98-99</u>	<u>99-00</u>	<u>00-01</u>	<u>01-02</u>	<u>02-03</u>	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>
NA	40	35	33	46	60	62							
<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>			
60	52	36	31	31	39	35	40	46	34	18			

Highlights:

- Homecoming Spirit Events
- Homecoming Pep Rally
- Homecoming Coronation
- Student Body Christmas Tree
- #BeKind #theArloWay t-shirt-proceeds (\$150) donated to Roots to Wings
- #BeKind #theArloWay t-shirt-proceeds (\$400) donated to Make-A-Wish Nebraska Chapter
- Daily Pledge of Allegiance for the high school
- Paper recycling for high school throughout the school year
- High School Teacher/Staff Appreciation Week-tissues, lifesavers, positive notes, lip balm, and gift card
- Walk of Fame for State participants
- Awarded a \$300 scholarship
- Created Senior Spotlight features for social media for the Class of 2021

Officers:

President	Halee Pfingsten
Vice President	Josh Miller
Secretary	Gabbi Anzalone
Senior Class Representative	Claire Allen
Junior Class Representative	Isaac Foust
Sophomore Class Representative	Aadra Karr
Freshman Class Representatives	Kaden Foust

Sponsor: **Teresa Feick**

Personnel Vocal Music

Director: Barina Buresh Crosland

Participation:

	<u>07-08</u>	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>
HS	44	53	43	39	57	35	30	30	41	52	45	38
JH	66	52	42	49	52	52	50	51	67	73	58	70
5 th Grd	34	35	39	42	37	47	42	50	46	47	39	55
6 th Grd	42	40	35	41	40	37	45	43	50	47	46	44

	<u>19-20</u>	<u>20-21</u>
HS	41	42
JH	74	62
5 th Grd	53	
6 th Grd	53	53

Highlights

High School Choir

- Musical Production "The Drowsy Chaperone"
- National Anthem at Athletic Events
- Conference Choral Clinic Virtual hosted by Arlington
- December concert
- Soup Supper Performance (snowed out)
- District Music Contest, Solos and small ensembles
- Spring Concert and Vocal/Instrumental Showcase Recital,
- Arlington High School Graduation performance

Junior High Choir

- October Concert
- Winter concert, December
- Soup Supper Performance, February (Snowed out) recordings made and shared with parents
- Spring Concert, April
- Middle School Show Choir Performed at April Concert
- Some participated in tech crew for the musical show.
- Middle School recital with solos and small ensembles, May

Show Choir

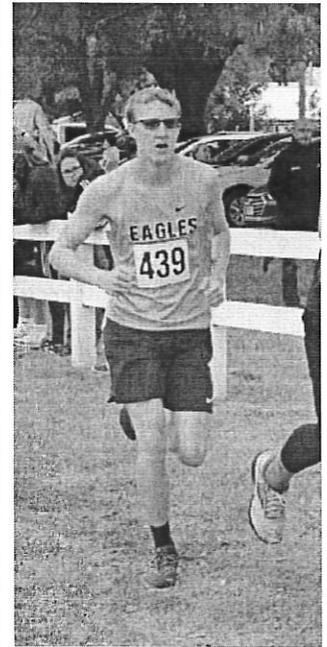
- Most activities cancelled due to Covid
- Participated in virtual Festival of the Arts through Midland
this included a few virtual workshops and a video critique of our recorded performance.
- Winter Concert Performance
- Spring Concert Performance

Individual Honors

- McKenzie Lucas auditioned for virtual Allstate Choir (was not selected)
- 6 auditioned for UNK Honor Choir, it was cancelled without acceptance results.
- All vocal solos received superior ratings at District Music contest as did several of our small groups
- Jordan Tweedy and our Octet (Kailynn Gubbels, Bailey Bracht, Malayna Lozo, Kate Miller, Evelyn Hilton, Elizabeth Hall, Stella Lewis, Hailey Hill) Both received Honorable Mention for their performances at District Music Contest. (Only a few from ALL participants are selected for this honor.)

The Eagle 2021

Arlington Yearbook



"Four Years Later"

The yearbook staff this class continued the challenging task. The one class with a total of 13 students were tasked with creating three separate yearbooks. The 104-page high school yearbook with the theme "Four Years Later", a 24-page middle school yearbook, and, for the first time, a 32-page elementary yearbook. The ad sales were a challenge due to Covid restrictions. We were also able to cover a number of events at home and even some away games to get pictures for each sport or activity.

- ▶ Staff members: 13 (1 class)
- ▶ HS books sold: 90
- ▶ MS books sold: 46
- ▶ Elementary books sold: 102



2020-2021 Quiz Bowl Report

The season was very limited due to COVID-19.

KTCH RADIO vs Chambers - 2/1/21

Participants (Varsity Division):

Jamey Rhea, Mackenzie O'Flaherty, Josh Iossi

Finish:

Lost 2 questions to 3

Bellevue University - 3/6/20

Participants: (Varsity Division):

Josh Miller, Josh Iossi, Jamey Rhea, Ethan McGee

Finish:

Lost to Lincoln Northeast

Lost to Elmwood-Murdoch

Capital Conference - 3/16/21

@ Logan View

Participants (Varsity Division):

Jamey Rhea, Josh Miller, Josh Iossi, Ethan McGee, Aiden Foreman

Finish:

Lost to Logan View

Beat Ashland-Greenwood

Beat DC West

Beat Logan View

Lost to Fort Calhoun (Toss-Up Tie Breaker Question)

3rd Place Finish

Seward - Underclassmen Bowl - May 5th

Participants: Team 1 (Ethan McGee, Mackenzie O'Flaherty, Dillon Kim, Jamey Rhea, Julia Landauer)

(Team 2) Blaine Vogt, Brooke Hilgenkamp, Tyler Ott, Sarah Rhea

Finish:

Team 1 (Finish 8th)

Beat Cross County

Lost to Fillmore Central

Lost to Central City

Single Elimination

Beat Arlington 2

Malcolm

Team 2 (Finish 9th)

Beat Wilber Clayonia

Beat to Centennial

Lost to Oakland Craig

Single Elimination

Lost to Arlington 1

Cheerleading

Participation:

HS	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>
	14	13	13	14	15	20	19	18

Highlights

Hosted our own home camp since we were unable to attend one
Participated in the State Cheer Championships
Cheerleading tryouts for the 2021-2022 school year, chose 11 cheerleaders for next year

Honors and Awards

Class C1 Traditional performance - State Runner up

13 Letter winners
7 achieved scholar athlete

Head Coach: Shelly Miller
Asst. Coach: Shawna Tierney
Volunteer Coach: Alli Miller

Arlington Cross Country 2020

The 2020 cross country season was another memorable one. Our theme for the season was “*Greater every run.*” We had 13 boys and 5 girls to fill out two full teams! This year our team captains were Elizabeth Morrison, Colby Grefe, and Barrett Nielsen. I was blessed to have such a tight-knit group of athletes, and I was always so proud of them for their grit, determination, and their desire to be successful day in and day out.

Our best performances of the season for both the guys and girls teams came at the C-1 District cross country meet. These athletes ran “lights out” with many cutting over 30 seconds off of their personal bests! We had 2 female athletes and 4 male athletes place in the top 25 at our district meet, with Colby Grefe earning a district medal, placing 10th overall. Our boys’ squad was a mere 8 points from qualifying for state as a team, finishing in 4th place... and I know that we will use those 8 points as fuel for working to reach the state meet this coming season..

Letter Winners: 3 women, 6 men

Scholar Athletes: Brynn Eckhart, Connor Flesner, Colby Grefe, Nolan May, Barrett Nielsen, Sebastyen Taylor

NCPA Academic All-State: Brynn Eckhart, Colby Grefe, Barrett Nielsen

B.C. Athletes of the Year: Brynn Eckhart
Colby Grefe

Team Awards:

- **Male Most Valuable Runner:** Colby Grefe
- **Female Most Valuable Runner:** Brynn Eckhart
- **Most Improved:** Sebastyen Taylor
- **XC Family:** Lane Johannes
- **Consistency:** Connor Flesner
- **Rookie of the Year:** Nolan May

Participation

Year	Boys	Girls
1996	14	9
1997	13	12
1998	9	12
1999	12	9
2000	10	9
2001	10	
2002	12	2
2003	4	3
2004	4	3
2005	6	4
2006	12	10
2007	14	10
2008	14	8
2009	21	8
2010	24	9
2011	18	6
2012	14	6
2013	14	5
2014	16	5
2015	11	3
2016	13	1
2017	16	4
2018	16	3
2019	18	4
2020	13	5

Head Coach:

Michaela Curran

Assistant Coaches:

Helen Regier, Kali Agler

Volunteer Coach:

Anna Hornung



Dance

Participation:

	<u>97-98</u>	<u>98-99</u>	<u>99-00</u>	<u>00-01</u>	<u>01-02</u>	<u>02-03</u>	<u>03-04</u>	<u>04-05</u>	<u>05-06</u>	<u>06-07</u>	<u>07-08</u>
HS	18	16	16	16	13	13	11	10	14	14	14
	<u>08-09</u>	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>
	14	14	14	12	12	14	10	10	11	9	11
	<u>19-20</u>	<u>20-21</u>									
	11	11									

Highlights:

- Welcomed 3 new dancers to the team, one junior one sophomore and one freshman.
- Competed in Nebraska State Cheer & Dance Competition in February (in person)
 - entered in Class C1 hip hop
- Performed at all home football games we were able to and Fall sports pep rally.
- Performed at Homecoming football game
- Performed at all home boys basketball games we were able to
- Abided by and adjusted to all covid rules and regulations as smooth as we could
- 11 letter winners, with 7 being Scholar Athletes

2020 Football Season in Review

Coaches:

- **High School**
 - Colter Mattson- Head Coach/DC
 - Connor Eurek- Assistant Coach/OC
 - Luke Hoelsing- Assistant Coach/Co-Special Teams Coordinator
 - Layne Laaker- Assistant Coach/Co-Special Teams Coordinator
 - John Faulkner- Assistant Coach
 - Abe Rojas- Volunteer Assistant
- **Junior High**
 - Head Coach- Tyler Spitzer
 - Assistant Coach- Jake Eckhardt

Participation:

- **High School:**
 - 33 Participants at the end of the season
- **Junior High:**
 - 24 Participants at the end of the season

Regular Season Records:

- **Varsity:**
 - 3-6; 3-1 in District Play
- **JV:**
 - 0-3 (Did not participate in all games)
- **Junior High:**
 - 1-4

Team Awards:

- **Defensive MVP:** Jesse Thompson
- **Offensive MVP:** Josh Miller
- **Special Teams MVP:** Frankie Rosenbalm
- **Scout Player of the Year:** Kaden Pittman
- **Booster Club Player of the Year:** Josh Miller

All-State Honors

OWH All-State

- Honorable Mention
 - Josh Miller
 - Jesse Thompson
 - Dustin Kirk
 - https://omaha.com/sports/high-school/list-nebraska-high-school-football-all-class-teams-honorable-mentions/article_12ecccec-44a2-11eb-800f-37e63bec1150.html

Lincoln Journal Star

- Honorable Mention
 - Josh Miller
 - Jesse Thompson
 - Dustin Kirk
 - https://journalstar.com/sports/high-school/football/the-journal-stars-2020-all-state-honorable-mention-football-honorees/article_722dbc5e-05b3-56c1-b5c7-cd362bf6a055.html

Academic All-State

- Josh Miller
- Braden Monke
 - <https://nsaahome.org/wp-content/uploads/2020/12/2020-21-Fall-NCPA-Winners.pdf>

Fremont Tribune All-Area

- First Team
 - Josh Miller- DB
- Honorable Mention
 - Jesse Thompson
 - https://fremonttribune.com/sports/high-school/all-area-football-player-of-the-year---koa-mcintyre-fremont-bergan/article_945e4887-d66a-5e63-b7b1-390c4db90f66.html

District Honors

- | | | | |
|---------------------|----|----|-----------------------|
| ● Josh Miller | QB | 12 | 1st-Team All-District |
| ● Jesse Thompson | LB | 12 | 1st-Team All-District |
| ● Dustin Kirk | DB | 12 | 1st-Team All-District |
| ● Isaac Foust | LB | 12 | 1st-Team All-District |
| ● Nick Smith | LB | 12 | 1st-Team All-District |
| ● Collin Burdess | LB | 11 | Honorable Mention |
| ● Jake Bartosh | OL | 12 | Honorable Mention |
| ● Frankie Rosenbalm | DB | 11 | Honorable Mention |

Letterwinners:

Jacob Barthosh, Jacob Beans, Aiden Borhardt, Collin Burdess, William Eppenbaugh, Isaac Foust, Kaden Foust, Jacob Hoefs, Josh Hoppe, Logan Kaup, Dustin Kirk, JoeSeth Mcbride, Josiah Meyer, Josh Miller, Braden Monke, Kaden Pittman, Cade Podany, Frankie Rosenbalm, Nick Smith, Jesse Thompson, Weston Wollberg, Kyle Quinn, Israel Sanchez

Season Results:

@ West Point-Beemer	L 37-22
North Bend	L 30-0
@ Ashland-Greenwood	L 22-7

Pierce	L 56-13
LVSS	L 21-13
@ Concordia	W 12-6
Ft. Calhoun	W 22-3
@ Boystown	L 34-28
@ DC West	W 36-0

Season Records:

Passes Completed in a Game; Josh Miller; Tied Record at 32 Completions

2020 Girls Golf Season										
9 Hole	2018 Avg.	2019 Avg.	2020 Avg.	A/B/B TRI	A/B/F TRI	A/Blair/EN	A/E-M/CB/W Quad	Blair JV - Scramble		
11/12th										
Ema Horner	-	66	56	54	71	53	47			
Charlie Hendry	-	71	59	58	66	60	52	46		
Dianna Taylor	78	60	59	64	61	66	46			
Kloey Dau	-	-	60	57	63	-	-			
Kaylie Erwin	-	-	68	71	81	61	60	46		
9/10th										
Bre Taylor	-	80	73	-	79	-	66	46		
Sarah Rhea	-	-	76	-	83	68	-	46		
18 Hole	2018 Avg.	2019 Avg.	2020 Avg.	WP-B	Benn	Arlo	EM	OC	Districts	State
Ema Horner	-	137	108	112	104	124	94	103	113	
Dianna Taylor	140	129	111	121	109	112	95	124	106	113,132 245
Kloey Dau	-	-	125	116	105	132	95	156	146	
Charlie Hendry	-	143	130	142	126	141	110	132	126	
Kaylie Erwin	-	-	131	137	125	137	104	135	149	
9/10th										
Sarah Rhea	-	-	140	-	-	140	-	-	-	
Bre Taylor	-	-	140	-	-	140	-	-	-	
Athlete of the Year:										
Dianna Taylor										
Most Improved:										
Sarah Rhea										
Top 15 Finishes:										
Ema Horner-WPB Invite-15th, Arlo Invite - 12th, EM Invite-9th, O-C Invite -14th										
Dianna Taylor - Arlo Invite -2nd, EM Invite 12th, C-2 District -10th, State Qualifier - 84/95										
Kloey Dau - EM Invite - 11th										
Letter Winners:										
Ema Horner										
Charlie Hendry										
Dianna Taylor										
Kloey Dau										
Kaylie Erwin										

Softball

Participation:	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
HS	14	16	14	21	22	16	14	19	20	20	18	20
	17-18	18-19	19-20	20-21	21-22	21-22	22-23	23-24	24-25	25-26	26-27	27-28
HS	15	19	26	24								
Record:	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Varsity	5-15	14-12	6-14	12-10	14-14	17-10	24-7	26-7	14-12	23-9	19-9	17-15
JV		2-2	5-4	8-4	8-2-1	7-1	3-2	9-2-1	5-5	7-3	9-2	7-2
Record:	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	
Varsity	28-7	23-9	22-8	15-13								
JV	8-0-1	6-1	7-2-2	6-6								

Individual Highlights:

Team Captains: Kylee Bruning & Hailey Brenn
Offensive Player of the Year: Paige Kraemer
Defensive Player of the Year: Hailey Brenn/Kiersten Taylor
Honorary Captain: Cadie Robinson

Most Improved Player: Paige Kraemer
Eagle Pride Award: Lilly Stonehocker
Dedication Award: Hailey Brenn
Teammate of the Year: Johna Moural
Lifter of the Year:

Booster Club Most Valuable Player: Kylee Bruning

New School Team Record: NONE

Record	Year

New Individual Season Records: NONE

Player	Record	Year

New Individual Career Records:

Player	Record	Years
Kylee Bruning	Career Runs - 112	2017-2020
Kylee Bruning	Career Hits - 150	2017-2020
Kylee Bruning	Career Put Out – 469	2017-2020

Team Season Highlights

- C-7 District Runner-up
- C-2 Sub-District Champion
- NCC Regular Season Champion (8-0)

Nebraska Capital Conference Honors:

1 st Team	2 nd Team	Honorable Mention
Kylee Bruning	Hailey Brenn	Kiersten Taylor
Paige Kraemer	Cadie Robinson	

Academic All- State Awards	Julia Landauer	Kiersten Taylor
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All-State Awards	Omaha World Herald	Lincoln Journal Star
1st Team	none	Kylee Bruning
2nd Team	Paige Kraemer	none
Honorable Mention	Kylee Bruning Cadie Robinson Hailey Brenn	Paige Kraemer Hailey Brenn Cadie Robinson Kiersten Taylor
All-Omaha Area	None	None

2020 – 2021 Arlington Eagles Volleyball



Participation														
	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
HS	35	32	29	19	16	16	14	22	20	30	27	19	21	24
JH	32	29	28	23	24	27	31	27	28	18	24	35	19	24

HS Record														
	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Varsity	13-15	19-12	15-14	11-15	18-9	11-16	4-23	22-7	21-8	23-7	16-12	2-25	7-21	8-18
JV	4-8	11-6	8-5	11-4	8-5	8-3	5-7	6-3	4-5	3-6	4-9	3-11	1-13	0-12
Reserve	8-10	14-3	11-9	5-9	7-0	N/A	2-1	4-10	7-7	2-12	3-9	4-7	1-9	0-7

JH Record														
	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
8th Grade (A)	8-5	7-5	9-3	12-2	10-3	9-4	9-3	5-8	6-7	5-6	8-2	6-5	4-8	5-8
7th Grade (B)	8-6	9-1	8-2	9-2	9-1	5-5	5-4	8-2	2-6	4-5	5-4	3-4	7-5	2-10
(C)	2-5	5-1	5-2	6-1	2-5	5-1	1-5	4-4	3-5	5-4	2-6	2-5	8-4	1-9

Coaching Staff

High School

- Head Coach – Katarina Nelson
- Assistant Coaches – Stacy Dunklau-Nelson & Cailyn Johnson

Junior High

- Head Coach – Carla Kaup
- Assistant Coach – Tashia Wolf

Junior High Highlights

- 2020 Jr High volleyball season was fortunately able to be played in spite of Covid-19 restrictions. There were 24 total student athletes out for the sport, no student managers. The 8th graders included two players from St. Paul's Lutheran, a total of 6 girls. The team had 18 girls who were in the 7th grade.
- The season started on August 17th with skill work and conditioning.
- The season culminated with the final tournament at Arlington Public schools on October 17th.

High School – Post Season Honors

Letter Winners

Arp	Taylor	9
Gubbels	Kailynn	11
Miller	Kate	11
Lewis	Stella	11
Arp	Cassidy	11
Wakefield	Janessa	11
Andersen	Chase	11
Thomsen	Kali	12
Ruwe	Mallory	12
Allen	Claire	12

NCPA Fall Academic All State

- Claire Allen
- Kailynn Gubbels

All Conference

- 2nd Team: Chase Andersen
- Honorable Mention: Kailynn Gubbels

Omaha World Herald - All Conference / C1 Honorable Mention

- Chase Andersen
- Kailynn Gubbels
- Janessa Wakefield

School Records / Top 10 Individual Bests

Match:

- Chase Andersen: 24 @ Logan View on 10/15/20
- TIED the school record
- Chase Andersen: 23 @ Louisville on 9/22/20
(Top 10 Individual Bests)
- Chase Andersen: 19 vs. Fort Calhoun on
8/27/20 (Top 10 Individual Bests)

Season:

- Chase Andersen: 228 in 2020 (Top 10 Individual Bests)

Enterprise Publishing - Athlete of the Week

- 10/21/21: Chase Andersen

Booster Club Awards

- Athlete of the Year: Chase Andersen
- Teammate Award: Kailynn Gubbels & Kate Miller
- Hustle Award: Claire Allen
- Most Improved: Taylor Arp

Scholar Athletes

- Claire Allen
- Kali Thomsen
- Chase Andersen
- Kailynn Gubbels
- Stella Lewis
- Kate Miller
- Janessa Wakefield

Arlington Boys Basketball Report

2020-2021

Roster:

Seniors: Aiden Foreman, Grant Martens

Juniors: Colby Grefe, Logan Kaup, Dustin Kirk, Nick Smith, Frankie Rosenbalm, Barrett Nielsen, Isaac Foust, Josiah Meyer, Micheal Sullivan,

Sophomores: Trevor Denker, Kaden Pittman, Kaleb TenEyck, Braden Monke, Weston Wollberg, Jack Bang, Darren Olson.

Freshmen: Nolan May, Kaden Foust, Connor Flesner, Andy Misfeldt, Tyler Ott, Parker Espinoza, Josh Hamre, Jacob Beans, Kaden Kitt, Aiden Borhart, Noah Bechtel.

Head Coach: Tyler Spitsler

JV Coach: Conner Eureka

Reserve Coach: Chad Sharp

Volunteers: Mark Williams, Abie Rojas

Records:

Varsity: 14-9 **JV:** 9-8 **Reserve:** 3-10

Letter Winners: Aiden Foreman, Colby Grefe, Logan Kaup, Dustin Kirk, Nick Smith, Frankie Rosenbalm, Barrett Nielsen, Isaac Foust

NCC All Conference:

Aiden Foreman- 1st team

Colby Grefe & Dustin Kirk- Honorable Mention

OWH & LJS All State:

Aiden Foreman, Colby Grefe & Dustin Kirk- Honorable Mention

2020-2021 Arlington Girls Basketball

(End of the Season Report)

Participation:

High School: 16

Records:

Varsity: 9-14

Conference: 4-5

Lincoln Lutheran Holiday Tournament: 4 th Place

Head Coach: Luke Brenn

Assistants: Leslie Gubbels and Jennefer Hilgenkamp

Jr. High Head Coach: Tashia Wolf

Jr. High Team Records:

A Team: 12-0

B Team: 4-3

C Team: 2-4

Highlights:

- Overall Record:9-14
- Having other coaches and people saying your team plays so hard all the time.
- Seeing the team work hard all season and playing our best basketball at the end of the season.

Seniors:

Kylee Bruning: Letter winner, Scholar Athlete, Honorable Mention All-Conference, Honorable Mention Omaha World Herald and All-Area Omaha World Herald, Honorable Mention All-Area Fremont Tribune.

Juniors:

Cassidy Arp: Letter winner

Hailey Brenn: Letter winner

Kailyn Gubbels: Letter winner, Scholar Athlete, 1st Team All-Conference, Honorable Mention Lincoln Journal Star, Honorable Mention Omaha World Herald and All-Area Omaha World Herald, Honorable Mention All-Area Fremont Tribune.

Stella Lewis: Letterwinner

Kate Miller: Letter winner

Sophomores:

Keelianne Green: Letter winner

Ryan Kirchmann

Sydney Magnino

Ally Moss

Bailey Taylor

Freshman:

Taylor Arp: Letterwinner

Josie Borgmann

Austyn Flesner: Letterwinner

Brooke Hilgenkamp: Letterwinner

April Klein

Student Managers:

Valeria Carvajal

Brit Neilsen

Emmy Timm

Macy Wolf

End of the Season Awards

(voted on by players only)

Booster Club MVP: Kailynn Gubbels

Hustle Award: Kailynn Gubbels

Teammate Award: Kate Miller

Most Improved: Josie Borgmann & April Klein

Wrestling 2020-2021

Participation

	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
HS	23	17	15	14	20	17	22	18	16	13	13
JH	11	9	9	6	12	16	11	8	9	11	11

Dual Record:

HS	11-4	8-8	15-4	10-3	6-8	5-9	4-10	11-10	14-6	22-6	5-16
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Team Duals

Blair	Beatrice	9-69
	Logan View	23-53
	Tekamah-Herman	51-18
	Schuyler	18-66
	Weeping Water	42-15
	Ft. Calhoun	36-36
	Adams Central	30-51
Kearney Catholic	Ravenna	29-51
	St. Paul	30-54
	Wilber-Clatonia	26-57
	Elkhorn North	21-48
Ord	Elkhorn	29-48
	Adams Central	30-54
	GI Northwest	18-63
	Bridgeport	36-42
	Conestoga	27-51
	Ord	34-42
	Stanton	48-15
	Oakland-Craig	60-18
	Wisner-Pilger	48-18
	Pender	18-48

Tournaments

	Place	Points
North Bend	7 th	66
Ashland-Greenwood	6 th	92
Yutan	4 th	86
Arlington	4 th	92
NCC	8 th	43.5
Sub-Districts	4 th	102
Districts	7 th	62.5
State	10 th	47

Letterwinners

Trevor Cooley, Hunter Gilmore, Josh Miller, JoeSeth McBride, Cade Podany, Kolton Gilmore, & Trey Hill

Academic All-State

Josh Miller

Most Valuable Wrestler – Eagle Warrior MVP

Josh Miller

Head Coach: Doug Hart

Asst Coach: Tyler Stender, Riley Smith, Remington Gay

JH Coach: Colter Mattson & Jeff Kment

Stats: Keith Fink

Managers: Tyler Rines, Brodie Wilkins, & Alaina Schwedhelm

Social Media: Kaelyn Kinnaman, Malayna Lozo, & Elizabeth Hall

2021 Arlington Baseball Report

Participation

	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>
HS	27	34	34	28	26	27	23	25	20	23	25	18

Record

	<u>09-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>
V	0-18	4-8	5-12	3-6	3-13	7-11	16-4	16-7	7-10	9-10	x	9-16
JV	3-9-1	7-0	2-8	2-6	8-7	15-2	11-7-1	10-4-1	8-7	6-6-1	x	4-9-3

Awards

- **Academic All-State**
Josh Miller
Aiden Foreman
- **All-Conference Selections**
No-official conference
- **Booster Club Athlete of the Year**
Athlete of the Year: Dustin Kirk

Highlights

- 9 win season
- Win in the district tournament.
- Single Season Runs, Hits, Singles, Stolen Bases, and Walks record broken.
- 4th Place in conference tournament

Head Coach: Tyler

Assist Coaches: Rusty Hilgenkamp, Ed Menking

**Continued below

Arlington (9-16)

Date	Opponent	Class	W-L	Div	W/L	Score	Points	Tournament Name	Tournament Location
03/19-03/20	Opponents:		-	-		-	-	Concordia Invite	Omaha Home for Boys/Northwest
03/19	Concordia/Brownell Talbot/Omaha Christian Academy	B	11-11	2	L	3-17	36	Concordia Invite	Omaha Home for Boys/Northwest
03/19	Omaha Northwest	A	8-20	3	W	15-8	46	Concordia Invite	Omaha Home for Boys/Northwest
03/25/21	Bennington	B	16-9	2	L	4-10	36		
03/27/21	Omaha Roncalli Catholic	B	12-10	2	L	4-10	36	Triangular (host: Omaha Roncalli Catholic)	
03/27/21	Mount Michael Benedictine	B	13-12	2	L	2-6	36	Triangular (host: Omaha Roncalli Catholic)	
03/29/21	GACC-SS-WPB	B	7-10	3	L	5-9	33		
03/30/21	@ Thurston-Cuming County	B	6-10	3	W	9-2	44		
04/01/21	@ Fort Calhoun	B	7-11	3	L	5-15	33		
04/05/21	Bellevue East	A	9-20	3	L	6-12	35		
04/06/21	Douglas County West	B	2-17	4	L	4-6	30		
04/08/21	@ Wayne	B	13-8	2		CANCELLED	-		
04/10/21	@ Omaha South	A	15-15	2	L	5-7	38		
04/12/21	Branched Oak	B	10-11	3	L	1-10	33		
04/16-04/17	Opponents:		-	-		-	-	NCC Tournament	Raymond Central
04/16	Douglas County West	B	2-17	4	W	5-4	41	NCC Tournament	Raymond Central
04/17	Branched Oak	B	10-11	3	L	1-5	33	NCC Tournament	Raymond Central
04/17	Platte Valley	B	11-12	3	L	5-6	33	NCC Tournament	Raymond Central
04/20/21	Fort Calhoun	B	7-11	3	W	6-5	44		
04/23/21	@ Douglas County West	B	2-17	4	W	9-8	41		
04/24/21	@ Omaha North	A	8-19	3	L	14-15	35		
04/26/21	@ Platteview	B	8-15	3	L	11-12	33		
04/27/21	Platte Valley	B	11-12	3	W	10-9	44		
04/30/21	@ Wahoo/Bishop Neumann/Lincoln Lutheran	B	10-15	3	L	2-10	33		
05/01/21	Thurston-Cuming County	B	6-10	3	W	17-11	44		
05/03/21	Wayne	B	13-8	2		CANCELLED	-		
05/04/21	@ Omaha Gross Catholic	B	9-15	3	W	10-5	44		
05/06/21	Lincoln Christian	B	7-8	3	W	10-9	44	District B-5 Tournament	
05/07/21	Ralston	B	20-7	2	L	2-14	36	District B-5 Tournament	

Class B:

- Hastings (20-5), 44.0800
- Norris (22-7), 43.8966
- Omaha Skutt Catholic (17-6), 43.6087
- Elkhorn (19-10), 43.3448
- Ralston (20-7), 42.7778
- Central City/Fullerton/Centura (19-5), 42.2500
- Bennington (16-9), 42.0800
- Beatrice (14-6), 41.9000
- Waverly (14-13), 41.4074
- Seward (13-8), 41.3810
- Omaha Roncalli Catholic (12-10), 41.0909
- Elkhorn North (11-14), 40.6400
- Adams Central (13-8), 40.5714
- Plattsmouth (14-8), 40.4545
- Wayne (13-8), 40.4286
- Mount Michael Benedictine (13-12), 40.2800
- Blair (12-13), 40.2000
- Concordia/Brownell Talbot/Omaha Christian Academy (11-11), 39.5909
- Nebraska City (8-11), 39.3158
- Omaha Gross Catholic (9-15), 39.2500
- Platte Valley (11-12), 39.1304
- Wahoo/Bishop Neumann/Lincoln Lutheran (10-15), 39.0800
- Branched Oak (10-11), 38.9524
- Lincoln Christian (7-8), 38.8667
- GACC-SS-WPB (7-10), 38.5294
- St. Paul / Palmer (6-8), 38.3571
- Platteview (8-15), 38.3478
- Fort Calhoun (7-11), 38.2778
- Thurston-Cuming County (6-10), 37.7500
- Arlington (9-16), 37.6400
- South Sioux City (5-18), 36.9565
- Fairbury (4-11), 36.9333
- Crete (4-17), 36.6190
- Twin River (2-15), 35.8235
- Falls City (3-14), 35.5294
- Douglas County West (2-17), 35.1579
- Auburn (1-15), 35.0000
- Maxwell St. Pat's (0-8), 33.7500

2
0
2
1

Boys Golf



Front Row: Jacob Strom, Jayden Thompson, Josh Iossi, Austin Smutz
Back Row: Ken Eppenbaugh, Josh Hamre, Eddie Rosenthal, Andy Misfeldt, Jacob Meehan



This has been a good season for us. We have made progress from the end of February when we started hitting indoors in the old gym to where we are today. We had a couple medalists Eddie placed 7th at the Bennington Invite and 14th at the Arlington Invite, while Jayden had a great day at the NCC Meet when he placed 3rd. The golfer of the year was Eddie Rosenthal.

The team competed well as we first set a standard has having all golfers in the 90's or better at Bennington, then all golfers in the 80's at North Bend. The team finished 4th at conference and 7th at a very tough Class C District Meet in Oakland.

High School Track 2020-21 Year in Review

Coaches

Steven Gubbels	Head Coach / Hurdles and Sprints
Michaela Curran	Distance/Mid-distance
Carla Kaup	Long and Triple Jump
Floyd Everitt	Pole Vault
Jake Eckhardt	Shot and Discus
Tyler Spitzer	High Jump
Jason Wiese	Head JH Coach
Madison Wakefield	JH assistant
Luke Hoelsing	JH assistant

Athletes

23 Female
28 Male

Regular Season Team Results

Meet Championships:

Girls: West Point Snow Melt; Tiger-Cadet; Arlington
Boys:

Meet Runners-up

Girls: Columbus Lakeview, Capitol Conference
Boys:

State Qualifiers & Results

Taylor Arp – 9

- Discus
 - 11' 4"; 15th

Cadence Robinson – 10

- Shot Put
 - 36' 8.5"; 10th

Kali Thomsen – 12

- Discus
 - 107' 10"; 19th

Jesse Thompson – 12

- Shot Put
 - 52' 3.75"; 5th

Kiersten Taylor – 10

- 4x400
 - 3rd Leg; 4:08.45; 4th

Chase Andersen – 11

- 4x400
 - 1st Leg; 4:08.45; 4th

Keelianne Green – 10

- 200
 - Prelims: 26.67; 17th
- Long Jump
 - 16' 9.75"; 7th
- Triple Jump
 - 35' 2.5"; 8th
- 4x400
 - 2nd Leg; 4:08.45; 4th

Kailynn Gubbels – 11

- High Jump
 - 5'8"; 1st
- 100 Hurdles
 - Prelims: 14.54; 1st (wind-aided)
 - Finals: 14.59; 1st
 - Class B State Record
 - Class B State Meet Record
 - All-Class Gold Performance
- 300 Hurdles
 - Prelims: 45.01; 2nd
 - Finals: 45.53; 2nd
- 4x400
 - 4th Leg; 4:08.45; 4th

State Meet Team Results

- Girls State Class B Team Finish: 7th – 36 points
- Girls ALL-CLASS Team Finish: 6th – 24 points

- Boys State Class B Team Finish: tie 37th – 4 points

New Records Set

School Records:

Keelianne Green: Long Jump – 17' 5"

Kailynn Gubbels: 300H - 45.01

Kailynn Gubbels: 100H - 14.52

Kailynn Gubbels: High Jump - 5' 10"

Class B State Records:

Kailynn Gubbels: 100H - 14.59 (also Class B State Meet Record)

Kailynn Gubbels: High Jump - 5' 10"

Capitol Conference Records:

Kailynn Gubbels: 300H - 45.97

Kailynn Gubbels: 100H - 14.69

Kailynn Gubbels: High Jump - 5' 10"

Secondary Principal's Report For the June 2021 Board Meeting

District Music Contest

Three of Arlington's entries for the District Music Contest received Honorable Mention distinction for Outstanding Performance.

<u>Name</u>	<u>School</u>	<u>Award</u>	<u>Type</u>	<u>Ensemble Students' Names</u>
Instrumental Ensemble	Arlington	Honorable Mention	Instrumental Ensemble	Gabrielle Anzalone, Julia Landauer
Vocal Octet	Arlington	Honorable Mention	Vocal Ensemble	Bailey Bracht, Kailynn Gubbels, Libby Hall, Hailey Hill, Evelyn Hilton, Stella Lewis, Malayna Lozo, Kate Miller
Jordan Tweedy	Arlington	Honorable Mention	Vocal Solo	

HOBY

Luke Hammang was the Hugh O'Brian Youth Leadership representative for Arlington. This year's leadership seminar was a two day virtual conference held on Friday and Saturday of last week.

Highest ACT Composite Scores

The Class of 2022 earned the highest composite average Arlington students have achieved on the ACT test in recent memory. The average score the class received is 24.5. The next highest average Mr. Everitt could find was 23.9. Of note, a few of the scores are not from the day of the state test, but they do represent the highest college reportable score.

Summer School

Summer school began June 7. We are offering Physical Science and World Geography for credit recovery this summer via OdysseyWare.

June Elementary Principal Board Report 2021

Math Growth Comparison of Regular Year vs Pandemic Year (Fall to Spring)

Grad. Year	Math Improvement (Fall-Spring 2017-18)	Math Improvement (Fall-Spring 2018-19)	Math Improvement (Fall-Spring 2019-20)	Math Improvement (Fall-Spring 2020-21)
2030	X	19.9	X	22.8
2029	24.6	18.4	X	17.9
2028	18.6	18.7	X	14
2027	15.5	18.5	X	12.7
2026	16.7	8.9	X	6.5
2025	12.5	7.9	X	9.8

Reading Growth Comparison of Regular Year vs Pandemic Year (Fall to Spring)

Grad. Year	Reading Improvement (Fall-Spring 2017-18)	Reading Improvement (Fall-Spring 2018-19)	Reading Improvement (Fall-Spring 2019-20)	Reading Improvement (Fall-Spring 2020-21)
2030	X	19.6	X	22.
2029	18.7	24.1	X	11.1
2028	16.8	8.9	X	4
2027	13.1	15.9	X	3
2026	12.9	3.8	X	3.3
2025	9.3	5.4	X	4.7

Math By Grade (Spring Data)

Grade Level	Math Year 2017-2018	Math Year 2018-2019	Math Year 2019-2020	Math Year 2020-2021
1st	181.7	184.2	X	185
2nd	192.4	196.7	X	194.7
3rd	205.2	203.2	X	211.2
4th	223.3	220.3	X	219.3
5th	223.7	225.7	X	225.5
6th	222.8	228	X	234
7th	235.6	229.4	X	233
8th	241.5	237.1	X	241

Reading By Grade (Spring Data)

Grade Level	Reading 2017-2018	Reading 2018-2019	Reading 2019-2020	Reading Year 2020-2021
1st	181,9	180.7	X	179.5
2nd	193.4	191.4	X	192.9

3rd	199.8	195.9	X	207.
4th	216.1	213.5	X	211.4
5th	217.2	215.5	X	210.6
6th	219	219.3	X	220.3
7th	223.7	223.4	X	220.2
8th	227.3	225.4	X	225

Reading Improvement Fall to Spring 2020-2021

Grade Level	Reading Year 2020-2021 Fall	Reading Year 2020-2021 WINTER	Reading Year 2020-2021 Spring	Reading Improvement Fall to Winter
K	140.4	146.9	154.1	13.7
1st	158.6	169.1	179.5	20.9
2nd	171.8	185.6	192.9	21.1
3rd	187.9	200.7	207	19.1
4th	200.3	206.0	211.4	11.1
5th	206.6	210.1	210.6	4
6th	217.4	220.3	220.4	3
7th	216.9	218.5	220.2	3.3
8th	220.3	223	225	4.7

Math Improvement Fall to Spring 2020-2021

Grade Level	Math Year 2020-2021 FALL	Math Year 2020-2021 WINTER	Math Year 2020-2021 Spring	Math Improvement Fall to Winter
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K	144.6	152.4	162.3	17.7
1st	164.9	176.3	185	20.1
2nd	175	184.9	194.3	19.3
3rd	188.2	200.3	211	22.8
4th	201.4	209.7	219.3	17.9
5th	211.5	218.5	225.5	14
6th	221.3	228.3	234	12.7
7th	226.5	228.1	233	6.5
8th	231.2	234.6	241	9.8

Reading Improvement Fall to Spring 2020-2021 Compared to the Average

Grade Level	Reading Year 2020-2021	Reading Year Average	Reading Improvement
K	13.7	16.45	-2.75
1st	20.9	15.47	5.43
2nd	21.1	13.22	7.89
3rd	19.1	10.50	8.6
4th	11.1	8.16	2.94
5th	4	6.5	-2.5
6th	3	5.19	-2.19
7th	3.3	4.16	-0.86
8th	4.7	3.65	1.05

Math Improvement Fall to Spring 2020-2021 Compared to the Average

Grade	Math Year 2020-2021	Math Year Average	Math Improvement
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Level			
K	17.7	17.54	.16
1st	20.1	16.35	3.75
2nd	19.3	14.38	4.92
3rd	22.8	12.6	10.2
4th	17.9	10.96	6.94
5th	14	9.61	4.39
6th	12.7	8.13	4.57
7th	6.5	6.52	-0.02
8th	9.8	5.38	4.42

Reading Improvement Fall to Spring 2020-2021 Compared to the Average

Grade Level	Reading Year 2020-2021 Spring	Reading Year Average	Reading Improvement
K	154.1	153.09	
1st	179.5	171.4	
2nd	192.9	185.57	
3rd	207	197.12	
4th	211.4	204.83	
5th	210.6	210.98	
6th	220.4		
7th	220.2		
8th	225		

Math Improvement Fall to Spring 2020-2021 Compared to the Average

Grade Level	Math Year 2020-2021 Spring	Math Year Average	Math Improvement
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K	162.3	157.11 189.42 210.51 222.88 230.30 232.42 234.19	
		1	
1st	185	189.42	
2nd	194.3	210.51	
3rd	211	222.88	
4th	219.3	230.3	
5th	225.5	232.42	
6th	234	234.19	
7th	233		
8th	241		

APS 2020-2021
STUDENT ENROLLMENT SUMMARY

Grades	8/25/2020	12/1/2020	2/1/2021	4/1/2021	5/20/2021	5/22/2020
PS	29	30	30	30	31	38
KG	53	55	55	56	56	42
1ST	37	36	36	36	37	46
2ND	47	46	46	46	46	45
3RD	45	45	43	43	42	44
4TH	40	40	40	40	40	55
5TH	57	57	56	57	57	54
6TH	56	55	54	54	53	53
PS-6 TOTAL	364	364	360	362	362	377
7TH	56	55	54	54	55	48
8TH	46	43	42	43	43	59
9TH	61	61	60	59	60	60
10TH	56	55	55	55	54	61
11TH	62	61	60	60	60	48
12TH	46	46	45	45	45	61
7-12 TOTAL	327	321	316	316	317	337
PK-12 TOTAL	691	685	676	678	679	714
FREE/REDUCED		160				171
SPED		107				120
ELL		5				6
OPTION ENROLLMENT						
IN/OUT	IN/OUT	IN/OUT	IN/OUT		IN/OUT	IN/OUT
KG	7/0	7/0			7/0	5/7
1ST	5/1	5/0			5/0	6/2
2ND	6/2	6/2			6/2	9/3
3RD	9/3	9/3			9/3	4/1
4TH	3/1	3/1			3/1	5/2
5TH	9/2	9/2			9/2	4/2
6TH	4/2	4/2			5/2	8/3
7TH	8/3	10/4			10/4	12/4
8TH	12/4	11/4			11/4	13/2
9TH	14/2	13/2			13/2	19/8
10TH	19/8	19/8			19/8	13/5
11TH	14/5	14/5			15/5	10/7
12TH	9/6	10/6			10/6	18/3
TOTAL	119/39	120/39			122/39	126/49

NASB SCHOOL LEADERS & LAW CONFERENCE

JUNE 2-3, 2021 | KEARNEY

IT'S BAAAACK!

LIVE AND IN PERSON ... JOIN US IN KEARNEY JUNE 2-3, FOR THE SCHOOL LEADERS AND LAW CONFERENCE AT THE KEARNEY HOLIDAY INN (WHILE WE DON'T CONDONE, NOR RECOMMEND TAKING A HAMMER TO YOUR COMPUTER, YOU WON'T NEED IT FOR THIS EVENT!)

TOPICS & BREAKOUTS INCLUDE

THE GOOD & THE BAD OF THE 2021 LEGISLATIVE SESSION

NOTHING TO HIDE! CHANGES TO THE OPEN MEETINGS ACT AND HOW TO MAKE SURE YOU ARE IN COMPLIANCE

EMPLOYMENT LAW JEOPARDY

TITLE IX & INEQUITIES IN HIGH SCHOOL ATHLETICS

WHAT'S COMING NEXT IN SPECIAL EDUCATION

TELL ME MORE! USING DATA TO TELL YOUR STORY

MOSER V. STATE — THE EXCEPTIONS TO TORT LIABILITY AND WHY THEY MATTER TO SCHOOL OFFICIALS

WHAT THE COURTS & THE BIDEN ADMINISTRATION HAVE BEEN UP TO

DESIGNING A PURPOSEFUL BOARD MEETING AGENDA

PANEL: SCHOOL FUNDING LAWSUIT THAT CREATED TEOSA - HISTORY AND IMPLICATIONS



UPCOMING NETWORKING & EVENTS

NASB ANNUAL MEMBER GOLF OUTING - JUNE 2 IN KEARNEY

NASB SCHOOL LEADERS & LAW CONFERENCE - JUNE 2-3 IN KEARNEY

ALICAP WORKSHOPS - JUNE 29 IN GERING - JUNE 30 IN KEARNEY - JULY 1 IN LINCOLN

Join NASB, as we travel the state for various workshops, meetings and events throughout the year.

To learn more, and register, visit the Events tab of www.NASBonline.org

<http://members.nasbonline.org/index.php/events>

To register for an NASB event, click on the 'My Membership' link, then navigate to the 'Events' dropdown and select 'Register'.
If you do not have an email and password to log in or have forgotten it, please contact NASB at 800-422-4572 for assistance.



<http://members.nasbonline.org/index.php/news-resources/videos>



JUNE

NASB ANNUAL MEMBER GOLF OUTING - JUNE 2 - KEARNEY COUNTRY CLUB

NASB SCHOOL LEADERS & LAW CONFERENCE - JUNE 2-3 - KEARNEY

ALICAP WORKSHOP - JUNE 29 - GERING

ALICAP WORKSHOP - JUNE 30 - KEARNEY

JULY

ALICAP WORKSHOP - JULY 1 - LINCOLN

NASB CALL FOR LEGISLATIVE PROPOSALS FOR 2022 DUE JULY 1

NASB ORIENTATION - JULY 21 - LINCOLN



AUGUST

AREA MEMBERSHIP MEETING - AUGUST 24 - GERING

AREA MEMBERSHIP MEETING - AUGUST 25 - NORTH PLATTE

AREA MEMBERSHIP MEETING - AUGUST 31 - VALENTINE

AND BEYOND ...

AREA MEMBERSHIP MEETINGS - AUGUST TO OCTOBER (SEE PAGE 9)

FACILITIES & CONSTRUCTION WORKSHOP - SEPTEMBER 9 - KEARNEY

LABOR RELATIONS CONFERENCE - OCTOBER 12-13 - LINCOLN

5TH ANNUAL SPARQ TAILGATE - OCTOBER 30 - EMBASSY SUITES - LINCOLN

2021 STATE EDUCATION CONFERENCE - NOVEMBER 17-19 - DOWNTOWN OMAHA

SALLIE HORKY CELEBRATES 30 YEARS WITH NASB!

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While she may not necessarily be the first person our members meet, she's likely the first person everyone on the NASB staff met during their interview process. Sallie Horky, NASB's Chief Operating Officer is celebrating her 30th year with the Association this May.

Sallie began her career with NASB as an administrative assistant working primarily with membership and the annual State Education Conference.

Today, she is responsible for aligning and developing key organizational functions including external partnerships for endorsed programs, Board of Director operations, and human resources and facilities management. She also oversees accounts receivables for the Association.

"Sallie was part of the NASB office team when I was hired," said John Bonaiuto, NASB's Executive Director from 1995 to 2011. "She was then as she is now a vital part of making NASB a member service organization. Sallie has worked regularly over the years on self-improvement in order to better serve the NASB membership and create a service-oriented culture throughout the office. She is the go-to person for anything and everything NASB members and staff need. A huge congrats on 30 years!"

"Sallie has been a huge part of our growth and success for the last 30 years," said NASB Executive Director, John Spatz. "It is hard to imagine how NASB could have reached this point without Sallie and her support of the staff, board, and membership."



NOW HIRING: BOARD LEADERSHIP/ALICAP ASSISTANT

HELP
WANTED

As Karla Kruse and her family head east to Charlotte, NC for her husband's new job, that leaves an open position within our Board Leadership and ALICAP departments. If you or anyone you know is interested, please visit the About Us section of the NASB website to view the job description and fill out the application for employment. Deadline for submissions: May 28, 2021

<http://members.nasbonline.org/index.php/about-us>

BE HEARD! CALL FOR LEGISLATIVE PROPOSALS - DUE JULY 1

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While the 2021 Legislative Session is not quite complete, now is the time for you and your board to think of items you might like addressed in 2022.

NOT SURE WHERE TO BEGIN?

DON'T THINK YOU HAVE THE POWER TO MAKE A DIFFERENCE?

As a board member, an elected official, and a community leader, you are in an excellent position to educate and influence the legislative process. From now until July 1, you have the opportunity to be heard and submit a topic you would like discussed at this summer's NASB Legislative Committee meeting, to then be drafted and introduced as future legislation. If you have a topic in mind, or would like assistance getting the ball rolling, please let Matt Belka know at mbelka@NASBonline.org.

Submit your legislative proposals now at:

<http://www.nasbonline.org/registrations/ProposedResolution.aspx>

10 Award points will be granted, per resolution, to the entire board that proposes a legislative change and/or new legislation.



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WE LIVE HERE! A MESSAGE FROM YOUR NASB PRESIDENT



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"Congratulations on getting to the end of a historic school year. It's exciting to watch every district finish well in a year that was filled with challenges but also so many successes. If you're like me, you might spend a little time each week listening to the Legislature. Over the last couple of weeks as property taxes and school funding were discussed, it was often inferred that public education in Nebraska is broken and that locally elected school board members cannot be trusted with the task they have been given. School Board Members, we know that is simply not true. We know that during this time you have kept things progressing so well in your local community. You have used the resources you've been given to offer the very best education to your students, and we know you're listening to the constituents that elected you to do what's best for your district. So thank you! Thank you for making public education in Nebraska great. Thank you for making your community a great place to live. It is an honor to serve along side you."

- Stacie Higgins, NASB President - Nebraska City BOE

School board members govern in the districts they live, they pay the taxes they levy, and their constituents are their neighbors

School board members are farmers, entrepreneurs, employees at local business, and volunteer their time to support their communities

Over the last year, school board members have helped parents by keeping schools open, they have helped teachers by making schools safe, and they have supported their tax payers by managing their budgets

As unpaid, elected volunteers, school board members have a lot at stake in making sure the school is accountable to parents and tax payers

RESOURCES ON VACCINES FROM CHILDREN'S HOSPITAL



COVID-19 VACCINE

FOR CHILDREN AGES 12 & UP



Below is a link to a video from Dr. Mel St. Germain, VP & Medical Director of Children's Physicians., which counsels parents about the importance of the vaccine. The page also includes a FAQ section and other resources.

<https://www.childrensomaha.org/COVIDVaccine/>



THROUGH THE EYES OF THE PUBLIC – PART II BOARD MEETING MINUTES

Part I of the three-part series maneuvered through a deep dive into the significance and importance of the board meeting agenda. We ask the superintendent and board to do a hard stop and reflect on what a patron can surmise about the work of the board and how this reflects on the school district as a whole. We know that a key touchpoint the board-superintendent has with internal and external stakeholders is communication through the deliberate design of the meeting agenda, board discussion, and outcomes. The effective and productive board meeting ensures the board is focused on governance and improved student academic performance. If you look through the eyes of the public, what do they see? Do they see effective governance, do they understand where the board is investing their time and resources? What does the board meeting agenda communicate?

For some boards and superintendents, we are asking for you to reflect and consider if change is necessary. I might add that a wise man once said, “If you change the way you look at things, the things you look at change.” Thank you, Wayne Dyer for your profound words of wisdom. Purposeful planning of the board meeting agenda ensures the agenda provides sufficiently descriptive content so that the public has reasonable notice of the matters to be considered and the agenda items align to proper board governance and growth of learning for all students. When this purposeful planning and alignment of the agenda has taken place, it provides a powerful foundation for the next point of contact with our public — the board meeting minutes. If the board tends to regard the approval of the minutes as an irrelevant routine responsibility, we urge the board to reconsider. The board minutes are the main channel of communication from the board to school personnel and the public.

The volume of calls and questions that we receive on this matter validates that patrons do pay attention to the board meeting minutes. A common concern or complaint is that the board does not include enough detail in the minutes because the patron will find note of their comment, but with no context of the topic or comment details, which can be frustrating to a patron addressing an issue or standing up for a cause they believe in. Another common complaint is that patrons want a play-by-play detailed report of what was said, by

whom, and why and the bit of drama to make it worth the read and eliminating the need to personally attend the meeting. As we always say, if a patron wants to know what was said, discussed, and decided at the meeting in full detail, please join us; we meet every month, same week, same night, same place, and same time, and there are usually open seats available.

Upon review of the minutes by board members, do a hard pause and reflect, what is the board communicating? Through the eyes of the public ... do the board meeting minutes include:

- Date, time, and location of the meeting
- District name, number, and county
- Board member attendance
- Confirmation of a quorum
- Statement reflecting the time the meeting was called to order by whom, the hour and the type of meeting (i.e., regular, reconvened, special, or emergency meeting)
- Confirmation of advanced notice to the public and location of the official agenda for public review
- Access and location of the Open Meetings Law within the boardroom
- Name and time for board members who arrive late or leave early
- Name of individuals addressing the board during public comment
- Record of reports from committees and members of the board
- Record of reports requested/received
- Summary of discussion on all matters proposed, deliberated, or decided, and a record of votes cast
- Record of how each board member voted on each agenda item requiring a roll call vote
- Each motion should include the name of the board member making the motion and the second
- Time and vote of each board member present when a vote is taken to hold a closed session and the reason for the closed session

CONTINUED ON PAGE 7

AT THE BOARD TABLE

LEADERSHIP

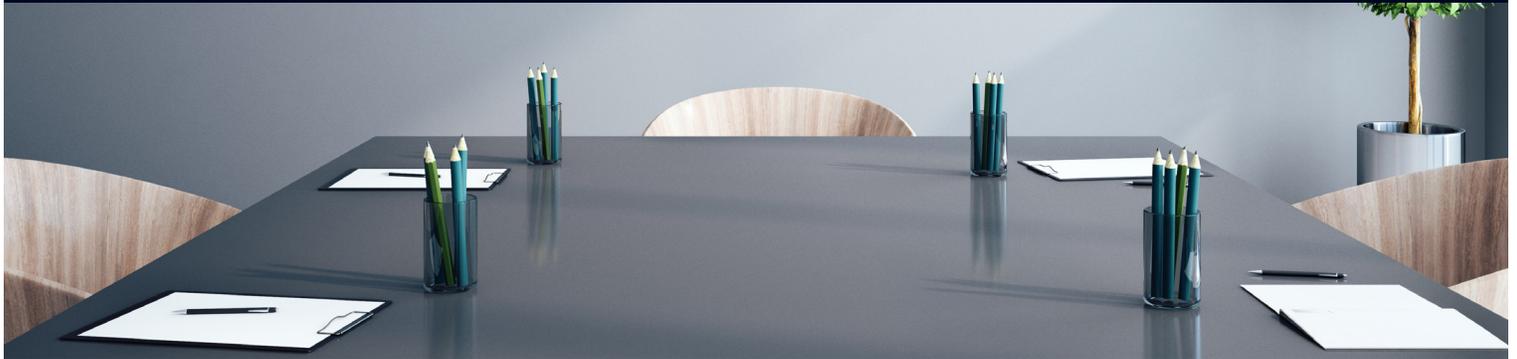
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CONTINUED FROM PAGE 6

- Record of the motion to close the meeting to the public and the vote of each member of the board; record of the time at which the meeting was closed, purpose for the closed session, and include the restated motion prior to entering closed session by the president, and time the board returned to open session
- Record of motion and time of adjournment

Last, and most importantly, through the eyes of the public, can patrons access board minutes on the district website? The board has a story to tell, what story are you sharing? Or are you allowing your public to make up their own version of your story? Do a hard stop and consider what the district is posted on the school website: Through the eyes of the public...

- Does the district website, provide access to the board meeting agenda, meeting notice, and minutes of each meeting?
- Is the district website updated frequently with the most current meeting documents available for public review?
- What is the district communicating to the public if the most current agenda and minutes date back more than a year or two?

If it is true that if we change the way we look at things then the things we look at change — then we encourage you to provide the information, the means, and the access to equip your stakeholders. Consequently, when the district's stakeholders look at the actions of the district, they do not need to fill in the gaps of information with their own narrative because you have provided all the information and done all possibly can do to create alignment and synergy with your stakeholders.

JUNE BOARD CALENDAR AGENDA ITEMS

View the full, detailed calendar at:

<http://members.nasbonline.org/index.php/resources>

Mission, Vision, & Goals

Board Self-Assessment and Goal Planning;
Strategic Plan Progress Report/Update; District Goals Update

Policy Governance

Bully Prevention Policy Review, on or before July 1; Policy regarding appropriate relationships with students, contents on or before June 30; Annual Review Parental and Family Engagement Policy (public hearing and adoption only if changes) on or before July 1

Accountability & Student Achievement

Reports; filing requirements, contents on or before July 20; Year End Assessment and Curriculum Review; Review School Improvement Plan

Advocacy

Submit Legislative Resolution or Standing Position to NASB Legislation Committee at <http://www.nasbonline.org/registrations/ProposedResolution.aspx>

District/ESU Resources [Budget]

Board/Administrators Budget Work Session; Review certificated staff; Review all Maintenance and Upkeep Contracts; Review the Food Service Program; Review TeamMates Program; Review Backpack Program; Review Transportation Program; Review classified staff

Reports

Board Committees; Superintendent; Administrators;
Remind board members to review their NASB Awards of Achievement points report



Prior to her election to the State Board of Education in November 2020, Patti Gubbels served on the Norfolk Board of Education, and was a member of the NASB Board of Directors, and the NASB Legislation Committee since 2016. We reached out to Patti to see if she, and her peers on the State Board of Education would like to give you all an update and answer any questions you may have here in the coming months.



Thank you to NASB and Matt Belka for offering an opportunity for Nebraska State Board of Education members to provide you, as local school board members, monthly updates and information. We look forward to sharing important topics with you.

Hundreds of people attended the May 7th State Board of Education meeting in Kearney where more than 70 speakers gave public comment related to the first draft of the proposed Health Education Standards. The Nebraska Department of Education (NDE) updated the board on the standards development process and provided clarification on some common misconceptions of the standards.

I know, as members of your local school boards, many of you are hearing from constituents who are expressing a variety of emotions and concerns about the first draft of the standards. I thought it might be helpful to share information about how the standards revision process works, to let you know where NDE is in that process, and to clarify some of the misconceptions related to the draft standards.

The public was invited to provide feedback in support or opposition to specific standards in the first draft that was released to the public in March. At the April State Board of Education Meeting, the Board directed the Commissioner and NDE to analyze public input survey results and standards input email comments and use that information to make revisions to the first draft.

NDE is working on a second draft with an anticipated release date later this summer. The second draft, once released, will be available for public review and comment. There may be several drafts of the Health Education Standards before the State Board of Education will be asked to approve the final draft.

If/when the Health Education Standards are approved by the State Board of Education, local school districts will be *encouraged* to adopt the state-approved standards, however, they are NOT *required* to do so. My hope is that the state-approved Health Education standards will include learning expectations that schools want to adopt. But, school districts can use the approved standards as a guide and adopt only the standards considered essential to fulfill the district's health education student learning expectations.

There are misconceptions about how the first draft of the standards were developed and about what they include. The draft of the Health Education Standards was written by a group of Nebraska educators with support from selected subject matter experts. The writing team relied on a number of existing health education resources such as National Health Education Standards, National Sex Education Standards, samples of other state Health Education

Standards, etc. The Nebraska Health Education Standards document does not include curriculum (textbook recommendations, lessons, instructional materials). Resources that include graphic or explicit images are NOT part of the standards.

Although the Health Education Standards development process is painful, it is working as intended. The NDE has heard from thousands of Nebraskans and is working diligently to rewrite some of the standards. Please watch for the release of the second draft.

In other State Board of Education meeting news, the Commissioner indicated that Nebraska K-12 public education will receive nearly \$854 million dollars through CARES, CRRSA, and The American Rescue Plan. As part of that allocation, NDE may set aside 10% for statewide use. The board heard how the NDE is providing support to schools as they navigate the one-time funds.

The State Board of Education approved a partnership with the Nebraska Children and Families Foundation to create a Community Schools Project to provide funding and support to implement and sustain Full-service Community Schools in three or four selected communities. Full -service Community Schools coordinate, integrate and provide academic, health, and social services to students and their families to improve educational outcomes. The board also voted to create the Nebraska Expanded Learning Expansion Collaborative. The public-private partnership will build upon the successes of 21st Century Afterschool Learning Centers to create a statewide approach to high-quality expanded learning opportunities.

Thank you for all of the work you do as local school board members!

Patti Gubbels
Nebraska State Board of Education - District 3

Disclaimer: The opinions from Dr. Patti S. Gubbels are hers and do not represent the Nebraska State Board of Education.

ARE YOU REGISTERED?



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NASB SCHOOL LEADERS & LAW CONFERENCE

JUNE 2-3, 2021 | KEARNEY

You're
invited
to a
FREE

**SUMMER
WORKSHOP**
HOSTED BY
ALICAP

This workshop will focus on Cyber Security and Sexual Abuse & Molestation.

SUGGESTED AUDIENCE

Superintendents, Administrators and IT Directors / Personnel

COST:

ALICAP Member Districts: 3 FREE Registrations
\$40 each additional registration

Non ALICAP Member Districts: \$40/ person

Registration closes June 21!

JOIN US AT ONE OF THREE LOCATIONS

June 29 – Gering Civic Center

June 30 – Younes Conference Center - Kearney

July 1 – Lincoln Courtyard Marriott

For assistance with registration, please call our office at 402-423-4951

2021 AREA MEMBERSHIP MEETINGS

Training | Recognition | Networking | Together



Gering - North Platte - Valentine - Norfolk - Kearney - La Vista - York - Fremont - Nebraska City

Beginning August 24th

... DATA ANALYTICS

The Legislature continues to struggle with considering changes to Nebraska's school funding formula. If you wish to provide a better picture to your representative of how your district fares under the TEEOSA funding and its impact on your tax levy, a few critical measures of data can be very useful in making that point.

Contact Jim to learn more!

... BOARD LEADERSHIP

Check out "At the Board Table" on pages 6-7.

Marcia, Kori, Tori, Melissa & Karla

... ENERGY PURCHASING

As expected, bills for gas usage during the February polar vortex event are much higher than normal, but gas providers have stepped forward to offer extended payment terms. It's important to note that other natural gas providers have received permission from the Public Service Commission to recoup those costs for their users through a three-year surcharge on gas, meaning their invoices will reflect that event for years to come. The forward pricing of large volumes of natural gas saved our consortium members substantial costs this winter by relying on supplies hedged in last summer and much less on the spot markets for their natural gas.

Contact Jim to learn more!

... SEARCH, STRENGTHS & AWARDS

EDUCATION LEADERSHIP SEARCH SERVICE

Is your district in need of an Interim Superintendent or a proposal for a Superintendent/ESU Administrator Search? Contact Shari at sbecker@NASBonline.org

AWARDS OF ACHIEVEMENT

Please check your board member points and contact Lisa with questions lsteinkuhler@NASBonline.org

GALLUP STRENGTHSFINDER

People exceptionally talented in the HARMONY theme look for consensus. They don't enjoy conflict; rather, they seek areas of agreement. Descriptive words for those with Harmony: practical, collaborative, agreeable, task oriented. Do you have Harmony in your Top 5?

Schedule a Gallup leadership team session to better understand your group's talents and create a culture for success. Contact Shari to get a date on the calendar.

- Shari -

... ALICAP & INSURANCE

MARK YOUR CALENDARS! ALICAP Summer Workshops:

June 29th in Gering
June 30th in Kearney
July 1st in Lincoln

Topics include Cyber Security and Sexual Abuse and Molestation, with target attendees being IT directors and school administrators. Visit www.ALICAP.org to register!

Thanks, Megan!



Paul Grieger
(800) 528-5145
pgrieger@dadco.com



Cody Wickham
(866) 809-5596
cwickham@dadco.com



Andy Forney
(866) 809-5443
aforney@dadco.com

Building a Better Future with Nebraska's Public Finance Partner

D.A. Davidson & Co. has long been a leader in innovative debt financing for school districts. What we're most proud of are the relationships we've nourished and the strong community improvements that are made as a result.

Our public finance professionals take a personal interest and a hands-on approach, carrying our deals from start to finish. Because you deserve solutions tailored to fit you.

- School Bond Issues
- Tax Anticipation / Construction Notes
- Lease-Purchase Financing
- QCPUF Bonds
- Refinancing Bond Issues



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... POLICY

Across the state we have seen School Boards deal with problems of incivility, shouting, and obscenity-laced public comments. This is a good time to review any handout you have for the public setting grounds for their behavior, remembering they may have been written when public manners and courtesy were taken for granted. Your new directions may need to be explicit rather than implied. Your policy for the Board President's role may need additional detail clearly stating that it is the president's duty to maintain appropriate language, tone, and respect in the meeting, and to make the decision if someone must be asked to leave.

Contact Jim to learn more!

... TECHNOLOGY

Releases, Enhancements, Tailgates and more ... Be sure to check out the most recent newsletter from Sparq Data at <https://bit.ly/33S9THC>

MARK YOUR CALENDAR

Saturday, October 30 -- 5th Annual Sparq Tailgate

Darion - dmiller@NASBonline.org Nicole - nkobus@NASBonline.org
www.sparqdata.com

... MEMBER ENGAGEMENT

That's a wrap on a very unusual school year for all of you. Thank you for all you have done to find ways to provide education, social experiences, and a safe environment for your students. Your district and community are better places because of the difficult decisions you have had to make in the last year. You are appreciated!

Looking forward to seeing you at the School Leaders & Law Conference in Kearney on June 3. Register online now.

Mark your calendars for this year's Area Membership dates and locations:

8/24 - Gering 8/25 - North Platte 8/31 - Valentine 9/1 - Norfolk
9/8 - Kearney 9/14 - La Vista 9/15 - York 9/29 - Fremont 10/6 - Nebraska City

Sharon

... ADVOCACY & GOVERNMENT RELATIONS

The 2021 Session is almost complete ... Stay engaged by bookmarking the NASB Government Relations page at:
<http://members.nasbonline.org/index.php/government-relations>

BE HEARD! CALL FOR LEGISLATIVE PROPOSALS ARE DUE JULY 1

While the 2021 Legislative Session is not quite complete, now is the time for you and your board to think of items you might like addressed in 2022. Submit your legislative proposals now at:

<http://www.nasbonline.org/registrations/ProposedResolution.aspx>

NASB's Government Relations team can do a briefing for your board, or anyone in your community.

Share Your Story - Know Your District's Data - Understand The Data That Will Make A Difference

Call Colby & Matt with any questions! #liveNASB #weLIVEhere

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Nebraska Association of School Boards | 1311 Stockwell Street - Lincoln, NE 68502 | Matt Belka, Editor | John Spatz, Publisher

EMERGENCY BROADBAND BENEFIT - HELPING YOU CONNECT

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What is it?

A temporary FCC program to help households struggling to afford internet service during the pandemic.

The benefit provides:

- Up to \$50/month discount for broadband service;
- Up to \$75/month discount for households on qualifying Tribal lands; and
- A one-time discount of up to \$100 for a laptop, desktop computer, or tablet purchased through a participating provider.



Who is eligible?

A household is eligible if one member of the household:

- Has an income that is at or below 135% of the Federal Poverty Guidelines or participates in certain government assistance programs;
- Receives benefits under the free and reduced-price school lunch or breakfast program;
- Received a Federal Pell Grant during the current award year;
- Experienced a substantial loss of income due to job loss or furlough since February 29, 2020; or
- Meets the eligibility criteria for a participating provider's existing low-income or COVID-19 program.

The Federal Communications Commission has launched a temporary program to help families and households struggling to afford Internet service during the COVID-19 pandemic. The Emergency Broadband Benefit provides a discount of up to \$50 per month toward broadband service for eligible households and up to \$75 per month for households on qualifying Tribal lands. Eligible households can also receive a one-time discount of up to \$100 to purchase a laptop, desktop computer, or tablet from participating providers.

Eligible households can enroll through a participating broadband provider or directly with the Universal Service Administrative Company (USAC) using an online or mail in application.

You can learn more about the benefit, including eligibility and enrollment information, by visiting www.fcc.gov/broadbandbenefit or by calling 833-511-0311.

THREE WAYS TO APPLY

1 Contact your Preferred Participating Provider Directly

Ask your provider if they participate in the EBB, or use our online tool to find a participating company near you.



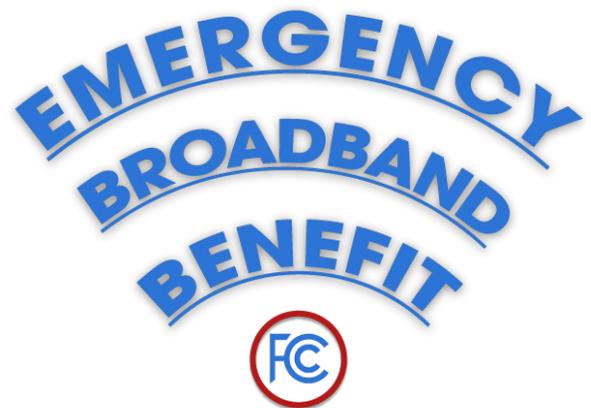
2 Online

Use the online application at GetEmergencyBroadband.org

3 By Mail

Print an application in English or Spanish. Complete the application and send with proof of eligibility to:

Emergency Broadband Support Center
P.O. Box 7081
London, KY 40742



For additional information, Call 833-511-0311, or visit fcc.gov/broadbandbenefit

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Shavonna Holman
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Lyons-Decatur Northeast



Region 12
Lisa Wagner
Central City



Region 13
Marilyn Bohn
Ravenna



Region 14
Sandy Noffsinger
Dundy County Stratton



Region 15
Joel Carlson
Cozad



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Stephanie Summers
David City



Region 17
Michelle Reikofski
Osmond



Region 18
Doug Keener
Mitchell



Region 19
Stacy Jolley
Millard

YOUR NASB STAFF

Matt Belka
Director of Marketing,
Communications & Advocacy



John Spatz
Executive Director



Makenzie Barry
Events Manager &
Accounting Associate



Shari Becker
Director of Education
Leadership Search Service



Sharon Endorf
Director of
Member Engagement



Megan Boldt
Associate Executive Director/
Director of ALICAP



Craig Caples
Director of Technology



Colby Coash
Associate Executive Director/
Dir. of Government Relations



Karla Kruse
Board Leadership/ALICAP
Admin. Assistant



Marcia Herring
Director of Board Leadership



Sallie Horkey
Chief Operating Officer



Rachel Horstman
Business Manager



Anne Silknitter
Education Leadership Search
Service Associate



Jim Luebke
Director of Policy Services



Melissa Lusk
Board Leadership
Development Associate



Tori Pierce
Board Leadership
Engagement Associate



Kori Stanosheck
Associate Director of
Board Leadership



Lisa Steinkuhler
Executive Admin. Assistant



Vicki Walter-Winters
Legal Admin. Assistant



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ARCHITECTS



BCDM

Pat Carson - 402-384-6422
pcarson@bcdm.net - bcdm.net
* GOLD LEVEL AFFILIATE

BVH Architecture

Cleve Reeves - 402-475-4551
creeves@bvh.com - bvh.com
* GOLD LEVEL AFFILIATE

CMBA Architects

Brad Kissler - 308-384-4444
kissler.b@cmbaarchitects.com
Jim Brisnehan - 308-384-4444
brisnehan.j@cmbaarchitects.com
Troy Keilig - 308-384-4444
keilig.t@cmbaarchitects.com
cmbaarchitects.com
(Architecture, Master Planning, Interiors, Bond
Promotion/Community Engagement)
* GOLD LEVEL AFFILIATE

Carlson West Povondra Architects

Jamie Eckmann - 402-551-1500
jeckmann@cwparchitects.com - cwparchitects.com
(Architecture, planning, feasibility studies)
* GOLD LEVEL AFFILIATE

DLR Group

Vanessa Schutte - 402-393-4100
vschutte@dlrgroup.com - dlrgroup.com
(Architecture, engineering, Ed. facility planning)

AWARDS

Awards Unlimited

Tim Moravec - 402-474-0815
tmoravec@awardsunlimited.com - awardsunlimited.com
(Trophies, awards, plaques, etc.)

BUILDING CONTROLS/SERVICES

Control Management Inc.

Nathan Haug - 402-571-9454
nathan@cmiomaha.com - cmiomaha.com
(Building Automation, Security and Energy
Optimization for New and Existing Systems)

Johnson Controls

Dave Schwerdtfeger - 402-350-6062
Dave.w.Schwerdtfeger@JCI.com
Shane Breitfelder - 402-450-9677
Shane.Breitfelder@JCI.com -
jci.com
(HVAC, Building Automation, Service Agreements,
Security and Fire, among others)

CONSTRUCTION SERVICES



Ayars & Ayars, Inc.

Darl Naumann - 402-435-8600 - 402-570-9214
dnaumann@ayarsayars.com - ayarsayars.com
(Design-build leader building beneficial relationships,
processes, and projects)
*GOLD LEVEL AFFILIATE

BD Construction

Marsha Wilkerson - 308-234-1836
mwilkerson@bdconstruction.com
www.BDconstruction.com
(Construction Management, Facility Planning,
Site Selection, Pre-bond Community Education,
Stakeholder Engagement)
*GOLD LEVEL AFFILIATE

Boyd Jones Construction

Emily Bannick - 402-550-1808
ebannick@boydjones.biz - boydjones.biz
(Construction Management, Pre-Bond,
Pre-Construction, Facility Evaluation,
Early Stage Planning)
* GOLD LEVEL AFFILIATE

Kingery Construction Co

Rod Berens - 402-465-4400
rodb@kccobuilders.com - kccobuilders.com
(Design-Bid-Build, Design-Build, Construction
Management, General Contractor, Pre-Bond/Pre-
Construction Assistance)
* GOLD LEVEL AFFILIATE

Nemaha Sports Construction Inc

Don Traska - 402-434-5488
don.traska@nemaha.net - www.nemaha.net
(Athletic Fields, Parks & Recreation, Hardscapes)
* GOLD LEVEL AFFILIATE

Sampson Construction

Joseph Young - 402-434-5450
joseph.young@sampson-construction.com
www.sampson-construction.com
(Design-Build, Design-Bid-Build, Construction
Manager, Small Projects)
* GOLD LEVEL AFFILIATE

W. A. Klinger

Matt Thompson - 712-233-3233
mthompson@waklinger.com - waklinger.com
(Pre-Construction, Construction Management,
Design-Build, and General Contracting)
* GOLD LEVEL AFFILIATE

ENERGY SERVICES



Ameresco, Inc.

David Goebel - 308-392-3283 - 402-370-8822
dgoebel@ameresco.com - www.ameresco.com
(Capital Improvements, Energy Efficiency &
Renewable Energy Solutions for Buildings)
* GOLD LEVEL AFFILIATE

Facility Advocates

Dave Raymond - 402-206-8777
draymond@facilityadvocates.com - facilityadvocates.com
(Building Construction & Energy Services)
* GOLD LEVEL AFFILIATE

Navitas

Nick Rosenberry - 402-840-0370
nrosenberry@navitas.us.com - navitas.us.com
(Energy Savings, Building Construction, Energy
Management, Guaranteed Results)
* GOLD LEVEL AFFILIATE

Optimized Systems

Mike Taylor - 402-981-1005
mike.taylor@optimized-systems.com
Optimized-Systems.com
(Energy Optimization, Management & Studies,
Metering, Mechanical System Assessments)
* GOLD LEVEL AFFILIATE

Schneider Electric

Tom Bachkora - 402-302-2721
tom.bachkora@se.com - Se.com/us/enable
(Committed to helping schools reach big ambitions
through an energy savings project)
* GOLD LEVEL AFFILIATE

TRANE

Andy Vinckier - 402-596-8000
avinckier@trane.com - trane.com/omaha
(Building Construction & Energy Services)
* GOLD LEVEL AFFILIATE

FINANCIAL SERVICES



Ameritas Investment Company

Michael Shoemaker - 402-467-6986
michael.shoemaker@ameritas.com
(Public Finance)
* GOLD LEVEL AFFILIATE

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FINANCIAL SERVICES

D.A. Davidson & Co.
Paul Grieger - 402-392-7986 - pgrieger@dadco.com
Cody Wickham - 402-392-7989 - cwickham@dadco.com
Andy Forney - 402-392-7988 - aforney@dadco.com
dadavidson.com
(Bonds/Election Services, Lease Purchase)
* GOLD LEVEL AFFILIATE

First National Capital Markets
Tobin Buchanan - 308-352-8328 - tbuchanan@fnni.com
Carl Dietz - 308-289-3920 - carldietz@fnni.com
Matt Fisher - 308-380-3831 - mfisher@fnni.com
fncapitalmarkets.com
(Public Finance, Election Guidance)
* GOLD LEVEL AFFILIATE

First Nebraska Credit Union
Michele Byrnes - 402-492-9100
marketing@firstnebraska.org - firstnebraska.org
(Taking care of your financial needs!)

Nebraska Liquid Asset Fund - NLAFF
Barry Ballou - 402-705-0350
balloub@pfm.com - NLAFFpool.org
(Liquid Asset Fund, financing programs)
* GOLD LEVEL AFFILIATE

Piper Sandler
Jay Spearman - 402-599-0307
jay.spearman@psc.com
(Lease Purchase, Construction Notes, Voted Bonds,
Refunding Bonds, QCPUF Bonds)
* GOLD LEVEL AFFILIATE

Wells Fargo Bank
Joseph Finnegan - 402-498-5019
joseph.p.finnegan@wellsfargo.com - wellsfargo.com
(Financial Services, Banking)
* Silver Level Affiliate

FOOD SERVICE



Lunchtime Solutions
Deni Winter - 605-235-0939 Ext 106
deni@lunchtimesolutions.com
lunchtimesolutions.com
(Progressive Food Service Management)
* GOLD LEVEL AFFILIATE

Opaa! Food Management of Nebraska
Greg Frost - 816-210-9359
gfrost@opaafod.com - opaafod.com
(Contract Food Service Management)

INSURANCE SERVICES



Blue Cross Blue Shield of Nebraska
Cortney Ray - 402-458-4823
cortney.ray@nebraskablue.com - nebraskablue.com
(Group health insurance)
* GOLD LEVEL AFFILIATE

INSURANCE SERVICES

National Insurance Services
Steve Ott - 800-627-3660 - sott@nisbenefits.com
www.nisbenefits.com
(Group LTD, Life, Vision, Special Pay Plans, HRAs)

Public Risk Management
Sheri Shonka - 402-884-3751 - 877-649-4612
sheri.shonka@prmn.com - alicap.org
(ALICAP, Insurance services)
* GOLD LEVEL AFFILIATE

LEGAL SERVICES

Mueller Robak, LLC
William Mueller - 402-434-3399
mueller@muellerrobak.com
(Lobby firm)

MENTORING

TeamMates Mentoring
Hannah Miller - 319-610-8538
hannah@teammates.org - teammates.org
(Together we transform lives)
* Silver Level Affiliate

PLAYGROUND/SCOREBOARDS/SURFACING



Creative Sites, LLC
Julie Kutilek - 402-614-4606 - 800-266-1250
julie@creativesitesllc.com
(Playground equipment, Site furnishings)
* GOLD LEVEL AFFILIATE

Crouch Recreation
Eric Crouch - 402-496-2669
eric@crouchrec.com - crouchrec.com
(Playgrounds, Shelters, Scoreboards, Safety Surfacing
& Site Amenities Manufacturers Rep)
* GOLD LEVEL AFFILIATE

Fisher Tracks, Inc.
Jordan Fisher - 800-432-3191 - 515-432-3191
jfisher@fishertracks.com - fishertracks.com
(Installation, Refurbishment & Design Build of
All-Weather Running Tracks)

PUBLIC RELATIONS SERVICES



Idea Bank Education
Jack Sheard - 402-463-0588
jack@ideabankmarketing.com
IdeaBankEducation.com
(Full-service agency in Central NE for communication
& marketing strategy, creative services & web/mobile
design & development)
* GOLD LEVEL AFFILIATE

SAFETY & SECURITY SERVICES



One Source
The Background Check Company
Neal Josten - 402-933-9999 Ext 5600
njosten@onesourcebackground.com
onesourcebackground.com
(Employment, Volunteer, Contractor Screening)
* GOLD LEVEL AFFILIATE

TECHNOLOGY CONSULTING

PRISM advisors
Jason Richards - 402-593-8911
jprichards@prism-advisors.com
prism-advisors.com
(PEOPLE, PROCESS & SYSTEMS. IT strategic
planning and project management)

TECHNOLOGY/SOFTWARE



Filament Essential Services
Dan Kunzman - 402-479-6663
dank@fes.org - www.filamentservices.org
(SOCS websites+apps, Marketing/Branding/Video,
Data. A new division of FES)
* GOLD LEVEL AFFILIATE

Sparq Data Solutions
Craig Caples - 402-423-4951
ccaples@sparqdata.com - sparqdata.com
(Paperless Board Meetings, Staff Negotiations,
Public Document Management, Document
Imaging & Scanning)
* GOLD LEVEL AFFILIATE

THERAPY SERVICES

Central Nebraska Rehabilitation Services
Mary Walsh-Sterup
308-675-1853 ext. 3222
mary@cnrehab.com - cnrehab.com
(Providing PT, OT and Speech therapy
in the school system)

TRANSPORTATION



Master's Transportation
Amber Bryant - 800-783-3613
abryant@masterstransportation.com
www.masterstransportation.com
(Your trusted source for safe, reliable, and
innovative group transportation solutions.)
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1311 STOCKWELL STREET
LINCOLN, NE 68502
WWW.NASBONLINE.ORG

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A MONTHLY PUBLICATION FROM THE NEBRASKA ASSOCIATION OF SCHOOL BOARDS



LEADERSHIP	INNOVATION	VISION	ENGAGEMENT	#liveNASB	#weLIVEhere
<p><u>IN THIS EDITION</u></p> <p>IT'S BAAAACK! NASB SCHOOL LEADERS & LAW CONFERENCE TRAINING, NETWORKING, ENGAGEMENT & EVENTS</p> <p>SALLIE HORKY CELEBRATES 30 YEARS WITH NASB!</p> <p>NOW HIRING: BOARD LEADERSHIP/ALICAP ASSISTANT</p> <p>BE HEARD! CALL FOR LEGISLATIVE PROPOSALS - DUE JULY 1</p> <p>WE LIVE HERE! A MESSAGE FROM YOUR NASB PRESIDENT</p> <p>RESOURCES ON VACCINES FROM CHILDREN'S HOSPITAL</p> <p>AT THE BOARD TABLE</p> <p>AN UPDATE FROM THE STATE BOARD OF EDUCATION</p> <p>EMERGENCY BROADBAND BENEFIT - HELPING YOU CONNECT</p> <p>NASB AFFILIATES</p> <p>... AND MUCH MORE!</p>			<p><u>AS WELL AS "THIS MONTH IN ..."</u></p> <p>... ADVOCACY & GOVERNMENT RELATIONS</p> <p>... ALICAP & INSURANCE</p> <p>... BOARD LEADERSHIP</p> <p>... DATA ANALYTICS</p> <p>... ENERGY PURCHASING</p> <p>... MEMBER ENGAGEMENT</p> <p>... POLICY</p> <p>... SEARCH, STRENGTHS & AWARDS</p> <p>... TECHNOLOGY</p>		

Nebraska Council of School Administrators

NCSA Final Legislative Report

107th Legislature, First Session

Convened January 6, 2021

Adjourned Sine Die May 27, 2021

*Prepared by
Dr. Michael Dulaney
NCSA Executive Director
June 2, 2021*

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I. Legislation Passed and Signed into Law

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LB 2 *Sponsor* *Committee* *Subject*
 Briese Revenue Change the valuation of agricultural land and horticultural land for certain school district taxes

LB 2 amends property tax valuation provisions to provide that for purposes of school district taxes levied to pay principal and interest on bonds that are approved by a vote of the people, agricultural land and land receiving special valuation will be valued at 50% of its actual value.

The bill also amends the acceptable range for these classes of property for review by the Tax Equalization and Review Commission to 44% to 50% of actual value or special valuation, respectively.

LB 2 passed on May 19, 2021 by a 36-6 vote and was signed into law by the Governor on May 24, 2021.

LB 2 becomes operative on January 1, 2022.

LB 5 *Sponsor* *Committee* *Subject*
 Blood Education Adopt the Purple Star Schools Act

LB 5 creates the Purple Star Schools Act and is applicable to any public, private, denominational, or parochial school in this state.

Under the bill, the State Board of Education may annually designate any school as a purple star school if the school applies for the designation in the manner prescribed by the board and meets the following qualifications:

- a) The school has designated a staff member as a military liaison, whose duties include, but not be limited to:
 - (i) Identifying military-connected students enrolled in the school;
 - (ii) Serving as a point of contact in the school for military-connected students and their families;
 - (iii) Determining the appropriate school services available to military-connected students; and
 - (iv) Assisting in the coordination of school programs relevant to military-connected students;
- b) Maintain an easily accessible web page on the school’s website that includes resources for military-connected students and their families, including information regarding:
 - (i) Relocation to, enrollment at, registration at, and transferring records to the school;
 - (ii) Academic planning, course sequences, and advanced classes available at the school;
 - (iii) Counseling and other support services available for military-connected students enrolled at the school; and
 - (iv) Contact information for the military liaison;
- c) Maintain a transition program led by students, where appropriate, that assists military-connected students in transitioning into the school;
- d) Offer professional development for staff members on issues related to military-connected students; and
- e) Do at least one of the following:
 - (i) Post a resolution showing support for military-connected students and their families on the school’s website;
 - (ii) Recognize April as the Military Child Month or November as Military Family Month with relevant events hosted by the school; or
 - (iii) Partner with a local military installation that provides opportunities for active duty military members to volunteer at the school, speak at an assembly, or host field trips for students.

The bill defines “military-connected student” as a student who: (a) Is a dependent of a current or former member or reserve member serving in the Nebraska National Guard or the United States Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force; or (b) Was a dependent of a member or reserve member who served in the Nebraska National Guard or the United States Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force who was killed in the line of duty during such service.

The State Board of Education is permitted to adopt and promulgate rules and regulations to carry out the Purple Star Schools Act.

LB 5 passed by a 46-0 vote on April 12, 2021. The bill was signed into law on April 16, 2021. LB 5 will become operative on August 28, 2021.

LB 17	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Kolterman	Retirement	Change actuarial valuation and amortization provisions for certain state retirement systems

LB 17 represents technical modifications, amortization and actuarial changes to the Judges, School Employees and State Patrol Retirement Acts. The proposed changes are the result of the recent IRS compliance audit, which occurred in 2020.

LB 17 was passed by a 33-13 vote on April 29, 2021 with the emergency clause attached. The Governor signed it into law on May 5, 2021. LB 17 became operative on May 6, 2021.

LB 83	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Flood	Government	Change the Open Meetings Act to provide for virtual conferencing

LB 83 would amend the Open Meetings Act in Chapter 84, Article 14, to: 1) modernize the way public bodies hold virtual meetings; and 2) create the statutory framework for public bodies to hold virtual meetings during a declared emergency by the Governor, Mayor, Village Board Chair or County Board Chair.

“Virtual conferencing” is defined as “conducting or participating in a meeting electronically or telephonically with interaction among the participants subject to subsection (2) of section 84-1412” which allows the public body to make and enforce reasonable rules and regulations regarding the conduct of persons attending, speaking, and recording at the virtual meeting.

LB 83 would not change the current Open Meetings Act requirement that school board meetings must be held in-person, and not by virtual or videoconferencing means. In other words, although schools are “public bodies” (as defined under § 84-1409) and subject to the Open Meetings Act, only those “public bodies” specifically listed in § 84-1411(2) and (3) are permitted to meet virtually.

Since school boards are not listed, they could not meet virtually under LB 83. However, ESUs and the ESUCC are listed under LB 83 and may meet virtually.

Other Provisions

Beginning July 31, 2022, LB 83 requires all school boards to make available on the district’s website the agenda and minutes of any meeting of the governing body. The agenda must be placed on the website at least 24 hours before the meeting of the governing body. Minutes must be placed on the website at such time as the minutes are available for inspection. This information must be available on the website for at least six months.

LB 83 passed on April 15, 2021 by a 43-0 vote with the emergency clause attached. The Governor signed it into law on April 21, 2021. The bill became operative on April 22, 2021.

LB 143	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Kolterman	Health	Require notice to school districts regarding changes in child placement

LB 143 provides that if a determination is made that it is not in the child’s best interest to remain in the same school after a placement change, notice of placement change must also be sent to the new school where the child will be enrolled.

In the event of an emergency placement change, the bill provides that, within 24 hours after court approval of the emergency placement change, DHHS, an association, or individual, must file a report and notice of placement change to all interested parties, including all of the child’s siblings that are known to DHHS and, if the child is of school age, the school where the child is enrolled or the new school where the child will be enrolled.

Note: As amended on General File, DHHS would have to provide the notice, but not the report, within 24 hours, and notice must be provided to both the school where the child is enrolled and the new school where the child will be enrolled.

LB 143 passed on April 29, 2021 by a 46-0 vote. It was signed into law on May 5, 2021. LB 143 will become operative on August 28, 2021.

LB 154	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Wayne	Education	Require tracking of student discipline as prescribed

LB 154 provides that, by August 1, 2022, the State Board of Education must implement a statewide system for tracking individual student discipline, using the student identifier system of the department, that can be aggregated to track student discipline by type of discipline and demographic characteristics, including race, poverty, high mobility, attendance, disability, and limited English proficiency. The board must require each school district to report, by individual student, any:

- (i) Act resulting in an in-school suspension, a short-term suspension, a long-term suspension, a one-semester expulsion, a two-semester expulsion, an assignment to an alternative school or alternative-learning program, the use of physical intervention with the student, or the restraint or seclusion of the student;
- (ii) Offense constituting grounds for a long-term suspension, an expulsion, or a mandatory reassignment, regardless of consequences assigned; and
- (iii) Act resulting in law enforcement involvement, including any incident reported to law enforcement or to an on-site school resource officer, and any school-related citation or arrest.

The bill provides that “school-related citation or arrest” would include a citation or arrest of a student for any activity conducted on school grounds; in a vehicle owned, leased, or contracted by a school being used for a school purpose or in a vehicle being driven for a school purpose by a

school employee or by such employee’s designee; or at a school-sponsored activity or athletic event.

Finally, LB 154 requires each school to designate at least one “discipline data coordinator” for the purposes of gathering and reporting the discipline data required under the bill.

LB 154 passed on April 29, 2021 by a 46-0 vote. It was signed into law on May 5, 2021. LB 154 will become operative on August 28, 2021.

LB 322	<i>Sponsor</i> Williams	<i>Committee</i> Education	<i>Subject</i> Adopt the School Safety and Security Reporting System Act
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LB 322 creates the School Safety and Security Reporting System Act. The bill was requested by NCSA in partnership with NDE and specifically Dr. Jolene Palmer, State School Security Director. The bill is modeled after a similar program in Colorado, which has proven to be very successful.

The bill requires NDE to establish a statewide, anonymous reporting system to support threat assessment teams and reduce risk and incidents of violence resulting in harm to self, others, or school property. The reporting system would be called the Safe2HelpNE report line.

Report Line

The Safe2HelpNE report line would be multi-modal to allow students, school staff, parents, and community members to anonymously report concerns and information about a threat or possible harm to people or property by telephone call, text, website, or email without charge. The Safe2HelpNE report line would be available to any public or nonpublic school that has a threat assessment team and that maintains a current list of the contact information for at least five team members designated to receive alerts from report line staff at any time of the day or night.

The identity of any individual who contacts the Safe2HelpNE report line would be confidential and would not be revealed.

Staff

The report line would be staffed seven days per week and 24 hours per day by professionals trained to receive concerns, use de-escalation techniques to minimize law enforcement involvement, and alert the appropriate threat assessment team for review, assessment, and action to protect people and property. The staff would also be trained in threat assessment and management processes, suicide prevention, recognizing mental illness and emotional disturbance, and applicable confidentiality and privacy laws. The staff of the Safe2HelpNE report line would have access to clinical consultation and support seven days per week and 24 hours per day from a licensed mental health professional.

The Safe2HelpNE report line staff would immediately alert the appropriate threat assessment team of any concern directly regarding a student, school staff member, or school property or that is

likely to impact a student, school staff member, or school property. If there is an immediate life safety concern, emergency services would be contacted prior to any threat assessment team. Each alert would be assessed by the threat assessment team receiving the alert.

Threat Assessment Team

Each threat assessment team would report the team’s response to any alert received from the Safe2HelpNE report line to NDE in the manner prescribed by the department. NDE would track all concerns received by the Safe2HelpNE report line and any action taken by the staff of the report line or by a threat assessment team.

Any information or material in the possession of the threat assessment team must remain separate from educational records and must be considered security records.

NDE would provide training for the members of any threat assessment team serving a public or nonpublic school. The training would provide the knowledge and skill to allow threat assessment teams to work collaboratively to conduct threat assessments, increase awareness of threats among school staff, students, and the public, and interrupt violence in the planning stage to thwart potential harm to people and property.

Funding

The bill provides intent language that the Legislature would appropriate money from the General Fund for the Safe2HelpNE report line for ten years. At the end of the ten years, NDE must electronically report cost-benefit data and recommendations regarding the continued viability of the report line to the Education Committee of the Legislature.

LB 322 passed on May 19, 2021 with the emergency clause attached by a 41-5 vote. The bill was signed into law on May 24, 2021 and became operative on May 25, 2021.

LB 368	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Sanders	Government	Provide the Auditor of Public Accounts enforcement powers for failure of political subdivisions to file reports

LB 368 proposes changes to the powers and duties of the State Auditor.

The bill provides that if a political subdivision required to file a report with the State Auditor fails to file the report by the applicable due date, the Auditor of Public Accounts may:

- (a) Assess the political subdivision a late fee of \$20 per day for each calendar day the required report remains not filed the late fee would begin on the day following the date the report is due. The total late fee assessed may not exceed \$2,000 per filing.
- (b) At the auditor’s discretion, audit the political subdivision (the expense of such audit would be paid by the political subdivision).

LB 368 passed on March 25, 2021 by a 46-0 vote. The bill was signed into law on March 31, 2021. The becomes operative on August 28, 2021.

LB 388	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Friesen	Transportation	Adopt the Nebraska Broadband Bridge Act

LB 388 creates the Nebraska Broadband Bridge Act with the purpose of facilitating and funding the development of broadband networks in unserved and underserved areas of Nebraska. The measure appropriates \$20 million annually, beginning in fiscal year 2021-2022, to the Public Services Commission (PSC).

LB 388 passed with the emergency clause attached on May 20, 2021 by a 49-0 vote. The bill was signed into law on May 26, 2021 and become operative on May 27, 2021.

LB 389	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Sanders	Education	Require the issuance of teaching certificates and permits to military spouses

LB 389 amends certification law (§ 79-813) to authorize the State Board of Education to issue a certificate or permit to any applicant who:

- (a) Is a military spouse;
- (b) Holds a valid certificate or permit currently in force in another state to teach, administer, or provide special services;
- (c) Has held such certificate or permit for at least one year;
- (d) Is in good standing in all states where a certificate or permit to teach, administer, or provide special services is held;
- (e) Does not have any pending investigations or complaints against any such certificate or permit;
- (f) Meets all residency and background check requirements otherwise required for a Nebraska certificate or permit; and
- (g) Pays any applicable fees.

The Commissioner of Education would be required to verify that the applicant meets the requirements noted above. The applicant would not be required to meet the human relations training requirement to obtain the certification or permit.

The certificate or permit would be valid for at least three years and would include the same or similar endorsements to teach in all subject areas for which the applicant had been certified to teach in such other state if a similar endorsement is offered in Nebraska.

A preliminary permit would be issued to an applicant upon submission of the application, payment of the applicable fees, and the successful completion of the criminal history record information check. The preliminary permit would remain in force until the commissioner completes the review of all requirements and either issues a certificate or permit or notifies the applicant of the reason the certificate or permit cannot be issued.

The State Board is required to adopt rules and regulations to:

- (i) expedite the processing of an application by an applicant whose spouse is serving on active duty at the time of the submission and
- (ii) specify the documentation necessary to establish the applicant’s status as a spouse of a person who is serving on active duty at the time of such submission.

Note: Section 38-118.01 defines “military spouse” as the spouse of an active duty service member in the armed forces of the United States.

LB 389 was passed on March 25, 2021 on a 46-0 vote. The Governor signed it into law on March 31, 2021. The law will become operative on August 28, 2021.

LB 396	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Brandt	Education	Adopt the Nebraska Farm-to-School Program Act

LB 396 creates the Nebraska Farm-to-School Program Act. The program is meant to link elementary and secondary public and nonpublic schools with Nebraska farms in a manner that:

- provides schools with fresh and minimally processed food for inclusion in school meals and snacks,
- encourages children to develop healthy eating habits, and
- improves the incomes of Nebraska farmers who will enjoy direct access to consumer markets.

The program may include activities that provide students with hands-on learning opportunities, such as farm visits, cooking demonstrations, and school gardening and composting programs, and that integrate nutrition and agricultural education into the school curricula.

NDE is required to employ a coordinator to administer the program. The duties of the coordinator include:

- (1) Identifying and promoting the critical ways for local communities to participate in the program and advise communities on needed strategies, plans, and action to administer the program;
- (2) Establishing a partnership with public agencies and nonprofit organizations to implement a public engagement campaign and establish a structure to facilitate communication between farmers and schools;

- (3) Providing leadership at the state level to encourage schools to develop and improve school nutrition plans using locally or regionally grown or locally or regionally processed food;
- (4) Conducting workshops and training sessions and providing technical assistance to school food services, farmers, processors, and distributors regarding the demand for and the availability of Nebraska food products, and assisting persons seeking to participate in the program.

LB 396 was passed on May 20, 2021 by a 48-0 vote. The measure was signed into law on May 25, 2021. LB 396 becomes operative on August 28, 2021.

LB 428	<i>Sponsor</i> Health Com.	<i>Committee</i> Health	<i>Subject</i> Entitlement of juveniles at youth rehabilitation and treatment centers to receive an appropriate educational equivalent to educational opportunities offered in public schools
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This bill as introduced requires that youth committed to the Youth Rehabilitation and Treatment Centers receive an appropriate education equivalent to educational opportunities offered within regular setting of public school districts and that the YRTCs maintain accreditation for school programs. The YRTCs currently are accredited.

The bill also requires the Department of Health and Human Services (DHHS), within 60 days after the effective date of the bill, to contract for the completion of a needs assessment and cost analysis for the establishment of an inpatient adolescent psychiatric unit housed within the Lincoln Regional Center. DHHS is required to submit a report with specified information to the Legislature on or before December 1, 2021.

LB 428 was passed on May 20, 2021 with the emergency clause attached by a 49-0 vote. The bill was signed into law on May 25, 2021. There are multiple operative dates in the measure.

LB 432	<i>Sponsor</i> Revenue Com.	<i>Committee</i> Revenue	<i>Subject</i> Change income tax rates
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LB 432 became an omnibus revenue-related bill incorporating the provisions of a variety of bills, including a provision to reduce the corporate income tax rate.

LB 432 creates a \$2,000 income tax credit to the parents of a stillborn child. The stillbirth must have occurred after the twentieth week of gestation, and must be considered a future dependent of the parent claiming the credit.

The measure also creates the Firefighter Cancer Benefits Act.

LB 432 reduces the top marginal corporate income tax rate from 7.81% to 6.84% by the following schedule:

- Jan 1, 2022 to Jan 1, 2023: 7.50%; and
- Jan 1, 2023 and after: 7.25%.

The measure includes intent language for the tax rate to be reduced to 7.00% in Tax Year 2024 and 6.84% in Tax Year 2025 and thereafter.

LB 432 passed on May 21, 2021 by a 42-1 vote. The bill was signed into law on May 26, 2021. There are multiple operative dates.

LB 451	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	McKinney	Business and Labor	Include characteristics associated with race, culture, and personhood within definition of race, including hair texture and protective hairstyles under the Nebraska Fair Employment Practice Act, and change provisions relating to unlawful employment practices

LB 451 amends the Nebraska Fair Employment Practice Act to state that race is inclusive of characteristics that are associated with race, culture, and personhood, including, but not limited to, skin color, hair texture, and protective hairstyles. The bill also provides that protective hairstyles includes, but is not limited to, hairstyles such as braids, locks, and twists.

The bill adds a new section to the Nebraska Fair Employment Practice Act stating that it would not be an unlawful employment practice for an employer to enact bona fide health and safety standards that regulate the expression of an applicant’s or employee’s race IF the employer demonstrates that:

- (a) Without the implementation of such standard, it is reasonably certain that the health and safety of the applicant, employee, or other materially connected person will be impaired;
- (b) The standard is adopted for non-discriminatory reasons;
- (c) The standard is applied equally; and
- (d) The employer has engaged in good faith efforts to reasonably accommodate the applicant or employee.

LB 451 passed on April 29, 2021 by a 40-4 vote. The measure was signed into law on May 5, 2021. LB 451 becomes operative on August 28, 2021.

LB 452	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	McKinney	Education	Adopt the Financial Literacy Act

LB 452 creates the Financial Literacy Act. Financial literacy is defined as knowledge and skills regarding budget and financial record keeping; banking; taxes; establishing, building, maintaining, and monitoring credit; debt; savings; risk management; insurance; and investment strategies.

Beginning with school year 2023-24, each school district, in consultation with NDE, must include financial literacy instruction, as appropriate, in the instructional program of its elementary and middle schools and require each student to complete at least one five-credit high school course in personal finance or financial literacy prior to graduation.

By December 31, 2024, and each December 31st thereafter, in order to promote and support financial literacy education, each school district must provide an annual financial literacy status report to its school board, including, but not limited to, student progress in financial literacy courses and other district determined measures of financial literacy progress from the previous school year.

The State Board of Education is required to adopt measurable academic content standards for financial literacy as part of the social studies standards.

LB 452 passed on May 20, 2021 by a 49-0 vote. The measure was signed into law on May 25, 2021. LB 452 becomes operative on August 28, 2021.

LB 527	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Walz	Education	Change provisions relating to transition services for students with a developmental disability

LB 527 amends § 83-1225 by changing the age from no later than 16 to no later than 14 years of age for students with a developmental disability to whom a school district provides transition services.

LB 528	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Walz	Education	Change, eliminate, and add provisions relating to education

LB 528 represents the NDE technical cleanup bill.

As passed, LB 528 would maintain the existing lottery distribution for purposes of education programs and services for a period of three years.

LB 528 was passed on May 20, 2021 with the emergency clause attached by a 48-0 vote. The measure was signed into law on May 25, 2021. The operative date is May 26, 2021.

LB 639	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Day	Education	Adopt the Seizure Safe Schools Act

LB 639 creates the Seizure Safe Schools Act and is applicable to both public and private schools.

Each school must have at least one school employee at each school who has met the training requirements necessary to administer or assist with the self-administration of a seizure rescue medication or medication prescribed to treat seizure disorder symptoms. This requirement is effective for school year 2022-23 and thereafter.

Training

The training would include instruction in administering seizure medications, recognizing the signs and symptoms of seizures, and responding to such signs and symptoms with the appropriate steps.

Training programs or guidelines adopted by any state agency for the training of school employees must be consistent with training programs and guidelines developed by a nationally recognized organization focused on epilepsy.

Authorization, Statement, Seizure Action Plan

Prior to the administration of a seizure rescue medication or medication prescribed to treat seizure disorder symptoms by a school employee, a student’s parent/guardian must:

- a. Provide the school with a written authorization to administer the medication at school;
- b. Provide a written statement from the student’s health care practitioner containing the following information: (i) The student’s name; (ii) The name and purpose of the medication; (iii) The prescribed dosage; (iv) The route of administration; (v) The frequency that the medication may be administered; and (vi) The circumstances under which the medication may be administered; and
- c. Provide the medication to the school in its unopened, sealed package with the intact label affixed by the dispensing pharmacy; and
- d. Collaborate with school employees to create a “seizure action plan.”

The bill defines “seizure action plan” as a written, individualized health plan designed to acknowledge and prepare for the health care needs of a student diagnosed with a seizure disorder.

The authorization, statement, and seizure action plan must be kept on file in the office of the school nurse or school administrator.

The seizure action plan must be distributed to any school personnel or volunteers responsible for the supervision or care of the student for whom such seizure action plan was created.

Any authorization provided by a parent/guardian would be effective for the school year in which it is provided and must be renewed each following school year.

Each certificated school employee must participate in a minimum of one hour of self-study review of seizure disorder materials. (The adopted committee amendments make this requirement operative for the 2022-23 school year and requires the self-study at least once in every two school years.)

If specified in a student’s seizure action plan, a student would be permitted to possess the supplies, equipment, and medication necessary to treat a seizure disorder in accordance with such seizure action plan.

Note: The requirements apply only to schools that have a student enrolled who has a seizure disorder and has a seizure rescue medication or medication prescribed to treat seizure disorder symptoms.

Immunity

A school or school employee who acts in compliance with the Seizure Safe Schools Act would not be liable for damages related to the care of a student’s seizure disorder unless the damages resulted from an act of willful or wanton misconduct by the school or school employee.

A school employee would not be subject to any disciplinary proceeding related to an act taken in compliance with the Seizure Safe Schools Act unless the action constitutes willful or wanton misconduct.

Rules and Regulations

The bill requires the State Board of Education to adopt and promulgate rules and regulations to carry out the Seizure Safe Schools Act, including:

- 1. Requirements for training programs for school employees;
- 2. Procedures for the development of seizure action plans; and
- 3. The content of seizure action plans.

LB 639 passed on May 19, 2021 by a 44-3 vote. The bill was signed into law on May 24, 2021. LB 639 becomes operative on August 28, 2021.

LB 644	<i>Sponsor</i> Hansen, B.	<i>Committee</i> Revenue	<i>Subject</i> Adopt the Property Tax Request Act
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LB 644 creates the Property Tax Request Act and becomes operative on January 1, 2022. The measure applies to counties, cities, school districts, and community colleges.

If the political subdivision seeks to increase its property tax request by more than the “allowable growth percentage,” the political subdivision may do so if:

- (a) A public hearing is held and notice of the hearing is provided in compliance with the new law; and

(b) The governing body of the political subdivision passes a resolution or an ordinance that complies with the new law.

“Allowable growth percentage” means a percentage equal to the sum of (a) two percent plus (b) the political subdivision’s real growth percentage.

Joint Hearing

Each political subdivision within a county that seeks to increase its property tax request by more than the allowable growth percentage must participate in a joint public hearing. Each political subdivision must designate one representative to attend the joint public hearing on behalf of the political subdivision.

If a political subdivision includes area in more than one county, the political subdivision will be deemed to be within the county in which the political subdivision’s principal headquarters are located.

At the hearing, there may be no items on the agenda other than discussion on each political subdivision’s intent to increase its property tax request by more than the allowable growth percentage.

The joint public hearing must be held on or after September 17 and prior to September 29 and before any of the participating political subdivisions file their adopted budget statement.

The joint public hearing must be held after 6 p.m. local time on the relevant date.

At the joint public hearing, the representative of each political subdivision must give a brief presentation on the political subdivision’s intent to increase its property tax request by more than the allowable growth percentage and the effect of the request on the political subdivision’s budget. The presentation must include:

- (i) The name of the political subdivision;
- (ii) The amount of the property tax request; and
- (iii) The following statements:
 - (a) The total assessed value of property differs from last year’s total assessed value by percent;
 - (b) The tax rate which would levy the same amount of property taxes as last year, when multiplied by the new total assessed value of property, would be \$..... per \$100 of assessed value;
 - (c) The (name of political subdivision) proposes to adopt a property tax request that will cause its tax rate to be \$..... per \$100 of assessed value;
 - (d) Based on the proposed property tax request and changes in other revenue, the total operating budget of (name of political subdivision) will exceed last year’s by percent; and

- (e) To obtain more information regarding the increase in the property tax request, citizens may contact the (name of political subdivision) at (telephone number and email address of political subdivision).

Any member of the public must be allowed to speak at the joint public hearing and must be given a reasonable amount of time to do so.

Notice of the joint public hearing must be provided:

- (i) By sending a postcard to all affected property taxpayers. The postcard must be sent to the name and address to which the property tax statement is mailed;
- (ii) By posting notice of the hearing on the home page of the relevant county's web site, except that this requirement will only apply if the county has a population of more than 25,000 inhabitants; and
- (iii) By publishing notice of the hearing in a legal newspaper in or of general circulation in the relevant county.

Each political subdivision that participates in the joint public hearing must send the information for the postcard to the county clerk by September 5. The county clerk must transmit the information to the county assessor no later than September 10. The county clerk must notify each participating political subdivision of the date, time, and location of the joint public hearing.

The county assessor will mail the postcards. The postcards must be mailed at least seven calendar days before the joint public hearing. The cost of creating and mailing the postcards, including staff time, materials, and postage, will be divided among the political subdivisions participating in the joint public hearing.

The information on the postcard and the notice must be posted on the county's web site, published in the newspaper, and must include the date, time, and location for the joint public hearing, a listing of and telephone number for each political subdivision that will be participating in the joint public hearing, and the amount of each participating political subdivision's property tax request. The postcard shall also contain the following information:

- (i) The following words in capitalized type at the top of the postcard: NOTICE OF PROPOSED TAX INCREASE;
- (ii) The name of the county that will hold the joint public hearing, which shall appear directly underneath the capitalized words described in subdivision (3)(h)(i) of this section;
- (iii) The following statement: The following political subdivisions are proposing a revenue increase as a result of property taxes in (insert current tax year). This notice contains estimates of the tax on your property and the proposed tax increase on your property as a result of this revenue increase. These estimates are calculated on the basis of the proposed (insert current tax year) data. The actual tax on your property and tax increase on your property may vary from these estimates.
- (iv) The parcel number for the property;

- (v) The name of the property owner and the address of the property;
- (vi) The property's assessed value in the previous tax year;
- (vii) The amount of property taxes due in the previous tax year for each participating political subdivision;
- (viii) The property's assessed value for the current tax year;
- (ix) The amount of property taxes due for the current tax year for each participating political subdivision;
- (x) The change in the amount of property taxes due for each participating political subdivision from the previous tax year to the current tax year; and
- (xi) The following statement: To obtain more information regarding the tax increase, citizens may contact the political subdivision at the telephone number provided in this notice.

After the joint public hearing, the governing body of each participating political subdivision must pass an ordinance or resolution to set the political subdivision's property tax request. If the political subdivision is increasing its property tax request over the amount from the prior year, including any increase in excess of the allowable growth percentage, then the ordinance or resolution must include, but not be limited to, the following information:

- (1) The name of the political subdivision;
- (2) The amount of the property tax request;
- (3) The following statements:
 - (i) The total assessed value of property differs from last year's total assessed value by percent;
 - (ii) The tax rate which would levy the same amount of property taxes as last year, when multiplied by the new total assessed value of property, would be \$..... per \$100 of assessed value;
 - (iii) The (name of political subdivision) proposes to adopt a property tax request that will cause its tax rate to be \$..... per \$100 of assessed value; and
 - (iv) Based on the proposed property tax request and changes in other revenue, the total operating budget of (name of political subdivision) will exceed last year's by percent; and
- (4) The record vote of the governing body in passing such resolution or ordinance.

Any resolution or ordinance setting a property tax request must be certified and forwarded to the county clerk on or before October 15 of the year for which the tax request is to apply.

The county clerk, or his/her designee, must prepare a report which will include (a) the names of the representatives of the political subdivisions participating in the joint public hearing and (b) the

name and address of each individual who spoke at the joint public hearing, unless the address requirement is waived to protect the security of the individual, and the name of any organization represented by each individual. The report must be delivered to the political subdivisions participating in the joint public hearing within 10 days after such hearing.

Any levy which is not in compliance with the Property Tax Request Act will be construed as an unauthorized levy.

An inadvertent failure to comply with the Property Tax Request Act would not invalidate a political subdivision's property tax request or constitute an unauthorized levy. The failure of a taxpayer to receive a postcard as required under the act would not invalidate a political subdivision's property tax request or constitute an unauthorized levy.

Note: LB 644 amends existing law to require school district and ESU budget statements to be filed by September 30th rather than the current September 20th.

II. Legislation Passed Notwithstanding the Governor’s Objections

LB 147	<i>Sponsor</i>	<i>Committee</i>	<i>Subject</i>
	Kolterman	Retirement	Change provisions relating to retirement systems for Class V school districts

On May 26, 2021, the Legislature voted to override the veto of LB 147 by a 31-18 vote. The bill became operative on May 27, 2021.

Among many important provisions, this measure begins the process to transfer management of the OPS (Class V) Retirement Plan to NPERS. Under the School Plan, it permits a recently retired teacher to serve up to 8 days per month as a substitute teacher during the 180-day wait period.

III. Interim Studies, 2021

Banking Committee

LR100 (Williams) Interim study to determine whether the Real Property Appraiser Act should be updated

The purpose of this resolution is to study whether the Real Property Appraiser Act should be updated. In order to carry out the purpose of this resolution, the study committee should seek the assistance of the Real Property Appraiser Board and should consider the input of interested persons as the study committee deems necessary and appropriate.

Business and Labor Committee

LR166 (Day) Interim study to review the Nebraska Fair Employment Practice Act

The purpose of this study is to review the Nebraska Fair Employment Practice Act. This study shall include, but not be limited to, an examination of the following:

- (1) Changes in employee protections brought about by changes to the federal Americans with Disabilities Act; and
- (2) A review of the Nebraska Fair Employment Practice Act's compatibility with the federal Americans with Disabilities Act Amendments Act of 2008.

This study may include a review of all state statutes, case law, administrative rules, memos, directives, and guidance published or distributed by any agency or entity of the state in furtherance of the public policy of fostering the employment of individuals with disabilities as outlined in the Nebraska Fair Employment Practice Act.

Education Committee

LR148 (Day) Interim study to examine the duties of education support professionals in Nebraska

The purpose of this resolution is to study the duties of education support professionals in Nebraska. The study may include, but is not limited to:

- (1) A review of the role education support professionals have in the operation of schools;
- (2) A review of the nine primary career classifications of education support professionals;
- (3) Available opportunities for professional growth for education support professionals; and
- (4) Whether a statutory definition of education support professional would contribute to improving education in Nebraska.

LR149 (Day) Interim study to examine the potential for statewide early childhood autism spectrum disorder screening

The purpose of this resolution is to study the potential for statewide early childhood autism spectrum disorder screening in a similar manner to the current statewide mandates on early childhood audiology and vision screenings. The issues addressed by this interim study shall include, but not be limited to:

- (1) A review of Nebraska's responsibilities under the Child Find mandate in the Individuals with Disabilities Education Act;
- (2) The significance of early identification of autism spectrum disorder;
- (3) Identification of the age at which children should first be screened for autism spectrum disorder; and
- (4) An examination of current strategies to increase early childhood autism spectrum disorder screening.

LR157 (Pansing Brooks) Interim study to examine how Nebraska schools can recruit teachers and administrators who accurately reflect the proportion of students of color attending Nebraska schools

The purpose of this interim study is to explore how Nebraska schools could recruit a teaching and administrative force that accurately reflects the proportion of students of color attending Nebraska schools. Many studies have proved the beneficial aspects of having a diverse teacher and administrative workforce, especially regarding closing achievement gaps for students of color. Furthermore, a more diverse teacher and administrative workforce that better represents our state's demographics benefits students of all racial backgrounds. Data shows that our teachers and administrators are not representative of the communities our students come from. Research shows us that there is a need to rectify this imbalance for the sake of our children and for the economic and social well-being of the state. The issues examined by this study shall include, but not be limited to:

- (1) Different approaches to informing minority students and people of color on the importance and benefits of entering the field of education;
- (2) Methods of seeking out cooperative relationships or partnerships with Historically Black Colleges and Universities, Hispanic and Latino Serving Institutions, and Native American Serving Institutions, that may lead to more diverse teacher and administrative staffs;
- (3) Relevant research and best practices to enhance minority teacher and administrator recruitment and retention throughout the state;
- (4) How to establish more public, private, and philanthropic partnerships to increase minority teacher and administrator recruitment, including, but not limited to, teacher and administrator preparation programs;

- (5) How to support and encourage local boards of education and educational service units to prioritize minority teacher recruitment and innovative strategies to attract and retain minority teachers within their districts;
- (6) Any requirements that prevent persons of color from choosing and remaining in the education professions, including, but not limited to, teacher preparation programs, certification requirements, testing of teachers, and teacher organization leadership;
- (7) Identification of methods to prepare, support, and encourage school leadership to increase retention of teachers of color; and
- (8) Input from members of the Legislature from the various regions of the state, members of the various teacher and administrator associations in Nebraska, faculty and administration of the various institutions training teachers, and organizations representing persons of color.

LR161 (McKinney) Interim study to examine the impact of natural hair discrimination in Nebraska educational settings

The purpose of this interim study is to examine the impact of natural hair discrimination in Nebraska educational settings and to support all schools in creating equitable policies and practices as such relate to students' racial, ethnic, and cultural identity. Restrictions on natural hair or hairstyles have historically been rooted in European standards of appearance and can perpetuate racist and hurtful stereotypes. Such policies exacerbate bias in educational settings by limiting an individual's ability to thrive in classroom settings, sports, and other extracurricular activities. It is vital that students and other individuals have the confidence needed to thrive and succeed. Such confidence is hindered when suspensions and other consequences are given for the way hair naturally grows from a person's head. This study shall include, but not be limited to:

- (1) A review of existing dress code, hairstyle, and other related policies in schools across the state;
- (2) An examination of model school policies that promote equitable educational environments as such relates to natural hair and protective hairstyles;
- (3) Identifying training and resources necessary to support schools in creating policies promoting equitable educational environments, free of natural hair discrimination, and accountability for such policies; and
- (4) Examining potential legislative solutions to ban race-based discriminatory policies and practices in schools that penalize students for their natural hair and protective hairstyles.

LR180 (Walz) Interim study to examine the identification of at-risk and economically disadvantaged students as a qualification factor for state-funded, education-related programs

The purpose of this resolution is to conduct an in-depth review of how at-risk and economically disadvantaged students are identified as a qualification factor for state-funded, education-related programs at the primary, secondary, and postsecondary education levels. The study shall include, but not be limited to, an examination of the following:

- (1) The use of the federal National School Lunch Program administered by the federal Department of Agriculture as a proxy to identify poverty;
- (2) The impact changes in such program, specifically the implementation of the community-eligibility provision and direct certification, have had on current and future student eligibility for state programs;
- (3) How poverty is identified and program qualification factors a rewritten in other states;
- (4) Relevant studies and literature with a focus on the best practices for determinations of poverty for education-related funding programs; and
- (5) Whether a need exists to update current state statutes to meet the legislative intent for the various funding programs in light of changes in federal policy and, if so, what options are available for such statutory updates.

LR181 (Walz) Interim study to examine home visitation for families in Nebraska

The purpose of this interim study is to examine home visitation for families in Nebraska. Home visitation is a prevention strategy used to support pregnant moms and new parents which promotes infant and child health, fosters educational development and school readiness, and prevents abuse and neglect. This interim study shall assess the status of home visitation in this state and explore ways to expand programming to more families. This study shall maintain the confidentiality of program participants and shall include, but not be limited to:

- (1) A collection of existing data on the type and location of available home-visitation programs, and to what extent each program aligns with evidence-based or evidence-informed approaches, including training or professional credentials required for each program model;
- (2) A review of the parents and children impacted by home visitation, including, but not limited to:
 - (a) Data regarding the parents and children served;
 - (b) Outcome measures, if available;
 - (c) Details on the waitlists for programs, if applicable; and
 - (d) Impact stories related to current and former program participants.
- (3) An examination of existing federal, state, and local funding sources for home visitation in the State of Nebraska, including, but not limited to:
 - (a) The Nebraska Early Childhood Endowment Fund;

- (b) Federal Head Start funds;
 - (c) Private funds;
 - (d) Federal Maternal, Infant and Early Childhood Home Visiting program funds;
 - (e) Federal Temporary Assistance for Needy Families funds;
 - (f) State and federal medicaid funds;
 - (g) Federal Family First Prevention Services Act funds;
 - (h) Funds appropriated to the State Department of Education for early childhood education; and
 - (i) The state General Fund;
- (4) A review of potential statutory or administrative changes that would support current models or establish new models of home visitation in this state, as well as, a consideration of the status of home visitation in other states; and
- (5) A determination of whether additional state funding is needed to increase development and access to home visitation.

LR182 (Walz) Interim study to examine the school enrollment options available to students

The purpose of this interim study is to examine the school enrollment options available to students, including virtual learning and distance education, and how these options influence public school enrollment decisions. This study shall include, but not be limited to, an examination of the following:

- (1) The enrollment option program, including, but not limited to:
 - (a) Whether the current statutory limits and exceptions meet the needs of students and families, along with the needs of school districts, or if current statutes create undue hardships for students, families, or school districts;
 - (b) The benefits and consequences of allowing part-time participation in the enrollment option program and how such enrollment could be reflected in the Tax Equity and Educational Opportunities Support Act;
 - (c) Whether the current school finance formula accurately accounts for the fiscal impact of the enrollment option program on school districts, incentivizes the recruitment of option students by school districts, or creates a discriminatory effect;
 - (d) Whether the current program unfairly limits opportunities for students enrolled in an exempt or nonpublic school by restricting any part-time enrollment to the school district in which they reside;
 - (e) Whether current statutes properly balance the needs of special education students with the combined capacity limitations of the school district and its affiliated educational service unit;
 - (f) Whether the appeal process for students whose application for option enrollment has been denied provides appropriate protections for students and families;

- (g) How the enrollment option program compares to public school choice programs in other states; and
 - (h) Any other issues related to the enrollment option program that the committee deems necessary; and
- (2) Student participation in virtual learning and distance education offered by school districts, including, but not limited to:
- (a) (a)(i) Courses school districts offer or intend to offer using virtual learning and distance education during the school year, (ii) the parameters that surround enrollment in such options during a summer session, and (iii) whether there are enough options statewide to meet the needs of students, families, and school districts;
 - (b) How students enrolled in virtual learning and distance education are accounted for in Tax Equity and Educational Opportunities Support Act formula needs and a determination of whether this method is sufficient to timely and accurately reflect the fiscal impact on school districts;
 - (c) Whether the formula for distance education incentives paid from lottery dollars accurately reflects the net costs associated with providing such services;
 - (d) Whether there are duplicative components in the school finance formula related to virtual learning and distance education;
 - (e) Whether a more streamlined mechanism exists for offsetting the net costs associated with virtual learning and distance education;
 - (f) How public school virtual learning and distance education are accounted for in the school finance funding formulas of other states; and
 - (g) Any other issues related to virtual learning or distance education that the committee deems necessary.

LR185 (Brandt) Interim study to examine the feasibility of an agricultural school or educational center in Nebraska

Agriculture is the primary economic driver in Nebraska and the backbone of the economy. According to the Nebraska Department of Agriculture, twenty-five percent of jobs in the state are related to agriculture. A majority of these jobs exist in support of traditional livestock and crop production operations, but more than three hundred career fields exist to support agriculture. Twenty-first century career opportunities in food systems, technology, research, environmental conservation and sustainability, international trade and policy, and finance, require a highly technical educational curriculum in order for students to succeed. Such a curriculum could include the study of the farm to table movement, the culinary arts, and the environmental effects of food production. Nearly every academic subject can be viewed through the lens of agriculture. However, there is a lack of focus in the education system, especially for students in urban areas, about where food comes from and the skills and

knowledge needed for careers in agriculture. This study shall examine the feasibility of, and interest in, an agricultural school or educational center in Nebraska, particularly in an urban location. An agricultural educational center or magnet school could provide a solution to the brain drain problem that has long siphoned young professionals away from our state in search of jobs elsewhere. Moreover, because of this state's unique geographic and historic connection to agriculture, providing educational opportunities in support of food systems will prepare students for careers right here in Nebraska. The issues addressed by this interim study may include, but not be limited to, an examination of:

- (1) The feasibility and interest in creating an agricultural school or educational center;
- (2) The benefits of an agricultural school with a focus on economics, food, health, and environmental studies;
- (3) The potential costs associated with creating an agricultural school or educational center and the process required to do so; and
- (4) Possible criteria for determining the best locations for a Nebraska agricultural school or educational center.

LR204 (Flood) Interim study to examine a coding curriculum for students in Nebraska

The purpose of this interim study is to examine a coding curriculum for students in Nebraska. This study shall include, but not be limited to, an examination of the following:

- (1) The benefits of coding knowledge for postsecondary education fields and employment opportunities;
- (2) The employment opportunities in Nebraska relating to coding;
- (3) The role of elementary and secondary schools in preparing students for the workforce who are capable of coding; and
- (4) The role of community colleges in preparing students for the workforce who are capable of coding.

LR213 (Day) Interim study to examine the mental and behavioral health needs of Nebraska students and the role of school psychologists

The purpose of this resolution is to study the mental and behavioral health needs of Nebraska students and the role of school psychologists in meeting such needs. This study shall include, but not be limited to:

- (1) A review of the prevalence of student mental and behavioral health needs in Nebraska, including the prevalence of internalizing and externalizing disorders in school-aged youth, suicide prevalence, the amount of alcohol and controlled substance use, and the number of students served through special education under the verification category of emotional disturbance;

- (2) An examination of the current mental and behavioral health workforce, including the total number of certified school psychologists in Nebraska schools, student-to-school psychologist ratios, and the current number of faculty and student trainees in school psychology training programs;
- (3) Evaluation and comparison of urban and rural barriers to school-based mental health access;
- (4) Evaluation of professional development challenges and opportunities for school psychologists, including job satisfaction and graduate training opportunities; and
- (5) Existing efforts to retain and expand Nebraska's mental and behavioral health workforce and opportunities to increase the number of certified school psychologists.

LR227 (Linehan) Interim study to examine learning communities and learning community coordinating councils

The purpose of this interim study is to examine learning communities and learning community coordinating councils. This study shall include, but not be limited to, an examination of the following:

- (1) The history of learning communities;
- (2) The intent behind creating learning community coordinating councils;
- (3) The intended outcomes to be accomplished by learning communities and learning community coordinating councils;
- (4) The statutorily-required responsibilities of learning communities and learning community coordinating councils;
- (5) The current statutorily-required responsibilities of learning community coordinating councils; and
- (6) What the current learning community coordinating council does on an annual basis.

LR228 (Albrecht) Interim study to examine the educational environment in Nebraska

The purpose of this interim study is to examine the educational environment in Nebraska. This study shall include, but not be limited to, an examination of the following:

- (1) The Nebraska Health Education Standards proposed by the State Department of Education;
- (2) The role of technology in education;
- (3) The content that is taught and available to students;
- (4) The relation between section 28-815 of the Nebraska Revised Statutes, obscenity, and content matter taught and available to students; and
- (5) Methods for providing a safe and healthy environment in which students can learn.

Executive Board

LR141 (DeBoer) Interim study to create a select interim committee of the Legislature known as the School Finance Study Committee

The purpose of this interim study is to create a select interim committee of the Legislature, to be known as the School Finance Study Committee, to conduct an in-depth study of the financing of the public elementary and secondary schools in the state. The committee shall consist of eleven members of the Legislature appointed by the Executive Board of the Legislative Council. Members shall include two members of the Education Committee of the Legislature, two members of the Appropriations Committee of the Legislature, two members of the Legislature's Planning Committee, two members of the Revenue Committee of the Legislature, and three at-large members of the Legislature. At least three members shall be appointed from each congressional district. The chairperson of the Education Committee of the Legislature shall be one of the members appointed from such committee and shall serve as the chairperson of the School Finance Study Committee. The study shall include an examination of the following:

- (1) Methods of financing public elementary and secondary schools, including methods used in other states, which would provide equitable educational opportunities across the state and offer alternatives to a heavy reliance on property tax;
- (2) The option of using a measure of income as a component in the financing of public elementary and secondary schools;
- (3) The option of using sales tax as a component in the financing of public elementary and secondary schools, including, but not limited to, an examination of the experience of any other states with such option;
- (4) Financing issues as they relate to the quality and performance of public elementary and secondary schools;
- (5) Funding methods for public prekindergarten services;
- (6) Funding methods for college-readiness and career-readiness programs, including, but not limited to, programs of excellence, dual-enrollment courses, and career academies;
- (7) The costs and resources necessary to meet the diverse and growing needs of students across the state, including, but not limited to, the needs of poverty students and limited English proficiency students;
- (8) Methods used by other states to fund public elementary and secondary school infrastructure needs; and
- (9) Other issues related to public elementary and secondary school finance as necessary and as determined by the chairperson of the committee.

Health Committee

LR203 (Flood) Interim study to examine medicaid expansion and behavioral health

The purpose of this interim study is to examine medicaid expansion and behavioral health. This study shall include, but not be limited to, an examination of the following:

- (1) The role and mission of behavioral health regions as they relate to medicaid expansion;
- (2) The coordination of behavioral health services after the expansion of medicaid;
- (3) The role of behavioral health regions in relation to individuals in need of long-term care for mental illness;
- (4) The plan for care of such individuals;
- (5) The current capacity to provide care for behavioral health patients who require locked, secure residential care; and
- (6) The capacity and demand for behavioral health care services at the Lincoln Regional Center.

Retirement Committee

LR105 (Kolterman) Interim study to examine the public employees' retirement systems administered by the Public Employees Retirement Board

The purpose of this study is to examine the public employees' retirement systems administered by the Public Employees Retirement Board, including the State Employees Retirement System, the Retirement System for Nebraska Counties under the County Employees Retirement Act, the School Employees Retirement System, the Nebraska State Patrol Retirement System, and the Nebraska Judges Retirement System. The study may also examine the Class V school employees retirement system established under the Class V School Employees Retirement Act. The study shall examine issues as they relate to the funding needs, benefits, contributions, and administration of each retirement system.

LR106 (Kolterman) Interim study to monitor underfunded defined benefit plans administered by political subdivisions as required by section 13-2402

The purpose of this study is to carry out the provisions of section 13-2402 of the Nebraska Revised Statutes, which requires the Nebraska Retirement Systems Committee of the Legislature to monitor underfunded defined benefit plans administered by political subdivisions.

Revenue Committee

LR162 (Stinner) Interim study to examine the School Readiness Tax Credit Act

The purpose of this resolution is to examine the School Readiness Tax Credit Act. This study shall include, but is not limited to, an examination of the following:

- (1) The number of tax credits claimed pursuant to the School Readiness Tax Credit Act;
- (2) Whether the School Readiness Tax Credit Act incentivizes child care employees to remain in the child care industry;
- (3) Whether the School Readiness Tax Credit Act incentivizes child care providers to become enrolled under the Step Up to Quality Child Care Act;
- (4) Barriers that prevent child care employees and child care providers from claiming tax credits pursuant to the School Readiness Tax Credit Act; and
- (5) How the amount of the tax credit currently available relates to education, professional development, and work experience requirements.

LR230 (Murman) Interim study to examine a potential constitutional amendment to limit property taxation to residential property only

The purpose of this resolution is to study whether an amendment to the Constitution of Nebraska should be submitted to the electors of the State of Nebraska for approval or rejection that would limit the application of property tax levies to support free instruction in the common schools to residential real property and not on agricultural land, horticultural land, or commercial property. In order to carry out the purpose of this resolution, the committee shall consider the input of interested individuals, public officials, and such entities as the committee deems necessary and beneficial.

Transportation Committee

LR193 (DeBoer) Interim study to examine broadband mapping and broadband speed testing in Nebraska

The purpose of this resolution is to examine broadband mapping and broadband speed testing in Nebraska. This study shall include, but not be limited to, an examination of the following:

- (1) The current methods used to create Nebraska's broadband coverage maps;
- (2) Various methods of collecting broadband coverage data;
- (3) The broadband mapping program used by the Federal Communications Commission;
- (4) Ways to improve Nebraska's broadband coverage maps;
- (5) The current methods used to measure broadband speeds in Nebraska;
- (6) Various methods of broadband speed testing used nationwide; and
- (7) Methods that could be used in Nebraska to improve accuracy of broadband speed tests.

LEA Use of ARP ESSER Funds

Of the total amount allocated to an LEA from the State's ARP ESSER award, the LEA **must reserve at least 20 percent of funds to address learning loss through the implementation of evidence-based interventions** and ensure that those interventions respond to students' social, emotional, and academic needs and address the disproportionate impact of COVID-19 on underrepresented student subgroups (each major racial and ethnic group, children from low-income families, children with disabilities, English learners, gender, migrant students, students experiencing homelessness, and children and youth in foster care). Remaining LEA funds may be used for a wide range of activities to address needs arising from the coronavirus pandemic, including:

1. Any activity authorized by the ESEA of 1965, IDEA, AEFLA, and Perkins. *Note: McKinney-Vento was not included as an allowable use under ESSER III ARP Act.*
2. Coordination of preparedness and response efforts.
3. Providing principals and other school leaders with resources necessary to address the needs of their individual schools. *Note: Not included in ESSER III/ARP Act.*
4. Activities to address the unique needs of low-income students, children with disabilities, English learners, racial and ethnic minorities.
5. Developing and implementing procedures and systems to improve the preparedness and response efforts of LEAs.
6. Training and professional development for LEA staff on sanitation and minimizing the spread of infectious diseases.
7. Purchasing supplies to sanitize and clean the facilities of a LEA, including buildings operated by such agencies.
8. Planning, coordinating, and implementing activities during long-term closures.
9. Purchasing educational technology (including hardware, software, and connectivity) for students who are served by the LEA that aids in regular and substantive educational interaction between students and their classroom instructors, including low-income students and children with disabilities, which may include assistive technology or adaptive equipment.
10. Providing mental health services and supports.
11. Planning and implementing activities related to summer learning and supplemental after-school programs.
12. **New ESSER II** Addressing learning loss among students, including low-income students, children with disabilities, English learners, racial and ethnic minorities, students experiencing homelessness, and children and youth in foster care, of the local educational agency, including:
 - a. Administering and using high-quality assessments that are valid and reliable, to accurately assess academic progress and assist educators in meeting students' academic needs, including differentiating instruction.
 - b. Implementing evidence-based activities to meet the comprehensive needs of students.
 - c. Providing information and assistance to parents and families on how they can effectively support students, including in a distance learning environment.
 - d. Tracking student attendance and improving student engagement in distance education.
13. **New ESSER II** School facility repairs and improvements to enable operation of schools to reduce the risk of virus transmission and exposure to environmental health hazards, and to support student health needs.
14. **New ESSER II** Inspection, testing, maintenance, repair, replacement, and upgrade projects to improve the indoor air quality in school facilities.
15. **New ESSER III** Development of strategies and implementation of public health protocols that align with Centers for Disease Control and Prevention guidance on reopening and operating school facilities to maintain the health and safety of students, educators, and other staff. **Important CDC Guidance can be found at: [Centers for Disease Control and Prevention's \(CDC\) Operational Strategy for K-12 Schools](#)**
16. Other activities that are necessary to maintain the operation and continuity of services in LEAs and continuing to employ existing staff of the LEA. Any entity that receives funds under the Education Stabilization Fund shall, to the greatest extent practicable, continue to pay its employees and contractors during the period of any disruptions or closures related to COVID-19.

James B. Gessford
Daniel F. Kaplan
Gregory H. Perry
Joseph F. Bachmann*
R. J. Shortridge*
Joshua J. Schauer*
Derek A. Aldridge**
Justin J. Knight***
Charles Kaplan
Haleigh B. Carlson
Daniel K. Kaplan



PERRY, GUTHERY, HAASE & GESSFORD, P.C., L.L.O.

Of Counsel
Thomas M. Haase
Rex R. Schultze

*Also admitted in Iowa
** Also admitted in Kansas
***Also admitted in Colorado

Ernest B. Perry (1876-1962)
Arthur E. Perry (1910-1982)
R.R. Perry (1917-1999)
Edwin C. Perry (1931-2012)

MEMORANDUM

To: Dr. Dan Schnoes, ESU 3 Administrator
From: Perry Law Firm
Date: May 28, 2021
RE: School District Annual Policy Service Update

The Nebraska Legislature adjourned on May 27th. This session involved several legislative bills that will require policy changes, as discussed in this memo. In addition, new federal and state auditing guidelines and procedures will require updates to school policies in certain areas. Finally, we have included several other policies that school districts may consider adopting, based upon scenarios that have occurred over the past year or so.

A. REQUIRED POLICY UPDATES

1. Policy 1200 – Anti-Harassment – Due to the enactment of LB 451, and to be consistent across policies, we have added the new non-discriminatory references to the general anti-harassment policy.

2. Policy 3132 – Internal Controls – NDE’s “Fiscal Desk Reviews” have started asking for each District’s “written Internal Controls and Policies and Procedures,” pursuant to 2 C.F.R. § 200.303, et seq. Policy 3132 includes those required policies and procedures.

3. Policy 4003 and Attachments – Employee Antidiscrimination – LB 451 adds protections under the Nebraska Fair Employment Practice Act with regard to race and hairstyles. Policy 4003 and its attachments are updated to reflect this change in the law.

4. Attachments to Policy 4007 – (FMLA) – The United States Department of Labor updated its Family and Medical Leave Act forms. To that end, the updated FMLA forms can replace the old versions of Forms 2-7. The FMLA Application itself (Form 1) remains the same.

5. Attachment to Policy 5002 – “Affidavit” – LB 528 removed the requirement that disenrollment forms be notarized for those students ages 16 through 18. NDE may issue an updated “Nebraska Withdrawal From Mandatory Attendance Form” in light of LB 528. If that occurs, we will replace the existing NDE form with the updated NDE form. No other disenrollment form needs to be changed.

6. Policy 5401 and 5401z – Equal Opportunity – Similar to Policy 1200, we have updated the new non-discrimination language to be consistent across all policies.

7. **Policy 6600 – Special Education Policies** – Recently, NDE’s special education audits have asked for more specifics and detail in policy. As such, we have updated Policy 6600 to conform with these new standards.

B. POLICY UPDATES TO CONSIDER

1. **Policy 1110 – Bulletin Boards** – As some schools move towards distributing messages electronically, each Board should revisit Policy 1110. Some districts may no longer need this Policy. Each district should review their policy to make sure it reflects current and intended practice, including what may be posted and whether outside groups may post on school bulletin boards.

2. **Policy 4025 – Professional Boundaries (NDE Model Policy)** – Neb. Rev. Stat. § 79-879 requires that every school district have a professional boundaries policy to address, among other things, grooming of students. NDE has developed a model policy that a school district may adopt, though NDE’s policy itself is not required. Many school districts already have a professional boundaries policy. Our preference is to continue using our current professional boundaries policy, but each board can decide if they want to adopt NDE’s model policy or keep their existing professional boundaries policy. If a district wants to keep its current professional boundaries policy, that district should confirm that the policy includes all requirements contained in Neb. Rev. Stat. § 79-879.

3. **Policy 6111 – Classroom Environment** – This year, several districts struggled with staff members who displayed controversial flags or had political posters in their classroom. To avoid this situation in the future, Boards may want to consider adding a provision in Policy 6111 to limit non-curricular posters, flags and other displays.

4. **Policy 6212 – Assessments – Academic Content Standards** – In light of the proposed health standards, Boards may want to review their policy on academic content standards. In the past, our policy has allowed Boards to automatically adopt the State Board’s recommended content standards. However, with the controversy over the proposed health standards, Boards may want to change their policy to require an affirmative vote to adopt a standard recommended by the State Board.

5. **Policy 8130 – Annual Organizational Meeting** – During this past year, a handful of school boards struggled to select their officers, including multiple votes and stalemates to elect a Board President. We have provided two options to address this apparent, ongoing problem. Option #1 is our current recommended policy, which allows Boards to decide how many votes will be taken before a stalemate is called. In some cases, this resulted in (at least the appearance of) board members “stalling” to “run out the clock.” With that in mind, we are providing Option #2, which resolves a stalemate with a coin flip. These policies are optional and will likely be district-specific on how the Board wants to handle the election of Board officers.

6. Policies 8151 & 8152 – Standing Committees – In some districts, the Board President appoints committees. In other districts, the Superintendent facilitates committee assignments. To align with each district’s practices, we have provided Policy 8151 for those districts that wish to have their Board President handle committee assignments. (Districts that prefer to delegate committee assignments to the Superintendent should review their policies to ensure that their current policies align with such practice.)

C. OTHER CONSIDERATIONS

1. COVID Policy and Planning for 2021-2022. Some districts have asked about developing a COVID-related policy or Board-approved procedures for the 2021-2022 school year, including requirements (or not) for masks, quarantining, employee leaves and absences, student attendance and remote learning, and other issues related to returning to school. Given how quickly things can change with COVID, we have not yet distributed any type of draft policy and are leery of recommending a formal board policy that may need to be continually updated and revised. Instead of a new, formal policy addressing COVID and the 2021-2022 school year, we see several other options, depending on the circumstances of each district:

- a. Extend the Superintendent Authority resolution that many schools passed last March to allow the Superintendent to make decisions on a timely basis (without needing formal board approval);
- b. Follow your typical health screening process and prevent symptomatic students from attending school. (A number of current board policies should already give the school the ability to address students who are sick, including Policies 1501 (Emergency Exclusion of Persons from School), 4012 (Infectious Diseases) and 6900 (Chronic Infectious Disease Practice and Procedure); and/or
- c. Approve a general framework at a Board meeting that will indicate the Board’s intent, without giving too many specifics to “pin down” the district if the COVID situation in the community changes unexpectedly.

There are obviously pros and cons with each approach and/or a combination of these approaches. Given that we are still three months away from the beginning of the 2021-2022 school year, we may need to revisit this topic (from a policy perspective) as we get closer to August.

2. Employee Vaccinations – Employee vaccinations are a “hot topic” in the employment law world. We have not heard from any Nebraska public school district who plans to require or incentivize employees to receive the COVID-19 vaccination. However, if your district would like to discuss a policy or requirement like this, please let us know and we can talk through the logistics of what that requirement would look like. Rather than issue a blanket policy for all districts, each district’s particular circumstances will (in all likelihood) need to be incorporated into a district-specific board policy or handbook provision.

3. Purple Star Schools Program. This year, LB 5 was signed into law. LB 5 allows for school districts to designate a staff member as a “military liaison” to identify and support military-connected students. LB 5 does not impose any requirements on schools. Rather, LB 5 is optional for each district, and each Board can determine if they would like to participate in the program or not.

4. Open Meetings Act Update. LB 83 updated and modernized statutory language in the Open Meetings Act. However, LB 83 did not allow public school boards to meet virtually, except in certain emergency situations. As such, public school boards need to continue meeting in-person. Each school district will need to update their Open Meetings Act poster to conform with the new Open Meetings Act language.

5. Title IX. On May 17th, the United States Department of Education announced that it will hold public hearings in June to “gather information for improving enforcement of Title IX of the Education Amendments of 1972.” If the federal government begins revising the recently enacted Title IX regulations, districts may need to update their Title IX policies in the middle of the school year. Until then, we will wait to see what happens.

6. Safety Hotline. LB 322 creates the “School Safety and Security Reporting System,” where individuals can report concerns about students to a statewide reporting system. LB 322 requires the Nebraska Department of Education to undertake certain efforts, but there is nothing in LB 322 that requires a change to board policies.

7. Substitute Teaching. LB 147 focused largely on transitioning the administration of the Omaha School Employees’ Retirement System to the Nebraska Public Employees Retirement Systems. LB 147 also included provisions that would generally allow a retired or terminated employee to substitute teach up to eight days per month. With that being said, LB 147 includes the following language: “Nothing in this subdivision precludes an employer from adopting a policy which limits or denies employees who have terminated employment from providing voluntary or substitute service within one hundred eighty days after termination.” We presume that most schools do not want a policy that limits the ability of terminated employees from volunteering or substitute teaching. However, if your district would like a policy to reflect this prohibition, please let us know.

8. Student Discipline Data. LB 154 requires the Nebraska Department of Education to implement a statewide system for tracking individual student discipline. LB 154 does not require any policy change or update, but LB 154 requires that each school “designate at least one discipline data coordinator for the purposes of gathering and reporting the discipline data required pursuant to [LB 154].” A school district can presumably designate the data coordinator without needing formal board action.

9. Transition Services. LB 527 changed the law regarding transition services. Under the old law, each school district was required to begin providing transition services to students with disabilities no later than the age of 16. LB 527 modified that law to provide that schools are now required to begin providing transition services to students to age 14. LB 527 does not require a policy change, but each district should ensure that their transition services will comply with LB 527.

10. Budget Notice. LB 528 amended 13-506, the statute governing the public hearings on proposed budgets, to require that each school district include the following statement in the notice:

For more information on statewide receipts and expenditures, and to compare cost per pupil and performance to other school districts, go to: [Insert Internet address for the web site established pursuant to section 5 of this act]. In addition, each school district shall electronically publish such statement on the school district web site. Such electronic publication shall be prominently displayed with an active link to the Internet address for the web site established pursuant to section 5 of this act to allow the public access to the information.

LB 528 requires NDE to create a website to include data and information about school district finances. We will send out the Internet address once we learn the website address.

11. Student Identification Cards. LB 528 requires that, beginning with the 2022-2023 school year, all school districts require the telephone number for a national suicide prevention hotline, a local suicide prevention hotline, or a crisis text line is printed on each new student identification card issued to a student enrolled in a middle school grade or a high school grade. LB 528 does not require schools to begin issuing student identification cards if the school does not currently issue student identification cards. If a district issues student identification cards, then that school should ensure that identification cards next year (2022-2023) comply with the new law.

12. Financial Literacy. LB 452 requires that, beginning with the 2022-2023 school year, each school district “in consultation with the State Department of Education, shall include financial literacy instruction, as appropriate, in the instructional program of its elementary and middle schools and require each student to complete at least one five-credit high school course in personal finance or financial literacy prior to graduation.” In addition, on or before December 31, 2024, each school district must “provide an annual financial literacy status report to its school board, including, but not limited to, student progress in financial literacy courses and other district determined measures of financial literacy progress from the previous school year.” Since these requirements are not effective until next school year (2022-2023), we will wait to update the associated policies until next summer (2022).

13. Seizure Safe Schools Act. LB 639 generally requires certain training and planning for students with seizures. Most schools already comply with LB 639. However, since LB 639 is not effective until the 2022-2023 school year, we will wait to update the associated policies until next summer (2022).

14. Property Tax Request Act. LB 644 generally imposes new requirements on political subdivisions seeking to increase its property tax request by the allowable growth percentage. Although LB 644 does not require any policy update, school districts will need to become familiar with these new requirements over this summer. We will provide more information on LB 644 in the coming weeks.

15. United States Supreme Court Case. Over the next month or two, the United States Supreme Court is expected to release its opinion in *Mahanoy Area School District v. B.L.* The Supreme Court's opinion will likely address how off-campus, social media speech interacts with the First Amendment. Depending on how the Court rules, we may need to update student handbooks and extracurricular handbooks to reflect the high court's ruling.

As always, please let us know if you have any questions or concerns.

Community RelationsBulletin Boards, Display Case, and Posted Material

School bulletin boards, display cases, and posting areas are for the purposes of conveying information about school activities and programs to students, staff, and the visiting public as deemed appropriate by the respective principals; however, building principals may use their discretion on posting or displaying non-school related information which is not political or commercial in nature. No information, poster or other display may be posted on any school bulletin board, display case or other areas without the prior permission of the building principal. The building principal shall have the final determination as to whether any posting is political and/or commercial in nature, and there shall be no appeal process if the principal denies a request to post or display non-school related information.

Legal Reference: Neb. Rev. Stat. Sec. 79-526 Board Authority for Supervision and Control

Date of Adoption: [Insert Date]

Community RelationsPersonnel - All Employees and StudentsAnti-discriminationA. **Elimination of Discrimination.**

The policy of [Name] Public Schools is to not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, in admission or access to, or treatment with regard to employment or with regard to its programs and activities.

[Name] Public Schools and its staff shall comply with all state and federal laws prohibiting discrimination. The Board of [Name] Public Schools intends to take any necessary measures to assure compliance with such laws against any prohibited form of discrimination and directs its staff to take all actions necessary to meet this objective.

The Superintendent shall be the Coordinator for anti-discrimination laws (including Title VI, Title IX; the Americans with Disabilities Act of 1990 (ADA), and Section 504 of the Rehabilitation Act of 1973 (Section 504)) and complaints or concerns involving discrimination or compliance with those laws should be addressed to said Coordinator.

B. **Preventing Harassment and Discrimination of Employees and Students.**

1. **Purpose:** [Name] Public Schools is committed to offering employment and educational opportunity to its employees and students based on ability and performance in a climate free of discrimination. Accordingly, unlawful discrimination or harassment of any kind by administrators, teachers, co-workers or other persons is prohibited. In addition, [Name] Public Schools will try to protect employees or students from reported discrimination or harassment by non-employees or others in the work place and educational environment.

For purposes of this policy, discrimination or harassment based on a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, is prohibited. The following are general definitions of what might constitute prohibited harassment.

- a. In general, ethnic or racial slurs or other verbal or physical conduct relating to a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual

orientation or gender identity, or other protected status, constitutes harassment when they unreasonably interfere with the person's work performance or create an intimidating work, instructional or educational environment.

- b. Age harassment has been defined by federal regulations as a form of age discrimination. It can consist of demeaning jokes, insults or intimidation based on a person's age.
- c. Sexual harassment has been defined by federal and state regulations as a form of sex discrimination. It can consist of unwelcome sexual advances, requests for sexual favors, or physical or verbal conduct of a sexual nature by supervisors or others in the work place, classroom or educational environment.

Sexual harassment may exist when:

- (a) Supervisors or managers make submission to such conduct either an explicit or implicit term and condition of employment (including hiring, compensation, promotion, or retention);
- (b) Submission to or rejection of such conduct is used by supervisors or managers as a basis for employment related decisions such as promotion, performance evaluation, pay adjustment, discipline, work assignment, etc.
- (c) The conduct has the purpose or effect of unreasonably interfering with an individual's work or educational performance or creating an intimidating, hostile, or offensive working, class room or educational environment.

Sexual harassment may include explicit sexual propositions, sexual innuendo, suggestive comments, sexually oriented "kidding" or "teasing", "practical jokes", jokes about gender-specific traits, foul or obscene language or gestures, displays of foul or obscene printed or visual material, and physical contact, such as patting, pinching or brushing against another's body.

2. **Procedures:**

- a. Employees or students should initially report all instances of discrimination or harassment to their immediate supervisor or teacher. However, if the employee or student is uncomfortable in presenting the problem to the supervisor or teacher, or if the supervisor or teacher is the problem, the employee or student is encouraged to go to the next level of supervision.
- b. If the report is not satisfactorily resolved within ten calendar days, or if the discrimination or harassment continues, please report your complaint to the Superintendent of [Name] Public Schools.

- c. If a satisfactory arrangement cannot be obtained through the Superintendent, the complaint may be processed to the Board of Education.
- d. The person to whom the complaint is made is to thoroughly investigate the complaint and work with the person filing the complaint to seek an appropriate resolution so the discrimination or harassment can be remedied and put to an end.
- e. Complaints of discrimination or harassment will be treated with the utmost confidence, consistent with resolution of the problem.
- f. Based on the results of the investigation, appropriate corrective action, up to and including discharge of offending employees, etc., may be taken.
- g. Under no circumstances will a supervisor or a teacher or the Board threaten or retaliate against a person for alleging discrimination or harassment.

Legal Reference: Title VI, 42 U.S.C. Sec. 2000d, Title VII, 42 U.S.C. Sec. 2000e, Title IX; 20 U.S.C. Sec. 1681, and the Nebraska Fair Employment Practices Act, Neb. Rev. Stat. Sec. 48-1101 et seq.
Age Discrimination in Employment Act (ADEA), the Older Workers Benefit Protection Act (OWBPA), 29 U.S.C. Sec. 621 et seq., and the Nebraska Age Discrimination in Employment Act, Neb. Rev. Stat. Sec. 48-1001 et seq.;
Americans with Disabilities Act (ADA), 42 U.S.C. Sec. 12101 et seq.
Section 504 of the Rehabilitation Act of 1973 (Section 504)
Pregnancy Discrimination Act, 42 U.S.C. Sec. 2000e(k)
Uniform Service Employment and Reemployment Rights Act (USERRA), 38 U.S.C. Sec. 4301 et seq.
Neb. Rev. Stat. Sec. 79-2,115, et seq

Date of Adoption: [Insert Date]

Business OperationsInternal Controls

The District will develop and maintain internal control procedures as required by law and in accordance with sound fiscal monitoring practices that will ensure appropriate oversight of state and federal funds. The following internal control procedures will be utilized for all federal grants:

Management requirements: The District will manage equipment (including replacement equipment), whether acquired in whole or in part under a federal award, until the District disposes of such equipment. The District will, as a minimum, meet the following requirements:

- 1) Maintain property records of the equipment (including equipment description, serial number or other identification number, source of funding, acquisition date, and the like);
- 2) Maintain a physical inventory procedure, with an inventory occurring at a minimum of every two years;
- 3) Implement a Control System procedure;
- 4) Continue to develop and implement adequate maintenance procedures for the equipment;
- 5) Continue to develop and implement sales procedures for the equipment; and
- 6) Continue to develop and implement disposition procedure for the equipment.

Legal Reference: 2 C.F.R. §§ 200.313 & 200.33.

Procurement: The District will use its own documented procurement procedures which reflect applicable State, local, and tribal laws and regulations, provided that the procurements conform to applicable Federal law and the requirement standards imposed by law, including:

- 1) A procedure for micro-purchases (Under \$10,000);
- 2) A procedure for small purchases (between \$10,000 to \$250,000);
- 3) A procedure for sealed bids;
- 4) A procedure for competitive proposals; and
- 5) A procedure for noncompetitive bids.

Legal Reference: 2 C.F.R. §§ 200.317 through 200.326.

Cross-Reference: Policies 3130 & 3131.

Record Retention: Financial records, supporting documents, statistical records, and all other related records pertinent to a federal award will be retained for a period of three years from the date of submission of the final expenditure report or, for Federal awards that are renewed quarterly or annually, from the date of the submission of the quarterly or annual financial report, respectively, as reported to the federal awarding agency or pass-through entity in the case of a sub-recipient.

For all other records, the District will retain such records for the length of time as required by law.

Legal Reference: 2 C.F.R. § 200.333.

Suspension and Debarment: The District will not contract with any entity or individual who has been debarred, suspended, or otherwise excluded from or ineligible for participation in federal assistance programs or activities. Before entering into a contract regarding a federal award, the District will verify that a vendor has not been debarred, suspended or otherwise excluded, and the District will maintain a copy of said verification.

Legal Reference: 2 C.F.R. § 200.213.

Financial Management: The District will maintain financial management systems to account for the federal funds, including records documenting compliance with federal statutes, regulations, and the terms and conditions of the federal award. These records will be sufficient to permit the District to prepare reports required by general and program-specific terms and conditions; and the tracing of funds to a level of expenditures adequate to establish that such funds have been used according to the Federal statutes, regulations, and the terms and conditions of the Federal award. The financial management system will provide for the following:

- 1) Identifying all of the federal awards received and expended and the federal programs under which they were received;
- 2) Ensuring that accurate, current, and complete disclosure of the financial results of each federal award or program are maintained in accordance with reporting requirements;
- 3) Identifying adequately the source and application of funds for federally-funded activities;
- 4) Ensuring effective controls over and accountability for all funds, property, and other assets;
- 5) Comparing actual expenditures with budget amounts for each federal award;
- 6) Ensuring payments of federal funds are made in accordance with applicable law, including 2 CFR § 200.305; and
- 7) Determining the allowability of costs in accordance with applicable law and the conditions of the federal award.

Legal Reference: 2 C.F.R. § 200.302.

Program Income: The District will consult with the federal awarding agency and refer to the applicable law and federal program terms and conditions to determine how to account for, deduct and otherwise handle income from federal programs.

Legal Reference: 2 C.F.R. § 200.307.

Cost Sharing or Matching: For all federal awards, any shared costs or matching funds and all contributions, including cash and third party in-kind contributions, must be accepted as part of the District's cost sharing or matching, when such contributions meet all of the following criteria:

- 1) Are verifiable from the District's records;
- 2) Are not included as contributions for any other Federal award;
- 3) Are necessary and reasonable for accomplishment of project or program objectives;
- 4) Are allowable under the applicable Cost Principles requirements;
- 5) Are not paid by the Federal Government under another Federal award, except where the federal statute authorizing a program specifically provides that Federal funds made

- available for such program can be applied to matching or cost sharing requirements of other Federal programs;
- 6) Are provided for in the approved budget when required by the federal awarding agency; and
 - 7) Conform to other provisions of the law or terms and conditions of the federal award, as applicable.

Legal Reference: 2 C.F.R. § 200.306.

Compensation: Compensation for personal services includes all remuneration for services of employees rendered during the period of performance under the federal award, including, but not limited to wages, salaries, and fringe benefits. Costs of compensation may be allowable under federal law and the federal grant to the extent that they satisfy the following requirements:

- 1) Is reasonable for the services rendered; and
- 2) Conforms to the established written expectations of the District, as applied consistently to both Federal and non-Federal activities.

If the District intends to charge compensation to federal awards, such charges will be based on records that accurately reflect the work performed, and will:

- 1) Be supported by a system of internal control which provides reasonable assurance that the charges are accurate, allowable, and properly allocated;
- 2) Be incorporated into the official records of the District;
- 3) Reasonably reflect the total activity for which the employee is compensated by the District, not exceeding 100% of compensated activities;
- 4) Encompass both federally-assisted and all other activities compensated by the District on an integrated basis, but may include the use of subsidiary records as defined in the District's written procedures;
- 5) Comply with the established accounting policies and practices of the District; and
- 6) Differentiate and account for the distribution of the employee's salary or wages among specific activities or cost objectives if the employee works on more than one Federal award; a Federal award and non-Federal award; an indirect cost activity and a direct cost activity; two or more indirect activities which are allocated using different allocation bases; or an unallowable activity and a direct or indirect cost activity.

Budget estimates will generally not be used to support charges to Federal awards but may be used for interim accounting purposes.

Legal Reference: 2 C.F.R. §§ 200.430 & 200.431.

Unexpected or Extraordinary Circumstances: For all federal awards, if the District does not currently have in place a sufficient policy that addresses extraordinary circumstances, such as those caused by COVID-19, the District may amend or create a policy at a later date in order to put emergency contingencies in place for federal and non-federal similarly situated employees. If the conditions exist for charges to be made to the federal grant, then charges may also be made to any non-federal sources that are used by the District in order to meet a matching requirement. The

District will take other steps to comply with federal award requirements in the event of unexpected or extraordinary circumstances.

Legal Reference: 2 C.F.R. §§ 200, et seq.

Date of Adoption: [Insert Date]

Personnel - All Employees (& Students)Anti-discrimination, Anti-harassment, and Anti-retaliation**A. Elimination of Discrimination.**

The [Name] Public Schools hereby gives this statement of compliance and intends to comply with all state and federal laws prohibiting discrimination. This school district intends to take any necessary measures to assure compliance with such laws against any prohibited form of discrimination.

The [Name] Public Schools does not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. Reasonable accommodations will be provided to employees with disabilities and to those who are pregnant, have given birth, or have a related medical condition, as required by law. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Students: [Name of Director], Director of Student Services [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Employees and Others: [Name of Director], Human Resources Director [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Complaints or concerns involving discrimination or needs for accommodation or access should be addressed to the appropriate Coordinator. For further information about anti-discrimination laws and regulations, or to file a complaint of discrimination with the Office of Civil Rights in the U.S. Department of Education (OCR), please contact the OCR at One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, Missouri 64106, (816) 268-0550 (voice), Fax (816) 268-0599, (800) 877-8339 (telecommunications device for the deaf), or ocr.kansascity@ed.gov.

B. Prohibited Harassment, Discrimination, and Retaliation of Employees, Students and Others.**1. Purpose:**

The [Name] Public Schools is committed to offering employment and educational opportunities to its employees and students in a climate free of discrimination. Accordingly, unlawful discrimination, harassment or retaliation of any kind by District employees, including, co-workers, non-employees (such as volunteers), third parties, and others is strictly prohibited and will not be tolerated.

Harassment is a form of discrimination and includes verbal, non-verbal, written, graphic, or physical conduct relating to a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation

or gender identity, or other protected status, that is sufficiently serious to deny, interfere with, or limit a person's ability to participate in or benefit from an educational or work program or activity, including, but not limited to:

- a. Conduct that is sufficiently severe or pervasive to create an intimidating, hostile, or abusive educational or work environment, or
- b. Requiring an individual to endure the offensive conduct as a condition of continued employment or educational programs or activities, including the receipt of aids, benefits, and services.

Educational programs and activities include all academic, educational, extracurricular, athletic, and other programs of the school, whether those programs take place in a school's facilities, on a school bus, at a class or training program sponsored by the school at another location, or elsewhere.

Discriminatory harassment because of a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, may include, but is not limited to:

- a. Name-calling,
- b. Teasing or taunting,
- c. Insults, slurs, or derogatory names or remarks,
- d. Demeaning jokes,
- e. Inappropriate gestures,
- f. Graffiti or inappropriate written or electronic material,
- g. Visual displays, such as cartoons, posters, or electronic images,
- h. Threats or intimidating or hostile conduct,
- i. Physical acts of aggression, assault, or violence, or
- j. Criminal offenses

The following examples are additional or more specific examples of conduct that may constitute sexual harassment:

- a. Unwelcome sexual advances or propositions,
- b. Requests or pressure for sexual favors,
- c. Comments about an individual's body, sexual activity, or sexual attractiveness,
- d. Physical contact or touching of a sexual nature, including touching intimate body parts and inappropriate patting, pinching, rubbing, or brushing against another's body,
- e. Physical sexual acts of aggression, assault, or violence, including criminal offenses (such as rape, sexual assault or battery, and sexually motivated stalking), against a person's will or where a person is incapable of giving consent due to the victim's age, intellectual disability, or use of drugs or alcohol,
- f. Requiring sexual favors or contact in exchange for aids, benefits, or services, such as grades, awards, privileges, promotions, etc., or

- g. Gender-based harassment; acts of verbal, nonverbal, written, graphic, or physical conduct based on sex or sex-stereotyping, but not involving conduct of a sexual nature.

If the District knows or reasonably should know about possible harassment, including violence, the District will conduct a prompt, adequate, reliable, thorough, and impartial investigation to determine whether unlawful harassment occurred (see section entitled “Grievance Procedures,” below), and take appropriate interim measures, if necessary. If the District determines that unlawful harassment occurred, the District will take prompt and effective action to eliminate the harassment, prevent its recurrence, and remedy its effects, if appropriate. If harassment or violence that occurs off school property creates a hostile environment at school, the District will follow this policy and grievance procedure, within the scope of its authority.

All District employees are expected to take prompt and appropriate actions to report and prevent discrimination, harassment, and retaliation by others. Employees who witness or become aware of possible discrimination, including harassment and retaliation, must immediately report the conduct to his or her supervisor or the compliance coordinator designated to handle complaints of discrimination (designated compliance coordinator).

2. Anti-retaliation:

The District prohibits retaliation, intimidation, threats, coercion, or discrimination against any person for opposing discrimination, including harassment, or for participating in the District's discrimination complaint process or making a complaint, testifying, assisting, or participating in any manner, in an investigation, proceeding, or hearing. Retaliation is a form of discrimination.

The District will take immediate steps to stop retaliation and prevent its recurrence against the alleged victim and any person associated with the alleged victim. These steps will include, but are not limited to, notifying students, employees, and others, that they are protected from retaliation, ensuring that they know how to report future complaints, and initiating follow-up contact with the complainant to determine if any additional acts of discrimination, harassment, or retaliation have occurred. If retaliation occurs, the District will take prompt and strong responsive action, including possible discipline, including expulsion or termination, if applicable.

3. Grievance (or Complaint) Procedures:

Employees or students should initially report all instances of discrimination, harassment or retaliation to their immediate supervisor or teacher or to the compliance coordinator designated to handle complaints of discrimination. If the employee or student is uncomfortable in presenting the problem to the supervisor or teacher, or if the supervisor or teacher is the problem, the employee or student may report the alleged discrimination, harassment or retaliation to the designated coordinator, or in the case of students, to another staff person (such as a counselor or principal).

Other individuals may report alleged discrimination to the designated coordinator. If the designated coordinator is the person alleged to have committed the discriminatory act, then the complaint should be submitted to the Superintendent for assignment. A discrimination complaint form is attached to this grievance procedure and is available in the office of each District building, on the District's website, and from the designated coordinators.

Under no circumstances will a person filing a complaint or grievance involving discrimination be retaliated against for filing the complaint or grievance.

i. Level 1 (Investigation and Findings):

Once the District receives a grievance, complaint or report alleging discrimination, harassment, or retaliation, or becomes aware of possible discriminatory conduct, the District will conduct a prompt, adequate, reliable, thorough, and impartial investigation to determine whether unlawful harassment occurred. If necessary, the District will take immediate, interim action or measures to protect the alleged victim and prevent further potential discrimination, harassment, or retaliation during the pending investigation. The alleged victim will be notified of his or her options to avoid contact with the alleged harasser, such as changing a class or prohibiting the alleged harasser from having any contact with the alleged victim pending the result of the District's investigation. The District will minimize any burden on the alleged victim when taking interim measures to protect the alleged victim.

The District will promptly investigate all complaints of discrimination, even if an outside entity or law enforcement agency is investigating a complaint involving the same facts and allegations. The District will not wait for the conclusion or outcome of a criminal investigation or proceeding to begin an investigation required by this grievance procedure. If the allegation(s) involve possible criminal conduct, the District will notify the complainant of his or her right to file a criminal complaint, and District employees will not dissuade the complainant from filing a criminal complaint either during or after the District's investigation.

The District will aim to complete its investigation within **ten (10) working days** after receiving a complaint or report, unless extenuating circumstances exist. Extenuating circumstances may include the unavailability of witnesses due to illness or incapacitation, or additional time needed because of the complexity of the investigation, the need for outside experts to evaluate the evidence (such as forensic evidence), or multiple complainants or victims. If extenuating circumstances exist, the extended timeframe to complete the investigation will **not exceed ten (10) additional working days without the consent of the complainant, unless the alleged victim agrees to a longer timeline.** Periodic status updates will be given to the parties, when appropriate.

The District's investigation will include, but is not limited to:

- a. Providing the parties with the opportunity to present witnesses and provide evidence.

- b. An evaluation of all relevant information and documentation relating to the alleged discriminatory conduct.
- c. For allegations involving harassment, some of the factors the District will consider include: 1) the nature of the conduct and whether the conduct was unwelcome, 2) the surrounding circumstances, expectations, and relationships, 3) the degree to which the conduct affected one or more students' education, 4) the type, frequency, and duration of the conduct, 5) the identity of and relationship between the alleged harasser and the suspect or suspects of the harassment, 6) the number of individuals involved, 7) the age (and sex, if applicable) of the alleged harasser and the alleged victim(s) of the harassment, 8) the location of the incidents and the context in which they occurred, 9) the totality of the circumstances, and 10) other relevant evidence.
- d. A review of the evidence using a “preponderance of the evidence” standard (based on the evidence, is it more likely than not that discrimination, harassment, or retaliation occurred?)

The designated compliance coordinator (or designated investigator) will complete an investigative report, which will include:

- a. A summary of the facts,
- b. Findings regarding whether discrimination, harassment or other inappropriate conduct occurred, and
- c. If a finding is made that discrimination, harassment or other inappropriate conduct occurred, the recommended remedy or remedies necessary to eliminate such discrimination, harassment or other inappropriate conduct.

If someone other than the designated compliance coordinator conducted the investigation, the compliance coordinator will review, approve, and sign the investigative report. The District will ensure that prompt, appropriate, and effective remedies are provided if a finding of discrimination, harassment, or retaliation is made. The District will maintain relevant documentation obtained during the investigation and documentation supportive of the findings and any subsequent determinations, including the investigative report, witness statements, interview summaries, and any transcripts or audio recordings, pertaining to the investigative and appeal proceedings.

The District will send concurrently to the parties written notification of the decision (findings and any remedy) regarding the complaint within **one (1) working day** after the investigation is completed. The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. Sec. 11232g; 34 C.F.R. Part 99, permits the District to disclose relevant information to a student who was discriminated against or harassed.

ii. Level 2 (Appeal to the Superintendent):

If a party is not satisfied with the findings or remedies (or both) set forth in the decision, he or she may file an appeal in writing with the Superintendent within **five (5) working days** after receiving the decision. The Superintendent will review the appeal and the investigative documentation and decision, conduct additional investigation, if necessary,

and issue a written determination about the appeal **within ten (10) working days** after receiving the appeal. The party who filed the appeal will be sent the Superintendent's determination at the time it is issued, and a copy will be sent to the designated compliance coordinator. [If the Superintendent is the subject of the complaint, the party will file the appeal directly with the Board.]

iii. Level 3 (Appeal to the Board):

If the party is not satisfied with the Superintendent's determination, he or she may file an appeal in writing with the Board of Education **within five (5) working days** after receiving the Superintendent's determination. The Board of Education will review the appeal, the Superintendent's determination, the investigative documentation and decision, and allow the party to address the Board at a Board meeting to present his or her appeal. The party will be allowed to address the Board at the Board's next regularly scheduled Board meeting (unless the Board receives the appeal within one week of the next regularly scheduled Board meeting) or at a time and date agreed to by the Board, designated compliance officer and the party. The Board will issue a written determination about the appeal **within thirty (30) days** after the party addresses the Board. The party who filed the appeal will be sent the Board's determination at the time it is issued, and a copy will be sent to the designated compliance coordinator. The Board's determination, and any actions taken, will be final on behalf of the District.

4. Confidentiality:

The identity of the complainant will be kept confidential to the extent permitted by state and federal law. The District will notify the complainant of the anti-retaliation provisions of applicable laws and that the District will take steps to prevent retaliation and will take prompt and strong responsive actions if retaliation occurs.

If a complainant requests confidentiality or asks that the complaint not be pursued, the District will take all reasonable steps to investigate and respond to the complaint consistent with the request for confidentiality or the request not to pursue an investigation, as long as doing so does not prevent the District from responding effectively to the harassment and preventing harassment of other students. If a complainant insists that his or her name or other identifiable information not be disclosed to the alleged perpetrator, the District will inform the complainant that its ability to respond may be limited. Even if the District cannot take disciplinary action against the alleged harasser, the District will pursue other steps to limit the effects of the alleged harassment and prevent its recurrence, if warranted.

5. Training:

The District will ensure that relevant District employees are adequately trained so they understand and know how to identify acts of discrimination, harassment, and retaliation, and how to report it to appropriate District officials or employees.

In addition, the District shall ensure that employees designated to address or investigate discrimination, harassment, and retaliation, including designated compliance coordinators, receive training to promptly and effectively investigate and respond to

complaints and reports of discrimination, and to know the District's grievance procedures and the applicable confidentiality requirements.

6. Designated Compliance Coordinators:

Designated compliance coordinators will be responsible for:

- a. Coordinating efforts to comply with anti-discrimination, anti-harassment, and anti-retaliation laws and regulations.
- b. Coordinating and implementing training for students and employees pertaining to anti-discrimination, anti-harassment and anti-retaliation laws and regulations, including the training areas listed above.
- c. Investigating complaints of discrimination (unless the coordinator designates other trained individuals to investigate).
- d. Monitoring substantiated complaints or reports of discrimination, as needed (and with the assistance of other District employees, if necessary), to ensure discrimination or harassment does not recur, and that retaliation conduct does not occur or recur.
- e. Overseeing discrimination complaints, including identifying and addressing any patterns or systemic problems, and reporting such patterns or systemic problems to the Superintendent and the Board of Education.
- f. Communicating regularly with the District's law enforcement unit investigating cases and providing current information to them pertaining to anti-discrimination, anti-harassment, and anti-retaliation standards and compliance requirements.
- g. Reviewing all evidence in harassment or violence cases brought before the District's disciplinary committee or administrator to determine whether the complainants are entitled to a remedy under anti-discrimination laws and regulations that was not available in the disciplinary process.
- h. Ensuring that investigations address whether other students or employees may have been subjected to discrimination, including harassment and retaliation.
- i. Determining whether District employees with knowledge of allegations of discrimination, including harassment and retaliation, failed to carry out their duties in reporting the allegations to the designated compliance coordinator and responding to the allegations.
- j. Recommending changes to this policy and grievance procedure.
- k. Performing other duties as assigned.

7. Preventive Measures:

The District will publish and widely distribute on an ongoing basis a notice of nondiscrimination (notice) in electronic and printed formats, including prominently displaying the notice on the District's website and posting the notice at each building in the District. The District also will designate an employee to coordinate compliance with anti-discrimination laws (see Designated Compliance Coordinator section, above, for further information on compliance coordinator), and widely publish and disseminate this grievance procedure, including prominently posting it on the District's website, at each

building in the District, reprinting it in District publications, such as handbooks, and sending it electronically to members of the school community.

The District also may distribute specific harassment and violence materials (such as sexual violence), including a summary of the District's anti-discrimination, anti-harassment, and anti-retaliation policy and grievance procedure, and a list of victim resources, during events such as school assemblies and back to school nights, if recent incidents or allegations warrant additional education to the school community.

Legal Reference: Title VI, 42 U.S.C. Sec. 2000d, Title VII, 42 U.S.C. Sec. 2000e, Title IX; 20 U.S.C. Sec. 1681, and the Nebraska Fair Employment Practices Act, Neb. Rev. Stat. Sec. 48-1101 et seq.
Age Discrimination in Employment Act (ADEA), the Older Workers Benefit Protection Act (OWBPA), 29 U.S.C. Sec. 621 et seq., and the Nebraska Age Discrimination in Employment Act, Neb. Rev. Stat. Sec. 48-1001 et seq.;
Americans with Disabilities Act (ADA), 42 U.S.C. Sec. 12101 et seq.
Section 504 of the Rehabilitation Act of 1973 (Section 504)
Pregnancy Discrimination Act, 42 U.S.C. Sec. 2000e(k)
Uniform Service Employment and Reemployment Rights Act (USERRA), 38 U.S.C. Sec. 4301 et seq.
Neb. Rev. Stat. Sec. 79-2,115, et seq

Date of Adoption: [Insert Date]

Notice of Nondiscrimination

The [Name] Public School District does not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Students: [Name of Director], Director of Student Services [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Employees and Others: [Name of Director], Human Resources Director [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Complaints or concerns involving discrimination or needs for accommodation or access should be addressed to the appropriate Coordinator. For further information about anti-discrimination laws and regulations, or to file a complaint of discrimination with the OCR at One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, Missouri 64106, (816) 268-0550 (voice), Fax (816) 268-0599, (800) 877-8339 (telecommunications device for the deaf), or ocr.kansascity@ed.gov.

**Complaint Form
Discrimination, Harassment or Retaliation**

The [Name] Public School District does not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. This complaint form is to be used when a person has a complaint related to discrimination, harassment or retaliation on such bases in regard to employment or the programs and activities of the school district.

Refer to Board Policy 4003 and/or 5401 for the particulars of the complaint and grievance process. You may attach additional materials to this form if needed.

The applicable coordinator may be contacted if you have questions about filling out this complaint form:
Students: [Name of Director], Director of Student Services [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).
Employees and Others: [Name of Director], Human Resources Director [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Name: _____ Date: _____

(1) Description of the complaint: _____

_____.

(2) Names of any witnesses to the matter being complained about: _____

_____.

(3) Identify and attach any document supporting the complaint: _____
_____.

(4) Confidentiality: I ___ do ___ do not give consent to my identity being shared with the person(s) against whom I am complaining. If I do not give consent, I understand that the investigation may be hindered, but that the District will nonetheless investigate and take prompt and effective action to remediate the concerns I have raised, if appropriate.

_____.

(5) Relief requested (what I want done in response to this complaint): _____
_____.

The undersigned states: The facts in this complaint are true to the best of my knowledge, information and belief. I give permission for an investigation to be made into this complaint. I understand that the District will take steps to prevent me being retaliated against for filing this complaint, that I am to notify the District if any such retaliation occurs, and that the District will take prompt and strong responsive action if retaliation occurs.

Received by: _____ Signature: _____
Date: _____

**Certification of Health Care Provider for
Employee's Serious Health Condition
under the Family and Medical Leave Act**

**U.S. Department of Labor
Wage and Hour Division**



**DO NOT SEND COMPLETED FORM TO THE DEPARTMENT OF LABOR.
RETURN TO THE PATIENT.**

OMB Control Number: 1235-0003
Expires: 6/30/2023

The Family and Medical Leave Act (FMLA) provides that an employer may require an employee seeking FMLA protections because of a need for leave due to a serious health condition to submit a medical certification issued by the employee's health care provider. 29 U.S.C. §§ 2613, 2614(c)(3); 29 C.F.R. § 825.305. The employer must give the employee **at least 15 calendar days** to provide the certification. If the employee fails to provide complete and sufficient medical certification, his or her FMLA leave request may be denied. 29 C.F.R. § 825.313. Information about the FMLA may be found [on the WHD website at www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

SECTION I – EMPLOYER

Either the employee or the employer may complete Section I. While use of this form is optional, this form asks the health care provider for the information necessary for a complete and sufficient medical certification, which is set out at 29 C.F.R. § 825.306. **You may not ask the employee to provide more information than allowed under the FMLA regulations, 29 C.F.R. §§ 825.306-825.308.** Additionally, you **may not** request a certification for FMLA leave to bond with a healthy newborn child or a child placed for adoption or foster care.

Employers must generally maintain records and documents relating to medical information, medical certifications, recertifications, or medical histories of employees created for FMLA purposes as confidential medical records in separate files/records from the usual personnel files and in accordance with 29 C.F.R. § 1630.14(c)(1), if the Americans with Disabilities Act applies, and in accordance with 29 C.F.R. § 1635.9, if the Genetic Information Nondiscrimination Act applies.

(1) Employee name: _____
First Middle Last

(2) Employer name: _____ Date: _____ (mm/dd/yyyy)
(List date certification requested)

(3) The medical certification must be returned by _____ (mm/dd/yyyy)
(Must allow at least 15 calendar days from the date requested, unless it is not feasible despite the employee's diligent, good faith efforts.)

(4) Employee's job title: _____ Job description (is / is not) attached.
Employee's regular work schedule: _____
Statement of the employee's essential job functions: _____

(The essential functions of the employee's position are determined with reference to the position the employee held at the time the employee notified the employer of the need for leave or the leave started, whichever is earlier.)

SECTION II - HEALTH CARE PROVIDER

Please provide your contact information, complete all relevant parts of this Section, and sign the form. Your patient has requested leave under the FMLA. The FMLA allows an employer to require that the employee submit a timely, complete, and sufficient medical certification to support a request for FMLA leave due to the serious health condition of the employee. For FMLA purposes, a "serious health condition" means an illness, injury, impairment, or physical or mental condition that involves *inpatient care* or *continuing treatment by a health care provider*. For more information about the definitions of a serious health condition under the FMLA, see the chart on page 4.

You may, but are **not required** to, provide other appropriate medical facts including symptoms, diagnosis, or any regimen of continuing treatment such as the use of specialized equipment. Please note that some state or local laws may not allow disclosure of private medical information about the patient's serious health condition, such as providing the diagnosis and/or course of treatment.

Employee Name: _____

Health Care Provider's name: (Print) _____

Health Care Provider's business address: _____

Type of practice / Medical specialty: _____

Telephone: (____) _____ Fax: (____) _____ E-mail: _____

PART A: Medical Information

Limit your response to the medical condition(s) for which the employee is seeking FMLA leave. Your answers should be your **best estimate** based upon your medical knowledge, experience, and examination of the patient. **After completing Part A, complete Part B to provide information about the amount of leave needed.** Note: For FMLA purposes, "incapacity" means the inability to work, attend school, or perform regular daily activities due to the condition, treatment of the condition, or recovery from the condition. Do not provide information about genetic tests, as defined in 29 C.F.R. § 1635.3(f), genetic services, as defined in 29 C.F.R. § 1635.3(e), or the manifestation of disease or disorder in the employee's family members, 29 C.F.R. § 1635.3(b).

(1) State the approximate date the condition started or will start: _____ (mm/dd/yyyy)

(2) Provide your **best estimate** of how long the condition lasted or will last: _____

(3) Check the box(es) for the questions below, as applicable. For all box(es) checked, the amount of leave needed must be provided in Part B.

Inpatient Care: The patient (has been / is expected to be) admitted for an overnight stay in a hospital, hospice, or residential medical care facility on the following date(s): _____

Incapacity plus Treatment: (e.g. outpatient surgery, strep throat)

Due to the condition, the patient (has been / is expected to be) incapacitated for *more than* three consecutive, full calendar days from _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy).

The patient (was / will be) seen on the following date(s): _____

The condition (has / has not) also resulted in a course of continuing treatment under the supervision of a health care provider (e.g. prescription medication (other than over-the-counter) or therapy requiring special equipment)

Pregnancy: The condition is pregnancy. List the expected delivery date: _____ (mm/dd/yyyy).

Chronic Conditions: (e.g. asthma, migraine headaches) Due to the condition, it is medically necessary for the patient to have treatment visits at least twice per year.

Permanent or Long Term Conditions: (e.g. Alzheimer's, terminal stages of cancer) Due to the condition, incapacity is permanent or long term and requires the continuing supervision of a health care provider (even if active treatment is not being provided).

Conditions requiring Multiple Treatments: (e.g. chemotherapy treatments, restorative surgery) Due to the condition, it is medically necessary for the patient to receive multiple treatments.

None of the above: If none of the above condition(s) were checked, (i.e., inpatient care, pregnancy) no additional information is needed. Go to page 4 to sign and date the form.

Employee Name: _____

- (4) If needed, briefly describe other appropriate medical facts related to the condition(s) for which the employee seeks FMLA leave. (e.g., use of nebulizer, dialysis) _____

PART B: Amount of Leave Needed

For the medical condition(s) checked in Part A, complete all that apply. Several questions seek a response as to the frequency or duration of a condition, treatment, etc. Your answer should be your **best estimate** based upon your medical knowledge, experience, and examination of the patient. Be as specific as you can; terms such as “lifetime,” “unknown,” or “indeterminate” may not be sufficient to determine FMLA coverage.

- (5) Due to the condition, the patient (had / will have) **planned medical treatment(s)** (scheduled medical visits) (e.g. psychotherapy, prenatal appointments) on the following date(s): _____

- (6) Due to the condition, the patient (was / will be) **referred to other health care provider(s)** for evaluation or treatment(s).

State the nature of such treatments: (e.g. cardiologist, physical therapy) _____

Provide your **best estimate** of the beginning date _____ (mm/dd/yyyy) and end date _____ (mm/dd/yyyy) for the treatment(s).

Provide your **best estimate** of the duration of the treatment(s), including any period(s) of recovery (e.g. 3 days/week) _____

- (7) Due to the condition, it is medically necessary for the employee to work a **reduced schedule**.

Provide your **best estimate** of the reduced schedule the employee is able to work. From _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy) the employee is able to work: (e.g., 5 hours/day, up to 25 hours a week)

- (8) Due to the condition, the patient (was / will be) **incapacitated for a continuous period of time**, including any time for treatment(s) and/or recovery.

Provide your **best estimate** of the beginning date _____ (mm/dd/yyyy) and end date _____ (mm/dd/yyyy) for the period of incapacity.

- (9) Due to the condition, it (was / is / will be) medically necessary for the employee to be absent from work on an **intermittent basis** (periodically), including for any episodes of incapacity i.e., episodic flare-ups. Provide your **best estimate** of how often (frequency) and how long (duration) the episodes of incapacity will likely last.

Over the next 6 months, episodes of incapacity are estimated to occur _____ times per (day / week / month) and are likely to last approximately _____ (hours / days) per episode.

Employee Name: _____

PART C: Essential Job Functions

If provided, the information in Section I question #4 may be used to answer this question. If the employer fails to provide a statement of the employee’s essential functions or a job description, answer these questions based upon the employee’s own description of the essential job functions. An employee who must be absent from work to receive medical treatment(s), such as scheduled medical visits, for a serious health condition is considered to be *not able* to perform the essential job functions of the position during the absence for treatment(s).

(10) Due to the condition, the employee (was not able / is not able / will not be able) to perform *one or more* of the essential job function(s). Identify at least one essential job function the employee is not able to perform:

Signature of Health Care Provider _____ Date _____ (mm/dd/yyyy)

Definitions of a Serious Health Condition (See 29 C.F.R. §§ 825.113-.115)
Inpatient Care
<ul style="list-style-type: none">• An overnight stay in a hospital, hospice, or residential medical care facility.• Inpatient care includes any period of incapacity or any subsequent treatment in connection with the overnight stay.
Continuing Treatment by a Health Care Provider (any one or more of the following)
<p><u>Incapacity Plus Treatment:</u> A period of incapacity of more than three consecutive, full calendar days, and any subsequent treatment or period of incapacity relating to the same condition, that also involves either:</p> <ul style="list-style-type: none">○ Two or more in-person visits to a health care provider for treatment within 30 days of the first day of incapacity unless extenuating circumstances exist. The first visit must be within seven days of the first day of incapacity; or,○ At least one in-person visit to a health care provider for treatment within seven days of the first day of incapacity, which results in a regimen of continuing treatment under the supervision of the health care provider. For example, the health provider might prescribe a course of prescription medication or therapy requiring special equipment.
<p><u>Pregnancy:</u> Any period of incapacity due to pregnancy or for prenatal care.</p>
<p><u>Chronic Conditions:</u> Any period of incapacity due to or treatment for a chronic serious health condition, such as diabetes, asthma, migraine headaches. A chronic serious health condition is one which requires visits to a health care provider (or nurse supervised by the provider) at least twice a year and recurs over an extended period of time. A chronic condition may cause episodic rather than a continuing period of incapacity.</p>
<p><u>Permanent or Long-term Conditions:</u> A period of incapacity which is permanent or long-term due to a condition for which treatment may not be effective, but which requires the continuing supervision of a health care provider, such as Alzheimer’s disease or the terminal stages of cancer.</p>
<p><u>Conditions Requiring Multiple Treatments:</u> Restorative surgery after an accident or other injury; or, a condition that would likely result in a period of incapacity of more than three consecutive, full calendar days if the patient did not receive the treatment.</p>

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

If submitted, it is mandatory for employers to retain a copy of this disclosure in their records for three years. 29 U.S.C. § 2616; 29 C.F.R. § 825.500. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. The Department of Labor estimates that it will take an average of 15 minutes for respondents to complete this collection of information, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

DO NOT SEND COMPLETED FORM TO THE DEPARTMENT OF LABOR. RETURN TO THE PATIENT.

**Certification of Health Care Provider for
Family Member's Serious Health Condition
under the Family and Medical Leave Act**

**U.S. Department of Labor
Wage Hour Division**



**DO NOT SEND COMPLETED FORM TO THE DEPARTMENT OF LABOR.
RETURN TO THE PATIENT.**

OMB Control Number: 1235-0003
Expires: 6/30/2023

The Family and Medical Leave Act (FMLA) provides that an employer may require an employee seeking FMLA leave to care for a family member with a serious health condition to submit a medical certification issued by the family member's health care provider. 29 U.S.C. §§ 2613, 2614(c)(3); 29 C.F.R. § 825.305. The employer must give the employee **at least 15 calendar days** to provide the certification. If the employee fails to provide complete and sufficient medical certification, his or her FMLA leave request may be denied. 29 C.F.R. § 825.313. Information about the FMLA may be found [on the WHD website at www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

SECTION I - EMPLOYER

Either the employee or the employer may complete Section I. While use of this form is optional, this form asks the health care provider for the information necessary for a complete and sufficient medical certification, which is set out at 29 C.F.R. § 825.306. **You may not ask the employee to provide more information than allowed under the FMLA regulations, 29 C.F.R. §§ 825.306-825.308.** Additionally, you **may not** request a certification for FMLA leave to bond with a healthy newborn child or a child placed for adoption or foster care.

Employers must generally maintain records and documents relating to medical information, medical certifications, recertifications, or medical histories of employees or employees' family members created for FMLA purposes as confidential medical records in separate files/records from the usual personnel files and in accordance with 29 C.F.R. § 1630.14(c)(1), if the Americans with Disabilities Act applies, and in accordance with 29 C.F.R. § 1635.9, if the Genetic Information Nondiscrimination Act applies.

(1) Employee name: _____
First Middle Last

(2) Employer name: _____ Date: _____ (mm/dd/yyyy)
(List date certification requested)

(3) The medical certification must be returned by _____ (mm/dd/yyyy)
(Must allow at least 15 calendar days from the date requested, unless it is not feasible despite the employee's diligent, good faith efforts.)

SECTION II - EMPLOYEE

Please complete and sign Section II before providing this form to your family member or your family member's health care provider. The FMLA allows an employer to require that you submit a timely, complete, and sufficient medical certification to support a request for FMLA leave due to the serious health condition of your family member. If requested by your employer, your response is required to obtain or retain the benefit of the FMLA protections. 29 U.S.C. §§ 2613, 2614(c)(3). **You are responsible for making sure the medical certification is provided to your employer within the time frame requested, which must be at least 15 calendar days.** 29 C.F.R. §§ 825.305-825.306. Failure to provide a complete and sufficient medical certification may result in a denial of your FMLA leave request. 29 C.F.R. § 825.313.

(1) Name of the family member for whom you will provide care: _____

(2) Select the relationship of the family member to you. The family member is your:
 Spouse Parent Child, under age 18
 Child, age 18 or older and incapable of self-care because of a mental or physical disability

Spouse means a husband or wife as defined or recognized in the state where the individual was married, including in a common law marriage or same-sex marriage. The terms "child" and "parent" include *in loco parentis* relationships in which a person assumes the obligations of a parent to a child. An employee may take FMLA leave to care for an individual who assumed the obligations of a parent to the employee when the employee was a child. An employee may also take FMLA leave to care for a child for whom the employee has assumed the obligations of a parent. No legal or biological relationship is necessary.

Employee Name: _____

(3) Briefly describe the care you will provide to your family member: *(Check all that apply)*

- Assistance with basic medical, hygienic, nutritional, or safety needs Transportation
 Physical Care Psychological Comfort Other: _____

(4) Give your **best estimate** of the amount of leave needed to provide the care described: _____

(5) If a **reduced work schedule** is necessary to provide the care described, give your **best estimate** of the reduced schedule you are able to work. From _____ *(mm/dd/yyyy)* to _____ *(mm/dd/yyyy)*, I am able to work
_____ *(hours per day)* _____ *(days per week)*.

Employee Signature _____ Date _____ *(mm/dd/yyyy)*

SECTION III - HEALTH CARE PROVIDER

Please provide your contact information, complete all relevant parts of this Section, and sign the form below. A family member of your patient has requested leave under the FMLA to care for your patient. The FMLA allows an employer to require that the employee submit a timely, complete, and sufficient medical certification to support a request for FMLA leave to care for a family member with a serious health condition. For FMLA purposes, a "serious health condition" means an illness, injury, impairment, or physical or mental condition that *involves inpatient care or continuing treatment by a health care provider*. For more information about the definitions of a serious health condition under the FMLA, see the chart at the end of the form.

You also may, but are **not required** to, provide other appropriate medical facts including symptoms, diagnosis, or any regimen of continuing treatment such as the use of specialized equipment. Please note that some state or local laws may not allow disclosure of private medical information about the patient's serious health condition, such as providing the diagnosis and/or course of treatment.

Health Care Provider's name: *(Print)* _____

Health Care Provider's business address: _____

Type of practice / Medical specialty: _____

Telephone: (____) _____ Fax: (____) _____ E-mail: _____

PART A: Medical Information

Limit your response to the medical condition for which the employee is seeking FMLA leave. Your answers should be your **best estimate** based upon your medical knowledge, experience, and examination of the patient. **After completing Part A, complete Part B to provide information about the amount of leave needed.** Note: For FMLA purposes, "incapacity" means the inability to work, attend school, or perform regular daily activities due to the condition, treatment of the condition, or recovery from the condition. Do not provide information about genetic tests, as defined in 29 C.F.R. § 1635.3(f), genetic services, as defined in 29 C.F.R. § 1635.3(e), or the manifestation of disease or disorder in the employee's family members, 29 C.F.R. § 1635.3(b).

(1) Patient's Name: _____

(2) State the approximate date the condition started or will start: _____ *(mm/dd/yyyy)*

(3) Provide your **best estimate** of how long the condition lasted or will last: _____

(4) For FMLA to apply, care of the patient must be medically necessary. Briefly describe the type of care needed by the patient *(e.g., assistance with basic medical, hygienic, nutritional, safety, transportation needs, physical care, or psychological comfort)*.

Employee Name: _____

(5) Check the box(es) for the questions below, as applicable. For all box(es) checked, the amount of leave needed must be provided in Part B.

Inpatient Care: The patient (has been / is expected to be) admitted for an overnight stay in a hospital, hospice, or residential medical care facility on the following date(s): _____

Incapacity plus Treatment: (e.g. outpatient surgery, strep throat)

Due to the condition, the patient (has been / is expected to be) incapacitated for *more than three* consecutive, full calendar days from _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy).

The patient (was / will be) seen on the following date(s): _____

The condition (has / has not) also resulted in a course of continuing treatment under the supervision of a health care provider (e.g. prescription medication (other than over-the-counter) or therapy requiring special equipment)

Pregnancy: The condition is pregnancy. List the expected delivery date: _____ (mm/dd/yyyy).

Chronic Conditions: (e.g. asthma, migraine headaches) Due to the condition, it is medically necessary for the patient to have treatment visits at least twice per year.

Permanent or Long Term Conditions: (e.g. Alzheimer's, terminal stages of cancer) Due to the condition, incapacity is permanent or long term and requires the continuing supervision of a health care provider (even if active treatment is not being provided).

Conditions requiring Multiple Treatments: (e.g. chemotherapy treatments, restorative surgery) Due to the condition, it is medically necessary for the patient to receive multiple treatments.

None of the above: If none of the above condition(s) were checked, (i.e., inpatient care, pregnancy) no additional information is needed. Go to page 4 to sign and date the form.

(6) If needed, briefly describe other appropriate medical facts related to the condition(s) for which the employee seeks FMLA leave. (e.g., use of nebulizer, dialysis) _____

PART B: Amount of Leave Needed

For the medical condition(s) checked in Part A, complete all that apply. Several questions seek a response as to the frequency or duration of a condition, treatment, etc. Your answer should be your **best estimate** based upon your medical knowledge, experience, and examination of the patient. Be as specific as you can; terms such as "lifetime," "unknown," or "indeterminate" may not be sufficient to determine if the benefits and protections of the FMLA apply.

(7) Due to the condition, the patient (had / will have) **planned medical treatment(s)** (scheduled medical visits) (e.g. psychotherapy, prenatal appointments) on the following date(s): _____

(8) Due to the condition, the patient (was / will be) **referred to other health care provider(s)** for evaluation or treatment(s).

State the nature of such treatments: (e.g. cardiologist, physical therapy) _____

Provide your **best estimate** of the beginning date _____ (mm/dd/yyyy) and end date _____ (mm/dd/yyyy) for the treatment(s).

Provide your **best estimate** of the duration of the treatment(s), including any period(s) of recovery _____ (e.g. 3 days/week)

Employee Name: _____

- (9) Due to the condition, the patient (was / will be) **incapacitated for a continuous period of time**, including any time for treatment(s) and/or recovery.

Provide your **best estimate** of the beginning date: _____ (mm/dd/yyyy) and end date _____ (mm/dd/yyyy) for the period of incapacity.

- (10) Due to the condition it, (was / is / will be) medically necessary for the employee to be absent from work to provide care for the patient on an **intermittent basis** (periodically), including for any episodes of incapacity i.e., episodic flare-ups. Provide your **best estimate** of how often (frequency) and how long (duration) the episodes of incapacity will likely last.

Over the next 6 months, episodes of incapacity are estimated to occur _____ times per (day / week / month) and are likely to last approximately _____ (hours / days) per episode.

Signature of Health Care Provider _____ Date _____ (mm/dd/yyyy)

Definitions of a Serious Health Condition (See 29 C.F.R. §§ 825.113-.115)

Inpatient Care

- An overnight stay in a hospital, hospice, or residential medical care facility.
- Inpatient care includes any period of incapacity or any subsequent treatment in connection with the overnight stay.

Continuing Treatment by a Health Care Provider (any one or more of the following)

Incapacity Plus Treatment: A period of incapacity of more than three consecutive, full calendar days, and any subsequent treatment or period of incapacity relating to the same condition, that also involves either:

- Two or more in-person visits to a health care provider for treatment within 30 days of the first day of incapacity unless extenuating circumstances exist. The first visit must be within seven days of the first day of incapacity; or,
- At least one in-person visit to a health care provider for treatment within seven days of the first day of incapacity, which results in a regimen of continuing treatment under the supervision of the health care provider. For example, the health provider might prescribe a course of prescription medication or therapy requiring special equipment.

Pregnancy: Any period of incapacity due to pregnancy or for prenatal care.

Chronic Conditions: Any period of incapacity due to or treatment for a chronic serious health condition, such as diabetes, asthma, migraine headaches. A chronic serious health condition is one which requires visits to a health care provider (or nurse supervised by the provider) at least twice a year and recurs over an extended period of time. A chronic condition may cause episodic rather than a continuing period of incapacity.

Permanent or Long-term Conditions: A period of incapacity which is permanent or long-term due to a condition for which treatment may not be effective, but which requires the continuing supervision of a health care provider, such as Alzheimer's disease or the terminal stages of cancer.

Conditions Requiring Multiple Treatments: Restorative surgery after an accident or other injury; or, a condition that would likely result in a period of incapacity of more than three consecutive, full calendar days if the patient did not receive the treatment.

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

If submitted, it is mandatory for employers to retain a copy of this disclosure in their records for three years. 29 U.S.C. § 2616; 29 C.F.R. § 825.500. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. The Department of Labor estimates that it will take an average of 15 minutes for respondents to complete this collection of information, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

DO NOT SEND COMPLETED FORM TO THE DEPARTMENT OF LABOR. RETURN TO THE PATIENT.

**Certification for Military Family Leave for
Qualifying Exigency
under the Family and Medical Leave Act**

**U.S. Department of Labor
Wage and Hour Division**



**DO NOT SEND FORM TO THE DEPARTMENT OF LABOR.
RETURN THE COMPLETED FORM TO THE EMPLOYER.**

OMB Control Number: 1235-0003
Expires: 6/30/2023

The Family and Medical Leave Act (FMLA) provides that eligible employees may take FMLA leave for a qualifying exigency while the employee's spouse, child, or parent (the military member) is on covered active duty or has been notified of an impending call or order to covered active duty. The FMLA allows an employer to require an employee seeking FMLA leave due to a qualifying exigency to submit a certification. 29 U.S.C. §§ 2613, 2614(c)(3). The employer must give the employee **at least 15 calendar days** to provide the certification. 29 C.F.R. § 825.305(b). If the employee fails to provide complete and sufficient certification, the employee's FMLA leave request may be denied. 29 C.F.R. § 825.313. Information about the FMLA may be found [on the WHD website at http://www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

SECTION I - EMPLOYER

Either the employee or the employer may complete Section I. While use of this form is optional, it asks the employee for the information necessary for a complete and sufficient qualifying exigency certification, which is set out at 29 C.F.R. § 825.309. **You may not ask the employee to provide more information than allowed under the FMLA regulations, 29 C.F.R. § 825.309.**

- (1) Employee name: _____
First Middle Last
- (2) Employer name: _____ Date: _____ (mm/dd/yyyy)
(List date certification requested)
- (3) This certification must be returned by _____ (mm/dd/yyyy).
(Must allow at least 15 calendar days from the date requested, unless it is not feasible despite the employee's diligent, good faith efforts.)

SECTION II - EMPLOYEE

Please complete all Parts of Section II and sign the form before returning it to your employer. The FMLA allows an employer to require that you submit a timely, complete, and sufficient certification to support a request for FMLA leave due to a qualifying exigency. If requested by your employer, your response is required to obtain the benefits and protections of the FMLA. 29 C.F.R. § 825.309. Failure to provide a complete and sufficient certification may result in a denial of your FMLA leave request. A complete and sufficient certification to support a request for FMLA leave due to a qualifying exigency includes written documentation confirming a military member's covered active duty or call to covered active duty status. **You are responsible for making sure the certification is provided to your employer within the time frame requested, which must be at least 15 calendar days.** 29 C.F.R. § 825.313.

- (1) Provide the name of the military member on covered active duty or call to covered active duty status:

First Middle Last
- (2) Select your relationship of the military member. The military member is your:
 Spouse Parent Child, of any age

Spouse means a husband or wife as defined or recognized in the state where the individual was married, including a common law marriage or same-sex marriage. The terms "child" and "parent" include *in loco parentis* relationships in which a person assumes the obligations of a parent to a child. An employee may take FMLA leave for a qualifying exigency related a military member who assumed the obligations of a parent to the employee when the employee was a child. An employee may also take FMLA leave for a qualifying exigency related a military member for whom the employee has assumed the obligations of a parent. No legal or biological relationship is necessary.

Employee Name: _____

PART A: COVERED ACTIVE DUTY STATUS

Covered active duty or call to covered active duty in the case of a member of the Regular Armed Forces means duty during the deployment of the member with the Armed Forces to a foreign country. Covered active duty or call to covered active duty in the case of a member of the Reserve components means duty during the deployment of the member with the Armed Forces to a foreign country under a Federal call or order to active duty in support of a contingency operation pursuant to: Section 688 of Title 10 of the United States Code; Section 12301(a) of Title 10 of the United States Code; Section 12302 of Title 10 of the United States Code; Section 12304 of Title 10 of the United States Code; Section 12305 of Title 10 of the United States Code; Section 12406 of Title 10 of the United States Code; chapter 15 of Title 10 of the United States Code; or, any other provision of law during a war or during a national emergency declared by the President or Congress so long as it is in support of a contingency operation. 10 U.S.C. § 101(a)(13)(B).

An employer may require the employee to provide a copy of the military member's active duty orders or other documentation issued by the military which indicates that the military member is on covered active duty or call to covered active duty status, and the dates of the military member's covered active duty service. **This information need only be provided to the employer once, unless additional leave is needed for a different military member or different deployment.**

- (3) Provide the dates of the military member's covered active duty service: _____
- (4) Please check one of the following and attach the indicated written document to support that the military member is on covered active duty or call to covered active duty status:
 - A copy of the military member's covered active duty orders
 - Other documentation from the military indicating that the military member is on covered active duty or has been notified of an impending call to covered active duty, such as official military correspondence from the military member's chain of command
 - I have previously provided my employer with sufficient written documentation confirming the military member's covered active duty or call to covered active duty status

PART B: APPROPRIATE FACTS

Under the FMLA, leave can be taken for a number of qualifying exigencies. 29 C.F.R. § 825.126(b). Complete and sufficient certification to support a request for FMLA leave due to a qualifying exigency includes available written documentation which supports the need for leave such as a copy of a meeting announcement for informational briefings sponsored by the military, a document confirming the military member's Rest and Recuperation leave, or other documentation issued by the military which indicates that the military member has been granted Rest and Recuperation leave, or a document confirming an appointment with a third party (e.g., a counselor or school official, or staff at a care facility, a copy of a bill for services for the handling of legal or financial affairs). Please provide appropriate facts related to the particular qualifying exigency to support the FMLA leave request, including information on the type of qualifying exigency and any available written documentation of the exigency event.

- (5) Select the appropriate **Qualifying Exigency Category** and, if needed, provide additional information related to the event:
 - Short notice deployment (*i.e.*, deployment within seven or fewer days of notice)
 - Military events and related activities (*e.g.*, *official ceremonies or events, or family support and assistance programs*):

 - Childcare related activities for the child of the military member (*e.g.*, *arranging for alternative childcare*):

Employee Name: _____

- Care for the military member's parent (*e.g., admitting or transferring the parent to a new care facility*):

 - Financial and legal arrangements related to the deployment (*e.g., obtaining military identification cards*)
 - Counseling related to the deployment (*i.e., counseling provided by someone other than a health care provider*)
 - Military member's short-term, temporary Rest and Recuperation leave (R&R) (leave for this reason is limited to 15 calendar days for each instance of R&R)
 - Post deployment activities (*e.g., arrival ceremonies, or reintegration briefings and events*): _____
 - Any other event that the employee and employer agree is a qualifying exigency: _____
- (6) **Available written documentation** supporting this request for leave is (attached / not attached / not available).

PART C: AMOUNT OF LEAVE NEEDED

Provide information concerning the amount of leave that will be needed. Several questions in this section seek a response as to the frequency or duration of the qualifying exigency leave needed. Be as specific as you can; terms such as “*unknown*” or “*indeterminate*” may not be sufficient to determine FMLA coverage.

- (7) List the approximate date exigency started or will start: _____ (*mm/dd/yyyy*)
- (8) Provide your best estimate of how long the exigency lasted or will last:
From _____ (*mm/dd/yyyy*) to _____ (*mm/dd/yyyy*)
- (9) Due to a qualifying exigency, I need to work a **reduced schedule**. Provide your **best estimate** of the reduced schedule you are able to work:
From _____ (*mm/dd/yyyy*) to _____ (*mm/dd/yyyy*)
I am able to work _____
(*e.g., 5 hours/day, up to 25 hours a week*)
- (10) Due to a qualifying exigency, I will need to be absent from work for a **continuous period of time**. Provide your **best estimate** of the beginning and ending dates for the period of absence:
From _____ (*mm/dd/yyyy*) to _____ (*mm/dd/yyyy*)

Employee Name: _____

(11) Due to a qualifying exigency, I will need to be absent from work on an **intermittent basis** (periodically).

Provide your **best estimate** of the frequency (how often) and duration (how long) of each appointment, meeting, or leave event, including any travel time.

Over the next 6 months, absences on an **intermittent basis** are estimated to occur: _____ times per
(day / week / month) and are likely to last approximately _____ (hours / days) per episode.

(12) My leave is due to a qualifying exigency that involves **Rest and Recuperation leave** (R & R) of the military member (leave for this reason is limited to 15 calendar days for each instance of R & R leave).

List the dates of the military member's R & R leave:

From _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy)

PART D: THIRD PARTY INFORMATION

If applicable, please provide information below that may be used by your employer to verify meetings or appointments with a third party related to the qualifying exigency. Examples of meetings with third parties include: arranging for childcare or parental care, to attend non-medical counseling, to attend meetings with school, childcare or parental care providers, to make financial or legal arrangements, to act as the military member's representative before a federal, state, or local agency for purposes of obtaining, arranging or appealing military service benefits, or to attend any event sponsored by the military or military service organizations. This information may be used by your employer to verify that the information contained on this form is accurate.

Individual (e.g., name and title) or Entity / Organization: _____

Address: _____

Telephone: (____) _____ Fax: (____) _____ E-mail: _____

Describe purpose of meeting: _____

Employee
Signature _____ Date _____ (mm/dd/yyyy)

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

If submitted, it is mandatory for employers to retain a copy of this disclosure in their records for three years. 29 U.S.C. § 2616; 29 C.F.R. § 825.500. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. The Department of Labor estimates that it will take an average of 15 minutes for respondents to complete this collection of information, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

**DO NOT SEND THE COMPLETED FORM TO THE DEPARTMENT OF LABOR.
RETURN FORM TO THE EMPLOYER.**

**Certification for Serious Injury or Illness of a
Current Servicemember for Military Caregiver Leave
under the Family and Medical Leave Act**

**U.S. Department of Labor
Wage Hour Division**



**DO NOT SEND COMPLETED FORM TO THE DEPARTMENT OF LABOR.
RETURN TO THE PATIENT.**

OMB Control Number: 1235-0003
Expires: 6/30/2023

The Family and Medical Leave Act (FMLA) provides that eligible employees may take FMLA leave to care for a covered servicemember with a serious illness or injury. The FMLA allows an employer to require an employee seeking FMLA leave for this purpose to submit a medical certification. 29 U.S.C. §§ 2613, 2614(c)(3). The employer must give the employee **at least 15 calendar days** to provide the certification. If the employee fails to provide complete and sufficient certification, his or her FMLA leave request may be denied. 29 C.F.R. § 825.313. Information about the FMLA may be found [on the WHD website at www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

SECTION I - EMPLOYER

Either the employee or the employer may complete Section I. While use of this form is optional, it asks the health care provider for the information necessary for a complete and sufficient medical certification. **You may not ask the employee to provide more information than allowed under the FMLA regulations, 29 C.F.R. § 825.310. Recertifications are not allowed for FMLA leave to care for a covered servicemember. Where medical certification is requested by an employer, an employee may not be held liable for administrative delays in the issuance of military documents, despite the employee's diligent, good-faith efforts to obtain such documents.** An employer requiring an employee to submit a certification for leave to care for a covered servicemember **must** accept as sufficient certification invitational travel orders (ITOs) or invitational travel authorizations (ITAs) issued to any family member to join an injured or ill servicemember at the servicemember's bedside. An ITO or ITA is sufficient certification for the duration of time specified in the ITO or ITA.

Employers must generally maintain records and documents relating to medical information, medical certifications, recertifications, or medical histories of employees or employees' family members created for FMLA purposes as confidential medical records in separate files/records from the usual personnel files and in accordance with 29 C.F.R. § 1630.14(c)(1), if the Americans with Disabilities Act applies, and in accordance with 29 C.F.R. § 1635.9, if the Genetic Information Nondiscrimination Act applies.

- (1) Employee name: _____
First Middle Last
- (2) Employer name: _____ Date: _____ (mm/dd/yyyy)
(List date certification requested)
- (3) This certification must be returned by: _____ (mm/dd/yyyy)
(Must allow at least 15 calendar days from the date requested, unless it is not feasible despite the employee's diligent, good faith efforts.)

SECTION II - EMPLOYEE and/or CURRENT SERVICEMEMBER

Please complete all Parts of Section II before having the servicemember's health care provider complete Section III. The FMLA allows an employer to require that an employee submit a timely, complete, and sufficient certification to support a request for FMLA leave due to a serious injury or illness of a covered servicemember. If requested by your employer, your response is required to obtain or retain the benefit of FMLA-protected leave.

PART A: EMPLOYEE INFORMATION

- (1) Name of the current servicemember for whom employee is requesting leave: _____

Employee Name: _____

(2) Select your relationship to the current servicemember. You are the current servicemember's:

- Spouse Parent Child Next of Kin

Spouse means a husband or wife as defined or recognized in the state where the individual was married, including a common law marriage or same-sex marriage. The terms "child" and "parent" include *in loco parentis* relationships in which a person assumes the obligations of a parent to a child. An employee may take FMLA leave to care for a covered servicemember who assumed the obligations of a parent to the employee when the employee was a child. An employee may also take FMLA leave to care for a covered servicemember for whom the employee has assumed the obligations of a parent. No biological or legal relationship is necessary. "Next of kin" is the servicemember's nearest blood relative, other than the spouse, parent, son, or daughter, in the following order of priority: (1) a blood relative as designated in writing by the servicemember for purposes of FMLA leave, (2) blood relatives granted legal custody of the servicemember, (3) brothers and sisters, (4) grandparents, (5) aunts and uncles, and (6) first cousins.

PART B: SERVICEMEMBER INFORMATION AND CARE TO BE PROVIDED TO THE SERVICEMEMBER

(3) The servicemember (is / is not) a current member of the Regular Armed Forces, the National Guard or Reserves. If yes, provide the servicemember's military branch, rank and unit currently assigned to: _____

(4) The servicemember (is / is not) assigned to a military medical treatment facility as an outpatient or to a unit established for the purpose of providing command and control of members of the Armed Forces receiving medical care as outpatients, such as a medical hold or warrior transition unit. If yes, provide the name of the medical treatment facility or unit: _____

(5) The servicemember (is / is not) on the Temporary Disability Retired List (TDRL).

(6) Briefly describe the care you will provide to the servicemember: *(Check all that apply)*

- Assistance with basic medical, hygienic, nutritional, or safety needs
 Psychological Comfort Physical Care
 Transportation Other: _____

(7) Give your **best estimate** of the amount of leave needed to provide the care described: _____

(8) If a reduced work schedule is necessary to provide the care described, give your **best estimate** of the reduced work schedule you are able to work. From _____ (mm/dd/yyyy) to _____ (mm/dd/yyyy), I am able to work: _____ (hours per day) _____ (days per week).

SECTION III - HEALTH CARE PROVIDER

Please provide your contact information, complete all Parts of this Section fully and completely, and sign the form below. The employee listed at Section I has requested leave under the FMLA to care for a family member who is a current member of the Regular Armed Forces, the National Guard, or the Reserves who is undergoing medical treatment, recuperation, or therapy, is otherwise in outpatient status, or is otherwise on the temporary disability retired list for a serious injury or illness. Note: For purposes of FMLA leave, a serious injury or illness is one that was incurred in the line of duty on active duty in the Armed Forces or that existed before the beginning of the member's active duty and was aggravated by service in the line of duty on active duty in the Armed Forces that may render the servicemember medically unfit to perform the duties of the servicemember's office, grade, rank, or rating. "Need for care" includes both physical and psychological care. It includes situations where, for example, due to his or her serious injury or illness, the servicemember is not able to care for his or her own basic medical, hygienic, or nutritional needs or safety, or needs transportation to the doctor. It also includes providing psychological comfort and reassurance which would be beneficial to the servicemember who is receiving inpatient or home

Employee Name: _____

care. A complete and sufficient certification to support a request for FMLA leave due to a current servicemember's serious injury or illness includes written documentation confirming that the servicemember's injury or illness was incurred in the line of duty on active duty or if not, that the current servicemember's injury or illness existed before the beginning of the servicemember's active duty and was aggravated by service in the line of duty on active duty in the Armed Forces, and that the current servicemember is undergoing treatment for such injury or illness by a health care provider listed above.

PART A: HEALTH CARE PROVIDER INFORMATION

Health Care Provider's Name: *(Print)* _____

Health Care Provider's business address: _____

Type of practice/Medical specialty: _____

Telephone: (____) _____ Fax: (____) _____ E-mail: _____

Please select the type of FMLA health care provider you are:

- DOD health care provider
- VA health care provider
- DOD TRICARE network authorized private health care provider
- DOD non-network TRICARE authorized private health care provider
- Health care provider as defined in 29 C.F.R. § 825.125

PART B: MEDICAL INFORMATION

Please provide appropriate medical information of the patient as requested below. Limit your responses to the servicemember's condition for which the employee is seeking leave. If you are unable to make some of the military-related determinations contained below, you are permitted to rely upon determinations from an authorized DOD representative, such as a DOD recovery care coordinator. Do not provide information about genetic tests, as defined in 29 C.F.R. § 1635.3(f), or genetic services, as defined in 29 C.F.R. § 1635.3(e).

(1) Patient's Name: _____

(2) List the approximate date condition started or will start: _____ *(mm/dd/yyyy)*

(3) Provide your **best estimate** of how long the condition will last: _____

(4) The servicemember's injury or illness: *(Select as appropriate)*

- Was incurred in the line of duty on active duty.
- Existed before the beginning of the servicemember's active duty and was aggravated by service in the line of duty on active duty.
- None of the above.

(5) The servicemember (is / is not) undergoing medical treatment, recuperation, or therapy for this condition.

If yes, briefly describe the medical treatment, recuperation or therapy: _____

Employee Name: _____

- (6) The current servicemember's medical condition is classified as: *(Select as appropriate)*
- (VSI) Very Seriously Ill/Injured** Illness/Injury is of such a severity that life is imminently endangered. Family members are requested at bedside immediately. *Please note this is an internal DOD casualty assistance designation used by DOD healthcare providers.*
 - (SI) Seriously Ill/Injured** Illness/injury is of such severity that there is cause for immediate concern, but there is no imminent danger to life. Family members are requested at bedside. *Please note this is an internal DOD casualty assistance designation used by DOD healthcare providers.*
 - OTHER Ill/Injured** A serious injury or illness that may render the servicemember medically unfit to perform the duties of the member's office, grade, rank, or rating.
 - NONE OF THE ABOVE.** *Note to Employee: If this box is checked, you may still be eligible to take leave to care for a covered family member with a "serious health condition" under 29 C.F.R. § 825.113 of the FMLA. If such leave is requested, you may be required to complete DOL FORM WH-380-F or an employer-provided form seeking the same information.*

PART C: AMOUNT OF LEAVE NEEDED

For the medical condition checked in Part B, complete all that apply. Some questions seek a response as to the frequency or duration of a condition, treatment, etc. Your answer should be your **best estimate** based upon your medical knowledge, experience, and examination of the patient. Be as specific as you can; terms such as "lifetime," "unknown," or "indeterminate" may not be sufficient to determine FMLA coverage.

- (7) Due to the condition, the servicemember will need care for a **continuous period of time**, including any time for treatment and recovery. Provide your **best estimate** of the beginning date _____ (mm/dd/yyyy) and end date _____ (mm/dd/yyyy) for this period of time.
- (8) Due to the condition, it is medically necessary for the servicemember to attend **planned medical treatment** appointments (scheduled medical visits). Provide your **best estimate** of the duration of the treatment(s), including any period(s) of recovery _____ (e.g. 3 days/week)
- (9) Due to the condition, it is medically necessary for the servicemember to receive care on an **intermittent basis** (periodically), such as the care needed because of episodic flare-ups of the condition or assisting with the servicemember's recovery. Provide your **best estimate** of how often (frequency) and how long (the duration) the intermittent episodes will likely last.

Over the next 6 months, intermittent care is estimated to occur _____ times per (day / week / month) and are likely to last approximately _____ (hours / days) per episode.

Signature of Health Care Provider _____ Date _____ (mm/dd/yyyy)

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

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DO NOT SEND THE COMPLETED FORM TO THE DEPARTMENT OF LABOR. RETURN IT TO THE PATIENT.

**DO NOT SEND TO THE DEPARTMENT OF LABOR.
PROVIDE TO EMPLOYEE.**

OMB Control Number: 1235-0003

Expires: 6/30/2023

In general, to be eligible to take leave under the Family and Medical Leave Act (FMLA), an employee must have worked for an employer for at least 12 months, meet the hours of service requirement in the 12 months preceding the leave, and work at a site with at least 50 employees within 75 miles. While use of this form is optional, a fully completed Form WH-381 provides employees with the information required by 29 C.F.R. §§ 825.300(b), (c) which must be provided within five business days of the employee notifying the employer of the need for FMLA leave. Information about the FMLA may be found [on the WHD website at www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

Date: _____ (mm/dd/yyyy)

From: _____ (Employer) To: _____ (Employee)

On _____ (mm/dd/yyyy), we learned that you need leave (beginning on) _____ (mm/dd/yyyy)
for one of the following reasons: (Select as appropriate)

- The birth of a child, or placement of a child with you for adoption or foster care, and to bond with the newborn or newly-placed child
- Your own serious health condition
- You are needed to care for your family member due to a serious health condition. Your family member is your:
 - Spouse
 - Parent
 - Child under age 18
 - Child 18 years or older and incapable of self-care because of a mental or physical disability
- A qualifying exigency arising out of the fact that your family member is on covered active duty or has been notified of an impending call or order to covered active duty status. Your family member on covered active duty is your:
 - Spouse
 - Parent
 - Child of any age
- You are needed to care for your family member who is a covered servicemember with a serious injury or illness. You are the servicemember's:
 - Spouse
 - Parent
 - Child
 - Next of kin

Spouse means a husband or wife as defined or recognized in the state where the individual was married, including in a common law marriage or same-sex marriage. The terms "child" and "parent" include *in loco parentis* relationships in which a person assumes the obligations of a parent to a child. An employee may take FMLA leave to care for an individual who assumed the obligations of a parent to the employee when the employee was a child. An employee may also take FMLA leave to care for a child for whom the employee has assumed the obligations of a parent. No legal or biological relationship is necessary.

SECTION I – NOTICE OF ELIGIBILITY

This Notice is to inform you that you are:

- Eligible** for FMLA leave. (See Section II for any Additional Information Needed and Section III for information on your Rights and Responsibilities.)
- Not eligible** for FMLA leave because: (Only one reason need be checked)
 - You have not met the FMLA's 12-month length of service requirement. As of the first date of requested leave, you will have worked approximately: _____ towards this requirement.
(months)
 - You have not met the FMLA's 1,250 hours of service requirement. As of the first date of requested leave, you will have worked approximately: _____ towards this requirement.
(hours of service)

Employee Name: _____

- You are an airline flight crew employee and you have not met the special hours of service eligibility requirements for airline flight crew employees as of the first date of requested leave (i.e., worked or been paid for at least 60% of your applicable monthly guarantee, and worked or been paid for at least 504 duty hours.)
- You do not work at and/or report to a site with 50 or more employees within 75-miles as of the date of your request.

If you have any questions, please contact: _____ (Name of employer representative)
at _____ (Contact information).

SECTION II – ADDITIONAL INFORMATION NEEDED

As explained in Section I, you meet the eligibility requirements for taking FMLA leave. Please review the information below to determine if additional information is needed in order for us to determine whether your absence qualifies as FMLA leave. Once we obtain any additional information specified below we will inform you, **within 5 business days**, whether your leave will be designated as FMLA leave and count towards the FMLA leave you have available. **If complete and sufficient information is not provided in a timely manner, your leave may be denied.**

(Select as appropriate)

- No additional information requested. If no additional information requested, go to Section III.
- We request that the leave be supported by a certification, as identified below.
 - Health Care Provider for the Employee
 - Health Care Provider for the Employee's Family Member
 - Qualifying Exigency
 - Serious Illness or Injury (Military Caregiver Leave)

Selected certification form is attached / not attached.

If requested, medical certification must be returned by _____ (mm/dd/yyyy) (Must allow at least 15 calendar days from the date the employer requested the employee to provide certification, unless it is not feasible despite the employee's diligent, good faith efforts.)

- We request that you provide reasonable documentation or a statement to establish the relationship between you and your family member, including *in loco parentis* relationships (as explained on page one). The information requested must be returned to us by _____ (mm/dd/yyyy). You may choose to provide a simple statement of the relationship or provide documentation such as a child's birth certificate, a court document, or documents regarding foster care or adoption-related activities. Official documents submitted for this purpose will be returned to you after examination.

- Other information needed (e.g. documentation for military family leave): _____
The information requested must be returned to us by _____ (mm/dd/yyyy).

If you have any questions, please contact: _____ (Name of employer representative)
at _____ (Contact information).

SECTION III – NOTICE OF RIGHTS AND RESPONSIBILITIES

Part A: FMLA Leave Entitlement

You have a right under the FMLA to take unpaid, job-protected FMLA leave in a 12-month period for certain family and medical reasons, including up to **12 weeks** of unpaid leave in a 12-month period for the birth of a child or placement of a child for adoption or foster care, for leave related to your own or a family member's serious health condition, or for certain qualifying exigencies related to the deployment of a military member to covered active duty. You also have a right

Employee Name: _____

under the FMLA to take up to **26 weeks** of unpaid, job-protected FMLA leave in a single 12-month period to care for a covered servicemember with a serious injury or illness (*Military Caregiver Leave*).

The 12-month period for FMLA leave is calculated as: (*Select as appropriate*)

- The calendar year (January 1st - December 31st)
- A fixed leave year based on _____
(*e.g., a fiscal year beginning on July 1 and ending on June 30*)
- The 12-month period measured forward from the date of your first FMLA leave usage.
- A “rolling” 12-month period measured backward from the date of any FMLA leave usage. (*Each time an employee takes FMLA leave, the remaining leave is the balance of the 12 weeks not used during the 12 months immediately before the FMLA leave is to start.*)

If applicable, the single 12-month period for *Military Caregiver Leave* started on _____ (*mm/dd/yyyy*).

You (*are* / *are not*) **considered a key employee** as defined under the FMLA. Your FMLA leave cannot be denied for this reason; however, we may not restore you to employment following FMLA leave if such restoration will cause substantial and grievous economic injury to us.

We (*have* / *have not*) determined that restoring you to employment at the conclusion of FMLA leave will cause substantial and grievous economic harm to us. Additional information will be provided separately concerning your status as key employee and restoration.

Part B: Substitution of Paid Leave – When Paid Leave is Used at the Same Time as FMLA Leave

You have a right under the FMLA to request that your accrued paid leave be substituted for your FMLA leave. This means that you can request that your accrued paid leave run concurrently with some or all of your unpaid FMLA leave, provided you meet any applicable requirements of our leave policy. Concurrent leave use means the absence will count against both the designated paid leave and unpaid FMLA leave at the same time. If you do not meet the requirements for taking paid leave, you remain entitled to take available unpaid FMLA leave in the applicable 12-month period. Even if you do not request it, the FMLA allows us to require you to use your available sick, vacation, or other paid leave during your FMLA absence.

(*Check all that apply*)

- Some or all of your FMLA leave will not be paid.** Any unpaid FMLA leave taken will be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- You have requested to use some or all of your available paid leave** (*e.g., sick, vacation, PTO*) during your FMLA leave. Any paid leave taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- We are requiring you to use some or all of your available paid leave** (*e.g., sick, vacation, PTO*) during your FMLA leave. Any paid leave taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- Other:** (*e.g., short- or long-term disability, workers' compensation, state medical leave law, etc.*) _____
Any time taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.

The applicable conditions for use of paid leave include: _____.

For more information about conditions applicable to sick/vacation/other paid leave usage please refer to _____
_____ available at: _____.

Employee Name: _____

Part C: Maintain Health Benefits

Your health benefits must be maintained during any period of FMLA leave under the same conditions as if you continued to work. During any paid portion of FMLA leave, your share of any premiums will be paid by the method normally used during any paid leave. During any unpaid portion of FMLA leave, you must continue to make any normal contributions to the cost of the health insurance premiums. To make arrangements to continue to make your share of the premium payments on your health insurance while you are on any unpaid FMLA leave, contact _____ at _____.

You have a minimum grace period of (30-days or _____ *indicate longer period, if applicable*) in which to make premium payments. If payment is not made timely, your group health insurance may be cancelled, provided we notify you in writing at least 15 days before the date that your health coverage will lapse, or, at our option, we may pay your share of the premiums during FMLA leave, and recover these payments from you upon your return to work.

You may be required to reimburse us for our share of health insurance premiums paid on your behalf during your FMLA leave if you do not return to work following **unpaid** FMLA leave for a reason other than: the continuation, recurrence, or onset of your or your family member's serious health condition which would entitle you to FMLA leave; or the continuation, recurrence, or onset of a covered servicemember's serious injury or illness which would entitle you to FMLA leave; or other circumstances beyond your control.

Part D: Other Employee Benefits

Upon your return from FMLA leave, your other employee benefits, such as pensions or life insurance, must be resumed in the same manner and at the same levels as provided when your FMLA leave began. To make arrangements to continue your employee benefits while you are on FMLA leave, contact _____ at _____.

Part E: Return-to-Work Requirements

You must be reinstated to the same or an equivalent job with the same pay, benefits, and terms and conditions of employment on your return from FMLA-protected leave. An equivalent position is one that is virtually identical to your former position in terms of pay, benefits, and working conditions. At the end of your FMLA leave, all benefits must also be resumed in the same manner and at the same level provided when the leave began. You do not have return-to-work rights under the FMLA if you need leave beyond the amount of FMLA leave you have available to use.

Part F: Other Requirements While on FMLA Leave

While on leave you (will be / will not be) required to furnish us with periodic reports of your status and intent to return to work every _____.

(Indicate interval of periodic reports, as appropriate for the FMLA leave situation).

If the circumstances of your leave change and you are able to return to work earlier than expected, you will be required to notify us at least two workdays prior to the date you intend to report for work.

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

It is mandatory for employers to provide employees with notice of their eligibility for FMLA protection and their rights and responsibilities. 29 U.S.C. § 2617; 29 C.F.R. § 825.300(b), (c). It is mandatory for employers to retain a copy of this disclosure in their records for three years. 29 U.S.C. § 2616; 29 C.F.R. § 825.500. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. The Department of Labor estimates that it will take an average of 10 minutes for respondents to complete this collection of information, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

DO NOT SEND THE COMPLETED FORM TO THE DEPARTMENT OF LABOR. EMPLOYEE INFORMATION.

**DO NOT SEND TO THE DEPARTMENT OF LABOR.
PROVIDE TO EMPLOYEE.**

OMB Control Number: 1235-0003

Expires: 6/30/2023

Leave covered under the Family and Medical Leave Act (FMLA) must be designated as FMLA-protected and the employer must inform the employee of the amount of leave that will be counted against the employee's FMLA leave entitlement. In order to determine whether leave is covered under the FMLA, the employer may request that the leave be supported by a certification. If the certification is incomplete or insufficient, the employer must state in writing what additional information is necessary to make the certification complete and sufficient. While use of this form is optional, a fully completed Form WH-382 provides employees with the information required by 29 C.F.R. §§ 825.300(d), 825.301, and 825.305(c), which must be provided within five business days of the employer having enough information to determine whether the leave is for an FMLA-qualifying reason. Information about the FMLA may be found [on the WHD website at www.dol.gov/agencies/whd/fmla](http://www.dol.gov/agencies/whd/fmla).

SECTION I - EMPLOYER

The employer is responsible in **all** circumstances for designating leave as FMLA-qualifying and giving notice to the employee. Once an eligible employee communicates a need to take leave for an FMLA-qualifying reason, an employer may not delay designating such leave as FMLA leave, and neither the employee nor the employer may decline FMLA protection for that leave.

Date: _____ (mm/dd/yyyy)

From: _____ (Employer) To: _____ (Employee)

On _____ (mm/dd/yyyy) we received your most recent information to support your need for leave due to:
(Select as appropriate)

- The birth of a child, or placement of a child with you for adoption or foster care, and to bond with the newborn or newly-placed child
- Your own serious health condition
- The serious health condition of your spouse, child, or parent
- A qualifying exigency arising out of the fact that your spouse, child, or parent is on covered active duty or has been notified of an impending call or order to covered active duty with the Armed Forces
- A serious injury or illness of a covered servicemember where you are the servicemember's spouse, child, parent, or next of kin (Military Caregiver Leave)

We have reviewed information related to your need for leave under the FMLA along with any supporting documentation provided and decided that your FMLA leave request is: (Select as appropriate)

- Approved.** All leave taken for this reason will be designated as FMLA leave. Go to Section III for more information.
- Not Approved:** (Select as appropriate)
 - The FMLA does not apply to your leave request.
 - As of the date the leave is to start, you do not have any FMLA leave available to use.
 - Other _____
- Additional information** is needed to determine if your leave request qualifies as FMLA leave. (Go to Section II for the specific information needed. If your FMLA leave request is approved and no additional information is needed, go to Section III.)

SECTION II – ADDITIONAL INFORMATION NEEDED

We need additional information to determine whether your leave request qualifies under the FMLA. Once we obtain the additional information requested, we will inform you **within 5 business days** if your leave will or will not be designated as FMLA leave and count towards the amount of FMLA leave you have available. **Failure to provide the additional information as requested may result in a denial of your FMLA leave request.**

If you have any questions, please contact: _____ at _____
(Name of employer FMLA representative) (Contact information)

Incomplete or Insufficient Certification

The certification you have provided is incomplete and/or insufficient to determine whether the FMLA applies to your leave request.
(Select as applicable)

- The certification provided is incomplete and we are unable to determine whether the FMLA applies to your leave request. "Incomplete" means one or more of the applicable entries on the certification have not been completed.

Employee Name: _____

- The certification provided is insufficient to determine whether the FMLA applies to your leave request. “Insufficient” means the information provided is vague, unclear, ambiguous or non-responsive.

Specify the information needed to make the certification complete and/or sufficient: _____

You must provide the requested information no later than (provide at least 7 calendar days) _____ (mm/dd/yyyy), unless it is not practicable under the particular circumstances despite your diligent good faith efforts, or your leave may be denied.

Second and Third Opinions

- We request that you obtain a (second / third opinion) medical certification at our expense, and we will provide further details at a later time. Note: The employee or the employee’s family member may be requested to authorize the health care provider to release information pertaining only to the serious health condition at issue.

SECTION III – FMLA LEAVE APPROVED

As explained in Section I, your FMLA leave request is approved. All leave taken for this reason will be designated as FMLA leave and will count against the amount of FMLA leave you have available to use in the applicable 12-month period. The FMLA requires that you notify us as soon as practicable if the dates of scheduled leave change, are extended, or were initially unknown. Based on the information you have provided to date, we are providing the following information about the amount of time that will be counted against the total **amount of FMLA leave** you have available to use in the applicable 12-month period: (Select as appropriate)

- Provided there is no change from your **anticipated FMLA leave schedule**, the following number of hours, days, or weeks will be counted against your leave entitlement: _____.
- Because the leave you will need will be **unscheduled**, it is not possible to provide the hours, days, or weeks that will be counted against your FMLA entitlement at this time. You have the right to request this information once in a 30-day period (if leave was taken in the 30-day period).

Please be advised: (check all that apply)

- Some or all of your FMLA leave will not be paid.** Any unpaid FMLA leave taken will be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- Based on your request, some or all of your available paid leave** (e.g., sick, vacation, PTO) **will be used during your FMLA leave.** Any paid leave taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- We are requiring you to use some or all of your available paid leave** (e.g., sick, vacation, PTO) **during your FMLA leave.** Any paid leave taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.
- Other:** _____
(e.g., Short- or long-term disability, workers’ compensation, state medical leave law, etc.) Any time taken for this reason will also be designated as FMLA leave and counted against the amount of FMLA leave you have available to use in the applicable 12-month period.

Return-to-work requirements. To be restored to work after taking FMLA leave, you (will be / will not be) required to provide a certification from your health care provider (fitness-for-duty certification) that you are able to resume work. This request for a fitness-for-duty certification is *only* with regard to the particular serious health condition that caused your need for FMLA leave. **If such certification is not timely received, your return to work may be delayed until the certification is provided.**

A list of the essential functions of your position (is / is not) attached. If attached, the fitness-for-duty certification must address your ability to perform the essential job functions.

PAPERWORK REDUCTION ACT NOTICE AND PUBLIC BURDEN STATEMENT

It is mandatory for employers to inform employees in writing whether leave requested under the FMLA has been determined to be covered under the FMLA. 29 U.S.C. § 2617; 29 C.F.R. § 825.300(d), (e). It is mandatory for employers to retain a copy of this disclosure in their records for three years. 29 U.S.C. § 2616; 29 C.F.R. § 825.500. Persons are not required to respond to this collection of information unless it displays a currently valid OMB control number. The Department of Labor estimates that it will take an average of 10 minutes for respondents to complete this collection of information, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding this burden estimate or any other aspect of this collection information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S-3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

DO NOT SEND THE COMPLETED FORM TO THE DEPARTMENT OF LABOR. EMPLOYEE INFORMATION.

RELEASE FORM
(For Child Age 6 to Not Attend School)

The undersigned, being first duly sworn, states upon oath as follows:

I am the parent or guardian of _____ (Child's name). The Child's date of birth is _____. The Child has or will reach the age of six prior to January 1 of the current school year, but will not reach age seven prior to January 1 of the current school year.

I elect to not enroll the Child in an accredited school this school year and hereby affirm (check or initial appropriate exception for attendance):

_____ the Child is participating in an education program that the parent or guardian believes will prepare the child to enter grade one for the following school year; or

_____ the parent or guardian intends for the Child to participate in a school which has elected or will elect pursuant to law not to meet accreditation or approval requirements and the parent or guardian intends to provide the Commissioner of Education with a statement pursuant to section 79-1601(3) on or before the child's seventh birthday.

Dated this ____ day of _____, 20__.

Parent or Guardian

Disenroll to Attend Homeschool

I am the parent or guardian of _____ (Child's name).

I elect to disenroll the Child from an accredited school this school year and hereby affirm _that I intend for the Child to participate in a school which has elected or will elect pursuant to law not to meet accreditation or approval requirements (a homeschool) and will provide the Commissioner of Education with a statement confirming such homeschool status.

Parent or Guardian

Date



NEBRASKA WITHDRAWAL FROM MANDATORY ATTENDANCE FORM

_____, _____, _____ submitted a written request to
 Requester's Name Address City
 _____, _____, alleging that he/she was a
 District Name District Code
 person with legal or actual charge or control of _____, with the child's
 Child's First Name Child's Middle Name Child's Last Name
 date of birth being ____/____/____, and having a NDE Student ID _____, and that said child be withdrawn
 Month/Day/Year ID #
 from school under the provisions of section 79-202 of the Nebraska Reissue Revised Statutes. Said child currently
 attends _____.
 School of Attendance Name School of Attendance Code

An exit interview was conducted on ____ day of _____, 20____, with the following being present:
 Day Month Year

 First and Last Name of Person Making Written Request with Legal or Actual Control of Child

 First and Last Name of Child (May be Left Blank if Reason is Illness)

 First and Last Name of Principal or Designee if Child is Currently Enrolled in District

 First and Last Name(s) of Other Persons Present and their Relationship to the Child

 First and Last Name of Superintendent or Designee

_____ presented evidence that (a) the person has legal or actual charge or control of the
 Name of Person Making Request
 child and (b) the child would be withdrawing due to:

- (i) financial hardships requiring the child to be employed to support the child's family or one or more dependents of the child, or
- (ii) an illness of the child making attendance impossible or impracticable.

All known alternative educational opportunities, including vocational courses of study, that are available to the child in the school district and how withdrawing from school is likely to reduce potential future earnings for the child and increase the likelihood of the child being unemployed in the future were presented and discussed.

I, being the person making the written request to withdraw the child, hereby affixes my signature representing that I attended said exit interview, all of the requirements having been presented and discussed, and I agree to the withdrawal of the child.

 Signature of Requester Signature of Child (May be left blank if Reason is Illness)

My signature below acknowledges that the exit interview was held, the required information was provided and discussed at the interview, and, that in my opinion, based upon the evidence presented at the exit interview, the person making the written request does in fact have legal or actual charge or control of the child, and the child is experiencing:

- (a) financial hardships requiring the child to be employed to support the child's family or one or more dependents of the child, or
- (b) an illness of the child making attendance impossible or impracticable.

 Superintendent's or Designee's Signature Date of Signature

79-202. (1) A person who has legal or actual charge or control of a child who is at least sixteen years of age but less than eighteen years of age may withdraw such child from school before graduation and be exempt from the mandatory attendance requirements of section 79-201 if an exit interview is conducted and the withdrawal form is signed as required by subsections (2) through (5) of this section for a child enrolled in a public, private, denominational, or parochial school or if a signed notarized release form is filed with the Commissioner of Education as required by subsection (6) of this section for a child enrolled in a school that elects pursuant to section 79-1601 not to meet accreditation or approval requirements.

(2) Upon the written request of any person who has legal or actual charge or control of a child who is at least sixteen years of age but less than eighteen years of age, the superintendent of a school district or the superintendent's designee shall conduct an exit interview if the child (a) is enrolled in a school operated by the school district or (b) resides in the school district and is enrolled in a private, denominational, or parochial school.

(3) The superintendent or the superintendent's designee shall set the time and place for the exit interview which shall be personally attended by: (a) The child, unless the withdrawal is being requested due to an illness of the child making attendance at the exit interview impossible or impracticable; (b) the person who has legal or actual charge or control of the child who requested the exit interview; (c) the superintendent or the superintendent's designee; (d) the child's principal or the principal's designee if the child at the time of the exit interview is enrolled in a school operated by the school district; and (e) any other person requested by any of the required parties who agrees to attend the exit interview and is available at the time designated for the exit interview which may include, but need not be limited to, other school district personnel or the child's principal or such principal's designee if the child is enrolled in a private, denominational, or parochial school.

(4) At the exit interview, the person making the written request pursuant to subsection (2) of this section shall present evidence that (a) the person has legal or actual charge or control of the child and (b) the child would be withdrawing due to either (i) financial hardships requiring the child to be employed to support the child's family or one or more dependents of the child or (ii) an illness of the child making attendance impossible or impracticable. The superintendent or superintendent's designee shall identify all known alternative educational opportunities, including vocational courses of study, that are available to the child in the school district and how withdrawing from school is likely to reduce potential future earnings for the child and increase the likelihood of the child being unemployed in the future. Any other relevant information may be presented and discussed by any of the parties in attendance.

(5)(a) At the conclusion of the exit interview, the person making the written request pursuant to subsection (2) of this section may sign the withdrawal form provided by the school district agreeing to the withdrawal of the child or may rescind the written request for the withdrawal. (b) Any withdrawal form signed by the person making the written request pursuant to subsection (2) of this section shall be valid only if (i) the child signs the form unless the withdrawal is being requested due to an illness of the child making attendance at the exit interview impossible or impracticable and (ii) the superintendent or superintendent's designee signs the form acknowledging that the interview was held, the required information was provided and discussed at the interview, and, in the opinion of the superintendent or the superintendent's designee, the person making the written request pursuant to subsection (2) of this section does in fact have legal or actual charge or control of the child and the child is experiencing either (A) financial hardships requiring the child to be employed to support the child's family or one or more dependents of the child or (B) an illness making attendance impossible or impracticable.

(6) A person who has legal or actual charge or control of the child who is at least sixteen years of age but less than eighteen years of age may withdraw such a child before graduation and be exempt from the mandatory attendance requirements of section 79-201 if such child has been enrolled in a school that elects pursuant to section 79-1601 not to meet the accreditation or approval requirements by filing with the State Department of Education a signed notarized release on a form prescribed by the Commissioner of Education.

(7) A child who has been withdrawn from school pursuant to this section may enroll in a school district at a later date as provided in section 79-215 or may enroll in a private, denominational, or parochial school or a school which elects pursuant to section 79-1601 not to meet accreditation or approval requirements. Any such enrollment shall void the withdrawal form previously entered, and the provisions of sections 79-201 to 79-210 shall apply to the child.

(8) The Commissioner of Education shall prescribe the required form for withdrawals pursuant to this section and determine and direct either that (a) withdrawal forms of school districts for any child who is withdrawn from school pursuant to this section and subdivision (3)(c) of section 79-201 shall be provided annually to the State Department of Education or (b) data regarding such students shall be collected under subsection (2) of section 79-528.

Students (& Employees)Anti-discrimination, Anti-harassment, and Anti-retaliation**A. Elimination of Discrimination.**

The [Name] Public School District hereby gives this statement of compliance and intends to comply with all state and federal laws prohibiting discrimination. This school district intends to take any necessary measures to assure compliance with such laws against any prohibited form of discrimination.

The [Name] Public School District does not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following persons have been designated to handle inquiries regarding the non-discrimination policies:

Students: [Name of Director], Director of Student Services [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Employees and Others: [Name of Director], Human Resources Director [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Complaints or concerns involving discrimination or needs for accommodation or access should be addressed to the appropriate Coordinator. For further information about anti-discrimination laws and regulations, or to file a complaint of discrimination with the Office for Civil Rights in the U.S. Department of Education (OCR), please contact OCR at One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, Missouri 64106, (816) 268-0550 (voice), Fax (816) 268-0599, (800) 877-8339 (telecommunications device for the deaf), or ocr.kansascity@ed.gov.

B. Prohibited Harassment, Discrimination, and Retaliation of Employees, Students and Others.**1. Purpose:**

The [Name] Public School District is committed to offering employment and educational opportunity to its employees and students in a climate free of discrimination. Accordingly, unlawful discrimination, harassment and retaliation of any kind by District employees, including, co-workers, non-employees (such as volunteers), third parties, and others is strictly prohibited and will not be tolerated.

Harassment is a form of discrimination and includes verbal, non-verbal, written, graphic, or physical conduct relating to a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, that is sufficiently serious to deny, interfere with, or limit a person's ability to participate in or benefit from an educational or work program or activity, including, but not limited to:

- a. Conduct that is sufficiently severe or pervasive to create an intimidating, hostile, or abusive educational or work environment, or
- b. Requiring an individual to endure the offensive conduct as a condition of continued employment or educational programs or activities, including the receipt of aids, benefits, and services.

Educational programs and activities include all academic, educational, extracurricular, athletic, and other programs of the school, whether those programs take place in a school's facilities, on a school bus, at a class or training program sponsored by the school at another location, or elsewhere.

Discriminatory harassment because of a person's sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status, may include, but is not limited to:

- a. Name-calling,
- b. Teasing or taunting,
- c. Insults, slurs, or derogatory names or remarks,
- d. Demeaning jokes,
- e. Inappropriate gestures,
- f. Graffiti or inappropriate written or electronic material,
- g. Visual displays, such as cartoons, posters, or electronic images,
- h. Threats or intimidating or hostile conduct,
- i. Physical acts of aggression, assault, or violence, or
- j. Criminal offenses

The following examples are additional or more specific examples of conduct that may constitute sexual harassment:

- a. Unwelcome sexual advances or propositions,
- b. Requests or pressure for sexual favors,
- c. Comments about an individual's body, sexual activity, or sexual attractiveness,
- d. Physical contact or touching of a sexual nature, including touching intimate body parts and inappropriate patting, pinching, rubbing, or brushing against another's body,
- e. Physical sexual acts of aggression, assault, or violence, including criminal offenses (such as rape, sexual assault or battery, and sexually motivated stalking), against a person's will or where a person is incapable of giving consent due to the victim's age, intellectual disability, or use of drugs or alcohol,
- f. Requiring sexual favors or contact in exchange for aids, benefits, or services, such as grades, awards, privileges, promotions, etc., or
- g. Gender-based harassment; acts of verbal, nonverbal, written, graphic, or physical conduct based on sex or sex-stereotyping, but not involving conduct of a sexual nature.

If the District knows or reasonably should know about possible harassment, including violence, the District will conduct a prompt, adequate, reliable, thorough, and impartial investigation to determine whether unlawful harassment occurred (see section entitled “Grievance Procedures,” below), and take appropriate interim measures, if necessary. If the District determines that unlawful harassment occurred, the District will take prompt and effective action to eliminate the harassment, prevent its recurrence, and remedy its effects, if appropriate. If harassment or violence that occurs off school property creates a hostile environment at school, the District will follow this policy and grievance procedure, within the scope of its authority.

All District employees are expected to take prompt and appropriate actions to report and prevent discrimination, harassment, and retaliation by others. Employees who witness or become aware of possible discrimination, including harassment and retaliation, must immediately report the conduct to his or her supervisor or the compliance coordinator designated to handle complaints of discrimination (designated compliance coordinator).

2. Anti-retaliation:

The District prohibits retaliation, intimidation, threats, coercion, or discrimination against any person for opposing discrimination, including harassment, or for participating in the District's discrimination complaint process or making a complaint, testifying, assisting, or participating in any manner, in an investigation, proceeding, or hearing. Retaliation is a form of discrimination.

The District will take immediate steps to stop retaliation and prevent its recurrence against the alleged victim and any person associated with the alleged victim. These steps will include, but are not limited to, notifying students, employees, and others, that they are protected from retaliation, ensuring that they know how to report future complaints, and initiating follow-up contact with the complainant to determine if any additional acts of discrimination, harassment, or retaliation have occurred. If retaliation occurs, the District will take prompt and strong responsive action, including possible discipline, including expulsion or termination, if applicable.

3. Grievance (or Complaint) Procedures:

Employees or students should initially report all instances of discrimination, harassment or retaliation to their immediate supervisor or teacher or to the compliance coordinator designated to handle complaints of discrimination (designated coordinator). If the employee or student is uncomfortable in presenting the problem to the supervisor or teacher, or if the supervisor or teacher is the problem, the employee or student may report the alleged discrimination, harassment or retaliation (“discrimination”) to the designated coordinator, or in the case of students, to another staff person (such as a counselor or principal).

Other individuals may report alleged discrimination to the designated coordinator. If the designated coordinator is the person alleged to have committed the discriminatory act, then the complaint should be submitted to the Superintendent for assignment. A discrimination complaint form is attached to this grievance procedure and is available in the office of each District building, on the District's website, and from the designated coordinators.

Under no circumstances will a person filing a complaint or grievance involving discrimination be retaliated against for filing the complaint or grievance.

i. Level 1 (Investigation and Findings):

Once the District receives a grievance, complaint or report alleging discrimination, harassment, or retaliation, or becomes aware of possible discriminatory conduct, the District will conduct a prompt, adequate, reliable, thorough, and impartial investigation to determine whether unlawful harassment occurred. If necessary, the District will take immediate, interim action or measures to protect the alleged victim and prevent further potential discrimination, harassment, or retaliation during the pending investigation. The alleged victim will be notified of his or her options to avoid contact with the alleged harasser, such as changing a class or prohibiting the alleged harasser from having any contact with the alleged victim pending the result of the District's investigation. The District will minimize any burden on the alleged victim when taking interim measures to protect the alleged victim.

The District will promptly investigate all complaints of discrimination, even if an outside entity or law enforcement agency is investigating a complaint involving the same facts and allegations. The District will not wait for the conclusion or outcome of a criminal investigation or proceeding to begin an investigation required by this grievance procedure. If the allegation(s) involve possible criminal conduct, the District will notify the complainant of his or her right to file a criminal complaint, and District employees will not dissuade the complainant from filing a criminal complaint either during or after the District's investigation.

The District will aim to complete its investigation within **ten (10) working days** after receiving a complaint or report, unless extenuating circumstances exist. Extenuating circumstances may include the unavailability of witnesses due to illness or incapacitation, or additional time needed because of the complexity of the investigation, the need for outside experts to evaluate the evidence (such as forensic evidence), or multiple complainants or victims. If extenuating circumstances exist, the extended timeframe to complete the investigation will **not exceed ten (10) additional working days without the consent of the complainant, unless the alleged victim agrees to a longer timeline.** Periodic status updates will be given to the parties, when appropriate.

The District's investigation will include, but is not limited to:

- a. Providing the parties with the opportunity to present witnesses and provide evidence.
- b. An evaluation of all relevant information and documentation relating to the alleged discriminatory conduct.
- c. For allegations involving harassment, some of the factors the District will consider include: 1) the nature of the conduct and whether the conduct was unwelcome, 2) the surrounding circumstances, expectations, and relationships, 3) the degree to which the conduct affected one or more students' education, 4) the type, frequency, and duration of the conduct, 5) the identity of and relationship between the alleged harasser and the suspect or suspects of the harassment, 6) the number of individuals

involved, 7) the age (and sex, if applicable) of the alleged harasser and the alleged victim(s) of the harassment, 8) the location of the incidents and the context in which they occurred, 9) the totality of the circumstances, and 10) other relevant evidence.

- d. A review of the evidence using a “preponderance of the evidence” standard (based on the evidence, is it more likely than not that discrimination, harassment, or retaliation occurred?)

The designated compliance coordinator (or designated investigator) will complete an investigative report, which will include:

- a. A summary of the facts,
- b. Findings regarding whether discrimination, harassment or other inappropriate conduct occurred, and
- c. If a finding is made that discrimination, harassment or other inappropriate conduct occurred, the recommended remedy or remedies necessary to eliminate discrimination, harassment or other inappropriate conduct.

If someone other than the designated compliance coordinator conducted the investigation, the compliance coordinator will review, approve, and sign the investigative report. The District will ensure that prompt, appropriate, and effective remedies are provided if a finding of discrimination, harassment, or retaliation is made. The District will maintain relevant documentation obtained during the investigation and documentation supportive of the findings and any subsequent determinations, including the investigative report, witness statements, interview summaries, and any transcripts or audio recordings, pertaining to the investigative and appeal proceedings.

The District will send concurrently to the parties written notification of the decision (findings and any remedy) regarding the complaint within **one (1) working day** after the investigation is completed. The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. § 11232g; 34 C.F.R. Part 99, permits the District to disclose relevant information to a student who was discriminated against or harassed.

ii. Level 2 (Appeal to the Superintendent):

If a party is not satisfied with the findings or remedies (or both) set forth in the decision, he or she may file an appeal in writing with the Superintendent within **five (5) working days** after receiving the decision. The Superintendent will review the appeal and the investigative documentation and decision, conduct additional investigation, if necessary, and issue a written determination about the appeal **within ten (10) working days** after receiving the appeal. The party who filed the appeal will be sent the Superintendent’s determination at the time it is issued, and a copy will be sent to the designated compliance coordinator. [If the Superintendent is the subject of the complaint, the party will file the appeal directly with the Board.]

iii. Level 3 (Appeal to the Board):

If the party is not satisfied with the Superintendent’s determination, he or she may file an appeal in writing with the Board of Education **within five (5) working days** after receiving the Superintendent’s determination. The Board of Education will review the appeal, the Superintendent’s determination, the investigative documentation and decision,

and allow the party to address the Board at a Board meeting to present his or her appeal. The party will be allowed to address the Board at the Board's next regularly scheduled Board meeting (unless the Board receives the appeal within one week of the next regularly scheduled Board meeting) or at a time and date agreed to by the Board, designated compliance officer and the party. The Board will issue a written determination about the appeal **within thirty (30) days** after the party addresses the Board. The party who filed the appeal will be sent the Board's determination at the time it is issued, and a copy will be sent to the designated compliance coordinator. The Board's determination, and any actions taken, will be final on behalf of the District.

4. Confidentiality:

The identity of the complainant will be kept confidential to the extent permitted by state and federal law. The District will notify the complainant of the anti-retaliation provisions of applicable laws and that the District will take steps to prevent retaliation and will take prompt and strong responsive actions if retaliation occurs.

If a complainant requests confidentiality or asks that the complaint not be pursued, the District will take all reasonable steps to investigate and respond to the complaint consistent with the request for confidentiality or the request not to pursue an investigation, as long as doing so does not prevent the District from responding effectively to the harassment and preventing harassment of other students. If a complainant insists that his or her name or other identifiable information not be disclosed to the alleged perpetrator, the District will inform the complainant that its ability to respond may be limited. Even if the District cannot take disciplinary action against the alleged harasser, the District will pursue other steps to limit the effects of the alleged harassment and prevent its recurrence, if warranted,

5. Training:

The District will ensure that relevant District employees, including but not limited to officials, administrators, teachers, substitute teachers, counselors, nurses and other health personnel, coaches, assistant coaches, paraprofessionals, aides, bus drivers, and school law enforcement officers, are adequately trained so they understand and know how to identify acts of discrimination, harassment, and retaliation, and how to report it to appropriate District officials or employees.

6. Designated Compliance Coordinators:

Designated compliance coordinators will be responsible for:

- a. Coordinating efforts to comply with anti-discrimination, anti-harassment, and anti-retaliation laws and regulations.
- b. Coordinating and implementing training for students and employees pertaining to anti-discrimination, anti-harassment and anti-retaliation laws and regulations, including the training areas listed above.
- c. Investigating complaints of discrimination (unless the coordinator designates other trained individuals to investigate).
- d. Monitoring substantiated complaints or reports of discrimination, as needed (and with the assistance of other District employees, if necessary), to ensure discrimination or harassment does not recur, and that retaliation conduct does not occur or recur.

- e. Overseeing discrimination complaints, including identifying and addressing any patterns or systemic problems, and reporting such patterns or systemic problems to the Superintendent and the Board of Education.
- f. Communicating regularly with the District's law enforcement unit investigating cases and providing current information to them pertaining to anti-discrimination, anti-harassment, and anti-retaliation standards and compliance requirements.
- g. Reviewing all evidence in harassment or violence cases brought before the District's disciplinary committee or administrator to determine whether the complainants are entitled to a remedy under anti-discrimination laws and regulations that was not available in the disciplinary process.
- h. Ensuring that investigations address whether other students or employees may have been subjected to discrimination, including harassment and retaliation.
- i. Determining whether District employees with knowledge of allegations of discrimination, including harassment and retaliation, failed to carry out their duties in reporting the allegations to the designated compliance coordinator and responding to the allegations.
- j. Recommending changes to this policy and grievance procedure.
- k. Performing other duties as assigned.

The designated compliance coordinators will not have other job responsibilities that may create a conflict of interest with their coordinator responsibilities.

7. Preventive Measures:

The District will publish and widely distribute on an ongoing basis a notice of nondiscrimination (notice) in electronic and printed formats, including prominently displaying the notice on the District's website and posting the notice at each building in the District. The District also will designate an employee to coordinate compliance with anti-discrimination laws (see Designated Compliance Coordinator section, above, for further information on compliance coordinator), and widely publish and disseminate this grievance procedure, including prominently posting it on the District's website, at each building in the District, reprinting it in District publications, such as handbooks, and sending it electronically to members of the school community. The District will provide training to employees and students at the beginning of each academic year in the areas (B.6.a-g) identified in the Training section, above.

The District also may distribute specific harassment and violence materials (such as sexual violence), including a summary of the District's anti-discrimination, anti-harassment, and anti-retaliation policy and grievance procedure, and a list of victim resources, during events such as school assemblies and back to school nights, if recent incidents or allegations warrant additional education to the school community.

Date of Adoption: [Insert Date]

**Complaint Form
Discrimination, Harassment or Retaliation**

The [Name] Public School District does not discriminate on the basis of sex, disability, race (including skin color, hair texture and protective hairstyles), color, religion, veteran status, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical condition, sexual orientation or gender identity, or other protected status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. This complaint form is to be used when a person has a complaint related to discrimination, harassment or retaliation on such bases in regard to employment or the programs and activities of the school district.

Refer to Board Policy 4003 and/or 5401 for the particulars of the complaint and grievance process. You may attach additional materials to this form if needed.

The applicable coordinator may be contacted if you have questions about filling out this complaint form:
Students: [Name of Director], Director of Student Services [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).
Employees and Others: [Name of Director], Human Resources Director [or other title], [Street Address], [City], NE [Zip Code] (____) ____ - ____ ([Email Address]).

Name: _____ Date: _____

(1) Description of the complaint: _____

_____.

(2) Names of any witnesses to the matter being complained about: _____

_____.

(3) Identify and attach any document supporting the complaint: _____
_____.

(4) Confidentiality: I ___ do___ do not give consent to my identity being shared with the person(s) against whom I am complaining. If I do not give consent, I understand that the investigation may be hindered, but that the District will nonetheless investigate and take prompt and effective action to remediate the concerns I have raised, if appropriate.

_____.

(5) Relief requested (what I want done in response to this complaint):

_____.

The undersigned states: The facts in this complaint are true to the best of my knowledge, information and belief. I give permission for an investigation to be made into this complaint. I understand that the District will take steps to prevent me being retaliated against for filing this complaint, that I am to notify the District if any such retaliation occurs, and that the District will take prompt and strong responsive action if retaliation occurs.

Received by: _____ Signature: _____
Date: _____

InstructionClassroom Environment

At all times, teachers are expected to organize, maintain and ensure that their classroom is in a safe, orderly and clean condition for student learning. Classrooms should be free from distractions (such as inappropriate or unprofessional posters or other displays) and other apparatus that may cause student health problems (such as essential oils and/or essential oil diffusers). Teachers who are uncertain as to whether their classroom meets this requirement are encouraged to consult with their building principal in a proactive manner.

Staff members may not hang posters, flags, banners or other displays in the classroom that are (1) unrelated to the curriculum and (2) may otherwise result in a disruption to the learning environment. Any staff member who is uncertain as to whether a particular display is permitted in the classroom should consult with their building principal in a proactive manner.

Date of Adoption: [Insert Date]

InstructionAssessments—Academic Content Standards

The Board of Education may vote to adopt the academic content standards recommended by the State Board of Education (“State Board”).

If the Board of Education does not affirmatively vote to adopt an academic content standard recommended by the State Board, then the Board of Education will adopt a standard equal to or excess in rigor of the standard recommended by the State Board.

The administration shall be responsible for implementing assessments on the state standards in accordance with the procedures established by the State Board and the Department of Education, including conducting assessments in the same subject areas and the same grade levels as established in the state standards, and the reporting of scores and sub-scores.

This policy does not supersede the existing standards adopted by the Board of Education except as set forth herein.

Legal Reference: Neb. Rev. Stat. Sections 79-760 to 79-760.05

Date of Adoption: [Insert Date]

InstructionSpecial Education

[Name] Public Schools adopts this special education policy with the intent that the policy maintains the District's compliance with all applicable laws affecting special education services and programs. The Superintendent or designees shall develop regulations or procedures to implement these policies. Employees and contractors of the District are expected to comply with these policies and all regulations, guidelines and procedures related to this policy in all respects.

The District will abide by all state and federal laws relating to special education. The District's special education policy and regulations, guidelines and procedures related to this policy are to be interpreted so as to be in compliance with such laws. In the event of changes in law, the school administration shall be authorized to implement modifications of practice to comply with such changes (whether the changes impose more or less stringent procedural or substantive requirements) until such time as amended policies are adopted by the Board of Education. References herein to 92 NAC 51 citations are made to Rule 51 as in effect on the date of the adoption of these policies. In the event of renumbering or other revisions to Rule 51, the policy shall be interpreted and implemented consistent with such renumbering or revisions.

1. Free Appropriate Public Education

A free appropriate public education shall be made available to all children with disabilities residing in the District from date of diagnosis through the school year in which the student reaches 21 years of age, including children with disabilities who have been suspended or expelled.

Legal Reference: 92 NAC 51-004.01 through 004.03A and 007.07C2 through 007.07C6

2. Full Educational Opportunity Goal

The District shall take steps to ensure that its children with verified disabilities have available to them the variety of educational programs and services available to children without disabilities in the areas served by the District, including art, music, industrial arts, family consumer science education, and vocational education.

Legal Reference: 92 NAC 51-004.11A

3. Child Find

All children from birth to age twenty-one (21) with disabilities residing in the District, including children with disabilities who are homeless or are wards of the state or attending nonpublic schools, regardless of the severity of their disabilities, who are in need of special education and related services, will be identified, located and evaluated and a practical method shall be developed and implemented by the administration to determine which children with disabilities are currently receiving needed special education and related services. The District will publish annual notice of any significant activity that is designed to identify, locate, or evaluate children to publicly notify parents. The District will screen and evaluate all children with suspected disabilities birth through age 21, and will implement practical methods to track which children are currently receiving special education and related services. The District will provide student referrals that are accompanied by documentation of scientific, research, or evidence-based academic and/or behavioral interventions that have been implemented as designed for the appropriate period of time

to show effect or lack of effect that demonstrates the child is not making a sufficient rate of progress to meet age or state-approved, grade-level standards within a reasonable time frame. The District will provide sustained supervision to monitor the implementation of compliant practices for the Child Find Rule. The District will use supervision and monitoring data to identify schools and/or personnel that require technical assistance to support compliant practices in the area of Child Find, paying particular attention to the communities experiencing disproportionality in the schools. All District Child Find activities will be equitably available to all children regardless of race, ethnicity, language, location, transience, income level, and access to medical care.

Legal Reference: 92 NAC 51-006.01 through 006.01A2

4. Pre-Referral Interventions

For a school age student, a general education student assistance team (SAT) or a comparable problem solving team shall be used prior to referral for multidisciplinary team evaluation. The SAT or comparable problem solving team shall utilize and document problem solving and intervention strategies to assist the teacher in the provision of general education. If the student assistance team or comparable problem solving team feels that all viable alternatives have been explored, a referral for multidisciplinary evaluation shall be completed. A referral shall include information from the SAT or comparable problem solving team, meeting the requirements of 92 NAC 51-006.01B and a listing of the members of the SAT or comparable problem solving team.

Legal Reference: 92 NAC 51-006.01B

5. Individualized Education Program (IEP)

An individualized education program, or an individualized family service plan, is to be developed, reviewed, and revised for each child with a disability in accordance with 92 NAC 51-007.

Legal Reference: 92 NAC 51-007

6. Least Restrictive Environment

To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are to be educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment will occur only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (the "Least Restrictive Environment Rules").

The District will: (1) develop and implement written procedures for implementation of the LRE Rules; (2) provide high quality, sustained professional learning activities on the written procedures for appropriate district and school personnel to assist with the implementation of the LRE Rules; (3) provide sustained supervision to monitor the implementation of compliant practices for the LRE Rules; (4) use the supervision and monitoring data to identify schools and/or personnel that require technical assistance to support compliant practices in the area of least restrictive environment, paying particular attention to the disproportionate group; (5) ensure that every Individualized Education Programs (IEP) team meaningfully considers various support systems and activities that could be used to assist students with disabilities (SWD) to be educated successfully in general education classes prior to the consideration of pullout special education services; (6) ensure that special education teachers provide support to general education teachers in a variety of ways including, but not limited to, consultation, implementation of accommodations or modifications, and co-teaching; (7) ensure that a continuum of alternative placements is

available to meet the needs of children with disabilities, particularly those in the disproportionate group, for special education and related services; (8) ensure that, in determining the educational placement of a child with a disability, including a preschool child with a disability, each district ensures that the placement decision is made by a group of persons including the parents, and other persons knowledgeable about the child, the meaning of the evaluation data, and the placement options. Particular attention is paid to the disproportionate group; (9) ensure that placement discussions are based upon a completed IEP developed by the IEP team, focused on individualized student needs; and (10) ensure that the IEP teams review the students' progress at least annually to determine appropriate placement and progress towards annual goals.

Legal Reference: 92 NAC 51-008.01

7. Procedural Safeguards

Children with disabilities and their parents shall be afforded the required procedural safeguards.

Legal Reference: 92 NAC 51-009.01 through 009.07; 009.10 through 009.12; 009.14, 006.07

8. Disciplinary Removal of Children with Disabilities

The District will (1) develop and implement written procedures for disciplining students with disabilities (the "Discipline Rules"); (2) provide high quality, sustained professional learning activities on the written procedures for appropriate district and school personnel to assist with the implementation of the Discipline Rules; (3) provide sustained supervision to monitor the implementation of compliant practices for the Discipline Rules; (4) use supervision and monitoring data, disaggregated by race/ethnicity, to identify schools and/or personnel that require technical assistance to support compliant practices in the area of discipline (including but not limited to: de-escalation techniques, functional behavior assessment, behavior intervention planning, and manifestation determination procedures); (5) ensure that school personnel appropriately consider unique circumstances on a case-by-case basis when determining suspension of a child with a disability, and ensure that data shows that these considerations are equitably made by race/ethnicity; (6) notify parents on the day that the decision is made to make a removal that constitutes a change in placement of a child with a disability because of violation of a code of child conduct, and send parents copies of the procedural safeguards; (7) provide educational services for students removed fewer than 10 days to enable the student to continue to participate in the general educational curriculum, although in another setting, and to progress toward meeting the goals set out in the Individualized Education Programs, with data showing that these services are equitably provided by race/ethnicity; (8) ensure that within 10 school days of any decision to change placement of a child with a disability because of a violation of a code of student conduct, the IEP Team will review all relevant information in the file to determine whether the conduct in question was caused by or had a direct and substantial relationship to the child's disability or the conduct was the direct result of the district's failure to implement the IEP, and that such determinations are made equitable by race/ethnicity; and (9) ensure that, if the IEP Team makes a determination that the conduct was a manifestation of the child's disability, then the IEP Team conducts a functional behavioral assessment, unless the District conducted a FBA before the behavior that resulted in the change of placement occurred, and implements a behavioral intervention plan.

Legal Reference: 92 NAC 51-016

9. Evaluation, Identification, and Reevaluation Procedures

Children with disabilities shall be evaluated, identified, and reevaluated in accordance with 92 NAC 51-006. The District will: (1) provide high quality, sustained professional learning activities on the written procedures for appropriate district and school personnel to assist with the implementation of the Evaluation and Reevaluation Rule; (2) provide sustained supervision to monitor the implementation of compliant practices for the Evaluation and Reevaluation Rule; (3) use the supervision and monitoring data, disaggregated by race and ethnicity, to identify schools and/or personnel that require technical assistance to support compliant practices in the area of evaluation and reevaluation, as well as the appropriate technical assistance/professional development to any schools and/or personnel identified in such data; (4) conduct a reevaluation of each child with a disability at least once every 3 years, unless the parent and the District agree that a reevaluation is unnecessary; (5) use a variety of assessment tools and strategies to gather relevant academic, functional, and developmental information about the child, including information provided by the parents, and information related to enabling the child to be involved in and progress in the general education curriculum that may assist in determining: (i) Whether the child is a child with a disability, and (ii) The content of the child's individualized education program; (6) use more than one procedure to determine whether a child has a disability and the appropriate educational program for the child; (7) use technically sound instruments to assess the relative contribution of cognitive and behavioral factors, in addition to physical or developmental factors; (8) select assessments and other evaluation materials in a manner that (i) does not discriminate on a racial or cultural basis, (ii) is provided and administered in the child's native language or other mode of communication and in the form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally, unless it is clearly not feasible to so provide or administer, (iii) has been validated for the specific purpose for which they are used, and (iv) are administered by trained and knowledgeable personnel in accordance with any instructions provided by the producer of the assessments; and (9) provide high quality, sustained professional learning activities on the written procedures for appropriate District and school personnel to assist with the implementation of the Evaluation and Reevaluation Rule.

The District will respond to a request for an Independent Educational Evaluation without unnecessary delay. Locations of any evaluator shall be within a reasonable distance of the District. A reasonable distance means within 100 miles of the school building the child attends and within Nebraska. In the event this geographic area restriction would prevent a parent from obtaining an Independent Educational Evaluation, the location of the evaluator may be outside the specified geographic area but must be within Nebraska. The District will provide the parent(s) with a list of qualified agencies/evaluators within the geographic area. The evaluators are to have their rates approved by the Nebraska Department of Education to be authorized to conduct the evaluation.

Legal Reference: 92 NAC 51-006

10. Confidentiality of Personally Identifiable Information

The confidentiality of student records and information shall be maintained in accordance with law.

Legal Reference: 92 NAC 51-003.16, 003.20, 009.03 through 009.03M3

11. Transition of Children from Part C to Preschool Programs

Children participating in early intervention programs under Part C of the IDEA (early intervention services) and who will participate in preschool programs assisted under Part B of the IDEA (services for school-aged children) shall experience a smooth and effective transition to those preschool programs in a manner consistent with 92 NAC 52-008. The District will participate in transition planning conferences arranged by the designated lead agency.

Legal Reference: 92 NAC 52-008

12. Children in Nonpublic Schools

To the extent consistent with the number and location of children with disabilities in the District who are enrolled by their parents in nonpublic elementary and secondary schools in the District, provision will be made for the participation of those children in the programs assisted or carried out under Part B of the IDEA (services for school-aged children) by providing them with special education and related services.

Legal Reference: 92 NAC 51-012.08 and 015

13. Personnel Standards and Personnel Development

Personnel providing special education or related services to children with disabilities shall be appropriately and adequately prepared and trained in accordance with IDEA requirements and the District will take measurable steps to recruit, hire, train and retain personnel meeting the requirements of IDEA to provide such services.

Legal Reference: 92 NAC 51-010

14. Participation in and Reporting of State and District Wide Assessments

All children with disabilities shall be included in all general state and district wide assessment programs, including assessments described under section 612(a)(16)(A) of the IDEA with appropriate accommodations and alternate assessments where necessary and as indicated in their respective individualized education programs. The District will make available to the Nebraska Department of Education the information necessary to carry out its duties relating to the reporting of children with disabilities participation in assessments.

Legal Reference: 92 NAC 51-004.05

15. Suspension and Expulsion Rates

The District will examine data, including data disaggregated by race/ethnicity, gender, LEP status, and disability category, to determine if significant discrepancies are occurring in the rate of long-term suspensions and expulsions of children with disabilities.

Legal Reference: 92 NAC 51-004.06E

16. Access to Instructional Materials

As part of any printed instructional materials adoption process, procurement contract, or other practice or instrument used for purchase of printed instructional materials, the District will enter into a written contract with the publisher of the printed instructional materials to:

- A. Require the publisher to prepare and, on or before delivery of the print instructional materials, provide to the National Instructional Material Access Center, electronic files containing the contents of the printed instructional materials using the National Instructional Materials Accessibility Standard, or

- B. Purchase instructional materials from the publisher that are produced in, or may be rendered in specialized formats.

Legal Reference: 92 NAC 51-004.15

17. Over-Identification and Disproportionality

Procedures shall be in place to ensure that testing and evaluation materials and procedures utilized for the evaluation and placement of children with disabilities will be selected and administered so as not to be racially or culturally discriminatory. Such materials or procedures shall be provided and administered in the child's native language or mode of communication, unless it is clearly not feasible to do so, and no single procedure shall be the sole criterion for determining an appropriate educational program for a child. All District special education provisions will be equitably available to all children regardless of race, ethnicity, language, location, transience, income level, and access to medical care.

Legal Reference: 92 NAC 51-006.02C

18. Prohibition on Mandatory Medication

Children shall not be required to obtain a prescription for a controlled substance as a condition of attending school, receiving an evaluation to determine whether a child has a disability or the nature and extent of special education and related services the child needs, or receiving special education services.

Legal Reference: 92 NAC 51-004.11D; 21 U.S.C. §812(c)

19. Transportation

Transportation will be provided for children with disabilities who are eligible for transportation and residents of the school district as required by law.

Legal Reference: 92 NAC 51-014.01 through 014.02

20. Surrogates

A surrogate will be appointed and other action taken to ensure the rights of children with a disability as required by law.

Legal Reference: 92 NAC 51-009.10

21. Early Intervention Services – Consent

When a parent refuses to provide consent under 92 NAC 52, a meeting will be held or offered to explain to the parents how their failure to consent affects the ability of their child to receive services under 92 NAC 52.

Legal Reference: 92 NAC 52

22. Eligibility Determinations

The District will (1) develop written procedures for implementation of the Eligibility Determination Rule; (2) provide high quality, sustained professional learning activities on the written procedures for appropriate district and school personnel to assist with the implementation of the Eligibility Determination Rule; (3) provide sustained supervision to monitor the implementation of compliant practices for the Eligibility Determination Rule; (4) use the supervision and monitoring data, disaggregated by race and ethnicity, to identify schools and/or personnel that require technical assistance to support compliant practices in the area of eligibility; (5) ensure Individualized Education Programs (IEPs) are developed for children with a

determination made of having a disability that has: (a) an adverse effect on educational performance (academic, functional, and/or developmental) and (b) requires special education and related services; (6) ensure that an eligibility report, which documents the area of disability, is completed and placed in each child's special education folder, with the eligibility report providing statements for each component of the eligibility and be comprehensive enough to serve as the evaluation report when necessary; (7) ensure the completion of the administration of assessments and other measures that the Multidisciplinary Evaluation Team (a group of qualified professionals and the parents of the child) determine whether the child is a child with a disability and the educational needs of the child; (8) ensure appropriate consideration of the exclusionary factor for reading (a child is not to be determined to be a child with a disability if the primary factor for that determination is a lack of appropriate instruction in reading, including the essential components of reading instruction as defined in section 1208(3) of ESEA); (9) ensure appropriate consideration of the exclusionary factor for math (a child must not be determined to be a child with a disability if the primary factor for that determination is a lack of appropriate instruction in math); (10) ensure appropriate consideration of the exclusionary factor for Limited English Proficiency (LEP) (a child will not be determined to be a child with a disability if the primary factor for that determination is limited English proficiency); and (11) ensure (1) evaluation data draw upon information from a variety of sources, including aptitude and achievement tests, parent input, and teacher recommendations as well as the information about the child's physical condition, social or cultural background, and adaptive behavior and (2) that information obtained from all these sources is documented and carefully considered.

Legal Reference: 92 NAC 51-006.04.

Legal Reference: 34 CFR Parts 300, 303 and 304
Neb. Rev. Stat. Sec. 79-1110 to 79-1167
92 NAC 51, 52 and 55

Date of Adoption: [Insert Date]

StudentsAnti-Bullying Policy

One of the missions of the District is to provide a physically safe and emotionally secure environment for students and staff.

The administration and staff are to implement strategies and practices to reinforce and encourage positive behaviors by students. Positive behaviors include non-violence, cooperation, teamwork, understanding, and acceptance of others.

The administration and staff are to implement strategies and practices to identify and prevent inappropriate behaviors by all students, including anti-bullying education for all students. Inappropriate behaviors include bullying, intimidation, and harassment. Bullying means any ongoing pattern of physical, verbal, or electronic abuse on school grounds, in a vehicle owned, leased, or contracted by the school being used for a school purpose by a school employee or designee, or at school-sponsored activities or school-sponsored athletic events.

The school district shall review the anti-bullying policy annually.

Legal Reference: Laws 2008, LB 205
Student Discipline Act, Neb. Rev. Stat. 79-254 to 79-296
NDE February 2003 State Board Action; Reaffirmed December 2005

Date of Adoption: June 8, 2015

Reviewed: June 11, 2018

InstructionParental/Community Involvement in Schools

Washington County School District No. 89-0024, Arlington Public Schools, after having conducted a public hearing concerning parental involvement and participation in the school district herewith declares that it shall be the policy of the District to provide access to parents to all textbooks, tests, curriculum materials, and any other instructional materials used by the school.

It shall further be the policy of the District in the event any parent has a complaint or objection to any such materials to make such provision for personal conferences with the parent and appropriate school personnel to discuss such concerns as the superintendent or his/her designee may deem appropriate. The superintendent or his/her designee shall prepare a complaint form which may be used by a parent to express objections to any such instructional material. Such complaint forms shall seek information including, but not limited to, the specific instructional material complained of, the reason for the complaint, and a proposed resolution of the complaint by the parent.

It shall further be the policy of the District to upon reasonable advance request by a parent to attend and monitor courses, assemblies, counseling sessions, and other instructional activities, to permit such parent to be in attendance at such activities unless such attendance would substantially interfere with a legitimate school interest.

It shall further be the policy of the district to encourage communications from the parents concerning when a parent believes it to be appropriate for his/her student to be excused from testing, classroom instruction, and other school experiences that the parent may find objectionable. The superintendent or his/her designee shall make a provision on the complaint form hereinabove referred to for receiving information from a parent concerning what specific testing, classroom instruction, or other school experience the parent finds objectionable, the basis for the parent's objection and a proposed solution for dealing with the objection that would be satisfactory to the parent.

It shall further be the policy of the District to provide full access to the records of the students to a parent or guardian all as set forth in Section 79-2,104, the Federal Education Right To Privacy Act, and other applicable law during regular business hours of the school at the school headquarters or wherever the student's records may regularly be maintained by the District.

It is the further policy of the District to notify a parent or parents of any student who may be subjected to a standard norm referenced or criterion referenced test or standard tests such as but not limited to the Iowa Test of Basic Skills or the California Achievement Test, to notify the parent when reasonable to do so, where a sample of such test might be observed and the date upon which such test will be administered. As to all testing by the District, experimental evaluation methodologies, experimental testing instruments and any testing instrument which would tend to inquire into the values, beliefs, or privacy rights of any student, or parent or guardian of such student shall be prohibited unless a parent requests in writing that such tests be administered to his/her resident student.

Prior to any school sponsored survey being administered to the students of the District, it shall be the duty of the superintendent or his/her designee to notify the parent or parents of each student involved in the survey of the nature of the survey, the date and time when such survey shall be administered, and the purpose for which and the uses of which survey exist from the school's perspective.

It shall be the policy of the District as a general matter to leave substantive decision making processes to the professional staff, administration and Board of Education, subject to an effort to receive information from parents as to any concerns, objections, or other information such parents would wish to provide to the school district concerning a parent's access, involvement, and participation in all activities of the school as it relates to the student of the District.

Date of Adoption: June 10, 2013

Date of Review: June 11, 2018

**Appendix "1" to 2016-2017 Student Fees Policy of
Arlington Public Schools**

Additional Specification of Required Materials and Fees¹

Program	General Description of Fee or Material	\$ Amount of Fee (Anticipated or Maximum)² or Specific Material Required
Elementary Program		
Physical Education classes	Appropriate clothing (non-specialized attire)	Tennis shoes and white socks, running shorts, T-shirt
Art classes and special projects or events	Appropriate clothing (non-specialized attire)	Old shirt for painting; other clothing which may get paint on it or otherwise be damaged.
Music-Optional band Courses	Musical instruments	Musical instruments and accessories (reeds, valve oil, drum sticks, lyres, flip folders, slide grease, reed guards, cleaning swabs, mouthpiece brushes, pad savers, ligatures, and a "gig bag", etc.) Limited instruments available for use by any student.
Music -Optional Blue Notes Honor Choir	Coordinating group attire	Blue notes shirts and dark pants
Classroom supplies	General supplies, such as writing instruments (pens, pencils, crayons, markers), notebooks, etc.	None--necessary classroom supplies will be made available by the school. Students will be responsible for the replacement cost of damaged or lost supplies. Students are encouraged but not required to bring items from class supply lists

¹ This listing is a part of the 2015-2016 Student Fees Policy and is intended to provide supplemental information. For additional specifications, refer to the Policy.

² Generally, dollar amounts are stated in terms of "maximums." The actual fee or charge may be less during the 2015-2016 school year.

Field Trips	Transportation and admission costs of field trips	None-costs of school sponsored, class-related field trips will be paid for by the school. Parents may be encouraged but not required to pay for field trip costs of up to \$5.00 per student for each field trip to defray costs. (With administrative approval, the requested donation may be up to \$100.00 for special field trips). Meals on field trips will be at the expense of the student. School lunches will be provided as needed for free-reduced lunch eligible students.
Summer school courses	Classes offered during the summer, or at night, if any	\$25 to \$200 per class.
Copies	Use of school copiers (except for one copy of the student file, which will be provided without charge).	Ten cents (.10) per page when charges apply.
Secondary Program	General Description of Fee or Material	\$ Amount of Fee (Anticipated or Maximum) or Specific Material Required
Physical Education classes	Appropriate clothing (non-specialized attire)	Tennis shoes and white socks, running shorts, T-shirt
Art and shop classes and special projects, science classes	Appropriate clothing (non-specialized attire) Goggles-1 pair provided per year. If lost or damaged students are required to purchase a new pair.	Old shirt for painting; other clothing which may get paint on it or otherwise be damaged; protective clothing for shop classes; approved protective goggles for science classes.
Art 7 and Art 8	Art Supplies	\$15.00

Adv. Art Classes	Art Supplies	\$20.00
Basic Tech	Materials for Projects	\$25.00
8 th Grade Exp. Tech	Materials for Projects	\$25.00
Beg. Metals	Toolbox Kit	\$30.00
Adv. Metals	Metal	Provide metal needed for two (2) instructor approved projects.
Small Engines	Parts (optional)	Parts supplied for personal interest projects.
Woods I	Wood and other materials	Cost based on individual student designed projects (4). Some materials obtained by students; some materials obtained by school with student responsible for cost. Project maximum \$150.00.
Woods II	Wood and other materials	Cost based on individual student designed projects (2). Some materials obtained by students; some materials obtained by school with student responsible for cost. Project maximum \$500.00.
Family & Consumer Science Classes	Food and sewing supplies	Cost based on individual student designed projects. Some materials obtained by students; some materials obtained by school with student responsible for cost. Project maximum \$10.00
7 th Grade	Sewing supplies	Cost based on individual student designed projects. Some materials obtained by students; some materials obtained by school with student responsible for cost. Project maximum \$12.50.
8 th Grade	Sewing supplies	
Foods I and Foods II	Consumed food supplies	\$20.00
Music-Optional band Courses	Musical instruments	Musical instruments and accessories (reeds, valve oil, etc.) Limited instruments available for use by any student. White tennis shoes, socks, and black shorts. \$120.00 maximum.
Classroom Supplies	General supplies, such as writing instruments (pens, pencils, crayons, markers), notebooks, etc.	None--necessary classroom supplies will be made available by the school. Students will be responsible for the replacement cost of damaged or lost supplies. Students are encouraged but not required to bring items from class supply lists which may be handed out by the office or individual teachers.

Classroom Projects, i.e., Family & Consumer Science, Industrial Technology	Project Cost	Student pays cost that is beyond the standard project provided by the school.
Advanced math or science classes	Specialized calculators	Some calculators will be available at school. If lost or damaged a replacement fee will be assessed at a rate paid by the school. Students are encouraged but not required to purchase such equipment for their personal use.
Copies	Use of school copiers (except for one copy of the student file, which will be provided without charge)	Ten cents (.10) per page when charges apply.
College Now	Tuition and fees for college courses taken for credit.	Any postsecondary education costs are to be paid directly by students to the college. Students are responsible for book fees.
Dual Credit-secondary education classes taught by Arlington staff.	Tuition and fees for college courses taken for credit.	\$40.00 Tuition \$25.00 Book Fee Payments will be made prior to the start of the course.
End of year lost or damaged books	Damage fee or replacement cost	Fees and fines up to \$5.00 for damaged books. Lost books or ruined books are charged replacement cost, generally at a maximum of \$60.00 – 80.00
Yearbooks - Optional	School Book	Yearbooks are published and made available for purchase every year. Cost is generally about \$40.
College entrance tests and preparation	Prep programs & tests	Costs of college entrance tests or prep courses, such as ACT preparation tutoring, PSAT test, and ACT test, are optional and to be paid directly to the private companies involved.
Summer school courses	Classes offered during the summer, or at night, if any	Drivers education class: \$330
Locker usage	Use of school locker	Student will be responsible for replacement or repair cost to damaged locker.

Extracurricular & Athletic Programs	General Description of Fee or Material	\$ Amount of Fee (Anticipated or Maximum) or Specific Material Required	
1. Admission	Spectator fees for admission to events	\$5.00 per event maximum. Students may purchase an Activity Ticket for up to \$50.00 per year. For District and Conference events hosted by the School, cost to be set by NSAA but not to exceed \$20.00 per event.	
2. Athletic Physicals	NSAA required athletic physicals	Cost varies; payable directly to student's physician or clinic.	
3. Equipment and attire	Students are responsible for required equipment and attire appropriate to the sport or activity which are not provided by the school, and are responsible for any optional clothing, equipment, or other items associated with the sport or activity. Uniform items are checked out to students. If lost or damaged students will be assessed fees in the amount of replacement cost.	Required items include athletic undergarments (supporter, bra, socks and undershirts), practice attire, including shorts, shirts, socks and shoes suitable for the activity, and dress attire suitable for team travel. Optional items for which students are responsible include: personal athletic bags, hair ties, sweat bands, non-required gloves, swim goggles, towels, forearm pads and personal medical devices (braces, orthopedic inserts, etc.). Additional required items for particular sports or activities include:	
		Basketball	No additional
		Football	Mouthpiece
		Golf	Golf bag & clubs
		Speech	Dress attire; copies of research
		Track	No additional
		Volleyball	Volleyball knee pads
		Wrestling	Wrestling head gear

		Baseball	Baseball Hat Baseball Glove
		Cheerleading and Flag Team Squads	Shoes, approved uniforms (top & skirt; jacket), poms and other accessories up to \$1200.00
4. Travel meals	Meals	Students are responsible for their own meals while traveling.	
5. Locker use	Padlock for locker	\$5.00 fee if damaged or not returned at the end of the year. Student will be responsible for replacement or repair cost to damaged locker.	
6. Camps and clinics	Registration and other costs of camps or clinics	Students are responsible for the cost of all clinics, camps and conditioning programs. Any personal items purchased at camps or clinics, such as t-shirts, shall be at the student's expense.	
7. Athletic Clubs	Letterman's club and other clubs supporting the athletic program	Currently no dues required. Annual dues not to exceed \$50.00 per club.	
8. Marching Band and Musical Groups	Equipment and attire.	Students will be responsible for the same costs as are set out for the athletic program. Students will be responsible for supplying their own musical instruments and accessories and for their own uniforms. Uniforms for the marching band will be supplied by the school; students may be required to pay a refundable band uniform rental fee of up to \$50.00. For High School Band Students an \$8.00 uniform cleaning fee is requested. For Junior High Band Students a \$7.00 uniform cleaning fee is requested. For High School Vocal students a \$6.00 choir robe cleaning fee is requested.	
Music Optional Show Choir	Coordinating group attire	Students will pay for outfits selected by the group. Cost will be based on selection at a maximum of \$300.00	

Clubs/Organizations		
All Organizations	State & national dues, meals and activities.	Annual dues not to exceed \$50.00 per club.
Dance Squad	Clothing/Camps	\$750.00-\$1000.00
Social & Recognition Activities		
1. School plays, musicals and social activities	Admission to events	\$10.00 per play or activity
2. School dances	Admission to prom, homecoming, etc.	Up to \$25.00 per event
3. Class dues		Each of the six secondary classes may assess its members an amount not to exceed \$50.00 annually for rental and decoration of dance facilities, punch and snacks at social activities, memorials and recognition plaques, flowers, and cards, and similar class activities. The payment of such an assessment shall be strictly voluntary, but students who do not pay may be denied admission to extracurricular activities supported by the class dues.
4. Picture Packets	Optional - Pictures are still taken for use in school yearbook.	Students purchase packets as desired and pay directly to photo company.

<p>5. Senior recognition assessment</p>	<p>Optional graduation activities</p>	<p>Participation in class activities attendant to graduation (such as being part of the composite picture, special yearbook pages, etc.) is not required in order for students to receive their high school diploma. Students who choose to participate will be required to pay the cost of the items involved in the graduation ceremony and attendant class activities. These may include the rental of graduation robes, caps, tassels, class flowers, one mother's flower, class gift, yearbook picture page, and class composite picture. A single Senior Class Recognition Assessment, not to exceed \$50, will be assessed to those Seniors who elect to participate in such activities. Expenses for above mentioned items will be paid out of the "Class Activity" account until funds are depleted. After this fund is empty, students will be responsible for all optional graduation activity costs.</p>
<p>6. Trips</p>	<p>Transportation, lodging, meals, admission to events, etc.</p>	<p>For the extracurricular and options trip - Students are responsible for costs of school sponsored trips where the trip is an extracurricular activity. The maximum costs of such trips will be \$2,000 per student. If the trip is not school sponsored, the costs of the trip are not subject to this policy and no fee waivers will apply. A trip is not school sponsored if: it is not supervised or administered by the school, attendance on the trip does not count towards graduation credit or grade advancement, and participation on the trip is voluntary for students.</p>

Reviewed: Nov 11, 2019

StudentsStudent Fees Policy

The Board of Education of Arlington Public Schools adopts the following student fees policy in accordance with the Public Elementary and Secondary Student Fee Authorization Act.

The District's general policy is to provide for the free instruction in school in accordance with the Nebraska Constitution and state and federal law. This generally means that the District's policy is to provide free instruction for courses which are required by state law or regulation and to provide the staff, facility, equipment, and materials necessary for such instruction, without charge or fee to the students.

The District does provide activities, programs, and services to children which extend beyond the minimum level of constitutionally required free instruction. Students and their parents have historically contributed to the District's efforts to provide such activities, programs, and services. The District's general policy is to continue to encourage and, to the extent permitted by law, to require such student and parent contributions to enhance the educational program provided by the District.

Under the Public Elementary and Secondary Student Fee Authorization Act, the District is required to set forth in a policy its guidelines or policies for specific categories of student fees. The District does so by setting forth the following guidelines and policies. This policy is subject to further interpretation or guidance by administrative or Board regulations which may be adopted from time to time. The Policy includes Appendix "I," which provides further specifics of student fees and materials required of students for the 2008-2009 school year. Parents, guardians, and students are encouraged to contact their building administration or their teachers or activity coaches and sponsors for further specifics.

(1) Guidelines for non-specialized attire required for specified courses and activities. Students have the responsibility to furnish and wear non-specialized attire meeting general District grooming and attire guidelines, as well as grooming and attire guidelines established for the building or programs attended by the students or in which the students participate. Students also have the responsibility to furnish and wear non-specialized attire reasonably related to the programs, courses and activities in which the students participate where the required attire is specified in writing by the administrator or teacher responsible for the program, course or activity.

The District will provide or make available to students such safety equipment and attire as may be required by law, specifically including appropriate industrial-quality eye protective devices for courses of instruction in vocational, technical, industrial arts, chemical or chemical-physical classes which involve exposure to hot molten metals or other molten materials, milling, sawing, turning, shaping, cutting, grinding, or stamping of any solid materials, heat treatment, tempering, or kiln firing of any metal or other materials, gas or electric arc welding or other forms of welding processes, repair or servicing of any vehicle, or caustic or explosive materials, or for laboratory classes involving caustic or explosive materials, hot liquids or solids, injurious radiations, or other

similar hazards. Building administrators are directed to assure that such equipment is available in the appropriate classes and areas of the school buildings, teachers are directed to instruct students in the usage of such devices and to assure that students use the devices as required, and students have the responsibility to follow such instructions and use the devices as instructed.

(2) Personal or consumable items & miscellaneous

(a) Extracurricular Activities. Students have the responsibility to furnish any personal or consumable items for participation in extracurricular activities.

(b) Courses

(i) General Course Materials. Items necessary for students to benefit from courses will be made available by the District for the use of students during the school day. Students may be encouraged, but not required, to bring items needed to benefit from courses including, but not limited to, pencils, paper, pens, erasers, notebooks, trappers, protractors and math calculators. A specific class supply list will be published annually in a Board-approved student handbook or supplement or other notice. The list may include refundable damage or loss deposits required for usage of certain District property.

(ii) Damaged or Lost Items. Students are responsible for the careful and appropriate use of school property. Students and their parents or guardian will be held responsible for damages to school property where such damage is caused or aided by the student and will also be held responsible for the reasonable replacement cost of school property which is placed in the care of and lost by the student.

(iii) Materials Required for Course Materials. Students are permitted to and may be encouraged to supply materials for course projects. Some course projects (such as projects in art and shop classes) may be kept by the student upon completion. In the event the completed project has more than minimal value, the student may be required, as a condition of the student keeping the completed project, to reimburse the District for the reasonable value of the materials used in the project. Standard project materials will be made available by the District. If a student wants to create a project other than the standard course project, or to use materials other than standard project materials, the student will be responsible for furnishing or paying the reasonable cost of any such materials for the project.

(iv) Music Course Materials. Students will be required to furnish musical instruments for participation in optional music courses. Use of a musical instrument without charge is available under the District's fee waiver policy. The District is not required to provide for the use of a particular type of musical instrument for any student.

(v) Parking. Students may be required to pay for parking on school grounds or at school-sponsored activities, and may be subject to payment of fines or damages for damages caused with or to vehicles or for failure to comply with school parking rules.

(3) Extracurricular Activities-Specialized equipment or attire. Extracurricular activities means student activities or organizations which are supervised or administered by the District, which do not count toward graduation or advancement between grades, and in which participation is not otherwise required by the District. The District will generally furnish students with specialized equipment and attire for participation in extracurricular activities. The District is not required to provide for the use of any particular type of equipment or attire. Equipment or attire fitted for the student and which the student generally wears exclusively, such as dance squad, cheerleading, and music/dance activity (e.g. choir or show choir) uniforms and outfits, along with T-shirts for teams or band members, will be required to be provided by the participating student. The cost of maintaining any equipment or attire, including uniforms, which the student purchases or uses exclusively, shall be the responsibility of the participating student. Equipment which is ordinarily exclusively used by an individual student participant throughout the year, such as golf clubs, softball gloves, and the like, are required to be provided by the student participant. Items for the personal medical use or enhancement of the student (braces, mouth pieces, and the like) are the responsibility of the student participant. Students have the responsibility to furnish personal or consumable equipment or attire for participation in extra curricular activities or for paying a reasonable usage cost for such equipment or attire. For musical extracurricular activities, students may be required to provide specialized equipment, such as musical instruments, or specialized attire, or for paying a reasonable usage cost for such equipment or attire.

(4) Extracurricular Activities-Fees for participation. Any fees for participation in extracurricular activities for the 2008-2009 school year are further specified in Appendix "1." Admission fees are charged for extracurricular activities and events.

(5) Postsecondary education costs. Students are responsible for postsecondary education costs. The phrase "postsecondary education costs" means tuition and other fees only associated with obtaining credit from a postsecondary educational institution. For a course in which students receive high school credit and for which the student may also receive postsecondary education credit, the course shall be offered without charge for tuition, transportation, books, or other fees, except tuition and other fees associated with obtaining credits from a postsecondary educational institution.

(6) Transportation costs. Students are responsible for fees established for transportation services provided by the District as and to the extent permitted by federal and state laws and regulations.

(7) Copies of student files or records. The Superintendent or the Superintendent's designee shall establish a schedule of fees representing a reasonable cost of reproduction for copies of a student's files or records for the parents or guardians of such student. A parent, guardian or student who requests copies of files or records shall be responsible for the cost of copies reproduced in accordance with such fee schedule. The imposition of a fee shall not be used to prevent parents of students from exercising their right to inspect and review the students' files or records and no fee shall be charged to search for or retrieve any student's files or records. The fee schedule shall permit one copy of the requested records be provided for or on behalf of the student without charge and shall allow duplicate copies to be provided without charge to the extent required by federal or state laws or regulations.

(8) Participation in before-and-after-school or pre-kindergarten services. Students are responsible for fees required for participation in before-and-after-school or pre-kindergarten services offered by the District, except to the extent such services are required to be provided without cost.

(9) Participation in summer school or night school. Students are responsible for fees required for participation in summer school or night school. Students are also responsible for correspondence courses.

(10) Breakfast and lunch programs. Students shall be responsible for items which students purchase from the District's breakfast and lunch programs. The cost of items to be sold to students shall be consistent with applicable federal and state laws and regulations. Students are also responsible for the cost of food, beverages, and personal or consumable items which the students purchase from the District or at school, whether from a "school store," a vending machine, a booster club or parent group sale, a book order club, or the like. Students may be required to bring money or food for field trip lunches and similar activities.

(11) Waiver Policy. The District's policy is to provide fee waivers in accordance with the Public Elementary and Secondary Student Fee Authorization Act. Students who qualify for free or reduced-price lunches under United States Department of Agriculture child nutrition programs shall be provided a fee waiver or be provided the necessary materials or equipment without charge for: (1) participation in extracurricular activities and (2) use of a musical instrument in optional music courses that are not extracurricular activities. Participation in a free-lunch program or reduced-price lunch program is not required to qualify for free or reduced price lunches for purposes of this section. Students or their parents must request a fee waiver prior to participating in or attending the activity, and prior to purchase of the materials.

(12) Distribution of Policy. The Superintendent or the Superintendent's designee shall publish the District's student fee policy in the Student Handbook or the equivalent (for example, publication may be made in an addendum or a supplement to the student handbook). The Student Handbook or the equivalent shall be provided to every student of the District or to every household in which at least one student resides, at no cost.

(13) Student Fee Fund. The School Board hereby **may** establish a Student Fee Fund. The Student Fee Fund shall be a separate school district fund not funded by tax revenue, into which all money collected from students and subject to the Student Fee Fund shall be deposited and from which money shall be expended for the purposes for which it was collected from students. Funds subject to the Student Fee Fund consist of money collected from students for: (1) participation in extracurricular activities, (2) postsecondary education costs, and (3) summer school or night school.

CERTIFICATION

On the 13th day of June, 2016, the school board held a public hearing at a meeting of the school board on a proposed student fee policy. Such public hearing followed a review of the amount of money collected from students pursuant to, and the use of waivers provided in, the student fee policy for the preceding school year. The foregoing student fee policy was adopted after such public hearing by a majority vote of the school board at an open public meeting in compliance with the public meetings in compliance with the public meetings laws.

Superintendent or Other Authorized School Official

Legal References:

- Neb. Rev. Stat. §§79-2,125 to 79-2,135 and Laws 2003, LB 249 (The Public Elementary and Secondary Student Fee Authorization Act)
- Neb. Constitution, Article VII, section 1.
- Neb. Rev. Stat. §§79-241, 79-605, and 79-611(transportation)
- Neb. Rev. Stat. §79-2,104 (student files or records)
- Neb. Rev. Stat. §79-715 (eye-protective devices)
- Neb. Rev. Stat. §79-737 (liability of students for damages to school books)
- Neb. Rev. Stat. §79-1104 (before-and-after-school or pre-kindergarten services)
- Neb. Rev. Stat. §§79-1106 to 79-1108.03 (accelerated or differentiated curriculum program)

Date of Adoption: June 13, 2016

Reviewed: Nov 11, 2019

CARTWRIGHT CONSTRUCTION

100 SOUTH FIFTH STREET

P O BOX 481

ARLINGTON NE 68002

402-478-4399

June 11, 2021

To;Arlington Public Schools

Proposal for cabinets to similar to existing cabinets,

Library north wall base w/upper and countertop w/install
\$6,880.00

Library computer area cabinets and remove and re-install existing countertop
\$4,360.00

Library computer area upper cabinet only w/install
\$1,860.00

Classroom #109 base w/upper and countertop w/install
\$8,140.00

SPORTS MEDICINE AGREEMENT

THIS SPORTS MEDICINE AGREEMENT (hereinafter the "Agreement") is made and entered into as of the 1st day of August, 2020, by and between Jamie Huss. (hereinafter "Independent Contractor") and the Arlington, Nebraska Public School District (hereinafter the "School").

WHEREAS, the School sponsors and organizes athletic competition;

WHEREAS, the Jamie Huss is an independent contractor. The Independent Contractor maintains a certified status by the Board of Certification and is licensed to practice Athletic Training in the State of Nebraska. The Independent Contractor is trained in the prevention, treatment and rehabilitation of sport-related injuries and is available to provide such services.

NOW, THEREFORE, IN CONSIDERATION OF THE ABOVE PREMISES AND THE MUTUAL PROMISES OF THE PARTIES HEREIN CONTAINED, IT IS HEREBY AGREED AS FOLLOWS:

1. SCHEDULING. The Independent Contractor shall be the exclusive provider of all athletic training services to the School for sports medicine coverage during the school year. The Independent Contractor will also provide injury clinic one day per week at a time and place agreed upon by both the School and Community Rehab. The independent contractor will be present at the school for a minimum of 3 afternoons/evening per week.

2. SPORTS MEDICINE SERVICES. During each selected varsity event, the Independent Contractor will be present at the event site and will provide the following services:

- a) The evaluation and treatment of injuries incurred by the student-athletes participating in the school sponsored varsity event;
- b) b. Assessment of musculoskeletal injuries with communication of these findings to coaches, parents and physicians as appropriate;
- c) Assistance with preventative taping and strapping of participants in the event, as needed;
- d) Actual treatment using treatment modalities available to designated sports medicine personnel pursuant to Neb. Rev. Stat. 71-1,243, subject to physician supervision, as needed, and;
- e) Organization and maintenance of applicable records, including records of treatment.

Additional duties to be performed will include:

- a) The Independent Contractor will be responsible for all water set up and tear down for home events;
- b) The Independent Contractor will maintain the inventory and the supplies of the Athletic Training Room;
- c) The Independent Contractor will perform rehabilitation and modality treatments for athletes as able to with equipment available;
- d) The Independent Contractor will develop and implement a "sideline workout" for athletes who are sitting out of practice if coaches desire;

- e) The Independent Contractor will work with the teachers and provide guidance on how to return an athlete to class after a concussion when needed;
- f) The Independent Contractor will develop an open line of communication with all coaches and administrators as needed to communicate injury reports and return to play timelines; and
- g) The Independent Contractor will perform other duties as deemed necessary by the Athletic Director

3. EVENT COVERAGE. The Independent Contractor will provide coverage as outlined below. In the event that the Independent contractor cannot cover the event, the Independent Contractor will provide alternate coverage and will notify the School of such coverage. If the School deems it necessary, the School agrees to arrange for the presence or availability of a licensed physician at the selected event. Event coverage is described as follows:

- a) All home and away varsity football games;
- b) All home junior varsity football games;
- c) All home varsity and junior varsity regular season softball games;
- d) All home varsity, junior varsity, reserve/freshman regular season volleyball games;
- e) All home 7th and 8th grade football games;
- f) All home varsity, junior varsity, reserve/freshman regular season boys' and girls' basketball games;
- g) All home varsity and junior varsity regular season wrestling duals or tournaments;
- h) All home varsity and junior varsity regular season baseball games;
- i) All home varsity, junior varsity and middle school regular season track and field meets; and
- j) Other home events where the School's athletic teams are participating, where prior notice is given.

The independent contractor will travel as requested to post-season or conference tournament play for varsity teams only

In the event that there are two home athletic events subject to this Agreement scheduled at the same time, the Independent Contractor will provide coverage according to the following order of sports:

- a) Fall
 - a. Football
 - b. Volleyball
 - c. Softball
- b) Winter
 - a. Basketball
 - b. Wrestling
- c) Spring
 - a. Track
 - b. Baseball

5. SITE OF SERVICES AND SCHOOL SUPPORT OF PROGRAMS. The School shall provide at its sole cost and expense appropriate space for the rendering of any sports medicine

services including, but not limited to, appropriate equipment for the development of preventative programs and an appropriate level of sports medicine supplies for the use of its students. The School shall be solely responsible for determining the times of practice and for scheduling all athletic events subject to this Agreement. The School shall facilitate and notify the Independent Contractor of any communications and schedule changes between the School, coaches and the Independent Contractor. The School shall have available on a timely basis, records showing the name, address and phone number of parents and physicians for each student-athlete, together with parental consent for athletic participation.

6. SUPERVISION AND REPORTING. The Independent Contractor shall report to the designated School athletic director or the coach of the individual sport with respect to sports medicine services to the student-athletes. The Independent Contractor will be responsible for communicating, either in writing or verbally, with the head coach whenever the application of regular athletic training skills indicates that an athlete is injured and cannot participate in further competition.

7. FEES For all scheduled services defined in this Agreement, the School agrees to pay the Independent Contractor \$30,000.00 over a 10-month time period. The School will pay the Independent Contractor \$3,00.00 per month for every month August-May.

Additional fees will apply, at the rate of \$30.00 per hour, for coverage by the Independent Contractor should the following situations arise:

- a) The School desires coverage for summer camps, open gyms or other activities outside of the contract months of August to May; or
- b) The School desires coverage for a conference tournament being hosted at the School. The additional fee will only apply to those hours where coverage is rendered by the Independent Contractor where the School's athletic teams are not participating;

In the event where the Independent Contractor cannot provide coverage, the Independent Contractor will be responsible for payment to the substitute Athletic Trainer.

8. TERMS AND CONDITIONS. This Agreement shall commence on the 1st day of August, 2020 and shall terminate on the 31st day of May, 2021 (the "Term") unless terminated earlier by either party upon at least (30) calendar days' prior written notice to the other party of its intention to terminate.

9. INSURANCE COVERAGE. The Independent Contractor will procure and maintain professional liability insurance coverage in the minimum amount of One Million Dollars (\$1,000,000) pertaining to services provided by the designated sports medicine personnel under this Agreement. The School shall provide and maintain sufficient secondary liability insurance coverage pertaining to the sports medicine services provided by the Independent Contractor.

10. HOLD HARMLESS CLAUSE. The School will indemnify and hold the Independent Contractor harmless from and against and all liabilities, claims and expenses arising from or relating to the services provided by the Independent Contractor pursuant to this Agreement,

including by not limited to, liability, claims and expenses for personal injury and professional negligence.

11. NOTICE. Any notices and payments required to be provided pursuant to this Agreement, or any notice of non-performance, shall be given to:

In the case of Independent Contractor:

Jamie Huss
~~9550 S 163rd Ave~~ 129 E Morningside Rd, Apt #460
~~Omaha, NE 68136~~ Fremont, NE 68025

In the case of the School: James Shada, Athletic Director
Arlington Public Schools
705 North 9th Street
Arlington, NE 6800

12. HIPAA COMPLIANCE. The Independent Contractor will act in compliance with all applicable HIPAA guidelines with regard to the handling of protected health information.

14. MISCELLANEOUS. The foregoing constitutes the entire Agreement of the parties and subsumes and includes all prior, oral and written communications and understandings. This Agreement may be amended only by the mutual written agreement of the parties. This Agreement shall not be assigned in whole or in part by either party hereto without the express written consent of the other party.

15. PANDEMIC CLAUSE. In the event of a National Pandemic or instance where the State of Nebraska limits the engagement in High School Athletics, the School and the Independent Contractor will arrange a different schedule for fees and coverage that will be mutually agreed upon by both parties.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date and year first written above in the preamble to this Agreement.

BY _____
Jamie Huss

Date _____

BY _____
Athletic Director
Arlington Public School District

Date _____

Attest: _____

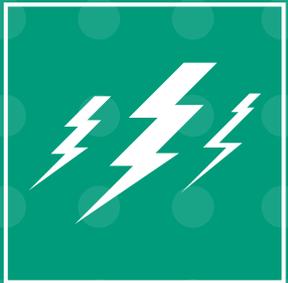
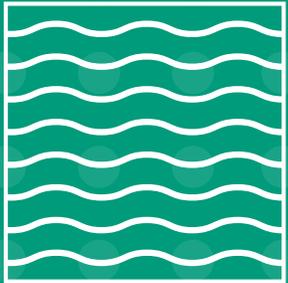
Date _____

Superintendent
Arlington Public School District



**PAPIO-MISSOURI RIVER
NATURAL RESOURCES DISTRICT**

2021 Papiro-Missouri River Natural Resources District



MULTI-HAZARD MITIGATION PLAN



JEO CONSULTING GROUP

Hazard Mitigation Plan Regional Planning Team

NAME	TITLE	JURISDICTION
Aaron Alward	Emergency Management Specialist	Douglas County EMA
Ann Chytka	Highway Superintendent	Burt County
Bryon Miller	Meteorologist	NWS
Dan Douglas	Emergency Manager	Washington County
David Pearson	Senior Hydrologist	NWS
David Six	Emergency Manager, Floodplain Administrator	Burt County
Deanna Hagberg	Emergency Manager	Dakota County
Dirk Petersen	Meteorologist	NWS
Doug Cook	Planning and Zoning Administrator, Floodplain Administrator	Douglas Cook
Jessica Sharf	Hazard Mitigation Specialist	NEMA
Jim Thieler	Public Works Assistant Director	City of Omaha
John Cook	Hazard mitigation Planning Specialist	NEMA
Joseph Green	Recovery Planning Specialist	NEMA
Josie Oliver	Emergency Manager, Floodplain Administrator	Burt County
Lori Laster	Stormwater Management Engineer	P-MRNRD
Lynn Marshall	Emergency Manager	Sarpy County
Mark Stursma	Director of Planning, Floodplain Administrator	City of Papillion
Michael Burns	Zoning Administrator, Floodplain Administrator	City of Valley
Noma Borde	Civil Engineer	City of Omaha
Stacy Gillman	Stormwater Assistant/Deputy Emergency Manager	Douglas County
Rynn Kerkhove	City Planner	City of Omaha
Tom Perez	Emergency Manager	Thurston County
Travis Gibbons	Assistant Planning Director	City of Papillion
Becky Appleford*	Project Manager	JEO Consulting Group
Brooke Seachord*	Project Planner	JEO Consulting Group
Mary Baker*	Resiliency Strategist	JEO Consulting Group

**served in an advisory consultant role*

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List of Acronyms

ACS – American Community Survey	NPDP – National Performance of Dam Program
BCA – Benefit Cost Analysis	NPS – National Park Service
CFR – Code of Federal Regulations	NRC – National Response Center
CIKR – Critical Infrastructure and Key Resources	NRD – Natural Resources District
CRS – Community Rating System	NTAS – National Terrorism Advisory System
DHS – Department of Homeland Security	NWS – National Weather Service
DMA 2000 – Disaster Mitigation Act of 2000	P-MRNRD – Papio-Missouri River Natural Resources District
EAB – Emerald Ash Borer	PDM – Pre-Disaster Mitigation Program
EAP – Emergency Action Plan	PDSI – Palmer Drought Severity Index
ELAP – Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish Program	PHMSA – U.S. Pipeline and Hazardous Material Safety Administration
EPA – Environmental Protection Agency	P.L. – Public Law
EPZ – Emergency Planning Zone	PSHA – Probabilistic Seismic Hazard Analysis
ESL – English as Second Language	RMA – Risk Management Agency
F&W – Fish and Wildlife	SBA – Small Business Administration
FBI – Federal Bureau of Investigations	SFHA – Special Flood Hazard Area
FEMA – Federal Emergency Management Agency	SPIA – Sperry-Piltz Ice Accumulation Index
FIRM – Flood Insurance Rate Map	SSA – Sector-Specific Agency
FMA – Flood Mitigation Assistance Program	START – National Consortium for the Study of Terrorism and Responses to Terrorism
FR – FEMA’s Final Rule	SURE – Supplemental Revenue Assistance Payments
GIS – Geographic Information Systems	TAP – Tree Assistance Program
HMA – Hazard Mitigation Assistance	TORRO – Tornado and Storm Research Organization
HMGP – Hazard Mitigation Grant Program	USACE – United States Army Corps of Engineering
HMP – Hazard Mitigation Plan	USDA – United States Department of Agriculture
HRCC – High Plains Regional Climate Center	USGS – United States Geological Survey
HSAS – Homeland Security Advisory System	WUI – Wildland Urban Interface
IP – Office of Infrastructure Protection	
JEO – JEO Consulting Group, Inc.	
LEOP – Local Emergency Operations Plan	
LFD – Livestock Forage Disaster Assistance Program	
LGA – Liquid Gallon	
LIP – Livestock Indemnity Program	
MHSW – Mobile Home Single Wide	
MPH – miles per hour	
NCEI – National Centers for Environmental Information	
NDA – Nebraska Department of Agriculture	
NDEE – Nebraska Department of Environment and Energy	
NDMC – National Drought Mitigation Center	
NDOT – Nebraska Department of Transportation	
NeDNR – Nebraska Department of Natural Resources	
NEMA – Nebraska Emergency Management Agency	
NFIP – National Flood Insurance Program	
NFS – Nebraska Forest Service	
NIPP – National Infrastructure Protection Plan	
NOAA – National Oceanic and Atmospheric Administration	

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EXECUTIVE SUMMARY

Introduction

This plan is an update to the Papio-Missouri River Natural Resources District Multi-Hazard Mitigation Plan (HMP), last approved in 2016. The plan update was developed in compliance with the requirements of the Disaster Mitigation Act of 2000 (DMA 2000).

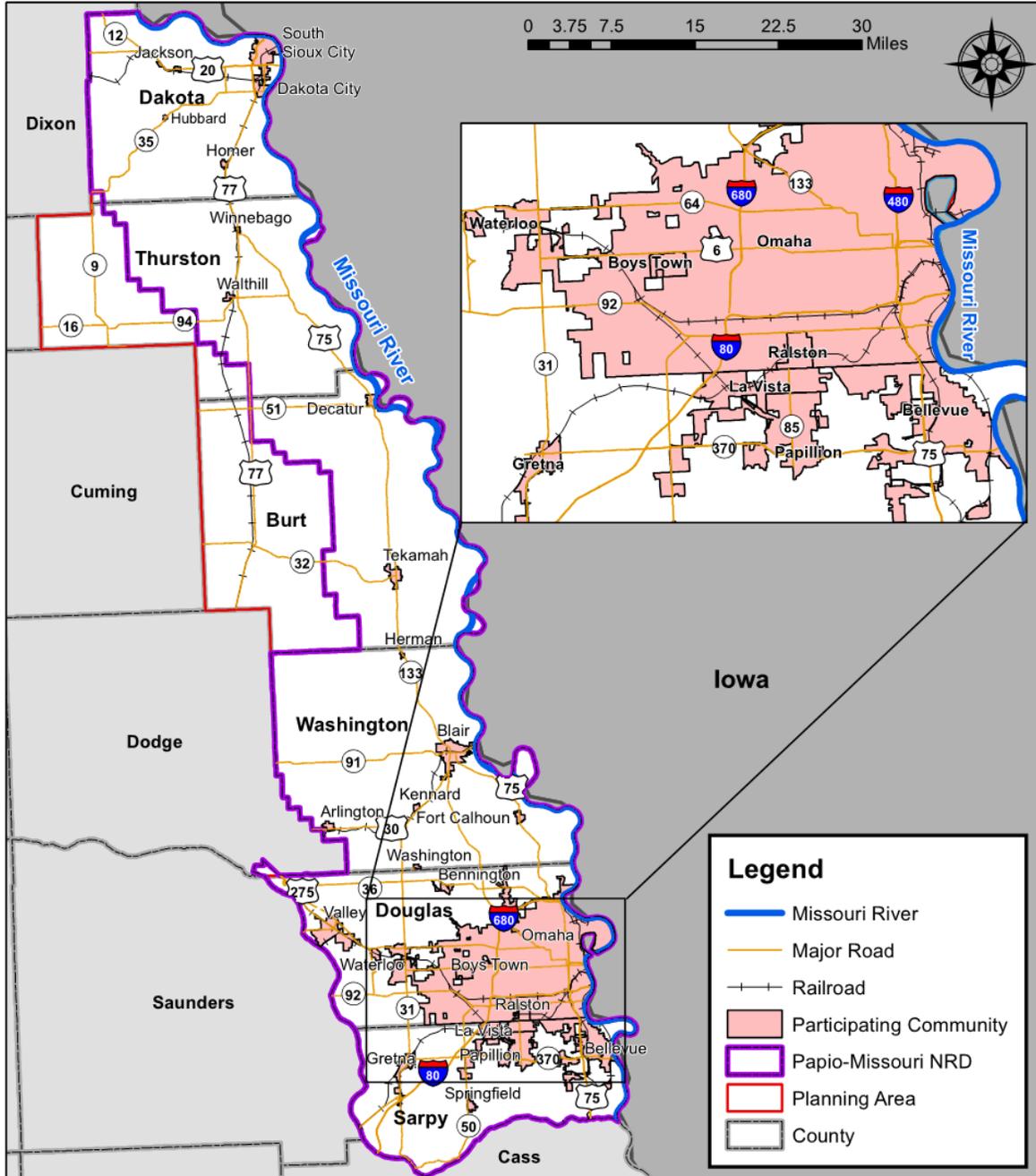
Hazard mitigation planning is a process in which hazards are identified and profiled; people and facilities at-risk are identified and assessed for threats and potential vulnerabilities; and strategies and mitigation measures are identified. Hazard mitigation planning increases the ability of communities to effectively function in the face of natural and human-caused disasters. The goal of the process is to reduce risk and vulnerability, in order to lessen impacts to life, the economy, and infrastructure.

Plan participants are listed in the following table and illustrated in the following planning area map. New participating jurisdictions in this plan update included the Village of Hubbard, Douglas County West Community Schools, Emerson-Hubbard Community Schools, Gretna Public Schools, Ralston Public Schools, Washington County Fair Board, and the Winnebago Indian Tribe. The communities of Boys Town, Kennard, and Washington did not participate in this HMP.

Table 1: Participating Jurisdictions in P-MRNRD HMP

PARTICIPATING JURISDICTIONS		
Papio-Missouri River Natural Resources District		
Burt County	Sarpy County	Winnebago Indian Tribe
Village of Decatur	City of Bellevue	Arlington Public Schools
City of Tekamah	City of Gretna	Blair Community Schools
Dakota County	City Of La Vista	Douglas County West Community Schools
City of Dakota City	City of Papillion	Emerson-Hubbard Community Schools
Village of Homer	City of Springfield	Fort Calhoun Community Schools
Village of Hubbard	Thurston County	Gretna Public Schools
Village of Jackson	Village of Walthill	Homer Community Schools
City of South Sioux City	Village of Winnebago	Papillion-La Vista Public Schools
Douglas County	Washington County	Ralston Public Schools
City of Bennington	Village of Arlington	Westside Community Schools
City of Omaha	City of Blair	Washington County Fair Board
City of Ralston	City of Fort Calhoun	
City of Valley	Village of Herman	
Village of Waterloo		

Figure 1: Map of Planning Area





Created By: MH
Date: 1/14/2020
Revised: 2/4/2020
Software: ArcGIS 10.7.1
File Name: PappioNRD_PlanningArea.mxd

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

2021 Pappio-Missouri River NRD
 Hazard Mitigation Plan

Planning Area



Goals and Objectives

The potential for disaster losses and the probability of occurrence of natural and manmade hazards present a significant concern for the communities participating in this plan update. The driving motivation behind the update of this hazard mitigation plan is to reduce vulnerability and the likelihood of impacts to the health, safety, and welfare of all citizens in the planning area. To this end, the Regional Planning Team and participating jurisdictions reviewed, updated, and approved goals, and objectives which helped guide the process of identifying both broad-based and community specific mitigation strategies and projects that will, if implemented, reduce their vulnerability and help build stronger, more resilient communities.

These goals and objectives were reviewed by the Regional Planning Team at the Kick-off meeting and revised to reflect experiences from the past HMP process and newly identified priorities. The goals and objectives for this plan update are as follows:

Goal 1: Protect the Health and Safety of the Public

Objective 1.1: Continued compliance with National Flood Insurance Program (NFIP) for participating communities; join NFIP if not currently participating

Objective 1.2: Construct safe rooms in schools, public buildings, and in select locations, at public outdoor venues

Objective 1.3: Update or obtain additional outdoor warning sirens, as needed, in the project area

Objective 1.4: Develop additional emergency notification methods to alert the public of potential hazards

Objective 1.5: Provide educational opportunities for the public to promote preparedness in the project area

Objective 1.6: Reduce flooding of developed residential and commercial areas

Objective 1.7: Identify vulnerable or at-risk populations in the project area

Goal 2: Reduce or Prevent Future Damage to Critical Facilities, Critical Infrastructure, and Maintain Their Operation after a Hazard

Objective 2.1: Protect power lines throughout the NRD by burying or reinforcing them

Objective 2.2: Obtain generators and other backup power systems required to keep critical facilities, critical infrastructure, and emergency operations running after a hazard event

Objective 2.3: Evaluate and identify infrastructure systems that require improvements in order to reduce or prevent damage from hazards

Objective 2.4: Protect all existing public infrastructure from all hazards

Objective 2.5: Develop and implement hazard event action and recovery plans including communications, debris management, and long-term recovery planning

Goal 3: Reduce or Prevent Future Damage to Existing Properties and Natural Resources

Objective 3.1: Enforce regulations and building codes promoting wise development and construction that reduces the potential for damage to existing or future structures and property

Objective 3.2: Protect existing streambanks and beds from erosion/downcutting

Objective 3.3: Perform studies to determine locations of concern and evaluate projects to mitigate against the damage caused by hazards

Objective 3.4: Develop projects to reduce or prevent damage to public structures

Objective 3.5: Improve local drainage and stabilize creeks where necessary

Objective 3.6: Improve protection procedures for structures throughout the planning area to reduce damage from hazard events

Objective 3.7: Implement a mitigation plan for tree trimming and tree removal

Objective 3.8: Improve and protect area roads and drainage structures against hazards

Objective 3.9: Maintain and improve surface water quality

Goal 4: Promote Multi-Agency Coordination and Resources

Objective 4.1: Maximize funding opportunities through grant money and other outside sources

Objective 4.2: Prioritize projects based on greatest risk

Objective 4.3: Encourage individual property owners to develop independent measures to protect their property and not rely on public funding

Objective 4.4: Promote the efficient use of all public, private, and allocated funds

Summary of Changes

The hazard mitigation planning process undergoes several changes during each plan update to best accommodate the planning area and specific conditions. Changes from the 2016 Hazard Mitigation Plan and planning process in this update included: combined risk assessment for hazards with similar mitigation strategies (High Winds and Tornadoes, Drought and Extreme Heat, and Severe Thunderstorms with Hail); elimination of hazards of low risk to local planning teams; modified public meeting planning process to respond to the COVID-19 pandemic; inclusion of Plan Maintenance sections to individual community profiles; development of NRD Hazard Mitigation Plan website; and a social media engagement campaign to garner feedback and input from residents within the planning area.

This update also works to unify the various planning mechanisms in place throughout the participating communities (i.e. comprehensive plans, local emergency operation plans, zoning ordinances, building codes, etc.) to ensure that the goals and objectives identified in those planning mechanisms are consistent with the strategies and projects included in this plan. Other changes made to the plan to address review comments from the 2016 plan are described in the table below.

Table 2: 2021 P-MRNRD HMP Changes

COMMENT/REVISION FROM 2016 REVIEW TOOL	LOCATION OF REVISION	SUMMARY OF CHANGE
Include more specific information for climate change for individual hazards	Hazard risk profiles	Regional vulnerabilities table includes impacts from climate change on hazard type
Improve map legends	Throughout plan	New maps have been developed and included where appropriate
Consider maps to clearly document risk	Community profiles	Critical facility maps now include floodplain layers.
Improve plan integration sections – specifically describe how plan integration was done in the past and will be done in the future	Community profiles	Plan integration summaries include descriptions of comprehensive plans, CIPs, annual budgets, building codes, zoning ordinances, and floodplain ordinances as appropriate.
Remove mitigation action redundancies	Section five, community profiles	Selected mitigation actions were reviewed and renamed/combined to remove redundancies between jurisdictions.

It should be noted as well that due to the COVID-19 outbreak, numerous changes were made in the midst of the planning process to plan meeting dates and requirements. To best protect residents and staff members in the planning area, all public meetings were held via an online or phone one-on-one format rather than in-person public workshop meetings. Additional changes and summary of the planning process are described in Section Two.

Plan Implementation

Various communities across the planning area have implemented hazard mitigation projects following the 2016 Hazard Mitigation Plan. A few examples of completed projects include establishment of an Emergency Operations Center, developing snow routes, Comprehensive Plan updates, equipment upgrades, backup generators, alert siren updates or replacements, enhanced floodplain regulation, and weather radios.

In order to build upon these prior successes and to continue implementing mitigation projects, despite limited resources, communities will need to continue relying upon multi-agency coordination as a means of leveraging resources. Communities across the six-county planning area have been able to work with a range of entities to complete projects; potential partners for future project implementation include, but are not limited to: University of Nebraska-Lincoln (UNL), Nebraska Forest Service (NFS), Nebraska Department of Transportation (NDOT), Nebraska Department of Natural Resources (NeDNR); Nebraska Emergency Management Agency (NEMA), United States Department of Agriculture (USDA), and Federal Emergency Management Agency (FEMA).

Hazard Profiles

The hazard mitigation plan includes a description of the hazards considered, including a risk and vulnerability assessment. Data considered during the risk assessment process includes: historic occurrences and recurrence intervals; historic losses (physical and monetary); impacts to the built environment (including privately-owned structures as well as critical facilities); and the local risk assessment. The following tables provide an overview of the risk assessment for each hazard and the losses associated with each hazard.

Table 3: Regional Risk Assessment

HAZARD	PREVIOUS OCCURRENCES (EVENTS/YEAR)	APPROXIMATE ANNUAL PROBABILITY	LIKELY EXTENT
Agricultural Animal Disease	60/6	100%	~15 animals
Agricultural Plant Disease	31/20	100%	Unavailable
Chemical Fixed Sites	377/30	100%	Localize to the facilities and adjacent surroundings.
Radiological Fixed Sites	0/48	<1%	10-mile evacuation radius
Chemical Transportation	1,869/49	100%	~45 gallons, Limited (<0.5 mile) from release site
Dam Failure	0/107	<1%	Varies by structure

HAZARD	PREVIOUS OCCURRENCES (EVENTS/YEAR)	APPROXIMATE ANNUAL PROBABILITY	LIKELY EXTENT
Drought	364/1,501 months	>25%	Mild Drought
Earthquakes	0/120	0%	<2.5 magnitude
Extreme Heat	Avg. 4 days per year	100%	>100°F
Flooding	1,196/24	100%	Some inundation of structures and roads near streams. Some evacuations of people may be necessary.
Grass/wildfire	1,383/19	100%	<100 acres; Some homes and structures threatened or at risk
High Winds	120/24	100%	9 BWF (47-54mph)
Levee Failure	6	1%	22,748 people and 8,019 structures in leveed area
Public Health Emergency	3/12	>1%	Varies by event; >1 fatality
Severe Thunderstorms (includes hail)	1,384/24	100%	>1" rainfall Avg 1.16 hail; 35-58 mph
Severe Winter Storms	494/24	100%	0.25-0.5" ice 20°-40° below zero (wind chill) 4-8" snow 25-40 mph winds
Terrorism	9/48	<20%	Isolated to a single building; damages <\$1M
Tornadoes	37/24	100%	EF0-EF2

The following table provides loss estimates for hazards with sufficient data. Detailed descriptions of major events are included in *Section Seven: Community Profiles* as appropriate per jurisdiction.

Table 4: Hazard Loss Estimates for the Planning Area

HAZARD	COUNT	PROPERTY	CROP
Agricultural Disease			
Animal Disease	60	876 animals	N/A
Plant Disease	31	N/A	\$250,012
Chemical & Radiological Fixed Sites	377	\$1,235,000	N/A
30 injuries			
Chemical Transportation	1,869	\$1,403,606	N/A
12+ injuries			
Dam Failure	0	\$0	N/A

HAZARD		COUNT	PROPERTY	CROP
Drought & Extreme Heat	Drought	364/1,501 months	\$0	\$135,375,401
	Extreme Heat	Avg. 4 days per year	\$0	\$9,513,270
Earthquakes		0	\$0	\$0
Flooding <i>3 fatalities</i>	Flash Flood	84	\$18,610,000	\$22,038,884
	Flood	112	\$437,071,000	
Grass/wildfire <i>5 injuries, 1 fatality</i>		1,383	13,602 acres	\$70,169
High Winds & Tornadoes <i>5 injuries, 1 fatality</i>	High Winds	120	\$231,000	\$2,316,372
	Tornadoes	37	\$5,085,000	\$311,393
Levee Failure		6	Unknown	N/A
Public Health Emergency		3 outbreak events	>59,378 infections; >485 fatalities	N/A
Severe Thunderstorms <i>10 injuries, 1 fatality</i>	Hail	797	\$513,207,000	\$84,472,212
	Heavy Rain	14	\$1,000,000	
	Lightning	42	\$3,635,500	
	Thunderstorm Wind	531	\$63,577,000	
Severe Winter Storms <i>3 fatalities</i>	Blizzards	58	\$35,000	\$1,263,867
	Extreme Cold	28	\$0	
	Heavy Snow	37	\$22,000,000	
	Ice Storms	17	\$10,000	
	Winter Storms	236	\$24,000	
Winter Weather		118	\$0	
Terrorism <i>7 injuries, 1 fatality</i>		9	\$39,500	N/A
Total		5,965	\$1,067,163,606	\$253,295,207

N/A – Data not available

Many of the natural hazards can be expected to occur annually within the planning area. Events like agricultural disease, flooding, extreme heat, grass and wildfires, severe thunderstorms, and severe winter storms will occur annually. Other hazards like drought will occur less often. What is not known regarding hazard occurrences is the scope of events and how they will manifest themselves locally.

Historically, severe thunderstorms and flooding have resulted in the most significant structural damage within the planning area. High winds and tornadoes and drought and extreme heat were also identified as top hazards of concern by residents in the planning area through a social media engagement campaign (see *Section Two: Planning Process*). These top hazards of concern for the planning area are summarized below.

Drought and Extreme Heat

Drought is a regular and reoccurring phenomenon in the planning area and the state of Nebraska. Historic data shows that droughts have occurred with regularity across the planning area and recent research indicates that trend will continue and potentially intensify, especially as the impacts of climate change are felt in the coming decades. Extreme heat impacts people, the built

environment, and the agricultural sector. Anticipated impacts include (but are not limited to): heat exhaustion in both human and animal populations, heat stroke, possible death in both human and animal populations, power outages, depletion of water sources, damages to roofs, damages to transportation routes, and major losses in the agricultural industry. Nearly \$145 million in total crop loss was reported for the planning area since 2000 from drought and extreme heat events.

Prolonged drought events can have a profound effect on the planning area and the individual communities. Expected impacts from prolonged drought events include (but are not limited to): economic loss in the agricultural sector, loss of employment in the agricultural sector, limited water supplies (drinking and fire suppression), and decrease in recreational opportunities. It is known and understood that high and extreme temperatures are a regular part of the climate for the six-county planning area. The months of June, July, and August are the warmest months for the planning area with an average of 4 days annually where max temperatures are 100°F or greater.

Flooding

Flooding is one of the most costly hazards in the planning area. Flash flooding, riverine flooding, and ice jam flooding are common for the planning area due to the regular occurrence of severe thunderstorms in spring and summer, and the proximity of many communities next to rivers and tributaries. Flooding can occur on a local level, only affecting a few streets, but can also extend throughout an entire district, affecting whole drainage basins particularly along major waterways such as the Missouri and Platte Rivers. During the spring and summer of 2011, the Missouri River flooded for months due to record releases from Gavins Point Dam and heavy rains in May over the Missouri River basin. The dam release was in response to record snowfall and heavy rains in Montana. The March 2019 flood caused devastating damage along the Missouri, Elkhorn, and Platte Rivers and closed roads, damaged buildings, knocked out power, and led to several fatalities. Urban areas, industrial, utilities, transportation routes, and agriculture all suffered damages due to these floods. The planning area expects loss inducing floods to occur on an annual basis with 196 flooding events being recorded by the National Centers for Environmental Information (NCEI) over nearly 24 years.

High Winds and Tornadoes

High winds and tornadoes occur in the planning area annually. The NCEI reports 37 tornadoes for the six county area since 1996. Of the reported events, all were ranked between an F/EF0 and F/EF2 and eight of the events reported damages. The most damaging tornado since 1996 struck the Village of Jackson in August 2001. It heavily damaged the school, destroyed 10 homes, and knocked down power lines, poles, and trees, and in total caused of \$3 million dollars in damages. Based on historic records, high winds and tornadoes can occur throughout the year, but most events occur in the spring. Impacts from past events in the planning area include: damages to homes, vehicles, and agricultural buildings; snapping of power poles and downing of power lines; and destruction of silos and center pivot irrigation systems.

Vulnerable populations within the planning area include residents living in mobile homes (two percent of all housing units), facilities without storm shelters which house large numbers of people (such as nursing homes, schools, factories, etc.), homeowners without storm shelters or basements, and residents with decreased mobility. All communities in the planning area have outdoor warning sirens.

Severe Thunderstorms

Thunderstorms differ from many other hazards in that they are generally large in magnitude, have a long duration, and travel across large areas and through multiple jurisdictions within a single region. Hail, lightning, heavy rain, and strong winds can all occur during storm events and cause damage. Additionally, thunderstorms often occur in a series, with one area having the potential to be impacted multiple times in one day. Severe thunderstorms are most likely to occur between the months of March and September with the highest number of events occurring in June. Typical impacts resulting from severe thunderstorms include (but are not limited to): loss of power, obstruction to transportation routes, grass/wildfires starting from lightning strikes, localized flooding, and damages discussed in the hazard profiles for hail and high winds as these are typical component of severe thunderstorms.

Vulnerable populations related to severe thunderstorms include: residents of mobile homes (two percent of housing units), citizens with decreased mobility, and those caught outside during storm events. Most residents within the planning area are familiar with severe thunderstorms and know how to appropriately prepare and respond to events. Most participating jurisdictions have reported updates or improvements to risk communication and outdoor warning systems. In addition, the use of text notifications have helped decrease the human vulnerability to this hazard.

Mitigation Strategies

There are a wide variety of strategies that can be used to reduce the impacts of hazards for the built environment and planning area residents. *Section Five: Mitigation Strategy* shows the mitigation actions chosen by the participating jurisdictions to prevent future losses. The following table shows the most common mitigation actions that can be implemented to prevent future losses.

Table 5: Key Mitigation Strategies

Hazard	MITIGATION STRATEGIES
Agricultural Plant and Animal Disease	<ul style="list-style-type: none"> -Public education and awareness -Outbreak emergency exercises
Chemical Fixed Site and Transportation Spills	<ul style="list-style-type: none"> -Public education and awareness -Chemical spill emergency exercises -Shelter in place training
Dam Failure	<ul style="list-style-type: none"> -Develop evacuation plans -Emergency exercise
Drought and Extreme Heat	<ul style="list-style-type: none"> -Expanding water storage capacity -Develop ground water/irrigation management plans -Upgrade rural water infrastructure -Develop vulnerable population databases within the community
Earthquakes	<ul style="list-style-type: none"> -Adopt more stringent building codes -Strengthen and retrofit at risk structures
Flooding	<ul style="list-style-type: none"> -Enroll/participate in the NFIP -Limit or restrict development in flood-prone areas -Property acquisition or flood-proofing of structures in the floodplain
Grass/Wildfire	<ul style="list-style-type: none"> -Acquire training and equipment for local fire departments

Hazard	MITIGATION STRATEGIES
	<ul style="list-style-type: none"> -Hazardous fuels reduction -Public education and awareness for safe burning practices, burn permits, and equipment maintenance
High Winds and Tornadoes	<ul style="list-style-type: none"> -Anchoring mobile homes and trailers -Remove hazardous trees -Design and construct storm shelters and safe rooms -Upgrade and maintain emergency warning sirens and early notification systems -Bury power lines or harden critical infrastructure
Levee Failure	<ul style="list-style-type: none"> -Maintain and upgrade levee systems -Conduct role-play table top levee failure exercises
Public Health Emergency	<ul style="list-style-type: none"> -Purchase, store, and inventory personal protective equipment for residents -Upgrade telecommunication equipment for remote work
Severe Thunderstorms	<ul style="list-style-type: none"> -Purchase and install backup power generators for redundant power -Install static detectors, surge protectors, and/or lightning rods -Remove hazardous trees -Design and construct storm shelters and safe rooms -Upgrade and maintain emergency warning sirens and early notification systems -Bury power lines or harden critical infrastructure
Severe Winter Storms	<ul style="list-style-type: none"> -Incorporate use of snow fences to protect vulnerable transportation routes -Purchase and install backup power generators for redundant power -Remove hazardous trees -Review and improve snow/ice removal protocols -Upgrade and maintain emergency warning sirens and early notification systems -Bury power lines or harden critical infrastructure
Terrorism	<ul style="list-style-type: none"> -Improve security systems including cameras and locking access -Upgrade cybersecurity systems

SECTION ONE INTRODUCTION

Hazard Mitigation Planning

Severe weather and hazardous events are becoming a more common occurrence in our daily lives. Pursuing mitigation strategies reduces risk and is a socially and economically responsible action to prevent long term risks from natural and human-caused hazard events.

Natural hazards, such as severe winter storms, tornadoes and high winds, severe thunderstorms, flooding, extreme heat, drought, agricultural diseases (plant and animal), earthquakes, and wildfires are part of the world around us. Human-caused hazards are a product of society and can occur with significant impacts to communities.

Human-caused hazards include levee or dam failure, hazardous chemical spills (either fixed sites or transportation), and terrorism or civil disorder events. These hazard events can occur as a part of normal operations or as a result of human error. All jurisdictions participating in this planning process are vulnerable to a wide range of natural and human-caused hazards that threaten the safety of residents and have the potential to damage or destroy both public and private property, cause environmental degradation, or disrupt the local economy and overall quality of life.

The Papio-Missouri River Natural Resources District (P-MRNRD) has prepared this multi-jurisdictional multi-hazard mitigation plan in an effort to identify potential impacts from natural and human-caused hazards and to better protect the people and property of the region from the effects of these hazards. This plan demonstrates a regional commitment to reducing risks from hazards and serves as a tool to help decision makers establish mitigation activities and resources. Further, this plan was developed to make P-MRNRD and the participating jurisdictions herein eligible for federal funding programs under the Hazard Mitigation Assistance (HMA) program. This plan was also developed to accomplish the following objectives:

- Minimize the disruption to each jurisdiction following a disaster;
- Establish actions to reduce or eliminate future damages in order to deficiently recover from disasters;
- Investigate, review, and implement activities or actions to ensure disaster related hazards are addressed by the most efficient and appropriate solution;
- Educate citizens about potential hazards; and,
- Facilitate development and implementation of hazard mitigation management activities to ensure a sustainable and more resilient community.



FEMA Definition of Hazard Mitigation:

“Any sustained action taken to reduce or eliminate the long-term risk to human life and property from [natural] hazards.”

Disaster Mitigation Act of 2000

The U.S. Congress passed the Disaster Mitigation Act of 2000 to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act.¹ Section 322 of the DMA 2000 requires that state and local governments develop, adopt, and routinely update a hazard mitigation plan to remain eligible for pre- and post-disaster mitigation funding.² These funds include the Hazard Mitigation Grant Program (HMGP)³, Flood Mitigation Assistance (FMA)⁴, and the newly released Building Resilient Infrastructure and Communities (BRIC)⁵. BRIC replaced the Pre-Disaster Mitigation (PDM) Program in 2020. The Federal Emergency Management Agency (FEMA) administers these programs under the Department of Homeland Security (DHS).⁶ The Nebraska Emergency Management Agency (NEMA) administers these grants at the state level.

FEMA MITIGATION DIRECTORATE

Mitigation is the cornerstone of emergency management. Mitigation focuses on breaking the cycle of disaster damage, reconstruction, and repeated damage. Mitigation lessens the impact disasters have on people's lives and property through damage prevention, appropriate development standards, and affordable flood insurance. Through measures such as avoiding building in damage-prone areas, stringent building codes, and floodplain management regulations, the impact on lives and communities is lessened.

This plan was developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans. The plan shall be monitored and updated on a routine basis, minimally every five years, to maintain compliance with the legislature per Section 322, mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the DMA 2000 (P.L. 106-390)⁷ and by FEMA's Final Rule (FR)⁸ published in the Federal Register on November 30, 2007, at 44 Code of Federal Regulations (CFR) Part 201.

Hazard Mitigation Assistance

On June 1, 2009, FEMA initiated the HMA program integration, which aligned certain policies and timelines of the various mitigation programs. These HMA programs present a critical opportunity to minimize the risk to individuals and property from hazards while simultaneously reducing the reliance on federal disaster funds.

Each HMA program was authorized by separate legislative actions and, as such, each program differs slightly in scope and intent. All three grant programs require jurisdictions to have participated in and adopted a FEMA-approved mitigation plan.

- **HMGP:** this program provides funds to states, territories, Indian tribal governments, local governments, and other eligible participants following a presidential disaster declaration.

¹ Federal Emergency Management Agency, Public Law 106-390. 2000. "Disaster Mitigation Act of 2000." Last modified September 26, 2013. <https://www.fema.gov/media-library/assets/documents/4596>.

² Federal Emergency Management Agency. June 2007. "Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, and Related Authorities." Federal Emergency Management Agency 592: 22. Sec. 322. Mitigation Planning (42 U.S.C. 5165). https://www.fema.gov/pdf/about/stafford_act.pdf.

³ Federal Emergency Management Agency. "Hazard Mitigation Grant Program." Last modified July 8, 2017. <https://www.fema.gov/hazard-mitigation-grant-program>.

⁴ Federal Emergency Management Agency. "Flood Mitigation Assistance Grant Program." Last modified July 11, 2017. <https://www.fema.gov/flood-mitigationassistance-grant-program>.

⁵ Federal Emergency Management Agency. "Building Resilient Infrastructure and Communities." Last modified September 8, 2020. <https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities>.

⁶ Federal Emergency Management Agency. "Hazard Mitigation Assistance." Last modified March 29, 2017. <https://www.fema.gov/hazard-mitigation-assistance>.

⁷ Federal Emergency Management Agency: Federal Register. 2002. "Section 104 of Disaster Mitigation Act 2000: 44 CFR Parts 201 and 206: Hazard Mitigation Planning and Hazard Mitigation Grant Programs; Interim Final Rule." <https://www.fema.gov/pdf/help/fr02-4321.pdf>.

⁸ Federal Emergency Management Agency: Federal Register. 2002 "44 CFR Parts 201 and 206: Hazard Mitigation Planning and Hazard Mitigation Grant Programs; Interim Final Rule." <https://www.fema.gov/pdf/help/fr02-4321.pdf>.

The DMA 2000 authorizes up to seven percent of HMGP funds available to a state after a disaster to be used for the development of state, tribal, and local mitigation plans.

- **FMA:** this program provides grant funds to implement projects such as acquisition or elevation of flood-prone homes. Jurisdictions must be participating communities in the National Flood Insurance Program (NFIP) to qualify.
- **BRIC:** this program is replacing the Pre-Disaster Mitigation Program and provides funds on an annual allocation basis to local jurisdictions for implementing programs and projects to improve resiliency and local capacity before disaster events.

Plan Financing and Preparation

Regarding plan financing and preparation, the P-MRNRD is the “sub-applicant” that is the eligible entity which submits applications for FEMA assistance to the “Applicant”. The “Applicant”, in this case is the State of Nebraska. If HMA funding is awarded, the sub-applicant becomes the “sub-grantee” and is responsible for managing the sub-grant and complying with program requirements and other applicable federal, state, territorial, tribal, and local laws and regulations.

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SECTION TWO

PLANNING PROCESS

Introduction

The process utilized to develop a hazard mitigation plan is as important as the final planning document itself. The P-MRNRD utilized and adapted the four-step hazard mitigation planning process as outlined by FEMA to fit the needs of the regional planning area, specific jurisdictions, and changing circumstances during the planning process period. The following section describes the planning process including: the development and establishment of both the Regional and Local Planning Teams; the function of each type of planning team; project meeting times, dates, agendas, and attendees; outreach efforts to the general public, neighboring jurisdictions, and available stakeholders; general information relative to the risk assessment process; general information relative to local/regional capabilities; plan review and adoption; and a brief discussion of plan maintenance.

Requirement § 201.6(b): Planning Process. An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

1 – An opportunity for the public to comment on the plan during the drafting state and prior to plan approval;

2 – An opportunity for neighboring communities, local, and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process; and

3 – Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

Multi-Jurisdictional Approach

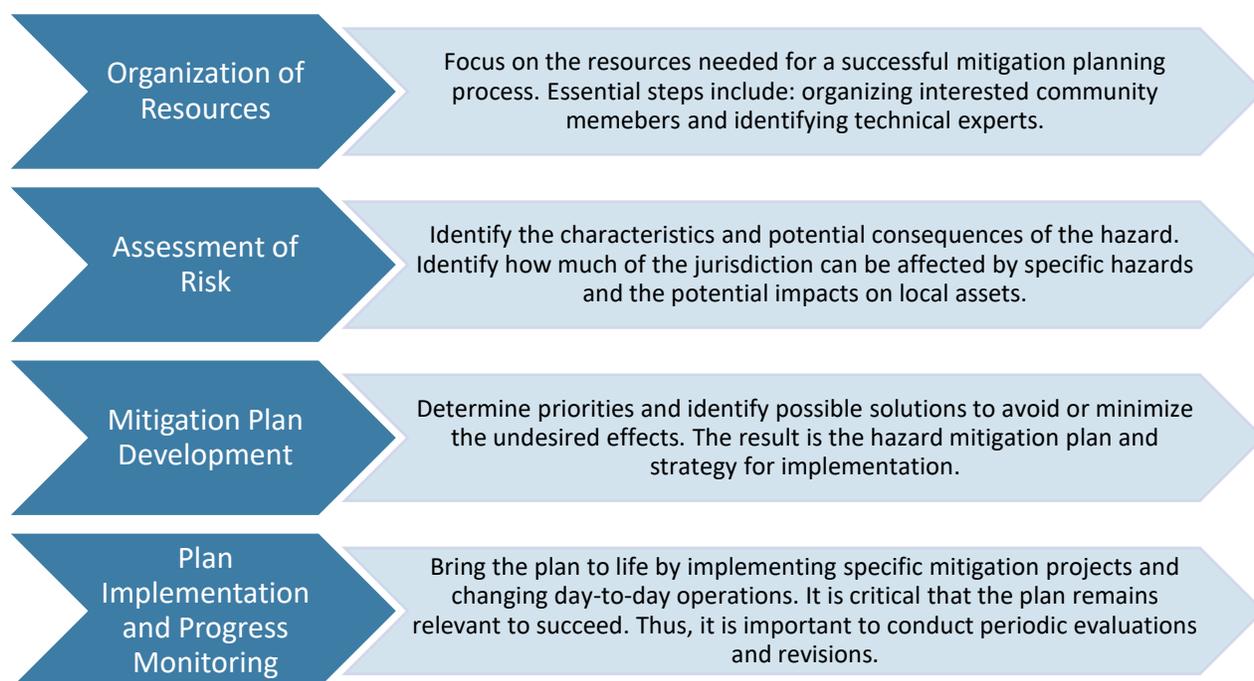
According to FEMA, “A multi-jurisdictional hazard mitigation plan is a plan jointly prepared by more than one jurisdiction.” For the purpose of this planning process, the term ‘jurisdiction’ refers to any eligible (i.e. taxing authority) participating entity. Title 44 Part 201, Mitigation Planning in the CFR, defines a ‘local government’ [jurisdiction] as “any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments, regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, any rural community, unincorporated town or village, or other public entity.” For the purposes of this plan, a ‘taxing authority’ was utilized as a qualifier for jurisdictional participation. FEMA recommends the multi-jurisdictional approach under the DMA 2000 for the following reasons:

- It provides a comprehensive approach to the mitigation of hazards that affect multiple jurisdictions;
- It allows economies of scale by leveraging individual capabilities and sharing cost and resources;
- It avoids duplication of efforts; and,
- It imposes an external discipline on the process.

Both FEMA and NEMA recommend this multi-jurisdictional approach through the cooperation of counties, regional emergency management, and natural resource districts. The P-MRNRD utilized the multi-jurisdictional planning process recommended by FEMA resources (Local Mitigation Plan Review Guide⁹, Local Mitigation Planning Handbook¹⁰, and Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards¹¹) to develop this plan.

Hazard Mitigation Planning Process

The hazard mitigation planning process as outlined by FEMA has four general steps which are detailed in the figure below. The mitigation planning process is rarely a linear process. It's common that ideas developed during the initial assessment of risks may need revision later in the process, or that additional information may be identified while developing the mitigation plan or during the implementation of the plan that results in new goals or additional risk assessments. The four-step approach is described in the figure below.



Organization of Resources

Plan Update Schedule

The P-MRNRD secured PDM grant funding for their multi-jurisdictional hazard mitigation plan (HMP) in 2019. JEO Consulting Group (JEO), was contracted in August 2018 to guide and facilitate the planning process and assemble the HMP. For the planning area sponsor, Lori Laster (Stormwater Management Engineer with P-MRNRD) served as the primary point of contact throughout the project. A clear timeline of this plan update process is provided in Figure 2.

⁹ Federal Emergency Management Agency. 2011. "Local Mitigation Plan Review Guide." https://www.fema.gov/media-library-data/20130726-1809-25045-7498/plan_review_guide_final_9_30_11.pdf

¹⁰ Federal Emergency Management Agency. 2013. "Local Mitigation Planning Handbook." https://www.fema.gov/media-library-data/20130726-1910-25045-9160/fema_local_mitigation_handbook.pdf.

¹¹ Federal Emergency Management Agency. 2013. "Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards." https://www.fema.gov/media-librarydata/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf.

Figure 2: Project Timeline



Regional Planning Team Establishment

At the beginning of the planning process the P-MRNRD and JEO staff identified key contacts to serve as the Regional Hazard Mitigation Planning Team. This Regional Planning Team comprised of county representatives for the six-county area, key officials for communities participating in the Community Rating System (CRS) program, state agencies, and the consultant, was established to guide the planning process; review the 2016 HMP and discuss planning process changes or plan requirements; and serve as the liaison between the project sponsor and consultant to local participating jurisdictions. Those invited to be a part of the Regional Planning Team included contacts from: P-MRNRD, county emergency management and county planning officials/floodplain administrators, City of Omaha, City of Papillion, City of Valley, Nebraska Department of Natural Resources, Nebraska Emergency Management Agency, National Weather Service, and JEO. The following table provides a list of Regional Planning Team Members who attended the Kick-off Meeting and/or participated in this plan update process.

Table 6: Regional Planning Team Members

NAME	TITLE	JURISDICTION
Aaron Alward	Emergency Management Specialist	Douglas County EMA
Ann Chytka	Highway Superintendent	Burt County
Bryon Miller	Meteorologist	NWS
Dan Douglas	Emergency Manager	Washington County
David Pearson	Senior Hydrologist	NWS
David Six	Emergency Manager, Floodplain Administrator	Burt County
Deanna Hagberg	Emergency Manager	Dakota County
Dirk Petersen	Meteorologist	NWS
Doug Cook	Planning and Zoning Administrator, Floodplain Administrator	Douglas Cook
Jessica Sharf	Hazard Mitigation Specialist	NEMA
Jim Thieler	Public Works Assistant Director	City of Omaha
John Cook	Hazard mitigation Planning Specialist	NEMA
Joseph Green	Recovery Planning Specialist	NEMA

SECTION TWO: PLANNING PROCESS

NAME	TITLE	JURISDICTION
Josie Oliver	Emergency Manager, Floodplain Administrator	Burt County
Lori Laster	Stormwater Management Engineer	P-MRNRD
Lynn Marshall	Emergency Manager	Sarpy County
Mark Stursma	Director of Planning, Floodplain Administrator	City of Papillion
Michael Burns	Zoning Administrator, Floodplain Administrator	City of Valley
Noma Borde	Civil Engineer	City of Omaha
Stacy Gillman	Stormwater Assistant/Deputy Emergency Manager	Douglas County
Rynn (Timothy) Kerkhove	City Planner	City of Omaha
Tom Perez	Emergency Manager	Thurston County
Travis Gibbons	Assistant Planning Director	City of Papillion
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Planner	JEO Consulting Group

Figure 3: Kick-off Meeting



A project Kick-off meeting was held on January 31, 2020 to discuss an overview of the planning process between JEO staff and the Regional Planning Team. Discussion at this meeting included participation requirements for eligible jurisdictions, HMP update project description, updates and changes to the HMP, establishment of Goals and Objectives, identify hazards for risk assessment, identifying all potential plan participants or key stakeholders, and general schedule for the planning process. This meeting also assisted in clarifying roles and responsibilities of Regional Planning Team and Local Planning Teams, strategies for public engagement throughout the process, and additional requirements and tasks to be completed for the three CRS communities in the planning area. The following table shows the date, location, and attendees from the Kick-off Meeting.

Table 7: Kick-off Meeting Information

MEETING DATE AND LOCATION		AGENDA ITEMS
WASHINGTON COUNTY NRD OFFICE 1060 WILBER ST BLAIR, NE 68008 JANUARY 31, 2020 10:00AM		-Consultant, regional, and local planning team responsibilities -Overview of plan update process and changes from 2016 HMP -Public engagement and participants -Goals and Objectives/Hazard Identification
NAME	TITLE	JURISDICTION
Aaron Alward	Emergency Management Specialist	Douglas County EMA
Bryon Miller	Meteorologist	NWS
Dan Douglas	Emergency Manager	Washington County
David Pearson	Senior Hydrologist	NWS
David Six	Emergency Manager, Floodplain Administrator	Burt County
Dirk Petersen	Meteorologist	NWS
Doug Cook	Planning and Zoning Administrator, Floodplain Administrator	Douglas Cook
Jessica Sharf	Hazard Mitigation Specialist	NEMA
Jim Thieler	Public Works Assistant Director	City of Omaha
John Cook	Hazard mitigation Planning Specialist	NEMA
Joseph Green	Recovery Planning Specialist	NEMA
Lori Laster	Stormwater Management Engineer	P-MRNRD
Lynn Marshall	Emergency Manager	Sarpy County
Michael Burns	Zoning Administrator, Floodplain Administrator	City of Valley
Noma Borde	Civil Engineer	City of Omaha
Stacy Gillman	Stormwater Assistant/Deputy Emergency Manager	Douglas County
Rynn (Timothy) Kerkhove	City Planner	City of Omaha
Travis Gibbons	Assistant Planning Director	City of Papillion
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Planner	JEO Consulting Group
Jeff Henson	Business Development Director	JEO Consulting Group
Mary Baker	Resiliency Strategist	JEO Consulting Group

Project Announcement - Neighboring Jurisdictions

Neighboring jurisdictions were notified of the P-MRNRD HMP update and invited to participate in the planning process. The following table lists the neighboring communities or entities notified of the planning process. The P-MRNRD mailed a copy of the Project Announcement letter to each listed jurisdiction. Community representatives from the City of Sioux City, Iowa attended a Round 2 meeting and reviewed City of South Sioux City mitigation actions. No other comments or revisions were received or incorporated.

Table 8: Notified Neighboring Jurisdictions

NOTIFIED NEIGHBORING JURISDICTIONS		
Cass County, NE	Lower Platte South NRD	Mills County, IA
Saunders County, NE	Lower Platte North NRD	Pottawattamie County, IA
Dodge County, NE	Lower Elkhorn NRD	Harrison County, IA
Cuming County, NE	City of Council Bluffs, IA	Monona County, IA
Wayne County, NE	City of Sioux City, IA	Woodbury County, IA
Dixon County, NE		

Project Announcement - Stakeholders

Potential stakeholders were identified by the consultant, plan sponsor, and Regional Planning Team members. These stakeholders were notified of the P-MRNRD HMP update and invited to participate in the planning process. The following table lists entities notified of the planning process. The P-MRNRD mailed a copy of the Project Announcement letter to each listed stakeholder. Stakeholders who attended meetings and reviewed materials included: Valley Volunteer Fire and Rescue, Methodist Health Systems, Burt County Public Power District, and Washington County Fair Board/AG Society. Comments and information provided by stakeholders was incorporated into applicable community profiles.

Table 9: Notified Stakeholders

NOTIFIED STAKEHOLDERS		
Alegent Health Bergan Mercy Health System	Elkhorn Logan Valley Public Health Department	North Omaha Airport
American Red Cross	Emerald Nursing and Rehab Omaha	Northeast Nebraska Public Health Department
Arbor Care Centers	Emerson Vol Fire Dept	Old Mill Rehabilitation Omaha Airport Authority Fire & Rescue
Arlington Vol Fire & Rescue	Eppley Airfield Airport	Omaha Fire Dept
Azria Health at Montclair	Florence Home	Omaha Nursing and Rehab
Azria Health Gretna	Fort Calhoun Fire & Rescue	Omaha Public Power District
Bellevue Fire Dept	Good Samaritan Society - Millard	
Bellevue Health and Emergency Clinic	Good Shepherd Lutheran Home	Papillion Fire Dept
Bellevue Medical Center	Gretna Fire Dept	Papillion Manor
Bellevue University	Heritage of Emerson	Ponca Hills Vol Fire Dept
Bennington Vol Fire & Rescue	Herman Rural Fire District	Quality Living
Blair Municipal Airport	Hillcrest Country Estates	Ralston Vol Fire Dept
Blair Vol Fire & Rescue	Hillcrest Health and Rehab	Regency Square Care Center

NOTIFIED STAKEHOLDERS		
Boys Town National Research Hospital	Hillcrest Millard	Ridgecrest Rehab Center
Brighton Gardens of Omaha	Hillcrest Shadow Lake	River City Nursing and Rehab
Brookstone Meadows Rehab and Care Center	Hover Vol Fire Dept	Rose Blumkin Jewish Home
Brookstone Village	Immanuel Fontenelle	Select Specialty Hospital
Burt County Extension Office	Irvington Vol Fire Dept	Siouxland Community Health Center
Burt County Farm Service Agency	Kennard Vol Fire Dept	Sorensen Care and Rehab
Burt County Public Power District	Keystone Ridge Post-Acute Nursing and Rehab	South Sioux City Vol Fire Dept
CHI Health Immanuel	Lasting Hope Recovery Center	Springfield Vol Fire Dept
CHI Health Lakeside	Life Care Center of Elkhorn	St. Joseph Villa Nursing Center
CHI Health Midlands	Life Care Center of Omaha	Tekamah Fire & Rescue Assoc
Children's Hospital and Medical Center	Madonna Rehabilitation Hospital Omaha	Tekamah Municipal Airport
Community Alliance Rehabilitation Services	Maple Crest Health Center	The Ambassador Omaha
Continental Springs	Martin Field Airport	The Lighthouse at Lakeside Village
Crowell Memorial Home	Memorial Community Hospital Corporation	The Nebraska Medical Center
Dakota City Vol Fire & Rescue	Methodist Community Health Clinic	Thurston County Extension Office
Dakota County Extension Office	Methodist Hospital	Thurston County Farm Service Agency
Dakota County Health Department	Methodist Women's Hospital	Valley Fire Rescue District and Emergency Services
Decatur Vol Fire & Rescue	Midwest Surgical Hospital	Valley Suburban Fire & Rescue
Dixon-Dakota County Farm Service Agency	Millard Airport	Village of Boys Town Dept of Fire & Rescue
Douglas County Community Mental Health Center	Millard Family Hospital	Walthill Vol Fire Dept
Douglas County Farm Service Agency	Nebraska Forest Service	Washington County Farm Service Agency
Douglas County Health Center	Nebraska Forest Service	Waterloo Fire Dept
Douglas County Health Department	Nebraska Orthopedic Hospital	Winnebago Vol Fire Dept
Eastern Nebraska Veterans Home	Nebraska Spine Hospital	

Participant Involvement

Participants play a key role in reviewing information, identifying hazards of top concern, providing descriptions of localized impacts from hazard events, identification and prioritization of potential mitigation projects and strategies, and the development of plan maintenance procedures.

To be a participant in the development of this HMP update, jurisdictions were required to:

- Pass a *Resolution of Participation*, (highly encouraged but not required)
- Attend Round 1 and Round 2 meetings or a one-on-one meeting with JEO staff,
- Provide relevant information throughout the plan update process, and
- Pass an *Adoption Resolution* for the approved HMP.

Jurisdictions had to have at least one representative present at meetings. Some jurisdictions sent multiple representatives to meetings. For jurisdictions who only had one representative at meetings, they were encouraged to take materials back to their governing bodies and include a diverse input on the meeting documents. Sign-in sheets from all public meetings can be found in *Appendix A*.

Outreach to eligible jurisdictions included notification prior to all public meetings, phone calls, emails, and calendar meeting invitations. The following table provides a summary of outreach activities utilized in this process.

Table 10: Outreach Activity Summary

ACTIVITY	INTENT
Project Website	Both a standard JEO project website (https://jeo.com/papio-missouri-river-nrd-hmp-update) and a P-MRNRD website (https://papiomitigation.org/) were developed to inform the public and local planning team members of past, current, and future activities. The P-MRNRD website will remain available for public use following plan completion. A current copy of the final HMP and a public comment box will be available to solicit additional comments and feedback.
Project Announcement	Project Announcement letter was sent to all neighboring jurisdictions and eligible participants to inform them of the planning process.
Press Release	Shared with Regional Planning Team to post on local websites and sent to all local media outlets for dispersal
Meeting Invitations (Round 1 and Round 2)	Calendar invitations, emails and phone calls were used to notify participants of meeting agenda/data/time/location for Round 1 and Round 2 meetings
Follow up Emails and Phone Calls	Correspondence to all participating jurisdictions to remind and assist them with the collection and submission of required local data
Project Flyer	A fact sheet flyer was developed and shared with all planning team members to post locally. Information include why and how to be involved in the process.
Social Media Campaign	A social media campaign based around “Would You Rather” was developed and shared via Twitter and Facebook to engage local residents in the hazard risk assessment process.

Community Rating System Engagement

The Community Rating System (CRS) is a voluntary, incentive-based program to encourage participating jurisdictions in the NFIP to exceed minimum floodplain management activities. Under the CRS community flood insurance premiums are discounted based upon the activities the community takes to reduce flood damage to existing buildings, management development in areas not mapped by the NFIP, protect new buildings beyond the minimum NFIP protection level, preserve and/or restore natural functions of floodplains, help insurance agents obtain flood data, and help people obtain flood insurance. Communities receive a CRS classification based upon the total credit for activities which indicate a specific flood insurance rate discount percentage.

Three communities within the P-MRNRD planning area are participants in the CRS program: the City of Omaha, the City of Papillion, and the City of Valley. There are 19 creditable actions organized under four categories (300, 400, 500, and 600) as described in the *CRS Coordinator's Manual*.¹² All three communities indicated that they would pursue additional points by coordinating the hazard mitigation planning process with CRS activity *510 Floodplain Management Planning*. Community specific one-on-one meetings were held and open to the public for each of the three CRS participants. Due to the development and prevalence of COVID-19 during the planning process, the majority of meetings were held in a virtual format. Information on these meetings were posted to the project website to encourage the public to participate. One member of the public participated as part of the City of Valley's local planning team.

Numerous meetings were held to discuss and gather information needed from each step of the planning process. The following table indicates the CRS meeting times and locations for each community. For additional information on these three communities, please refer to their participant sections in *Section Seven*.

Table 11: Community Specific CRS Meetings

COMMUNITY	MEETING DATE AND TIME	MEETING AGENDA
Omaha	January 31, 2020; 10:00am (in-person meeting)	HMP Project Kick-off
	May 20, 2020; 2:00pm (virtual meeting)	Hazard Assessment Meeting
	August 3, 2020; 9:30am (virtual meeting)	Regional Planning Team Meeting – Assessing Problems
	August 10, 2020; 2:00pm (virtual meeting)	Plan Integration and Capabilities Discussion
	September 9, 2020; 1:00pm (virtual meeting)	CRS/HMP Mitigation Strategy Meeting
Papillion	January 31, 2020; 10:00am (in-person meeting)	HMP Project Kick-off
	June 3, 2020; 2:00pm (virtual meeting)	Hazard Assessment Meeting
	June 3, 2020; 3:00pm (virtual meeting)	Plan Integration and Capabilities Discussion
	August 3, 2020; 9:30am (virtual meeting)	Regional Planning Team Meeting– Assessing Problems
	August 5, 2020; 10:00am	CRS/HMP Mitigation Strategy Meeting

¹² FEMA. 2017. "National Flood Insurance Program Community Rating System Coordinator's Manual." https://www.fema.gov/media-library-data/1493905477815-d794671adeed5beab6a6304d8ba0b207/633300_2017_CRS_Coordinators_Manual_508.pdf.

COMMUNITY	MEETING DATE AND TIME	MEETING AGENDA
Valley	(virtual meeting) January 31, 2020; 10:00am (in-person meeting)	HMP Project Kick-off
	May 26, 2020; 2:00pm (virtual meeting)	Hazard Assessment Meeting
	May 26, 2020; 3:00pm (virtual meeting)	Plan Integration and Capabilities Discussion
	July 27, 2020; 10:00am (virtual meeting)	CRS/HMP Mitigation Strategy Meeting
	August 3, 2020; 9:30am (virtual meeting)	Regional Planning Team Meeting– Assessing Problems

The CRS process includes a 10-step guide to accomplish plan development and meet requirements. The following section lists each step and describes how each step was met during this plan update.

CRS Step 1: Organize

- Mitigation Planning Regulation Counterpart: 201.6(c)(1)

Local planning teams were established for each participating community and included local officials from various departments. At a minimum, a representative from each of the following departments were invited to participate in the planning process: Planning and Zoning, Public Works/City Engineer, City Administration/Mayor's Office, Parks and Recreation, Floodplain Administrator, Fire and Rescue, Police Department, and County Emergency Management. Each local planning team was encouraged to invite and engage community members to participate on the Planning Team as well. Planning team members attended community specific meetings and provided information for the community throughout the planning process.

A *Resolution of Participation* was adopted locally for participating jurisdictions which identified their commitment to participate in the HMP update and identified specific community members to represent the community throughout the planning process. While resolutions were not required in order to be a participant in this HMP process, jurisdictions were strongly encouraged to pass a resolution to showcase their commitment to the update process and inform local governing bodies of the planning process (*See Appendix A for copies*). A full list of community-specific local planning team members can be found in their respective *Community Profiles*.

CRS Step 2: Involve the Public

- Mitigation Planning Regulation Counterpart: 201.6(b)(1)

Neighboring jurisdictions (Table 8), local stakeholders (Table 9), and residents were encouraged to participate in the planning process. At the beginning of the planning process, a public open house had been scheduled to engage the public in the HMP development. However, due to directed health measures put in place in response to COVID-19, this open house was cancelled, and a social media campaign was launched to gather local resident input for specific hazards of concern and response opportunities. More information about the social media campaign can be found in the section below. Each CRS community was also responsible for updating information on their city websites and social media platforms to notify residents of the HMP update process.

All neighboring jurisdictions, stakeholders, and local planning teams were notified when the plan was available for a 30-day public review period. The draft plan was posted online on the project website and shared on community websites. The plan was available to the public to review and provide additional comments and suggested revisions.

To aid in public input during the draft review process, a second Open House was held virtually on Thursday, January 21, 2021 from 5:00pm to 7:00pm. This virtual open house served as an opportunity for residents and stakeholders to speak one-on-one with a project planner about the HMP. Meeting attendants included board members from the Papio-Missouri River NRD and the City of Omaha; however, no members of the general public attended the virtual open house or provided additional feedback.

CRS Step 3: Coordinate

- Mitigation Planning Regulation Counterpart: 201.6(b)(2) & (3)

Other community planning mechanisms are reviewed and incorporated into individual *Community Profile* as part of the HMP update process. Plans and studies reviewed during this process include, but are not limited to: Comprehensive Plans, Zoning Ordinances, Floodplain Ordinances, Building Codes, Watershed Management Plans, Local Emergency Operations Plans, Flood Insurance Studies, and others. Local planning team members assisted in the review and summary of planning mechanisms including Planning and Zoning Administrators, City or Village Clerks, Floodplain Administrators, and County Emergency Managers. Neighboring jurisdictions were also contacted to provide input on interagency coordination including the Cities of Council Bluffs and Sioux City Iowa.

Outside agencies were contacted to provide technical information and reviews of *Community Profiles* and hazard risk assessment sections. These included the Dam Safety Division of NeDNR (Dam Failure), Floodplain Management Section of NeDNR (Flooding), USACE (Levee Failure), and NDMC (Drought and Extreme Heat). Copies of the draft plan were sent to each of these agencies for technical comment during the public review period. Additionally, members of the National Weather Service attended meetings and served on the Regional Planning Team. Table 9 identifies additional agencies and organizations invited to engage in the planning process.

CRS Step 4: Assess the Hazards

- Mitigation Planning Regulation Counterpart: 201.6(c)(2)(i)

While the CRS program primarily focuses on flooding as a hazard of top concern, this HMP update evaluates risk to a variety of natural and human-made hazards. The Regional Planning Team, which included representatives from the CRS communities, identified the hazards to assess in the HMP at the Kick-off Meeting. A regional hazard risk analysis was completed for each of these hazards (see *Section Four*), and community-specific concerns, vulnerabilities, and historical impacts were included for community-identified hazard prioritization (see applicable *Section Seven: Community Profiles*). Hazards profiled in this HMP include: Agricultural Plant and Animal Disease, Chemical and Radiological Fixed Sites, Chemical Transportation, Dam Failure, Drought and Extreme Heat, Earthquakes, Flooding, Grass/wildfire, High Winds and Tornadoes, Levee Failure, Public Health Emergency, Severe Thunderstorms, Severe Winter Storms, and Terrorism.

CRS Step 5: Assess the Problem

- Mitigation Planning Regulation Counterpart: 201.6(c)(2)(ii) & (iii)

Damage estimates and impacts from past events were included and evaluated as part of the hazard risk assessment. These included: historical occurrences, reported injuries or fatalities, reported property damage estimates, reported crop loss estimates, reported evacuations, reported historical record crests, displaced population estimates from flooding, estimated building and economic losses through HAZUS-MH (flooding), estimated agricultural losses through HAZUS-MH (flooding), repetitive and severe repetitive flood loss properties, and community-specific critical facilities in the floodplain. See *Section Four* or applicable *Section Seven: Community Profiles* for specific concerns.

CRS Step 6: Set Goals

- Mitigation Planning Regulation Counterpart: 201.6(c)(3)(i)

The HMP planning process requires the establishment of clear Goals and Objectives to guide the planning process. Goals from the 2016 HMP were reviewed at the Kick-off meeting by the Regional Planning Team and CRS community Local Planning Team members. Established Goals and Objectives for the 2021 HMP include the three CRS communities and can be seen in the *Executive Summary* or *Section Five*.

CRS Step 7: Review Possible Activities

- Mitigation Planning Regulation Counterpart: 201.6(c)(3)

All participating jurisdictions in this HMP planning process reviewed, updated, and/or identified mitigation actions to address hazards of top concerns. FEMA's *Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards* was used to review a wide range of mitigation activities for all hazards of concern. CRS communities specifically reviewed, updated, and/or identified mitigation actions to address flooding in the following six strategies: preventative actions, property protection, natural resources, emergency services, structural projects, and public information. All actions were evaluated and discussed for feasibility, benefits, and costs by local planning teams at mitigation strategy specific meetings per community. Descriptions of identified mitigation actions for CRS communities can be found in the applicable *Section Seven: Community Profiles*.

CRS Step 8: Draft an Action Plan

An action plan was developed for the selected mitigation projects by each participating jurisdiction in their respective *Community Profile*. Reviewed information per mitigation action include: estimated cost, identified local funding options, lead agency/department, priority level, and anticipated timeline to implementation. Additionally, Plan Integration sections in each *Community Profile* describes potential planning mechanisms in which hazard mitigation (or flood risk reduction strategies) can and should be integrated.

CRS Step 9: Adopt the Plan

- Mitigation Planning Regulation Counterpart: 201.6(c)(5)

Prior to plan submission for state and federal review and approval, the draft HMP was made available to all stakeholders, neighboring jurisdictions, coordinating agencies, and participating

jurisdictions for a public review period. This review period allows each member of these agencies to provide comments or additional revisions which are incorporated into the appropriate section prior to plan submission. A public open house meeting was held during public review period to assist jurisdictions review the draft HMP and track all changes.

Once the plan has been submitted, reviewed, and approved by NEMA and FEMA, each participating jurisdiction will adopt the plan locally via resolution. See *Appendix A* for a draft Adoption Resolution template. Passed resolutions are filed with NEMA and are available upon request from the State Hazard Mitigation Officer at NEMA.

CRS Step 10: Implement, Evaluate, and Revise

- Mitigation Planning Regulation Counterpart: 201.6(c)(4)

Implementation of previously identified mitigation actions are listed, as appropriate, in respective *Community Profiles*. Each mitigation action listed in community specific sections includes the identification of a Lead Agency to assist in future implementation of actions. Additionally, to aid in monitoring and maintenance for the HMP, a description of the maintenance strategy per community is included in the *Community Profile*. This includes the members of local planning teams responsible for monitoring the plan, providing status updates, submitting revisions or changes to the state as needed after disaster events, and their process to include the public in the review process.

Social Media Campaign

As a method to engage the general public in the development of the HMP and capture local concerns, priorities, and ideas, the Papio-Missouri River NRD developed and launched a social media campaign with the assistance of JEO Consulting Group and MediaSpark. The campaign was based upon the *Would You Rather?* game many community members would be familiar with in order to share complex ideas and requirements as part of the HMP. As identified by the project sponsor, finding effective ways to engage the public and gain feedback can be challenging because the HMP is a complex planning tool. It addresses issues that community members may be unaware of, and identifies potential impacts that people may not have dealt with. In addition, the HMP showcases numerous solutions to natural and human-caused hazards--and ways to get involved--that are unfamiliar to readers. Because of these plan functions, it is critical to successfully engage the public.

The goals of this campaign were to:

- Increase awareness of the HMP planning process;
- Educate district residents on what the terms “hazards” and “Hazard Mitigation Plan” are;
- Improve community commentary and input about hazards of local concern; and
- Obtain citizen feedback via an online survey to include in the plan update.

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Social media posts were created and shared by the project sponsor and planning team members which asked residents which type of hazard that would rather experience and why, as well as included a link to the project survey. To incentivize participation, all residents who commented on the post were entered to win a project related T-shirt and respondents to the survey were entered to win a gift card prize. To increase overall engagement and the reach of the social media campaign, the P-MRNRD partnered with Omaha Scanner and Sarpy [County] Scanner to act as influencers. Each report local raw, breaking news for their areas and have large, active followings. Hazards addressed in the *Would You Rather* campaign were focused on natural hazard events. Screenshots of the *Would You Rather* posts can be found below.



Figure 4: Would You Rather Posts

Papio-Missouri River Natural Resources District
August 6 · 🌐

Would you rather? Experience the creeping disaster of a drought or the rapid destruction of a tornado? Comment with your reason below for a chance to win a COOL t-shirt! Want a chance at bigger prize? Fill out this very SHORT survey to help our community prepare for hazardous events: <https://bit.ly/31rOe7q>

#wouldyourather #nebraskahazards #mitigatetherisks #papionrd

Omaha Scanner
August 6 · 🌐

Would you rather? Experience the creeping disaster of a drought or the rapid destruction of a tornado? Comment with your reason below for a chance to win a COOL... [See More](#)

Papio-Missouri River Natural Resources District
August 21 · 🌐

Would you rather? See your neighbor's cornfield wilt from fungal disease or burn to ash in a wildfire? Comment with your reason below for a chance to win a COOL t-shirt! For more info on how you can help our community prepare for hazardous events, visit: <https://bit.ly/31rOe7q> #wouldyourather #nebraskahazards #mitigatetherisks #papionrd

Papio-Missouri River Natural Resources District
August 19 · 🌐

Would you rather? Have a tree fall on your house and lose power during a thunderstorm or be barricaded in your house in 3 feet of snow? Comment with your reason below for a chance to win a COOL t-shirt! For more info on how you can help our community prepare for hazardous events, visit: <https://bit.ly/31rOe7q> #wouldyourather #nebraskahazards #mitigatetherisks #papionrd

Papio-Missouri River Natural Resources District
August 25 · 🌐

Would you rather? Be entered to win a \$50 gift card...or not? (Easy choice.) Complete this short survey that helps identify the hazards in our community so that we can plan for them. Visit: <https://bit.ly/31rOe7q> #wouldyourather #nebraskahazards #mitigatetherisks #papionrd

SECTION TWO: PLANNING PROCESS

Questions about hazards, past events, priorities for mitigation, and what community members would like to see done locally were asked through the survey. In total, over 700 survey responses were collected, and 657 responses came from residents within the planning area. Zip codes were collected through the survey to determine resident locations and are provided in the table below.

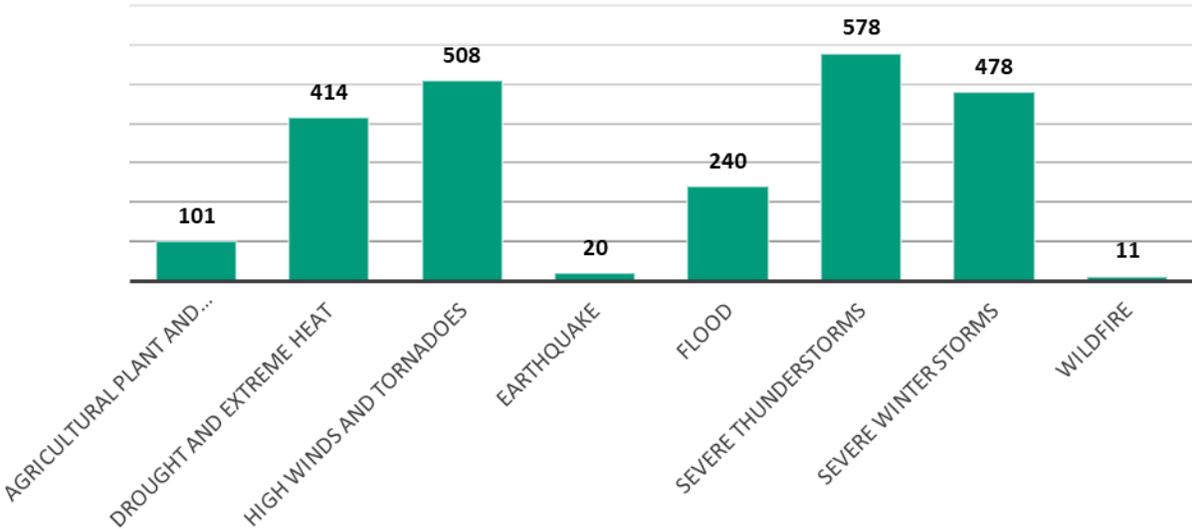
Table 12: Communities Represented in Social Media Survey

COMMUNITIES REPRESENTED BY COUNTY	
Burt County	Craig, Decatur, Lyons, Oakland, Tekamah
Dakota County	South Sioux City
Douglas County	Bennington, Omaha, Valley
Sarpy County	Bellevue, Gretna, La Vista, Papillion, Springfield
Thurston County	Pender
Washington County	Arlington, Blair, Fort Calhoun, Kennard

Overall participant results are summarized below while specific concerns or comments can be found in *Community Profiles* as appropriate. The most commonly experienced hazard events for residents include Severe Thunderstorms, High Winds and Tornadoes, Severe Winter Storms, and Drought and Extreme Heat. This also aligned with the top ranked hazards of concern (from most concerning to least concerning) by ranked choice voting.

1. High Winds and Tornadoes
2. Severe Thunderstorms
3. Drought and Extreme Heat
4. Severe Winter Storms
5. Flooding
6. Agricultural Plant and Animal Disease
7. Wildfire
8. Earthquakes

Figure 5: Most Common Hazard Experienced (Social Media Survey)



The majority of respondents indicated the best way to share information about preparing for a disaster is through emergency text alerts (538 votes), social media posts (396 votes), radio broadcasts (such as through the NWS, 260 votes), and community specific websites (219). Other unique communication methods listed included sharing information at social events, public meetings, flyers/brochures from schools, email, local nonprofits and community groups, and YouTube videos.

Oftentimes implemented mitigation actions are prioritized based upon need to mitigate risk, cost effectiveness, feasibility, and public support. To help identify overall local support for types of mitigation projects, respondents were asked to rank from very important to not important mitigation action end goals.

Table 13: Priorities for Mitigation Question and Answers (Social Media Campaign)

Preparing for a disaster can take many forms. How important is it to mitigate potential hazard risk to the following?					
	Protecting people	Protecting private property	Protecting community assets (parks, community buildings)	Protecting critical facilities (hospitals, fire/police stations, utilities)	Preventing development in hazardous areas (example - flood prone areas)
Very Important	626 (95%)	290 (44%)	163 (25%)	619 (94%)	363 (55%)
Somewhat Important	26 (4%)	321 (49%)	378 (58%)	30 (5%)	211 (32%)
Neutral	4 (1%)	32 (5%)	92 (14%)	7 (1%)	66 (10%)
Somewhat Not Important	1 (0%)	13 (2%)	17 (3%)	1 (0%)	11 (2%)
Not Important	0 (0%)	1 (0%)	7 (1%)	0 (0%)	6 (1%)
	Protecting natural environments	Protecting historical/cultural landmarks	Increasing cooperation between emergency response agencies and the public	Improving notification and weather alert communication systems	Improving emergency response capabilities (fire/police/emergency management equipment and training)
Very Important	371 (56%)	238 (36%)	504 (77%)	506 (77%)	515 (78%)
Somewhat Important	226 (34%)	302 (46%)	134 (20%)	122 (19%)	103 (16%)
Neutral	51 (8%)	79 (12%)	16 (2%)	27 (4%)	36 (5%)
Somewhat Not Important	6 (1%)	31 (5%)	2 (0%)	2 (0%)	3 (0%)
Not Important	3 (0%)	7 (1%)	1 (0%)	0 (0%)	0 (0%)

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Respondents were also asked for household mitigation actions which had been done or not. The most commonly done actions included identifying the safest place in the home/workplace during a tornado, signed up for emergency alerts, and attended safety related training or certifications.

Table 14: Household Mitigation Question and Answers (Social Media Campaign)

Have you or a member of your household taken any of the following actions to protect your home?						
	Elevated your home for flood protection	Moved out of hazardous areas (floodplain or near major highways)	Braced or reinforced walls, foundations, chimneys, or utilities	Anchored your home/trailers/tanks to foundation	Used fire-resistant building or roof materials	Maintain 30' of bare space around homes or buildings
Have Done	44 (7%)	87 (13%)	99 (15%)	55 (8%)	190 (29%)	92 (14%)
Not Applicable	330 (50%)	368 (56%)	172 (26%)	409 (62%)	137 (21%)	134 (20%)
Not Done	139 (21%)	139 (21%)	291 (44%)	153 (23%)	233 (35%)	249 (38%)
Plan to Do	3 (0%)	12 (2%)	23 (4%)	5 (1%)	34 (5%)	19 (3%)
Unable to Do	141 (21%)	51 (8%)	72 (11%)	33 (5%)	61 (9%)	163 (25%)
	Signed up for emergency alerts from your county emergency management agency	Attended safety related training and certifications (CERT, First Aid, CPR, etc.)	Developed a Home Emergency Plan that describes what you will do during a natural disaster	Identified the safest place to be in your home/work during a tornado	Identified the safest place to be in your home/work during an earthquake	
Have Done	464 (71%)	433 (66%)	319 (43%)	625 (95%)	203 (31%)	
Not Applicable	8 (1%)	10 (2%)	9 (1%)	4 (1%)	169 (26%)	
Not Done	108 (16%)	149 (23%)	160 (24%)	9 (1%)	244 (37%)	
Plan to Do	72 (11%)	57 (9%)	167 (25%)	16 (2%)	38 (6%)	
Unable to Do	5 (1%)	6 (1%)	2 (0%)	3 (0%)	2 (0%)	

Lastly, respondents were asked what they would like to see their respective communities do in the future to protect people and infrastructure from future hazard events. Specific suggestions are included the *Community Profiles* as applicable; however, common themes and responses are listed below.

- Improving alert sirens and hazard event notification systems for residents (i.e. text alerts).
- Address climate change via state and community level planning.
- Build and improve community coordination, planning, and communication efforts at the neighborhood, local, and community level.
- Increase local education efforts – share what resources are available to local residents, engage in school programs, aid residents in preparing for hazard events with kits or home planning.
- Hold emergency exercises with the public.
- Expand and improve local emergency response programs (Fire Departments), equipment, and infrastructure.
- Reduce impacts from flooding (prevent development in floodplains, additional flood control structures, stormwater management, etc.)
- Strengthen local power supplies and infrastructure.
- Build and designate emergency shelters, particularly in apartment buildings.
- Improve snow removal resources and transportation corridors.
- Remove or trim old and dying trees.

Assessment of Risk

Round 1 Meetings: Hazard Identification and Assessment

Round 1 Meetings are an opportunity to familiarize participating jurisdictions with the HMP update process, review information from the previous HMP, and begin the hazard identification at the local level. At these meetings, the local jurisdictional representatives serve as the Local Planning Teams to review the hazards to be profiled in this HMP update (as established by the Regional Planning Team at the Kick-off Meeting) and provide information about local impacts, historical occurrences, and overall community exposure to the various hazards. For a complete list of hazards reviewed in the 2021 P-MRNRD HMP, see *Section Four Risk Assessment*.

The following table shows the dates and times for Round 1 Meetings. Note that due to the development and prevalence of COVID-19, Round 1 Meetings were converted to an online platform. One-on-one meetings were held for Burt County jurisdictions (Burt County, Village of Decatur, and Village of Tekamah) due to time constraints between scheduled meetings and conversion to an online platform to accommodate local COVID-19 concerns.

Table 15: Round 1 Meetings

AGENDA ITEMS	
General overview of the HMP planning process; discussion of participation requirements and <i>Resolution of Participation</i> ; begin risk assessment and impact reporting discussion; review and identification of critical facilities; update capability assessment; and review and update past mitigation actions	
COUNTY MEETING	DATE AND TIME
BURT COUNTY	<i>Held as individual one-on-one meetings</i>
DAKOTA COUNTY	Wednesday, May 13 at 10:00am via Zoom
DOUGLAS COUNTY	Thursday, May 21 at 2:00pm via Zoom
SARPY COUNTY	Wednesday, May 6 at 2:00pm via Zoom
THURSTON COUNTY	Wednesday, May 27 at 2:00pm via Zoom
WASHINGTON COUNTY	Thursday, May 7 at 2:00pm via Zoom

The intent of these meetings was to familiarize the jurisdictional representatives with an overview of the work to be completed over the next year as the plan progressed, discuss the responsibilities of being a participant, and to collect preliminary information to update the HMP. Data collected at these meetings included: updates to mitigation actions from the 2016 P-MRNRD HMP; hazard prioritization for each jurisdiction; review/update the list of critical facilities; and to begin reviewing community profiles for demographics and capabilities. These meetings also served as an opportunity to gather input on the identification of hazards, such as records of historical occurrences and the community's capability to mitigate and respond to those events.

The following table shows the attendees for each jurisdiction who attended a virtual Round 1 meeting. Follow up one-on-one meetings were held for communities who did not have representatives present at public meetings through in-person meetings or conference calls with JEO Staff.

Table 16: Round 1 Meeting Attendees

Name	TITLE	JURISDICTION
<i>Dakota County Meeting – Wednesday, May 13</i>		
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Angela Curry	City Clerk	City of Bellevue
Lexy Hindt	Deputy State Hazard Mitigation Officer	NEMA
Deanna Hagberg	Emergency Manager	Dakota County
Heather Thole	Hazard Mitigation Specialist	NEMA
Adele Phillips	Flood Mitigation Planner	Dept. Natural Resources
Pat Somsky	Grant Administrator	City of South Sioux City
Maria Bottger	Clerk/Treasurer	Village of Kennard
Donna Hirsch	Village Clerk	Village of Jackson
Jason Allen	City Administrator	City of Dakota City
John Gassman	State Hazard Mitigation Officer	NEMA
Joe Green	Hazard Mitigation Specialist	NEMA
Anthony Kohel	Junior Planner	JEO Consulting Group
Oscar Gomez	Assistant City Administrator	City of South Sioux City
Alyssa Tenorio		JEO Consulting Group
Mary Baker	Resiliency Strategist	JEO Consulting Group

Name	TITLE	JURISDICTION
Kent Zimmerman	Code Official	City of South Sioux City
Gregg Cruickshank	Superintendent	Homer Community Schools
<i>Douglas County Meeting – Thursday, May 21</i>		
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Aaron Alward	Emergency Management Specialist	Douglas County
Adele Phillips	Flood Mitigation Planner	NeDNR
Dan Freshman	Public Works Director	City of Ralston
Russell Olsen	Superintendent	Westside Community Schools
Doug Cook	Planning and Zoning Administrator/Floodplain Administrator	Douglas County
Ken Mertl	Engineer's Office	Douglas County
Mindy		City of Bennington
Brian Norton	Environmental Compliance	Douglas County
Melissa Johnson		Village of Waterloo
Mike Schonlau	GIS	Douglas County
Stacy Gillman	Stormwater Assistant, Environmental Services	Douglas County
Natalia Menard	Rescue Captain	Valley Volunteer Fire and Rescue Department
Mary Baker	Resiliency Strategist	JEO Consulting Group
Jason Buckingham	Business Manager	Ralston Public Schools
Terry Haack	Superintendent	Bennington Public Schools
<i>Sarpy County Meeting – Wednesday, May 6</i>		
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Christopher Solberg	Deputy Community Development Directory	City of La Vista
Dan Gittinger	Development Services Director	City of Gretna
Donna Lynam	Assistant Planning Director	Sarpy County
Jason Kubicek	Planning and Building Planner	Sarpy County
Jeff Kooistra	City Administrator	City of Gretna
Jesse Eret	Program Specialist	Sarpy County
Kathleen Gottsch	City Administrator	City of Springfield
Lalit Jha		JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Mary Baker	Resiliency Strategist	JEO Consulting Group
Matt Krajewski	Readiness Branch Chief	Army Corps of Engineers
Mike Kraus	Community Outreach and Strategic Planning	Methodist Health System
Pat Dowse	City Engineer	City of La Vista
Rich Beran	Superintendent	Gretna Public Schools
Lynn Marshall	Director of Emergency Manager	Sarpy County
<i>Thurston County Meeting – Wednesday, May 27</i>		
Becky Appleford	Project Manager	JEO Consulting Group

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Name	TITLE	JURISDICTION
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Joleen Thiele	Environmental Protection Manager	Winnebago Tribe of Nebraska
Lisa Beaudette	Village Clerk	Village of Walthill
Denise Jenson	Water Quality Specialist	Winnebago Indian Tribe
Mary Baker	Resiliency Strategist	JEO Consulting Group
Washington County Meeting – Thursday, May 7		
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Chris Schewchuk	Planning and Zoning Administrator	Washington County
Niki Herre	Clerk	Arlington
John Gassmann	State Hazard Mitigation Officer	NEMA
Joseph Green	Hazard Mitigation Planning Specialist	NEMA
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
Allen Schoemaker	Public Works Department	City of Blair
Leon Haith	Superintendent	Blair Community Schools
Dan Douglas	Emergency Manager	Washington County
Mary Baker	Resiliency Strategist	JEO Consulting Group
Lalit Jha		JEO Consulting Group
Alicia Koziol	City Clerk	City of Fort Calhoun
Corban Helmandollar	Maintenance Supervisor	City of Fort Calhoun

Table 17: Round 1 One-on-One Meeting Attendees

Name	TITLE	JURISDICTION
City of Tekamah – Tuesday, April 21		
Kathryn McElroy	City Clerk	City of Tekamah
Matt Deemer	Street Superintendent	City of Tekamah
Tony Daugherty	Water/Sewer Superintendent	City of Tekamah
Ron Grass	Mayor	City of Tekamah
Lori Laster	Stormwater Management Engineer	P-MRNRD
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Village of Decatur – Friday, May 15		
Donnette Smith	Clerk	Village of Decatur
Mark Siecke	Board Chairman	Village of Decatur
Justin Smith	Chief of Police	Village of Decatur
Larry McCulloch	Maintenance Supervisor	Village of Decatur
Brooke Seachord	Project Coordinator	JEO Consulting Group
Burt County – Monday, June 8		
Josie Oliver	Emergency Manager/Zoning Administrator/Floodplain Administrator	Burt County
Ann Chytka	Highway Superintendent	Burt County

Name	TITLE	JURISDICTION
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Village of Hubbard – Thursday, June 25</i>		
Lisa Bousquet	Village Clerk	Village of Hubbard
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Village of Herman – Tuesday, July 7</i>		
Vicky Kellogg	Village Clerk	Village of Herman
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Emerson-Hubbard Public Schools – Thursday, July 9</i>		
Lindsey Baudette	Superintendent, Middle/High School Principal	Emerson-Hubbard Public Schools
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Arlington Public Schools – Thursday, July 9</i>		
Dawn Lewis	Superintendent	Arlington Public Schools
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Papillion-La Vista Public Schools – Friday, July 17</i>		
Doug Lewis	Assistant Superintendent	Papillion-La Vista School District
Trent Steele	Director – Human Resources and Student Services (Secondary)	Papillion-La Vista School District
Brooke Seachord	Project Coordinator	JEO Consulting Group

Mitigation Plan Development

Round 2 Meetings: Mitigation Strategy, Maintenance, and Integration

The identification and prioritization of mitigation measures is an essential component in developing effective hazard mitigation plans. Round 2 meetings are designed to allow participating jurisdictions an opportunity to identify and describe new mitigation strategies to address prioritized hazards or identified gaps in planning, response, or resiliency from Round 1 meetings. Participating jurisdictions were also asked to review the information collected from Round 1 meetings related to their community through this planning process. The Local Planning Teams were asked to ensure all information included was up-to-date and accurate. Information/data reviewed include, but was not limited to: local hazard prioritization results; identified critical facilities and their location within the community; future development areas; continued, removed, or completed mitigation actions, and overall growth trends.

Round 2 meetings are also used as an opportunity to discuss Plan Integration components. Each participating jurisdiction was asked to either describe or provide a copy of other planning mechanisms which support the goals and intent of the HMP for inclusion. These included Local Emergency Operations Plans, Comprehensive Plans, 1- & 6-Year Plans, Zoning Ordinances, Floodplain Ordinances, Building Codes, or other plans used by the jurisdiction. Newly added to Round 2 meetings also included a discussion of Plan Maintenance by the Local Planning Team and the importance of updating local profiles as priorities change, mitigation actions are completed, or after a disaster event.

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A brief status update on project schedule, public review period, final local adoption, and the approval and grant opportunities available once the plan is approved by NEMA and FEMA was also provided to all participants. Due to ongoing concerns for COVID-19, all Round 2 meetings were held virtually. The following table shows the attendees for each jurisdiction who attended a virtual Round 2 meeting. Follow up one-on-one meetings were held for communities who did not have representatives present at public meetings through in-person meetings or conference calls with JEO Staff.

Table 18: Round 2 Meetings

AGENDA ITEMS	
Review of the HMP planning process; review of Round 1 collected and integrated information; identify and prioritize new mitigation actions; discussion of plan maintenance requirements; review and integration of other community planning mechanisms.	
COUNTY MEETING	DATE AND TIME
BURT COUNTY	Monday, October 5 at 2:00pm via Zoom
DAKOTA COUNTY	Monday, October 19 at 2:00pm via Zoom
DOUGLAS COUNTY	Thursday, October 22 at 2:00pm via Zoom
SARPY COUNTY	Wednesday, October 28 at 1:00pm via Zoom
THURSTON COUNTY	Tuesday, October 27 at 2:00pm via Zoom
WASHINGTON COUNTY	Tuesday, October 13 at 10:00am via Zoom

Table 19: Round 2 Meeting Attendees

Name	TITLE	JURISDICTION
<i>Burt County Meeting – Monday, October 5</i>		
Andrew Donawa	Emergency Manager	Burt County
Karolyn McElroy	City Clerk	City of Tekamah
Ann Chytka	Highway Superintendent	Burt County
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
Jon Dockhorn	General Manager	Burt County PPD
Paul Richards	County Highways Supervisor – District 4	Burt County
Matt Deemer	Street Superintendent	City of Tekamah
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Dakota County Meeting – Monday, October 19</i>		
Becky Appleford	Project Manager	JEO Consulting Group
Anthony Kohel	Junior Planner	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Deanna Hagberg	Emergency Manager	Dakota County
Kelly Bach	Parks Maintenance Field Supervisor	City of Sioux City
Mark Simms	Utilities Director	City of Sioux City
Ron Engle	Environmental Services and Development Manager	City of Sioux City
Dawn Lewis	Superintendent	Arlington Public Schools
Callie Wockenfuss	Assistant Grants Administrator	City of South Sioux City
Lance Hedquist	City Administrator	City of South Sioux City
Kent Zimmerman	Code Official	City of South Sioux City

Name	TITLE	JURISDICTION
Joe Conley	Code Official	City of South Sioux City
Lexy Hindt	Deputy State Hazard Mitigation Officer	NEMA
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
Sarah Jackson	Hazard Mitigation Planning Specialist	NEMA
<i>Douglas County Meeting – Thursday, October 22</i>		
Brooke Seachord	Project Coordinator	JEO Consulting Group
Anthony Kohel	Junior Planner	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Russell Olsen	Director of Facilities	Westside Community Schools
Aaron Alward	Emergency Management Specialist	Douglas County EMA
Steve Cacioppo	Senior GIS Analyst	Douglas County
Dan Freshman	Public Works Director	City of Ralston
Stacy Gillman	Stormwater Coordinator/Floodplain Manager	Douglas County
Dan Esch	County Clerk	Douglas County
Ken Mertl	Design Engineer	Douglas County
Brian Norton	Environmental Compliance Manager	Douglas County
Terry Haack	Superintendent	Bennington Public Schools
Melissa Poloncic	Superintendent	Douglas County West Schools
Lexy Hindt	Deputy State Hazard Mitigation Officer	NEMA
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
<i>Sarpy County Meeting – Wednesday, October 28</i>		
Christopher Solberg	Deputy Community Development Directory	City of La Vista
Dan Gittinger	Development Services Director	City of Gretna
Jason Kubicek	Planning and Building Planner	Sarpy County
Jesse Eret	Program Specialist	Sarpy County
Kathleen Gottsch	City Administrator	City of Springfield
Pat Dowse	City Engineer	City of La Vista
Rich Beran	Superintendent	Gretna Public Schools
Lynn Marshall	Director of Emergency Manager	Sarpy County
Angela Curry	Planning Director	City of Bellevue
Mary Baker	Resiliency Strategist	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Nora Lucas	Planning Intern	JEO Consulting Group
<i>Thurston County Meeting – Tuesday, October 27</i>		
Lisa Bousquet	Clerk	Village of Hubbard
Leon Haith	Director of Special Services	Blair Community Schools

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Name	TITLE	JURISDICTION
Gregg Cruickshank	Superintendent/Elementary Principal	Homer Community Schools
Kirk Ahrends	Superintendent	Walthill Public School
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
Matt May	Emergency Manager	Village of Winnebago, Winnebago Indian Tribe
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Becky Appleford	Project Manager	JEO Consulting Group
Anthony Kohel	Hazard Mitigation Planner	JEO Consulting Group
Washington County Meeting – Tuesday, October 13		
Becky Appleford	Project Manager	JEO Consulting Group
Brooke Seachord	Project Coordinator	JEO Consulting Group
Lori Laster	Stormwater Specialist	Papio-Missouri River NRD
Corban Helmandollar	Maintenance Supervisor	City of Fort Calhoun
Niki Herre	Village Clerk	Village of Arlington
Aaron Barrow	Assistant City Administrator	City of Blair
Heather Thole	Hazard Mitigation Planning Specialist	NEMA
Dan Douglas	Emergency Manager	Washington County
Alicia Koziol	City Clerk	City of Fort Calhoun
Jason Cloudt	President	Washington County Fair Board/AG Society
Jerry Green	Superintendent	Fort Calhoun Community Schools
Mary Baker	Resiliency Strategist	JEO Consulting Group
Allen Shoemaker	Public Works Director	City of Blair

Table 20: Round 2 One-on-One Meeting Attendees

NAME	TITLE	JURISDICTION
Winnebago Indian Tribe – Friday, September 11		
Denise Jensen	Water Quality Specialist	Winnebago Indian Tribe
Joy Johnson	Tribal Planning Director	Winnebago Indian Tribe
Joleen Thiele	Environmental Protection Department Manger	Winnebago Indian Tribe
Matthew Map	Emergency Manager	Winnebago Indian Tribe
Ireta Blackbird	Physical Resources Director	Winnebago Indian Tribe
Lori Laster	Stormwater Management Engineer	P-MRNRD
Brooke Seachord	Project Coordinator	JEO Consulting Group
Village of Homer – Monday, September 14 (joint R1-R2 meeting)		
Elvin Varra	Maintenance Supervisor	Village of Homer
Shawna Kubik	Clerk	Village of Homer
Brooke Seachord	Project Coordinator	JEO Consulting Group
Village of Winnebago – Monday, September 14 (joint R1-R2 meeting)		
Audrienna Livering	Clerk	Village of Winnebago
Matthew May	Emergency Manager	Village of Winnebago
Ron White Bear	Chairman	Village of Winnebago
Brooke Seachord	Project Coordinator	JEO Consulting Group

NAME	TITLE	JURISDICTION
<i>Village of Waterloo – Wednesday, November 11</i>		
Melissa Johnson	Village Clerk	Village of Waterloo
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Thurston County – Wednesday, November 11</i>		
Tom Perez	Emergency Manager	Thurston County
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Village of Walthill – Friday, November 13</i>		
Lisa Beaudette	Clerk/Treasurer	Village of Walthill
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Emerson-Hubbard Community Schools – Friday, November 13</i>		
Lindsey Baudette	Superintendent, Middle/High School Principal	Emerson-Hubbard Public Schools
Brooke Seachord	Project Coordinator	JEO Consulting Group
<i>Village of Jackson – Tuesday, November 17</i>		
Therese Mangill	Village Clerk	Village of Jackson
Phil Luebbert	Senior Planner	JEO Consulting Group
<i>City of Dakota City – Wednesday, November 18</i>		
Jason Allen	City Administrator	City of Dakota City
Becky Appleford	Project Manager	JEO Consulting Group
<i>Village of Decatur – Wednesday, November 18</i>		
Mark Sieke	Board Chairman	Village of Decatur
Justin Smith	Police Chief	Village of Decatur
Theresa Mangill	Clerk	Village of Decatur
Karl Dietrich	Planner	JEO Consulting Group
<i>Papillion-La Vista Public Schools – Tuesday, November 24</i>		
Trent Steele	Human Resources and Student Services	Papillion-La Vista Public Schools
Brooke Seachord	Project Coordinator	JEO Consulting Group

Data Sources and Information

Effective hazard mitigation planning requires the review and inclusion of a wide range of data, documents, plans, and studies. The following table identifies many of the sources utilized during this planning process. Individual examples of plan integration documents are identified in their respective *Section Seven: Community Profiles*. Additionally, sources and references are included throughout the document.

Table 21: Data, Plans, and Information used in HMP Development

DOCUMENTS	
Benefit-Cost Analysis https://www.fema.gov/grants/guidance-tools/benefit-cost-analysis#:~:text=Benefit%2DCost%20Analysis%20(BCA),BCR%20is%201.0%20or%20greater.	Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards (2013) https://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf
Disaster Mitigation Act of 2000 https://www.congress.gov/bill/106th-congress/house-bill/707#:~:text=Requires%20the%20President%2C%20in%20determining,future%20natural%20disasters%3B%20(3).	Mitigation Planning and the Community Rating System Key Topics Bulletin https://www.fema.gov/media-library-data/1560365486495-6e5bdaa89de4bf2363596e615f4c7575/MitigationPlanningandtheCommunityRatingSystemKeyTopicsBulletin.pdf
Hazard Mitigation Assistance Guidance and Addendum (2015)	National Flood Insurance Program Community Rating System

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https://www.fema.gov/media-library-data/1424983165449-38f5dfc69c0bd4ea8a161e8bb7b79553/HMA_Addendum_022715_508.pdf	https://www.fema.gov/media-library-data/1535126505943-439b296e7778b037d05f698f65c7891b/2018NFIP_CRS_Brochure_June_2018_508OK.pdf
Hazard Mitigation Assistance Unified Guidance (2013) https://www.fema.gov/media-library-data/15463cb34a2267a900bde4774c3f42e4/FINAL_Guidance_081213_508.pdf	National Flood Insurance Program Community Status Book (2020) https://www.fema.gov/flood-insurance/work-with-nfip/community-status-book
Local Mitigation Plan Review Guide (2011) https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-plan-review-guide_09_30_2011.pdf	National Response Framework (2019) https://www.fema.gov/emergency-managers/national-preparedness/frameworks/response
Local Mitigation Planning Handbook (2013) https://www.fema.gov/sites/default/files/2020-06/fema-local-mitigation-planning-handbook_03-2013.pdf	Robert T. Stafford Disaster Relief and Emergency Assistance Act (2019) https://www.fema.gov/sites/default/files/2020-03/stafford-act_2019.pdf
PLANS AND STUDIES	
Flood Hazard Mitigation Plan State of Nebraska (2013) https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/flood-hazmit-plan.pdf	Papio-Missouri River NRD Hazard Mitigation Plan (2016) https://www.papionrd.org/flood-control/hazard-mitigation-planning/
Flood Insurance Studies https://www.fema.gov/flood-maps/change-your-flood-zone/status/flood-insurance-study	Public Power in Nebraska (2018) https://nebraskalegislature.gov/pdf/reports/research/public_power_2018.pdf
Fourth National Climate Assessment https://nca2018.globalchange.gov/	State of Nebraska Hazard Mitigation Plan (2014) https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/hazmitplan.pdf
National Climate Assessment (2014) https://nca2014.globalchange.gov/	State of Nebraska Hazard Mitigation Plan (2019) https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/hazmitplan2019.pdf
Nebraska State Drought Plan (2000) https://carc.nebraska.gov/docs/NebraskaDrought.pdf	
TECHNICAL AND DATA RESOURCES	
Arbor Day Foundation – Tree City Designation (2019) https://www.arborday.org/programs/treecityusa/directory.cfm	Nebraska Department of Natural Resources – Dam Inventory https://gis.ne.gov/portal/apps/webappviewer/index.html?id=2aab04a13817421992dc5398ad462e22
CDC Social Vulnerability Index https://www.atsdr.cdc.gov/placeandhealth/svi/index.html	Nebraska Department of Transportation http://dot.nebraska.gov/
CDC Underlying Cause of Death https://wonder.cdc.gov/ucd-icd10.html	Nebraska Emergency Management Agency http://www.nema.ne.gov
Census Bureau – My Tribal Area https://www.census.gov/tribal/	Nebraska Flooding: March 2019 (Storymap) https://storymaps.arcgis.com/stories/9ce70c78f5a44813a326d20035cab95a
Federal Emergency Management Agency https://www.fema.gov/	Nebraska Forest Service (NFS) http://www.nfs.unl.edu/
FEMA Disaster Declarations https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v1	Nebraska Forest Service – Wildland Fire Protection Program http://nfs.unl.edu/fire
FEMA Flood Map Service Center https://msc.fema.gov/portal/advanceSearch	Nebraska Local Health Departments http://dhhs.ne.gov/Pages/Local-Health-Departments.aspx
FEMA Hazard Mitigation Plan Status https://fema.maps.arcgis.com/apps/webappviewer/index.html?id=ec2fb023df744cf480da89539338c386	Nebraska Power Review Board https://nprb.gworks.com/
High Plains Regional Climate Center http://climod.unl.edu/	Nebraska Rural Electric Association https://www.nrea.org/nrea-member-systems
Midwest Regional Climate Center https://mrcc.illinois.edu/gismaps/cntyorn.htm#	Nebraska State Historical Society http://www.nebraskahistory.org/histpres/index.shtm

TECHNICAL AND DATA RESOURCES	
National Agricultural Statistics Service http://www.nass.usda.gov/	NOAA – Billion Dollar Weather and Climate Disasters https://www.ncdc.noaa.gov/billions/overview
National Centers for Environmental Information https://www.ncei.noaa.gov/	NWS – Seasonal Drought Outlook https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php
National Consortium for the Study of Terrorism and Responses to Terrorism (START) http://www.start.umd.edu/gtd/	PHMSA Incident Statistics https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics
National Drought Mitigation Center – Drought Impact Reporter http://droughtreporter.unl.edu/map/	Small Business Administration – Disaster Loan Assistance https://disasterloan.sba.gov/ela/Declarations/Index
National Drought Mitigation Center – Drought Monitor http://droughtmonitor.unl.edu/	Stanford University - National Performance of Dams Program https://npdp.stanford.edu/
National Environmental Satellite, Data, and Information Service http://www.nesdis.noaa.gov/	Storm Prediction Center Statistics http://www.spc.noaa.gov
National Fire Protection Association https://www.nfpa.org/	The Census of Agriculture (2012) https://www.nass.usda.gov/Publications/AqCensus/2012/
National Flood Insurance Program https://www.fema.gov/national-flood-insuranceprogram	The Census of Agriculture (2017) https://www.nass.usda.gov/Publications/AqCensus/2017/index.php
National Flood Insurance Program https://dnr.nebraska.gov/floodplain/floodinsurance	Union of Concerned Scientists – Killer Heat Interactive Tool https://www.ucsusa.org/resources/killer-heat-interactive-tool?location=lancaster-county--ne
National Historic Registry https://www.nps.gov/subjects/nationalregister/index.htm	United States Army Corps of Engineers – National Levee Database https://levees.sec.usace.army.mil/#/
National Interagency Fire Center https://www.nifc.gov/fireInfo/fireInfo_statistics.html	United States Census Bureau https://data.census.gov/cedsci/
National Oceanic Atmospheric Administration (NOAA) http://www.noaa.gov/	United States Department of Agriculture http://www.usda.gov
National Weather Service http://www.weather.gov/	United States Department of Agriculture – Risk Management Agency http://www.rma.usda.gov
National Weather Service StormReady and TsunamiReady https://www.weather.gov/stormready/communities	United States Department of Agriculture – Web Soil Survey https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
Natural Resources Conservation Service www.ne.nrcs.usda.gov	United States Department of Transportation – Pipeline and Hazardous Materials Safety Administration https://www.phmsa.dot.gov/
NE DHHS Rosters of Facilities and Services http://dhhs.ne.gov/licensure/Pages/Rosters-of-Facilities-and-Services.aspx	United States Geological Survey http://www.usgs.gov/
Nebraska Association of Resources Districts http://www.nrdnet.org	United States National Response Center http://www.nrc.uscg.mil/
Nebraska Climate Assessment Response Committee http://carc.agr.ne.gov	UNL – College of Agricultural Sciences and Natural Resources – Schools of Natural Resources http://casnr.unl.edu
TECHNICAL AND DATA RESOURCES	

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Nebraska Department of Agriculture – Livestock Disease https://nda.nebraska.gov/animal/reporting/index.html	UNL – County Extension Offices https://extension.unl.edu/statewide/hal/officeslist/
Nebraska Department of Education http://nep.education.ne.gov/	UNL IANR – Nebraska Landslides http://snr.unl.edu/data/geologysoils/landslides/landslidedatab ase.aspx
Nebraska Department of Education http://educdirsrc.education.ne.gov/	USACE National Inventory of Dams https://nid.sec.usace.army.mil/ords/f?p=105:1
Nebraska Department of Environment and Energy http://www.deq.state.ne.us/	USDA – Disaster Assistance Programs https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/index
Nebraska Department of Health and Human Services http://dhhs.ne.gov/Pages/default.aspx	USGS – Landslide Inventory https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d
Nebraska Department of Natural Resources http://www.dnr.ne.gov	Wildfire Risk to Communities https://wildfirerisk.org/
Nebraska Department of Natural Resource – Geographic Information Systems (GIS) https://dnr.nebraska.gov/data	

Plan Implementation and Progress Monitoring

Public Review Period

Once the draft 2021 HMP was completed, a public review period was opened to allow for participants and community members at large to review the plan and provide comments and changes. The public review period was open from January 4, 2021 to February 5, 2021. All participating jurisdictions and relevant stakeholders were emailed and mailed a letter notifying them of the public review period. This draft HMP was also made publicly available on both the JEO and NRD project websites to download. Received comments and suggested changes were incorporated into the plan. Examples of such revisions included: clarification of siren ownership in counties, planning team member titles, additions of fixed chemical sites in communities, and updates to critical facilities.

Plan Adoption

Based on FEMA requirements, this multi-jurisdictional hazard mitigation plan must be formally adopted by each participant's governing body through the approval of an *Adoption Resolution*. The approval creates 'individual ownership' of the plan by each participating entity. Formal adoption provides evidence of a participant's full commitment to implement the plan's goals, objectives, and action items. A copy of the resolution draft submitted to participating jurisdiction is located in Appendix A. Copies of adoption resolutions may be requested from the State Hazard Mitigation Officer.

Requirement § 201.6(c)(5): For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

HMPs need to be living documents. Once adopted, participants are responsible for implementing and updating the plan as described in their *Community Profiles*. Those who participated directly in the planning process would be logical champions for updating the plan. In addition, the plan will need to be reviewed and updated as projects are completed and particularly after major events occur. Participating jurisdictions outlined individual maintenance goals in respective profiles and were notified such amendments and updates can be shared via the plan sponsor or JEO for

inclusion in the HMP. Additionally, HMPs should be integrated into other planning mechanism as they are reviewed and updated. This includes county and local comprehensive or emergency action plans as applicable.

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SECTION THREE

PLANNING AREA PROFILE

Introduction

To identify jurisdictional vulnerabilities, it is vitally important to understand the people and built environment of the planning area. The following section is meant to provide a description of the characteristics of the planning area to create an overall profile. Many characteristics are covered in each jurisdiction's community profile including demographics, transportation routes, and structural inventory. Redundant information will not be covered in this section. Therefore, this section highlights at-risk populations and characteristics of the built environment that add to regional vulnerabilities.

Planning Area Geographic Summary

The P-MRNRD is located along the eastern border of Nebraska adjacent to Iowa and covers 1,790 square miles. The district includes all or part of six counties which make up the planning area: Burt, Dakota, Douglas, Sarpy, Thurston, and Washington. Since all six counties are full participants in this plan, the planning area will be defined by the full county area (2,140 square miles). The planning area is composed of three primary topographical regions: Valley-Side Slopes, Bluffs and Escarpments, and Valleys. Valley-side slopes are moderately sloping land that occurs between the escarpments and the major stream valleys in western Nebraska. These areas are mostly siltstone bedrock covered by a few feet to a few tens of feet of sand, gravel, or silt. Bluffs and Escarpments are rugged land with very steep and irregular slopes. Bedrock materials, such as sandstone, shale and limestone are often exposed in these areas. And Valleys are flat-lying land along major streams. The materials of the valleys are stream-deposited silt, clay, sand, and gravel.¹³

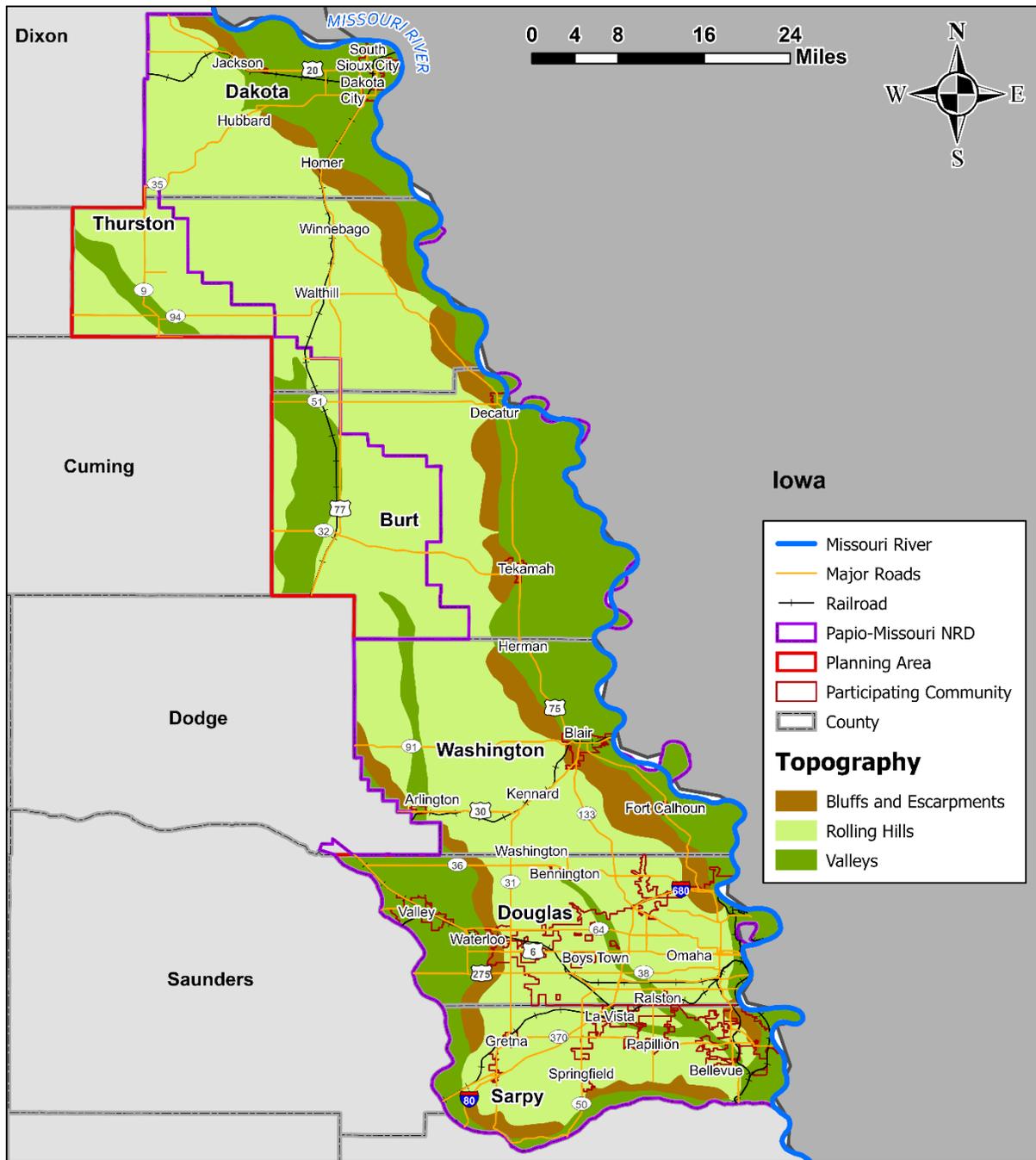
The planning area rests within the watersheds of the Missouri River, Lower Platte, Elkhorn River, and Papillion Creek and is home to numerous rivers, tributaries, creeks, or other bodies of water. The following list includes some of these waterbodies but is not a comprehensive list.

- **Rivers:** Missouri River, Platte River, Elkhorn River
- **Tributaries/Streams/Creeks:** Logan Creek, Silver Creek, Elk Creek, Fiddler Creek, Jones Creek, Pigeon Creek, Big Papillion Creek, Papillion Creek, Omaha Creek, Middle Creek, Bell Creek, Tekamah Creek
- **Lakes/Reservoirs:** Summit Lake, Bennington Lake, Danish Alps Reservoir

The planning area includes the most heavily populated metropolitan area in the State of Nebraska, the City of Omaha. Much of the remaining planning area is comprised of small to moderate sized communities, agricultural land, and rivers or water bodies.

¹³ Center for Applied Rural Innovation. August 2001. "Topographic Regions Map of Nebraska." <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1062&context=caripubs>.

Figure 6: Planning Area Topography





JEO CONSULTING GROUP INC

Created By: MW
 Date: 12/9/2020
 Software: ArcGIS Pro 2.6.2
 File Name: PapioNRD_Upfront.aprx

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

2021 Papio-Missouri River NRD Hazard Mitigation Plan

Topography



SOUTH DAKOTA
 COLORADO
 KANSAS
 IOWA

Demographics

Demographic and asset information can be used to determine differing levels of vulnerability via population and housing, structural inventories and valuations, critical facilities, and vulnerable areas analysis. In general, the planning area is a mixture of rural and large metropolitan areas. The planning area includes all of Burt, Dakota, Douglas, Sarpy, Thurston, and Washington Counties. While the NRD and U.S. Census Bureau do not collect specific demographic information for the NRD, it serves an estimated population of 834,683. This population includes a range of demographic cohorts and persons at risk to natural and man-made disasters. The following table depicts the estimated population per county in 2000, 2010, and the 2020 projected population. At the time of this plan development, the U.S. 2020 census data was not available and is thus not included.

Table 22: Estimated Population for the Planning Area

COUNTY	2000 POPULATION	2010 POPULATION	2020 POPULATION (ESTIMATED)
Burt	7,791	6,858	6,037
Dakota	20,253	21,006	21,787
Douglas	463,585	517,110	576,815
Sarpy	122,595	158,840	205,801
Thurston	7,171	6,940	6,716
Washington	18,780	20,234	21,801
TOTAL	640,175	730,988	834,683

Source: U.S. Census Bureau¹⁴

Table 23: Estimated Population for the Planning Area by Cohort

AGE	PLANNING AREA	STATE OF NEBRASKA
<5	7.6%	6.9%
5 – 19	21.3%	20.7%
20 – 64	59.2%	57.6%
>64	11.9%	14.8%
Median	36.4	36.3

Source: U.S. Census Bureau

The population for the planning area has grown since the 2010 regional population census (730,988 persons). The region accounts for approximately 43% of the total population for the state in 2017.

At-risk Populations

In general, at-risk populations may have difficulty with medical issues, poverty, extremes in age, and communications due to language barriers. Several outliers may be considered when discussing potentially at-risk populations, including:

- Not all people who are considered “at-risk” are at risk;
- Outward appearance does not necessarily mark a person as at-risk;
- A hazard event will, in many cases, impact at-risk populations in different ways.

The National Response Framework defines at-risk populations as “...populations whose members may have additional needs before, during, and after an incident in functional areas,

¹⁴ U.S. Census Bureau. 2000/2010/2017. “Age and Sex: 2017 American Community Survey (ACS) 5-year estimates.” <https://data.census.gov/cedsci/>.

SECTION THREE: PLANNING AREA PROFILE

including but not limited to: maintaining independence, communication, transportation, supervision, and medical care."¹⁵

Dependent children under 19 years old are one of the most vulnerable populations to disasters.¹⁶ The majority of people in this age group do not have access to independent financial resources, transportation, or cellular telephones. They also lack practical knowledge necessary to respond appropriately during a disaster. As a result, this demographic group experiences increased vulnerability to the following list of hazards: tornadoes (especially daytime events), severe thunderstorms, severe winter storms, extreme heat, water shortage created by drought, and chemical releases. Lack of awareness can at times be a concern for people in this age range as well as an inability to recognize and respond to environmental stimuli, which could lead to increased vulnerability to flooding (especially flash flooding), severe thunderstorms, tornadoes, and severe winter storms.

Despite this vulnerability, children are generally overlooked in disaster planning because the presence of a care-taker is assumed. With over a quarter of the planning area's total population younger than 19, children are a key vulnerable group to address in the planning process. Over a quarter of this subset are additionally children are under the age of five, further exacerbating their vulnerability.

Schools house a high number of children within the planning area during the daytime hours of weekdays, as well as during special events on evenings and weekends. The following table identifies the various school districts located within the six-county planning area, and Figure 7 is a map of the school district boundaries. This list is comprehensive and does not represent only the school districts participating in this plan.

Table 24: School Inventory

SCHOOL DISTRICT	TOTAL ENROLLMENT (2018-2019)
Arlington Public Schools	700
Bancroft-Rosalie Community Schools	307
Bellevue Public Schools	9,807
Bennington Public Schools	2,931
Blair Community Schools	2,294
Douglas County West Community Schools	970
Elkhorn Public Schools	9,857
Emerson-Hubbard Community Schools	251
Fort Calhoun Community Schools	719
Gretna Public Schools	5,492
Homer Community Schools	390
Logan View Public Schools	547
Lyons-Decatur Northeast Public Schools	284
Millard Public Schools	24,104
Oakland Craig Public Schools	465
Omaha Public Schools	51,194
Papillion-La Vista Public Schools	12,158
Pender Public Schools	390

¹⁵ United States Department of Homeland Security, June 2016. "National Response Framework Forth Edition." https://www.fema.gov/media-librarydata/1572366339630-0e9278a0ede9ee129025182b4d0f818e/National_Response_Framework_4th_20191028.pdf.

¹⁶ Flanagan, Gregory, Hallisey, Heitgerd, & Lewis. 2011. "A Social Vulnerability Index for Disaster Management." *Journal of Homeland Security and Emergency Management*, 8(11): Article 3.

SCHOOL DISTRICT	TOTAL ENROLLMENT (2018-2019)
Ponca Public Schools	466
Ralston Public Schools	3,406
South Sioux City Community Schools	3,865
South Sarpy District 46	1,160
Springfield Platteview School District	1,160
Tekamah-Herman Community Schools	518
Umonhonnation Public Schools	539
Walthill Public Schools	367
Westside Community Schools	5,942
Winnebago Public Schools	586

Source: Nebraska Department of Education¹⁷

Like minors, seniors (age 65 and greater) are often more significantly impacted by temperature extremes. During prolonged heat waves, seniors may lack resources to effectively address hazard conditions and as a result may incur injury or potentially death. Prolonged power outages (either standalone events or as the result of other contributing factors) can have significant impacts on any citizen relying on medical devices for proper bodily functions. One study conducted by the Center for Injury Research and Policy found that increases in vulnerability related to severe winter storms (with significant snow accumulations) begin at age 55.¹⁸ The study found that on average there are 11,500 injuries and 100 deaths annually related to snow removal. Males over the age of 55 are 4.25 times more likely to experience cardiac symptoms during snow removal.

While the previously identified populations do live throughout the planning area, there is the potential that they will be located in higher concentrations at care facilities. The following table identifies the number and capacity of care facilities throughout the planning area.

Table 25: Care Facility Inventory

COUNTY	HOSPITALS	HOSPITAL BEDS	HEALTH CLINICS	ADULT CARE HOMES	ADULT CARE BEDS	ASSISTED LIVING HOMES	ASSISTED LIVING BEDS
Burt	1	16	0	2	91	1	24
Dakota	0	0	2	3	187	2	73
Douglas	17	2,682	47	25	3,051	48	3,328
Sarpy	2	212	8	6	745	9	817
Thurston	1	21	2	2	67	1	16
Washington	1	21	0	2	158	4	156
Total	22	2,952	59	40	4,299	65	4,414

Source: Nebraska Department of Health and Human Services^{19, 20, 21, 22}

¹⁷ Nebraska Department of Education. 2020. "Nebraska Education Profile: District and School Data." Accessed August 2020. <http://nep.education.ne.gov/>

¹⁸ Center for Injury Research and Policy. January 2011. "Snow Shoveling Safety." Accessed July 2017. <http://www.nationwidechildrens.org/cirp-snow-shoveling>.

¹⁹ Department of Health and Human Services. September 2020. "Hospitals." <http://dhhs.ne.gov/publichealth/Documents/Hospital%20Roster.pdf>.

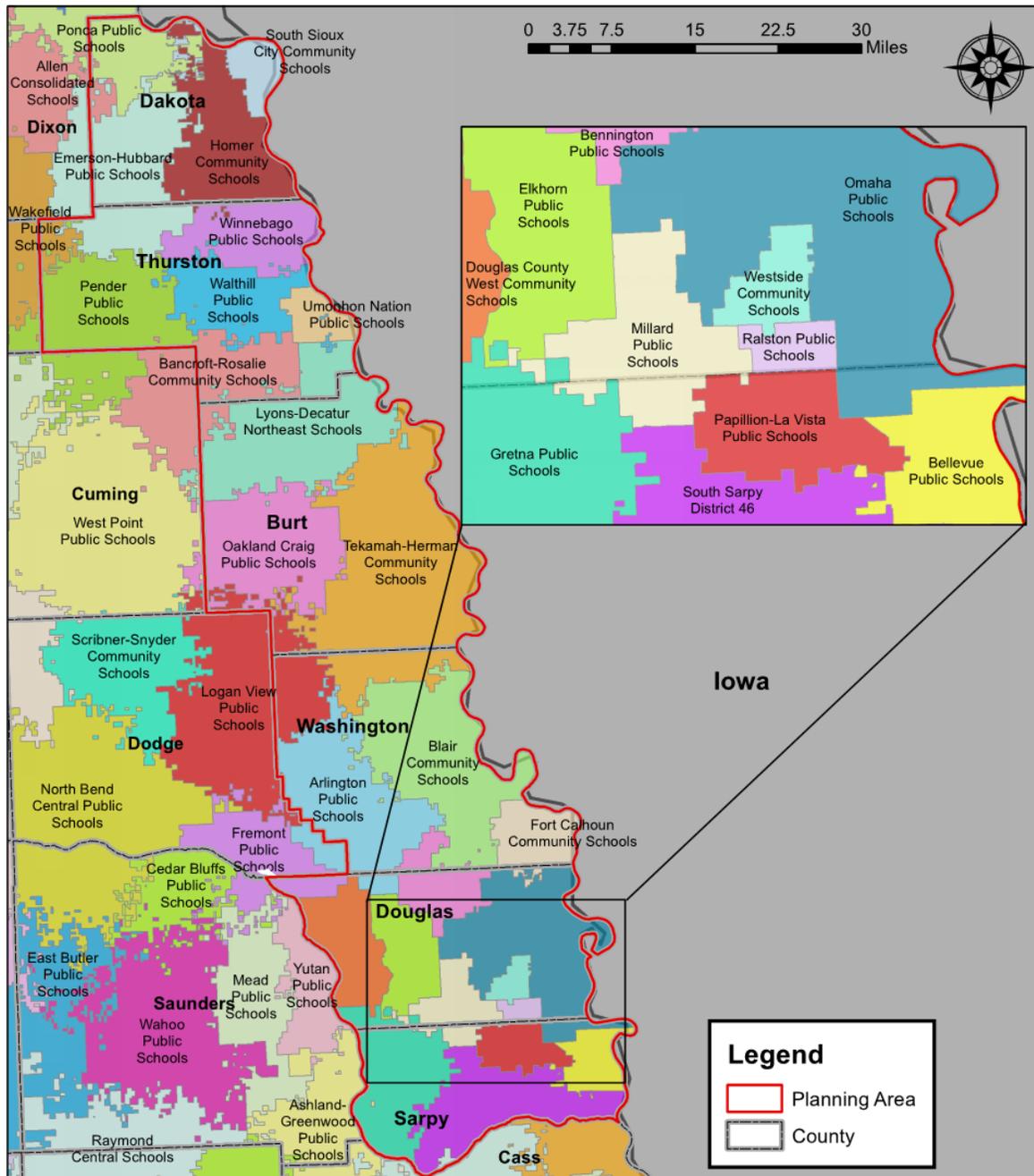
²⁰ Department of Health and Human Services. September 2020. "Health Clinics." http://dhhs.ne.gov/licensure/Documents/HC_ASC_ESRD%20Lic%20Roster.pdf.

²¹ Department of Health and Human Services. September 2020. "Assisted Living Facilities." <http://dhhs.ne.gov/publichealth/Documents/ALF%20Roster.pdf>.

²² Department of Health and Human Services. September 2020. "Long Term Care Facilities." <http://dhhs.ne.gov/publichealth/Documents/LTCRoster.pdf>.

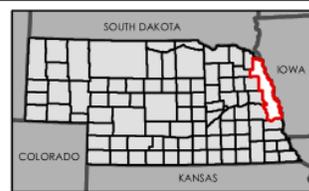
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Figure 7: Regional School Districts



Created By: MB
 Date: 7/23/2020
 Revised: 7/23/2020
 Software: ArcGIS 10.7.1
 File Name: PapioNRD_SchoolDistricts.mxd
 This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.

2021 Papio-Missouri River NRD
 Hazard Mitigation Plan
School Districts



In addition to residents being classified as at-risk by age, there are other specific groups within the planning area that experience vulnerabilities related to their ability to communicate or their economic status. The following table provide statistics per county regarding households with English as a second language (ESL) and population reported as in poverty within the past 12 months.

Table 26: ESL and Poverty At-risk Populations

COUNTY	PERCENT THAT SPEAK ENGLISH AS A SECOND LANGUAGE	FAMILIES BELOW POVERTY LEVEL
Burt	2.7%	9.3%
Dakota	39.9%	15.9%
Douglas	14.7%	9.4%
Sarpy	9.0%	3.6%
Thurston	5.3%	24.0%
Washington	2.5%	7.0%

Source: U.S. Census Bureau^{23, 24}

Residents below the poverty line may lack resources to prepare for, respond to, or recover from hazard events. Residents with limited economic resources will struggle to prioritize the implementation of mitigation measures over more immediate needs. Further, residents with limited economic resources are more likely to live in older, more vulnerable structures. These structures could be: mobile homes; located in the floodplain; located near know hazard sites (i.e. chemical storage areas); or older poorly maintained structures. Residents below the poverty line will be more vulnerable to all hazards within the planning area.

Residents who speak English as a second language may struggle with a range of issues before, during, and after hazard events. General vulnerabilities revolve around what could be an inability to effectively communicate with others or an inability to comprehend materials aimed at notification and/or education. When presented with a hazardous situation it is important that all community members be able to receive, decipher, and act on relevant information. An inability to understand warnings and notifications may prevent non-native English speakers from reacting in a timely manner. Further, educational materials related to regional hazards are most often developed in the dominant language for the area, for the planning area that would be English. Residents who struggle with English in the written form may not have sufficient information related to local concerns to effectively mitigate potential impacts. Residents with limited English proficiency would be at an increased vulnerability to all hazards within the planning area.

Similar to residents below the poverty line, racial minorities tend to have access to fewer financial and systemic resources that would enable them to implement hazard mitigation projects and to respond and recover from hazard events, including residence in standard housing and possession of financial stability. The planning area is primarily White, non-Hispanic, with little change in diversity since 2010. Small changes in racial inequity will likely not significantly affect the region's overall vulnerability to hazards. However, it is important to note a large portion of the population in Thurston County is Native American.

²³ U.S. Census Bureau. 2019. "Language Spoken at Home: 2017 American Community Survey (ACS) 5-year estimates." <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#>.

²⁴ U.S. Census Bureau. 2019. "Selected Economic Characteristics: 2017 ACS 5-year estimate." <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#>.

Table 27: Racial Composition in the Planning Area

RACE	2010		2017		% CHANGE
	NUMBER	% OF TOTAL	NUMBER	% OF TOTAL	
White, Non-Hispanic	577,200	81%	637,271	82%	+1%
Black	63,422	9%	69,077	9%	0%
American Indian And Alaskan Native	7,465	1%	8,026	1%	0%
Asian	15,656	2%	24,018	3%	+1%
Native Hawaiian & Other Pacific Islander	698	0%	527	0%	0%
Other Races	27,478	4%	17,334	2%	-2%
Two Or More Races	20,499	3%	23,185	3%	0%
Total Population	712,418	-	779,438	-	-

Source: U.S. Census Bureau^{25, 26}

Native American and Tribal Populations

The planning area includes portions of two Native American Reservations: the Winnebago Indian Tribe and the Omaha Indian Tribe. Indigenous populations have historically been underrepresented in large scale planning efforts while also experiencing severe impacts from hazard events and climate change at the local level. The Winnebago and Omaha reservations comprise a small portion of the overall planning area's population; however, the two reservations encompass the majority of Thurston County in eastern Nebraska. The Winnebago Indian Reservation serves over 5,000 enrolled members and accounts for 42% of Thurston County's population. The Omaha Indian Reservation also serves over 5,000 members and covers areas in southern Thurston County, northeastern Cuming County, and into Monona County Iowa.

Indian reservations present specific vulnerabilities to hazard events. Many homes and traditional structures in reservations were built prior to the adoption of local building codes and/or pre-FIRM development. Increased poverty rates are common on tribal lands and many residents lack adequate funds to implement household mitigation actions. Other local vulnerabilities may include lack of adequate warning systems for tribal residents who do not live in incorporated areas, lack of adequate means of transportation for evacuation, and access issues during hazard events due to poorly maintained or unpaved roads.

Built Environment and Structural Inventory

Data related to the built environment is an important component of a hazard mitigation plan. It is essential that during the planning process communities and participating jurisdictions display an understanding of their built environment and work to identify needs that may exist within their planning area. The US Census provides information related to housing units and potential areas of vulnerability. The selected characteristics examined below include: lacking complete plumbing facilities; lacking complete kitchen facilities; no telephone service available; housing units that are mobile homes; and housing units with no vehicles.

25 U.S. Census Bureau. 2019. "Race: 2017 ACS 5-year estimates." <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=#>.
 26 U.S. Census Bureau. 2019. "Race: 2010 ACS 5-year estimate." <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=#>.

Table 28: Selected Housing Characteristics

	BURT	DAKOTA	DOUGLAS	SARPY	THURSTON	WASHINGTON	TOTAL
Occupied housing units	2,885 (82.7%)	7,427 (95.1%)	213,689 (93.0%)	63,851 (95.4%)	2,142 (88.0%)	8,133 (95.6%)	298,127
Lacking complete plumbing facilities	0.5%	0.5%	0.3%	0.3%	0.4%	0.1%	838 (0.00%)
Lacking complete kitchen facilities	1.4%	1.5%	1.0%	0.6%	0.1%	0.9%	2,791 (0.01%)
No telephone service available	3.2%	3.1%	2.6%	1.5%	5.2%	2.1%	7,104 (2.4%)
Housing unit with no vehicles available	4.9%	6.0%	7.5%	2.8%	8.3%	4.5%	18,977 (6.4%)
Mobile homes	5.8%	9.7%	1.2%	0.8%	5.7%	2.1%	4,647 (1.6%)

Source: U.S. Census Bureau²⁷

Less than three percent of housing units lack access to landline telephone service. This does not necessarily indicate that there is not a phone in the housing unit, as cellular telephones are increasingly a primary form of telephone service. However, this lack of access to landline telephone service does represent a population at increased risk to disaster impacts. Reverse 911 systems are designed to contact households via landline services and as a result, some homes in hazard prone areas may not receive notification of potential impacts in time to take protective actions. Emergency managers should continue to promote the registration of cell phone numbers with emergency alert systems and utilize systems which automatically ping cellphones by triangulating cell towers.

Approximately two percent of housing units in the planning area are mobile homes. Dakota, Burt, and Thurston counties have the largest shares of mobile homes. Mobile homes have a higher risk of sustaining damages during high wind events, tornadoes, severe thunderstorms, and severe winter storms. Mobile homes that are either not anchored or are anchored incorrectly can be overturned by 60 mph winds. A thunderstorm is classified as severe when wind speeds exceed 58 mph, placing improperly anchored mobile homes at risk.

Burt County has the highest percentage of unoccupied housing units. Unoccupied homes may not be maintained as well as occupied housing, thus adding to their vulnerability. Furthermore, approximately six percent of all housing units in the planning area do not have a vehicle available. Households without vehicles may have difficulty evacuating during a hazardous event and a reduced ability to access resources in time of need.

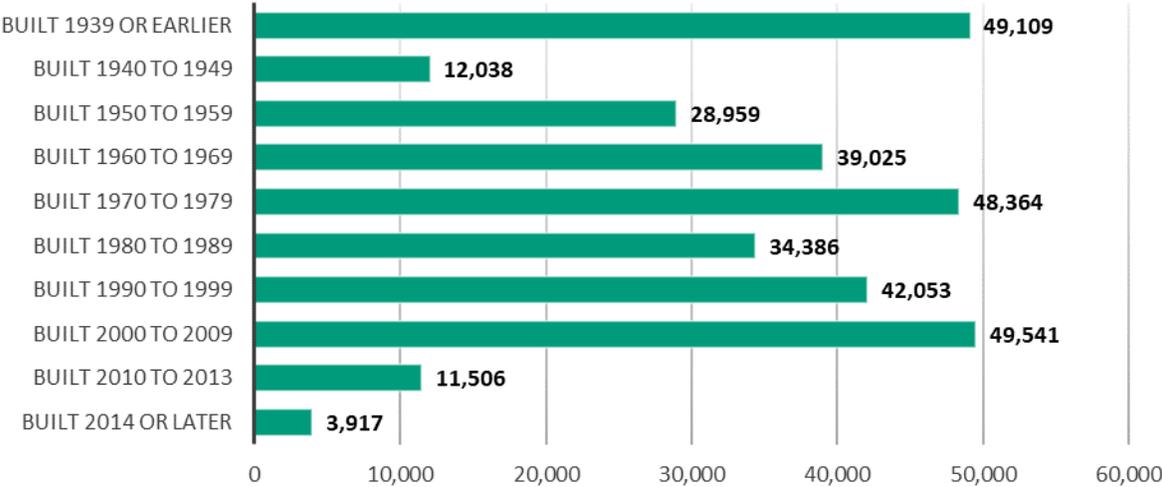
Housing age throughout the planning area is spread relatively evenly between prior to 1939 and between 1950 to 2009, with only a small percentage of homes built after 2010 (Figure 1). Housing age can serve as an indicator of risk, as structures built prior to state building codes being developed may be more vulnerable. According to the Department of Housing and Urban

²⁷ U.S. Census Bureau. 2019. "Selected Housing Characteristics: 2017 ACS 5-year estimates." <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=#>

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Development (HUD), older homes are at greater risk of poor repair and dilapidation resulting in blighted or substandard properties. Residents living in these homes maybe at higher risk to the impacts of high winds, tornadoes, severe winter storms, and thunderstorms. Over half of the housing units within the planning area were constructed before the 1980s. Across the state, the first building codes were adopted in 1987, but prior to this time, codes and building standards were established (or not) by each county and community. The State of Nebraska later adopted the International Building Code (IBC) 2000 codes (adopted in 2003), the IBC 2009 codes (adopted in 2010), and the IBC 2018 codes as of 2020.

Figure 8: Housing Age in Planning Area



Source: U.S. Census Bureau

State and Federally Owned Properties

The following table provides an inventory of state and federally-owned properties within the planning area by county. Note that this list does not include federally or state-owned highway systems or specific buildings within each community.

Table 29: State and Federally Owned Facilities

FACILITY	NEAREST COMMUNITY
Burt County	
Summit Lake State Recreation Area	Tekamah
Soldier Bend Wildlife Area	Tekamah
Pelican Point State Recreation Area	Tekamah
Middle Decatur Bend State Wildlife Management Area	Decatur
Onawa Materials Yard Wildlife Area	Decatur
Omaha Reservation	Decatur
Open Fields and Waters Site 3368 (CRP land)	Tekamah
Dakota County	
Basswood Ridge State Wildlife Management Area	Hubbard
Danish Alps State Recreation Area	Hubbard
Omadi Bend Wildlife Management Area	Homer
Open Fields and Waters Site 3449 (CRP land)	Waterbury
Open Fields and Waters Site 3448 (CRP land)	Jackson
Open Fields and Waters Site 3436 (CRP land)	Jackson

FACILITY	NEAREST COMMUNITY
Open Fields and Waters Site 3538 (CRP land)	Hubbard
Open Fields and Waters Site 3537 (CRP land)	Hubbard
Open Fields and Waters Site 3415 (CRP land)	Hubbard
Open Fields and Waters Site 3535 (CRP land)	Hubbard/Emerson
Open Fields and Waters Site 3534 (CRP land)	Emerson
Open Fields and Waters Site 3344 (CRP land)	Hubbard
Open Fields and Waters Site 3532 (CRP land)	Homer
Open Fields and Waters Site 3490 (CRP land)	Homer
Open Fields and Waters Site 3502 (CRP land)	Hubbard
Douglas County	
N.P. Dodge Park	Bennington
Hummel Park	Bennington
Neale Woods Nature Center	Bennington
Cunningham Lake Park	Bennington
Allwine Prairie Preserve	Bennington
Two Rivers State Recreation Area/Wildlife Management Area	Venice
Bluestem Prairie Preserve	Omaha
Sarpy County	
Sarpy Park State Recreational Area	Springfield
Chalco Hills Recreation Area	Chalco
Walnut Creek Recreation Area	Papillion
Gifford Point WMA	Bellevue
Fontenelle Forest Nature Center	Bellevue
Schramm Park State Recreation Area	Springfield
Thurston County	
Omaha Reservation/Tribal Properties/Bureau of Indian Affairs	South half of the county
Winnebago Reservation/Tribal Properties/Bureau of Indian Affairs	North half of the county
Open Fields and Waters Site 3395 (CRP land)	Walthill
Washington County	
Fort Atkinson State Historical Park	Fort Calhoun
Boyer Chute National Wildlife Refuge	Fort Calhoun
DeSoto National Wildlife Refuge	Fort Calhoun

Source: *Nebraska Game and Parks*²⁸

Historical Sites

According to the National Register of Historic Places for Nebraska by the National Park Service (NPS), there are 217 historic sites located in the planning area. Structures identified as cultural or historic resources represent assets that are unique to the planning area and are, in many situations, irreplaceable and have local significance. Additional sites of historical and cultural significance for the Winnebago Indian Tribe are not fully discussed in the following table but are included in the *Community Profile*.

Table 30: Historical Sites

SITE NAME	DATE LISTED	NEAREST COMMUNITY	COUNTY	IN FLOODPLAIN?
Ackerhurst--Eipperhurst Dairy Barn	3/28/2002	Bennington	Douglas	N

²⁸ Nebraska Game and Parks. 2020. "Public Access ATLAS." [Web Map]. Accessed September 2020. https://www.google.com/search?q=public+atlas+access&rlz=1C1GCEA_enUS812US812&oq=public+atlas+access&aqs=chrome..69j57j69i60j0l4.3399j0j7&sourceid=chrome&ie=UTF-8

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SITE NAME	DATE LISTED	NEAREST COMMUNITY	COUNTY	IN FLOODPLAIN?
Anheuser-Busch Beer Depot	2/1/1979	Omaha	Douglas	N
Apartments at 2514 North 16th Street	8/30/2010	Omaha	Douglas	N
Aquila Court Building	10/2/1973	Omaha	Douglas	N
Astro Theater	8/13/1974	Omaha	Douglas	N
Bank of Florence	10/15/1969	Omaha	Douglas	N
Barker Building	7/2/2008	Omaha	Douglas	N
Barton, Guy C., House	8/14/1973	Omaha	Douglas	N
Beebe and Runyan Furniture Showroom and Warehouse	7/23/1998	Omaha	Douglas	N
Bemis Omaha Bag Company Building	1/11/1985	Omaha	Douglas	N
Bennington State Bank	11/8/2006	Bennington	Douglas	N
Bertrand Site	3/24/1969	Blair	Washington	Y
Big Papillion Creek Bridge	6/29/1992	La Vista	Sarpy	N
Blackbird Hill	5/2/1979	Macy	Thurston	N
Blacksmith Shop	5/12/1978	Bellevue	Sarpy	N
Blackstone Hotel	1/11/1985	Omaha	Douglas	N
Blair High School	3/14/1991	Blair	Washington	N
Bonderson, Ben, Farm	11/8/2006	Emerson	Dakota	N
Bradford-Pettis House	7/21/1983	Omaha	Douglas	N
Brandeis, J. L., and Sons Store Building	10/20/1982	Omaha	Douglas	N
Brandeis-Millard House	11/28/1980	Omaha	Douglas	N
Broomfield Rowhouse	3/21/2007	Omaha	Douglas	N
Bryant, Edward W. and Rose Folsom, House	8/5/2004	Tekamah	Burt	N
Burlington Headquarters Building	12/4/1974	Omaha	Douglas	N
Burlington Station	8/7/1974	Omaha	Douglas	N
Burt County Courthouse	1/10/1990	Tekamah	Burt	Y
Burt County State Bank	3/4/2009	Tekamah	Burt	N
Cabanne Archeological Site	5/5/1972	Omaha	Douglas	N
Capitol Garage	5/11/2012	Omaha	Douglas	N
Castetter, Abraham, House	6/25/1982	Blair	Washington	N
Center School	8/23/1985	Omaha	Douglas	N
Champe-Fremont 1 Archeological Site	10/21/1975	Omaha	Douglas	N
City National Bank Building and Creighton Orpheum Theater	3/26/1973	Omaha	Douglas	N
Columbian School	11/28/1990	Omaha	Douglas	N
Congregational Church of Blair	2/1/1979	Blair	Washington	N
Cornish, Joel N., House	8/13/1974	Omaha	Douglas	N
Country Club Historic District	12/30/2004	Omaha	Douglas	N
Crook, Gen. George, House	4/16/1969	Omaha	Douglas	N
Crowell, C. C., Jr., House	7/19/1982	Blair	Washington	N
Deutsche Ev. Luth. St. Johannes Kirche	8/2/1982	Lyons	Burt	N
Disbrow, M.A., and Company Buildings	8/1/2008	Omaha	Douglas	N
Douglas County Courthouse	10/11/1979	Omaha	Douglas	N
Dr. Susan Picotte Memorial Hospital	12/16/1988	Walthill	Thurston	N
Drake Court Apartments and the Dartmore Apartments Historic District	11/10/1980	Omaha	Douglas	N
Drake Court Historic District	6/4/2014	Omaha	Douglas	N
Dundee--Happy Hollow Historic District	7/22/2005	Omaha	Douglas	N
Eggers--O'Flyng Building	12/13/1991	Omaha	Douglas	N
Emmanuel Lutheran Church	10/15/1969	Dakota City	Dakota	N
Farm Credit Building	3/29/2011	Omaha	Douglas	N
Farnam Building	3/9/2000	Omaha	Douglas	N
Father Flanagan's Boys' Home	2/4/1985	Boys Town	Douglas	N
Father Flanagan's House	9/6/1979	Boys Town	Douglas	N
Federal Office Building	3/17/2009	Omaha	Douglas	N
Field Club Historic District	11/15/2000	Omaha	Douglas	N
First National Bank Building	6/25/1982	Omaha	Douglas	N
First Thurston County Courthouse	1/10/1990	Pender	Thurston	N
First Unitarian Church of Omaha	3/27/1980	Omaha	Douglas	N

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SITE NAME	DATE LISTED	NEAREST COMMUNITY	COUNTY	IN FLOODPLAIN?
Flatiron Hotel	9/21/1978	Omaha	Douglas	N
Fontanelle Bank	4/16/1969	Bellevue	Sarpy	N
Fontanelle Township Hall	9/9/1982	Fontanelle	Washington	N
Fontanelle Forest Historic District	1/21/1974	Bellevue	Sarpy	N
Ford Hospital	3/20/1986	Omaha	Douglas	N
Fort Atkinson	10/15/1966	Fort Calhoun	Washington	N
Fort Crook Historic District	12/12/1976	Bellevue	Sarpy	N
Fort Omaha Historic District	3/27/1974	Omaha	Douglas	N
Frahm, Alfred H. and Sarah, House	3/2/2006	Fort Calhoun	Washington	N
Franklin School	2/5/1998	Omaha	Douglas	N
Gallagher Building	7/1/1994	Omaha	Douglas	N
Garneau-Kilpatrick House	10/7/1982	Omaha	Douglas	N
Georgia Row House	11/12/1982	Omaha	Douglas	N
Gold Coast Historic District	3/14/1997	Omaha	Douglas	N
Gordon, William E., House	11/8/2006	Bellevue	Sarpy	N
Guhl, William and Emma, Farmhouse	7/2/2008	Oakland	Burt	N
H. Thiessen Pickle Company	12/13/2011	Omaha	Douglas	N
Hamilton, William, House	10/15/1969	Bellevue	Sarpy	N
Havens-Page House	10/7/1982	Omaha	Douglas	N
Hill Hotel	4/20/1988	Omaha	Douglas	N
Holy Family Church	7/17/1986	Omaha	Douglas	N
Homer Site	8/14/1973	Homer	Dakota	N
Hospe, Anton, Music Warehouse	7/23/1998	Omaha	Douglas	N
Houston, E. C., House	3/13/1986	Tekamah	Burt	N
Howard Street Apartment District	11/22/1996	Omaha	Douglas	N
Immaculate Conception Church and School	5/6/1998	Omaha	Douglas	N
Jewell Building	7/21/1983	Omaha	Douglas	N
John E Reagan House	5/5/2014	Omaha	Douglas	N
Joslyn, George A., Mansion	8/25/1972	Omaha	Douglas	N
Keeline Building	3/9/2000	Omaha	Douglas	N
Kelly, George H., House	7/21/1983	Omaha	Douglas	N
Kennedy Building	8/23/1985	Omaha	Douglas	N
Kimball, Mary Rogers, House	7/19/1996	Omaha	Douglas	N
Kirschbraun and Sons Creamery, Inc.	7/23/1998	Omaha	Douglas	N
Kurz Omaha Village	8/14/1973	Papillion	Sarpy	N
Leone, Florentine, and Carpathia Apartment Buildings	5/16/1985	Omaha	Douglas	N
Lincoln Highway	12/1/1987	Elkhorn	Douglas	N
Lincoln Highway--Omaha to Elkhorn	3/13/2003	Elkhorn	Douglas	N
Linoma Beach	3/11/2003	Gretna	Sarpy	Y
Livestock Exchange Building	7/7/1999	Omaha	Douglas	N
Logan Creek Site	1/26/1970	Oakland	Burt	N
Logan, The	7/22/2005	Omaha	Douglas	N
Long Creek School	2/23/2001	Blair	Washington	N
Main Street Bridge	6/29/1992	Elkhorn	Douglas	N
Malcolm X House Site	3/1/1984	Omaha	Douglas	N
Margaret, The	5/15/2007	Omaha	Douglas	N
Mason School	3/13/1986	Omaha	Douglas	N
McCarty-Lilley House	12/22/1978	Bellevue	Sarpy	N
McLaughlin, Charles D., House	11/8/1982	Omaha	Douglas	N
Meisch House	3/13/1986	South Sioux City	Dakota	N
Melrose, The	11/29/1989	Omaha	Douglas	N
Memmen Apartments	9/22/2014	Omaha	Douglas	N
Mercer, Dr. Samuel D., House	6/17/1976	Omaha	Douglas	N
Meyer and Raapke	9/4/2013	Omaha	Douglas	N
Military Road Segment	12/10/1993	Omaha	Douglas	N
Minne Lusa Residential Historic District	4/25/2014	Omaha	Douglas	N
Monmouth Park School	12/15/1983	Omaha	Douglas	N

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SITE NAME	DATE LISTED	NEAREST COMMUNITY	COUNTY	IN FLOODPLAIN?
Moses Merrill Mission and Oto Indian Village	3/16/1972	La Platte	Sarpy	N
Moses, G.C., Block	3/9/2000	Omaha	Douglas	N
Moyer Row Houses	3/12/2008	Omaha	Douglas	N
Nash Block	5/16/1985	Omaha	Douglas	N
Neef, Henry B., House	9/16/2010	Omaha	Douglas	N
Nicholas Street Historic District	3/2/2009	Omaha	Douglas	N
Normandie Apartments	12/6/1991	Omaha	Douglas	N
North Omaha Creek Bridge	6/29/1992	Winnebago	Thurston	N
North Presbyterian Church	3/20/1986	Omaha	Douglas	N
Northern Natural Gas Building	8/26/2009	Omaha	Douglas	N
Northwestern Bell Telephone Company Regional Headquarters	7/17/2009	Omaha	Douglas	N
Notre Dame Academy and Convent	3/5/1998	Omaha	Douglas	N
O'Connor, Cornelius, House	11/23/1977	Homer	Dakota	N
Of-Gordon House	3/17/2010	Bennington	Douglas	N
Old Log Cabin	10/16/1970	Bellevue	Sarpy	N
Old Market Historic District	3/23/1979	Omaha	Douglas	N
Old McDonald Farm	7/5/2001	Blair	Washington	N
Old People's Home	10/21/1987	Omaha	Douglas	N
Olson's Market	9/3/2013	Omaha	Douglas	N
Omaha Bolt, Nut and Screw Building	7/10/1992	Omaha	Douglas	N
Omaha Ford Motor Company Assembly Plant	12/29/2004	Omaha	Douglas	N
Omaha High School	10/11/1979	Omaha	Douglas	N
Omaha National Bank Building	10/18/1972	Omaha	Douglas	N
Omaha Park and Boulevard System	4/23/2013	Omaha	Douglas	Varies by location
Omaha Public Library	5/22/1978	Omaha	Douglas	N
Omaha Quartermaster Depot Historic District	7/26/1979	Omaha	Douglas	N
Omaha Rail and Commerce Historic District	7/19/1996	Omaha	Douglas	N
Omaha Star, The	12/27/2007	Omaha	Douglas	N
Packer's National Bank Building	5/16/1985	Omaha	Douglas	N
Park Avenue Apartment District	7/2/2008	Omaha	Douglas	N
Park School	11/29/1989	Omaha	Douglas	N
Parker, Frank, Archeological Site	3/4/2009	Florence	Douglas	N
Patterson Site	3/22/2007	South Bend	Sarpy	N
Peerless Motor Company	11/15/2007	Omaha	Douglas	N
Penke, Carl, Farm	3/21/2007	Bennington	Douglas	N
Poppleton Block	10/7/1982	Omaha	Douglas	N
Porter-Thomsen House	10/21/1982	Omaha	Douglas	N
Prague Hotel	7/9/1987	Omaha	Douglas	N
Presbyterian Church	10/15/1970	Bellevue	Sarpy	N
Redick Tower	6/21/1984	Omaha	Douglas	N
Robinson, J. C., House	11/28/1980	Waterloo	Douglas	N
Robinson, Lizzie, House	2/25/1993	Omaha	Douglas	N
Rose Realty--Securities Building	7/19/1996	Omaha	Douglas	N
Rosewater School	5/16/1985	Omaha	Douglas	N
Sacred Heart Catholic Church Complex	3/24/1983	Omaha	Douglas	N
Saddle Creek Underpass	6/29/1992	Omaha	Douglas	N
Saint Joseph Parish Complex	7/17/1986	Omaha	Douglas	N
Sanford Hotel	9/26/1985	Omaha	Douglas	N
Sarpy, Peter A., Trading Post Site	6/10/1975	Bellevue	Sarpy	N
Saunders School	3/13/1986	Omaha	Douglas	N
Sautter, John, Farmhouse	9/30/1980	Papillion	Sarpy	N
Scottish Rite Cathedral	8/10/2011	Omaha	Douglas	N
Selby Apartments	12/30/2004	Omaha	Douglas	N
Selma Terrace	7/2/2008	Omaha	Douglas	N

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SITE NAME	DATE LISTED	NEAREST COMMUNITY	COUNTY	IN FLOODPLAIN?
Shafer, M.F., and Co. Building	12/5/2002	Omaha	Douglas	N
Simon Brothers Company	4/1/1999	Omaha	Douglas	N
South Omaha Main Street Historic District	2/14/1989	Omaha	Douglas	N
Specht, Christian, Building	9/19/1977	Omaha	Douglas	N
Spielman, H. M. S., House	7/17/1986	Tekamah	Burt	N
Springfield Community Hall	7/23/1998	Springfield	Sarpy	N
St. Cecilia's Cathedral	1/25/1979	Omaha	Douglas	N
St. John's A.M.E. Church	5/29/1980	Omaha	Douglas	N
St. Martin of Tours Episcopal Church	10/21/1982	Omaha	Douglas	N
St. Matthias' Episcopal Church	11/23/1980	Omaha	Douglas	N
St. Philomena's Cathedral and Rectory	1/3/1980	Omaha	Douglas	N
St. Richard's Catholic School and Rectory	3/12/2012	Omaha	Douglas	N
Stabrie Grocery	11/15/2007	Omaha	Douglas	N
Stabrie Grocery	11/15/2007	Omaha	Douglas	N
Standard Oil Building	8/24/1979	Omaha	Douglas	N
Steiner Rowhouse No. 1	7/3/1991	Omaha	Douglas	N
Steiner Rowhouse No. 2	7/3/1991	Tekamah	Burt	N
Stork, John Henry, Log House	5/29/1980	Omaha	Douglas	N
Storz, Gottlieb, House	8/7/1974	Omaha	Douglas	N
Strehlow Terrace	12/23/1986	Walthill	Thurston	N
Susan La Flesche Picotte House	11/10/2009	Omaha	Douglas	N
Swartz Printing Company Building	7/3/2007	Omaha	Douglas	N
Swoboda Bakery	7/19/1996	Tekamah	Burt	N
Tekamah Carnegie Library	3/15/2005	Tekamah	Burt	N
Tekamah City Bridge	6/29/1992	Omaha	Douglas	N
Terrace Court	7/2/2008	Omaha	Douglas	N
The Anderson Building	11/20/2009	Omaha	Douglas	N
The Berkeley Apartments	7/19/1996	Omaha	Douglas	N
The Nottingham Apartments	4/23/2013	Omaha	Douglas	N
The Ottawa Block	4/22/2013	Omaha	Douglas	N
The Sherman	3/13/1986	Papillion	Sarpy	N
Third Sarpy County Courthouse	7/5/1990	Pender	Thurston	N
Thurston County Courthouse	1/10/1990	Omaha	Douglas	N
Traver Brothers Row Houses	5/21/2013	Omaha	Douglas	N
Trinity Cathedral	8/7/1974	Blair	Washington	N
Trinity Seminary Building	7/3/1980	Omaha	Douglas	N
Twin Towers	3/22/2010	Omaha	Douglas	N
U.S.S. HAZARD and U.S.S. MARLIN	1/17/1979	Omaha	Douglas	N
Undine Apartments	3/12/2008	Omaha	Douglas	N
Union Passenger Terminal	11/12/1971	Omaha	Douglas	N
USS HAZARD (AM-240) National Historic Landmark	1/1/1979	Omaha	Douglas	N
Vinton School	11/29/1989	Omaha	Douglas	N
Vinton Street Commercial Historic District	7/11/2006	Blair	Washington	N
Washington County Courthouse	1/10/1990	Omaha	Douglas	N
Weber Mill	12/31/1998	Omaha	Douglas	N
Webster Telephone Exchange Building	12/5/1977	Omaha	Douglas	N
West Lawn Mausoleum	12/30/2004	Omaha	Douglas	N
Wohlner's Neighborhood Grocery	9/16/2010	Omaha	Douglas	N
Zabriskie, Edgar, House	11/28/1978	Papillion	Sarpy	N
Zweibel Farmstead	11/30/2000	Bennington	Douglas	N

Source: National Parks Service²⁹

²⁹ National Park Service. January 2020. "National Register of Historic Places NPGallery Database." <https://npgallery.nps.gov/nrhp>.

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SECTION FOUR RISK ASSESSMENT

Introduction

The ultimate purpose of this hazard mitigation plan is to minimize the loss of life and property across the planning area. This section contains a regional and local risk assessment including descriptions of potential hazards, regional vulnerabilities and exposures, probability of future occurrences, and potential impacts and losses. By conducting a regional and local risk assessment, participating jurisdictions can develop specific strategies to address areas of concern identified through this process. The following table defines terms that will be used throughout this section of the plan.

Table 31: Term Definitions

TERM	DEFINITION
Hazard	A potential source of injury, death, or damage
Asset	People, structures, facilities, and systems that have value to the community
Risk	The potential for damages, loss, or other impacts created by the interaction of hazards and assets
Vulnerability	Susceptibility to injury, death, or damages to a specific hazard
Impact	The consequences or effect of a hazard on the community or assets
Historical Occurrence	The number of hazard events reported during a defined period of time
Extent	The strength or magnitude relative to a specific hazard
Probability	Likelihood of a hazard occurring in the future

***Requirement §201.6(c)(2): Risk assessment.** The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.*

***Requirement §201.6(c)(2)(i):** The risk assessment shall include a] description of the type ... of all natural hazards that can affect the jurisdiction.*

***Requirement §201.6(c)(2)(i):** The risk assessment shall include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.*

***Requirement §201.6(c)(2)(ii):** The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community.*

***Requirement §201.6(c)(2)(ii):** The risk assessment] must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged floods.*

***Requirement §201.6(c)(2)(ii)(A):** The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard area.*

***Requirement §201.6(c)(2)(iii):** For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.*

Methodology

The risk assessment methodology utilized for this plan follows the risk assessment methodology outlined in the FEMA Local Mitigation Planning Handbook. This process consists of four primary steps:

1. Describe the hazard
2. Identify vulnerable community assets
3. Analyze risk
4. Summarize vulnerability

When describing the hazard, this plan will examine the following items: previous occurrences of the hazard within the planning area; locations where the hazard has occurred in the past or is likely to occur in the future; extent of past events and likely extent for future occurrences; and probability of future occurrences. While the identification of vulnerable assets will be conducted across the entire planning area, *Section Seven* includes community-specific discussions of assets at risk for relevant hazards. Analysis for regional risk will examine historic impacts and losses and what is possible should the hazard occur in the future. Risk analysis will include both qualitative (i.e. description of historic or potential impacts) and quantitative data (i.e. assigning values and measurements for potential loss of assets) with available data.

For each of the hazards profiled the best and most appropriate data available will be considered. Further discussion relative to each hazard is discussed in the hazard profile portion of this section.

Average Annual Damages and Frequency

FEMA *Requirement §201.6(c)(2)(ii)(B)* suggests that when the appropriate data is available, hazard mitigation plans should also provide an estimate of potential dollar losses for structures in vulnerable areas. This risk assessment methodology includes an overview of assets at risk and provides historic average annual dollar losses for all hazards for which historic event data is available. Additional loss estimates are provided separately for those hazards for which sufficient data is available. These estimates can be found within the relevant hazard profiles.

Average annual losses from historical occurrences can be calculated for those hazards for which there is robust historic record and for which monetary damages are recorded. There are three main pieces of data used throughout this formula.

- **Total Damages in Dollars:** This is the total dollar amount of all property damages and crop damages as recorded in federal, state, and local data sources. The limitation to these data sources is that dollar figures usually are estimates and often do not include all damages from every event, but only officially recorded damages from reported events.
- **Total Years on Record:** This is the span of years there is data available for recorded events. During this planning process, vetted and cleaned up National Centers for Environmental Information (NCEI) was primarily used from between January 1996 and November 2019. Although some data is available back to 1950, this plan update only utilizes the more current and accurate data available. Other periods of record for data is supplied where appropriate.
- **Number of Hazard Events:** This shows how often an event occurs. The frequency of a hazard event will affect how a community responds. A thunderstorm may not cause much

damage each time, but multiple storms can have an incremental effect on housing and utilities. In contrast, a rare tornado event can have a widespread effect on a city.

An example of the event damage estimate is found below:

$$\text{Average Frequency (\#)} = \frac{\text{Total Events Recorded (\#)}}{\text{Total Years of Record (\#)}}$$

$$\text{Annual Damages (\$)} = \frac{\text{Total Damages in Dollars (\$)}}{\text{Total Years Recorded (\#)}}$$

Each hazard will be included, while those which have caused significant damages or occurred in significant numbers are discussed in detail. It should be noted NCEI data is not all inclusive, and it provides very limited information on crop losses. To provide a better picture of the crop losses associated with the hazards within the planning area, crop loss information provided by the Risk Management Agency (RMA) of the USDA was also utilized for this update of the plan. The collected data was from 2000 to 2019. Data for all the hazards are not always available, so only those with an available dataset are included in the loss estimation.

Hazard Identification

The identification of relevant hazards for the planning area began with a review of the 2019 State of Nebraska Hazard mitigation Plan. The Regional Planning Team reviewed, discussed, and determined the list of hazards to be profiled in this HMP update at the Kick-off meeting. The hazards for which a risk assessment was completed are listed in the table below.

Table 32: Hazards Addressed in the Plan

HAZARDS ADDRESSED IN THE 2021 P-MRNRD HMP		
Agricultural Plant and Animal Disease	Earthquakes	Public Health Emergency
Chemical and Radiological Fixed Sites	Flooding	Severe Thunderstorms
Chemical Transportation	Grass/Wildfire	Severe Winter Storms
Dam Failure	High Winds and Tornadoes	Terrorism
Drought and Extreme Heat	Levee Failure	

Hazard Changes and/or Elimination

Due to the development of new events, impacts to the planning area, and overall response capabilities associated per hazard, several changes were made to the hazards profiled for the 2021 HMP. These hazards are listed below with a brief explanation or description of the change.

Eliminated

- Civil Disorder – While civil disorder events have occurred in large metropolitan areas, primarily stemmed from racial tensions, political movements, or economic and labor disputes, this hazard is best addressed by other planning and funding mechanisms. No state emergencies related to civil disorder have occurred. Based on the discretion of the Regional Planning Team, this hazard will not be profiled further in this plan. Terrorism is profiled in this plan with an emphasis on local concerns and capabilities and brief overview of civil disorder.

SECTION FOUR: RISK ASSESSMENT

- Urban Fire - Fire departments across the planning area have mutual aid agreements in place to address this threat, and typically this hazard is addressed through existing plans and resources. As such, urban fire will not be fully profiled for this plan. Discussion relative to fire will be focused on wildfire and the potential impacts they could have on the built environment. This approach is consistent with the 2019 Nebraska State Hazard Mitigation Plan.

Changes

Additionally, several hazards from the 2016 P-MRNRD HMP have been modified and combined to provide a more robust and interconnected discussion. The following hazards from the previous HMP have combined hazard profiles:

- Drought and Extreme Heat
- Severe Thunderstorms and Hail
- High Winds and Tornadoes

A newly added hazard, Public Health Emergency, was also added to this HMP due to the development and concerns regarding the novel coronavirus (COVID-19).

Hazard Assessment Summary Tables

The following table provides an overview of the data contained in the hazard profiles. Hazards listed in this table and throughout the section are in alphabetical order. This table is intended to be a quick reference for people using the plan and does not contain source information. Source information and full discussion of individual hazards are included later in this section.

Table 33: Regional Risk Assessment

HAZARD	PREVIOUS OCCURRENCES (EVENTS/YEAR)	APPROXIMATE ANNUAL PROBABILITY	LIKELY EXTENT
Agricultural Animal Disease	60/6	100%	~15 animals
Agricultural Plant Disease	31/20	100%	Unavailable
Chemical Fixed Sites	377/30	100%	Localize to the facilities and adjacent surroundings.
Radiological Fixed Sites	0/48	<1%	10-mile evacuation radius
Chemical Transportation	1,869/49	100%	~45 gallons, Limited (<0.5 mile) from release site
Dam Failure	0/107	<1%	Varies by structure
Drought	364/1,501 months	>25%	Mild Drought
Earthquakes	0/120	0%	<2.5 magnitude
Extreme Heat	Avg. 4 days per year	100%	>100°F
Flooding	1,196/24	100%	Some inundation of structures and roads near streams. Some evacuations of people may be necessary.

HAZARD	PREVIOUS OCCURRENCES (EVENTS/YEAR)	APPROXIMATE ANNUAL PROBABILITY	LIKELY EXTENT
Grass/wildfire	1,383/19	100%	<100 acres; Some homes and structures threatened or at risk
High Winds	120/24	100%	9 BWF (47-54mph)
Levee Failure	6	1%	Total of 22,748 people and 8,019 structures in leveed areas
Public Health Emergency	3/12	>1%	Varies by event; >1 fatality
Severe Thunderstorms (includes hail)	1,384/24	100%	>1" rainfall Avg 1.16 hail; 35-58 mph 0.25-0.5" ice
Severe Winter Storms	494/24	100%	20°-40° below zero (wind chill) 4-8" snow 25-40 mph winds
Terrorism	9/48	<20%	Isolated to a single building; damages <\$1M
Tornadoes	37/24	100%	EF0-EF2

The following table provides loss estimates for hazards with sufficient data. Detailed descriptions of major events are included in *Section Seven: Community Profiles* as appropriate per jurisdiction.

Table 34: Hazard Loss Estimates for the Planning Area

HAZARD	COUNT	PROPERTY	CROP	
Agricultural Disease	Animal Disease	60	876 animals	N/A
	Plant Disease	31	N/A	\$250,012
Chemical & Radiological Fixed Sites <i>30 injuries</i>	377	\$1,235,000	N/A	
Chemical Transportation <i>12+ injuries</i>	1,869	\$1,403,606	N/A	
Dam Failure	0	\$0	N/A	
Drought & Extreme Heat	Drought	364/1,501 months	\$0	\$135,375,401
	Extreme Heat	Avg. 4 days per year	\$0	\$9,513,270
Earthquakes	0	\$0	\$0	
Flooding <i>3 fatalities</i>	Flash Flood	84	\$18,610,000	\$22,038,884
	Flood	112	\$437,071,000	
Grass/wildfire <i>5 injuries, 1 fatality</i>	1,383	13,602 acres	\$70,169	
High Winds & Tornadoes <i>5 injuries, 1 fatality</i>	High Winds	120	\$231,000	\$2,316,372
	Tornadoes	37	\$5,085,000	\$311,393
Levee Failure	6	Unknown	N/A	

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HAZARD	COUNT	PROPERTY	CROP
Public Health Emergency	3 outbreak events	>59,378 infections; >485 fatalities	N/A
Severe Thunderstorms <i>10 injuries, 1 fatality</i>	Hail	\$513,207,000	\$84,472,212
	Heavy Rain	\$1,000,000	
	Lightning	\$3,635,500	
	Thunderstorm Wind	\$63,577,000	
Severe Winter Storms <i>3 fatalities</i>	Blizzards	\$35,000	\$1,263,867
	Extreme Cold	\$0	
	Heavy Snow	\$22,000,000	
	Ice Storms	\$10,000	
	Winter Storms	\$24,000	
	Winter Weather	\$0	
Terrorism <i>7 injuries, 1 fatality</i>	9	\$39,500	N/A
Total	5,965	\$1,067,163,606	\$253,295,207

N/A – Data not available

Historical Disaster Declarations

The following tables show past disaster declarations that have been granted within the planning area.

Farm Service Agency Small Business Administration Disasters

The U.S. Small Business Administration (SBA) was created in 1953 as an independent agency of the federal government to aid, counsel, assist, and protect the interests of small business concerns, to preserve free competitive enterprise, and maintain and strengthen the overall economy of our nation. A program of the SBA includes disaster assistance for those affected by major natural disasters. The following table summarizes the SBA Disasters involving the planning area in the last decade.

Table 35: SBA Declarations

DISASTER DECLARATION NUMBER	DECLARATION DATE	DESCRIPTION	PRIMARY COUNTIES	CONTIGUOUS COUNTIES
NE-0067	2017	N/A	Sarpy	
NE-00063	7/28/2014	Tornados, Straight-line Winds, and Flooding	Burt, Thurston, Washington	
NE-00062	7/24/2014	Severe Storms, Tornados, Straight-line Winds, and Flooding	Dakota, Thurston	
NE-00055	11/26/2013	Severe Storms, Winter Storms, Tornados, and Flooding	Thurston	
NE-00053	12/10/2013*	Drought	Burt, Dakota, Douglas, Sarpy,	

DISASTER DECLARATION NUMBER	DECLARATION DATE	DESCRIPTION	PRIMARY COUNTIES	CONTIGUOUS COUNTIES
			Thurston, Washington	
NE-00051	4/15/2013*	Drought	Douglas, Sarpy, Washington	Burt
NE-00050	4/8/2013*	Drought	Burt, Dakota, Thurston	Douglas, Sarpy, Washington
NE-00049	4/1/2013*	Drought		Dakota, Thurston
NE-00043	8/12/2011 & 12/12/2011	Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	
NE-00042	7/18/2011	Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	
NE-00041	9/7/2011 & 8/12/2011 & 11/18/2011	Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	
NE-00038	7/15/2010 & 8/29/2010 & 9/1/2010	Severe Storms, Flooding, and Tornadoes	Burt, Douglas, Sarpy, Thurston, Washington	
NE-00035	4/21/2010 & 6/10/2010	Severe Storms, Ice Jams, and Flooding	Dakota, Thurston	
NE-00033	2/25/2010 & 3/26/2010	Severe Winter Storms and Snowstorm	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	
NE-00022	9/2/2008	Severe Storms, Heavy Rain, Hail, and Straight-line Winds	Douglas	Sarpy, Washington
NE-00021	6/20/2008 & 6/24/2008 & 7/29/2008	Severe Storms, Tornadoes, and Flooding	Burt, Douglas, Sarpy, Thurston	
NE-00020	6/20/2008 & 6/24/2008 & 7/29/2008	Severe Storms, Tornadoes, and Flooding	Douglas, Sarpy	Washington

Source: Small Business Administration, 2001-2018³⁰

³⁰ Small Business Administration. 2001-2018. "SBA Disaster Loan Data." Accessed December 2019. <https://www.sba.gov/loans-grants/see-what-sba-offers/sba-loan-programs/disaster-loans/disaster-loan-data>.

Presidential Disaster Declarations

The presidential disaster declarations involving the planning area from 1953 to April 2019 are summarized in the following table. Declarations prior to 1962 are not designated by county and are not included.

Table 36: Presidential Disaster Declarations

DISASTER DECLARATION NUMBER	DECLARATION DATE	TITLE	AFFECTED COUNTIES	TOTAL PUBLIC ASSISTANCE	TOTAL INDIVIDUAL ASSISTANCE
4420	3/21/2019	Severe Winter Storm, Straight-Line Winds, and Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	\$125,608,688	\$27,274,186
4387	8/27/2018	Severe Storms, Tornadoes, Straight-line Winds, Flooding	Dakota, Thurston	N/A	-
4325	8/1/82017	Severe Storms, Tornadoes, Flooding	Douglas, Sarpy, Thurston	N/A	-
4185	7/28/2014	Severe Storms, Tornadoes, Straight-line Winds, Flooding	Burt, Thurston, Washington	\$3,596,345	-
4183	7/24/2014	Severe Storms, Tornadoes, Straight-line Winds, Flooding	Dakota, Thurston	\$14,222,959	-
4156	11/26/2013	Severe Storms, Winter Storms, Tornadoes, and Flooding	Thurston	\$2,729,443	\$4,311,497
4013	8/12/2011	Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	\$65,392,060	-
3323	6/18/2011	Flooding	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	N/A	-
1924	7/15/2010	Severe Storms, Flooding, and Tornadoes	Burt, Douglas, Sarpy, Thurston, Washington	\$50,081,981	-
1902	4/21/2010	Severe Storms, Ice Jams, and Flooding	Dakota, Thurston	\$3,112,391	-
1878	2/25/2010	Severe Winter Storms and Snowstorm	Burt, Douglas, Thurston, Washington	\$6,582,498	-
1779	7/18/2008	Severe Storms, Straight-line Winds, and Flooding	Douglas, Sarpy	\$12,064,643	-

DISASTER DECLARATION NUMBER	DECLARATION DATE	TITLE	AFFECTED COUNTIES	TOTAL PUBLIC ASSISTANCE	TOTAL INDIVIDUAL ASSISTANCE
1770	6/20/2008	Severe Storms, Tornadoes, and Flooding	Burt, Douglas, Sarpy, Thurston	\$36,258,650	\$1,560,229
3245	9/13/2005	Hurricane Katrina Evacuation	All Counties	\$393,813	-
1517	5/25/2004	Severe Storms, Tornadoes, and Flooding	Douglas, Sarpy, Thurston, Washington	\$413,351,657	\$829,908
1480	7/21/2003	Severe Storms and Tornadoes	Douglas	\$3,891,329	-
1394	10/12/2001	Severe Storms and Flooding	Dakota County	\$1,414,196	-
1286	8/20/1999	Severe Storms and Flooding	Burt, Douglas, Washington	\$2,083,481	-
1190	11/1/1997	Severe Snow Storms	Douglas, Sarpy, Washington	N/A	-
998	7/19/1993	Flooding, Severe Storms	Burt, Douglas, Sarpy, Washington	N/A	-
983	4/2/1993	Ice Jams, Flooding	Sarpy	N/A	-
873	7/4/1990	Flooding, Severe Storm, Tornado	Thurston, Washington	N/A	-
716	7/3/1984	Tornadoes, Flooding	Burt, Thurston, Washington	N/A	-
552	3/24/1978	Storms, Ice Jams, Snowmelt, Flooding	Douglas, Sarpy, Washington	N/A	-
467	5/7/1975	Severe Storms, Tornadoes	Douglas	N/A	-
308	7/7/1971	Floods	Dakota, Thurston	N/A	-
303	2/23/1971	Floods	Burt, Dakota, Douglas, Sarpy, Thurston, Washington	N/A	-
228	7/18/1967	Severe Storms, Flooding	Burt, Dakota, Douglas, Sarpy, Thurston	N/A	-

Source: FEMA, 1953-2019³¹

³¹ Federal Emergency Management Agency. 2019. "Disaster Declarations." Accessed March 2020. <https://www.fema.gov/openfema-dataset-disaster-declarationssummaries-v1>.

Climate Adaptation

Long-term climate trends have shifted throughout the 21st century and have created significant changes in precipitation and temperature which have altered the severity and subsequent impacts from severe weather events. The Regional and Local Planning Teams identified changes in the regional climate as a top concern impacting communities, Indian tribes, residents, local economies, and infrastructure throughout the planning area. Discussions on temperature, precipitation, and climate impacts are included below.

The planning area is located in the Great Plains region of the United States, which stretches from Montana and North Dakota southward in a vertical line to Texas (Figure 13). The Great Plains region features relatively flat plains with some areas raising to over 5,000 feet in elevation. Significant weather extremes impact this area including winter storms, extreme heat and cold, severe thunderstorms, drought, and flood producing rainfall.

The National Climate Assessment has provided an overview with the report's overarching findings and summaries by region with assessment highlights listed below:

- **Energy, Water and Land Use:** rising temperatures are leading to increased demand for water and energy. In parts of the region, this will constrain development, stress natural resources, and increase competition for water among communities, agriculture, energy production, and ecological needs.
- **Sustaining Agriculture:** Changes to crop growth cycles due to warming winters and alterations in the timing and magnitude of rainfall events have already been observed; as these trends continue they will require new agriculture and livestock management practices.
- **Conservation and Adaptation:** landscape fragmentation is increasing, for example, in the context of energy development activities in the northern Great plains. A highly fragmented landscape will hinder adaptation of species when climate change alters habitat composition and timing of plant development cycles.
- **Vulnerable Communities:** Communities that are already the most vulnerable to weather and climate extremes will be stressed even further by more frequent extreme events occurring within an already highly variable climate system.
- **Opportunities to Build Resilience:** the magnitude of expected changes will exceed those experienced in the last century. Existing adaptation and planning efforts are inadequate to respond to these projected impacts.

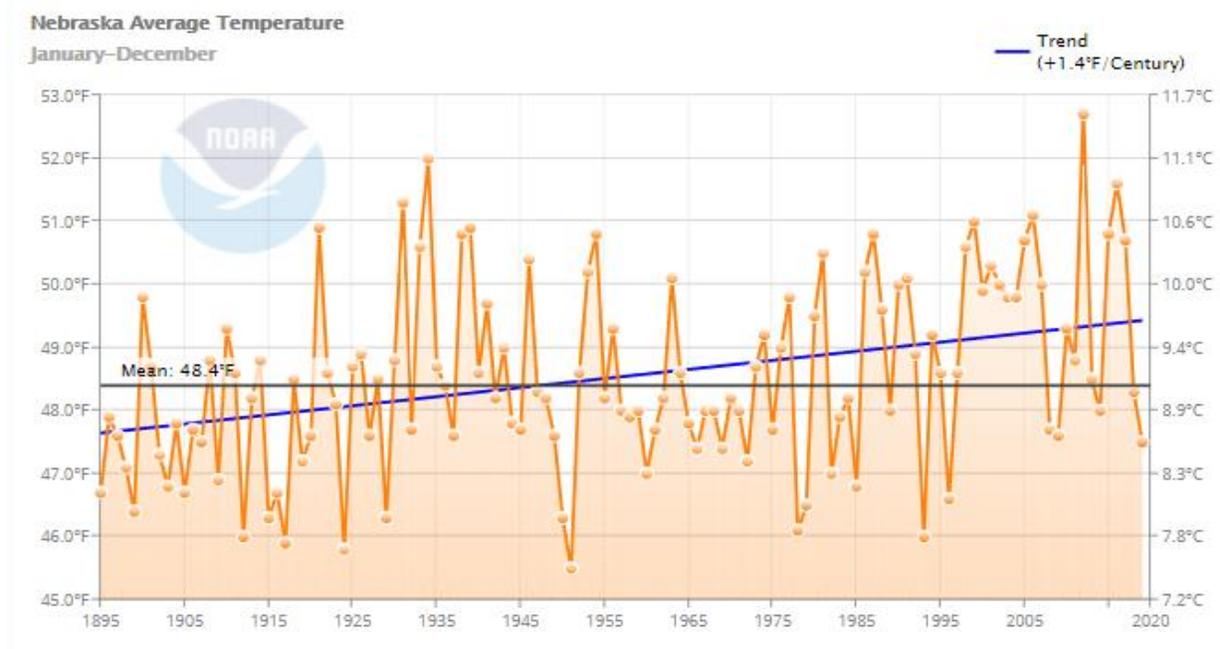
Temperature

Since 1895 Nebraska's overall average temperature has increased by almost 1.5°F (Figure 10). This trend will likely contribute to an increase in the frequency and intensity of hazardous events, which will cause significant economic, social, and environmental impacts on Nebraskans. Climate modeling suggests warmer temperature conditions will continue in the coming decades and rise steadily into mid-century.

Figure 9: Great Plains Region



Figure 10: Nebraska Average Temperature (1895-2020)



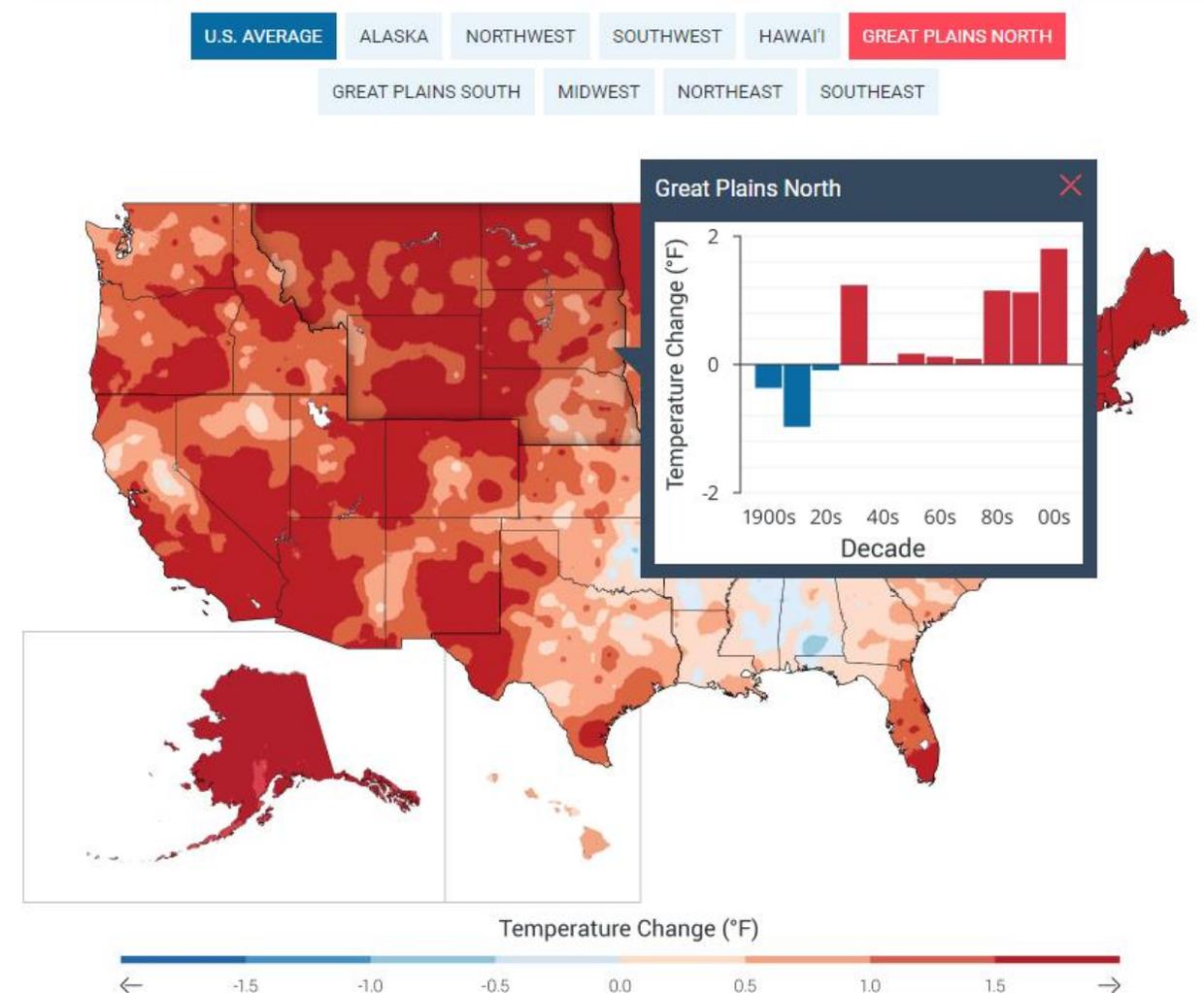
Source: NOAA, 2020³²

The Great Plains region has additionally seen the greatest increase in overall temperature in the past two decades. While overall temperature shifts have not been consistent, the trend for increasing temperatures is apparent. Additionally, the length of the frost-free season (i.e. growing season) has been increasing nationally since the 1980s. While a longer growing season may provide some benefit for heavily agricultural areas, concurrent changes in temperature, water availability, and pest pressures may cause additional impacts. For instance, longer growing seasons coinciding with periods of drought and extreme heat can indicate lower production from increased plant mortality and increased risk to wildfire ignition probability and fuel load potentials. On average, the Great Plains has seen an increase of ten days to the annual growing season.³³

³² NOAA. 2020. "Climate at a Glance: Statewide Time Series." Accessed September 2020. https://www.ncdc.noaa.gov/caq/statewide/time-series/25/tavg/12/12/1895-2020?base_prd=true&begbaseyear=1901&endbaseyear=2000&trend=true&trend_base=100&begtrendyear=1895&endtrendyear=2020

³³ U.S. Global Change Research Program. "2014 National Climate Assessment: Frost-free Season." Accessed 2020. <https://nca2014.globalchange.gov/report/our-changing-climate/frost-free-season#tab2-images>

Figure 11: Observed U.S. Temperature Change



Source: National Climate Assessment, 2014³⁴

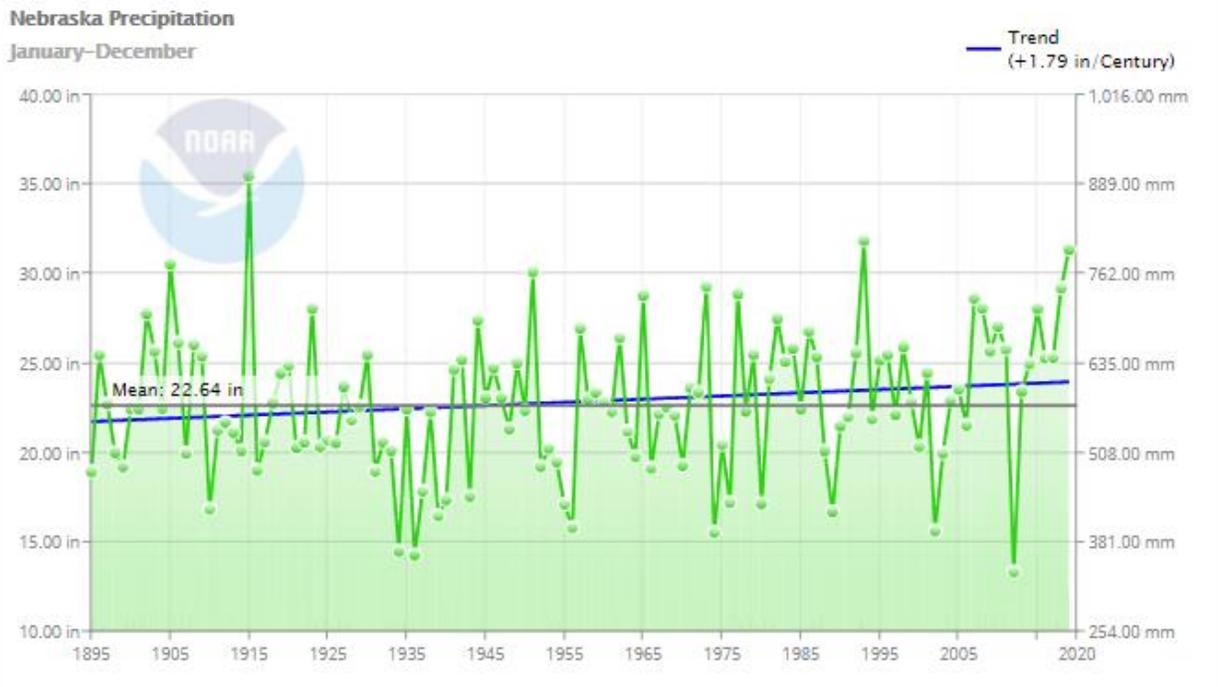
Precipitation

Changing extremes in precipitation are anticipated in the coming decades, particularly in the increasing likelihood of greater rain and snow fall as well as more intense drought periods. Seasonal variations will be heightened, with more frequent and greater intensity rainfall expected in the spring and winter and hotter, drier periods in the summer. Since 1895, yearly annual precipitation for Nebraska has increased slightly. This trend is expected to continue as the impacts of climate change continue to be felt. Climate modeling may show only moderate changes in precipitation and streamflow, however most of the great plains region is already at risk to large annual and seasonable variability as seen by flooding and drought events occurring in concurrent years. There are likely going to be more days with a heavy precipitation event (rainfall of greater than one inch per day) across the region and subsequent impacts to riverine flooding events or overwhelmed local stormwater management systems. Groundwater and reservoir sources of

³⁴ U.S. Global Change Research Program. "2014 National Climate Assessment." Accessed 2020. <https://nca2014.globalchange.gov/>

water are increasingly important to communities and residents in the great plains region to meet water needs during periods of shortage.

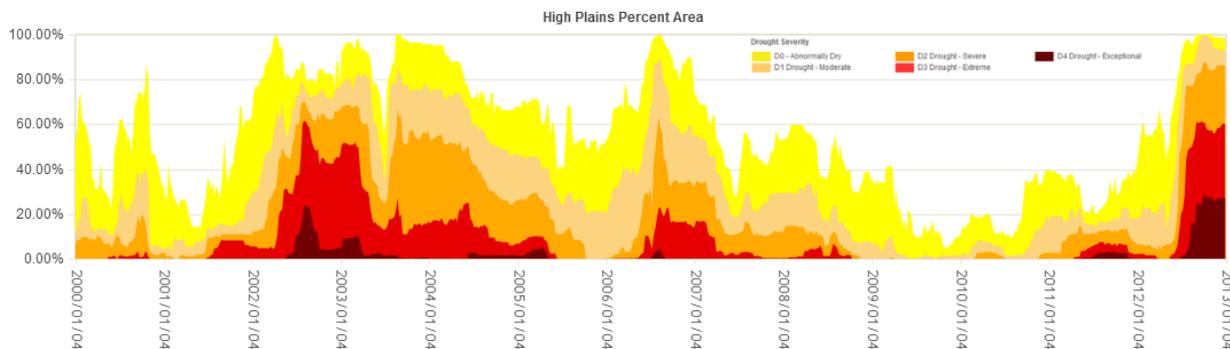
Figure 12: Nebraska Average Precipitation (1895-2020)



Source: NOAA, 2020³⁵

Changes in precipitation is tied to changes in drought patterns. The following figure shows the percent of area in the High Plains (Kansas to North Dakota) which experienced significant increases in moderate to exceptional drought in 2012. Record dryness occurred in Record dryness occurred in Nebraska between June through August of 2012. Nebraska in 2012 had the driest year on record. The area will remain vulnerable to periodic drought as most of projected increases in precipitation is anticipated to occur during the winter months, while increasing temperatures lead to increased soil drying.

Figure 13: Drought Severity 2000-2012 (KS, NE, SD, ND)



Source: NOAA, 2018

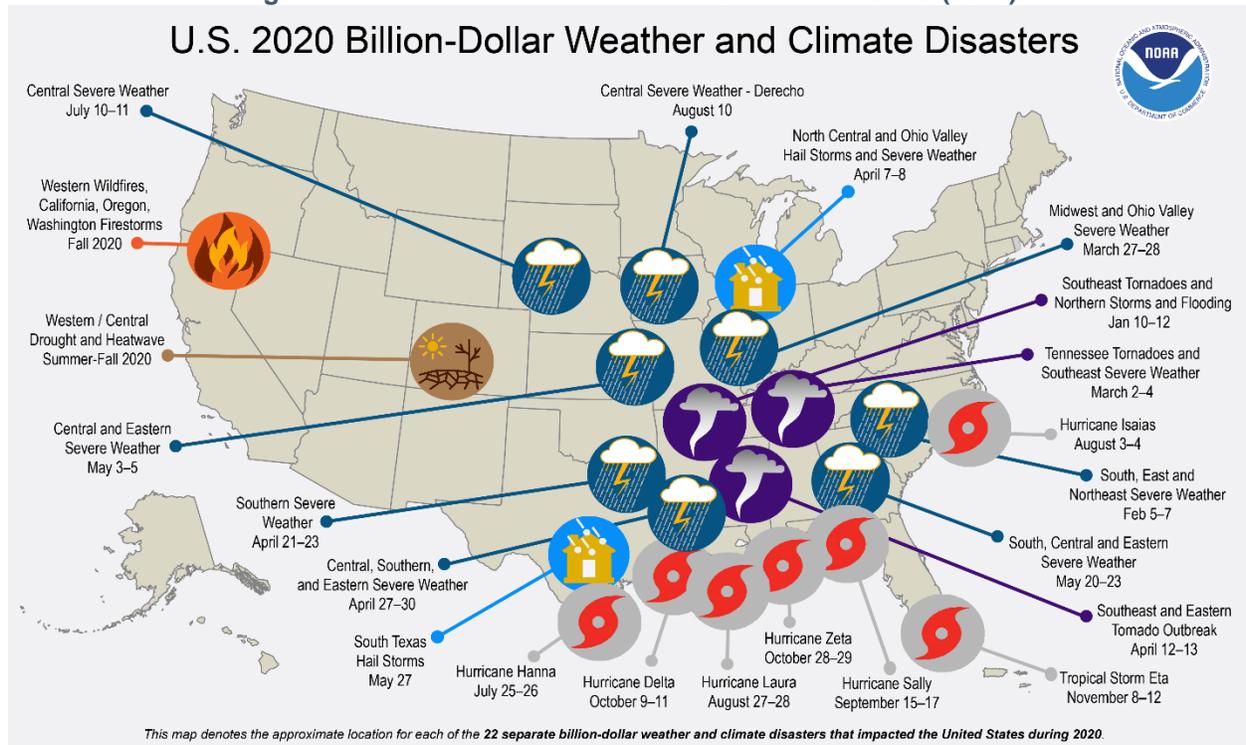
³⁵ NOAA. 2020. "Climate at a Glance: Statewide Time Series." Accessed September 2020. https://www.ncdc.noaa.gov/cag/statewide/time-series/25/pcp/12/12/1895-2020?base_prd=true&begbaseyear=1901&endbaseyear=2000&trend=true&trend_base=100&begtrendyear=1895&endtrendyear=2020

Climate Impacts

The United States as a whole is experiencing significant changes in temperature, precipitation, and significant weather events as a result of climate change. Challenges that are expected to impact communities, residents, and environments as a result of these changes include: resolving increasing competition among land, water, and energy resources; developing and maintaining sustainable agricultural systems; conserving vibrant and diverse ecological systems; and enhancing the resilience of the region’s people to the impacts of climatic extremes.

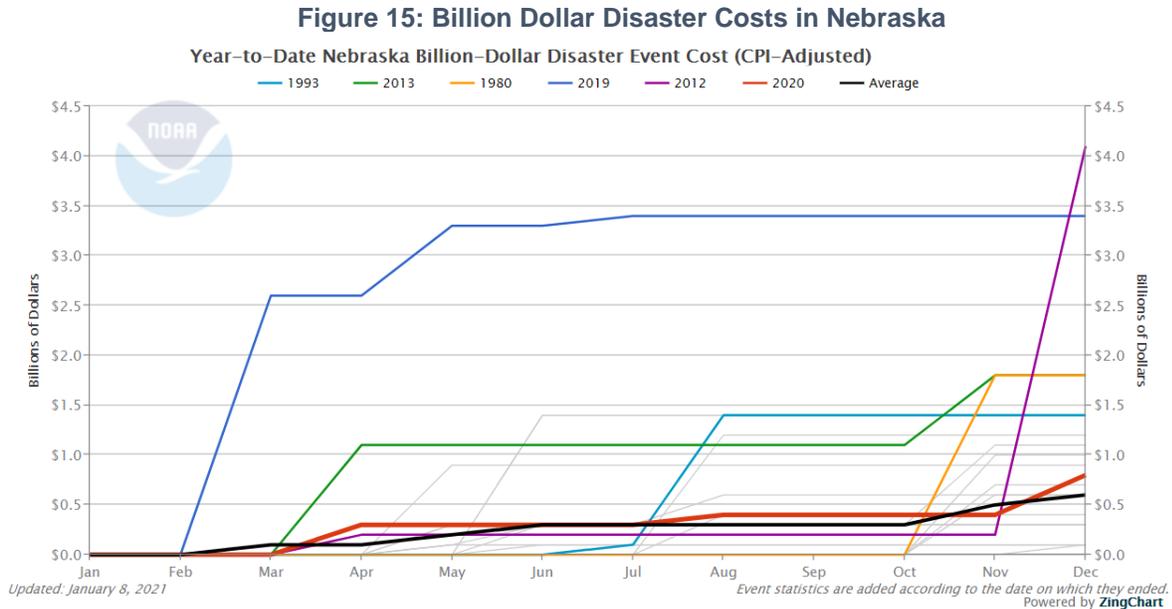
As seen in the figure below, the United States is experiencing an increase in the number of billion-dollar natural disasters. Regardless of whether this trend is due to changes in overall weather patterns and climate or due to increased development, the trend exists and directly impacts residents and communities across the nation.

Figure 14: Billion Dollar Weather and Climate Disasters (2020)



Source: NOAA, 2020³⁶

³⁶ NOAA. 2020. "Billion-Dollar Weather and Climate Disasters: Overview. Accessed February 2021. <https://www.ncdc.noaa.gov/billions/overview>



Source: NOAA, 2021

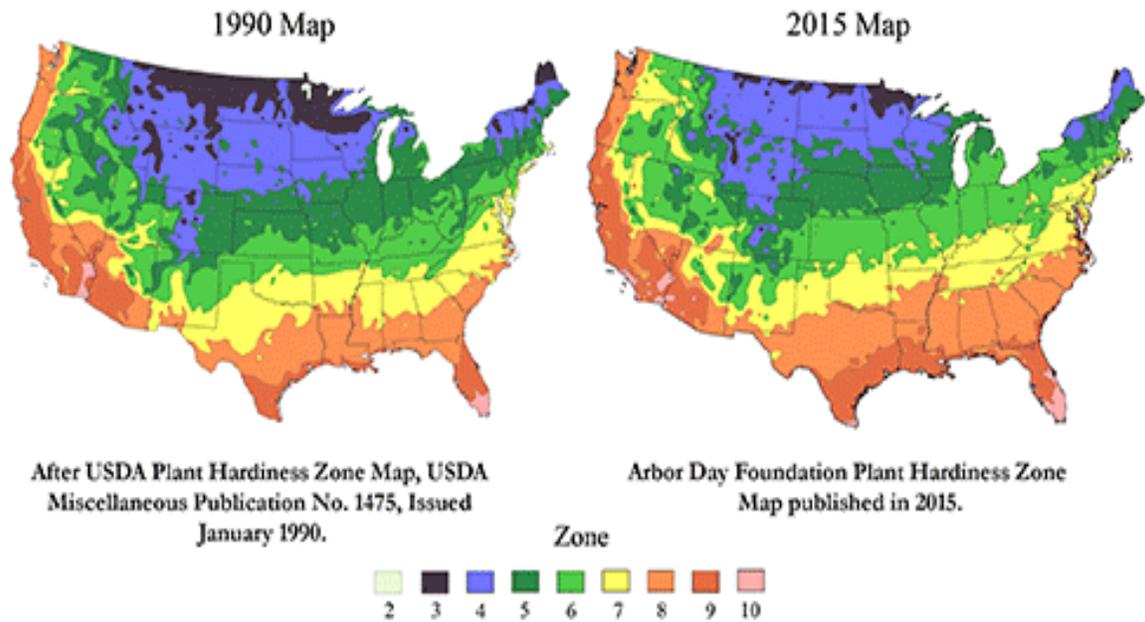
According to a University of Nebraska report (*Understanding and Assessing Climate Change: Implications for Nebraska*, 2014) Nebraskans can expect the following from the future climate:

- Increase in extreme heat events (days over 100°F)
- Decrease in soil moisture by 5-10%
- Increase in drought frequency and severity
- Increase in heavy rainfall events
- Increase in flood magnitude
- Decrease in water flow in the Missouri River from reduced snowpack in the Rocky Mountains
- Additional 3-40 days in the frost-free season

The agricultural sector will experience an increase in droughts, an increase in grass and wildfire events, changes in the growth cycle as winters warm, an influx of new and damaging agricultural diseases or pests, and changes in the timing and magnitude of rainfall. As described in the Plant Hardiness Zone maps available for the United States, these changes have shifted the annual growing season and expected conditions for agricultural production. As a heavily agriculturally dependent state, Nebraska is vulnerable to changes in growing season duration and growing season conditions. These added stressors on agriculture could have devastating economic effects if new agricultural and livestock management practices are not adopted. The planning area is located primarily within zones 5a and 5b.

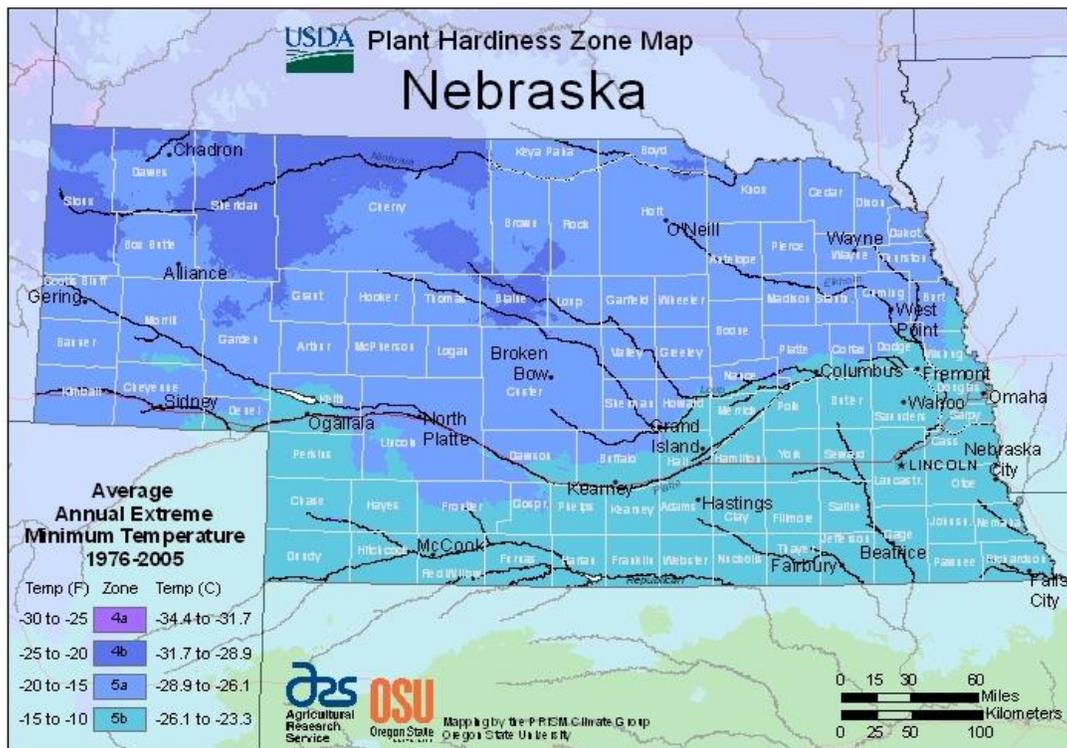
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Figure 16: Plant Hardiness Zone Change



Source: Arbor Day Foundation, 2018³⁷

Figure 17: Plant Hardiness Zone Change



Source: USDA, 2012³⁸

³⁷ Arbor Day Foundation. 2018. "Hardiness Zones." https://www.arborday.org/media/map_change.cfm.

³⁸ USDA. 2012. "Plant Hardiness Zone Maps: Nebraska." <https://planthardiness.ars.usda.gov/PHZMWeb/>

These trends will have a direct impact on water and energy demands. As the number of 100°F days increase, along with warming nights, the stress placed on the energy grid will likely increase and possibly lead to more power outages. Critical facilities and vulnerable populations that are not prepared to handle periods of power outages, particularly during heat waves, will be at risk. Fossil fuel and renewable energy production and infrastructure is also expanding across the northern great plains, and increasingly severe weather events put added stress on these systems. Energy sector vulnerabilities include the transmission and transportation of energy resources. Roads, pipelines, and rail lines are all at risk of damages from flooding, extreme heat, erosion, or added stress from increased residential demands.³⁹

The planning area will have to adapt to these changes or experience an increase in economic losses, loss of life, property damages, and agricultural damages. HMPs have typically been informed by past events in order to be more resilient to future events, and this HMP includes strategies for the planning area to address these changes and increase resilience. However, future updates of this HMP should consider including adaptation as a core strategy to be better informed by *future* projections on the frequency, intensity, and distribution of hazards as well.

Hazard Profiles

Based on research and experiences of the participating jurisdictions, the hazards profiled were determined to either have a historical record of occurrence or the potential for occurrence in the future. Local hazard concerns and events that deviate from the region's norm are discussed in greater detail in *Section Seven: Community Profiles*.

³⁹ USGCRP, 2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II: Report-in-Brief [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 186 pp.

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The following table identifies the top hazards of concern for participating jurisdictions.

Table 37: Top Hazards of Concern by Jurisdiction

JURISDICTION	Agricultural Disease	Chemical Fixed Sites	Chemical Transportatio	Dam Failure	Drought and Extreme Heat	Earthquakes	Flooding	Grass/Wildfire	High Winds and Tornadoes	Levee Failure	Public Health Emergency	Severe Thunderstorm	Severe Winter Storms	Terrorism
Papio Missouri NRD				X	X		X			X				
Burt County			X	X	X		X		X			X	X	
Village of Decatur			X	X	X		X		X		X	X		
City of Tekamah		X	X	X			X		X		X	X		
Dakota County				X			X		X			X	X	
City of Dakota City	X			X			X		X		X		X	
Village of Homer			X		X		X		X			X	X	
Village of Hubbard									X			X	X	
Village of Jackson		X	X				X		X			X		
City of South Sioux City			X				X		X		X	X	X	
Douglas County				X			X		X	X		X		
City of Bennington				X			X	X	X		X	X	X	
City of Omaha		X		X			X		X	X		X	X	
City of Ralston							X		X	X		X	X	
City of Valley			X	X			X		X	X		X	X	
Village of Waterloo							X		X	X			X	
Sarpy County				X	X		X		X	X		X	X	
City of Bellevue		X					X	X	X	X		X		
City of Gretna		X	X				X		X		X	X	X	
City of La Vista			X	X			X		X	X	X	X		
City of Papillion				X			X		X	X		X	X	
City of Springfield							X	X	X		X	X	X	
Thurston County			X				X		X	X		X	X	
Village of Walthill			X				X		X			X	X	
Village of Winnebago			X				X		X		X	X	X	
Washington County		X		X			X		X			X	X	

JURISDICTION	Agricultural Disease	Chemical Fixed Sites	Chemical Transportatio	Dam Failure	Drought and Extreme Heat	Earthquakes	Flooding	Grass/Wildfire	High Winds and Tornadoes	Levee Failure	Public Health Emergency	Severe Thunderstorm	Severe Winter Storms	Terrorism
Village of Arlington							X		X		X	X	X	
City of Blair					X		X		X	X	X	X	X	X
City of Fort Calhoun							X		X		X	X	X	
Village of Herman							X		X		X	X	X	
Arlington Public Schools							X		X		X	X	X	
Blair Community Schools			X						X		X	X	X	
Douglas County West Schools							X		X		X	X	X	
Emerson-Hubbard Community Schools									X		X	X	X	
Fort Calhoun Community Schools							X		X		X	X	X	
Gretna Public Schools									X	X	X	X	X	X
Homer Community Schools		X					X		X		X	X	X	
Papillion-La Vista Public Schools							X		X		X	X	X	
Ralston Public Schools									X		X	X	X	X
Westside Public Schools									X		X	X	X	X
Winnebago Indian Tribe		X	X		X		X	X	X		X	X	X	

Agricultural Plant and Animal Disease

Agricultural diseases include any biological disease or infection that can reduce the quality or quantity of either livestock or vegetative crops. This section looks at both animal disease and plant disease, as both make up a significant portion of Nebraska's and the planning area's economy.

The economy of the State of Nebraska is heavily vested in both livestock and crop sales. According to the Nebraska Department of Agriculture (NDA) in 2017, the market value for Nebraska of agricultural products sold was estimated at \$22 billion; this total is split between crops (estimated \$9.3 billion) and livestock (estimated \$12.7 billion). For the planning area, the market value of sold agricultural products exceeded \$816 million (\$281 million animal sales and \$535 million crop sales).⁴⁰

The following table shows the population of livestock within the planning area. This count does not include wild populations that are also at risk from animal diseases.

Table 38: Livestock Inventory

COUNTY	MARKET VALUE OF 2017 LIVESTOCK SALES	CATTLE AND CALVES	HOGS AND PIGS	POULTRY EGG LAYERS	SHEEP AND LAMBS
Burt	\$118,464,000	36,533	89,802	733	501
Dakota	\$7,063,000	6,742	(D)	1,018	282
Douglas	\$3,507,000	2,288	2,849	994	246
Sarpy	\$4,496,000	4,172	9	1,310	111
Thurston	\$105,494,000	41,297	10,077	246	492
Washington	\$42,335,000	21,588	15,746	2,988	854
Total	\$281,359,000	112,620	118,483	7,289	2,486

Source: U.S. Census of Agriculture, 2017; (D) – data not available

According to the NDA, the primary crops grown throughout the state include alfalfa, corn, sorghum, soybeans, and wheat. The planning area is a mixture of pasture/grassland, crop land, and incorporated areas. The following tables provide the value and acres of land in farms in the planning area.

Table 39: Land and Value of Farms in the Planning Area

COUNTY	NUMBER OF FARMS	LAND IN FARMS (ACRES)	MARKET VALUE OF 2017 CROP SALES
Burt	521	298,103	\$145,280,000
Dakota	267	166,515	\$77,891,000
Douglas	367	90,809	\$52,029,000
Sarpy	417	99,472	\$50,426,000
Thurston	309	232,077	\$101,762,000
Washington	747	247,958	\$108,055,000
Total	2,628	1,134,934	\$535,443,000

Source: U.S. Census of Agriculture, 2017

⁴⁰ US Department of Agriculture, National Agricultural Statistics Server. 2020. "2017 Census of Agriculture – Nebraska." https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_2_County_Level/Nebraska/

Table 40: Crop Values

COUNTY	CORN		SOYBEANS		WHEAT	
	Acres Harvested	Value	Acres Harvested	Value	Acres Harvested	Value
Burt	127,768	\$84,006,000	116,813	(D)	(D)	(D)
Dakota	72,655	\$46,233,000	60,163	\$30,543,000	-	-
Douglas	35,704	\$20,020,000	31,694	\$15,499,000	1,338	\$243,000
Sarpy	40,793	\$24,698,000	45,032	\$21,722,000	72	\$3,000
Thurston	95,919	\$57,103,000	82,433	\$41734000	408	(D)
Washington	97,790	\$58,939,000	92,875	\$45,619,000	100	\$40,000
Total	470,629	\$290,999,000	429,010	\$155,117,000	1,918	\$286,000

Source: U.S. Census of Agriculture, 2017

Location

Given the strong agricultural presence in the planning area, animal and plant diseases have the potential to occur in any of the six-counties. If a major outbreak were to occur, the economy across the local planning area would likely be affected, barring the major metropolitan City of Omaha. Douglas County (which includes the City of Omaha) has the smallest amount of land used for agriculture; however, many residents work in industries closely tied to surrounding agriculture producers which could be impacted by disease outbreaks.

The primary land uses where animal and/or plant diseases will be observed include: agricultural lands; range or pasture lands; forests; and/or concentrated animal feeding operations (CAFOs). It is possible that animal or plant disease will occur in domestic animals or crops in urban areas but their impacts will be limited in scope and severity.

Historical Occurrences

Animal Disease

The NDA provides reports on diseases occurring in the planning area. There were 60 instances of animal diseases reported between January 2014 and December 2019 by the NDA. These outbreaks affected a total of 876 animals and impacted all six counties.

Table 41: Livestock Diseases Reported in the Planning Area

DISEASE	YEAR	COUNTY	POPULATION IMPACTED
Anaplasmosis	2017	Burt; Washington	2; 1
	2018	Burt	1
Bovine Viral Diarrhea	2017	Burt; Douglas	1; 5
	2019	Burt	1
Caprine Arthritis/Encephalitis	2014	Washington	1
Epizootic Hemorrhagic Disease	2016	Douglas	1
	2018	Douglas	1
Equine Herpesvirus	2017	Douglas	2
	2019	Douglas	1
Equine Influenza	2017	Sarpy	1
Equine Rhinopneumonitis	2019	Douglas	1
Infectious Bovine Rhinotracheitis/Infectious Pustule	2017	Douglas	6
	2014	Thurston; Washington	18; 3
Paratuberculosis	2016	Burt; Thurston	9; 20
	2017	Burt; Douglas; Thurston; Washington	12; 2; 57; 1

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DISEASE	YEAR	COUNTY	POPULATION IMPACTED	
	2018	Burt; Douglas; Thurston; Washington	6; 3; 11; 1	
	2019	Burt; Thurston	3; 1	
	2016	Douglas	1	
Porcine Circovirus	2017	Burt	1	
	2018	Washington	201	
	2015	Douglas; Washington	250; 104	
	2016	Burt	7	
	2017	Burt	1	
	2018	Burt; Washington	1; 1	
Porcine Coronavirus	2019	Burt	2	
	2014	Burt; Douglas	2; 1	
	2016	Burt; Washington	5; 1	
	2019	Burt	1	
Porcine Epidemic Diarrhea	2014	Burt; Douglas	1; 2	
	2015	Washington	104	
	2016	Burt; Thurston; Washington	1; 1; 3	
	2017	Douglas	2	
	2018	Burt; Washington	1; 2	
	2019	Burt; Thurston; Washington	1; 1; 1	
	Porcine Reproductive and Respiratory Syndrome	2017	Burt; Dakota; Thurston	1; 1; 1
	Seneca Valley Virus	2018	Dakota	1
West Nile Virus	2019	Douglas	1	

Source: U.S. Census of Agriculture, 2014-2019⁴¹

Plant Disease

A variety of diseases can impact crops and often vary from year to year. The NDA and the USDA provide information on some of the most common plant diseases, which are listed below.

Table 42: Common Crop Diseases by Crop Type

Corn	Anthraxnose	Southern Rust
	Bacterial Stalk Rot	Stewart's Wilt
	Common Rust	Common Smut
	Fusarium Stalk Rot	Gross's Wilt
	Fusarium Root Rot	Head Smut
	Gray Leaf Spot	Physoderma
	Maize Chlorotic Mottle Virus	
Soybeans	Anthraxnose	Pot and Stem Blight
	Bacterial Blight	Purple Seed Stain
	Bean Pod Mottle	Rhizoctonia Root Rot
	Brown Spot	Sclerotinia Stem Rot
	Brown Stem Rot	Soybean Mosaic Virus
	Charcoal Rot	Soybean Rust
	Frogeye Leaf Spot	Stem Canker
	Phytophthora Root and Stem Rot	Sudden Death Syndrome
Wheat	Barley Yellow Dwarf	Leaf Rust
	Black Chaff	Tan Spot

⁴¹ Nebraska Department of Agriculture. 2020. "Livestock Disease Reporting." <http://www.nda.nebraska.gov/animal/reporting/index.html>.

	Crown and Root Rot	Wheat soy-borne Mosaic
	Fusarium Head Plight	Wheat Streak Mosaic
Sorghum	Ergot	Zonate Leaf Spot
	Sooty Stripe	
Trees	Burr Oak Blight	Dutch Elm Disease
	Powdery Mildew	Leaf Spot and Blight
	Canker (various types)	Root Rot
	Pine Wilt Disease	Crown Gall

In addition to the viral and bacterial diseases that could impact crops, pests can also result in crop loss or detract from crop quality. Pests present in the planning area include:

- Emerald Ash Borer (EAB)
- Grasshoppers
- Western Bean Cutworm
- European Corn Borer
- Corn Rootworm
- Corn Nematodes, Bean Weevil
- Mexican Bean Beetle
- Soybean Aphids
- Rootworm Beetles

Emerald Ash Borer

The spread and presence of the Emerald Ash Borer (EAB) has become a rising concern for many Nebraskan communities in recent years. The beetle spreads through transport of infected ash trees, lumber, and firewood. All species of North American ash trees are vulnerable to infestation. Confirmed cases of EAB have been in three Canadian provinces and 35 U.S. states, primarily in the eastern, southern and midwestern regions. Nebraska's confirmed cases occurred on private land in Omaha and Greenwood in 2016 and Lancaster County in 2018.⁴² The following figure shows the locations of Nebraska's confirmed EAB cases as of August 2020. Additional confirmed cases have likely occurred since then and many communities across the state and planning area are prioritizing the removal of ash trees to help curb potential infestations and tree mortality.

While adult beetles cause little damage, larvae damage trees by feeding on the inner bark of mature and growing trees, causing tunnels. Effects of EAB infestation include: extensive damage to trees by birds, canopy dieback, bark splitting, and water sprout growth at the tree base, and eventual tree mortality. EAB has impacted millions of trees across North America, killing young trees one to two years after infestation and mature trees three to four years after infestation.⁴³ Estimated economic impacts to Nebraska's 44 million ash trees exceeds \$961 million.⁴⁴ Dead or dying trees affected by EAB are also more likely to cause damage during high winds, severe Thunderstorms, or severe winter storms from weakened or hazardous limbs and can contribute a significant fuel load to grass/wildfire events.

Because of the Nebraska infestations, a quarantine order has been established in Cass, Dodge, Douglas, Otoe, Sarpy, Saunders, Lancaster, and Washington Counties that restricts the

⁴² Emerald Ash Borer Information Network. April 2018. "Emerald Ash Borer." <http://www.emeraldashborer.info/>.

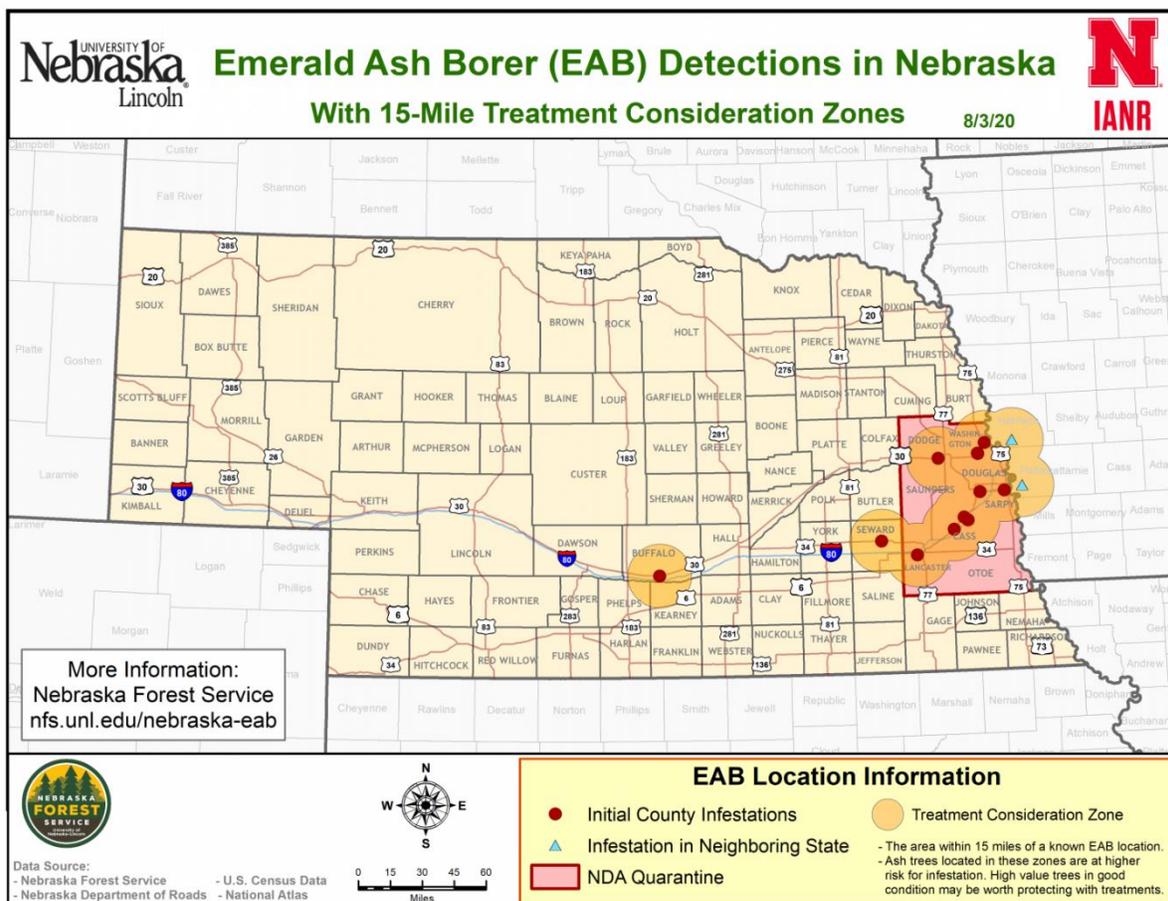
⁴³ Arbor Day Foundation. 2015. "Emerald Ash Borer." <https://www.arborday.org/trees/health/pests/emerald-ash-borer.cfm>.

⁴⁴ Nebraska Department of Agriculture. 2019. "Emerald Ash Borer." <https://nda.nebraska.gov/plant/entomology/eab/index.html>.

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movement of ash trees and lumber to further mitigate the spread of EAB. The Nebraska Department of Agriculture regulates and monitors the sale and distribution of firewood in the state to restrict the flow of firewood from outside the state.

Figure 18: EAB Confirmation in Nebraska



Source: NDA, 2020⁴⁵

Many communities across the planning area are taking action to remove dead, dying, or at-risk ash trees. For example, the Keep Omaha Beautiful group replaced removed ash trees with other native species along the Big Papio Trail:

“Keep Omaha Beautiful is doing its part to replace ash trees devastated by the arrival of the emerald ash borer. The group recently joined with 25 volunteers from Turner Construction to plant 60 trees along the Big Papio Trail near John D. Wear Avenue. Almost 30 ash trees had been removed from that area. Later this month [October 2020], Keep Omaha Beautiful will plant another 140 trees — all native species — in 10 additional southwest Omaha parks. Going in are American linden, black oak, bur oak, chinkapin oak, red oak, shingle oak, sycamore, Kentucky coffeetree, northern catalpa and triumph elm, which is resistant to Dutch elm disease.

“Replanting a diverse collection of native trees along this trail will make our community trees more resilient moving forward,” Executive Director Christopher Stratman said. “It also adds a much-

⁴⁵ Nebraska Department of Agriculture. 2020. “Emerald Ash Borer.” <https://nda.nebraska.gov/plant/entomology/eab/index.html>.

needed ecological and aesthetic benefit for the neighborhood and will be enjoyed by the thousands of people who bike and walk the Big Papio Trail every year.”

Since 2018, 2,300 trees have been planted in 50 parks and along three trails as part of the Trees for Omaha program supported by Turner Construction, the Arbor Day Foundation and the Iowa West Foundation. The goal is to plant several thousand native trees in metro area parks and public spaces to replace the trees that will be lost due to the ash borer.

“Planting native, underrepresented trees is an incredible win for our community. They provide habitat, improve air quality, reduce greenhouse gases, improve stormwater management and even help improve our mental well-being, all while beautifying our city,” Stratman said.⁴⁶

Average Annual Losses

According to the USDA RMA (2000-2019) there have been 31 plant disease events in the planning area. The RMA does not track losses for livestock, but annual crop losses from plant disease can be estimated. The USDA RMA also does not include losses associated with ash tree mortality from EAB.

Table 43: Agricultural Disease Losses

HAZARD TYPE	NUMBER OF EVENTS	EVENTS PER YEAR	TOTAL LOSS	AVERAGE ANNUAL LOSS
Plant Disease	31	1.55	\$250,012	\$12,501
Animal Disease	60	10	876 animals	146 animals/yr

Source: RMA, 2000-2019; NDA, 2014-2019

Extent

There is no standard for measuring the magnitude of agricultural disease. Historical events have impacted a relatively small number of livestock and/or crops. The average animal disease event impacts 15 or less animals per event. However, the largest historical event has been the infection of 250 porcine animals in Douglas County in 2015. The planning area is heavily dependent on the agricultural economy. Any severe plant or animal disease outbreak which may impact this sector would negatively impact the entire planning area.

Nebraska farmers also lose a significant amount of crops each year as a result of wildlife foraging. This can be particularly problematic in areas where natural habitat has been diminished or in years where weather patterns such as early or late frost, deep snow, or drought has caused the wild food sources to be limited.

Probability

Given the historical record of agricultural plant and animal disease (31 plant disease outbreaks in 20 years; 60 animal disease outbreaks reported in six years) and the role of agriculture in the planning area, for the purposes of this plan, the annual probability of agricultural disease occurrence is 100 percent.

⁴⁶ Omaha World Herald. October 5, 2020. “Keep Omaha Beautiful plants 60 trees along Big Papio Trail.” https://omaha.com/lifestyles/keep-omaha-beautiful-plants-60-trees-along-big-papio-trail/article_62070935-35f0-5c92-9259-35574ed7ded5.html#tracking-source=home-the-latest

Community Top Hazard Status

The following jurisdiction identified Agricultural Plant and Animal Disease as a top hazard of concern:

- City of Dakota City

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 44: Regional Agricultural Vulnerabilities

SECTOR	VULNERABILITY
People	-Those in direct contact with infected livestock -Potential food shortage during prolonged events -Residents in poverty if food prices increase
Economic	-Economic power tied to the agricultural industry -Large scale or prolonged events may impact tax revenues and local capabilities -Land values may largely drive population changes within the planning area
Built Environment	None
Infrastructure	-Transportation routes can be closed during quarantine
Critical Facilities	-None
Climate	-Changes in seasonal normals can promote spread of invasive species and agricultural disease

Chemical and Radiological Fixed Sites

The following description for hazardous materials is provided by the Federal Emergency Management Agency (FEMA):

Chemicals are found everywhere. They purify drinking water, are used in agriculture and industrial production, fuel our vehicles and machines, and simplify household chores. But chemicals also can be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal. The community is at risk if a chemical is used unsafely or released in harmful amounts.⁴⁷

Hazardous materials in various forms can cause fatalities, serious injury, long-lasting health effects, and damage to buildings, homes, and other property. Many products containing hazardous chemicals are used and stored in homes routinely. Chemicals posing a health hazard include carcinogens, toxic agents, reproductive toxins, irritants, and many other substances that can harm human organs or vital biological processes.

Chemical manufacturers are one source of hazardous materials, but there are many others, including service stations, hospitals, and hazardous materials waste sites.

Varying quantities of hazardous materials are manufactured, used, or stored at an estimated 4.5 million facilities in the United States—from major industrial plants to local dry-cleaning establishments or gardening supply stores.

Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. Hazardous material incidents are technological (meaning non-natural hazards created or influenced by humans) events that involve large-scale releases of chemical, biological or radiological materials. Hazardous materials incidents generally involve releases at fixed-site facilities that manufacture, store, process or otherwise handle hazardous materials or along transportation routes such as major highways, railways, navigable waterways and pipelines.

The EPA requires the submission of the types and locations of hazardous chemicals being stored at any facility within the state over the previous calendar year. This is completed by submitting a Tier II form to the EPA as a requirement of the Emergency Planning and Community Right-to-Know Act of 1986.⁴⁸

Fixed-sites are those that involve chemical manufacturing sites and stationary storage facilities. Table 45 demonstrates the nine classes of hazardous material according to the 2012 Emergency Response Guidebook.

⁴⁷ Federal Emergency Management Agency. 2017. "Hazardous Materials Incidents." <https://www.ready.gov/hazardous-materials-incident>.

⁴⁸ Emergency Planning and Community Right-to-Know Act of 1986, Pub. L. No. 116 § 10904. 1986.

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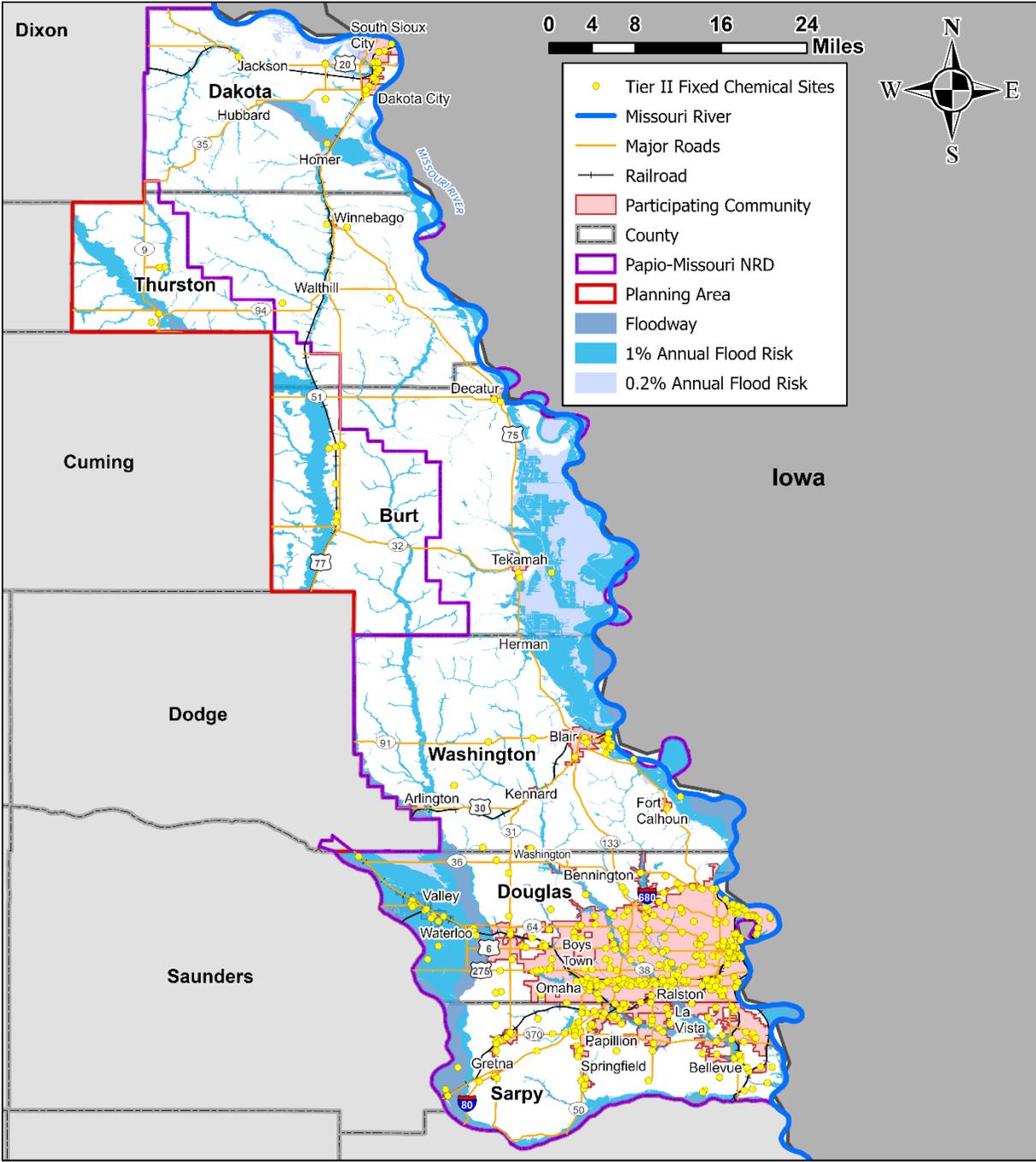
Table 45: Hazardous Material Classes

CLASS	TYPE OF MATERIAL	DIVISIONS
1	Explosives	1.1 Explosives with a mass explosion hazard 1.2 Explosives with a projection hazard but not a mass explosion hazard 1.3 Explosives which have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard 1.4 Explosives which present no significant blast hazard 1.5 Very insensitive explosives with a mass explosion hazard 1.6 Extremely insensitive articles which do not have a mass explosion hazard
2	Gases	2.1 Flammable gases 2.2 Non-flammable, non-toxic gases 2.3 Toxic gases
3	Flammable liquids (& combustible liquids)	
4	Flammable solids; Spontaneously combustible materials	4.1 Flammable solids, self-reactive substances and solid desensitized explosives 4.2 Substances liable to spontaneous combustion 4.3 Substances which in contact with water emit flammable gases
5	Oxidizing substances and Organic peroxides	5.1 Oxidizing substances 5.2 Organic peroxides
6	Toxic substances and infectious substances	6.1 Toxic substances 6.2 Infectious substances
7	Radioactive materials	
8	Corrosive materials	
9	Miscellaneous hazardous materials/products, substances, or organisms	

Source: *Emergency Response Guidebook, 2016*⁴⁹

⁴⁹ U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration. 2016. "2016 Emergency Response Guidebook." <https://www.phmsa.dot.gov/hazmat/outreach-training/erg>.

Figure 19: Fixed Chemical Sites in the Planning Area





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2021 Papio-Missouri River NRD
 Hazard Mitigation Plan

Fixed Chemical Sites



SOUTH DAKOTA
IOWA
COLORADO
KANSAS

Location

There are 480 locations across the planning area that house hazardous materials according to the Tier II reports submitted to the Nebraska Department of Environment and Energy (NDEE) in 2019. The majority of these facilities are located in the City of Omaha. A listing of chemical storage sites in each jurisdiction can be found their respective *Section Seven: Community Profiles*.

There is also one decommissioned radiological fixed site in the planning area. The Fort Calhoun Nuclear Power Station was a 1,500 Mwt, pressurized water reactor which operated between 1973 and 2016. The reactor was located between the City of Fort Calhoun and the City of Blair in Washington County on 660 acres adjacent to the Missouri River and was permanently shut down on October 24, 2016. Omaha Public Power District (OPPD) certified all fuel had been removed from the reactor by November 2016. According to OPPD's FCS Post-Shutdown Decommissioning Activities Report (March 30, 2017), they intend to move all spent nuclear fuel into dry cask storage by the end of 2022 and put the plant into SAFSTOR (*A method of decommissioning in which a nuclear facility is placed and maintained in a condition that allows the facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use*) until its ready to fully decommission the facility in 2060. The plants license termination is scheduled for 2065.⁵⁰

While the facility is no longer active, local concerns still exist until the facility is fully decommissioned. The following figure shows the evacuation area for Fort Calhoun Station, and Table 46 provides a description of the evacuation routes for the locations within the P-MRNRD.

⁵⁰ Omaha Public Power District. March 30, 2017. Letter: Fort Calhoun Station, Unit No. 1, Post-Shutdown Decommissioning Activities Report. <https://www.nrc.gov/docs/ML1708/ML17089A759.pdf>

Figure 20: Evacuation Routes for Fort Calhoun Nuclear Power Station

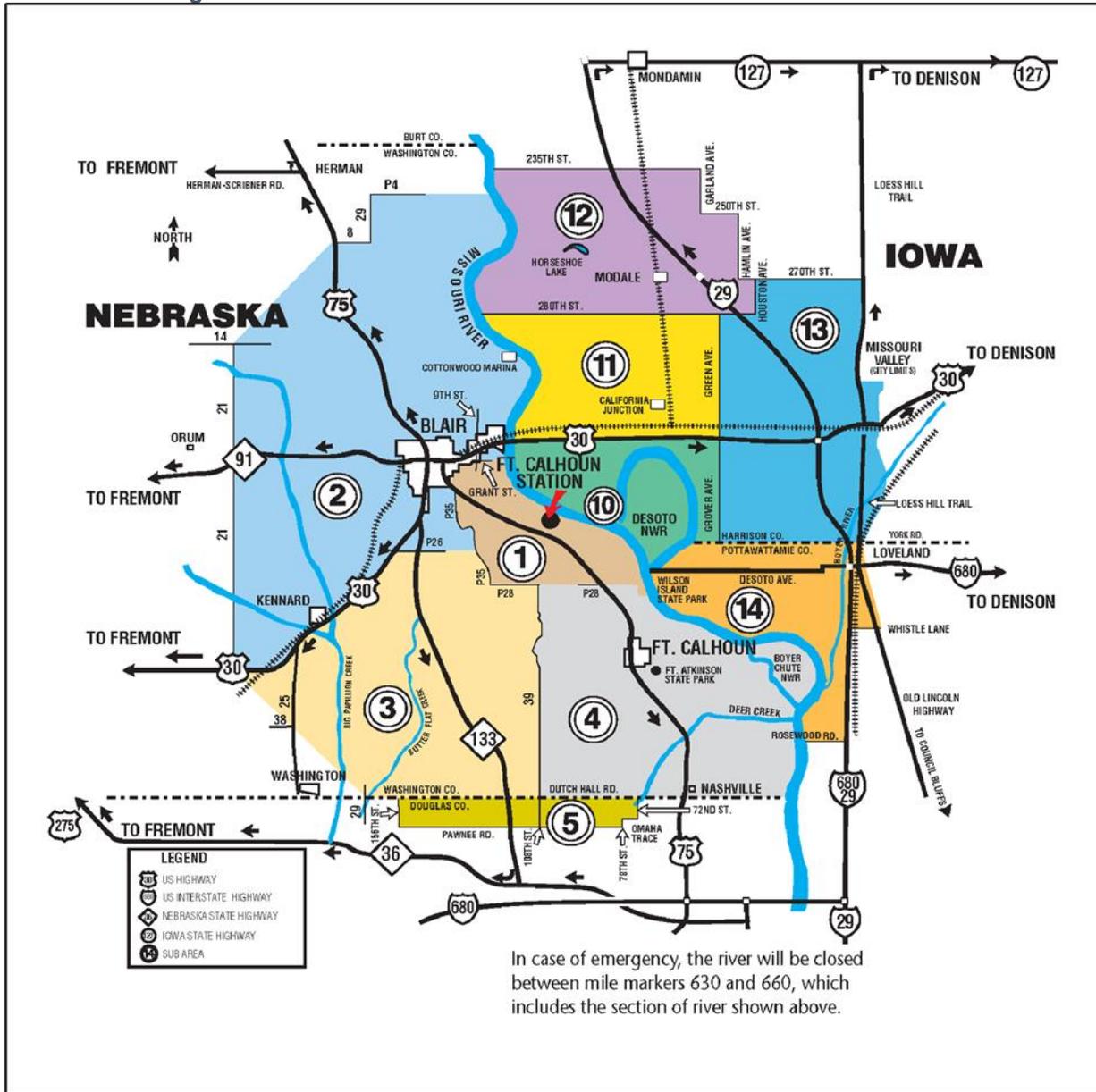


Table 46: Evacuation Route Descriptions for Nebraska

AREA	DESCRIPTION	EVACUATION ROUTE
1	<p>This area includes the DeSoto National Wildlife Refuge, but does not include the city of Blair. This area is bounded:</p> <ul style="list-style-type: none"> On the north by and on a line with Grant Avenue from the Missouri River west to 9th Street. On the west by the eastern boundary of the Blair city limits south from Grant Avenue and 9th Street to Highway 75, south on county road P35 to county road P28. On the south from the intersection of county road P35 and county road P28 east to the DeSoto 	<p>County Roads west to U.S. Hwy 30. (Do not drive past or toward Fort Calhoun Station) West on U.S. Hwy 30 to Fremont.</p>

SECTION FOUR: RISK ASSESSMENT

AREA	DESCRIPTION	EVACUATION ROUTE
	<p>National Wildlife Refuge, following the southern boundary of DeSoto east to the Missouri River.</p> <ul style="list-style-type: none"> On the east by that stretch of the Missouri River from the southern boundary of the DeSoto National Wildlife Refuge north to a line with Grand Avenue. 	
2	<p>This area includes the city of Blair, the Blair Industrial Park, the village of Kennard, and the Cottonwood Marina, but does not include the village of Herman. This area is bounded:</p> <ul style="list-style-type: none"> On the north by and on a line with county road P4 from the Missouri River west to county road 29, south to county road 8, then west to Highway 75. On the west from the intersection of county road 8 and Highway 75 SSW to the intersection of county road 14 and county road 21, then south on county road 21 to Highway 30. On the south from the intersection of county road 21 and Highway 30 to county road P26. Then east to county road P35 north on county road P35 to Highway 75, the eastern boundary of the Blair city limits to the intersection of Grant Avenue and 9th Street, by and on a line with Grant Avenue and 9th Street east to the Missouri River. On the east by the Missouri River from a line with Grant Avenue north to a line with county road P4. 	<p>(Residents of Blair) west on State Hwy 91 to U.S. Hwy 77/275, south on U.S. Hwy 77/275 to Fremont. Or, west on U.S. Hwy 30 to Fremont. Or, (Residents north of Blair) County Roads to U.S. Hwy 75, north on U.S. Hwy 75 to the Herman-Scribner Road, west on the Herman-Scribner Road to U.S. Hwy 77/275, south on U.S. Hwy 77/275 to Fremont. Or, (Residents south and west of Blair) County Roads to U.S. Hwy 30, west on U.S. Hwy 30 to Fremont.</p>
3	<p>This area does not include the village of Washington, the village of Kennard, or the Blair Industrial Park. This area is bounded:</p> <ul style="list-style-type: none"> On the north by and on a line with county road P28 from county road 39 west to county road P35, following county road P35 north to a line with county road P26, by and on a line with county road P26 west to Highway 30. On the west from the intersection of county road P26 and Highway 30 following Highway 30 SSW to county road 21. On the south from the intersection of Washington County Road 21 and Highway 30 SSE passing through the intersection of Washington county road 38 and county road 25 just north of the village of Washington, continuing SSE to the intersection of Washington county road 29 and Dutch hall Road (also known as the Washington/Douglas County Line), then east on Dutch Hall Road to Washington county road 39. On the east from the intersection of Dutch Hall Road and county road 39 north to county road P28 and the southern boundary of subarea 1. 	<p>South to NE Hwy 36, NE Hwy 36 west to U.S. Hwy 275, north on U.S. Hwy 275 to the Fremont Military Avenue exit, west on Military Avenue to Johnson Road, Johnson Road south to the Fremont Middle School.</p>
4	<p>This area includes the city of Fort Calhoun and the Boyer Chute Recreational Area, but does not include the DeSoto National Wildlife Refuge. This area is bounded:</p>	<p>South to NE Hwy 36, NE Hwy 36 west to U.S. Hwy 275, north on U.S. Hwy 275 to the Fremont Military Avenue exit,</p>

AREA	DESCRIPTION	EVACUATION ROUTE
	<ul style="list-style-type: none"> On the north by the southern boundary of the DeSoto National Wildlife Refuge west from the Missouri River to county road P28, county road P28 west to county road 39. On the west from the intersection of county road 39 and county road P28 south on county road 39 to Dutch Hall Road (also known as the Washington/ Douglas County Line). On the south from the intersection of Dutch Hall Road east by and on a line to the Missouri River. On the east by that stretch of the Missouri River from a line with Dutch Hall Road to the southern boundary of DeSoto National Wildlife Refuge. 	west on Military Avenue to Johnson Road, Johnson Road south to the Fremont Middle School.
5	<p>This area is within Douglas County, but does not include the village of Washington or any part of Washington County. This area is bounded:</p> <ul style="list-style-type: none"> On the north from the intersection of 72nd Street and Dutch Hall Road (also known as the Washington/Douglas County line) west to 156th Street. On the west from the intersection of 156th Street and Dutch Hall Road south to Pawnee Road. On the south from the intersection of 156th Street and Pawnee Road east to the intersection of 78th Street and Pawnee Road, north to Omaha Trace, then east to the intersection of Omaha Trace and 72nd Street. On the east from the intersection of Omaha Trace and 72nd Street north to Dutch Hall Road. 	South to NE Hwy 36, NE Hwy 36 west to U.S. Hwy 275, north on U.S. Hwy 275 to the Fremont Military Avenue exit, west on Military Avenue to Johnson Road, Johnson Road south to the Fremont Middle School.

Source: OPPD

Historical Occurrences

Fixed Site Spills

According to the NRC database, there have been 377 fixed site chemical spills between January 1990 and February 2020 in the planning area. The following table lists only those events with the largest quantity of material released (>7,500 gallons), incidents with injuries/fatalities/evacuations, and reported property damages.

Table 47: Chemical Fixed Site Incidents

YEAR	LOCATION OF RELEASE	QUANTITY SPILLED	MATERIAL INVOLVED	# INJURED	# EVACUATED	PROPERTY DAMAGE
1990	Omaha	Unknown	Unknown	2	0	\$0
1991	Omaha	Unknown	Chlorine	10	60	\$0
1991	Fort Calhoun	7,500 gallons	Sulfuric Acid	0	0	\$0
1991	Omaha	11,000 gallons	Asphalt emulsion	0	0	\$0
1992	Dakota City	100 gallons	Anhydrous Ammonia	4	1,800	\$0
1993	Omaha	Unknown	Liquified Petroleum	0	200	\$0
1996	Omaha	78,000 lbs.	Sodium Hypochlorite	0	0	\$0

SECTION FOUR: RISK ASSESSMENT

YEAR	LOCATION OF RELEASE	QUANTITY SPILLED	MATERIAL INVOLVED	# INJURED	# EVACUATED	PROPERTY DAMAGE
1998	Omaha	10,000 lbs.	Sulfuric acid	0	0	\$0
2006	Omaha	Unknown	Unknown	1	0	\$0
2006	Blair	50,000 lbs.	Sodium Bisulfite	0	0	\$0
2010	Omaha	Unknown	Natural Gas	0	0	\$75,000
2010	Omaha	Unknown	Natural Gas	0	0	\$60,000
2010	Omaha	Unknown	Natural Gas	0	0	\$50,000
2011	Omaha	16,000,000 gallons	Sewage	0	0	\$0
2011	Blair	0.5 gallons	Gasoline	1	0	\$0
2012	Omaha	Unknown	Natural Gas	1	0	\$0
2012	Elkhorn	Unknown	Natural Gas	3	0	\$0
2013	Blair	240,000 gallons	City Water	0	0	\$0
2016	Omaha	Unknown	Natural Gas	1	0	\$0
2016	Omaha	Unknown	Natural Gas	4	0	\$50,000
2016	Omaha	Unknown	Anhydrous Ammonia	0	100	\$0
2016	Homer	9,737 mil CBF	Natural Gas	0	0	\$0
2016	Omaha	Unknown	Natural Gas	2	0	\$0
2017	Winnebago	Unknown	Gasoline	1	0	\$0
2017	Omaha	Unknown	Natural Gas	0	0	\$1,000,000
2019	Offutt Airforce Base	Unknown	Gasoline	0	300	\$0

Source: National Response Center, 1990-Feb 2020

Radiological Hazard Events

Several incidences have impacted the Fort Calhoun Nuclear Power Plant. In 1992, the plant was evacuated when 20,000 gallons of coolant leaked into a containment building from the reactor. No other known complete evacuations have taken place.

During the summer flooding in 2011, the Missouri River flooding reached 1,004 feet above mean sea level on June 6, which led to OPPD to declare an Unusual Event for the Fort Calhoun Nuclear Plant. Sandbags and earthen berms were installed around the plant to protect the facility from flooding, and these protective measures would protect the plant from flood waters reaching 1,012 feet above sea level. Fort Calhoun Nuclear Power Station had already been in safe cold shutdown mode since April 2011 for refueling and the anticipated flooding. According to the U.S. Nuclear Regulatory Commission, the next day on June 7 an electrical component in a switch gear room caused a small fire, which forced a partial evacuation. The fire was quickly extinguished and the officials stated that the public was never in any danger. As a result of the fire, pumping of coolant water through the spent fuel pool was impacted and cooling was interrupted for 90 minutes. In response, OPPD declared an Alert phase at 11:44 AM and parts of the plant were evacuated. Once the room was clear of smoke and confirmed that no fire remained in the area, the Alert phase was lifted at 1:15 PM that same day and resumed Unusual Event status. After the waters receded that summer and several corrective measures were made to the plant over the following two years, OPPD restarted Fort Calhoun Nuclear Station on December 26, 2013.

The March 2019 flood event approached the Fort Calhoun Nuclear Station. While the station had been shut down, it remains in a state of decommissioning. Sand and sandbagging efforts were utilized to protect the facility. OPPD stated the spent nuclear fuel stored at the facility was on an elevated concrete pad and safe from the flooding. While the March 2019 flood event caused

catastrophic damage for many areas in the planning area, water levels at the Fort Calhoun station were approximately two feet lower than during the flooding of 2011.

Average Annual Losses

According to the NRC, there have been 377 chemical fixed site spills in the planning area. The NRC does not track crop losses. These events reported \$1,235,000 in property damages.

Table 48: Chemical Fixed Site Losses

HAZARD TYPE	NUMBER OF EVENTS	EVENTS PER YEAR	TOTAL INJURIES	TOTAL EVACUATED	TOTAL LOSS	AVERAGE ANNUAL LOSS
Chemical Spills	377	12.5	30	2,709	\$1,235,000	\$41,167

Source: NRC, 1990-2019

Extent

The extent of chemical spills at fixed sites varies and depends on the type of chemical that is released with a majority of events localized to the facility. There were 377 releases that have occurred in the planning area, and the total amount spilled ranged from 0 to 16,000,000 gallons or from two to 78,000 pounds. Of these events, 14 spills led to evacuations and 11 spill events caused injuries. No spill events led to fatalities. One chemical release of ammonia anhydrous triggered an evacuation radius of 0.13 miles and one person was evacuated from that radius. A second event in 2016 led to an evacuation radius of 0.12 miles and caused two injuries when a natural gas leak caused an explosion. The most damaging event (estimated property damage \$1,000,000) included a house fire and release of natural gas at a private residence.

Based on historic records, it is likely that any spill involving hazardous materials will not affect an area larger than a quarter mile from the spill location.

The Nuclear Regulatory Commission has a classification scale for nuclear power plant events to ensure consistency in the communications and emergency response. Fort Calhoun Station had an Unusual Event and an Alert in June 2011. Schools are notified at the Alert phase and evacuate according to their school district's plan. Sirens are sounded at the Site Area Emergency phase. The other event types are possible if the station were to not maintain the radioactive material in the proper way. However, this risk has been mitigated as fuel has been removed from the station as of 2016 and remaining spent fuel rods will be removed when the facility is fully decommissioned.

Table 49: Nuclear Power Plant Emergency Event Phases

EVENT TYPE	DESCRIPTION
Unusual Event	This is the lowest of the four emergency classifications. This classification indicates that a small problem has occurred. No release of radioactive material is expected and federal, state, and county officials are notified.
Alert	Events are in process or have occurred which involve an actual or potential substantial degradation in the level of safety of the plant. Any releases of radioactive material from the plant are expected to be limited to a small fraction of the EPA Protective Action Guide for Nuclear Incidents.
Site Area Emergency	Involves events in process or which have occurred that result in actual or likely major failures of plant functions needed for protection of the public. Any releases of radioactive material are not expected to exceed the levels established by the EPA Protective Action Guide for Nuclear Incidents except near the site boundary.

SECTION FOUR: RISK ASSESSMENT

EVENT TYPE	DESCRIPTION
General Emergency	The most serious emergency classification and indicates a serious problem. A general emergency involves actual or imminent substantial core damage or melting of reactor fuel with the potential for loss of containment integrity. Emergency sirens will be sounded and federal, state, and county officials will act to ensure public safety. Radioactive releases during a general emergency can reasonably be expected to exceed EPA Protective Action Guide for Nuclear Incidents for more than the immediate site area.

Source: NRC

Probability

Given the historical record of 377 chemical spill events in 30 years, chemical releases are likely to happen in the future. For the purpose of this plan, the annual probability of occurrence for chemical fixed site spills is 100%.

Localized plant (i.e. not a 10-mile radius) evacuations have occurred twice at the Fort Calhoun Nuclear Power Station since it came online in 1973. Since 2016, the plant has begun decommissioning and future events are not anticipated to occur. In the unlikely event of a General Emergency being issued, the 10-mile radius EPZ would be instituted, which would include the City of Fort Calhoun, City of Blair, and the Village of Kennard. Furthermore, if an event were to occur at the station, the entire 10-mile radius may not be affected depending on the type of accident and the weather conditions. Since the station has not had a General Emergency that lead to the 10-mile radius EPZ, the probability for a radiological event will be stated at less than 1 percent annually for this plan.

Community Top Hazard Status

The following jurisdictions identified Chemical and Radiological Fixed Sites as a top hazard of concern:

- City of Tekamah
- Village of Jackson
- City of Omaha
- City of Bellevue
- City of Gretna
- Washington County
- Homer Community Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 50: Regional Chemical and Radiological Fixed Site Vulnerabilities

SECTOR	VULNERABILITY
People	-Those in close proximity could have minor to moderate health impacts -Possible evacuations -Hospitals, nursing homes, and the elderly at greater risk due to low mobility
Economic	-A chemical plant shutdown in smaller communities would have significant impacts to the local economy

SECTOR	VULNERABILITY
	-A long-term evacuation of the EPZ would have a negative effect on the economy in the area
Built Environment	-Risk of fire or explosion
Infrastructure	-Transportation routes can be closed during evacuations
Critical Facilities	-Risk of fire, explosion, or other damages
	-Risk of evacuation
Climate	-More extreme weather events and flood events put sites at risk of flooding at greater risk

Chemical Transportation

The transportation of hazardous materials is defined by the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA) as "...a substance that has been determined to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce..."⁵¹ According to PHMSA, hazardous materials traffic in the U.S. exceeds 1,000,000 shipments per day as of 2015. This has likely increased significantly.

Nationally, the U.S. has had 98 fatalities associated with the transport of hazardous materials between 2010 and 2019.⁵² While such fatalities are a low probability risk, even one event can harm many people. For example, a train derailment in Crete, Nebraska in 1969 caused anhydrous ammonia to leak from a ruptured tanker. The resulting poisonous fog killed nine people and injured 53.

The U.S. Department of Transportation, through PHMSA, has broad jurisdiction to regulate the transportation of hazardous materials, including the discretion to decide which materials shall be classified as hazardous. These materials are placed into one of nine hazard classes based on their chemical and physical properties. The hazard schedules may be further subdivided into divisions based on their characteristics. Because the properties and characteristics of materials are crucial in understanding the dynamics of a spill during a transportation incident, it is important for response personnel to understand the hazard classes and their divisions.

Location

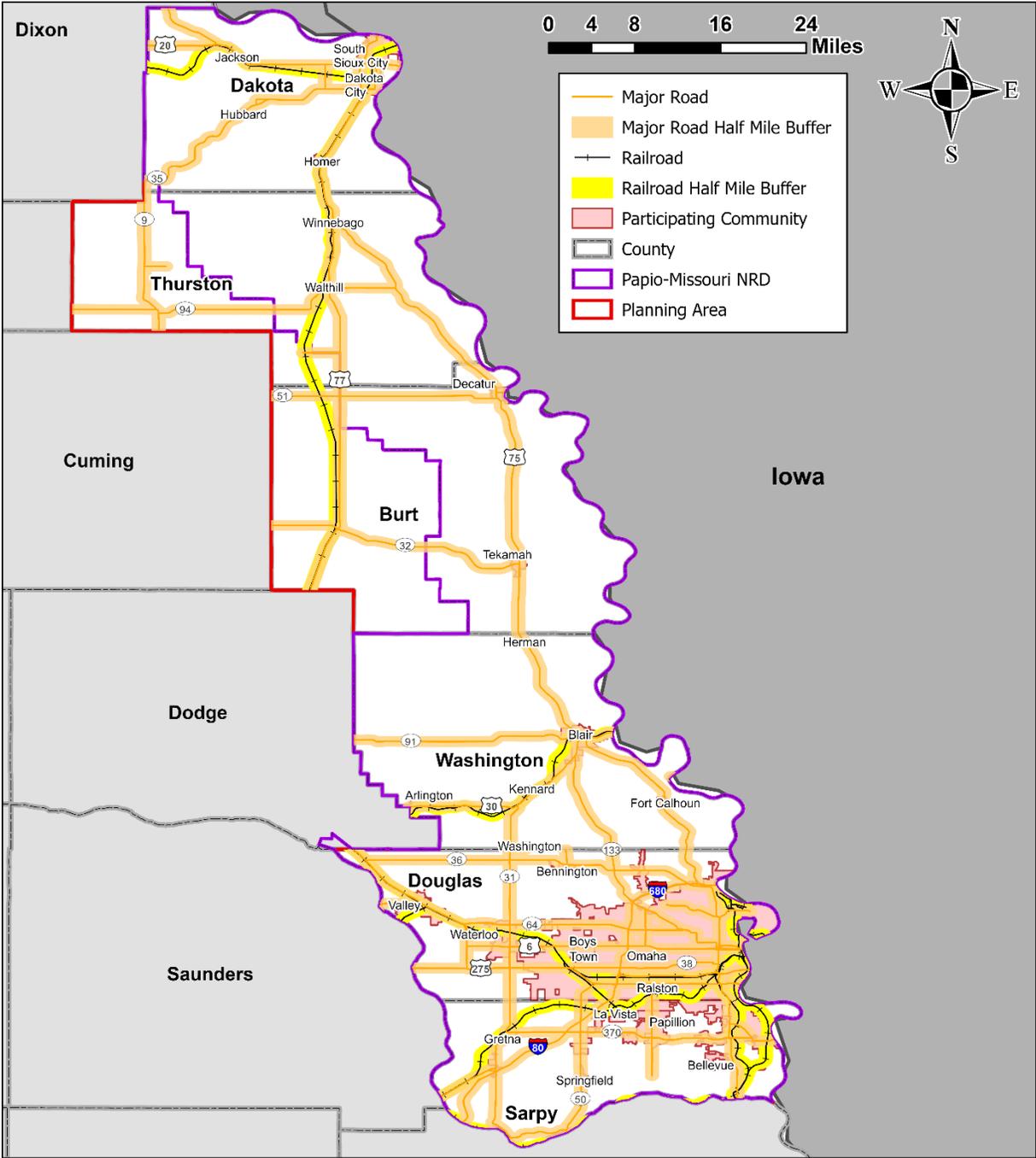
Chemical releases can occur during transportation, primarily on major transportation routes as identified in Figure 21. A large number of spills also typically occur during the loading and unloading of chemicals for highway and pipeline chemical transport. According to PHMSA, there are several gas transmission and hazardous liquid pipelines located in the planning area. Maps of pipelines and incidents from PHMSA for each of the six counties in the planning area can be seen below (Figure 22 through Figure 27).⁵³

⁵¹ Pipeline and Hazardous Materials Safety Administration. 2018. "Hazmat Safety Community FAQ." <https://phmsa.dot.gov/regulations>.

⁵² Pipeline and Hazardous Materials Safety Administration. 2017. "10 Year Incident Summary Reports." <https://www.phmsa.dot.gov/hazmat-program-management-data-and-statistics/data-operations/incident-statistics>.

⁵³ Pipeline and Hazardous Materials Safety Administration. 2019. "National Pipeline Mapping System." <https://www.npms.phmsa.dot.gov/>.

Figure 21: Major Transportation Routes with Half Mile Buffer in the Planning Area





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 Date: 12/9/2020
 Software: ArcGIS Pro 2.6.2
 File Name: PapioNRD_Upfront.aprx

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2021 Papio-Missouri River NRD
 Hazard Mitigation Plan

**Major Transportation
 Routes**



SECTION FOUR: RISK ASSESSMENT

Figure 22: Burt County Public Map Viewer Maps

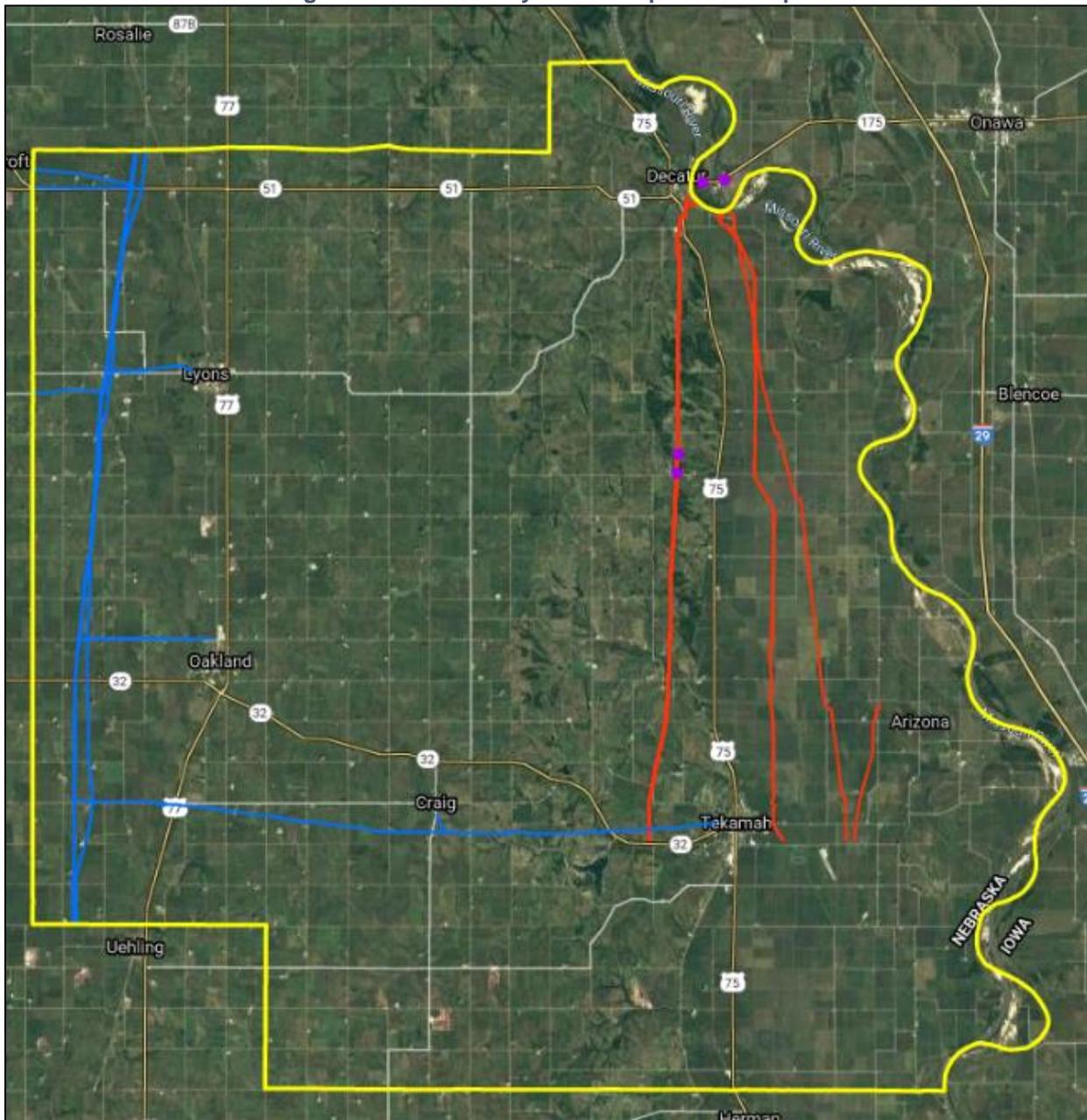
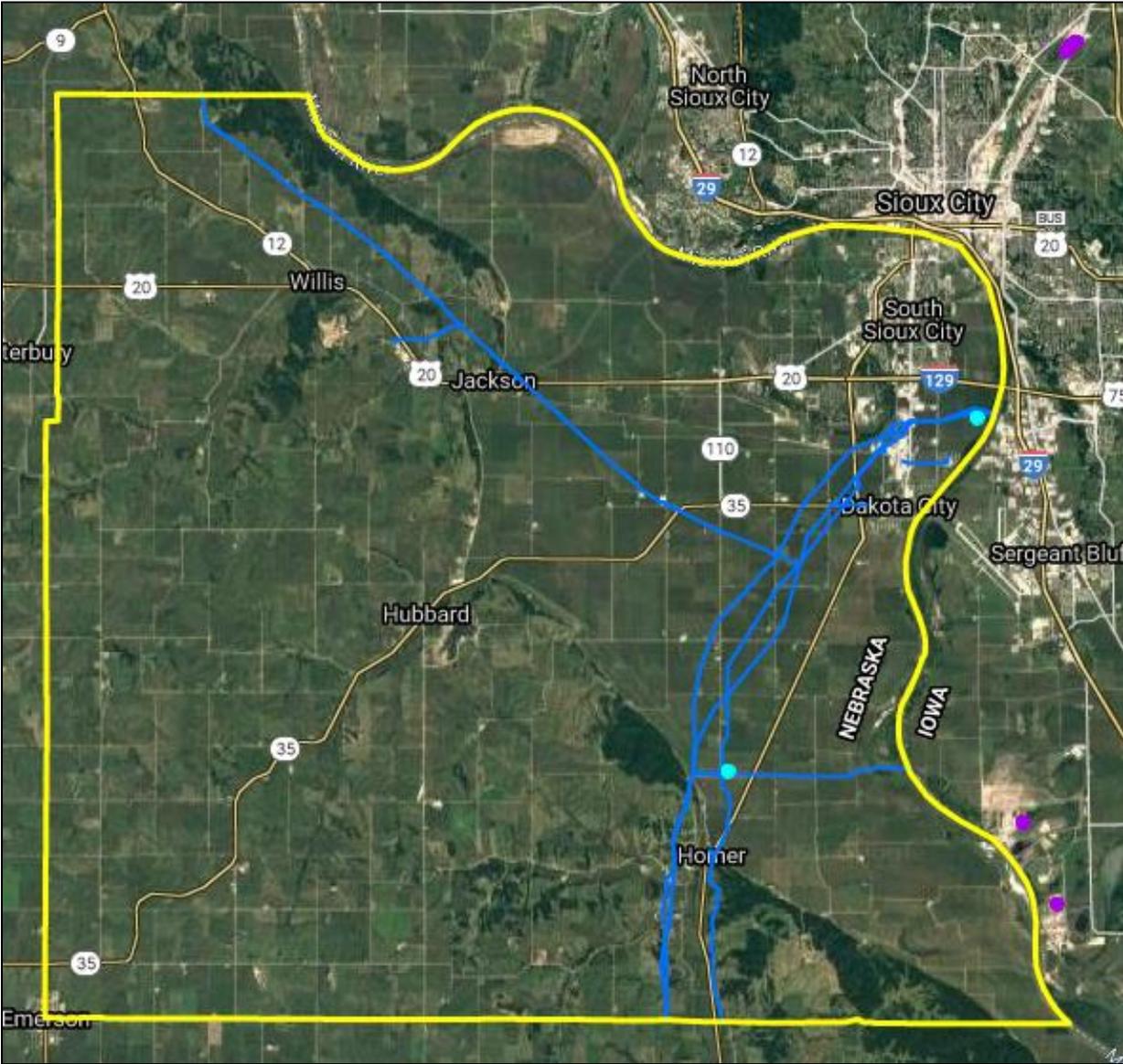


Figure 23: Dakota County Public Map Viewer



SECTION FOUR: RISK ASSESSMENT

Figure 24: Douglas County Public Map Viewer

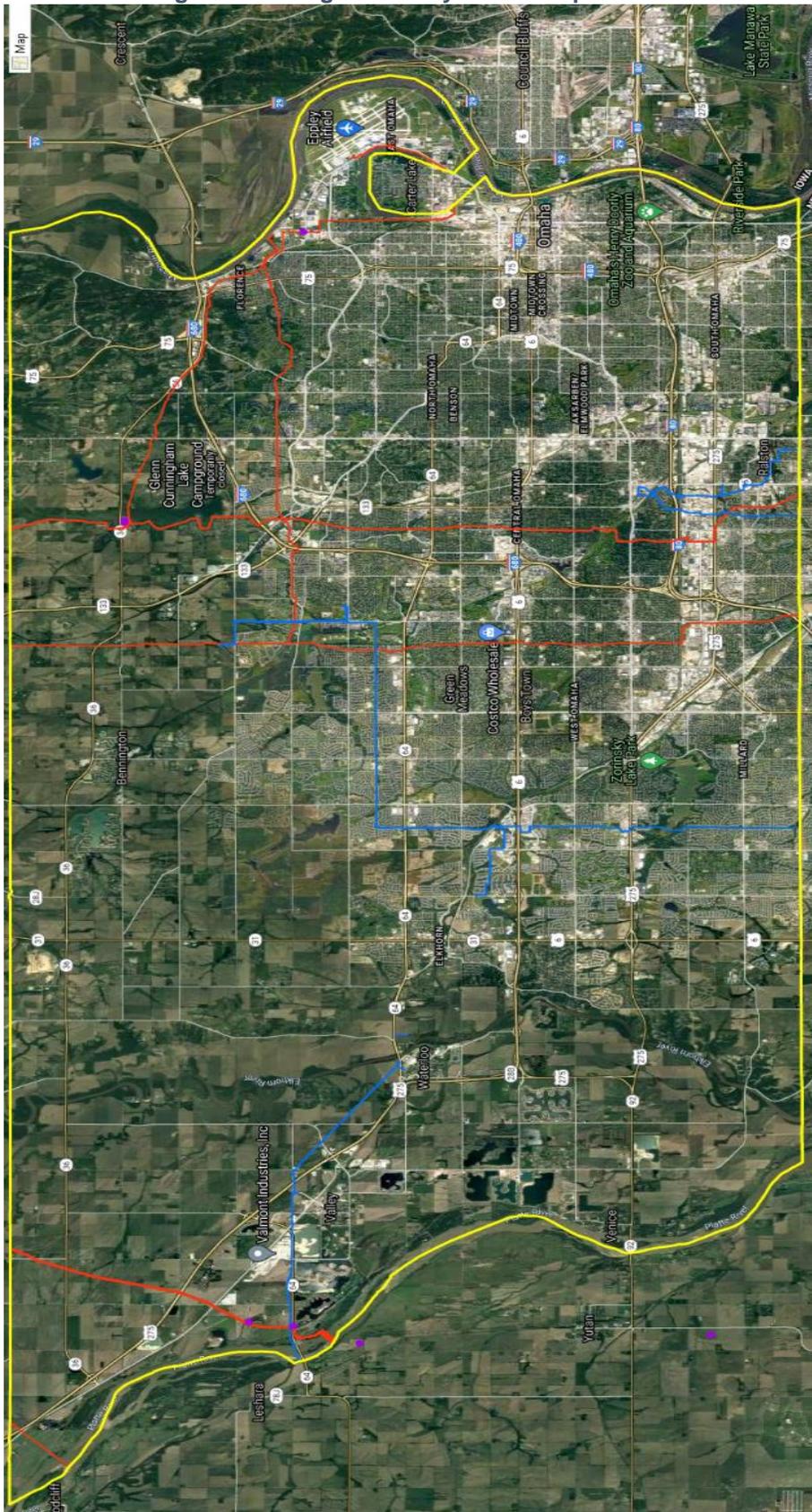


Figure 25: Sarpy County Public Map Viewer

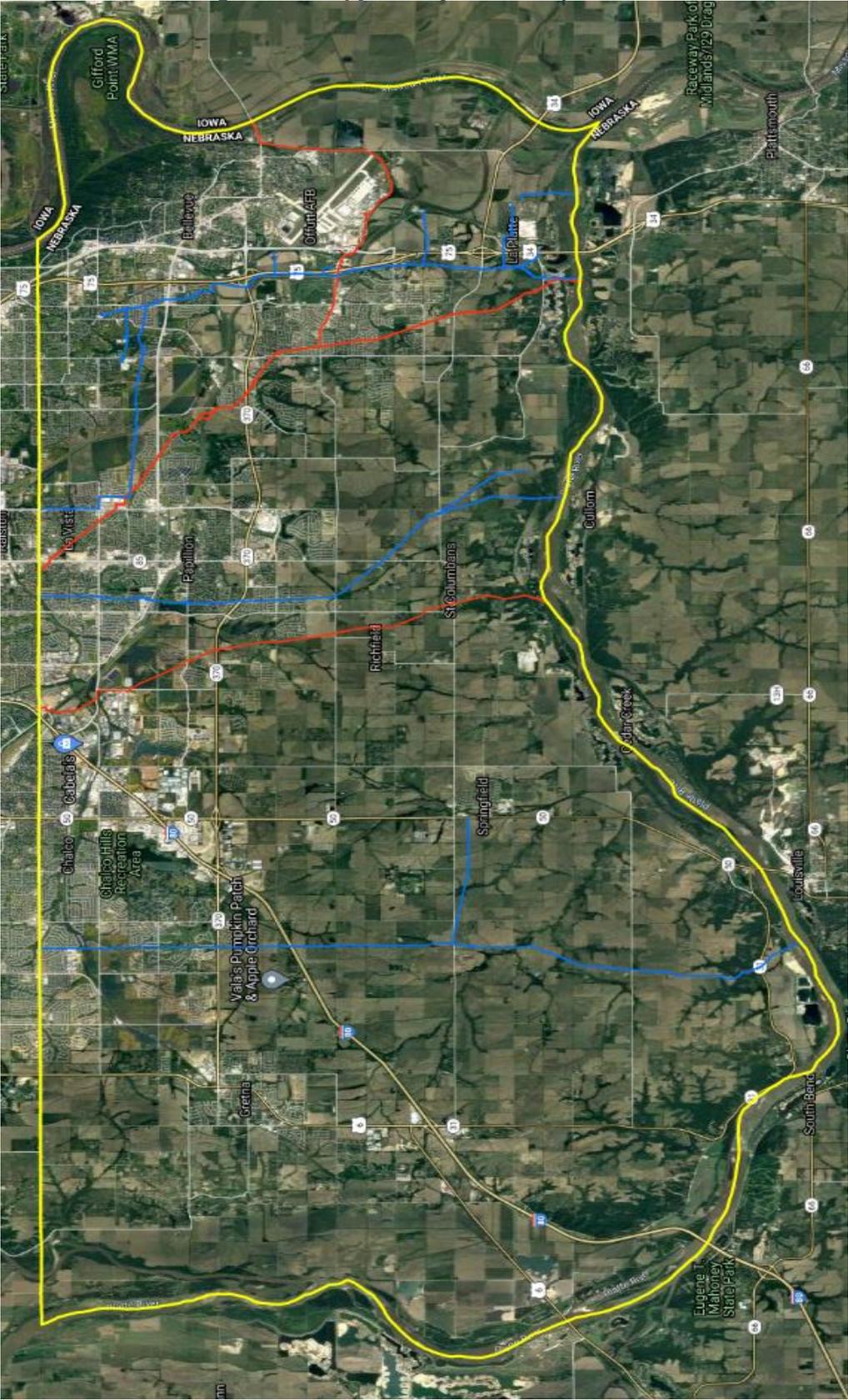


Figure 26: Thurston County Public Map Viewer

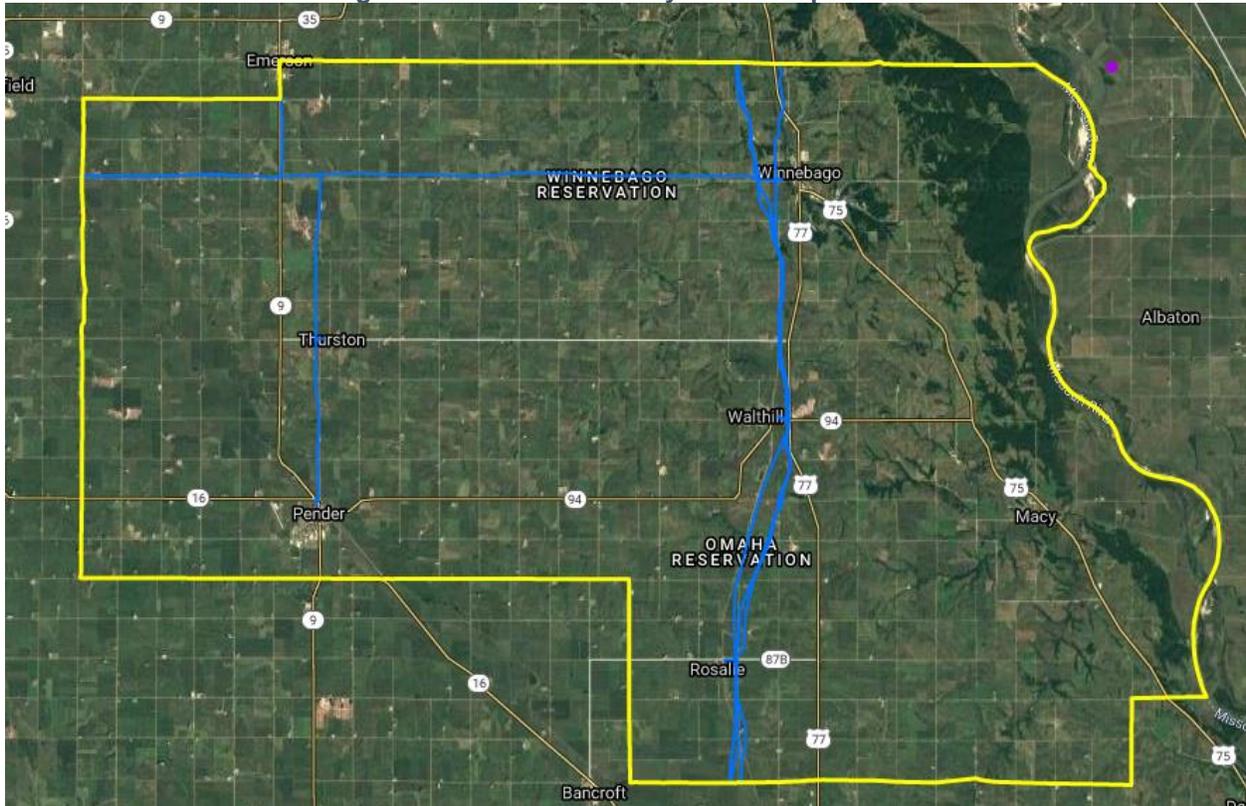
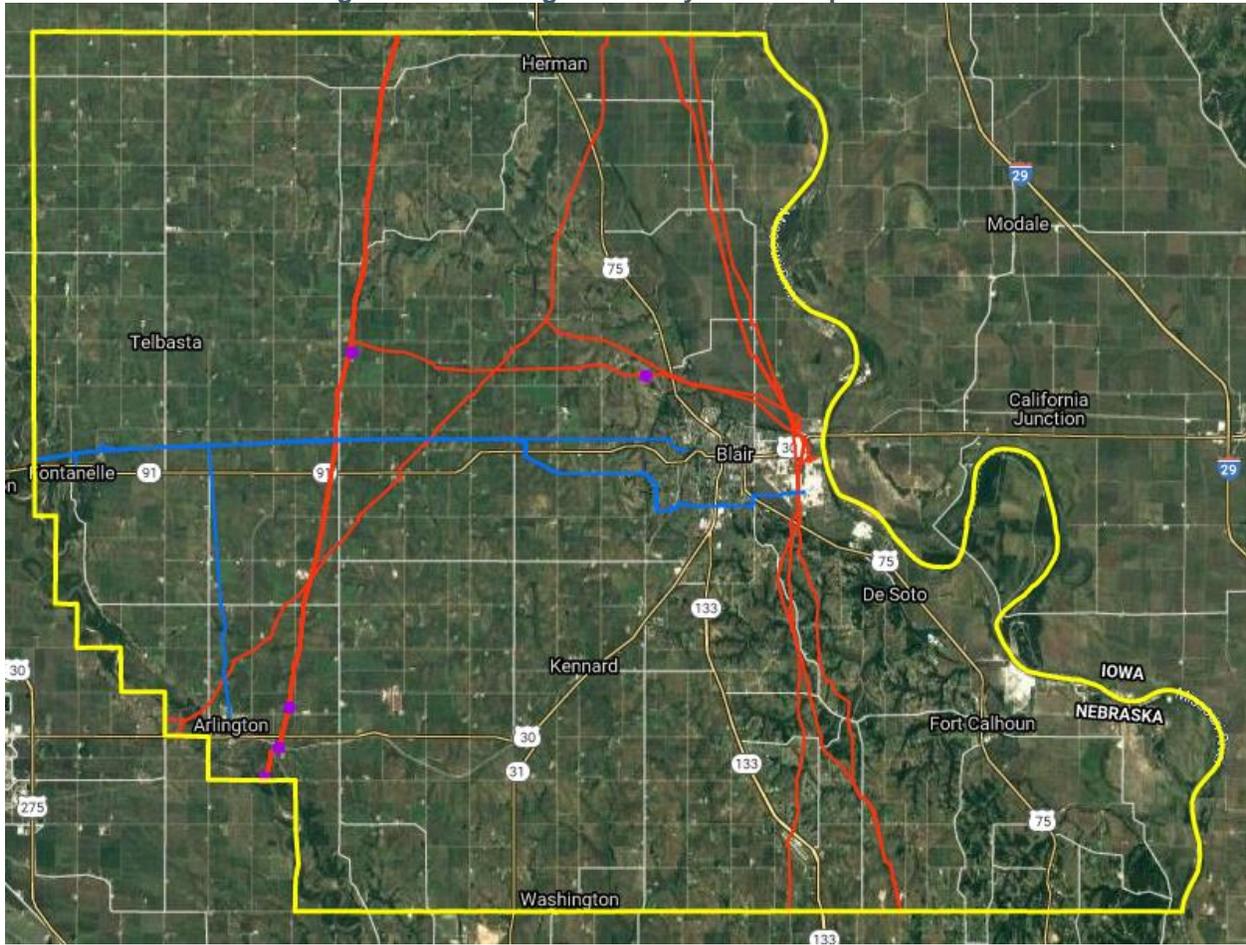


Figure 27: Washington County Public Map Viewer



Historical Occurrences

PHSMA reports 1,869 chemical transportation spills in the planning area between 1971 and 2019. During these events, there were no fatalities, 14 events with injuries, and \$1,403,606 in damages.

The following table provides a list of the most significant historical transportation chemical spills, including the largest spills, most costly incidents, and incidents with injuries.

SECTION FOUR: RISK ASSESSMENT

Table 51: Historical Chemical Spills 1971-2019

DATE OF EVENT	LOCATION OF RELEASE	FAILURE DESCRIPTION	MATERIAL INVOLVED	METHOD OF TRANSPORTATION	QUANTITY (GALS)	TOTAL DAMAGES	INJURIES (Y/N)
1/10/1977	Offutt AFB	Vehicular Crash or Accident Damage	Petroleum Gases, Liquefied or Liquefied Petroleum Gas	Highway	9,000	\$0	No
4/23/1990	Omaha	Dropped	Acetone	Highway	0.25	\$25	No
10/29/1991	South Sioux City	Accident Damage	Methane, Compressed or Natural Gas, Compressed (With High Methane Content)	Highway	6,000	\$150,000	Yes
12/9/1991	Omaha	Dropped	Formic Acid Solution	Highway	1	\$4,000	Yes - 1
2/12/1992	Omaha	Defective Component or Device;	Hydrochloric Acid, Solution	Highway	10	\$30	Yes – 1
8/7/1992	Omaha	Improper Preparation for Transportation	Hydrogen Peroxide, Aqueous Solutions with Not Less Than 20 Percent But Not More Than 40 Percent Hydrogen Peroxide (Stabilized As Necessary)	Highway	0.125	\$275	Yes – 1
10/12/1992	Omaha	Rollover Accident; Vehicular Crash or Accident Damage	Ethanol or Ethyl Alcohol or Ethanol Solutions or Ethyl Alcohol Solutions	Highway	1,500	\$143,000	No
5/13/1993	Omaha	Improper Preparation for Transportation; Inadequate Blocking	Flammable Liquids, N.O.S.	Highway	40	\$11,000	No

DATE OF EVENT	LOCATION OF RELEASE	FAILURE DESCRIPTION	MATERIAL INVOLVED	METHOD OF TRANSPORTATION	QUANTITY (GALS)	TOTAL DAMAGES	INJURIES (Y/N)
		and Bracing; Impact with Sharp or Protruding Object (e.g., nails)					
6/6/1994	Omaha	Unknown	Isopropanol or Isopropyl Alcohol	Highway	2.5	\$80	Yes – 1
7/1/1994	Omaha	Defective Component or Device	Nitric Acid	Highway	0.66	\$125	Yes - 1
2/9/1998	Omaha	Improper Preparation for Transportation; Abrasion; Impact with Sharp or Protruding Object (e.g., nails)	Corrosive Liquids, Flammable, N.O.S.	Highway	10	\$15,400	No
1/12/1999	Omaha	Defective Component or Device;	Ammonia Anhydrous	Highway	1.34	\$660	Yes
9/12/1999	Omaha	Loose Closure, Component, or Device	Corrosive Liquids, N.O.S.	Highway	0.25	\$360	Yes – 1
3/5/2001	Valley	Rollover Accident; Vehicular Crash or Accident Damage	Gasoline	Highway	120	\$163,256	No
5/20/2001	Omaha		Batteries, Wet, Filled with Acid, Electric Storage	Air	4	\$708	Yes - 1
12/2/2001	Omaha	Defective Component or Device;	Ammonia Anhydrous	Rail	0	\$1,000	Yes - 1

SECTION FOUR: RISK ASSESSMENT

DATE OF EVENT	LOCATION OF RELEASE	FAILURE DESCRIPTION	MATERIAL INVOLVED	METHOD OF TRANSPORTATION	QUANTITY (GALS)	TOTAL DAMAGES	INJURIES (Y/N)
6/3/2002	Bennington	Defective Component or Device; ;	Ammonia Anhydrous	Highway	585	\$39,300	No
1/14/2004	Blair	Loose Closure, Component, or Device; Defective Component or Device	Sulfuric Acid	Rail	1	\$0	Yes - 1
5/21/2007	Omaha	Human Error	Gasoline	Highway	100	\$15,518	No
5/28/2008	Omaha	Corrosion - Exterior; Deterioration or Aging	Hydrochloric Acid, Solution	Rail	300	\$100,150	No
8/10/2012	Omaha	Leakage	Corrosive Liquid, Acidic, Inorganic, N.O.S.	Highway	125	\$35,000	No
10/10/2012	South Sioux City	Vehicular Crash or Accident Damage	Diesel Fuel and Gasoline	Highway	0	\$16,000	No
6/12/2013	Bellevue	Human Error	Liquefied Petroleum Gas	Highway	0.27	\$0	Yes - 1
8/23/2013	Omaha	Defective Component or Device	Fire Extinguishers Containing Compressed or Liquefied Gas	Highway	20	\$0	No
7/29/2015	Bennington	Defective Component or Device;	Gasoline, Casinghead	Highway	325	\$33,677	No
4/19/2017	Omaha	Vehicular Crash or Accident Damage	Sodium Hydroxide, Solution	Highway	500	\$200,460	No
8/8/2017	Omaha	Human Error	Sulfuric Acid with More Than 51 Percent Acid	Rail	720	\$0	Yes - 1

DATE OF EVENT	LOCATION OF RELEASE	FAILURE DESCRIPTION	MATERIAL INVOLVED	METHOD OF TRANSPORTATION	QUANTITY (GALS)	TOTAL DAMAGES	INJURIES (Y/N)
10/31/2018	Omaha	Inadequate Preparation for Transportation	Corrosive Liquid, Basic, Inorganic, N.O.S.	Highway	0.5	\$0	Yes - 1
7/2/2019	La Vista	Accident Damage	Bisulfites, Aqueous Solutions, N.O.S.	Highway	330	\$14,000	No

Source: PHMSA, 1971-2019

Average Annual Losses

The average damage per event estimate was determined based upon PHMSA's Incidents Reports since 1971 and the number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. This hazard causes, on average over \$28,000 per year in property damages.

Table 52: Chemical Transportation Losses

HAZARD TYPE	NUMBER OF EVENTS	EVENTS PER YEAR	TOTAL LOSS	AVERAGE ANNUAL LOSS
Chemical Transportation Spills	1,869	38.1	\$1,403,606	\$28,645

Source: PHMSA, 1971-2019

Extent

The probable extent of chemical spills during transportation is difficult to anticipate and depends on the type and quantity of chemical released. Releases that have occurred during transportation in the planning area ranged from zero to 9,000 liquid gallons (LGA), with an average reported spilled quantity of 45 LGA.

Six incidents led to evacuations, but two of the evacuations were precautionary as the substance was unknown at the time. Only one evacuation was as large as a half mile from the incident. Thus, it is likely that hazardous material spills during transportation will not affect an area larger than a half mile from the spill location.

Probability

The historical record indicates that chemical releases during transport are likely to occur annually in the planning area with 1,869 events over a 49-year period.

Community Top Hazard Status

The following jurisdictions identified Chemical Transportation as a top hazard of concern:

- Burt County
- Village of Decatur
- City of Tekamah
- Village of Homer
- Village of Jackson
- City of South Sioux City
- City of Valley
- City of Gretna
- City of La Vista
- Thurston County
- Village of Walthill
- Village of Winnebago
- Blair Community Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 53: Regional Chemical Transportation Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Those in close proximity to transportation corridors -Possible evacuations -Hospitals, nursing homes, and the elderly at greater risk due to low mobility
Economic	<ul style="list-style-type: none"> -Evacuations and closed transportation routes could impact businesses near spill
Built Environment	<ul style="list-style-type: none"> -Risk of fire or explosion
Infrastructure	<ul style="list-style-type: none"> -Transportation routes can be closed
Critical Facilities	<ul style="list-style-type: none"> -Risk of fire, explosion, or other damages -Risk of evacuation
Climate	<ul style="list-style-type: none"> -More extreme weather events and flood events put transportation corridors at risk of flooding at greater risk

Dam Failure

According to the Nebraska Administrative Code, dams are “any artificial barrier, including appurtenant works, with the ability to impound water, wastewater, or liquid-borne materials and which is:

- twenty-five feet or more in height from the natural bed of the stream or watercourse measured at the downstream toe of the barrier, or from the lowest elevation of the outside limit of the barrier if it is not across a stream channel or watercourse, to the maximum storage elevation, or
- has an impounding capacity at maximum storage elevation of fifty acre-feet or more, except that any barrier described in this subsection which is not in excess of six feet in height or which has an impounding capacity at maximum storage elevation of not greater than fifteen acre-feet shall be exempt, unless such barrier, due to its location or other physical characteristics, is classified as a high hazard potential dam.

Dams do not include:

- an obstruction in a canal used to raise or lower water;
- a fill or structure for highway or railroad use, but if such structure serves, either primarily or secondarily, additional purposes commonly associated with dams it shall be subject to review by the department;
- canals, including the diversion structure, and levees; or
- water storage or evaporation ponds regulated by the United States Nuclear Regulatory Commission.⁵⁴

The NeDNR uses a classification system for dams throughout the state, including those areas participating in this plan. The classification system includes three classes, which are defined in the table below.

Table 54: Dam Size Classification

SIZE	EFFECTIVE HEIGHT (FT) X EFFECTIVE STORAGE (ACRE-FT)	EFFECTIVE HEIGHT
Small	≤ 3,000 acre-ft	And ≤ 35 feet
Intermediate	> 3,000 acre-ft to < 30,000 acre-ft	Or > 35 feet
Large	≥ 30,000 acre-ft	Regardless of height

Source: NeDNR, 2013⁵⁵

The effective height of a dam is defined as the difference in elevation in feet between the natural bed of the stream or watercourse measured at the downstream toe (or from the lowest elevation of the outside limit of the barrier if it is not across stream) to the auxiliary spillway crest. The effective storage is defined as the total storage volume in acre-feet in the reservoir below the elevation of the crest of the auxiliary spillway. If the dam does not have an auxiliary spillway, the effective height and effective storage should be measured at the top of dam elevation.

⁵⁴ Nebraska Department of Natural Resources. "Department of Natural Resources Rules for Safety of Dam and Reservoirs." Nebraska Administrative Code, Title 458, Chapter 1, Part 001.09.

⁵⁵ Nebraska Department of Natural Resources. 2013. "Classification of Dams: Dam Safety Section."
<https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/damsafety/resources/Classification-Dams.pdf>.

Dam failure, as a hazard, is described as a structural failure of water impounding structure. Structural failure can occur during extreme conditions, which include but are not limited to:

- Reservoir inflows in excess of design flows
- Flood pools higher than previously attained
- Unexpected drop in pool level
- Pool near maximum level and rising
- Excessive rainfall or snowmelt
- Large discharge through spillway
- Erosion, landslide, seepage, settlement, and cracks in the dam or area
- Earthquakes
- Vandalism
- Terrorism

NeDNR regulates dam safety and has classified dams by the potential hazard each poses to human life and economic loss. The following are classifications and descriptions for each hazard class:

- **Minimal Hazard Potential** - failure of the dam expected to result in no economic loss beyond the cost of the structure itself and losses principally limited to the owner's property.
- **Low Hazard Potential** - failure of the dam expected to result in no probable loss of human life and in low economic loss. Failure may damage storage buildings, agricultural land, and county roads.
- **Significant Hazard Potential** - failure of the dam expected to result in no probable loss of human life but could result in major economic loss, environmental damage, or disruption of lifeline facilities. Failure may result in shallow flooding of homes and commercial buildings or damage to main highways, minor railroads, or important public utilities.
- **High Hazard Potential** - failure of the dam expected to result in loss of human life is probable. Failure may cause serious damage to homes, industrial or commercial buildings, four-lane highways, or major railroads. Failure may cause shallow flooding of hospitals, nursing homes, or schools.

Dams that are classified with high hazard potential require the creation of an Emergency Action Plan (EAP). The EAP defines responsibilities and provides procedures designed to identify unusual and unlikely conditions which may endanger the structural integrity of the dam within sufficient time to take mitigating actions and to notify the appropriate emergency management officials of possible, impending, or actual failure of the dam. The EAP may also be used to provide notification when flood releases will create major flooding. An emergency situation can occur at any time; however, emergencies are more likely to happen when extreme conditions are present. The EAP includes information regarding the efficiency of emergency response entities so that proper action can be taken to prevent the loss of life and property. Local emergency response entities generally included in an EAP include but are not limited to 911 Dispatch, County Sheriffs, Local Fire Departments, Emergency Management Agency Director, County Highway Department, and the National Weather Service (NWS). There are 35 high hazard dams located within the planning area.

Location

Communities or areas downstream of a dam, especially high hazard dams, are at greatest risk of property or infrastructure damage and loss of life due to dam failure. In total there are 156 dams located within the planning area, as well as new dams which are currently planned/under construction and one undefined hazard dam in Dakota County. New dams anticipated to be completed in the next five years include Papio Creek WP-7 near Papillion. At this time dam owners and the NeDNR have opted at this time to not include dam breach maps or inundation maps in hazard mitigation plans due to the sensitive nature of this information. Requests can be made of the dam owner or the Dam Safety Division of NeDNR to view an inundation to view an inundation map specific to a dam. Figure 28 maps the physical locations of dams in the planning area.

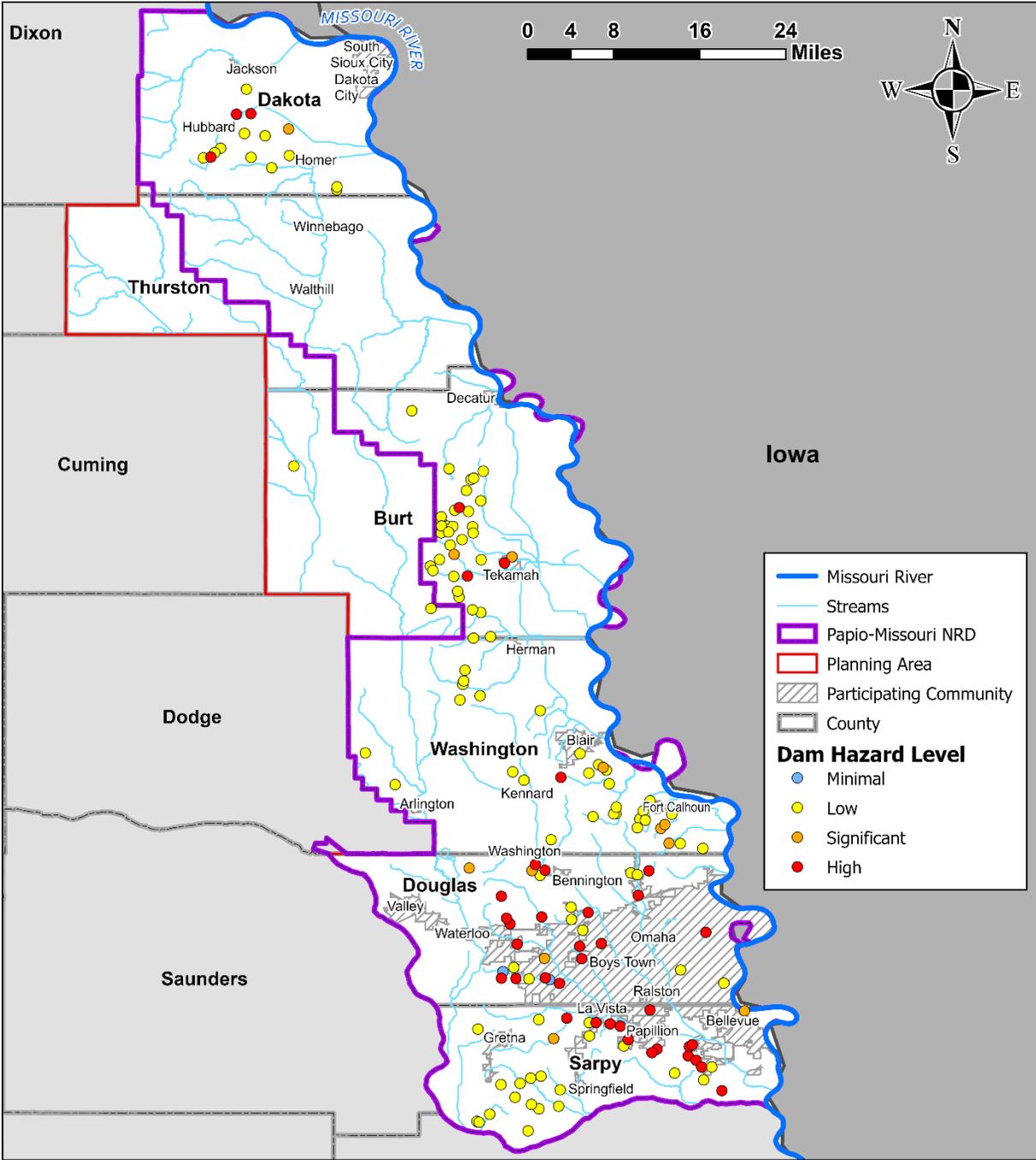
Table 55: Dams in the Planning Area

COUNTY	MINIMAL HAZARD	LOW HAZARD	SIGNIFICANT HAZARD	HIGH HAZARD	TOTAL
Burt	0	32	2	3	37
Dakota	0	11	1	3	15
Douglas	0	14	3	17	34
Sarpy	0	22	2	12	36
Thurston	0	0	0	0	0
Washington	0	30	4	1	35
Total	0	110	12	35	157

Source: NeDNR, 2020⁵⁶

⁵⁶ Nebraska Department of Natural Resources. 2019. "Nebraska Dam Inventory." <https://dnr.nebraska.gov/dam-safety/nebraska-dam-inventory>.

Figure 28: Dam Locations in the Planning Area





Created By: MW
Date: 12/7/2020
Software: ArcGIS Pro 2.6.2
File Name: PapioNRD_Upfront.aprx

This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plat.

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Dam Locations



The following table lists dams classified as “High Hazard” in the planning area.

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Table 56: High Hazard Dams in the Planning Area

NID	DAM NAME	OWNER	STREAM NAME	DOWNSTREAM TOWN
Burt County				
NE01597	Tekamah-Mud Creek 22-A	P-MRNRD	Tekamah Creek	Tekamah
NE01690	Tekamah-Mud Creek 5-A	P-MRNRD	Tekamah Creek	Tekamah
NE03103	Silver Creek 11	P-MRNRD	Silver Creek	Farmstead
Dakota County				
NE02700	Hubbard Dam	P-MRNRD	Pigeon Creek	Hubbard
NE03270	Pigeon-Jones Creek 15	P-MRNRD	Jones Creek	None
NE08466*	Pigeon Jones Creek 12A	P-MRNRD	Pigeon Creek	Hubbard
Douglas County				
NE00030	Lonergan Dam	JSP Lakeside LLC	Little Papio Creek	Omaha
NE00031	Boys Town Dam 2	First National Business Park Owners Association	Big Papio Creek	Omaha
NE00032	Legacy Dam	Legacy Homeowners Association	Boxelder Creek	Omaha
NE00138	Candlewood Dam	P-MRNRD	Big Papio Creek	Omaha
NE00307	Boys Town Dam 1	Father Flanagan's Boys Home	Hell Creek	Omaha
NE01065	Papillion Creek Site 16 - Standing Bear Dam	USACE	Papio Creek	Omaha
NE01518	Papillion Creek Site 11 - Cunningham Dam	USACE	Little Papio Creek	Omaha
NE02185	Papillion Creek Site 18 - Zorinsky Dam	USACE	Boxelder Creek	Omaha
NE02426	Indian Creek Golf Course Dam 1	Gottsch Enterprises LLC	West Papio Creek	Rural Elkhorn
NE02427	Indian Creek Golf Course Dam 2	Gottsch Enterprises LLC	West Papio Creek	Rural Elkhorn
NE02585	Newport Landing Dam	P-MRNRD	Big Papio Creek	Bennington
NE02631	Bennington Lake Basin 2	Newport Landing Homeowners Association	Big Papio Creek	Bennington
NE02638	Sachs-Palmer Dam	P-MRNRD	Big Papio Creek	Rural Elkhorn
NE02735	Zorinsky Basin 3 - Whitehawk	P-MRNRD	Boxelder Creek	Omaha
NE02784	Papio Creek 13 - Youngman	P-MRNRD	West Papio Creek	Omaha
NE03289	Papio Creek 15-A	P-MRNRD	West Papio Creek	Omaha
NE08588*	Zorinsky Basin 2	P-MRNRD	Boxelder Creek	Omaha
NE09714	Adams Park Dam	City of Omaha	Missouri River	Omaha
Sarpy County				
NE00092	Papio Creek S-32	P-MRNRD	Big Papio Creek	Bellevue
NE01751	Papio Creek S-31	P-MRNRD	South Papio Creek	Bellevue
NE01818	Papio Creek S-27	P-MRNRD	Papio Creek	Bellevue

NID	DAM NAME	OWNER	STREAM NAME	DOWNSTREAM TOWN
NE01882	Papillion Creek Site 20 - Wehrspann Dam	USACE	Papio Creek	Omaha
NE02217	Thompson Creek Dam	City Of La Vista Public Works Department	Thompson Creek	La Vista
NE02430	Papio Creek 21 - Walnut Creek	P-MRNRD	Walnut Creek	Papillion
NE02512	Lakewood Villages Upper Dam	Lakewood Villages Lake Lot Owners Assn	Papio Creek	Bellevue
NE02513	Lakewood Villages Lower Dam	Lakewood Villages Lake Lot Owners Assn	Papio Creek	Bellevue
NE02653	Hanson Lake Dam	P-MRNRD	Platte River	Hanson Lakes
NE02830	Shadow Lake Dam	P-MRNRD	Midland Creek	Papillion
NE02831	Midland Lake Dam	P-MRNRD	Midland Creek	Papillion
NE05082	Prairie Queen Main Dam	P-MRNRD	South Papillion Creek	La Vista
NE09746*	Papio Creek WP-6	P-MRNRD	Schram Creek	Papillion
NE09785	Papio Creek WP-7*	P-MRNRD	West Papillion Creek	Papillion
Washington County				
NE01883	Papio Creek W-3	P-MRNRD	Big Papio Creek	Kennard

Source: NeDNR, 2020⁵⁷; *Indicates dams are approved for construction as of September 2020

Upstream Dams Outside the Planning Area

Several dams and reservoirs are located in the Missouri River basin upstream from the P-MRNRD boundary. Of these dams and reservoirs, six are located on the main stem of the Missouri River and provide the majority of the flood peak discharge reduction in the NRD counties from the Missouri River. Data on these dams are provided in the table below.

Table 57: Upstream Dams of Concern

DAM	LOCATION	YEAR OPERATIONAL	HAZARD POTENTIAL
Big Bend	Fort Thompson, South Dakota	1964	High
Fort Peck	Fort Peck, Montana	1940	High
Fort Randall	Pickstown, South Dakota	1953	High
Garrison	Riverdale, North Dakota	1955	High
Gavin's Point	Yankton, South Dakota	1955	High
Oahe	Pierre, South Dakota	1962	High
Kingsley Dam	Keystone, Nebraska	1941	High

During significant flood events heightened releases from upstream dams may contribute to flooding impacts in the planning area. Of the dams listed above, only four are designed for significant flood control: Fort Peck, Garrison, Oahe, and Fort Randall. Notably during the 2011 flood event, heightened dam release rates, including from Gavins Point, contributed to flooding impacts.

Historical Occurrences

According to the Stanford university National Performance of Dams Program and NeDNR no dam failure events have occurred within the planning area. However during the August 1999 flood

⁵⁷ Nebraska Department of Natural Resources. 2019. "Nebraska Dam Inventory." <https://dnr.nebraska.gov/dam-safety/nebraska-dam-inventory>.

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event, Summit Lake Dam (Tekamah Mud Creek 5-A) experienced high water levels and was within inches of flowing over the crest of the auxiliary spillway. This dam is located on Tekamah Creek approximately three miles west of Tekamah near Highway 32 in Burt County.

Additionally, no dams of concern upstream of the planning area have experienced failure events. Each dam is inspected on a regular basis and after flash flood events. If problems are found during an inspection, the proper course of action is taken to ensure the structural integrity of the dam is preserved. In the event that dam failure is imminent, the EAP for the dam governs the course of action.

Average Annual Losses

Due to a lack of data and the sensitive nature of this hazard, potential losses are not calculated for this hazard. Community members in the planning area that wish to quantify the threat of dam failure should contact their County Emergency Management, the P-MRNRD, or the NeDNR.

Extent

While a breach of a high hazard dam would certainly impact those in inundation areas, the total number of people and property exposed to this threat would vary based on the dam location. Since inundation maps are not made publicly available for security reasons, the following is provided as a description of areas affected in the inundation area from the County's Local Emergency Operations Plan (LEOP) where available for specific high hazard dams. Note that not all of the high hazard dams in each county are given extended descriptions in the county LEOPs.

Burt County

Tekamah-Mud Creek 9-A – The inundation would affect the Tekamah Creek as far as Tekamah. In Burt County, the area affected would be slightly greater than the 100-year floodplain with the greatest effect on Tekamah and Summit and Arizona Townships which would approach 100 percent inundation.

Tekamah-Mud Creek 5-A – The inundation area would affect the Tekamah Creek as far as Tekamah. In Burt County, the area affected would be slightly greater than the 100-year floodplain with the greatest affect on Summit and Arizona Townships.

Approximately 23 percent of the population of Burt County could be affected by the failure of one or another of these dams.

Dakota County

Gavins Point Dam (outside the planning area) – The inundation area would affect the Missouri River along northern and southern edge of Dakota County. In Dakota County, the area affected would be slightly greater than the 100-year floodplain with the greatest affect on South Sioux City, Dakota City, and areas north of Jackson.

Kramper Lake Dam – The inundation areas would affect the Jones Creek/Pigeon Creek as far South as Clay Blvd. In Dakota County, the area affected would be slightly greater than the 100-year floodplain with the greatest affect on State Hwy 35 and US Hwy 77.

Approximately four percent of the population of Dakota County could be affected by the failure of one or another of these dams.

Douglas County

Papio Creek 11 – Cunningham Lake – The inundation area would affect the entire Little Papillion Creek as far Harrison Street. In Douglas Creek, the area affected would be slightly greater than the 1 percent floodplain with the greatest effect on areas along the creek through Omaha, which would approach 100 percent inundation.

Papio Creek 16 – Standing Bear Lake – The inundation area would affect the Big Papillion Creek as far Harrison Street. In Douglas County, the area affected would be slightly greater than the 1 percent floodplain with the greatest effect on areas along the creek through Omaha, which would approach 100 percent inundation.

Approximately 10 percent of the population of Douglas County would be affected by the failure of one or another of these dams.

Sarpy County (descriptions from 2011 LEOP)

Upper Missouri River Dams (Oahe, Big Bend, Fort Randall, and Gavins Point) – The combined failure of all four dams would affect Bellevue, Papillion, and La Vista. Inundation areas would be greater than the 1 percent floodplain. Papillion Creek would be affected to the west of Papillion. The Platte River would be affected to just southeast of Springfield.

Papio Creek 16 – Standing Bear Lake – The inundation would affect the Big Papillion Creek through Sarpy County. The area affected would be less than the 1 percent floodplain with the greatest effect on Chalco and portions of Papillion.

Papio Creek 18 - Zorinsky Lake – The inundation area would affect the west branch of the Papillion Creek beyond its confluence with the Big Papillion Creek. The area affected would be greater than the 1 percent floodplain with the greatest effect on downtown Papillion.

Papio Creek 20 – Wehrspann Lake – The inundation area would affect the entire Papillion Creek as far east as it extends. In Sarpy County, area affected would be slightly greater than the 1 percent floodplain with the greatest effect on Chalco and portions of Papillion, which would approach 100 percent inundation.

Papio Dam Site 21 – Walnut Creek – Failure would be equivalent to slightly less than a 1 percent chance flood in the west branch of the Papillion Creek, from north of the dam to the confluence with the Papillion Creek.

Kingsley Dam (outside the planning area) – Failure would be equivalent to a 0.2 percent chance flood throughout western and southern Sarpy County, including much of the area south of Offutt Air Force Base. Backwater rises can also be expected on the Buffalo, Springfield, and Papillion Creeks, and the Missouri River.

Approximately 3.8 percent of the population of Sarpy County could be affected by the failure of one or more of these dams.

Thurston County

Gavin's Point Dam (outside of planning area). The inundation are would affect the Missouri River as far as Kansas City, Missouri. In Thurston County, the area affected would be

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slightly greater than the 100-year floodplain with the greatest effect on the sparsely populated eastern border of the county which would approach 100 percent inundation.

Approximately five percent of the population of Thurston County could be affected by the failure of this dam.

Washington County

Gavin's Point Dam (outside of planning are). Approximately five percent (5%) of the population of Washington County could be affected by the failure of one or another of these dams.

Probability

According to the 2019 Nebraska State Hazard Mitigation Plan and NeDNR, the probability of a high hazard dam failing is “very low” due to the high design standards for this class of dam. There is a higher possibility of a significant or low hazard dam failing as those dams are not designed to the same standard. For the purpose of this plan, the probability of dam failure will be stated as less than 1% annually as no dam failure events have been reported in the planning area.

Community Top Hazard Status

The following jurisdictions identified Dam Failure as a top hazard of concern:

- Burt County
- Village of Decatur
- Village of Tekamah
- Dakota County
- City of Dakota City
- Douglas County
- City of Bennington
- City of Omaha
- City of Valley
- Sarpy County
- City of La Vista
- City of Papillion
- Washington County

Regional Vulnerabilities

According to the *Classification of Dams (2013)* developed and updated by NeDNR, “*the potential for future development must be taken into consideration when determining the hazard potential class for a dam. Any dam located in close proximity to a city or village as detailed in Table 68 must be designed to meet the requirements for a high hazard potential structure. The design requirements can be adjusted if development in the downstream breach inundation area is sufficiently curtailed due to zoning restrictions, easements, deed restrictions, or other methods of restriction acceptable to the Department.*”⁵⁸ Regional vulnerabilities to dam failure vary based on surrounding development and other flood control measures. As communities and the region develop, considerations should be made to a variety of local vulnerabilities. The following table

⁵⁸ Nebraska Department of Natural Resources. March 2013. “Classification of Dams.” <https://dnr.nebraska.gov/sites/dnr.nebraska.gov/files/doc/dam-safety/resources/Classification-Dams.pdf>.

provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 58: Regional Dam Failure Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Those living downstream of high hazard dams -Evacuations likely with high hazard dams -Hospitals, nursing homes, and the elderly at greater risk due to low mobility
Economic	<ul style="list-style-type: none"> -Businesses located in the inundation areas would be impacted and closed for an extended period of time -Employees working in the inundation area may be out of work for an extended period of time
Built Environment	<ul style="list-style-type: none"> -Damage to homes and buildings
Infrastructure	<ul style="list-style-type: none"> -Transportation routes could be closed for extended periods of time
Critical Facilities	<ul style="list-style-type: none"> -Critical facilities in inundation areas are vulnerable to damages
Climate	<ul style="list-style-type: none"> -Increased annual precipitation contributes to sustained stress on systems -Changes in water availability and supply can constrain energy production and reservoir stores

Drought and Extreme Heat

Drought is generally defined as a natural hazard that results from a substantial period of below normal precipitation. Although many erroneously consider it a rare and random event, drought is a normal, recurrent feature of climate. It occurs in virtually all climatic zones, but its characteristics vary significantly from one region to another. A drought often coexists with periods of extreme heat, which together can cause significant social stress, economic losses, and environmental degradation. Extreme heat can also be characterized by long periods of high temperatures in combination with high humidity. During these conditions, the human body has difficulty cooling through the normal method of the evaporation of perspiration. Health risks arise when a person is overexposed to heat or prolonged drought conditions. Extreme heat can also cause people to overuse air conditioners, which can lead to power failures. Power outages for prolonged periods increase the risk of heat stroke and subsequent fatalities due to loss of cooling and proper ventilation.

The planning area is a mixture of rural and large metropolitan areas, which presents an added vulnerability to extreme heat and drought events as:

- In rural areas those suffering from an extreme heat event may be farther away from medical resources;
- Cities trap heat to a greater extent, exacerbating extreme heat events for residents; and
- Drought conditions can significantly and negatively impact the agricultural economic base and numerous affiliate industries.

Drought is a slow-onset, creeping phenomenon that can affect a wide range of people, livestock, and industries. While many impacts of these hazards are non-structural, there is the potential that during extreme heat or prolonged drought events structural impacts can occur. Drought normally affects more people than other natural hazards, and its impacts are spread over a larger geographical area. As a result, the detection and early warning signs of drought conditions or long-term extreme heat and assessment of impacts are more difficult to identify than that of quick-onset natural hazards (e.g., flood) that results in more visible impacts. According to the National Drought Mitigation Center (NDMC), droughts are classified into four major types:

- **Meteorological Drought** – is defined based on the degree of dryness and the duration of the dry period. Meteorological drought is often the first type of drought to be identified and should be defined regionally as precipitation rates and frequencies (norms) vary.
- **Agricultural Drought** – occurs when there is deficient moisture that hinders planting germination, leading to low plant population per hectare and a reduction of final yield. Agricultural drought is closely linked with meteorological and hydrological drought; as agricultural water supplies are contingent upon the two sectors.
- **Hydrological Drought** – occurs when water available in aquifers, lakes, and reservoirs falls below the statistical average. This situation can arise even when the area of interest receives average precipitation. This is due to the reserves diminishing from increased water usage, usually from agricultural use of high levels of evapotranspiration, resulting from prolonged high temperatures. Hydrological drought often is identified later than meteorological and agricultural drought. Impacts from hydrological drought may manifest themselves in decreased hydropower production and loss of water-based recreation.
- **Socioeconomic Drought** – occurs when the demand for an economic good exceeds supply due to a weather-related shortfall in water supply. The supply of many economic

goods includes, but are not limited to: water, forage, food grains, fish, and hydroelectric power.⁵⁹

The National Weather Service (NWS) is responsible for issuing excessive heat outlooks, excessive heat watches, and excessive heat warnings.

- **Excessive heat outlooks** are issued when the potential exists for an excessive heat event in the next 3 to 7 days. Excessive heat outlooks can be utilized by public utility staffs, emergency managers, and public health officials to plan for extreme heat events.
- **Excessive heat watches** are issued when conditions are favorable for an excessive heat event in the next 24 to 72 hours.
- **Excessive heat warnings** are issued when an excessive heat event is expected in the next 36 hours. Excessive heat warnings are issued when an extreme heat event is occurring, is imminent, or has a very high probability of occurring.

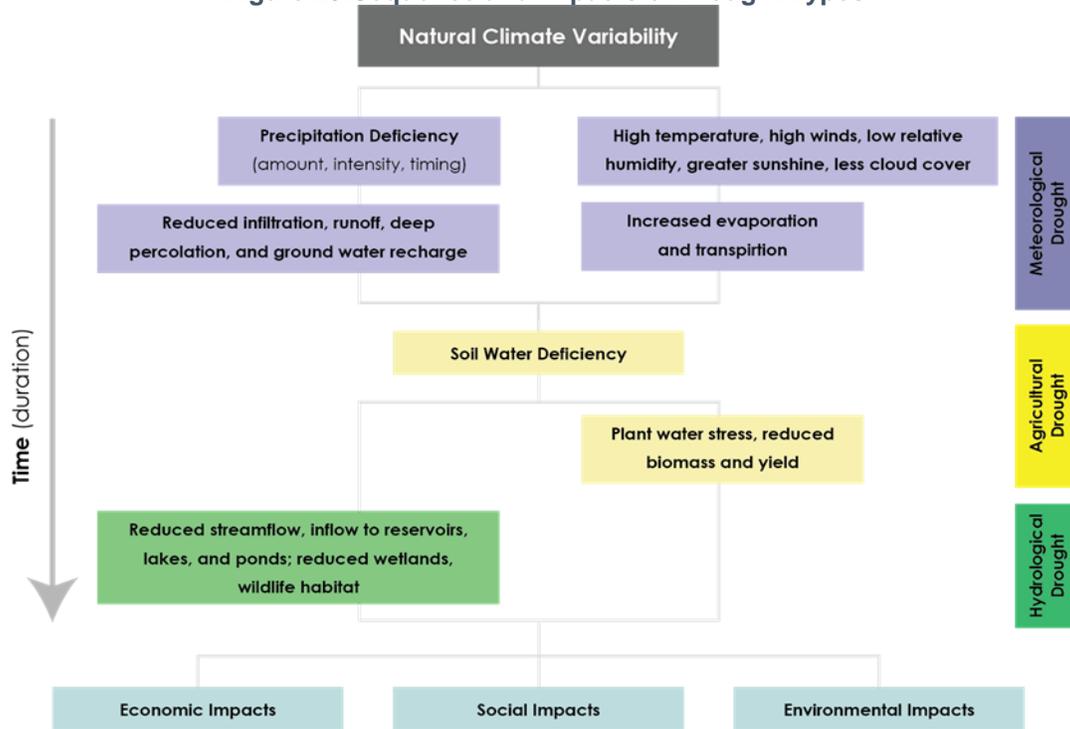
Along with humans, animals also can be affected by high temperatures, drought conditions, and humidity levels. For instance, cattle and other farm animals respond to heat by reducing feed intake, increasing their respiration rate, and increasing their body temperature. These responses assist the animal in cooling itself, but this is usually not sufficient. When animals overheat, they will begin to shut down body processes not vital to survival, such as milk production, reproduction, or muscle building.

Additionally, government authorities report that civil disturbances and riots are more likely to occur during heat waves or when water supplies are threatened. In cities, pollution becomes a problem with high heat as the heat traps pollutants in densely populated urban areas. Adding pollution to the stresses associated with the heat magnifies the health threat to the urban population.

The following figure indicates different types of droughts, their temporal sequence, and the various types of effects they can have on a community.

⁵⁹ National Drought Mitigation Center. 2017. "Drought Basics." <http://drought.unl.edu/DroughtBasics.aspx>.

Figure 29: Sequence and Impacts of Drought Types



Source: National Drought Mitigation Center, University of Nebraska-Lincoln, 2017⁶⁰

Location

The entire planning area is susceptible to impacts resulting from drought and extreme heat.

Historical Occurrences

The Palmer Drought Severity Index (PDSI) is utilized by climatologists to standardize global long-term drought analysis. The PDSI was developed in 1965 to measure dryness based on recent precipitation and temperatures. The data for the planning area was collected from Climate Division 6 – East Central Nebraska which includes the planning area between the years of 1895 and 2020. The table below shows details of the Palmer classifications. The figure below shows the data from this time period. The negative Y axis represents a drought, for which ‘-2’ indicates a moderate drought, ‘-3’ a severe drought, and ‘-4’ an extreme drought. Major drought events occurred in the 1930s (Dust Bowl era), the 1980s and the most recent 2012 drought. The planning area has a cyclical wet and dry period.

Table 59: Palmer Drought Magnitude

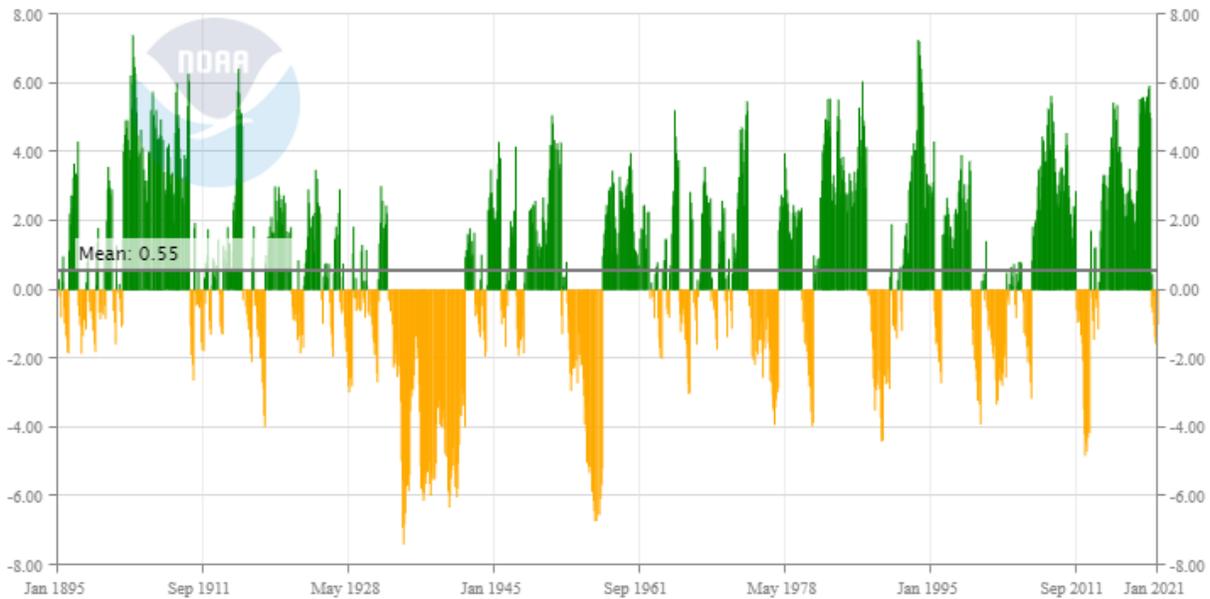
NUMERICAL VALUE	DESCRIPTION	NUMERICAL VALUE	DESCRIPTION
4.0 or more	Extremely Wet	-0.5 to -0.99	Incipient Dry Spell
3.0 to 3.99	Very Wet	-1.0 to -1.99	Mild Drought
2.0 to 2.99	Moderately Wet	-2.0 to -2.99	Moderate Drought
1.0 to 1.99	Slightly Wet	-3.0 to -3.99	Severe Drought
0.5 to 0.99	Near Normal	-4.0 or less	Extreme Drought
0.49 to -0.49	Near Normal	--	--

Source: NCEI, Jan 1895-Jan 2020

⁶⁰ National Drought Mitigation Center. 2017. "Types of Drought." <http://drought.unl.edu/DroughtBasics/TypesofDrought.aspx>.

Figure 30: Palmer Drought Severity Index

Nebraska, Climate Division 6 Palmer Drought Severity Index (PDSI)



Source: NOAA

The following table indicates it is reasonable to expect drought to occur throughout the planning area. The planning area has experienced several ‘extreme’ drought and future moderate, severe, and extreme droughts are likely in the future.

Table 60: Historic Drought Events and Probability

DROUGHT MAGNITUDE	MONTHS IN DROUGHT	PERCENTAGE
-1 Magnitude (Mild)	135/1,501	9.0%
-2 Magnitude (Moderate)	91/1,501	6.1%
-3 Magnitude (Severe)	45/1,501	3.0%
-4 Magnitude or Greater (Extreme)	93/1,501	6.2%
Total Months in Drought	364/1,501	24.3%

Source: NCEI, Jan 1895-Jan 2020

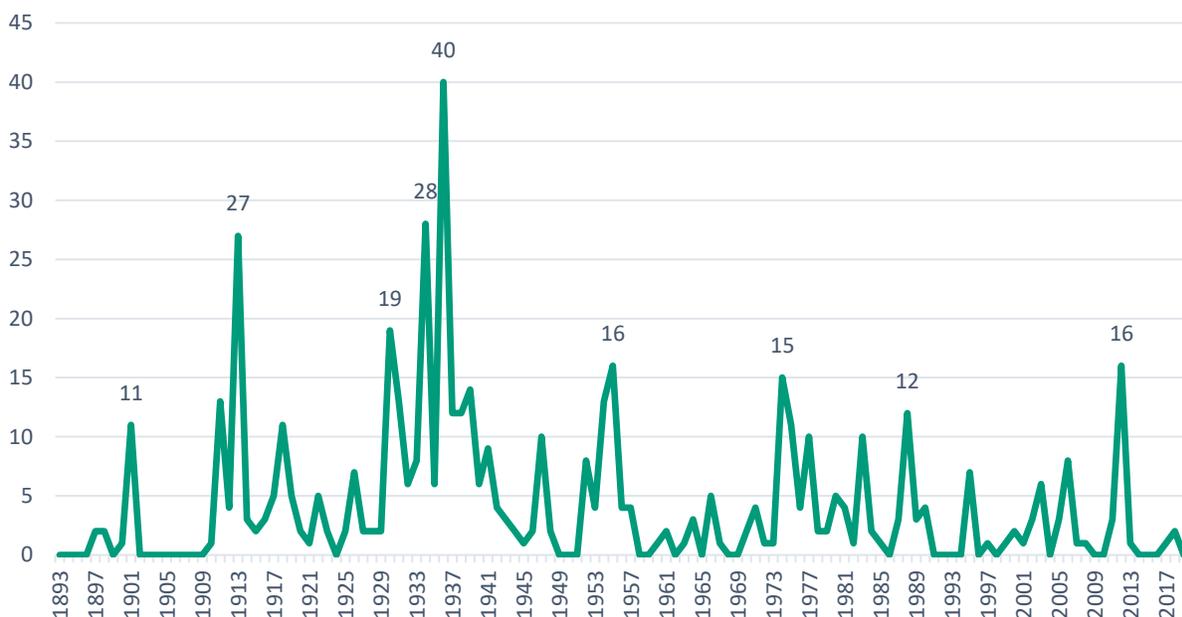
The planning area has experienced extreme droughts 16 times since 1895 (1931, 1934-1940, 1955-1957, 1981, 1989-1990, and 2012-2013). Severe droughts occurred in most decades dating back to the 1910’s with the exception of the 1920s, 1950s, and 1990s. Over half of all years dating back to 1895 experienced precipitation levels below what is considered normal for the planning area. The 2012 drought event is the most recent significant event on record for the planning area; however, the overall event did not warrant a presidential disaster declaration within Nebraska. The whole state of Nebraska was in severe drought conditions from the middle of July in 2012 to the end of May in 2013 and over 70% of the state was in exceptional drought conditions for over eight months. Numerous cities implemented mandatory water restrictions, and some encouraged voluntarily water conservation during the period of drought. Local planning teams reported a few impacts from the 2012 drought which were primarily lower water well levels and some

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communities encouraged water restrictions. One community working to reduce drought risk is the City of Blair. Currently, the city water utility is constructing a new water intake at a lower elevation on the Missouri River for its water treatment plant to mitigate the risk of low river levels during periods of drought. It is expected to be completed in 2022.

According to the High Plains Regional Climate Center (HPRCC), on average, the planning area experiences four days above 100°F per year. The planning area experienced the most days on record above 100°F in 1936 with 40 days and 1934 with 28 days. Conversely, 2019 was the most recent 'coolest' year on record with zero days above 100°F. However, this is likely attributed to a lack of reportable data.

Figure 31: Number of Days above 100°F

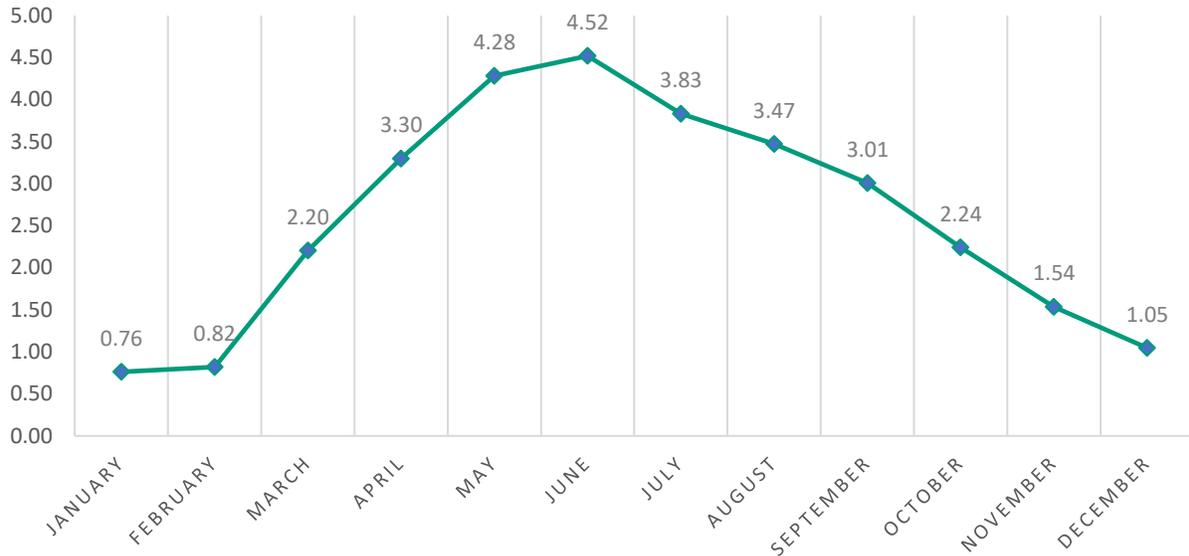


Source: HPRCC, 2020

On average, the planning area receives approximately 31 inches of precipitation annually.⁶¹ The following figure shows average precipitation per month in the planning area. Prolonged deviations from the norm showcase drought conditions and influence growing conditions for farmers or resource management needs for local agricultural producers.

⁶¹ NOAA National Centers for Environmental Information. January 2020. "Data Tools: 1981-2010 Normals." [datafile]. <https://www.ncdc.noaa.gov/cdoweb/datatools/normals>.

Figure 32: Average Monthly Precipitation



Source: NCEI, 2019

For the purposes of this plan, only reports of 'Excessive Heat' are analyzed from the NCEI Storm Events Database. However, several 'Heat' events have caused significant impacts to the planning area. Event information for significant Excessive Heat and Heat events are described below:

- **Heat - Dakota County 7/28/1999** – Excessive heat occurred with heat indices above 120 degrees. Several cattle were lost, and a 68-year-old woman died in an uncooled apartment in South Sioux City.
- **Heat - Douglas County 7/22/2005** – High temperatures in the upper 90s to around 105 and lows of 75 to 80 prevailed over much of eastern Nebraska and southwest Iowa from Friday July 22nd through Sunday the 24th. Afternoon heat index values reached 105 to 115 degrees across much of the area, with the highest values observed Friday. Temperatures in excess of 100 degrees continued on Monday over southeast Nebraska and southwest Iowa, but cooler 80s were observed over northeast Nebraska, and many lows over the entire region were slightly cooler Monday morning. Although many locations saw their highest heat index values on Friday due to higher dewpoints, the hottest day was Saturday when both Lincoln and Omaha hit 105 degrees and Norfolk reached 101. The 105 in Omaha was a record for the date and the hottest in 10 years. The excessive heat caused many cattle deaths over the region...especially over northeast Nebraska. One rendering company collected 1,250 head of dead cattle over the weekend, 200 alone from one producer. The rendering company estimated that losses to cattle producers would be in the millions of dollars. Although no human deaths because of the heat were confirmed, University of Nebraska Medical Center officials believed the death of an infant that was left in a vehicle for a while on Saturday was related to the weather. Also there was at least one report of a highway buckling because of the heat, Highway 75 in Cass county Nebraska.
- **Heat - Douglas County 6/27/2012** – As a large upper level ridge built over the central U.S., temperatures across eastern Nebraska and southwest Iowa climbed into the 90s to low 100s. When combined with dew point temperatures in the 60s and 70s, heat index

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values reached 105 to 115 degrees in east central and southeast Nebraska and across southwest Iowa during the afternoon and evening of June 27th and 28th. Overnight lows in the 70s to near 80 provided little relief on the 28th. A slow moving cool front brought some relief to parts of the area during the evening of the 27th and to the rest of the area during the evening and overnight hours of the 28th. One of the first prolonged heat-wave episodes of the season sent around 45 people to local hospitals in the Omaha area due to heat exhaustion. The heat was also apparently responsible for one death as a Council Bluffs Iowa man was found dead after crashing his vehicle into a construction zone and then attempting to walk for help a half mile down the road. His core body temperature was around 110 degrees.

- **Excessive Heat – Sarpy/Douglas Counties 6/22/2009** - *A period of hot and very humid conditions was observed over eastern Nebraska and southwest Iowa on June 22nd and 23rd. High temperatures were in the lower to upper 90s. Overnight lows were in the mid to upper 70s. The combination of the heat and humidity brought heat index values up into the 108 to 118-degree range. Since these extremely uncomfortable temperatures occurred with light winds, generally less than 10 mph, conditions became deadly for livestock, especially during the afternoon of the 23rd. It was estimated that at least 2,000 head of cattle died because of the heat in eastern Nebraska and western Iowa, most of them on the 23rd.*
- **Excessive Heat – Burt/Douglas/Sarpy/Thurston/Washington Counties 8/8/2010** - *A large portion of Nebraska experienced high temperatures into the mid and upper 90s with dew point temperatures reaching near 80, which produced a prolonged period of afternoon and early evening heat index values that reached from 105-115 degrees. In the Omaha area, about 30-40 people were treated at local hospitals for heat related issues.*
- **Heat – Burt/Douglas/Sarpy/Washington Counties 8/30/2013** – *Heat index values peaked in the 104 to 109-degree range as temperatures approached 100 with dew points around 70 degrees. At least 30 people were treated at area hospitals for heat related ailments during the heat wave in the Omaha area.*

Average Annual Losses

The annual property estimate was determined based upon NCEI Storm Events Database since 1996. The annual crop loss was determined based upon the RMA Cause of Loss Historical Database since 2000. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. The direct and indirect effects of extreme heat and drought are difficult to quantify. Potential losses such as power outages could affect businesses, homes, and critical facilities. High demand and intense use of air conditioning or water pumps can overload the electrical systems and cause damages to infrastructure. The NCEI database did not report any direct property damage due to extreme heat or drought events. However, it is important to note that additional heat damages were reported which were the result of loss of livestock during extreme heat events.

Table 61: Drought and Extreme Heat Losses

HAZARD TYPE	AVG. # DAYS OVER 100°F ¹	TOTAL PROPERTY LOSS ²	AVERAGE ANNUAL PROPERTY LOSS	TOTAL CROP LOSS ³	AVERAGE ANNUAL CROP LOSS
Drought	-	\$0	\$0	\$135,375,401	\$6,768,770
Extreme Heat	4 days	\$0	\$0	\$9,513,270	\$475,664

Source: 1 HPRCC (1893-2020), 2 NCEI (Jan 1996-Nov 2019), 3 USDA RMA (2000-2019)

The USDA reported a total of \$139,957,809 in drought relief to Nebraska from 2008 to 2011 for all five disaster programs: Supplemental Revenue Assistance payments (SURE); Livestock Forage Disaster Assistance Program (LFD); Emergency Assistance for Livestock, Honeybees, and Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish Program (ELAP); Livestock Indemnity Program (LIP); and Tree Assistance program (TAP).

The extreme drought in 2012 significantly affected the agricultural sector across the State of Nebraska and for the planning area. According to the PDSI, 2012's average severity index was ranked at a -4.47, with extremes in August and September of -7.35 and -7.57 respectively. The Farm Credit Services reported total indemnity payments to Nebraska totaled \$1.49 billion from crop loss. Cattle ranching is a large driver of the local planning area's economy. The 2012 drought forced ranchers to cull herds by as much as 60% to cope with reduced forage production with an estimated loss of \$200 per head by taking cattle to market earlier than normal. Neighborhood plots and small organic farms up to large-scale corn and soybean productions and ranches all faced agricultural declines. Hay production was down 28%, corn was down 16%, and soybean production dropped by 21%.⁶²

Estimated Loss of Electricity

According to the FEMA Benefit Cost Analysis (BCA) Reference Guide, if an extreme heat event occurred within the planning area, the following table assumes the event could potentially cause a loss of electricity for 10 percent of the population at a cost of \$126 per person per day.⁶³ In rural areas, the percent of the population affected and duration may increase during extreme events. The assumed damages do not take into account physical damages to utility equipment and infrastructure.

Table 62: Loss of Electricity – Assumed Damage by Jurisdiction

COUNTY	2017 (EST.) POPULATION	POPULATION AFFECTED (ASSUMED 10%)	ELECTRIC LOSS OF USE ASSUMED DAMAGE PER DAY
Burt	6,546	654	\$82,404
Dakota	20,529	2,052	\$258,552
Douglas	549,706	54,970	\$6,926,220
Sarpy	175,188	17,518	\$2,207,268
Thurston	7,055	705	\$88,830
Washington	20,414	2,041	\$257,166

⁶² National Integrated Drought Information System, National Drought Mitigation Center, and University of Nebraska-Lincoln. 2015. "From Too Much to Too Little: how the central U.S. drought of 2012 evolved out of one of the most devastating floods on record in 2011." https://www.drought.gov/drought/sites/drought.gov.drought/files/media/reports/regional_outlooks/CentralRegion2012DroughtAssessment_1-5-15.pdf.

⁶³ Federal Emergency Management Agency. June 2009. "BCA Reference Guide."

Extent

A key factor to consider regarding drought and extreme heat situations is the humidity level relative to the temperature. As is indicated in the following figure from the National Oceanic and Atmospheric Administration (NOAA), as the relative humidity increases, the temperature needed to cause a dangerous situation decreases. For example, for 100 percent relative humidity, dangerous levels of heat begin at 86°F whereas a relative humidity of 50 percent requires 94°F. The combination of relative humidity and temperature result in a Heat Index as demonstrated below:

$$100\% \text{ Relative Humidity} + 86^\circ\text{F} = 112^\circ\text{F Heat Index}$$

**Figure 33: NOAA Heat Index
Temperature (°F)**

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

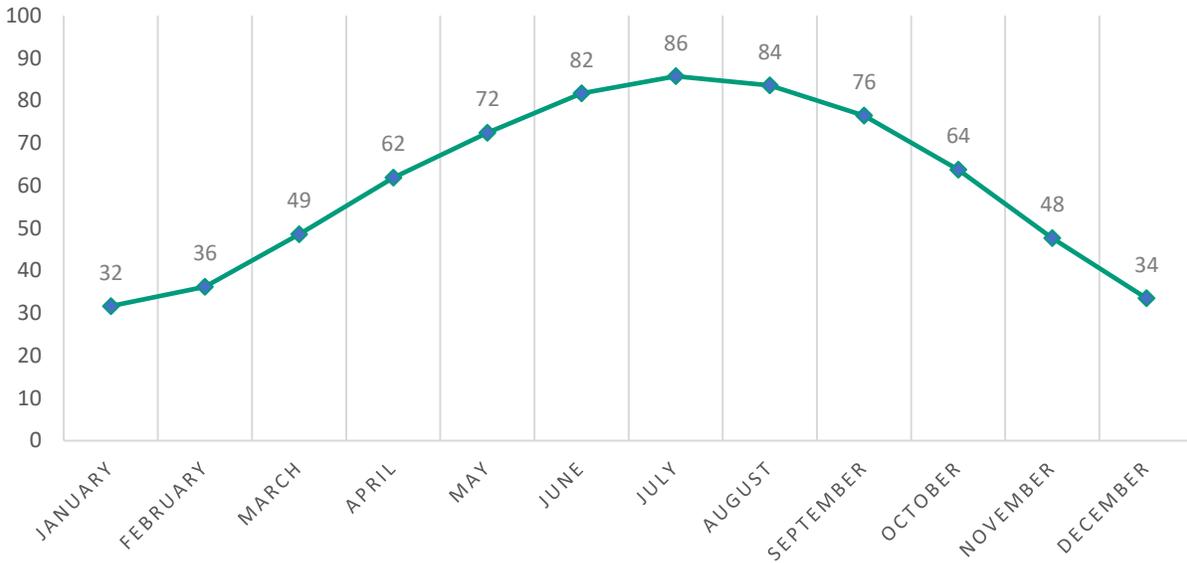
- Caution
- Extreme Caution
- Danger
- Extreme Danger



The figure above is designed for shady and light wind conditions. Exposures to full sunshine or strong hot winds can increase hazardous conditions and raise heat index values by up to 15°F. For the purposes of this plan, extreme heat is being defined as temperatures of 100°F or greater.

For the planning area the months with the highest average temperatures are June, July, and August.

Figure 34: Monthly Climate Normals Max Temperature (1981-2010)



Source: NCEI, 2019

Probability

Extreme heat is a regular part of the climate; there is a 100 percent probability that temperatures greater than 100°F will occur annually. Drought conditions are also likely to occur regularly in the planning area. The following table summarizes the magnitude of drought and monthly probability of occurrence.

Table 63: Record of Drought in the Planning Area

DROUGHT MAGNITUDE	MAGNITUDE	MONTHS IN DROUGHT	PERCENTAGE
4 or more to -0.99	No Drought	1,137/1,501	75.7%
-1 to -1.99	Mild Drought	135/1,501	9.0%
-2 to -2.99	Moderate Drought	91/1,501	6.1%
-3 to -3.99	Severe Drought	45/1,501	3.0%
-4.0 or less	Extreme Drought	93/1,501	6.2%

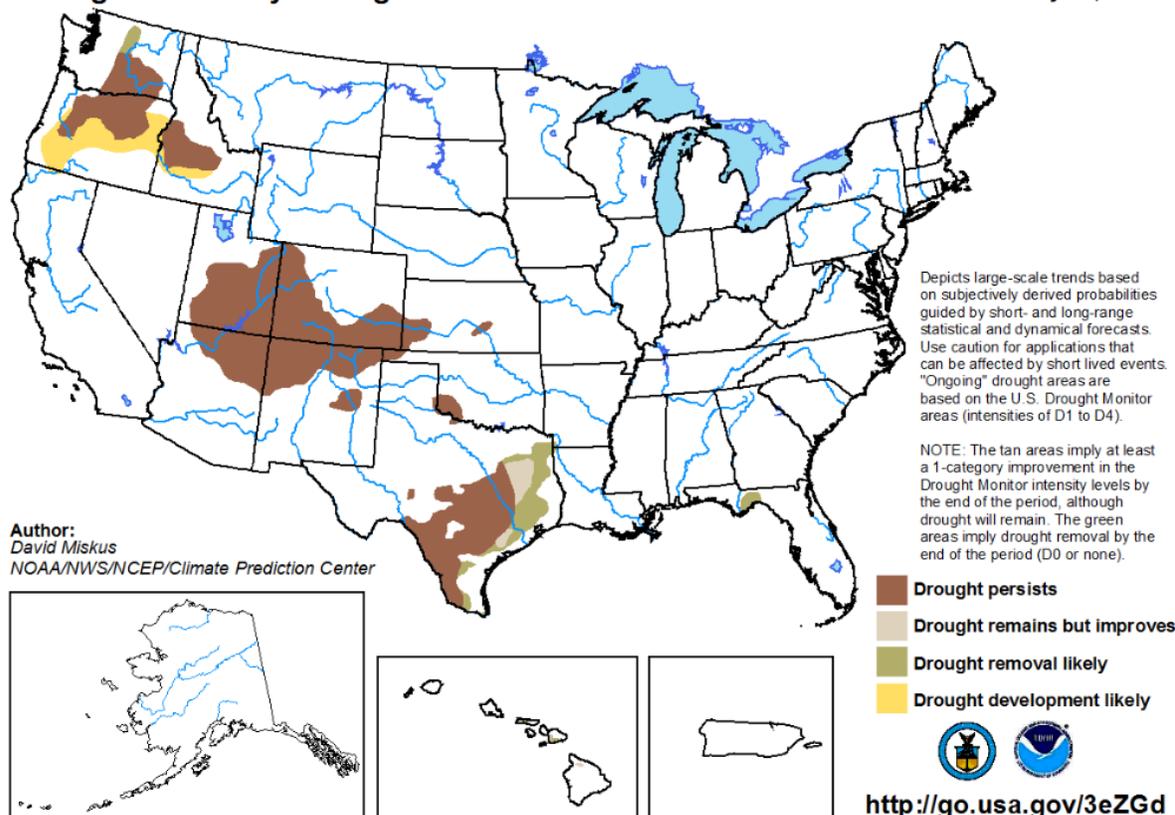
Source: NCEI, Jan 1895-Jan 2020

The U.S. Seasonal Drought Outlook (F) provides a short-term drought forecast that can be utilized by local officials and residents to examine the likelihood of drought developing or continuing depending on the current situation. The drought outlook is updated consistently throughout the year and should be reviewed on an ongoing basis. The following figure provides the drought outlook for February 2020 as an example.

Figure 35: U.S. Seasonal Drought Outlook

U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period

Valid for February 2020
Released January 31, 2020



Source: NCEI, February 2020

The Union for Concerned Scientists released a report in July 2019 titled *Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days*⁶⁴ which included predictions for extreme heat events in the future dependent on future climate actions. These figures show the average number of days per year above a selected heat index, or “feels like” temperature, for three different time periods: historical, midcentury, and late century. The table below summarizes those findings for the planning area. It is worth noting period of records and available data used in the following report is different than information provided by the more local HPRCC and may not be fully reflected.

⁶⁴ Union of Concerned Scientists. 2019. “Killer Heat in the United States: Climate Choices and the Future of Dangerously Hot Days.” <https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf>.

Table 64: Extreme Heat Predictions for Days over 100F

COUNTY	HISTORICAL AVERAGE 1971-2000 (DAYS PER YEAR)	MIDCENTURY PREDICTION 2036-2065 (DAYS PER YEAR)	LATE CENTURY 2070-2099 (DAYS PER YEAR)
Burt	6	35	61
Dakota	5	30	56
Douglas	5	34	60
Sarpy	6	37	63
Thurston	6	33	58
Washington	6	35	60

Source: Union of Concerned Scientists, 1971-2000⁶⁵

Community Top Hazard Status

The following jurisdictions identified Drought and Extreme Heat as a top hazard of concern:

- Burt County
- City of Tekamah
- Village of Homer
- Sarpy County
- City of Blair
- Winnebago Indian Tribe

Regional Vulnerabilities

The Drought Impact Reporter is a database of drought impacts throughout the United States with data going back to 2000. The Drought Impact Reporter has recorded a total of 30 drought-related impacts throughout the region. This is not a comprehensive list of droughts which may have impacted the planning area, but only those with reported impacts. These impacts are summarized in the following table.

Table 65: Drought Impacts in Planning Area

CATEGORY	DATE	AFFECTED COUNTIES	TITLE
Water Supply & Quality	7/25/2005	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 7/25/2005
Water Supply & Quality	7/26/2005	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 7/26/2005
Water Supply & Quality	7/29/2005	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 7/29/2005

⁶⁵ 58 Union of Concerned Scientists. 2019. "Extreme Heat and Climate Change: Interactive Tool". <https://www.ucsusa.org/global-warming/global-warming-impacts/extreme-heatinteractive-tool?location=lanca-ster-county--ne>

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CATEGORY	DATE	AFFECTED COUNTIES	TITLE
Water Supply & Quality	8/3/2005	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 8/3/2005
Water Supply & Quality	10/21/2005	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 10/21/2005
Fire	3/8/2006	Douglas County	Fire impact from Media submitted on 3/8/2006
Fire	7/5/2006	Douglas County	Fire impact from Media submitted on 7/5/2006
Water Supply & Quality	7/14/2006	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Water Supply & Quality impact from Media submitted on 7/14/2006
Relief, Response & Restrictions	9/28/2006	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Relief, Response & Restrictions impact from Media submitted on 9/28/2006
Relief, Response & Restrictions	11/27/2006	Dakota County	Relief, Response & Restrictions impact from Media submitted on 11/27/2006
Water Supply & Quality	7/24/2007	Sarpy County	Water Supply & Quality impact from Media submitted on 7/24/2007
Water Supply & Quality	7/26/2007	Sarpy County	Water Supply & Quality impact from Media submitted on 7/26/2007
Agriculture, Relief, Response & Restrictions, Water Supply & Quality	7/20/2012	Burt County, Dakota County, Douglas County, Sarpy County, Washington County	Low flow in several Nebraska rivers brought surface irrigation closures
Water Supply & Quality	7/26/2012	Douglas County, Omaha, NE	Record water use in Omaha, Nebraska as drought, heat increase water demand
Plants & Wildlife, Tourism & Recreation, Water Supply & Quality	8/22/2012	Douglas County, Valley, NE, Sarpy County	Lower Platte River in Nebraska experiencing record low flows
Agriculture, Relief, Response &	4/24/2013	Burt County, Thurston County	Water use restrictions for irrigators in the Lower Elkhorn

CATEGORY	DATE	AFFECTED COUNTIES	TITLE
Restrictions, Water Supply & Quality			Natural Resources District in northeastern Nebraska
Relief, Response & Restrictions, Water Supply & Quality	4/24/2013	Burt County, Thurston County	More than \$100,000 paid to assist those with dry domestic wells in northeastern Nebraska
Agriculture, Relief, Response & Restrictions	5/17/2013	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Drought-related USDA disaster declarations in 2013
Plants & Wildlife	6/6/2013	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Grass planted on new levees along the Missouri River in eastern Nebraska was slow to grow
Society & Public Health	9/26/2013	Douglas County, Sarpy County	Drought alleviated some of the flooding that would have otherwise occurred along the Platte River in southern Nebraska
Agriculture	6/14/2017	Dakota County	Crops stressed, soybeans replanted in northwest Iowa
Agriculture	7/14/2017	Dakota County, NE, South Sioux City, NE	Dryland corn short near South Sioux City, Nebraska
Fire, Relief, Response & Restrictions	2/22/2018	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Nebraskans urged to leave the fireworks to the professionals
Society & Public Health	8/14/2018	Douglas County	Hazy conditions from Canadian fires causing congestion for residents in Douglas County, Nebraska
Relief, Response & Restrictions, Water Supply & Quality	2/18/2019	Douglas County, NE, Omaha, NE	Reduced water use from eastern Nebraska well field
Fire, Society & Public Health	3/27/2019	Douglas County, Sarpy County, Washington County	Drought prevented agricultural burning in Kansas, Oklahoma in 2018
Agriculture	4/22/2019	Burt County, Dakota County, Douglas County, Sarpy County, Thurston County, Washington County	Corn chopped for silage in eastern Nebraska
Agriculture, Water Supply & Quality	4/23/2019	Burt County, Dakota County, Douglas County, Sarpy County, Thurston	Nebraska ranchers hauling water to livestock

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CATEGORY	DATE	AFFECTED COUNTIES	TITLE
		County, Washington County	
Agriculture, Plants & Wildlife	2/12/2020	Dakota County	Siouxland farmers chopping silage
Agriculture, Relief, Response & Restrictions	2/12/2020	Dakota County	Siouxland farmers cutting corn weeks early

Source: NDMC, 2000-2020

As identified in Nebraska’s Drought Mitigation and Response Plan, drought is a common feature of the Nebraska landscape and often causes significant economic, environmental, and social impacts. Although agriculture is the major sector affected, impacts on rural and municipal water supplies, fish and wildlife, tourism, recreation, water quality, soil erosion, the incidence of wildland fires, electricity demand, and other sectors are also significant. Also, the indirect impacts of drought on personal and business incomes, tax revenues, unemployment, and other areas are also important. In general, drought produces a complex web of impacts that ripple through many sectors of the economy. This is largely due to the dependence of so many sectors on water for producing goods and providing services. It is impossible to predict all the potential impacts, but the common impacts of drought have been compiled by the NDMC and are illustrated in the following table.

Table 66: Drought Related Impacts

SECTOR	VULNERABILITY
Economic	<ul style="list-style-type: none"> • Strain on financial institutions (foreclosures, greater credit risks, capital shortfalls, etc.) • Revenue losses to federal, state, and local governments (from reduced tax base) • Deterred capital investment, expansion • Dislocation of businesses • Loss from impaired navigability of streams, rivers, and canals • Cost of water transport or transfer; Cost of new or supplemental water resource development
Environmental	<ul style="list-style-type: none"> • Reduction and degradation of fish and wildlife habitat; Damage to animal species • Lack of feed and drinking water • Increased vulnerability to predation (e.g., from species concentration near water) • Loss of biodiversity • Wind and water erosion of soils • Reservoir and lake drawdown • Damage to plant species • Water quality effects (e.g., salt concentration, increased water temperatures, pH, dissolved oxygen) • Air quality effects (dust, pollutants) • Visual landscape quality (dust, vegetative cover, etc.) • Increased fire hazard • Estuarine impacts; changes in salinity levels, reduced flushing

SECTOR	VULNERABILITY
Social	<ul style="list-style-type: none"> • Increased groundwater depletion (mining), land subsidence • Loss of wetlands, cultural sites, recreational areas • Food shortages (decreased nutritional level, malnutrition, famine) • Loss of human life (e.g., food shortages, heat) • Public safety from forest and range fires • Conflicts between water users, public policy conflicts • Increased anxiety • Health-related low flow problems (e.g., diminished sewage flows, increased pollutant concentrations, etc.) • Recognition of institutional constraints on water use • Inequity in the distribution of drought impacts/relief; Decreased quality of life in rural areas; Increased poverty and impacts of poverty • Social unrest, civil strife; loss of confidence in government officials

Source: NDMC

All segments of the population are vulnerable to the effects of extreme heat, some specific groups have higher levels of vulnerability to extreme heat include the elderly (55 years and older), residents of nursing homes or care facilities, children, those isolated from social interactions, and low-income groups. Elderly residents and people living in nursing homes and care facilities have less tolerance for temperature extremes and can quickly feel the effects of extreme temperatures. Low-income elderly in urban areas and young children under the age of 5 are especially at risk and susceptible to the effects of extreme temperatures. Young children have a smaller body mass to surface ratio making them more vulnerable to heat-related morbidity and mortality. Children also become dehydrated more quickly than adults making for greater concern. Low-income people and families may lack resources that mitigate the impacts of extreme heat such as air conditioning. The following table provides information related to regional vulnerabilities for drought and extreme heat. For jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 67: Regional Drought and Extreme Heat Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Insufficient water supply -Loss of jobs in agriculture sector -Residents in poverty if food prices increase -Health impacts: heat exhaustion; heat stroke; those working outdoors; people without air conditioning; young children/elderly outside or without air conditioning
Economic	<ul style="list-style-type: none"> -Closure of water intensive businesses (carwashes, pool, etc.) -short-term interruption of business -Loss of tourism dollars -Losses in crop production -Decrease in cattle prices -Decrease of land prices → jeopardizes educational funds
Built Environment	<ul style="list-style-type: none"> -Cracking of foundations (residential and commercial structures) -Damages to landscapes -Damage to air conditioning/HVAC systems if overworked
Infrastructure	<ul style="list-style-type: none"> -Damages to waterlines below ground -Damages to roadways (prolonged extreme events)

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SECTOR	VULNERABILITY
Critical Facilities	-Stressing of electrical systems (brownouts during peak usage) -Loss of power and impact on infrastructure
Climate	-Increased risk of wildfire events, damaging buildings and agricultural land -Increases in extreme heat conditions are likely, adding stress on livestock, crops, people, and infrastructure

Earthquakes

An earthquake is the result of a sudden release of energy in the Earth's tectonic plates that creates seismic waves. The seismic activity of an area refers to the frequency, type, and size of earthquakes experienced over a period of time. Although rather uncommon, earthquakes do occur in Nebraska and are usually small, generally not felt, and cause little to no damage. Earthquakes are measured by magnitude and intensity. Magnitude is measured by the Richter Scale, a base-10 logarithmic scale, which uses seismographs around the world to measure the amount of energy released by an earthquake. Intensity is measured by the Modified Mercalli Intensity Scale, which determines the intensity of an earthquake by comparing actual damage against damage patterns of earthquakes with known intensities. The following figure shows the fault lines in Nebraska and the following tables summarize the Richter Scale and Modified Mercalli Scale.

Table 68: Richter Scale

RICHTER MAGNITUDES	EARTHQUAKE EFFECTS
Less than 3.5	Generally not felt, but recorded
3.5 – 5.4	Often felt, but rarely causes damage
Under 6.0	At most, slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions
6.1 – 6.9	Can be destructive in areas up to about 100 kilometers across where people live
7.0 – 7.9	Major earthquake. Can cause serious damage over larger areas
8 or Greater	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

Source: FEMA, 2016⁶⁶

Table 69: Modified Mercalli Intensity Scale

SCALE	INTENSITY	DESCRIPTION OF EFFECTS	CORRESPONDING RICHTER SCALE MAGNITUDE
I	Instrumental	Detected only on seismographs	
II	Feeble	Some people feel it	< 4.2
III	Slight	Felt by people resting, like a truck rumbling by	
IV	Moderate	Felt by people walking	
V	Slightly Strong	Sleepers awake; church bells ring	< 4.8
VI	Strong	Trees sway; suspended objects swing, objects fall off shelves	< 5.4
VII	Very Strong	Mild alarm; walls crack; plaster falls	< 6.1
VII	Destructive	Moving cars uncontrollable; masonry fractures, poorly constructed buildings damaged	
IX	Ruinous	Some houses collapse; ground cracks; pipes break open	< 6.9

⁶⁶ Federal Emergency Management Agency. 2020. "Earthquake Risk." <https://www.fema.gov/emergency-managers/risk-management/earthquake>

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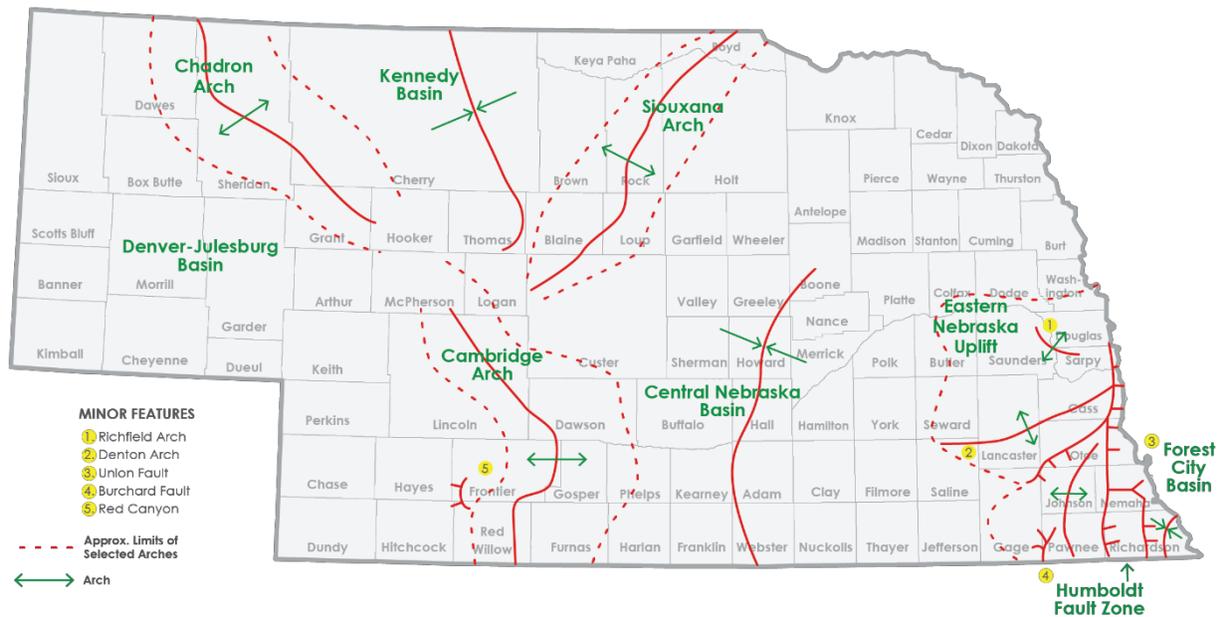
SCALE	INTENSITY	DESCRIPTION OF EFFECTS	CORRESPONDING RICHTER SCALE MAGNITUDE
X	Disastrous	Ground cracks profusely; many buildings destroyed; liquefaction and landslides widespread	< 7.3
XI	Very Disastrous	Most Buildings and bridges collapse; roads, railways, pipes, and cables destroyed; general triggering of other hazards	< 8.1
XII	Catastrophic	Total destruction; trees fall; ground rises and falls in waves	> 8.1

Source: FEMA, 2020

Location

The most likely locations in the planning area to experience an earthquake are near a fault line (Figure 36). Burt, Dakota, Thurston, and Washington Counties are least likely to experience an earthquake as they are not located near a fault line. The Richfield Arch within the Eastern Nebraska Uplift could impact Sarpy or Douglas Counties if an earthquake were to occur in Nebraska. Additionally, it is important to note there are no major fault lines located in Iowa or South Dakota near the planning area.

Figure 36: Fault Lines in Nebraska



Historical Occurrences

According to the United States Geological Survey (USGS), there have been no reported earthquakes within the planning area since 1900.⁶⁷ While outside the period of record for available data, one account of an earthquake, which was probably the strongest in the state history, from November 15, 1877 was felt in the Omaha area. There were two shocks 45 minutes apart; the second was the strongest. In North Platte, the shock was reported to have lasted 40 seconds and

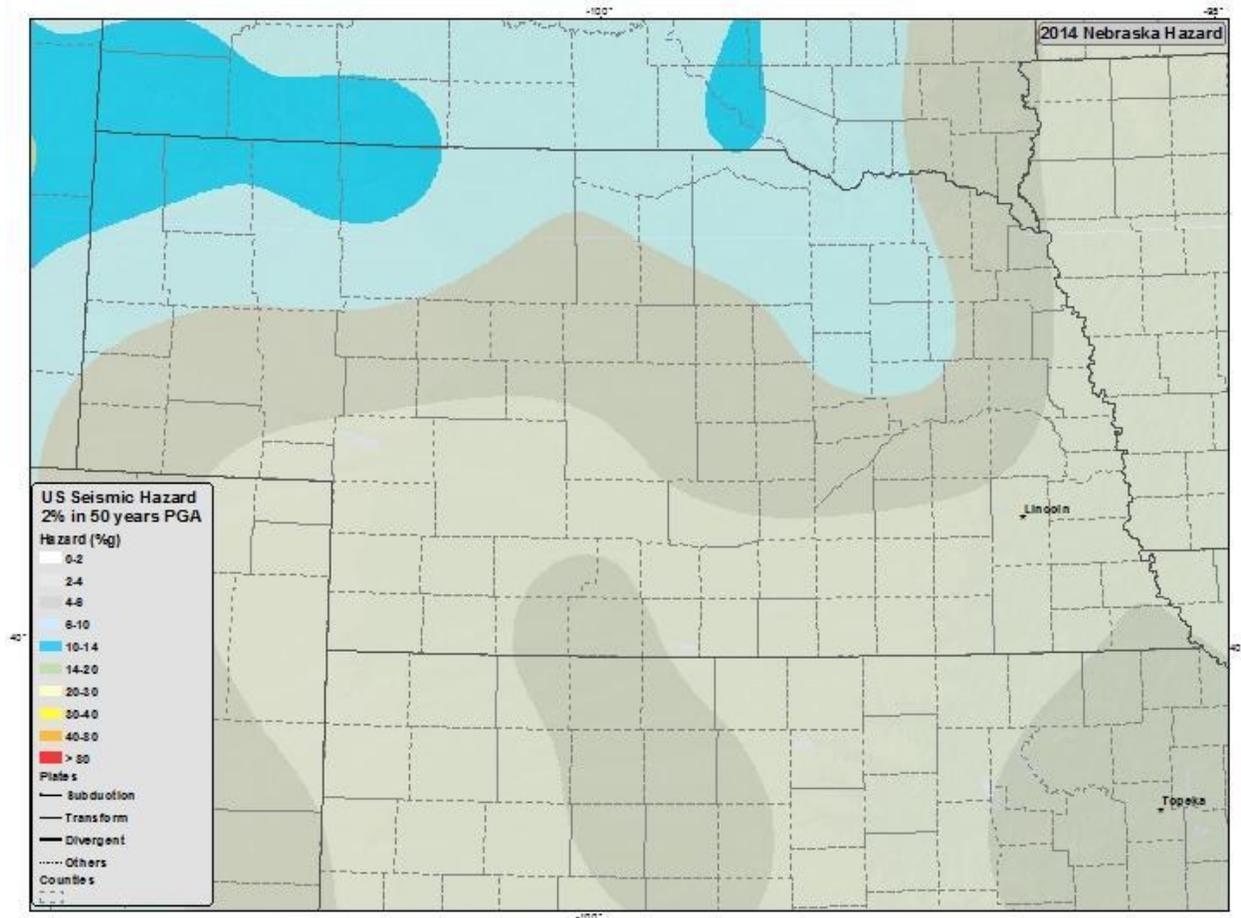
⁶⁷ United States Geological Survey. 2020. "Information by Region – Nebraska." <https://earthquake.usgs.gov/earthquakes/byregion/nebraska.php>.

intensity VII effects were noted. Buildings rocked in Lincoln, and walls were damaged in Columbus. The shock was strongly felt in Omaha. Cracked walls were reported in Sioux City, Iowa. The total felt area covered approximately 360,000 square kilometers including most of Nebraska and portions of Iowa, Kansas, the Dakotas, and northwestern Missouri.

Average Annual Losses

Due to the lack of sufficient earthquake data, limited resources, low earthquake risk for the area, and no recorded damages, it is not feasible to utilize the 'event damage estimate formula' to estimate potential losses for the planning area. Figure 37 shows the State of Nebraska's seismic hazard risk across the state. According to the USGS, the planning area has a less than 0.2 percent change of damages from earthquakes.

Figure 37: 2014 Seismic Hazard Map - Nebraska



Source: USGS, 2020⁶⁸

Extent

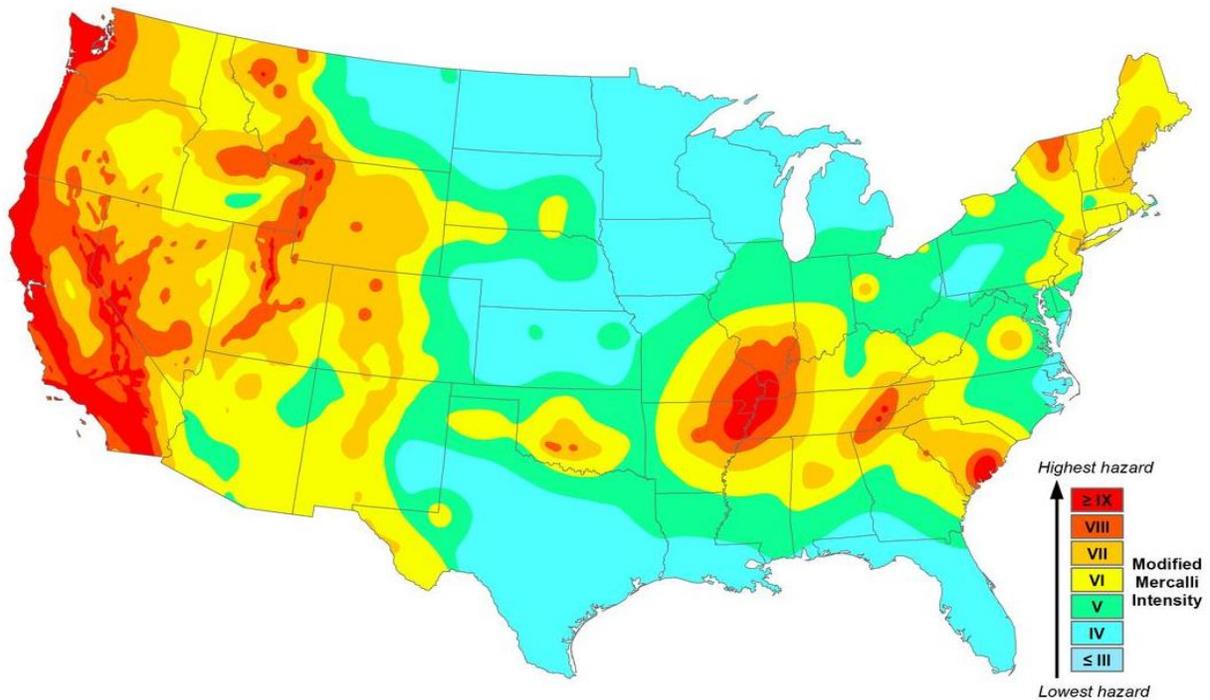
If an earthquake were to occur in the planning area, it would likely measure 2.5 or less on the Richter Scale. Very little to no damage is anticipated from events of these magnitudes.

⁶⁸ USGS. 2014. "2014 Seismic Hazard Map – Nebraska." Accessed September 2020. <https://www.usgs.gov/media/images/2014-seismic-hazard-map-nebraska>.

Probability

The following figure summarizes the probability of an intense earthquake occurring in the planning area. However, with no earthquakes occurring in the planning area in 120 years, for the purposes of this plan, there is a less than one percent change of an earthquake occurring in any given year.

Figure 38: Earthquake Probability



USGS map showing the intensity of potential earthquake ground shaking that has a 2% chance of occurring in 50 years

Source: USGS, 2016

Community Top Hazard Status

No participating jurisdictions identified Earthquakes as a top hazard of concern.

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 70: Regional Earthquake Vulnerabilities

SECTOR	VULNERABILITY
People	-Risk of injury or death from falling objects and structures
Economic	-Short term to long term interruption of business
Built Environment	-Damage to buildings, homes, or other structures from foundation cracking, falling objects, shattered windows, etc.
Infrastructure	-Damage to subterranean infrastructure (i.e. waterlines, gas lines) -Damage to roadways
Critical Facilities	-Same as other structures
Climate	-None

Flooding

Flooding due to rainfall can occur on a local level, sometimes affecting only a few streets, but can also extend throughout an entire region, affecting whole drainage basins and impacting property in multiple states. Heavy accumulations of ice or snow can also cause flooding during the melting stage. These events are complicated by the freeze/thaw cycles characterized by moisture thawing during the day and freezing at night. There are four main types of flooding in the planning area: riverine flooding, flash flooding, sheet flooding, and ice jam flooding.

Riverine Flooding

Riverine flooding, typically more slowly developing with a moderate to long warning time, is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt or ice melt. The areas adjacent to rivers and stream banks that carry excess floodwater are called floodplains. A floodplain or flood risk area is defined as the lowland and relatively flat area adjoining a river or stream. The terms “base flood” and “100-year flood” refer to the area in the floodplain that is subject to a one percent or greater chance of flooding in any given year. Floodplains are part of a larger entity called a basin or watershed, which is defined as all the land draining to a river and its tributaries.

Flash Flooding, including Levee or Dam Failure

Flash floods, typically rapidly developing with little to no warning time, result from convective precipitation usually due to intense thunderstorms or sudden releases due to failure of an upstream impoundment created behind a dam, landslide, or levee. Flash floods are distinguished from regular floods by a timescale of fewer than six hours. Flash floods cause the most flood-related deaths as a result of this shorter timescale. Flooding from excessive rainfall in Nebraska usually occurs between late spring and early fall.

Urban Flooding

In some cases, flooding may not be directly attributable to a river, stream, or lake overflowing its banks. Rather, it may simply be the combination of excessive rainfall or snowmelt, saturated ground, and inadequate drainage capacity. With no place to go, the water will find the lowest elevations – areas that are often not in a floodplain. This type of flooding, often referred to as urban flooding, is becoming increasingly prevalent as development exceeds the capacity of drainage infrastructure, therefore limiting its ability to properly convey stormwater. Flooding also occurs due to combined storm and sanitary sewers being overwhelmed by the high flows that often accompany storm events. Typical impacts range from dangerously flooded roads to water backing into homes or basements, which damages mechanical systems and can create serious public health and safety concerns.

Ice Jam Flooding

Ice jams occur when ice breaks up in moving waterways, and then stacks on itself where channels narrow or human-made obstructions constrict the channel. This creates an ice dam, often causing flooding within minutes of the dam formation. Ice formation in streams occurs during periods of cold weather when finely divided colloidal particles called “frazil ice” form. These particles combine to form what is commonly known as “sheet ice.” This type of ice covers the entire river. The thickness of this ice sheet depends upon the degree and duration of cold weather in the area. This ice sheet can freeze to the bottom of the channel in places. During spring thaw, rivers frequently become clogged with this winter accumulation of ice. Because of relatively low stream banks and channels blocked with ice, rivers overtop existing banks and flow overland. This type

of flooding tends to more frequently occur on wide, shallow rivers such as the Platte, although other rivers can be impacted.

Location

The P-MRNRD has the distinction of having three of Nebraska’s major rivers within its boundary: the Platte River, Missouri River, and Elkhorn River.

- **Missouri River** - Before large, Missouri River main stem dams were completed by the U.S. Army Corps of Engineers (USACE) in the 1940s to 1960s, Nebraska communities’ on the Missouri River had an extensive history of flooding. These communities include South Sioux City, Dakota City, Decatur, Blair, and Omaha. The entire reach of the Missouri River from the northwest corner of Dakota County to the southeast corner of Sarpy County is under the P-MRNRD’s administration, which means that the P-MRNRD bears responsibility to manage the flooding issues associated with the steep tributaries draining to the Missouri River bottomlands.
- **Platte River** - The second major Nebraska river, impacting the P-MRNRD, is the Platte River, which flows along Sarpy County’s southern border. Prior to the March 2019 floods, flooding problems with the Platte River in the planning area have not been significant when compared to other communities outside the planning area that are on the Platte River, such as North Bend, Columbus, and Grand Island. However, Valley, Waterloo, and unincorporated areas of Sarpy County have historically been impacted by Platte River flooding. The most devastating and frequent flood events have been the result of ice jams typically forming just above highway or railroad bridges or other constrictions crossing the river.
- **Elkhorn River** - The third major Nebraska river to impact the P-MRNRD is the Elkhorn River, which acts as the NRD’s western border for Washington County. Like the Platte River, the Elkhorn’s flood history is not as significant in the P-MRNRD as in other upstream locations such as Norfolk, West Point, Hooper, and Nickerson. However, the communities on the Elkhorn located in the P-MRNRD boundary that have experienced flooding include Arlington, Valley, Waterloo, and unincorporated King Lake. The Elkhorn River can experience extreme flooding from both riverine and ice jam events. Large areas located in between the Platte and Elkhorn Rivers in Douglas and Sarpy County are especially prone to inundation.
- **Other Rivers** - In addition to the three major Nebraska rivers, the Papillion Creek and its tributaries, which drains the majority of the Omaha metropolitan area, are within the P-MRNRD. The Papillion Creek Watershed is moderately sloped compared to other Missouri River tributaries, but is capable of causing extreme flash flooding due to its shape and extent of urbanization.

Table 71 shows the current status of Flood Insurance Rate Map (FIRM) panels within the study areas. Figure 40 through Figure 45 show flood risk hazard areas for the floodway, one percent annual chance, and 0.2 percent annual chance flood events for counties in the planning area. For jurisdiction-specific maps as well as an inventory of structures in the floodplain, please see *Section Seven: Community Profiles*. For additional details on localized flood risk such as flood zone types, please refer to the official FIRM available from FEMA’s Flood Map Service Center.

Table 71: FEMA FIRM Panel Status

JURISDICTION	PANEL NUMBER	EFFECTIVE DATE
Burt County	31021CIND0A, 31021C0025E, 31021C0050E, 31021C0070E, 31021C0075E, 31021C0090E,	6/5/2020

JURISDICTION	PANEL NUMBER	EFFECTIVE DATE
	31021C0100E, 31021C0125E, 31021C0150E, 31021C0175E, 31021C0200E, 31021C0225E, 31021C0250E, 31021C0275E, 31021C0286E, 31021C0287E, 31021C0288E, 31021C0289E, 31021C0300E, 31021C0325E, 31021C0350E, 31021C0375E, 31021C0400E, 31021C0425E, 31021C0450E	
Decatur	31021CIND0A, 31021C0070E, 31021C0090E, 31021C0175E, 31021C0200E	6/5/2020
Tekamah	31021CIND0A, 31021C0275E, 31021C0286E, 31021C0287E, 31021C0288E, 31021C0289E, 31021C0425E	8/11/1981
Dakota County	31043CIND0A, 31043C0020D, 31043C0025D, 31043C0040D, 31043C0045D, 31043C0060D, 31043C0075D, 31043C0080D, 31043C0085D, 31043C0090D, 31043C0095D, 31043C0105D, 31043C0115D, 31043C0120D, 31043C0150D, 31043C0155D, 31043C0160D, 31043C0175D, 31043C0178D, 31043C0180D, 31043C0185D, 31043C0190D, 31043C0195D, 31043C0205D, 31043C0215D	1/6/2012
Dakota City	31043CIND0A, 31043C0115D, 31043C0120D	1/6/2012
Homer	31043CIND0A, 31043C0160D, 31043C0175D, 31043C0178D, 31043C0180D, 31043C0190D	1/6/2012
Hubbard	31043CIND0A, 31043C0090D, 31043C0155D	1/6/2012
Jackson	31043CIND0A, 31043C0080D, 31043C0085D, 31043C0090D, 31043C0095D	1/6/2012
South Sioux City	31043CIND0A, 31043C0105D, 31043C0106D, 31043C0107D, 31043C0108D, 31043C0109D, 31043C0115D, 31043C0120D	1/6/2012
Douglas County	31055CIND0D, 31055C0025H, 31055C0050H, 31055C0075H, 31055C0088H, 31055C0135H, 31055C0145H, 31055C0153H, 31055C0154J, 31055C0155J, 31055C0160J, 31055C0161H, 31055C0162J, 31055C0165H, 31055C0170K, 31055C0177J, 31055C0179J, 31055C0180H, 31055C0182H, 31055C0280H, 31055C0285H, 31055C_NTU_LETTER	5/19/2014, 12/2/2005, 5/19/2014, 5/3/2010
Bennington	31055CIND0D, 31055C0075H, 31055C0177J, 31055C0180H, 31055C0181H, 31055C0182H, 31055C_NTU_LETTER	5/19/2014, 12/2/2005, 5/3/2010
Boys Town	31055CIND0D, 31055C0194J, 31055C0213K, 31055C0307J, 31055C0326J, 31055C_NTU_LETTER	5/19/2014, 5/3/2010
Omaha	31055CIND0D, 31055C0025H, 31055C0050H, 31055C0075H, 31055C0088H, 31055C0089H, 31055C0093H, 31055C0094H, 31055C0113H, 31055C0114H, 31055C0118H, 31055C0135H, 31055C0145H, 31055C0153H, 31055C0160J, 31055C0161H, 31055C0162J, 31055C0165H,	5/19/2014, 12/2/2005, 5/3/2010

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JURISDICTION	PANEL NUMBER	EFFECTIVE DATE
	31055C0170K, 31055C0177J, 31055C0179J, 31055C0180H, 31055C0181H, 31055C0182H, 31055C0183J, 31055C0184H, 31055C0186J, 31055C0187J, 31055C0188J, 31055C0189J, 31055C0191J, 31055C0192H, 31055C0193J, 31055C0194J, 31055C0201H, 31055C0202H, 31055C0203H, 31055C0204H, 31055C0206H, 31055C0207H, 31055C0208H, 31055C0209H, 31055C0211H, 31055C0212H, 31055C0213K, 31055C0214H, 31055C0216H, 31055C0217H, 31055C0218H, 31055C0219H, 31055C0226H, 31055C0227H, 31055C0228H, 31055C0229H, 31055C0231H, 31055C0233H, 31055C0234H, 31055C0237H, 31055C0241H, 31055C0242H, 31055C0243H, 31055C0244H, 31055C0261H, 31055C0280H, 31055C0285H, 31055C0301H, 31055C0302J, 31055C0306J, 31055C0307J, 31055C0308J, 31055C0309J, 31055C0326J, 31055C0327H, 31055C0328J, 31055C0329J, 31055C0331H, 31055C0332H, 31055C0333H, 31055C0334H, 31055C0353H, 31055C0360H, 31055C_NTU_LETTER	
Ralston	31055CIND0D, 31055C0333H, 31055C0334H, 31055C_NTU_LETTER	5/19/2004, 12/2/2005
Valley	31055CIND0D, 31055C0135H, 31055C0145H, 31055C0153H, 31055C0154J, 31055C0155J, 31055C0160J, 31055C0161H, 31055C0162J, 31055C0170K, 31055C_NTU_LETTER	5/19/2014, 12/2/2005
Waterloo	31055CIND0D, 31055C0170K, 31055C_NTU_LETTER	5/19/2004
Sarpy County	31153CIND0B, 31153C0025G, 31153C0035H, 31153C0036H, 31153C0037H, 31153C0039H, 31153C0041H, 31153C0042H, 31153C0043H, 31153C0044H, 31153C0060G, 31153C0061H, 31153C0063H, 31153C0085G, 31153C0093G, 31153C0095G, 31153C0115G, 31153C0145G, 31153C0150G, 31153C0155G, 31153C0160G, 31153C0165G, 31153C0170G, 31153C0180G, 31153C0190G, 31153C0200G, 31153C0205G, 31153C0210G, 31153C0215G, 31153C0220G, 31153C0230G, 31153C0255G	5/3/2010, 12/2/2005
Bellevue	31153CIND0B, 31153C0060G, 31153C0069H, 31153C0070H, 31153C0085G, 31153C0090H, 31153C0093G, 31153C0095G, 31153C0115G, 31153C0205G, 31153C0210G, 31153C0230G	5/3/2010, 12/2/2005
Gretna	31153CIND0B, 31153C0025G, 31153C0036H, 31153C0037H, 31153C0039H, 31153C0041H, 31153C0043H, 31153C0150G, 31153C0155G	5/3/2010, 12/2/2005

JURISDICTION	PANEL NUMBER	EFFECTIVE DATE
La Vista	31153CIND0B, 31153C0035H, 31153C0042H, 31153C0055H, 31153C0060G, 31153C0061H, 31153C0062H, 31153C0070H, 31153C0090H	5/3/2010, 12/2/2005
Papillion	31153CIND0B, 31153C0061H, 31153C0062H, 31153C0063H, 31153C0064H, 31153C0068H, 31153C0069H, 31153C0070H, 31153C0090H, 31153C0180G, 31153C0200G, 31153C0205G	5/3/2010, 12/2/2005
Springfield	31153CIND0B, 31153C0160G, 31153C0180G	5/3/2010, 12/2/2005
Thurston County	31173CIND0A, 31173C0025E, 31173C0040E, 31173C0045E, 31173C0075E, 31173C0100E, 31173C0125E, 31173C0150E, 31173C0165E, 31173C0175E, 31173C0200E, 31173C0225E, 31173C0250E, 31173C0275E, 31173C0276E, 31173C0277E, 31173C0280E, 31173C0285E, 31173C0325E, 31173C0350E, 31173C0375E	1/6/2010
Walthill	31173CIND0A, 31173C0200E, 31173C0225E,	1/6/2010
Winnebago	31173CIND0A, 31173C0225E	1/6/2010
Winnebago Indian Tribe	31173CIND0A, 31173C0025E, 31173C0040E, 31173C0045E, 31173C0075E, 31173C0100E, 31173C0125E, 31173C0150E, 31173C0165E, 31173C0175E, 31173C0200E, 31173C0225E, 31173C0250E	1/6/2010
Washington County	31177CIND0A, 31177C0015D, 31177C0020D, 31177C0040D, 31177C0045D, 31177C0065D, 31177C0067D, 31177C0069D, 31177C0070D, 31177C0086D, 31177C0088D, 31177C0105D, 31177C0110D, 31177C0115D, 31177C0118D, 31177C0120D, 31177C0130D, 31177C0135D, 31177C0140D, 31177C0145D, 31177C0155D, 31177C0158D, 31177C0159D, 31177C0160D, 31177C0165D, 31177C0176D, 31177C0178D, 31177C0179D, 31177C0188D, 31177C0189D, 31177C0193D, 31177C0194D, 31177C0195D, 31177C0215D, 31177C0231D, 31177C0232D, 31177C0234D, 31177C0251D, 31177C0252D, 31177C0254D, 31177C0260D, 31177C0262D, 31177C0264D, 31177C0268D, 31177C0270D, 31177C0280D, 31177C0285D, 31177C0290D, 31177C0295D, 31177C0305D, 31177C0306D, 31177C0307D, 31177C0308D, 31177C0309D, 31177C0315D, 31177C0320D, 31177C0326D, 31177C0328D, 31177C0329D, 31177C0333D, 31177C0336D, 31177C0337D, 31177C0338D, 31177C0339D, 31177C0341D, 31177C0343D	1/6/2012
Arlington	31177CIND0A, 31177C0232D, 31177C0234D, 31177C0251D, 31177C0252D, 31177C0253D, 31177C0254D, 31177C0261D, 31177C0262D	1/6/2012
Blair	31177CIND0A, 31177C0155D, 31177C0158D, 31177C0159D, 31177C0165D, 31177C0166D, 31177C0167D, 31177C0168D, 31177C0169D,	1/6/2012

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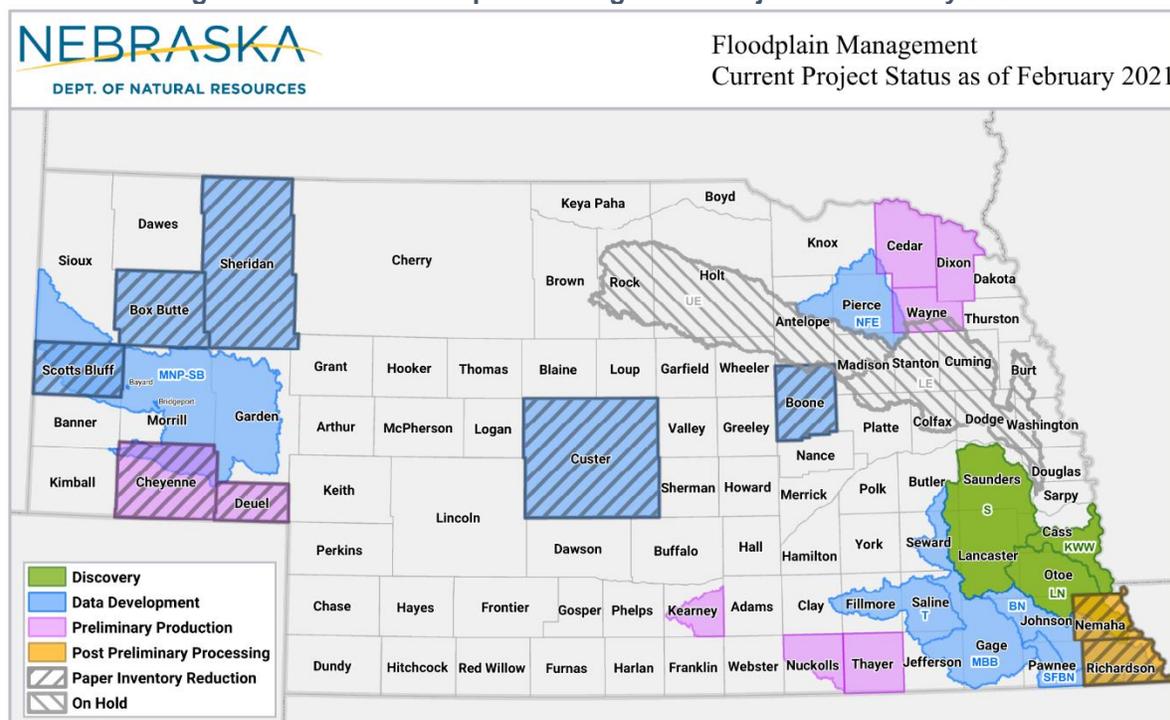
JURISDICTION	PANEL NUMBER	EFFECTIVE DATE
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Fort Calhoun	31177CIND0A, 31177C0306D, 31177C0307D, 31177C0308D, 31177C0309D, 31177C0320D	1/6/2012
Herman	31177CIND0A, 31177C0065D	1/6/2012
Kennard	31177CIND0A, 31177C0280D, 31177C0285D	1/6/2012
Washington	31177CIND0A, 31177C0290D, 31177C0295D	1/6/2012

Source: FEMA⁶⁹

Risk Map Products

Risk Mapping, Assessment, and Planning (Risk MAP) is a FEMA program that provides communities with flood information and additional flood risk data (e.g. flood depth grids, percent chance grids, etc.) that can be used to enhance their mitigation plans and take action to better protect their citizens. As of February 2021, portions of the planning area are currently undergoing flood risk mapping activities (Figure 39). Re-mapping of portions of western Douglas and Washington Counties (the Lower Elkhorn River watershed) is currently on hold as new topographic data is being collected for the Elkhorn River watershed which experienced significant channel shifts in 2019. The Burt County Risk Map project was completed in 2020 and Risk MAP products are currently available. As data becomes available, Nebraska Department of Natural Resources (NeDNR) hosts the Risk Map products on an interactive web map, which can be viewed here: <https://dnr.nebraska.gov/floodplain/interactive-maps>. This data can also be obtained from the FEMA Flood Map Service Center.

Figure 39: NeDNR Floodplain Management Projects – February 2021



⁶⁹ Federal Emergency Management Agency. Accessed February 2021. "FEMA Flood Map Service Center." <http://msc.fema.gov/portal/advanceSearch>.

SECTION FOUR: RISK ASSESSMENT

Figure 41: Dakota County Flood Risk Hazard Areas

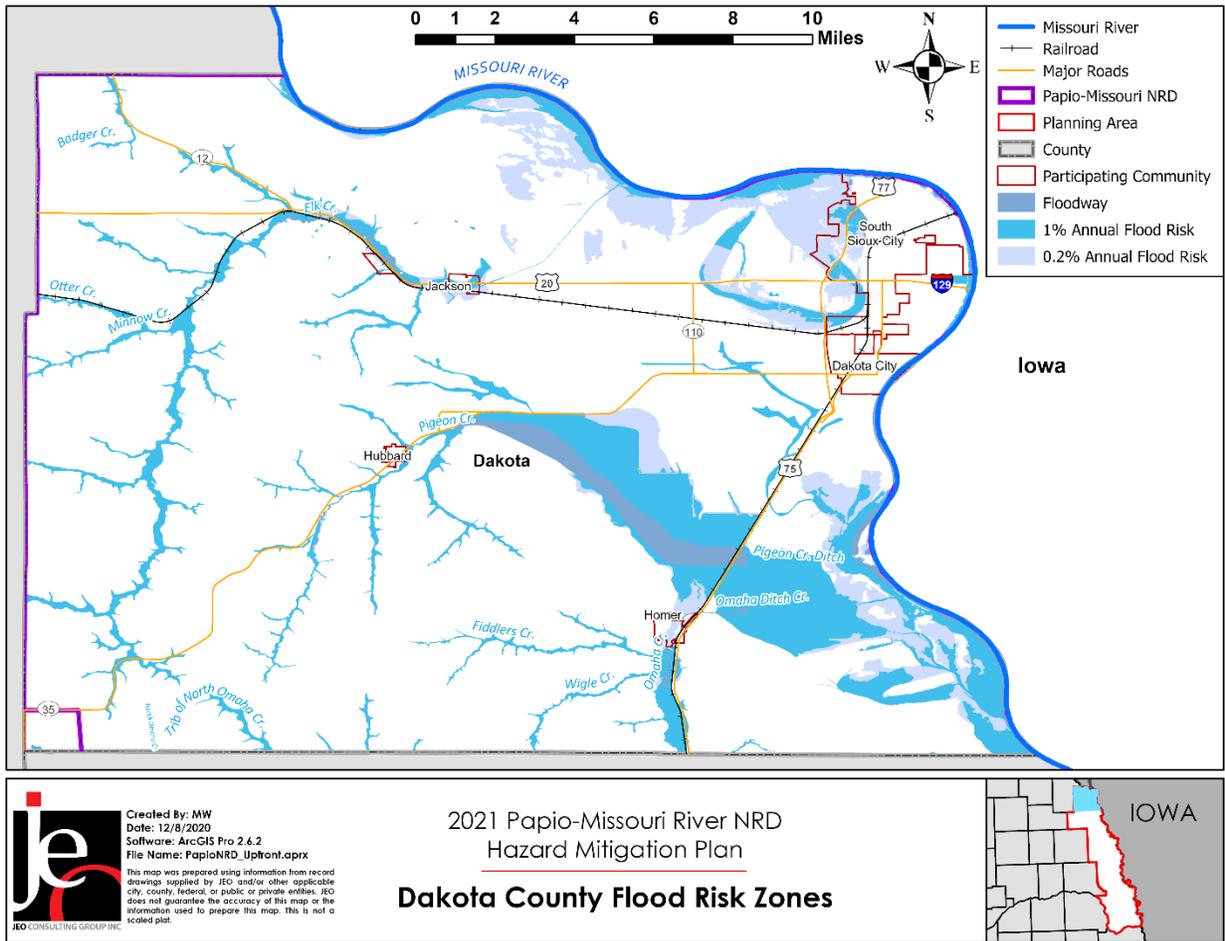


Figure 43: Sarpy County Flood Risk Hazard Areas

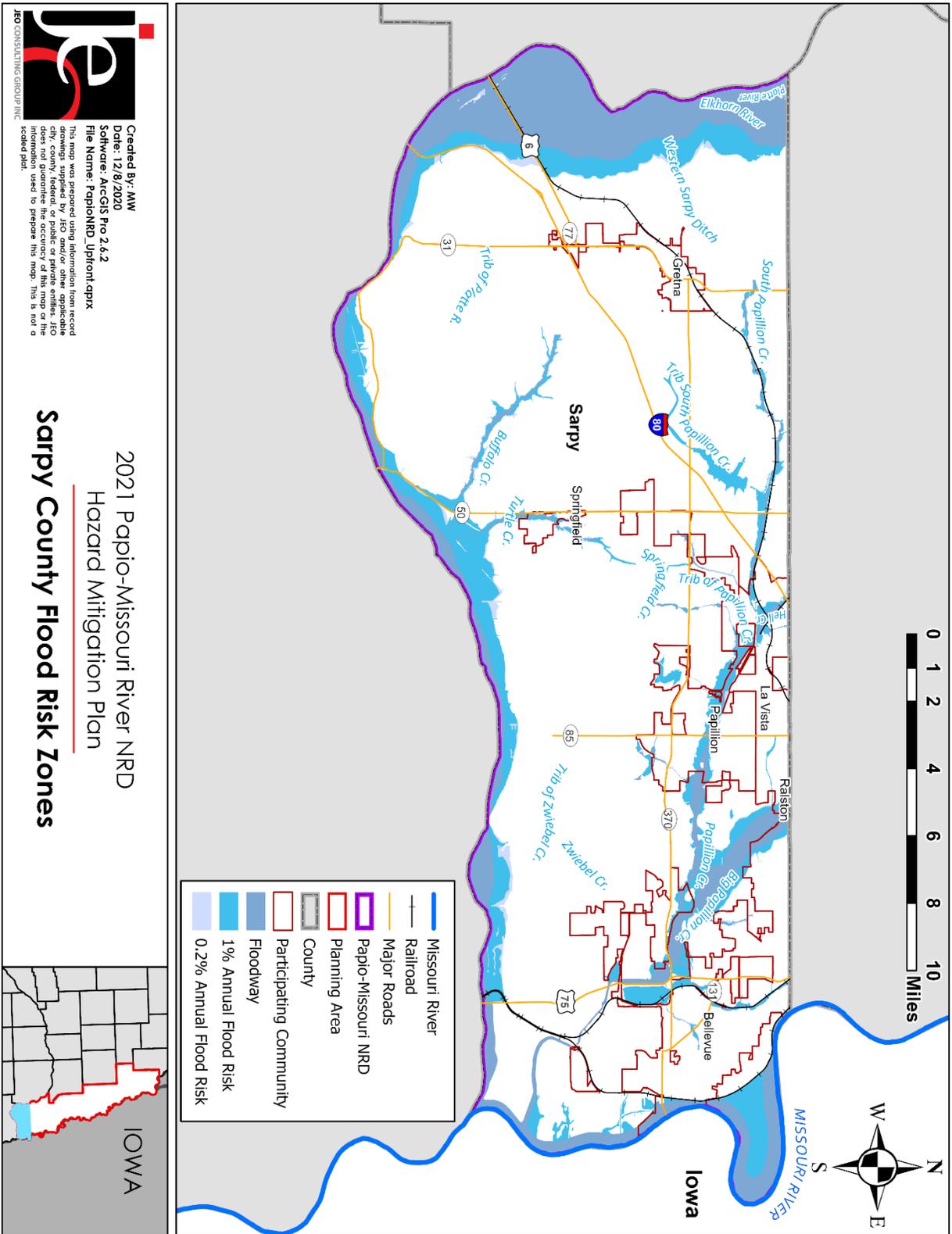


Figure 44: Thurston County Flood Risk Hazard Areas

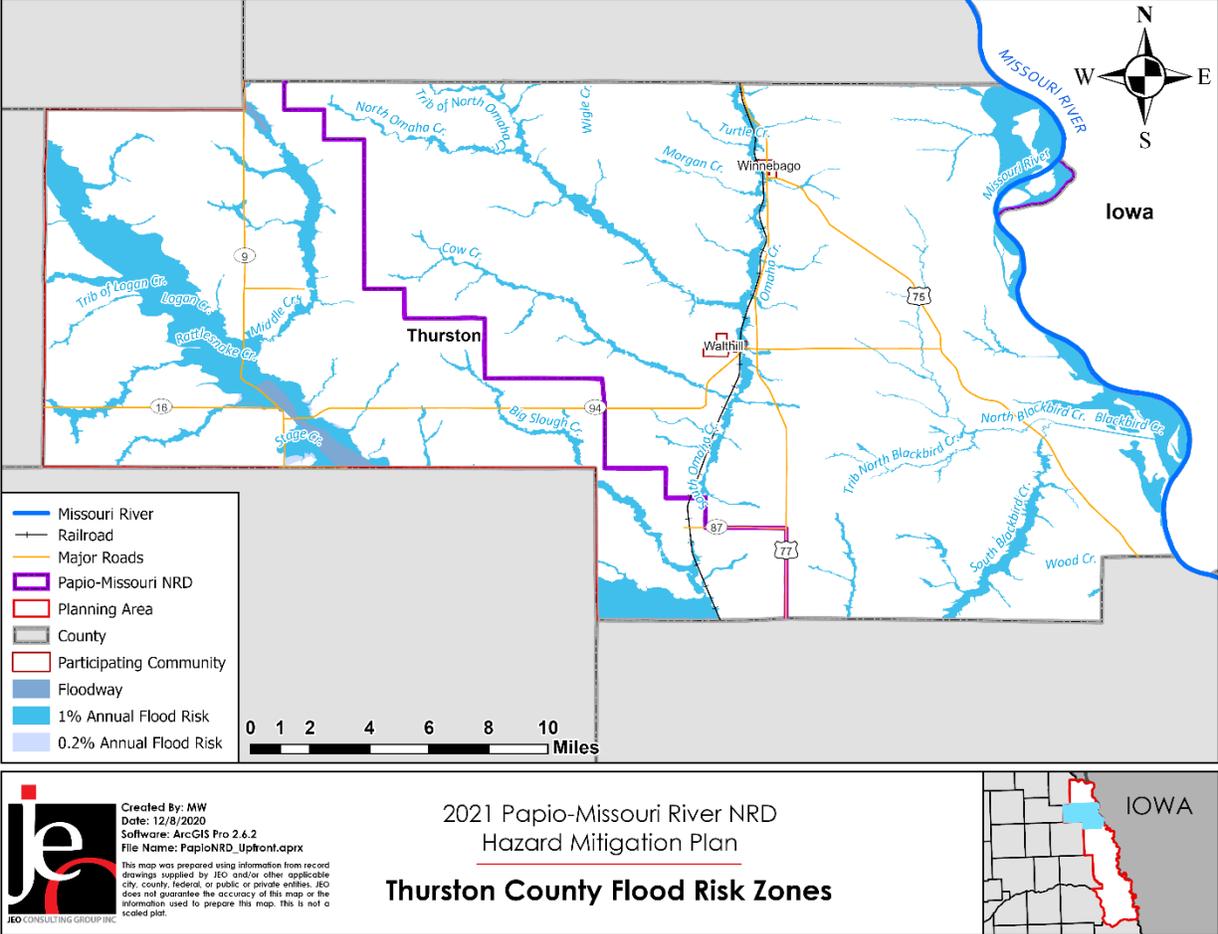
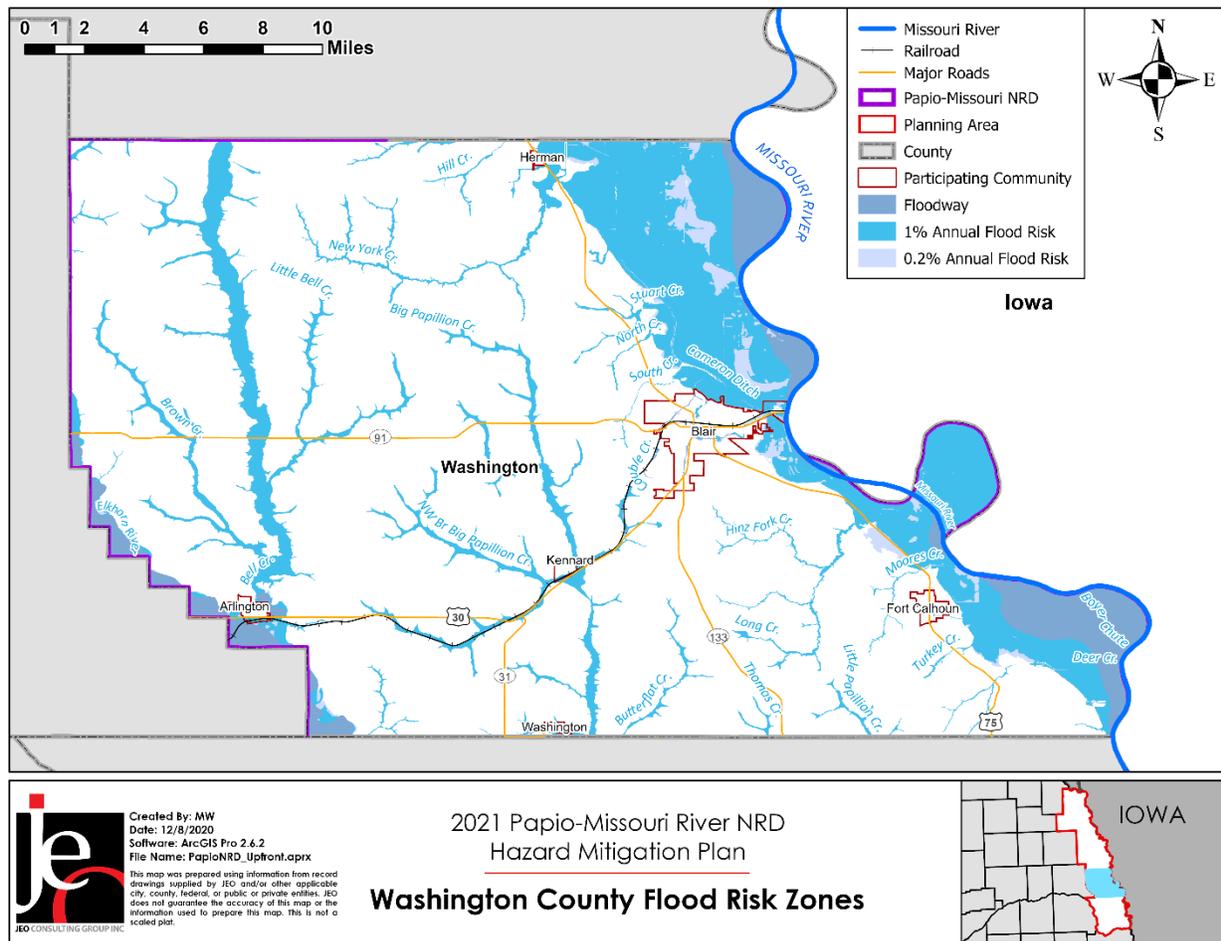


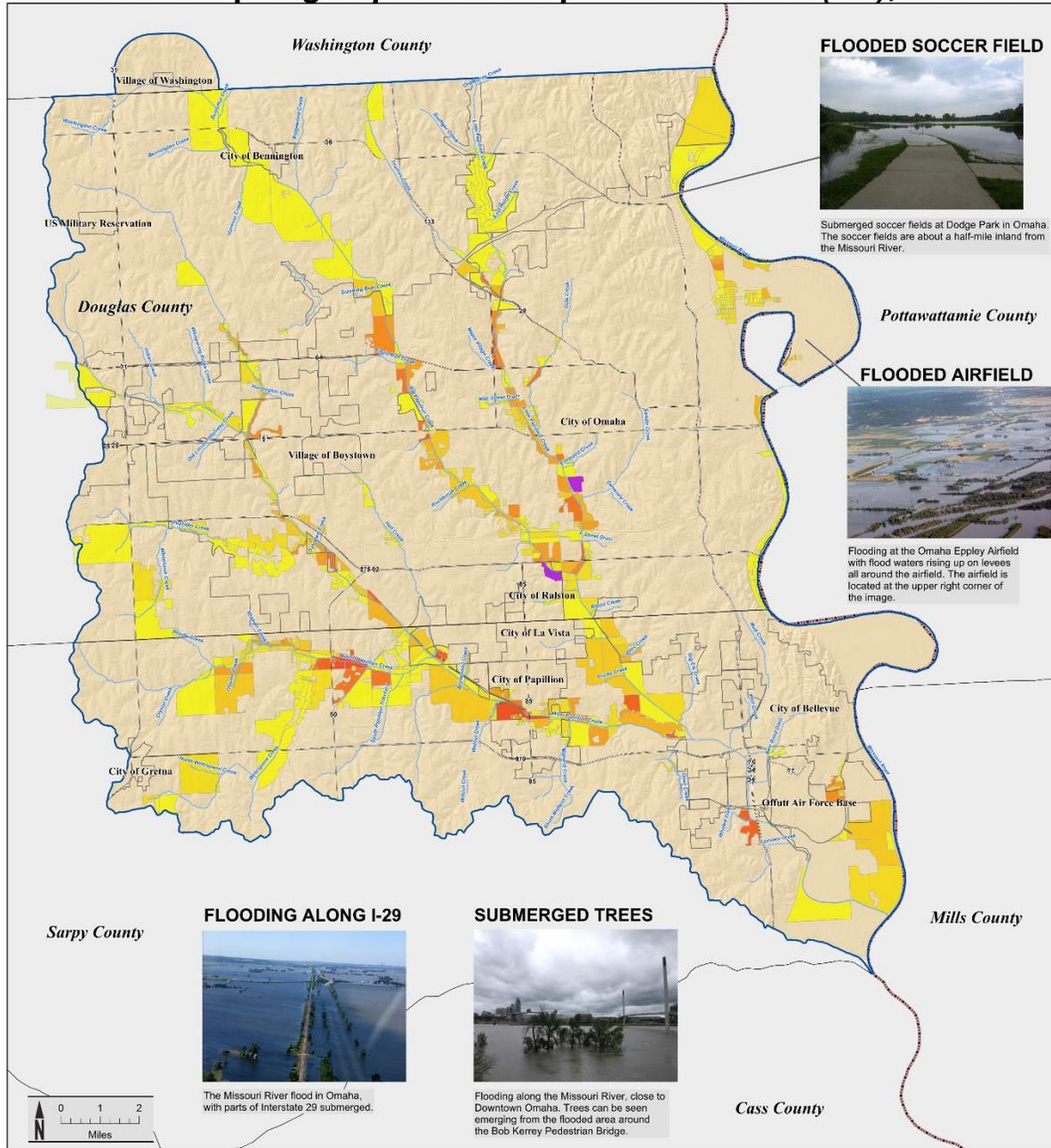
Figure 45: Washington County Flood Risk Hazard Areas



A completed Flood Risk Report which includes portions of the planning area is the Big Papillion-Mosquito Watershed (Nebraska – 10230006) report dated September 12, 2016. Figure 46 shows the Big Papillion-Mosquito Watershed area. The watershed includes all or portions of three counties (Douglas, Sarpy, and Washington) and twelve communities (Bellevue, Bennington, Gretna, La Vista, Omaha, Papillion, Ralston, Boystown, Washington Village, Offutt Air Force Base, and US Military Reserve). The total drainage area is 945.5 square miles with the Missouri River and the Papillion River the primary waterbodies in the area. The full analysis of flood risk is available in the report; however, total estimates for potential losses from flood event scenarios exceeded \$24 million is annualized losses. Community specific Flood Risk Report data is incorporated as applicable in *Section Seven: Community Profiles*.

Figure 46: Big Papillion-Mosquito Watershed Flood Risk Map

Flood Risk Map: Big Papillion-Mosquito Watershed (NE), 10230006



MAP SYMBOLOLOGY

- | | | |
|--------------------|-------------------------------|-------------------|
| Base Data | Flood Data | Flood Risk |
| Corporate Limits | Rivers and Streams | Very Low |
| Major Roads | Restudy Area | Low |
| Watershed Boundary | New SFHA | Medium |
| State Boundary | Coastal Surge Influence Area* | High |
| | | Very High |

WATERSHED LOCATOR



Risk Mapping, Assessment, and Planning (Risk MAP)

FRM FLOOD RISK MAP

Big Papillion-Mosquito Watershed (NE), 10230006

HUC-8 Code
10230006

For more information of data used for this non-regulatory map, please consult the Big Papillion-Mosquito Watershed, Nebraska Flood Risk Database and Flood Risk Report.

RELEASE DATE
04/26/2016

Other regulatory products reviewed and utilized in this planning process include Letter of Map Amendments (LOMAs), Letter of Map Revisions (LOMR), and Flood Insurance Studies (FIS) as available and applicable for each of the six-counties in the planning area. Specific LOMAs as identified in the planning process are described in their appropriate community profiles in *Section Seven*.

Historical Occurrences

The NCEI reports events as they occur in each community. A single flooding event can affect multiple communities and counties at a time; the NCEI reports these large scale, multi-county events as separate events. The result is a single flood event covering a large portion of the planning area could be reported by the NCEI as several events. According to the NCEI, 84 flash flooding events resulted in \$18,610,000 in property damage, while 112 riverine flooding events caused \$437,071,000 in property damage. USDA RMA data does not distinguish the difference between riverine flooding damages and flash flooding damages. The total crop loss according to the RMA is \$22,038,884.

Moreover, there were three flash flood events that resulted in three fatalities. In 1999, one Omaha man died after extensive flooding along Cole Creek caused his basement wall to wash out and carried him 40 yards downstream. The second fatality occurred in 2004 during a flash flood event in Omaha when a man left his stalled vehicle for help. He was likely swept away in a nearby drainage ditch and was found 20 miles downstream in the Missouri River. The third fatality also occurred after a man's vehicle became stalled in flooded waters in Sarpy County during a 2014 flash flood event. Prior to 1996, some of the significant flood events which impacted communities in the P-MRNRD area were:

- **Missouri River:** 1881, 1943, 1947, 1950, 1952, 1978, 1984, 2011
Communities Impacted: South Sioux City, Dakota City, Decatur, Blair, Omaha, Bellevue
- **Elkhorn River:** 1881, 1917, 1920, 1940, 1944, 1960, 1962, 1970, 1978, 1990
Communities Impacted: Waterloo, Valley, Arlington, King Lake
- **Platte River (at Louisville):** 1881, 1882, 1912, 1936, 1944, 1947, 1952, 1960 (highest stage from ice jam), 1962, 1967, 1970, 1978, 1984, 1993 (highest flow volume), 2019
- **Big Papillion Creek:** 1950, 1952, 1959, 1964, 1965
Communities Impacted: Omaha, Irvington, Fort Crook, Papillion, Millard, Ralston, Bennington, Bellevue
- **Little Papillion Creek:** 1960, 1964, 1965
Communities Impacted: Omaha
- **West Branch Papillion Creek:** 1948, 1959, 1964, 1965
Communities Impacted: Elkhorn, Papillion
- **Omaha Creek:** 1922, 1940, 1954, 1957, 1967, 1993
Communities Impacted: Homer
- **Tekamah Creek:** 1904, 1915, 1944, 1963, 1974
Communities Impacted: Tekamah

The events summarized below were significant in loss of life, injuries, or the amount of damages.

Missouri River Flood 2011

This significant flood occurred during the spring and summer of 2011 along the Missouri River, which at the time was the largest on record for the entire basin in terms of runoff volume, and record peak flows were also experienced in some reaches. The flooding situation was complex

and evolved throughout the summer. The initial trigger of the flood occurred far upstream from the record snowfall in the Rocky Mountains of Montana and Wyoming, which was then compounded by near-record spring rainfall in central and eastern Montana. This led to all six major dams along the Missouri River to release record amounts of water to prevent potential dam failure, which led to flooding threatening several towns and cities from Montana south to Missouri. Communities in the planning area that were threatened included South Sioux City, Dakota City, Decatur, Blair, Fort Calhoun, Bellevue, and Omaha. Furthermore, more heavy rains in the second half of May 2011, which were almost equal to the typical annual average rainfall, fell over the Missouri River basin. Thus, extremely heavy rainfall in conjunction with an estimated 212 percent of normal snowpack in the Rocky Mountains contributed to this flooding event.

The USACE attempted to regulate the release of water through the 850 miles of river from North Dakota through South Dakota to the confluence with the Mississippi River in St. Louis. The following table indicates the summary of the release flows from the six dams along the Missouri River, which ultimately impacted areas along the Missouri River in the P-MRNRD. The information only showcases the peak flows out of the dam structures and gages downstream observed higher flows due to other flooding impacts.

DAM NAME	PREVIOUS RECORD FLOW	PREVIOUS RECORD YEAR	FLOW MAY 1, 2011	FLOW MAY 31, 2011	FLOW JUNE/JULY 2011
Fort Beck Dam	35,000	1975	7,000	9,700	65,500
Garrison Dam	65,000	1975	17,400	80,400	150,200
Oahe Dam	59,000	1997	29,400	86,300	160,300
Big Bend Dam	74,000	1997	21,200	83,900	165,000
Fort Randall Dam	67,000	1997	42,300	76,600	157,000
Gavins Point Dam	70,000	1997	45,000	77,000	160,700

Source: USACE

These releases led to high flood stages all along the Missouri River, including the P-MRNRD area. Urban areas, industrial, utilities, transportation routes, and agriculture all suffered damages due to the 2011 flood. In Dakota County, flooding at South Sioux City reached its highest stage at 5.2 feet above flood stage on June 27th. Additionally, many residents were evacuated from their homes and at least 100 businesses were closed and evacuated. During July, the river levels did not improve and in fact increased slightly to 5.3 feet above flood stage on July 21st. The river slowly fell during the month of August and went below flood stage on August 25th at South Sioux City. Those evacuated from homes and businesses were able to return late in August after nearly two months away.

For Thurston County, flooding was mostly confined to agricultural lowlands, recreation areas, and roads near the river. However, flooding did force the evacuation of 12 people near Macy. Flooding persisted into late August.

In Burt County, the flooding generally began during the first week of June as the gauge at Decatur didn't surpass flood stage until around June 6th. The level climbed to around 40 feet (5 feet above flood stage) by the end of June and remained around that level through July. Flooding in Burt County affect agricultural lowlands, recreation areas, and roads near the river but also forced the evacuation of 150-200 homes. Late in June, the Highway 175 Bridge over the Missouri between Decatur and Onawa was closed due to erosion of the abutment on the Iowa side of the bridge. The flooding persisted into August.

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By the end of May, the river at Blair reached its flood stage of 26.5 feet and continued rising through June to over 32 feet. The river fell slightly during July but remained in the moderate category into August. Areas near Fort Calhoun were especially impacted by the flood waters where at least 60 homes or cabins were flooded or cutoff by flood waters. At least 200 residences in the county were evacuated leaving at least 500 people displaced. The high school in Fort Calhoun was opened as a shelter for flood victims. Blair spent \$500,000 to build up a levee surrounding its water treatment plant. The Fort Calhoun Nuclear Power Station also was in shut down and emergency sand bagging helped keep flood waters out.

In Douglas County, the river climbed to 29 feet, which is flood stage, at Omaha on May 27th and continued to rise into June. Flooding from the Missouri closed a park and baseball fields on the northwest side of Omaha and low areas around downtown on the river side of the levee began flooding when flood gates were installed. By the end of June at Omaha, the river had reached 35 feet and briefly hit 36 feet in late July. The south Omaha wastewater treatment plant was forced to send 6 million gallons of wastewater daily into the river beginning in early June due to flood waters affecting the facility. The high water and persistent pressure on levees forced Eppley airfield and other businesses to constantly monitor the situation and have pumps on standby as either rains, storm sewer backups, or boils near the levee would force pumping of the water back over the levee. By June 22nd, Eppley had spent \$2.5 million on flood prevention. Burlington Northern Railroad had to shut down one of its tracks to allow it to be used as a levee. Flood waters decreased to 34 feet by mid-August and continued to drop to 31 feet by the end of August. The USACE is estimated to have spent a little over \$2 million on levee repair work in Omaha during the event. By the end of August, the City of Omaha’s tab for the flood fight had totaled \$10 million. The river had fallen below flood stage by mid-September.

In Sarpy County, river flooding spread into one park causing its closure and a section of the rail track that Amtrak used had to be closed to allow for its use as a levee during the height of the flooding. The USACE estimated that close to \$1 million was spent on levee repair work in Sarpy County during the flooding.

March 2019 Flood Event

The March 2019 flood event significantly impacted the entire planning area and most of the eastern side of the State of Nebraska. Winter Storm Ulmer developed on March 12th and slowly moved across the Midwest including Nebraska. Due to heavy precipitation on frozen ground and melting snowpack, numerous water systems (rivers and watersheds) were overwhelmed and failed. In other areas, floodwater released by ice jams breaking up destroyed roads, bridges, and levees. Several stream gauges in the planning area reached record crests including:

Table 72: Peak Flow and Stage Records from 2019 Flood Event

STREAM GAGE LOCATION	STATION ID	PEAK FLOW	DATE	APPLICABLE FLOOD STAGE
South Omaha Creek at Walthill	USGS 06600900	24.63 ft	3/13/2019	Major Flood Stage - 24.5ft
Logan Creek at Pender*	USGS 06799450	24.94 ft	3/14/2019	Major Flood Stage - 23 ft.
Missouri River at Decatur	USGS 06601200	36.51 ft	3/17/2019	Flood Stage - 35ft
Missouri River near Blair	USGS 06609100	31.12 ft	3/18/2019	Moderate Flood Stage - 28.5ft

STREAM GAGE LOCATION	STATION ID	PEAK FLOW	DATE	APPLICABLE FLOOD STAGE
Big Papillion Creek at Standing Bear Lake and Dam	NWS	1,108.95 ft [^]	3/14/2019	Flood Stage - 1,108.9ft
Big Papillion Creek at Fort Street at Omaha	USGS 06610732	25.58 ft	3/13/2019	Flood Stage - 23.5ft
Elkhorn River at Waterloo	USGS 06800500	24.68 ft	3/16/2019	Major Flood Stage - 21ft
Missouri River at Omaha	USGS 06610000	34.4 ft	3/17/2019	Moderate Flood Stage - 32ft
Boxelder Creek at Lake Zorinsky	NWS	1,116.14 ft [^]	3/14/2019	Flood Stage - 1,115.2ft
Platte River near Venice	USGS 06796550	19.92 ft	3/15/2019	Moderate Flood Stage - 17.5ft
Platte River at Louisville	USGS 06805500	13.82 ft	3/16/2019	Major Flood Stage - 12ft
Platte River near Ashland	USGS 06801000	24.32 ft	3/16/2019	Major Flood Stage - 23.5ft

Source: NWS, 2020; USGS, 2020

*Pender is located in Thurston County but not within the P-MRNRD; ^indicates not peak flow of record

In total, 104 cities, 81 counties, and 5 tribal nations in Nebraska received State or Federal Disaster Declarations due to the flood events.

The NeDNR has collected and reviewed extensive data records from the flood event. An event-wide storymap has been developed and provides an excellent resource to understand the cause, duration, impacts, and recovery efforts from this event. The storymap can be viewed at: <https://storymaps.arcgis.com/stories/9ce70c78f5a44813a326d20035cab95a>.

Impacts from this event included significant damage to homes, commercial buildings, agriculture, bridges, and roads. Agriculturally, hundreds of acres of pastureland and fields were destroyed by several inches to feet of sand and silt left behind by receding flood waters. The flooding event also occurred in the midst of calving season, resulting in the loss of hundreds of calves for ranchers across the state. Roads, bridges, and critical transportation routes across the state were blocked by flood waters or washed out entirely. At least three fatalities occurred during the flood event while the Nebraska National Guard performed dozens of rescues in inundated areas. No fatalities were reported within the P-MRNRD and six-county planning area during this event.

In total, the U.S. Army Corps of Engineers reported 41 breaches to federal and non-federal levees across the state of Nebraska. The failure of these structures significantly impacted subsequent flooding in neighboring communities. Several levee breaches occurred on the Platte River by Douglas and Sarpy Counties including the Papio Creek Levee System (R-616-613 – MO Riv RB & Papillion Creek LB) which heavily damaged Offutt Air Force Base and the Papio Creek wastewater treatment plant for the City of Omaha, and required an evacuation of the National Weather Services' office in Valley. See the *Levee Failure* profile for more information. The Burt County Public Power District (BCPPD) reported 1,324 services out of power for an average of 2.77 hours. While no mitigation projects were implemented after the event, the BCPPD is currently (as of winter 2020) working with homeowner associations across the district to evaluate mitigation opportunities along the Missouri River.

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Several communities in the planning area evacuated areas including eastern Washington County, Sarpy County, and Valley. Community specific impacts reported by affected communities are included in *Section Seven: Community Profiles* as appropriate.

Average Annual Losses

The average damage per event estimate was determined based upon the NCEI Storm Events Database since 1996 and number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury or loss of life. Flooding caused a total average of \$18,985,709 in property damages and \$1,101,944 in crop losses per year for the planning area.

Table 73: Flooding Losses

HAZARD TYPE	# OF EVENTS ¹	AVERAGE # EVENTS PER YEAR	TOTAL PROPERTY LOSS ¹	AVERAGE ANNUAL PROPERTY LOSS	TOTAL CROP LOSS ²	AVERAGE ANNUAL CROP LOSS
Flash Flood	84	3.5	\$18,610,000	\$774,417	\$22,038,884	\$1,101,944
Flood	112	4.7	\$437,071,000	\$18,211,292		

Source: 1 NCEI (1996-2019), 2 USDA RMA (2000-2019)

Extent

The NWS has three categories to define the typical severity of a flood once a river reaches flood stage as indicated in Table 74. Actual impacts will vary by community.

Table 74: Flooding Stages

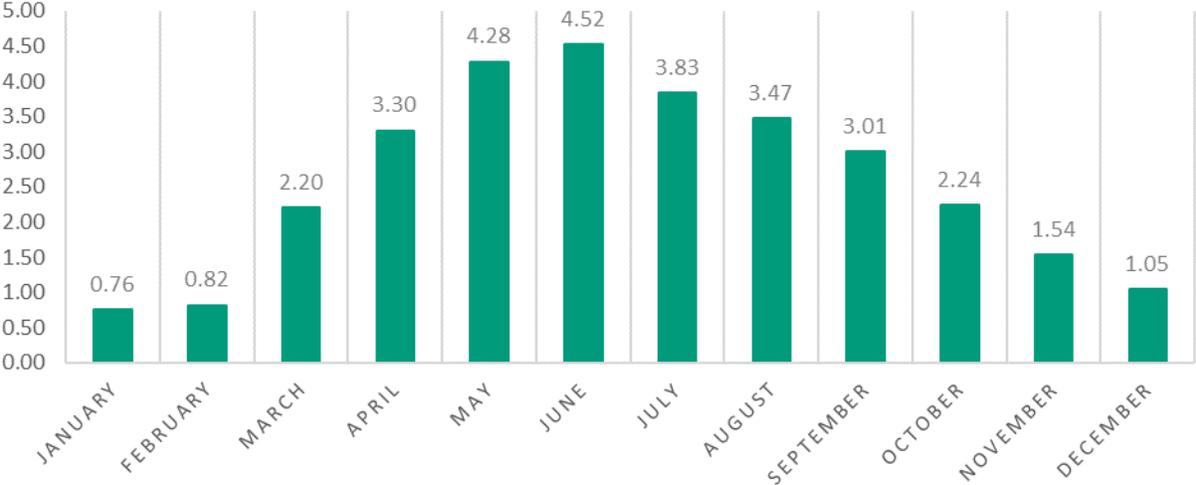
FLOOD STAGE	DESCRIPTION OF TYPICAL FLOOD IMPACTS
Minor Flooding	Minimal or no property damage, but possibly some public threat or inconvenience
Moderate Flooding	Some inundation of structures and roads near streams. Some evacuations of people and/or transfer of property to higher elevations are necessary
Major Flooding	Extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations

Source: NOAA, 2017⁷⁰

The following figure shows the normal average monthly precipitation for the planning area, which is helpful in determining whether any given month is above, below, or near normal in precipitation. As indicated in Figure 47, the most common month for flooding within the planning area is in June.

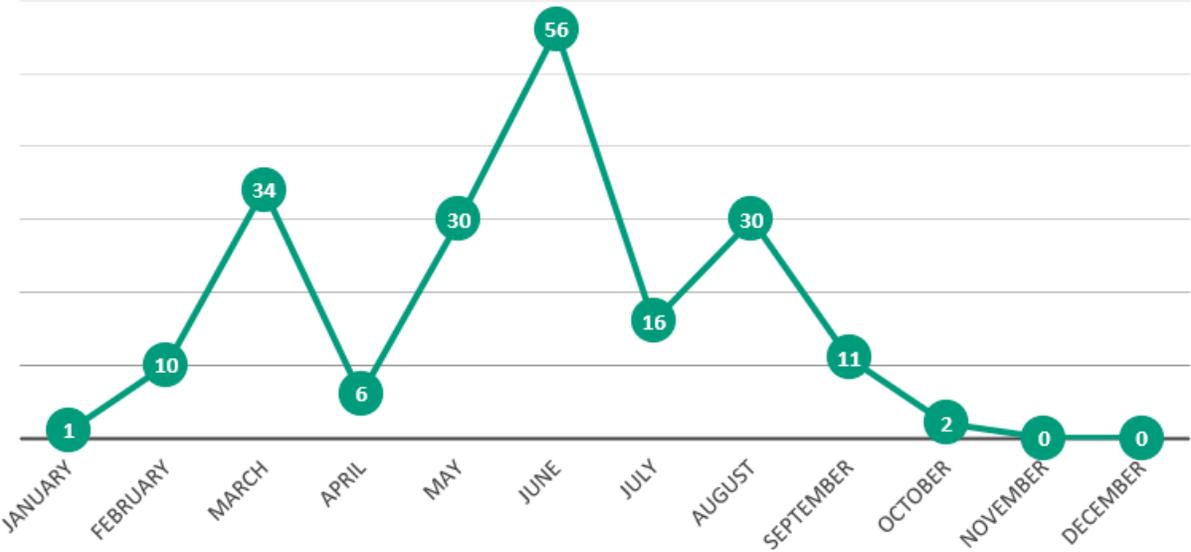
⁷⁰ National Weather Service. 2017. "Flood Safety." <http://www.floodsafety.noaa.gov/index.shtml>.

Figure 47: Average Monthly Precipitation



Source: NCEI

Figure 48: Monthly Events for Flood/Flash Floods in the P-MRNRD



Source: NCEI

Estimated Population Displaced

To assist in estimated potential losses to the planning area a Level 1 HAZUS analysis was conducted. This analysis provided estimates based on the location of population and building assets in relation to HAZUS-generated 1 percent annual chance floodplain boundaries. Population displaced was aggregated from HAZUS-MH data at the census-block level, the most detailed information available from the U.S. Census. Table 75 provides the numbers of people that would be displaced and those that would need shelter in each city. According to this analysis, over 6,000 people in the planning area are at risk of being displaced if a 1 percent annual chance flood impacted their area. The city at highest risk for having the most displaced people is Omaha with 2,340 people displaced.

Table 75: Displaced Populations Resulting from 1% Annual Chance Flood

JURISDICTION	DISPLACED POPULATION	POPULATION NEEDING SHORT-TERM SHELTER
Burt County	418	1
Decatur	4	0
Tekamah	403	5
Dakota County	206	0
Dakota City	0	0
Homer	2	0
Hubbard	5	0
Jackson	0	0
South Sioux City	30	0
Douglas County	4,459	276
Bennington	48	1
Boys Town	0	0
Omaha	2,340	145
Ralston	34	1
Valley	0	0
Waterloo	0	0
Sarpy County	1,581	73
Bellevue	133	6
Gretna	0	0
La Vista	1	0
Papillion	104	7
Springfield	9	0
Thurston County	68	0
Walthill	1	0
Winnebago	0	0
Washington County	132	1
Arlington	19	0
Blair	64	1
Fort Calhoun	0	0
Herman	0	0
Kennard	4	0
Washington	0	0
Total	10,065	517

Source: JEO HAZUS Analysis

Estimated Building and Economic Losses

To estimate economic losses due to a 1-percent annual-chance flood, HAZUS-MH provides reports on the types and number of buildings impacted, estimates of the building repair costs, and the associated loss of building contents and business inventory, as well as building damage loss ratios. For each county in the planning area, this section provides three sets of analysis reports.

- Building Counts and Types of Damaged Buildings:** This provides an approximation of the total number of buildings expected to be impacted and is further broken down by usage types. The damaged building counts utilized include any structure that may sustain damage to 1-10% of the structure and up to and including being substantially damaged (i.e. greater than 50% of the structure is damaged). The damaged building counts generated by HAZUS-MH are susceptible to rounding errors and are likely the weakest output of the model due to the use of census blocks for analysis. These numbers should

not be used to assesses a real, structure-by-structure risk. HAZUS-MH attempts to assess risk with a wider lens, to provide an estimation of risk across an area.

- **Building Damage Loss Ratio:** This is an indication of the community’s ability to recover after an event. Building Damage Loss Ratio percent is calculated by taking the Building Structural Damage divided by Building Structural Value (or Building Exposure) and then multiplying by 100. Loss ratios exceeding 10 percent are considered significant by FEMA.
- **Economic Losses:** Building damage can result in additional losses to a community as a whole, by restricting a building’s ability to function properly. Income loss data accounts for business interruption and rental income losses, as well as the resources associated with damage repair and employment and housing losses. These losses are calculated by HAZUS-MH using a methodology based on the building damage estimates. There could be errors and inadequacies associated with the flood risk modeling of the HAZUS-MH model, as it is a basic assessment for a Level 1 analysis. Flood damage is directly related to the depth of the potential flooding. For example, a two-foot flood generally results in approximately 20 percent damage to the structure, which translates to 20 percent of the structure’s replacement value. The planning area’s building inventory loss estimates, which are linked to census block geography were separated by jurisdiction, according to the HAZUS-MH analysis results, illustrate how the potential for loss varies across the planning area, on average. The following tables provide additional information about impacts to infrastructure, economic losses, and value of agricultural products at risk from flood events.

Note: the following model was run under the assumption levee systems will not be breached during a 1% annual flood event. If levee failures were to occur, a significantly higher number of buildings and damages would be anticipated.

Table 76: Counts and Types of Damaged Buildings

JURISDICTION	AGRICULTURE	COMMERCIAL	EDUCATION	GOVERNMENT	INDUSTRIAL	RELIGION	RESIDENTIAL	TOTAL
Burt County	0	1	0	0	0	0	59	60
Decatur	0	0	0	0	0	0	0	0
Tekamah	0	2	0	0	0	0	55	57
Dakota County	0	0	0	0	0	0	9	0
Dakota City	0	0	0	0	0	0	0	0
Homer	0	0	0	0	0	0	0	0
Hubbard	0	0	0	0	0	0	0	0
Jackson	0	2	0	0	0	0	55	57
South Sioux City	0	0	0	0	0	0	9	0
Douglas County	0	0	0	0	0	0	0	0
Bennington	0	0	0	0	0	0	0	0
Boys Town	0	0	0	0	0	0	0	0
Omaha	0	16	0	0	6	0	334	356
Ralston	0	0	0	0	0	0	5	5
Valley	0	0	0	0	0	0	0	0
Waterloo	0	0	0	0	0	0	0	0

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JURISDICTION	AGRICULTURE	COMMERCIAL	EDUCATION	GOVERNMENT	INDUSTRIAL	RELIGION	RESIDENTIAL	TOTAL
Sarpy County	0	4	0	0	0	0	432	436
Bellevue	0	0	0	0	0	0	28	28
Gretna	0	0	0	0	0	0	0	0
La Vista	0	0	0	0	0	0	0	0
Papillion	0	4	0	0	0	0	35	39
Springfield	0	0	0	0	0	0	0	0
Thurston County	0	0	0	0	0	0	0	0
Walthill	0	0	0	0	0	0	0	0
Winnebago	0	0	0	0	0	0	0	0
Washington County	0	0	0	0	0	0	10	10
Arlington	0	0	0	0	0	0	3	3
Blair	0	0	0	0	0	0	14	14
Fort Calhoun	0	0	0	0	0	0	0	0
Herman	0	0	0	0	0	0	0	0
Kennard	0	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0	0
Total	0	27	0	0	6	0	1,289	1,322

Source: JEO HAZUS Analysis

Table 77: Building Damage Loss Ratio

JURISDICTION	BUILDING EXPOSURE	BUILDING DAMAGE	LOSS RATIO (DAMAGE/EXPOSURE)
Burt County	\$877,276,000	\$4,502,000	0.5%
Decatur	\$66,661,000	\$265,000	0.4%
Tekamah	\$204,999,000	\$3,496,000	1.7%
Dakota County	\$1,825,083,000	\$3,161,000	0.2%
Dakota City	\$149,787,000	\$0	0.0%
Homer	\$37,180,000	\$97,000	0.3%
Hubbard	\$20,724,000	\$28,000	0.1%
Jackson	\$25,799,000	\$3,000	>0.1%
South Sioux City	\$1,166,404,000	\$636,000	>0.1%
Douglas County	\$62,073,500,000	\$181,049,000	0.3%
Bennington	\$200,010,000	\$933,000	0.5%
Boys Town	N/A	\$0	\$0
Omaha	\$49,314,971,000	\$105,307,000	0.2%
Ralston	\$732,202,000	\$1,089,000	0.1%
Valley	N/A	\$0	0.0%
Waterloo	\$95,153,000	\$0	0.0%
Sarpy County	\$17,597,762,000	\$61,901,000	0.4%
Bellevue	\$5,204,413,000	\$2,114,000	>0.1%
Gretna	N/A	\$0	0.0%
La Vista	\$1,490,356,000	\$120,000	>0.1%
Papillion	\$2,120,014,000	\$7,953,000	0.4%
Springfield	\$146,421,000	\$316,000	0.2%

JURISDICTION	BUILDING EXPOSURE	BUILDING DAMAGE	LOSS RATIO (DAMAGE/EXPOSURE)
Thurston County	\$591,173,000	\$691,000	0.1%
Walthill	\$49,786,000	\$0	0.0%
Winnebago	\$34,349,000	\$0	0.0%
Washington County	\$2,483,215,000	\$2,430,000	0.1%
Arlington	\$143,186,000	\$55,000	>0.1%
Blair	\$989,923,000	\$1,227,000	0.1%
Fort Calhoun	N/A	\$0	0.0%
Herman	N/A	\$0	0.0%
Kennard	\$36,644,000	\$47,000	0.1%
Washington	N/A	\$0	0.0%

Source: JEO HAZUS Analysis

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Table 78: Economic Losses

JURISDICTION	BUILDING LOSS			BUSINESS INTERRUPTION				Total
	Building Damage	Contents Damage	Inventory Loss	Relocation Loss	Capital Related Loss	Wages Loss	Rental Income Loss	
Burt County	\$4,502,000	\$5,010,000	\$189,000	\$3,945,000	\$3,640,000	\$7,040,000	\$1,382,000	\$25,708,000
Decatur	\$265,000	\$270,000	\$5,000	\$33,000	\$7,000	\$2,332,000	\$8,000	\$2,920,000
Tekamah	\$3,496,000	\$4,207,000	\$103,000	\$3,457,000	\$2,922,000	\$5,946,000	\$1,360,000	\$21,491,000
Dakota County	\$3,161,000	\$2,570,000	\$123,000	\$978,000	\$691,000	\$882,000	\$496,000	\$8,901,000
Dakota City	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Homer	\$97,000	\$72,000	\$1,000	\$11,000	\$11,000	\$33,000	\$3,000	\$228,000
Hubbard	\$28,000	\$11,000	\$0	\$14,000	\$0	\$0	\$4,000	\$57,000
Jackson	\$3,000	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$5,000
South Sioux City	\$636,000	\$609,000	\$25,000	\$130,000	\$143,000	\$290,000	\$153,000	\$1,986,000
Douglas County	\$181,049,000	\$250,516,000	\$12,053,000	\$66,694,000	\$138,540,000	\$170,564,000	\$39,767,000	\$859,183,000
Bennington	\$933,000	\$836,000	\$25,000	\$287,000	\$253,000	\$601,000	\$75,000	\$3,010,000
Boys Town	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Omaha	\$105,307,000	\$154,716,000	\$8,782,000	\$37,996,000	\$85,168,000	\$99,106,000	\$22,538,000	\$513,613,000
Ralston	\$1,089,000	\$1,100,000	\$12,000	\$292,000	\$439,000	\$749,000	\$133,000	\$3,814,000
Valley	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Waterloo	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sarpy County	\$61,901,000	\$52,619,000	\$1,949,000	\$17,901,000	\$19,598,000	\$35,890,000	\$7,546,000	\$197,404,000
Bellevue	\$2,114,000	\$1,348,000	\$13,000	\$737,000	\$296,000	\$422,000	\$291,000	\$5,221,000
Gretna	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
La Vista	\$120,000	\$190,000	\$11,000	\$13,000	\$101,000	\$108,000	\$9,000	\$552,000
Papillion	\$7,953,000	\$14,867,000	\$347,000	\$3,458,000	\$9,734,000	\$22,350,000	\$1,821,000	\$60,530,000
Springfield	\$316,000	\$215,000	\$2,000	\$46,000	\$112,000	\$101,000	\$12,000	\$801,000
Thurston County	\$691,000	\$788,000	\$4,000	\$159,000	\$249,000	\$1,459,000	\$32,000	\$3,382,000
Walthill	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Winnebago	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Washington County	\$2,430,000	\$1,931,000	\$81,000	\$678,000	\$383,000	\$593,000	\$252,000	\$6,348,000
Arlington	\$55,000	\$26,000	\$0	\$88,000	\$1,000	\$3,000	\$25,000	\$198,000
Blair	\$1,227,000	\$672,000	\$3,000	\$497,000	\$48,000	\$111,000	\$264,000	\$2,822,000
Fort Calhoun	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Herman	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Kennard	\$47,000	\$20,000	\$0	\$13,000	\$0	\$1,000	\$4,000	\$85,000
Washington	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Source: JEO HAZUS Analysis

Agricultural Potential Losses

HAZUS-MH also provides estimates on the potential agricultural losses that may be sustained from a 1 percent annual chance flood. Table 79 provides the estimated amount and types of crops available on a preset date of July 1. This date was picked to best determine the 'worst-case scenario' for agricultural losses when fields have been planted and well established by this point in the season.

Table 79: Agriculture Products Dollar Exposure (Average Total Yield)

JURISDICTION	ALFALFA HAY	CORN	OATS	SOYBEANS
Burt County	\$101,798,973	\$141,284,058	\$80,190,749	\$140,831,759
Decatur	\$82,421,887	\$110,182,302	64,926,715	\$109,829,571
Tekamah	\$80,107,161	\$107,278,815	\$63,103,321	\$106,935,378
Dakota County	\$42,499,228	\$77,271,771	\$31,074,066	\$76,200,734
Dakota City	\$31,372,681	\$49,667,255	\$20,331,090	\$48,978,835
Homer	\$21,253,178	\$51,232,170	\$21,012,415	\$50,522,059
Hubbard	\$21,253,178	\$51,232,170	\$21,012,415	\$50,522,059
Jackson	\$42,170,937	\$62,357,577	\$25,444,900	\$61,493,260
South Sioux City	\$31,372,681	\$49,667,255	\$20,331,090	\$48,978,835
Douglas County	\$40,812,655	\$70,653,318	\$25,874,163	\$69,343,760
Bennington	\$10,028,690	\$54,655,388	\$24,337,745	\$56,353,923
Boys Town	N/A	N/A	N/A	N/A
Omaha	\$19,982,501	\$66,101,265	\$25,843,211	\$69,209,724
Ralston	\$10,028,690	\$35,364,275	\$12,944,736	\$34,686,438
Valley	N/A	N/A	N/A	N/A
Waterloo	\$19,982,501	\$44,261,004	\$12,944,736	\$44,679,108
Sarpy County	\$28,768,968	\$81,600,936	\$8,066,909	\$80,856,148
Bellevue	\$14,387,308	\$50,295,746	\$4,033,454	\$50,453,049
Gretna	N/A	N/A	N/A	N/A
La Vista	\$14,387,308	\$45,732,687	\$5,773,673	\$45,875,719
Papillion	\$14,387,308	\$45,785,194	\$5,783,307	\$45,928,390
Springfield	\$24,927,996	\$56,218,705	\$4,033,454	\$56,394,532
Thurston County	\$85,705,889	\$108,819,237	\$48,852,476	\$112,251,498
Walthill	\$57,034,720	\$72,415,964	\$32,509,870	\$74,700,033
Winnebago	\$57,034,720	\$72,415,964	\$32,509,870	\$74,700,033
Washington County	\$41,710,140	\$149,868,169	\$54,270,025	\$138,540,910
Arlington	\$23,801,615	\$80,285,958	\$29,303,847	\$74,217,826
Blair	\$29,429,314	\$115,574,526	\$43,604,455	\$106,839,231
Fort Calhoun	N/A	N/A	N/A	N/A
Herman	N/A	N/A	N/A	N/A
Kennard	\$20,870,832	\$100,356,385	\$37,437,340	\$92,771,301
Washington	N/A	N/A	N/A	N/A

Source: JEO HAZUS Analysis, N/A – data not available

Table 80 provides the estimated maximum total loss of agricultural crops that could occur during a 1 percent annual chance flood. The maximum total loss is defined as being an agricultural field

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being flooded for 14 days or longer. Corn would experience the greatest losses with 10.4 percent of total yield loss during a flood. Oats would be second at 9.8 percent total yield loss.

Table 80: Economic Loss for Agriculture (Max Total Loss in Bushels)

JURISDICTION	ALFALFA HAY	CORN	OATS	SOYBEANS
Burt County	\$4,592,745	\$8,143,394	\$4,890,885	\$5,578,714
Decatur	\$11,214	\$23,583	\$12,283	\$15,538
Tekamah	\$216,515	\$455,350	\$237,170	\$300,018
Dakota County	\$5,507,924	\$5,538,996	\$2,758,019	\$5,196,314
Dakota City	\$89	\$90	\$47	\$57
Homer	\$64,367	\$70,470	\$36,046	\$45,447
Hubbard	\$81,566	\$133,703	\$64,795	\$90,653
Jackson	\$642,278	\$742,911	\$350,112	\$483,326
South Sioux City	\$25,525	\$25,866	\$13,399	\$16,474
Douglas County	\$760,094	\$2,493,988	\$547,394	\$1,307,164
Bennington	\$0	\$332,917	\$137,920	\$208,819
Boys Town	\$0	\$0	\$0	\$0
Omaha	\$59,420	\$705,819	\$283,521	\$34,544
Ralston	\$0	\$177,731	\$71,731	\$111,282
Valley	\$0	\$0	\$0	\$0
Waterloo	\$35,951	\$35,840	\$24,369	\$20,900
Sarpy County	\$1,060,269	\$4,360,131	\$194,265	\$2,889,470
Bellevue	\$0	\$610,572	\$0	\$397,935
Gretna	\$0	\$0	\$0	\$0
La Vista	\$0	\$470,965	\$67,040	\$304,764
Papillion	\$0	\$326,192	\$27,987	\$211,758
Springfield	\$20,087	\$35,866	\$0	\$24,440
Thurston County	\$1,623,597	\$2,518,389	\$1,120,776	\$1,775,504
Walthill	\$17,927	\$22,162	\$10,636	\$18,189
Winnebago	\$16,402	\$20,277	\$9,731	\$16,642
Washington County	\$1,221,419	\$3,178,000	\$1,341,827	\$2,046,506
Arlington	\$33,375	\$75,779	\$28,010	\$45,627
Blair	\$191,912	\$365,719	\$141,343	\$225,868
Fort Calhoun	\$0	\$0	\$0	\$0
Herman	\$0	\$0	\$0	\$0
Kennard	\$0	\$179,820	\$66,134	\$119,419
Washington	\$0	\$0	\$0	\$0

Source: JEO HAZUS Analysis

National Flood Insurance Program (NFIP)

The NFIP was established in 1968 to reduce flood losses and disaster relief costs by guiding future development away from flood hazard areas where feasible; by requiring flood resistant design and construction practices; and by transferring the costs of flood losses to the resident of floodplains through flood insurance premiums.

In return for availability of federally backed flood insurance, jurisdictions participating in the NFIP must agree to adopt and enforce floodplain management standards to regulate development in special flood hazard areas (SFHA) as defined by FEMA's flood maps. The following tables summarize NFIP participation and active policies within the planning area as of March 2020.

Table 81: NFIP Participants

JURISDICTION	PARTICIPATE IN NFIP?	ELIGIBLE-REGULAR PROGRAM	DATE CURRENT MAP	SANCTION	SUSPENSION	RESCINDED
Burt County	Yes	9/1/2005	6/5/2020	-	-	-
Decatur	Yes	6/16/1992	6/16/1992(M)	-	-	-
Tekamah	Yes	8/1/1979	8/11/1981	-	-	-
Dakota County	Yes	4/15/1982	1/06/2012	-	-	-
Dakota City	Yes	9/16/1981	1/06/2012	-	-	-
Homer	Yes	4/3/1984	1/06/2012	-	-	-
Hubbard	No	-	-	-	-	-
Jackson	Yes	9/4/1987	1/06/2012	-	-	-
South Sioux City	Yes	8/15/1979	1/06/2012	-	-	-
Douglas County	Yes	1/16/1981	5/19/2014	-	-	-
Bennington	Yes	12/4/1979	5/3/2010	-	-	-
Boys Town	Yes		5/3/2010	-	-	-
Omaha	Yes	10/7/1980	5/19/2014	-	-	-
Ralston	Yes	5/15/1980	12/2/2005	-	-	-
Valley	Yes	3/18/1980	5/19/2014	-	-	-
Waterloo	Yes	1/14/1977	5/19/2014	-	-	-
Sarpy County	Yes	1/16/1981	5/3/2010	-	-	-
Bellevue	Yes	1/16/1980	5/3/2010	-	-	-
Gretna	Yes	9/21/2010	5/3/2010	-	-	-
La Vista	Yes	1/16/1980	5/3/2010	-	-	-
Papillion	Yes	8/18/1972	5/3/2010	-	-	-
Springfield	Yes	2/15/1978	12/2/2005	-	-	-
Thurston County	Yes	1/6/2010	1/6/2010	-	-	-
Walthill	Yes	9/1/1986	1/6/2010(L)	-	-	-
Winnebago	Yes	9/1/1986	1/6/2010(M)	-	-	-
Winnebago Indian Tribe	Yes	1/6/2010	1/6/2010	-	-	-
Washington County	Yes	2/4/1981	1/6/2012	-	-	-
Arlington	Yes	1/16/1981	1/6/2012	-	-	-
Blair	Yes	7/16/1981	1/6/2012	-	-	-
Fort Calhoun	Yes	12/1/1983	1/6/2012	-	-	-
Herman	Yes	3/18/1985	1/6/2012	-	-	10/28/1977
Kennard	No	-	-	-	-	-
Washington	Yes	9/14/1990	1/6/2012(M)	-	-	-

Source: FEMA, NFIP Community Status Book Report⁷¹

Note: (M) – No elevation determined – All Zone, A, C, and X; (L) – Original FIRM by Letter – All Zone A, C, and X

⁷¹ Federal Emergency Management Agency. 2020. "The National Flood Insurance Program Community Status Book." <https://www.fema.gov/cis/NE.html>.

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It should be noted that while the number of policies in force may change monthly and annually as representatives enroll, maintain, or lapse policies, the total number of losses and payments are cumulative over time.

Table 82: NFIP Policies in Force and Total Payments

JURISDICTION	POLICIES IN-FORCE	TOTAL COVERAGE	TOTAL PREMIUMS	CLOSED LOSSES*	TOTAL PAYMENTS*
Burt County	22	\$4,121,300	\$26,063	43	\$885,979.76
Decatur	1	\$207,000	\$953	5	\$124,942.88
Tekamah	5	\$738,700	\$2,341	2	\$765.53
Dakota County	12	\$2,626,000	\$14,947	11	\$60,419.77
Dakota City	8	\$2,800,000	\$3,736	10	\$78,651.78
Homer	2	\$1,140,000	\$3,338	1	\$3,427.06
Jackson	10	\$1,306,900	\$12,436	0	\$0
South Sioux City	40	\$14,645,000	\$37,236	65	\$756,896.22
Douglas County	169	\$34,400,100	\$186,188	293	\$3,970,113.72
Bennington	4	\$625,000	\$3,997	1	\$28,395.46
Boys Town	1	\$70,000	\$2,121	N/A	N/A
Omaha	827	\$228,872,100	\$1,054,464	272	\$5,074,607.90
Ralston	12	\$3,957,200	\$16,381	1	\$34,200.54
Valley	424	\$77,957,900	\$411,962	201	\$2,518,402.31
Waterloo	14	\$3,743,700	\$8,559	11	\$331,179.61
Sarpy County	495	\$124,602,000	\$523,881	689	\$18,182,173.80
Bellevue	172	\$45,621,500	\$129,160	99	\$2,608,645.73
Gretna	3	\$1,050,000	\$1,401	2	\$9,026.58
La Vista	17	\$5,761,000	\$23,992	1	\$976.63
Papillion	100	\$33,412,200	\$89,019	17	\$32,887.02
Springfield	1	\$175,000	\$374	12	\$66,973.62
Thurston County	0	\$0	\$0	0	\$0
Walthill	0	\$0	\$0	0	\$0
Winnebago	0	\$0	\$0	0	\$0
Washington County	25	\$4,227,200	\$32,366	79	\$1,719,308.87
Arlington	10	\$1,117,600	\$19,524	20	\$426,901.55
Blair	35	\$10,387,900	\$49,003	20	\$563,290.69
Fort Calhoun	1	\$210,000	\$361	21	\$216,976.95
Herman	1	\$210,000	\$361	0	\$0
Washington	1	\$280,000	\$684	N/A	N/A

Source: FEMA, HUDEX Policy Loss Data, November 30 2020⁷²

*Note Closed Losses and Total Payments are from 2015 Claim Statistics due to lack of data access at the time of this plan development.

This plan highly recommends and strongly encourages plan participants to enroll, participate, and remain in good standing with the NFIP. Compliance with the NFIP should remain a top priority for each participant, regardless of whether or not a flooding hazard area map has been delineated for the jurisdiction. Jurisdictions are encourage to initiate activities above the minimum participation requirements, such as those described in the Community Rating System (CRS) Coordinator’s Manual (FIA-15/2017).⁷³ Currently, the Cities of Omaha, Papillion, and Valley participate in the CRS program within the planning area.

⁷² Federal Emergency Management Agency: National Flood Insurance Program. December 2019. Policy & Claim Statistics for Flood Insurance.” Accessed November 2020. <https://www.fema.gov/policy-claim-statistics-flood-insurance>.

⁷³ Federal Emergency Management Agency. May 2017. “National Flood Insurance Program Community Rating System: Coordinator’s Manual FIA-15/2017.” Accessed October 2020. https://www.fema.gov/media-library-data/1493905477815-d794671adeed5beab6a6304d8ba0b207/633300_2017_CRS_Coordinators_Manual_508.pdf.

NFIP Repetitive Loss Structures

NeDNR and FEMA Region VII were contacted to determine if any existing buildings, infrastructure, or critical facilities are classified as NFIP Repetitive Loss Structures. Note there are two definitions for repetitive loss structures. Severe repetitive loss is a grant definition for HMA purposes that has specific criteria while repetitive loss is a general NFIP definition. There are 13 repetitive loss properties and 19 severe repetitive loss properties located in the planning area as of February 2020.

Table 83: Repetitive Loss and Severe Repetitive Loss Properties

JURISDICTION	NFIP REPETITIVE LOSS	# OF REPETITIVE LOSS PROPERTIES	REPETITIVE LOSS TYPE	# OF SEVERE REPETITIVE LOSS PROPERTIES	SEVERE REPETITIVE LOSS TYPE
Burt County	5	-	-	-	-
Decatur	-	-	-	-	-
Tekamah	-	-	-	-	-
Dakota County	-	-	-	-	-
Dakota City	-	-	-	-	-
Homer	-	-	-	-	-
Hubbard	-	-	-	-	-
Jackson	-	-	-	-	-
South Sioux City	3	-	-	-	-
Douglas County	30	3	Single Family	1	Other Non-Residence
Bennington	-	-	-	-	-
Boys Town	-	-	-	-	-
Omaha	10	0	Single Family	2	1-Other Non-residence, 1-Other Residence
Ralston	-	-	-	-	-
Valley	3	0	Single Family	1	Single Family
Waterloo	-	-	-	-	-
Sarpy County	120	7	Single Family	11	Single Family
Bellevue	-	-	-	-	-
Gretna	-	-	-	-	-
La Vista	-	-	-	-	-
Papillion	-	-	-	-	-
Springfield	3	0	Single Family	1	Single Family
Thurston County	-	-	-	-	-
Walthill	-	-	-	-	-
Winnebago	-	-	-	-	-

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JURISDICTION	NFIP REPETITIVE LOSS	# OF REPETITIVE LOSS PROPERTIES	REPETITIVE LOSS TYPE	# OF SEVERE REPETITIVE LOSS PROPERTIES	SEVERE REPETITIVE LOSS TYPE
Washington County	9	-	-	-	-
Arlington	4	2	Single Family	1	Single Family
Blair	-	-	-	-	-
Fort Calhoun	4	1	Single Family	2	Single Family
Herman	-	-	-	-	-
Kennard	-	-	-	-	-
Washington	-	-	-	-	-

Source: NeDNR, February 2020 (personal correspondence)

Probability

The NCEI reports 84 flooding and 112 flash flooding events from January 1996 to September 2019. Based on the historic record and reported incidents by participating communities, there is a 100 percent probability that flooding will occur annually in the planning area.

Community Top Hazard Status

The following jurisdictions identified Flooding as a hazard of top concern:

- Burt County
- Village of Decatur
- City of Tekamah
- Dakota County
- City of Dakota City
- Village of Homer
- Village of Jackson
- City of South Sioux City
- Douglas County
- City of Bennington
- City of Omaha
- City of Ralston
- City of Valley
- Village of Waterloo
- Sarpy County
- City of Bellevue
- City of Gretna
- City of La Vista
- City of Papillion
- City of Springfield
- Thurston County
- Village of Walthill
- Village of Winnebago

- Washington County
- Village of Arlington
- City of Blair
- City of Fort Calhoun
- Village of Herman
- Arlington Public Schools
- Fort Calhoun Community Schools
- Homer Community Schools
- Papillion-La Vista Public Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

An updated national study examining social vulnerability as it relates to flood events found that low-income and minority populations are disproportionately vulnerable to flood events.⁷⁴ These groups may lack needed resources to mitigate potential flood events as well as resources that are necessary for evacuation and response. In addition, low-income residents and renters are more likely to live in areas vulnerable to the threat of flooding, yet lack the resources necessary to purchase flood insurance. And finally flash floods are more often responsible for injuries and fatalities than prolonged flood events.

Other groups that may be more vulnerable to floods, specifically flash floods, include the elderly, those outdoors during rain events, and those in low-lying areas. Elderly residents may suffer from a decrease or complete lack of mobility and as a result, be caught in flood-prone areas. Residents in campgrounds or public parks may be more vulnerable to flooding events. Many of these areas exist in natural floodplains and can experience rapid rise in water levels resulting in injury or death.

On a state level, the Nebraska's State National Flood Insurance Coordinator's office has done some interesting work, studying who lives in special flood hazard areas. According to the NeDNR, floodplain areas have a few unique characteristics which differ from non-floodplain areas:

- Higher vacancy rates within floodplain
- Far higher percentage of renters within floodplain
- Higher percentage of non-family households in floodplain
- More diverse population in floodplain
- Much higher percentage of Hispanic/Latino populations in the floodplain

To analyze parcels and populations located in the floodplain, GIS parcel data were acquired from each County Assessor. This data was analyzed for the location, number, and value of property improvements at the parcel level. Property improvements include any built structures such as roads, buildings, and paved lots. The data did not contain the number of structures on each parcel. A summary of the results of this analysis for the six-county planning area is provided in the following table. Specific jurisdictional parcel improvements in the floodplain can be found in the corresponding community profile in *Section Seven: Community Profiles*.

Burt and Dakota Counties have the largest percentage of parcel improvements located in the floodplain at 16 percent each, which indicates these counties, particularly along waterways, have

⁷⁴ Tate, E., Rahman, M.A., Emrich, C.T. *et al.* Flood exposure and social vulnerability in the United States. *Nat Hazards* (2021). <https://doi.org/10.1007/s11069-020-04470-2>

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the greatest flood vulnerability to people and infrastructure. However, Douglas County has the greatest number and value of improvements located in the floodplain. Significant flood events would impact the economy throughout the entire planning area as structures and roadways are damaged.

Table 84: Planning Area Parcel Improvements and Value in the Floodplain

COUNTY	NUMBER OF IMPROVEMENTS	TOTAL IMPROVEMENT VALUE	NUMBER OF IMPROVEMENTS IN FLOODPLAIN	VALUE OF IMPROVEMENTS IN FLOODPLAIN	PERCENTAGE OF IMPROVEMENTS IN FLOODPLAIN
Burt	2,930	\$224,548,564	475	\$39,168,525	16%
Dakota	6,426	\$1,065,477,730	1,004	\$259,988,105	16%
Douglas	181,119	\$40,769,402,153	6,529	\$3,524,039,706	4%
Sarpy	58,723	\$14,080,714,093	2,690	\$1,162,504,920	5%
Thurston	1,634	\$116,821,505	195	\$15,407,915	12%
Washington	7,873	\$1,674,606,235	1,035	\$307,870,575	13%

Source: GIS Workshop/Sarpy County Assessor/Douglas County Assessor, 2019

The following table is a summary of regional vulnerabilities. For jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 85: Regional Flooding Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Low income and minority populations may lack the resources needed for evacuation, response, or to mitigate the potential for flooding -Elderly or residents with decreased mobility may have trouble evacuating -Residents in low-lying areas, especially campgrounds, are vulnerable during flash flood events -Residents living in the floodplain may need to evacuate for extended periods
Economic	<ul style="list-style-type: none"> -Business closures or damages may have significant impacts -Agricultural losses from flooded fields or cattle loss -Closed roads and railroads would impact commercial transportation of goods
Built Environment Infrastructure	<ul style="list-style-type: none"> -Building may be damaged -Damages to roadways and railways
Critical Facilities	<ul style="list-style-type: none"> -Wastewater facilities are at risk, particularly those in the floodplain -Critical facilities, especially those in the floodplain, are at risk to damage (critical facilities are noted within individual community profiles)
Climate	<ul style="list-style-type: none"> -Changes in seasonal and annual precipitation normals will likely increase frequency and magnitude of flood events

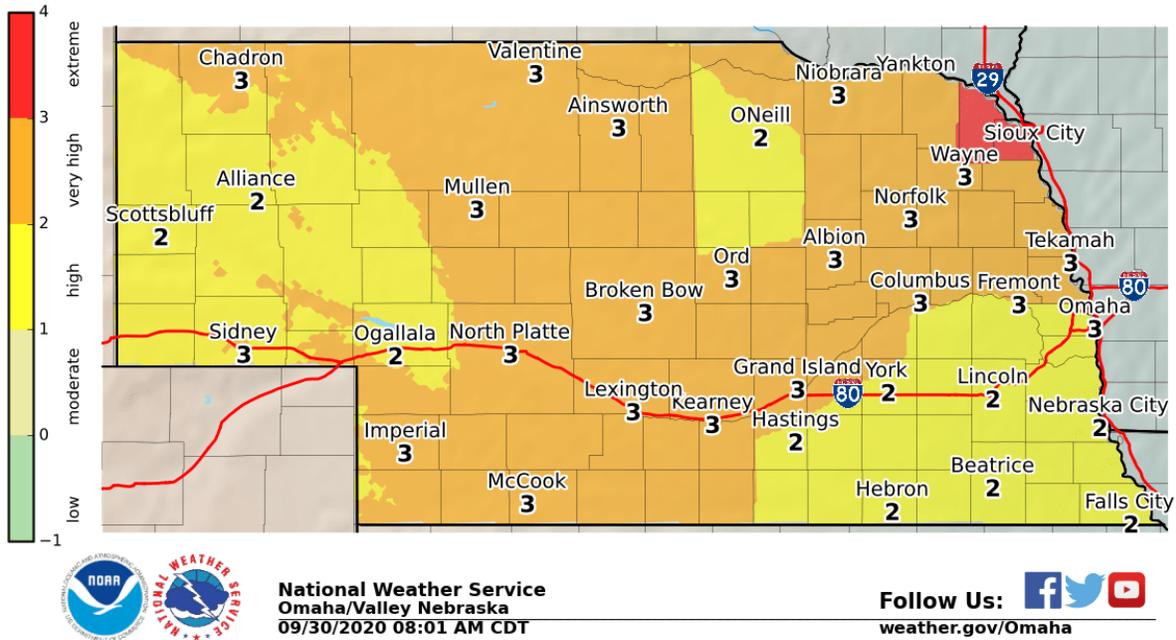
Grass/Wildfires

Wildfires, also known as grassfires, brushfires, forest fires, or wildland fires, are any uncontrolled fire that occurs in the countryside or wildland. Wildland areas may include, but are not limited to: grasslands; forests; woodlands; agricultural fields; pastures; and other vegetated areas. Wildfires range in size from a few acres (the most common) to thousands of acres in some cases. Fire events can quickly spread from their original source, change direction quickly, and jump gaps (such as roads, rivers, and fire breaks). Wildfire events are particularly dependent on the surrounding conditions including temperature, humidity, wind speed, wind direction, slope, and available fuel load. While some wildfires burn in remote forested regions, others can cause extensive destruction of homes and other property located in the wildland-urban interface (WUI), the zone of transition between developed areas and undeveloped wilderness.

Wildfires are a growing hazard in most regions of the United States, posing a threat to life and property, particularly where rural or native ecosystems meet urban developed areas or where local economies are heavily dependent on open agricultural land. Although fire is a natural and often beneficial process, fire suppression can lead to more severe fires due to the buildup of vegetation, which creates more fuel and increases the intensity and devastation of future fires.

Wildfires are characterized in terms of their physical properties including topography, weather, and fuels. Wildfire behavior is often complex and variably dependent on factors such as fuel type, moisture content in the fuel, humidity, wind speed, topography, geographic location, ambient temperature, the effect of weather on the fire, and the cause of ignition. Fuel and structure durability are the primary factors can control and are the target of most mitigation efforts. The NWS monitors the risk factors including high temperature, high wind speed, fuel moisture (greenness of vegetation), low humidity, and cloud cover in the state on a daily basis (Figure 49). Fire danger predictions are updated regularly and should be reviewed frequently by community leaders and fire department officials.

Figure 49: Rangeland Fire Danger Example
Nebraska Rangeland Fire Danger - *Does not account for snow cover*
 Valid: September 30, 2020

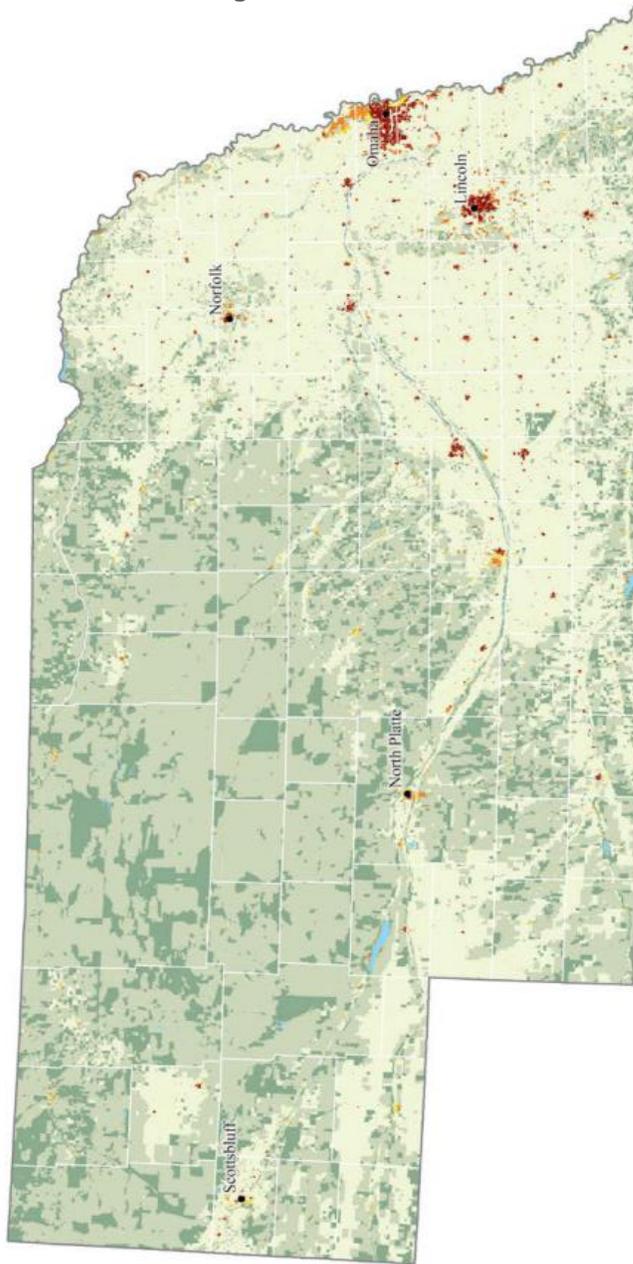


In recent decades, as the population of the United States has decentralized and residents have moved farther away from the center of villages and cities, the area known as the wildland urban interface (WUI) has developed significantly, in both terms of population and building stock. The WUI is defined as the zone of transition between developed areas and undeveloped wilderness, where structures and other human development meet wildland. The expansion of the WUI increases the likelihood that wildfires will threaten people and homes, making it the focus of the majority of wildfire mitigation efforts. The Nebraska Forest Service (NFS) develops Community Wildfire Protection Plans for regions across the state. Sarpy and Douglas Counties are located within the Southeast Region; while Dakota, Thurston, Burt, and Washington counties are located within the proposed Missouri River East region which is anticipated to be developed in 2022.⁷⁵

The following figure produced by the USDA Forest Service displays the State of Nebraska’s WUI conditions as of 2010. The approximate location of the planning area is indicated by the black outline. Areas that are indicated by the WUI (Figure 50), either interface (yellow) or intermix (orange) are primarily found in portions of Douglas and Sarpy Counties, eastern Washington County and parts of eastern Thurston County. The rest of the planning area is located in a non-WUI vegetated designated area, with no or low-density housing with a mix of vegetated, non-vegetated, and agricultural land.

⁷⁵ Nebraska Forest Service. 2020. "Community Wildfire Protection Plans." <https://nfs.unl.edu/publications/community-wildfire-protection-plans>.

Figure 50: 2010 Wildland Urban Interface Map of Nebraska



Wildland-Urban Interface (WUI)

- Interface
- Intermix
- Non-WUI Vegetated**
- No housing
- Very low housing density
- Non-vegetated or Agriculture**
- Low and very low housing density
- Medium and high housing density
- Water
- County border
- Highway

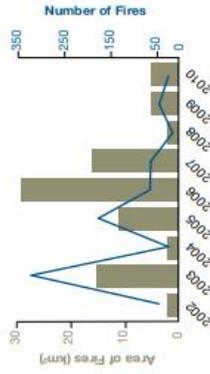


For more information on the maps and data presented here, please refer to page 20.

Population and Geography Overview

Census Data	Number	%
Population	1,826,341	
Housing units	796,793	
Seasonal use	13,881	2
Land Ownership	Area (km ²)	%
Public-Federal	2,662	1
Public-State	1,055	1
Public-Local	631	0
Private	195,981	98
Land Cover	Area (km ²)	%
Forest	3,990	2
Shrubland/herbaceous	108,136	54
Planted/cultivated	74,102	37
Developed	7,216	4
Water/wetland	6,741	3
Others	144	0
Total area	200,329	

Wildfire History



WUI in Numbers (see legend)

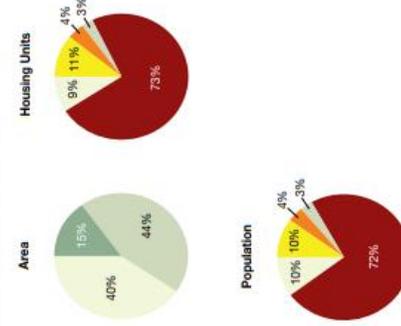
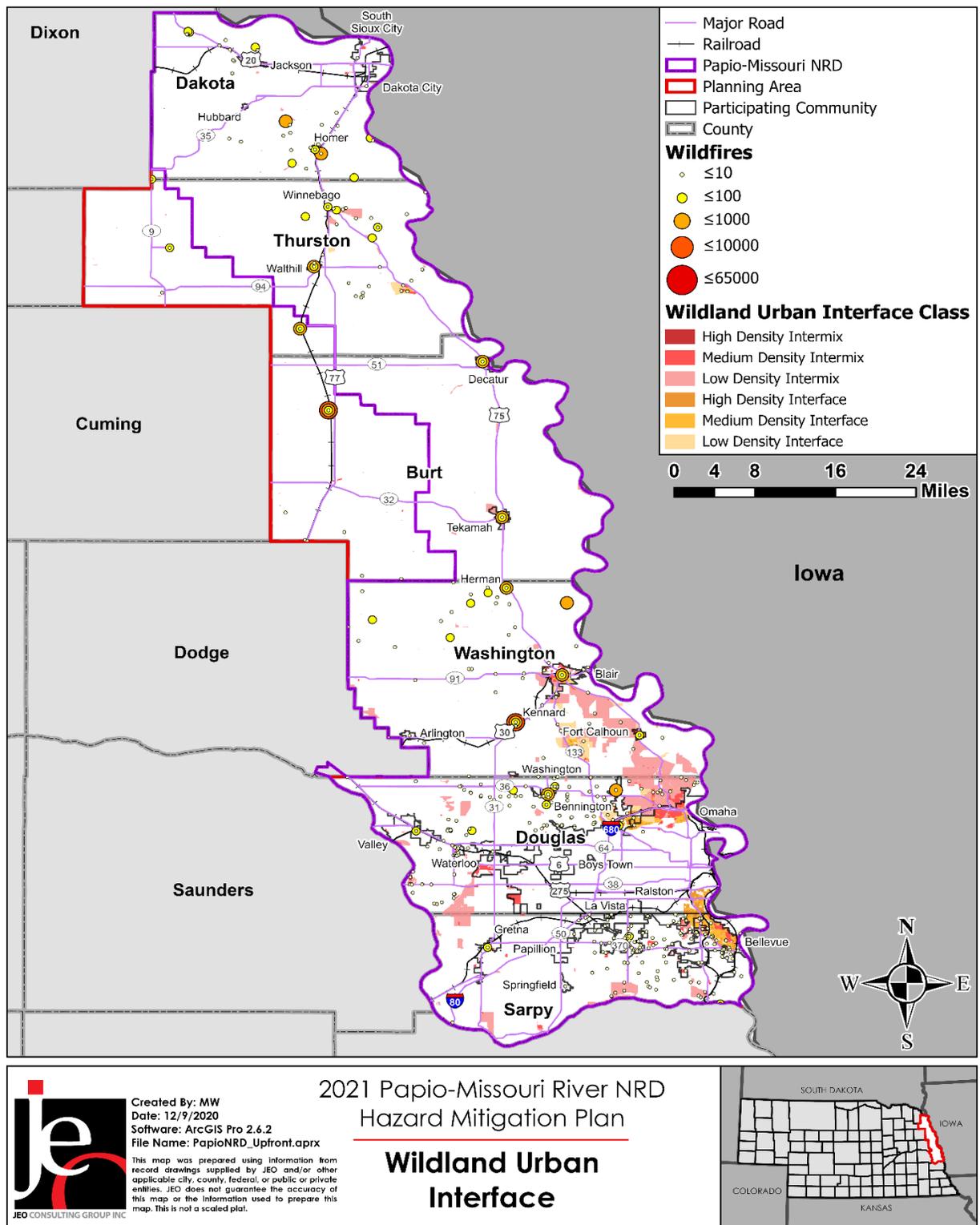


Figure 51: Planning Area Wildland Urban Interface Map

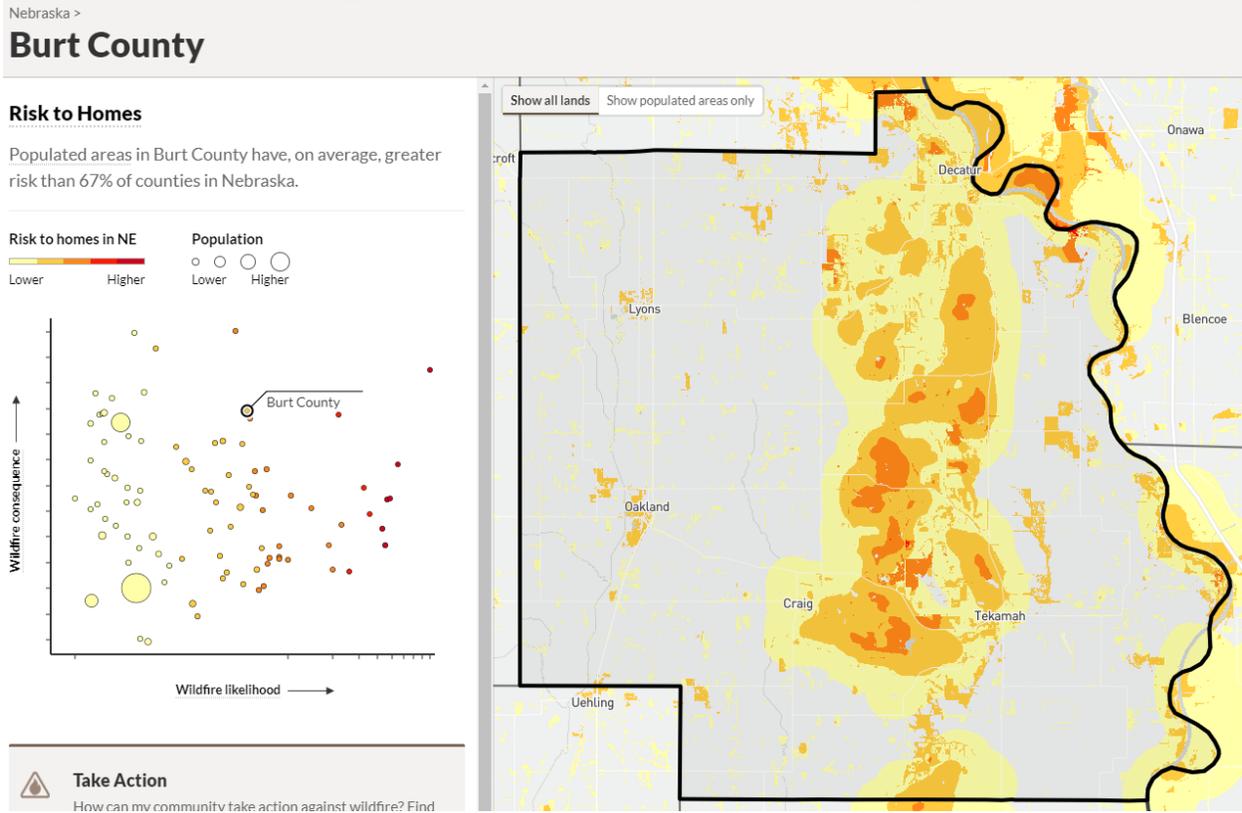


Source: USDA, 2010⁷⁶

⁷⁶ USDA, USFS, & University of Wisconsin. 2010. "The 2010 Wildland-Urban Interface of the Conterminous United States." https://www.fs.fed.us/nrs/pubs/map/rmap_nrs8.pdf.

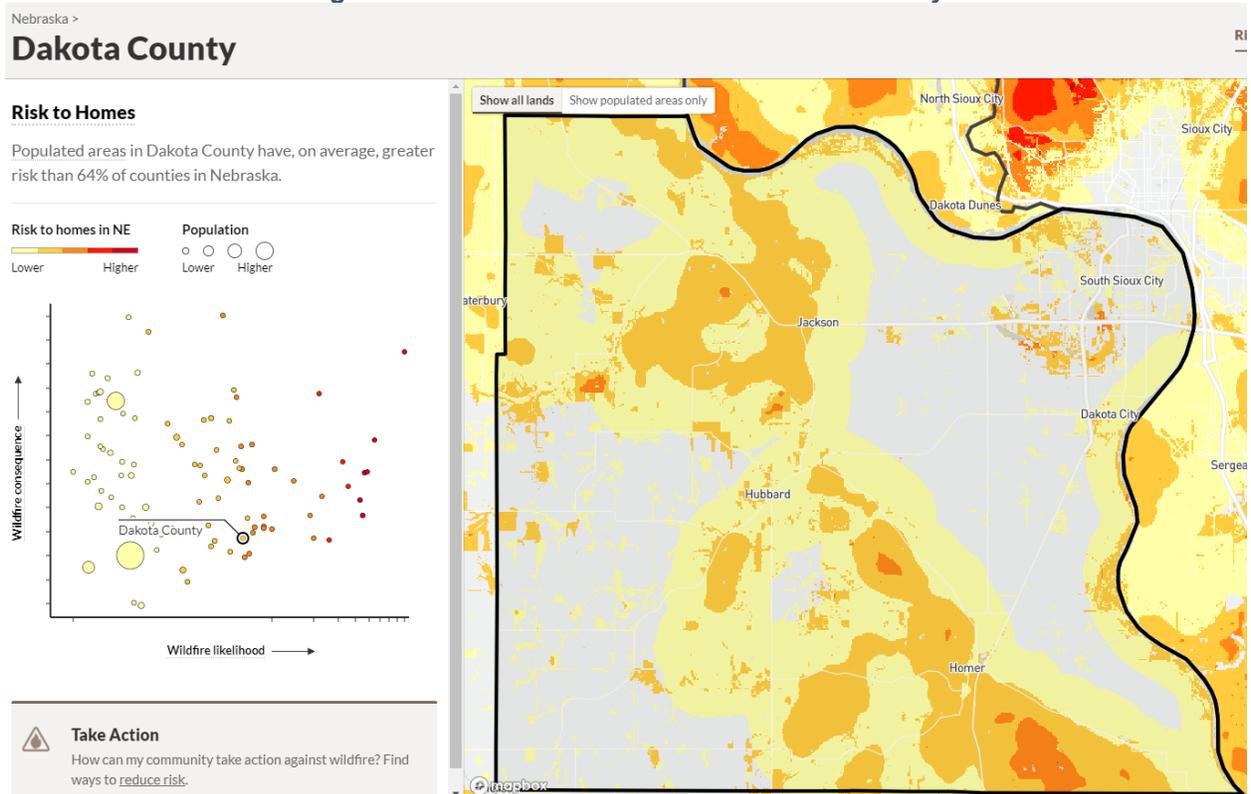
The United States Department of Agriculture Forest Service created the interactive web resource *Wildfire Risk to Communities* to help communities and jurisdictions understand, explore, and reduce wildfire risk. The following figures show wildfire risk to homes per county in the planning area.

Figure 52: Wildfire Risk to Homes – Burt County



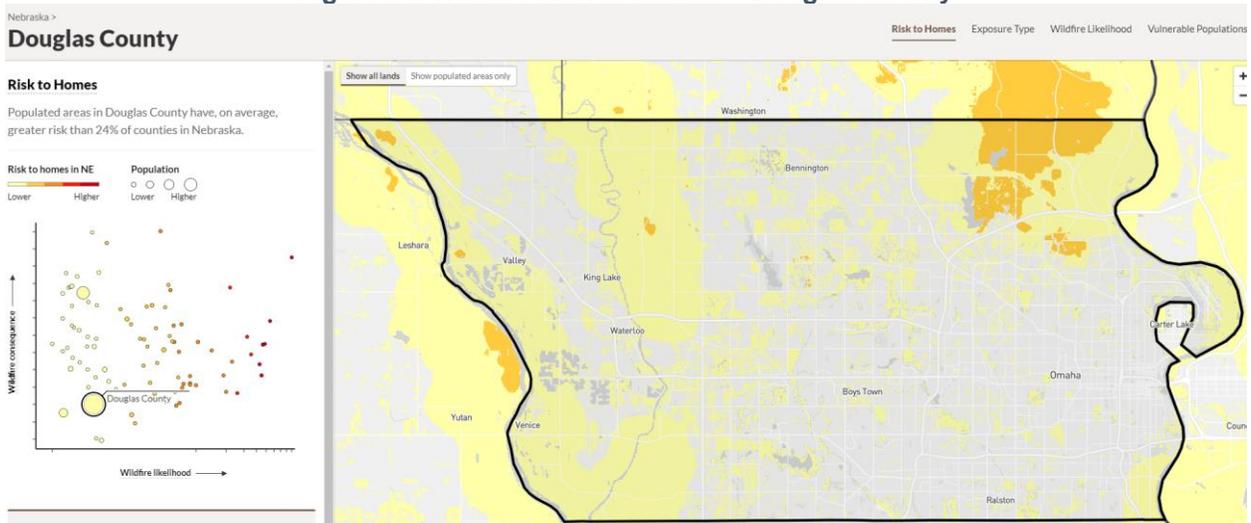
Source: *Wildfire Risk to Communities*

Figure 53: Wildfire Risk to Homes – Dakota County



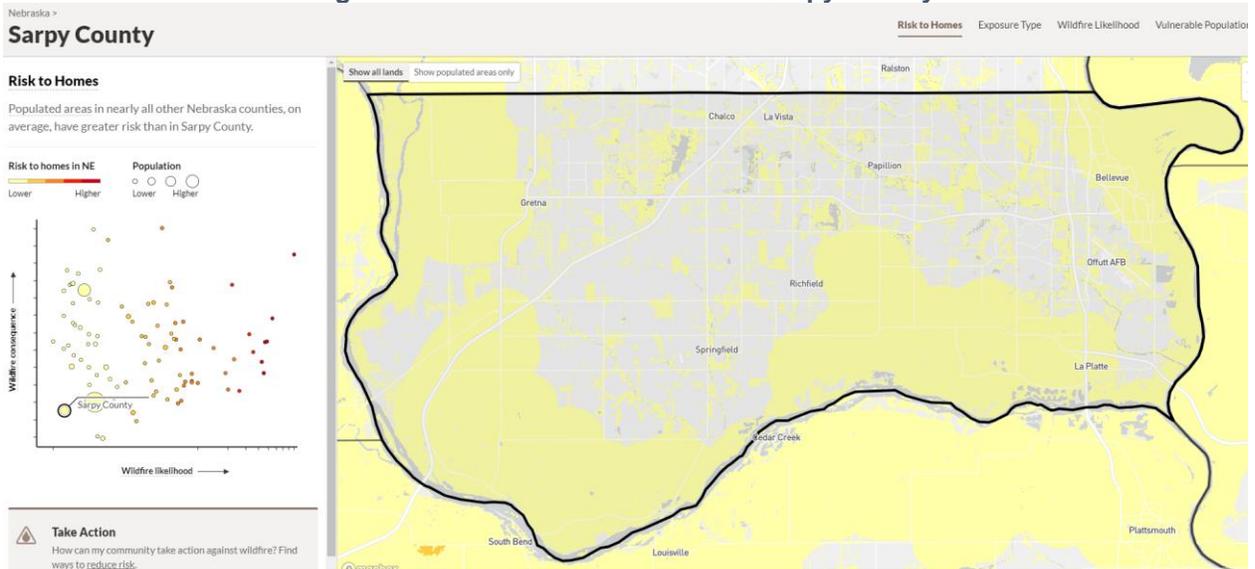
Source: Wildfire Risk to Communities

Figure 54: Wildfire Risk to Homes – Douglas County



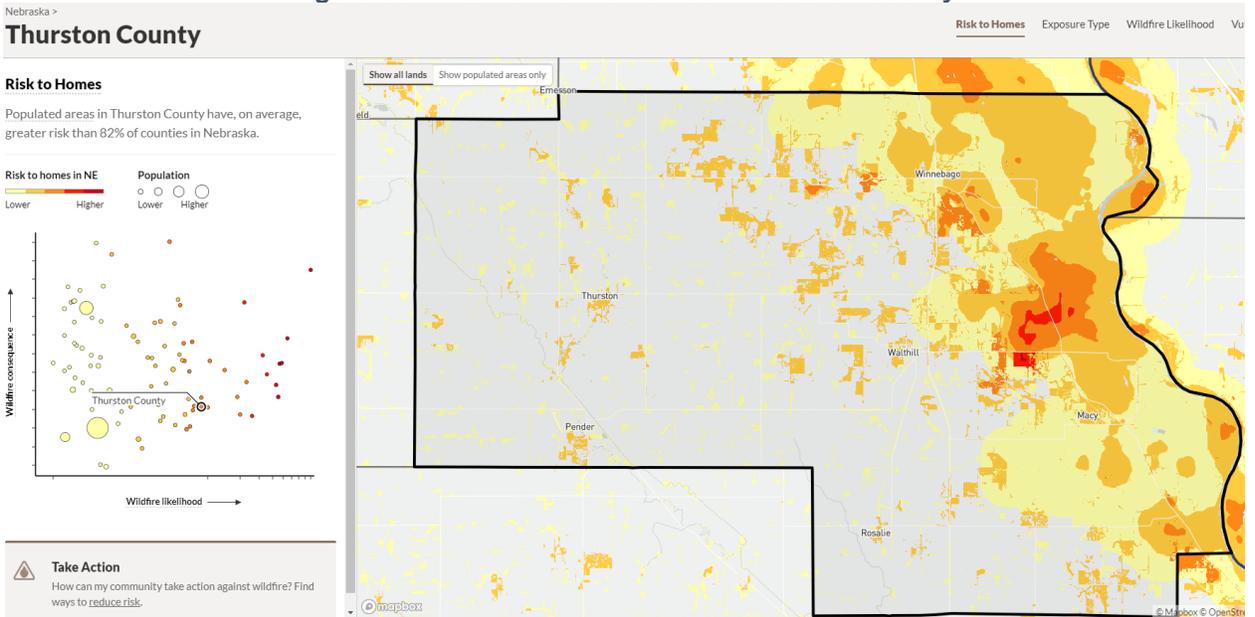
Source: Wildfire Risk to Communities

Figure 55: Wildfire Risk to Homes – Sarpy County



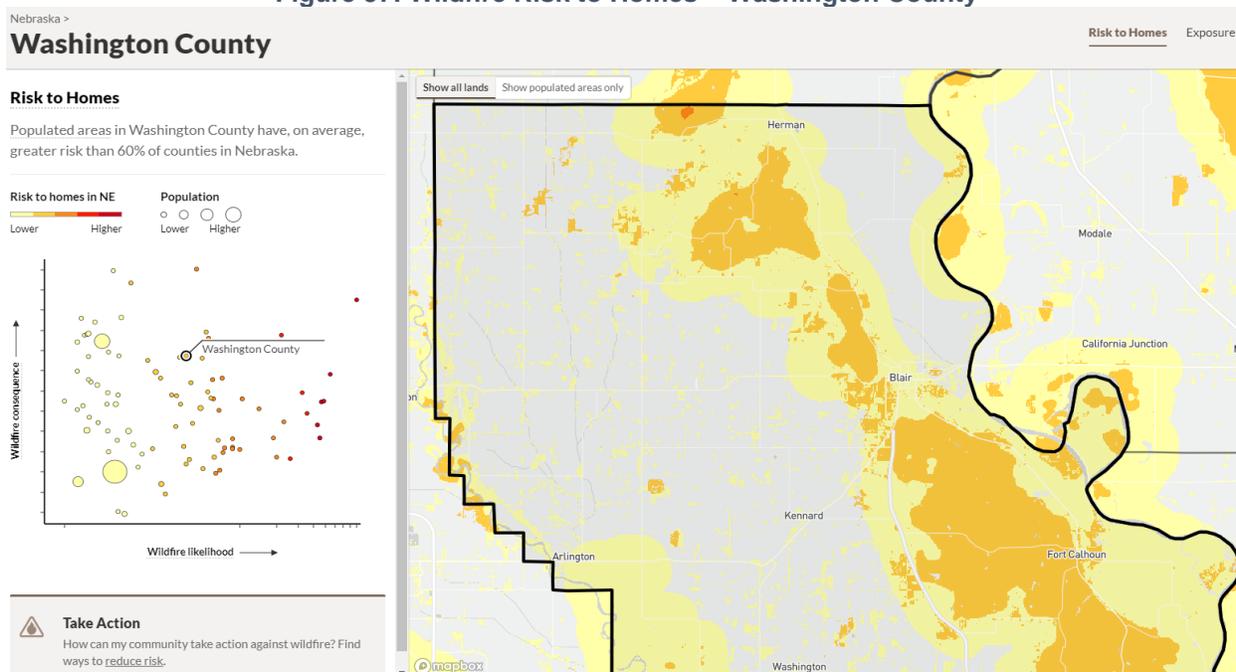
Source: Wildfire Risk to Communities

Figure 56: Wildfire Risk to Homes – Thurston County



Source: Wildfire Risk to Communities

Figure 57: Wildfire Risk to Homes – Washington County



Source: Wildfire Risk to Communities

Of the counties in the planning area, Thurston County has the greatest risk of wildfire. The following tables describes other specific risks and vulnerabilities seen across the planning area.

Table 86: Wildfire Vulnerabilities by County

COUNTY	RISK TO HOMES (COMPARED TO NE COUNTIES)	EXPOSURE TYPE	WILDFIRE LIKELIHOOD (COMPARED TO NE COUNTIES)
Burt	Greater risk than 67% of NE Counties	Directly Exposed (23%) Indirectly Exposed (34%) Not Exposed (43%)	Greater risk than 65% of NE Counties
Dakota	Greater risk than 64% of NE Counties	Directly Exposed (17%) Indirectly Exposed (13%) Not Exposed (70%)	Greater risk than 72% of NE Counties
Douglas	Greater risk than 24% of NE Counties	Directly Exposed (13%) Indirectly Exposed (3%) Not Exposed (84%)	Greater risk than 27% of NE Counties
Sarpy	Nearly all other NE counties have greater risk	Directly Exposed (22%) Indirectly Exposed (16%) Not Exposed (62%)	Nearly all other NE counties have greater risk
Thurston	Greater risk than 82% of NE Counties	Directly Exposed (34%) Indirectly Exposed (30%) Not Exposed (36%)	Greater risk than 82% of NE Counties
Washington	Greater risk than 60% of NE Counties	Directly Exposed (35%) Indirectly Exposed (49%) Not Exposed (16%)	Greater risk than 55% of NE Counties

Source: Wildfire Risk to Communities, 2020⁷⁷

⁷⁷ United States Department of Agriculture, United States Forest Service. 2020. "Wildfire Risk to Communities." <https://wildfirerisk.org/>.

Table 87: Wildfire Vulnerable Populations by County

COUNTY	FAMILIES IN POVERTY	PEOPLE WITH DISABILITIES	PEOPLE OVER 65	DIFFICULTY WITH ENGLISH	HOUSEHOLDS WITH NO VEHICLE	MOBILE HOMES
Burt	165 (8.6%)	1,031 (16%)	1,556 (23.8%)	26 (0.4%)	136 (4.7%)	72 (2.5%)
Dakota	795 (13.0%)	2,071 (10.3%)	2,619 (12.9%)	1,858 (10%)	415 (5.6%)	792 (10.6%)
Douglas	11,552 (8.7%)	57,927 (10.6%)	68,170 (12.3%)	19,690 (3.8%)	15,690 (7.2%)	2,038 (0.9%)
Sarpy	1,707 (3.6%)	15,717 (9%)	19,582 (11%)	1,795 (1.1%)	1,850 (2.8%)	422 (0.6%)
Thurston	350 (21.7%)	891 (12.6%)	861 (12.1%)	79 (1.2%)	167 (7.7%)	93 (4.3%)
Washington	363 (6.3%)	2,887 (14.4%)	3,471 (17.2%)	73 (0.4%)	368 (4.5%)	247 (3%)

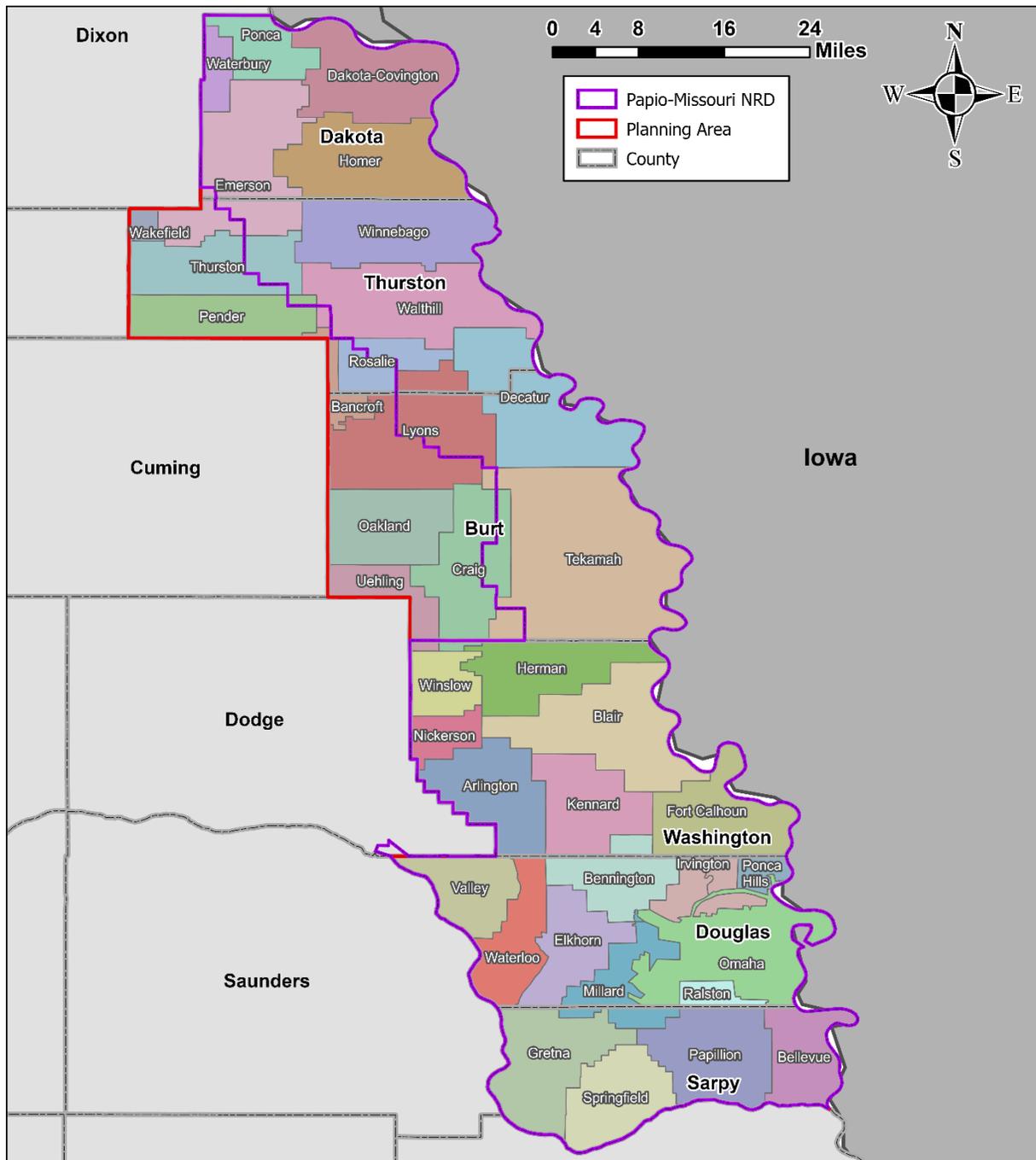
Source: *Wildfire Risk to Communities, 2020*⁷⁸

Location

For the planning area, 22 fire districts were identified to report events: Arlington Volunteer Fire and Rescue, Bellevue Fire Department, Bennington Volunteer Fire and Rescue, Blair Volunteer Fire and Rescue, Dakota City Volunteer Fire and Rescue, Decatur Volunteer Fire and Rescue, Fort Calhoun Fire and Rescue, Gretna Fire Department, Herman Rural Fire Department, Homer Volunteer Fire Department, Irvington Volunteer Fire Department, Kennard Volunteer Fire Department, Omaha Airport Authority Fire and Rescue, Omaha Fire Department, Papillion Fire Department, Ponca Hills Volunteer Fire Department, Ralston Volunteer Fire Department, South Sioux City Volunteer Fire Department, Springfield Volunteer Fire Department, Tekamah Fire and Rescue Association, Valley Suburban Fire Protection District #5, Village of Boys Town Department of Fire and Rescue, Walthill Volunteer Fire Department, Waterloo Fire Department, Winnebago Volunteer Fire Department.

⁷⁸ United States Department of Agriculture, United States Forest Service. 2020. "Wildfire Risk to Communities." <https://wildfirerisk.org/>.

Figure 58: Fire Districts in the Planning Area



	<p>Created By: MW Date: 12/9/2020 Software: ArcGIS Pro 2.6.2 File Name: PapioNRD_Upfront.aprx</p> <p><small>This map was prepared using information from record drawings supplied by JEO and/or other applicable city, county, federal, or public or private entities. JEO does not guarantee the accuracy of this map or the information used to prepare this map. This is not a scaled plot.</small></p>	<p>2021 Papio-Missouri River NRD Hazard Mitigation Plan</p> <hr/> <p>Fire Districts</p>	
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Wildfire count data was provided by the Nebraska Forest Service from January 2000 to August 2018. As the number of reported wildfires by the county indicates, wildfire events can occur in any county within the planning area. Douglas County has reported the greatest number of fires and Washington County had the greatest amount of acres burned. The greatest threat of wildfire that could impact people and homes is in portions of Douglas and Sarpy Counties, the eastern portion of Washington County, and eastern Thurston County.

Table 88: Reported Wildfires by County

COUNTY	REPORTED WILDFIRES	ACRES BURNED	OTHER IMPACTS
Burt	86	848	-
Dakota	103	1,419	-
Douglas	359	2,214	2 injuries; 2 structures destroyed
Sarpy	203	247	1 injury; 1 structure destroyed
Thurston	352	3,356	2 injuries; 1 fatality; 1 structure destroyed
Washington	280	5,519	-
Total	1,383	13,602	

Source: NFS, 2000-2018⁷⁹

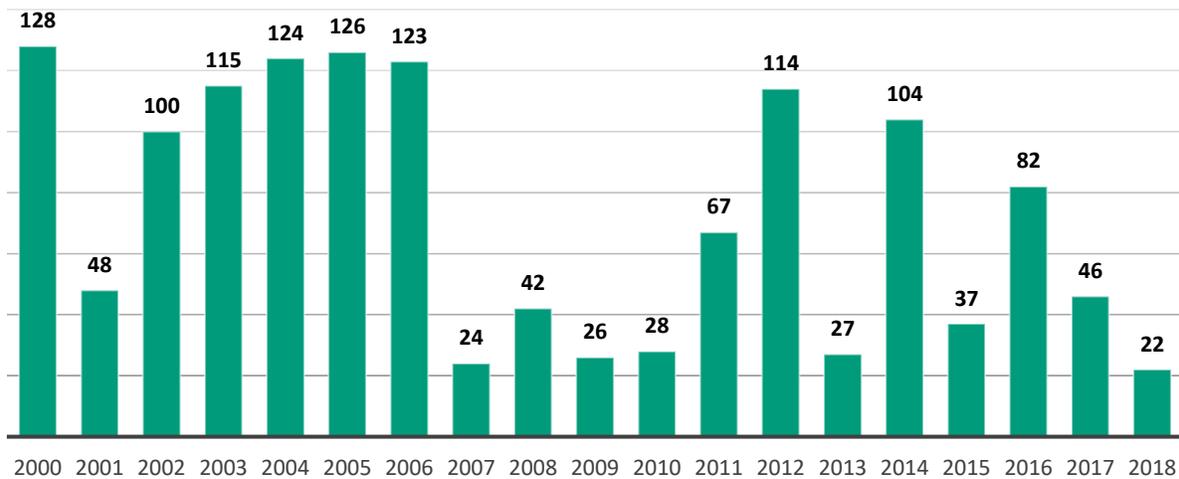
Historical Occurrences

For the planning area, 22 different fire departments reported a total of 1,383 wildfires between January 2000 and August 2018 according to the Nebraska Forest Service. Most fires occurred in 2000, 2005, and 2004 (Figure 59). The majority of wildfires were caused by Debris Burning or Miscellaneous causes (Figure 60). Wildfire events have ranged from less than one acre to 2,560 acres, with an average event burning 11 acres. It is important to note that there is no comprehensive fire event database. Fire events, magnitude, and local responses were reported voluntarily by local fire departments and local reporting standards can vary between departments. Actual fire events and their impacts are likely underreported in the available data.

The reported events burned 13,602 acres in total. While the RMA lists no damages from fire in the planning area, the NFS reported \$70,169 in crop loss and \$45,880 in property damages. There have been no presidential disaster declarations in the planning area which included wildfire events.

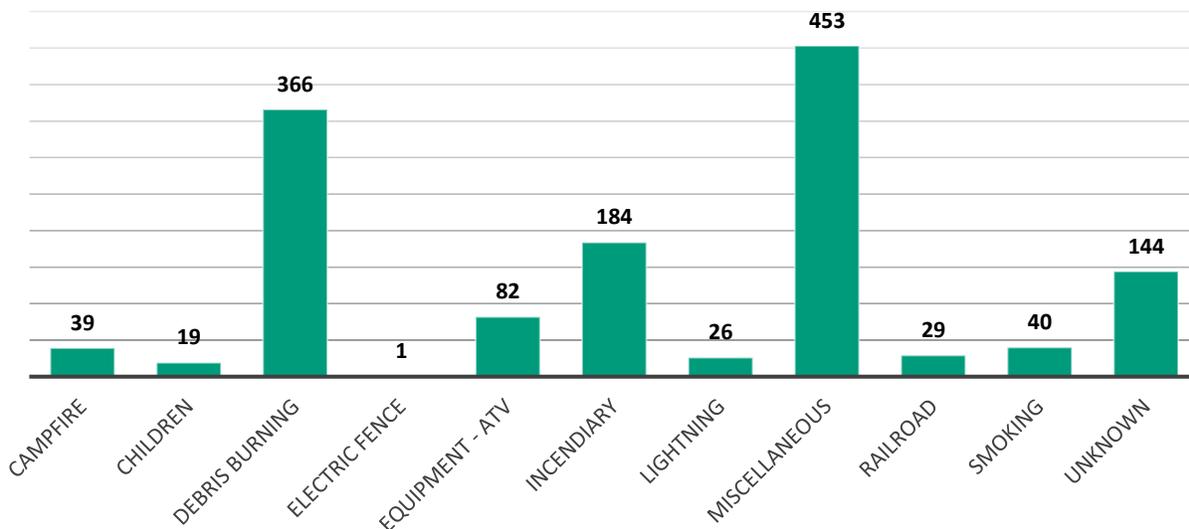
⁷⁹ Nebraska Forest Service. 2020. "Fire Incident Type Summary." Data Files 2000-2018 provided by NFS.

Figure 59: Wildfire Events by Year



Source: NFS, 2000-2018

Figure 60: Wildfires by Cause in Planning Area



Source: NFS, 2000-2018

Average Annual Losses

The average damage per event estimate was determined based upon records from the Nebraska Forest Service Wildfires Database from January 2000 to August 2018 and the number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. During this 19-year period, 1,383 wildfires burned 13,602 acres and caused \$70,169 crop and \$45,880 property damages.

Damages caused by wildfires extend past the loss of building stock, recreation areas, timber, forage, wildlife habitat, and scenic views. Secondary effects of wildfires, including erosion, landslides, introduction of invasive species, and changes in water quality, all increase due to the exposure of bare ground and loss of vegetative cover following a wildfire, and can often be more disastrous than the fire itself in long-term recovery efforts.

Table 89: Wildfire Loss Estimation

HAZARD TYPE	NUMBER OF EVENTS	EVENTS PER YEAR	AVERAGE ACRES PER FIRE	TOTAL PROPERTY LOSS	AVERAGE PROPERTY LOSS	TOTAL CROP LOSS	AVERAGE ANNUAL CROP LOSS
Grass/Wildfire	1,383	73	11	\$45,880	\$2,415	\$70,169	\$3,693

Source: NFS, 2000-2018

Table 90: Wildfire Event Impacts and Threats

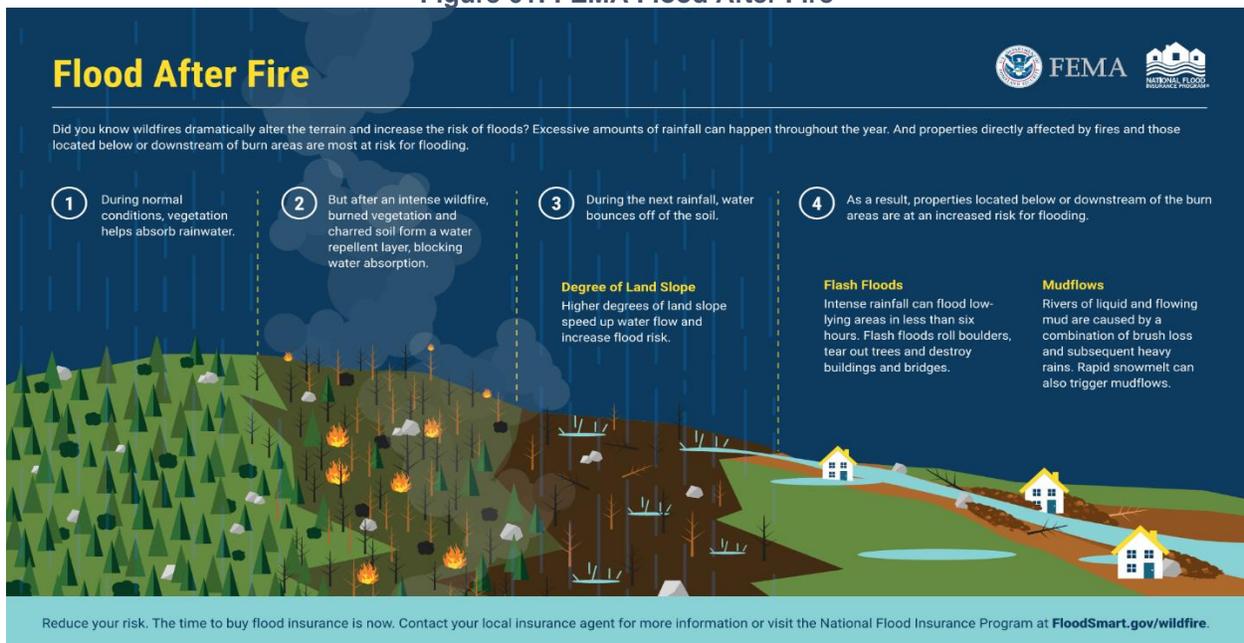
HAZARD TYPE	INJURIES	FATALITIES	HOMES THREATENED OR DESTROYED	OTHER STRUCTURES THREATENED OR DESTROYED
Grass/Wildfire	5	1	57	27

Extent

Overall, 1,383 wildfires were reported in the planning area and burned 13,602 acres in total. Of these, 28 fires burned 100 acres or more, with the largest wildfire burning 2,560 acres in Washington County in March 2000. The average area burned per wildfire was less than 11 acres indicating while many fires may occur, they are typically small in nature and easily contained.

Wildfire also contributes to an increased risk from other hazard events, compounding damages and straining resources. FEMA has provided additional information in recent years detailing the relationship between wildfire and flooding (Figure 61). Wildfire events remove vegetation and harden soil, reducing infiltration capabilities during heavy rain events. Subsequent severe storms that bring heavy precipitation can then escalate into flash flooding, dealing additional damage to jurisdictions.

Figure 61: FEMA Flood After Fire



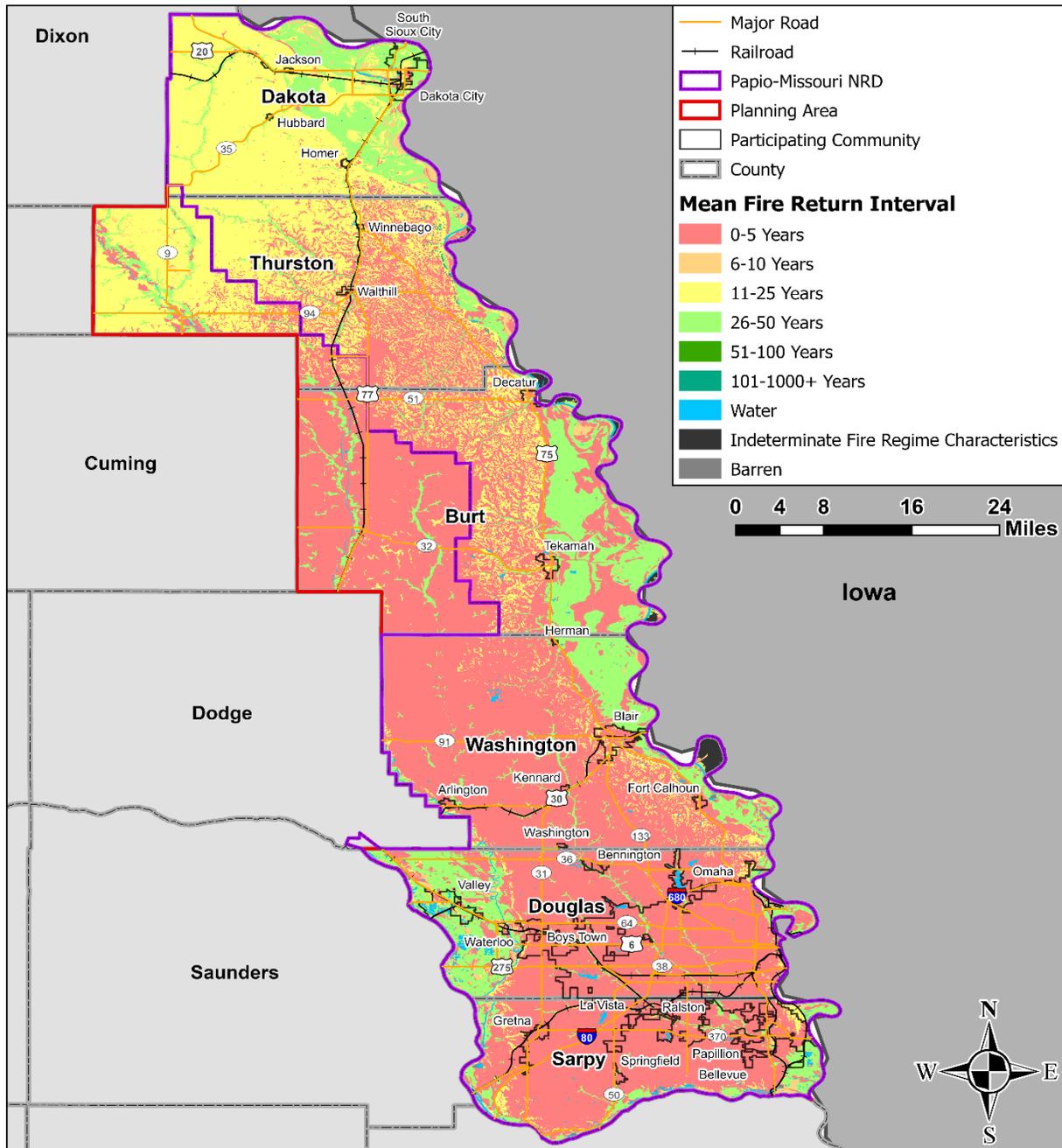
Source: FEMA, 2020⁸⁰

⁸⁰ FEMA and NFIP. 2020. "Flood After Fire." Accessed September 2020. https://www.fema.gov/media-library-data/1573670012259-3908ab0344f8bf5d537ee0c6fb531d/101844-019_FEMA_FAF_Infographic-ENG-web_v8_508.pdf.

SECTION FOUR: RISK ASSESSMENT

Figure 62 shows the USGS' Mean Fire Return Interval. This model considers a variety of factors, including landscape, fire dynamics, fire spread, fire effects, and spatial context. These values show how often fires occur in each area under natural conditions.

Figure 62: Mean Fire Return Interval





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Date: 12/9/2020
Software: ArcGIS Pro 2.6.2
File Name: PapioNRD_Upfront.aprx

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Hazard Mitigation Plan

**Mean Fire
Return Interval**



Probability

Probability of grass/wildfire occurrence is based on the historic record provided by the Nebraska Forest Service and reported potential by participating jurisdictions. Based on the historical record, there is a 100% annual probability of wildfires occurring in the planning area each year.

Community Top Hazard Status

The following jurisdictions identified Grass/Wildfire as a top hazard of concern:

- City of Bennington
- City of Bellevue
- City of Springfield
- Winnebago Indian Tribe

Regional Vulnerabilities

Periods of drought can occur throughout the year while extreme heat conditions during summer months greatly increase the potential for and magnitude of wildland fires. Drought has a high probability of occurring in the planning area and the planning area sees, on average, four days above 100°F. During a severe drought, dry conditions, and/or windy conditions, large wildfires can more easily spread.

Wildfire poses a threat to a range of demographic groups. Wildfire, wildfire within the WUI, and urban fire could result in major evacuations of residents in impacted and threatened areas. Groups and individuals lacking reliable transportation could be trapped in dangerous locations. Lack of transportation is common among the elderly, low income individuals, and racial minorities; including on tribal reservation lands. Wildfires can cause extensive damage to both urban and rural building stock and properties including critical facilities and infrastructure, as well as agricultural producers which support the local industry and economy. Damaged homes can reduce available housing stock for residents, causing residents to leave the area. Additionally, fire events threaten the health and safety of residents and emergency response personnel. Recreation areas, timber and grazing land, wildlife habitat, and scenic views can also be threatened by wildfires.

Development across the planning area may be located within the WUI, particularly in large metropolitan areas with a large amount of intermix overlap. Local officials can adopt codes and ordinances that can guide growth in ways to mitigate potential losses from wildfires. These may include more stringent building code standards, setback requirements, or zoning regulations.

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 91: Regional Grass/Wildfire Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Risk of injury or death for residents and firefighting personnel -Displacement of people and loss of homes -Lack of transportation poses risk to low income individuals, families, and elderly -Transportation routes may be blocked by fire, preventing evacuation efforts
Economic	<ul style="list-style-type: none"> -Damages to buildings and property can cause significant losses to business owners -Loss of businesses

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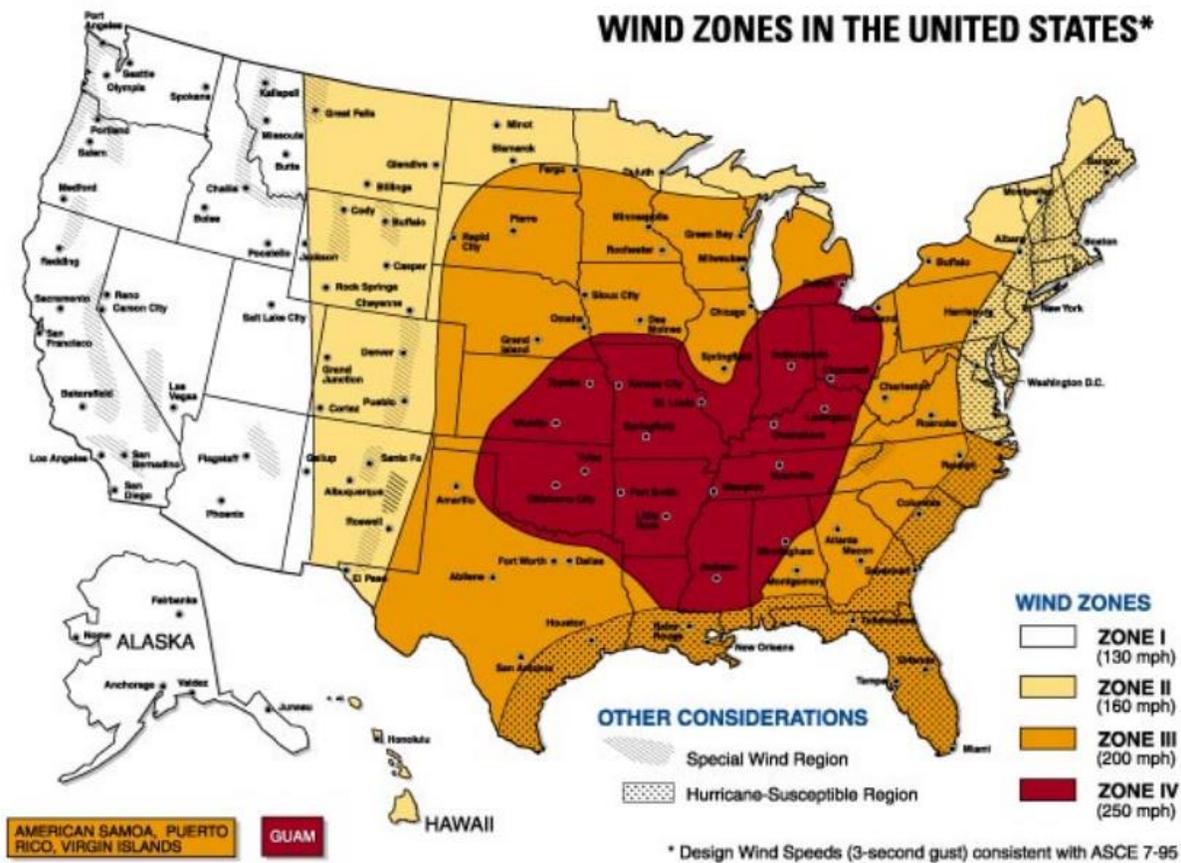
SECTOR	VULNERABILITY
Built Environment	-Property damages
Infrastructure	-Damage to power lines and utility structures
Critical Facilities	-Risk of damages
Climate	<ul style="list-style-type: none"> -Changes in seasonal temperature and precipitation normals can increase frequency and severity of wildfire events -Changes in climate can help spread invasive species, changing potential fuel loads in wildland areas
Other	<ul style="list-style-type: none"> -Increase chance of landslides, erosion, and land subsidence -May lead to poor water quality -Post fire, flash flooding events may be exacerbated

High Winds and Tornadoes

High winds typically accompany severe thunderstorms, severe winter storms, tornadoes, and other large low-pressure systems, which can cause significant crop damage, downed power lines, loss of electricity, traffic flow obstructions, and significant property damage including to trees and center-pivot irrigation systems.

The National Weather Service (NWS) defines high winds as sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration.⁸¹ The NWS issues High Wind Advisories when there are sustained winds of 25 to 39 miles per hour and/or gusts to 57 mph. F shows the wind zones in the United States. The wind zones are based on the maximum wind speeds that can occur from a tornado or hurricane event. The planning area is located in Zone III which has maximum winds of 200 mph equivalent to an EF4/5 tornado.

Figure 63: Wind Zones in the U.S.



Source: FEMA

High winds are a critical component of tornado formation. A tornado is typically associated with a supercell thunderstorm. For a rotation to be classified as a tornado, three characteristics must be met:

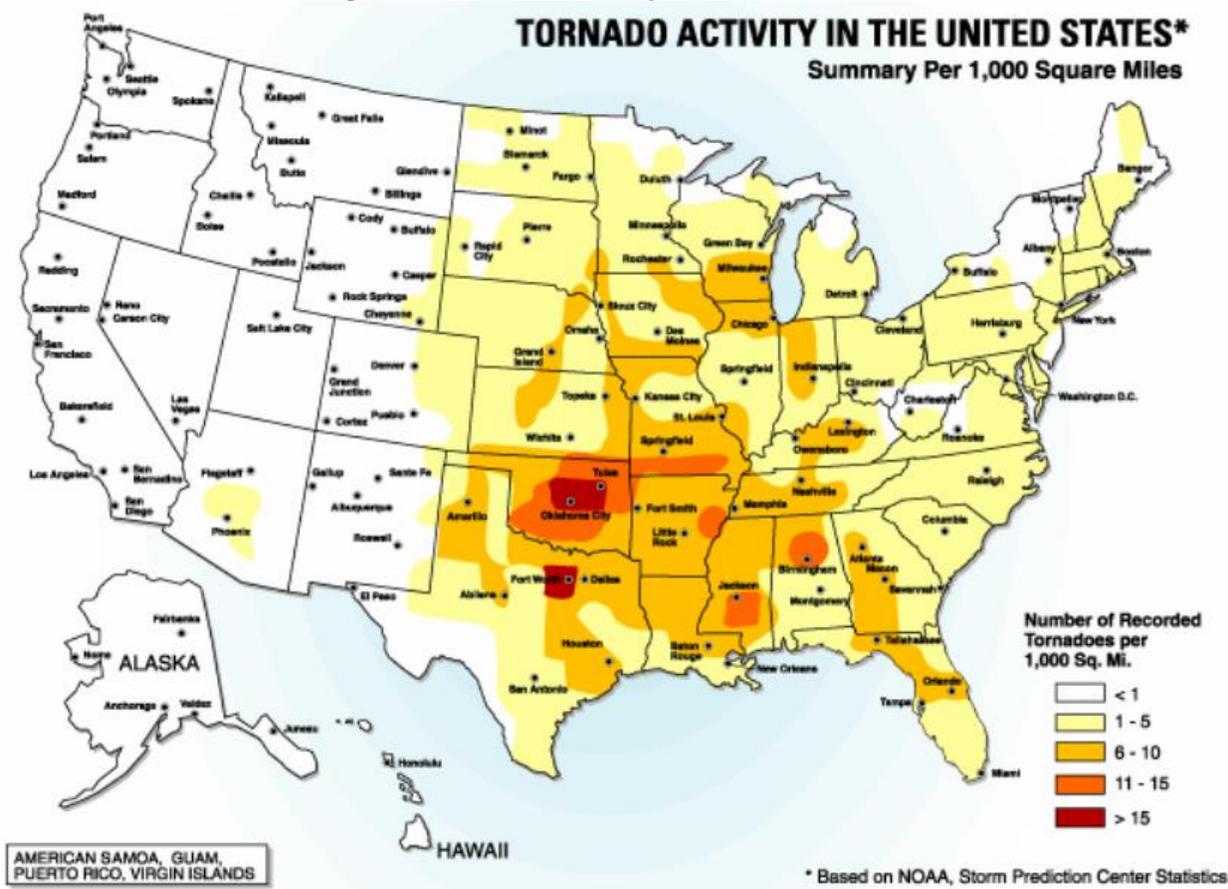
⁸¹ National Weather Service. 2017. "Glossary." <http://w1.weather.gov/glossary/index.php?letter=h>.

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- There must be a microscale rotating area of wind, ranging in size from a few feet to a few miles wide;
- The rotating wind, or vortex, must be attached to a convective cloud base and must be in contact with the ground; and,
- The spinning vortex of air must have caused enough damage to be classified by the Fujita Scale as a tornado.

Once tornadoes are formed, they can be extremely violent and destructive. They have been recorded all over the world, but are most prevalent in the American Midwest and South, in an area known as “Tornado Alley.” Approximately 1,250 tornadoes are reported annually in the contiguous United States. Tornadoes can travel distances over 100 miles and reach over 11 miles above ground. Tornadoes usually stay on the ground no more than 20 minutes. Nationally, the tornado season typically occurs between April and July. On average, 80 percent of tornadoes occur between noon and midnight. In Nebraska, 77 percent of all tornadoes occur in the months of May, June, and July.

Figure 64: Tornado Activity in the United States



Source: FEMA

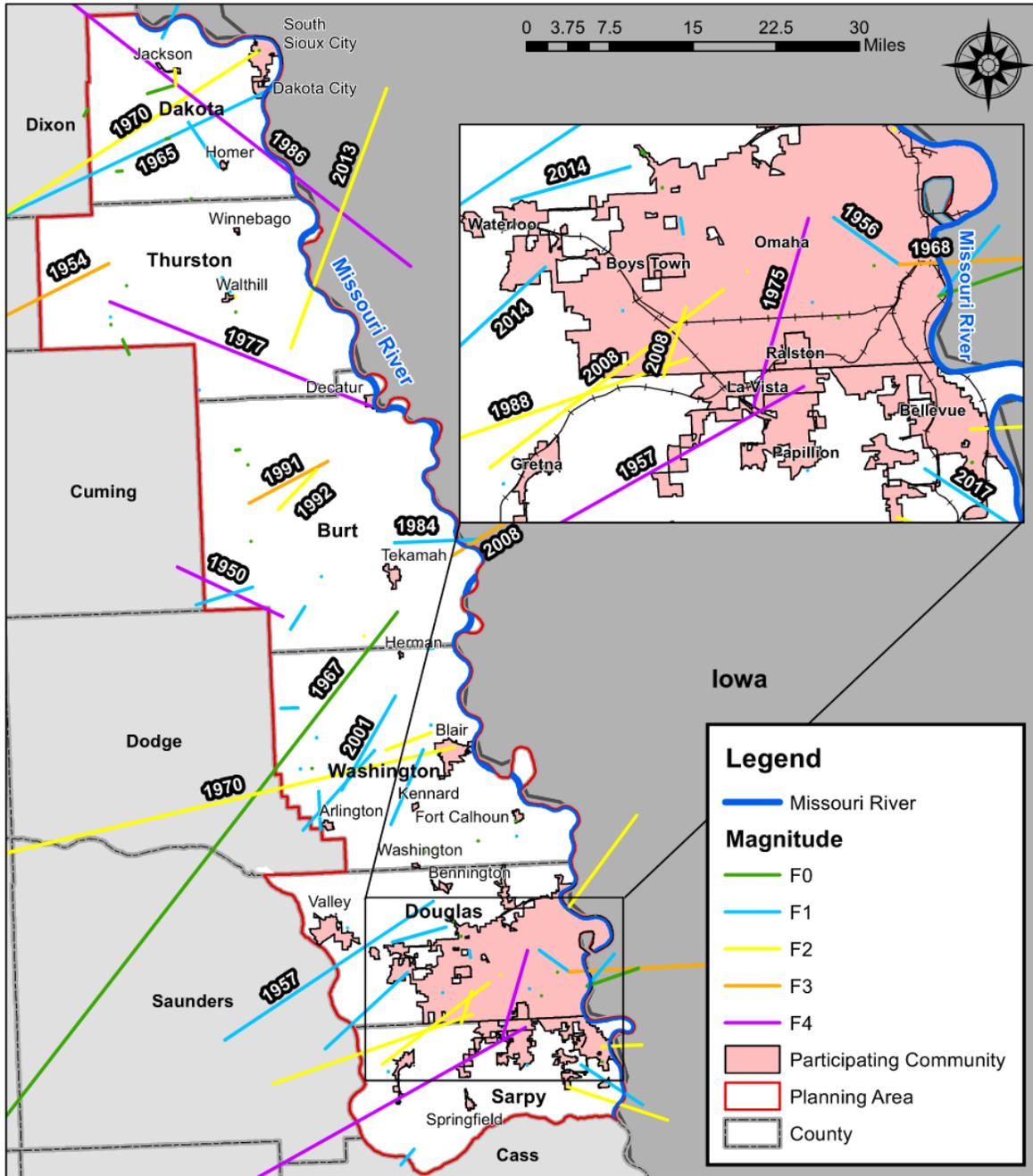
Nebraska is ranked fifth in the nation for tornado frequency with an annual average of 57 tornadoes between 1991 and 2010.⁸²

⁸² National Centers for Environmental Information. 2013. “U.S. Tornado Climatology.” <https://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornadoclimatology>.

Location

High winds and tornadoes can occur throughout the planning area. The impacts would be greater in more densely populated areas, such as in the Omaha metropolitan area and South Sioux City. The following map shows the historical track locations across the region according to the Midwestern Regional Climate Center. Few significant tornado events have directly impacted communities located in the planning area, but touchdowns and tornado events can occur anywhere within the six-county planning area.

Figure 65: Tornado Tracks in the Planning Area





Created By: MB
Date: 7/23/2020
Revised: 7/23/2020
Software: ArcGIS 10.7.1
File Name: PapioNRD_TornadoTracks.mxd

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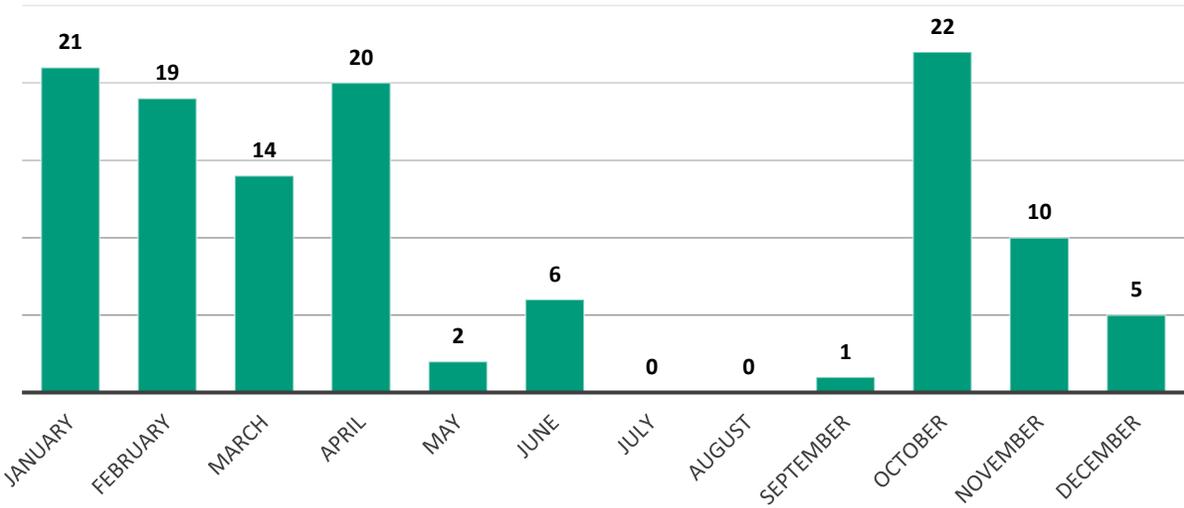
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Historic Tornado Tracks



Historical Occurrences

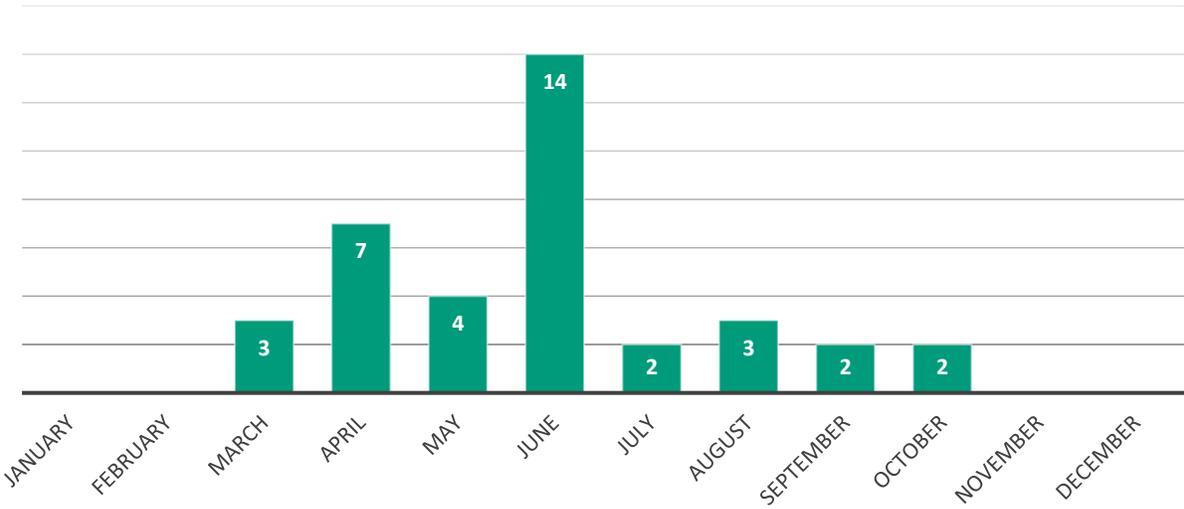
Due to the regional scale of high winds, the NCEI reports events as they occur in each county. While a single event can affect two or more counties at a time, the NCEI reports them as separate events. There were 120 high wind events that occurred between January 1996 and November 2019 and 37 tornadic events ranging in magnitude from EF/F0 to EF/F2. These events were responsible for \$5,316,000 in property damages (NCEI) and \$2,627,765 in crop damages (RMA). As seen in the following figures, the majority of high wind events occur in the spring and winter months, while most tornado events occur in the summer. One high wind event in Douglas County in 1996 led to one fatality and five separate high wind or tornado events led to injuries. Significant hazard events with direct impacts to communities are discussed in more detail in the applicable *Community Profiles*.

Figure 66: High Wind Events by Month



Source: NCEI, 1996-2019

Figure 67: Tornadoes by Month in the Planning Area



Source: NCEI, 1996-2019

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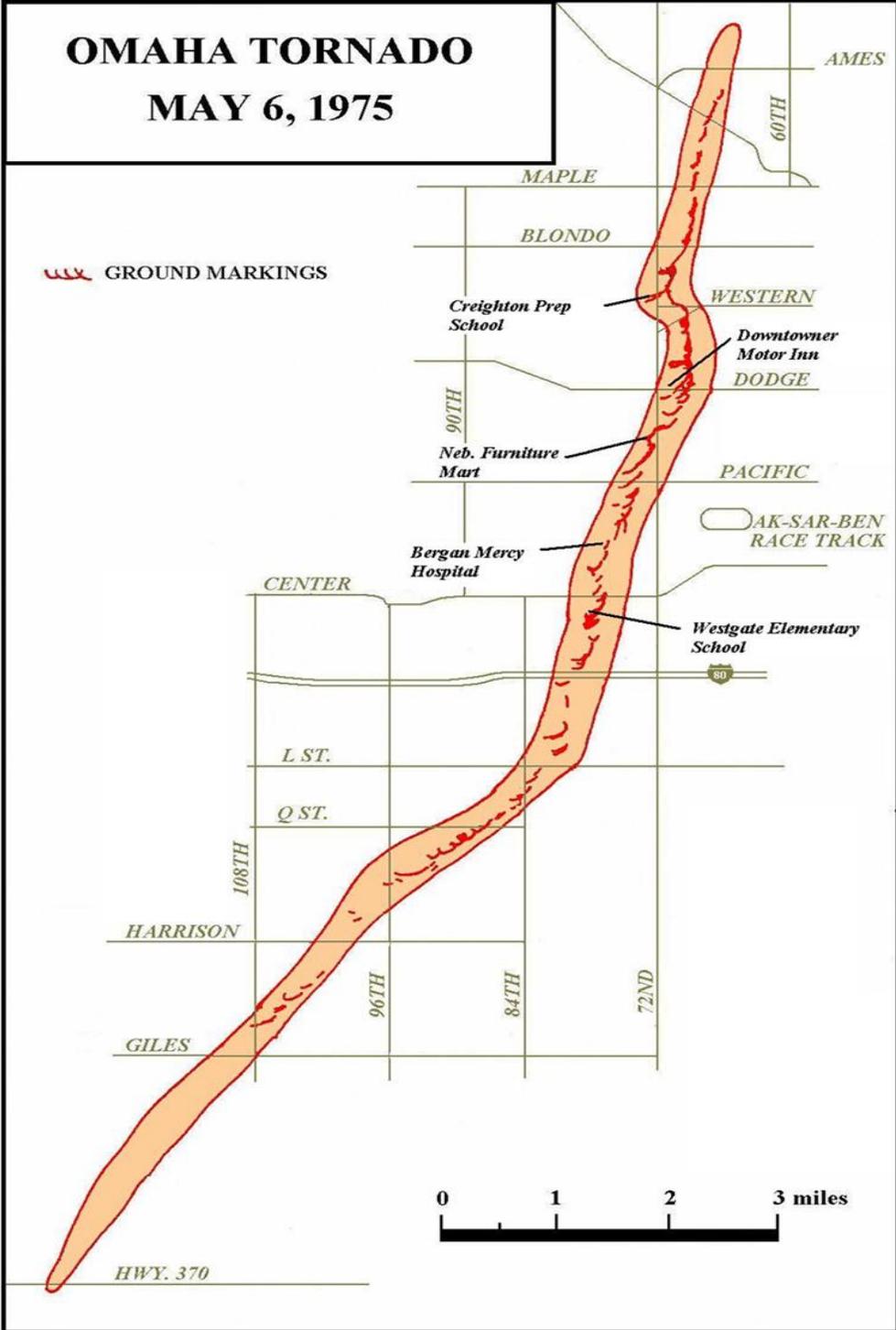
Event descriptions from NCEI for the most damaging events (those including injuries, fatalities, or greatest property damage estimates) are provided below.

- **4/25/1996 High Wind** – one fatality. *“High winds sustained from 20 to 40 mph with gusts to 70 mph were found over Eastern Nebraska from early the 25th until early the 26th. Winds gusting to 51 mph toppled a 65 foot tree, killing a 13 year old Omaha boy as he played outside. A Creighton man was injured when a beam from a parking canopy was blown on him. Knox County had several reports of windows broken and vehicle doors being blown open and breaking their springs. At Verdigre in Knox County, high winds blew over a semi-trailer.”*
- **3/11/2011 Tornado** – EF1 tornado with \$1,100,000 in property damages. *“A strong upper level trough and associated cold front pushed across the region during the afternoon and evening of March 22. The upper level system caused low pressure to deepen over eastern Nebraska/northeast Kansas with a warm front extending northeast from the low into east central Nebraska and southwest Iowa. By mid afternoon, ahead of the cold front and south of the warm front, temperatures climbed into the upper 70s to lower 80s and dew point temperatures reached the upper 50s. The instability and shear near the low and warm front created a favorable environment for supercell development, a few of which produced damaging hail and at least 3 tornadoes in the area. A NWS storm survey team assessed that a tornado touched down around 5 miles south-southwest of Craig and lifted about 4 miles south-southwest of town causing damage up to weak EF1 intensity. An outbuilding and large storage bins were damaged, blown over or completely destroyed. A storage shed garage door was also blown out. Damage to the bins alone was estimated at close to \$1 million. Telephone poles were bent, two center pivots were flipped and a tree was topped along the path which was estimated at close to 2.5 miles long and around 75 yards wide.”*
- **10/4/2013 Tornado** – an EF2 tornado with two injuries. *“The same powerful storm system that produced severe weather across eastern Nebraska on October 3rd remain in the area on the 4th. A strong area of low pressure moved from eastern Colorado into southern South Dakota during the day. As this occurred, a dry line was sweeping across central and into eastern Nebraska. A warm front continued to lift north into northeast Nebraska and western Iowa by late afternoon. With unseasonably warm and moist air in the region the atmosphere became strongly unstable. This instability coupled with a strong wind field associated with the powerful storm system and created an environment favorable for significant severe weather. Supercells developed near the intersection of the dry line and warm front over northeast Nebraska during the afternoon and tracked northeast. The supercells were responsible for large hail, damaging winds, and significant tornadoes. Other isolated thunderstorms developed south along the dry line into western Iowa producing very large hail and damaging winds during the evening of the 4th. Tornado damage started in Thurston County approximately 3 miles southwest of Macy in rural areas. The tornado then tracked northeast through Macy. The tornado weakened in intensity as it tracked northeast from the edge of Macy across highway 75 and moved toward the Missouri River. The damage in Macy varied in width from 100 to 250 yards wide. There were a total of 6 homes that were considered to have received heavy damage or destroyed and can not be occupied. There were a total of 12 homes and 1 business that received at least minor damage. Numerous vehicles were damaged and there were two minor injuries. Outside of Macy, the majority of the damage was to trees but some farmsteads received minor damage to buildings.”*

Additionally, one significant tornado event which occurred prior to 1996, impacted the Omaha metropolitan area. On May 6, 1975, an F4 tornado touched down in the extreme western portion of La Vista and also impacted the northwest corner of Ralston. However, most of the damage was in Omaha. A good storm spotting network and advanced warning kept the death toll from exceeding three people. A ten-mile swath was destroyed through the heart of the city. About 2,000

homes, 120 businesses, and many public facilities were destroyed including a hospital and several schools. The final damage estimate was \$250 million (in 1975 dollars), three deaths, and an estimated 2,600 persons were injured. The following figure shows the path of the tornado.

Figure 68: May 6, 1975 Tornado Path



Source: NWS

Average Annual Losses

The average damage per event estimate was determined based upon NCEI Storm Events Database since 1996 and number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury or loss of life. It is estimated that high wind events can cause an average of \$9,625 per year in property damages and \$115,819 per year in crop damages. Tornadoes have caused an average of \$211,875 per year in property damages; however, damages from tornadoes vary greatly depending on the severity or magnitude of each event.

Table 92: High Winds and Tornado Losses

Hazard Type	# of Events ¹	Average # events per year	Total Property Loss ¹	Average Annual Property Loss	Total Crop Loss ²	Average Annual Crop Loss
High Winds	120	5	\$231,000	\$9,625	\$2,316,372	\$115,819
Tornadoes	37	1.5	\$5,085,000	\$211,875	\$311,393	\$15,570

Source: 1 NCEI (1996-2019), 2 USDA RMA (2000-2019)

Extent

The Beaufort Wind Scale can be used to classify wind strength while the magnitude of tornadoes is measured by the Enhanced Fujita Scale. The following table outlines the Beaufort scale including wind speed ranking, range of wind speeds per ranking, and a brief description of conditions for each.

Table 93: Beaufort Wind Ranking

Beaufort Wind Force Ranking	Range of Wind	Conditions
0	<1 mph	Smoke rises vertically
1	1-3 mph	Direction shown by smoke but not wind vanes
2	4-7 mph	Wind felt on face; leaves rustle; wind vanes move
3	8-12 mph	Leaves and small twigs in constant motion
4	13-18 mph	Raises dust and loose paper; small branches move
5	19-24 mph	Small trees in leaf begin to move
6	25-31 mph	Large branches in motion; umbrellas used with difficulty
7	32-38 mph	Whole trees in motion; inconvenience felt when walking against the wind
8	39-49 mph	Breaks twigs off tree; generally, impedes progress
9	47-54 mph	Slight structural damage; chimneypots and slates removed
10	55-63 mph	Trees uprooted; considerable structural damages; improperly or mobiles homes with no anchors overturned
11	64-72 mph	Widespread damages; very rarely experienced
12 - 17	72 - > 200 mph	Hurricane; devastation

Source: Storm Prediction Center, 2017⁸³

⁸³ Storm Prediction Center: National Oceanic and Atmospheric Administration. 1805. "Beaufort Wind Scale." <http://www.spc.noaa.gov/faq/tornado/beaufort.html>.

The Enhanced Fujita Scale replaced the Fujita Scale in 2007. The Enhanced Fujita Scale does not measure tornadoes by their size or width, but rather the amount of damage caused to human-built structures and trees after the event. The official rating category provides a common benchmark that allows comparisons to be made between different tornadoes. The enhanced scale classifies EF0-EF5 damage as determined by engineers and meteorologists across 28 different types of damage indicators, including different types of building and tree damage. To establish a rating, engineers and meteorologists examine the damage, analyze the ground-swirl patterns, review damage imagery, collect media reports, and sometimes utilize photogrammetry and videogrammetry. Based on the most severe damage to any well-built frame house, or any comparable damage as determined by an engineer, an EF-Scale number is assigned to the tornado.

The following tables summarize the Enhanced Fujita Scale and damage indicators. According to a recent report from the National Institute of Science and Technology on the Joplin Tornado, tornadoes rated EF3 or lower account for around 96 percent of all tornado damages.⁸⁴

Table 94: Enhanced Fujita Scale

Storm Category	3 Second Gust (mph)	Damage Level	Damage Description
EF0	65-85	Gale	Some damages to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign board
EF1	86-110	Weak	The lower limit is the beginning of hurricane wind speed; peels surface off rooms; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages might be destroyed
EF2	110-135	Strong	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
EF3	136-165	Severe	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
EF4	166-200	Devastating	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown, and large missiles generated.
EF5	200+	Incredible	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.
EF No Rating	--	Inconceivable	Should a tornado with the maximum wind speed in excess of EF5 occur, the extent and types of damage may not be conceived. A number of missiles such as iceboxes, water heaters, storage tanks, automobiles, etc. will create serious secondary damage on structures.

Source: NOAA; FEMA

⁸⁴ Kuligowski, E.D., Lombardo, F.T., Phan, L.T., Levitan, M.L., & Jorgensen, D.P. March 2014. "Final Report National Institute of Standards and Technology(NIST) Technical Investigation of the May 22, 2011, Tornado in Joplin, Missouri."

Table 95: Enhanced Fujita Scale Damage Indicator

Number	Damage Indicator	Number	Damage Indicator
1	Small barns, farm outbuildings	15	School – 1 story elementary (interior or exterior halls)
2	One- or two-family residences	16	School – Junior or Senior high school
3	Single-wide mobile homes (MHSW)	17	Low-rise (1-4 story) buildings
4	Double-wide mobile homes (MHDW)	18	Mid-rise (5-20 story) buildings
5	Apartment, condo, townhouse (3 stories or less)	19	High-rise (over 20 stories)
6	Motel	20	Institutional buildings (hospital, government, or university)
7	Masonry apartment or motel	21	Metal building systems
8	Small retail buildings (fast food)	22	Service station canopy
9	Small professional (doctor office, branch bank)	23	Warehouse (tilt-up walls or heavy timber)
10	Strip mall	24	Transmission line tower
11	Large shopping mall	25	Free-standing tower
12	Large, isolated (“big box”) retail building	26	Free standing pole (light, flag, luminary)
13	Automobile showroom	27	Tree- hardwood
14	Automotive service building	28	Tree -softwood

Source: NOAA; FEMA

Using the NCEI reported events, the most common high wind event in the planning area is a level 9 on the Beaufort Wind Ranking scale. The reported high wind events ranged from 35 mph to 59 mph, with an average speed of 50 mph. Based on the historical record, it is most likely that tornadoes that occur within the planning area will be of EF0 strength. Of the 37 reported tornado events, 17 were EF/F0, 15 were EF/F1 and five were EF/F2. High winds and tornadoes are likely to occur annually in the planning area.

Probability

Based on historical records and reported events, it is likely that high winds and tornadic events will occur within the planning area annually. For the 24 years examined, there were 120 high wind events and 37 tornadoes reported. For the purpose of this plan, annual probability for these events is 100%.

Community Top Hazard Status

The following jurisdictions identified High Winds and Tornadoes as a top hazard of concern:

- Burt County
- Village of Decatur
- City of Tekamah
- Dakota County
- City of Dakota City
- Village of Homer
- Village of Hubbard
- Village of Jackson

- City of South Sioux City
- Douglas County
- City of Bennington
- City of Omaha
- City of Ralston
- City of Valley
- Village of Waterloo
- City of Bellevue
- City of Gretna
- City of La Vista
- City of Papillion
- City of Springfield
- Thurston County
- Village of Walthill
- Village of Winnebago
- Washington County
- Village of Arlington
- City of Blair
- City of Fort Calhoun
- Village of Herman
- Arlington Public Schools
- Blair Community Schools
- Emerson-Hubbard Community Schools
- Fort Calhoun Community Schools
- Gretna Public Schools
- Homer Community Schools
- Papillion-La Vista Public Schools
- Ralston Public Schools
- Westside Community Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 96: Regional Grass/Wildfire Vulnerabilities

Sector	Vulnerability
People	-Vulnerable populations include those living in mobile homes (especially if improperly anchored), nursing homes, schools, or in substandard housing -People outside during events -Citizens without access to shelter below ground or in reinforced rooms -Elderly with decreased mobility or poor hearing may be at higher risk -Lack of multiple ways to receive weather warnings, especially at night

SECTION FOUR: RISK ASSESSMENT

Sector	Vulnerability
Economic	<ul style="list-style-type: none"> -Agricultural losses to both crops and livestock -Damages to businesses and prolonged power outages can cause significant impacts to the local economy, especially with EF3 tornadoes or greater
Built Environment	<ul style="list-style-type: none"> -All building stock is at risk of significant damages
Infrastructure	<ul style="list-style-type: none"> -Downed power lines and power outages -All above ground infrastructure at risk to damages -Impassable roads due to debris blocking roadways
Critical Facilities	<ul style="list-style-type: none"> -All critical facilities are at risk to damages and power outages
Climate	<ul style="list-style-type: none"> -Changes in seasonal precipitation and temperature normals can increase frequency and magnitude of events

Levee Failure

According to FEMA:

“The United States has thousands of miles of levee systems. These manmade structures are most commonly earthen embankments designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water to provide some level of protection from flooding. Some levee systems date back as far as 150 years. Some levee systems were built for agricultural purposes. Those levee systems designed to protect urban areas have typically been built to higher standards. Levee systems are designed to provide a specific level of flood protection. No levee system provides full protection from all flooding events to the people and structures located behind it. Thus, some level of flood risk exists in these levee-impacted areas.”

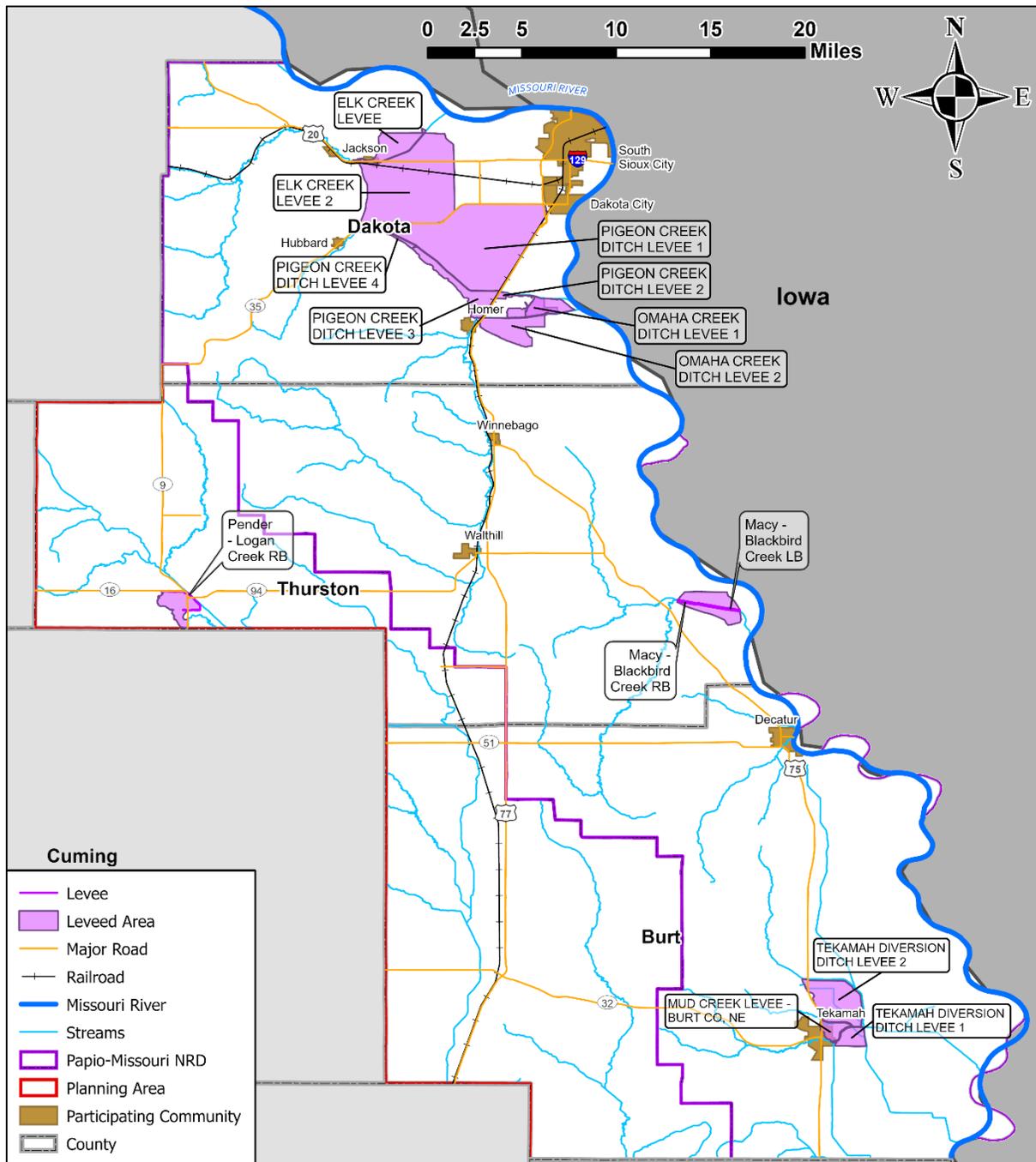
Levee failure can occur several ways. A breach of a levee is when part of the levee breaks away, leaving a large opening for floodwaters to flow through. A levee breach can be gradual by surface or subsurface erosion, or it can be sudden. A sudden breach of a levee often occurs when there are soil pores in the levee that allow water to flow through causing an upward pressure greater than the downward pressure from the weight of the soil of the levee. This under seepage can then resurface on the backside of the levee and can quickly erode a hole to cause a breach. Sometimes the levee actually sinks into a liquefied subsurface below.

Another way a levee failure can occur is when the water overtops the crest of the levee. This happens when the flood waters simply exceed the lowest crest elevation of the levee. An overtopping can lead to significant erosion of the backside of the levee and can result to a breach and thus a levee failure.

Location

There are 22 federal levees and 18 non-federal levees located within the six-county and P-MRNRD planning area as reported in USACE’s National Levee Database. See Figure 69, Table 97, and Table 85 for information on leveed areas.

Figure 69: Levees in the Planning Area (northern counties)





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2021 Papio-Missouri River NRD
Hazard Mitigation Plan

**Leveled Area
Upper Counties**

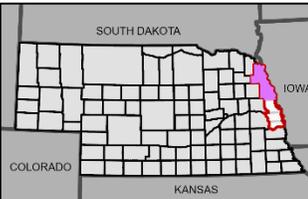
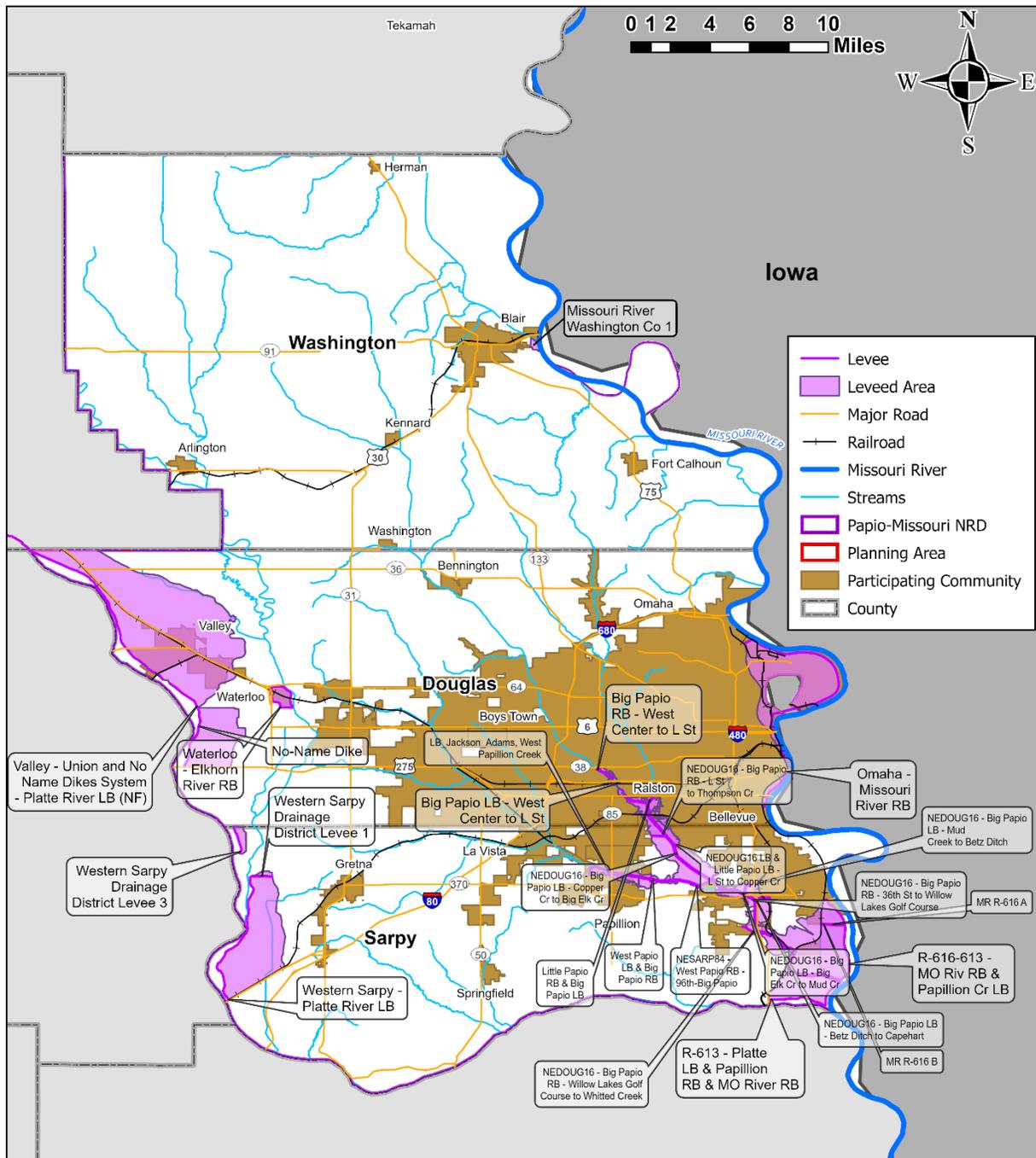


Figure 70: Levees in the Planning Area (southern counties)



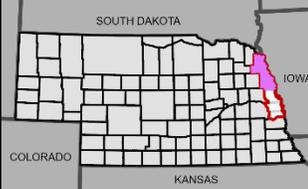


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2021 Papio-Missouri River NRD
 Hazard Mitigation Plan

**Leaved Area
 Lower Counties**



SECTION FOUR: RISK ASSESSMENT

Beyond the USACE's National Levee Database, there is no known comprehensive list of levees that exists in the planning area especially for private agricultural levees. Thus, it is not possible at this time to document the location of non-federal levees, the areas they provide flood risk reduction, nor the potential impact of these levees.

Table 97: USACE Levees in Planning Area

NAME	SPONSOR	LOCATION	LENGTH (MILES)	RISK LEVEL	PROTECTED AREA (SQ MILES)	POPULATION IN LEVEED AREA	STRUCTURES IN LEVEED AREA	PROPERTY VALUE IN LEVEED AREA
Big Papio LB - West Center to L St	Papio-Missouri River NRD	Omaha, Douglas County	0.62	Low	0.1	41	45	\$46.3M
Big Papio RB - West Center to L St	Papio-Missouri River NRD	Omaha, Douglas County	0.41	Low	0.11	22	22	\$28.5M
Little Papio RB & Big Papio LB	Papio-Missouri River NRD	Omaha, Douglas County	1.25	Low	0.14	179	27	\$65.3M
Macy - Blackbird Creek LB	Omaha Tribal Council	Macy, Thurston County	2.52	Low	1.43	7	10	\$1.42M
Macy - Blackbird Creek RB	Omaha Tribal Council	Macy, Thurston County	2.44	Low	1.06	0	0	\$0
NEDOUG16 - Big Papio LB - Betz Ditch to Capehart	Papio-Missouri River NRD	Bellevue, Sarpy County	1.89	Low	0.64	1	4	\$14.4K
NEDOUG16 - Big Papio LB - Big Elk Cr to Mud Cr	Papio-Missouri River NRD	Bellevue, Sarpy County	2.37	Low	0.23	3	6	\$3.76M
NEDOUG16 - Big Papio LB - Copper Cr to Big Elk Cr	Papio-Missouri River NRD	Bellevue, Sarpy County	2.96	Low	0.77	126	105	\$41.8M
NEDOUG16 - Big Papio LB - Mud Creek to Betz Ditch	Papio-Missouri River NRD	Bellevue, Sarpy County	1.81	Low	0.36	1	6	\$3.36M
NEDOUG16 - Big Papio RB - 36th St to Willow Lakes Golf Course	Papio-Missouri River NRD	Bellevue, Sarpy County	2.00	Low	0.46	146	11	\$13.8M
NEDOUG16 - Big Papio RB - L St to Thompson Cr	Papio-Missouri River NRD	Omaha, Douglas County	3.28	Low	0.63	254	73	\$95.8M
NEDOUG16 - Big Papio RB - Willow Lakes Golf Course to Whitted Creek	Papio-Missouri River NRD	Offutt AFB, Sarpy County	1.82	Low	0.27	450	36	\$24.7M

SECTION FOUR: RISK ASSESSMENT

NAME	SPONSOR	LOCATION	LENGTH (MILES)	RISK LEVEL	PROTECTED AREA (SQ MILES)	POPULATION IN LEVEED AREA	STRUCTURES IN LEVEED AREA	PROPERTY VALUE IN LEVEED AREA
NEDOUG16 LB & Little Papio LB - L St to Copper Cr	Papio-Missouri River NRD	Omaha, Douglas County	3.03	Low	0.77	126	105	\$41.8M
NESARP84 - West Papio RB - 96th-Big Papio	Papio-Missouri River NRD	Papillion, Sarpy County	5.01	Low	0.87	866	112	\$77.4M
Omaha - Missouri River RB	Cities of Omaha & Carter Lake	Council Bluffs, Pottawattamie County, Iowa & Omaha, Douglas County	12.17	Moderate	9.78	8,375	3,320	\$1.6B
Pender - Logan Creek RB	Village of Pender	Pender, Thurston County	2.44	Low	1.7	1,114	750	\$202M
R-613 - Platte LB & Papillion RB & MO River RB	Papio-Missouri River NRD	Bellevue, Sarpy County	9.03	Low	3.47	593	136	\$47.4M
R-616-613 - MO Riv RB & Papillion Cr LB	Papio-Missouri River NRD	Offutt AFB, Sarpy County	9.67	Moderate	7.0	1,532	540	\$278M
Valley - Union and No Name Dikes System - Platte River LB (NF)	Burlington Northern Sante Fe Railroad, Papio-Missouri River NRD	Leshara, Saunders County	11.80	Not Screened	29.19	6,254	1,354	\$1.29B
Waterloo - Elkhorn River RB	City of Waterloo	Waterloo, Douglas County	3.41	Low	0.65	800	432	\$107M
West Papio LB & Big Papio RB	Papio-Missouri River NRD	Papillion, Sarpy County	7.49	Low	1.83	134	108	\$39.5M
Western Sarpy - Platte River LB	Papio-Missouri River NRD	Wann, Sarpy County	7.73	Not Screened	8.78	94	55	\$22.1M

Source: USACE Levee Database

Table 98: Non-USACE Levees in Planning Area

NAME	LOCATION	LENGTH (MILES)	PROTECTED AREA (SQ MILES)	POPULATION IN LEVEED AREA	STRUCTURES IN LEVEED AREA	PROPERTY VALUE IN LEVEED AREA
Elk Creek Levee	Jackson, Dakota County	3.41	1.89	230	97	\$31M
Elk Creek Levee 2	Jackson, Dakota County	2.76	13.63	189	86	\$28.4M
LB Jackson Adams, West Papillion Creek	Papillion, Sarpy County	0.07	0.0024	0	0	\$0
Missouri River Washington Co 1	Blair, Washington County	1.11	0.14	0	0	\$0
MR R-616 A	Offutt AFB, Sarpy County	0.91	0.73	0	0	\$0
MR R-616 B	Offutt AFB, Sarpy County	0.92	2.64	25	10	\$9.77M
Mud Creek Levee - Burt Co, Ne	Tekamah, Burt County	1.93	0.76	590	309	\$78.1M
No-Name Dike	Venice, Douglas County	3.15	4.93	316	131	\$49.5M
Omaha Creek Ditch Levee 1	Homer, Dakota County	1.54	1.12	11	4	\$1.01M
Omaha Creek Ditch Levee 2	Homer, Dakota County	2.49	2.46	20	12	\$2.95M
Pigeon Creek Ditch Levee 1	Homer, Dakota County	8.45	19.02	208	94	\$28.8M
Pigeon Creek Ditch Levee 2	Homer, Dakota County	2.42	1.42	6	2	\$737K
Pigeon Creek Ditch Levee 3	Homer, Dakota County	4.49	2.17	10	4	\$1.38M
Pigeon Creek Ditch Levee 4	Hubbard, Dakota County	2.12	0.22	4	1	\$307K
Tekamah Diversion Ditch Levee 1	Tekamah, Burt County	1.66	0.98	8	5	\$1.18M
Tekamah Diversion Ditch Levee 2	Tekamah, Burt County	3.06	3.96	13	6	\$1.28M
Western Sarpy Drainage District Levee 1	Gretna, Sarpy County	0.76	0.13	0	0	\$0
Western Sarpy Drainage District Levee 3	Wann, Sarpy County	1.39	0.37	0	1	\$0

Source: USACE Levee Database; *Note non-USACE levees are not screened for risk level

Historical Occurrences

As there is no formal database of historical levee failures, the following sources were consulted: members of the Planning Team, local newspapers and media outlets, P-MRNRD, and USACE. Levees along the Missouri River were tested during the 1993, 2011, and 2015 floods and did not experience failure events.

The Union Dike levee and the right bank levees in Douglas County have been breached numerous times during past flood events. Following the 1978 flood event, substantial improvements to the Union Dike levee system were recommended. These improvements were completed in 1990 and the levee withstood the March 1993 flood.

After the March 2019 flood event, USACE reported 41 breaches and numerous damages to federal and non-federal levees across the State of Nebraska. The failure of these structures significantly impacted subsequent flooding in neighboring communities. For a complete event narrative, refer to the Flooding hazard profile. As of December 2020, descriptions of levee failures or damages within the planning area from USACE are found below.

- Omaha – Missouri River Right Bank Levee System Restoration Information. Background: The Omaha – Missouri River Right Bank Levee System was damaged during the 2019 Flood Event, leading to the Project Sponsor submitting a Public Law (PL) 84-99 Rehabilitation Assistance request to the US Army Corps of Engineers – Omaha District. Current Action: Construction contract has been awarded. Contract amount \$1,255,879.
- Papillion Creek System. Background: Many of the thirteen (13) Papillion Creek Levee Systems were damaged during the 2019 Flood Event, leading to the Project Sponsor submitting Public Law (PL) 84-99 Rehabilitation Assistance requests to the US Army Corps of Engineers – Omaha District. Current Action: Repair the levee system to the authorized level of flood risk management. Contract amount \$7.3M.
- R616-613 Levee Restoration Information. Background: The R-616/613 Missouri River Right Bank & Papillion Creek Left Bank and R-613 Platte River Left Bank, Papillion Creek Right Bank, & Missouri River Right Bank Levee Systems were damaged during the 2019 Flood Event, leading to the Levee Sponsor submitting a Public Law (PL) 84-99 Rehabilitation Assistance request to the US Army Corps of Engineers – Omaha District. Current Action: Complete the levee repair construction contract. Contract amount \$10,300,000.
- Waterloo Restoration Information. Background: The Waterloo – Elkhorn River Right Bank Levee System was damaged during the 2019 Flood Event, leading to the Project Sponsor submitting a Public Law (PL) 84-99 Rehabilitation Assistance request to the US Army Corps of Engineers – Omaha District. Current Action: Design funding has been received to begin the engineering and design work on the levee repair project. The purpose of this rehabilitation project is to repair the levee system to the authorized level of flood risk management. Next Steps: advertise and award the levee repair construction contract and repair the system to its authorized level of flood risk management.
- Western Sarpy Levee Restoration Information. Background: The Western Sarpy – Platte River Left Bank Levee System was damaged during the 2019 Flood Event, leading to the Levee Sponsor submitting a Public Law (PL) 84-99 Rehabilitation Assistance request to the US Army Corps of Engineers – Omaha District. Current Action: Complete the levee repair construction contract. Contract amount \$4.2M.

- Union Dike and No Name Levee Restoration Information COMPLETED. Background: The Union and No Name Dikes – Platte River Left Bank Levee System experienced significant damage during the 2019 Flood Event. This led to one (1) breach and substantial other damage occurring throughout the Levee System. Current Action: A priority breach impacting the property and infrastructure behind the Union and No Name Levee System was identified for initial repairs. This construction contract was awarded on 21 March 2019 and initial repairs were completed on 28 March 2019. These initial repairs were directed at stopping the flow from the Platte River into the area behind the levee system and providing an incremental level of flood risk management. A follow-on contract to further repair the levee system and provide additional flood risk management was awarded on 06 April 2020. Contract amount \$1.05M, final repair cost \$1.67M.

Potential Losses

To determine potential losses from levee failure, a parcel inventory from the levee breach area was utilized. Based on the nature of assessor parcel data, it is not possible to do a true structural inventory with structure-specific impacts. Instead, inundated parcels were used as a proxy for structural data. The following tables show the number of parcels included in the leveed areas within the planning area based on data from local County Assessors. A total of 9,491 parcels are within the leveed area valued at over 2.3 billion.

Table 99: Potential Losses from Levee Failure

COUNTY	NUMBER OF PARCELS IN LEVEED AREA	VALUE OF ALL PARCELS IN LEVEED AREA	MEAN VALUE OF PARCELS IN LEVEED AREA
Burt	383	\$42,645,589	\$123,610.40
Dakota	848	\$178,418,925	\$221,089.13
Douglas	5,791	\$1,659,583,692	\$287,473.36
Sarpy	1,675	\$417,068,274	\$248,995.98
Thurston	782	\$73,284,279	\$104,245.06
Washington	12	\$4,586,315	\$458,631.50

Source: County Assessors

According to the USACE, a total of 126.8 square miles, 22,748 people, and 8,019 structures are located within leveed areas within the planning area. While structures and persons will be at risk during levee failure events, it is not likely all would be at risk during a singular event.

Extent

USACE, who is responsible for federal levee oversight and inspection of levees, has three ratings for levee inspections. Any levee failure events in the planning area will fall within USACE's rating system; however, it is not currently possible to determine what level of damage each levee system will experience. Non-federal levees are not inspected and thus do not have ratings.

Table 100: USACE Levee Rating Categories

RATINGS	DESCRIPTION
Acceptable	All inspection items are rated as Acceptable
Minimally Acceptable	One or more inspection items are rated as Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable inspection items would not prevent the segment/system from performing as intended during the next flood event.
Unacceptable	One or more items are rated as Unacceptable and would prevent the segment/system from performing as intended, or a serious deficiency noted in past inspections has not been corrected within the established timeframe, not to exceed two years.

Source: USACE

As of September 2020, two federal levees in the planning area were rated as Unacceptable:

- Macy – Blackbird Creek LB
- Macy – Blackbird Creek RB

The Unacceptable rating for the Macy levee was a result of issues observed at the time of the inspection, which occurred on 3/28/2017, that threatened the integrity of the system during the next flood event. While the USACE Periodic Inspection Report (PI) from this inspection is not publicly available, the following items were listed in the August 28, 2015 PI which warranted the rating of Unacceptable for the Macy FCP (which includes both Blackbird Creek LB and RB).

Table 101: Macy Levee Unacceptable Rating and Deficiencies

FEATURE CATEGORY	INSPECTION ITEM	DEFICIENCIES
General Items	Operations and Maintenance Manuals	-Emergency Supplies and Equipment -Flood Preparedness and Training
Levee Embankment	-Unwanted Vegetation Growth -Depressions/Rutting -Animal Control	-Encroachments -Riprap Revetments & Bank Protection
Flood Damage Reduction Channels	Erosion	-Vegetation and Obstructions -Shoaling (sediment deposition) -Encroachments -Riprap Revetments & Banks

Source: USACE PI, August 2015

Levee Improvements and FEMA Accreditation

In 2004, as it initiated work under the Flood Map Modernization Initiative (Map Mod), FEMA determined that analysis of the role of levees in flood risk reduction would be an important part of the mapping efforts. A report issued in 2005 noted that the status of the Nation's levees was not well understood and the condition of many levees and floodwalls had not been assessed since their original inclusion in the NFIP. As a result, FEMA established policies to address existing levees. As DFIRMs are developed, levees fall under one of the three following categories:

- 1) Accredited Levee - With the exception of areas of residual flooding (interior drainage), if the data and documentation specified in 44 CFR 65.10 is readily available and provided to FEMA, the area behind the levee will be mapped as a moderate-risk area. There is no mandatory flood insurance purchase requirement in a moderate-risk area, but flood insurance is strongly recommended.
- 2) Provisionally Accredited Levee (PAL) - If data and documentation is not readily available, and no known deficiency precludes meeting requirements of 44 CFR 65.10, FEMA can allow the party seeking recognition up to two years to compile and submit full

documentation to show compliance with 44 CFR 65.10. During this two-year period of provisional accreditation, the area behind the levee will be mapped as moderate-risk with no mandatory flood insurance purchase requirement.

3) De-Accredited Levees – If the information established under 44 CFR 65.10 is not readily available and provided to FEMA, and the levee is not eligible for the PAL designation, the levee will be de-accredited by FEMA. The area behind the levee will be mapped as a high risk area, subject to mandatory flood insurance purchase.

A significant project within the planning area includes upgrades and improvements being done to the Missouri River levees R-613 and R-616. Improvements began in 2019 and are scheduled to be completed in 2021 in order to maintain accreditation. These levees provide protection for a significant number of infrastructure including Offutt Air Force Base, the City of Omaha's Papillion Creek Wastewater Treatment Plant, major transportation corridors, Highway 34 bridge access, Union Pacific Railroad and Burlington Northern Railroad lines, and residential areas. A loss of accreditation from FEMA would lead to a loss of protection from the 1 percent annual flood on FEMA's FIRMs unless the levees are significantly reconstructed and upgraded to meet FEMA's requirements. The R-613-616 levee was overtopped during the 2019 flood along the left bank of the Papillion Creek approximately 9,000 lineal feet upstream of the Missouri River. The R-613 Levee was completely overtopped along the entire length of the Platte River, Missouri River and about 2 miles of the right bank Papillion Creek closest to the Missouri River. Due to these breach events, both Offutt Air Force Base and the Papillion Creek Wastewater Treatment Plant (WWTP) were significantly damaged. The Papillion Creek WWTP is one of two major plants which services the Omaha Metropolitan Area (areas west of 42nd St in Omaha to include Bennington, Boys Town, Elkhorn, Papillion, La Vista, Omaha, Bellevue, and Offutt Air Force Base).

Figure 71: Overtopped Levee



SECTION FOUR: RISK ASSESSMENT

Figure 72: Flooding at Offutt Air Force Base



Source: Offutt Air Force Base – Media

Figure 73: 2019 Flood Satellite Comparison



Figure 74: Papillion Creek WWTP Flooding



Under the PL84-99 program, USACE completed necessary repairs on all overtopped levee sections between July 2019 and April 2020. The PMRNRD continues to complete the levee modifications required for accreditation including levee raises, seepage berms, and rehabilitated pipe penetrations. Completion of construction and submittal of levee certification documentation is anticipated by the end of 2021. Total costs of the USACE repairs was approx. \$10 million and the levee improvements are expected to exceed \$32 million. The P-MRNRD has proposed a cost share agreement with the City of Omaha, City of Bellevue, and Sarpy County to fund the needed modifications. The P-MRNRD has hired independent engineering consultants to evaluate and analyze the problem and design the needed improvements. The Corps of Engineers will review the work to ensure that it meets criteria and their approval.

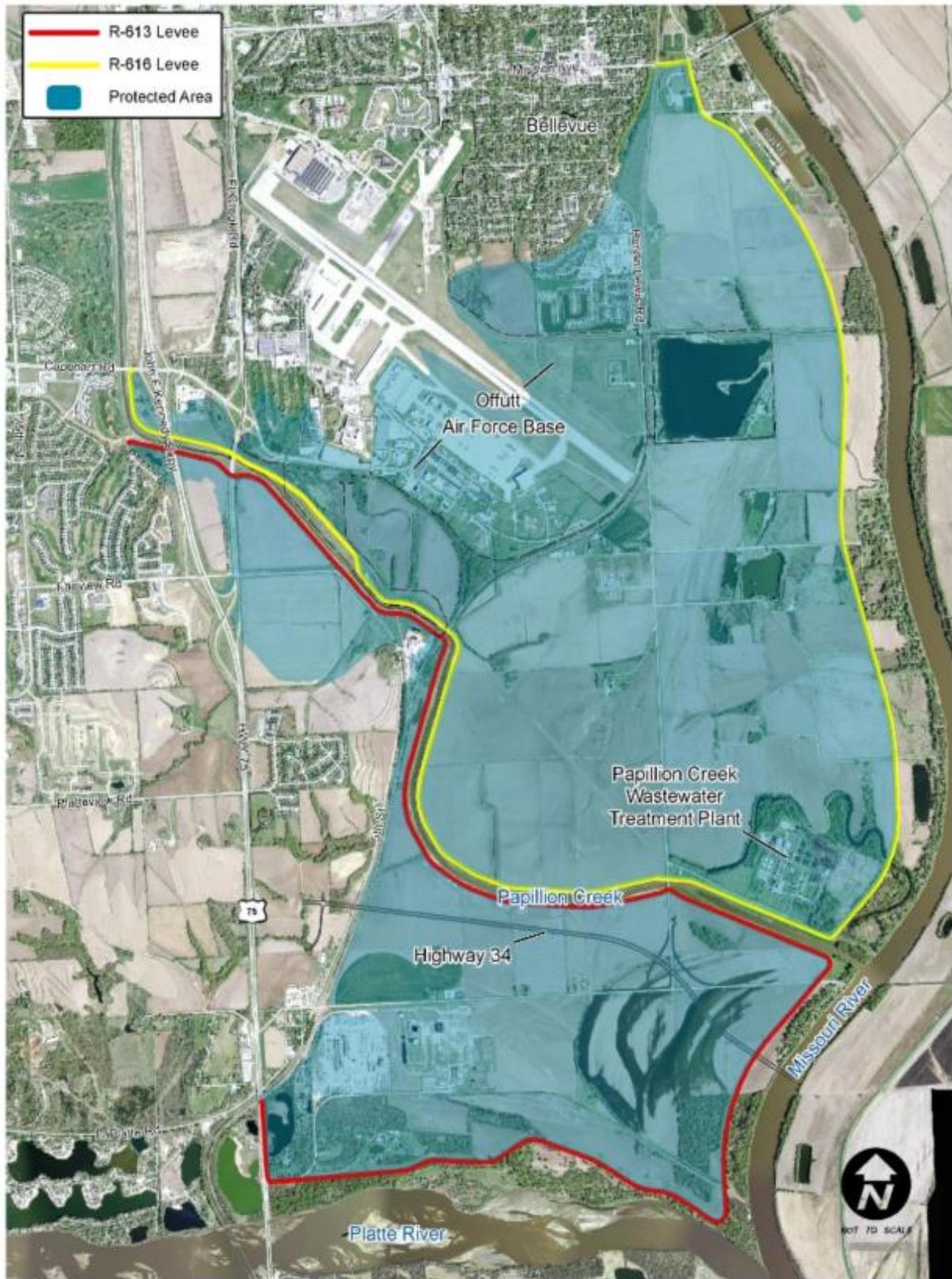
Table 102: Missouri Levee R-613 and R-616 Anticipated Project Cost

LINE ITEM	R-613 ESTIMATED COST	R-616 ESTIMATED COST
Construction	\$10,850,000	\$12,000,000
Land Rights	\$1,000,000	\$750,000
Engineering	\$3,250,000	\$4,250,000
Subtotal	\$15,100,000	\$17,000,000
Totals	~\$32,000,000	

Source: P-MRNRD Fact Sheet, January 2019

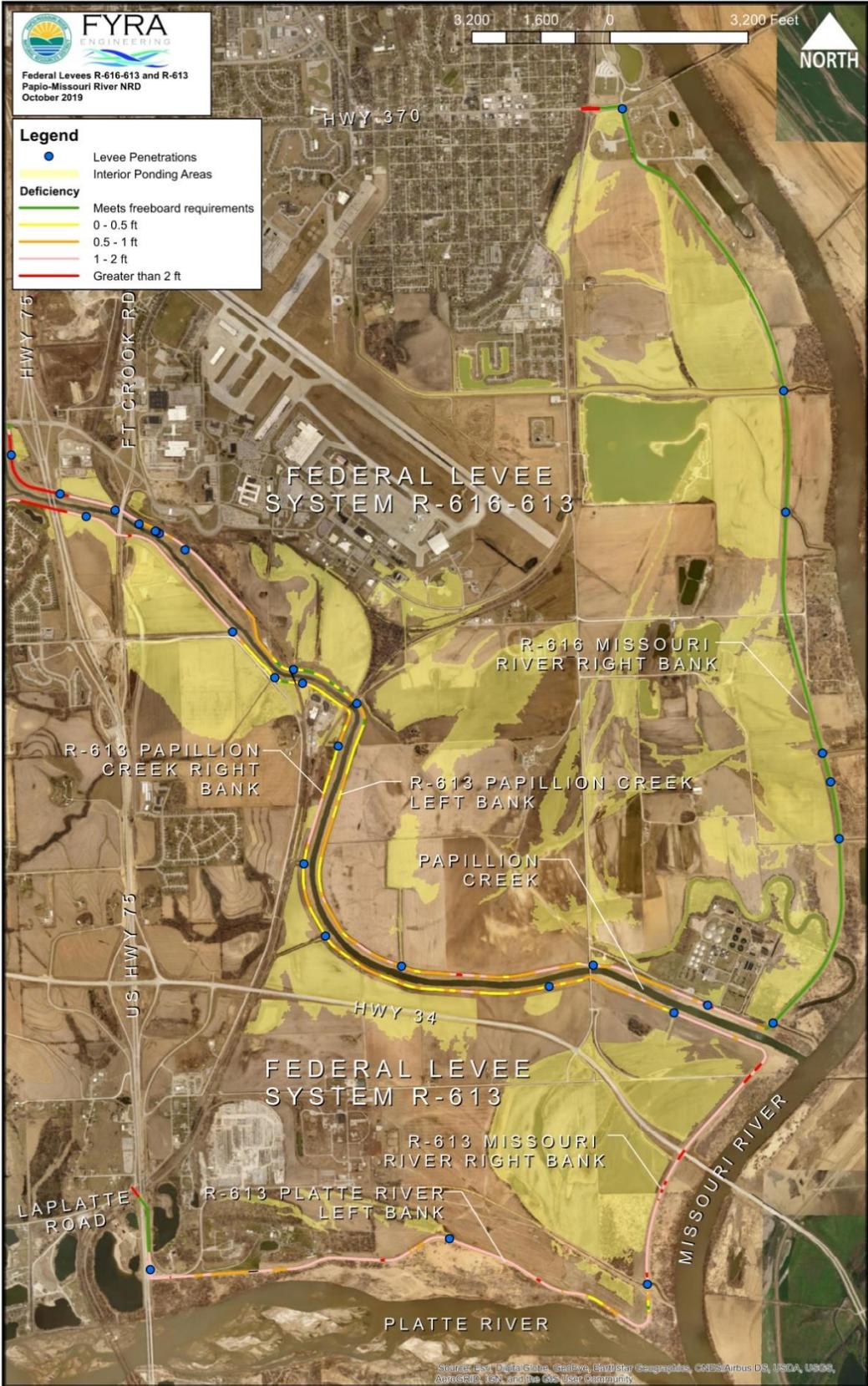
SECTION FOUR: RISK ASSESSMENT

Figure 75: Missouri River R-613-616 Levees



Source: P-MRNRD Levee Factsheet

Figure 76: Missouri River R-613-616 Levee Interior Ponding Issues



Probability

While several levees within the planning area were significantly damaged during the March 2019 flood event, no other historical records of levee failure were found. While it is possible for levee failure to occur in the future, this is considered a low probability. For the purposes of this plan, the probability of levee failure will be stated as one percent annually. It should be noted that until permanent repairs are made to damaged levee systems, there is an increased risk of failure. As outlined in the historical occurrences section, the USACE is currently overseeing repairs and working with contractors to complete permanent repairs as soon as practical.

Community Top Hazard Status

The following jurisdictions identified Levee Failure as a top hazard of concern:

- Douglas County
- City of Omaha
- City of Ralston
- City of Valley
- Village of Waterloo
- Sarpy County
- City of Bellevue
- City of La Vista
- City of Papillion
- Thurston County
- City of Blair

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 103: Regional Levee Failure Vulnerabilities

SECTOR	VULNERABILITY
People	-Those living in federal and non-federal levee protected areas -Residents with low mobility or with no access to a vehicle are more vulnerable during levee failure events -Those without adequate notification (text alerts, sirens, internet or cable access) may be at greater risk
Economic	-Businesses and industries protected by levees are at risk during failures
Built Environment	-All buildings within levee protected areas are at risk to damages
Infrastructure	-Major transportation corridors and bridges at risk during levee failures
Critical Facilities	-Critical facilities in levee protected areas are at risk
Climate	-Changes in seasonal precipitation and temperature normals can increase strain on infrastructure

Public Health Emergency

According to the World Health Organization, a public health emergency is:

“an occurrence or imminent threat of an illness or health condition, caused by bio terrorism, epidemic or pandemic disease, or (a) novel and highly fatal infectious agent or biological toxin, that poses a substantial risk of a significant number of human fatalities or incidents or permanent or long-term disability” (WHO/DCD, 2001). The declaration of a state of public health emergency permits the governor to suspend state regulations, change the functions of state agencies.⁸⁵

The number of cases that qualifies as a public health emergency depends on several factors including the illness, its symptoms, ease in transmission, incubation period, and available treatments or vaccinations. With the advent of sanitation sewer systems and other improvements in hygiene since the 19th century, the spread of infectious disease has greatly diminished. Additionally, the discovery of antibiotics and the implementation of universal childhood vaccination programs have played a major role in reducing human disease impacts. Today, human disease incidences are carefully tracked by the Centers for Disease Control and Prevention (CDC) and state organizations for possible epidemics and to implement control systems. Novel illnesses or diseases have the potential to develop annually and significantly impact residents and public health systems.

Some of the best actions or treatments for public health emergencies are nonpharmaceutical interventions (NPI). These are readily available behaviors or actions and response measures people and communities can take to help slow the spread of respiratory viruses such as influenza or coronavirus. Understanding NPIs and increasing the capacity to implement them in a timely way, can improve overall community resilience during a pandemic. Using multiple NPIs simultaneously can reduce influenza transmission in communities even before vaccination is available.⁸⁶ Pandemics are global or national disease outbreaks. These types of illnesses, such as influenza, can spread easily person-to-person, cause severe illness, and are difficult to contain. An especially severe pandemic can lead to high levels of illness, death, social disruption, and economic turmoil. Past public health emergency events include:

- 1918 Spanish Flu: the H1N1 influenza virus spread world-wide during 1918 and 1919. It is estimated that at least 50 million people worldwide died during this pandemic with about 675,000 deaths alone in the United States. No vaccine was ever developed and control efforts included self-isolation, quarantine, increased personal hygiene, disinfectant use, and social distancing.
- 1957 H2N2 Virus: a new influenza A (H2N2) virus emerged in Eastern Asia and eventually crossed into coastal U.S. cities in summer of 1957. In total 1.1 million people worldwide died of the flu with 116,000 of those in the United States.
- 1968 H3N2 Virus: an influenza A virus discovered in the United States in September 1968 which killed over 100,000 citizens. The majority of deaths occurred in people 65 years and older.
- 2009 H1N1 Swine Flu: a novel influenza A virus discovered in the United States and spread quickly across the globe. This flu was particularly prevalent in young people while those over 65 had some antibody resistance. The CDC estimated the U.S. had over 60.8 million cases and 12,469 deaths.

⁸⁵ World Health Organization. 2008. Accessed April 2020. “Glossary of humanitarian Terms.” <https://www.who.int/hac/about/definitions/en/>.

⁸⁶ U.S. Department of Health and Human Services. 2017. “Pandemic Influenza Plan: 2017 Update.” <https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf>

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- 2019 Mumps: a highly contagious illness spread by coughing, sneezing, and or sharing saliva. Mumps outbreaks can still occur in areas which have received the MMR vaccine. Symptoms of mumps can include fever, headache, loss of appetite with other complications extending to inflammation of the testicles, ovaries, pancreas, and/or brain and deafness. The City of Omaha, Thurston County, and Washington County experienced a moderate outbreak of mumps in 2019.
- 2019 COVID-19: the coronavirus disease 2019 is a contagious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which originated in Wuhan China and spread globally. As of December 2, 2020 the CDC reported in the U.S. over 13,626,022 cases and 269,763 deaths attributed to COVID-19. Efforts to control and limit the virus included face coverings, self-isolation, quarantine, increased cleaning measures, and social distancing. Significant impacts to the national and global economy have been caused by COVID-19.

The State of Nebraska Department of Health and Human Services (DHHS) requires doctors, hospitals, and laboratories to report on many communicable diseases and conditions to monitor disease rates for epidemic events. Additionally, regional or county health departments monitor local disease outbreaks and collect data relevant to public health. The following health departments are found in the planning area⁸⁷:

- Dakota County Health Department
- Douglas County Health Department
- Northeast Nebraska Public Health Department
- Thurston County Public Health and Social Services
- Elkhorn Logan Valley Public Health Department
- Three Rivers Public Health Department
- Sarpy/Cass Counties Health Department

Location

Human disease outbreaks can occur anywhere in the planning area. Public health emergencies or pandemic threshold levels are dependent on the outbreak type, transmission vectors, location, and season. Normal infectious disease patterns are changing due to increasing human mobility and climate change. Rural populations are particularly at risk for animal-related diseases while urban areas are at greater risk from community spread type illnesses. All residents throughout the planning area are at risk during public health emergencies. All areas within the planning area experienced impacts from COVID-19 specifically during 2020.

Historical Occurrences

Cases and fatalities associated with Public Health Emergencies vary between illness types and severity of outbreak. Past major outbreaks in Nebraska have specifically included the H1N1 Swine Flu in 2009, mumps outbreak in 2019, and COVID-19 in 2020.

- H1N1 Swine Flu (2009) – outbreaks were first reported in mid-April 2009 and spread rapidly. The new flu strand for which immunity was nonexistent in persons under 60 years old was similar in many ways to typical seasonal influenza. Symptoms of H1N1 included fever greater than 100F, cough, and sore throat. County specific counts of H1N1 are not available, however a total of 71 confirmed cases were reported by June 12, 2009.⁸⁸ Outbreaks in Nebraska were typically seen sporadically with occasional cluster outbreaks

⁸⁷ Nebraska Department of Health and Human Services. Accessed December 2020. "Local Health Departments." <http://dhhs.ne.gov/Pages/Local-Health-Departments.aspx>

⁸⁸ CDC. June 2009. "Novel H1N1 Flu Situation Update." <https://www.cdc.gov/h1n1flu/updates/061209.htm>.

at summer camps for youth. The U.S. Public Health Emergency for the H1N1 Influenza outbreak expired on June 23, 2010. The CDC developed and encouraged all US residents to receive a yearly flu vaccination to protect against potential exposures. The H1N1 continues to appear annually and persons in the planning area are at risk of infection in the future.

- Mumps (2019) –In August 2019, 30 attendees at a Nebraska wedding developed mumps after being exposed to one asymptomatic patient. Transmission from this event resulted in 31 secondary cases, 27 tertiary cases, and three quaternary cases. Isolation and a communitywide third-dose MMR vaccination campaign helped end the outbreak.⁸⁹
- COVID-19 (2020) – In January 2020 the CDC confirmed the first case of COVID-19 in the United States and it quickly spread across the country. By March 2020 the World Health Organization declared COVID-19 a pandemic and travel bans were instituted around the globe. Primary symptoms of the infection included cough, fever or chills, shortness of breath or difficulty breathing, fatigue, muscle and body aches, headache, loss of taste or smell, sore throat, and others.

The first confirmed case of COVID-19 in the State of Nebraska was a 36-year old Omaha resident in early March. Counties and cities throughout the planning area have instituted mask mandates and other directed health measures to protect residents from the spread of COVID-19.

The table below displays COVID-19 confirmed cases and deaths as of December 3, 2020.

Table 104: COVID-19 in the Planning Area

COUNTY	TOTAL NUMBER OF TESTS	CONFIRMED CASES	FATALITIES
Burt	2,291	447	1
Dakota	11,462	3,191	51
Douglas	251,055	41,855	358
Sarpy	75,818	12,001	60
Thurston	2,913	551	5
Washington	7,223	1,262	10

Source: Nebraska DHHS COVID-19 Dashboard, December 3, 2020

Average Annual Losses

The national economic burden of influenza medical costs, medical costs plus lost earnings, and total economic burden was \$10.4 billion, \$26.8 billion, and \$87.1 billion respectively in 2007.⁹⁰ However, associated costs with pandemic response are much greater. Current estimated costs for COVID-19 in the United States exceed \$16 trillion (as of December 2020). Estimated costs for the State of Nebraska or the 6-county planning area are unknown at this time. Specific costs do not include losses from displacement, functional downtime, economic loss, injury, or loss of life. The direct and indirect effects of significant health impacts are difficult to quantify and will vary depending on the type and spread of the virus.

Extent

Those most affected by public health emergencies are typically the very young, the very old, the immune-compromised, the economically vulnerable, and the unvaccinated. Roughly 29% of the planning area's population is 19 years old or younger, and 11.9% of the planning area is 64 years old or older, while approximately 12% of the population lives below the poverty line. Current

⁸⁹ Donahue M, Hendrickson B, Julian D, et al. Multistate Mumps Outbreak Originating from Asymptomatic Transmission at a Nebraska Wedding — Six States, August–October 2019. *MMWR Morb Mortal Wkly Rep* 2020;69:666–669. DOI: <http://dx.doi.org/10.15585/mmwr.mm6922a2external icon>.

⁹⁰ Molinari, N.M., Ortega-Sanchez, I.R., Messonnier, M., Thompson, W.W., Wortley, P.M., Weintraub, E., & Bridges, C.B. April 2007. "The annual impact of seasonal influenza in the US: measuring disease burden and costs." DOI: 10.1016/j.vaccine.2007.03.046.

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estimates for vaccination rates are not publicly available. As of January 2021, vaccine development for COVID-19 was in preliminary rollout to first responders, essential workers, and those over 80 years old in Nebraska.

These factors increase vulnerability to the impacts of pandemics. Refer to *Section Three: Planning Area Profile* for further discussion of age and economic vulnerability in the planning area. It is not possible to determine the extent of individual public health emergency events, as the type and severity of a novel outbreak cannot be predicted. However, depending on the disease type, a significant portion of residents may be at risk to illness or death.

The extent of a public health emergency is also closely tied to the proximity or availability of health centers. The following table identifies hospitals in the planning area.

Table 105: Hospitals in the Planning Area

COUNTY	FACILITY NAME	NEAREST COMMUNITY	TOTAL LICENSED BEDS
Burt	Oakland Mercy Hospital	Oakland	16
Douglas	Boys Town National Research Hospital	Boys Town	52
Douglas	Methodist Women’s hospital	Elkhorn	137
Douglas	Alegent Health Bergan Mercy Health System	Omaha	396
Douglas	Boys Town National Research Hospital	Omaha	31
Douglas	CHI Health Immanuel	Omaha	352
Douglas	CHI Health Lakeside	Omaha	157
Douglas	Children’s Hospital and Medical Center	Omaha	145
Douglas	Douglas County Community Mental Health Center	Omaha	16
Douglas	Lasting Hope Recovery Center	Omaha	64
Douglas	Madonna Rehabilitation Hospital	Omaha	62
Douglas	Madonna Rehabilitation Specialty Hospital Omaha	Omaha	48
Douglas	Methodist Hospital	Omaha	423
Douglas	Midwest Surgical Hospital LLC	Omaha	19
Douglas	Millard Family Hospital	Omaha	4
Douglas	Nebraska Orthopedic Hospital	Omaha	24
Douglas	Nebraska Spine Hospital	Omaha	34
Douglas	Select Specialty Hospital	Omaha	52
Douglas	The Nebraska Medical Center	Omaha	718
Sarpy	Bellevue Medical Center	Bellevue	91
Sarpy	CHI Health Midlands	Papillion	121
Thurston	Pender Community Hospital	Pender	21
Washington	Memorial Community Hospital Corporation	Blair	21

Source: Nebraska Department of Health and Human Services⁹¹

Immunodeficiency disorders (such as diabetes), obesity, or other pre-existing health complications reduce the ability of the body to fight infection. Diabetes prevalence per county and for the state are listed in the table below.⁹²

⁹¹ Department of Health and Human Services. September 2020. "Hospitals." <http://dhhs.ne.gov/publichealth/Documents/Hospital%20Roster.pdf>.

⁹² Centers for Disease Control and Prevention. 201y. "Diagnosed diabetes prevalence – Nebraska." <https://gis.cdc.gov/grasp/diabetes/DiabetesAtlas.html>.

Table 106: Diabetes Prevalence in the Planning Area (2017)

COUNTY	DIAGNOSED DIABETES RATE (TOTAL ADULTS AGE 20+)
Burt	8.1%
Dakota	10.4%
Douglas	9.3%
Sarpy	9.1%
Thurston	18.2%
Washington	8.5%
State of Nebraska	8.0% (2016 data)

Source: CDC, 2017

Nebraska state law (Title 173) requires all students have the following vaccinations: poliomyelitis, Diphtheria, pertussis, tetanus, measles, mumps, rubella, Hepatitis B, and varicella (chicken pox). The Vaccines for Children (VFC) program is a federally funded and state-operated vaccine supply program that provides free vaccines to children under 18 who are of American Indian or Alaska Native descent, enrolled in Medicaid, uninsured, or underinsured. Additionally, the HPV vaccination series is recommended for teenagers and influenza vaccinations are recommended yearly for those over six months old. Individuals without vaccinations are at greater risk of contracting diseases or carrying diseases to others.

Probability

There is no pattern as to when public health emergencies will occur. Based on historical records, it is likely that small-scale disease outbreaks will occur annually within the planning area. However, large scale emergency events (such as seen with COVID-19) cannot be predicted.

Community Top Hazard Status

The following jurisdictions identified Public Health Emergency as a top hazard of concern:

- Village of Decatur
- City of Tekamah
- City of Dakota City
- City of South Sioux City
- City of Bennington
- City of Gretna
- City of La Vista
- City of Springfield
- Village of Winnebago
- Village of Arlington
- City of Fort Calhoun
- Gretna Public Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

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Table 107: Regional Public Health Emergency Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Vulnerable populations include the very young, the very old, the unvaccinated, the economically vulnerable, and those with immunodeficiency disorders or other comorbidities. -Institutional settings such as prisons, dormitories, long-term care facilities or health care facilities, meat-packing plants, daycares, and schools are at higher risk to contagious diseases -Poverty, rurality, underlying health conditions, and drug or alcohol use increase chronic and infectious disease rates
Economic	<ul style="list-style-type: none"> -Large scale or prolonged events may cause businesses to close, which could lead to significant revenue loss and loss of income for workers
Built Environment	None
Infrastructure	<ul style="list-style-type: none"> -Transportation routes may be closed if a quarantine is put in place -Healthcare facilities in the planning area may be overwhelmed quickly by widespread events
Critical Facilities	<ul style="list-style-type: none"> -Healthcare facilities in the planning area may be overwhelmed quickly by widespread events -Critical facilities could see suspended action or reduced resources due to sick staff
Climate	<ul style="list-style-type: none"> -Climate change impacts on extreme weather, air quality, transmission of disease via insects and pests, food security, and water quality increase threats of disease
Other	<ul style="list-style-type: none"> -Long-term public health emergencies can have negative impacts on resident's mental health

Severe Thunderstorms

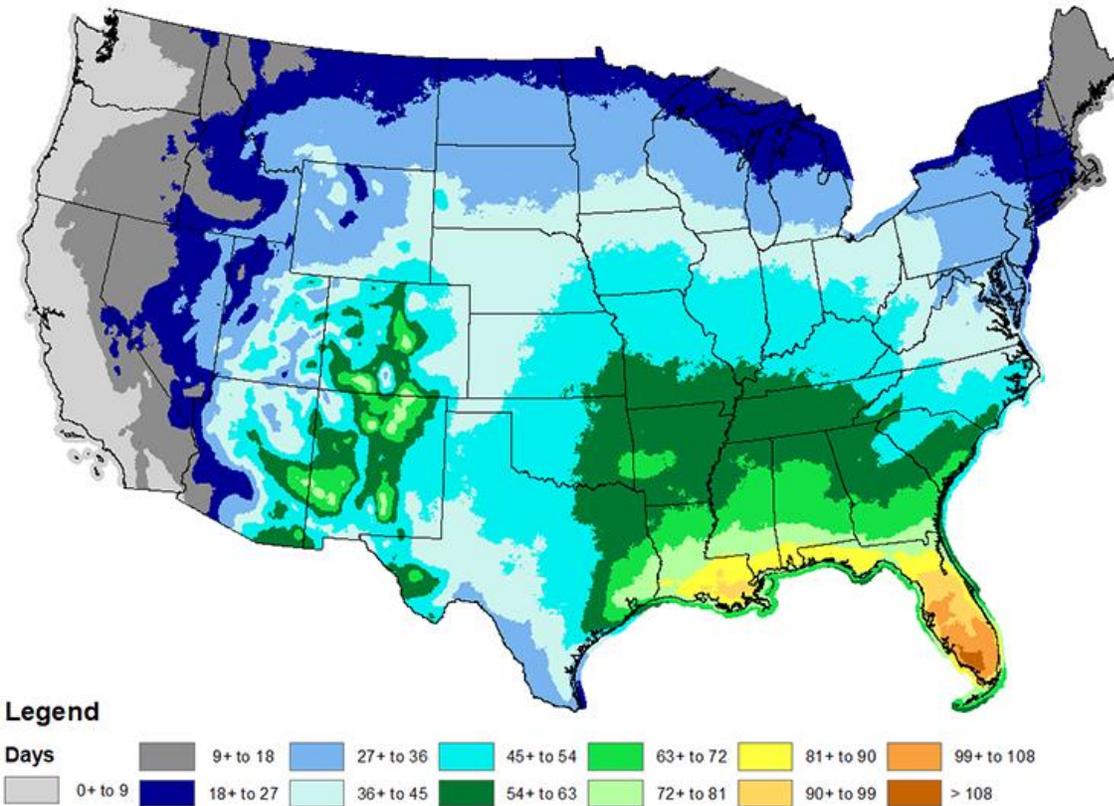
Severe thunderstorms are common and unpredictable seasonal events throughout Nebraska. A thunderstorm is defined as a storm that contains lightning and thunder, which is caused by unstable atmospheric conditions. When the cold upper air sinks and the warm, moist air rises, storm clouds or “thunderheads” develop, resulting in thunderstorms. This can occur singularly, in clusters, or in lines.

Thunderstorms can develop in fewer than 30 minutes and can grow to an elevation of eight miles into the atmosphere. Lightning, by definition, is present in all thunderstorms and can cause harm to humans and animals, fires to buildings and agricultural lands, and electrical outages in municipal electrical systems. Lightning can strike up to 10 miles from the portion of the storm depositing precipitation. There are three primary types of lightning: intra-cloud, inter-cloud, and cloud to ground. While intra and inter-cloud lightning are more common, communities are potentially impacted when lightning comes in contact with the ground. Lightning generally occurs when warm air mixes with colder air masses resulting in atmospheric disturbances necessary for polarizing the atmosphere.

Economically, thunderstorms are generally beneficial in that they provide moisture necessary to support Nebraska’s largest industry, agriculture. The majority of thunderstorms do not cause damage, but when they escalate to severe storms, the potential for damages increases. Damages can include: crop losses from wind and hail; property losses due to building and automobile damages from hail; high wind; flash flooding; and death or injury to humans and animals from lightning, drowning, or getting struck by falling or flying debris. Figure 77 displays the average number of days with thunderstorms across the country each year. The planning area experiences an average of 36 to 54 thunderstorms over the course of one year.

Figure 77: Average Annual Thunderstorms

Annual Mean Thunderstorm Days (1993-2018)



Source: NWS, 2018⁹³

Location

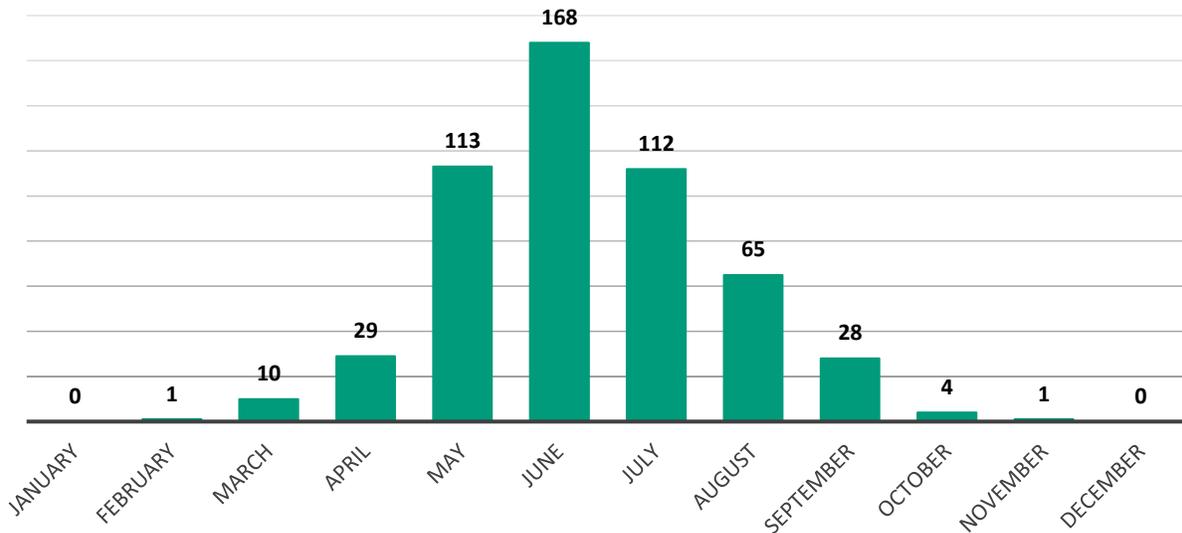
The entire six-county planning area is at risk to thunderstorms and associated damages from heavy rain, lightning, hail, and thunderstorm level winds.

Historical Occurrences

Severe thunderstorms in the planning area usually occur in the afternoon and evening during the summer months.

⁹³ National Weather Service. 2020. "Global Weather: Introduction to Thunderstorms." https://www.weather.gov/jetstream/tstorms_intro#:~:text=It%20is%20estimated%20that%20there,its%20share%20of%20thunderstorm%20occurrences.

Figure 78: Thunderstorm Wind Events by Month



Source: NCEI, 1996-2019

The NCEI reports events as they occur in each community. A single severe thunderstorm event can affect multiple communities and counties at a time; the NCEI reports these large scale, multi-county events as separate events. The result is a single thunderstorm event covering the entire region could be reported by the NCEI as several events.

The NCEI reports a total of 531 thunderstorm wind, 14 heavy rain, 42 lightning, and 797 hail events in the planning area from January 1996 to November 2019. In total these events were responsible for \$581,419,500 in property damages. The USDA RMA data does not specify severe thunderstorms as a cause of loss, however heavy rains and hail which may be associated with severe thunderstorms caused \$84,472,212 in crop damages. There were ten injuries and one fatality reported in association with these storm events.

Average Annual Losses

The average damage per event estimate was determined based upon recorded damages from NCEI Storm Events Database since 1996 and number of historical occurrences. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Severe thunderstorms cause an average of \$24,225,812 per year in property damages.

Table 108: High Winds and Tornado Losses

HAZARD TYPE	# OF EVENTS ¹	AVERAGE # EVENTS PER YEAR	TOTAL PROPERTY LOSS ¹	AVERAGE ANNUAL PROPERTY LOSS	TOTAL CROP LOSS ²	AVERAGE ANNUAL CROP LOSS
Hail	797	33	\$513,207,000	\$21,383,625	\$30,441,657	\$1,522,083
Heavy Rain	14	0.6	\$1,000,000	\$41,667	\$54,030,555	\$2,701,528
Lightning	42	1.75	\$3,635,500	\$151,479	N/A	N/A
Thunderstorm Winds	531	22	\$63,577,000	\$2,649,042	N/A	N/A
Totals	1,384	58	\$581,419,500	\$24,225,812	\$84,472,212	\$4,223,611

Source: 1 NCEI (1996-2019), 2 USDA RMA (2000-2019)

Extent

The geographic extent of a severe thunderstorm event may be large enough to impact the entire planning area (such as in the case of a squall line, derecho, or long-lived supercell) or just a few square miles, in the case of a single cell that marginally meets severe criteria. The NWS defines a thunderstorm as severe if it contains hail that is one inch in diameter or capable of winds gusts of 58 mph or higher. The Tornado and Storm Research Organization (TORRO) scale is used to classify hailstones and provides some detail related to the potential impacts from hail. Table 64 outlines the TORRO Hail Scale.

Table 109: TORRO Hail Ranking

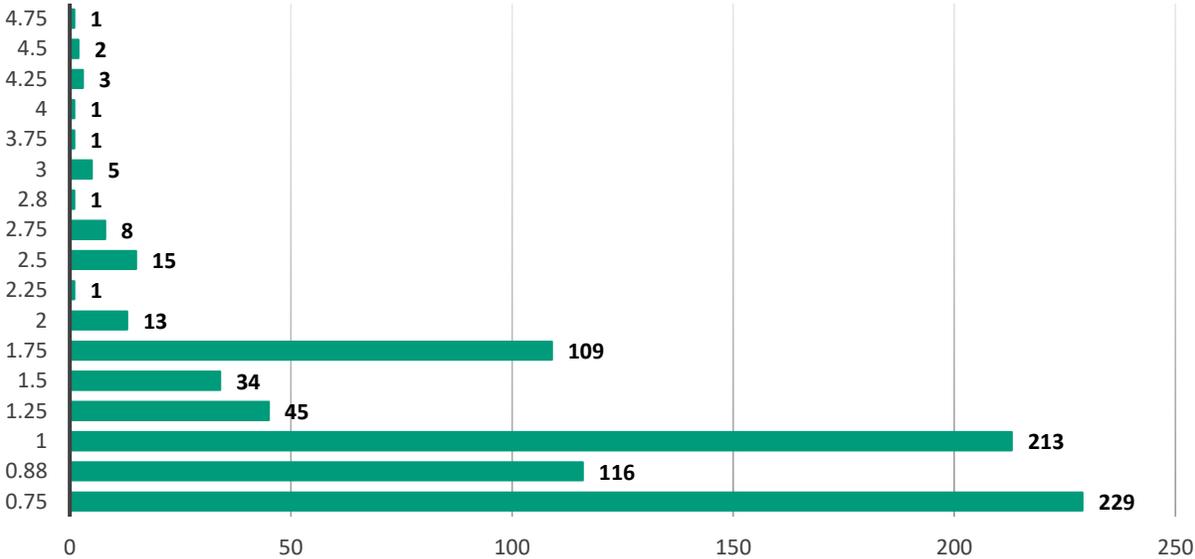
Class	Type of Material	Divisions
H0: Hard Hail	5 mm; 0.2 in (pea size)	No damage
H1: Potentially Damaging	5-15 mm; 0.2-0.6in (marble)	Slight general damage to plants and crops
H2: Significant	10-20 mm; 0.4-0.8 in (grape)	Significant damage to fruit, crops, and vegetation
H3: Severe	20-30 mm; 0.8-1.2 in (walnut)	Severe damage to fruit and crops, damage to glass and plastic structures
H4: Severe	30-40mm; 1.2-1.6 in (squash ball)	Widespread damage to glass, vehicle bodywork damaged
H5: Destructive	40-50 mm; 1.6-2.0 in (golf ball)	Wholesale destruction of glass, damage to tiled roofs; significant risk of injury
H6: Destructive	50-60 mm; 2.0-2.4 in (chicken egg)	Grounded aircrafts damaged, brick walls pitted; significant risk of injury
H7: Destructive	60-75 mm; 2.4-3.0 in (tennis ball)	Severe roof damage; risk of serious injuries
H8: Destructive	75-90 mm; 3.0-3.5 in (large orange)	Severe damage to structures, vehicles, airplanes, risk of serious injuries
H9: Super Hail	90-100 mm; 3.5-4.0 in (grapefruit)	Extensive structural damage, risk of severe or even fatal injuries to persons outdoors
H10: Super Hail	>100 mm; >4 in (melon)	Extensive structural damage; risk of severe or even fatal injuries to persons outdoors.

Source: TORRO, 2017⁹⁴

The NCEI reported 797 individual hail events across the planning area. As the NCEI reports events per county, this value overestimates the total amount of thunderstorm events. The average hailstone size was 1.16 inches. Events of this magnitude correlate to an H3 Severe classification. It is reasonable to expect H3 classified events to occur several times in a year throughout the planning area. In addition, it is reasonable, based on the number of occurrences, to expect larger hailstones to occur in the planning area annually. The planning area has endured seven H10 hail events (>4.0 inches) during the period of record. Figure 34 shows hail events based on the size of the hail.

⁹⁴ Tornado and Storm Research Organization. 2017. "Hail Scale." <http://www.torro.org.uk/hscale.php>.

Figure 79: Hail Events by Magnitude



Source: NCEI, 1996-2019

Probability

Based on historical records and reported events, severe thunderstorms events and storms with hail are likely to occur on an annual basis. The NCEI reported a total of 1,384 severe thunderstorm events between 1996 and 2019; resulting in 100 percent chance annually for thunderstorms.

Community Top Hazard Status

The following jurisdictions identified Severe Thunderstorms as a top hazard of concern:

- Burt County
- Village of Decatur
- City of Tekamah
- Dakota County
- Village of Homer
- Village of Hubbard
- Village of Jackson
- City of South Sioux City
- Douglas County
- City of Bennington
- City of Omaha
- City of Ralston
- City of Valley
- Sarpy County
- City of Bellevue
- City of Gretna
- City of La Vista
- City of Papillion
- City of Springfield

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- Thurston County
- Village of Walthill
- Village of Winnebago
- Washington County
- Village of Arlington
- City of Blair
- City of Fort Calhoun
- Village of Herman
- Arlington Public Schools
- Blair Community Schools
- Emerson-Hubbard Community Schools
- Fort Calhoun Community Schools
- Gretna Public Schools
- Homer Community Schools
- Papillion-La Vista Public Schools
- Ralston Public Schools
- Westside Community Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 110: Regional Severe Thunderstorm Vulnerabilities

SECTOR	VULNERABILITY
People	-Elderly citizens with decreased mobility may have trouble evacuating or seeking shelter -Mobile home residents are at risk of injury and damage to their property if the mobile home is not properly anchored -Injuries can occur from: not seeking shelter, standing near windows, and shattered windshields in vehicles
Economic	-Damages to buildings and property can cause significant losses to business owners and employees
Built Environment	-Buildings are at risk to hail damage -Downed trees and tree limbs -Roofs, siding, windows, gutters, HVAC systems, etc. can incur damage
Infrastructure	-High winds and lightning can cause power outages and down power lines -Roads may wash out from heavy rains and become blocked from downed tree limbs
Critical Facilities	-Power outages are possible -Critical facilities may sustain damage from hail, lightning, and wind
Climate	-Changes in seasonal precipitation and temperature normals can increase frequency and magnitude of severe storm events
Other	-High winds, hail, lightning, heavy rain, and possibly tornadoes can occur with this hazard

Severe Winter Storms

Severe winter storms are an annual occurrence in Nebraska. Winter storms can bring extreme cold, freezing rain, heavy or drifting snow, and blizzards. Blizzards are particularly dangerous due to drifting snow and the potential for rapidly occurring whiteout conditions which greatly inhibit vehicular traffic. Generally, winter storms occur between the months of November and March, but may occur as early as October and as late as April. Heavy snow is usually the most defining element of a winter storm. Large snow events can cripple an entire jurisdiction by hindering transportation, knocking down tree limbs and utility lines, and structurally damaging buildings. Extreme cold, freezing rain, and blizzards also occur alongside many severe winter storms.

Extreme Cold

Along with snow and ice storm events, extreme cold is dangerous to the well-being of people and animals. What constitutes as extreme cold varies from region to region, but is generally accepted as temperatures that are significantly lower than the average low temperature. For the planning area, the coldest months of the year are January, February, and December. The average low temperature for these months are all below freezing (average low for the three months in the planning area is 14.5°F). The average high temperatures for the months of January, February, and December are near 33.8°F in the planning area.⁹⁵

Freezing Rain

Along with snow events winter storms also have the potential to deposit significant amounts of ice. Ice buildup on tree limbs and power lines can cause them to collapse. This is most likely to occur when rain falls and freezes upon contact, especially in the presence of wind. Freezing rain is the name given to rain that falls when surface temperatures are below freezing. Unlike a mixture of rain and snow, ice pellets or hail, freezing rain is made entirely of liquid droplets. Freezing rain can also lead to many problems on the roads, as it makes them slick, causing automobile accidents, and making vehicle travel difficult.

Blizzards

Blizzards are particularly dangerous due to drifting snow and the potential for rapidly occurring whiteout conditions, which greatly inhibits vehicular traffic. Heavy snow is usually the most defining element of a winter storm. Large snow events can cripple an entire jurisdiction for several days by hindering transportation, knocking down tree limbs and utility lines, structurally damaging buildings, and injuring or killing crops and livestock.

Location

The entire planning area is at risk of severe winter storms.

Historical Occurrences

Due to the regional scale of severe winter storms, the NCEI reports events as they occur in each county. According to the NCEI, there were a combined 494 severe winter storm events for the planning area from January 1996 to November 2019. These recorded events caused a total of \$22,069,000 in property damages and \$1,263,867 in crop damages.

The most damaging event was a heavy snow event which impacted both Douglas and Sarpy counties on October 25, 1997 which caused a reported \$22,000,000 in property damages. Two

⁹⁵ High Plains Regional Climate Center. 2020. "Monthly Climate Normals 1981-2010." <http://climod.unl.edu/>.

storm events led to fatalities – two fatalities in 2005 and one fatality in 2009 in Sarpy and Douglas County respectively.

Average Annual Losses

The average damages per event estimate was determined based upon NCEI Storm Events Database since 1996 and includes aggregated calculations for each of the six types of winter weather as provided in the database. This does not include losses from displacement, functional downtime, economic loss, injury, or loss of life. Severe winter storms have caused an average of \$919,542 per year in property damage for the planning area.

Table 111: Severe Winter Storms Losses

HAZARD TYPE	# OF EVENTS ¹	AVERAGE # EVENTS PER YEAR	TOTAL PROPERTY LOSS ¹	AVERAGE ANNUAL PROPERTY LOSS	TOTAL CROP LOSS ²	AVERAGE ANNUAL CROP LOSS
Blizzard	58	2.4	\$35,000	\$1458		
Extreme Cold	28	1.2	\$0	\$0		
Heavy Snow	37	1.5	\$22,000,000	\$916,667	\$1,263,867	\$63,193
Ice Storm	17	0.7	\$10,000	\$417		
Winter Storms	236	9.8	\$24,000	\$1,000		
Winter Weather	118	4.9	\$0	\$0		
Totals	494	20.6	\$22,069,000	\$919,542	\$1,263,867	\$63,193

Source: 1 NCEI (1996-2019), 2 USDA RMA (2000-2019)

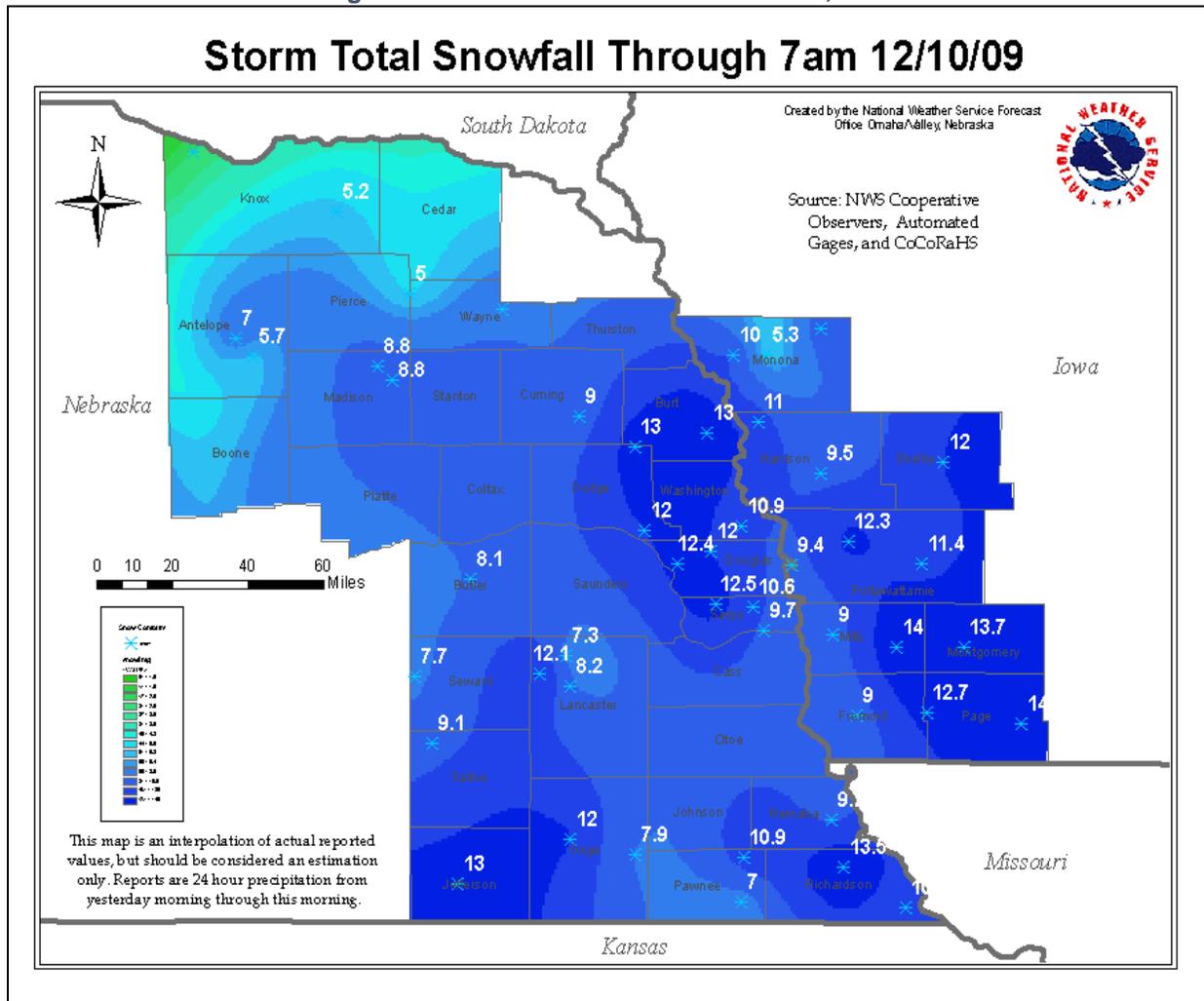
Event descriptions from NCEI for the most damaging events (those including fatalities or greatest property damage estimates) are provided below.

- Winter Storm, 10/25-26/1997** - A major early season snowstorm struck the area. A heavy wet snowfall of 6 to 14 inches fell on trees, many of which were still fully or partially leafed, and caused extensive damage and/or total destruction. At least 205,000 residents in the affected area were without power just after the storm, many of the outages lasted for several days. Omaha Public Power District estimated that it was the worst outage in 50 years. Nearly 85% of the trees in the Omaha area and 25% of the trees in the Lincoln area sustained damage or were totally destroyed. Many emergency shelters in and around the Omaha and Lincoln areas were opened for use by those who suffered a hardship from the storm.
- Winter Storm, 1/4/2005** - This storm dropped 8 to 14 inches of snow over most of eastern Nebraska and southwest Iowa, with over a foot reported across the Omaha metro area. In fact, 14.1 inches was recorded at Omaha Eppley from this storm, tying it for the 3rd heaviest snowstorm on record. The storm came through in two main bursts, the first started late Tuesday afternoon 1/4/05 and continued to around dawn Wednesday. The second bout of heavy snow fell from late Wednesday afternoon until around midnight that night. Toward the end of the snow Wednesday evening wind chill values fell to 10 below to 25 below zero as brisk north winds combined with temperatures that eventually fell to zero or colder. These bitterly cold wind chill values continued into early Thursday morning. The storm claimed 2 lives Tuesday night as a young couple became disoriented after leaving their stuck vehicle in a rural area southwest of Omaha. Despite calls for help on

their cell phone, they were unable to provide enough detail to be located before they collapsed and froze to death. The storm closed many schools across the region both Wednesday and Thursday. Besides the 14.1 inches recorded at Omaha Eppley, other heavier storm totals in eastern Nebraska included; 14.2 inches at the NWS in Valley, 12 inches in Fremont and Gretna, 11 inches at Uehling and 10 inches in David City, Raymond, Springfield, Weston, Plattsmouth, Bennington and Friend. Heavier amounts in southwest Iowa included; 12 inches at Little Sioux and Underwood, 11 inches in Harlan and Logan and 10 inches at Oakland.

- Blizzard, 12/7-9/2009** - *A large and relatively slow moving storm brought a prolonged winter storm and even, for a time, blizzard conditions to eastern Nebraska and western Iowa from late on Dec. 7th through the early morning hours of Dec. 9th. The storm was driven by an upper level disturbance that tracked from the west coast across the Rockies and deepened over the Mississippi River Valley. The heaviest snow fell in advance of when the stronger winds arrived, mainly during the morning and afternoon of Dec. 8th. However, as north winds increased to 30 to 50 mph during the night of the 8th and early on the 9th, visibilities frequently dropped to near zero, especially in open areas. Considerable drifting snow also occurred, in many cases closing roads back shut almost as fast as they could be opened. This prompted many counties to pull snow plows off the roads for a while during the night of the 8th and early on the 9th. Many schools were closed for 3 days because of the storm; due the forecast of heavy snow to begin on the 7th, because of poor visibilities and roads that were drifted shut on the 8th and still some closed roads and bitter cold wind chills which followed the storm on the 9th. An elderly Omaha man was found dead during the evening of the 8th when he apparently had car trouble and returned to his apartment and was found dead sitting down in a chair outside. ||Total snowfall from the storm was 6 to 15 inches over most of eastern Nebraska and western Iowa. Higher amounts in eastern Nebraska included 15 inches in Union, 14 inches in Columbus, around 12 inches at the NWS in Valley, at Tekamah, Uehling, Steele City and Weeping Water. In western Iowa heavier amounts included 12 inches in Clarinda and Hastings and around 11 inches in Harlan, Red Oak and Little Sioux. Snowfall of 8 to 12 inches fell across much of the county from this storm with a little over 12 inches measured at the NWS office in Valley, 9.4 inches measured at Omaha Eppley and around 10.5 inches measured in Bennington and at Boystown. The snow began during the late evening of 12/7 and continued into the early morning hours of 12/9. Winds were not that strong when the snow started, but north winds increased during the afternoon of 12/8 and especially that evening into the next morning. Frequent wind gusts of 40 mph or more were observed with a peak gust of 52 mph measured by the ASOS at Omaha Eppley. The winds produced considerable blowing and drifting snow with blizzard conditions during the evening and early morning hours of the 8th and 9th. Some county roads were drifted shut and interstate on-ramps and residential roads were difficult to keep open. An elderly man was found dead outside an Omaha apartment complex late on the 8th after he had sought help for car trouble and then evidently sat down in a chair outdoors, according to police. A 28-year-old woman was killed late on the 8th when she was hit by a snowplow that was backing up outside of her southwest Omaha apartment complex and a 63-year-old man died of a heart attack on the 9th after shoveling snow outside of his northwest Omaha home. The weight of the snow damaged several roofs of businesses in Omaha and also caused the city to spend over \$500,000 in equipment rental for snow removal besides over \$1 million in actual snow removal expenses.*

Figure 80: Snow Totals for December 8-9, 2009

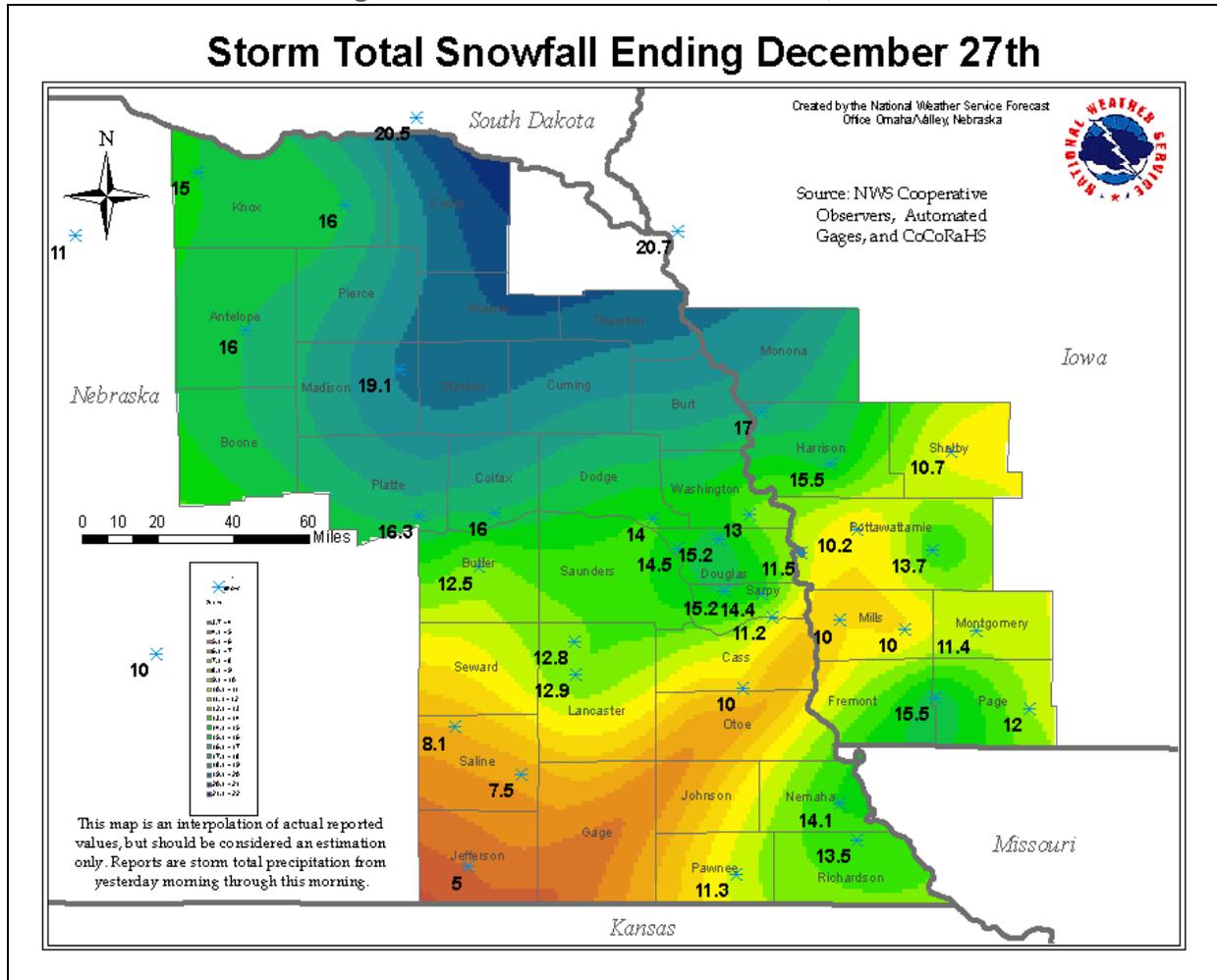


Source: NWS Omaha/Valley

- Blizzard/Winter Storm, 12/23/2009** - The second major winter storm of the month hit eastern Nebraska as a complex weather pattern brought a prolonged period of winter weather, including blizzard conditions, to the region around Christmas. Low pressure a lot in the southern Plains lifted northeast into Missouri as another low pressure system dropped south out of Canada. These two systems then merged over the central United States and eventually pulled Atlantic moisture westward into the Plains. Before they merged, the southern system pulled up Gulf of Mexico moisture and brought areas of freezing rain to the southeast Nebraska and three to five inches of snow to northeast Nebraska on the 23rd. The second system pulled down Arctic air as north winds gusted between 40 and 50 mph over most of the region. This not only changed all the precipitation to snow on the 24th, but also brought blizzard conditions to much of eastern Nebraska on Christmas Eve and much of Christmas Day. Snow and blowing snow and occasional blizzard conditions then continued through much of the 26th. Snowfall from the prolonged winter storm totaled 10-18 inches over most of eastern Nebraska. Heavier totals included 18 inches in Norfolk, 14 inches near Gretna and Bennington, and 13 inches at the NWS in Valley, Fort Calhoun, and Papillion. The snow and strong winds drifted most rural roads

closed and even made many highways impassable, especially in northeast Nebraska and sections of southeast Nebraska where winds were a bit stronger. The following figure provides the snow totals for this event.

Figure 81: Snow Totals for December 27, 2009



- Winter Storm, 1/6/2010** - The third winter storm in a month hit eastern Nebraska and southwest Iowa. This storm was caused by an upper-level disturbance that dropped out of Canada and strengthened over the Central Plains before moving off to the east. This system pulled down Arctic air behind it and not only produced strong winds but also dangerously cold wind chill values. Even though snow amounts from this storm were about half as much or less than the storms that hit in December of 2009, and winds were similar or perhaps even a bit lighter, they lasted a relatively long time. Also, the snow from this storm fell on top of a base of older snow that already was around 10-20 inches deep over much of the area. Thus, substantial blowing and drifting snow was observed, with visibilities frequently one mile or less. In addition, the drifting snow from this storm was possibly worse than the prior two storms and many rural roads became impassable for several days, as did many highways and interstates over the region. The task of snow removal was so daunting in some areas that the Nebraska Department of Roads sent large rotary plows and other equipment from western Nebraska to help churn snow off the

roads in eastern Nebraska. Many schools were closed for three days because of the snow, blowing snow, and dangerously cold wind chills. Snow totals were generally three to six inches from the storm, with around five inches at NWS Valley, Omaha Eppley Airport, and Papillion.

- **Winter Storm, 12/19-20/2012** - A winter storm developed over the western United States on December 18th, and then moved into the central Plains on the 19th producing heavy snow, localized areas of sleet and freezing rain, and in some areas blizzard conditions. Light rain developed during the late morning and early afternoon on December 19th as moisture spread north into the area from the south. As cooler air worked into the storm system from the north, the rain mixed with and eventually changed over to snow. The change over from rain to snow initially occurred over central Nebraska, spreading into northeast and east central Nebraska, and eventually west central Iowa by mid to late afternoon. Snowfall coverage and intensity increased into the evening hours as the upper level storm system moved through Kansas. Areas of thunder snow were reported in parts of east central Nebraska and southwest Iowa. The snow mixed with sleet and freezing rain over parts of southwest Iowa during the event before finally changing over to all snow just before midnight. The change-over from rain to snow also occurred just before midnight over parts of far southeast Nebraska. As the area of surface low pressure deepened and moved through Missouri toward eastern Iowa, northwest winds increased across eastern Nebraska and western Iowa. Wind speeds of 40 to 50 mph were common from late evening on the 19th into the morning hours of the 20th. The combination of falling temperatures and increasing winds led to significant blowing and drifting of snow and areas of blizzard conditions, especially in open areas. Winds also combined with the initially heavy wet nature of the snow to create power outages for over 45,000 customers across the area. The heaviest snow fell in a band from Butler and Seward County in Nebraska, through the Omaha and Lincoln metro areas, and into west central Iowa. In this band 8 to 10 inches of snow were common with isolated amounts up to 10 inches reported in Saunders and Sarpy County in Nebraska. To the north and the south of this band snowfall amounts were lighter with 3 to 6 inches common. There were also reports of over a quarter inch of sleet and freezing rain in southwest Iowa around Page County, before the precipitation switched over to all snow. The storm finally came to an end by mid day on the 20th as the system pushed off to the east and the winds diminished.
- **Winter Storm, 2/1/2015** - A deep trough across the southwest United States moved into the southern Plains early on January 31st. Ahead of this system deep moisture spread northward across the central Plains. This broad, but persistent area of warm air advection led to increasing showers over Kansas, which moved northward into eastern Nebraska and western Iowa early on the 31st. This initial precipitation was a mix of light rain and snow through mid afternoon. As colder air, associated with a stronger northern stream trough and cold front, started to move into the area late Saturday afternoon and evening the precipitation turned to all snow and began to accumulate. Snow, occasionally moderate, continued into Saturday night diminishing to light snow on Sunday morning, before ending Sunday afternoon. Snowfall of 5 to 9 inches were common across east central and southeast Nebraska, as well as southwest Iowa. As the colder air moved into the area Saturday night winds switched from northeast to northwest and increased. Winds of 20 to 30 mph with gusts over 40 mph were common into the day on Sunday that led to considerable blowing and drifting snow. The combination of falling and blowing snow resulted in reduced visibilities and very difficult driving conditions.

Extent

The Sperry-Piltz Ice Accumulation Index (SPIA) was developed by the NWS to predict the accumulation of ice and resulting damages. The SPIA assesses total precipitation, wind, and temperatures to predict the intensity of ice storms. Ice Storm Warnings are issued when accumulation of at least 0.25 inches is expected from a storm, which controlling for high winds, would tend to classify ice storms in Nebraska as SPIA Level 2 or higher. The most common accumulation during ice storms was a quarter of an inch. The following figure shows the SPIA index.

Figure 82: SPIA Index
The Sperry-Piltz Ice Accumulation Index, or “SPIA Index”

Copyright, February, 2009

ICE DAMAGE INDEX	*AVERAGE ICE AMOUNT (in inches) <i>Revised: Oct. 2011</i>	WIND (mph)	DAMAGE AND IMPACT DESCRIPTIONS
0	<0.25	<15	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	0.10 – 0.25	15 – 25	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
	0.25 – 0.50	>15	
2	0.10 – 0.25	25 – 35	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
	0.25 – 0.50	15 – 25	
	0.50 – 0.75	>15	
3	0.10 – 0.25	> – 35	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
	0.25 – 0.50	25 – 35	
	0.50 – 0.75	15 – 25	
	0.75 – 1.00	>15	
4	0.25 – 0.50	> – 35	Prolonged and widespread utility interruptions with extensive damage to main distribution feeder lines and some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
	0.50 – 0.75	25 – 35	
	0.75 – 1.00	15 – 25	
	1.00 – 1.50	>15	
5	0.50 – 0.75	> – 35	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.
	0.75 – 1.00	> – 25	
	1.00 – 1.50	> – 15	
	> 1.50	Any	

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

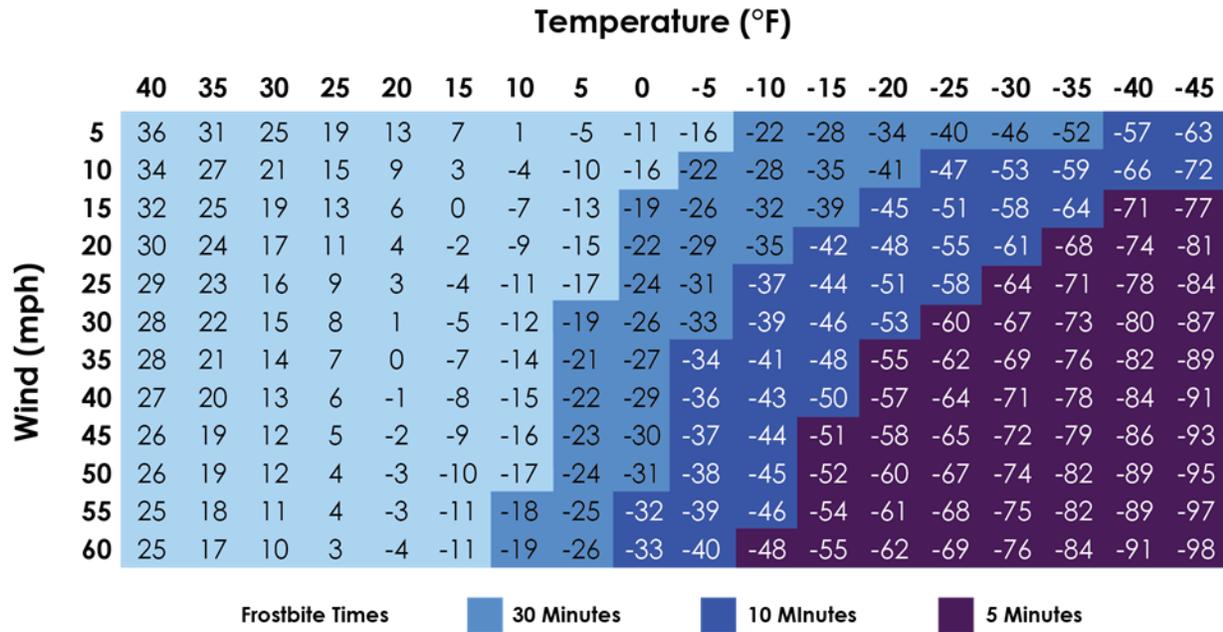
Source: SPIA-Index⁹⁶

⁹⁶ SPIA-Index. 2009. “Sperry-Piltz Ice Accumulation Index.” <https://www.spia-index.com/>.

SECTION FOUR: RISK ASSESSMENT

The wind chill index was developed by the NWS to determine the decrease in air temperature felt by the body on exposed skin due to wind. The wind chill is always lower than the air temperature and can quicken the effects of hypothermia or frost bite as it gets lower. The following figure shows the Wind Chill Index used by the NWS.

Figure 83: Wind Chill Index Chart
NWS Windchill Chart



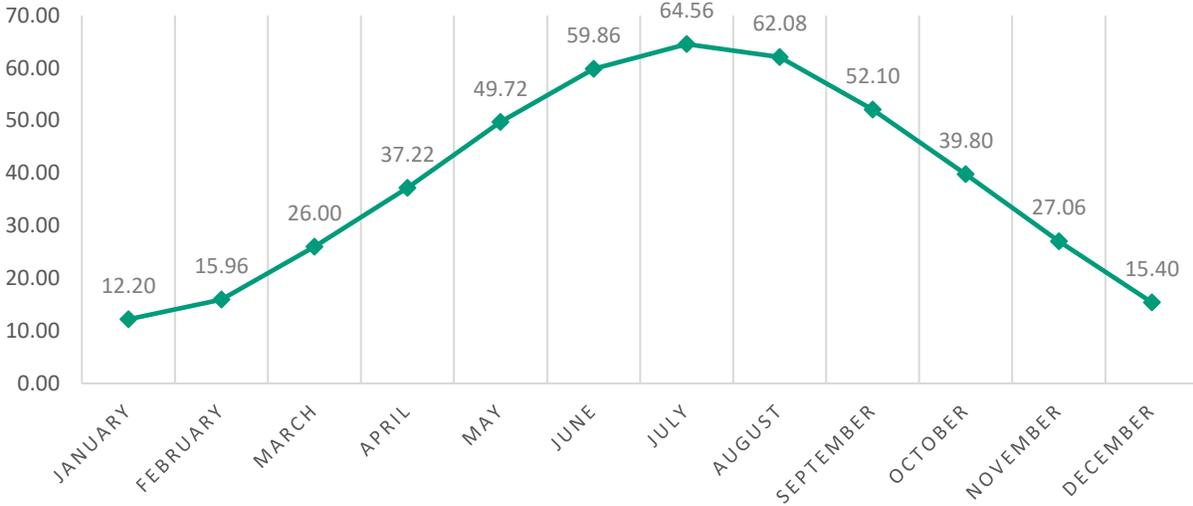
$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

T = Air Temperature (°F) V = Wind Speed (mph)



Source: NWS

Figure 84: Monthly Climate Normals Min Temperature (1981-2010)

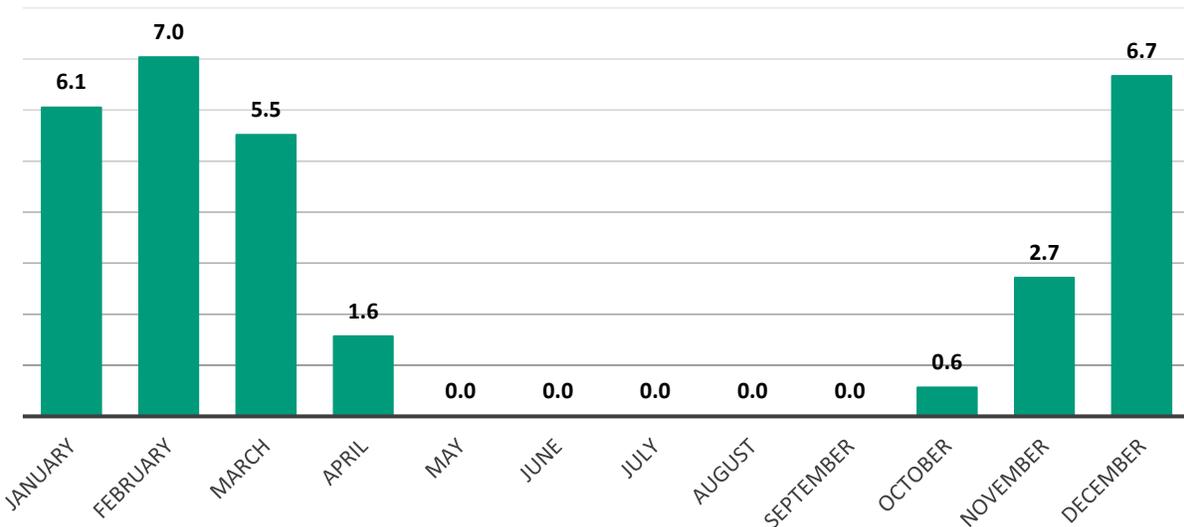


Source: NCEI

Probability

Average monthly snowfall for the planning area is shown in Figure 85, which shows the snowiest months are between December and March. A common snow event (likely to occur annually) will result in accumulation totals between one and six inches. Often these snow events are accompanied by high winds. It is reasonable to expect wind speeds of 25 to 35 mph with gusts reaching 50 mph or higher. Strong winds and low temperatures can combine to produce extreme wind chills of 20°F to 40°F below zero.

Figure 85: Monthly Normal Snowfall in Inches (1981-2010)



Source: High Plains Regional Climate Center

Based on the historical record and reported events, severe winter storms are likely to occur on an annual basis. The NCEI reported 494 severe winter storms between 1996 and 2019, resulting in a 100 percent chance annually for severe winter storms.

Community Top Hazard Status

The following jurisdictions identified Severe Winter Storms as a top hazard of concern:

- Burt County
- Dakota County
- City of Dakota City
- Village of Homer
- Village of Hubbard
- City of South Sioux City
- City of Bennington
- City of Omaha
- City of Ralston
- City of Valley
- City of Waterloo
- Sarpy County
- City of Gretna
- City of Papillion
- City of Springfield
- Thurston County
- Village of Walthill
- Village of Winnebago
- Washington County
- Village of Arlington
- City of Blair
- City of Fort Calhoun
- Village of Herman
- Arlington Public Schools
- Emerson-Hubbard Community Schools
- Fort Calhoun Community Schools
- Gretna Public Schools
- Papillion-La Vista Public Schools
- Ralston Public Schools
- Westside Community Schools
- Winnebago Indian Tribe

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 112: Regional Severe Winter Storm Vulnerabilities

SECTOR	VULNERABILITY
People	<ul style="list-style-type: none"> -Elderly citizens are at higher risk to injury or death, especially during extreme cold and heavy snow accumulations -Citizens without adequate heat and shelter at higher risk of injury or death
Economic	<ul style="list-style-type: none"> -Closed roads and power outages can cripple a region for days, leading to significant revenue loss and loss of income for workers
Built Environment	<ul style="list-style-type: none"> -Heavy snow loads can cause roofs to collapse -Significant tree damage possible, downing power lines and blocking roads
Infrastructure	<ul style="list-style-type: none"> -Heavy snow and ice accumulation can lead to downed power lines and prolonged power outages -Transportation may be difficult or impossible during blizzards, heavy snow, and ice events
Critical Facilities	<ul style="list-style-type: none"> -Emergency response and recovery operations, communications, water treatment plants, and others at risk to power outages, impassable roads, and other damages
Climate	<ul style="list-style-type: none"> -Changes in seasonal precipitation and temperature normals can increase frequency and magnitude of severe storm events.

Terrorism

According to the Federal Bureau of Investigation (FBI), there is no single, universally accepted definition of terrorism. Terrorism is defined in the Code of Federal Regulations as “the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof in furtherance of political or social objectives” (28 C.F.R. Section 0.85).

The FBI further describes terrorism as either domestic or international, depending on the origin, base, and objectives of the terrorist organization. For the purpose of this report, the following definitions from the FBI will be used:

- Domestic terrorism is the unlawful use, or threatened use, of force or violence by a group or individual based and operating entirely within the United States or Puerto Rico without foreign direction committed against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof in furtherance of political or social objectives.
- International terrorism involves violent acts or acts dangerous to human life that are a violation of the criminal laws of the United States or any state, or that would be a criminal violation if committed within the jurisdiction of the United States or any state. These acts appear to be intended to intimidate or coerce a civilian population, influence the policy of a government by intimidation or coercion, or affect the conduct of a government by assassination or kidnapping. International terrorist acts occur outside the United States or transcend national boundaries in terms of the means by which they are accomplished, the persons they appear intended to coerce or intimidate, or the locale in which their perpetrators operate or seek asylum.

There are different types of terrorism depending on the target of attack which are:

- Political Terrorism, Bio-terrorism, Cyber-terrorism, Eco-terrorism, Nuclear-terrorism, Narco-terrorism, and Agro-terrorism.

Terrorist activities are also classified based on motivation behind the event (such as ideology: i.e. religious fundamentalism, national separatist movements, and social revolutionary movements). Terrorism can also be random with no ties to ideological reasoning. The FBI also provides clear definitions of a terrorist incident and prevention:

- A terrorist *incident* is a violent act or an act dangerous to human life, in violation of the criminal laws of the United States, or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.
- Terrorism *prevention* is a documented instance in which a violent act by a known or suspected terrorist group or individual with the means and a proven propensity for violence is successfully interdicted through investigative activity.

Note: the FBI investigates terrorism-related matters without regard to race, religion national origin, or gender. Reference to individual members of any political, ethnic, or religious group in this report is not meant to imply that all members of that group are terrorists. Terrorists represent a small criminal minority in any larger social context.

Primarily, threat assessment, mitigation and response to terrorism are federal and state directives and work primarily with local law enforcement. The Office of Infrastructure Protection within the

Federal Department of Homeland Security is a component within the National Programs and Protection Directorate.

The Office of Infrastructure Protection leads the coordinated national program to reduce and mitigate risk within 18 national critical infrastructure and key resources (CIKR) sectors from acts of terrorism and natural disasters and to strengthen sectors' ability to respond and quickly recover from an attack or other emergency. This is done through the National Infrastructure Protection Plan (NIPP).

Under the NIPP, a Sector-Specific Agency (SSA) is the federal agency assigned to lead a collaborative process for infrastructure protection for each of the 18 sectors. The NIPP's comprehensive framework allows the Office of Infrastructure Protection to provide the cross-sector coordination and collaboration needed to set national priorities, goals, and requirements for effective allocation of resources. More importantly, the NIPP framework integrates a broad range of public and private CIKR protection activities.

The SSAs provide guidance about the NIPP framework to state, tribal, territorial and local homeland security agencies and personnel. They coordinate NIPP implementation within the sector, which involves developing and sustaining partnerships and information-sharing processes, as well as assisting with contingency planning and incident management.

The Office of Infrastructure Protection has SSA responsibility for six of the 18 CIKR sectors. Those six are: Chemical; Commercial Facilities; Critical Manufacturing; Dams; Emergency Services; Nuclear Reactors, Materials and Waste.

SSA responsibility for the other 12 CIKR sectors is held by other Department of Homeland Security components and other federal agencies. Those 12 are:

- Agriculture and Food – Department of Agriculture; Food and Drug Administration
- Banking and Finance – Department of the Treasury
- Communications – Department of Homeland Security
- Defense Industrial Base – Department of Defense
- Energy – Department of Energy
- Government Facilities – Department of Homeland Security
- Information Technology – Department of Homeland Security
- National Monuments and Icons – Department of the Interior
- Postal and Shipping – Transportation Security Administration
- Healthcare and Public Health – Department of Health and Human Services
- Transportation Systems – Transportation Security Administration; U.S. Coast Guard
- Water – Environmental Protection Agency

The NIPP requires that each SSA prepare a Sector-Specific Plan, review it annually, and update it as appropriate.

The Department of Homeland Security and its affiliated agencies are responsible for disseminating any information regarding terrorist activities in the country. The system in place is the National Terrorism Advisory System (NTAS). NTAS replaced the Homeland Security Advisory System (HSAS) which was the color coded system put in place after the September 11th attacks by Presidential Directive 5 and 8 in March of 2002. NTAS replaced HSAS in 2011.

SECTION FOUR: RISK ASSESSMENT

NTAS is based on a system of analyzing threat levels and providing either an imminent threat alert or an elevated threat alert. An *Imminent Threat Alert* warns of a credible, specific and impending terrorist threat against the United States. An *Elevated Threat Alert* warns of a credible terrorist threat against the United States.

The Department of Homeland Security, in conjunction with other federal agencies, will decide whether a threat alert of one kind or the other should be issued should credible information be available. Each alert provides a statement summarizing the potential threat and what, if anything should be done to ensure public safety. The NTAS Alerts will be based on the nature of the threat: in some cases, alerts will be sent directly to law enforcement or affected areas of the private sector, while in others, alerts will be issued more broadly to the American people through both official and media channels.

An individual threat alert is issued for a specific time period and then automatically expires. It may be extended if new information becomes available or the threat evolves. The sunset provision contains a specific date when the alert expires as there will not be a constant NTAS Alert or blanket warning that there is an overarching threat. If threat information changes for an alert, the Secretary of Homeland Security may announce an updated NTAS Alert. All changes, including the announcement that cancels an NTAS Alert, will be distributed the same way as the original alert.

Location

Terrorist attacks can occur throughout the entire planning area. In rural areas, concerns are primarily related to agro-terrorism and tampering with water supplies. In urban areas, concerns are related to political unrest, activist groups, and others that may be targeting businesses, police, and federal buildings.

Historical Occurrences

Previous accounts of terrorism in the planning area were gathered from the Global Terrorism Database, maintained by the University of Maryland and the National Consortium for the Study of Terrorism and Responses to Terrorism (START). This database contains information for over 140,000 terrorist attacks. According to the database, there have been nine terrorist incidents in the planning area between 1970-2018.⁹⁷ These events caused more than \$39,500 in property damages, one death, and seven injuries within the planning area.

Table 113: Terrorism Losses

Date	Location	Perpetrator Group	Fatalities	Injuries	Target Type	Property Damage
January 22, 1970	South Sioux City	Strikers	0	0	Private Citizens & Property	Damage sustained from blast, which left hole in a house. Damages unknown
January 30, 1970	South Sioux City	Strikers	0	0	Business	\$2,500
January 30, 1970	South Sioux City	Strikers	0	0	Unknown	Unknown

⁹⁷ National Consortium for the Study of Terrorism and Responses to Terrorism (START). 2016. Global Terrorism Database [Data file]. Retrieved from <https://www.start.umd.edu/gtd>.

Date	Location	Perpetrator Group	Fatalities	Injuries	Target Type	Property Damage
February 23, 1970	South Sioux City and Dakota City	Strikers	0	0	Utilities	Four power transmission poles bombed
June 11, 1970	Omaha	Black Panthers (suspected)	0	0	Police	Four-foot hole in the corner of building from bomb blast
July 2, 1970	Omaha	Black Panthers (suspected)	0	0	Business	Building destroyed. Damages unknown
August 17, 1970	Omaha	Black Panthers	1	7	Private Citizens & Property	\$2,000
August 18, 1977	Omaha	Anti-Abortion Activists	0	0	Abortion Related	\$35,000
September 6, 1991	Bellevue	Anti-Abortion Activists	0	0	Abortion Related	Private residence including farm and horses were destroyed in a fire. Damages unknown.

Source: START, 1970-2018

Threat assessment, mitigation, and response to terrorism are federal and state directives that work in conjunction with local law enforcement. Terroristic events are addressed at the federal level by the U.S. Department of Homeland Security and at the state level by the Nebraska Emergency Management Agency.

Average Annual Losses

The average damage per event estimate was determined based upon the START Global Terrorism Database information since 1970. This does not include losses from displacement, functional downtime, or economic loss. If a terrorist event were to occur in the planning area, damages can range from minimal (in rural areas, <\$1 million) to significant (in metropolitan areas, >\$10 million).

Table 114: Terrorism Incident Losses

Hazard Type	# of Events ¹	Average # events per year	Total Property Loss ¹	Average Annual Property Loss	Total Crop Loss ²	Average Annual Crop Loss
Terrorism	9	0.2	\$39,500	\$823	N/A	N/A

Source: 1 NCEI (1996-2019), 2 USDA RMA (2000-2019)

Extent

Terrorist attacks can vary greatly in scale and magnitude, depending on the location, method, and target of the attack. Previous terrorist attacks in the planning area have been limited to primarily individual buildings.

Probability

Given nine incidents over the course of 48 years, the annual probability for terrorism in the planning area has a 19 percent chance of occurring during any given year. This does not indicate that a terrorist event will occur with that frequency within the planning area as terrorist events are typically clustered in timeframe due to extenuating circumstances.

Community Top Hazard Status

The following jurisdictions identified Terrorism as a top hazard of concern:

- City of Blair
- Gretna public Schools
- Ralston Public Schools
- Westside Community Schools

Regional Vulnerabilities

The following table provides information related to regional vulnerabilities; for jurisdictional-specific vulnerabilities, refer to *Section Seven: Community Profiles*.

Table 115: Regional Terrorism Vulnerabilities

Sector	Vulnerability
People	-Police officers and first responders at risk of injury or death -Media personnel at risk
Economic	-Damaged businesses can cause loss of revenue and loss of income for workers -Agriculture attacks could cause significant economic losses for the region
Built Environment	-Targeted buildings may sustain heavy damage
Infrastructure	-Water supply, power plants, utilities all at risk of damage
Critical Facilities	-Police stations and governmental offices are at higher risk
Climate	-Activism pertaining to climate can place first responders and residents at risk

SECTION FIVE

MITIGATION STRATEGY

Introduction

The primary focus of the mitigation strategy is to identify action items to reduce the effects and impacts from the identified top hazards of concern per community. These action items should help reduce impacts on existing infrastructure and property in a cost effective and technically feasible manner. Mitigation strategy development is also based upon the established Goals and Objectives as determined by the Regional Planning Team at the Kick-off meeting.

At the Kick-off Meeting the Regional Planning Team reviewed the goals from the 2016 HMP and discussed recommended additions and modifications. The intent of each goal and set of objectives is to develop strategies to account for risks associated with hazards and identify ways to reduce or eliminate those risks. Each goal and set of objectives is followed by 'mitigation alternatives,' or actions. Participating jurisdictions were provided a copy of the Goals and Objectives at meetings to review and provide comments. For the purposes of this plan, all jurisdictions used the same Goals and Objectives.

Requirement §201.6(c)(3)(i): *[The hazard mitigation strategy shall include a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.*

Requirement §201.6(c)(3)(ii): *[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.*

Requirement: §201.6(c)(3)(ii): *[The mitigation strategy] must also address the jurisdiction's participation in the National Flood Insurance Program (NFIP), and continued compliance with NFIP requirements, as appropriate.*

Requirement: §201.6(c)(3)(iii): *[The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.*

Requirement §201.6(c)(3)(iv): *For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.*

Goals and Objectives

Below is the list of goals and objectives as determined by the Regional Planning Team and reviewed by participating jurisdictions. These goals and objectives provided specific direction to guide participants in reducing future hazard related losses and in their selection of mitigation actions.

Goal 1: Protect the Health and Safety of the Public

Objective 1.1: Continued compliance with National Flood Insurance Program (NFIP) for participating communities; join NFIP if not currently participating

Objective 1.2: Construct safe rooms in schools, public buildings, and in select locations, at public outdoor venues

Objective 1.3: Update or obtain additional outdoor warning sirens, as needed, in the project area

Objective 1.4: Develop additional emergency notification methods to alert the public of potential hazards

Objective 1.5: Provide educational opportunities for the public to promote preparedness in the project area

Objective 1.6: Reduce flooding of developed residential and commercial areas

Objective 1.7: Identify vulnerable or at-risk populations in the project area

Goal 2: Reduce or Prevent Future Damage to Critical Facilities, Critical Infrastructure, and Maintain Their Operation after a Hazard

Objective 2.1: Protect power lines throughout the NRD by burying or reinforcing them

Objective 2.2: Obtain generators and other backup power systems required to keep critical facilities, critical infrastructure, and emergency operations running after a hazard event

Objective 2.3: Evaluate and identify infrastructure systems that require improvements in order to reduce or prevent damage from hazards

Objective 2.4: Protect all existing public infrastructure from all hazards

Objective 2.5: Develop and implement hazard event action and recovery plans including communications, debris management, and long-term recovery planning

Goal 3: Reduce or Prevent Future Damage to Existing Properties and Natural Resources

Objective 3.1: Enforce regulations and building codes promoting wise development and construction that reduces the potential for damage to existing or future structures and property

Objective 3.2: Protect existing streambanks and beds from erosion/downcutting

Objective 3.3: Perform studies to determine locations of concern and evaluate projects to mitigate against the damage caused by hazards

Objective 3.4: Develop projects to reduce or prevent damage to public structures

Objective 3.5: Improve local drainage and stabilize creeks where necessary

Objective 3.6: Improve protection procedures for structures throughout the planning area to reduce damage from hazard events

Objective 3.7: Implement a mitigation plan for tree trimming and tree removal

Objective 3.8: Improve and protect area roads and drainage structures against hazards

Objective 3.9: Maintain and improve surface water quality

Goal 4: Promote Multi-Agency Coordination and Resources

Objective 4.1: Maximize funding opportunities through grant money and other outside sources

Objective 4.2: Prioritize projects based on greatest risk

Objective 4.3: Encourage individual property owners to develop independent measures to protect their property and not rely on public funding

Objective 4.4: Promote the efficient use of all public, private, and allocated funds

Mitigation Alternatives (Action Items)

After establishing the goals, mitigation alternatives were prioritized. The alternatives considered included: the mitigation actions identified per community/jurisdiction in the previous plan; additional mitigation actions discussed during the planning process; and recommendations from JEO for additional mitigation actions based on identified needs. JEO reviewed identified mitigation actions per community and provided suggestions to each participant to address gaps or vulnerabilities unaddressed in the hazards of top concern.

This prioritized list of alternatives helped participants determine which actions will best assist their respective jurisdiction in alleviating damages in the event of a disaster. The listed priority does not indicate which actions will be implemented first, but will serve as a guide in determining the order in which each action should be implemented.

These projects are the core of a hazard mitigation plan. The planning teams were instructed that each alternative must be directly related to the goals of the plan and identified hazards of top concern per community. Alternatives must be specific activities that are concise and can be implemented individually. Mitigation alternatives were evaluated based on referencing the community's risk assessment and capability assessment. Communities were encouraged to choose mitigation actions that were realistic and relevant to the concerns identified.

A final list of alternatives was established including the following information: description of the action; which hazard(s) the action mitigated; responsible party; priority; cost estimate; potential funding sources; and estimated timeline. This information was established through input from participants and determination by JEO.

It is important to note that not all of the mitigation actions identified by a community may ultimately be implemented due to limited capabilities, prohibitive costs, low benefit-cost ratio, or other concerns. These factors may not be identified during the planning process. Participants have not committed to undertaking identified mitigation actions in the plan. The cost estimates, priority ranking, potential funding, and identified agencies are used to give communities an idea of what actions may be the most feasible over the next five years. This information will serve as a guide for the participants to assist in hazard mitigation for the future. Additionally, some jurisdictions may identify and pursue additional mitigation actions not identified in this HMP. Such actions should be discussed and noted in the HMP during the annual plan maintenance process.

Mitigation Action Descriptions

Mitigation actions identified by participants of the P-MRNRD HMP are found in the Mitigation Alternative Project Matrix below. Additional information about selected actions can be found in *Section Seven: Community Profiles*. Each action includes the following information in the respective community profile:

- Mitigation Action – general title of the action item
- Description – brief summary of what the action item(s) will accomplish
- Hazard(s) Addressed – which hazard the mitigation action aims to address
- Estimated Cost – a general cost estimate for implementing the mitigation action for the appropriate
- jurisdiction
- Potential funding – a list of any potential funding mechanisms to fund the action

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- Timeline – a general timeline as established by planning participants
- Priority –a general description of the importance and workability in which an action may be implemented (high/medium/low); priority may vary between each community, mostly dependent on funding capabilities and the size of the local tax base
- Lead agency – listing of agencies or departments which may lead or oversee the implementation of the action item
- Status – a description of what has been done, if anything, to implement the action item

Implementation of the actions will vary between individual plan participants based upon the availability of existing information; funding opportunities and limitations; and administrative capabilities of communities. Establishment of a cost-benefit analysis is beyond the scope of this plan and could potentially be completed prior to submittal of a project grant application or as part of a five-year update. Completed, removed, and continuing or new mitigation alternatives for each participating jurisdiction can be found in *Section Seven: Community Profiles*.

Mitigation Action Matrix

Throughout this planning process, each jurisdiction was asked to review mitigation projects from the 2016 HMP and identify new potential mitigation alternatives to further reduce the effects of hazards. Selected projects varied amongst jurisdictions depending upon the significance of each hazard present. The following tables are a compilation of new and continuing mitigation alternatives identified by participating jurisdictions. The Cities of Omaha, Papillion, and Valley are CRS communities. Additional flood-specific mitigation actions for Omaha, Papillion, and Valley are listed in a separate table below. Completed and removed mitigation alternatives can be found in the respective community profile.

Table 116: Mitigation Actions Selected per Jurisdiction – P-MRNRD, Burt, and Dakota Counties

MITIGATION ACTION	GOAL	P-MRNRD	BURT COUNTY	DECATUR	TEKAMAH	DAKOTA COUNTY	DAKOTA CITY	HOMER	HUBBARD	JACKSON	SOUTH SIOUX CITY
			BURT COUNTY			DAKOTA COUNTY					
Alert Sirens	1.3		X			X	X				
Assess Warning System	1.4										X
Back-up Power Generator	2.2	X		X			X	X	X		X
Bury Power Lines	2.1				X		X				X
Channel Maintenance and Bank Stabilization	3.2									X	
Civil Service Improvements	2.3						X	X			X
Community Rating System	1.1										X
Community Water System Emergency Response Plan	2.5										X
Cybersecurity Improvements	2.3										X
Dam Failure Exercise	2.5					X					
Database of Vulnerable Populations	1.7		X								
Drainage Ditches	3.2					X					X
Drainage Study/Stormwater Master Plan	2.5	X									
Education Program on Mitigation Actions	1.5										X
Emergency Communication	1.4		X								X
Emergency Exercise	2.5	X					X	X			
Emergency Fuel Supply Plan	2.5							X			
Equipment Upgrades	2.3										X
Facilities for Vulnerable Populations	1.7		X								
Fire Hydrant Rehabilitation	3.4						X				
First Aid Training	1.5										X
Flood Warning System Upgrades	1.4	X									
Floodplain Regulation Enforcement/Updates	3.1		X	X		X		X			
Floodprone Property Acquisition	1.6	X									
GIS Mapping	3.3		X						X		

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MITIGATION ACTION	GOAL	P-MRNRD	BURT COUNTY	DECATUR	TEKAMAH	DAKOTA COUNTY	DAKOTA CITY	HOMER	HUBBARD	JACKSON	SOUTH SIOUX CITY
			BURT COUNTY			DAKOTA COUNTY					
Grade Control Structures	3.5		X								
Hazardous Tree Removal	3.7									X	X
Identify Tornado Shelter Locations	1.2										X
Implement Water System Improvements	2.3							X			
Increase Public Awareness of Hazards	1.5		X								
Infrastructure Hardening	3.6										X
Install New Well	3.4									X	
Mobile Home Anchoring	3.1				X						
Provide Severe Weather Notification	1.4		X								
Public Awareness and Education	1.5									X	X
Railroad Plan	2.5										X
Roadway Improvements	3.8								X		
Shelter in Place Training	1.5		X					X			
Snow Fences	2.4										X
Storage Space	2.4										X
Storm Shelter Identification	1.2		X								
Storm Shelters/Safe Rooms	1.2		X		X		X	X			X
Stormwater System and Drainage Improvements	3.5										X
Streambank Stabilization	3.2			X		X					
Teleconference Equipment	3.6						X				
Tornado Safety	1.5		X								
Transportation Drainage Improvements	3.8			X							X
Tree Assistance	3.7										
Tree City USA	3.1									X	
Tree Management Plan	3.7					X					X
Tree Planting	3.7										X

MITIGATION ACTION	GOAL	P-MRNRD	BURT COUNTY	DECATUR	TEKAMAH	DAKOTA COUNTY	DAKOTA CITY	HOMER	HUBBARD	JACKSON	SOUTH SIOUX CITY
			BURT COUNTY			DAKOTA COUNTY					
Upgrade Problem Bridges and Culverts	3.8	X									
Upgrades and Improvements to Levees MR-613 and MR-616	3.6	X									
Wastewater Facility Improvements	3.4			X							
Weather Radios	1.4		X					X			
Westside Storm Plan	2.5										X

Table 117: Mitigation Actions Selected per Jurisdiction – Douglas and Sarpy Counties

MITIGATION ACTION	GOAL	DOUGLAS COUNTY	BENNINGTON	OMAHA	RALSTON	VALLEY	WATERLOO	SARPY COUNTY	BELLEVUE	GRETNA	LA VISTA	PAPILLION	SPRINGFIELD
		DOUGLAS COUNTY						SARPY COUNTY					
Alert Sirens	1.3							X		X			
Back-up Municipal Records	3.6												X
Back-up Power Generator	2.2		X		X	X	X	X		X	X	X	X
Bury Outdoor Warning Siren Power Supply	2.2	X											
Bury Power Lines	2.1		X								X		
Channel Maintenance and Bank Stabilization	3.2										X		X
Civil Service Improvements	2.3						X			X			X

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MITIGATION ACTION	GOAL	DOUGLAS COUNTY	BENNINGTON	OMAHA	RALSTON	VALLEY	WATERLOO	SARPY COUNTY	BELLEVUE	GRETNA	LA VISTA	PAPILLION	SPRINGFIELD
		DOUGLAS COUNTY						SARPY COUNTY					
Comprehensive City Disaster/Emergency Response Plan	2.5												X
Database of Vulnerable Structures	1.7			X									
Develop an Urban Tree Management Program	3.7			X							X		
Development Restrictions	3.1							X					
Drainage Ditches	3.2				X		X						
Drainage Study/Stormwater Master Plan	2.5	X											
Education Program on Mitigation Actions	1.5												X
Emergency Communication	1.4							X		X			
Emergency Communication System	1.4						X	X					
Emergency Operations	2.3				X								X
Establish Public Health Emergency Policies	2.5												X
Facilities for Vulnerable Populations	1.7							X					
Fire Hydrant Rehabilitation	3.4												X
First Aid Training	1.5												X
Floodplain Management	3.9							X					X
Floodplain Regulation Enforcement/Updates	3.1												X
Floodprone Property Acquisition	1.6	X						X					
Hazardous Tree Removal	3.7								X				
Higher Building Codes and Standards	3.1							X		X			
High-Resolution LiDAR	2.3	X											
Impact Resistant Roof Covering	3.1				X								

MITIGATION ACTION	GOAL	DOUGLAS COUNTY	BENNINGTON	OMAHA	RALSTON	VALLEY	WATERLOO	SARPY COUNTY	BELLEVUE	GRETNA	LA VISTA	PAPILLION	SPRINGFIELD
		DOUGLAS COUNTY						SARPY COUNTY					
Identify Tornado Shelter Locations	1.2			X									
Infrastructure Hardening	3.6												X
Intergovernmental Support	4.4									X			
Maintain and Improve Levee	3.6						X						
Parcel Level Evaluation of Flood Prone Properties	3.3	X											
Provide Severe Weather Notification	1.4						X						
Public Awareness and Education	1.5												X
Raise 36th Street Bridge	3.8								X				
Siren Survey	1.3							X					
Snowplow	3.8				X								
Storm Shelters/Safe Rooms	1.2				X	X	X				X	X	X
Stormwater Management Committee	3.5							X					
Stormwater System and Drainage Improvements	3.5				X					X	X		X
Streambank Stabilization	3.2				X								
Structural Inventory	3.3				X								
Surge Protectors	2.4												X
Tornado Safety	1.5												X
Tree Assistance	3.7												X
Tree City USA	3.1												X
Update Zoning and Floodplain Ordinances	3.1						X						
Update Zoning Ordinance and Comprehensive Plan	3.1												X
Upgrade Problem Bridges and Culverts	3.8										X		

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MITIGATION ACTION	GOAL	DOUGLAS COUNTY	BENNINGTON	OMAHA	RALSTON	VALLEY	WATERLOO	SARPY COUNTY	BELLEVUE	GRETNA	LA VISTA	PAPILLION	SPRINGFIELD
		DOUGLAS COUNTY							SARPY COUNTY				
Upgrades and Improvements to Levees MR-613 and MR-616	3.6							X	X				
Weather Radios	1.4			X						X			X

Table 118: Mitigation Actions Selected per Jurisdiction – Thurston and Washington Counties

MITIGATION ACTION	GOAL	THURSTON COUNTY	WALTHILL	WINNEBAGO	WASHINGTON COUNTY	ARLINGTON	BLAIR	FORT CALHOUN	HERMAN
		THURSTON COUNTY			WASHINGTON COUNTY				
Alert Sirens	1.3	X		X	X	X			
Assess Storm Shelter Needs and Availability	1.2						X		
Back-up Municipal Records	3.6				X				X
Back-up Power Generator	2.2	X	X	X		X		X	X
Build Berm at Park	3.6								X
Channel Maintenance and Bank Stabilization	3.2						X		
Civil Service Improvements	2.3				X				
Complete Flood Mitigation and Watershed Study for Bell Creek	3.3				X				
Complete Structural Inventory	2.3						X		
Curfew Siren	1.3			X					
Database of Vulnerable Populations	1.7				X				
Develop an Urban Tree Management Program	3.7						X	X	

MITIGATION ACTION	GOAL	THURSTON COUNTY	WALTHILL	WINNEBAGO	WASHINGTON COUNTY	ARLINGTON	BLAIR	FORT CALHOUN	HERMAN
		THURSTON COUNTY			WASHINGTON COUNTY				
Display Signage	1.5			X					
Drainage Ditches	3.2		X				X		
Drainage Study/Stormwater Master Plan	2.5		X						
Emergency Exercise	2.5				X				
Emergency Operations	2.3				X				
Emergency Response Plan	2.5				X				
Facilities for Vulnerable Populations	1.7				X				
Flood Mitigation Study for Bell Creek	3.3					X			
Floodplain Regulation Enforcement/Updates	3.1	X							
Floodprone Property Acquisition	1.6				X	X			
Identify Tornado Shelter Locations	1.2						X		
Impact Resistant Roof Covering	3.1				X				
Install Railroad Crossing Arms	3.8			X					
Intake Structure for Water Treatment Plan	3.6						X		
PPE Supplies	2.4							X	
Provide Severe Weather Notification	1.4						X		
Public Awareness and Education	1.5	X			X				
Roadway Improvements	3.8							X	
Security and Warning System	1.4						X		
Shelter in Place Training	1.5				X				
Short Term Residency Shelters	1.2				X				
Storm Shelters/Safe Rooms	1.2		X	X	X				
Stormwater System and Drainage Improvements	3.5					X		X	
Update Comprehensive Plan	3.1								X
Weather Radios	1.4		X						

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Table 119: Mitigation Actions Selected per Jurisdiction – Special Districts

MITIGATION ACTION	GOAL	ARLINGTON SCHOOLS	BLAIR SCHOOLS	DOUGLAS COUNTY WEST	EMERSON-HUBBARD SCHOOLS	FORT CALHOUN SCHOOLS	GRETNA SCHOOLS	HOMER SCHOOLS	PAPILLION-LA VISTA SCHOOLS	RALSTON SCHOOLS	WESTSIDE COMMUNITY SCHOOLS	WINEBAGO INDIAN TRIBE	WASHINGTON COUNTY FAIR
		SCHOOL DISTRICTS											
Back-up Power Generator	2.2		X		X	X	X	X		X	X		
Drainage Improvements	3.2											X	
Emergency Communication	1.4								X		X		
Emergency Exercise	2.5		X									X	
Evacuation Plan	2.5											X	
Facility Floodproofing	1.6	X										X	
Hazardous Tree Removal	3.7										X		
Impact Resistant Roof Covering	3.1	X						X					
Install Vehicular Barriers	3.8	X											
PPE Supplies	2.4						X						
Public Awareness and Education	1.5										X		
Replace Boiler at High School	2.3				X								
Replace Windows at Elementary School	2.3				X								
Replacement Roof for Middle-High School	2.3				X								
School Continuity Plan	2.5										X		
Security and Warning System	3.4	X											
Storm Shelters/Safe Rooms	1.2		X	X		X			X		X	X	
Update Safety Plan	2.5				X								
Upgrade Problem Bridges and Culverts	3.8												X
Weather Radios	1.4				X								

Table 120: Mitigation Actions Selected per CRS Jurisdiction – Omaha, Papillion, and Valley

CATEGORY OF FLOODPLAIN MANAGEMENT	MITIGATION ACTION	OMAHA	PAPILLION	VALLEY
PREVENTATIVE	Community-Wide Master Plan to Prioritize Flood Related Projects	X		X
	Improve Floodplain Regulations			X
	Drainage Study/Stormwater Master Plan			X
	Floodplain Regulation Enforcements/Updates			X
	Mutual Aid Through WARN Program			X
	Community Rating System	X		X
	Low Impact Development	X	X	
	Stormwater Management Committee	X		
PROPERTY PROTECTION	Fuel Tank Anchoring			X
	Facility Flood Proofing	X	X	
	Mitigate Repetitive Loss Properties	X		
	Parcel Level Evaluation of Flood Prone Properties	X		
	Site Hardening	X		
	Well Field Improvements		X	
NATURAL RESOURCE PROTECTION	Bank Stabilization for Erosion Control	X	X	
	Floodplain Management	X	X	
	Wetlands Protection	X		
EMERGENCY SERVICES	Emergency Management Exercise	X	X	X
	Develop Flood Assistance Strategies	X		
STRUCTURAL FLOOD CONTROL PROJECTS	Channel Stabilization		X	
	Levee Certification and Accreditation	X	X	
	Drainage Ditches and Culverts			X
	Grade Control Sewer Lift Stations			X
	Remove Flow Constrictions			X
	Stormwater System Improvements and Management			X
	Upgrades and Improvements to Levees MR-R-613 and MR-R-616	X		
PUBLIC INFORMATION	Risk Communication	X	X	X

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SECTION SIX PLAN IMPLEMENTATION AND MAINTENANCE

Introduction

Participants of the P-MRNRD HMP will be responsible for monitoring, evaluating, and updating the plan during its five-year lifespan. Hazard mitigation projects will be prioritized by each participant's governing body with support and suggestions from the public, business owners, and stakeholders. Unless otherwise specified by each participant's governing body and/or lead agencies identified in the mitigation action, the participant's governing body will be responsible for implementation of the recommended projects. The lead agency (or appropriate department/staff) identified on each mitigation action will report on the status of projects and include which implementation processes worked well, any difficulties encountered, how coordination efforts are proceeding, and which strategies could be revised.

Requirement §201.6(c)(4)(i): [The plan maintenance process shall include a] section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

Requirement §201.6(c)(4)(ii): [The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Requirement §201.6(c)(4)(iii): [The plan maintenance process shall include a] discussion on how the community will continue public participation in the plan maintenance process.

To assist with monitoring of the plan, as each recommended project is completed, a detailed timeline of how that project was completed will be written and attached to the plan in a format selected by the governing body. Information that will be included will address project timelines, agencies involved, area(s) benefited, total funding (if complete), etc. At the discretion of each governing body, a local task force will be used to review the original draft of the mitigation plan and to recommend changes.

The FEMA required update of this plan will occur at least every five years, to reduce the risk of the HMP expiring. Updates may be incorporated more frequently, especially in the event of a major hazard. The governing body will start meeting to discuss mitigation updates at least six months prior to the deadline for completing the plan review. The persons overseeing the evaluation process will review the goals and objectives of the previous plan and evaluate them to determine whether they are still pertinent and current. Among other questions, they may want to consider the following:

- Do the goals and objectives address current and expected conditions?
- If any of the recommended projects have been completed, did they have the desired impact on the goal for which they were identified? If not, what was the reason it was not successful (lack of funds/resources, lack of political/popular support, underestimation of the amount of time needed, etc.)?
- Have either the nature, magnitude, and/or type of risks changed?
- Are there implementation problems?

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- Are current resources appropriate to implement the plan?
- Were the outcomes as expected?
- Did the plan partners participate as originally planned?
- Are there other agencies which should be included in the revision process?

Worksheets in Appendix C may also be used to assist with plan updates.

In addition, the governing body will be responsible for ensuring that the HMP's goals are incorporated into applicable revisions of each participant's comprehensive plan and any new planning projects undertaken by the participant. The HMP will also consider any changes in comprehensive plans and incorporate the information accordingly in its next update.

Continued Public Involvement

To ensure continued plan support and input from the public and business owners, public involvement will remain a top priority for each participant. Notices for public meetings involving discussion of an action on mitigation updates will be published and posted in the following locations a minimum of two weeks in advance:

- Public spaces around the jurisdiction
- City/Village Halls
- Websites
- Local radio stations
- Local newspapers
- Regionally-distributed newspaper

Unforeseen Opportunities

If new, innovative mitigation strategies arise that could impact the planning area or elements of this plan, which are determined to be of importance, a plan amendment may be proposed and considered separate from the annual review and other proposed plan amendments. The P-MRNRD will compile a list of proposed amendments received annually and prepare a report for NEMA, by providing applicable information for each proposal, and recommend action on the proposed amendments.

Incorporation into Existing Planning Mechanisms

The Planning Team utilized a variety of plan integration tools to help communities determine how their existing planning mechanisms were related to the Hazard Mitigation Plan. Utilizing FEMA's *Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan*⁹⁸ guidance, as well as FEMA's *2015 Plan Integration*⁹⁹ guide, each community engaged in a plan integration discussion. This discussion was facilitated by a Plan Integration Worksheet. This document offered an easy way for participants to identify and explore planning mechanisms which amplify and interface with the HMP.

⁹⁸ Federal Emergency Management Agency. November 2013. "FEMA Region X Integrating the Local Natural Hazard Mitigation Plan into a Community's Comprehensive Plan." https://www.fema.gov/media-library-data/20130726-1908-25045-0016/integrating_hazmit.pdf.

⁹⁹ 8 Federal Emergency Management Agency. July 2015. "Plan Integration: Linking Local Planning Efforts." https://www.fema.gov/media-librarydata/1440522008134-ddb097cc285bf741986b48fdcef31c6e/R3_Plan_Integration_0812_508.pdf.

SECTION SEVEN

COMMUNITY PROFILES

Purpose of Community Profiles

Community Profiles contain information specific to jurisdictions participating in the P-MRNRD planning effort. Community Profiles were developed with the intention of highlighting each jurisdiction's unique characteristics that affect its risk to hazards. Community Profiles may serve as a short reference of identified vulnerabilities and mitigation actions for a jurisdiction as they implement the mitigation plan. Information from individual communities was collected at public and one-on-one meetings and used to establish the plan. Community Profiles may include the following elements:

- Local Planning Team members
- Location/Geography
- Climate (County level)
- Demographics
- Transportation
- Future Development Trends
- Parcel Improvements and Valuations
- Critical Infrastructure and Key Resources
- Historical Hazard Events (County Level)
- Hazard Prioritization
- Governance
- Capability Assessment
- Plan Integration
- Plan Maintenance
- Mitigation Actions

In addition, maps specific to each jurisdiction are included such as: jurisdictional boundary; identified critical facilities; dam or levee locations; flood prone areas; and a future land use map (when available). The hazard prioritization information, as provided by individual participants, in *Section Seven: Community Profiles* varies due in large part to the extent of the geographical area, the jurisdiction's designated representatives (who were responsible for completing meeting worksheets), identification of hazards, occurrence and risk of each hazard type, and locally supplied information.

The overall risk assessment for the identified hazard types represents the presence and vulnerability to each hazard type area wide throughout the entire planning area. A discussion of certain hazards selected for each Community Profile were prioritized by the local planning team based on the identification of hazards of greatest concern, hazard history, and the jurisdiction's capabilities. The hazards not examined in depth can be found in *Section Four: Risk Assessment*.