Agenda
Regular Session Meeting
Sedalia School District #200
Monday, December 3, 2018 6:30 p.m.
Parkview Elementary
Media Center
1901 South New York Avenue

Call to Order

1.1 Call to Order	Info

Recognitions and Presentations

2.1 Public and Staff Comment	Info
2.2 Sedalia School District Foundation	Info
2.3 Sedalia Community Educators Association	Info
2.4 Legion of Valor Bronze Cross for Achievement	Info
2.5 Student Engagement – Creating Magical Lessons!	Info
2.6 Approval of November 26, 2018	**Action**

Consent Agenda

3.1 Minutes for Monthly Business Meeting October 22, 2018	**Action**
3.2 Personnel	**Action**
3.3 Treasurer's Report	**Action**
3.4 Payment of Bills	**Action**

Decision Unfinished Business

4.1 Professional Development Manual	**Action**

Decision

5.1 Board Filing Candidate	**Action**
5.2 MOSIP Core Portfolio Funds Transfer	**Action**
5.3 Maintenance Warehouse HVAC Bid	**Action**
5.4 Early Childhood Special Ed and Title I Preschool Program Evaluation	**Action**
5.5 Parents as Teachers Program Evaluation	**Action**
5.6 ECSE Additional Position	**Action**
5.7 Pettis County Mitigation Plan	**Action**

Discussion

6.1 DNR Energy Loan Repayment	Info
6.2 Early Childhood Long Range Planning	Info
6.3 JAG – Jobs for America's Graduates	Info

Information

7.1 Attendance 90/90 Report	Info
7.2 Quarterly Building Reports	Info
7.3 ACT Data	Info
7.4 Mr. and Mrs. Robert Hicks Lunch Account Donation	Info

Adjournment

8.1 Adjournment to Closed Session	**Action**

Minutes
Regular Meeting
Sedalia School District #200
Monday, October 22, 2018 6:30 p.m.
Smith-Cotton High School
Commons Area
2010 Tiger Pride Blvd.

Call to Order	Dr. Sharp president, called the meeting to order at 6:30 p.m.
Quorum	Board Members present: Dr. Jeffrey Sharp, President; David Wolf, Vice President; Scott Gardner, Secretary; Kenny Coffelt, Treasurer; Diana Nichols, Steve Schilb and Michael Stees.
Present	Steve Triplett, Superintendent; Dr. Todd Fraley, Assistant Superintendent; Chris Pyle, Assistant Superintendent; Dr. Nancy Scott, Assistant Superintendent; Kali Butts, Student Advisor to the Board; Lisa Hammerly, Recording Secretary.
PLTW New Wing	Principal Smith-Cotton High School, Wade Norton and PLTW Teacher, Michael Wright provided a tour to the new PLTW wing at Smith-Cotton High School.
Public Comments	None.
Recognitions & Pres.	Sedalia School District Foundation thanked everyone for a successful Homecoming. Sedalia Community Educators Association, Andrea Young commented on the increase in MSTA memberships for the 2018-19 school year; which exceeded their original goal. Kali Butts, Student Advisor to the Board of Education was introduced.
Approval of Agenda	Kenny Coffelt moved, seconded by Diana Nichols, that the Board approve October 22, 2018 Agenda a presented. Affirmative: 7
Consent Agenda	Scott Gardner moved, seconded by Kenny Coffelt, that the Board approve the October 22, 2018 Consent Agenda, including Minutes for Monthly Business Meeting September 24, 2018, Minutes for Special Meeting September 2018, Personnel, Treasurer's Report, Interfund Transfer $96,999.00 DNR Energy Conservation Loan, Interfund Transfer $4,484.91 Guaranteed Energy Performance Savings Contract, Interfund Transfer $7,738.40 Food Services, Payment of Bills, AG-Power Lease Agreement, Missouri State Fairgrounds License Agreement, Preliminary Bus Routes. Affirmative: 7
RevTrack Agreement	Scott Gardner moved, seconded by Diana Nichols that the Board approve the RevTrack Agreement presented. Affirmative: 7
MCE Policies	Scott Gardner moved, seconded by Diana Nichols, that the Board approve the MCE Policies as presented. Affirmative: 7
Food Service Report	Scott Gardner moved, seconded by Diana Nichols, that the Board approve the Food Service Annual Report as presented. Affirmative: 7

Minutes
Regular Meeting
Sedalia School District #200
Monday, October 22, 2018 6:30 p.m.
Smith-Cotton High School
Commons Area
2010 Tiger Pride Blvd.

Professional Dev Plan	Director Curriculum K-5, Rebecca Brownfield and Director Curriculum Devon Gilmore presented the Professional Development Plan 2018-2019. The Professional Development Plan 2018-2019 will be brought back under Decision Unfinished Business November 26, 2018.
Attendance 90/90 Report	Mr. Triplett presented the 90/90 Attendance Report.
Membership Enrollment	Mr. Triplett presented the Membership Enrollment Report.
Stanley Black and Decker	Mr. Norton presented the Stanley Black and Decker donation for 15 stainless steel worktables valued at $500 each, and two new tool chests and cabinets at $1,600.00 each.
Equity Bank Donation	Mr. Norton presented the Equity Bank donation in the amount of $2,000.00.
Adjournment	Kenny Coffelt moved, seconded by Diana Nichols, to adjourn to closed session for purposes listed in sections RSMo. 610.021 (1) Legal Actions, (3) Personnel and (13) Protected Records at 7:48 p.m. Affirmative: 7
	Approved this 26th day of November 2018, by order of the Board of Education, Sedalia School District #200, Pettis County, Sedalia, MO.

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Scott Gardner, Secretary Dr. Jeffrey Sharp, President

Sedalia School District #200
2806 Matthew Drive
Sedalia, MO 65301-7981

Bank & Cash Reconciiiation

Fund Cash Balance by Fund

Fund Number and Description	Cash Balance	Comments
001 - General Fund	24,082,526.72	
002 - Special Revenue Fund	3,894,829.76	
003 - Debt Service Fund	.00	
004 - Capital Projects Fund	7,645,925.95	
Adjustment 1 :	.00	
Adjustment 2 :	.00	
Adjustment 3 :	.00	
Adjustment **4** :	.00	
T O TA L :	35,623,282.43	

Bank Cash and Reconciled Balances:

Account Code & Bank	Cash Balanoe	Reconciled Balance	Comments
xxxx41.1 - .Series 20158 - UMB BANK	.00	.00	
xxxx1387- Chris E Egdorf - US Bank	8,002.41	8,002.41	
xxxx1251 - Gene ral Funds "- MOSIP	3,891,289.02	3,891,289.02	
xxxx1252 - Capital Funds MOSIP	2,744,464.88	2,744,464.88	
xxxx57.3 - Series 2016 - UMB BANK	.00	.00	
xxxx0278 - - Equity Bank	13,864,960.38	14,395,418.73	
xxxx0294 - - Equity BankActivity Gate	10,947.73	10,947.73	
xxxx0213 - Portfolio Cash -MOSIP	357,066.10	357,066.10	
xxxx0213 - US Bank- MOSIP	14,746,551.91	14,746,551.91	
Outstanding Amount xxxx0278 - - Equity Bank	.00	-530,458.35	
Adjustment 1 :	.00	.oo	
Adjustment 2 :	.00	.DO!	
Adjustment 3 :	.00	.00	
Adjustment 4 :	.00	.00	
TOTAL:	35,623,282.43	35,623,282.43	

Bank Cash and Fund Cash are in Balance

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Sedalia School District #200
2806 Matthew Drive
Sedalia, MO 65301-7981

Cash Fiow Summaxy *For* month 0£ October

	Fund - 001	Fund -002	Fund- 003	Fund -004	All Funds
A Cash Balance as of 10/01/18	24,811,488.01	3,904,729.95	0.00	7,891,147.38	36,607,365.34
B. Revenues (SXXX) :	705,411.11	2,500,993.62	0.00	18,884.48	3,225,289.21
C. Expenses (6XXX) :	1,432,306.23	2,469,299.11	0.00	264,105.91	4,165,711.25
D. Excess Revenue (B - C) :	(726,895.12)	31,694.51	0.00	(245,221.43)	(940,422.04)
E. New Cash Balance (A+ D):	24,084,592.89	3,936,424.46	0.00	7,645,925.95	35,666,943.30
F. Net Change in Fund Balance (3XXX) :	26.99	0.00	0.00	0.00	26.99
G. Net Change in Other Assets & Liabilities (1200 - 2999) :,	(2,093.16)	(41,594.70)	0.00	0.00	(43,687.86)
H . Final Balance as of 10/31/18	24,082,526.72	3,894,829.76	0.00	7,645,925.95	35,623,282.43

Sedalia School District #200
2806 Matthew Drive
Sedalia, **MO 65301-7981**

Fund Balance Report

for the period ending October, 2018

Fund	General Fund	Teachers Fund	Debt Service Fund	Capital Projects Fund	Total
	1	2	3	4	
Beginning Fund Balance	26,863,609.94	-0.00	0.00	9,443,096.74	36,306,706.68
Revenues	1,876,600.60	9,254,482.50	0.00	225,118.62	11,356,201.72
Transfer To	0.00	0.00	0.00	109,222.31	109,222.31
Transfer From	109,222.31	0.00	0.00	0.00	109,222.31
Expenses	4,681,027.47	5,710,965.79	0.00	2,131,511.72	12,523,504.98
Ending Fund Balance	23,949,960.76	3,543,516.71	0.00	7,645,925.95	35,139,403.42
From General Fund to Debt Service Fund	0.00				
From General Fund to Capital Projects Fund	109,222.31				

ASSETS

Cash & Investments	$35,623,282.43
TOTAL ASSETS	$35,623,282.43

LIABILITIES

Flexible Spending Account	($3,163.17)
Escrowed - Group Health Insurance/Life Insurance/ Retirement/Dues/Garnishments	$479,039.77
TOTAL LIABILITIES	$475,876.60

NET ASSETS

Restricted For:	
US Bank Egdorf Scholarship Fund	($8,002.41)
TOTAL NET ASSETS	$35,139,403.42

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Current *Month Budget Report*

Acrount Code	Account Oescription	BudgeV (Open Bal)	MTD Activity	YTD Activity	Current Balance	Encumbrance	NextMTD Activity	Projected Balance	% of Budget
Fund 001 Totals	Total Asse1s (1xxx)	26,906,196.35	-728,72029	-2,823,108 .63	24 ,083 ,087 .72		-1,248,744 .33	22 ,834,343.39	
	Total Liabilities **(2xxx)**	-34,633.96	1,852.16	-90,490.59	-125,124.55		-222,295.89	-347,420.44	
	Fund Balance **(3xxx)**	-26,871,562.39	-26.99	109,172 .35	-26 ,762,390.04	0.00	0.00	-26,762,390.04	
	Total Revenues (5xxx)	19,285,625.34	705,411.11	1,876,600.60	17,409,024.74	0.00	11,296.23	17,397,728 .51	9.79
	Total Expenditures (6xxx)	18 ,399 ,328 . 11	1,432 ,306.23	4,681,027.47	13,718 ,300 .64	301 ,555 .77	1,482 ,336.45	11, 934,406.42	35.14
	Expenditures - Revenues	-886,297.23	726,895.12	2,804 ,426.67		301,555.77	1,471,040.22	-5,463,32 0.09	
	Ending Fund Balance	-27,757,859.62			-23,957 ,963 .17			-22,185,367 .1B	79.92
	Ledger Balance	0.00	0.00	0.00	0.00		0.00	0.00	
Fund 002 Totals	Total Assets (1xxx)	1,810.05	-9,900.19	3,693,019.71	3,894,829.76		-1,647,761.63	2,247,047.93	
	Total Liabilities (2xxx)	-1,810 .05	41,594.70	-349, 503.00	-351,313.05		-863,933.49	-1,215,246.54	
	Fund Balance **(3xxx)**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total Revenues **(5xxx)**	30,295,330.00	2,5 00,993.62	9,254,482.50	21,040,847.50	0.00	0,00	21,04 0,847.50	30.55
	Total Expenditures **(6xxx)**	30,449,759 .06	2,469,299 .11	5,710 ,965.79	24,738 ,793.27	138,092 .00	2,511 ,715 .32	22,086,965.95	27.46
	Expenditures - Revenues	154,4 29.06	-31,694.51	-3,543,516 .71		138 ,092 .00	2,511, 715 .32	1 ,048,138.45	
	Ending Fund Balance	154,429.06			-3,543 ,516.71			-893,709.39	-578.72
	Ledger Balance	0.00	0.00	0.00	0.00		0.00	0.00	
Fund 003 Totals	Total Asse1s **(1xxx)**	0.00	0.00	0.00	0.00		0,00	0.00	
	Total Liabilities **(2xxx)**	0.00	0.00	0.00	0.00		0.00	0.00	
	Fund Balance (3xxx)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total Revenues **(5xxx)**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total Expenditures **(6xxx)**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Expendib.Jres - Revenues	, 0 00	0.00	0.00		0.00	0.00	0.00	
	Ending Fund Balance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Ledger Balance				0.00			0.00	
Fund 004 Totals	Total Asse1s **(1x xx)**	9,443,096.74	-245,221 .43	-1,797,170.79	7,645,925.95		-38,417.12	7,607,508.83	
	Total liabilities **(2xxx)**	0.00	0.00	0.00	0.00		0.00	0.00	
	Fund Balance **(3xxx)**	-9,443 ,096 .74	0. 00	-109,222.31	-9,552,319.05	0.00	0.00	-9,552,319.05	
	Total Revenues **(5xxx)**	3,564,603.88	16,864.48	225,118.62	3,339,485.26	0.00	0.00	3,339,485.26	6.32
	Total Expenditures **(6xxx)**	6,649,993 .89	264,1 05.91	2,131,511.72	4,518,482.17	273,4372 3	38,417.12	4,206 ,627.82	36.74
	Expend ib.Jres - Revenues	3,085,39,0 01	245 ,221 .43	1,906 ,393 .10		273,43723	38,417.12	867,142.56	
	Ending Fund Balance	-6,357 ,706 73			-7,645 ,925.95			-7,334,071 .60	115.36
	Ledger Balance	0.00	0.00	0.00	0.00		0.00	0.00	
Grand Total	Total Assets (1xxx)	36,351,103.14	-983,841.91	-727,259 .71	35,623 ,643.43		-2,934,943 .28	32,688,900.15	
	Total Liabilities **(2xxx)**	-36,444.01	43,446.86	-439,993.59	-476,437.60		-1,086 ,229.38	-1,562,666.98	
	Fund Balance **(3xxx)**	-36,314,659. 13	-26.99	-49.96	-36,314 ,709.09	0.00	0.00	-36,314,709.09	
	Total Revenues **(5xxx)**	53,145,559. 22	3,225,289.21	11,356 ,201.72	41,789,357.50	0.00	11,296.23	41,778,061 .27	21. 39
w	Total Expendit ures **(6xxx)**	55,499,081.06	4,165 ,711. 25	12,523 ,504 .98	42 ,975 ,576.08	713 ,085 .00	4,032,468.89	38,230,022.19	31.12
	Expenditures - Revenues	2,353 ,521.64	940,422.04	1,167,303.26		713,085.00	4, 021,172.66	-3,548,039 .08	
	Endi ng Fund Balance	0. 00			-35,147 ,405 .83			-30,4 13,148.17	0. 00
	l edge r Balance (1 xxx + 2xxx + 3xxx)	0.00	0.00	D. 00	0.00		0.00	0.00	

% of Budget for Expenditures, Revenues and Expenses - Revenues = (YTD Activity + Encumbrance + NeX1MTD Activity)/Budget(OpenBal)

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Account Statement

For the Month Ending October 31, 2018

Consolidated Summary Statement

School District #200

Portfolio Summary

Portfolio Holdin g s	Cash Dividends and Income	Closing Market Value	Current Yield
MOSIP	550.06	364,799.51	2.11 o/o
MOSIPTERM	0.00	6,628,020.49	* N/A
Total	**$550.06**	**$6,992,820.00**	

* *Not Applicable*

Investment Allocation

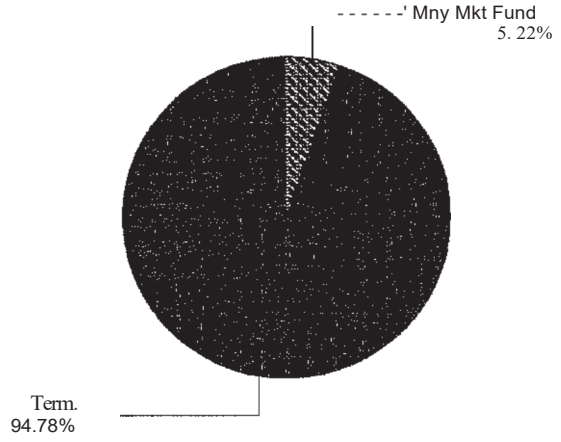
Investment Type	Closing Market Value	Percent
Money Market Mutual Fund	364, 799.51	5.22
Term Investment	6,628,020.49	94.78
Total	**$6,992,820.00**	**100.00%**

Maturity Distribution (Fixed Income Holdings)

Portf"Olio Holdings	Closing Market Value	Percent
Under 30 days	6,992,820.00	100.00
31 to 60 days	0.00	0.00
61 to 90 days	0.00	0.00
91 tn 180 days	0.00	0.00
181 days to 1 year	0.00	0.00
1 to 2 years	0.00	0.00
2 to 3 years	0.00	0.00
3 to4years	0.00	0.00
4 to 5 years	0.00	0.00
Over 5 years	0.00	0.00
Total	**$6,992,820.00**	**100,00%**

Weighted Average Days to Maturity **26**

Sector Allocation



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SEDALIA SCHOOL DISTRICT
ACCOUNT 19-PF6174

Period from October 1, 2018 to October 31, 2018

MARKET VALUE RECONCILIATION

	CURRENT PERIOD 10/01/201B TO 10/31/2018	YEAR TO DATE 01/01/2018 TO 10/31/2018
Beginning Mar t Value	**15,030,271.57**	**13 482.20**
Receipts		
Cash Receipts	.00	2,344,545.96
Total Receip ts	**.OD**	**2 545.96**
Disbursements		
Cash Disbursements	-304,194.56	- 997,302.68
Total Disbursements	**-304,194.56**	**- 997,302.68**
Asset Activity		
Taxable Interest	37,491.68	186,858.73
Realized Gain/Loss	-7924	-50,028.76
Change In Unrealized Gain/Loss	-2,062-42	-49,606.27
Change In Accrued Income	-14,875.12	2,602.73
Total Asset Acfivl!Y	**20 74.90**	**89,826.43**
Net Change In Market Value	**-283z719.66**	**1,437,069.71**
Ending Market Value	**141746z251.91**	**14z746,551.91**

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Memorandum

To: Director – Board of Education

CC: Steve Triplett/Nancy Scott/Todd Fraley/Chris Pyle

From: Harriet Wolfe

Date: November 26, 2018

Re: Payment of Bills

Attached are the payment of bills from October 16 – November 16, 2018.
Total Amount of $2,965,430.15

BOE AP Check Register Report Oct 16 - Nov 16 2018

Selection Criteria : Check # Range From ACH010933 To ACH011043 | Check # Range From ACH010809 To ACH010921 | Check # Range From 114442 To 114824 |

Vendor Name	Amount
Total ACR All Seasons of Sedalia	**695.82**
Total ACT Inc	**3,991.00**
Total AG Coop Services Inc	**33.30**
Total Ag-Power Inc	**5,154.95**
Total Airgas USA LLC	**100.00**
Total Allain, James W	**70.38**
Total Allied Signs Inc	**300.00**
Total American Auto Rental	**636.83**
Total Amos, Brian C	**20.00**
Total Andersons	**893.68**
Total Andymark Inc	**558.41**
Total Aramark Uniform Services	**9,199.53**
Total Archibeque, Adam B	**20.00**
Total Associated Theatrical Contractors	**400.00**
Total AT&T Mobility	**829.40**
Total Auto Glass Express	**192.40**
Total Bach Company	**2,634.80**
Total Bales, Julie L	**62.20**
Total Bandanas Bar-B-Q	**2,342.82**
Total Bartz, Jeremy S	**100.00**
Total BC Mowing & Tilling LLC	**12,688.00**
Total Beaufort County Family Court	**961.80**
Total Becker Piano Tuning	**220.00**
Total Beckman, Jonathan E	**60.50**
Total Benton, Victor	**220.00**
Total Bernard Food Industries Inc	**3,266.76**
Total Bessine Walterbach, LLP	**585.22**
Total Best Western Plus Capital Inn	**237.52**
Total Bintner, Connie S	**100.00**
Total Bintner, Robert J	**147.00**
Total Bird, Anna M	**176.30**
Total Black Dawn Armory	**8,802.00**
Total Blick Art Materials	**503.73**
Total Blue Cross Blue Shield of KC	**399,235.50**
Total Blue Note Boosters Inc	**500.00**
Total Boomerang Project	**80.00**
Total Border States Industries Inc	**865.22**
Total Bothwell Regional Health Center	**550.00**
Total Boys n Girls Club of Sedalia	**107.70**
Total Braden Signs	**370.00**
Total Brainspring	**496.70**
Total Branson, Lindsey J	**24.60**
Total Brant, Kyra S	**39.72**
Total Brockway, Rebecca L	**358.18**
Total Brownfield, Rebecca L	**170.00**
Total Bruce, Andrew T	**20.00**
Total Bryan, Kelly M	**20.00**
Total BSN Sports	**1,119.10**
Total Buds Fire Extinguisher Sales & Serv	**173.50**
Total Bureau of Education	**449.00**
Total Campe, Marsha K	**105.33**
Total Cardmember Service	**1,280.88**
Total Carolina Biological Supply Co	**98.90**
Total Case, Jennifer L	**24.60**
Total Case, Steven D	**111.00**
Total Cash	**500.00**
Total Cash, Marcy L	**117.46**
Total Casto, Kelley W	**20.00**
Total CBS Manhattan LLC	**2,596.00**
Total CENGAGE Learning Inc	**2,700.00**
Total CenterPoint Energy Services	**1,382.21**
Total Central Mo Jazz Festival	**175.00**
Total Chancellor Bradley J	**112.50**

BOE AP Check Register Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Charter Communications	103.11
Total Cherrydale Farms	4,560.80
Total City of Sedalia Mo	2,018.27
Total City Safe and Lock Service	21.00
Total Claim Care Inc	3,229.88
Total Clark, Deanna L	20.00
Total Clark, Dilbert G	20.00
Total Classroom Direct	128.55
Total Clear, Nicholas E	100.00
Total Collins, John R	20.00
Total Command 1 LLC	2,155.00
Total Creator Designs Inc	157.62
Total Crescent Parts and Equipment	18,735.27
Total Crooker, Caleb K	147.60
Total Crow Burlingame Co	14.00
Total Crull, John	83.00
Total Curriculum Associates Inc	379.68
Total Curry, Jason G	20.00
Total Curry, Robert J	1,165.00
Total Curry, Stacy L	163.06
Total Custom Meeting Planners Inc	100.00
Total Data Management Inc	224.00
Total Davidson, Shawna M	370.70
Total Davis, Courtney B	143.34
Total Davis, Robert P	534.46
Total DC Battery	149.00
Total DECA Inc	400.00
Total DECO Tool An MSC Company LLC	1,519.95
Total Dehaven Scott C	100.00
Total Demco Inc	143.54
Total Designs by JC Custom Apparel	594.00
Total Dickman, Keri M	147.00
Total Different Roads to Learning Inc	1,172.67
Total Digi-Key Corporation	531.90
Total Discount Dance Supply	385.92
Total DISH	47.02
Total Ditzfeld Container Service LLC	2,075.14
Total Ditzfeld Transfer Inc	5,445.00
Total Domann, Phyllis	16.75
Total Dons Truck Twng and Truck Wash Inc	125.00
Total Doyle, Joseph G	85.46
Total Dramatic Publishing Company	311.11
Total DuenasPerez, Milton	20.00
Total Dugan Glass Inc	7,758.19
Total Dugan Paints Inc	442.19
Total Dunn, Sheila A	40.30
Total EAI Education	70.62
Total Ecolab	420.36
Total Educational Theatre Association	90.00
Total Ehlers, Fredrick C	75.00
Total El Espolon	800.00
Total El Tapitio	366.57
Total Elite Linen Service	527.84
Total Ellebracht, Victoria	200.00
Total Extempore	130.00
Total Fairchild Anthony P	100.00
Total Fastenal Company	284.38
Total Federal Program Consulting Inc	5,974.29
Total First Student Inc	182,615.50
Total Fischer Concrete Service Inc	652.30
Total Fisher, Wendy S	85.49
Total Flaghouse Inc	530.09
Total Flinn Scientific Inc	87.90
Total Follett School Solutions Inc	1,575.68
Total Forrest T Jones & Company Inc	262.00

Vendor Name	Amount
Total Forsythe, David M	**83.00**
Total Fraley, Eric T	**1,835.04**
Total Fromuth Tennis	**1,464.45**
Total Fry, Jeremy D	**100.56**
Total Fun and Function LLC	**586.41**
Total Gangemella, Gregg A	**83.00**
Total Gilmore, Devon R	**235.60**
Total Goodwin, Sheila	**11.86**
Total Gopher Sport	**1,713.17**
Total Grable, Kristal	**2.75**
Total Graphic Edge Inc	**724.10**
Total Graves Menu Maker Foods	**7,571.42**
Total Great Circle	**9,315.00**
Total GTM Sportswear	**684.00**
Total Guardian Life Insurance Co.	**29,493.83**
Total Gumdrop Books	**381.05**
Total Haas Factory Outlet Kansas city	**862.50**
Total Hagedorn, Bradley J	**417.26**
Total Haley, Jeffery	**100.00**
Total Hammerly, Lisa A	**65.60**
Total Harris, Monica L	**66.33**
Total Harrison, Joshua W	**20.00**
Total Harvey, Amanda G	**167.80**
Total Hawkins, Keith D	**20.00**
Total Hawkins, Michael C	**220.00**
Total Heartland Vision Consultants Inc	**6,200.00**
Total Heinemann	**194.72**
Total Henry, Lindsay N	**191.81**
Total Heritage Environmental Services Inc	**19,098.01**
Total Herrick, Timothy C	**20.00**
Total Hess, Nathan	**400.00**
Total Hiatt, Kathryn E	**36.90**
Total Hieronymus, Brett R	**20.00**
Total Hiland Dairy Foods	**34,451.06**
Total Hillyard Columbia	**1,473.48**
Total Homan, Ashley R	**373.92**
Total Home Heating and Air Co Inc	**1,293.01**
Total Howieson, Carrie L	**85.97**
Total Hulsey, Joseph M	**75.00**
Total Hunsaker, Shawn C	**60.00**
Total Hurley, Jennifer T	**18.86**
Total Husong, Marcinda M	**53.21**
Total Hutchison, Dick	**83.00**
Total IBT Inc BIN 150031	**55.63**
Total Impact Signs Awnings Wraps Inc	**905.00**
Total Insurance and Benefits Group	**470.00**
Total Internal Revenue Service	**616,396.63**
Total Isayko, Marina V	**55.76**
Total Jackson Stephanie E	**198.76**
Total Jackson, Stefan	**215.00**
Total Jaco, Kyla M	**944.64**
Total John Deere Financial	**99.99**
Total Johnson Chase A	**60.00**
Total Johnston, Chris D	**20.00**
Total Jones, Deanna R	**49.94**
Total Jostens Inc	**2,633.77**
Total JourneyEd.com Inc	**2,399.00**
Total Junior Library Guild	**258.00**
Total JW Pepper and Son Inc	**174.71**
Total KCP&L	**69,791.95**
Total Kempton, Madeline R	**248.54**
Total Kendrick, Grace A	**20.00**
Total Kenmark Inc	**3,020.00**
Total Kennedy, Steve A	**20.00**
Total Kiefer Swim Products	**223.80**

BOE AP Check Register Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Kindle, Jason P	**40.52**
Total Knox, Steven	**100.00**
Total Kresse, Anthony M	**20.00**
Total Kuhlman, Tisha L	**351.10**
Total L & R Specialties	**349.55**
Total Laffoon Lyle W	**100.00**
Total Lakeland Regional Hospital	**60.00**
Total Lakeshore	**590.83**
Total Lane, Steven D	**20.00**
Total Lansing, Lucas Hunter William	**110.00**
Total Lansing, William	**200.00**
Total Learning A-Z	**439.80**
Total Learning Insights Inc	**1,300.00**
Total Little Caesars Pizza	**200.00**
Total LockdownMagnet	**162.50**
Total Lorenz, Kristee L	**40.50**
Total Lowes Companies Inc	**3,049.16**
Total MACA Orchard Farm High School	**25.00**
Total Magana, Melissa P	**172.93**
Total Maggert, Alicia R	**181.51**
Total Maledy, Charles G	**22.63**
Total Marcums Landscaping Stones LLC	**297.00**
Total Marnholtz, Chad M	**298.00**
Total Marsh, Mitchell	**114.00**
Total Marshall High School	**350.00**
Total MartinezFlores Maria G	**20.00**
Total MASC	**310.00**
Total MasteryConnect Inc	**56,976.00**
Total Mathieu, Gerard J	**20.00**
Total Mazzios Corporation	**539.85**
Total McClain, Michael A	**40.50**
Total McMaster-Carr Supply Company	**1,722.04**
Total McVicker, Monty	**183.00**
Total MDHE Collections Custodial Account	**258.57**
Total MedinaFlores, Rosario	**20.00**
Total MEI Total Elevator Solutions	**1,407.52**
Total Menard Inc	**4,653.90**
Total Menjivar, Ana G	**20.00**
Total Meridian Student Planners	**540.00**
Total Meyer Laboratory Inc	**398.00**
Total Meyer, Aaron	**58.28**
Total Mid Atlantic Trust Company	**64,771.64**
Total Mid City Lumber Co Ltd	**16.71**
Total Midwest CompuTech	**14,735.80**
Total Mighty Melt Sandwich and Spud Shop	**187.87**
Total Missouri Department of Revenue	**104,054.00**
Total Missouri State Thespians	**2,968.56**
Total Mo Dept of Natural Resources	**125.00**
Total Mo Dept of Revenue	**69.86**
Total MO Family Support Payment Center	**5,868.99**
Total Mo Vocational Enterprise	**960.00**
Total MOAHPERD	**250.00**
Total MOAQUA Ltd	**1,231.50**
Total Moon, Cindy G	**5.58**
Total Moon, Pamela S	**74.62**
Total Moores Flower Shop & Greenhouse	**60.00**
Total Moss, Rebecca R	**86.13**
Total MSBA	**2,444.52**
Total MSC Industrial Supply Co Inc	**337.45**
Total MSCA	**1,650.00**
Total MSHSAA	**171.00**
Total MSTA	**13,274.75**
Total Music Theatre International	**869.35**
Total Myers, Linda S	**20.00**
Total Nevada R5 School District	**550.00**

BOE AP Check Register Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Newton, Cheridan R	11.28
Total Nichols, Sara J	99.20
Total Nierman, Christine E	271.42
Total Nightwatch Security & Telephone	24,863.10
Total Norton, Patrick W	1,421.63
Total Oelrichs, Ryan F	30.75
Total Otten Small Engine LLC	35.90
Total Padgett, Timothy J	44.60
Total Panera LLC	109.95
Total Pannier, Sara J	192.33
Total Parker Alvin	126.00
Total Parker, Katherine E	40.50
Total PEERS	71,044.56
Total Pepco Inc	10,273.77
Total Perkins, Jeri A	647.34
Total Perma Bound	800.70
Total Petterson, Roxanne N	20.00
Total Pettis County Circuit Clerk	2,147.63
Total Philips and Company-Sedalia	15,245.49
Total Phillips Media Group LLC	263.59
Total Pierce, Joni R	1.27
Total Plank Road Publishing	288.43
Total Playscripts Inc	15.24
Total Plummer Michael E	114.00
Total Polk, Jordan K	20.00
Total Praxair Distribution Inc	65.10
Total ProCare Therapy Inc	13,570.00
Total Project Lead The Way Inc	2,412.25
Total PSRS	538,516.82
Total Pummills Sporting Goods	5,745.80
Total Purchase Power	2,518.50
Total Pyle, Christopher L	170.00
Total RAC-JAC Properties Inc	54.87
Total Ramirez, Edgar	120.00
Total Really Good Stuff	48.93
Total Ream, Chanelle	15.50
Total Rebecca Speier, Berman & Rabin	796.05
Total Reedy, Lesther M	20.00
Total Rehmer Malinda K	106.63
Total Reimund, Pamela S	103.27
Total Rettke, Stephanie	5.82
Total Richardson Rodney L	158.00
Total Richardson, Charles Ethan	100.00
Total Richmond R16School District	150.00
Total Ricoh USA Inc	19,691.77
Total Robert A Truener Masonry	2,064.60
Total RoomTagz	159.96
Total Roto Rooter of Sedalia LLC	11,891.60
Total Royal Papers	834.36
Total Rusk, Todd N	100.00
Total Saint Joe Distributing	777.93
Total Saltsgaver, Shelbi D	20.00
Total Satnan, Robert H	60.00
Total SCEA	7,300.00
Total Schlup Jr, Kenneth F	20.00
Total Scholastic Book Fairs Inc	7,457.53
Total Scholastic Inc	764.95
Total School Specialty Inc	7,022.50
Total Scientific Learning Corporation	1,400.00
Total Scott, Nancy L	280.97
Total Scott, Tara D	33.86
Total Sedalia Fire Department	2,500.00
Total Sedalia Rental and Supply	3,370.30
Total Sedalia School District 200	9,102.92
Total Sedalia School District 200	1,960.00

BOE AP Check Register Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Sedalia School District Foundation	1,207.67
Total Sedalia Water Department	12,639.13
Total Seyer Kenneth J	157.00
Total Shiffler Equipment Sales Inc	520.15
Total Silvey, Nicole L	40.01
Total Simoncic, Amy L	107.58
Total Simons Jr, Richard D	20.00
Total SkyCoach LLC	1,865.75
Total Sleep Inn Medical District	181.78
Total Smith, Casey D	20.00
Total Smith, Rebecca E	1,107.00
Total Social Thinking/Think Social	97.32
Total Socket Telecom LLC	5,081.20
Total SonEquity Pest Management	847.00
Total Specialty Sportswear	8,025.75
Total Spellmeyer, Priscilla D	781.12
Total Spratley, Brooke A	20.00
Total Springfield Grocer Company Inc	110,624.30
Total Springfield Paper Company	8,138.58
Total St Cyr, Travis	35.40
Total Staples Business Advantage	1,007.81
Total Stark, Ashley R	44.56
Total State Fair Community College	237.00
Total State Fair Quick Lube	135.85
Total Steger, Michelle M	55.76
Total Stone Laser Imaging	619.52
Total Stratton, Nicole A	137.19
Total SummersDaly, Susan L	147.13
Total Superior Lawns	1,953.33
Total Sutherland Lumber Company	480.00
Total Synchrony Bank/Amazon	25,329.54
Total T Mobile	243.16
Total Table of 5 Catering	112.50
Total Tallman Company	11,907.32
Total Tan Tar A Resort	550.02
Total Tankersley, Jerry D	105.76
Total Tech Electronics Inc	2,613.06
Total Therapy Shoppe Inc	98.96
Total Thomas, Kevin S	20.00
Total Thomeczek & Brink LLC	318.50
Total Tierney Brothers Inc	6,025.00
Total Tobii Dynavox LLC	1,432.80
Total Tomo Drug Testing	57.00
Total Touchtone Communications Inc	5.97
Total Trans Central Suppliers Inc	173.84
Total Tresona Multimedia LLC	2,050.00
Total Triarco	237.60
Total Triplett, Linda M	28.66
Total Triplett, Steven G	320.00
Total Truman High School	200.00
Total Tueth Keeney Cooper Mohan &	1,477.00
Total UINTERACT.LABOR.MO.GOV	4,182.07
Total UMB Healthcare Services	42,475.12
Total United Way	2,598.17
Total University of MO	2,825.00
Total UPS Store	61.82
Total US Ticket	397.38
Total Valesa, Yelena M	20.00
Total Verizon Wireless	152.98
Total Vex Robotics Inc	13,269.68
Total Volk, Lisa L	20.00
Total W Schiller and Company Inc	12,638.21
Total WageWorks	6,136.87
Total Walker, Sarah R	67.15
Total Walmart Community/RFCSLLC	7,964.45

BOE AP Check Register Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Warehouse Tire and Muffler	**708.30**
Total Warrensburg High School	**99.00**
Total Watring, Andrea L	**1,600.50**
Total WCMCDA	**260.00**
Total WCMMEA	**370.00**
Total Wells Kimberly C	**262.78**
Total West Bend Mutual Insurance Co	**371.00**
Total Westlake Hardware	**1,872.57**
Total WEX BANK	**18,865.32**
Total Wilken Music	**105.00**
Total William V MacGill & Company	**8,794.13**
Total Windsor High School	**58.00**
Total WK Chevrolet Inc	**28,396.00**
Total Woods Super Markets Inc	**132.47**
Total Woolery, Denise R	**20.00**
Total Woollums, Dillon	**500.00**
Total Worthington Direct Holdings LLC	**455.55**
Total Wyatte, Robin C	**89.12**
Total Young, Ashley V	**77.90**
Total Zayats, Yekaterina	**181.79**
Grand Total	**2,965,430.15**

Memorandum

To: Director – Board of Education

CC: Steve Triplett/Nancy Scott/Todd Fraley/Chris Pyle

From: Harriet Wolfe

Date: November 26, 2018

Re: Payment of Bills with P-Card

Attached are the payment of bills using the P-Card from October 16 – November 16, 2018.
Total Amount of $33,210.98

BOE AP P-Card Report Oct 16 - Nov 16 2018

Selection Criteria : Check Date Range From 11/16/2018 To 11/16/2018 | Invoice Number = Card |

Vendor Name	Amount
Total AC Hotels by Marriott	**678.97**
Total ALDI	**31.86**
Total ASCD	**1,373.00**
Total Benjamin B Nelson OD	**140.00**
Total Best Western St Louis	**108.79**
Total Big Lots Stores	**14.50**
Total Blue Chip Athletics Inc	**1,331.76**
Total Bratchers Market	**37.62**
Total Capitol Plaza Hotel	**314.58**
Total College Board Events	**285.00**
Total Coltons Steakhouse and Grill	**172.48**
Total Culvers	**51.22**
Total Dollar General	**3.33**
Total Dollar Tree	**38.34**
Total Dominos Pizza	**60.79**
Total Drury Inn and Suites-Joplin	**10.42**
Total Dutch Bakery	**92.67**
Total El Espolon	**45.94**
Total Findaway	**759.95**
Total Grainger	**264.59**
Total Harbor Freight	**151.92**
Total High Altitude Science	**734.94**
Total Hilton Garden Inn Springfield	**133.20**
Total Holiday Inn Express Olatha	**265.00**
Total JCPenney	**61.88**
Total Jimmy Johns	**132.70**
Total Lowes Companies Inc	**123.36**
Total Marriott Downtown Kansas City	**338.94**
Total Menard Inc	**540.85**
Total MFA Agri Ser-Sedalia	**68.50**
Total Missouri Turf Paint	**808.82**
Total Mo State Highway Patrol	**81.75**
Total MOASBO	**235.00**
Total MobyMax	**99.00**
Total NAEIR	**59.00**
Total Network Thermostat	**6,134.40**
Total Oriental Trading Co Inc	**26.97**
Total Panera LLC	**1,019.86**
Total Party City	**71.91**
Total Pearson Education	**140.00**
Total Phillips Media Group LLC	**83.59**
Total Pioneer Valley Books	**380.60**
Total Pro Ed	**781.00**
Total Pro Vision	**808.23**
Total Raymond Geddes & Company	**260.19**
Total Sams Club	**114.00**
Total Sleep Inn Medical District	**1,726.91**
Total Sonic Drive In	**54.42**
Total Splashtop	**4,605.00**
Total Staples Business Advantage	**91.51**
Total Summit Professional Education LLC	**879.96**
Total Sutherland Lumber Company	**142.36**
Total Swivl	**836.60**
Total Tan Tar A Resort	**573.05**
Total Teachers Pay Teachers	**422.02**
Total Town and Country Motel	**139.98**
Total Tractor Supply	**99.99**
Total US Postal Service Sedalia	**100.00**
Total Vaughan Pools of Sedalia	**1,122.83**
Total Vista Grande LLC	**63.00**
Total Walgreen Drug Stores	**51.74**
Total Walmart Community/RFCSLLC	**2,411.38**
Total Westlake Hardware	**198.42**

BOE AP P-Card Report Oct 16 - Nov 16 2018

Vendor Name	Amount
Total Woods Super Markets Inc	**151.83**
Total Zaxbys	**68.56**
Grand Total	**33,210.98**

Sedalia School District #200

Professional Development Manual

2018-2019

Mission:
Provide a challenging education in a safe environment for all students so they will become productive, responsible, and successful members of our diverse society.

Our ongoing commitment to maximize learning and achievement for all students is accomplished by providing high-quality staff members and exemplary educational experiences for our students.

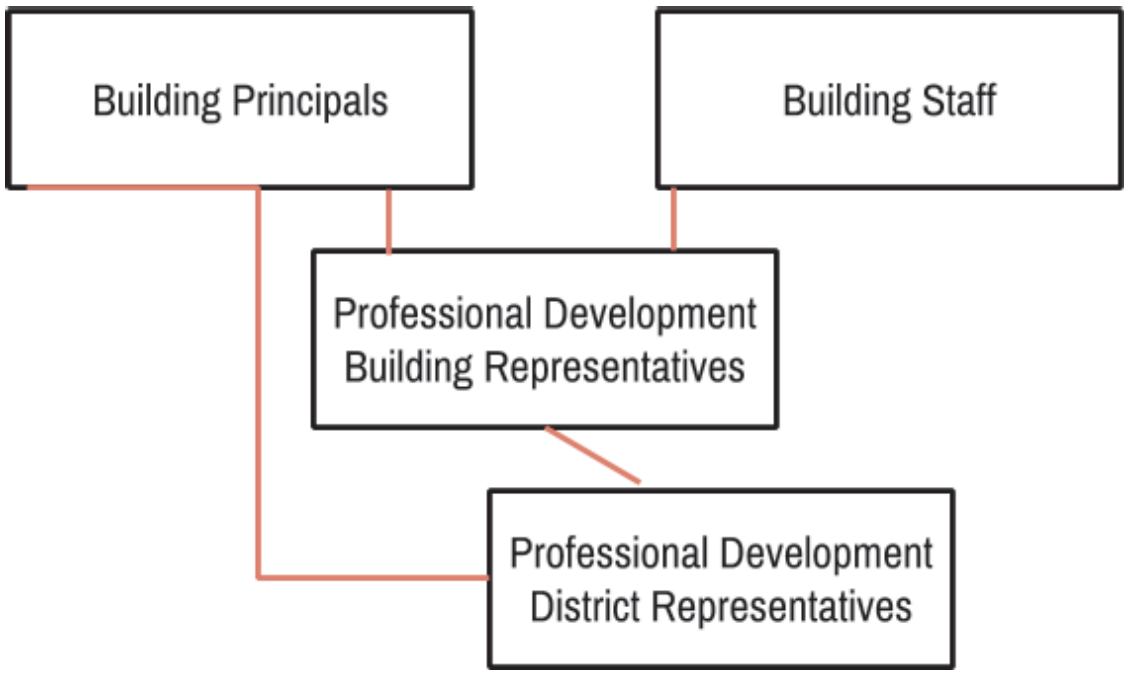
Table of Contents

Materials may be referenced to [Missouri Department of Education PDC Manual]

Building Representatives

Building	Representative	Term	Selected By
Horace Mann	Courtney Davis	1	Principal
Heber Hunt	Lindsey Branson	1	Principal
Parkview	Ashley Klein	1	Principal
Skyline	Ann Cave	1	Principal
Washington	Jo Black	1	Principal
PCEC	Alisha Huddleston	1	Principal
Sedalia Middle	Angie Meyer	1	Principal
SCJHS	Michelle Steger	1	Principal
SCHS	Ashley Raetz	1	Principal
Whittier	Jennie Guerrini	1	Principal
District	Gilmore/Brownfield	1	Superintendent

The flow of communication within the PDC team follows the model below:



Mission of Professional Development

Today's educators are held accountable for preparing all students to successfully meet more rigorous standards and performance outcomes and to insure that students are college and career ready by graduation. Professional learning is the Global Positioning System (GPS) that will enable schools and school systems to reach that final destination − high levels of learning for all students.

Professional learning for educators is the crucial element in the equation for success. If the destination is to reach higher levels of learning for all students, then professional learning for the adults in the school system must be part of the school culture. Learning for educators leads to learning for all students. The two are irrevocably connected. To arrive at this destination, professional learning must be based on research-based practices and implementation must be consistently supported. The mission of professional development is to position educators for success by strengthening each educator's professional practice to ensure high levels of performance for all students.

Stephanie Hirsh, executive director of Learning Forward [formerly the National Staff Development Council (NSDC)] states: "Effective professional learning is embedded in a culture committed to continuous improvement and informed by data and research on student and educator performance."

The leverage point with the greatest potential to strengthen and improve educators' daily professional performance is a culture focused on continuous, effective professional learning based on the performance needs of educators. Decisions at the district and building level regarding professional learning should be based on district and building performance data on both students and educators. Successful classroom implementation will depend on a sustained culture of shared responsibility for the learning of all students coupled with continuous support.

To align local professional development efforts with state guidelines, consider the following critical questions:

- Does the professional development plan directly relate to the district Comprehensive School Improvement Plan (CSIP) and the 5th Cycle Missouri School Improvement Program (MSIP) professional development standards?
- Is each professional development activity consistent with the vision and the goals of the district's professional development program?
- Does each professional development offering enhance the participants' repertoire of skills and content knowledge?
- Does each professional development activity involve active learning processes?
- Does each professional development offering lead to improvement of teaching practice?
- Does each professional development offering help students become better and more efficient learners?

Reference: Missouri Professional Learning Guidelines

Professional Development Management

Sedalia School District #200 uses the web-based program *Frontline* to keep records, registration, and enrollment processes in a central location. In Frontline you must select the Purpose (salary movement) for requested activities.

The choices you will see are:
1. Certification Credit (Contract hours)
2. Stipend (Non-contract hours only)
3. Salary Movement (Non-contract hours ONLY - NO Stipend)

Examples of when NOT to use Purpose #3: Salary movement credit (non-contract hours)
College credit earned hours
Faculty meetings that are for informational purposes Curriculum Meetings for dissemination of materials
Parent/teacher conferences
IEP meetings
Summer school meetings
End of year celebrations
Family fun nights
Meetings that are connected with extra duty you are already being paid for
Committee meetings (example: SPW or SCEA) Early outs are contract time
Beginning Teacher Assistance Program Conference

Expenditures for which "One Percent" PD Funds May Not Be Used (Per DESE):
1. Individual membership dues to associations or organizations.
2. Travel, food, lodging and registration fees to conferences and workshops of general interest which do not support Individual Professional Growth Plans, building/and or district professional development plan and Comprehensive School Improvement Plan.
3. Travel, food, lodging and registration fees to conferences, workshops, clinics, etc. that pertain to extracurricular activities and sponsorships. (sports, glee club, cheerleading, etc.) This does not exclude health education.
4. Instructional equipment or materials or administrative equipment or materials.
5. Salaries. Professional development funds may not be used to pay any part of any salary. Also professional development funds may not be used to pay for any student-related activities such as extracurricular activities, sponsorships, summer school or evening school activities.
6. Travel as a form of professional development. (As traveling to Spain to become more informed about the country in order to teach Spanish.)
7. Any expenditure of funds for any state or federal program for which monies are already available for professional development. (Example: professional development funds cannot be used to pay the expenses for a Title I activity; however, professional development funds could be used to pay the expenses of a Title I teacher to attend a technology conference planned for the benefit of all teachers.)

It is the employee's responsibility to obtain approval for the leave by completing the Frontline PD request form before the time of leave and submitting it for approval. You will receive notification of approval/denial prior to the activity.

If the request is part of the building plan, then the building administrator will give approval. It is the building's responsibility to request a substitute if one is needed. Once the building administrator has approved the request, it is forwarded to Central Office where it will be approved/denied/or requests for more information may be made.

Upon return, the employee must go to Frontline and click on "Mark Complete" to finalize the activity that was attended in order to gain final approval for hours to be awarded and show up in the Portfolio.

The "Travel Reimbursement Form" must be filled out in order to receive reimbursement for meals, travel, etc. and itemized hard copy receipts attached and submitted to principals for their signature and for expense coding. This form will then be sent to Central Office for payment.

Please do not put alcohol on your meal receipt. Should you choose to have a drink please pay cash or put it on a separate receipt. Receipts with alcohol on them will not be reimbursed. Charge Card/Cash receipts that are not itemized will not be reimbursed.

Reimbursement for meals: You will be reimbursed up to $36.00 per day. Tips are included in the $36.00 allowance.

For travel use, the mileage is found on the mileage chart on the Sedalia #200 website. If the city you are traveling to is not on the chart, use the mileage from your vehicle for travel straight to and from the event site.

From Accounts Payable: Any expenses not turned in within 42 days after the expenses were incurred will be handled through payroll and appropriate taxes will be deducted.

If the form is completed with all necessary information and receipts are attached, the principal will code and sign it and send to Central Office.

If the form is received at Central Office prior to the 5th of the month, then the reimbursement checks will be available after the board meeting, which is the fourth Monday of the month.

Forms that need to be returned for any reason will cause a delay in processing and reimbursement may not be made until the following month.

Upon return from out-of-district professional development: Staff member will submit the completion form in Frontline as well as debriefing form indicated how the professional development will improve instruction and how he/she plans to share the information internally with additional staff members.

One-Way Mileage x 2 x $0.54 = Total Round Trip Cost

Destination	One Way Mileage	Total Round Trip Cost
Blue Springs	78	84.24
Branson	155	167.40
California	37	39.96
Camden on the Lake	76	82.08
Camdenton	80	86.40
Clinton	42	45.36
Cole Camp	23	24.84
Columbia	68	73.44
Crest Ridge	40	43.20
Dresden	8	8.64
Fayette	61	65.88
Hughesville	17	18.36
Jefferson City	61	65.88
Kansas City	95	102.60
Knob Noster	15	16.20
La Monte	13	14.04
Lees Summit	66	71.28
Liberty	98	105.84
Lincoln	25	27.00
Lodge of Four Seasons	69	74.52
Odessa	61	65.88
Smithton	9	9.72
Springfield	118	127.44
St. Louis	191	206.28
St. Pius	95	102.60
Sweet Springs	31	33.48
Tan-Tar-A Lodge	80	86.40
Warrensburg	30	32.40
Whiteman AFB	27	29.16
Windsor	30	32.40

Strategic Planning

Strategic planning is an ongoing process which involves areas such as Curriculum, Assessment, Performance Improvement, Facilities, Budgeting, Technology Planning, and Community Partnerships. These endeavors have included community members, staff, students, parents, and outside consultants working with our district.

Strategic planning is an effective process to focus resources on those areas believed to be important to the Sedalia community. The fundamental purpose is to provide worthwhile educational opportunities for students. Strategic planning provides the framework within which ideas for improving the school district may be evaluated in a fair and equitable manner and annually reviewed by the Board of Education. Strategic planning also provides the road map toward fulfilling the mission of the Sedalia School District #200.

Beliefs

The Belief Statement is a succinct, formal expressional of the school district's fundamental values and what it aspires to be, the Belief Statement is the ultimate "why" behind every action. Belief statements are not arranged in order of importance.

We believe public education is the best assurance for the preservation and enrichment of our society. Curriculum and instruction must be rich and differentiated so that "achievable" goals will be offered to every child. Every child has the right to conscientious, professional educators who actively participate in guided professional development. All district personnel should act as positive role models and representatives of strength, stability, and the significance of learning in the community. The district is concerned with the intellectual growth, social development, physical well-being, and emotional stability of all its students. The district shares the responsibility with the home and community in developing positive character and ethical behavior for all learners. Members of an effective school community work together in an atmosphere of mutual respect, which promotes a safe environment for learning.

District Three-Year Goals

Viable Curriculum (CSIP 3.1)

1. Identify Essential Standards within Missouri Learning Standards for each class/grade

2. Develop common language for essential standards

3. Cross-walk to MAP/EOC Blueprints

Develop Common Formative Assessments (CSIP 3.1, 4.1)

1. Guide Planning, Instruction, Remediation

2. Collaborative Teaming and Data Decision Making

3. Provide feedback on student performance

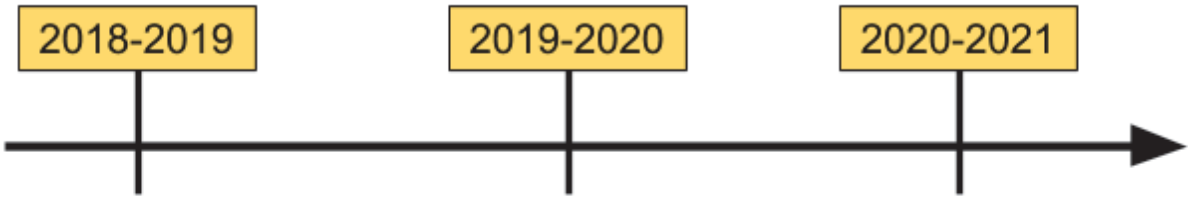
Developing Assessment Capable Learners (CSIP 3.1, 4.1)

1. Where am I going?

2. Where am I now?

3. How do I get there?

Ongoing: Strategic planning and evaluation of professional development needs for continued improvement



Professional Development: Focus on ACL practices including CFA's, Feedback, Data Teams and RTI, identifying essential skills, common language, and writing quality assessments

Development: Identify essential skills; create common language amongst grade level/department/content level teams; Develop Units of Instruction; Develop CFA's aligned to units of instruction including pre-tests and post-tests; Feedback Loops for students.

Implementation & Evaluation: Units of Instruction with CFAs; Data Teaming for Data Based Decision Making; Feedback Loops for Students.

Professional development goals and planning are determined by, but not limited to, the following:

Survey data through Missouri Model Districts/DESE (See Appendix)
Quarterly district admin/coaches meeting
Strategic planning
NEE observation data
PDC building representatives/admin

Professional Development Outline 2018-2019

Where am I going?

August 13-17 (New Staff Training)

- Two-day Kagan training K-12
- K-5 PLTW training
- 6-12 Technology and Curriculum PD
- K-5 Math and Focus training

September 4, 2018 (Full Day)
District MMD Goal Implementation (Similar model to what admin did on July 10)

- Goal: Share districtwide MMD goals and vision as an entire staff
- Secondary: 8-11 a.m., High School Cafeteria
- Elementary: 12 -3 p.m., High School Cafeteria
- Alternating afternoon/morning times will be **dyslexia training**

Where am I going and how am I going to get there?

December 21, 2018 (Early Out w/students, 2 hour PD)

- Building Evaluation of MMD progress from semester 1
- **Work day for Kindergarten and 1st grade due to January Phonics First training
- Goal: Determine areas of growth still needed to meet our district instructional goals

January 2, 2019 (Full Day)

- Goal: Provide tools and resources for teachers to successfully improve DACLs, CFAs, feedback, and technology integration
- Kindergarten & 1st grade w/Orton-Gillingham Phonics First training
- Breakout sessions, Quality Teaching Practices/MMD and technology
- Focus areas divided into skill level, grade levels, and content areas as possible
- Approximately 20-25 breakout sessions needed

January 3, 2019 (Work Day)

- Goal: Final grade imports, process & plan QTP/MMD/Tech into spring semester
- Kindergarten and 1st grade w/Orton-Gillingham Phonics First training

January 4, 2019 (Full Day)

- Goal: Implement knowledge gained from January 2 session to begin integration into second semester
- Structure: Grade-level teacher collaboration in the AM
- Building discretion to discuss building goals/approach within district MMD model in the PM
- Kindergarten and 1st w/Orton-Gillingham Phonics First training

February 15, 2019 (Full Day)

- Goal: Increasing student engagement among a diverse student population
- Dr. Derek Greenfield - Diversity Training

**Additional individualized professional development will also take place through the virtual learning platform as well as collaborative meetings with instructional coaches

Internal Analysis

This analysis takes stock of what is currently taking place within the school district. It identifies areas of strength and improvements. Improvement issues are the natural outgrowth of studying where the district is today and what it wants to become in the future.

Documents, which were reviewed in preparation for the internal analysis of the school district, include:

District Assessment Data:
Annual Performance Report
Attendance and Graduation Rate
Curriculum Plan
Economic Development Data
Facilities study
Technology plan
NEE Evaluation Tool
Sedalia Connections Newsletter
MERIC Database

Strengths

Education

- Keeping Sedalia 200's mission in the forefront of planning
- Fully accredited
- Pettis County Cooperative for Early Childhood
- Collaborative school board
- Aligned curriculum to current state standards
- Data-driven professional development
- Summer programs (enrichment at elementary and secondary, Reading Camp at elementary, Summer school at high school)
- Strong involvement and a wide variety of successful extra-curricular and co-curricular activities that address all student interests
- Successful Title I schoolwide program PreK-4; (PreK has been expanded, which has doubled the student population being served)
- Newly structured ELL Program for grades 1-5 (2015)
- Whittier Alternative School
- Universal breakfast (PreK-5)
- University partnerships
- Increased technology throughout the district by adding wireless capabilities and educational technology staff for training and support
- Free developmental screenings for preschoolers
- Meeting the needs of diverse learners through a cohesive special education program PreK-12

- Additional AP and dual credit courses offered in conjunction with State Fair Community College and University of Central Missouri
- Gifted program (REACH) for grades 3-12
- PLTW and Launch programs for STEM: Districtwide STEAM
- Grow Your Own student program (started 2017-2018)
- Administrative Grow Your Own program (2016-2017)
- Connecting the Prairie to the Ivy (students will visit Ivy League schools)
- Closely monitored financial resources to further enhance the educational process
- Expanded mental health resources
- Partnership with DESE (MMD)
- Science Dimensions program (K-5)
- Phonics First (Orton-Gillingham based program) in K-5 buildings

Staff

- Caring staff willing to improve to meet student needs
- High expectations for all students
- Highly qualified staff and administrators
- District K-5 Math coach
- Instructional coaches: one at each elementary building, one at the middle school, and two shared grades 6-12
- Instructional technology facilitators- K-12
- Behavior Interventionist Specialist
- Locally competitive salaries for certified staff
- First-year mentoring program provided by a retired certified teacher
- Our district nurse coordinator attends state mental health meetings
- Superintendent is a member of Missouri Association of School Administrators (MASA) and Missouri School Board Association (MSBA)
- Assistant Superintendents are members of MSBA, MASA, and Missouri Association of School Business Officials (MOASBO)
- Title and special education teachers Orton-Gillingham trained in grades K-4
- Kagan-trained teachers grades K-12
- Social workers are home/school liaison in every building
- SOS-trained staff grades 5-12
- Mental Health First Aid-trained teachers grades 6-12

Community and Parent Involvement

- Business/industry partnerships in all schools
- Active alumni groups: Sedalia School District Foundation
- Gateway to Change program
- Service Learning programs (schools working to impact community)
- Production of Tiger Times (student-written newspaper)

Internal Analysis continued....

- Production of Tiger Pride magazine produced annually by the district communications director
- Rookie Reporter Tiger TImes students interviews on school topics are submitted and published in the local daily newspaper
- Active PTAs
- Improving communications with parents, students, staff, and community with the addition of our district communications director, who is in charge of the district's social media's pages such as Facebook, Twitter, and Instagram
- Implementation of Blackboard Mass Notifications, SISK12 Parent Portal, and the Sedalia School District app
- Effective working relationships with county and city government
- Student-run Community Cafe, providing free meals for residents in need
- Staff contributions to community: United Way and volunteer hours in community
- HOSA club (students exploring health occupations with field trips and speakers after school
- Online SISK12 enrollment (2018)
- Mentor programs
- "Day Trippin'" (2018) - occasional videos with superintendent interacting with students and staff discussing education initiatives (on district's YouTube channel and Facebook page)

Facility Improvements

- Facility improvements: Jennie Jaynes Activities Complex (2015), Freshman Wing at Smith-Cotton High School (2015), Smith-Cotton High School auxiliary gym and additional classroom space (2016), remodeled Washington Elementary office space (2017), PLTW wing at Smith-Cotton High School (2018), outdoor commons area at Smith-Cotton High School (projected completion 2018-2019), additional office space at Whittier (2018-2019)
- Restructured the Harriet A. Wolfe Media Center to include a commons area and three new classrooms
- Seven new classrooms at the Smith-Cotton Junior High by remodeling the old cafeteria (2017-2018)

Safety

- District Student Resource Officer (SRO) and one armed security officer in each building
- Integrated OpenEye surveillance camera software in all buildings with magnetic door lock buzz-in system for monitored entrance in each building
- Keycards/fob access at Smith-Cotton Junior High and Smith-Cotton High School
- Cable lock security system in each classroom to serve as a backup locking system for interior doors

Challenges

Education

- Continuous long-range planning
- Revise and implement curriculum to improve instruction and student performance
- Meeting the needs of our diverse community of learners
- Student/teacher ratios
- Increased severity of behavioral issues and staff support (Pre-K through grade 4)
- Mental Health

Staff

- Maintain competitive staff salaries
- Lack of qualified district substitutes
- High stress level and teacher turnover rate

Community and Parent Involvement

- Overall parental involvement in child's educational welfare
- Visibility of community support in educational and extracurricular activities

Facility Improvements

- Capital improvement
- Growing student population

External Analysis

City Census Population and Family Structure

Positives

- Business growth is creating new jobs while attracting families that are both traditional and non-tradition in structure
- Latest census information in 2017 for Sedalia: Population 21,387

Challenges

- Managing the increase in education cost in relation to population growth while meeting the needs of our diverse population
- Highly mobile student population has increased from 798 in 2013-2014 to 887 in 2014-2015
- Current total student population is 5059, compared with 4,933 in 2013 (2.5% increase)
- According to MERIC Economic Database, the estimated median household income for Sedalia (2015) $31,460 compared to the state average of $50,873

Goals

- Additional revenue to cover rising cost of providing quality education
- Continue to develop and explore business and community partnerships
- Increase use of the ELL program and services to Level 1 students on the ACCESS
- Provide resource information to families for community support programs available through the social workers

Technology

Positives

- Ease of access via personal mobile devices and internet-connected smartphones, internet-enabled TVs, and gaming devices

Challenges

- Constant upgrading of technological infrastructure and having to build new professional development programs to maintain faculty knowledge. Rapid evolutions and shifts in the technological landscape proving increasingly challenging to determine what works best and is most efficient. Monitoring

appropriate use of devices at school is a security concern. Due to the current poverty level, not all students have accessibility while outside school. Cost to maintain up-to-date infrastructure and bandwidth to provide access.

Goals

- Provide training/classes and information to students and their families about the importance of their digital footprint in relation to social media, beginning at the middle school. Allow use of libraries for students on a regular basis to have accessibility to technology not available at home.

Economic Climate

Positives

- Well-established industries and business provide a stable base to actively recruit new businesses
- Economic Development of Sedalia predicts over 1,000 new jobs over the next five years due to announced and soon-to-be announced projects

Challenges

- 65% of the student population are eligible for free or reduced lunch
- Meeting the needs of increased student population due to the growth of industry; maintaining appropriate student-to-teacher ratio due to increase of population; 25% of population come from homes living below the poverty line
- Limited housing and community amenities result in new families of industry settling in surrounding cities
- Unemployment in Sedalia spiked to 4.7 in April 2018 and continues to stay above 4
- Higher demand than supply for daycare

Goals

- Decrease student-to-teacher ratios
- Promote programs already in place both school-side and within the community--Dental and Vision help, Buddy Backpack, CACTUS, Coat lady, Lions Club, churches adopting families, Salvation Army, United Way, Boys and Girls Club, Rotary and Open Door

Community Patterns

Positives

- Increased community involvement-Sedalia School District Foundation; Chamber of Commerce; Pettis County Community Partnership (PCCP); business partnerships; downtown development (DREAM); growth of SFCC by partnership with University of Central Missouri; developing interagency relationships

Challenges

- Increase in poverty levels and concerns about crime within the community. Conflict resolution skills for community members; some sort of sponsored education open to all regarding how to peacefully resolve conflict situations.

Professional Development Plan

Pettis County Early Childhood Cooperative

2018-2019

Goal #1: 95% of the students who are given the Brigance Early Childhood Screen will show growth from the pretest to the post test.

The Brigance Early Childhood Screen will be administered to students in the fall as a pretest to establish baseline data.

Teachers will analyze the results of the pretest and design and implement lessons according to the each student's cognitive and physical abilities. Weekly team meetings will be held with staff including related service providers (speech/language pathologist, occupational therapist, and physical therapist) to discuss student progress and develop lessons for the following week.

Specific trainings to help staff implement instructional strategies/techniques will be conducted throughout the year including but not limited to small group training rotations during monthly ALL TEAM meetings.

The Brigance Early Childhood Screen will be administered to students in the spring as a post test. The results will be analyzed and compared to the results from the pretest to determine growth.

Goal #2: 95% of the students who receive a progress report card will show growth in all seven areas.

Teachers will review the progress report card and share it with the parents during conferences. Weekly team meetings will be held with staff including related service providers (speech/language pathologist, occupational therapist, and physical therapist)to discuss student progress and develop lessons for the following week.

Specific trainings to help staff implement instructional strategies/techniques will be conducted throughout the year including but not limited to small group training rotations during monthly ALL TEAM meetings.

Goal #3: 95% of the students who have an IEP (Individualized Educational Plan) will show growth on their IEP goals.

Teachers will develop and review each student's IEP goals and design lessons according to these goals. Weekly team meetings will be held with staff including related service providers (speech/language pathologist, occupational therapist, and physical therapist) to discuss student progress and develop lessons for the following week.

Specific trainings to help staff implement instructional strategies/techniques will be conducted throughout the year including but not limited to small group training rotations during monthly ALL TEAM meetings.

Goal #4: Parent/teacher conferences will be conducted with a minimum of 95% parent participation.

Teachers will conduct home visits before the school year begins in order to develop a positive rapport with parents. In addition, staff will make monthly contacts either in person or by phone and will hold two evening team/family activity nights during the school year. Teachers will also invite parents to the three parent/teacher conferences. If the parents do not attend, the teachers will follow-up with a home visit or a phone call in order to achieve 95% parent participation.

Professional Development Plan

Heber Hunt Elementary

2018-2019

Goal #1: Heber Hunt Elementary will improve building MAP scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject tested.

- Analyze assessment data: MAP, AIMSWEB, common assessments
- Data-based decision-making
- Departmental and grade-level collaboration

Goal #2: Heber Hunt Elementary will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

- Front office staff will make daily contact with the parents or guardians of an absent student.
- Individual students with perfect attendance will be recognized during quarterly PBS assemblies.
- Students identified as at-risk due to their daily attendance will be monitored by the front office and guidance office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Goal #3: A minimum of 80% of Heber Hunt students will be reading on grade level or above.

- Well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness

Professional Development Plan

Horace Mann Elementary

2018-2019

Goal #1: A minimum of 80% of Horace Mann students will be reading on grade level or above.

- Well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness
- Grade-level data team meetings to analyze rates of improvement in student reading scores including AimsWeb, running records, and formative assessments.
- After-school tutoring
- Students reading below level are progress monitored every two weeks
- Orton Gillingham implemented with the most struggling learners

Goal #2: Horace Mann Elementary will improve building MAP scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject tested.

- Analyze assessment data: MAP, AIMSWEB, common assessments
- Use MAP Item Analysis to determine areas of strength and growth
- Administer the MAP Practice test to prepare students for the format and types of questions they will encounter on the test
- Data-based decision-making to drive instruction
- Departmental and grade-level collaboration

Goal #3: Horace Mann Elementary students will meet or exceed the MSIP 5 requirement for 90/90 attendance with regard to individual students.

- Front office staff will make daily contact with the parents or guardians of an absent student.
- Individual students with perfect attendance will be recognized during quarterly PBS assemblies.
- Students identified as at-risk due to their daily attendance will be monitored by the front office and guidance office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Professional Development Plan

Parkview Elementary

2018-2019

Goal #1: Parkview Elementary will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

- Front office staff will make daily contact with the parents or guardians of an absent student.
- Individual students with perfect attendance will be recognized during quarterly PBS assemblies.
- Students identified as at-risk due to their daily attendance will be monitored by the front office and guidance office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Goal #2: Parkview Elementary will improve building MAP scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject tested.

- Analyze assessment data: MAP, AIMSWEB, common assessments
- Data-based decision-making
- Departmental and grade-level collaboration

Goal #3: A minimum of 80% of Parkview students will be reading on grade level or above.

- Well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness

Professional Development Plan

Skyline Elementary

2018-2019

Goal #1: Skyline Elementary will increase the Building Total MPI from "Approaching" to "On Track" in both Math and Communication Arts. This will be a 14% increase for ELA and a 4% increase for Math.

- Use MAP Item Analysis to determine areas of strength and growth
- Write common assessments that are standard-based and reflect the rigor and format of the MAP.
- Identify Priority Standards for each grade level in Math and ELA
- Write Units of Instruction that address the Priority Standards and give students multiple opportunities to interact with the standards
- Administer the MAP Practice test to prepare students for the format and types of questions they will encounter on the test
- Analyze the assessment data in grade-level teams and use the information to guide instruction and re-teaching
- Provide Tier 2 instruction for re-teaching priority standards

Goal #2: Skyline Elementary will meet or exceed the MSIP 5 requirement of 90/90 individual student attendance.

- Every student who is absent will receive a personal phone call from the administrative assistant or nurse
- Schoolwide and individual classroom attendance incentives will be implemented
- Students falling below 90% will be enrolled in the Skyline Attendance Club. The social worker will work with the parents and students to improve attendance. Students who increase their attendance will be rewarded with incentives.
- In severe cases, a referral will be made to the prosecuting attorney resulting in truancy court

Goal #3: A minimum of 80% of Skyline students will be reading on grade level or above as measured by AIMSWeb.

- D Well-articulated, aligned curriculum.
- D Identified priority standards in ELA.
- D Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- D Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness
- D Grade-level data team meetings to analyze rates of improvement in student reading scores including AimsWeb, running records, and formative assessments.

- D After-school tutoring
- D Students reading below level are progress monitored every two weeks
- D Orton Gillingham implemented with the most struggling learners

Professional Development Plan

Washington Elementary

2018-2019

Goal #1: During the 2018-2019 school year, MAP scores will increase by 3% in the proficient and advanced levels for students as measured by the MAP test.

- Analyze assessment data: MAP, AIMSWEB, common assessments
- Data-based decision-making
- Departmental and grade-level collaboration

Goal #2: During the 2018-2019 school year, at least 80% of Washington students will be reading on grade level or above as measured by AIMSWeb.

- Well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness

Goal #3: Washington Elementary will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

- Social worker will make daily contact with the parents or guardians of an absent student.
- Building attendance incentives when the average daily attendance is 97%-spelling out ATTENDANCE
- Students identified as at-risk due to their daily attendance will be monitored by the front office and guidance office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Professional Development Plan

Sedalia Middle School

2018-2019

Goal #1: Sedalia Middle School will improve building MAP scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject area tested.

- Analyze assessment data: MAP, AIMSWEB, common assessments
- Data-based decision-making
- Departmental and grade-level collaboration

Goal #2: A minimum of 80% of Sedalia Middle School students will be reading on grade level or above.

- Well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.
- Response to Intervention (RTI) is provided to all students as a second layer of reading intervention. Second layer interventions: comprehension, fluency, phonemic awareness, phonological awareness

Goal #3: Sedalia Middle School will meet or exceed the MSIP 5 requirement for 90/90 individual students attendance.

- Front office staff will make daily contact with the parents or guardians of an absent student.
- Individual students with perfect attendance will be recognized during quarterly PBS assemblies.
- Students identified as at-risk due to their daily attendance will be monitored by the front office and guidance office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Professional Development Plan

Smith-Cotton Junior High School

2018-2019

Goal #1: Smith-Cotton Jr. High will improve building MAP scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject area tested.

- Analyze assessment data: MAP, Common Assessments, CFA's
- Departmental and grade-level collaboration

Goal #2: A minimum of 80% of Smith-Cotton Jr. High students will be reading on grade level or above.

- A well-articulated, aligned curriculum.
- Identified priority standards in ELA.
- Quality teaching practices are implemented school-wide with a focus on assessment-capable learners.

Goal #3: Smith-Cotton Jr. High will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

- Guidance office and/or front office staff will make daily contact with the parents or guardians of an absent student.
- Students identified as at-risk due to their daily attendance will be monitored by the guidance office and front office staff.
- A referral will be made to truancy court for students whose attendance falls below 83%.

Professional Development Plan

Smith-Cotton High School

2018-2019

Goal #1: Smith-Cotton High School will improve building EOC scores. The percentages will increase by 3% in the top two levels and decrease by 3% in the bottom two levels for each subject area tested.

Action Steps:

1. All departments have begun analyzing both formative and summative assessments and are working to make changes so they better reflect the style of new EOC tests.
    a. English - making changes to question stems that mimic EOC and rewriting for deeper DOK. Administering EOC practice test in early spring and reteaching on any standards of concern.
    b. Science - writing two- and three-dimensional questions for unit quizzes and tests (new to to the spring 2019 EOC)
    c. Math - working with Mr. Harter to review pacing guides for standards “holes” or “gaps.” Creating EOC prep tests on Mastery Connect.
    d. Government - Also evaluating curriculum for “holes/gaps” as it relates to the new standards to be tested spring 2020.
2. All teachers are receiving training on how to write clear and meaningful “I can…” statements in student-friendly language derived from the learning standards with the purpose of moving students towards evaluating their own learning.

Goal #2: Smith-Cotton High School will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

Action Steps:(Daily)

1. The administrative assistants charged with attendance will make daily contact with the parents or guardians of each absent student.
2. An attendance committee is being formed to evaluate attendance data and address various attendance concerns, such as incentives, intervention, loss of credit due to attendance, and to review attendance policy and procedures.
3. The school counselors will use weekly attendance history reports for their respective grade levels to schedule parent attendance meetings.
4. The school social worker and interpreter will make daily contacts for their targeted groups through telephone calls, emails, texts, and home visits.
5. The school administrators will review the daily attendance, run weekly attendance data, flag students at various markers, and conference with students and parents/guardians.
6. Attendance letters will be sent out at the following steps; 4 absences, 6-8 absences, and 8 and above.
7. Perfect attendance awards will be given to freshman students with 100% attendance records during the freshman awards assembly in May.

Goal #3: Smith-Cotton graduates will score at or above the state average composite score on the ACT.

Action Steps:

1. Junior level fall pre-ACT testing (10/25)

a. ACT Leadership team will participate in ACT Data day (Nov 12-20) to accomplish the following:
    i. Set cut scores for spring ACT testing
    ii. Set goals for class of 2020 ACT scores
    iii. Form ACT workshop groups
    iv. Discuss and formulate eight-week plans for any subgroup whose scores fall below the building level cut scores
2. Hold eight-week ACT Workout Wednesdays for 9th-11th graders (Jan 28th-March 25th)
3. Provide a two-day ACT workshop for all juniors participating in spring ACT testing (March 2019)
4. Junior level spring ACT testing (4/2)
5. Build an Academic Honors Hall for students who meet set academic standards (Fall of 2018)
6. Discuss ACT Prep course for the 2019-20 school year (Fall of 2018)

Professional Development Plan

Whittier Alternative High School

2018-2019

Goal #1: Whittier Alternative High School (WAHS) will meet or exceed the MSIP 5 requirement for 90/90 individual student attendance.

- D Phone calls are made daily when students are not in attendance.
- D The social worker and staff members make home visits and provide transportation on an as needed basis.
- D Attendance letters are sent out at four absences per quarter.
- D The administrator will review the daily attendance, run weekly attendance data, flag students at various markers, and conference with students and parents/guardians.

Goal #2: WAHS will help reduce the dropout rate by HH1% for the 2018-2019 school year.

- D Whittier Alternative High School provides night school as an alternative learning environment for students who have unique needs that do not allow for a traditional school-day timeframe.
- D Extra tutoring is provided before school from 8 to 9 a.m. for students.
- D Whittier Alternative High School works diligently to seek and maintain positive and productive partnership within the community. These partnerships provide unique learning opportunities for students, mentoring, and the outlet needed for students to give back to the community as well.

Goal #3: The staff of Whittier Alternative High School will help to increase the graduation rate to a minimum of 91%. We will do this by encouraging the teaching staff to actively seek new methods and techniques of teaching to increase student involvement at school.

- D Collaboration among staff continues regularly as they explore methods to help students achieve success. This often includes collaborative efforts for emotional support and survival skills in addition to academic achievement.
- D The teaching staff actively participates in the professional development as provided by the district and building administration.
- D Project-based learning and service learning opportunities are embedded frequently in the curriculum at Whittier Alternative High School.

Appendix A

High Quality Professional Development Standards - https://learningforward.org/

Standards for Professional Learning

Standards for Professional Learning outline the characteristics of professional learning that leads to effective teaching practices, supportive leadership, and improved student results. Learning Forward is the only association focused solely on the most critical lever in improving schools - building the knowledge and skills of educators. Through the Standards for Professional Learning, Learning Forward leads the field in understanding what links professional learning to improved student achievement. We assist classroom, school, and system leaders in solving their toughest problems of practice. Learning Forward members experience practical learning opportunities, receive timely publications, and connect to like-minded educators from around the world.

STANDARDS FOR PROFESSIONAL LEARNING			
Professional learning that increases educator effectiveness and results for all students ...	**LEARNING COMMUNITIES:** Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.	**LEADERSHIP:** Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.	**RESOURCES:** Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
DATA: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.	**LEARNING DESIGNS:** Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.	**IMPLEMENTATION:** Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.	**OUTCOMES:** Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards.

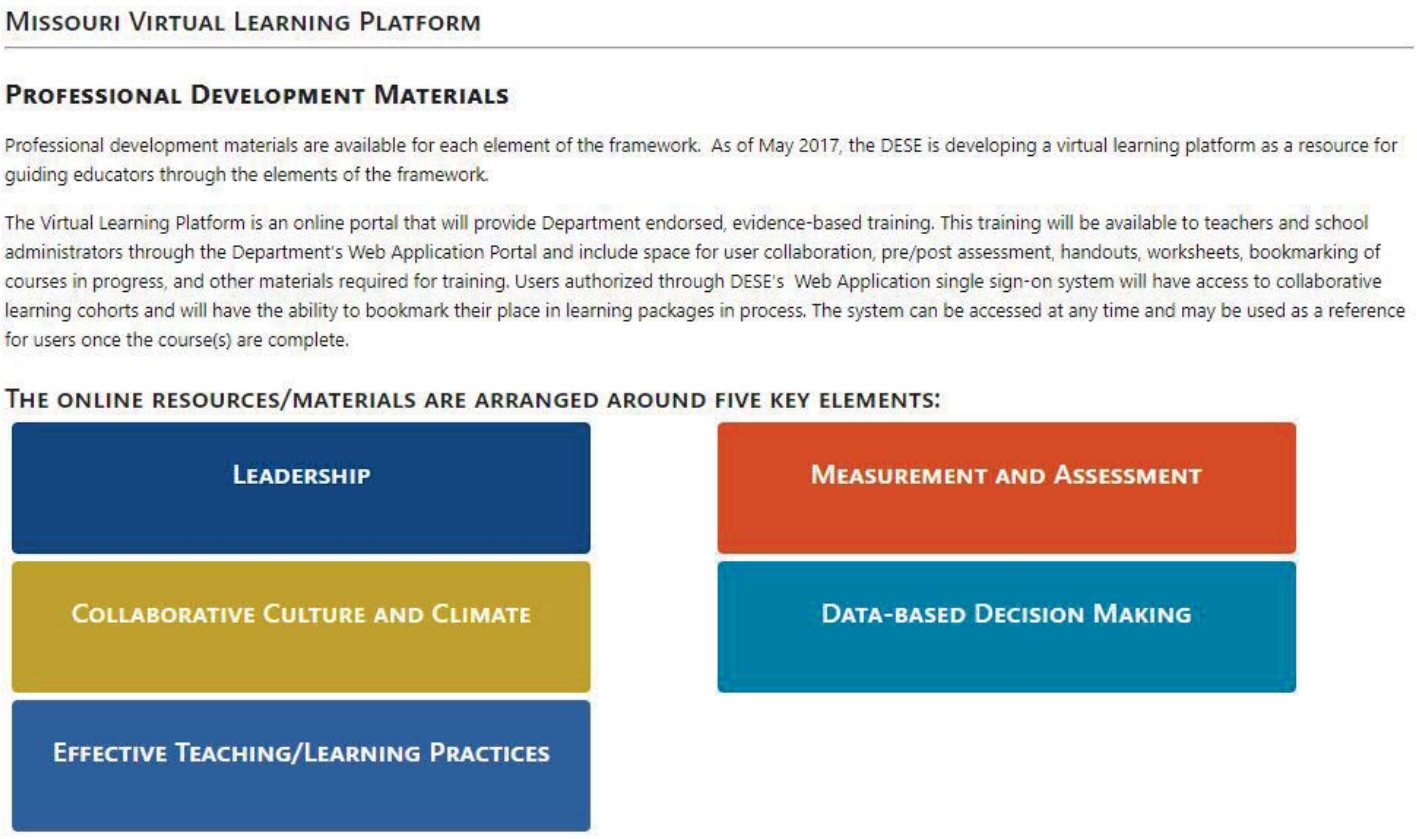
Four prerequisites for effective professional learning:

1) Educators' commitment to students, all students, is the foundation of effective professional learning.
2) Each educator involved in professional learning comes to the experience ready to learn.
3) Because there are disparate experience levels and use of practice among educators, professional learning can foster collaborative inquiry and learning that enhances individual and collective performance.
4) Like all learners, educators learn in different ways and at different rates.

Appendix B - Virtual Learning Platform/MoEdu-SAIL

All Sedalia #200 certified staff members will use the Web Applications tool on the DESE website to join the Virtual Learning Platform. This platform will provide additional PD modules that teachers can access at anytime to support quality teaching practices in the classroom. Additionally, the MoEdu-SAIL website will also provide virtual professional development for certified staff.

Missouri
DEPARTMENT OF ELEMENTARY & SECONDARY
EDUCATION



MoEdu-Sail - http://www.moedu-sail.org/

Appendix C - Missouri Professional Guidelines for Student Success

Pedagogy to support the Missouri Learning Standards will not look like transmission teaching-we transmit and they receive-but will look like students engaged and grappling with complexity. Assignments should include evidence of students' thinking at progressively deeper levels. Teachers will need to think about a constructivist approach to teaching and learning.

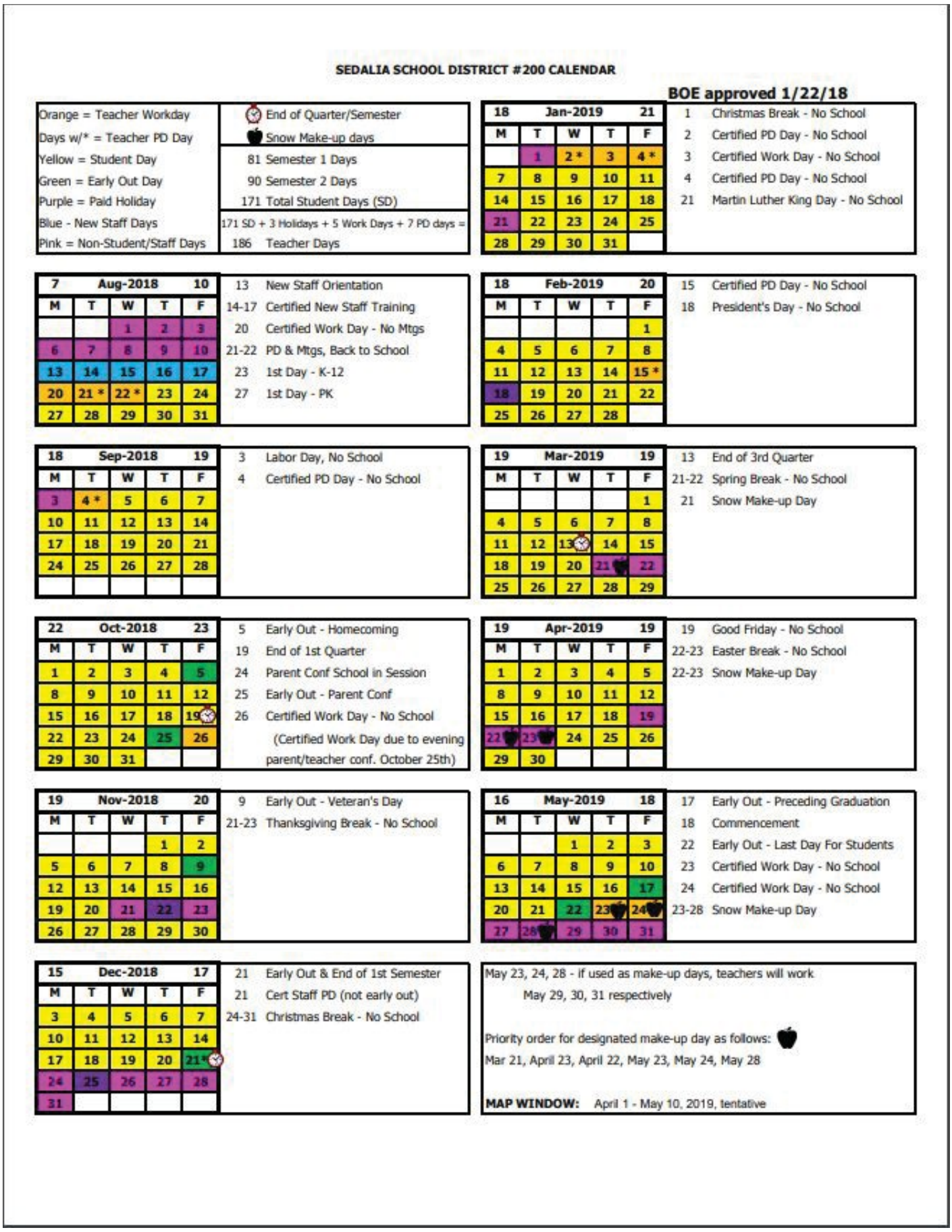
- ➔ Know where you are going, why you are going there, and how will you know when you get there − clear goals for learning and a plan for assessment
- ➔ A primary emphasis on a hands-on, problem-centered approach in which the learners are actively involved
- ➔ Class discussions designed to make a connection between activities and the underlying conceptual knowledge (cues, questions, and advanced organizers will be applicable)
- ➔ Projects built around thematic units or the intersection of topics from two or more disciplines
- ➔ Concept mapping and non-linguistic/graphical representation will help students show depth of knowledge reached
- ➔ Experiments and research projects in which findings are presented and debated with the class as a whole
- ➔ Field trips that allow students to put the concepts and ideas discussed in class in a real-world context
- ➔ Questions and approaches that require inquiry, problem solving, and the synthesizing of ideas
- ➔ Provide learning opportunities that ensure that all students actively participate − utilize cooperative learning, reciprocal teaching, etc.
- ➔ Adapt materials to accommodate students with special needs
- ➔ Model exemplars and provide real-life and work applications of what students should know and be able to do
- ➔ Formative assessment for learning and feedback
- ➔ Early interventions for struggling learners

Appendix D - Survey Data

The process for professional development surveys changed with the Missouri Model District framework starting in 2017, evaluating quality teaching practices. Surveys from this point forward will be taken each fall and spring to monitor effectiveness and progress of professional development within the Missouri Model District framework.

Self Assessment Practice Profile Spring 2018	
Total teachers	**279**
ETLP	**Overall District Percent**
1. Learning targets	**42**
2. Students assess	**50**
3. Students Identify	**47**
4. Feedback to targets	**80**
5 Student to student feedback	**56**
6. students state criteria	**41**
7. Instruction state standards	**89**
8. Student reviews CFA	**66**
CFA	
1. Use CFA	**88**
2. All in CFA	**93**
3. Student reviews CFA	**66**
4. CFA used to plan	**89**
DBDM	
1. Team reviews data	**83**
2. Team Positive	**80**
3. Effective teaming practices	**75**
4. Data determines practices	**83**
5. Visual representations	**76**
Leadership	
1. Leaders manage	**94**
2. Teacher to teacher feedback	**81**
3. Leader committed	**92**
4. Leader active	**89**
PD	
1. PD instruction	**93**
2. Coaching instruction	**81**
3. PD monitor	**80**
4. Teacher feedback instruction	**56**

Appendix E - District Calendar



SEDALIA SCHOOL DISTRICT #200 CALENDAR

BOE approved 1/22/18

Orange = Teacher Workday	End of Quarter/Semester
Days w/* = Teacher PD Day	Snow Make-up days
Yellow = Student Day	81 Semester 1 Days
Green = Early Out Day	90 Semester 2 Days
Purple = Paid Holiday	171 Total Student Days (SD)
Blue - New Staff Days	171 SD + 3 Holidays + 5 Work Days + 7 PD days =
Pink = Non-Student/Staff Days	186 Teacher Days

18	Jan-2019			21
M	T	W	T	F
	1	2 *	3	4 *
7	8	9	10	11
14	15	16	17	18
21	22	23	24	25
28	29	30	31	

1	Christmas Break - No School
2	Certified PD Day - No School
3	Certified Work Day - No School
4	Certified PD Day - No School
21	Martin Luther King Day - No School

7	Aug-2018			10
M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21 *	22 *	23	24
27	28	29	30	31

13	New Staff Orientation
14-17	Certified New Staff Training
20	Certified Work Day - No Mtgs
21-22	PD & Mtgs, Back to School
23	1st Day - K-12
27	1st Day - PK

18	Feb-2019			20
M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15 *
18	19	20	21	22
25	26	27	28	

15	Certified PD Day - No School
18	President's Day - No School

18	Sep-2018			19
M	T	W	T	F
3	4 *	5	6	7
10	11	12	13	14
17	18	19	20	21
24	25	26	27	28

3	Labor Day, No School
4	Certified PD Day - No School

19	Mar-2019			19
M	T	W	T	F
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22
25	26	27	28	29

13	End of 3rd Quarter
21-22	Spring Break - No School
21	Snow Make-up Day

22	Oct-2018			23
M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30	31		

5	Early Out - Homecoming
19	End of 1st Quarter
24	Parent Conf School in Session
25	Early Out - Parent Conf
26	Certified Work Day - No School (Certified Work Day due to evening parent/teacher conf. October 25th)

19	Apr-2019			19
M	T	W	T	F
1	2	3	4	5
8	9	10	11	12
15	16	17	18	19
22	23	24	25	26
29	30			

19	Good Friday - No School
22-23	Easter Break - No School
22-23	Snow Make-up Day

19	Nov-2018			20
M	T	W	T	F
			1	2
5	6	7	8	9
12	13	14	15	16
19	20	21	22	23
26	27	28	29	30

9	Early Out - Veteran's Day
21-23	Thanksgiving Break - No School

16	May-2019			18
M	T	W	T	F
		1	2	3
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	31

17	Early Out - Preceding Graduation
18	Commencement
22	Early Out - Last Day For Students
23	Certified Work Day - No School
24	Certified Work Day - No School
23-28	Snow Make-up Day

15	Dec-2018			17
M	T	W	T	F
3	4	5	6	7
10	11	12	13	14
17	18	19	20	21*
24	25	26	27	28
31				

21	Early Out & End of 1st Semester
21	Cert Staff PD (not early out)
24-31	Christmas Break - No School

May 23, 24, 28 - if used as make-up days, teachers will work May 29, 30, 31 respectively

Priority order for designated make-up day as follows:
Mar 21, April 23, April 22, May 23, May 24, May 28

MAP WINDOW: April 1 - May 10, 2019, tentative

LEGAL NOTICE
FILING FOR DIRECTOR
O:F SEDALIA SCHOOL DISTRICT #200

:Filing dates for the Board of Education of Sedalia School District #200 are as follows: December 11, 2018 through January 15, 2019. Hours for filing are 8:00 a.m. to 4:30 p.m. Monday through Friday. Filing will not occur on days that the Sedalia #200 District Office is closed due to inclement weather. Exceptions arc the following legal and school holidays:

- Close at 2:00 p.m. December 21, 2018, and remained closed through the New Year's Holiday;
- Open at 8:00 a.m. January 2, 2019;
- January 15, 2019 open at 8:00 a.m. until 5:00 p.m. at which time filing closes.

Ji'iling will take place at the Board of Education Office, 2806 Matthew Dr., Sedalia, MO 65301.

Qualifications, as provided by statute, are that candidates be citizens of the United States and resident taxpayers of the district, who have resided in Missouri for one year preceding their election or appo in tment , and who arc at least twenty-four years of age.

Two members, each to serve a three-year term of office, will be elected to the Board of Education on April 2, 2019.

Scott Gardner, Secretary
Board of Education
Sedalia School District #200

2 x 12/1/17 and 12/8/17

Sedalia School District #200

Missouri Model District

District Office
2806 Matthew Drive
Sedalia, MO 65301-7981
(660) 829-6450
Fax (660) 827-8938
www.sedalia200.org

Steven G. Triplett. Ed.S.
Superintendent

Nancy L. Scott, Ed.D.
Assistant Superintendent
Human Resources
Federal Programs

Christopher Pyle, Ed.S.
K-12 Special Education
Buildings & Grounds

Todd Fraley, Ed.D.
Assistant Superintendent
Technology
Security

Harriet Wolfe, Ed.D.
Chief Finance Officer

Becky Brownfield, ED.S.
Director of Curriculum
Instruction & Assessment 6-12

Devon Gilmore, M.Ed.
Director of Curriculum
Instruction & Assessment K-5

Bob Satnan, B.A.
Communications Director

DATE: November 26, 2018

TO: Board of Education, Mr. Steve Triplett

FROM: H. Wolfe

RE: Change in Moving Additional Funds to Equity Bank from U.S. Bank

- At the August Board meeting, a motion was approved to terminate our agreement with MOSIP to manage our assets. At the time, we indicated to the Board that we would move all the mature investments immediately and then move the remaining as they matured, in order to avoid financial penalties.

- In conversation with Equity Bank, it was determined that, even though we would pay a penalty for withdrawing investments early, we could recoup that penalty amount in less than six months with the better interest rate from Equity.

- More specifically, if we withdrew immature investments totaling $13,597,712.59, the early withdrawal *penalty* would be *$158,273.91* and the recouped amount, based on Equity's 2.45% would be $333,143.96, within 5.7 months. The second group of early withdrawal, totaling $1,411,593.34, would incur a *penalty* of *$5,971.24*, and the recoupment in 2.07 months would be $34,584.04.

- The total interest earned from Equity on $15,009.305.93 @ 2.45% would be $367,728, minus a total penalty of $165,745.15, for a net gain of $201,983.85.

- We believe the Fed rate may increase in December, so this is a conservative estimate, based on current rates.

- It would be helpful on this time sensitive issue, if the Board would consider a new motion to allow us to move all the MOSIP Core Portfolio funds prior to December 1, 2018.

SEDALIA SCHOOL DISTRICT #200

2806 Matthew Drive, Sedalia, MO 65301-7981 p:660.829.6450 f:660-827-8938

Steven G. Triplett, Ed. S.
Superintendent

Nancy L. Scott, Ed. D.
Assistant Superintendent

Christopher Pyle, Ed. S.
Assistant Superintendent

Todd Fraley Ed. D.
Assistant Superintendent

Harriet A. Wolfe, Ed. D.
Chief Financial Officer

Becky Brownfield, Ed. S.
Director Curriculum Instruction
Assessment 6-12

Devon Gilmore, M. Ed.
Director Curriculum Instruction
Assessment K-5

Bob Satnan, B.A.
Communications Director

Missouri Model District
www.sedalia200.org

Sedalia #200 is an
equal opportunity and
affirmative action employer

To: Board of Education and Mr. Triplett

From: Chris Pyle

Date: November 26, 2018

Re: Maintenance Warehouse HVAC

Attached you will find information and a bid analysis regarding our recent bid process for HVAC for the Maintenance Warehouse. We received bids from Home Heating and Air from Sedalia and Premier Climate Control from Green Ridge.

My recommendation is to accept the low bid from Premier Climate Control for $22,690.00.

Thank you for your consideration in this matter. If you have any questions, please contact me at (660)-829-6457. Thank You.

SEDALIA SCHOOL DISTRICT #200
BID ANALYSIS REPORT

Commodity: HVAC Warehouse Bid

Bids Obtained by: Richie Simons

Date: November 7, 2018

Vendor	Amount of Bid	Contact Person	Phone Number
Premier Climate Control	$22,690.00	Matt Smith	660-553-1414
Home Heating & Air Cond.	$35,279.00	Dale Phillips	660-827-0101

Recommendation:

0 **Accept low qualified bid of:** Premier Climate Control $22,690.00 Option 1

☐ **Accept local bid of:**

D **Accept alternate bid of:**

Use of commodity: HVAC system for new maintenance warehouse

Does this replace an existing district commodity? 0 NO 0 YES (explain)

New HVAC system for maintenance warehouse at 1411 Waterloo Road

Final approval

Date

AFFIDAVIT OF PUBLICATION

(Space above for recording information)

STATE OF MISSOURI) **ss.**
COUNTY OF PETTIS)

I, **William D. Weibert**, being duly sworn according to law, state that I am the Publisher of the **Sedalia Democrat** a daily newspaper of general circulation in the County of Pettis, State of Missouri, where located; which newspaper has been admitted to the Post Office as periodical class matter in the City of Sedalia, Missouri, the city of publication, which newspaper has been published regularly and consecutively for a period of three years and has a list of bona fide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provision of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310, Revised Statutes of Missouri 2000.

The affixed notice appeared in said newspaper for **two times** as follows:

1st Insertion: Vol.	150 No.	**253**	24th day of	October	20	**18**
2nd Insertion: Vol.	150 No.	**256**	**27th** day of	**October**	20	**18**
3rd Insertion: Vol.	No.		day of		20	
4th Insertion: Vol.	No.		day of		20	
5th Insertion: Vol.	No.		day of		20	
6th Insertion: Vol.	No.		day of		20	
7th Insertion: Vol.	No.		day of		20	

Signed ?tiifl *lfrd*

Subscribed and sworn to before me this **29tj** day of **October** **18**

Eddie E. Crouch, Notary Public

My commission expires 12-09-2021

EDDIE E CROUCH
Notary Public – Notary Seal
State of Missouri, Pettis County
Commission # 13904170
My Commission Expires Dec. 09, 2021

NOTICE TO BIDDERS

The Sedalia School District #200 is seeking bids for new HVAC units at the new warehouse located at 1411 Waterloo Road. For bid specifications contact Richie Simons at 660-460-1270. Bids are to be sealed and marked "HVAC Bid-Warehouse" and delivered to the District Office, by 10:00 a.m. on Wednesday, November 7, 2018 at which time the bids will be opened. The school district reserves the right to reject any or all bids.

2x-10/24, 27, 2018

Assessment and Evaluation
Programs and Services
Sedalia #200 School District

The Sedalia #200 Board of Education and the Administration conduct regular assessments of all programs and services provided in our schools. A program evaluation calendar is maintained to review all components of programs in our district. Student data, needs of the programs, goals, accomplishments, surveys, and an overall evaluation of the effectiveness of the programs are maintained in a written plan. Committee reports are scheduled on a monthly basis and information is reviewed in regard to goal setting for the school district.

PROGRAM TITLE:
Early Childhood – Early Childhood Special Education and Title One Preschool

ADMINISTRATION/BOARD REVIEW DATE:
November 26, 2018

PROGRAM DIRECTOR/TEACHER/TITLE:
Grace Kendrick - Pettis County Early Childhood Principal

TOTAL NUMBER OF CHILDREN IN PROGRAM/SERVICE:

- 228 students enrolled at the end of 2017-2018 school year (unduplicated count)
- 164 children served during the year with special needs
  (*This includes ECSE and speech services for Title and Integrated students*)
- 80 Title students
- 20 Integrated – Peer Models

CURRENTLY SERVING:

- 175 students (unduplicated count)
- 113 students with special needs
  (*This includes ECSE and speech services for Title and Integrated students*)
- 78 Title students
- 14 Integrated – Peer Models

SPECIAL EDUCATION EVALUATIONS COMPLETED:

- 2014-2015: 96
- 2015-2016: 108
- 2016-2017: 123
- 2017-2018: 98
- 2018-2019: 22 evaluations completed thus far with 22 more children in the evaluation process

PROGRAM GOALS:

- 95% of the students will show growth in at least one of the three areas (social relationships, acquisition and use of knowledge and skills, and taking appropriate action to meet his/her needs) as measured on the Early Childhood Outcomes upon exiting the Early Childhood Special Education program.

- 95% of the students will show growth as noted on the Brigance Early Childhood screen.

- Quarterly parent/teacher conferences will be conducted with a minimum of 95% parent participation.

SUMMARY OF HOW GOALS WERE MET:

- Staff members participate in ongoing training that focuses on strategies and creative ways to enhance the students' skill levels in all areas. Weekly team meetings are held to analyze student data (progress), develop programs, and conduct training on specific skills.

- Classroom design, schedules, language, and constructive daily activities are consistent with the HighScope curriculum. Anecdotal records are completed throughout the year and used in progress monitoring of each child.

- The early childhood teachers utilize a team teaching approach and work very closely with the families of the children in their classrooms. One home visit is conducted soon after the child enrolls in school and at least one additional personal visit is conducted with each family per quarter. These personal visits are held in the home and/or at school. Additional monthly parent contacts are made by phone, in person, or in written form.

- Team Connection nights are scheduled with children and parents throughout the year.

- Monthly team meetings are held with four 25 minute breakout sessions for staff training.

CHANGES MADE IN THE PROGRAM:

- Reassigned staff to accommodate the needs of the students and to give support to new staff.
- Created an additional classroom for students with autism. The three classrooms that serve children on the autism spectrum collaborate and move children and paras among the classrooms depending on the students' needs.

ACTIVITIES THAT WERE CONTINUED:

- High Scope Curriculum
- Positive Behavior Support (PBS) – A Social Skills Lesson is implemented daily during large or small group time.
- Team teaching
- Weekly team meetings
- Monthly All TEAMS meeting
- SIS Computerized IEP and Evaluation Program
- Team Connection nights with parents
- Child Observation Record (paper/pencil)
- Uploading registration and other student documents in SIS
- Breakfast and Lunch
- Interactive boards and iPads are used as a large or small group activity
- Staff members have participated in a variety of training including, but not limited to, special education process, HighScope, sensory integration, motor development, safety, technology, health issues, CPI, and PBS.

PROGRAM EFFECTIVENESS:

- 96% of the students showed growth in at least one of the three indicators as measured on the Early Childhood Outcomes (ECO) report. The ECO is an observation tool that is used to record a student's ability in three developmental areas (*Positive Social-Emotional Skills, Acquisition and Use of Knowledge and Skills,* and *Use of Appropriate Behaviors to Meet Their Needs*). The ECO is completed when a child enters the program and again when he/she exits the Early Childhood program.

- Brigance: 98% of the students showed improvement.

- Parent Teacher Conferences - Parent Participation
  100% October, February, and May (2017-2018)
  98% during conference times, 100% after original conference date (Fall 2018)

PARENT COMMENTS:

<u>Home Visits:</u>

- More free to speak
- I thought it was weird
- The teacher was very attentive to my child's needs
- The teachers were amazing and were so loving to my child
- That I was always well informed about my son
- It's nice to know my child's teachers take the extra time to stay so involved in her development
- How nice the teachers were and presented themselves to the kids

- Having him be familiar with his teachers before the first day of school
- Getting to meet his teacher before school

Team Connections:

- Teachers are always nice and great
- More information is given
- My daughter and I can communicate with each other now
- How they interacted with the whole family
- Being able to connect with the teachers and other parents
- We enjoyed bonding with our children and getting to know teachers/staff better
- Seeing all of the students interact with each other
- Good time for parents to visit with other parents and families
- Hearing positive things about my child and learning of her progress
- The activity and meeting other parents/teachers

Program:

- My child learned a lot
- Friendly and caring staff
- Patience with the kids
- Addresses their delays and still provides what they need to know in school
- Positive relationships between teacher and students
- Environment
- How to handle emotions/feelings
- Child developing positive outlook on learning
- Individual academic needs are monitored closely
- Friendly atmosphere
- How they teach in a scaffolding approach

Recommendations:

- Keep doing a great job!
- Include parents in class activities and parties
- Having more parent involved activities
- Sending more photos to parents
- None; doing great!
- I would like to come to the school more often to see my kiddo with his peers
- Better communication

Assessment and Evaluation
Programs and Services
Sedalia #200 School District

The Sedalia #200 Board of Education and Administration maintain regular assessments of all programs and services provided in our schools. A program evaluation calendar is scheduled to review all components of programs in our district. Student data, needs of the programs, goals, accomplishments, surveys, and an overall evaluation to the effectiveness of the programs is maintained in a written plan. Committee reports are scheduled on a monthly basis and information is reviewed in regard to goal setting for the school district.

PROGRAM TITLE:
Parents As Teachers (PAT)

The PAT program provides practical, effective child development information for eligible families with children prenatal through age five. Private visits and screenings are provided.

BOARD REVIEW DATE:
November 26, 2018

PROGRAM DIRECTOR:
Grace Kendrick - Pettis County Early Childhood Principal

TOTAL NUMBER OF CHILDREN IN PROGRAM/SERVICE:

2018-2019

Currently:	*Number of personal visits completed for the county:*	1,093
	Sedalia only:	805
	Number of screenings completed for the county:	151
	Sedalia only:	121

2017-2018

Number of personal visits completed for the county:	1,713
Sedalia only:	1,081
Number of screenings completed for the county:	508
Sedalia only:	338

PROGRAM GOALS:

- *Provide personal visits to eligible families consistent with state funding*
- *Screen eligible children to identify potential concerns*
- *Empower parents to give their children the best possible start in life*
- *Provide children with a solid foundation for school and life success*
- *Increase parents' knowledge of child development and appropriate ways to stimulate their child's intellectual, language, social, and physical development*

SUMMARY OF HOW GOALS WERE MET*:*

We continued our contract with Early Head Start to provide visits to eligible families. Three Co-op parent educators served the five county schools. A parent educator served as the screening coordinator and was the liaison between Early Childhood Special Education, Title Preschool, Head Start, and Parents As Teachers.

CHANGES MADE IN THE PROGRAM:

Filled a vacant PAT position.

Area of Focus:

Retaining quality personnel and working towards addressing the PAT National Affiliate Standards.

Incorporated online trainings and webinars during monthly PAT staff meetings.

ADDITIONAL INFORMATION:

The PAT program exceeded number of visits allocated in two of the school districts in the county. Current number of visits completed for Sedalia are higher than at this time last year.

Screening participation exceeded allocation given.

Large scale screening opportunities were available in each of the Co-op school districts and at Head Start. In addition, screenings were offered upon parent request at the Co-op and in the home when necessary.

See Attached Parent Survey Results.

2017-2018: 66 surveys

PARENT SATISFACTION SURVEY

To help us make our program the best it can be, please complete this short survey by circling the number that best describes your experience. Your response will be kept private. Thank you!

(1=Strongly Disagree; 2=Disagree; 3=Neither Agree nor Disagree; 4=Agree; 5=Strongly Agree).

Circle the number that best describes your experience.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Unanswered
Please note that ratings go from left to right						
1. I feel comfortable talking with my parent educator.				8	58	
2. My Parent Educator is genuinely interested in me and my child.				7	59	
3. Activities in the visits strengthen my relationship with my child.			3	16	47	
4. My parent educator encourages me to read books to my child.			2	12	52	
5. My parent educator and I partner to set goals for my child, myself and my family.				16	50	
6. My parent educator helps me find useful resources in my community.			2	15	42	
7. My parent educator gives me handouts that help me continue learning about parenting and child development.				15	51	
8. This program motivates me to try new parenting strategies.			2	17	36	1
9. This program increases my understanding of my child's development.				14	52	
10. This program helps me build relationships with other families.			16	17	32	1
11. I feel less stressed because of this program.			10	20	36	
12. I am very satisfied with this program.				13	53	
13. I would recommend this program to a friend.				11	55	

What about this program has been most helpful to you and your family?

1. Setting goals has helped us be able to achieve goals
2. Visits
3. helping me with information about Smithton preschool
4. setting goals with my child in mind; the constant flow of information provided
5. getting questions answered and bringing handouts
6. helping the child know what they need help with
7. new ideas
8. visits and screenings
9. fantastic educator
10. the activities
11. realizing what is normal for the stages the girls are in
12. learning new activities to strengthen my granddaughter's weaknesses and helping build her skills
13. the teacher helps my child with what he really needs help with
14. activities, handouts, information
15. the setting of and working to reach various goals
16. the resources in my community to get as much help as we can
17. my child is tough at times but she helps advise me and different things to help us bond
18. bringing a new perspective and supporting our family to set goals
19. learning more about my child's development and what I should be doing

What could be improved about this program?

1. Offered to more Sedalia families
2. all the info is good
3. everything is good
4. for me, everything is perfect!

Additional Comments:

1. We enjoy the program!
2. thank you for the program
3. i like the visits and the activities with my children
4. i am very happy because I learned a lot from the program
5. the program is so helpful!
6. what a blessing to our family!

PETTIS COUNTY EARLY CHILDHOOD COOPERATIVE

2255 S. Ingram, Sedalia, Missouri 65301 Phone: 660-827-8955 Fax: 660-827-8957

GRACE KENDRICK
Principal

MEMBER DISTRICTS

Pettis Co. R-V
Hughesville, MO

LaMonte R-IV
LaMonte, MO

Smithton R-VI
Smithton, MO

Green Ridge R-VIII
Green Ridge, MO

Pettis Co. R-XII
(Dresden)
Sedalia, MO

Sedalia #200
Sedalia, MO

PROVIDING
SERVICES FOR

Early Childhood
Special Education
Title One Preschool

and

Parents As Teachers

MEMO

TO: Steve Triplett

FROM: Grace Kendrick

DATE: November 26, 2018

RE: Personnel

Due to the significant needs of the children who qualify for early childhood special education, I am requesting an additional para-educator position. DESE will fund this para-educator position with no cost to the district.

Please contact me if you have any questions.

Thank you.

Sedalia 200 School District, Missouri

RESOLUTION NO. _____

A RESOLUTION OF THE SEDALIA 200 SCHOOL DISTRICT ADOPTING THE PETTIS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION *PLAN*

WHEREAS the Sedalia 200 School District recognizes the threat that natural hazards pose to people and property within the Sedalia 200 School District; and

WHEREAS the Sedalia 200 School District has participated in the preparation of a multi- hazard mitigation plan, hereby known as the Pettis County Multi-Jurisdictional Hazard Mitigation Plan, hereafter referred to as the *Plan,* in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the *Plan* identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the Sedalia 200 School District from the impacts of future hazards and disasters; and

WHEREAS the Sedalia 200 School District recognizes that land use policies have a major impact on whether people and property are exposed to natural hazards, the Sedalia 200 School District will endeavor to integrate the *Plan* into the comprehensive planning process and

WHEREAS adoption by the Sedalia 200 School District demonstrates their commitment to hazard mitigation and achieving the goals outlined in the *Plan*

NOW THEREFORE, BE IT RESOLVED BY THE SEDALIA 200 SCHOOL DISTRICT, in the State of Missouri, THAT:

In accordance with (*local rule for adopting resolutions*), the Sedalia 200 School District adopts the final FEMA-*approved plan*.

ADOPTED by a vote of_____in favor and_____against, and_____abstaining, this_____day of _____,_____.

By (Sig): _____

Print name: _____

ATTEST:

By (Sig.): _____

Print name: _____

APPROVED AS TO FORM:

By (Sig.): _____

Print name: _____

1 ITRODUCTION AND PLANNING PROCESS

2 PLANNING AREA PROFILE AND CAPABILITIES

3 RISK ASSESSMENT

Executive Summary

The purpose of hazard mitigation is to reduce or eliminate long-term risk to people and property from hazards. Pettis County and participating jurisdictions and school/special districts developed this multi-jurisdictional local hazard mitigation plan update to reduce future losses from hazard events to the County and its communities and school/special districts. The plan is an update of a plan that was approved in 2011. The plan and the update were prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to result in eligibility for the Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance Grant Programs.

The Pettis County Multi-Hazard Mitigation Plan is a multi-jurisdictional plan that covers the following 13 jurisdictions that participated in the planning process:

- Pettis County
- City of Green Ridge
- City of Houstonia
- Village of Hughesville
- City of La Monte
- City of Sedalia
- City of Smithton
- Pettis Co. R-V School District
- Pettis Co. R-XII School District
- Green Ridge R-VIII School District
- La Monte R-IV School District
- Sedalia 200 School District
- Smithton R-VI School District

All local jurisdictions and school districts within Pettis County participate in the planning process.

Pettis County and the entities listed above developed a Multi-Jurisdictional Hazard Mitigation Plan that was approved by FEMA in February 2011 (hereafter referred to as the 2011 Hazard Mitigation Plan). This current planning effort serves to update that previously approved plan.

The plan update process followed a methodology prescribed by FEMA, which began with the formation of a Mitigation Planning Committee (MPC) comprised of representatives from Pettis County and participating jurisdictions. The MPC updated the risk assessment that identified and profiled hazards that pose a risk to Pettis County and analyzed jurisdictional vulnerability to these hazards. The MPC also examined the capabilities in place to mitigate the hazard damages, with emphasis on changes that have occurred since the previously approved plan was adopted. The MPC determined that the planning area is vulnerable to several hazards that are identified, profiled, and analyzed in this plan. Riverine and flash flooding, winter storms, severe thunderstorms/hail/lightning/high winds, and tornadoes are among the hazards that historically have had a significant impact.

Based upon the risk assessment, the MPC updated goals for reducing risk from hazards. The goals are listed below:

1. Protect the Lives and Livelihoods of all Citizens.
2. Ensure continued operation of government and emergency function in a disaster.

3. Preserve and maintain property, infrastructure, businesses, and jurisdiction vitality.

4. Manage growth through sustainable principles and practices

To advance the identified goals, the MPC developed recommended mitigation actions, which are detailed in Chapter 4 of this plan. The MPC developed an implementation plan for each action, which identifies priority level, background information, and ideas for implementation, responsible agency, timeline, cost estimate, potential funding sources, and more.

Prerequisites

This plan has been reviewed by and adopted with resolutions or other documentation of adoption by all participating jurisdictions and schools/special districts. The documentation of each adoption is included in Appendix C, and a model resolution is included on the following page.

The following jurisdictions participated in the development of this plan and have adopted the multi-jurisdictional plan:

- Insert when adopted

Model Resolution for Adoption

(LOCAL GOVERNING BODY/SCHOOL DISTRICT), Missouri RESOLUTION NO.___

A RESOLUTION OF THE (LOCAL GOVERNING BODY /SCHOOL DISTRICT) ADOPTING THE PETTIS COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

WHEREAS the (local governing body/school district) recognizes the threat that natural hazards pose to people and property within the (local governing body/school district); and

WHEREAS the (local governing body/school district) has participated in the preparation of a multijurisdictional local hazard mitigation plan, hereby known as the (plan name), hereafter referred to as the Plan, in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the Plan identifies mitigation goals and actions to reduce or eliminate long-term risk to people and property in the (local governing body/school district) from the impacts of future hazards and disasters; and

WHEREAS the (local governing body) recognizes that land use policies have a major impact on whether people and property are exposed to natural hazards, the (local governing body/school district) will endeavor to integrate the Plan into the comprehensive planning process; and

WHEREAS adoption by the (local governing body/school district) demonstrates their commitment to hazard mitigation and achieving the goals outlined in the Plan.

NOW THEREFORE, BE IT RESOLVED BY THE (LOCAL GOVERNMENT/SCHOOL DISTRICT), in the State of Missouri, THAT:

In accordance with (local rule for adopting resolutions), the (local governing body/school district) adopts the final FEMA-approved Plan.

ADOPTED by a vote of __ in favor and __ against, and __ abstaining, this day of__ ,_____.

By (Sig):_____
Print name:_____

ATTEST:
By (Sig.):_____
Print name:_____

APPROVED AS TO FORM:
By (Sig.):_____
Print name:_____

1 INTRODUCTION AND PLANNING PROCESS

1.1 Purpose

Every year in the United States, natural disasters take the lives of hundreds of people and injure thousands more. Nationwide, taxpayers pay billions of dollars annually to help communities recover from hazard events. Most disasters that occur are predictable and much of the damage caused by these events can be alleviated or even eliminated with proper planning.

The Pettis County Multi-Jurisdiction Natural Hazard Mitigation plan is an effort to reduce the impact of natural hazards on citizens and property, by outlining actions that will mitigate the hazards' effects and break the cycle of repetitive losses due to disasters. Hazard mitigation as defined by the Federal Emergency Management Agency (FEMA) is any action taken to eliminate or reduce the long-term risk to human life and property from natural and technological hazards. Because Missouri is prone to several types of natural disasters, mitigation planning becomes imperative in preventing human and economic loss. Hazard mitigation planning is the process through which hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set and appropriate strategies to lessen impacts are determined, prioritized and implemented.

Information in this plan will be used to help guide and coordinate mitigation activities and decisions for local land use policy in future development plans. Proactive mitigation planning will help reduce the cost of disaster response and recovery to the community and its property owners by protecting critical facilities, reducing liability exposure, and minimizing overall community impacts and disruption.

This plan is designed to provide a general blueprint for hazard mitigation activities and is structured to serve as the basis for specific hazard mitigation efforts for multiple hazards. The Pettis County mitigation plan complies with the State Emergency Management Agency and FEMA planning guidance; FEMA regulations, rules, guidelines and checklists; Code of Federal Regulations; and existing Federal and State laws; and such other reasonable criterion as the President/Governor, Federal/State congresses and SEMA/FEMA may establish in consultation with City/County governments while the plan is being developed.

This plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 (Public Law
106-390) and the implementing regulations set forth by the Interim Final Rule published in the Federal Register on February 26, 2002, (44 CFR §201.6) and finalized on October 31, 2007. (Hereafter, these requirements and regulations will be referred to collectively as the Disaster Mitigation Act). The regulations established the requirements for local hazard mitigation plans are in the Robert T. Stafford Disaster Relief and Emergency Act (Public Law 93-288)

1.2 Background & Scope

The Pettis County Natural Hazards Mitigation Plan documents Pettis County's hazard mitigation planning process, identifies relevant hazards and risks and outlines the strategy the County and participating jurisdictions will use to decrease hazard vulnerability and increase resiliency and

sustainability. This plan was updated in 2018, building off the framework of the 2011 versions of this plan.

Information in this plan will be used to help guide and coordinate mitigation activities and decisions for local land use policy in future development plans. Proactive mitigation planning will help reduce the cost of disaster response and recovery to the community and its property owners by protecting critical facilities, reducing liability exposure, and minimizing overall community impacts and disruption.

1.3 Plan Organization

- Chapter 1: Introduction and Planning Process
- Chapter 2: Planning Area Profile and Capabilities
- Chapter 3: Risk Assessment
- Chapter 4: Mitigation Strategy
- Chapter 5: Plan Implementation and Maintenance
- Appendices

Table 1.1

Changes Made in Plan Update	
Chapter 1	Changes made to timeline and representatives
Chapter 2	Changes made to capabilities of jurisdictions and ability to mitigate
Chapter 3	Updated statistics, reviewed hazards, added land subsidence/sinkholes
Chapter 4	Updated Mitigation Strategy to reflect capabilities of Jurisdictions
Chapter 5	Updated procedures of maintenance and implementation to reflect jurisdictions requirements.

1.4 Planning Process

Table 1.2

Jurisdictional Representatives Pettis County Mitigation Planning Committee		
Name	**Title**	**Jurisdiction/Agency/Organization**
Trisha Rooda	Emergency Management Director	Pettis County/City of Sedalia
Brent Hampy	Commissioner	Pettis County
Nathan Cooley	GIS Planner	Pioneer Trails RPC
Rodney Edington	Superintendent	Green Ridge R-VIII
Tom Durrill	Operator	City of Green Ridge
Mark Jackson	Deputy EM	Pettis County/City of Sedalia

1.4.1 Multi-Jurisdictional Participation

The Plan serves as a written document of the planning process. Active participation of local jurisdiction representatives and stakeholders in the hazard mitigation planning process is essential if the Plan is to have value. To be eligible for mitigation funding, local governments must adopt the FEMA-approved update of the Plan. The participation of the local government stakeholders in the planning process is considered critical to successful implementation of this plan. Each jurisdiction that is seeking approval for the Plan must have its governing body adopt the updated plan, regardless the degree of modifications. PTRPC collaborated with the local governments in Pettis County to assure participation in the planning process and the development of a plan that represents the needs and interests of Pettis County and its local jurisdictions. Appendix C contains resolutions for jurisdictions adopting the Plan. County Commissioners, incorporated communities, public school and special districts, and various other stakeholders in mitigation planning were invited to a kick-off meeting for the Plan update on June 23, 2016. At this meeting it was explained that the Disaster Mitigation Act (DMA) requires each jurisdiction participating in the planning process officially adopt the plan. The criteria for participation that each jurisdiction must meet in order to be considered a "participant" in the Plan was established at this meeting and include the following:

- Participation in at least two (2) MPC meetings, by either direct participation or authorized representation;
- Each participating jurisdiction must provide to the MPC sufficient information to support plan development by completion and return of Data Collection Questionnaires and validating/correcting critical facility inventories; μ Identification and Cost/Benefit Review of Mitigation Actions;
- Review and comment on plan drafts;
- Provide documentation to show time donated to the planning effort

In order to be included in the plan as a participating jurisdiction, each jurisdiction was required to send a representative to two (2) meetings and completion of data collection questionnaire as minimum requirements. If, however, a representative was not able to attend at least two meetings they were encouraged to arrange for a one-to-one meeting with PTRPC staff or contact the PTRPC office to obtain information presented at any of the planning meetings. Although not required, a set of standards for participation were developed in order for each jurisdiction to participate in the planning process and account for the variability of resources within each jurisdiction. This set of standards included; identifying and cost/benefit review of mitigation actions, reviewing and commenting on plan draft materials, and providing documentation to show time donated to the planning effort. Jurisdictions that met at least one (1) of the minimum requirements and any combination of additional three standards are considered to have satisfactorily participated in the planning process.

Table 1.4 shows the representation of each participating jurisdiction at the planning meetings and the provision of responses to the Data Collection Questionnaire. All jurisdictions 44 CFR Requirement §201.6(a)(3): Multi-jurisdictional plans may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. 1.6 participating in the Plan reviewed or commented on the draft Plan, participated in the update/development of mitigation actions, or documented the donation of time. Meeting sign-in sheets are located in Appendix B.

Table 1.3

Hazard Mitigation Planning Participation by Jurisdiction							
Jurisdiction	Kick-off Meeting	Meeting #2	Meeting #3	Meeting #4	Meeting #5	Data Questionnaire Completed	Update/Develop Mitigation Actions
Pettis County	X	X	X	X		X	
City of Green Ridge		X	X	X		X	
City of Houstonia		X	X			X	
Village of Hughesville		X	X				
City of La Monte		X		X		X	
City of Sedalia	X	X	X	X		X	
City of Smithton						X	
Green Ridge R-VIII			X	X		X	
La Monte R-IV							
Pettis Co. R-V		X		X		X	
Pettis Co. R-XII		X				X	
Sedalia 200	X	X	X			X	
Smithton R-VI		X	X			X	

1.4.2 Planning Steps

FEMA's Local Mitigation Planning Handbook (March 2013), Local Mitigation Plan Review Guide (October 1, 2011), and Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials (March 1, 2013) were used as the source for developing the Plan update Process. The development of the plan followed the 10-step planning process adapted from FEMA's Community Rating System (CRS) and Flood Mitigation Assistance programs. The 10-step process allows the Plan to meet funding eligibility requirements of the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, Community Rating System, and Flood Mitigation Assistance Program. Table 1.5 shows how the CRS process aligns with the Nine Task Process outlined in the 2013 Local Mitigation Planning Handbook.

Following Table 1.5 is a summary of how PTRPC staff used the Nine Task Process to develop the update to the Plan

Table 1.4

Pettis County Mitigation Plan Update Process	
Community Rating System (CRS) Planning Steps (Activity 510)	**Local Mitigation Planning Handbook Tasks (44 CFR Part 201)**
Step 1. Organize	Task 1: Determine the Planning Area and Resources

	Task 2: Build the Planning Team 44 CFR 201.6(c)(1)
Step 2. Involve the public	Task 3: Create an Outreach Strategy 44 CFR 201.6(b)(1)
Step 3. Coordinate	Task 4: Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Step 4. Assess the hazard	Task 5: Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
Step 5. Assess the problem	
Step 6. Set goals	Task 6: Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i); 44 CFR 201.6(c)(3)(ii); and 44 CFR 201.6(c)(3)(iii)
Step 7. Review possible activities	
Step 8. Draft an action plan	
Step 9. Adopt the plan	Task 8: Review and Adopt the Plan
Step 10. Implement, evaluate, revise	Task 7: Keep the Plan Current
	Task 9: Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

Step 1: Organize the Planning Team (Handbook Tasks 1 & 2)

In March 2017, PTRPC entered into cooperative agreements with SEMA and Pettis County to prepare this multi-jurisdictional plan for public entities in Pettis County. Discussions on the development of the Pettis County Multi-Jurisdictional Natural Hazard Mitigation Plan began in August 2017 with an introductory scoping meeting attended by PTRPC staff. This meeting was conducted to discuss the timeline for developing the hazard mitigation plan, the planning process, identification of stakeholders and community organizations to include in the planning process and a date for the kick-off meeting for October 11, 2017 to initiate participation of jurisdictions and public entities in the planning process. The PTRPC staff identified prospective participant representatives and stakeholders and a contact list was prepared for mailing an invitation letter to the kick-off Meeting. The list of invitees included local elected officials, municipal government staff, county government staff, emergency services personnel, public school administrators, members from health and social services organizations, and volunteer organizations. A complete list of invitees is in Appendix D.

The MPC met on several occasions from August 2017 through February 2018 to collaborate on the development of the Plan update. Participants assisted in data collection; reviewed and revised the Plan's goals, objectives and mitigation strategies; and provided reviews and comments on the Plan throughout the update process. Communication with MPC members occurred throughout the planning process through face-to-face meetings, phone interviews, and email correspondence in addition to committee meetings. Table 1.6 shows the meeting schedule and items discussed for MPC meetings.

Table 1.6

Schedule of Hazard Mitigation Meetings		
Meeting	**Topic**	**Date**
Informational Meeting	· Prospective participants and stakeholders identified, contact list to be prepared.	8/2017

	· Schedule Kick-Off Meeting, date, time, and location. · Draft invitation letters	
Kick-off Meeting	· Raising awareness for mitigation strategy/ increase countywide preparedness to natural hazards · The Disaster Mitigation Act of 2000 · Mitigation Planning Process · Local Plan Participation · Project Timeline	10/11/2017
Planning Meeting #2	· Reviewed the resources available in Pettis County as well as hazard identification. · The third phase of the hazard mitigation process was also introduced and discussed. · Discuss actions that were accomplished in regards to hazard mitigation and what goals need to be introduced or revised	11/7/2017
Planning Meeting #3	· Reviewed Questionnaires. · Answered question regarding definitions in mitigation plans. · Discussed actions completed and revised sections.	12/5/2017
Planning Meeting #4	· Reviewed Questionnaires. · Reviewed hazard mitigation plan draft. · Reviewed jurisdiction resolutions · Answered questions regarding resolutions	1/9/2018

Step 2: Plan for Public Involvement (Handbook Task 3)

It was determined meeting dates and invitations would posted on the PTRPC website along with drafts of the Plan for public comment during the drafting stage and prior to submission of the Plan to SEMA for approval. A final draft of the Plan was posted on the PTRPC website on February 10, 2017 prior to being submitted to SEMA for approval.

It was also discussed at the kick-off meeting that informal solicitation of public input would be sought by members of the MPC through announcements at gatherings and other public meetings, such as board of alderman and local emergency planning committee meetings. This plan for public involvement did not result in any public comment on the Plan. The reasons for lack of public comment are likely due to lack of effectiveness of legal notices and web postings.

The MPC also decided to use a public survey to get more response from the public. The survey was distributed to all jurisdictions to make available to their residents. An online survey was also made available through SurveyMonkey and a link then posted on the county web site and Pettis Co. EMA social media pages. Eighty-eight survey responses were collected via SurveyMonkey. Paper surveys that were received from the public totaled 124.

The following tables show survey responses and other comments. A copy of the public survey is included in Appendix ?.

	Jurisdiction	Pettis Co R-XII																																							
Likelihood	Flooding	1	2	2	2	3	2	2	2	3	3	3	3	2	2	2	2	2	2	3	2	3	2	2	4	1	3	1	2	3	2	3	3	2	4	3	2	3	4	3	2	3
	Dam failure	1	1	1	1	1	1	1	1	1		2	2	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1
	Earthquake	2	1	1	1	1	3	1	1	1	1	1	3	2	2	2	1	3	2	1	1	3	2	1	1	1	2	2	1	2	3	2	2	1	1	1	1	1	2	1	2	2
	Sinkholes	1	1	1		1	1	1	1	1	1	1		1	2	2	1	2	2	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1
	Drought	2	2	1	1	2	2	2	2	2	2	3	3	4	2	4	2	3	4	1	1	1	2	1	3	1	3	4	1	2	3	3	2	2	1	3	1	2	1	3	2	2
	Extreme Temps	2	2	3	3	2	2	2	2	4	4	3	3	4	3	3	3	3	3	2	1	3	2	2	3	1	2	4	2	3	4	4	3	1	4	3	2	3	4	2	4	2
	Severe Tstorm	3	4	3	4	4	4	4	2	4	4	4	4	4	3	4	4	2	4	4	4	4	4	3	3	1	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	3
	Severe Winter	3	3	2	3	3	4	2	2	4	4	5	4	4	3	4	4	3	4	2	2	4	2	2	3	1	4	2	3	4	4	4	3	4	4	4	2	3	3	2	4	2
	Tornadoes	3	2	2	4	3	4	3	2	4	4	4	4	4	3	4	3	4	4	3	3	4	4	3	4	2	3	4	2	4	4	4	4	3	4	4	3	3	4	3	4	2
	Wild Fire	3	1	1	1	1	2	1	1	1	1	1	3	1	2	1	1	1	1	1	3	1	1	2	1	1	2	1	1	1	1	1	1	1	4	2	1	1	2	1	1	1
Potential Magnitude	Flooding		2	2	2		1	2	1	1	2	3	1	2	2	3	2	2	3	4	3	3	3	2	4	3	2	2	3	2	3	2	3	2	3	2	1	3	2	4	2	2
	Dam failure			1	1		1	1	1	1	2	3	2	1	1	1	2	2	1	3	1	1	2	1	1	2	1	1	3	1	1	1	2	1	1	1	1	4	2	1	1	1
	Earthquake			1	1		3	1	1	1	1	1	2	2	2	4	2	3	4	4	2	3	3	1	1	3	2	2	4	2	2	2	2	1	1	1	1	2	1	1	2	2
	Sinkholes			1	1		1	2	1	1	1	1	2	1	2	3	2	2	3	3	2	1	2	2	1	2	2	1	1	2	2	1	2	1	1	1	1	2	1	1	1	1
	Drought			1	1		2	2	1	2	2	3	2	4	2	4	2	3	4	4	2	1	3	3	3	3	2	4	3	2	3	3	3	2	3	1	1	3	1	4	2	3
	Extreme Temps			3	3		2	2	2	3	3	4	2	4	2	4	1	3	4	4	2	3	3	2	2	3	2	3	2	2	3	3	3	2	3	1	2	3	3	4	2	2
	Severe Tstorm		3	4	3		4	3	2	4	3	4	2	4	3	3	2	2	3	3	3	3	3	3	3	3	3	2	2	3	4	3	4	3	3	2	2	2	1	3	2	3
	Severe Winter		1	2	3		3	2	2	4	3	3	2	4	3	4	2	3	4	2	3	3	3	2	3	3	3	3	2	3	4	3	3	2	3	2	2	3	4	4	2	2
	Tornadoes		4	4	3		4	4	2	4	3	4	4	4	3	4	3	4	4	3	3	3	4	3	4	3	3	3	3	3	4	4	4	3	4	4	2	3	4	3	3	2
	Wild Fire			1	1		2	1	1	1	1	1	4	1	2	1	2	1	1	2	1	1	2	1	1	1	2	2	4	1	3	1	1	1	4	1	1	4	1	3	1	2

Pettis Co. R-XII COMMENTS:
-- more knowledgeable to community on shelters/ when open/ when to seek shelter
--schools have mass text; why can't tornadoes be mass texted to community
--ensure adequate warning systems are in place in all areas, so people have enough warning in case of emergency
-- Department stores built with safe rooms

	Jurisdiction	Green Ridge																																																
Likelihood	Flooding	2	2	1	1	2	3	1	2	2	2	2	1	1	1	3	1	1	3	1	1	2	4	1	2	1	3	4	3	1	2	2	1	3	2	2	2	1	2	1	4	1	1	1	3	2	3	3	1	1
	Dam failure	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Earthquake	4	1	1	1	1	3	1	3	1	2	2	2	2	2	2	1	2	1	3	2	2	1	2	2	3	2	1	1	1	1	2	1	2	1	1	1	3	1	2	1	1	2	2	1	3	2	1	1	1
	Sinkholes	4	2	1	1	1	2	1	1	1	1	2	1	2	1	3	1	2	1	1	2	1	2	2	1	1	2	1	1	1	1	2	2	1	1	1	1	2	2	2	1	2	2	1	1	2	1	1	1	1
	Drought	4	4	1	1	2	3	1	2	2	4	2	3	4	4	3	2	3	4	4	2	2	2	3	3	3	4	2	2	3	3	3	2	4	2	2	2	4	3	4	2	2	3	4	3	3	2	1	1	2
	Extreme Temps	4	3	1	2	3	3	2	3	2	4	3	3	4	2	3	2	2	4	4	1	2	3	4	4	4	2	2	3	2	3	2	2	4	2	2	1	4	3	4	2	2	3	4	3	1	3	2	2	3
	Severe Tstorm	4	4	2	4	4	4	3	4	4	4	3	3	4	4	3	2	4	4	4	3	4	4	4	4	4	4	3	3	4	3	4	4	4	2	2	3	4	4	4	4	3	3	4	3	3	4	3	2	4
	Severe Winter	4	3	2	2	3	4	2	3	2	4	2	3	4	4	4	2	3	3	4	3	4	4	4	4	4	4	3	3	3	3	4	4	4	3	2	3	4	4	4	4	3	3	4	2	1	3	3	2	3
	Tornadoes	4	3	2	4	4	4	2	4	2	3	2	3	4	4	3	2	4	3	4	2	4	4	3	3	4	4	3	3	2	4	4	4	4	3	2	3	3	4	3	2	3	4	4	3	4	4	2	2	3
	Wild Fire	2	2	1	1	1	2	1	1	1	1	1	1	2	1	3	1	2	2	1	1	1	1	3	1	1	3	1	2	1	1	1	1	2	1	1	1	1	2		1	2	2	3	1	1	1	1	1	1
Potential Magnitude	Flooding	2	2	1	2	2	3	1	2	2	1	1	1	2	1	3	1	1	3	1	1	2	2	1	2	1	2	2	1	3	3	2	1	2	2	2	2	1	2	1	2	3	2	1	2	2	2	2	1	1
	Dam failure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Earthquake	1	4	1	2	1	2	1	2	1	2	2	2	3	2	4	1	2	2	2	1	2	1	3	1	2	2	1	2	1	1	2	2	2	1	1	1	3	1	2	1	1	2	2	1	2	2	1	3	2
	Sinkholes	4	2	1	1	1	2	1	2	1	2	2	1	2	1	4	1	2	3	2	2	1	1	1	2	1	3	1	2	1	1	2	2	1	1	1	1	2	2	2	1	1	2	1	1	2	1	1	1	2
	Drought	4	3	1	1	3	3	1	2	2	3	2	3	4	3	3	2	3	3	3	2	2	1	4	3	3	3	2	2	2	3	3	3	4	2	2	2	3	3	3	2	2	2	4	2	2	3	1	3	3
	Extreme Temps	4	1	1	2	3	3	2	2	2	3	2	3	4	3	3	2	2	3	3	1	2	1	4	3	3	3	2	2	2	3	3	3	4	2	2	2	3	3	3	2	2	3	4	3	2	2	2	3	3
	Severe Tstorm	4	2	2	4	3	4	3	3	3	4	3	3	4	3	3	2	3	3	3	2	3	3	4	3	3	3	2	3	3	3	3	4	4	3	3	3	3	3	3	3	3	3	4	3	3	4	3	4	3
	Severe Winter	4	2	2	2	3	4	3	3	2	4	3	3	4	3	3	2	3	3	3	3	3	2	4	3	3	3	2	2	3	2	4	4	4	2	2	3	3	3	3	3	3	2	4	2	2	2	3	4	3
	Tornadoes	4	4	2	4	4	4	3	3	3	4	3	3	4	4	4	2	4	4	4	4	4	3	4	3	4	4	2	3	4	3	4	4	4	2	2	4	4	4	4	2	3	3	4	3	3	4	3	4	4
	Wild Fire	4	3	1	1	1	2	1	1	1	2	2	1	2	1	3	1	2	4	1	1	1	1	3	1	1	1	1	2	1	2	1	1	2	1	1	1	2	3	1	1	2	2	3	1	2	2	1	2	2

Green Ridge Comments:
--power & obstruction free roads; city can maintain its self from most events
--Would like to see planning for natural disaster response done with the community for those who want to help in case of an event.
--Tornado shelter LEAKS

	Jurisdiction	La Monte	Hughesville														Smithton R-VI																				Monkey	Average
Likelihood	Flooding	2	1	1	1	1	2	1	2	1	4	1	1	1	1	1	4	4	4	4	1	1	3	2	3	2	3	1	2	4	4	1	3	1	2	2.3	**2.5**
	Dam failure	1	1	1	1	1	1	1	1	1	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1.1	**2.3**
	Earthquake	1	2	2	1	4	2	3	1	2	1	2	3	1	2	3	2	2	1	1	3	1	1	1	2	1	1	1	1	1	4	1	2	1	1	1.9	**3.0**
	Sinkholes	1	2	1	1	4	2	1	1	2	1	2	1	1	1	2	1	1	1	1	1	1	4	1	1	2	1	1	1	2	2	1	1	1	2	1.7	**2.7**
	Drought	2	1	3	3	4	2	3	4	3	2	2	2	3	4	3	3	3	3	4	1	1	3	2	3	3	3	2	3	2	3	1	3	2	2	2.8	**3.0**
	Extreme Temps	3	3	3	1	4	3	2	3	3	2	3	2	4	4	4	4	2	3	4	1	1	4	2	4	3	3	3	1	2	4	2	3	2	2	3.4	**1.9**
	Severe Tstorm	4	4	4	4	4	3	3	4	4	3	4	3	4	4	4	4	4	4	4	4	4	3	4	2	4	2	4	4	2	4	4	2	4	2	3	3.7	**3.5**
	Severe Winter	4	4	4	4	4	3	2	4	4	3	4	3	4	4	4	3	2	3	4	2	2	4	1	4	2	4	4	2	4	4	2	4	2	2	3.4	**2.2**
	Tornadoes	3	3	3	4	4	3	3	4	4	2	4	4	4	4	4	2	3	4	4	2	3	3	2	3	2	4	3	2	4	4	2	4	2	2	3.9	**1.7**
	Wild Fire	1	1	1	1	1	1	1	1	2	2	2	1	2	1	3	1	2	1	2	1	1	2	1	3	1	4	1	1	1	3	1	3	2	1	2	**1.9**
Potential Magnitude	Flooding	2	1	3	2	1	2	1	2	1	1	2	1	3	1	1	2	2	3	2	3	1	1	1	3	2	3	1	2	4	3	3	2	1	2	2	**2.4**
	Dam failure	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	2	1	1	4	1	3	4	1	1	1.2	**2.1**
	Earthquake	1	2	2	3	4	1	4	4	2	4	2	2	3	2	2	2	3	1	2	2	1	2	1	2	2	1	1	1	4	4	4	4	1	1	2.3	**2.8**
	Sinkholes	1	2	2	1	4	2	2	1	2	4	2	1	3	1	2	1	3	2	2	1	1	4	1	1	2	1	1	1	2	1	2	4	1	2	1.9	**2.6**
	Drought	2	1	3	2	4	2	2	4	3	4	3	2	2	4	2	2	3	4	3	3	1	4	1	4	3	3	2	1	4	3	1	3	2	1	2.7	**3.2**
	Extreme Temps	3	3	3	2	4	3	2	2	3	4	3	2	2	3	1	2	2	1	2	3	1	3	1	3	2	2	1	1	3	3	3	2	2	1	2.9	**2.0**
	Severe Tstorm	4	4	4	3	4	3	3	3	4	3	4	3	3	4	3	2	1	1	3	4	3	3	1	4	2	2	3	2	3	4	2	1	2	3	2.7	**2.9**
	Severe Winter	4	4	4	2	4	3	2	2	4	3	4	3	3	4	3	1	1	2	3	2	3	4	1	4	3	3	3	2	4	4	3	2	2	1	3	**2.9**
	Tornadoes	3	3	4	3	4	3	4	4	4	4	4	4	4	4	3	4	4	4	4	4	3	4	4	3	3	4	3	2	4	4	4	3	3	2	3.9	**3.6**
	Wild Fire	1	1	2	2	1	1	2	3	2	4	3	1	4	1	2	4	4	3	3	3	3	3	1	3	2	4	1	1	2	4	4	3	2	1	2.1	**2.4**

Hughesville Comments:
- improve law enforcement system
-Tornado site at the school always had water standing in it. I feel the hazard is more from that than the tornado. Fix existing on and we should be fine.
-water/sewer lines old & cannot find

Smithton R-VI Comments:
- bigger storm shelters so they can hold larger amount of people in dangerous situations
- People to collect large limbs after a disaster event

Step 3: Coordinate with Other Departments and Agencies and Incorporate Existing Information (Handbook Task 3)

As stated in Section 1.4, neighboring communities, businesses, academia, and other non-profit interests were notified via email and letters, a notification was sent to adjacent county Emergency Management Directors, Chambers of Commerce, local and regional agencies, such as; OACAC, Health Departments, American Red Cross, Ambulance Districts, and the University of Missouri Extension office. A complete listing of agencies invited to participate in the planning process and what meetings they were invited to attend is included in Appendix D.

Coordination with FEMA Risk MAP Project

There was no coordination with FEMA RiskMAP projects during the update of this plan, as any ongoing efforts were unknown

Integration of Other Data, Reports, Studies, and Plans

A significant amount of information has been updated and revised based on the review of existing plans, studies, and reports. A few examples of information included are as listed below, a complete list of references can be found in Appendix A.

- Pettis County Emergency Operations Plan
- 2013 Missouri State Hazard Mitigation Plan
- State department of Natural Resources (DNR)
- National inventory of Dams (NID)
- Missouri Department of Conservation (MDC)
- Local comprehensive plans μ Economic Development Plans
- US Department of Agriculture (USDA)

Step 4: Assess the Hazard: Identify and Profile Hazards (Handbook Task 5)

At the third MPC meeting profiles of identified hazards from the 2010 Plan were presented. Storm event data from the National Climatic Data Center for the five year period since the adoption of the 2010 Plan were included in the hazard profiles. The presentation incorporated data from studies, reports, and technical information available through internet research. During the process of identifying hazards the MPC reviewed:

- Previous disaster declarations in the county
- Hazards in the most recent State Hazard Mitigation Plan
- Hazards identified in the previously approved hazard mitigation plan.

The MPC was asked to prioritize the identified hazards based on probability of occurrence, human impact, property impact, and likely functional downtime of facilities and businesses. Additional information about the conclusions drawn at this meeting can be found in the Risk Assessment chapter of the Plan.

Step 5: Assess the Problem: Identify Assets and Estimate Losses

Identified assets in the planning area include population, structures, critical facilities and infrastructure, and other important assets that may be at risk to hazards. The inventory of assets for each jurisdiction was derived from parcel data from the Pettis County Assessor, the Pettis County Structures dataset, local jurisdiction data collection questionnaires, and HAZUS MH 2.2. Potential losses to existing development were estimated based on hazard event scenarios. In most cases the county assessor's appraised improved values were used to estimate structure losses in impacted areas for structure occupancy types. The methodology for estimating losses varies by hazard. Loss estimates are included in each hazard profile of the Risk Assessment chapter.

Step 6: Set Goals (Handbook Task 6)

The MPC conducted a discussion session during their second meeting to review and update the Plan goals. To ensure that the goals developed for this update were comprehensive and supported State goals, the 2013 State Plan goals were reviewed. The MPC also reviewed the goals from current surrounding county plans.

In the 2011 Plan, the organization of the actions included broad goals and a set of objectives linking the actions to the goals. The MPC opted to keep the goals from the 2011 Plan. The plan updates goals and objectives area as follows:

Goal 1: Protect the lives and livelihoods of all citizens.

- Objective 1.1 – Provide sufficient warning systems
- Objective 1.2 -- Decrease the occurrence and impact of flooding
- Objective 1.3 – Increase knowledge of safety measures among employers and the general public

Goal 2: Manage growth through sustainable principles and practices.

- Objective 2.1 – Reduce and prevent degradation of, or conflicts with, natural resources

Goal 3: Ensure continued operation of government and emergency functions during and after a disaster.

- Objective 3.1 – Strengthen critical structures and infrastructure
- Objective 3.2 – Strengthen multi-jurisdictional cooperation among emergency agencies

Goal 4: Preserve and maintain property, infrastructure, business, and jurisdiction vitality.

- Objective 4.1 – Reduce or prevent impacts from hazards on private property
- Objective 4.2 – Reduce or prevent impacts from hazards on public property

Step 7: Review Possible Mitigation Actions and Activities

The focus of the MPC meeting on December 5, 2017 was update of the mitigation strategy. For a comprehensive range of mitigation actions to consider, the MPC reviewed the following information during the meeting:

- A list of actions proposed in the previous mitigation plan, the current State Plan, and approved plans in surrounding counties,

- Key issues from the risk assessments, including the Problem Statements concluding each hazard profile and vulnerability analysis,

- State priorities established for Hazard Mitigation Assistance grants, and input during meetings, responses to Data Collection Questionnaires.

Jurisdiction representatives on the MPC were encouraged to review the details of the risk assessment vulnerability analysis specific to their jurisdiction. They were also provided a link to the FEMA's publication, Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards (January 2013). This document was developed by FEMA as a resource for identification of a range of potential mitigation actions for reducing risk to natural hazards and disasters.

Step 8: Draft an Action Plan

At the final MPC meeting on January 9, 2018 all proposed actions were subjected to a cost/benefit review using a modified STAPLEE scoring method. The STAPLEE scoring method is discussed in the Mitigation Strategy chapter. The method was used to develop a priority score for proposed actions. Several lower scoring actions were discarded. This meeting also included action worksheets to clarify what department or position would be responsible for implementing the action, potential funding sources, timeline, and local planning mechanisms for implementation. The action plans are listed for each jurisdiction in the Mitigation Strategy chapter.

Step 9: Adopt the Plan (Handbook Task 8)

Once the Plan is approved by SEMA and FEMA then the governing body of each jurisdiction must adopt the plan by resolution to be eligible for hazard mitigation assistance. Adoption resolutions will be collected and submitted with the final plan to SEMA and FEMA. Adoption resolutions are included in Appendix C.

Step 10: Implement, Evaluate, and Revise the Plan (Handbook Tasks 7 & 9)

At the final MPC meeting on February 8, 2016 the MPC developed and agreed upon an overall strategy for plan implementation and for monitoring and maintaining the plan over time. The overall strategy has been updated and is presented in the Plan Maintenance chapter.

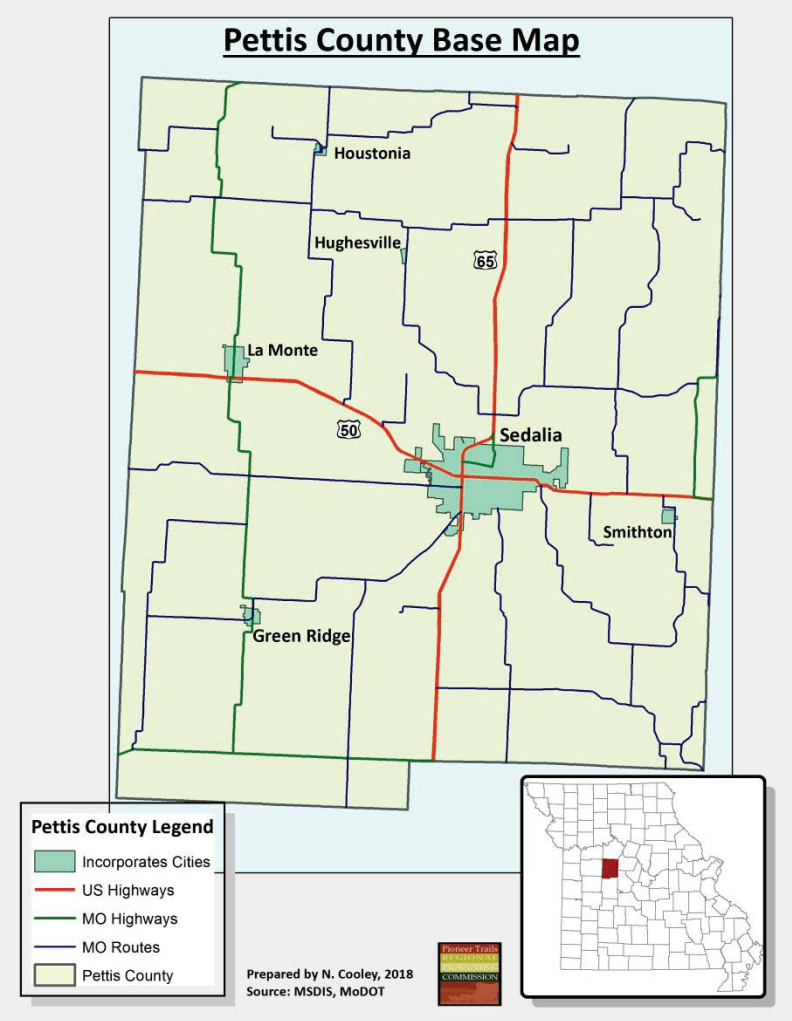
2.1 Pettis County Area Profile

Pettis County is located in west central Missouri and is a neighbor to seven other counties. Population in Pettis County is 42,213, according to 2016 Census Bureau estimates. This estimate is 12 residents since the 2010 Census. Population has gained 2810 people, +0.067%, since the 2000 census when 39,403 people resided in Pettis County. This is compared to the population growth of Missouri of 7% and the United States of 9.7% during the same time period.

The 2015 American Community Survey 5-Year Estimate (ACS), puts Pettis County's median household income at 39,928 in 2015. The 2000 Census shows a median household income for Pettis County to be 31,822. The increase for median household income, $8010, is a 20.3% increase from the 2000 census.

The average estimated home value in Pettis County is $101,400, according to the 2015 ACS. Compared to the average home value in Missouri, $138,400, Pettis County's average home value is 26.78% lower than that of Missouri and 43.67% lower than the national estimated home value of $176,400. Home values have increased from $93,200 in 2010, to the current average $101,400, an 8.07% increase.

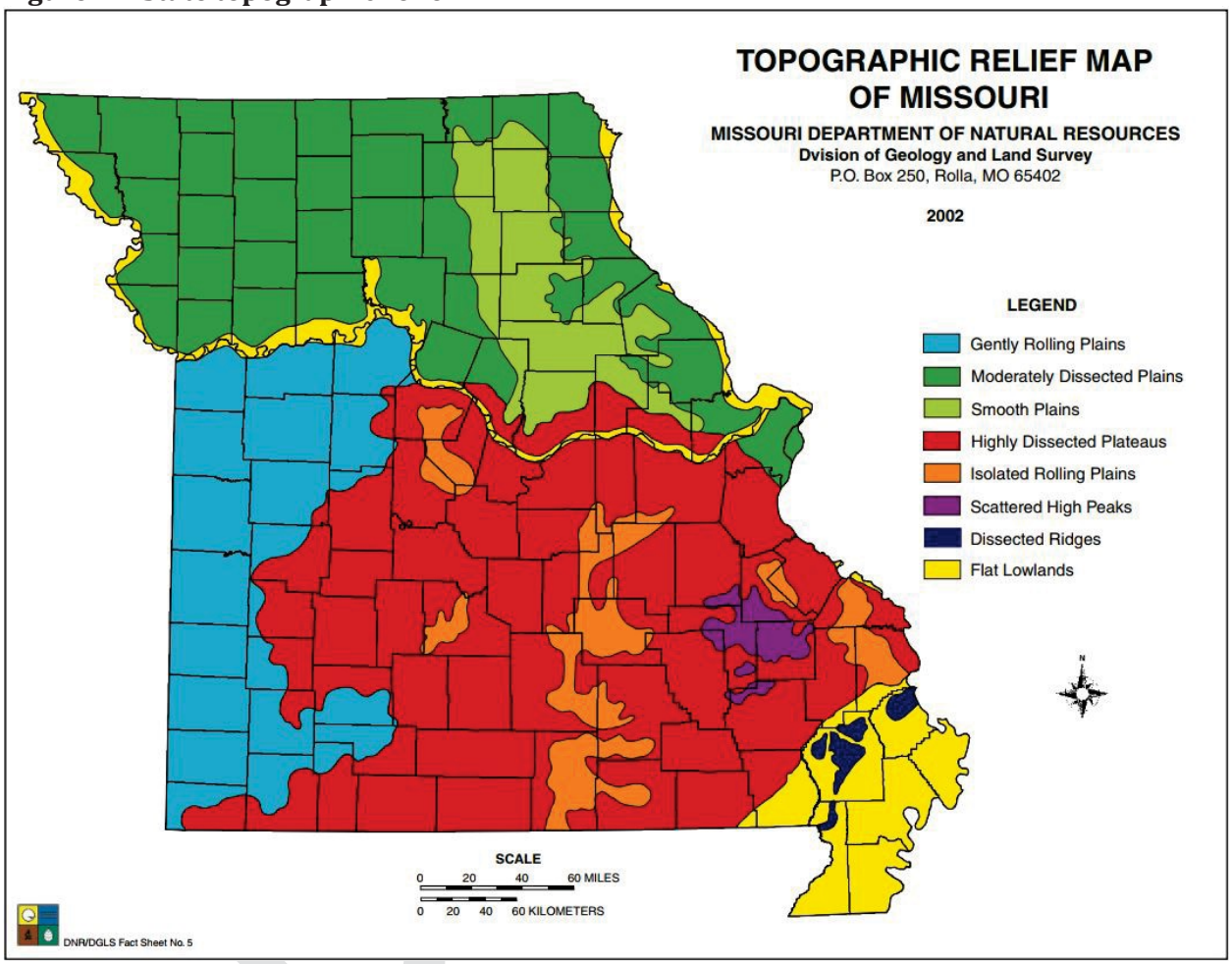
Figure 2.1 Pettis County Base Map



2.1.2 Geography, Geology and Topography

Pettis County encompasses 682.22 square miles in the rural part of Missouri, 45mi to the east of Kansas City and 20mi south of the Missouri River, and averages 61.9 people per square mile in 2010. The largest populated area within Pettis County is Sedalia.

Figure 2.2 State topographic relief



Soils

There are a total of seven soil associations in Pettis County including the Dockery-Tangle nookLamine Association, Pershing-Green ton-Dockery Association, Hartwell Association, BluelickGoss-Pembroke
Association, Maplewood=Paintbrush-Eldon Association, Arispe-MacksburgGreenton Association, Eldon=Paintbrush=Bahner Association.

The Dockery-Tanglenook-Lamine Association landscape association consists of flood plains along streams that dissect the county. This association makes up about 3 percent of the county. It is about 48 percent Dockery soidl, 22 percent Tanglenook and similar soils, 18 percent Lamine soils and 12 percent minor soils. Dockery soils are somewhat poorly drained. They are on flood plains adjacent

ot stream channels. Thanglenook soil are poorly drained. They are on high stream flood plains few feet higher than the adjacent bottom land. Lamine soils are somewhat poorly drained. They are on high stream flood plains a few feet high that the adjacent bottom land.

Pershing-Greenton-Dockery Association landscape consists of branching ridge tops with sloping areas between them that form the beginnings of a dissected drainage pattern. This association makes up about 6 percent of the county. It is about 32 percent Pershing and similar soils, 22 percent Greenton and similar soils, 11 percent Dockery soils, and 35 percent minor soils. Pershing soils are gently sloping and moderately sloping. They formed in loess. They are on ridge tops, side slopes and foot slopes. Greenton soils are moderately sloping and strongly sloping. They formed in a thing mantle of loess underlain by shale and limestone residuum. They are on side slopes. Dockery soils are nearly level. They formed in alluvium. They are on flood plains.

Hartmwell Association landscape consists of long, brnachning ridge tops and extremely long side slopes that are very gently sloping. Foot slopes below the side slopes are adjacent to small flood plains that converge downward in the landscape toward larger streams. This association makes up about 15 percent of the county. Ti is about 84 percent Hartwell soils and 16 percent minor soils; Hartwell soils are on ridge tops, side slopes and foot slopes.

Bluelick-Goss-Pembroke Association landscape consists of long main ridge tops with numerous lateral side ridges sloping areas between the side ridges. The ridge tops begin a branching pattern of drainage that converges to form small drainage ways connecting with larger streams. Strongly sloping to steep areas with prominent drainage patterns border these bottomland areas. This association makes up about 19 percent of the county. It is about 25 percent Bluelick soils, 22 percent Goss and similar soils, 20 percent Pembroke soils, and 33 percent minor soils. Bluelick soils are gently sloping to strongly sloping. They are comprised of loess in the underlying cherty limestone residuum. They are on ridge tops and side slopes. Goss Soils are moderately steep and steep. They formed in cherty limestone or dolomite residuum. They are on side slopes. Pembroke soils are gently sloping to strongly sloping. They formed in loess. They are on ridge tops, side slopes and foot slopes.

Maplewood-Paintbrush-Eldon Association landscape consists of long main ridge tops with numerous lateral side ridges separated by long side slopes and narrow banking drainage ways. This association makes up about 18 percent of the county. It is about 28 percent Maplewood and similar soils, 26 percent paintbrush and similar soils, 12 percent Eldon and similar soils, and 34 percent minor soils. Maplewood soils are gently sloping and are somewhat poorly drained. They formed in loess and in the underlying cherty limestone and dolomite residuum. They are one ridge tops and side slopes. Eldon soils are moderately sloping and strongly clopping and are well drained. They formed in cherry limestone and dolomite residuum. They are on side slopes.

Arispe-Macksburg-Greenton Association landscape consists of long, broad, branching main ridges with numerous lateral side ridges. Long, concave side slopes between the main ridges begin a pattern of branching drainage that converges to form small flood plains. This association makes up about 32 percent of the county. It is about 52 percent Arispe soils, 25 percent Macksburg soils, 11 percent Greenton Soils, and 12 percent minor soils. Macksburg soils are gently sloping. They formed in loess. They are on ridge tops. Greenton soils are gently sloping and moderately sloping. They formed in a thing mantle of loess and in the underlying limestone and shale residuum. They are on side slopes.

Eldon-Paintbrugh-Bahner Association The landscape of this association consists of long main ridge tops with numerous lateral side ridges. Sloping areas between the side ridges begin a branching pattern of drainage that converges to form small flood plains adjacent to larger streams. Strongly-sloping to steep areas with prominent drainage patterns border these bottomland areas. This association makes up about 7 percent of the county. It is about 48 percent Eldon and similar soils, 20 percent Paintbrush soils, 10 percent Bahner soils, and 22 percent minor soils. Eldon soils are moderately sloping and strongly sloping and are well drained. They are on side slopes. Paintbrush soils are gently sloping and moderately sloping and are moderately well drained. They are on ridge tops and side slopes. Bahner soils are gently sloping and moderately sloping and are moderately well drained. They are on ridge tops and side slopes

2.1.3 Climate

National Center for Environmental Information data shows Pettis County having a moderate climate where average high temperatures range from 41F, winter, to 86F degrees in the summer. July averages the warmest temperature at 87 degrees. January's average high temperature of 38 degrees makes if the coldest month of the year. Average low temperatures range from 18 to 66 degrees.

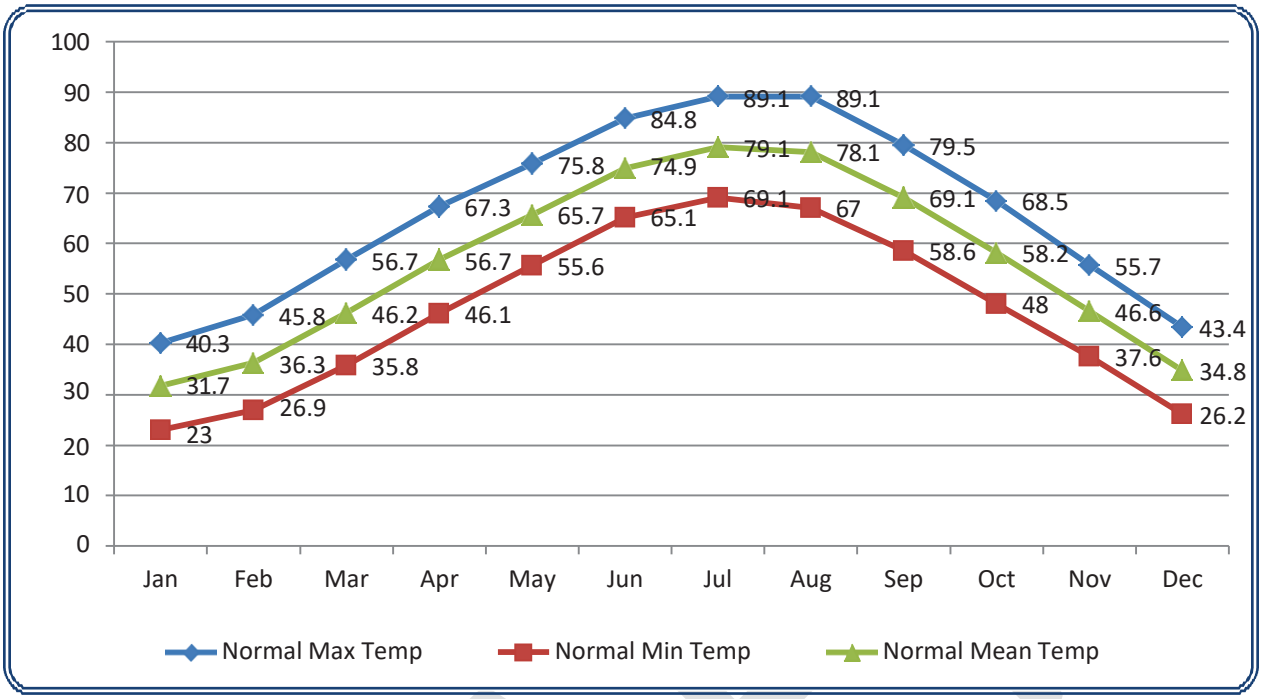
Annual precipitation in Pettis County on average is 44.3 inches. Eighty-six percent of the annual precipitation falls in the form of rain with the summer season averaging the most, 14.36 in, or 36% of the total. Winter precipitation averages 6.1 inches.

*As of this writing (12.7.2017) the data on climate is the most recent data available to us from the website (http://cdo.ncdc.noaa.gov/cgi-bin/climatenormals/climatenormals.pl) which is from 1981-2010 when future data becomes available to us we will implement it in future updates to this plan.

Table 2.1

NCEI Monthly Normal for Sedalia, Pettis County, 1981-2010													
Month:	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Normal Max Temp (OF)	40.3	45.8	56.7	67.3	75.8	84.8	89.1	89.1	79.5	68.5	55.7	43.4	66.4
Normal Min Temp	23	26.9	35.8	46.1	55.6	65.1	69.1	67	58.6	48	37.6	26.2	46.7
Normal Mean Temp	31.7	36.3	46.2	56.7	65.7	74.9	79.1	78.1	69.1	58.2	46.6	34.8	56.5
Normal Precipitation (in)	1.67	1.93	2.61	4.25	4.69	5.09	4.21	3.49	4.11	3.64	3.1	2.32	41.11

Source: http://mrcc.isws.illinois.edu/CLIMATE/Station/Monthly/StnNormals2.jsp



2.1.4 Population/Demographics

Table 2.2

Pettis County Population 2000-2016 by Jurisdiction				
Jurisdiction	**2000 POP**	**2016 ACS Est.**	**2000-2016 Change**	**2000-2016 % Change**
Pettis Co.-Unincorporated	16,596	18,130	1534	3.6%
Green Ridge	445	498	48	9.6%
Houstonia	275	221	-54	-19.6%
Hughesville	174	184	10	5.4%
La Monte	1,064	1,131	67	5.9%
Sedalia	20,339	21,489	1,150	5.4%
Smithton	510	560	50	8.9%
Pettis Co. Total	39,403	42,213	2,805	6.7%

Source: U.S. Bureau of the Census, Decennial Census

Pettis County's most at-risk populations are for the most part, on par with state and national averages. Children under age 5 in the county, comprising 6.9% of the total population, is slightly higher compared to state and national averages of 6.2%. The county has a slightly higher elderly population, or those above the age of 65, at 15.3% of the population, which matches Missouri's percentage but is higher than the national percentage of 14.5%. In addition, Pettis County's median age is 37.5 compared to the national age of 37.7 and the state average at 38.3.

Pettis County contains 18,204 housing units, 2,200 of which are vacant, at an average household size of 2.52, which is lower than both the state and national averages. Table 2.3 provides the number of Pettis County residents within specific age groups and a comparison of percentages with the state of Missouri and the United States.

Table 2.3

Pettis County Population Age Composition, Missouri/United States Comparison				
Age Group	**# of People**	**Percent of Population**	**Missouri Percent**	**United States Percent**
Under 5	2,917	6.9%	6.2%	6.2%
5 to 9 years	2,813	6.7	6.4	6.4
10 to 14 years	3,062	7.3	6.5	6.5
15 to 19 years	2,828	6.7	6.6	6.7
20 to 24 years	2,698	6.4	7.1	7.1
25 to 34 years	5,635	13.4	13.2	13.6
35 to 44 years	4,719	11.2	12.1	12.7
45 to 54 years	5,714	13.5	13.5	13.6
55 to 59 years	2,794	6.6	7	6.7
60 to 64 years	2,568	6.1	6.1	5.9
65 to 74 years	3,419	8.1	8.6	8.3
75 to 84 years	1,973	4.7	4.7	4.3
85 years and over	1,053	2.5%	2%	1.9%
Total Population	**42,193**		**6,059,651**	**308,745,538**
Median Age (years)	37.5		38.3	37.7

Source: U.S. Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Table 2.4 provides additional demographic and economic indicators for Pettis County, and incorporated communities compared to the state of Missouri and the United States. The county as a whole had slightly lower percentages of unemployment but higher families living below the poverty level than the state of Missouri or the United States. In terms of education, the percentage of population in the county that is a high school graduate, 83.1%, was less than Missouri or the United States, 88.8% and 87% respectfully. The percentage of the county population that spoke a language other than English in the home, 10.4%, is higher than Missouri, 6%, however, it was considerably less than the United States, 21.1%.

Table 2.4

Unemployment, Poverty, Education, and Language Percentage Demographics for Pettis County						
Jurisdiction	Total in Labor Force	Percent Population Unemployed	Percent Families Below Poverty Level	Percent Population High School Grad	Percent Population Bachelor degree or higher	Percent Population Language other than English
Pettis County	20,147	6.5%	12.8%	83.1%	17.2%	10.4%
Green Ridge	232	7.8	1.6	91.2	12.8	0.7
Houstonia	110	10	20	75.8	12.1	0
Hughesville	71	7.2	2.6	81.4	7.1	0
La Monte	614	3	15.7	65.3	7	39.9
Sedalia	10,562	8.8	17.4	80.5	15.8	10.7
Smithton	260	2.3	18.7	84.3	6.8	0.4
Missouri	3,055,025	6.6	10.8	88.8	27.6	6
United States	160,818,740	7.4%	11.0%	87.0%	30.3%	21.1%

Source: U.S. Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

2.1.5 History

Pettis County is one of 115 counties and county equivalent cities in Missouri. Organized in January 26, 1833, it took its name from Spencer Pettis, the third Congressman from Missouri, elected in 1828, when the entire State made but one congressional district. He is remembered for his duel with Major Thomas Biddle, which resulted in the death of both. The Territory of Pettis County was taken from the counties of Cooper and Saline; at one time the southern boundary of Saline County passed through the present city of Sedalia. During the Civil War sentiment was greatly divided and a large number of the arms-bearing people entered one or the other of the contending armies. With the exception of the attack upon Sedalia during the Price raid in 1864, the county saw little of war except the occasional passage of troops. However, the county seat was a large military post and depot. A few of the personal feuds which so greatly marred some other portions of the estate did exist in this County. Pettis County is a strong rural county, but Sedalia was closely tied to the railroad lines passing through it. Those times are almost forgotten, except for the annual Ragtime Festival held to commemorate the partnership in Sedalia of music publisher John Stark and ragtime composer Scott Joplin.

2.1.6 Occupations

Table 2.5

Occupation Statistics, Pettis County Missouri					
Jurisdiction	Management, Business, Science, & Arts Occupations	Service Occupations	Sales & Office Occupations	Natural Resource Construction & Maintenance Occupations	Production, Transportation & Material Moving Occupation
Pettis County	27.2%	18.6%	21.8%	9.4%	23.0%
Green Ridge	23.6%	26.9%	17.9%	9.4%	22.2%
Houstonia	24.2%	14.1%	22.2%	11.1%	28.3%
Hughesville	20.3%	14.1%	20.3%	10.9%	33.4%

La Monte	12.7%	17.3%	19.9%	9.4%	40.7%
Sedalia	25.5%	21.8%	23.2%	6.3%	23.3%
Smithton	17.3%	20.1%	14.2%	11.4%	37.0%

Source: U.S. Census, 2016 American Community Survey, 5-year Estimates.

2.1.7 Agriculture

According to the United States Department of Agriculture (USDA) 2012 Agricultural Census, there were 1,311 farms covering 419,697 acres in Pettis County. The average farm size was 320 acres, which was slightly larger than the average farm size in Missouri at 285 acres, with a market value of $177,001,000 of agricultural products sold. The average market value of products sold per farm was $135,019. Of the total, 69% was from livestock sales and 31% came from crop sales.

2.1.8 FEMA Hazard Mitigation Assistance Grants in Planning Area

2.2 Jurisdictional Profiles and Mitigation Capabilities

This section will include individual profiles for each participating jurisdiction. It will also include a discussion of previous mitigation initiatives in the planning area. There will be a summary table indicating specific capabilities of each jurisdiction that relate to their ability to implement mitigation opportunities. The unincorporated county is profiled first, followed by the incorporated communities, the special districts, and the public-school districts.

2.2.1 Unincorporated Pettis County

Pettis County is classified as a 4th class county. Its county seat is Sedalia. The County is governed by a three-member County Commission, led by the presiding Commissioner. The County government is divided into the following departments and divisions: Assessor's Office, Auditor's Office, Circuit Court Clerk, County Clerk, County Commission, Public Administrator's Office, Prosecuting Attorney's Office, Recorder, Sheriff's Department, and Treasurer's Office. The county and its cities collaborate on numerous issues such as infrastructure, law enforcement, and emergency services. MoDOT and the county and cities collaborate concerning transportation issues. The Missouri Department of Conservation (MDC) and local firefighters work together to safeguard the county's forested areas.

Mitigation Initiatives/Capabilities

Staff capabilities to mitigate the impact of natural hazards include the County Commission and the Pettis County/Sedalia Emergency Management Agency. The Pettis County / City of Sedalia Emergency Management Agency is responsible for developing and updating annually a Pettis County/City of Sedalia Emergency Operation Plan which lays a framework that will allow Pettis County and the City of Sedalia to save lives, minimize injuries, protect property and the environment, preserve functioning civil government, and maintain economic activities essential to the survival and recovery from natural and manmade disasters. This plan was developed through the collaborative efforts of the Pettis County/City of Sedalia Emergency Management Agency, other governmental and private entities throughout Pettis County and the city of Sedalia

Table 2.6 is based on data that have been collected by distribution of the Data Collection Questionnaire to each of the participating communities.

Table 2.6

Pettis County, Unincorporated Mitigation Capabilities	
Capabilities	Status Including Date of Document or Policy
Planning Capabilities	
Comprehensive Plan	No
Builder's Plan	No
Capital Improvement Plan	No
City Emergency Operations Plan	N/A
County Emergency Operations Plan	Yes, 12/2016
Local Recovery Plan	N/A
County Recovery Plan	Yes, 12/2016
City Mitigation Plan	N/A
County Mitigation Plan	Yes, 2/2013
Debris Management Plan	Yes, 12/2016
Economic Development Plan	No
Transportation Plan	Yes, 12/2016
Land-use Plan	No
Flood Mitigation Assistance (FMA) Plan	Yes
Watershed Plan	Yes, 2004
Firewise or other fire mitigation plan	N/A
Critical Facilities Plan (Mitigation/Response/Recovery)	N/A
Policies/Ordinance	
Zoning Ordinance	No
Building Code	No
Floodplain Ordinance	Yes
Subdivision Ordinance	No
Tree Trimming Ordinance	No
Nuisance Ordinance	No
Storm Water Ordinance	No
Drainage Ordinance	No
Site Plan Review Requirements	No
Historic Preservation Ordinance	No
Landscape Ordinance	No
Program	
Zoning/Land Use Restrictions	No
Codes Building Site/Design	No
Hazard Awareness Program	No

National Flood Insurance Program	Yes, CID 290823
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	NO
National Weather Service (NWS) Storm Ready Certification	Yes, 2015
Firewise Community Certification	N/A
Building Code Effectiveness Grading (BCEGs)	No
ISO Fire Rating	N/A
Economic Development Program	Yes
Land Use Program	No
Public Education/Awareness	Yes
Property Acquisition	No
Planning/Zoning Boards	No
Stream Maintenance Program	No
Tree Trimming Program	No
Engineering Studies for Streams (Local/County/Regional)	No
Mutual Aid Agreements	Yes
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	N/A
Hazard Analysis/Risk Assessment (County)	Yes
Evacuation Route Map	Yes
Critical Facilities Inventory	Yes
Vulnerable Population Inventory	No
Land Use Map	Yes
Staff/Department	
Building Code Official	No
Building Inspector	No
Mapping Specialist (GIS)	Yes
Engineer	No
Development Planner	No
Public Works Official	Yes
Emergency Management Coordinator	Yes
NFIP Floodplain Administrator	Yes
Bomb and/or Arson Squad	No
Emergency Response Team	No
Hazardous Materials Expert	Yes
Local Emergency Planning Committee	Yes
County Emergency Management Commission	Yes
Sanitation Department	No
Transportation Department	Yes

Economic Development Department	Yes
Housing Department	No
Historic Preservation	Yes
Non-Governmental Organizations (NGOs)	
American Red Cross	Yes
Salvation Army	Yes
Veterans Groups	Yes
Local Environmental Organization	No
Homeowner Associations	Yes
Neighborhood Associations	Yes
Chamber of Commerce	Yes
Community Organizations (Lions, Kiwanis, etc.	Yes
Financial Resources	
Apply for Community Development Block Grants	Yes
Fund projects thru Capital Improvements funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	No
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	Yes

Source: Data Collection Questionnaire, 2018

2.2.2 City of Green Ridge

The City of Green Ridge is located to the southeast of Sedalia and has a Mayor/5-person City Council local government. The population of Green Ridge has seen a 48% increase from 2000 to 2016 according the U.S. Census Bureau.

- One outdoor warning siren
- FEMA storm shelter
- Zoning Ordinance
- Nuisance Ordinance
- Zoning/Land use restrictions
- ISO fire rating of seven

The City of Green Ridge's population of 65 and older accounts for 12% of the total. Housing structures built in 1939 and before account for 15.3%, and mobile homes accounting for 2.2%.

Table 2.7 is based on the Data Collection Questionnaire distributed to each jurisdiction.

Table 2.7

City of Green Ridge Mitigation Capabilities

Capabilities	Status Including Date of Document or Policy
Planning Capabilities	
Comprehensive Plan	No
Builder's Plan	No
Capital Improvement Plan	No
City Emergency Operations Plan	No
County Emergency Operations Plan	N/A
Local Recovery Plan	No
County Recovery Plan	N/A
City Mitigation Plan	No
County Mitigation Plan	N/A
Debris Management Plan	No
Economic Development Plan	No
Transportation Plan	No
Land-use Plan	No
Flood Mitigation Assistance (FMA) Plan	No
Watershed Plan	No
Firewise or other fire mitigation plan	No
Critical Facilities Plan (Mitigation/Response/Recovery)	No
Policies/Ordinance	
Zoning Ordinance	Yes
Building Code	No
Floodplain Ordinance	No
Subdivision Ordinance	No
Tree Trimming Ordinance	No
Nuisance Ordinance	Yes
Storm Water Ordinance	No
Drainage Ordinance	No
Site Plan Review Requirements	No
Historic Preservation Ordinance	No
Landscape Ordinance	No
Program	
Zoning/Land Use Restrictions	Yes
Codes Building Site/Design	No
Hazard Awareness Program	No
National Flood Insurance Program	No
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	No
National Weather Service (NWS) Storm Ready Certification	No

Firewise Community Certification	No
Building Code Effectiveness Grading (BCEGs)	No
ISO Fire Rating	Rating: 7
Economic Development Program	No
Land Use Program	No
Public Education/Awareness	No
Property Acquisition	No
Planning/Zoning Boards	Yes
Stream Maintenance Program	No
Tree Trimming Program	No
Engineering Studies for Streams (Local/County/Regional)	No
Mutual Aid Agreements	No
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	No
Hazard Analysis/Risk Assessment (County)	N/A
Evacuation Route Map	No
Critical Facilities Inventory	No
Vulnerable Population Inventory	No
Land Use Map	No
Staff/Department	
Building Code Official	No
Building Inspector	No
Mapping Specialist (GIS)	No
Engineer	No
Development Planner	No
Public Works Official	Yes
Emergency Management Coordinator	No
NFIP Floodplain Administrator	No
Bomb and/or Arson Squad	No
Emergency Response Team	No
Hazardous Materials Expert	No
Local Emergency Planning Committee	No
County Emergency Management Commission	Yes
Sanitation Department	No
Transportation Department	No
Economic Development Department	No
Housing Department	No
Historic Preservation	No
Non-Governmental Organizations (NGOs)	
American Red Cross	No

Salvation Army	No
Veterans Groups	Yes
Local Environmental Organization	No
Homeowner Associations	No
Neighborhood Associations	No
Chamber of Commerce	Yes
Community Organizations (Lions, Kiwanis, etc.	No
Financial Resources	
Apply for Community Development Block Grants	Yes
Fund projects thru Capital Improvements funding	No
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

Source: Data Collection Questionnaire, 2018

2.2.3 City of Houstonia

The City of Houstonia is situated in the northwest corner of Pettis County. The local government is by mayor/city council. Houstonia has seen a 19.6% decline In population since 2000 according to the U.S. Census Bureau.

- Two outdoor warning sirens
- FEMA approved storm shelter

The City of Houstonia's population of 65 and older accounts for 10.7% of the total. Housing structures built in 1939 and before accounts for 35.6%, and has 19.5% of the housing structures being mobile homes.

Table 2.8 is based on the Data Collection Questionnaire distributed to each jurisdiction.

City of Houstonia Mitigation Capabilities	
Capabilities	Status Including Date of Document or Policy
Planning Capabilities	
Comprehensive Plan	No
Builder's Plan	No
Capital Improvement Plan	No
City Emergency Operations Plan	No
County Emergency Operations Plan	N/A
Local Recovery Plan	No
County Recovery Plan	N/A
City Mitigation Plan	No
County Mitigation Plan	N/A

Debris Management Plan	No
Economic Development Plan	No
Transportation Plan	No
Land-use Plan	No
Flood Mitigation Assistance (FMA) Plan	No
Watershed Plan	No
Firewise or other fire mitigation plan	No
Critical Facilities Plan (Mitigation/Response/Recovery)	No
Policies/Ordinance	
Zoning Ordinance	No
Building Code	No
Floodplain Ordinance	No
Subdivision Ordinance	No
Tree Trimming Ordinance	No
Nuisance Ordinance	No
Storm Water Ordinance	No
Drainage Ordinance	No
Site Plan Review Requirements	No
Historic Preservation Ordinance	No
Landscape Ordinance	No
Program	
Zoning/Land Use Restrictions	No
Codes Building Site/Design	No
Hazard Awareness Program	No
National Flood Insurance Program	No
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	No
National Weather Service (NWS) Storm Ready Certification	No
Firewise Community Certification	No
Building Code Effectiveness Grading (BCEGs)	No
ISO Fire Rating	N/A
Economic Development Program	No
Land Use Program	No
Public Education/Awareness	No
Property Acquisition	No
Planning/Zoning Boards	No
Stream Maintenance Program	No
Tree Trimming Program	No

Engineering Studies for Streams (Local/County/Regional)	No
Mutual Aid Agreements	No
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	No
Hazard Analysis/Risk Assessment (County)	N/A
Evacuation Route Map	No
Critical Facilities Inventory	No
Vulnerable Population Inventory	No
Land Use Map	No
Staff/Department	
Building Code Official	No
Building Inspector	No
Mapping Specialist (GIS)	No
Engineer	No
Development Planner	No
Public Works Official	No
Emergency Management Coordinator	No
NFIP Floodplain Administrator	No
Bomb and/or Arson Squad	No
Emergency Response Team	No
Hazardous Materials Expert	No
Local Emergency Planning Committee	No
County Emergency Management Commission	No
Sanitation Department	No
Transportation Department	No
Economic Development Department	No
Housing Department	No
Historic Preservation	No
Non-Governmental Organizations (NGOs)	
American Red Cross	No
Salvation Army	No
Veterans Groups	No
Local Environmental Organization	No
Homeowner Associations	No
Neighborhood Associations	No
Chamber of Commerce	No
Community Organizations (Lions, Kiwanis, etc.	No
Financial Resources	
Apply for Community Development Block Grants	Yes
Fund projects thru Capital Improvements funding	No

Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	Yes

Source: Data Collection Questionnaire, 2018

2.2.4 Village of Hughesville

The Village of Hughesville is located in the northcentral region of the county between Sedalia and Houstonia. The Census Bureau shows the population of Hughesville has increased by 5.4% since 2000 to 184 in 2016.

- 1

The Village of Hughesville's population of 65 and older accounts for 16.8% of the total. Housing structures built in 1939 and before accounts for 14.3%, and 19% of the housing structures are of the mobile home type

2.2.5 City of La Monte

The City of La Monte is situates along Highway 50 to the west of Sedalia. La Monte has a mayor and four person council style of local government and a population that is slowly increasing. Since 2000, La Monte's population has increased by 5.9%, according the U.S. Census Bureau.

- FEMA storm shelter
- One outdoor warning siren
- Zoning ordinance
- Drainage ordinance
- Storm water ordinance

The City of La Monte's population of 65 and older accounts for 10.5% of the total. Housing structures built in 1939 and before account for 4.7% of the total, with 4.7% of the housing structures are mobile homes.

City of La Monte Mitigation Capabilities	
Capabilities	Status Including Date of Documaent or Policy
Planning Capabilities	
Comprehensive Plan	No
Builder's Plan	No
Capital Improvement Plan	No
City Emergency Operations Plan	No
County Emergency Operations Plan	N/A
Local Recovery Plan	No
County Recovery Plan	N/A
City Mitigation Plan	No
County Mitigation Plan	N/A
Debris Management Plan	No

Economic Development Plan	No
Transportation Plan	No
Land-use Plan	No
Flood Mitigation Assistance (FMA) Plan	No
Watershed Plan	No
Firewise or other fire mitigation plan	No
Critical Facilities Plan (Mitigation/Response/Recovery)	No
Policies/Ordinance	
Zoning Ordinance	Yes
Building Code	No
Floodplain Ordinance	Yes
Subdivision Ordinance	Yes
Tree Trimming Ordinance	Yes
Nuisance Ordinance	Yes
Storm Water Ordinance	Yes
Drainage Ordinance	Yes
Site Plan Review Requirements	No
Historic Preservation Ordinance	No
Landscape Ordinance	Yes
Program	
Zoning/Land Use Restrictions	Yes
Codes Building Site/Design	Yes
Hazard Awareness Program	Yes
National Flood Insurance Program	No
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	No
National Weather Service (NWS) Storm Ready Certification	No
Firewise Community Certification	No
Building Code Effectiveness Grading (BCEGs)	No
ISO Fire Rating	Rating: 7
Economic Development Program	No
Land Use Program	No
Public Education/Awareness	No
Property Acquisition	No
Planning/Zoning Boards	Yes
Stream Maintenance Program	No
Tree Trimming Program	No
Engineering Studies for Streams (Local/County/Regional)	No

Mutual Aid Agreements	Yes
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	No
Hazard Analysis/Risk Assessment (County)	N/A
Evacuation Route Map	No
Critical Facilities Inventory	Yes
Vulnerable Population Inventory	Yes
Land Use Map	No
Staff/Department	
Building Code Official	No
Building Inspector	Yes
Mapping Specialist (GIS)	No
Engineer	No
Development Planner	No
Public Works Official	Yes
Emergency Management Coordinator	Yes
NFIP Floodplain Administrator	No
Bomb and/or Arson Squad	No
Emergency Response Team	No
Hazardous Materials Expert	No
Local Emergency Planning Committee	No
County Emergency Management Commission	Yes
Sanitation Department	No
Transportation Department	No
Economic Development Department	No
Housing Department	No
Historic Preservation	No
Non-Governmental Organizations (NGOs)	
American Red Cross	No
Salvation Army	No
Veterans Groups	Yes
Local Environmental Organization	No
Homeowner Associations	No
Neighborhood Associations	No
Chamber of Commerce	No
Community Organizations (Lions, Kiwanis, etc.	Yes
Financial Resources	
Apply for Community Development Block Grants	No
Fund projects thru Capital Improvements funding	No
Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes

Impact fees for new development	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

Source: Data Collection Questionnaire, 2018

2.2.6 City of Sedalia

The City of Sedalia is centrally located in Pettis County and serves as the county seat. Overseeing the local government in Sedalia is a Mayor and 8-person City Council. The Census Bureau shows the population of Sedalia has increased by 5.4% since 2000 to 21,489 in 2016.

- 18 Outdoor sirens, four of which are located on the Missouri State Fair grounds.
- Comprehensive Plan
- Economic Development plan
- Watershed plan
- Zoning ordinance
- NFIP participate
- Land use program

The City of Sedalia's population of 65 and older accounts for 15% of the total population. Housing structures built in 1939 and before account for 27.7% of the total, with 1.1% of the housing structures being mobile homes.

Table 2.11 is based on the Data Collection Questionnaire distributed to each jurisdiction.

City of Sedalia Mitigation Capabilities	
Capabilities	Status Including Date of Document or Policy
Planning Capabilities	
Comprehensive Plan	Yes, 10/1/2012
Builder's Plan	No
Capital Improvement Plan	Yes, 3/20/2017
City Emergency Operations Plan	Yes, 10/1/2012
County Emergency Operations Plan	Yes, 10/1/2012
Local Recovery Plan	Yes, 10/1/2012
County Recovery Plan	Yes, 10/1/2012
City Mitigation Plan	Yes, 10/1/2012
County Mitigation Plan	Yes, 10/1/2012
Debris Management Plan	Yes, 12/1/2016
Economic Development Plan	Yes, 8/15/2016 need copy
Transportation Plan	Yes, 2016

Land-use Plan	Yes, 2008
Flood Mitigation Assistance (FMA) Plan	No
Watershed Plan	Yes, 2013, need copy
Firewise or other fire mitigation plan	N/A
Critical Facilities Plan (Mitigation/Response/Recovery)	Yes, 10/1/2012
Policies/Ordinance	
Zoning Ordinance	Yes
Building Code	Version: 2015
Floodplain Ordinance	Yes, 2014
Subdivision Ordinance	Yes
Tree Trimming Ordinance	Yes
Nuisance Ordinance	Yes
Storm Water Ordinance	Yes
Drainage Ordinance	Yes
Site Plan Review Requirements	Yes
Historic Preservation Ordinance	Yes
Landscape Ordinance	Yes
Program	
Zoning/Land Use Restrictions	Yes
Codes Building Site/Design	Yes
Hazard Awareness Program	Yes
National Flood Insurance Program	Yes, CID: 290283
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	N/A
National Weather Service (NWS) Storm Ready Certification	Yes
Firewise Community Certification	N/A
Building Code Effectiveness Grading (BCEGs)	Class 9
ISO Fire Rating	Rating: 3
Economic Development Program	Yes
Land Use Program	Yes
Public Education/Awareness	Yes
Property Acquisition	No
Planning/Zoning Boards	Yes
Stream Maintenance Program	Yes
Tree Trimming Program	Yes
Engineering Studies for Streams (Local/County/Regional)	No
Mutual Aid Agreements	Yes
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	Yes, need copy

Hazard Analysis/Risk Assessment (County)	Yes, need copy
Evacuation Route Map	Yes
Critical Facilities Inventory	Yes, need copy
Vulnerable Population Inventory	No
Land Use Map	Yes, need copy
Staff/Department	
Building Code Official	Yes, FT
Building Inspector	Yes, FT
Mapping Specialist (GIS)	Yes, PT
Engineer	Yes, Contract
Development Planner	Yes, FT
Public Works Official	Yes, FT
Emergency Management Coordinator	Yes, PT
NFIP Floodplain Administrator	Yes, PT
Bomb and/or Arson Squad	Bomb-- No Arson-- Yes
Emergency Response Team	Yes, FT
Hazardous Materials Expert	Yes, FT
Local Emergency Planning Committee	Yes, PT
County Emergency Management Commission	Yes, PT
Sanitation Department	Yes, FT
Transportation Department	Yes, FT
Economic Development Department	Yes, PT
Housing Department	Yes, FT
Historic Preservation	Yes, PT
Non-Governmental Organizations (NGOs)	
American Red Cross	Yes
Salvation Army	Yes
Veterans Groups	Yes
Local Environmental Organization	Yes
Homeowner Associations	Yes
Neighborhood Associations	Yes
Chamber of Commerce	Yes
Community Organizations (Lions, Kiwanis, etc.	Yes
Financial Resources	
Apply for Community Development Block Grants	Yes
Fund projects thru Capital Improvements funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes

Incur debt through private activities	Yes
Withhold spending in hazard prone areas	Yes

2.2.6 City of Smithton

The City of Smithton is located to the east of Sedalia, just off of Highway 50. Smithton has seen its population increase by 8.9% since 2000, according to the U.S. Census Bureau. A mayor and city council make up the local government in Smithton.

- One outdoor warning siren
- FEMA approved storm shelter
- Zoning ordinance
- Floodplain ordinance
- Planning/Zoning boards

The City of Smithton's population of 65 and older accounts for 8.4% of the total population. Housing structures built in 1939 and before account for 19.5% of the total, with 9.5% of the housing structures being mobile homes.

Table 2.12 is based on the Data Collection Questionnaire distributed to each jurisdiction.

City of Smithton Mitigation Capabilities	
Capabilities	Status Including Date of Documaent or Policy
Planning Capabilities	
Comprehensive Plan	Yes
Builder's Plan	Yes
Capital Improvement Plan	Yes
City Emergency Operations Plan	No
County Emergency Operations Plan	N/A
Local Recovery Plan	No
County Recovery Plan	N/A
City Mitigation Plan	No
County Mitigation Plan	N/A
Debris Management Plan	No
Economic Development Plan	No
Transportation Plan	No
Land-use Plan	Yes
Flood Mitigation Assistance (FMA) Plan	Yes 1997
Watershed Plan	No
Firewise or other fire mitigation plan	No
Critical Facilities Plan (Mitigation/Response/Recovery)	No
Policies/Ordinance	
Zoning Ordinance	Yes
Building Code	No
Floodplain Ordinance	Yes
Subdivision Ordinance	Yes

Tree Trimming Ordinance	No
Nuisance Ordinance	Yes
Storm Water Ordinance	No
Drainage Ordinance	No
Site Plan Review Requirements	Yes
Historic Preservation Ordinance	No
Landscape Ordinance	Yes
Program	
Zoning/Land Use Restrictions	Yes
Codes Building Site/Design	Yes
Hazard Awareness Program	No
National Flood Insurance Program	Yes
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	Yes, 10, PW error, was 6
National Weather Service (NWS) Storm Ready Certification	No
Firewise Community Certification	No
Building Code Effectiveness Grading (BCEGs)	No
ISO Fire Rating	N/A
Economic Development Program	No
Land Use Program	Yes
Public Education/Awareness	No
Property Acquisition	Yes
Planning/Zoning Boards	Yes
Stream Maintenance Program	No
Tree Trimming Program	No
Engineering Studies for Streams (Local/County/Regional)	Yes, need copy
Mutual Aid Agreements	No
Studies/Reports/Maps	
Hazard Analysis/Risk Assessment (City)	No
Hazard Analysis/Risk Assessment (County)	N/A
Evacuation Route Map	No
Critical Facilities Inventory	No
Vulnerable Population Inventory	No
Land Use Map	Yes, need copy
Staff/Department	
Building Code Official	No
Building Inspector	No
Mapping Specialist (GIS)	No
Engineer	No

Development Planner	No
Public Works Official	Yes, FT
Emergency Management Coordinator	Yes, PT
NFIP Floodplain Administrator	Yes, PT
Bomb and/or Arson Squad	No
Emergency Response Team	No
Hazardous Materials Expert	No
Local Emergency Planning Committee	No
County Emergency Management Commission	No
Sanitation Department	No
Transportation Department	No
Economic Development Department	No
Housing Department	No
Historic Preservation	No
Non-Governmental Organizations (NGOs)	
American Red Cross	No
Salvation Army	No
Veterans Groups	No
Local Environmental Organization	No
Homeowner Associations	No
Neighborhood Associations	No
Chamber of Commerce	No
Community Organizations (Lions, Kiwanis, etc.	No
Financial Resources	
Apply for Community Development Block Grants	Yes
Fund projects thru Capital Improvements funding	Yes
Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

Table 2.13

Mitigation Capabilities Summary for Pettis County							
Capabilities	**Status Including Date of Document or Policy**						
	Pettis County	**Green Ridge**	**Houstonia**	**Hughesville**	**La Monte**	**Sedalia**	**Smithton**
Planning Capabilities							
Comprehensive Plan	N/A	No	No		No	Yes, 10/1/2012	Yes
Builder's Plan	No	No	No		No	No	Yes
Capital Improvement Plan	No	No	No		No	Yes, 3/20/2017	Yes
City Emergency Operations Plan	N/A	No	No		No	Yes, 10/1/2012	No
County Emergency Operations Plan	Yes, 12/2016	N/A	N/A	N/A	N/A	Yes, 10/1/2012	N/A
Local Recovery Plan	N/A	No	No		No	Yes, 10/1/2012	No
County Recovery Plan	Yes, 12/2016	N/A	N/A	N/A	N/A	Yes, 10/1/2012	N/A
City Mitigation Plan	N/A	No	No		No	Yes, 10/1/2012	No
County Mitigation Plan	Yes, 2/2013	N/A	N/A	N/A	N/A	Yes, 10/1/2012	N/A
Debris Management Plan	Yes, 12/2016	No	No		No	Yes, 12/1/2016	No
Economic Development Plan	No	No	No		No	Yes, 8/15/2016 need copy	No
Transportation Plan	Yes, 12/2016	No	No		No	Yes, 2016	No
Land-use Plan	No	No	No		No	Yes, 2008	Yes
Flood Mitigation Assistance (FMA) Plan	Yes	No	No		No	No	Yes 1997
Watershed Plan	Yes, 2004	No	No		No	Yes, 2013, need copy	No
Firewise or other fire mitigation plan	N/A	No	No		No	N/A	No
Critical Facilities Plan		No	No		No	Yes, 10/1/2012	No
Policies/Ordinance							
Zoning Ordinance	No	Yes	No		Yes	Yes	Yes
Building Code	No	No	No		No	Version: 2015	No
Floodplain Ordinance	Yes	No	No		Yes	Yes, 2014	Yes
Subdivision Ordinance	No	No	No		Yes	Yes	Yes
Tree Trimming Ordinance	No	No	No		Yes	Yes	No

Nuisance Ordinance	No	Yes	No		Yes	Yes	Yes
Storm Water Ordinance	No	No	No		Yes	Yes	No
Drainage Ordinance	No	No	No		Yes	Yes	No
Site Plan Review Requirements	No	No	No		No	Yes	Yes
Historic Preservation Ordinance	No	No	No		No	Yes	No
Landscape Ordinance	No	No	No		Yes	Yes	Yes
Program							
Zoning/Land Use Restrictions	No	Yes	No		Yes	Yes	Yes
Codes Building Site/Design	No	No	No		Yes	Yes	Yes
Hazard Awareness Program	No	No	No		Yes	Yes	No
National Flood Insurance Program	Yes, 290823	No	No		No	Yes, CID: 290283	Yes
Community Rating System (CRS) program under the National Flood Insurance Program (NFIP)?	NO	No	No		No	N/A	Yes, 10, PW error, was 6
National Weather Service (NWS) Storm Ready Certification	Yes, 2015	No	No		No	Yes	No
Firewise Community Certification	N/A	No	No		No	N/A	No
Building Code Effectiveness Grading (BCEGs)	No	No	No		No	Class 9	No
ISO Fire Rating	N/A	Rating: 7	N/A		Rating: 7	Rating: 3	N/A
Economic Development Program	Yes	No	No		No	Yes	No
Land Use Program	No	No	No		No	Yes	Yes
Public Education/Awareness	Yes	No	No		No	Yes	No
Property Acquisition	No	No	No		No	No	Yes
Planning/Zoning Boards	No	Yes	No		Yes	Yes	Yes
Stream Maintenance Program	No	No	No		No	Yes	No
Tree Trimming Program	No	No	No		No	Yes	No
Engineering Studies for Streams (Local/County/Regional)	No	No	No		No	No	Yes, need copy
Mutual Aid Agreements	Yes	No	No		Yes	Yes	No
Studies/Reports/Maps							

Hazard Analysis/Risk Assessment (City)	N/A	No	No		No	Yes, need copy	No
Hazard Analysis/Risk Assessment (County)	Yes	N/A	N/A	N/A	N/A	Yes, need copy	N/A
Evacuation Route Map	Yes	No	No		No	Yes	No
Critical Facilities Inventory	Yes	No	No		Yes	Yes, need copy	No
Vulnerable Population Inventory	No	No	No		Yes	No	No
Land Use Map	Yes	No	No		No	Yes, need copy	Yes, need copy
Staff/Department							
Building Code Official	No	No	No		No	Yes, FT	No
Building Inspector	No	No	No		Yes	Yes, FT	No
Mapping Specialist (GIS)	Yes	No	No		No	Yes, PT	No
Engineer	No	No	No		No	Yes, Contract	No
Development Planner	No	No	No		No	Yes, FT	No
Public Works Official	Yes	Yes	No		Yes	Yes, FT	Yes, FT
Emergency Management Coordinator	Yes	No	No		Yes	Yes, PT	Yes, PT
NFIP Floodplain Administrator	Yes	No	No		No	Yes, PT	Yes, PT
Bomb and/or Arson Squad	No	No	No		No	Bomb-- No Arson-- Yes	No
Emergency Response Team	No	No	No		No	Yes, FT	No
Hazardous Materials Expert	Yes	No	No		No	Yes, FT	No
Local Emergency Planning Committee	Yes	No	No		No	Yes, PT	No
County Emergency Management Commission	Yes	Yes	No		Yes	Yes, PT	No
Sanitation Department	No	No	No		No	Yes, FT	No
Transportation Department	Yes	No	No		No	Yes, FT	No
Economic Development Department	Yes	No	No		No	Yes, PT	No
Housing Department	No	No	No		No	Yes, FT	No
Historic Preservation	Yes	No	No		No	Yes, PT	No
Non-Governmental Organizations (NGOs)							
American Red Cross	Yes	No	No		No	Yes	No
Salvation Army	Yes	No	No		No	Yes	No
Veterans Groups	Yes	Yes	No		Yes	Yes	No

Local Environmental Organization	No	No	No		No	Yes	No
Homeowner Associations	Yes	No	No		No	Yes	No
Neighborhood Associations	Yes	No	No		No	Yes	No
Chamber of Commerce	Yes	Yes	No		No	Yes	No
Community Organizations	Yes	No	No		Yes	Yes	No
Financial Resources							
Apply for Community Development Block Grants	Yes	Yes	Yes		No	Yes	Yes
Fund projects thru Capital Improvements funding	Yes	No	No		No	Yes	Yes
Authority to levy taxes for specific purposes	Yes	Yes	No		No	Yes	No
Fees for water, sewer, gas, or electric services	No	Yes	Yes		Yes	Yes	Yes
Impact fees for new development	Yes	No	No		No	Yes	No
Incur debt through general obligation bonds	Yes	Yes	Yes		No	Yes	Yes
Incur debt through special tax bonds	Yes	No	Yes		No	Yes	No
Incur debt through private activities	Yes	No	Yes		No	Yes	No
Withhold spending in hazard prone areas	Yes	No	Yes		No	Yes	No

Source: Data Collection Questionnaires, 2018

2.2.7 Special Districts

Sewer and Water Facilities

Pettis County Water/Sewer Facilities		
Jurisdiction	**Municipal Water**	**Municipal Sewer**
Green Ridge	Yes	Yes
Houstonia	No	Yes
Hughesville	No	Yes
La Monte	Yes	Yes
Sedalia	Yes	Yes
Smithton	No	Yes

Pettis County has one public water and sewer district that is shared among parts of Johnson, Pettis, and Saline counties. This district coves roughly the northwest quarter of Pettis County. The county continues to improve its ability to service residents and businesses with public water and sewer.

Electricity and Natural Gas

Electricity is provided to residents of Pettis County by one of four providers. The majority of Pettis County is covered by Kansas City Power & Light Greater Missouri Operations (KCP&L GMO) and KCP&L, the remaining areas are covered by Union cooperative with a small section covered by Ameren UE.

Solid Waste Disposal

Law Enforcement

The Pettis County Sheriff's Office includes the sheriff and ?? patrol officers. The department participates in mutual aid agreements with all incorporated areas of the county. The department out of the headquarters in Sedalia and covers the entire county. The towns of Sedalia and Green Ridge maintain municipal police departments.

Emergency Medical Services

Fire Protection

Pettis County is served by seven fire departments. Houstonia, Hughesville, Green Ridge, and Lake Creek departments are volunteer departments supported by dues. The La Monte, Sedalia, and Pettis County Fire Protection District departments are tax supported.

The Pettis County Fire Protection District operates six stations located at strategic points within the district.

Emergency Services (E-911)

2.2.8 Public School Profiles and Mitigation Capabilities

Table 2.?

School District: Green Ridge R-VIII		
Building Name	**Bldg Address**	**Bldg Enrollment**
Green Ridge High	401 W Pettis St., Green Ridge	173
Green Ridge Elementary	402 W Pettis St., Green Ridge	201

Source: School data questionnaire, mcds.dese.mo.gov

Table 2.?

School District: LaMonte R-IV		
Building Name	**Bldg Address**	**Bldg Enrollment**
La Monte High	301 S. Washington, La Monte	146
La Monte Elementary	201 S. Washington, La Monte	210

Source: School data questionnaire, mcds.dese.mo.gov

Table 2.?

School District: Pettis Co. R-V		
Building Name	**Bldg Address**	**Bldg Enrollment**
Northwest High	16215 Highway H, Hughesville	164
Northwest Elementary	407 W Tuck, Houstonia	186

Source: School data questionnaire, mcds.dese.mo.gov

Table 2.?

School District: Pettis Co. R-XII		
Building Name	**Bldg Address**	**Bldg Enrollment**
Pettis Co. R-XII Elementary	22675 Depot Road, Sedalia	132

Source: School data questionnaire, mcds.dese.mo.gov

Table 2.?

School District: Sedalia 200		
Building Name	**Bldg Address**	**Bldg Enrollment**
Smith-Cotton High	2010 Tiger Pride Boulevard, Sedalia	1483
Smith-Cotton Junior High	312 East Broadway, Sedalia	1071
Sedalia Middle School	2205 S Ingram, Sedalia	389
Heber Hunt Elementary	600 S Warren, Sedalia	482
Parkview Elementary	1901 S New York, Sedalia	480
Horace Mann Elementary	1100 W 16th, Sedalia	314
Skyline Elementary	2505 W 32nd St., Sedalia	496
Washington Elementary	610 S Engineer, Sedalia	257

Early Childhood Center	2255 S Ingram, Sedalia	176

Source: School data questionnaire, mcds.dese.mo.gov

Table 2.?

School District: Smithton R-VI		
Building Name	**Bldg Address**	**Bldg Enrollment**
Smithton High	505 S Myrtle, Smithton	270
Smithton Elementary	506 S Myrtle, Smithton	306

Source: School data questionnaire, mcds.dese.mo.gov

Figure 2.? – School districts

Table 2.?

Summary of Pettis County School District Capabilities						
Capability	**Green Ridge R-VIII**	**La Monte R-IV**	**Pettis Co. R-V**	**Pettis Co. R-XII**	**Sedalia 200**	**Smithton R-VI**
Planning Elements						
Master Plan			No			
Capital Improvement Plan	No, in progress	No	No	No		No
School Emergency Plan	Yes, 2016	Yes, 2016	Yes	Yes		Yes
Shelter in place protocols	Yes		Yes	Yes		Yes
Evacuation protocols	Yes	Yes, 2016	Yes	Yes		Yes
Weapons Policy	Yes, 2017	Yes, 2016	Yes	Yes		Yes
Personnel Resources						
Full-time building official (i.e. Principal)	Yes	Yes	Yes	Yes		Yes
Emergency Manager	Yes	Yes	No	No		No
Grant Writer	No	No	No	No		No
Public Information Officer	Yes	No	No	No		No
Financial Resources						
Capital improvements project funding	Yes	No	No	Yes		
Local funds	Yes	No	Yes	Yes		
General obligation bonds	Yes	No	No	No		
Special tax bonds	Yes	No	No	No		
Private activities/donations	Yes	No	No	Yes		
State and federal funds	Yes	No	Yes	Yes		
Additional Capabilities						
Public Address/Emergency Alert System	Yes	Yes	No	Yes	Yes	Yes

NOAA weather radio in buildings?	Yes	Yes	Yes	Yes	Yes	Yes
FEMA Tornado Shelter/Saferoom	Yes	Yes	Yes	Yes	Yes	Yes
Campus police/Resource Officer	No	No	No	No	Yes	No

Source: School data questionnaire, 2018

3 Risk Assessment

The goal of the risk assessment is to estimate the potential loss in the planning area, including loss of life, personal injury, property damage, and economic loss, from a hazard event. The risk assessment process allows communities and school/special districts in the planning area to better understand their potential risk to the identified hazards. It will provide a framework for developing and prioritizing mitigation actions to reduce risk from future hazard events.

This is an update of the Pettis County Hazard Mitigation Plan adopted in February 2011. According to the U.S. Census Bureau July 1, 2016 population estimates, the population of Pettis Count increased from 42,201 in 2010 to 42,213 at the time of the 2016 population estimate.

Since 2011, Pettis County has since remained a class 4 county in Missouri. According to Missouri Revised statutes (RSMO 48.020), "All counties which have attained the second classification prior to August 13, 1988, and which would otherwise return to the third classification after August 13, 1988, because of changes in assessed valuation shall remain a county in the second classification and shall operate under the laws of this state applying to the second classification.."

This chapter is divided into four main parts:

- Section 3.1 Hazard Identification identifies the hazards that threaten the planning area and provides a factual basis for elimination of hazards from further consideration;
- Section 3.2 Assets at Risk provides the planning area's total exposure to natural hazards, considering critical facilities and other community assets at risk;
- Section 3.3 Future Land Use and Development discusses areas of planned future development
- Section 3.4 Hazard Profiles and Vulnerability Analysis provides more detailed information about the hazards impacting the planning area.

For each hazard, there are three sections:

1) Hazard Profile provides a general description and discusses the threat to the planning area, the geographic location at risk, potential severity/magnitude/extent, previous occurrences of hazard events, probability of future occurrence, risk summary by jurisdiction, impact of future development on the risk;

2) Vulnerability Assessment further defines and quantifies populations, buildings, critical facilities, and other community/school or special district assets at risk to natural hazards;

3) Problem Statement briefly summarizes the problem and develops possible solutions.

3.1

The Plan profiles all natural hazards that can affect Pettis County. The natural hazards that can affect the county have been identified in the 2011 Pettis County Plan and the 2013 Missouri State Plan. Natural hazards are naturally occurring climatological, hydrological or geologic events that

have a negative effect on people and the built environment. Natural hazards identified in the 2011 Pettis County Plan included:

- Dam Failure
- Drought
- Earthquakes
- Extreme Heat
- Wildfire
- Flooding (Flash and River)
- Land Subsidence/ Sinkholes
- Levy Failure
- Thunderstorm/High Winds/Lightning/Hail
- Tornado
- Winter Weather/Snow/Ice/Sever Cold

No new natural hazards have been identified since the adoption of the previous plan. The 2013 Missouri State Plan combines severe cold from severe winter weather hazard and heatwave into an extreme temperature hazard. The Plan will follow the 2013 Missouri State Plan and incorporate this change. The 2013 Missouri State Plan also addresses human-caused and technological hazards; however, these will not be included in this plan update.

3.1.1 Review of existing plans

The MPC reviewed the hazards identified in the previously approved plan, as well as the hazards identified in the state plan at the November 11, 2017 meeting. The hazards identified in the 2011 Pettis County Plan are identified in the 2013 Missouri State Plan. The State Plan also includes levee failure as well as structural and urban fire in addition to wildfire. Human-caused and technological hazards identified in the State Plan include:

- CBRNE Attack
- Civil Disorder
- Cyber Disruption
- Hazardous Materials
- Mass Transportation Accidents
- Nuclear Power Plants
- Public Health Emergencies/Environmental Issues
- Special Events
- Terrorism
- Utility Interruptions and System Failures

In Missouri, local plans customarily include only natural hazards, as only natural hazards are required by federal regulations to be included. The MPC was informed that they may decide to include technological hazards and human-caused threats in the plan, although this is not required by federal regulations. The MPC determined to include only natural hazards. The MPC agreed that human-caused and technological hazards are addressed in a Regional Homeland Security Oversight Committee (RHSOC) Threat and Hazard Identification Risk Assessment (THIRA) and that including only natural hazards would meet the needs of local entities participating in the plan update.

3.1.2 Review of Disaster Declaration History

From 1990 to present, Pettis County has experienced severe storms, tornadoes, flooding, an ice storm and severe winter storms. All of these natural hazard events triggered federal disaster declarations. Federal and/or state declarations may be granted when the severity and magnitude of an event surpasses the ability of the local government to respond and recover. Disaster assistance is supplemental and sequential. When the local government's capacity has been surpassed, a state disaster declaration may be issued, allowing for the provision of state assistance. If the disaster is so severe that both the local and state governments' capacities are exceeded; a federal emergency or disaster declaration may be issued allowing for the provision of federal assistance.

FEMA also issues emergency declarations, which are more limited in scope and do not include the long-term federal recovery programs of major disaster declarations. Determinations for declaration type are based on scale and type of damages and institutions or industrial sectors affected.

Table 3.1

FEMA Disaster Declarations that include Pettis County, Missouri, 1990-Present			
Disaster Number	**Description**	**Declaration Date/Incident Period**	**Individual Assistance (IA) / Public Assistance (PA)**
4238	Severe storms, tornadoes, straight-line winds, & flooding	7 August, 2015	PA
1980	Severe storms, tornadoes & flooding	9-May-11	IA / PA
1961	Severe winter storm & snowstorm	23 March 2011 / 31 Jan-5 Feb 2011	PA
1773	Severe storms & flooding	25 June 2008 / 1 June-13 Aug 2008	PA
1635	Severe storms, tornadoes & flooding	5 April 2006 / 30 Mar-3 April 2006	IA / PA
1631	Severe storms, tornadoes & flooding	16 March 2006 / 8 Mar-13 Mar 2006	IA / PA
1403	Ice storm	6 February / 29 Jan-13 Feb 2002	IA / PA
995	Flooding & severe storm	9 July 1993 / 10 June-25 Oct 1993	IA / PA

Source: Federal Emergency Management Agency, https://www.fema.gov/data-visualization-summary-disaster-declarations-and-grants

3.1.3 Additional Research Sources

A variety of sources were researched for data on natural hazards. Primary sources included FEMA, SEMA, National Climate Data Center (NCDC) and National Oceanic and Atmospheric Administration (NOAA). The U.S. Geological Survey (USGS) and the Center for Earthquake Research and Information (CERI) were major sources for earthquake information. The Missouri Department of Natural Resources (MDNR) Dam Safety Division provided information concerning dams and the Missouri Department of Conservation (MDC). Other information sources included county officials; existing city, county, regional and state plans; and information from local officials.

The additional sources of data on locations and past impacts of hazards in Pettis County include:

- Missouri Hazard Mitigation Plans (2010 and 2013)
- Pettis County Hazard Mitigation Plan (2010)
- Federal Emergency Management Agency (FEMA)
- Missouri Department of Natural Resources (MDNR)
- National Drought Mitigation Center Drought Reporter
- US Department of Agriculture's (USDA) Risk Management Agency Crop Insurance
- Statistics
- National Agricultural Statistics Service
- Data Collection Questionnaires completed by each jurisdiction
- State of Missouri GIS data
- Environmental Protection Agency
- Flood Insurance Administration
- Hazards US (HAZUS)
- Missouri Department of Transportation
- Missouri Division of Fire Marshal Safety
- Missouri Public Service Commission
- National Fire Incident Reporting System (NFIRS)
- National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center (NCDC);
- Pipeline and Hazardous Materials Safety Administration
- County and local Comprehensive Plans to the extent available
- County Emergency Management
- County Flood Insurance Rate Map, FEMA
- Flood Insurance Study, FEMA
- SILVIS Lab, Department of Forest Ecology and Management, University of Wisconsin 3.7
- U.S. Army Corps of Engineers
- U.S. Department of Transportation
- United States Geological Survey (USGS)
- Various articles and publications available on the internet
    - U.S. Army Corps of Engineers
    - U.S. Department of Transportation
    - United States Geological Survey (USGS)
    - Various articles and publications available on the internet

The only centralized source of data for many of the weather-related hazards is the National Oceanic and Atmospheric Administration's (NOAA) National Climatic Data Center (NCDC). Although it is usually the best and most current source, there are limitations to the data which should be noted. The NCDC documents the occurrence of storms and other significant weather phenomena having sufficient intensity to cause loss of life, injuries, significant property damage, and/or disruption to commerce. In addition, it is a partial record of other significant meteorological events, such as record maximum or minimum temperatures or precipitation that occurs in connection with another event. Some information appearing in the NCDC may be provided by or gathered from sources outside the National Weather Service (NWS), such as the media, law enforcement and/or other government agencies, private companies, individuals, etc. An effort is made to use the best available information but because of time and resource constraints, information from these sources

may be unverified by the NWS. Those using information from NCDC should be cautious as the NWS does not guarantee the accuracy or validity of the information.

The NCDC damage amounts are estimates received from a variety of sources, including those listed above in the Data Sources section. For damage amounts, the NWS makes a best guess using all available data at the time of the publication. Property and crop damage figures should be considered as a broad estimate. Damages reported are in dollar values as they existed at the time of the storm event. They do not represent current dollar values.

The database currently contains data from January 1950 to August 2017, as entered by the NWS. Due to changes in the data collection and processing procedures over time, there are unique periods of record available depending on the event type. The following timelines show the different time spans for each period of unique data collection and processing procedures.

1. Tornado: From 1950 through 1954, only tornado events were recorded.

2. Tornado, Thunderstorm Wind and Hail: From 1955 through 1992, only tornado, thunderstorm wind and hail events were keyed from the paper publications into digital data. From 1993 to 1995, only tornado, thunderstorm wind and hail events have been extracted from the Unformatted Text Files..

3. All Event Types (48 from Directive 10-1605): From 1996 to present, 48 event types are recorded as defined in NWS Directive 10-1605. Note that injuries and deaths caused by a storm event are reported on an area-wide basis. When reviewing a table resulting from an NCDC search by county, the death or injury listed in connection with that county search did not necessarily occur in that county.

3.1.4 Hazards Identified

The natural hazards that can possibly or have affected Pettis County are profiled below. All hazards do not affect every jurisdiction participating in the Plan. Table 3.2 provides a summary of the jurisdictions that may be affected by each hazard. An “x” in the table indicates that jurisdictions are affected by the hazard, and a "-" indicates the hazard is not applicable to that jurisdiction.

Table 3.2

Hazards Identified for Each Jurisdiction								
Jurisdiction	**Tornado/ T-Storm**	**Floods**	**Severe Winter Weather**	**Drought**	**Extreme Temperatures**	**Dam Failure**	**Wildfires**	**Earthquake**
Pettis Co	X	X	X	X	X	-	X	X
Green Ridge	X	-	X	X	X	-	-	X
Houstonia	X	X	X	X	X	-	-	X
Hughesville	X	-	X	X	X	-	-	X
La Monte	X	-	X	X	X	-	-	X
Sedalia	X	X	X	X	X	-	-	X
Smithton	X	-	X	X	X	-	-	

Sedalia 200	X	X	X	-	X	-	-	-
Pettis Co. R-XII	X	-	X	-	X	-	-	-
Smithton R-VI	X	-	X	-	X	-	-	-
Pettis Co. R-V	X	-	X	-	X	-	-	-
La Monte R-IV	X	-	X	-	X	-	-	-

3.1.5 Multi-Jurisdictional Risk Assessment

The risk assessment assesses each participating jurisdiction's vulnerability to each hazard that can affect the planning area. Many of the hazards identified in the risk assessment have the same probability of occurrence throughout the planning area. The hazards that vary across the planning area in terms of risk include dam failure, flood, and wildland fire. These differences are detailed in each hazard profile under geographic location and vulnerability.

Pettis County's climate is mostly uniform. With an average population increase of about 6.7%, since 2000, building construction within urban areas has increased as well. Population estimates show that Pettis County is growing and should continue to in the future. Growth management will need to be utilized in urban areas. Growth mitigation capabilities of each jurisdiction are profiled in section 2.2.1.

Naturally, the urbanized areas of Pettis County have a greater density of important assets, which are more vulnerable to weather-related hazards. This increase in vulnerability, however, can be mitigated through updated building codes and code enforcement as well as land use planning. These capabilities and resources to mitigate the impact of natural hazards vary across jurisdictions in the planning area. These differences will be discussed in greater detail in the vulnerability sections of each hazard.

3.2 Assets at Risk

This section assesses the planning area population, structures, critical facilities and infrastructure, and other important assets that may be at risk to hazards. The inventory of assets for each jurisdiction were derived from parcel data from the Pettis County Assessor, the Pettis County Structures dataset downloaded from Missouri Spatial Data information Service (MSDIS), local jurisdiction data collection questionnaires, and HAZUS MH 2.2. Minimal development has occurred in Pettis County since the previous update.

3.2.1 Total Exposure of Population and Structures

Unincorporated County and Incorporated Cities

In the following three tables, population data is based on 2016 ACS estimate data. Building counts and building exposure values are based on parcel data provided by the Pettis County Assessor. Contents exposure values were calculated by factoring a multiplier to the building exposure values based on usage type. The multipliers were derived from the HAZUS MH 2.1 and are defined below

in Table 3.3. Land values have been purposely excluded from consideration because land remains following disasters, and subsequent market devaluations are frequently short term and difficult to quantify. Another reason for excluding land values is that state and federal disaster assistance programs generally do not address loss of land (other than crop insurance). It should be noted that the total valuation of buildings is based on county assessors' data which may not be current. In addition, government owned properties are usually taxed differently or not at all, and so may not be an accurate representation of true value. Note that public school district assets and special districts assets are included in the 3.10 total exposure tables assets by community and county.

Table 3.3 shows the total population, building count, estimated value of buildings, estimated value of contents and estimated total exposure to parcels for the unincorporated county and each incorporated city. Table 3.4 that follows provides the building value exposures for the county and each city in the planning area broken down by usage type. Finally, Table 3.5 provides the building count total for the county and each city in the planning area broken out by building usage types (residential, commercial, industrial, and agricultural).

Table 3.3

Maximum Population & Parcel Exposure by Jurisdiction					
Jurisdiction	**2016 Population ACS Est.**	**Parcel Count**	**Parcel Exposure ($)**	**Contents Exposure ($)**	**Total Exposure ($)**
Pettis County (Unincorporated)	18,130	15,097	$838,534,770	$495,912,200	$1,334,446,970
Green Ridge	498	246	$10,067,170	$5,554,105	$15,621,275
Houstonia	221	145	$3,976,750	$1,667,160	$5,643,910
Hughesville	184	109	$3,827,120	$2,133,270	$5,960,390
La Monte	1,131	493	$19,296,970	$12,193,260	$31,490,230
Sedalia	21,489	10,234	$628,913,520	$523,592,545	$1,152,506,065
Smithton	560	247	$12,066,780	$7,067,350	$19,134,130
Pettis County Totals	**42,213**	**26,654**	**$1,516,683,080**	**$1,048,119,890**	**$2,564,802,970**

Contents Exposure derived by applying multiplier to Building Exposure based on HAZUS MH 2.1 standard contents multipliers per usage type as follows: Residential (50%), Commercial (100%), Industrial (150%), Agricultural (100%). For purposes of these calculations, government, school, and utility were calculated at the commercial contents rate.

Table 3.4

Parcel Values/Exposure by Usage Type				
Jurisdiction	**Residential ($)**	**Commercial ($)**	**Agriculture ($)**	**Total Exposures**
Pettis County (Unincorporated)	$752,201,890	$79,684,790	$190,305,550	$1,022,192,230
Green Ridge	$9,910,380	$883,140	$21,310	$10,814,830
Houstonia	$3,165,800	$72,970	$11,290	$3,250,060
Hughesville	$3,961,100	$149,480	$3,240	$4,113,820
La Monte	$19,207,700	$2,416,950	$172,460	$21,797,110

Sedalia	$536,370,650	$254,601,810	$805,410	$791,777,870
Smithton	$11,488,120	$1,322,770	$520	$12,811,410
Pettis County Totals	**$1,336,305,640**	**$339,131,910**	**$191,319,780**	**$1,866,757,330**

Source: Parcel Count and Parcel Exposure, Pettis County Assessor's Office Database

Table 3.5

Parcel Count by Usage Type				
Jurisdiction	**Residential**	**Commercial**	**Agricultural**	**Total**
Pettis County (Unincorporated)	7,612	420	7,065	15,097
Green Ridge	218	18	10	246
Houstonia	136	6	3	145
Hughesville	99	9	1	109
La Monte	423	50	20	493
Sedalia	9,107	1,049	78	10,234
Smithton	232	14	1	247
Pettis County Totals	**17,827**	**1,566**	**7,178**	**26,571**

Source: Parcel Count and Parcel Exposure, Pettis County Assessor's Office Database

Even though schools and special districts' total assets are included in the tables above, additional discussion is needed, based on the data that is available from the districts' completion of the Data Collection Questionnaire and district maintained websites. The number of enrolled students at the participating public school districts is provided in Table 3.6 below. Additional information includes the number of buildings, building values (building exposure) and contents value (contents exposure). These numbers will represent the total enrollment and building count for the public school districts regardless of the county in which they are located. Not all questionnaires received had completed information. Questionnaires can be found in appendix E.

Table 3.6

Enrollment and Building Exposure by Jurisdiction-Public School Districts					
Public School District	**Enrollment**	**Building Count**	**Building Exposure ($)**	**Contents Exposure ($)**	**Total Exposure ($)**
La Monte R-IV	356	3		$620,000	$620,000
Pettis County R-V	350	2			$0
Smithton R-VI	576	3	$15,378,861	$2,818,737	$18,197,598
Green Ridge R-VIII	374	5	$10,118,578	$14,860,854	$24,979,432
Pettis County R-XII	132	1			$0
Sedalia 200	5148	9	$153,858,000	$23,808,622	$177,666,622

Source: Enrollment numbers from "Building Enrollment 1991-2017" spreadsheet found online at: http://mcds.dese.mo.gov/quickfacts/Pages/District-and-School-Information.aspx. The Building Exposure, Contents Exposure, and Total Exposure amounts come from the completed Data Collection Questionnaires from Public School Districts. In general, the school districts obtain this information from their insurance coverage amounts.

3.2.2 Critical and Essential Facilities and Infrastructure

This section will include information from the Data Collection Questionnaire and other sources concerning the vulnerability of participating jurisdictions' critical, essential, high potential loss, and transportation/lifeline facilities to identified hazards. Definitions of each of these types of facilities are provided below.

- Critical Facility: Those facilities essential in providing utility or direction either during the response to an emergency or during the recovery operation.
- Essential Facility: Those facilities that if damaged, would have devastating impacts on disaster response and/or recovery.
- High Potential Loss Facilities: Those facilities that would have a high loss or impact on the community.
- Transportation and lifeline facilities: Those facilities and infrastructure critical to transportation, communications, and necessary utilities.

Table 3.7 includes a summary of the inventory of critical and essential facilities and infrastructure in the planning area. The list was compiled from the Data Collection Questionnaire as well as other internet based publications. Questionnaires can be found in appendix E.

Table 3.7

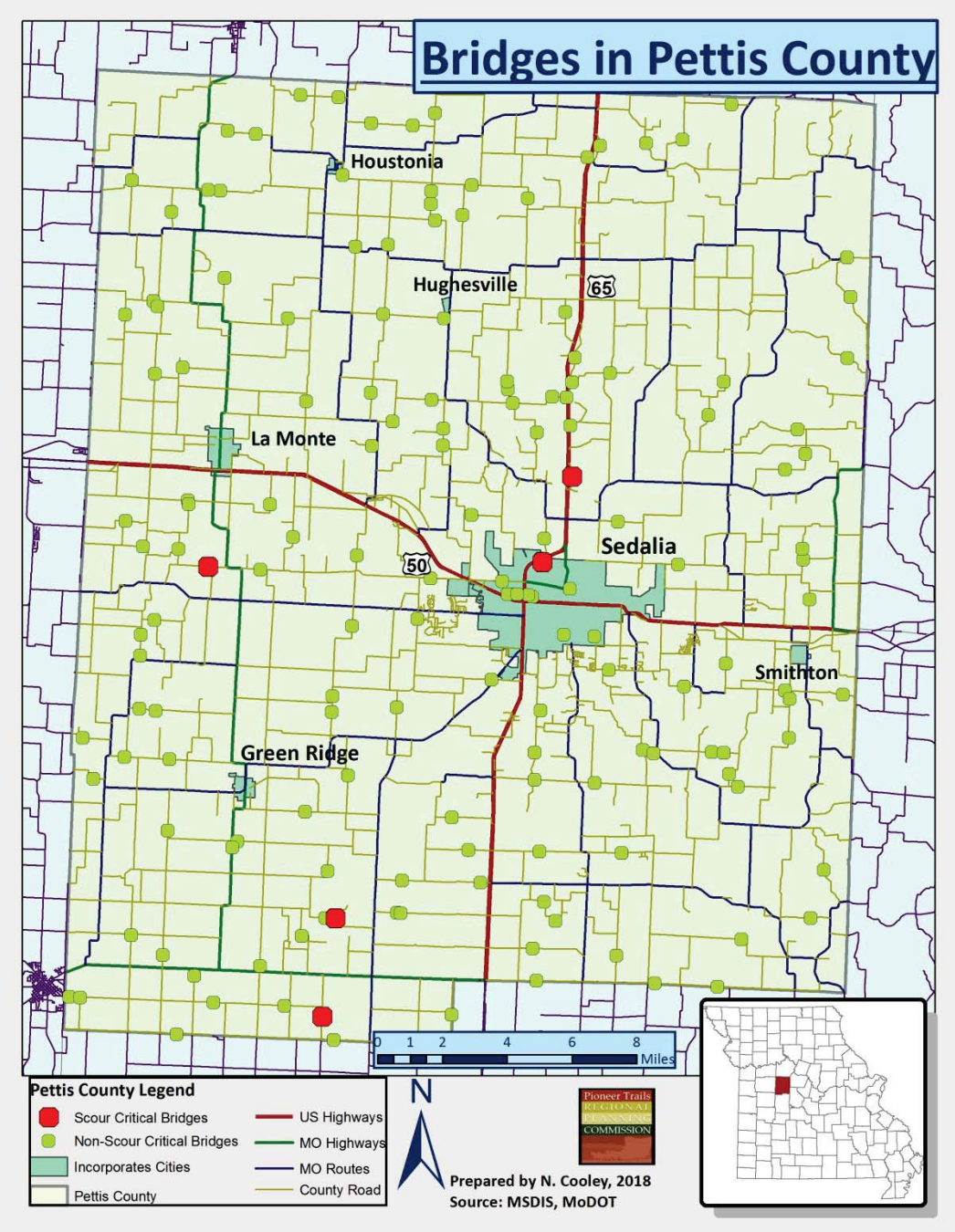
Inventory of Critical/Essential Facilities & Infrastructure by Jurisdiction																							
Jurisdiction	**Airport**	**Bus Facility**	**Communications Tower**	**Electric Power Facility**	**Emergency Operations**	**Fire Service**	**Government**	**Housing**	**Shelters**	**Hwy. Bridge**	**Hospital/Health Care**	**Military**	**Natural Gas Facility**	**Nursing Home**	**Police Station**	**Potable Water Facility**	**Rail**	**Sanitary Pump Stations**	**School Facilities**	**Storm water Pump Stations**	**Tier II Chemical Facility**	**Wastewater Facility**	**Total**
Pettis County																							
Green Ridge	--	--	--	--	--	X	X	--		X	--	--	X		X			X	X			X	
Houstonia	--	--	--	--	--			--		--	--	--	--	--	--	--	--	X	X			X	
Hughesville	--	--	--	--	--			--		--	--	--	--	--	--	--	--						
La Monte	--	--	--	--	--			--	--	--	--	--	--	--		--	--						
Sedalia	X	X	X		X	X	X	X	X		X		X	X	X		X	X		X	X	X	
Smithton																							
Totals																							

Table 3.8

Bridges of Pettis County					
Pettis County	Total	Good Rating	Fair Rating	Poor Rated	Structurally Deficient
	238	104	109	25	53 (22.3%)

Structurally Deficient (SD): This term was previously defined in https://www.fhwa.dot.gov/bridge/0650dsup.cfm as having a condition rating of 4 or less for Item 58 (Deck), Item 59 (Superstructure), Item 60 (Substructure), or Item 62 (Culvert), OR having an appraisal rating of 2 or less for Item 67 (Structural Condition) or Item 71 (Waterway Adequacy) *Beginning with the 2018 data archive*, this term will be defined in accordance with the Pavement and Bridge Condition Performance Measures final rule, published in January of 2017, as a classification given to a bridge which has any component [Item 58, 59, 60, or 62] in Poor or worse condition [code of 4 or less].

Figure 3.1 Pettis County Bridges



3.2.3 Other Assets

Assessing the vulnerability of the planning area to disaster also requires data on the natural, historic, cultural, and economic assets of the area. This information is important for many reasons.

- These types of resources warrant a greater degree of protection due to their unique and irreplaceable nature and contribution to the overall economy.
- Knowing about these resources in advance allows for consideration immediately following a hazard event, which is when the potential for damages is higher.
- The rules for reconstruction, restoration, rehabilitation, and/or replacement are often different for these types of designated resources.
- The presence of natural resources can reduce the impacts of future natural hazards, such as wetlands and riparian habitats which help absorb floodwaters.
- Losses to economic assets like these (e.g., major employers or primary economic sectors) could have severe impacts on a community and its ability to recover from disaster.

Threatened and Endangered Species: (Table 3.9) showing Federally Threatened, Endangered, Proposed and Candidate Species in the county.

Table 3.9

Endangered/Threatened Species in Pettis County		
Common Name	**Scientific Name**	**Status**
Gray Bat	Myotis grisescens	Endangered
Indiana Bat	Myotis sodalis	Endangered
Northern Long-eared Bat	Myotis septentrionalis	Threatened
Mead's Milkweed	Asclpias meadii	Threatened

https://ecos.fws.gov/ipac/location/WHPFTFXKZFBFRPAAPTDGQGGIE4/resources#endangered-species

Natural Resources: The Missouri Department of Conservation (MDC) provides a database of lands the MDC owns, leases, or manages for public use. Table 3.10 provides the names and locations of parks and conservation areas in the planning area.

Table 3.10

Conservation Areas in Pettis County		
Area Name	**Address**	**Closest City**
Bothwell Lodge SHS	19349 Bothwell State Park Road	Sedalia
Perry Memorial CA	NE 1200 Rd JOCO	Concordia
Pinhook Access	Pin Hood Rd	Sedalia
State Fair Grounds	HWY 65 & 16th Street	Sedalia
J. N. Turkey Kearn Memorial Wildlife Area	SE 1201 Rd JOCO	Green Ridge
Hartwell CA	Route AA	Green Ridge

Burns Tract	Hope Dale Rd	Green Ridge
W. R. Kearn Memorial CA	S Hope Dale Rd	Green Ridge
Bryson's Hope CA	S Hope Dale Rd	Green Ridge
Grandfather Prairie CA	W Mather Rd	Sedalia
Friendlt Prairie CA	W Manila Rd	Sedalia
Paint Brush Paririe CA	E Manila Rd	Sedalia
Drovers Prairie CA	S Hoffman Rd	Sedalia
Kahrs-Boger Park	S Route M	Sedalia
Parks in Pettis County		
Park Name	**Address**	**Jurisdiction**
Liberty Park	Hwy 65 & Third St.	Sedalia
Centennial Park	16th Street and New York	Sedalia
Housel Park	Howard and Hurley	Sedalia
Hubbard Park	Johnson and Missouri streets	Sedalia
Kata Park	24th and Grand	Sedalia
Vermont Park	Vermont and 14th Street	Sedalia
Clover Dell Park	West 32nd Street, 8/10 of a mile from the city limits	Sedalia

Historic Resources:

The National Register of Historic Places is the official list of registered cultural resources worthy of preservation. It was authorized under the National Historic Preservation Act of 1966 as part of a national program. The purpose of the program is to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. The National Register is administered by the National Park Service under the Secretary of the Interior. Properties listed in the National Register include districts, sites, buildings, structures and objects that are significant in American history, architecture, archeology, engineering, and culture.

Properties in Pettis County listed in the National Register of Historic Places are listed in Table 3.11

Table 3.11

National Register of Historic Places in Pettis County		
Property	**Location**	**Date Listed**
Bois d'Arc Cooperative Dairy Farm Historic District	Hughesville vicinity	9/27/1991
Building at 217 W Main Street	W Main St, Sedalia	10/24/1996
G and G Veterinary Hospital	W Main St, Sedalia	4/15/2011
Gentry, William H., House	Sedalia vicinity	11/14/1997
Harris House	W 6th St, Sedalia	7/10/1979
Heard, John T. and Lillian, House	W Broadway, Sedalia	4/15/2011
Hillview Cooperative Dairy Farm Historic District	Hughesville vicinity	9/27/1991
Hotel Bothwell	E 4th St., Sedalia	9/8/1989

Hubbard, C. C., High School	N Osage Ave., Sedalia	7/3/1997
Jones, Henry, Farmstead	Sedalia vicinity	12/3/2008
McVey School	Sedalia vicinity	10/14/1999
Missouri, Kansas and Texas Railroad Depot	E 3rd St., Sedalia	3/28/1979
Missouri/Sedalia Trust Co.	S Ohio, Sedalia	3/29/1983
Missouri State Fairgrounds Historic District	Sedalia	6/28/1991
Osage Farms Type 315:13 Government Farmhouse	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 1 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 25 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 26 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 30 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 31 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 41 Historic District	Houstonia vicinity	9/27/1991
Osage Farms Unit No. 43 Historic District	Hughesville vicinity	9/27/1991
Osage Farms Unit No. 5 and No. 6 Historic District	Houstonia vicinity	9/27/1991
Osage Farms Unit No. 8 and No. 9 Historic District	Houstonia vicinity	9/27/1991
Sedalia Commercial Historic District	Sedalia	updated 2/14/17
Sedalia Public Library	Sedalia	1/10/1980
Thomson, Gen. David, House	Hughesville vicinity	10/4/1982

Source: Missouri Department of natural Resources – Missouri National Register Listings by County
http://dnr.mo.gov/shpo/mnrlist.htm

Economic Resources:

Table 3.12 shows major non-government employers in the planning area.

Table 3.12

Major Non-Government Employers in Pettis County	
Employer Name	**Average Employees**
Tyson Foods	1000+
Sedalia 200 School District	500+
Bothwell Regional Health Center	500+
Waterloo Industries	250+
State Fair Community College	250+
Wal-Mart	250+
Duke Manufacturing	250+
Maxion Wheels	250+
Inter-State Studios	250+
Four Seasons Living Center	250+
Gardener Denver	250+
Fall River Health & Safety	100+
Center for Human Services	100+

WireCo World Group	100+
Pittsburgh Corning	100+
General Cable	100+
Woods Supermarket	100+
Menards	100+
Green Ridge School District	65+

Source: Pettis County completed questionnaires

Agriculture-Related Jobs in Pettis County:

Pettis county agriculture plays a big part in the county's economy. Pettis County was the number eleventh county in Missouri for Total Market Value sold in 2012. Pettis was also number six in the value of the livestock sold, with poultry and eggs making up about 69% of the revenue totaling an estimated $122,542,000 and crop sales, $54,467,000, making up the remaining 31%. **Table 3.13** shows more information on agriculture in Pettis County.

Table 3.13

Pettis County	2012	2007	% Change
Number of Farms	1,311	1,398	-6
Land in Farms	419,697	408,932	+3
Average Farm Size	320	293	+9
Market Value of Products Sold			
Crop Sales	54,467,000		
Livestock Sales	122,542,000		
Total	177,010,000	166338000	+6
Average per Farm	135,019	118983	+13
Government Payments			
Government Payments	5,117,000	3,907,000	+31
Average Payment per Farm	7,661	5,581	+37

https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/Missouri/cp29159.pdf

3.3 Land Use and Development

3.3.1 Development since Previous Plan Update

Table 3.14

Pettis County Population Growth				
Jurisdiction	**2016 ACS Est.**	**2000 Population**	**2000-2016 Change**	**2000-2016 % Change**
Pettis County	42,213	39,403	2,810	6.7%
Green Ridge	498	445	48	9.6%
Houstonia	221	275	-54	-19.6%
Hughesville	184	174	10	5.4%
La Monte	1,131	1,064	67	5.9%

Sedalia	21,489	20,339	1,150	5.4%
Smithton	560	510	50	8.9%

Source: U.S. Bureau of the Census, Decennial Census; Population Statistics are for entire incorporated areas as reported by the Census bureau

Population growth or decline is generally accompanied by increases or decreases in the number of housing units. Increases in population add to the built environment and increase risk and exposure to hazard events, the same correlation can be found with a decline in population as well.

Table 3.15

Pettis County Change in Housing Units, 2000-2016				
Jurisdiction	**Housing units 2016 ACS**	**Housing units 2000**	**2000-2016 ACS # Change**	**2000-2016 ACS % Change**
Pettis County	18,204	16,963	1,241	6.82%
Green Ridge	183	187	-4	-2.17%
Houstonia	87	105	-18	-17.14%
Hughesville	63	69	-6	-8.70%
La Monte	549	468	81	14.75%
Sedalia	10,196	9,419	777	7.62%
Smithton	200	212	-12	-5.66%

Source: U.S. Census Bureau, https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Pettis County as a whole has seen an increase in population and in number of housing units. There was only on community that saw a fall in both population and housing units. Green Ridge, Hughesville and Smithton all saw housing units decline but population rise. New development in Sedalia, a steel mill, will minimally increase the jurisdictions' vulnerability to identifies assets.

City of Green Ridge

The City of Green Ridge is a rural community of about 445 residents a small increase from 2000. Although the Green Ridge population has grown, 9.6%, the number of housing units has slipped by 2.17%. Minimal development has occurred since the last plan update but the building of a new bus barn is planned during this planning cycle.

City of Houstonia

The City of Houstonia is the second smallest community included in this plan, population 221, and has seen the largest decline in population, -19.6%, and housing units, -17.14, since the 2000 census. With both of the previous factors in decline, development has been negligible.

Village of Hughesville

The Village of Hughesville has an estimated population of 184, a slight increase since 2000, 174. However, the number of housing units has seen a slight decrease from 69 to 63. No new development has happened since the last plan.

City of La Monte

Since the 2000 census, the City of La Monte, the second largest jurisdiction, has experienced a population increase of almost 6%, from 1064 to 1131. La Monte also had the largest percentage increase, 14.75%, in housing units which total 549 in the 2016 ACS estimate. The additional

housing units up the vulnerability for La Monte although this increase is relatively small. No large projects are currently planned that would increase La Monte's vulnerability.

City of Sedalia
Sedalia is the largest urbanized city in Pettis County and has experienced a steady population increase of about 72 people per year since 2000, or a 5.4% increase from 20,339 to 21,489. The number of housing units in Sedalia has increased along with the population, totaling 10,196 for the 2016 ACS estimate, a 7.6% increase from 9,419 in 2000. Two projects planned within the next five years include a new police station and regional sewage lift station. These assets, mainly the police station project, and the increase in housing units increase the overall vulnerability for Sedalia since the last mitigation plan.

Smithton
The City of Smithton, the third largest population, has increased to 560 for 2016 up from 510 in 2000, marking an almost 9% increase. However, housing units in Smithton have declined by 5.7%, for a total of 200 units. With no major development or population growth, there has not been an increase in the cities vulnerability.

3.3.2 Future Land Use & Development

Table 3.16

Building Permits Issued by the City of Sedalia by Year								
Year	All Permits	Single Family	Apartment/Duplex	Commercial	Industrial	Signs	Commercial Addition/ Repair	Dwelling Addition/ Repair
2016	444	22	6	4	0	56	66	219
2015	505	5	9	15	0	77	48	279
2014	438	13	2	4	0	41	38	273
2013	437	16	1	10	1	39	55	237

Source: Sedalia questionnaire.

3.4 Hazard Profiles, Vulnerability, and Problem Statements

Each hazard will be analyzed individually in a hazard profile in section 3.1.4. The profile will consist of a general hazard description, location, severity/magnitude/extent, previous events, future probability, a discussion of risk variations between jurisdictions, and how anticipated development could impact risk. At the end of each hazard profile will be a vulnerability assessment, followed by a summary problem statement.

Hazard Profiles

The level of information presented in the profiles will vary by hazard based on the information available. With each update of this plan, new information will be incorporated to provide better evaluation and prioritization of the hazards that affect the planning area. Detailed profiles for each of the identified hazards include information categorized as follows:

Hazard Description: This section consists of a general description of the hazard and the types of impacts it may have on a community or school/special district.

Geographic Location: This section describes the geographic location of the hazard in the planning area. Where available, use maps to indicate the specific locations of the planning area that are vulnerable to the subject hazard. For some hazards, the entire planning area is at risk.

Severity/Magnitude/Extent: This includes information about the severity, magnitude, and extent of a hazard. For some hazards, this is accomplished with description of a value on an established scientific scale or measurement system, such as an EF2 tornado on the Enhanced Fujita Scale. Severity, magnitude, and extent can also include the speed of onset and the duration of hazard events. Describing the severity/magnitude/extent of a hazard is not the same as describing its potential impacts on a community. Severity/magnitude/extent defines the characteristics of the hazard regardless of the people and property it affects.

Previous Occurrences: This section includes available information on historic incidents and their impacts. Historic event records form a solid basis for probability calculations.

Probability of Future Occurrence: The frequency of recorded past events is used to estimate the likelihood of future occurrences. Probability was determined by dividing the number of recorded events by the number of years and multiplying by 100. This gives the percent chance of the event happening in any given year. For events occurring more than once annually, the probability will be reported 100% in any given year, with a statement of the average number of events annually.

Vulnerability Assessments

Following the hazard profile for each hazard will be the vulnerability assessment. The vulnerability assessment further defines and quantifies populations, buildings, critical facilities, and other community assets at risk to damages from natural hazards. The vulnerability assessments will be based on the best available county-level data, which is in the Missouri Hazard Mitigation Plan (2010). The county-level assessments in the State Plan were based on the following sources:

- Statewide GIS data sets compiled by state and federal agencies; and
- FEMA's HAZUS-MH loss estimation software.

The vulnerability assessments in the Pettis County plan will also be based on:

- Written descriptions of assets and risks provided by participating jurisdictions;
- Existing plans and reports;
- NOAA/NCDC Storm event Database;
- Personal interviews with planning committee members and other stakeholders; and
- Other sources as cited. In the Vulnerability Assessment, the following sub-headings will be addressed:

Potential Losses to Existing Development: Including types and numbers, of buildings, critical facilities.

Previous and Future Development: This section will include information on how changes in development have impacted the community's vulnerability to this hazard. It also includes a

description of any changes in development that occurred in known hazard prone areas since the previous plan have increased or decreased the community's vulnerability, and any anticipated future development in the county, and how that would impact hazard risk in the planning area.

Hazard Summary by Jurisdiction: For hazard risks that vary by jurisdiction, this section will provide an overview of the variation and the factual basis for that variation. For example, a community that has adopted more recent building codes and constructed safe rooms would be less vulnerable to the impact of tornados.

Problem Statements

Each hazard analysis must conclude with a brief summary of the problems created by the hazard in the planning area, and possible ways to resolve those problems. Jurisdiction-specific information in those cases where the risk varies across the planning area is included.

3.4.6 Flooding (Flash & River)

Hazard Profile

Hazard Description

A flood is partial or complete inundation of normally dry land areas. Riverine flooding is defined as the overflow of rivers, streams, drains, and lakes due to excessive rainfall, rapid snowmelt, or ice. There are several types of riverine floods, including headwater, backwater, interior drainage, and flash flooding. Riverine flooding 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 during rapid runoff are called floodplains. A floodplain 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, which is defined as all the land drained by a river and its branches.

Flooding caused by dam and levee failure is discussed in Section 3.4.1 and Section 3.4.8 respectively. It will not be addressed in this section.
A flash flood occurs when water levels rise at an extremely fast rate as a result of intense rainfall over a brief period, sometimes combined with rapid snowmelt, ice jam release, frozen ground, saturated soil, or impermeable surfaces. Flash flooding can happen in Special Flood Hazard Areas (SFHAs) as delineated by the National Flood Insurance Program (NFIP), and can also happen in areas not associated with floodplains.

Ice jam flooding is a form of flash flooding that occurs when ice breaks up in moving waterways, and then stacks on itself where channels narrow. This creates a natural dam, often causing flooding within minutes of the dam formation.

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. 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 sheet flooding, is becoming increasingly prevalent as development outstrips the ability of the drainage infrastructure to properly carry and disburse the water flow.

Most flash flooding is caused by slow-moving thunderstorms or thunderstorms repeatedly moving over the same area. Flash flooding is a dangerous form of flooding which can reach full peak in only a few minutes. Rapid onset allows little or no time for protective measures. Flash flood waters move at very fast speeds and can move boulders, tear out trees, scour channels, destroy buildings, and obliterate bridges. Flash flooding can result in higher loss of life, both human and animal, than slower developing river and stream flooding.

In certain areas, aging storm sewer systems are not designed to carry the capacity currently needed to handle the increased storm runoff. Typically, the result is water backing into basements, which damages mechanical systems and can create serious public health and safety concerns. This combined with rainfall trends and rainfall extremes all demonstrate the high probability, yet generally unpredictable nature of flash flooding in the planning area.

Although flash floods are somewhat unpredictable, there are factors that can point to the likelihood of flash floods occurring. Weather surveillance radar is being used to improve monitoring capabilities of intense rainfall. This, along with knowledge of the watershed characteristics, modeling techniques, monitoring, and advanced warning systems has increased the warning time for flash floods.

Geographic Location

The follow figures show the 100-year floodplain around and critical facilities within the jurisdictions in Pettis County. **Figures 3.11-16** detail the floodplain around incorporated areas while **Figures 3.17-22** show critical facilities for each jurisdiction.

Figure 3.11

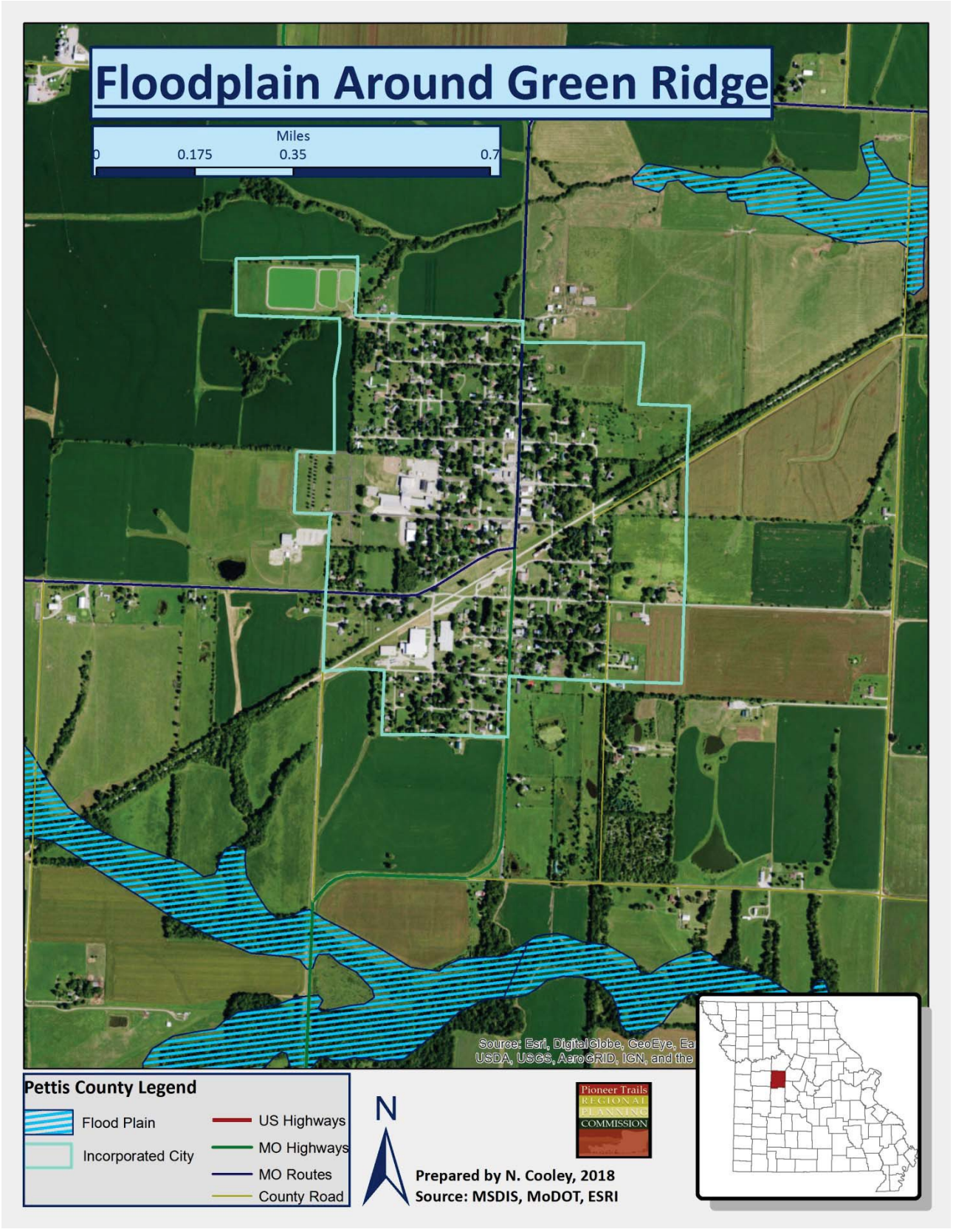

Floodplain Around Green Ridge
Miles
0
0.175
0.35
0.7
Source: Esri, DigitalGlobe, GeoEye, Ea
USDA, USGS, AeroGRID, IGN, and the
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.12

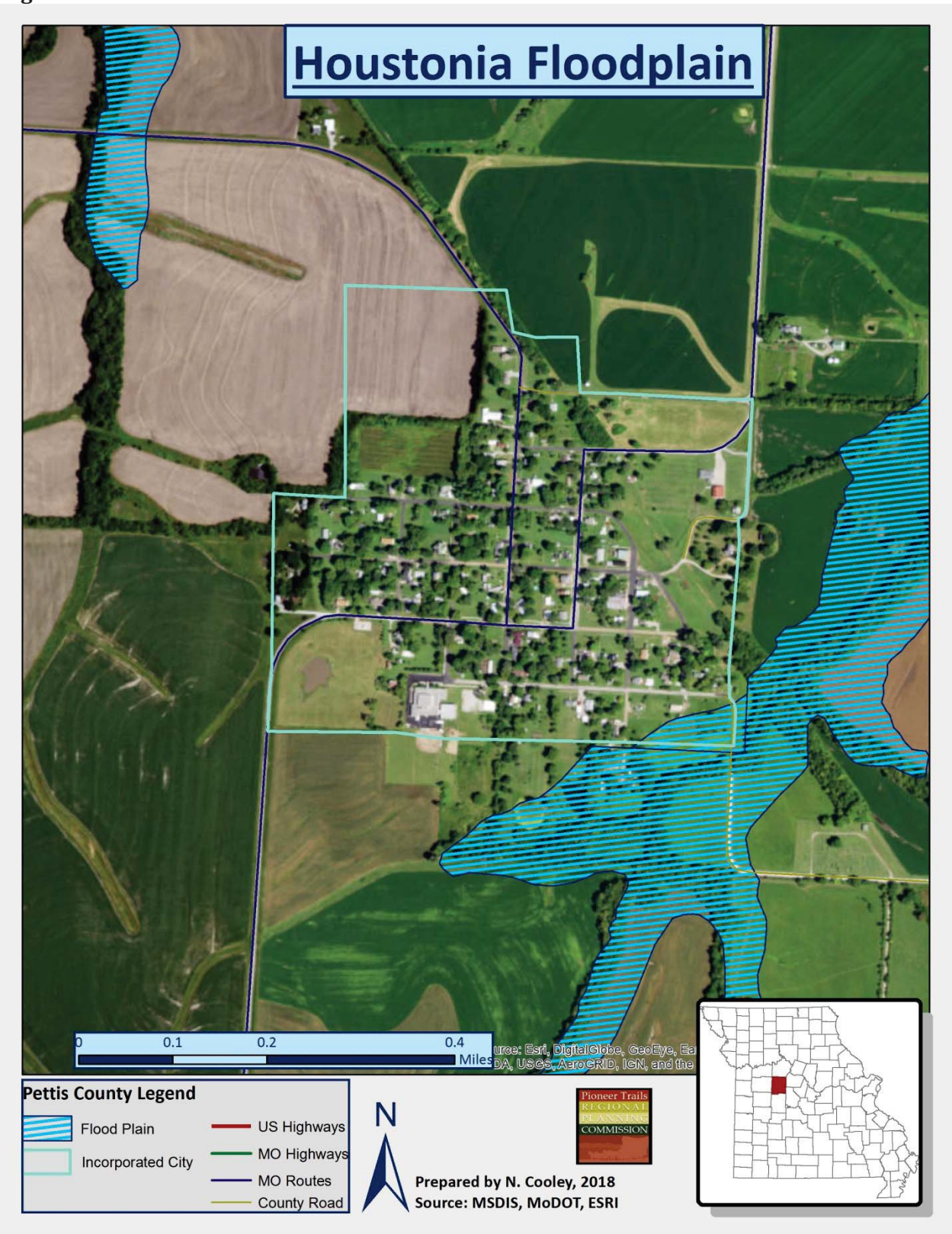

Houstonia Floodplain
0
0.1
0.2
0.4
Miles
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.13

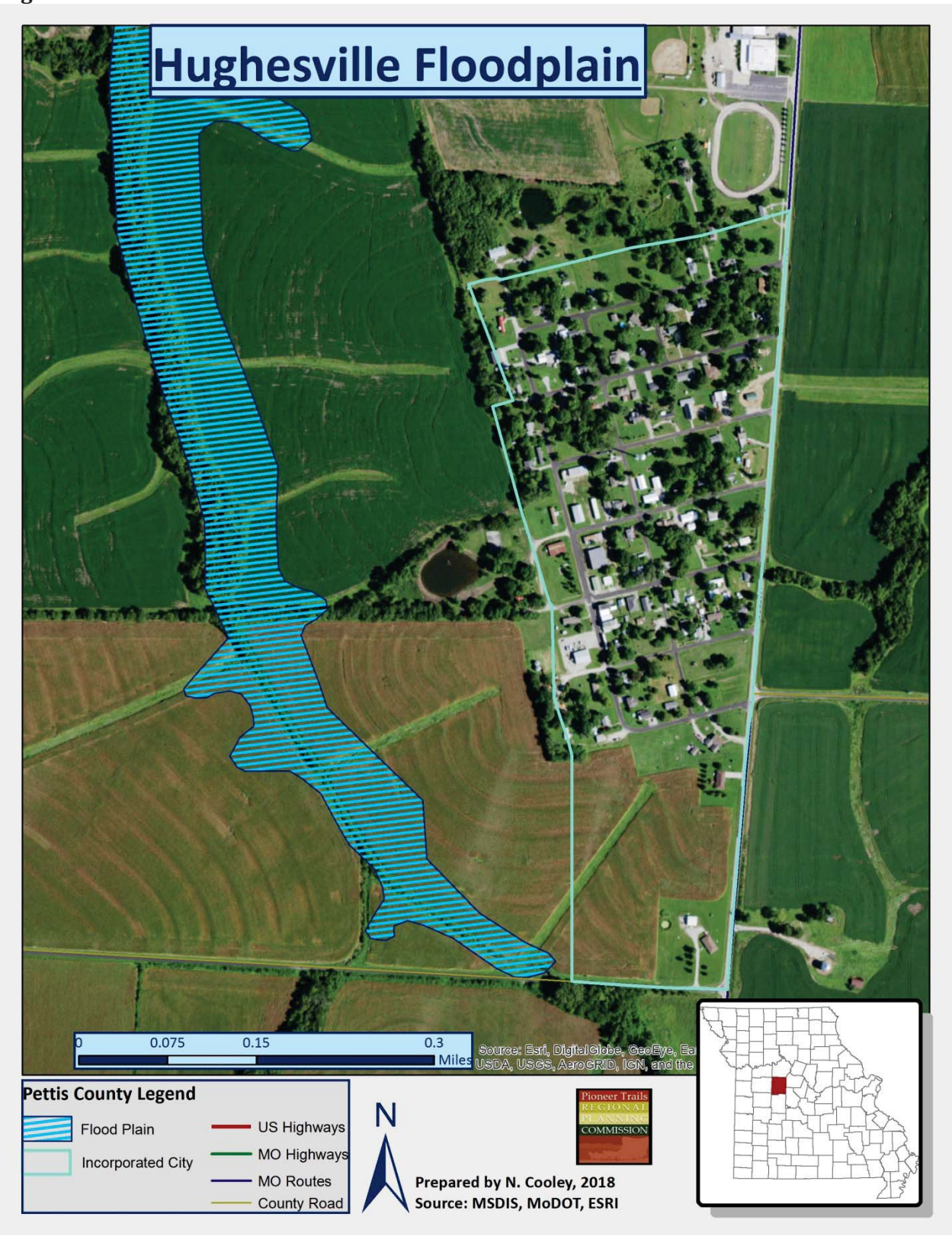

Hughesville Floodplain
0
0.075
0.15
0.3
Miles
Source: Esri, DigitalGlobe, GeoEye, Ea
USDA, USGS, AeroGRID, IGN, and the
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.14

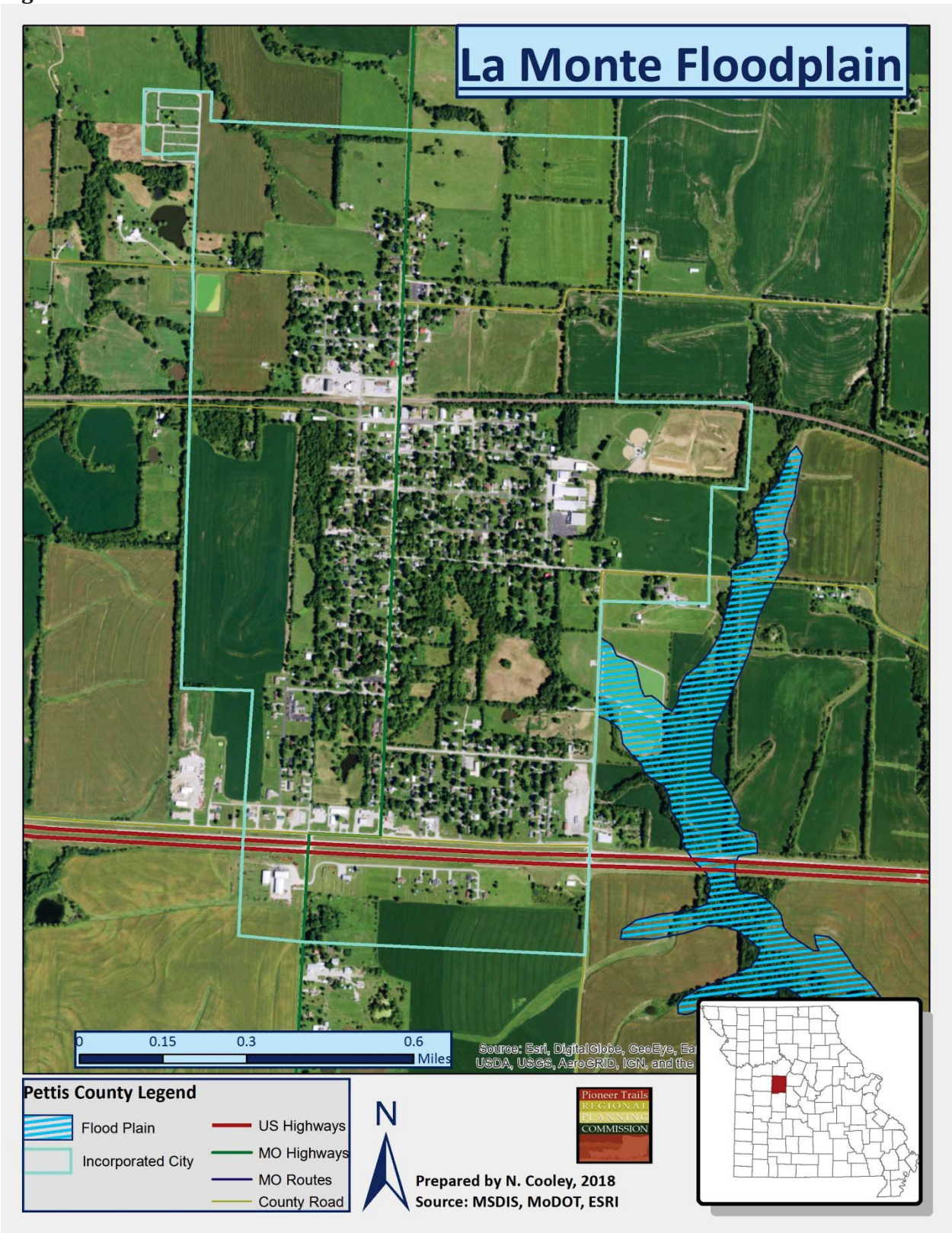

La Monte Floodplain
0
0.15
0.3
0.6
Miles
Source: Esri, DigitalGlobe, GeoEye, Ea
USDA, USGS, AeroGRID, IGN, and the
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.15

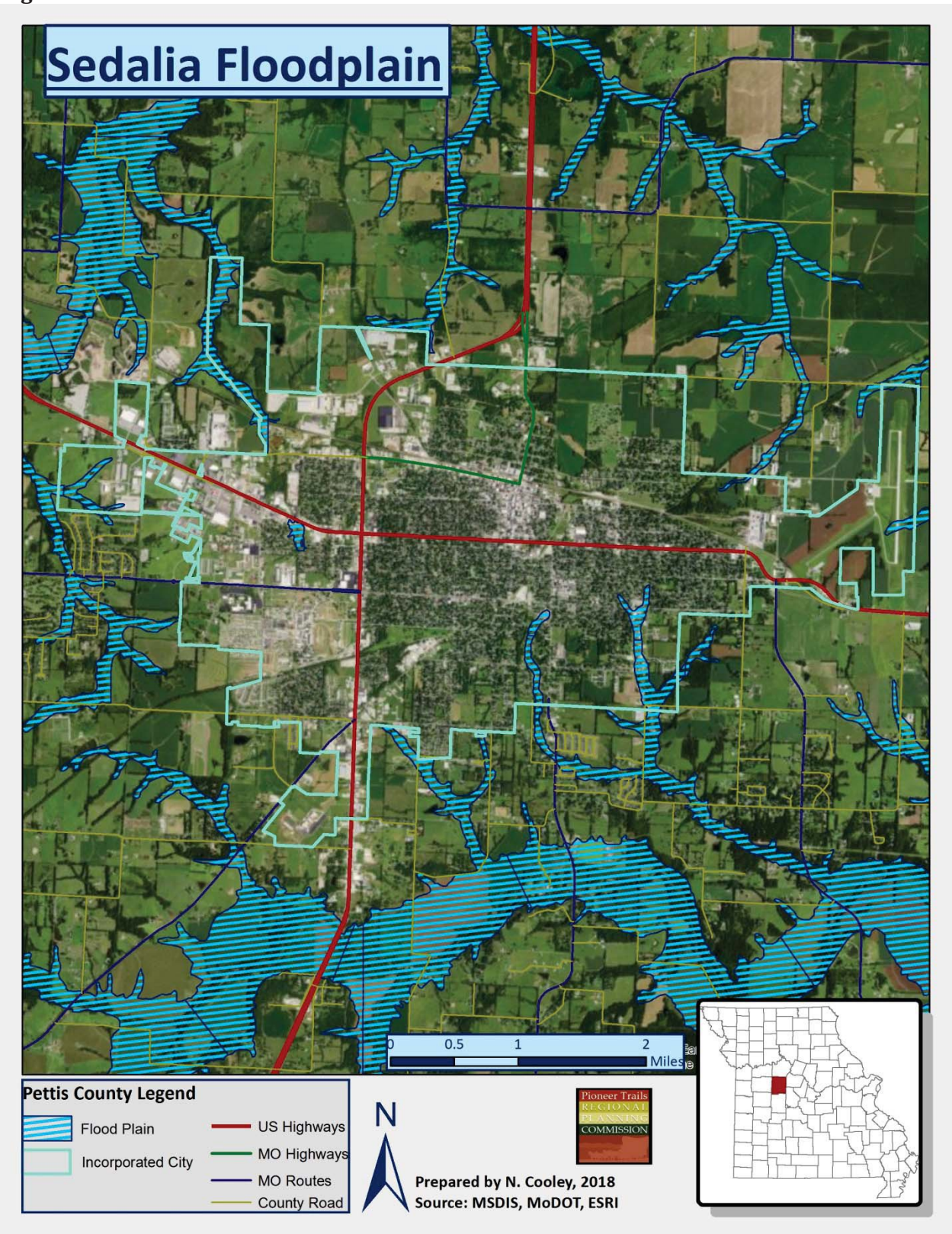

Sedalia Floodplain
0
0.5
1
2
Miles
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.16

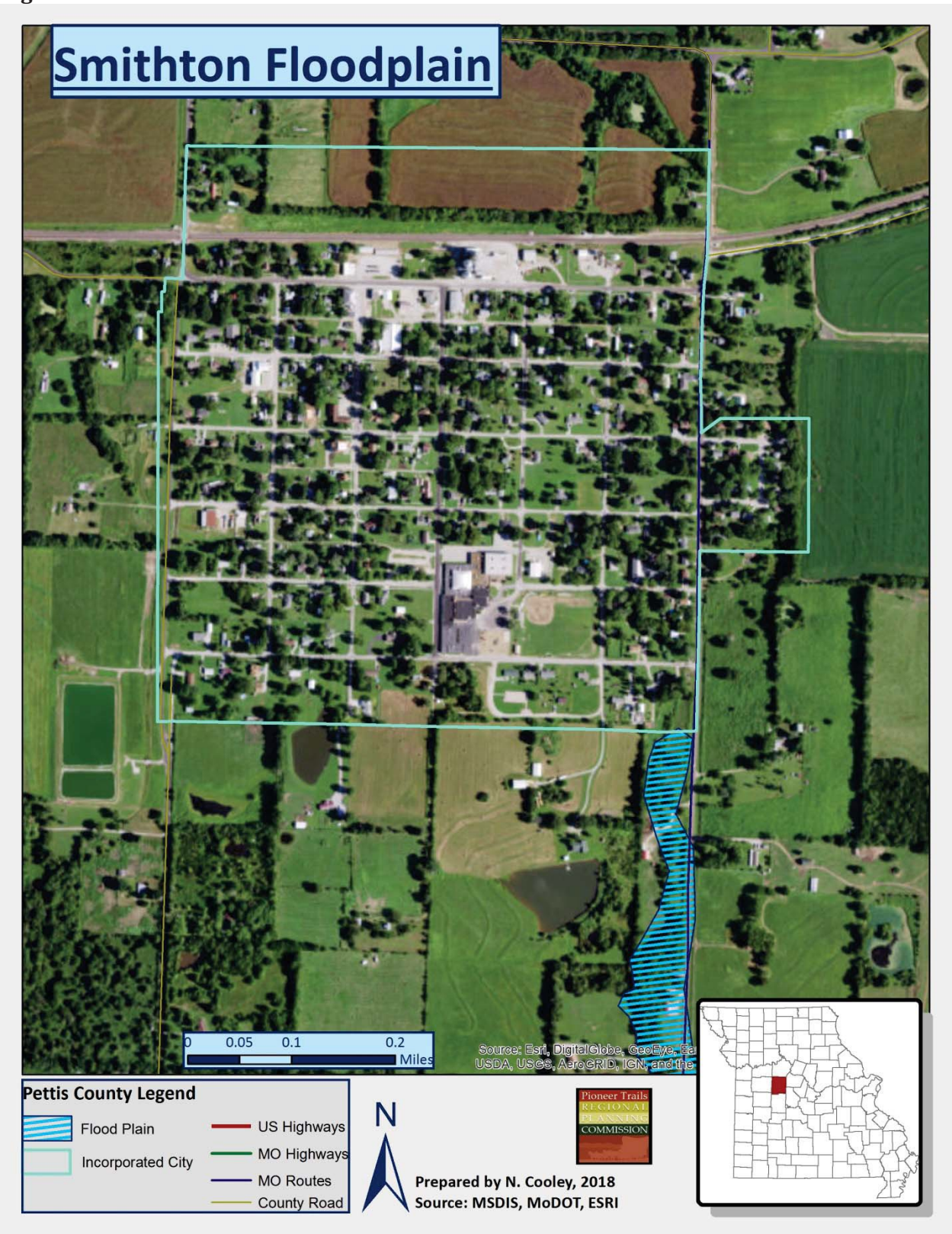

Smithton Floodplain
0 0.05 0.1 0.2
Miles
Source: Esri, DigitalGlobe, GeoEye, Ea
USDA, USGS, AeroGRID, IGN, and the
Pettis County Legend
Flood Plain
Incorporated City
US Highways
MO Highways
MO Routes
County Road
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.17

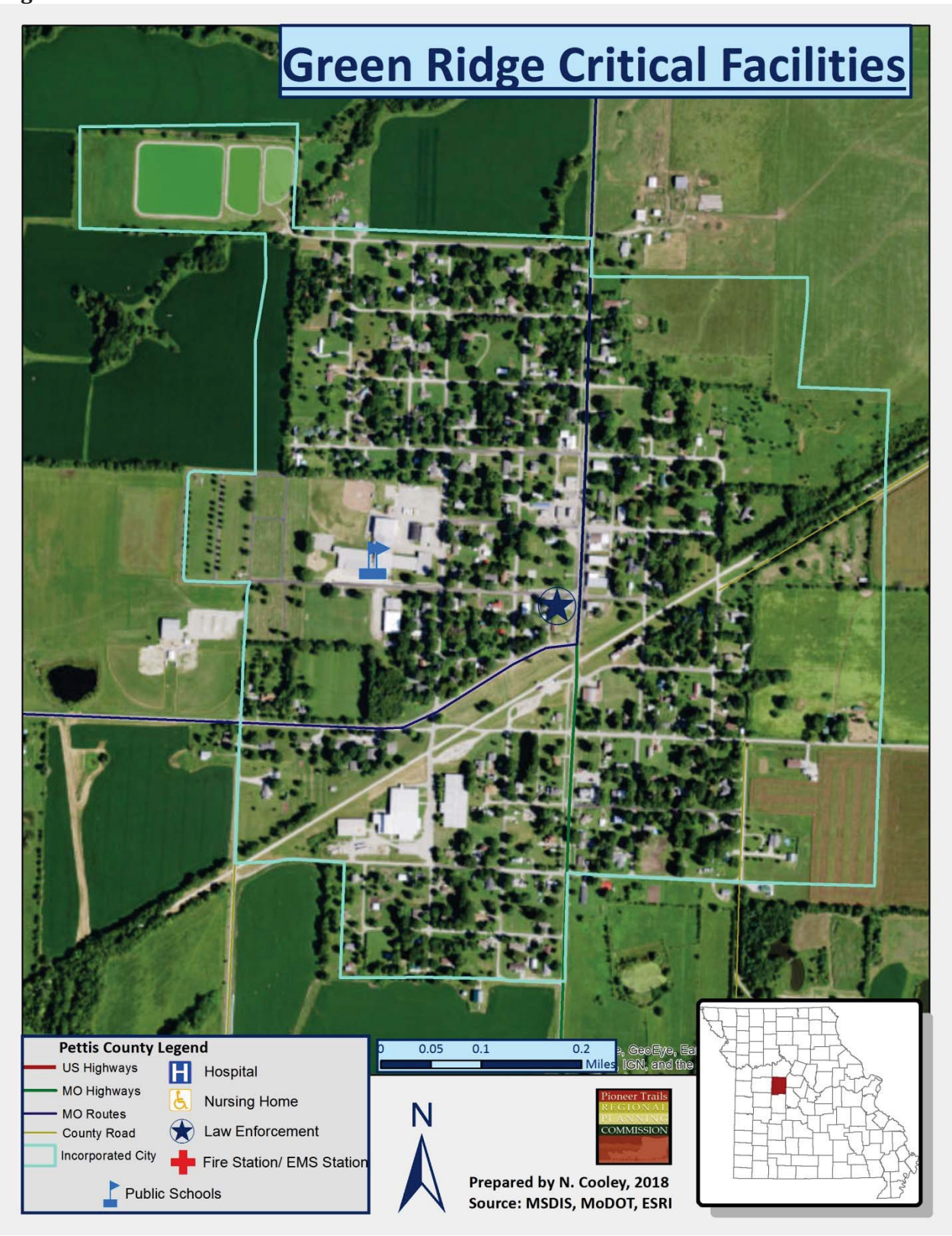

Green Ridge Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0 0.05 0.1 0.2
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.18

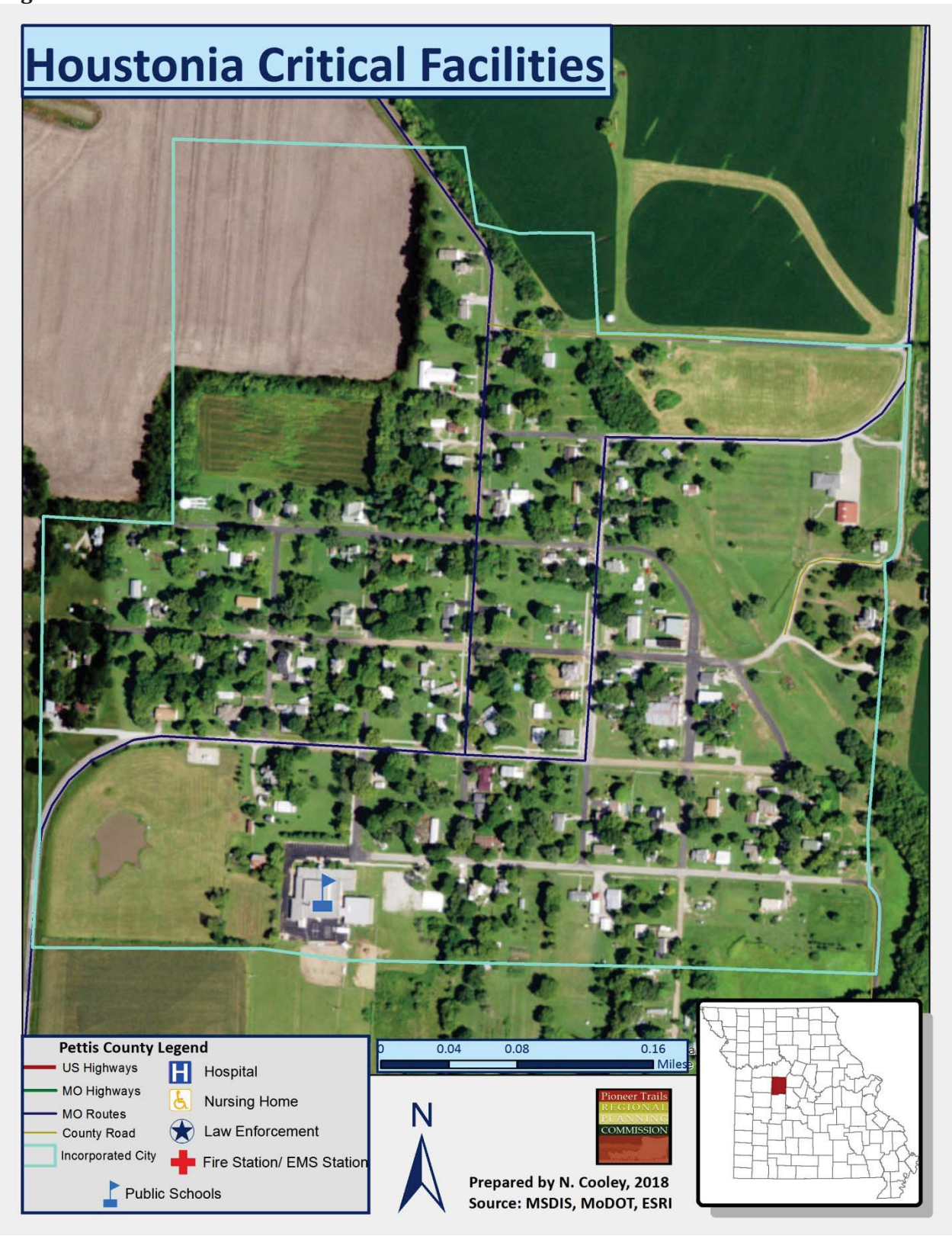

Houstonia Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0 0.04 0.08 0.16
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.19

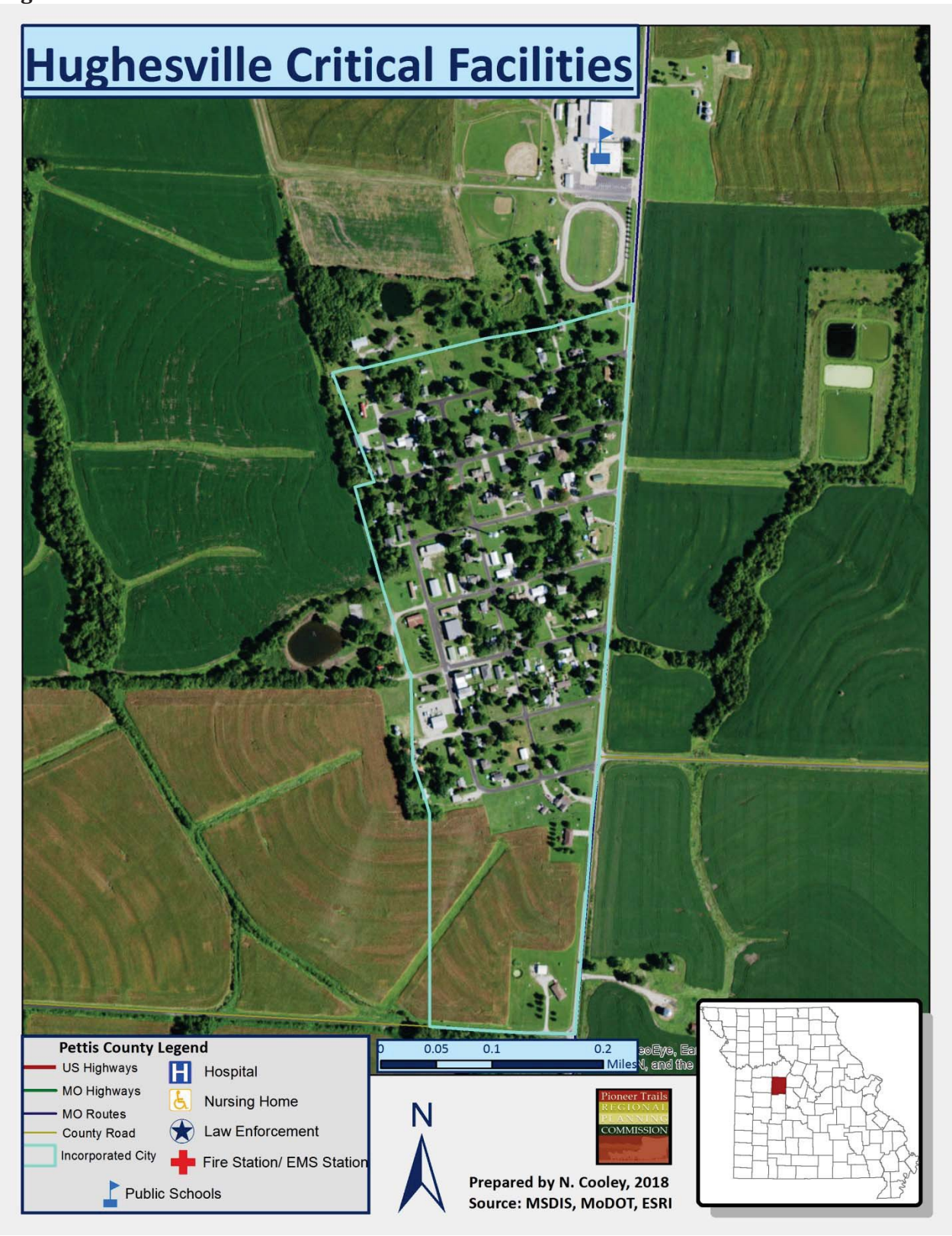

Hughesville Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0 0.05 0.1 0.2
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.20

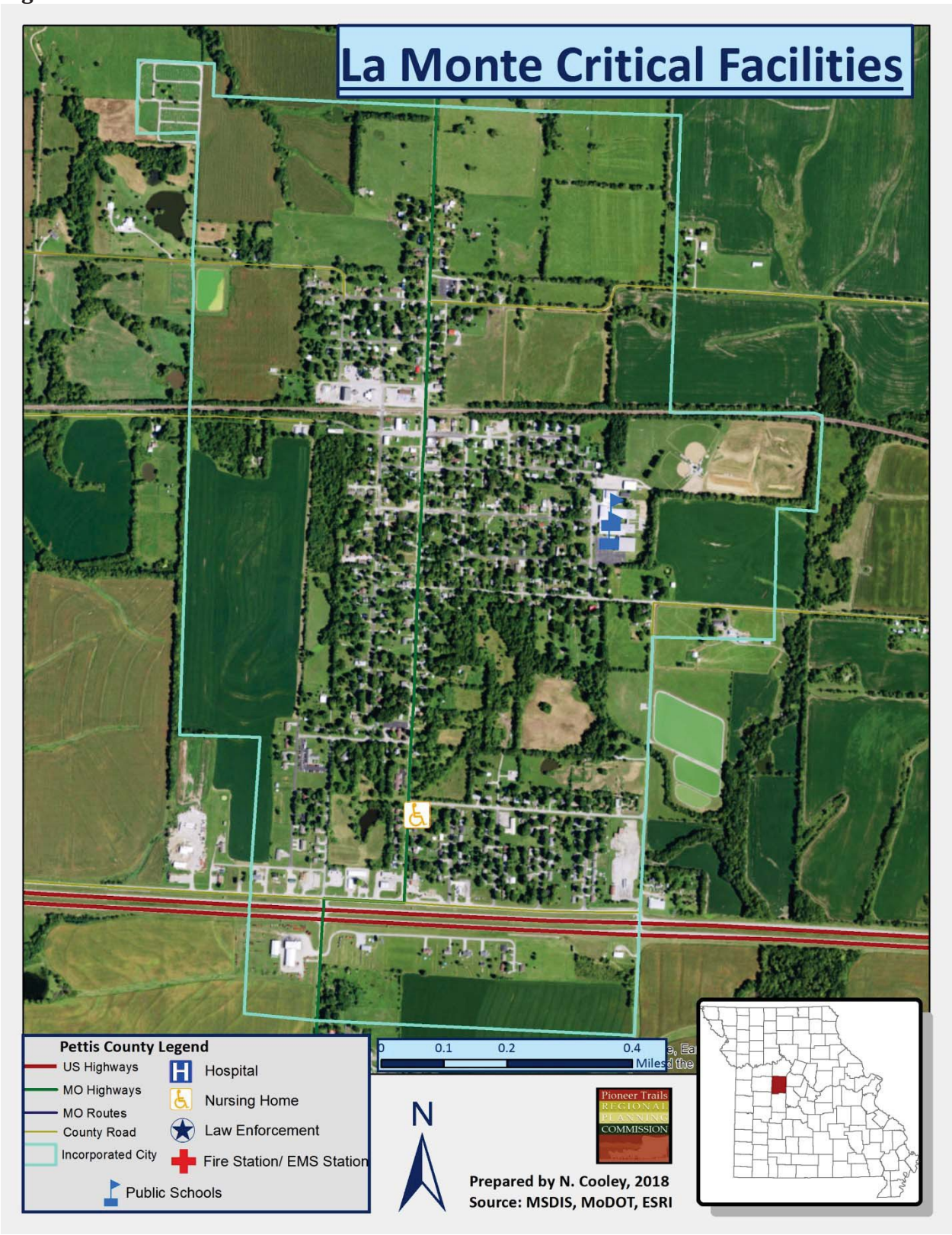

La Monte Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0 0.1 0.2 0.4
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.21

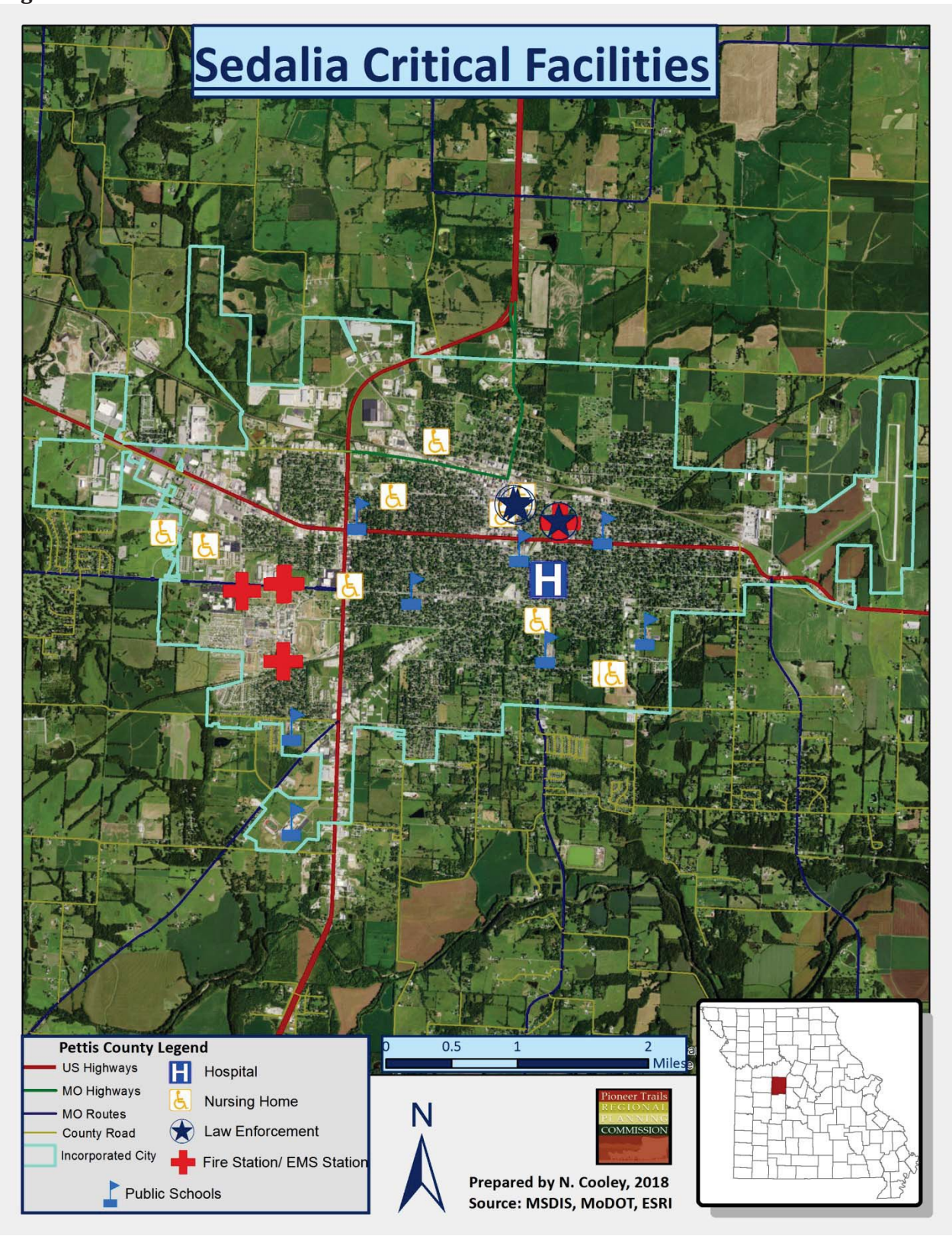

Sedalia Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0
0.5
1
2
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Figure 3.22

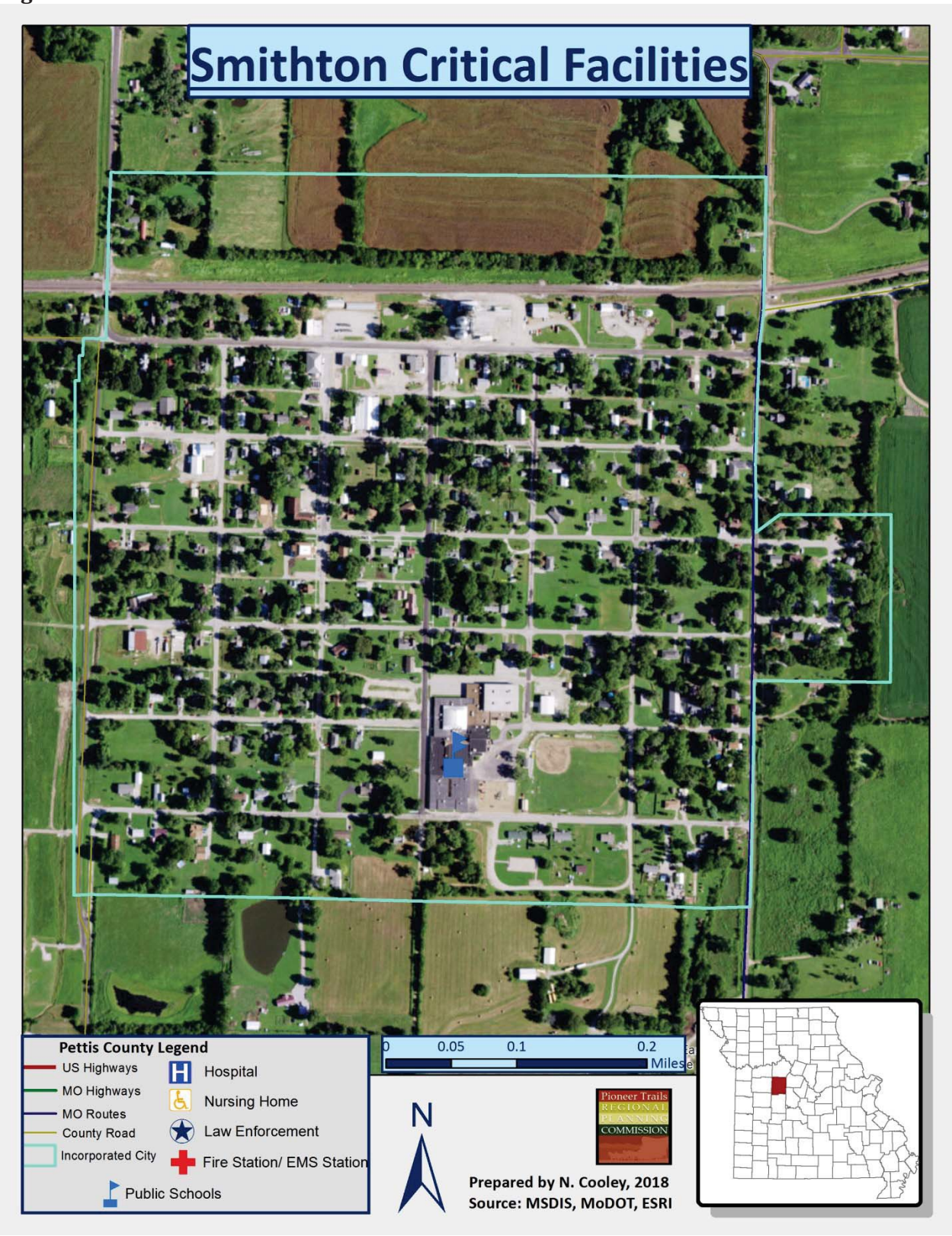

Smithton Critical Facilities
Pettis County Legend
US Highways
MO Highways
MO Routes
County Road
Incorporated City
Hospital
Nursing Home
Law Enforcement
Fire Station/ EMS Station
Public Schools
0
0.05
0.1
0.2
Miles
N
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
Prepared by N. Cooley, 2018
Source: MSDIS, MoDOT, ESRI

Table 3.23

Pettis County NCDC Flooding Events by Location, 1996-2017		
Location	**Event Dates**	**# of Event Days**
Pettis County	6/28/1997, 7/30/1998, 8/7/1999, 7/11/2000, 12/28/2005	5
Green Ridge	6/28/1997	1
Sedalia	7/30/1998, 8/7/1999, 7/11/2000	3

Source: National Climatic Data Center

The NCDC storm event data lists flash flood events according to the nearest community or place. Most of these events cover larger areas than the smaller geographic areas reported in the data. Some specific locations are listed within the narratives for flash flood events. Where specific roads and locations are listed they are provided in the table. Although some events may not be inside the corporate limits of the community identified in the narrative, they are in such proximity that the community named would be the most affected by impassible roads. It is safe to assume that numerous low water crossings would be impacted by heavy rains that exacerbate flash flooding across the county. In addition, multiple records are related to the same event and vice versa.

Table 3.24

Pettis County NCDC Flash Flooding Events by Location, 1996-2017		
Location	**Event Dates**	**# of Event Days**
Pettis County	7/20/1996, 6/20/1998, 7/26/1998, 5/26/2000, 4/10/2001, 6/4/2001, 5/10/2003, 1/4/2005, 1/12/2005, 6/10/2007, 6/29/2007, 9/12/2008, 6/15/2009, 7/11/2010, 5/20/2013, 8/7/2013, 4/3/2014, 7/1/2015, 8/1/2016,	19
Green Ridge	1/12/2005, 7/11/2010,	2
Houstonia	4/10/2001, 8/1/2016	2
Hughesville	5/20/2013	1
La Monte	7/20/1996, 8/1/2016	2
Sedalia	6/20/1998, 7/26/1998, 6/4/2001, 1/4/2005, 6/29/2007, 9/12/2008, 6/15/2009	7
Smithton	7/1/2015	1

Source: National Climatic Data Center

Severity/Magnitude/Extent

Missouri has a long and active history of flooding over the past century, according to the 2010 State Hazard Mitigation Plan. Flooding along Missouri's major rivers generally results in slow-moving disasters. River crest levels are forecast several days in advance, allowing communities downstream sufficient time to take protective measures, such as sandbagging and evacuations. Nevertheless, floods exact a heavy toll in terms of human suffering and losses to public and private property. By contrast, flash flood events in recent years have caused a higher number of deaths and major property damage in many areas of Missouri.

Flooding presents a danger to life and property, often resulting in injuries, and in some cases, fatalities. Floodwaters themselves can interact with hazardous materials. Hazardous materials

stored in large containers could break loose or puncture as a result of flood activity. Examples are bulk propane tanks. When this happens, evacuation of citizens is necessary.

Public health concerns may result from flooding, requiring disease and injury surveillance. Community sanitation to evaluate flood-affected food supplies may also be necessary. Private water and sewage sanitation could be impacted, and vector control (for mosquitoes and other entomology concerns) may be necessary.

When roads and bridges are inundated by water, damage can occur as the water scours materials around bridge abutments and gravel roads. Floodwaters can also cause erosion undermining road beds. In some instances, steep slopes that are saturated with water may cause mud or rock slides onto roadways. These damages can cause costly repairs for state, county, and city road and bridge maintenance departments, see Figure 3.1 for bridges in planning area. When sewer back-up occurs, this can result in costly clean-up for home and business owners as well as present a health hazard.

National Flood Insurance Program (NFIP) Participation

Table 3.25 provides details on NFIP participation for the communities in the planning area. **Table 3.26** contains the number of policies in force, amount of insurance in force, number of closed losses, and total payments for each jurisdiction, where applicable. The time period represented by the data for closed losses is from.

Table 3.25

NFIP Participation in Pettis County				
Community ID #	**Community Name**	**Initial FIRM Identified**	**Current Effective Map Date**	**Regular Emergency Program Entry Date**
290701	City of La Monte	N/A	(NSFHA)	8/24/1984
290823#	Pettis County	5/1/1994	5/1/1994	5/1/1994
290823#	City of Sedalia	9/18/1985	1/5/1996	9/18/1985
290526	City of Smithton	N/A	(NSFHA)	9/10/1984
290575	City of Houstonia	N/A	9/19/1975	9/19/1976

Source: www.fema.gov/cis/MO.html

Table 3.26

Pettis County NFIP Policy & Claim Statistics as of 11-30-2017				
Community Name	**Total Losses**	**Open Losses**	**Closed Losses**	**Total Payments**
Pettis County	6	5	0	$197,291.95
Sedalia	31	17	0	$49,062.03

Source: bsa.nfipstat.fema.gov/reports/1040.htm#29

Repetitive Loss/Severe Repetitive Loss Properties

Repetitive Loss Properties are those properties with at least two flood insurance payments of $5,000 or more in a 10-year period. According to the Flood Insurance Administration, jurisdictions included in the planning area have a combined total of 0 repetitive loss properties.

A SRL property is defined it as a single family property (consisting of one-to-four residences) that is covered under flood insurance by the NFIP; and has (1) incurred flood-related damage for which four or more separate claims payments have been paid under flood insurance coverage with the amount of each claim payment exceeding $5,000 and with cumulative amounts of such claims payments exceeding $20,000; or (2) for which at least two separate claims payments have been made with the cumulative amount of such claims exceeding the reported value of the property.

Previous Occurrences

Pettis County NCDC Flooding Events by Location, 1996-2017		
Location	**Event Dates**	**# of Event Days**
Pettis County	6/28/1997, 7/30/1998, 8/7/1999, 7/11/2000, 12/28/2005	5
Green Ridge	6/28/1997	1
Sedalia	7/30/1998, 8/7/1999, 7/11/2000	3

Source: National Climatic Data Center

Pettis County NCDC Flash Flooding Events by Location, 1996-2017		
Location	**Event Dates**	**# of Event Days**
Pettis County	7/20/1996, 6/20/1998, 7/26/1998, 5/26/2000, 4/10/2001, 6/4/2001, 5/10/2003, 1/4/2005, 1/12/2005, 6/10/2007, 6/29/2007, 9/12/2008, 6/15/2009, 7/11/2010, 5/20/2013, 8/7/2013, 4/3/2014, 7/1/2015, 8/1/2016,	19
Green Ridge	1/12/2005, 7/11/2010,	2
Houstonia	4/10/2001, 8/1/2016	2
Hughesville	5/20/2013	1
La Monte	7/20/1996, 8/1/2016	2
Sedalia	6/20/1998, 7/26/1998, 6/4/2001, 1/4/2005, 6/29/2007, 9/12/2008, 6/15/2009	7
Smithton	7/1/2015	1

Source: National Climatic Data Center

Probability of Future Occurrence

There have been 33 occurrences of flooding in Saline County from 1996 to 2016 in the NCDC storm event database. Out of those, 27 of them were flash flood and 5 of them were riverine flood events. Using a 20-year period of record this equates to 1.35 flash floods a year and >1 riverine floods. Due to this there is a 100% probability of occurrence in any given year of a flood of either type.

Vulnerability

Vulnerability Overview

Periods of heavy rain, falling at the rate of one inch per hour, can flood low water crossings throughout the county making many roads impassable. This creates a severe threat to motorists that attempt to drive through flood waters over the roadway. Riverine flooding occurs less frequently than flash flooding, however, property damage is still possible. Areas in low lying areas outside of the floodplain are frequently flooded. Flooding of streets has been reported in several of the communities and many highways are susceptible to flooding.

Potential Losses to Existing Development

Pettis County Building Count (HAZUS-MH 2.1)							
Residential	**Commercial**	**Industrial**	**Agriculture**	**Religion**	**Government**	**Education**	**Total**
5,073	263	56	98	40	27	10	5,567

Total Direct Building Loss and Income Loss for Flooding in Pettis County						
Structural Damage	**Contents Damage**	**Inventory Loss**	**Total Direct Loss**	**Total Income Loss**	**Total Direct & Income Loss**	**Calc Loss Ratio**
$10,215,522.22	$9,405,093.69	$330,897.86	$19,951,513.77	$40,141.71	$19,991,655.48	3.10

Impact of Previous and Future Development

Future development could impact flash and riverine flooding in the planning area. Development in low-lying areas near rivers and streams or where interior drainage systems are not adequate to provide drainage during heavy rainfall events will be at risk to flash flooding. Future development would also increase impervious surfaces causing additional water run-off and drainage problems during heavy rainfall events.

Hazard Summary by Jurisdiction

It should be noted that all of these communities can be impacted by flooding of major roads and low water crossings in the areas proximate to their corporate limits. Several incorporated areas in the county are susceptible to street flooding during periods of heavy rain as evidenced by the previous occurrences**.** The greatest impact of flooding is in the unincorporated part of the county. Due to the topography and many streams in the county, numerous low water crossings are damaged and create a significant hazard to public safety during flood events.

Problem Statement

Floods are frequent events and have the potential to costly through damages and fatal to residents in the county. Participation in the NFIP enables residents to purchase flood insurance. Street flooding in incorporated areas can be addressed through storm water management projects and enforce storm water management regulations.

3.4.1 Dam Failure

Hazard Profile

Hazard Description

A dam is defined as a barrier constructed across a watercourse for the purpose of storage, control, or diversion of water. Dams are typically constructed of earth, rock, concrete, or mine tailings. Dam failure is the uncontrolled release of impounded water resulting in downstream flooding, affecting both life and property. Dam failure can be caused by any of the following:

1. Overtopping - inadequate spillway design, debris blockage of spillways or settlement of the dam crest.

2. Piping - internal erosion caused by embankment leakage, foundation leakage and deterioration of pertinent structures appended to the dam.

3. Erosion - inadequate spillway capacity causing overtopping of the dam, flow erosion, and inadequate slope protection.

4. Structural Failure - caused by an earthquake, slope instability or faulty construction.

According to the State Plan, Missouri had some 5,423 recorded dams in 2013, the largest number of man-made dams of any state in the country. Missouri's topography allows lakes to be built easily and inexpensively, which accounts for the high number of dams. Despite the large number of dams, there are only 682 (about 13 percent) state regulated dams, with an additional 66 federally regulated dams. Federal dams in Missouri are primarily regulated by two federal agencies; the U.S. Army Corps of Engineers (USACE), and the U.S. Department of Agriculture Forest Service. The remaining 4,495 dams are unregulated.

Dams that fall under state regulation are non-federally regulated dams that are more than 35 feet in height. Most nonfederal dams are privately owned structures built either for agricultural, water supply or recreational use. The Department of Natural Resources (MDNR) Water Resources Center maintains the Dam and Reservoir Safety Program in Missouri. The program ensures that dams over 35 feet in height are safely constructed, operated, and maintained pursuant to Chapter 236 of Revised Statutes of Missouri.

The Department of Natural Resources provides information about regulated and unregulated dams in Missouri. The information includes details of the dam dimensions, date of construction, approximate reservoir volume, contributing drainage basin area and hazard classification. In addition, USACE maintains the National Inventory of Dams (NID). The information in the NID database matches the list from the MDNR website with some additional details for dams in Pettis County. Although both agencies provide a hazard classification for dams, the dam classification systems differ.

The Missouri Dam and Reservoir Safety Council Rules and Regulations uses three classes of downstream environmental zone used when considering permits. The downstream environment zone is the area below the dam that would become inundated should the dam fail. Inundation is defined as water two feet or more over the submerged ground outside of the stream channel. These

classes are based on the number of structures and types of development contained within the inundation area as presented in Table 3.17. The downstream environment zone classification is also used to prescribe the frequency of inspection. Pettis County has two dams that fall into the Class I category; they are Spring Fork Lake Dam and the Windsor Farrington Park Lake Dam. These are shown in more detail in **Figures 3.3 and 3.4.**

Table 3.17

MoDNR Dam Hazard Classification Definitions	
Hazard Class	**Definition**
Class I	The area downstream from the dam that would be affected by inundation contains ten (10) or more permanent dwellings or any public building. Inspection of these dams must occur every two years.
Class II	The area downstream from the dam that would be affected by inundation contains one to nine permanent dwelling, or one (1) or more campgrounds with permanent water, sewer and electrical services or one (1) or more industrial buildings. Inspection of these dams must occur once every three years.
Class III	The area downstream from the dam that would be affected by inundation does not contain any of the structures identified for Class I or Class II dams. Inspection of these dams must occur once every five years.

Source: Missouri Department of Natural Resources, http://dnr.mo.gov/env/wrc/docs/rules_reg_94.pdf

Dams in the NID are classified according to hazard potential, an indicator of the consequences of dam failure. A dam's hazard potential classification, presented in Table 3.18, does not indicate its condition. Dams assigned the high hazard potential classification are those where failure will potentially result in loss of human life. Significant hazard potential are those dams where failure results in no probable loss of human life but can cause economic loss. Dams assigned the low hazard potential classification are those where failure or results in no probable loss of human life and low economic or environmental losses. Losses are principally limited to the owner's property.

Table 3.18

Hazard Class	Definition
Low Hazard	Failure results only in minimal property damage.
Significant	Failure could possibly result in the loss of life and appreciable property damage.
High Hazard	If the dam were to fail, lives would be lost and extensive property damage could result.

Source: National Inventory of Dams

There is not a direct correlation between the State Hazard classification and the NID classifications. However, most dams that are in the State's Classes I and II are considered NID High Hazard Dams.

Geographic Location

Dams in Planning Area:

There are a total of 28 dams in Pettis County recorded by the National Inventory of Dams (NID) database. Out of the 23 dams only one is regulated, the Spring Fork Dam in southern Pettis County. Of the twenty-eight dams in Pettis, six are classified as a high hazard dam according to the NID,

Windsor Farrington Park Lake, Hermora Lake, Rubydo Lake, Hayes Lake, Spring Fork Lake, and Daum Lake dams. Information regarding the Blackburn Pond can be found in Table 3.19.

Figure 3.2

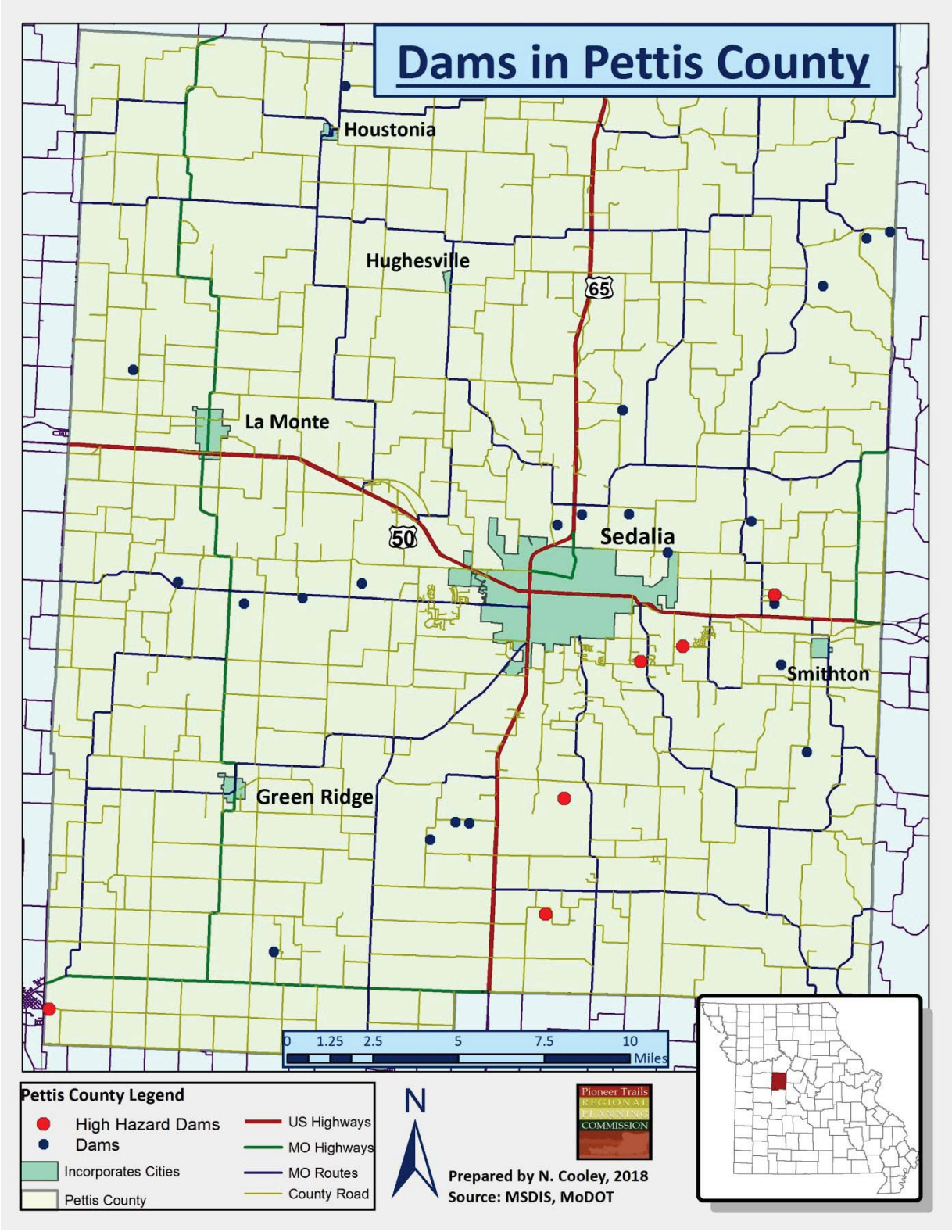


Table 3.19

High Hazard Dams in Pettis County								
Dam Name	**Emergency Action Plan (EAP)**	**Dam Height (Ft)**	**Max Storage (Acre-Ft)**	**Last Inspection Date**	**River**	**Nearest Downstream City**	**Distance To Nearest City (Miles)**	**Dam Owner**
Daum Lake		25	201	N/A		Clinton	12	Harold Daum
Hayes Lake		20	16	N/A		--	--	Private
Hermora Lake		26	209	N/A		Otterville	6	Dick G Mansees
Rubydo Lake		20	86	N/A		Redbird	14	Dick G Mansees
Spring Fork Lake		43	3104	8/26/2014		Sedalia	7	City of Sedalia
Windsor Farrington Park Lake		26	209	7/16/1980				

Sources: Missouri Department of Natural Resources, http://dnr.mo.gov/env/wrc/dam-safety/statemap.htm and National Inventory of Dams, http://nid.usace.army.mil/cm_apex/f?p=838:12By the end of 2015, the Missouri DNR anticipates having Emergency Action Plans, including inundation maps for all state-regulated Class 1 and Class 2 dams. Contact the DNR Dam and Reservoir Safety Program at 800-361-4827 to request the inundation maps for your county to show geographic locations at risk, extent of failure and to perform GIS analysis of those assets at risk to dam failure.

Figures 3.3 & 3.4 shows a closer view of each Class I hazard dam.

Figure 3.3

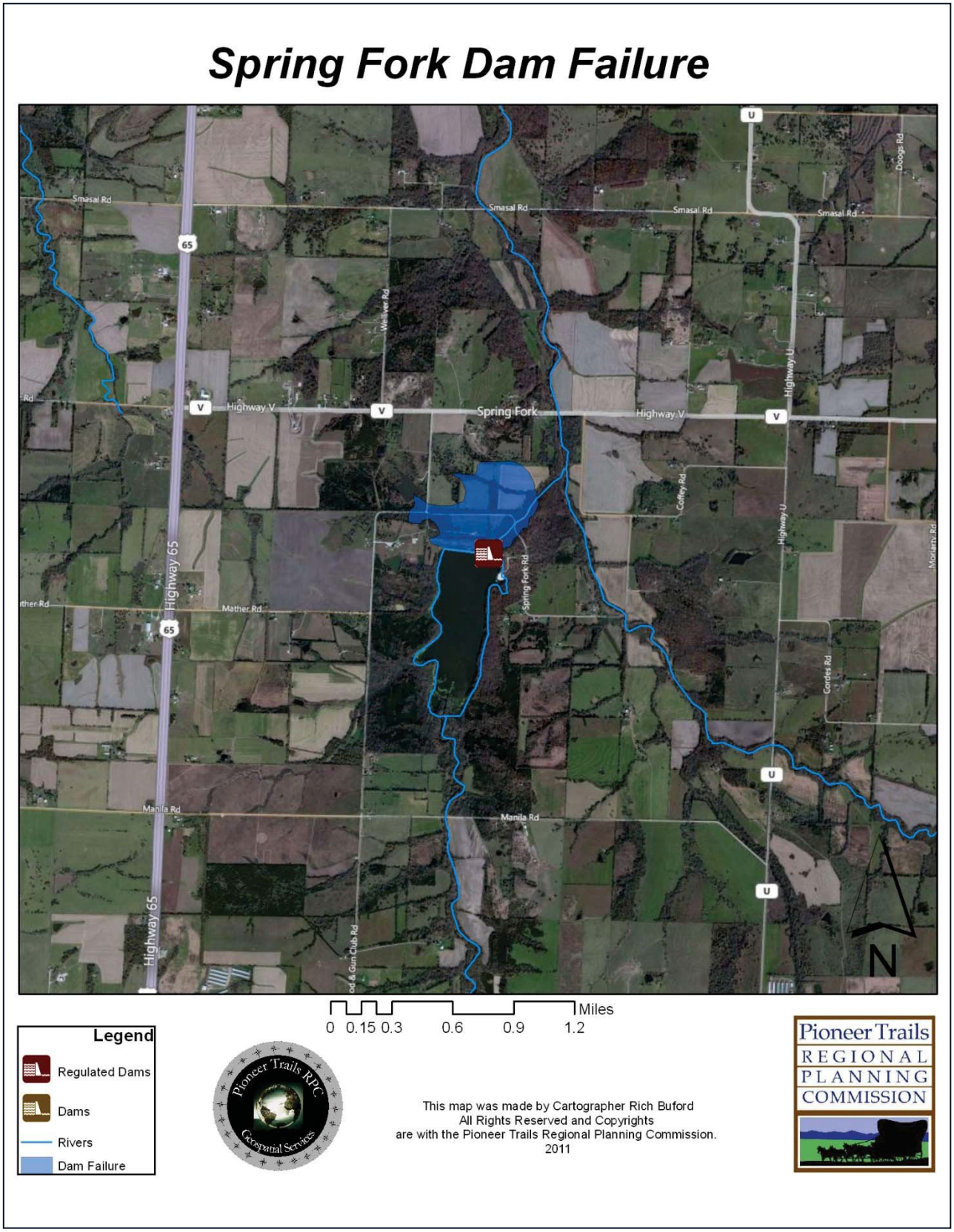

Spring Fork Dam Failure
Smasal Rd
Highway V
Spring Fork
Mather Rd
Manila Rd
Highway 65
Spring Fork Rd
Coffey Rd
Cordes Rd
Doogs Rd
Highway U
N
Miles
0 0.15 0.3 0.6 0.9 1.2
Legend
Regulated Dams
Dams
Rivers
Dam Failure
Pioneer Trails RPC
Geospatial Services
This map was made by Cartographer Rich Buford
All Rights Reserved and Copyrights
are with the Pioneer Trails Regional Planning Commission.
2011
Pioneer Trails
REGIONAL
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Figure 3.4


Windsor Farrington Park Dam
N
0 0.04 0.08 0.16 0.24 0.32 Miles
Legend
Dams
Rivers
Pettis City Outline
Dam Failure
Pioneer Trails RPC
Geospatial Services
Pioneer Trails
REGIONAL
PLANNING
COMMISSION
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are with the Pioneer Trails Regional Planning Commission.
2012

Severity/Magnitude/Extent

The impact on the downstream community, dependent upon what is downstream could be very serious. The adverse impacts of future dam failures affecting Pettis County at the high hazard level are shown below. Intersecting almost all the issues above is the issue of public education about dams. The ordinary citizen is unaware that the beautiful lakes on which he or she boats, skis or fishes are only there because of manmade dams. Developers build in dam break flood inundation areas knowing nothing about the potential that an upstream dam has, to cause devastation should it fail. In fact, some developers and zoning officials are completely unaware of dams within their community. Even if citizens understand and are aware of dams, they still can be overly confident in the infallibility of these manmade structures. Living in dam break flood-prone areas is a risk. Many dam owners do not realize their responsibility and liability toward the downstream public and environment.

The adverse impacts of future dam failures affecting Pettis County at the high hazard level are shown below.

Without mitigation measures:		With mitigation measures:	
Life	Catastrophic	Life	Negligible
Property	Catastrophic	Property	Negligible
Emotional	Catastrophic	Emotional	Negligible
Financial	Catastrophic	Financial	Negligible

Comments: One large dam holding back a high volume of water could destroy life and property for several miles downstream.

It can be stated that the severity/magnitude of dam failure would be similar in some cases to the impacts associated with flood events (see the flood hazard vulnerability analysis and discussion). Based on the hazard class definitions, failure of any of the High Hazard/Class I dams could result in a serious threat of loss of human life, serious damage to residential, industrial or commercial areas, public utilities, public buildings, or major transportation facilities. Catastrophic failure of any high hazard dams has the potential to result in greater destruction due to the potential speed of onset and greater depth, extent, and velocity of flooding. Note that for this reason, dam failures could flood areas outside of mapped flood hazards.

See 2013 State Plan page 3.66 – 3.69 for additional information

Previous Occurrences

There is no record of a dam failure within Pettis county over the 26-year period from 1975 to 2001. Seven-teen dam failures were recorded in the state of Missouri for the same time period. This does not include the Taum Sauk failure in 2005 or the Moon Valley Lake Dam failure in 2008 since the comprehensive data collected by Stanford University was not updated past 2001. According to this data, the annual probability calculates to a 65% (17/26 = 0.65 or 65%) probability in any given year for at least one dam failure event somewhere in the State of Missouri. However, with over 5,000 dams in the State, this translates to an overall low probability per dam structure.

Probability of Future Occurrence

There are no records of dam failure in Pettis County. Since there are zero recorded events in the planning area, a calculation of a probability percent is not possible. According to information from the 2013 State Plan, Missouri's percentage of high hazard dams in the DNR inventory puts the State at about the national average for that category. However, if development occurs downstream of dams the percentage of high hazard dams will increase. Additionally, the probabilities of dam failure increases as many of the smaller and privately owned dams continue to deteriorate without the benefit of further regulation or improvements. Regular inspection and maintenance schedules for dams greatly reduce the probability of dam failure.

Vulnerability

Vulnerability Overview

Vulnerability to dam Failure in Pettis County is limited to structures and critical facilities located in dam inundation zones. A failure at the Spring Fork Lake dam would not cause a large amount of damage due to the area downstream is farm and woodlands. If the failure happened during the growing season damages could occur to crops planted in the farm land in the inundation area. If the Winsor Farrington Park Lake dam were to experience a break, minimal property damage would be incurred as only one structure lies within the inundation area. The remainder of the inundation area is either wooded or farmland or pastures. No school district facilities are located within inundation areas or downstream environments form existing dams. No critical facilities are located within inundation areas also.

Impact of Previous and Future Development

It is possible that future development will occur in the downstream environment of dams within the county; however, no major development is expected due to the slow growth of Pettis County and its jurisdictions.

Hazard Summary by Jurisdiction

Pettis County, Sedalia, and the City of Green Ridge are the only jurisdictions in the county vulnerable to dam failure. No school district facilities are located within inundation areas or downstream environments form existing dams.

Problem Statement

Out of the six high risk dams located in Pettis County, none are located in the direct vicinity of a jurisdiction but risk is higher to those living around these structures. Residents near a Class I or Class II hazard dams should become familiar with the dam's emergency action plans, if available. Emergency plans written for dams include procedures for notification and coordination with local law enforcement and other governmental agencies, information on the potential inundation area, plans for warning and evacuation, and procedures for making emergency repairs.

3.4.2 Drought

Hazard Profile

Hazard Description

Drought is generally defined as a condition of moisture levels significantly below normal for an extended period of time over a large area that adversely affects plants, animal life, and humans. A drought period can last for months, years, or even decades. There are four types of drought conditions relevant to Missouri, according to the State Plan, which are as follows.

- Meteorological drought is defined in terms of the basis of the degree of dryness (in comparison to some "normal" or average amount) and the duration of the dry period. A meteorological drought must be considered as region-specific since the atmospheric conditions that result in deficiencies of precipitation are highly variable from region to region.

- Hydrological drought is associated with the effects of periods of precipitation (including snowfall) shortfalls on surface or subsurface water supply (e.g., streamflow, reservoir and lake levels, ground water). The frequency and severity of hydrological drought is often defined on a watershed or river basin scale. Although all droughts originate with a deficiency of precipitation, hydrologists are more concerned with how this deficiency plays out through the hydrologic system. Hydrological droughts are usually out of phase with or lag the occurrence of meteorological and agricultural droughts. It takes longer for precipitation deficiencies to show up in components of the hydrological system such as soil moisture, streamflow, and ground water and reservoir levels. As a result, these impacts also are out of phase with impacts in other economic sectors.

- Agricultural drought focus is on soil moisture deficiencies, differences between actual and potential evaporation, reduced ground water or reservoir levels, etc. Plant demand for water depends on prevailing weather conditions, biological characteristics of the specific plant, its stage of growth, and the physical and biological properties of the soil.

- Socioeconomic drought refers to when physical water shortage begins to affect people.

  Data sources: http://www.drought.unl.edu/

Geographic Location

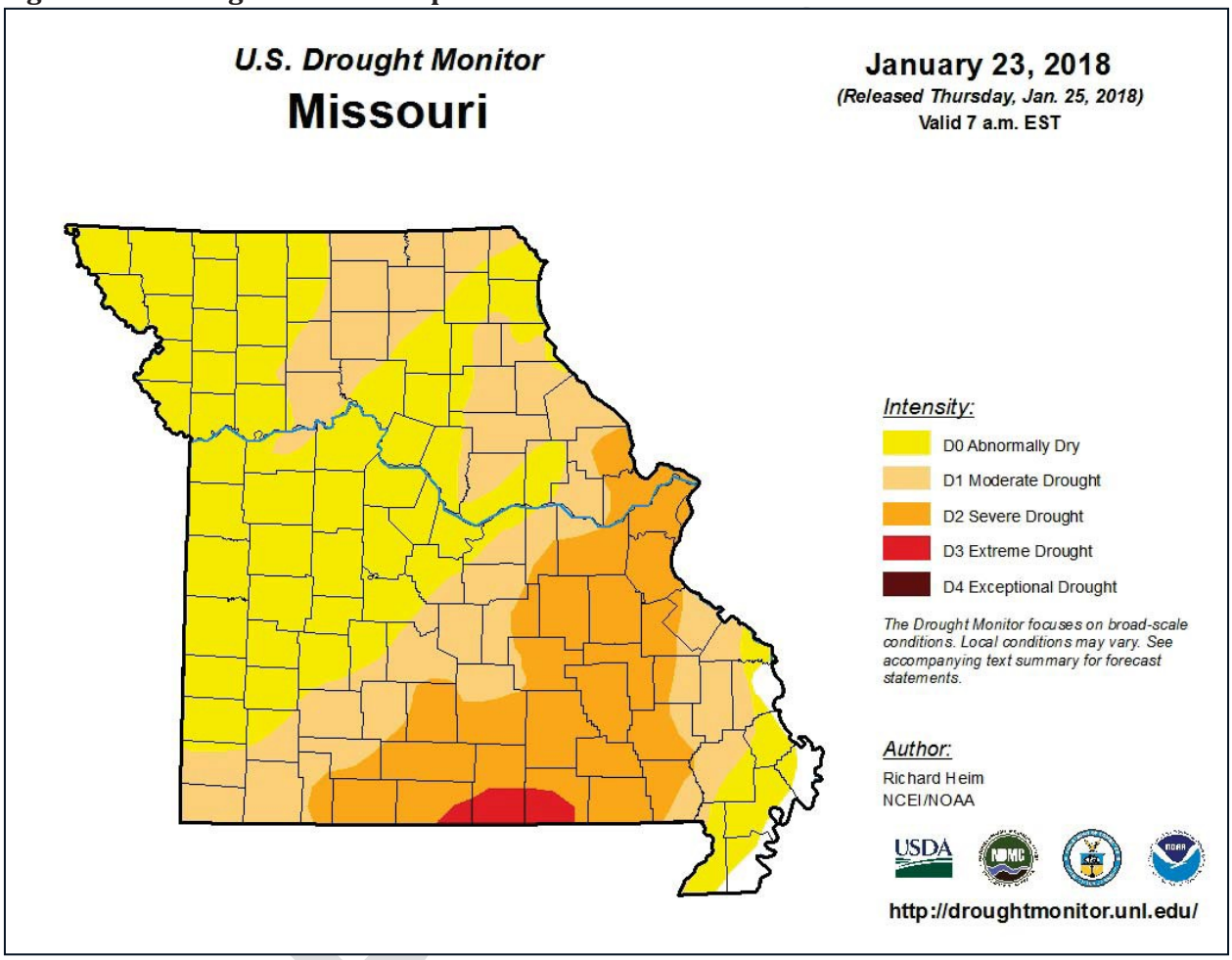
Droughts are regional climatic events that can impact large areas and multiple counties. The entire county is at risk to the impacts of drought. However, drought most directly impacts the agricultural sector, so areas within the county where there is extensive agricultural land use can experience significant impacts. The major agricultural activity in the county is livestock which accounts for 69% of sales. Due to the large amount of livestock, and their needs, in the region, an extreme drought can have a devastating effect if water supplies run short in an extended drought period.

Severity/Magnitude/Extent

The National Drought Monitor Center at the University of Nebraska at Lincoln summarized the potential severity of drought as follows. Drought can create economic impacts on agriculture and related sectors, including forestry and fisheries, because of the reliance of these sectors on surface

and subsurface water supplies. In addition to losses in yields in crop and livestock production, drought is associated with increases in insect infestations, plant disease, and wind erosion. Droughts also bring increased problems with insects and disease to forests and reduce growth. The incidence of forest and range fires increases substantially during extended droughts, which in turn place both human and wildlife populations at higher levels of risk. Income loss is another indicator used in assessing the impacts of drought because so many sectors are affected. Finally, while drought is rarely a direct cause of death, the associated heat, dust and stress can all contribute to increased mortality.

Figure 3.5 – Drought Monitor Map



The Palmer Index has proven most effective in identifying long-term drought of more than several months. However, the Palmer Index has been less effective in determining conditions over a matter of weeks. It uses a "0" as normal, and drought is shown in terms of negative numbers; for example, negative 2 is moderate drought, negative 3 is severe drought, and negative 4 is extreme drought. Palmer's algorithm also is used to describe wet spells, using corresponding positive numbers.

According to the MDNR Missouri Drought Plan revised in 2002, Missouri's Drought Response System is divided into four phases based on Palmer index values:

- Phase I: Advisory Phase—Requires a drought monitoring and assessment system to provide enough lead time for state and local planners to take appropriate action;

- Phase II: Drought Alert—When the PDSI reads -1.0 to -2.0, and stream flows, reservoir levels, and groundwater levels are below normal over a several month period, or when the Drought Assessment Committee (DAC) determines that Phase II conditions exist based on other drought determination methods;

- Phase III: Conservation Phase—When the PDSI reads -2.0 to -4.0, and stream flows, reservoir levels, and groundwater levels continue to decline, along with forecasts indicating an extended period of below-normal precipitation, or when the DAC determines that Phase III conditions exist based on other drought determination models;

- Phase IV: Drought Emergency—When the PDSI is lower than -4.0, or when the DAC determines that Phase IV conditions exist based on other drought determination methods.

Palmer also developed a formula for standardizing drought calculations for each individual location based on the variability of precipitation and temperature at that location. The Palmer index can therefore be applied to any site for which sufficient precipitation and temperature data is available.

Green Ridge, Smithton, La Monte, Houstonia, and Hughesville all rely on wells These communities could have problems with public water in the event of a long term drought. The impact of drought on deeper public wells would not be significant unless the drought was of such severity to reduce groundwater levels.

Previous Occurrences

Pettis County Previous Drought Occurrence	
4/1/2000	April 2000 was the driest on record in the state of Missouri, according to the Midwestern Climate Center. Drought Monitor showed most of northern and western Missouri in a severe drought. According to the Missouri State Climatologist, 1999-2000 was the 5th driest July-through-April period on record. The areas hardest hit by the long-term drought were along Missouri's northern border, where rainfall deficits had reached 15 to 20 inches.
7/1/2012	Dry conditions, which started in the spring, intensified during the month of July. Drought conditions expanded across Missouri, with D2 conditions at the beginning of the month, increasing to D3 conditions by the end of the month. Most locations by the end of the month, had yearly rainfall deficits of 10 to 15 inches.
8/1/2012	Dry conditions, which started in the spring, intensified during the month of August. Drought D2 and D3 conditions at the beginning of the month, increased to D3 and D4 conditions by the end of the month. Most locations by the end month continued yearly rainfall deficits in the 10 to 15 inch range.
9/1/2012	The remnants of Hurricane Isaac, brought some much needed relief to drought conditions across the area, on the 1st of September. This helped improve drought conditions from D4 and D3 to D3 and D2. Rainfall totals with the remnants of Isaac, ranged from around one inch near the Iowa border, to around 7 inches in the Kansas City Metropolitan area.

10/1/2012	The drought continued across west central and northwest Missouri through the month of October, with slight improvement noted, especially across north central and central portions of the state. Rainfall deficits for the year were in the 10 to 15 inch range. Drought D1 to D2 conditions prevailed across the county. Sedalia received 4.60 inches of rain.
1/1/2013	There have been several storm systems that have impacted the region in the last half of January. Most of the precipitation from these systems has fallen along and southeast of a Kansas City to Kirksville line. This has resulted in some improvement to the drought across portions of central to northern and northeastern Missouri. Moderate to severe D1 to D2 drought conditions prevailed across the county.

Probability of Future Occurrence

Over the 20-year record period, Saline County was in drought for 11 months. There are a total of 240 months in the record period. The calculated risk percent from the number of months of drought and total number of months in the record period equates to the annual average percentage of 4.6% probability of drought occurrence in the county.

Although drought is not predictable, long-range outlooks and predicted impacts of climate change could indicate an increased chance of drought.

Vulnerability

Vulnerability Overview

The agriculture sector is particularly vulnerable to drought. Periods of dry weather can reduce stock ponds and force the early sale of livestock. Crop production can be disrupted and vegetative diseases can spread reducing yields. Cities that operate water wells can experience water shortages during persistent drought periods. Those that rely on private wells are likely be impacted by reductions in the groundwater supply.

Potential Losses to Existing Development

There are no anticipated structural losses, loss of life, or injuries associated with this hazard.

Impact of Future Development

Increases in acreage planted with crops would add to exposure to drought-related agricultural losses. In addition, increases in population result in increased demand for treated water, adding additional strain on water supply systems.

Impact of Climate Change

A new analysis, performed for the Natural Resources Defense Council, examined the effects of climate change on water supply and demand in the contiguous United States. The study found that more than 1,100 counties will face higher risks of water shortages by mid-century as a result of

climate change. Two of the principal reasons for the projected water constraints are shifts in precipitation and potential evapotranspiration (PET). Climate models project decreases in precipitation in many regions of the U.S., including areas that may currently be described as experiencing water shortages of some degree.
The Natural Resources Defense Council developed a new water supply sustainability index. The risk to water sustainability is based on the following criteria:

- Projected water demand as a share of available precipitation
- Groundwater use as a share of projected available precipitation
- Susceptibility to drought
- Projected increase in freshwater withdrawals
- Projected increase in summer water deficit

The risk to water sustainability for counties meeting two of the criteria are classified as "moderate," while those meeting three of the criteria are classified as "high," and those meeting four or more are classified as "extreme." Counties meeting less than two criteria are considered to have low risk to water sustainability. According to the Natural Resources Defense Council, without climate change the water supply sustainability index for Saline County is low. With climate change, the water supply sustainability index increases to moderate (NRDC).

Hazard Summary by Jurisdiction

Although the probability of drought is the same for the entire county, farming and livestock enterprises in the unincorporated parts of the county would feel the greatest impact. These impacts are mitigated somewhat by the purchase of crop insurance. No major waterways travel through Pettis County, leaving jurisdictions to rely on groundwater for all their water needs. Communities are susceptible to water shortages due to groundwater reduction; other communities with no source are more at risk to extreme water shortages in the event of a drought. School and special districts would be the least impacted by drought; however, those districts in communities with single source wells or none at all may experience water shortages prior to those in larger communities.

Problem Statement

Although drought most likely will not cause structural damage, the impact is greatest on the agriculture sector and if persistent enough, could cause reductions in groundwater and water shortages in communities that provide potable water services. Potential solutions to mitigate the impact of drought would be for communities to develop an ordinance to restrict the use of public water resources for non-essential usage, such as landscaping, washing cars, filling swimming pools, etc. during extreme drought periods. School and special districts can also implement water conservation measures at all district facilities.

3.4.10 Tornado

Hazard Profile

Hazard Description

The NWS defines a tornado as "a violently rotating column of air extending from a thunderstorm to the ground." It is usually spawned by a thunderstorm and produced when cool air overrides a

layer of warm air, forcing the warm air to rise rapidly. Often, vortices remain suspended in the atmosphere as funnel clouds. When the lower tip of a vortex touches the ground, it becomes a tornado.

High winds not associated with tornadoes are profiled separately in this document in **Section 3.4.9,** Thunderstorm/High Wind/Hail/Lightning.

Essentially, tornadoes are a vortex storm with two components of winds. The first is the rotational winds that can measure up to 500 miles per hour, and the second is an uplifting current of great strength. The dynamic strength of both these currents can cause vacuums that can overpressure structures from the inside.

Although tornadoes have been documented in all 50 states, most of them occur in the central United States due to its unique geography and presence of the jet stream. The jet stream is a high-velocity stream of air that separates the cold air of the north from the warm air of the south. During the winter, the jet stream flows west to east from Texas to the Carolina coast. As the sun moves north, so does the jet stream, which at summer solstice flows from Canada across Lake Superior to Maine. During its move northward in the spring and its recession south during the fall, the jet stream crosses Missouri, causing the large thunderstorms that breed tornadoes.

A typical tornado can be described as a funnel-shaped cloud in contact with the earth's surface that is "anchored" to a cloud, usually a cumulonimbus. This contact on average lasts 30 minutes and covers an average distance of 15 miles. The width of the tornado (and its path of destruction) is usually about 300 yards. However, tornadoes can stay on the ground for upward of 300 miles and can be up to a mile wide. The National Weather Service, in reviewing tornadoes occurring in Missouri between 1950 and 1996, calculated the mean path length at 2.27 miles and the mean path area at 0.14 square mile.
The average forward speed of a tornado is 30 miles per hour but may vary from nearly stationary to 70 miles per hour. The average tornado moves from southwest to northeast, but tornadoes have been known to move in any direction. Tornadoes are most likely to occur in the afternoon and evening, but have been known to occur at all hours of the day and night.

GeographicLocation

There are no specific locations for future occurrences, as the threat is county wide.

Severity/Magnitude/Extent

Tornadoes are the most violent of all atmospheric storms and are capable of tremendous destruction. Wind speeds can exceed 250 miles per hour and damage paths can be more than one mile wide and 50 miles long. Tornadoes have been known to lift and move objects weighing more than 300 tons a distance of 30 feet, toss homes more than 300 feet from their foundations, and siphon millions of tons of water from water bodies. Tornadoes also can generate a tremendous amount of flying debris or "missiles," which often become airborne shrapnel that causes additional damage. If wind speeds are high enough, missiles can be thrown at a building with enough force to penetrate windows, roofs, and walls. However, the less spectacular damage is much more common.

Tornado magnitude is classified according to the EF- Scale (or the Enhance Fujita Scale, based on the original Fujita Scale developed by Dr. Theodore Fujita, a renowned severe storm researcher). The EF- Scale (see **Table 3.30**) attempts to rank tornadoes according to wind speed based on the damage caused. This update to the original F Scale was implemented in the U.S. on February 1,2007.

Table 3.30 Enhanced F Scale for Tornado Damage

FUJITA SCALE			DERIVED EF SCALE		OPERATIONAL EF SCALE	
F-Number	Fastest ¼-mile (mph)	3 Second Gust (mph)	EF-Number	3 Second Gust (mph)	EF-Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85	0	65-85
1	73-112	79-117	1	86-109	1	86-110
2	113-157	118-161	2	110-137	2	111-135
3	158-207	162-209	3	138-167	3	136-165
4	208-260	210-261	4	168-199	4	166-200
5	261-318	262-317	5	200-234	5	Over 200

Source: The National Weather Service, www.spc.noaa.gov/faq/tornado/ef-scale.html

The wind speeds for the EF scale and damage descriptions are based on information on the NOAA Storm Prediction Center as listed in Error! Reference source not found.**1**. The damage descriptions are summaries. For the actual EF scale, it is necessary to look up the damage indicator (type of structure damaged) and refer to the degrees of damage associated with that indicator. Information on the Enhanced Fujita Scale's damage indicators and degrees or damage is located onlineat www.spc.noaa.gov/efscale/ef-scale.html.

Table 3.31

Enhanced Fujita Scale			
Scale	Wind Speed (mph)	Relative Frequency	Potential Damage
EF0	65-85	53.50%	Light. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over. Confirmed tornadoes with no reported damage (i.e. those that remain in open fields) are always rated EF0).
EF1	86-110	31.60%	Moderate. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
EF2	111-135	10.70%	Considerable. Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes complete destroyed; large trees snapped or uprooted; light object missiles generated; cars lifted off ground.
EF3	136-165	3.40%	Severe. Entire stores of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
EF4	166-200	0.70%	Devastating. Well-constructed houses and whole frame houses completely levelled; cars thrown and small missiles generated.

EF5	>200	<0.1%	Explosive. Strong frame houses levelled off foundations and swept away; automobile-sized missiles fly through the air in excess of 300 ft.; steel reinforced concrete structure badly damaged; high rise buildings have significant structural deformation; incredible phenomena will occur.

Source: NOAA Storm Prediction Center, http://www.spc.noaa.gov/efscale/ef-scale.html

Enhanced weather forecasting has provided the ability to predict severe weather likely to produce tornadoes days in advance. Tornado watches can be delivered to those in the path of these storms several hours in advance. Lead time for actual tornado warnings is about 30 minutes. Tornadoes have been known to change paths very rapidly, thus limiting the time in which to take shelter. Tornadoes may not be visible on the ground if they occur after sundown or due to blowing dust or driving rain and hail.

Previous Occurrences

Table 3.32 shows NCDC reported tornado events and damages since 1993 in the planning area. Prior to that date, only really destructive tornadoes were recorded. It is necessary to go back as far as possible because of the random and intermittent nature of tornado events. Consult the event narratives for descriptions of notable storm events, and include the information in the plan.

There are limitations to the use of NCDC tornado data that must be noted. For example, one tornado may contain multiple segments as it moves geographically. A tornado that crosses a county line or state line is considered a separate segment for the purposes of reporting to the NCDC. Also, a tornado that lifts off the ground for less than 5 minutes or 2.5 miles is considered a separate segment. If the tornado lifts off the ground for greater than 5 minutes or 2.5 miles, it is considered a separate tornado. Tornadoes reported in Storm Data and the Storm Events Database is in segments.

Table 3.32

Recorded Tornadoes in Pettis County , 1993 – 2017							
Location	**Date**	**Time**	**Magnitude**	**Deaths**	**Injuries**	**Property Damage**	**Crop Damage**
La Monte	3/6/2017	21:13	EF0	0	0	$0.00	$0.00
La Monte	5/20/2013	15:57	EF1	0	0	$20,000.00	$0.00
Pettis Co.	5/25/2011	11:52	EF0	0	0	$0.00	$0.00
Sedalia	5/25/2011	11:22	EF2	0	20	$4,000,000.00	$0.00
Sedalia	5/20/2010	17:46	EF0	0	0	$8,000.00	$0.00
Hughesville	9/12/2008	16:44	EF0	0	0	$5,000.00	$0.00
Green Ridge	3/30/2006	20:24	F1	1	0	$450,000.00	$0.00
La Monte	3/12/2006	20:57	F2	0	0	$0.00	$0.00
Houstonia	3/12/2006	20:07	F2	0	0	$0.00	$0.00
Green Ridge	3/12/2006	16:12	F2	1	6	$2,500,000.00	$0.00
Pettis Co.	3/12/2006	15:57	F1	0	0	$0.00	$0.00
La Monte	3/12/2006	15:49	F0	0	0	$0.00	$0.00
Sedalia	3/9/2006	0:19	F0	0	0	$5,000.00	$0.00
Houstonia	10/29/2004	18:16	F1	0	0	$300,000.00	$0.00

Sedalia	5/6/2003	13:55	F0	0	2	$2,000.00	$0.00
La Monte	5/4/2003	18:35	F0	0	0	$5,000.00	$0.00
Smithton	5/30/2001	18:38	F1	0	0	$0.00	$0.00
La Monte	4/10/2001	16:45	F1	0	0	$50,000.00	$0.00
Totals				**2**	**28**	**$7,345,000.00**	**$0.00**

Source: National Climate Data Center, http://www.ncdc.noaa.gov/stormevents

Probability of Future Occurrence

According to the NCDC storm records, there have been 13 tornado events from 1993 to 2017. Based on the past occurrences of tornadoes in Pettis County, there is a 54% probability that the county will experience a tornado in any given year.

Vulnerability

Vulnerability Overview

The 2013 State Plan used a methodology to the vulnerability of each county in the state to determine each county's vulnerability to tornadoes. While this approach attempts to prioritize tornado vulnerable counties, it does not identify any particular geographic patterns to tornado risk. The state's analysis combined annualized losses and frequency of occurrence to determine the greatest likelihood of being impacted by a tornado. The state's vulnerability rating ranged from very high, high, and moderate. The vulnerability rating for Pettis County was rated at moderate risk.

Figure 3.29 Tornado Alley

Potential Losses to Existing Development

During the 24 year period from 1993 to 2017, a total of $7,345,000 in property losses equates to $272,037 in average annual losses in the county. The most common tornado events recorded in the county are F0 and F1 magnitude events. One of the 19 tornado events on record the highest magnitude tornado recorded was an EF2. There was also some F2 magnitude tornadoes recorded in the NCDC data.

Previous and Future Development

During the 24 year period from 1993 to 2017, a total of $7,345,000 in property losses were incurred. This equates to $272,037 in average annual losses in the county. This value indicates that potential future losses in the county will remain moderately low. Future development and any increase in population will increase exposure to damage; however not much is expected in the near future.

Hazard Summary by Jurisdiction

Although tornado events are area-wide hazard, communities with a greater percentage of structures built prior to 1939, or the high concentration of mobile homes, are considered to be more vulnerable to the impact of high wind and hail damage.

Jurisdiction	% of Housing Built 1939 or Earlier	% of housing is mobile home
Green Ridge	15.3%	2.2%
Houstonia	35.6%	19.5%
Hughesville	14.3%	19%
La Monte	4.7%	4.7%
Sedalia	27.7%	1.1%
Smithton	19.5%	9.5%

Problem Statement

Tornadoes are the most violent of all atmospheric storms and are capable of tremendous destruction. Wind speeds can exceed 250 miles per hour and damage paths can be more than one mile wide and 50 miles long. Significant tornado events in Saline County have resulted in two deaths, 28 injuries, and $7,345,000 in property damage over the last 24 years. Information in the 2013 State Plan indicates that Saline County has a low vulnerability to tornados based on frequency of occurrence and previous damages.

The risk of property damage, injury, and death in the county can be mitigated by Constructing FEMA saferooms in facilities that house vulnerable populations such as nursing homes government buildings, and schools. Additionally, identifying safe refuge areas in public buildings, nursing homes, and other facilities that house vulnerable populations that do not have a safe room will lower the vulnerability. Retrofitting school district facilities with protective filming of windows and installation of blast proof doors will provide more protection for students and staff at school facilities. Additional warnings and alerts will also provide the public and schools more time to take

cover during tornado. Cities can adopt or update and enforce IBC 2012 building codes that include construction techniques such as roof tie down straps to mitigate damage to future development.

3.4.9 Thunderstorm/High Winds/Lightning/Hail

Hazard Profile

Hazard Description

Thunderstorms

A thunderstorm is defined as a storm that contains lightning and thunder which is caused by unstable atmospheric conditions. When cold upper air sinks and warm moist air rises, storm clouds or 'thunderheads' develop resulting in thunderstorms. This can occur singularly, as well as in clusters or lines. The National Weather Service defines a thunderstorm as "severe" if it includes hail that is one inch or more, or wind gusts that are at 58 miles per hour or higher. At any given moment across the world, there are about 1,800 thunderstorms occurring. Severe thunderstorms most often occur in Missouri in the spring and summer, during the afternoon and evenings, but can occur at any time. Other hazards associated with thunderstorms are heavy rains resulting in flooding (discussed separately in Section 3.4.6) and tornadoes (discussed separately in Section 3.4.10).

High Winds

A severe thunderstorm can produce winds causing as much damage as a weak tornado. The damaging winds of thunderstorms include downbursts, microbursts, and straight-line winds. Downbursts are localized currents of air blasting down from a thunderstorm, which induce an outward burst of damaging wind on or near the ground. Microbursts are minimized downbursts covering an area of less than 2.5 miles across. They include a strong wind shear (a rapid change in the direction of wind over a short distance) near the surface. Microbursts may or may not include precipitation and can produce winds at speeds of more than 150 miles per hour. Damaging straight-line winds are high winds across a wide area that can reach speeds of 140 miles per hour.

Lightning

All thunderstorms produce lightning which can strike outside of the area where it is raining and is has been known to fall more than 10 miles away from the rainfall area. Thunder is simply the sound that lightning makes. Lightning is a huge discharge of electricity that shoots through the air causing vibrations and creating the sound of thunder.

Hail

According to the National Oceanic and Atmospheric Administration (NOAA), hail is precipitation that is formed when thunderstorm updrafts carry raindrops upward into extremely cold atmosphere causing them to freeze. The raindrops form into small frozen droplets. They continue to grow as they come into contact with super-cooled water which will freeze on contact with the frozen rain droplet. This frozen droplet can continue to grow and form hail. As long as the updraft forces can support or suspend the weight of the hailstone, hail can continue to grow before it hits the earth.

At the time when the updraft can no longer support the hailstone, it will fall down to the earth. For example, a ¼" diameter or pea sized hail requires updrafts of 24 miles per hour, while a 2 ¾" diameter or baseball sized hail requires an updraft of 81 miles per hour. According to the NOAA, the

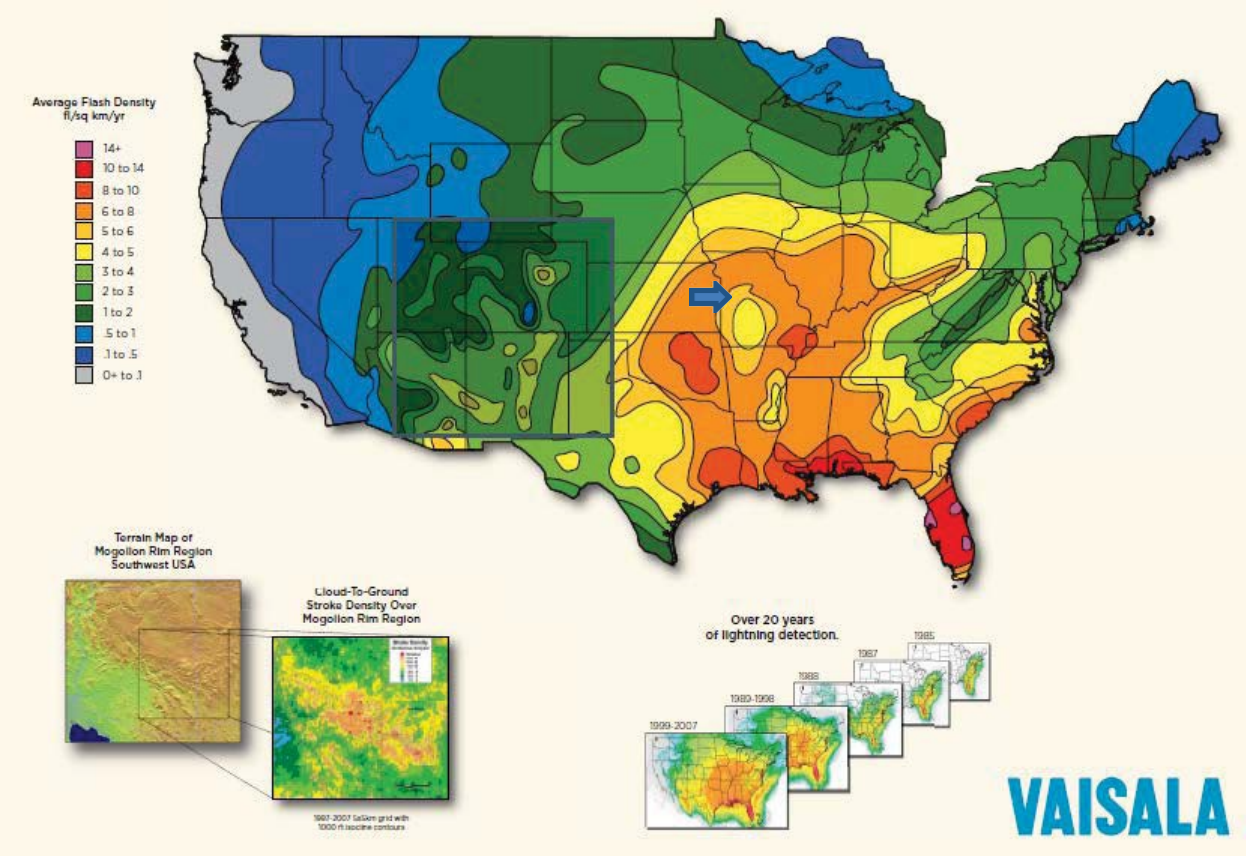
largest hailstone in diameter recorded in the United States was found in Vivian, South Dakota on July 23, 2010. It was eight inches in diameter, almost the size of a soccer ball. Soccer-ball-sized hail is the exception, but even small pea-sized hail can do damage.

Geographic Location

Thunderstorms/high winds/hail/lightning events are an area-wide hazard that can happen anywhere in the county. Although these events occur similarly throughout the planning area, they are more frequently reported in more urbanized areas. In addition, damages are more likely to occur in more densely developed urban areas, such as Marshal and Slater.

Figure 3.26 shows lightning frequency in the state, Pettis County spans multiple flash-density zones and could see from 4-8 flashes.

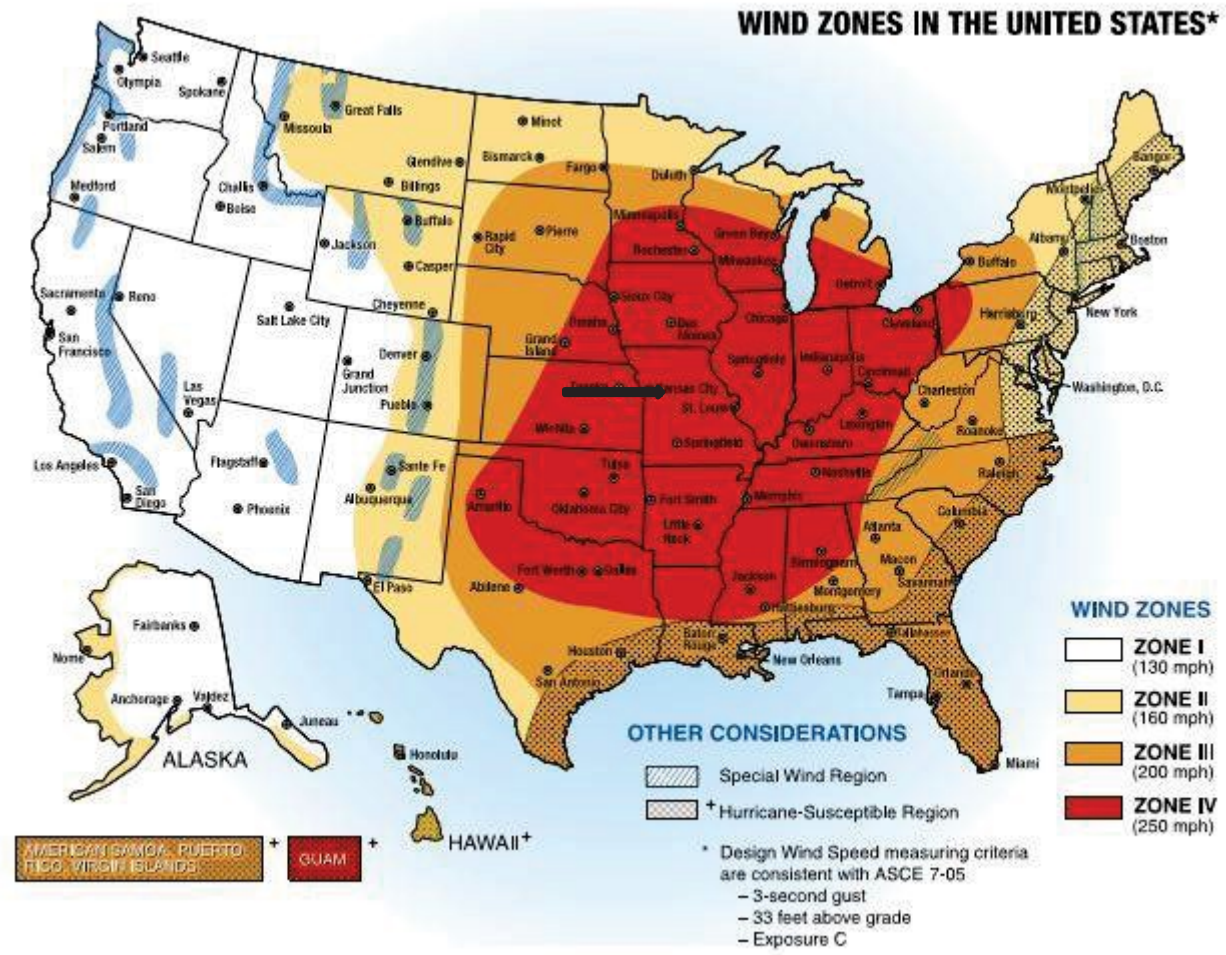
Figure 3.26



Source: National Weather Service, http://www.lightningsafety.noaa.gov/stats/08_Vaisala_NLDN_Poster.pdf.

Figure 3.27 shows wind zones in the United States.

Figure 3.27



Source: FEMA 320, Taking Shelter from the Storm, 3rd edition, http://www.weather.gov/media/bis/FEMA_SafeRoom.pdf

Severity/Magnitude/Extent

Severe thunderstorm losses are usually attributed to the associated hazards of hail, downburst winds, lightning and heavy rains. Losses due to hail and high wind are typically insured losses that are localized and do not result in presidential disaster declarations. However, in some cases, impacts are severe and widespread and assistance outside state capabilities is necessary. Hail and wind also can have devastating impacts on crops. Severe thunderstorms/heavy rains that lead to flooding are discussed in the flooding hazard profile. Hailstorms cause damage to property, crops, and the environment, and can injure and even kill livestock. In the United States, hail causes more than $1 billion in damage to property and crops each year. Even relatively small hail can shred plants to ribbons in a matter of minutes. Vehicles, roofs of buildings and homes, and landscaping are also commonly damaged by hail. Hail has been known to cause injury to humans, occasionally fatal injury.

In general, assets in the County vulnerable to thunderstorms with lightning, high winds, and hail include people, crops, vehicles, and built structures. Although this hazard results in high annual

losses, private property insurance and crop insurance usually cover the majority of losses. Considering insurance coverage as a recovery capability, the overall impact on jurisdictions is reduced.

Most lightning damages occur to electronic equipment located inside buildings. But structural damage can also occur when a lightning strike causes a building fire. In addition, lightning strikes can cause damages to crops if fields or forested lands are set on fire. Communications equipment and warning transmitters and receivers can also be knocked out by lightning strikes.

Based on information provided by the Tornado and Storm Research Organization (TORRO), **Table 3.?** below describes typical damage impacts of the various sizes of hail.

Tornado & Strom Research Organization Hailstorm Intensity Scale				
Intensity Category	**Diameter (mm)**	**Diameter (inches)**	**Size Description**	**Typical Damage Impacts**
Hard Hail	5-9	0.2-0.4	Pea	No damage
Potentially Damaging	10-15	0.4-0.6	Mothball	Slight general damage to plants/crops
Severe	21-30	0.8-1.2	Walnut	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
Severe	31-40	1.2-1.6	Squash ball	Widespread glass damage, vehicle bodywork damage
Destructive	41-50	1.6-2.0	Golf ball	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
Destructive	51-60	2.0-2.4	Hen's egg	Bodywork of grounded aircraft dented, brick walls pitted
Destructive	61-75	2.4-3.0	Tennis ball	Severe roof damage, risk of serious injuries
Destructive	76-90	3.0-3.5	Softball	Severe damage to aircraft bodywork
Super Hailstorm	91-100	3.6-3.9	Grapefruit	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
Super Hailstorm	>100	4.0+	Melon	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Source: Tornado and Storm Research Organization (TORRO), Department of Geography, Oxford Brookes University
Notes: In addition to hail diameter, factors including number and density of hailstones, hail fall speed and surface wind speeds affect severity. http://www.torro.org.uk/site/hscale.php

Straight-line winds are defined as any thunderstorm wind that is not associated with rotation (i.e., is not a tornado). It is these winds, which can exceed 100 miles per hour, which represent the most common type of severe weather. They are responsible for most wind damage related to thunderstorms. Since thunderstorms do not have narrow tracks like tornadoes, the associated wind damage can be extensive and affect entire (and multiple) counties. Objects like trees, barns, outbuildings, high-profile vehicles, and power lines/poles can be toppled or destroyed, and roofs, windows, and homes can be damaged as wind speeds increase.

The tables below (**Tables 3.27** through **Table 3.29**) summarize past crop damages as indicated by crop insurance claims between the years of 2007 and 2016. The tables illustrate the magnitude of the impact on the planning area's agricultural economy. There were no recorder crop insurance claims caused by lightning in the same time period.

Table 3.27

Crop Insurance Claims Paid in Pettis County for Thunderstorms, 2007-2016			
Crop Year	**Crop Name**	**Cause of Loss Description**	**Insurance Paid**
2016	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$239,591.16
2015	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$9,247,003.04
2014	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$70,778.20
2013	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$357,615.00
2012	Corn/Soybeans	Excess Moisture /Precip. /Rain	$210,941.00
2011	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$345,159.00
2010	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$1,629,436.00
2009	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$1,518,600.00
2008	Wheat/Corn/Soybean/Sorghum	Excess Moisture /Precip. /Rain	$2,167,567.00
2007	Corn/Soybeans/Wheat	Excess Moisture /Precip. /Rain	$68,318.00
Total	-	-	**$15,855,088.40**

Source: USDA Risk Management Agency, Insurance Claims, http://www.rma.usda.gov/data/cause.htm

Table 3.28

Crop Insurance Claim Paid in Pettis County form High Winds, 2007-2016			
Crop Year	**Crop Name**	**Cause of Loss Description**	**Insurance Paid**
2015	Soybeans	Wind/Excess Wind	$7,685.00
2011	Corn	Wind/Excess Wind	$84,113.00
2010	Corn	Wind/Excess Wind	$1,948.00
Total	-	-	**$93,746.00**

Source: USDA Risk Management Agency, Insurance Claims, http://www.rma.usda.gov/data/cause.htm

Table 3.29

Crop Insurance Claime Paid in Pettis County for Hail, 2007-2016

Crop Year	Crop Name	Cause of Loss Description	Insurance Paid
2016	Wheat/Soybeans	Hail	$6,489.00
2015	Corn/Soybeans	Hail	$90,466.00
2014	Soybeans/Wheat	Hail	$161,916.59
2013	Wheat	Hail	$22,998.00
2012	Corn/Wheat/Soybeans	Hail	$32,786.00
2011	Corn	Hail	$22,890.00
2010	Corn	Hail	$20,454.00
2009	Wheat	Hail	$33,684.00
2007	Soybeans	Hail	$3,309.00
Total	-	-	**$394,992.59**

USDA Risk Management Agency, Insurance Claims, http://www.rma.usda.gov/data/cause.htm

The onset of thunderstorms with lightning, high wind, and hail is generally rapid. Duration is less than six hours and warning time is generally six to twelve hours. Nationwide, lightning kills 75 to 100 people each year. Lightning strikes can also start structural and wildland fires, as well as damage electrical systems and equipment.

Previous Occurrences

NCDC Reported Events with $3000 or more in Damages from Thunderstorm Winds, 1999-2017						
Location	**Date**	**Magnitude**	**Deaths**	**Injuries**	**Property Damage**	**Crop Damage**
Sedalia	8/18/2011	61 kts. EG	0	0	$3,000	0
Sedalia	6/18/2011	61 kts. E	0	0	$20,000	0
Sedalia	7/3/2005	57 kts. EG	0	0	$10,000	0
Smithton	7/5/2004	65 kts. EG	0	0	$5,000	0
Sedalia	7/5/2004	65 kts. EG	0	0	$30,000	0
Sedalia	6/25/2000	60 kts. EG	0	0	$10,000	$10,000
Longwood	5/26/2000	70 kts EG	0	0	$10,000	$5,000
Houstonia	2/25/2000	--	0	0	$5,000	0
Dresden	2/25/2000	--	0	0	0	$5,000
La Monte	11/22/1999	70 kts EG	0	0	$100,000	0

Source: https://www.ncdc.noaa.gov/

NCDC Reported Events with Damages from Hail, 1999-2017						
Location	**Date**	**Magnitude**	**Deaths**	**Injuries**	**Property Damage**	**Crop Damage**
Sedalia	3/16/2006	1.75 in.	0	0	$2,000,000	0

Source: https://www.ncdc.noaa.gov/

NCDC Reported Events with Damages from Lightning, 1999-2017						
Location	**Date**	**Magnitude**	**Deaths**	**Injuries**	**Property Damage**	**Crop Damage**
Sedalia	5/8/2000	--	0	0	$30,000	0
Green Ridge	5/8/2000	--	0	0	$10,000	0

Source: https://www.ncdc.noaa.gov/

Limitations to the use of NCDC reported lightning events include the fact that only lightning events that result in fatality, injury and/or property and crop damage are in the NDCD.

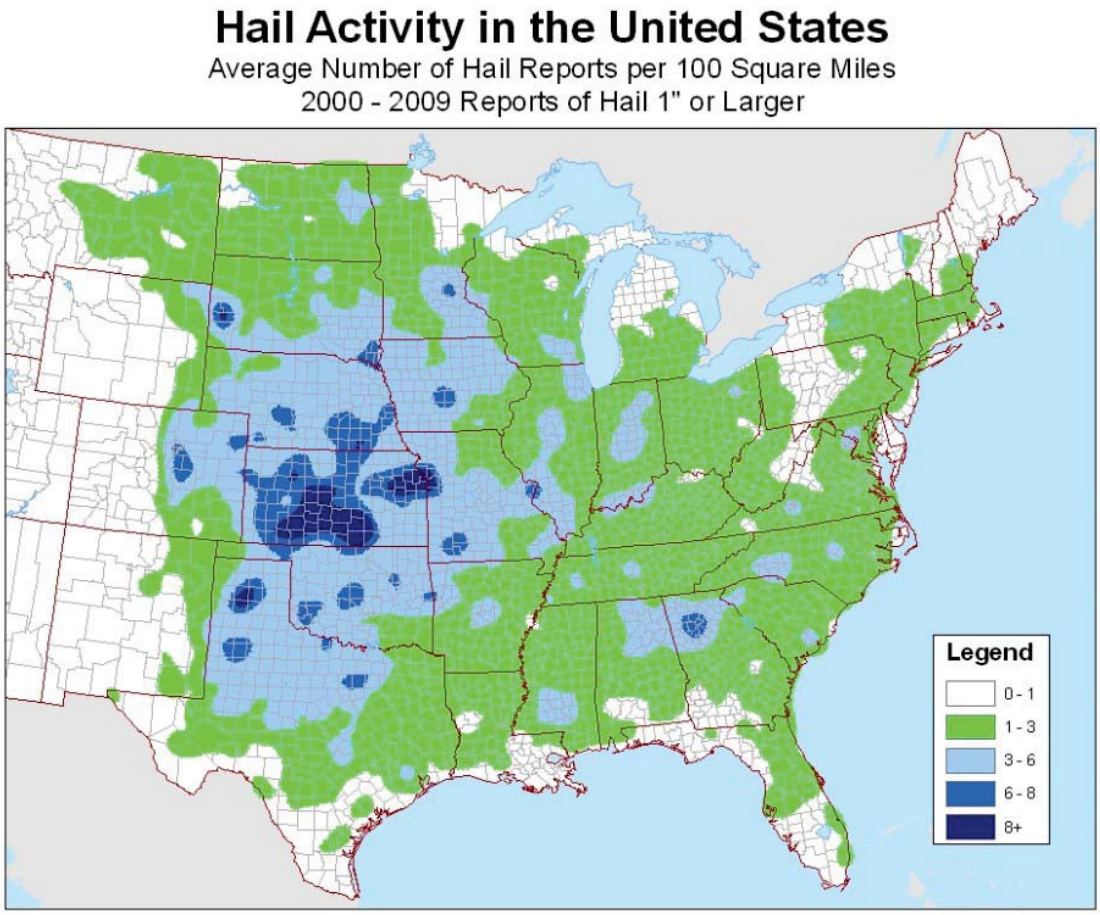
No Damages have been reported in Pettis County for high wind events per the NCDC database, for the years ranging from 1997 through 2017.

Probability of Future Occurrence

The probability for lightning events cannot be determined due to the lack of data and incidents available through the NCDC. There have been 59 Thunderstorm event days over a 20-year period reported to the NCDC from 7/1997 –7/ 2017. This averages out to 2.15 events in any given year for a 100% probability of occurrence. There have been 66 Hail events reported to the NCDC over a 20-year period, averaging 3.3 events per year for a 100% probability of occurrence. There have been two occurrences of High Winds in Pettis county over the 20-year period, this gives a 10% chance of occurrence of an event any given year.

Figure 3.28 is based on hailstorm data from 2000-2009. It shows the probability of hailstorm occurrence (1" diameter or larger) based on number of reports per year. Pettis County is in the3 to 6 and 6 to 8 zone.

Figure 3.28



Vulnerability

Vulnerability Overview

Thunderstorms, high wind, hail, and lightning pose varying risk for jurisdictions in Pettis County. Downbursts resulting from thunderstorms can be just as damaging as an EF-1 tornado.

Thunderstorms and high winds have resulted in 3 injuries in Pettis County and have produced $488,250 in property damage along with $20,000 in crop damage. Poorly built structures, barns, outbuildings are more vulnerable to the impact of high winds during thunderstorms. Both high winds and hail can damage roofs. Hail can also damage crops and dent cars and trucks. Total hail damage recorded in the NCDC database for Pettis County from 1997 – 2017 is $2,000,000 for one event in 2006. Lightning can cause wildfires and structural fires, damage electrical utilities causing power outages, and sometimes fatalities. Pettis County has seen three lighting events cause property damage to the amount of $40,000.

Potential Losses to Existing Development

The average annual loss determined from historical losses for thunderstorms, high wind, hail and lightning are indicators of the potential losses to existing development. High wind events in the

County have damaged critical facilities, schools, local governments, and private property. Potential annual losses throughout the county are: thunderstorm - $19,300 hail - $111,111, high winds - $3,361 and lightning -< $2,222.00.

Previous and Future Development

Growth in Pettis County is occurring at a slow rate, with Sedalia currently seeing the most growth in terms of population and housing built. Additional development in these areas results in the exposure of more households and businesses vulnerable to damages from high winds, hail, and lightning.

Hazard Summary by Jurisdiction

Although thunderstorms/high winds/lightning/hail events are area-wide, demographics of jurisdictions with high percentages of housing built before 1939 are susceptible.

Jurisdiction	% of Housing Built 1939 or Earlier
Green Ridge	15.3%
Houstonia	35.6%
Hughesville	14.3%
La Monte	4.7%
Sedalia	27.7%
Smithton	19.5%

Problem Statement

Poorly built structures, barns, and outbuildings are more vulnerable to the impact of high winds during thunderstorms. High winds can topple utility poles and lead to power outages. Both high winds and hail can damage roofs. Hail can also damage crops and dent cars and trucks. People are also at risk to injury and death during high wind events. Crop insurance mitigates the risk to farmers and the agriculture sector within the county. Lightning events have caused structural fires and can strike electrical utilities leading to power outages.

The risk of property damage, injury, and death in the county can be mitigated by identifying safe refuge areas in public buildings, nursing homes and other facilities that house vulnerable populations that do not have a safe room. Retrofitting school district facilities with protective filming of windows and installation of blast proof doors will provide more protection for students and staff at school facilities. Additional warnings and alerts will also provide the public and schools more time to take cover during high wind events. Education and hazard awareness programs in public schools would also increase public safety in the event of severe thunderstorm events.

3.4.11 Winter Weather/Snow/Ice/Severe Cold

Hazard Profile

Hazard Description

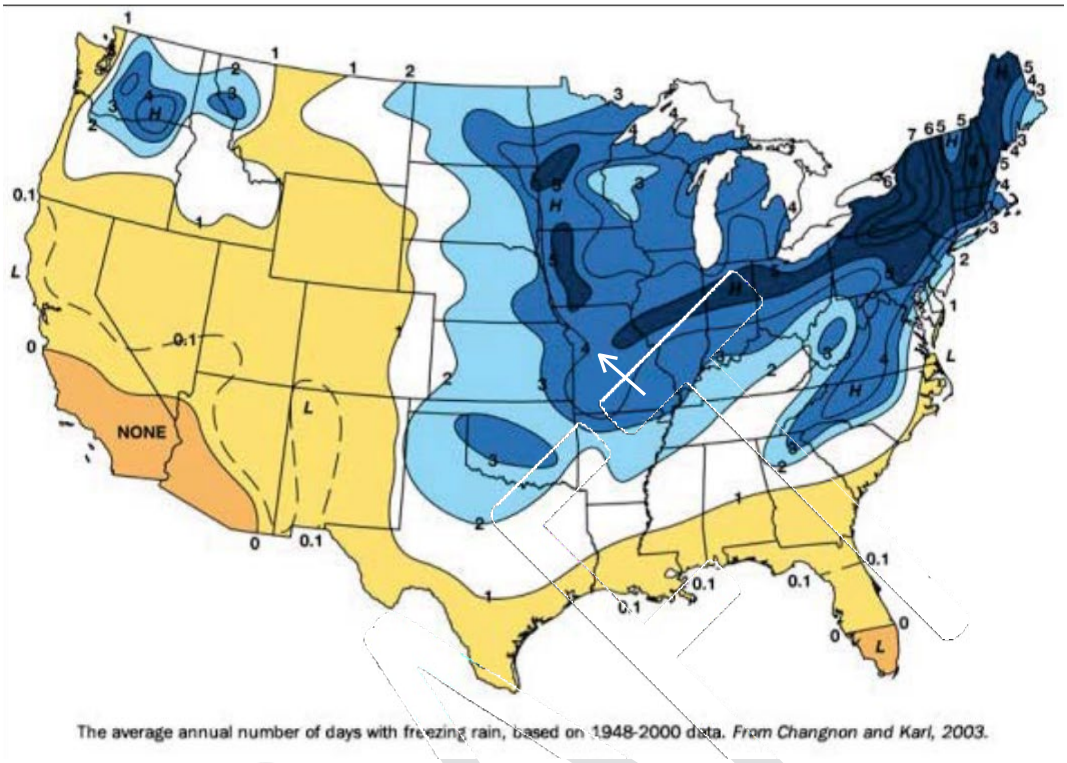
A major winter storm can last for several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall, and cold temperatures. The National Weather Service describes different types of winter storm events as follows.

- **Blizzard**—Winds of 35 miles per hour or more with snow and blowing snow reducing visibility to less than ¼ mile for at least three hours.
- **Blowing Snow**—Wind-driven snow that reduces visibility. Blowing snow may be falling snow and/or snow on the ground picked up by the wind.
- **Snow Squalls**—Brief, intense snow showers accompanied by strong, gusty winds. Accumulation may be significant.
- **Snow Showers**—Snow falling at varying intensities for brief periods of time. Some accumulation is possible.
- **Freezing Rain**—Measurable rain that falls onto a surface with a temperature below freezing. This causes it to freeze to surfaces, such as trees, cars, and roads, forming a coating or glaze of ice. Most freezing-rain events are short lived and occur near sunrise between the months of December and March.
- **Sleet**—Rain drops that freeze into ice pellets before reaching the ground. Sleet usually bounces when hitting a surface and does not stick to objects.

Geographic Location

The entire county is vulnerable to heavy snow, ice, extreme cold temperatures, and freezing rain. **Figure 3.30** depicts the average number of hours per year with freezing rain. Pettis County is in a zone that can expect 9 – 12 hours of freezing rain per year.

Figure 3.30 Average Number of Days with Freezing Rain



Source: http://mrcc.isws.illinois.edu/living_wx/icestorms/index.html

Severity/Magnitude/Extent

Severe winter storms include extreme cold, heavy snowfall, ice, and strong winds which can push the wind chill well below zero degrees in the planning area. Heavy snow can bring a community to a standstill by inhibiting transportation (in whiteout conditions), weighing down utility lines, and by causing structural collapse in buildings not designed to withstand the weight of the snow. Repair and snow removal costs can be significant. Ice buildup can collapse utility lines and communication towers, as well as make transportation difficult and hazardous. Ice can also become a problem on roadways if the air temperature is high enough that precipitation falls as freezing rain rather than snow.

Extreme cold often accompanies severe winter storms and can lead to hypothermia and frostbite in people without adequate clothing protection. Cold can cause fuel to congeal in storage tanks and supply lines, stopping electric generators. Cold temperatures can also overpower a building's heating system and cause water and sewer pipes to freeze and rupture. Extreme cold also increases the likelihood for ice jams on flat rivers or streams. When combined with high winds from winter storms, extreme cold becomes extreme wind chill, which is hazardous to health and safety.

The National Institute on Aging estimates that more than 2.5 million Americans are elderly and especially vulnerable to hypothermia, with the isolated elders being most at risk. About 10 percent of people over the age of 65 have some kind of bodily temperature-regulating defect, and 3-4 percent of all hospital patients over 65 are hypothermic.

Also at risk are those without shelter, those who are stranded, or who live in a home that is poorly

insulated or without heat. Other impacts of extreme cold include asphyxiation (unconsciousness or death from a lack of oxygen) from toxic fumes from emergency heaters; household fires, which can be caused by fireplaces and emergency heaters; and frozen/burst pipes.

Buildings with overhanging tree limbs are more vulnerable to damage during winter storms when limbs fall. Businesses experience loss of income as a result of closure during power outages. In general heavy winter storms increase wear and tear on roadways though the cost of such damages is difficult to determine. Businesses can experience loss of income as a result of closure during winter storms.

Overhead power lines and infrastructure are also vulnerable to damages from winter storms. In particular ice accumulation during winter storm events damage to power lines due to the ice weight on the lines and equipment. Damages also occur to lines and equipment from falling trees and tree limbs weighted down by ice. Potential losses could include cost of repair or replacement of damaged facilities, and lost economic opportunities for businesses.

Secondary effects from loss of power could include burst water pipes in homes without electricity during winter storms. Public safety hazards include risk of electrocution from downed power lines. Specific amounts of estimated losses are not available due to the complexity and multiple variables associated with this hazard. Standard values for loss of service for utilities reported in FEMA's 2009 BCA Reference Guide, the economic impact as a result of loss of power is $126 per person per day of lost service.

Wind can greatly amplify the impact of cold ambient air temperatures. Provided by the National Weather Service**, Figure 3.31** below shows the relationship of wind speed to apparent temperature and typical time periods for the onset of frostbite.

Figure 3.31

Winter storms, cold, frost and freeze take a toll on crop production in the planning area. **Table 3.33** showing the USDA's Risk Management Agency payments for insured crop losses in the planning area as a result of cold conditions and snow from 2007 to 2016.

Table 3.33

Crop Insurance Claims Paid in Saline County as a Result of Cold Conditions and Snow 2007-2016			
Crop Year	**Crop Name**	**Cause of Loss Description**	**Insurance Paid**
2016	Wheat	Cold Wet Weather/Cold Winter/Freeze	$9,318.79
2015	Wheat/Corn/Soybeans	Cold Wet Weather/Cold Winter	$79,472.24
2014	Wheat/Corn/Soybeans	Cold Wet Weather/Cold Winter/Freeze	$221,397.52
2013	Wheat/Corn/Soybeans	Cold Wet Weather/Cold Winter	$156,310.00
2012	Corn	Cold Wet Weather/Cold Winter	$6,911.00
2011	Wheat/Corn/Soybeans/Sorghum	Cold Wet Weather/Cold Winter/Freeze	$507,336.00
2010	Wheat/Corn/Soybeans	Cold Wet Weather/Cold Winter/Freeze	$318,124.00
2009	Wheat/Corn/Soybeans/Sorghum	Cold Wet Weather	$199,341.00
2008	Wheat/Corn	Cold Wet Weather/Cold Winter/Freeze	$35,489.00
2007	Wheat/Corn/Soybeans	Cold Wet Weather/Cold Winter/Freeze	$197,426.00
		Total	**$1,731,125.55**

Source: USDA Risk Management Agency, http://www.rma.usda.gov/data/cause.htm

Previous Occurrences

NCDC Saline County Winter Weather Events Summary, 1997-2017					
Type of Event	**Number of Occurrences**	**# of Deaths**	**# of Injuries**	**Property Damage**	**Crop Damage**
Blizzard	1	0	0	0	0
Cold/Wind Chill	2	0	0	0	0
Extreme Cold/Wind	2	0	0	0	0
Frost/Freeze	1	0	0	0	0
Heavy Snow	7	0	0	0	0
Ice Storm	8	0	0	$105,000	0
Winter Storm	15	0	0	$8,000	0
Winter Weather	5	0	0	0	0
Total	**41**	**0**	**0**	**$113,000**	**0**

Source: NCDC, data accessed 11/2/2017

Notable Winter Storm Events In Pettis County		
Event	**Date**	**Narrative**
Blizzard	2/1/2011	Blizzard conditions were observed across the county, with frequent wind gusts up to 45 mph, visibilities less than 1/4 of a mile, and heavy snow of up to 21.3 inches, measured in Sedalia. Travel was nearly impossible, with the blowing and drifting snow, and the very low visibilities.

Cold/Wind Chill	1/6/2014	A polar plunge of arctic air slammed into Kansas, bringing wind chill values to around 30 degrees below zero for the morning of January 6.
Heavy Snow	2/4-5/2014	A major winter storm trekked through Kansas and Missouri on February 4 and 5. By the time the storm finished it dropped around 6-10 of snow across the entire area. Northerly winds on the back side of this system gusted up to 30 mph and produced substantial blowing and drifting. Many areas reported drifts of2 to 3 feet.
Ice Storm	1/30/2002	A long-lived major ice and snow storm blasted much of northwest, northern and central Missouri from late Tuesday, January 29th, until Thursday, January 31st. Ice accumulations of over an inch were observed from the Kansas City metropolitan area, east and north through Moberly Missouri. At one point 409,504 total customers were without electrical power in the CWA, with some residents without power up to two weeks. For the Kansas City area, the ice storm was ranked as the worst ever.

Probability of Future Occurrence

The probability for all of the different types of winter weather are included as one probability, since one storm generally includes multiple types of events. There were 41 severe winter weather events in Pettis County from 1997 to 2017. This equates to a 100% probability of occurrence in any given year in the planning area.

Vulnerability

Vulnerability Overview

Severe winter storms include extreme cold, heavy snowfall, ice, and strong winds which can push the wind chill well below zero degrees in the planning area. Heavy snow can bring a community to a standstill by inhibiting transportation (in whiteout conditions), weighing down utility lines, and by causing structural collapse in buildings not designed to withstand the weight of the snow. Repair and snow removal costs can be significant. Ice buildup can collapse utility lines and communication towers, as well as make transportation difficult and hazardous. People over 65 and those living in poverty have an increased risk of hypothermia and frostbite due to extreme cold and wind chill

In the 2013 State Plan, seven factors were considered in determining overall severe winter storm vulnerability as follows: housing density, likelihood of occurrence, building exposure, crop exposure, average annual property loss ratio, average annual crop insurance claims and social vulnerability. The state ranked each of these criteria using a scale from one to five, one being lowest and five being the highest, to rank each county's vulnerability to severe winter weather. Saline County received a vulnerability rating of medium-high.

Potential Losses to Existing Development

During the 20 year period from 1997 to 2017, a total of three events caused $113,000 in property damage losses. This number, equally distributed over the 20 year period, puts estimated losses at $5,650 on average for annual losses countywide.

Previous and Future Development

Increased development and any resulting increase in population will increase exposure to damage from severe winter weather; however not much growth is expected. Future commercial development can expect functional downtime and decreased revenues during periods of severe winter weather. Road construction in the county will increase the need for snow removal and salt to keep transportation lifelines open during periods of severe winter weather.

Hazard Summary by Jurisdiction

Severe winter weather can cause power outages and put structures at risk to fires when individuals in homes resort to fuel heaters. The risk of extreme cold deaths and frostbite varies among segments of the populations. People over 65, those living below the poverty level, and Mobile home parks or areas with high density populations have an increased vulnerability to severe winter weather.

Jurisdiction	% of population below the Poverty Level	% Population over 65 years of age	% Mobile Home Housing Units
Pettis County	17.3%	13.2%	5.8%
City of Green Ridge	0%	13.2 %	2.9%
City of Houstonia	8.4%	13%	18.7%
Village of Hughesville	6.1%	24.8%	0
City of La Monte	15.4%	10.7%	31%
City of Sedalia	4.1%	13.6%	0
City of Smithton	19.9%	14.2%	7.4%

Source: 2010 Census; 2011-2015 American Community Survey 5 year estimates; United States Census Bureau

Problem Statement

Heavy snow can bring a community to a standstill by inhibiting transportation (in whiteout conditions), weighing down utility lines, and by causing structural collapse in buildings not designed to withstand the weight of the snow. Repair and snow removal costs can be significant. Ice buildup can collapse utility lines and communication towers, as well as make transportation difficult and hazardous. People over 65 and those living in poverty have an increased risk of hypothermia and frostbite due to extreme cold and wind chill.

Providing heating and cooling centers in the county would be beneficial to the population as a good percentage live in poverty. These facilities, which could be advertised online or through the news, would provide individuals who are at risk refuge from periods of extreme cold. Public works departments and road districts can develop snow removal plans and maintain adequate snow removal equipment and salt to quickly open roads after periods of heavy snow and freezing rain. The County and cities can work with local electric providers to develop vegetation management programs in rights of way to minimize damages to falling tree limbs laden with ice resulting from ice storms to minimize power outages throughout the county.

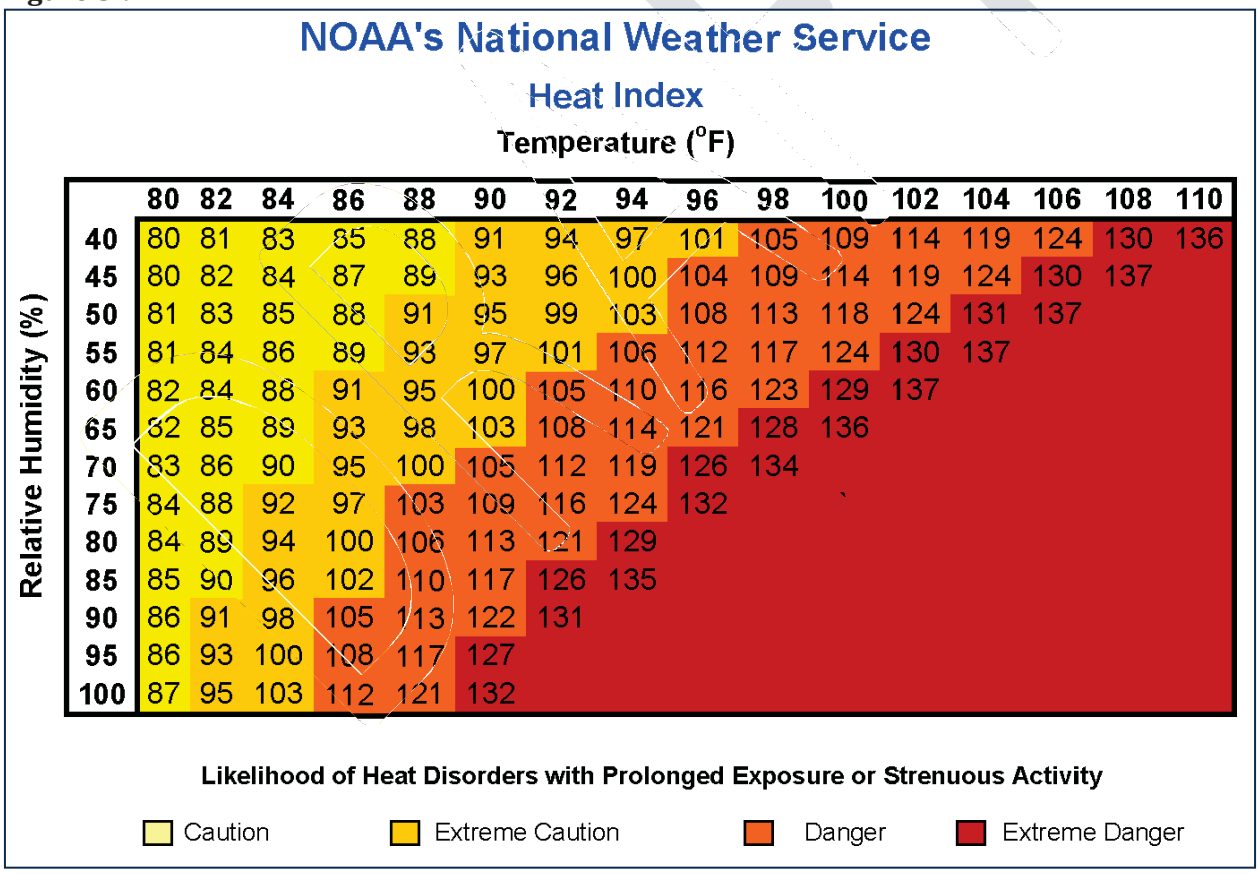
3.4.4 Extreme Heat

Hazard Profile

Hazard Description

Extreme temperature events, both hot and cold, can impact human health and mortality, natural ecosystems, agriculture and other economic sectors. The remainder of this section profiles extreme heat. Extreme cold events are profiled in combination with Winter Storm in Section 3.4.11. According to information provided by FEMA, extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks. Ambient air temperature is one component of heat conditions, with relative humidity being the other. The relationship of these factors creates what is known as the apparent temperature. The Heat Index chart shown in Figure 3.6 uses both of these factors to produce a guide for the apparent temperature or relative intensity of heat conditions.

Figure 3.9



Source: http://www.nws.noaa.gov/om/heat/heat-images/heatindexchart.png

Geographic Location

Extreme heat is an area-wide hazard event, and that the risk of extreme heat does not vary across the planning area.

Severity/Magnitude/Extent

Extreme heat can cause stress to crops and animals. According to USDA Risk Management Agency, losses to insurable crops during the 10-year time period from 2007 to 2016 were $1,176,239.00. Extreme heat can also strain electricity delivery infrastructure overloaded during peak use of air conditioning during extreme heat events. Another type of infrastructure damage from extreme heat is road damage. When asphalt is exposed to prolonged extreme heat, it can cause buckling of asphalt-paved roads, driveways, and parking lots.

From 1988-2011, there were 3,496 fatalities in the U.S. attributed to summer heat. This translates to an annual national average of 146 deaths. During the same period, 0 deaths were recorded in the planning area, according to NCDC data. The National Weather Service stated that among natural hazards, no other natural disaster—not lightning, hurricanes, tornadoes, floods, or earthquakes—causes more deaths.

Those at greatest risk for heat-related illness include infants and children up to five years of age, people 65 years of age and older, people who are overweight, and people who are ill or on certain medications. However, even young and healthy individuals are susceptible if they participate in strenuous physical activities during hot weather. In agricultural areas, the exposure of farm workers, as well as livestock, to extreme temperatures is a major concern.

Table 3.20 lists typical symptoms and health impacts due to exposure to extreme heat.

Table 3.20

Typical Health Impacts of Extreme Heat	
Heat Index	**Disorder**
80-90O F	Fatigue possible with prolonged exposure and/or physical activity
91-105O F	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and/or physical activity
106-130+O F	Heatstroke/sunstroke highly likely with continued exposure

Source: National Weather Service Heat Index Program, www.weather.gov/os/heat/index.shtml

The National Weather Service has an alert system in place (advisories or warnings) when the Heat Index is expected to have a significant impact on public safety. The expected severity of the heat determines whether advisories or warnings are issued. A common guideline for issuing excessive heat alerts is when for two or more consecutive days: (1) when the maximum daytime Heat Index is expected to equal or exceed 105 degrees Fahrenheit (°F); and the night time minimum Heat Index is 80°F or above. A heat advisory is issued when temperatures reach 105 degrees and a warning is issued at 115 degrees.

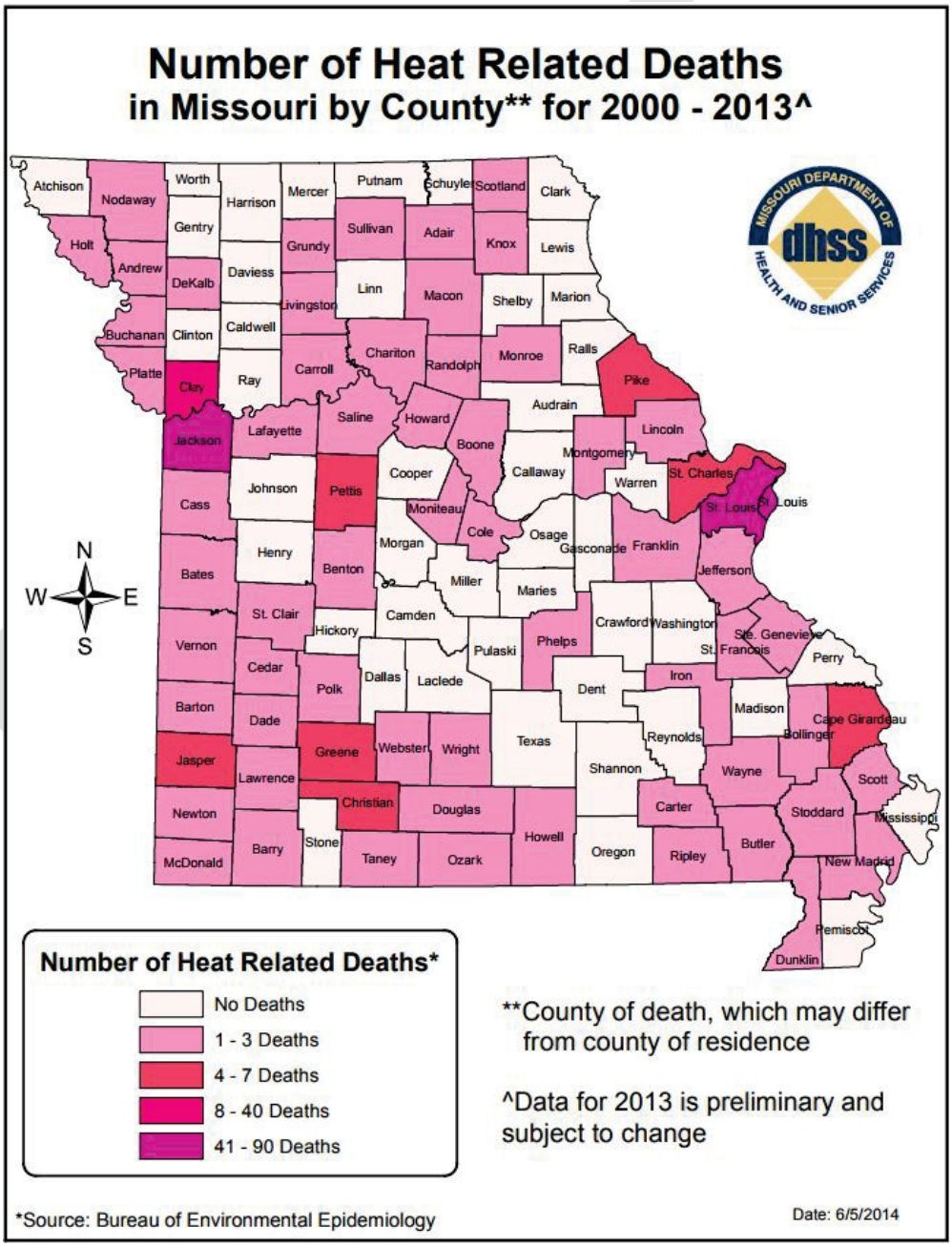
Previous Occurrences

Table 3.21

Extreme Heat Occurrence between 1997-2017					
Date	**Event Type**	**Deaths**	**Injuries**	**Property Damage**	**Crop Damage**
8/6/2007	Excessive Heat	0	0	0	0
7/18/2012	Excessive Heat	0	0	0	0

Source: www.ncdc.noaa.gov

Figure 3.10



Source: http://health.mo.gov/living/healthcondiseases/hyperthermia/pdf/hyper2b.pdf

Probability of Future Occurrence

If a 20-year period is used, the probability that an extreme heat event will occur in Pettis County in any given year is 10%, or once every 10 years. Data limitations can indicate that extreme heat events could be underreported in the NCDC.

Vulnerability

Vulnerability Overview

High humidity, which often accompanies heat in Missouri, can make the effects of heat even more harmful. While heat-related illness and death can occur from exposure to intense heat in just one afternoon, heat stress on the body has a cumulative effect. Consequently, the persistence of a heat wave increases the threat to public health. The people most at risk are children under five years of age and adults over the age of 65 as well as people who work outdoors. The agriculture sector can also suffer crop loss during periods of extreme heat. Extreme heat may also cause buckling of roads.

Potential Losses to Existing Development

Based on information in the 2013 Plan and DHSS, four to seven heat related deaths may occur within Pettis County over the next 13 years.

Impact of Future Development

Population growth can result in increases in the age-groups that are most vulnerable to extreme heat. Population growth also increases the strain on electricity infrastructure, as more electricity is needed to accommodate the growing population.

Hazard Summary by Jurisdiction

Those at greatest risk for heat-related illness and deaths include children up to five years of age, people 65 years of age and older, people who are overweight, and people who are ill or on certain medications. To determine jurisdictions within the planning area with populations more vulnerable to extreme heat, demographic data was obtained from the 2010 Census on population percentages in each jurisdiction comprised of those under age 5 and over age 65. Data was not available for overweight individuals and those on medications vulnerable to extreme heat. Table 3.? below summarizes vulnerable populations in the participating jurisdictions. Note that school and special districts are not included in the table because students and those working for the special districts are not customarily in these age groups.

Table 3.22

County Population Under Age 5 and Over Age 65, 2010 Census Data				
Jurisdiction	**Population Under 5 yrs**	**Under 5 yrs %**	**Population 65 yrs or more**	**65+ %**
Pettis County	3,146	7.5%	6,203	14.7%
Green Ridge	26	5.5%	63	13.2%
Houstonia	11	5.0%	30	13.6%
Hughesville	17	9.3%	26	14.2%

La Monte	111	9.7%	131	11.5%
Sedalia	1,783	8.3%	3,226	15.1%
Smithton	42	7.4%	54	9.5%

Source: U.S. Census Bureau, includes entire population of each city or county

All Schools in the planning area have proper air-conditioning and follow proper procedures in the event of extreme heat.

Problem Statement

Older and younger segments of the population are more vulnerable to the impact of extreme heat. In addition people living below the poverty level may be more vulnerable during periods of extreme heat due to a lack of air conditioning or utilities in their homes. Institutionalized populations, such as those living in nursing homes, become more vulnerable to extreme heat due to power outages. To help reduce the risk of death, heating and cooling centers should be promoted and known to the public, especially to those who have young children or are over the age of 65. Collaborating with local community organizations to continue to donate fans and offer weatherization programs would mitigate the impact on vulnerable populations in the county.

3.4.3 Earthquakes

Hazard Profile

Hazard Description

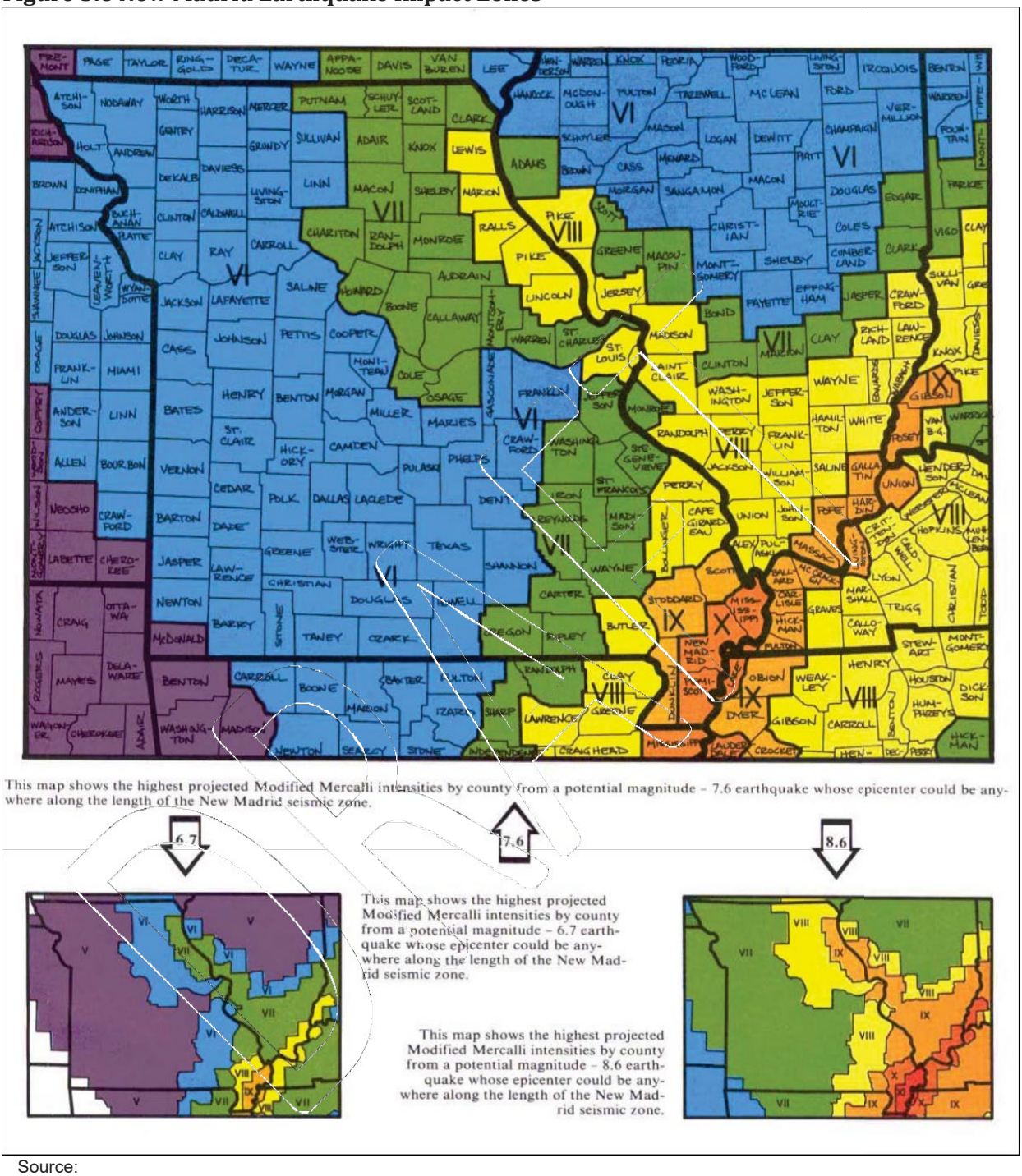
An earthquake is a sudden motion or trembling that is caused by a release of energy accumulated within or along the edge of the earth's tectonic plates. Earthquakes occur primarily along fault zones and tears in the earth's crust. Along these faults and tears in the crust, stresses can build until one side of the fault slips, generating compressive and shear energy that produces the shaking and damage to the built environment. Heaviest damage generally occurs nearest the earthquake epicenter, which is that point on the earth's surface directly above the point of fault movement. The composition of geologic materials between these points is a major factor in transmitting the energy to buildings and other structures on the earth's surface.

Geographic Location

The greatest hazard to Pettis County comes from the New Madrid Seismic Zone situated in southeast Missouri. The potential of high magnitude earthquakes occurring along the New Madrid fault presents risk that does not vary across the planning area. The Nemaha uplift in central Kansas is also prone to seismic activity; however, the center of the Humbolt fault zone near the Nemaha Uplift only produces lower magnitude seismic events do to its distance from Pettis County Missouri.

Figure 3.6 shows the highest projected Modified Mercalli intensities by county from a potential magnitude 7.6 earthquake whose epicenter could be anywhere along the length of the New Madrid Seismic Zone. The secondary maps in Figure 3.6 show the same regional intensities for 6.7 and 8.6 earthquakes, respectively

Figure 3.6 New Madrid Earthquake Impact Zones



This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude – 7.6 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.

6.7

This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude – 6.7 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.

7.6

8.6

This map shows the highest projected Modified Mercalli intensities by county from a potential magnitude – 8.6 earthquake whose epicenter could be anywhere along the length of the New Madrid seismic zone.

Source:
http://sema.dps.mo.gov/docs/programs/Planning,%20Disaster%20&%20Recovery/State%20of%20Missouri%20Hazard%20Analysis/2012-State-Hazard-Analysis/Annex_F_Earthquakes.pdf

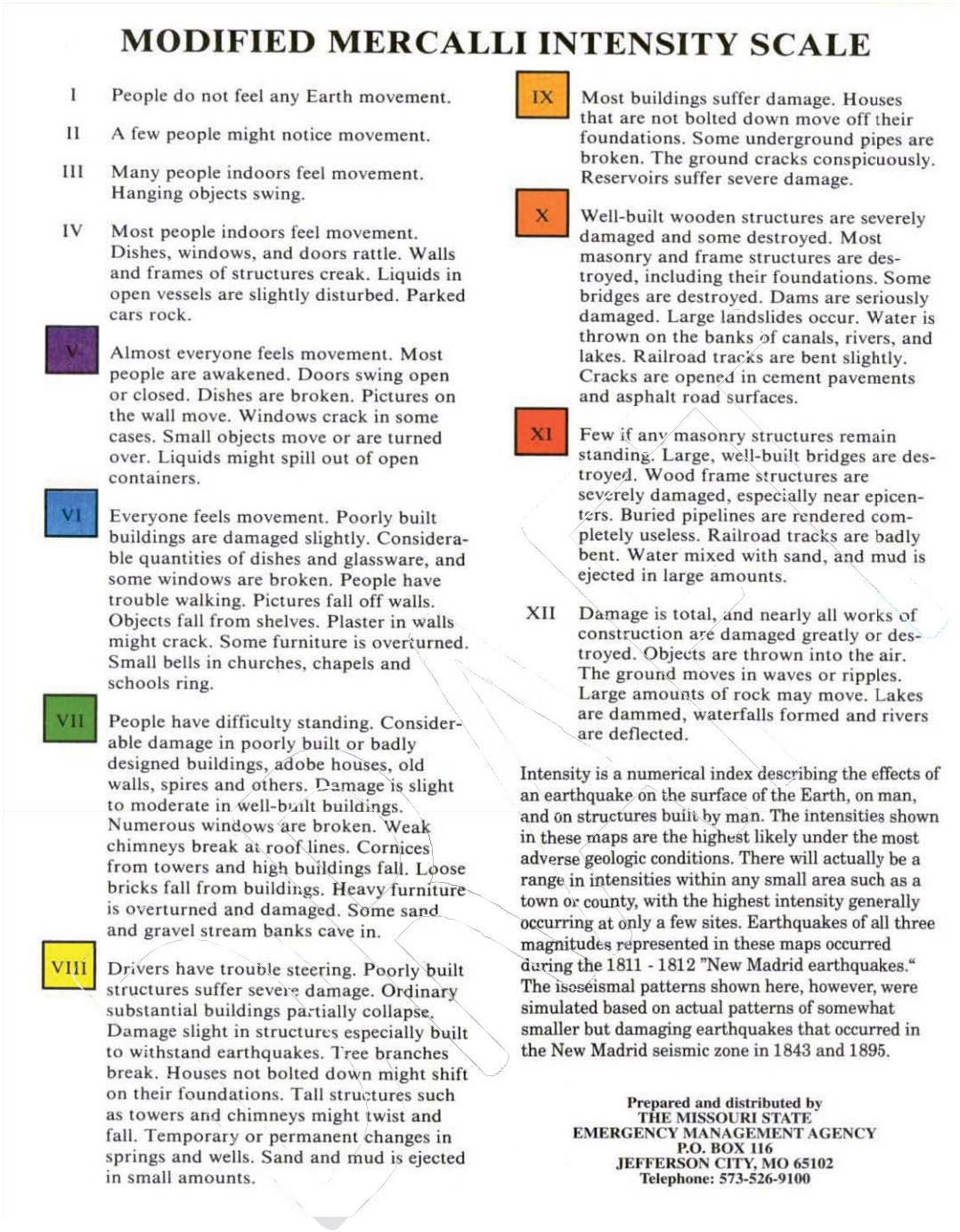
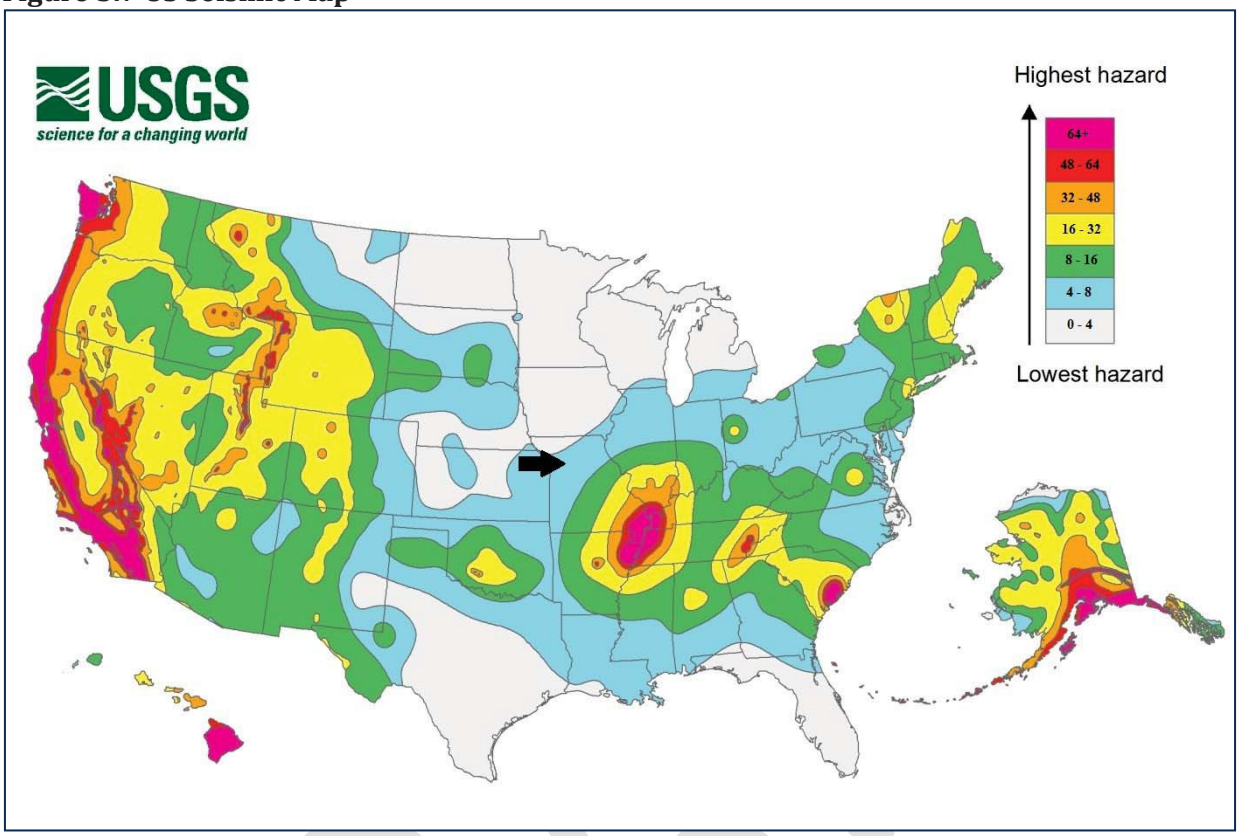


Figure 3.7 illustrates seismicity in the United States.

Figure 3.7 US Seismic Map



Source: United States Geological Survey

Severity/Magnitude/Extent

The extent or severity of earthquakes is generally measured in two ways: 1) the Richter Magnitude Scale is a measure of earthquake magnitude; and 2) the Modified Mercalli Intensity Scale is a measure of earthquake severity. The two scales are defined a follows.

Richter Magnitude Scale

The Richter Magnitude Scale was developed in 1935 as a device to compare the size of earthquakes. The magnitude of an earthquake is measured using a logarithm of the maximum extent of waves recorded by seismographs. Adjustments are made to reflect the variation in the distance between the various seismographs and the epicenter of the earthquakes. On the Richter scale, magnitude is expressed in whole numbers and decimal fractions. For example, comparing a 5.3 and a 6.3 earthquake shows that the 6.3 quake is ten times bigger in magnitude. Each whole number increase in magnitude represents a tenfold increase in measured amplitude because of the logarithm. Each whole number step in the magnitude scale represents a release of approximately 31 times more energy.

Modified Mercalli Intensity Scale

The intensity of an earthquake is measured by the effect of the earthquake on the earth's surface. The intensity scale is based on the responses to the quake, such as people awakening, movement of furniture, damage to chimneys, etc. The intensity scale currently used in the United States is the

Modified Mercalli (MM) Intensity Scale. It was developed in 1931 and is composed of 12 increasing levels of intensity. They range from imperceptible shaking to catastrophic destruction, and each of the twelve levels is denoted by a Roman numeral. The scale does not have a mathematical basis, but is based on observed effects. Its use gives the laymen a more meaningful idea of the severity.

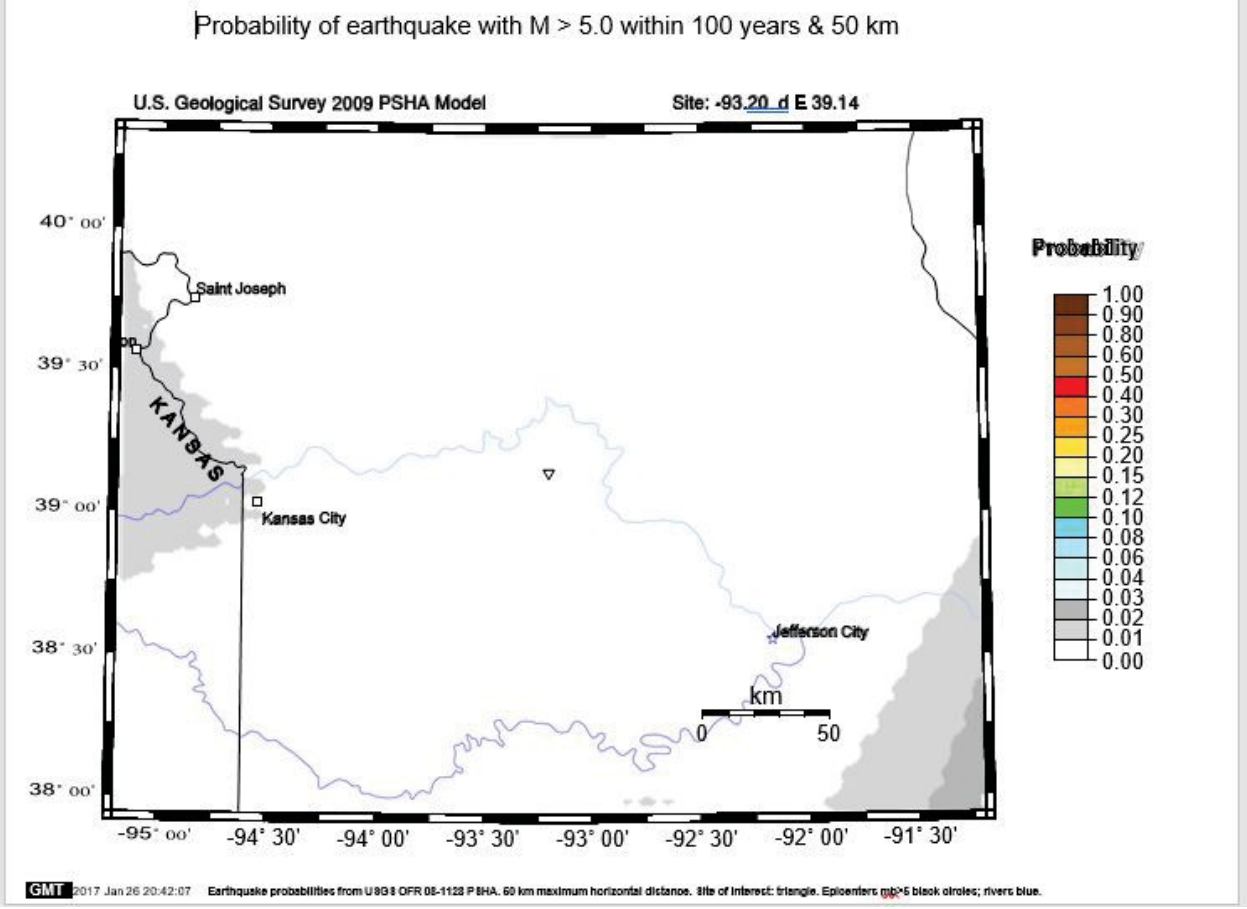
Previous Occurrences

There is no Historical record of an earthquake occurrence in Pettis County.

Probability of Future Occurrence

Without a historical record of earthquakes in Pettis County it is not possible to calculate a precise probability of earthquake occurrences. According to the United States Geological Survey, Pettis County's probability of receiving an earthquake of 5.0 or higher is at 0%.

Figure 3.8



Source: https://geohazards.usgs.gov/eqprob/2009/index.php

Vulnerability

Vulnerability Overview

Ground shaking is the most damaging effect from earthquakes. Ground shaking will impact all structures and critical infrastructure such as roads and electrical transmission systems. The greatest earthquake risk to Pettis County is the New Madrid fault in the boot-heel region of Missouri. A 7.6 magnitude earthquake would result in poorly built buildings damaged slightly; considerable quantities of dishes, glassware and windows are broken; people having trouble walking; pictures falling off walls; objects falling from shelves; plaster in walls cracking; and furniture overturned. Damage to structures will occur but will vary on the quality of construction. In addition, some underground utilities may be damaged. Some injuries may occur but fatalities are unlikely.

Potential Losses to Existing Development

Pettis County Building Count (HAZUS-MH 2.1)							
Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
5,073	263	56	98	40	27	10	5,567

Estimated Values for the Key Occupancies (Uses) for Pettis County*							
Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
$3,115,585	$603,582	$202,010	$36,209	$52,855	$35,819	$265,143	$4,311,203

* Amounts in thousands of dollars

HAZUS-MH Earthquake Loss Estimation: 2% Probability of Exceedance in 50 Years Scenario					
Structural Damage	Non-Structural Damage	Contents Damage /Inventory Loss	Loss Ratio (%)	Income Loss	Total Loss to Buildings
$14,737,000	$43,231,000	$15,727,000	1.34	$19,734,000	$93,429,000

Impact of Future Development

Future development is not expected to increase the risk other than contributing to the overall exposure of what could become damaged as a result of an event.

Problem Statement

Based on likely damage from a 7.6 magnitude earthquake along the New Madrid fault, older poorly built structures will suffer slight damage. Potential damages to future development can be mitigated by adopting and enforcing at least IBC 2012 building codes. Updating and enforcing building codes throughout Pettis County would mitigate the impact on future development from an earthquake event.

3.4.7 Land Subsidence/Sinkholes

Hazard Profile

Hazard Description

Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that naturally can be dissolved by ground water circulating through them. As the rock dissolves, spaces and caverns develop underground. The sudden collapse of the land surface above them can be dramatic and range in size from broad, regional lowering of the land surface to localized collapse. However, the primary causes of most subsidence are human activities: underground mining of coal, groundwater or petroleum withdrawal, and drainage of organic soils. In addition, sinkholes can develop as a result of subsurface void spaces created over time due to the erosion of subsurface limestone (karst).

Land subsidence occurs slowly and continuously over time, as a general rule. On occasion, it can occur abruptly, as in the sudden formation of sinkholes. Sinkhole formation can be aggravated by flooding.

In the case of sinkholes, the rock below the surface is rock that has been dissolving by circulating groundwater. As the rock dissolves, spaces and caverns form, and ultimately the land above the spaces collapse. In Missouri, sinkhole problems are usually a result of surface materials above openings into bedrock caves eroding and collapsing into the cave opening. These collapses are called "cover collapses" and geologic information can be applied to predict the general regions where collapse will occur. Sinkholes range in size from several square yards to hundreds of acres and may be quite shallow or hundreds of feet deep.

According to the U.S. Geological Survey (USGS), the most damage from sinkholes tends to occur in Florida, Texas, Alabama, Missouri, Kentucky, Tennessee, and Pennsylvania. Fifty-nine percent of Missouri is underlain by thick, carbonate rock that makes Missouri vulnerable to sinkholes. Sinkholes occur in Missouri on a fairly frequent basis. Most of Missouri's sinkholes occur naturally in the State's karst regions (areas with soluble bedrock). They are a common geologic hazard in southern Missouri, but also occur in the central and northeastern parts of the State. Missouri sinkholes have varied from a few feet to hundreds of acres and from less than one to more than 100 feet deep. The largest known sinkhole in Missouri encompasses about 700 acres in western Boone County southeast of where Interstate 70 crosses the Missouri River. Sinkholes can also vary is shape like shallow bowls or saucers whereas other have vertical walls. Some hold water and form natural ponds.

Geographic Location

Figures 3.23-3.25 show the locations of known land subsidence areas. All locations occur in a rural areas of Pettis County.

Figure 3.23

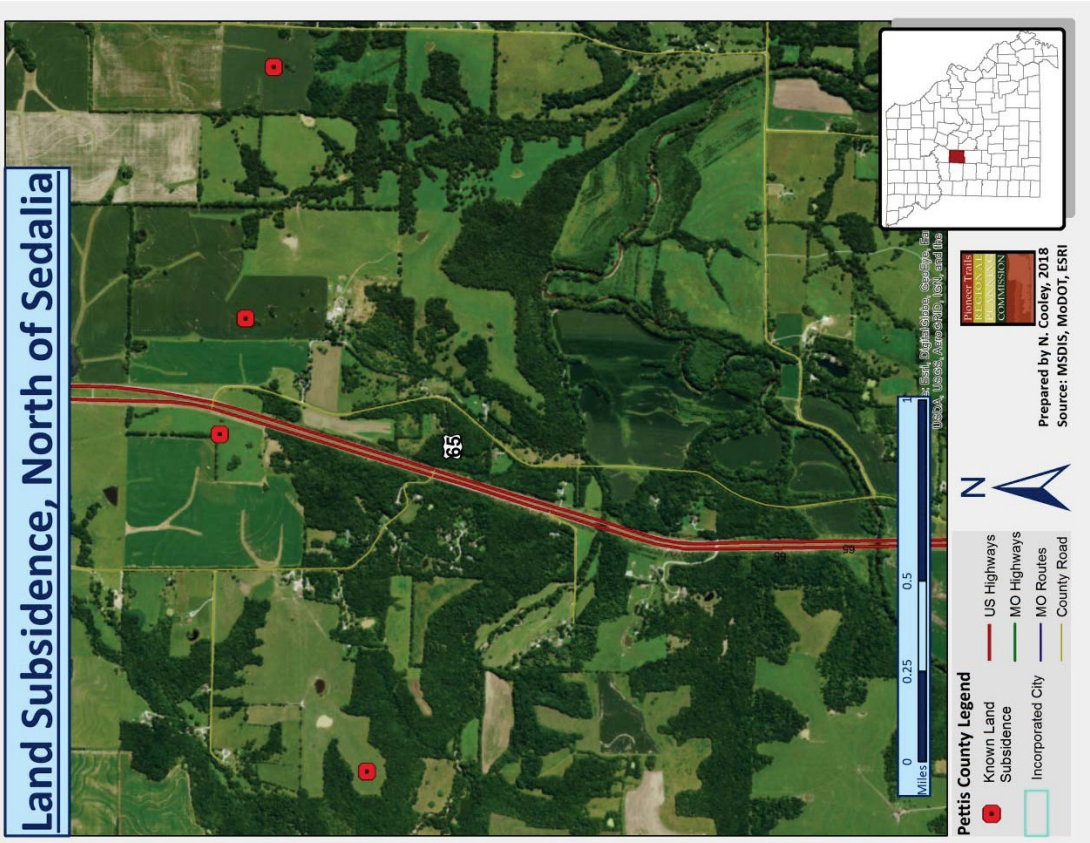


Figure 3.24

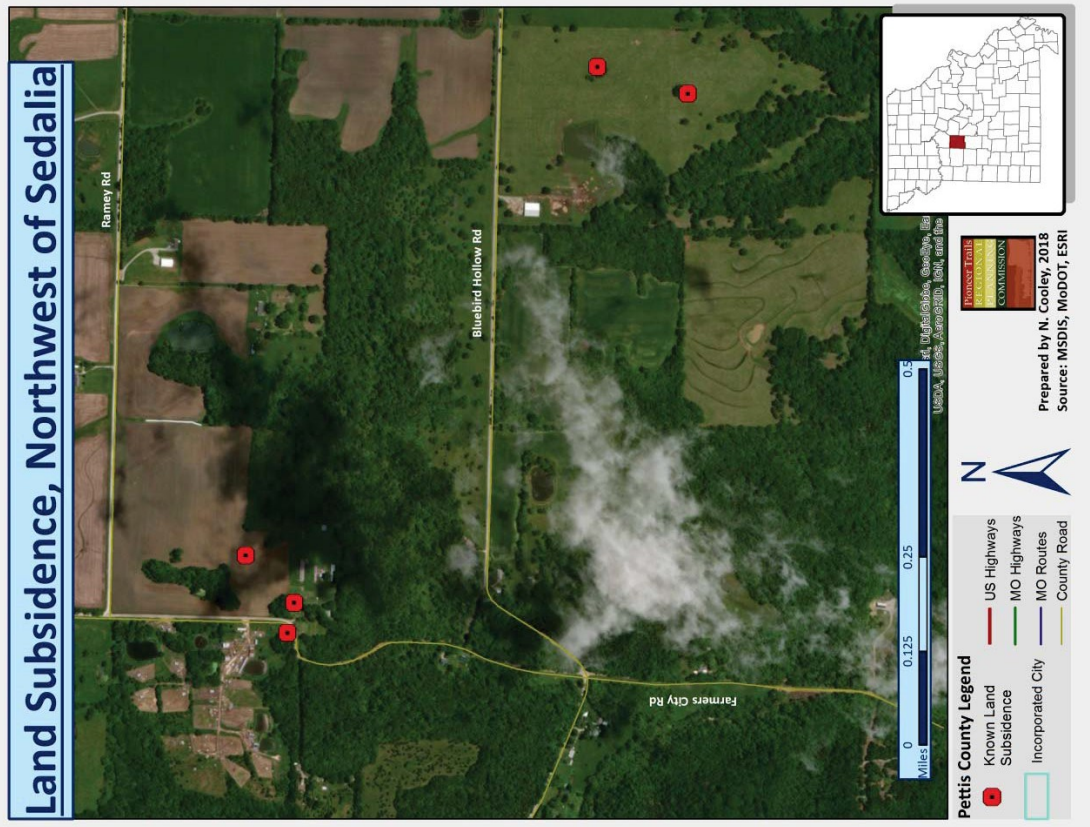


Figure 3.25

Severity/Magnitude/Extent

Sinkholes vary in size and location, and these variances will determine the impact of the hazard. A sinkhole could result in the loss of a personal vehicle, a building collapse, or damage to infrastructure such as roads, water, or sewer lines. Groundwater contamination is also possible from a sinkhole. Because of the relationship of sinkholes to groundwater, pollutants captured or dumped in sinkholes could affect a community's groundwater system. Sinkhole collapse could be triggered by large earthquakes. Sinkholes located in floodplains can absorb floodwaters but make detailed flood hazard studies difficult to model.

The 2013 State Plan included only seven documented sinkhole "notable events". The plan stated that sinkholes are common to Missouri and the probability is high that they will occur in the future. To date, Missouri sinkholes have historically not had major impacts on development nor have they caused serious damage. Thus, the severity of future events is likely to be low.

Previous Occurrences

Sinkholes are a regular occurrence in Missouri, but rarely are events of any significance. Despite the regular occurrences, there have been no major recent documented occurrences of sinkholes opened in Pettis County.

Probability of Future Occurrence

The probability cannot be calculated due to the lack of information regarding known sinkhole events in Pettis County.

Vulnerability

Vulnerability Overview

Sinkholes in Missouri are a common feature where limestone and dolomite outcrop. Dolomite is a rock similar to limestone with magnesium as an additional element along with the calcium normally present in the minerals that form the rocks. While some sinkholes may be considered a slow changing nuisance; other more sudden, catastrophic collapses can destroy property, delay construction projects, contaminate ground water resources, and damage underground utilities. The entire county is underlain with limestone and dolomite bedrock.

Potential Losses to Existing Development

No existing development is at risk of damage.

Impact of Previous and Future Development

Future development over abandoned mines and in areas of known risk to sinkhole formation in the planning area will increase vulnerability to this hazard. Population and development in these areas, will increase exposure to sinkhole occurrence. There are currently no regulations prohibiting construction over or near known sinkholes. Future development may also change storm runoff patterns and cause expansion or formation of sinkholes.

Hazard Summary by Jurisdiction

The risk of sinkhole damage for individual communities and school districts is limited to the amount of exposure of buildings and infrastructure. Some parts of the county are more at risk for potential sinkhole formations more than other areas. There are no jurisdictions with existing structures that are at risk of sinkholes. It is unlikely that school, and special districts, will be affected by sinkholes due to the localized nature of their exposure.

Problem Statement

It is likely that more sinkholes will occur as development occurs within the county. Sinkholes can be remediated with fill material. Once a sinkhole has been remediated building should be prohibited at the site. Existing sinkholes can expand if surface runoff erodes the edges of the sinkhole. Storm water runoff should be diverted away from known sinkholes. The county and jurisdictions should adopt regulations prohibiting construction at least 30 feet from known sinkholes. Information about identifying potential sinkhole formation and promoting Missouri FAIR plan sinkhole insurance can be included in public outreach and hazard awareness programs. Undeveloped land that is in a sinkhole risk area can be used for park space or other recreational purposes.

3.4.5 Wildfire

Hazard Profile

Hazard Description

The fire incident types for wildfires include: 1) natural vegetation fire, 2) outside rubbish fire, 3) special outside fire, and 4) cultivated vegetation, crop fire.

The Forestry Division of the Missouri Department of Conservation (MDC) is responsible for protecting privately owned and state-owned forests and grasslands from wildfires. To accomplish this task, eight forestry regions have been established in Missouri for fire suppression. The Forestry Division works closely with volunteer fire departments and federal partners to assist with fire suppression activities. Currently, more than 900 rural fire departments in Missouri have mutual aid agreements with the Forestry Division to obtain assistance in wildfire protection if needed.

Most of Missouri fires occur during the spring season between February and May. The length and severity of both structural and wildland fires depend largely on weather conditions. Spring in Missouri is usually characterized by low humidity, and high winds. These conditions result in higher fire danger. In addition, due to the recent lack of moisture throughout many areas of the state, conditions are likely to increase the risk of wildfires. Drought conditions can also hamper firefighting efforts, as decreasing water supplies may not prove adequate for firefighting. It is common for rural residents burn their garden spots, brush piles, and other areas in the spring. Some landowners also believe it is necessary to burn their forests in the spring to promote grass growth, kill ticks, and reduce brush. Therefore, spring months are the most dangerous for wildfires. The second most critical period of the year is fall. Depending on the weather conditions, a sizeable number of fires may occur between mid-October and late November.

Geographic Location

Absent demographic information indicating otherwise, the risk of structural fire probably does not vary widely across the planning area. However, damages due to wildfires would be higher in communities with more wildland–urban interface (WUI) areas. The term refers to the zone of transition between unoccupied land and human development and needs to be defined in the plan. Within the WUI, there are two specific areas identified: 1) Interface and 2) Intermix. The interface areas are those areas that abut wildland vegetation and the Intermix areas are those areas that intermingle with wildland areas.

Severity/Magnitude/Extent

Wildfires damage the environment, killing some plants and occasionally animals. Firefighters have been injured or killed, and structures can be damaged or destroyed. The loss of plants can heighten the risk of soil erosion and landslides. Although Missouri wildfires are not the size and intensity of those in the Western United States, they could impact recreation and tourism in and near the fires.

Wildland fires in Missouri have been mostly a result of human activity rather than lightning or some other natural event. Wildfires in Missouri are usually surface fires, burning the dead leaves on the ground or dried grasses. They do sometimes “torch” or “crown” out in certain dense evergreen stands like eastern red cedar and shortleaf pine. However, Missouri does not have the extensive

stands of evergreens found in the western US that fuel the large fire storms seen on television news stories.

While very unusual, crown fires can and do occur in Missouri native hardwood forests during prolonged periods of drought combined with extreme heat, low relative humidity, and high wind. Tornadoes, high winds, wet snow and ice storms in recent years have placed a large amount of woody material on the forest floor that causes wildfires to burn hotter and longer. These conditions also make it more difficult for fire fighters suppress fires safely.

Often wildfires in Missouri go unnoticed by the general public because the sensational fire behavior that captures the attention of television viewers is rare in the state. Yet, from the standpoint of destroying homes and other property, Missouri wildfires can be quite destructive.

Previous Occurrences

There have been no significant wild fire occurrences in the planning area.

Probability of Future Occurrence

Vulnerability

Vulnerability Overview

Wildfires occur throughout wooded and open vegetation areas of Missouri They can occur any time of the year, but mostly occur during long, dry hot spells. Any small fire, if not quickly detected and suppressed, can get out of control. Most wildfires are caused by human carelessness or negligence. However, some are precipitated by lightning strikes and in rare instances, spontaneous combustion. Structures and people in WUI areas in the county and cities are more vulnerable to the impact of wildfires due to the level of fuel mixed with structures.

Potential Losses to Existing Development

Impact of Future Development

It is anticipated that there will be future development in WUI areas throughout unincorporated areas of the county. Future growth in WUI areas of the county will increase the risk and exposure to wildfires. It is expected that WUI development in cities will be mitigated by development regulations reducing the risk to wildfire hazard.

Hazard Summary by Jurisdiction

The vulnerability across the jurisdictions for wildland fires does not vary greatly. Absent demographic factors or other variations in housing construction, risk of structural fire probably does not vary greatly across the planning area.

Without mitigation measures:	With mitigation measures:
Life:.....negligible	Life .....negligible

Property: .....negligible
Emotional: .....negligible
Financial: .....negligible

Property .....negligible
Emotional: .....negligible
Financial:.....negligible

Problem Statement

Wildfire events can destroy, damage, and threaten structures in hazard prone areas. The unincorporated part of the county has the highest risk and exposure to wildfires. County officials and the fire department can promote fire resistant construction materials and landscape design techniques to mitigate the risk to wildfire in future development. Information about these materials and techniques are included in the MDC publication, Living with Wildfire. Including this information in education and awareness programs for the public may potentially mitigate wildfire damage in the county.

3.4.8 Levee Failure

Hazard Profile

Hazard Description

Levees are earth embankments constructed along rivers and coastlines to protect adjacent lands from flooding. Floodwalls are concrete structures, often components of levee systems, designed for urban areas where there is insufficient room for earthen levees. When levees and floodwalls and their appurtenant structures are stressed beyond their capabilities to withstand floods, levee failure can result in injuries and loss of life, as well as damages to property, the environment, and the economy.

Levees can be small agricultural levees that protect farmland from high-frequency flooding. Levees can also be larger, designed to protect people and property in larger urban areas from less frequent flooding events such as the 100-year and 500-year flood levels. For purposes of this discussion, levee failure will refer to both overtopping and breach as defined in FEMA's Publication "So You Live Behind a Levee" (http://content.asce.org/ASCELeveeGuide.html). Following are the FEMA publication descriptions of different kinds of levee failure.

> **Overtopping: When a Flood Is Too Big**
> Overtopping occurs when floodwaters exceed the height of a levee and flow over its crown. As the water passes over the top, it may erode the levee, worsening the flooding and potentially causing an opening, or breach, in the levee.
>
> **Breaching: When a Levee Gives Way**
> A levee breach occurs when part of a levee gives way, creating an opening through which floodwaters may pass. A breach may occur gradually or suddenly. The most dangerous breaches happen quickly during periods of high water. The resulting torrent can quickly swamp a large area behind the failed levee with little or no warning.

Earthen levees can be damaged in several ways. For instance, strong river currents and waves can erode the surface. Debris and ice carried by floodwaters—and even large objects such as boats or barges—can collide with and gouge the levee. Trees growing on a levee can blow over, leaving a hole where the root wad and soil used to be. Burrowing animals can create holes that enable water to pass through a levee. If severe enough, any of these situations can lead to a zone of weakness that could cause a levee breach. In seismically active areas, earthquakes and ground shaking can cause a loss of soil strength, weakening a levee and possibly resulting in failure. Seismic activity can also cause levees to slide or slump, both of which can lead to failure.

Geographic Location

Missouri is a state with many levees. Currently, there is no single comprehensive inventory of levee systems in the state. Levees have been constructed across the state by public entities and private entities with varying levels of protection, inspection oversight, and maintenance. The lack of a comprehensive levee inventory is not unique to Missouri.

There are two concurrent nation-wide levee inventory development efforts, one led by the United State Army Corps of Engineers (USACE) and one led by Federal Emergency Management Agency

(FEMA). The National Levee Database (NLD), developed by USACE, captures all USACE related levee projects, regardless of design levels of protection. The Midterm Levee Inventory (MLI), developed by FEMA, captures all levee data (USACE and non-USACE) but primarily focuses on levees that provide 1% annual-chance flood protection on FEMA Flood Insurance Rate Maps (FIRMs).

Severity/Magnitude/Extent

Levee failure is typically an additional or secondary impact of another disaster such as flooding or earthquake. The main difference between levee failure and losses associated with riverine flooding is magnitude. Levy failure often occurs during a flood event, causing destruction in addition to what would have been caused by flooding alone. In addition, there would be an increased potential for loss of life due to the speed of onset and greater depth, extent, and velocity of flooding due to levee breach.

Agricultural levees and levees that are not designed to provide flood protection from at least the 1-percent annual chance flood likely do exist in the planning area. However, none of these levees are shown on the Preliminary DFIRM, nor are they enrolled in the USACE Levee Safety Program. As a result, an inventory of these types of levees is not available for analysis. Additionally, since these types of levees do not provide protection from the 1-percent annual chance flood, losses associated with overtopping or failure are captured in the Flood Section of this plan.

The USACE regularly inspects levees within its Levee Safety Program to monitor their overall condition, identify deficiencies, verify that maintenance is taking place, determine eligibility for federal rehabilitation assistance (in accordance with P.L. 84-99), and provide information about the levees on which the public relies. Inspection information also contributes to effective risk assessments and supports levee accreditation decisions for the National Flood Insurance Program administered by the Federal Emergency Management Agency (FEMA).

The USACE now conducts two types of levee inspections. Routine Inspection is a visual inspection to verify and rate levee system operation and maintenance. It is typically conducted each year for all levees in the USACE Levee Safety Program. Periodic Inspection is a comprehensive inspection led by a professional engineer and conducted by a USACE multidisciplinary team that includes the levee sponsor. The USACE typically conducts this inspection every five years on the federally authorized levees in the USACE Levee Safety Program.

Both Routine and Periodic Inspections result in a rating for operation and maintenance. Each levee segment receives an overall segment inspection rating of Acceptable, Minimally Acceptable, or Unacceptable.

Levee System Inspection Ratings

Acceptable -- All inspection items are rated as Acceptable.

Minimally Acceptable -- One or more levee segment 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 levee segment inspection items are rated as Unacceptable and would prevent the segment/system from performing as intended, or a serious

deficiency noted in past inspections (previous Unacceptable items in a Minimally Acceptable overall rating) has not been corrected within the established timeframe, not to exceed two years.

There are no levees within the planning area according to the National Levee Database (NLD).

Previous Occurrences

With no levees in the panning area, no levee breaches or incidents in the planning area are listed in the 2010 and 2013 State Plan.

Probability of Future Occurrence

Probabilities cannot be calculated due to the lack of data regarding levee failure in the Pettis County planning area.

Vulnerability

Vulnerability Overview

It is not possible to conduct a comprehensive GIS-based analysis of state-owned facilities to determine those that may be in areas protected by levees. The US Army Corps of Engineers is in the process of compiling a levee inventory which will include GIS data of levee protected areas. As this inventory becomes more complete, it will enable a more comprehensive analysis of state-owned facilities that might be vulnerable to this hazard.

Potential Losses to Existing Development

Potential loss of existing development would be the same as flooding in section 3.4.6.

Impact of Previous and Future Development

Previous and future development can be would be similar to flooding in section 3.4.6.

Hazard Summary by Jurisdiction

Hazards to the jurisdictions in Pettis county are minimal since all levees in the county do not offer flood protection.

Problem Statement

Flooding is the most common hazard associated with levee failure, breach or overtopping. Levee failure, breach, or overtopping can result not only in loss of life, but also considerable loss of capital investment, loss of income, and property damage. Maintaining levees integrity will help prevent possible levee failures.

4 Mitigation Strategy

This section presents the mitigation strategy updated by the Mitigation Planning Committee (MPC) based on the updated risk assessment. The mitigation strategy was developed through a collaborative group process. The process included review of general goal statements to guide the jurisdictions in lessening disaster impacts as well as specific mitigation actions to directly reduce vulnerability to hazards and losses. The following definitions are taken from FEMA's Local Hazard Mitigation Review Guide (October 1, 2012).

- Mitigation Goals are general guidelines that explain what you want to achieve. Goals are long-term policy statements and global visions that support the mitigation strategy. The goals address the risk of hazards identified in the plan.
- Mitigation Actions are specific actions, projects, activities, or processes taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals.

4.1 Goals

This planning effort is an update to Pettis County's existing hazard mitigation plan approved by FEMA in 2011. Therefore, the goals from the 2011 Pettis County Hazard Mitigation Plan were reviewed to see if they were still valid, feasible, practical, and applicable to the defined hazard impacts. The MPC conducted a discussion session during their second meeting to review and update the plan goals. To ensure that the goals developed for this update were comprehensive and supported State goals, the 2011 State Hazard Mitigation Plan goals were reviewed. The MPC also reviewed the goals from current surrounding county plans.

Pettis County's Mitigation goals were derived from conferences with county commissioners, emergency management director, jurisdiction stakeholder, as well as the key planning documents (i.e. Emergency Operations Plan).These meetings were conducted during the development of the Pettis County Hazard Mitigation Plan.

Four main goals:

- Goal 1: Protect the lives and livelihoods of all citizens.
- Goal 2: Manage growth through sustainable principles and practices.
- Goal 3: Ensure continued operation of government and emergency functions during and after a disaster.
- Goal 4: Preserve and maintain property, infrastructure, business, and jurisdiction vitality.

4.2 Identification and Analysis of Mitigation Actions

During the third MPC meeting, the results of the risk assessment update were provided to the MPC members for review and the key issues were identified for specific hazards. Changes in risk since adoption of the previously approved plan were discussed. The second meeting concluded with the distribution of a list of possible mitigation actions to prompt discussions within and among the

jurisdictions. The list included actions from the previously approved plan. Actions from the previous plan included completed actions, on-going actions, and actions upon which progress had not been made. The MPC discussed SEMA's identified funding priorities and the types of mitigation actions generally recognized by FEMA.

The MPC determined to include problem statements in the plan update at the end of each hazard profile, which had not been done in the previously approved plan. The problem statements summarize the risk to the planning area presented by each hazard, and include possible methods to reduce that risk. Use of the problem statements allowed the MPC to recognize new and innovative strategies for mitigate risks in the planning area.

The focus of Meeting number four was to update the mitigation strategy. For a comprehensive range of mitigation actions to consider, the MPC reviewed the following information during Meeting number four:

• A list of actions proposed in the previous mitigation plan, the current State Plan, and approved plans in surrounding counties,

• Key issues from the risk assessments, including the Problem Statements concluding each hazard profile and vulnerability analysis,

• State priorities established for Hazard Mitigation Assistance grants, and

• Public input during meetings, responses to Data Collection Questionnaires, and other efforts to involve the public in the plan development process.

For the fourth meeting, individual jurisdictions, including school and special districts, developed final mitigation strategy for submission to the MPC. They were encouraged to review the details of the risk assessment vulnerability analysis specific to their jurisdiction. They were also provided a link to the FEMA's publication, Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards (January 2013). This document was developed by FEMA as a resource for identification of a 44 CFR 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. 4.3 range of potential mitigation actions for reducing risk to natural hazards and disasters.

The MPC reviewed the actions from the previously approved plan for progress made since the plan had been adopted, using worksheets included in Appendix E of this plan. Prior to Meeting number three, the list of actions for each jurisdiction was emailed to that jurisdiction's MPC representative along with the worksheets. Each jurisdiction was instructed to provide information regarding the "Action Status" with one of the following status choices:

• Completed, with a description of the progress,

• Not Started/Continue in Plan Update, with a discussion of the reasons for lack of progress,

• In Progress/Continue in Plan Update, with a description of the progress made to date or

• Deleted, with a discussion of the reasons for deletion.

Based on the status updates, there were zero completed actions, zero deleted actions, and eleven continuing actions.

Table 4.1

Action Status Summary	
Included Jurisdictions	**Completed Actions**
NONE	NONE
Included Jurisdictions	**Deleted Actions**
NONE	NONE
Included Jurisdictions	**Continuing Actions**
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.1 Provide Sufficient Warning Systems
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.2 Decrease the Occurrence and impact of flooding
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.3 Increase knowledge of safety measures among employers and general public
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.4 Increase and maintain appropriate emergency equipment
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.5 Protect residential structures
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	1.6 Protect employment and commercial facilities
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	2.1 Reduce and prevent degradation of, or conflicts with natural resources

Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	3.1 Strengthen critical structures and infrastructures
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	3.2 Strengthen multi-jurisdictional cooperation among emergency services
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	4.1 Reduce or prevent impacts from hazards on private properties
Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI	4.2 Reduce or prevent impacts from hazards on public properties

4.3 Implementation of Mitigation Actions

Jurisdictional MPC members were encouraged to meet with others in their community to finalize the actions to be submitted for the updated mitigation strategy. Throughout the MPC consideration and discussion, emphasis was placed on the importance of a benefit-cost analysis in determining project priority. The Disaster Mitigation Act requires benefit-cost review as the primary method by which mitigation projects should be prioritized. The MPC decided to pursue implementation according to when and where damage occurs, available funding, political will, jurisdictional priority, and priorities identified in the Missouri State Hazard Mitigation Plan. The benefit/cost review at the planning stage primarily consisted of a qualitative analysis, and was not the detailed process required for grant funding application. For each action, the plan sets forth a narrative describing the types of benefits that could be realized from action implementation. The cost was estimated as closely as possible, with further refinement to be supplied as project development occurs.

FEMA's STAPLEE methodology was used to assess the costs and benefits, overall feasibility of mitigation actions, and other issues impacting project. During the prioritization process, the MPC used worksheets to assign scores. The worksheets posed questions based on the STAPLEE elements as well as the potential mitigation effectiveness of each action. Scores were based on the responses to the questions as follows:

Definitely YES = 3 points

Maybe yes = 2

Probably no = 1

Definitely NO = 0

The following questions were asked for each proposed action.

S: Is the action socially acceptable?
T: Is the action technically feasible and potentially successful?
A: Does the jurisdiction have the administrative capability to successfully implement this action?
P: Is the action politically acceptable?
L: Does the jurisdiction have the legal authority to implement the action?

E: Is the action economically beneficial?
E: Will the project have an environmental impact that is either beneficial or neutral? (score "3" if positive and "2" if neutral)

Will the implemented action result in lives saved?
Will the implanted action result in a reduction of disaster damage?

The final scores are listed below in the analysis of each action. The worksheets are attached to this plan as Appendix E. The STAPLEE final score for each action, absent other considerations, such as a localized need for a project, determined the priority. Low priority action items were those that had a total score of between 0 and 24. Moderate priority actions were those scoring between 25 and 29. High priority actions scored 30 or above. A blank STAPLEE worksheet is shown in Figure 4.1

Figure 4.1 STAPLEE Worksheet, blank

Action Title:	Jurisdiction:
Action ID:	

STAPLEE Criteria	Evaluation Rating Definitely YES = 3 Maybe YES = 2 Probably NO = 1 Definitely NO = 0	Score
S: Is it Socially acceptable?		
T: Is it Technically feasible and potentially successful?		
A: Does the jurisdiction have the administrative capacity to execute this action?		
P: Is it Politically acceptable?		
L: Is there Legal authority to implement?		
E: Is it Economically beneficial?		
E: Will the project have either a neutral or positive impact on the natural environment? (score a 3 if positive impact, 2 if neutral impact)		
Will historic structures be saved or protected?		
Could it be implemented quickly?		
STAPLEE Score		

Mitigation Effectiveness Criteria	Evaluation Rating	Score
Will the implemented action result in lives saved?	Assign from 5-10 points based on the likelihood that lives would be saved.	
Will the implemented action result in a reduction of disaster damages?	Assign from 5-10 points based on the relative reduction of disaster damages.	
Mitigation Effectiveness Score		

Total Score (STAPLEE Score + Mitigation Effectiveness Score): _____

Priority Level: ☐High (30+ points) ☐Medium (25-29 points) ☐Low (less than 25 points)

Completed by (name/title/phone #): _____

Goal 1: Protect the lives and livelihoods of all citizens

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Provide sufficient warning system
Hazard(s) Addressed:	All hazards listed in this plan
Action or Project	
Action/Project Number:	1.1
Name of Action or Project:	Warning systems
Action or Project Description:	1. Identify area in need of additional warning systems and acquire needed equipment to fill areas of need. 2. Educate and promote use of warning systems.
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	Lower loss of life, more prepared public, have access to all warnings within county
Plan for Implementation	
Responsible Organization/Department:	EMA Director
Action/Project Priority:	
Timeline for Completion:	Annual review
Potential Fund Sources:	Gov't programs/private funds/internal revenue
Local Planning Mechanisms to be Used in Implementation, if any:	Social media, newsletter, EMA website
Progress Report	
Action Status	Ongoing
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Decrease the occurrence and impact of flooding
Hazard(s) Addressed:	Flooding, ravine and flash
Action or Project	
Action/Project Number:	1.2
Name of Action or Project:	Reduce Flooding Impact
Action or Project Description:	Encourage participation in NFIP by non-participating communities. Promote environmentally sound watershed and storm water practices to decrease flash floods
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	Decrease the impact flooding has on jurisdictions and their residents.
Plan for Implementation	
Responsible Organization/Department:	EMA Director/County floodplain manager
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	Gov't programs/private funds/internal revenue
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Increase knowledge of safety measures among employers and general public
Hazard(s) Addressed:	
Action or Project	
Action/Project Number:	1.3
Name of Action or Project:	
Action or Project Description:	
Applicable Goal Statement:	
Estimated Cost:	
Benefits:	
Plan for Implementation	
Responsible Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	Gov't programs/private funds/internal revenue
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Increase and maintain appropriate emergency equipment
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	1.4
Name of Action or Project:	Emergency Equipment
Action or Project Description:	Review and upgrade, as needed, policies for identifying and budgeting additional equipment. Execute and maintain mutual aid agreements with all relevant agencies
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	Provide equipment and have mutual aid policies in place in the event of a hazardous situation.
Plan for Implementation	
Responsible Organization/Department:	EMA Director / 9-1-1 Director
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	Gov't programs/private funds
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Protect residential structures
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	1.5
Name of Action or Project:	
Action or Project Description:	
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	
Plan for Implementation	
Responsible Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Protect employment and commercial facilities
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	1.6
Name of Action or Project:	
Action or Project Description:	
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	
Plan for Implementation	
Responsible Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Hughesville
Risk / Vulnerability	
Problem being Mitigated:	Increase knowledge of safety measures among employers and general public
Hazard(s) Addressed:	Flooding/Tornado/Sever Storm
Action or Project	
Action/Project Number:	1.7
Name of Action or Project:	Community Safety Outreach Program
Action or Project Description:	Develop and distribute a community safety packet to all current residence, along with new residents moving into the community.
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	More knowledgeable & prepared public in a disaster event, reduce loss of life and private property.
Plan for Implementation	
Responsible Organization/Department:	Village of Hughesville
Action/Project Priority:	
Timeline for Completion:	On going
Potential Fund Sources:	internal revenue
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	In progress
Report of Progress	
Completed by:	Jennifer Raines

Action Worksheet	
Name of Jurisdiction:	Green Ridge R-VIII School District
Risk / Vulnerability	
Problem being Mitigated:	Insufficient knowledge/awareness of warning systems
Hazard(s) Addressed:	All hazards listed in plan
Action or Project	
Action/Project Number:	1.8
Name of Action or Project:	Provide staff, parents, students, and other community patrons information of warning systems Educate and promote use of warning systems/shelters
Action or Project Description:	School will provide storm shelter information, siren descriptions, and contact information to promote sign up for Nixle warning system notifications.
Applicable Goal Statement:	Protect the lives and livelihoods of all citizens
Estimated Cost:	
Benefits:	Many people will have adequate information of hazards from Nixle warning systems. District patrons will be better prepared when storms arrive to the area.
Plan for Implementation	
Responsible Organization/Department:	Green Ridge School Offices
Action/Project Priority:	
Timeline for Completion:	By May 2018
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Goal 2: Manage growth through sustainable principles and practices

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Reduce and prevent degradation of, or conflicts with natural resources
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	2.1
Name of Action or Project:	Natural Resource Protection
Action or Project Description:	Comply with all DNR regulations
Applicable Goal Statement:	Manage growth through sustainable principles and practices.
Estimated Cost:	
Benefits:	Healthier and more sustainable natural resources in planning area.
Plan for Implementation	
Responsible Organization/Department:	EMA Director/jurisdiction government
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Goal 3: Ensure continued operation of government and emergency functions during and after a disaster

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Strengthen critical structures and infrastructures
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	3.1
Name of Action or Project:	Critical Structures
Action or Project Description:	Review, prioritize, institute and monitor needed upgrades or retrofits for critical buildings and infrastructure. Review emergency access/evacuation routes and mitigate and problem areas.
Applicable Goal Statement:	Ensure continued operation of government and emergency functions in a disaster.
Estimated Cost:	
Benefits:	Protection of property and prevention of occurrences of damage
Plan for Implementation	
Responsible Organization/Department:	County Commission/EMA Director
Action/Project Priority:	
Timeline for Completion:	Completed on bi-annually
Potential Fund Sources:	Government program funds, private funding.
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Strengthen multi-jurisdictional cooperation among emergency services
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	3.2
Name of Action or Project:	Cooperation
Action or Project Description:	Identify, review, and implement mechanisms to foster collaboration among jurisdictions, agencies, and special districts. Hold emergency personnel meeting semi-annually.
Applicable Goal Statement:	Ensure continued operation of government and emergency functions in a disaster.
Estimated Cost:	
Benefits:	Create a more functional and supportive network among the various entities to allow for more efficient hazard mitigation practices.
Plan for Implementation	
Responsible Organization/Department:	EMA/Jurisdictional EMS personnel.
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Goal 4: Preserve and maintain property, infrastructure, business, and jurisdiction vitality.

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Reduce or prevent impacts from hazards on private properties
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	4.1
Name of Action or Project:	Hazard on Private Property
Action or Project Description:	Educate residents on property protection from hazards, encourage utilities, communications, developers to construct underground lines, Jurisdiction encouraged to use hazard maps with developers
Applicable Goal Statement:	Preserve and maintain property. Infrastructure, business and jurisdiction vitality.
Estimated Cost:	
Benefits:	Reduce risk of private property damage.
Plan for Implementation	
Responsible Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

Action Worksheet	
Name of Jurisdiction:	Pettis County, Green Ridge, Houstonia, Hughesville, La Monte, Sedalia, Smithton, Green Ridge R-VIII, La Monte R-IV, Pettis Co R-V, Pettis Co. R-XII, Sedalia 200, Smithton R-VI
Risk / Vulnerability	
Problem being Mitigated:	Reduce or prevent impacts from hazards on public properties
Hazard(s) Addressed:	All hazards addressed in this plan
Action or Project	
Action/Project Number:	4.2
Name of Action or Project:	Hazard on Public Property
Action or Project Description:	Encourage jurisdictions to adopt new codes and enforce current codes and ordinances, encourage relocation of emergency response agencies from geographically redundant areas, encourage coordination communications, upgrade of lifeline facilities to meet most current building seismic codes.
Applicable Goal Statement:	Preserve and maintain property. Infrastructure, business and jurisdiction vitality.
Estimated Cost:	
Benefits:	Reduce or eliminate damages from hazards to public properties.
Plan for Implementation	
Responsible Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status	
Report of Progress	
Completed by:	

5 Plan Maintenance Process

This chapter provides an overview of the overall strategy for plan maintenance and outlines the method and schedule for monitoring, updating and evaluating the plan. The chapter also discusses incorporating the plan into existing planning mechanisms and how to address continued public involvement.

5.1 Monitoring, Evaluating, and Updating the Plan

5.1.1 Responsibility for Plan Maintenance

The MPC can be a standing committee, with oversight by a responsible agency or elected body. Oversight responsibility could fall to such entities as the county emergency management agency, the Regional Planning Commission, or Local Emergency Operations. If the MPC is not a standing committee, responsibility for maintenance needs to be delegated to another individual or entity. Maintenance should involve agreement of the participating jurisdictions, including school and special districts, to:

- Meet annually, and after a disaster event, to monitor and evaluate the implementation of the plan;
- Act as a forum for hazard mitigation issues;
- Disseminate hazard mitigation ideas and activities to all participants;
- Pursue the implementation of high priority, low- or no-cost recommended actions;
- Maintain vigilant monitoring of multi-objective, cost-share, and other funding opportunities to help the community implement the plan's recommended actions for which no current funding exists;
- Monitor and assist in implementation and update of this plan;
- Keep the concept of mitigation in the forefront of community decision making by identifying plan recommendations when other community goals, plans, and activities overlap, influence, or directly affect increased community vulnerability to disasters;
- Report on plan progress and recommended changes to the County Board of Supervisors and governing bodies of participating jurisdictions; and
- Inform and solicit input from the public.

The designated responsible entity is an advisory body and can only make recommendations to county, city, town, or district elected officials. Its primary duty is to see the plan successfully carried out and to report to the community governing boards and the public on the status of plan implementation and mitigation opportunities. Other duties include reviewing and promoting mitigation proposals, hearing stakeholder concerns about hazard mitigation, passing concerns on to appropriate entities, and posting relevant information in areas accessible to the public.

5.1.2 Maintenance Schedule

The designated responsible entity agrees to meet annually and after a state or federally declared hazard event as appropriate to monitor progress and update the mitigation strategy. The Pettis County Emergency Management Director will be responsible for initiating the plan reviews and will invite members of the MPC and other designated responsible entities to the meeting.

In coordination with all participating jurisdictions, a five-year written update of the plan will be submitted to the Missouri State Emergency Management Agency (SEMA) and FEMA Region VII per

Requirement §201.6(c)(4)(i) of the Disaster Mitigation Act of 2000, unless disaster or other circumstances (e.g., changing regulations) require a change to this schedule.

5.1.3 Maintenance Process

Progress on the proposed actions can be monitored by evaluating changes in vulnerabilities identified in the plan. The MPC, and other designated responsible entities, during the annual meeting should review changes in vulnerability identified as follows:

- Decreased vulnerability as a result of implementing recommended actions,
- Increased vulnerability as a result of failed or ineffective mitigation actions,
- Increased vulnerability due to hazard events, and/or
- Increased vulnerability as a result of new development (and/or annexation).

Future 5-year updates to this plan will include the following activities:

- Consideration of changes in vulnerability due to action implementation,
- Documentation of success stories where mitigation efforts have proven effective,
- Documentation of unsuccessful mitigation actions and why the actions were not effective,
- Documentation of previously overlooked hazard events that may have occurred since the previous plan approval,
- Incorporation of new data or studies with information on hazard risks,
- Incorporation of new capabilities or changes in capabilities,
- Incorporation of growth data and changes to inventories, and
- Incorporation of ideas for new actions and changes in action prioritization.

In order to best evaluate any changes in vulnerability as a result of plan implementation, the participating jurisdictions will adopt the following process:

- Each proposed action in the plan identified an individual, office, or agency responsible for action implementation. This entity will track and report on an annual basis to the jurisdictional MPC (or designated responsible entity) member on action status. The entity will provide input on whether the action as implemented meets the defined objectives and is likely to be successful in reducing risk.

- If the action does not meet identified objectives, the jurisdictional MPC (or designated responsible entity) member will determine necessary remedial action, making any required modifications to the plan.

Changes will be made to the plan to remedy actions that have failed or are not considered feasible. Feasibility will be determined after a review of action consistency with established criteria, time frame, community priorities, and/or funding resources. Actions that were not ranked high but were identified as potential mitigation activities will be reviewed as well during the monitoring of this plan. Updating of the plan will be accomplished by written changes and submissions, as the (MPC or designated responsible entity) deems appropriate and necessary. Changes will be approved by the Pettis County Board of Commissioners and the governing boards of the other participating jurisdictions.

5.2 Incorporation into Existing Planning Mechanisms

Where possible, plan participants, including school and special districts, will use existing plans and/or programs to implement hazard mitigation actions. Those existing plans and programs were described in Section 2 of this plan. Based on the capability assessments of the participating jurisdictions, communities in Pettis County will continue to plan and implement programs to reduce losses to life and property from hazards. This plan builds upon the momentum developed through previous and related planning efforts and mitigation programs and recommends implementing actions, where possible, through the following plans:

- Pettis County Emergency Operations Plan
- School Emergency Plans
- School Master Plans
- Capital improvements project funding
- Participation in the NFIP
- Zoning and planning restrictions
- Economic Development programs
- Capital Improvement plans
- Comprehensive plans
- Zoning ordinances
- Building codes
- Subdivision codes
- Storm water ordinances
- Hazard awareness programs
- Floodplain ordnances

The MPC and designated responsible entity members involved in updating these existing planning mechanisms will be responsible for integrating the findings and actions of the mitigation plan, as appropriate. The MPC and designated responsible entities are also responsible for monitoring this integration and incorporation of the appropriate information into the five-year update of the multijurisdictional hazard mitigation plan. Additionally, after the annual review of the Hazard Mitigation Plan, the Pettis County Emergency Management Director will provide the updated Mitigation Strategy with current status of each mitigation action to the County (Board of Commissioners) as well as all Mayors, City Clerks, and School District Superintendents. The Emergency Manager Director will request that the mitigation strategy be incorporated, where appropriate, in other planning mechanisms

Table 5.1

Planning Mechanisms Identified for Integration of Hazard Mitigation Plan			
Jurisdiction	**Planning Mechanisms**	**Integration Process from Previous Plan**	**Integration Process for Current Plan**
Pettis Co	County Emergency Plan County Recovery Plan County Mitigation Plan Debris Management Plan Watershed Plan Floodplain Ordinance	County Commission County Emergency Management Director	County Commission County Emergency Management Director
Green Ridge	Zoning Ordinance	City Ordinance	City Ordinance
Houstonia	City Mitigation Plan	City Ordinance	City Ordinance
Hughesville			
La Monte			
Sedalia	Comprehensive Plan Capital Improvement Plan City Emergency Operations Local Recovery Plan City Mitigation Plan Economic Development Plan Land-use Plan Watershed Plan Zoning Ordinance	Local Emergency Planning Committee Emergency Management Coordinator Development Planner	Local Emergency Planning Committee Emergency Management Coordinator Development Planner
Smithton	Comprehensive Plan Capital Improvement Plan Land-use Plan Zoning Ordinance	City Ordinance	City Ordinance

5.3 Continued Public Involvement

The hazard mitigation plan update process provides an opportunity to publicize success stories resulting from the plan's implementation and seek additional public comment. Information about the annual reviews will be posted in the local newspaper as well as on the Pettis County website following each annual review of the mitigation plan. When the MPC reconvenes for the five-year update, it will coordinate with all stakeholders participating in the planning process. Included in this group will be those who joined the MPC after the initial effort, to update and revise the plan. Public notice will be posted and public participation will be actively solicited, at a minimum, through available website postings and press releases to local media outlets, primarily newspapers.

Appendix

Appendix A

RESOURCES:

Missouri State Hazard Mitigation Plan July 2013

http://sema.dps.mo.gov/docs/programs/LRMF/mitigation/MO_Hazard_Mitigation_Plan_2013.pdf

Missouri State Hazard Mitigation Plan July 2010
https://ia902503.us.archive.org/8/items/2010MOHazardMitigationPlan/2010MOHazardMitigation Plan.pdf

Midwestern Regional Climate Center
http://mrcc.isws.illinois.edu/

Missouri Historical Agricultural Weather Database, University of Missouri Extension
http://agebb.missouri.edu/weather/history/index.asp

U.S. Census Bureau, American Factfinder
https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Missouri Census Data Center
http://mcdc.missouri.edu/othersites.shtml

University of Missouri Extension
http://extension.missouri.edu/main/DisplayCategory.aspx?C=1

FEMA Hazard Mitigation Grant Dataset
https://www.fema.gov/openfema-dataset-hazard-mitigation-grants-v1

Missouri Department of Elementary & Secondary Education
https://mcds.dese.mo.gov/quickfacts/pages/District-and-School-Information.aspx

U.S. Census Bureau Building Permit Data
https://www.census.gov/data/data-tools/censtats.html

FEMA Disaster Declarations
https://www.fema.gov/disasters?field_state_tid_selective=67&field_disaster_type_term_tid=All&field_disaster_declaration_type_value=DR&items_per_page=20&=GO

Missouri Department of Public Safety SEMA
http://www.msdis.missouri.edu/index.html

Federal Highway Administration National Bridge Inventory
https://www.fhwa.dot.gov/bridge/nbi/no10/county.cfm

U.S. Fish & Wildlife Service, Endangered Species
https://www.fws.gov/midwest/Endangered/lists/missouri-cty.html
https://ecos.fws.gov/ipac/location/E73JMZLXBJHAJHKCOPIXGDSD5A/resources

National Park Services
https://www.nps.gov/clg/

Missouri DNR, Pettis County National Historic Register Listings
https://dnr.mo.gov/shpo/pettis.htm

Stanford University's National Performance of Dams Program
http://npdp.stanford.edu/index.html

U.S. Corp. of Engineers, National Inventory of Dams
http://nid.usace.army.mil/cm_apex/f?p=838:7:0::NO

National Drought Mitigation Center
http://drought.unl.edu/
http://droughtreporter.unl.edu/map/

United States Drought Monitor
http://droughtmonitor.unl.edu/home/statedroughtmonitor.aspx?mo

USGS Earthquake Hazards Program
http://earthquake.usgs.gov/hazards/products/conterminous/2014/hazardmap2014_lg.jpg 6.5

Richter Magnitude Earthquake Scenario, New Madrid Fault Zone Map
http://www.igsb.uiowa.edu/browse/quakes/quakes.htm

Probability of magnitude 5.0 or greater within 100 year, United States Geological Survey
http://geohazards.usgs.gov/egprob/2009/index.php

DNR, History of Earthquakes in Missouri
http://earthquake.usgs.gov/hazards/products/conterminous/2014/hazardmap2014_lg.jpg

National Centers for Environmental Information
https://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=ALL&beginDate_mm=01&beginDate_dd=01&beginDate_yyyy=1996&endDate_mm=12&endDate_dd=31&endDate_yyyy=2016&county=SALINE%3A195&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton =Search&statefips=29%2CMISSOURI

National Weather Services
http://www.nws.noaa.gov/os/heat/index.shtml

Missouri Department of Conservation Wildfire Data Search
http://mdc4.mdc.mo.gov/applications/firereporting/report.aspx

National Fire Incident Reporting System
http://www.dfs.dps.mo.gov/programs/resources/fire-incident-reporting-system.asp

FEMA map services center
http://Msc.fema.gov/portal

NFIP Community Status Book
http://www.fema.gov/national-flood-insurance-program/national-flood-insurance-programcommunity-status-book

NFIP Claim Status
http://bsa.nfipstat.fema.gov/reports/reports.html

USGS Sinkholes
https://pubs.usgs.gov/fs/2007/3060/pdf/FS2007-3060.pdf

National Levee Database
http://nld.usace.army.mil/egis/f?p=471:32:21188307172373:LOAD_SEARCH:NO:32

FEMA Levee Resource Library
https://www.fema.gov/fema-levee-resources-library

Sedalia Parks & Recreation

http://www.sedaliaparks.com/facilities/

Appendix B

Appendix C

SEDALIA SCHOOL DISTRICT #200

2806 Matthew Drive, Sedalia, MO 65301-7981 p:660.829.6450 f:660-827-8938

Steven G. Triplett, Ed. S.
Superintendent

Nancy L. Scott, Ed. D.
Assistant Superintendent

Christopher Pyle, Ed. S.
Assistant Superintendent

Todd Fraley Ed. D.
Assistant Superintendent

Harriet A. Wolfe, Ed. D.
Chief Financial Officer

Becky Brownfield, Ed. S.
Director Curriculum Instruction
Assessment 6-12

Devon Gilmore, M. Ed.
Director Curriculum Instruction
Assessment K-5

Bob Satnan, B.A.
Communications Director

Missouri Model District
www.sedalia200.org

Sedalia #200 is an
equal opportunity and
affirmative action employer

DATE: November 1, 2018

TO: Board of Education

FROM: H. Wolfe

RE: Early Pay-Off for DNR Energy Loan

- In reviewing some of our structured debt, it appears that this would be a good time to pay off the remainder of the 2006 DNR Energy loan which was originally used to replace lighting, windows and doors in Heber Hunt and install geo-thermal in original S-C, Washington and Heber Hunt.

- Our remaining payments through 2021 amount to $512,250.21. If we pay the remainder prior to February 1, we would pay a total of $492,305.70, which would result in saving $19,944.51 in interest (@ 3.75%). That money could then be used toward additional insulation and/or HVAC for the new Maintenance Warehouse building.

- Please take this pre-payment information under advisement for approval at the December Board Meeting.

EXCERPT OF MINUTES OF MEETING OF THE BOARD OF EDUCATION SEDALIA SCHOOL DISTRICT NO. 200 OF PETTIS COUNTY, MISSOURI

The Board of Education of the Sedalia School District No. 200 of Pettis County, Missouri met in regular session in the Smith-Cotton at 6:30 p.m. on Monday, December 17, 2018. The following Members being present/absent:

		PRESENT/ABSENT
Jeffrey Sharp, M.D.	President and Member	
David Wolf	Vice President and Member	
Kenneth Coffelt	Treasurer and Member	
Scott Gardner	Secretary and Member	
Michael Stees	Member	
Diana Nichols	Member	
Steve Schilb	Member	

The Secretary of the Board of Education, Scott Gardner, was present and performed the duties of said office.

The President declared that a quorum was present and called the meeting to order. The minutes of the last meeting of the Board of Education were read and, on motion duly made, seconded and carried, were approved.

OTHER PROCEEDINGS

The matter of authorizing the redemption of $483,244.86 principal amount of the District's outstanding Missouri Department of Natural Resources Lease Certificates of Participation, Series 2004 came on for consideration and was discussed.

Thereupon, _____ presented and moved the adoption of a Resolution, entitled as follows:

RESOLUTION AUTHORIZING THE REDEMPTION OF $483,244.86 PRINCIPAL AMOUNT OF MISSOURI DEPARTMENT OF NATURAL RESOURCES LEASE CERTIFICATES OF PARTICIPATON, SERIES 2004 AND AUTHORIZING THE PUBLICATION OF NOTICE OF REDEMPTION.

_____ seconded the motion to pass the Resolution and, the question being put to a roll call vote, was duly passed by the following vote:

Ayes: _____

_____

Nays: _____

Thereupon, the President declared said Resolution duly passed and the Resolution was then signed by the President and attested by the Secretary of the Board of Education.

OTHER PROCEEDINGS

There being no other business to come before the Board of Education at this time, on motion duly made, seconded and carried, the meeting thereupon adjourned.

(SEAL)

_____
Scott Gardner
Secretary of the Board of Education

SEDALIA SCHOOL DISTRICT NO. 200 OF PETTIS COUNTY, MISSOURI BOARD OF EDUCATION

RESOLUTION AUTHORIZING THE REDEMPTION OF $483,244.86 PRINCIPAL AMOUNT OF MISSOURI DEPARTMENT OF NATURAL RESOURCES LEASE CERTIFICATES OF PARTICIPATION, SERIES 2004.

WHEREAS, the Sedalia School District No. 200 of Pettis County, Missouri (the "District") has issued $2,295,779 Missouri Department of Natural Resources Lease Certificates of Participation, Series 2004, dated November 30, 2004 (the "Certificates"), of which $483,244.86 remains outstanding; and

WHEREAS, Certificates maturing in the year 2019 through 2021 are subject to prepayment on February 1, 2019 (the "Redemption Date"), at a price of par plus accrued interest, without premium with thirty days notice to the bondholder; and

WHEREAS, the Board of Education (the "Board") has determined that there exists sufficient moneys to call on the Redemption Date, $483,244.86 principal amount of the Certificates maturing in the years 2019 through 2021.

NOW, THEREFORE, BE IT RESOLVED by the Board of Education of Sedalia School District No. 200 of Pettis County, Missouri, as follows:

SECTION 1. Pursuant to the provisions of the trust indenture under which the Certificates were issued, the District shall notify the Missouri Department of Natural Resources of the Redemption Date and the aggregate principal amount of Certificates to be redeemed ($483,244.86).

SECTION 2. No further action shall be required of the Board to complete the redemption of the Certificates.

ADOPTED by the Board of Education of Sedalia School District No. 200 of Pettis County, this 17th day of December, 2018.

_____
Jeffrey Sharp, M.D.
President of the Board of Education

Attest _____
Scott Gardner
Secretary of the Board of Education

SEDALIA SCHOOL DISTRICT #200

2806 Matthew Drive, Sedalia, MO 65301-7981 p:660.829.6450 f:660-827-8938

November 26, 2018

To: Board of Education

From: Mr. Triplett

Re: Early Childhood Long Range Planning

The construction of an early childhood facility has been discussed since 2016. Recent conversations between district administration and LJ Hart and Company show a source of construction funds at approximately $6,000,000.

I have attached documents showing sources of funds, concept budgets, and site development plans. Both office space and parking space are becoming a concern at the Sedalia 200 District office, so you will see an option for space to be occupied by administration within the new construction as well.

Moving the early childhood will open up approximately 20,000 sq. ft. of usable space at the Sedalia Middle School. Future conversations will need to take place to see how to best utilize this space.

Please take this information under advisement for approval at the December meeting to begin the process for construction of an early childhood facility to be open for the 2020-2021 school year.

Sedalia School District #200
Sedalia, MO
Master Plan Facility Improvements
Compiled by Septagon Construction, Dennis Paul

New Early Childhood Facility Concept Budget for new Building by SCHS in 2019/2020

Description		Area	Unit $	Preliminary Budget
New Building at Main level($160 **to $220/SF)**	SF	25,000	$ 180	$ **4,500,000**
New Addition at Basement level($70 **to $160/SF)**	SF		$ 100	$
Exterior Canopy and Balcony Area **($80 to $150/SF)**			$ 100	$
Hardened Space for Storm Shelter **(estimated @ $60/SF)**			$ 60	$
Site Improvements@ 12% of Building Budgets **(10% to 15%)**				$ **540,000**
Design Fees @ 7%				$ **352,800**
Contingency @ 5%				$ **252,000**
Furnishings	?			
Other Items	?			
First Pass Budget w/out movable furnishings, data systems, and phone system:				$ **5,644,800**

Total Area: **25,000**

Sedalia School District #200

Sedalia, **MO**

Master Plan Facility Improvements

Compiled by Septagon Construction, Dennis Paul, (

New Early Childhood Facility, Concept Budget for new Building by SCHS in 2019/2020

Description		Area	Unit$	Preliminary Budget
New Building at Main level($160 **to $220/SF)**	SF	25,000	$ 180	$ **4,500,000**
New Addition at Basement level($70 **to $160/SF)**	SF	6,000	$ 100	$ **600,000**
Exterior Canopy and Balcony Area **($80 to $150/SF)**			$ 100	$
Hardened Space for Storm Shelter **(estimated @$60/SF)**			$ 60	$
Site Improvements@ 12% of Building Budgets **(10% to 15%)**				$ **612,000**
Design Fees @ 7%				$ **399,840**
Contingency @ 5%				$ **285,600**
Furnishings	?			
Other Items	?			
First Pass Budget w/out movable furnishings, data systems, and phone system:				$ **6,397,440**

Total Area: **31,000**

Sedalia School District #200
Sedalia, MO
Master Plan Facility Improvements
Compiled by Septagon Construction, Dennis Paul

New Early Childhood Facility Concept Budget for new Building by SCHS in 2019/2020

Description		Area	Unit$	Preliminary Budget
New Building at Main level($160 **to $220/SF)**	SF	25,000	$ 180	$ **4,500,000**
New Addition at Basement level($70 **to $160/SF)**	SF		$ 100	$
Exterior Canopy and Balcony Area **($80 to $150/SF)**			$ 100	$
Hardened Space for Storm Shelter **(estimated @ $60/SF)**		2,500	$ 60	$ **150,000**
Site Improvements@ 12% of Building Budgets **(10% to 15%)**				$ **558,000**
Design Fees @ 7%				$ **364,560**
Contingency @ 5%				$ **260,400**
Furnishings	?			
Other Items	?			
First Pass Budget w/out movable furnishings, data systems, and phone system:				$ **5,832,960**

Total Area: **25,000**

Sedalia School District #200
Sedalia, MO
Master Plan Facility Improvements
Compiled by Septagon Construction, Dennis

New Central Office & Early Childhood Facility

Concept Budget for new Building by SCHS in 2019/2020

Description		Area	Unit$	Preliminary Budget
New Early Childhood at Main level **($160 to $220/SF)**	SF	25,000	$ 180	$ **4,500,000**
Central Office Space at Main level **($160 to $220/SF)**	SF	8,000	$ 180	$ **1,440,000**
New Addition at Basement level **($70 to $160/SF)**	SF		$ 100	$
Exterior Canopy and Balcony Area **($80 to $150/SF}**			$ 100	$
Hardened Space for Storm Shelter **(estimated @$60/SF)**		2,500	$ 60	$ **150,000**
Site Improvements@ 12% of Building Budgets **(10% to 15%)**				$ **730,800**
Design Fees @ 7%				$ **477,456**
Contingency @ 5%				$ **341,040**
Furnishings	?			
Other Items	?			
First Pass Budget w/out movable furnishings, data systems, and phone system:				$ **7,639,296**

Total Area: **33,000**

Sedalia School District #200
Sedalia, **MO**
Master Plan Facility Improvements
Compiled by Septagon Construction, Dennis Paul

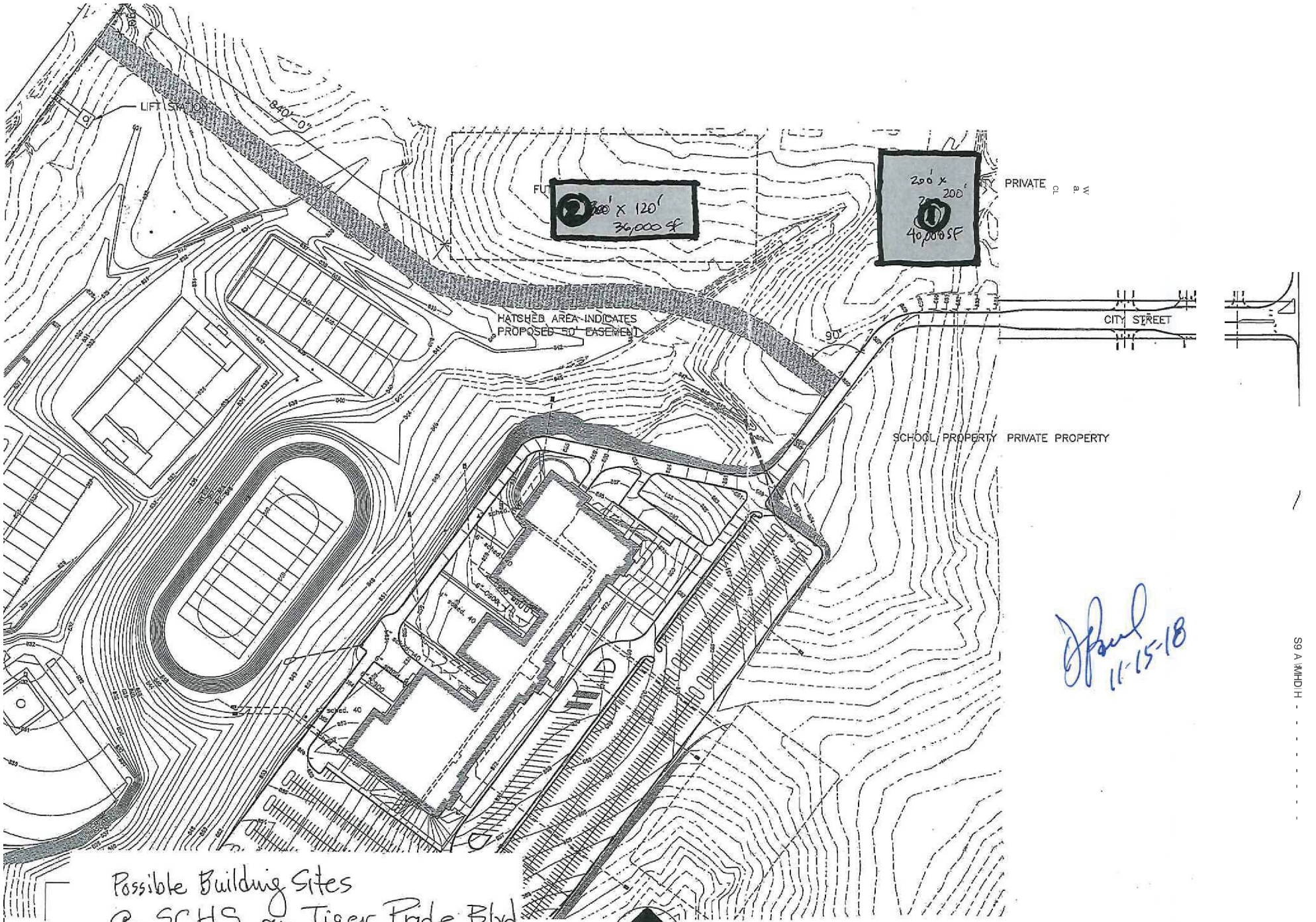
- 1

Early Childhood Facility & Future Space

Concept Budget for new Building by SCHS in 2019/2020

Description		Area	Unit$	Preliminary Budget
New Early Childhood at Main level **($160 to $220/SF)**	SF	25,000	$ 180	$ **4,500,000**
Unfinished Space at Main level **($70 to $120/SF)**	SF	8,000	$ 80	$ **640,000**
New Addition at Basement level **($70 to $160/SF)**	SF		$ 100	$
Exterior Canopy and Balcony Area **($80 to $150/SF)**			$ 100	$
Hardened Space for Storm Shelter **(estimated @ $60/SF)**		2,500	$ 60	$ **150,000**
Site Improvements@ 12% of Building Budgets **(10% to 15%)**				$ **634,800**
Design Fees @ 7%				$ **414,736**
Contingency @ 5%				$ **296,240**
Furnishings	?			
Other Items	?			
First Pass Budget w/out movable furnishings, data systems, and phone system:				$ **6,635,776**

Total Area: **33,000**


LIFT STATION
840'-0"
FUTURE
300' X 120'
36,000 SF
200' X 200'
40,000 SF
PRIVATE
HATCHED AREA INDICATES
PROPOSED 50' EASEMENT
90°
CITY STREET
SCHOOL PROPERTY PRIVATE PROPERTY
11-15-18
Possible Building Sites
@ SCHS on Tiger Pride Blvd
November 2018
NORTH
SITE DEVELOPMENT PLAN AUGUST 2018
SCALE: 1" = 200'-0"

SEDALIA SCHOOL DISTRICT #200

2806 Matthew Drive, Sedalia, MO 65301-7981 p:660.829.6450 f:660-827-8938

November 26, 2018

To: Board of Education

From: Mr. Triplett

Re: JAG Memorandum of Understanding

Jobs For America's Graduates (JAG) is a curriculum designed to help students with significant barriers in their lives graduate from high school and make positive transitions to post-secondary education and/or a meaningful career. JAG is a mission of Missouri Gov. Mike Parson and First Lady Teresa Parson to help develop the workforce for our state.

I have attached some information to help you better understand the program. JAG has been in existence since 1979, serving more than 1.3 million students. JAG has maintained a success rate of over 90% of students being engaged in some combination of work, higher education and/or the military for 35-40 hours per week.

The annual estimated investment to bring JAG to Smith-Cotton High School is $60,000, which includes the salary and benefits for the addition of one elective teacher. Also included is the cost of any trips, special events and miscellaneous expenses. With the Memorandum of Understanding comes a grant from the state for approximately $30,000 or about half of the cost.

It is my recommendation that Sedalia School District 200 move forward with a commitment to the program with the signing of the M.O.U. and the hiring of one (1) additional elective teacher at Smith-Cotton High School.

Please feel free to contact me if you need any additional information.

JAG

JOSS FOR AMERICA'S GRADUATES:

Dropout Prevention, Postsecondary Education,
Careers and Leadership Development for Opportunity Youth

PROGRAM OVERVIEW

PROGRAM SUMMARY

Jobs for America 's Graduates (JAG), founded in 1980, is a nonprofit employment program dedicated to helping young people who have potential, but who are, for a variety of reasons, at-risk for not graduating from high school. JAG helps students graduate and make the successful transition to postsecondary education and meaningful employment. JAG is a voluntary in-school program that counts as a high school elective. It focuses on a set of core competencies that prepare students to succeed in the workforce. Using this approach over 38 years , JAG has consistently achieved graduation rates of 90+ percent for a group of students who typically have a 50 percent graduation rate. Each year, JAG serves more than 63,000 students in about 1,500 communities in 34 states, including Missouri. Since its inception, JAG has served more than 1.1 million students. *(A summary of JAG's success may be found on page 2 of this summary.)*

JOBS FOR AMERICA'S GRADUATES-MISSOURI

JAG was introduced in Missouri more than 30 years ago. Over those years, the organization has ebbed and flowed. In 2014, there was a concerted effort to revitalize JAG-Missouri and since then much has been accomplished. On July 1, 2017, the organization took yet another step in its development, becoming a separate nonprofit: JAG-Missouri, Inc.

FUNDING

The revitalizatiqn in 2014 was a success, thanks to the funding investments from Community Development Block Grants (CDBG) through the State of Missouri and a private matching contribution from the Strada Education Network (formerly USA Funds). With this funding, JAG-Missouri has been able to provide funding assistance for JAG schools. Other funding support has come from the Missouri Department of Elementary and Secondary Education and the Delta Regional Authority, as well as private partners such as AT&T and Regions Bank. Since 2015, another key funding source has been the Temporary Assistance for Needy Families (TANF) through the Missouri Department of Social Services. Many of the 34 states support the JAG program through TANF. The funding JAG-Missouri provides to the schools covers about half of the cost of delivering the program for a full calendar year, with the schools fulfilling the terms of a formal Memorandum of Understanding.

FOR MORE INFORMATION

For more information about JAG-Missouri, Inc., and becoming a participating school/district, please visit this website: www.JAG-Missouri.org .....and/or contact:

Paul Kincaid
Executive Director
Jobs for America's Graduates-Missouri, Inc.
Paul@KincaidCommunica tfons.com
(417) 425-5139

Kincaid can provide additional information and is available to meet with school officials, superintendent and principal groups, workforce developmentgroups, and potential partners.

JAG Missouri

Performance Outcomes Summary

Jobs for America's Graduates (JAG)

Jobs for America's Graduates (JAG) is a 38-year-old non-profit and employment program dedicated to helping students with barriers to their success to graduate from high school and make successful transitions to postsecondary education and meaningful employment. JAG focuses on a set of core competencies that prepare students to succeed in the workforce. Using this approach, JAG has consistently achieved graduation rates of 90+ percent for this group of students, which typically has a 50 percent graduation rate. JAG currently serves nearly 57,000 students in 1,200 communities in 34 states, including Missouri. JAG has now served more than 1.1 million students since it was established.

Positive Outcomes for JAG-Missouri

Positive Outcomes	JAG National Goals	2016 Missouri Outcomes	2017 Missouri Outcomes *Achieved "5 of 5" Performance Status
*Graduation Rate	90%	99% (127outof128)	98.75% (315outof319)
*Total CivHian Job Placement and Military Service	60%	57%	66%
*Positive Outcomes (Full + Part Time Jobs+ education + military)	80%	86%	89%
*Full Time Jobs	60%	59%	69%
*Total Full-time Placement (Full Time School+ Full Time Work)	80%	90%	87%
	30%	48%	47%

Class of 2017 Academic Scholarships:$ 1,410,320.00 Awarded to 64 students

Programs in 2016-17

These 21 Programs served **721 students:**

- Bismarck
- Caruthers.ville
- Central Academy for Excellence, Kansas City
- Central, Park Hills
- Farmington High School
- Hayti
- Hillsboro High School & **Middle** School
- Jennings High School
- Jennings Educational Training School (JETS)
- Kennett
- Normandy
- Riverview Gardens
- Roosevelt, St. Louis
- South Pemiscot
- Study Alternative, Springfield
- Sumner, St. Louis
- Vashon, St. Louis
- West County, Leadwood
- West Plains High School and Zizzer Pride Alternative

Five New Programs for 2017-18

With these new schools, JAG-Missouri is expected to serve nearly 1,000 students in-school, and 333 in the follow-up stage.

- Arcadia Valley High School
- Charleston High School
- Farmington Middle School
- Portageville Middle & High School

JAG RESULTS AND STUDENT SUCCESS- CLASS OF 2016

- **95% Graduation Rate (a record)** - completion of a high school diploma or GED.
- **Positive Outcome Rate of 84%-** after graduation, students are eniployed, in the military, in postsecondary training, or some combination thereof.
- **Job Placement Rate of 63% - *Double*** the employment rate for this population and ***triple*** the rate of full time employment.
- **A 75% Full Time Jobs Rate** - of the students working, 75% are working full-time employment; the highest in more than 20 years.
- **90% Full-Time Placement Rate** - *the combination of employment or college, alone or together equal to a minimum 35-hour weekly commitment of time,* ***Three times*** the national average.
- **43% Higher Education Rate** - Students graduate from high school and successfully transition into post-secondary education.

KEY IMPACTS

- **Employment .Impact:** A recent report conducted by Dr. Andy Sum, Director of the Center for Labor Market Studies at Northeastern University. Dr. Sum's report cites JAG as a program that ***doubles*** the rate that disadvantaged youth get jobs, and ***triples*** the rate they get full time jobs as compared to their peers who are not in JAG. Given the dire youth unemployment situation we currently face, we are very proud of these findings.
- **Employer Satisfaction:** A random sample survey of employers of JAG graduates were asked by the U.S. Chamber of Commerce to rate their perceptions of JAG workers and the JAG program:
  - To quote the Chamber: *"The results portray a highly successful program that enjoys considerable success and one that is valued among JAG employers. Both the JAG program and the worker consistently received high rankings throughout the survey."*
  - An overwhelming majority of supervisors (98%) are "Very Likely" or "Somewhat Likely" to employ other JAG Graduates.
  - Only 3% of the JAG workers did not meet supervisors' expectations

THE JAG MODEL: COMPREHENSIVE, PRACTICAL, PROVEN, ACCOUNTABLE, COST EFFECTIVE

- **Classroom Instruction.** A trained **"Career Specialist"** provides individual and group instruction to **35-45 students** in a class delivered for credit during the school day.
- **Employability Skills.** The JAG NATIONAL CURRICULUM equips participants with a minimum of 37 employability competencies and intensive career exploration and training opportunities, utilizing project based learning (PBL) methodology.
- **Adult Mentoring.** Specialists (JAG teachers) provide 180 contact hours and the individual attention students with barriers to their success need to overcome obstacles that stand in the way of personal and academic success.
- **Advice and Support.** Specialists provide guidance as students make significant career and life decisions and connect participants to other social and education services in the community.
- **Summer Employment Training.** Job placement is provided and partnerships are developed with summer youth employment programs to maximize year-long learning.
- **Student-Led Leadership Development.** Participants join a highly motivating student-led organization to develop, practice and refine their leadership and teaming skills and serve their communities.
- **Job and Postsecondary Education Placement Services.** Employer marketing and assistance with postsecondary education opportunities is provided by the Specialist to support their students' postsecondary goals and successful transition to those opportunities following graduation.
- **12-Month Follow-up Services.** JAG provides no less than twelve months of follow-up services and support to participants after graduation or completion of a high school equivalency exam.
- **Accountability System.** A comprehensive, internet-based tracking and reporting system that includes information on the participants served, services delivered and performance outcomes.
- **Cost Effective Approach.** The average cost per participant is $1,600. Considerably less than othe ms with the sa e oals.

JAG

JOBS FOR AMERICA'S GRADUATES:

Dropout Prevention, Postsecondary Education,
Careers and Leadership Development for At-Risk Youth

CORE CURRICULUM

Employers identified and validated the competencies which provide the foundation for the JAG National In-School Curriculum. Senior Program graduates are expected to attain the core competencies (A.1 to F.37) and Multi-Year Program graduates are expected to complete the core competencies as well as the additional competencies identified in the Individual Development Plan of each participant. The additional competencies may include G.1 to 1.87 depending on the number of years a participanti s involved in the Multi-Year Program. The JAG competencies include:

A. CAREER DEVELOPMENT COMPETENCIES

A.1 Jdentify occupational interests, aptitudes and abilities.
A.2 Relate interests, aptitudes and abilities to appropriate occupations.
A.3 Identify desired life style and relate to selected occupations.
A.4 Develop a career path for a selected occupation.
A.5 Select an immediate job goal.
A.6 Describe the conditions and specifications of the job goal.

B. JOB ATTAINMENT COMPETENCIES

B.7 Construct a resume.
B.8 Conduct a job search.
B.9 Develop a letter of application.
B.10 Use the telephone to arrange an interview.
B.11 Complete application forms.
B.12 Complete employment tests.
B.13 Complete a job interview.

C. JOB SURVIVAL COMPETENCIES

C.14 Demonstrate appropriate appearance.
C.15 Understand what employers expect of employees.
C.16 Identify problems of new employees.
C.17 Demonstrate time management.
C.18 Follow directions.
C.19 Practice effective human relations.
C.20 Appropriately resign from a job.

D. BASIC COMPETENCIES

D.21 Comprehend verbal communications.
D.22 Comprehend written communications.
D.23 Communicate in writing.
D.24 Communicate verbally.
D.25 Perform mathematical calculations.

E. LEADERSHIP AND SELF DEVELOPMENT COMPETENCIES

E.26 Demonstrate team membership.
E.27 Demonstrate team leadership.
E.28 Deliver presentations to a group.
E.29 Compete successfully with peers.
E.30 Demonstrate commitment to an organization.

F. PERSONAL SKILLS COMPETENCY

F.31 Understand types of maturity.
F.32 Identify a self-value system and how it affects life.
F.33 Base decisions on values and goals.
F.34 Identify process of decision-making.
F.35 Demonstrate ability to assume responsibility for actions and decisions.
F.36 Demonstrate a positive attitude.
F.37 Develop healthy self-concept for home, school and work.

G. LIFE SURVIVAL SKILLS

G.38 Evaluate a career plan to determine appropriate postsecondary educational options.
G.39 Identify how best to achieve marketable occupation skills for an entry level job.
G.40 Conduct a job analysis.
G.41 Apply critical thinking skills.
G.42 Demonstrate effective study skills.
G.43 Demonstrate how to use group dynamics techniques.
G.44 Explain the roles and function of a value-added organization.
G.45 Understand the essential elements of high performing work teams.
G.46 Describe how to work and communicate with diverse people at work and in the community to satisfy their expectations.
G.47 Demonstrate techniques for building commitment by others.
G.48 Demonstrate an openness to change.
G.49 Provide constructive feedback.
G.50 Negotiate solutions to conflicts.
G.51 Demonstrate politeness and civility.
G.52 Demonstrate an ability to adapt to people and situations.
G.53 Exhibit work ethics and behaviors essential to success.
G.54 Set and prioritize goals and establish a timeline for achieving them.
G.55 Apply the problem solving process to complex problems.
G.56 Demonstrate an ability to analyze the strengths and weaknesses of self and others.
G.57 Design and justify solutions by tracking and evaluating results.
G.58 Identify ways to build mutual trust and respect.
G.59 Prepare a short- and long-term personal budget.

H.

H.60 **WORK PLACE COMPETENCIES**
H.61 Demonstrate punctuality and good attendance practices.
H.62 Demonstrate initiative and proactivity.
H.63 Demonstrate how to work effectively with others.
H.64 Demonstrate an attitude that attracts the attention of management.
H.65 Demonstrate an ability to communicate and work with customers to satisfy their expectations.
H.66 Demonstrate listening skills which will result in gaining a clear understanding of information being conveyed.
H.67 Demonstrate an ability to follow and give directions.
H.68 Demonstrate good reasoning skills which results in thinking first, then taking action.
H.69 Demonstrate integrity and honesty in dealings with internal and external customers.
H.70 Demonstrate a willingness to accept responsibility for one's own actions.
H.71 Demonstrate a commitment in completing work assignments accurately and in a timely fashion.
H.72 Demonstrate an ability to satisfy the purposes of a delegated task.
H.73 Demonstrate an ability to prioritize and manage time effectively in the workplace.
H.74 Demonstrate enthusiasm for work.
H.75 Demonstrate an eagerness to learn new responsibilities or improve current responsibilities.
H.76 Demonstrate an understanding of the work to be accomplished.
Demonstrate familiarity with a variety of technologies.

H.77 Demonstrate an ability to self-evaluate and develop a continuous improvement (career development) plan.
H.78 Demonstrate basic computer operation skills.
H.79 Demonstrate an ability to learn from past experiences and others.
H.80 Demonstrate an ability to send, receive and organize e-mail messages.
H.81 Demonstrate an ability to search for information on the Internet.

I. ECONOMIC EMPOWERMENT COMPETENCIES

1.82 Understand Insurance-Auto, Renters, Home, Health, Disability and Life (Allstate)
1.83 Practice Better Money Management Skills (Visa U.S.A.)
1.84 Demonstrate How to Start a Small Business (Allstate)
1.85 Be successful in dealing with law enforcement when they are enforcing the law (Allstate)
1.86 Valuing Diversity (Allstate)
1.87 Risky Business (Allstate and National Council on Economic Education)

MEMORANDUM OF UNDERSTANDING

_____SCHOOL DISTRICT and

Jobs for America's Graduates - Missouri, Inc.

WHEREAS, this Memorandum of Understanding, entered into between Jobs for America's Graduates - Missouri (JAG-Missouri) and_____ School District outlines the elements of a partnership to successfully implement and sustain JAG-Missouri Multi-Year Dropout Prevention Programs.

WHEREAS, JAG-Missouri is financed using federal Community Development Block Grant funds, corporate and foundation contributions, state funds and participating school funds and/or in- kind contributions. JAG-Missouri creates business, industry and education partnerships committed to achieve the mission of JAG to ensure that at-risk high school students remain in high school, attain employability skills through classroom and work-based learning experiences during high school, graduate and receive twelve (12) months of follow-up services by the JAG Specialist. In the follow-up period, JAG participants are successfully transitioned into a career and/or pursue a postsecondary education to enhance career entry and advancement.

WHEREAS, the JAG-Missouri Program is based on the JAG Model, the Multi-Year Dropout Prevention Program Application serves high school students during one or more years in high school (9th through 12th grades) and for an additional twelve (12) months of post-graduation follow-up services.

WHEREAS, the five (5) primary performance goals of the JAG Model in serving students are results-oriented and measurable at the conclusion of the 12-month follow-up period:

- a 90% graduation/GED rate;
- an 80% overall success rate at the end of twelve (12) months after graduation, with participants either employed in a job leading to a career, in the military, or enrolled in a postsecondary education or training, or a combination of work and postsecondary education;
- 60% of graduates are employed;
- 60% of employed graduates are in full-time jobs leading to careers; and
- 80% of the graduates are employed full-time and/or are combining work and school.

The goals are measurable in grades 9-12:

- daily recording of information and data using e-NDMS to assure accuracy;
- reduction in the number of absences compared to prior year;
- improvement in GPA compared to prior year;
- reduction in the number of suspensions and expulsions compared to prior year;
- reduction in disciplinary actions;
- participation in the student-led Career Association;
- achieve gain scores in comparing JAG knowledge pre-tests and post-tests;
- involvement in no less than ten (10) hours of community service per month;
- enrollment in summer school to overcome any deficiencies;
- a return to school rate of 80% (as measured in September of each year);
- reduction in the number of barriers while enrolled in the Multi-Year Program;
- achieve the minimal number of contact hours per school year; and,
- satisfactory scores on any high stakes tests.

WHEREAS, the Electronic National Data Management System (e-NDMS) provides tracking of students served, services delivered, and outcomes achieved. Statewide and school performance outcomes are used in JAG's National Accreditation Process. JAG-State Organizations and JAG-Local Affiliates must receive standard accreditation to remain in good standing. It is understood that JAG may conduct a pre-accreditation visit prior to the actuaL accreditation to assist with an informal analysis of progress. The formal Accreditation visit may be at the end of the first year and again in the third year of operation before performance goals are achieved.

WHEREAS, the partners are totally committed to providing_ world-class school-to-career and/or dropout prevention programs, a process of continuous improvement will be implemented and maintained throughout the existence of the JAG-Missouri accredited program.

WHEREAS, the responsibilities of the state organization, JAG-Missouri, include:

1. Establish a Jobs for America's Graduates, Inc. (JAG) accredited Multi-Year Dropout Prevention Program at the high school through a mutually beneficial partnership between JAG-Missouri and the school district and high school committed to achieving the performance goals previously stated.

2. Maintain an active , involved oversight body to provide leadership in the implementation, operation, accountability, and continuous improvement of programs which satisfy the JAG accreditation standards.

3. Develop a positive working relationship within local communities, including employers, high schools, postsecondary or technical schools, and community service organizations for the purpose of promoting and establishing local JAG accredited programs in accordance with the JAG Program Model.

4. Provide technical assistance and training to the JAG Specialist and other key staff of the participating school on the successful implementation and operation of a JAG accredited program. Initially and as needed, training and supports will be provided in partnership with the JAG National Organization.

5. Provide access to electronic JAG Model Books (including a SPECIALIST HANDBOOK, CAREER ASSOCIATION HANDBOOK, and NATIONAL CURRICULUM MODULES) and other program materials, publications arid national communications to the participating school.

6. Provide staff development experiences for the JAG Specialist to assure understanding of the JAG Model Multi-Year Program Application. Share best practices through planned local and state staff development activities and by attending the annual JAG National Training Seminar and Pre-NTS Workshops held annually in July.

7. Provide staff support and conduct periodic school quality assurance reviews and consulting visits to give encouragement, support, and feedback to the Specialist. Provide a periodic review of documentation required of a JAG accredited program committed to tracking students, services, and outcomes throughout one to four years and 12-month follow-up period. JAG will conduct a site review and prepare an accreditation report for review by the JAG-Missouri oversight body, funding sources, management team and participating schools and Specialists.

8. Sponsor the annual JAG-Missouri State Career Development Conference, utilizing input from students, Specialists and members of the JAG-Missouri oversight body.

9. Conduct periodic school visits and reviews and assist JAG in its accreditation process to ensure conformity with the performance standards as promulgated by JAG-Missouri_and JAG.

10. Provide a level of financial support to the local school district for the quality implementation and delivery of the JAG Model.

WHEREAS, the responsibilities of_____School District and_____ High School include:

1. Employ a full-time, mutually acceptable, certified teacher qualified to fulfill the responsibilities of the JAG Specialist. The JAG Specialist takes personal responsibility for students with a goal of no less than 35 and no more than 45 students who are most at-risk of leaving school before graduation and/or becoming unemployed or underemployed after graduation.

2. . Provide any funding and support necessary to make this program successful. Provide direct or in-kind contributions such as contribute support services including the use of appropriate classroom space, furnished office space, computer with internet connectivity, utilities, telephone, fax machine, printer, copier, etc.

3. Provide the JAG Model Program in a regularly scheduled class or classes for credit. Follow-up services will be provided each graduate including employer marketing, job development and placement services for twelve {12) months post-graduation. Non-graduates will receive follow-up services that will result in completion of requirements for a high school diploma or a GED certificate.

4 Establish an in-schoolAdvisory Committee to assist the JAG Specialist in recruiting, screening and selecting students most in need of services delivered in Multi-Year Dropout Prevention Programs and provide on-going support for students and the JAG-Missouri program.

At a minimum, the committee will include one representative from administration, counseling staff, the faculty and the JAG Specialist. The Advisory Committee and Specialist are mutually responsible for recruiting, screening and selecting students who satisfy JAG criteria to receive the in-school and follow-up services of the program.

5. Provide scheduled time access to students during the school year as well as cumulative records for the purpose of identifying, screening, selecting and enrolling qualified students in the JAG Model accredited program.

6. . Provide for the scheduling of students and adequate contact time.

7. Provide classroom space for specialist-led competency-based instruction and appropriate facilities for the student-led Career Association activities. The school will also provide the use of other school facilities and equipment necessary to deliver the services of a JAG Model accredited program.

8. Provide for the coordination of the JAG-Missouri program and Career Association with other school programs and services where appropriate.

9. Enable students to attend statewide Leadership and Career Development Conferences held in the State of Missouri and provide transportation for students to attend these events.

10. Provide academic credit toward graduation to those students who successfully complete the JAG program that includes no less than nine (9) months of in-school and twelve (12) months of follow-up services. The Multi-Year Dropout Prevention Program may serve students in the g\ f 0l\ 11h and 1h grades plus 12 months of follow-up services.

11. Support JAG-Missouri's efforts to involve parents , family, employers, and community to meet the needs of JAG-Missouri students that will keep them in school through graduation and ensure full cooperation and participation during the post-graduationfollow-up period.

12. Work with JAG-Missouri to provide performance evaluations of the Specialist and assistance to achieve full compliance to the JAG Program Model standards.

13. Provide **mandatory** release time for the JAG Specialist to perform mandatory off campus employer marketing, job development, and placement responsibilities. Active face-to-face contacts with employers are essential to a successful Multi-Year Dropout Prevention Programs. The school will also facilitate attendance at mandatory staff meetings, the annual JAG National Training Seminar and Pre-NTS Workshops and the National Student Leadership Conference. Make transportation available (or reimbursement for travel) to the Specialist for mandatory attendance at staff meetings, training and off-campus employer marketing, job development and placement activities.

14. Provide adequate school-based supervision to ensure that the JAG Specialist fulfills the responsibilities of this Memorandum of Understanding and achieves the performance standards of the JAG Program Model and requirements of any funding sources.

15. Provide feedback to JAG-Missouri that will result in the continuous improvement of the program to maintain accreditation by Jobs for America's Graduates.

WHEREAS, the responsibilities of **Jobs for America's Graduates (JAG)** include:

1. Provide technical assistance and training to the JAG State Director upon request.

2. Provide full access to copyrighted JAG model books and curriculum modules, operational guides, administrative manuals, Electronic National Data Management System- (e-NDM S), etc. Network members can access electronic files of all JAG documents through the Private Documentation System behind the firewall at the JAG web site- www.jag.org.

3. Provide JAG Specialists with staff development opportunities through attendance at the annual JAG National Training Seminar and Pre-NTS Workshops at a reasonable registration fee.

4. Assist the JAG-Missouri management team and JAG Specialists with full implementation of JAG's Electronic National Data Management System (e-NDMS) designedto track students, services and outcomes for the purpose of determining the effectiveness of the program based on specific performance standards. JAG-State Organizations and JAG-local Affiliates have access to the Electronic National Database that produces management information for decision-making and program and staff evaluation purposes.

5. Conduct accreditation of the JAG-Missouri State Organization to ensure conformity with process and performance standards as promulgated by JAG.

6. Make available the protected trademark, "Jobs for America's Graduates," and associated emblem and copyrighted materials directly related to and limited to the periods in which the program is delivered in a manner consistent with the mission and goals of the JAG Program Model and terms of this Memorandum of Understanding.

PARTNERSHIP COMMITMENT

This Memorandum of Understanding is for the 2017-18 school year.

The partners mutually agree that the JAG Model program will operate within the principles, policies, procedures and JAG standards as outlined in this document and agreed to by the participating school, JAG-Missouri, and Jobs for America's Graduates.

It is a mutually agr-eed that efforts will!- be made to continue the JAG accredited program in subsequent school years based on:

- the availability of funding
- an adequate number of students to make the program cost-effective
- attainment of JAG Model performance goals
- mutual satisfaction with the program based on.this Memorandum of Understanding.

In agreement with the provisions of the Memorandum of Understanding, the partners affix their signatures in the spaces provided.

_ _ _ _ _ _ _ _ _ _ School District

_____ Date_____

Superintendent

_____High School

_____ Date_____

Principal

JAG-Missouri

_____ Date_____

Representative

SEDALIA SCHOOL DISTRICT #200
PROPORTIONAL ATTENDANCE RATE - 2018-2019
Standard 4 - 90% of the students will attend 90% of the time

		A		B		C		D			
School	Date	Total Adjusted Enrollment	Proportional Attendance Rate	(1 point) Adjusted Enrollment at 90-100%	%	(.5 point) Adjusted Enrollment at 87.5-89.9%	%	(.25 point) Adjusted Enrollment at 85-87.4%	%	Adjusted Enrollment < 85.0%	%
Heber Hunt Elem	9/10/2018	442.00	93.90	408.36	92.39	10.82	2.45	5.00	1.13	17.82	4.03
	10/8/2018	442.91	94.50	405.33	91.52	22.39	5.06	8.00	1.81	7.19	1.62
	11/7/2018	442.56	94.95	410.46	92.75	15.04	3.40	8.86	2.00	8.20	1.85
Horace Mann Elem	9/10/2018	259.75	89.20	228.11	87.82	6.18	2.38	2.00	0.77	23.46	9.03
	10/8/2018	261.57	94.83	244.04	93.30	6.00	2.29	4.00	1.53	7.53	2.88
	11/7/2018	262.08	92.47	235.79	89.97	8.77	3.35	8.69	3.32	8.83	3.37
Parkview Elem	9/10/2018	489.52	93.31	453.52	92.65	5.00	1.02	3.00	0.61	28.00	5.72
	10/8/2018	491.13	94.00	451.65	91.96	18.00	3.67	4.00	0.81	17.48	3.56
	11/7/2018	489.68	93.40	443.81	90.63	23.85	4.87	6.40	1.31	15.62	3.19
Skyline Elem	9/10/2018	485.54	94.29	453.90	93.48	6.00	1.24	3.64	0.75	22.00	4.53
	10/8/2018	488.14	94.43	450.88	92.37	16.10	3.30	8.00	1.64	13.16	2.70
	11/7/2018	491.11	94.15	450.19	91.67	17.75	3.61	13.22	2.69	9.95	2.03
Washington Elem	9/10/2018	233.82	95.30	220.82	94.44	4.00	1.71	0.00	0.00	9.00	3.85
	10/8/2018	233.47	93.79	213.48	91.44	8.00	3.43	6.00	2.57	5.99	2.57
	11/7/2018	234.00	95.07	217.85	93.10	7.00	2.99	4.42	1.89	4.73	2.02
SMS	9/10/2018	386.11	94.13	361.29	93.57	3.82	0.99	1.00	0.26	20.00	5.18
	10/8/2018	385.17	94.18	359.33	93.29	4.84	1.26	4.00	1.04	17.00	4.42
	11/7/2018	384.63	95.38	361.09	93.88	8.06	2.10	6.90	1.79	8.58	2.23
Smith-Cotton Jr High	9/10/2018	1156.08	91.91	1045.98	90.48	26.82	2.32	12.82	1.11	70.46	6.09
	10/8/2018	1157.45	92.38	1046.66	90.43	32.41	2.80	25.45	2.20	52.93	4.57
	11/7/2018	1157.99	93.27	1056.32	91.22	37.70	3.26	19.51	1.68	44.46	3.84
Smith-Cotton HS	9/10/2018	1399.93	88.63	1220.48	87.18	32.09	2.29	17.00	1.21	130.36	9.31
	10/8/2018	1413.97	89.50	1222.43	86.45	65.96	4.66	40.15	2.84	85.43	6.04
	11/7/2018	1412.34	89.84	1219.00	86.31	79.84	5.65	39.66	2.81	73.84	5.23

SEDALIA SCHOOL DISTRICT #200
PROPORTIONAL ATTENDANCE RATE - 2018-2019
Standard 4 - 90% of the students will attend 90% of the time

		A		B		C		D			
School	Date	Total Adjusted Enrollment	Proportional Attendance Rate	(1 point) Adjusted Enrollment at 90-100%	%	(.5 point) Adjusted Enrollment at 87.5-89.9%	%	(.25 point) Adjusted Enrollment at 85-87.4%	%	Adjusted Enrollment < 85.0%	%
District Wide	9/10/2018	4852.75	91.72	4392.46	90.51	94.73	1.95	44.46	0.92	321.10	6.61
	10/8/2018	4873.81	92.44	4393.80	90.15	173.70	3.56	99.60	2.04	206.71	4.24
	11/7/2018	4874.39	92.74	4394.51	90.16	198.01	4.06	107.66	2.21	174.21	3.57

CALCULATION: Sum of columns B + .5C + .25D divided by column A = Proportional Attendance Rate

Pettis County Early Childhood Cooperative

Date: November 26, 2018

CSIP 1: Student Achievement

147 IEP goals show progress

65 IEP goals mastered

Average Daily Attendance

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Early Childhood	95%	92%	91%								

CSIP 2: Highly Qualified Staff

Trainings:

Special Education Process
HighScope
Praise vs. Encouragement
Anecdotal Record Keeping
Sensory Integration
Trauma
Smart Notebook
Google
Positive Behavior Supports
Kagan Cooperative Learning
Crisis Prevention Intervention Training
Staff participated in a variety of other trainings designed for the specific needs of our students including but not limited to autism, health, and safety.

Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Informal Daily walk throughs	4 NEE	4 NEE								

CSIP 3: School Environment

Drills conducted

Fire Drill	9/5/18; 10/24/18
Tornado Drill	9/13/18
Intruder Drill	8/24/18, 9/20/18

Mr. Beckman is present during the morning arrival and afternoon dismissal.

CSIP 4: Family & Community

Open House
Farm Field Trip
Grandfriends' Day: 200 Visitors
Homecoming Parade
Visits From:

- Fire Department
- KidSight - Oct 29
- SFCC Dental

SCHS -Educators Rising Students -helped in the classrooms and on the farm field trip.
Whittier students work weekly in the classrooms.
CTC students work weekly in the classrooms.
Developmental screenings are conducted throughout the quarter.

P/T Conferences

October	February	May
• 177/181 held during scheduled times • 4 held after original conference date • 100% completed		

Home Visits Conducted

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
161				

Number of Team Connection Events

September	October	November	December	January	February	March	April
0	7						

Heber Hunt Elementary Board Report 2018-19
2nd Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

STAR

	Fall (Established)	Winter (Established)	Spring (Established)
2nd Grade	53%		
3rd Grade	53%		
4th Grade	60%		

AIMSWEB Composite Reading Assessments

	Fall (Established)	Winter (Established)	Spring (Established)
Kindergarten	15%		
1st Grade	24%		
2nd Grade	35%		
3rd Grade	39%		
4th Grade	49%		

CSIP 1: Student Achievement

Objective 4: 90% of the students will attend 90% of the time.

Average Daily Attendance

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total	----	93.9%	94.5%	94.9%							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	24 walk throughs	29	22	11							

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted (listed)

Fire – 9-6, 9-13, 9-24

Tornado – 8-29

Intruder –8-21 ,9-7, 9-20

Earthquake – (safety procedures discussed)

Implementation of Positive Behavior Support Common Area Expectations

PBS Character Assemblies – School-wide assembly focusing on character word of the month

Purchase of PBS incentives and signage

Attendance Incentive Assemblies

Implementation of PBIS Tier 1 and 2
Training in PBIS Tier 3
Therapy Dog-Vince
School Protection Officer on Campus
School Social Worker
Weekly Playground Inspections

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office/Recovery	2	28	35	26							
Bus	0	6	3	0							

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

PTA Skate Nights
Open House
Parent/Teacher Conferences
Attendance Incentive Assemblies
PBS/Character Assemblies
Title One Reading Night
PTA Monthly Meetings
PTA BINGO Night
Spring Vocal Music Concert
Heber Hunt Day of Service
Dads & Donuts
Moms & Muffins
Grandparents Day
Fall Book Fair
Heber Hunt Walking School Bus
PBS Quarter Parties
PTA Fall Party
Foundation Breakfast Performance
Winter Vocal Music Concert
Talent & Art Show
Feast

Parent Teacher Conference Attendance Percentage

Grade	Total %
Kindergarten	94%
1st Grade	94%
2nd Grade	96%
3rd Grade	95%
4th Grade	95%
Mixed Age	97%

Horace Mann Elementary Board Report 2018-2019
1st Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

Aimsweb Composite Reading Assessments

	Fall (Established)	Winter (Established)	Spring (Established)
Kindergarten (LNF/LWSF)	11.8%		
First (ORF)	13.5%		
Second (VOC/RC/ORF**)**	31.5%		
Third (VOC/RC/ORF)	51.8%		
Fourth (VOC/SRF/RC/ORF)	41.5%		

CSIP 1: Student Achievement

Objective 4: The building and district Average Daily Attendance will be 90% of a minimum of 90% of students.

Attendance – Percentage of Students Meeting 90% Criteria

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total	-	89.20	94.83								

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	24 walk through	20	14								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted - Fire: 8/27, 9/26, 10/11

Tornado: 8/27, 9/26, 9/27

Intruder: 8/22, 9/20

Implementation of PBIS Tier 1 and 2

Training in PBIS Tier 2 & 3

Focus on school-wide expectations

Attendance Incentives

School Goal focus - Share your Popcorn

Therapy Dog - Toby

School Social Worker
School Protection Officer on Campus
Semi-Annual Safety Check
Weekly Playground Inspections

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office/Recovery	1	20	44								
Bus	1	6	2								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

Open House
Parent/Teacher Conferences
PTA Monthly Meetings
PBS Family Night
Fire Safety Talks and Fire Safe House
Book Fair
Homecoming Parade
Foundation Breakfast Performance
Food Drive
Class Parties
School Carnival
Grandparents Day

Parent/Teacher Conference Attendance Percentage
(Multiple attempts will be made to reschedule conferences)

Kindergarten	**98%**
First Grade	**97%**
Second Grade	**100%**
Third Grade	**98%**
Fourth Grade	**100%**
Mixed Age	**100%**

- **Parents of only 4 students did not conference with our teachers**

Parkview Elementary Board Report 2018-2019
1st Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

Aimsweb Composite Reading Assessments

	Fall (Established)	Winter (Established)	Spring (Established)
Kindergarten (LNF/LWSF)	LNF - 18/16.8%		
First (ORF)	31/33%		
Second (VOC/RC/ORF**)**	38/44.7%		
Third (VOC/RC/ORF)	57/58.2%		
Fourth (VOC/SRF/RC/ORF)	48/46.6%		

CSIP 1: Student Achievement

Objective 4: The building and district Average Daily Attendance will be 90% of a minimum of 90% of students.

Attendance – Percentage of Students Meeting 90% Criteria

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total	-	93.31	94.00	93.40							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	25 walk through	18	28								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted - Fire:
Tornado:
Intruder:
Implementation of PBIS Tier 1 and 2
Training in PBIS Tier 3
Focus on school-wide expectations
Attendance Incentives
School Social Worker
School Protection Officer on Campus

Semi-Annual Safety Check
Weekly Playground Inspections

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office/Recovery	0	8	26								
Bus	4	10	35								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

Open House
Parent/Teacher Conferences
PTA Monthly Meetings
PBS Family Night
Fire Safety Talks and Fire Safe House
Book Fair
All Pro Dad meets monthly
3rd Grade Field Trip to MO Days
1st Field Trip to Fire Station
3rd-4th went to Annie Jr. at SCJH
Homecoming Parade
Foundation Breakfast Performance
Back to School Dance
Class Parties
School Carnival
Monthly Tiger Pride Assemblies
Grandparents Day
Kindergarten Field Trip to Pumpkin Patch
4th toured Central MO Cancer Center
K-2 went to Elephant and Piggie at SCHS

Parent/Teacher Conference Attendance Percentage
(Multiple attempts will be made to reschedule conferences)

Kindergarten	**96%**
First Grade	**95%**
Second Grade	**98%**
Third Grade	**100%**
Fourth Grade	**96%**

Skyline Elementary Board Report 2018-2019
1st Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

Aimsweb Composite Reading Assessments

	Fall (Established)	Winter (Established)	Spring (Established)
Kindergarten (LNF/LWSF)	17%		
First (ORF)	27%		
Second (VOC/RC/ORF**)**	34%		
Third (VOC/RC/ORF)	48%		
Fourth (VOC/SRF/RC/ORF)	63%		

CSIP 1: Student Achievement

Objective 4: The building and district Average Daily Attendance will be 90% of a minimum of 90% of students.

Attendance – Percentage of Students Meeting 90% Criteria

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total	-	94.29	94.43	94.15							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	26 walk through	14	17								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted - Fire, Tornado, Intruder
Implementation of PBIS Tier 1 and 2
Training in PBIS Tier 3
Daily School Assemblies with focus on school-wide expectations
Attendance Incentives
School Goal focus - Culture, Mission, Vision
Therapy Dog - Rayder
School Protection Officer on Campus
School Social Worker
Weekly Playground Inspections

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office/Recovery	4	29	20								
Bus	2	18	11								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

Open House
Parent/Teacher Conferences
PTA Monthly Meetings
PBS Family Night
Fire Safety Talks and Fire Safe House
Book Fair
Homecoming Parade
Foundation Breakfast Performance
Food Drive
Class Parties
School Carnival
Grandparents Day

Parent Teacher Conference Attendance Percentage
(Multiple attempts will be made to reschedule conferences)

Kindergarten	**97.8%**
First Grade	**96.6%**
Second Grade	**90%**
Third Grade	**90%**
Fourth Grade	**94%**

Washington Board Report 2018-2019
1st Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

Aimsweb Composite Reading Assessments

	Fall (Established)	Winter (Established)	Spring (Established)
Kindergarten (LNF/LWSF)	6%		
First (ORF)	13%		
Second (VOC/RC/ORF**)**	34%		
Third (VOC/RC/ORF)	39%		
Fourth (VOC/SRF/RC/ORF)	47%		

CSIP 1: Student Achievement

Objective 4: The building and district Average Daily Attendance will be 90% of a minimum of 90% of students.

Attendance – Percentage of Students Meeting 90% Criteria

	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total	95.3	93.79	95.07							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	13 walk through	5	15								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted - Fire, Tornado, Intruder
Implementation of PBIS Tier 1 and 2
Training in PBIS Tier 3
Attendance Incentives-Building and student
School Protection Officer on Campus
School Social Worker
Weekly Playground Inspections
PBS assemblies/Wellness words

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office/Recovery	3	13	18								
Bus	0	3	1								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

Open House
Parent/Teacher Conferences
PTA Monthly Meetings
PBS Family Night
Fire Safety Talks/ Fire Safe House
Book Fair
Mentor kickoff
Homecoming Parade
Foundation Breakfast Performance
Food Drive
Class Parties
School Carnival
Walking School Bus

Parent/Teacher Conference Attendance Percentage
(Multiple attempts will be made to reschedule conferences)

Kindergarten	**94%**
First Grade	**98%**
Second Grade	**100%**
Third Grade	**95%**
Fourth Grade	**98%**

Sedalia Middle School Board Report 2018-19

1st Quarter

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

STAR

	Fall (Established)	Winter (Established)	Spring (Established)
5th Grade	66%		

AIMSWEB - Reading

	Fall (Established)	Winter (Established)	Spring (Established)
Composite	53%		

Composite = Oral Reading Fluency/Silent Reading Fluency/Comprehension/Vocabulary

AIMSWEB – Math

Achievement Level %	Fall (Established)	Winter (Established)	Spring (Established)
Composite	61%		

Composite = Math Computation Fluency/Concepts & Application/Number Sense

Grade Distribution

Content	A	B	C	D	F
ELA	240	58	19	19	8
Math	177	106	59	24	8
Science	116	145	48	16	5
Social Studies	142	106	51	27	18

CSIP 1: Student Achievement

Objective 4: 90% of the students will attend 90% of the time.

Average Daily Attendance

School	Date	Total Adjusted Enrollment	Proportional Attendance Rate	(1 point) Adjusted Enrollment at 90-100%	%	(.5 point) Adjusted Enrollment at 87.5-89.9%	%	(.25 point) Adjusted Enrollment at 85-87.4%	%	Adjusted Enrollment < 85.0%	%
SMS	9/10/2018	386.11	94.13	361.29	93.57	3.82	0.99	1.00	0.26	20.00	5.18
	10/8/2018	385.17	94.18	359.33	93.29	4.84	1.26	4.00	1.04	17.00	4.42
	11/7/2018	384.63	95.38	361.09	93.88	8.06	2.10	6.90	1.79	8.58	2.23

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
NEE Observations	---	17	16								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted (listed)

Fire – 9/5, 10/24

Tornado – 9/13

Intruder – 8/21, 9/20

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Office	3	12	24								
Bus	---	6	30								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities (listed):

Open House

Parent/Teacher Conferences

Attendance Incentive Assemblies

PBS Assemblies

PTA Monthly Meetings

Foundation Breakfast Performance

PBS Quarter Parties

PBS Outreach Night

Parent Teacher Conference Attendance Percentage

Teams	Face-to-Face	Total %
A-10	71/74	96%
Apache	60/67	90%
Blackhawks	63/70	90%
Falcons	69/73	95%
Stealth	61/70	87%
Skyraiders	25/31	81%

Smith-Cotton Junior High Board Report
First Quarter 2018-19 School Year

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

STAR

Smith Cotton Junior High School - Growth

Grade	School Year Aug 1 - Sep 30 (Fall)	Percent of Students by District Benchmark Category	Total Students	40+ PR	25-39 PR	10-24 PR	1-9 PR
Grade 6	2018 - 2019 Grade 6		394	41% 163	14% 56	24% 96	20% 79
	2017 - 2018 Grade 5		362	45% 164	14% 49	20% 72	21% 77
	2016 - 2017 Grade 4		330	50% 164	13% 42	15% 48	23% 76

Smith Cotton Junior High School - Growth

Grade	School Year Aug 1 - Sep 30 (Fall)	Percent of Students by District Benchmark Category	Total Students	40+ PR	25-39 PR	10-24 PR	1-9 PR
Grade 7	2018 - 2019 Grade 7		364	42% 152	20% 71	18% 64	21% 77
	2017 - 2018 Grade 6		332	40% 132	14% 45	23% 78	23% 77
	2016 - 2017 Grade 5		311	49% 151	15% 47	17% 53	19% 60

Smith Cotton Junior High School - Growth

Grade	School Year Aug 1 - Sep 30 (Fall)	Percent of Students by District Benchmark Category	Total Students	40+ PR	25-39 PR	10-24 PR	1-9 PR
Grade 8	2018 - 2019 Grade 8		356	44% 157	13% 46	23% 82	20% 71
	2017 - 2018 Grade 7		333	45% 150	17% 57	15% 49	23% 77
	2016 - 2017 Grade 6		304	54% 163	14% 43	17% 51	15% 47

**These graphs show the cohort for each grade level over the last three years in the SSD.*

**Percentile rank (PR) ranges from 1 to 99. Percentile rank indicates the percentage of other students nationally who obtained scores equal to or lower than the score of a particular student.*

COMMON ASSESSMENTS 1st QUARTER

6th Grade

Content	A	B	C	D	F
Math	22	19	22	12	25
Science	23	16	20	12	29
Communication Arts	3	13	15	16	53
Social Studies	44	27	14	8	7

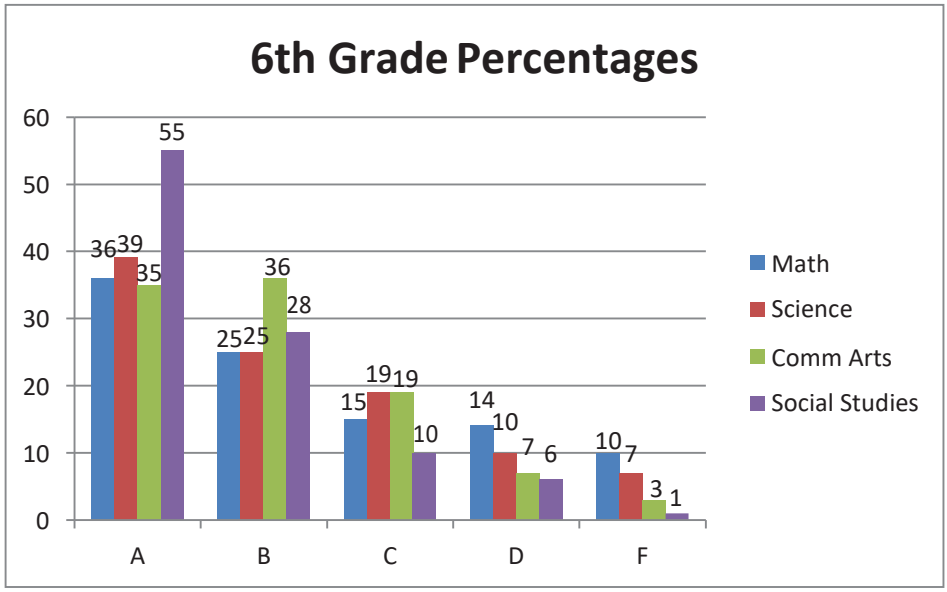
7th Grade

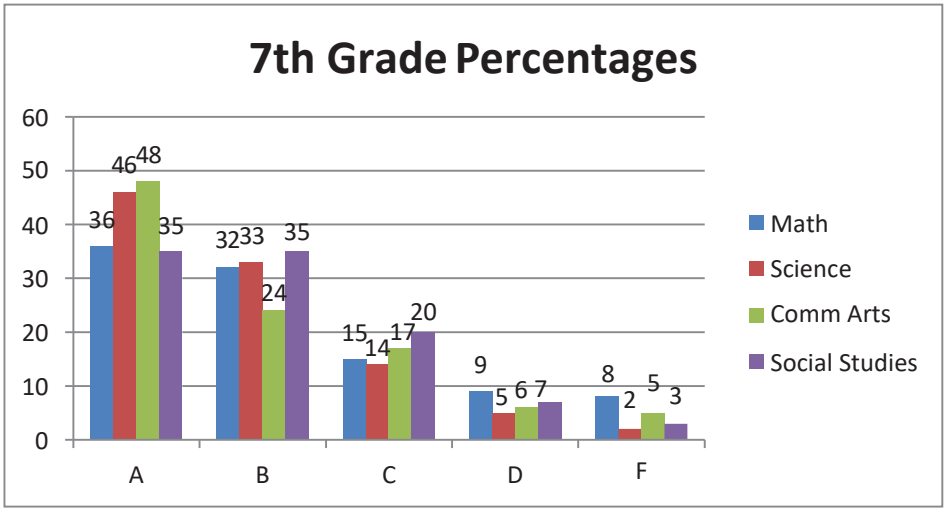
Content	A	B	C	D	F
Math	49	20	16	7	8
Science	50	18	12	7	13
Communication Arts	21	30	15	17	17
Social Studies	34	26	16	11	13

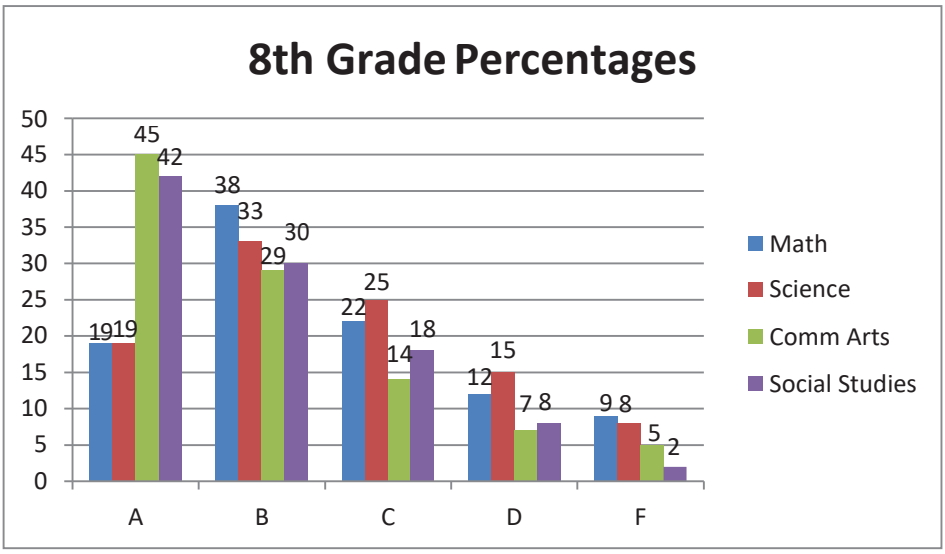
8th Grade

Content	A	B	C	D	F
Math	25	30	13	14	18
Science	7	13	21	19	40
Communication Arts	22	26	17	15	20
Social Studies	44	30	10	9	7

GRADE DISTRIBUTION 1st QUARTER







CSIP 1: Student Achievement

Objective 4: 90% of the students will be at school 90% of the time.

90/90

	YTD as of 9/10/18	YTD as of 10/8/18	YTD as of 11/7/18	YTD as of	YTD as of	YTD as of	YTD as of	YTD as of	YTD as of	Total
Building Total 17-18	88.75	92.34	92.01	91.68	91.17	91.48	91.77	91.27	91.66	91.89%
18-19	**91.91**	**92.38**	**93.27**							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Walk-Through	NA	62	68								

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted (listed)

- **Fire Drills: August 28th, October 9th**
- **Tornado Drill: October 4th**
- **Intruder Drill: August 21st (staff only), September 20th (district-wide)**

Discipline referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Total
Building Total 17-18	19	184	195								
18-19	**19**	**198**	**302**								
Bus Total 17-18	2	27	39								
18-19	**2**	**24**	**42**								

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year. **SCJH Open House Night – August 20th 6th grade 5-5:45, 7th/8th grade 6:15-7, Pizza Hut Family Nights, Papa John's Family Night, Internet Safety Assemblies – School Resource Officer, Sgt. John Cline – October 3rd, Parent Teacher Conferences were held October 24th and 25th.**

Parent Teacher Conference Attendance Percentage

6th Grade

Team	% Attended	% Made Contact With
MVP	69%	85%
Dream Team	82%	87%
All Star	84%	87%

7th Grade

Team	% Attended	% Made Contact With
Cosmic Kids	53%	86%
Voyagers	61%	84%
Visionaries	54%	85%

8th Grade

Team	% Attended	% Made Contact With
Navigators	54%	80%
Dynamo	52%	81%
Sarah's Champions	67%	77%

Smith-Cotton High School Board Report
1st Quarter 2018-19 School Year

CSIP 1: Student Achievement

Objective 2: A minimum of 80% of Sedalia School District #200 students will be reading on grade level or above.

STAR

	Fall Grade Level Equivalency	Spring Grade Level Equivalency
9th Grade	7.3	
10th Grade	8.3	

EOC Courses Grade Breakdown

Content	A	B	C	D	F
Biology	31	94	107	76	40
English II	133	67	44	20	19
Algebra I	14	41	69	40	28
Algebra II	36	31	9	0	0
American Government	73	52	38	7	0

CSIP 1: Student Achievement

Objective 4: 90% of the students will attend 90% of the time.

Attendance – Percentage of Students Meeting 90% Criteria

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
Percentage of Students	88.63	89.50	89.84							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
Walk-Through	8	76	60							

(Walk-Through numbers are current as of 10/25/18)

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

Drills conducted (listed)

Fire Drills: 8/24/18, 9/26/18, 10/29/18, 11/7/18
(Procedures modified from last school year to accommodate additional building additions.)
Tornado Drills: 8/24/18
Intruder: 8/22/18, 9/20/18

Discipline Referrals

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
Building Total 18-19	7	88	120							
Building Total 17-18	9	103	132	155	119	73	79	71	124	85
Truancy 18-19	0	10	10							
Truancy 17-18	0	13	17	13	15	5	9	5	7	9
Bus 18-19	0	8	3							
Bus 17-18	0	9	11	16	12	13	10	3	3	6

Truancy referrals are included in building total numbers. Bus referrals are not included in building total numbers.
October numbers are through the end of the quarter, 10/25/18.

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Parent/Teacher Conferences Attendance: 377/1,415 (26%)

All Grades Open House
Freshmen Parent Meetings
Homecoming Tours
Sedalia FIT Internships
Students of the Month for Rotary
Staff Community Café
Parent/Teacher Conferences
Parent Informational Nights on topics of relevance/concern

Whittier High School Board Report

CREDIT DISTRIBUTION

9th Grade

	Com Arts	Math	Science	Social Studies	Non-Core
Day School	0	1	2	3	4
Night School	0	0	0	0	0

10th Grade

	Com Arts	Math	Science	Social Studies	Non-Core
Day School	1	2	4	7	16
Night School	0	0	0	0	03

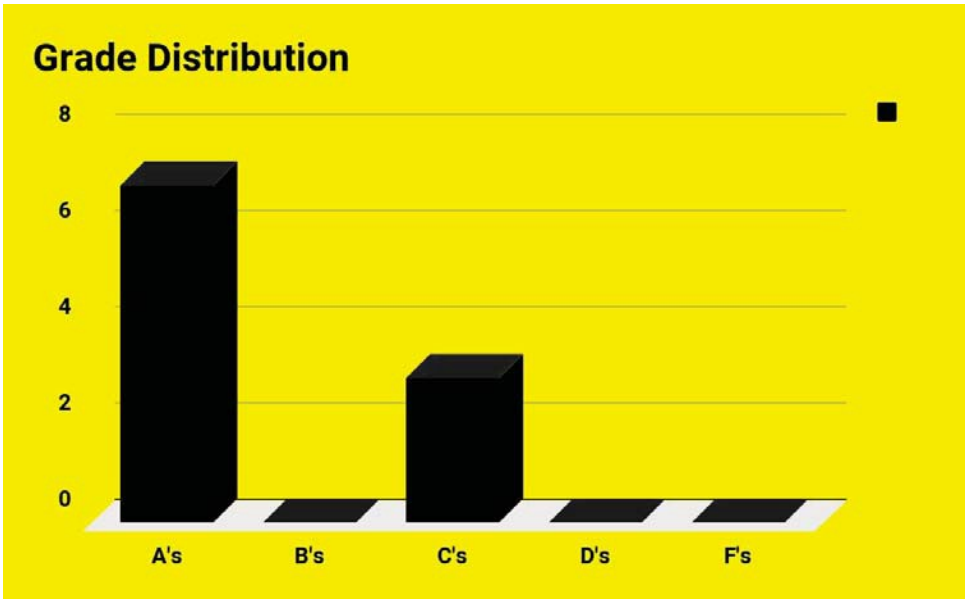
11th Grade

	Com Arts	Math	Science	Social Studies	Non-Core
Day School	25	15	15	21	39
Night School	0	0	0	1	3

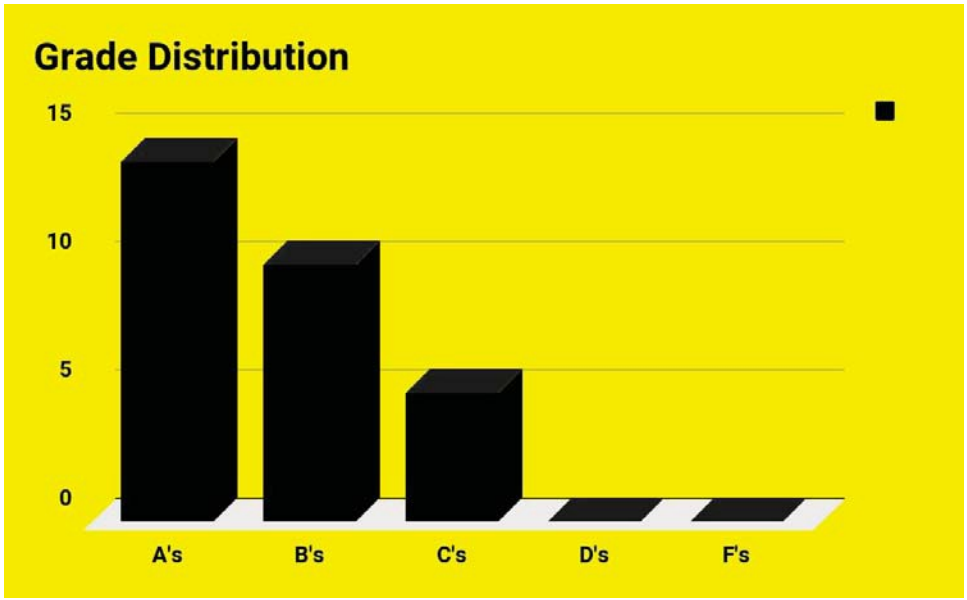
12th Grade

	Com Arts	Math	Science	Social Studies	Non-Core
Day School	15	8	5	11	21
Night School	0	0	0	0	11

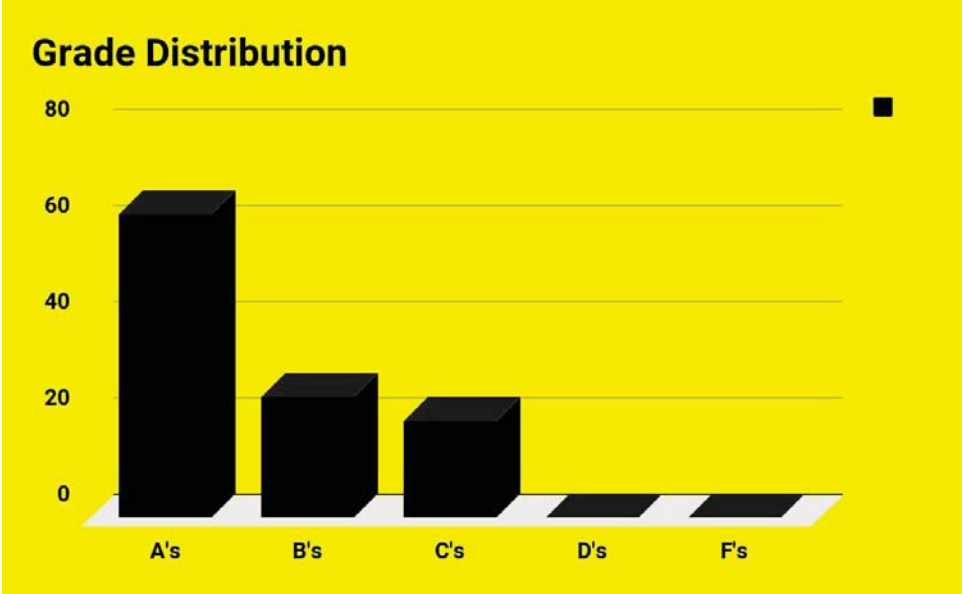
GRADE DISTRIBUTION—DAY SCHOOL



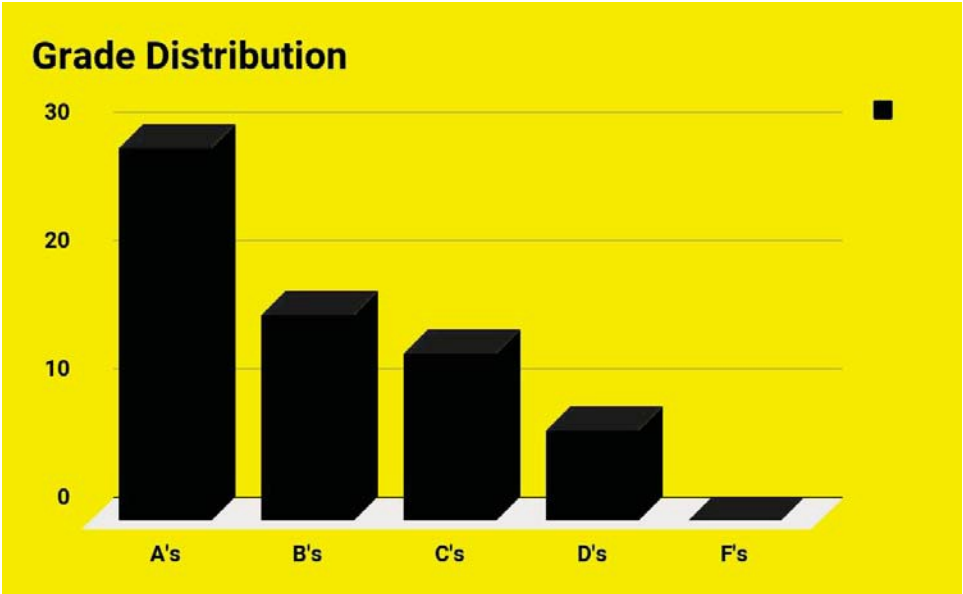
9th Grade



10th Grade

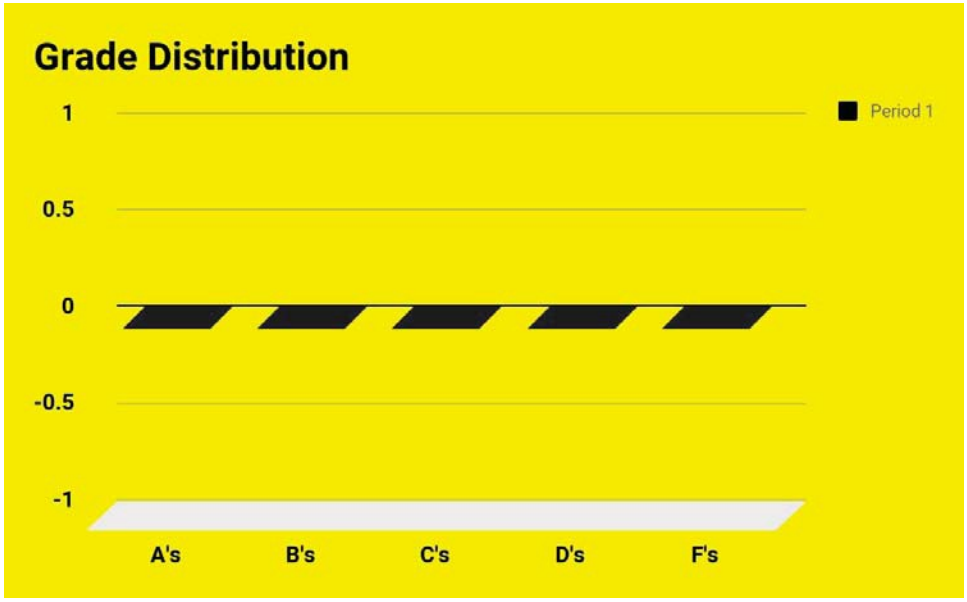


11th Grade



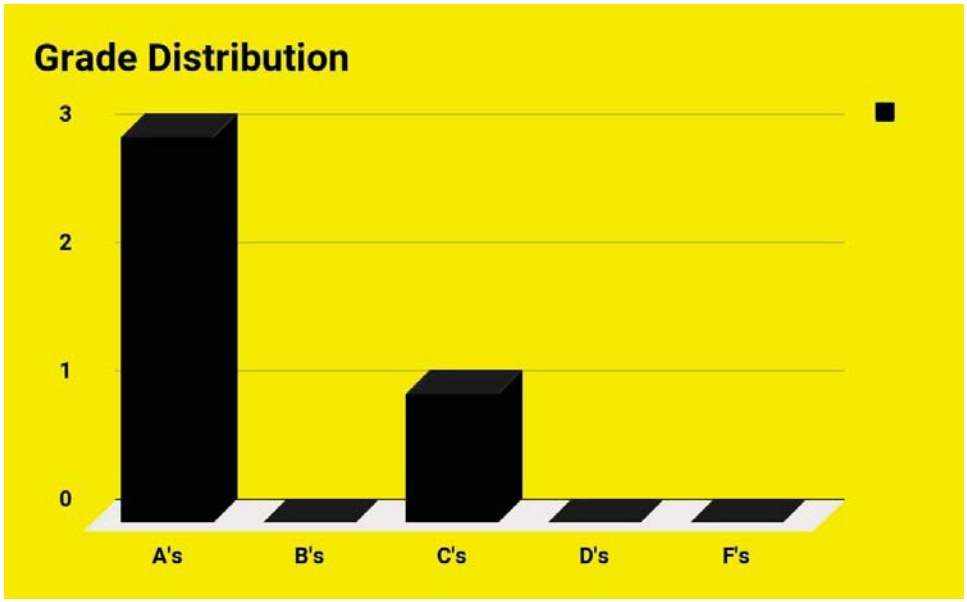
12th Grade

GRADE DISTRIBUTION—NIGHT SCHOOL

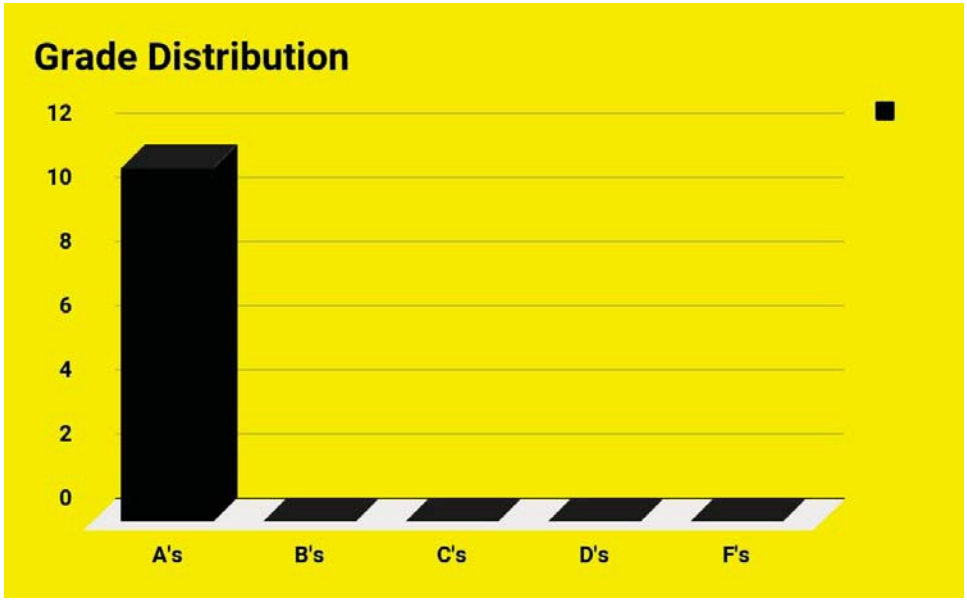


9th Grade

10th Grade



11th Grade



12th Grade

CSIP 1: Student Achievement

Objective 4: The building and district Average Daily Attendance will be at least 95%.

Average Daily Attendance---Whittier

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
Total	95%	95%	95%							

Average – 90/90 Standard 4---- Whittier

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
On Target %	71%	82%	84%							
Year To Date	71%	83%	83%							

CSIP 2: Highly Qualified Staff

Recruit, attract, develop, and retain highly qualified staff to carry out the LEA/District mission, goals, and objectives.

	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
NEE Walkthroughs	0	8	6							

CSIP 3: School Environment

Provide and maintain appropriate instructional resources, support services, and functional and safe facilities.

- **Fire Drills: August 31st, October 9th,**
- **Tornado Drill: October 9th,**
- **Bullying Assembly: September 7th**
- **Internet Safety Assembly: September 7th**
- **Intruder Training for Staff: August 22nd**

- **District Wide Intruder: September 20th**
- **Earthquake Information: October 18th**

Discipline referrals

Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May
1	2	6							

CSIP 4: Family & Community

100% of parents and community members will have the opportunity to interact with staff at least three times per year.

Building Activities

1. **Open House(s): August 23th**
2. **FaceBook**
3. **Skills Program**
4. **Service Learning --- Special Olympic-Play Unified Day**
5. **Fall Parent Teacher Conferences, October 24th and 25th**
6. **SOS--Signs of Suicide Prevention Program--September 24th**

Parent Teacher Conference Attendance

Parents of 14 students were here during Parent Teacher Conferences. All of our parents in Day School and Night School were contacted through our Blackboard program via text.

H SCHOOL 2018

ACT Data

2018 2019 UPDATES

- October 25
  - Official ACT Practice Test - "Pre-ACT"
  - Official booklets and scoring by ACT
  - Detailed reporting - individualized student plans
  - Juniors
- Continue Wednesday Workouts - 9 weeks
- Workshops
- Testing Sophomores - Spring

Additional Student Resource

EBSCO Learning Express - Benefit of MOREnet

Prepare for Your ACT® Test

ACT® Preparation Tutorials

Introduction to the ACT® Test Tutorial
ACT® English Test Preparation Tutorial
ACT® Mathematics Test Preparation Tutorial
ACT® Reading Test Preparation Tutorial
ACT® Science Test Preparation Tutorial
ACT® Writing Test Preparation Tutorial

ACT® Practice Tests

ACT® English Practice Tests
ACT® Math Practice Tests
ACT® Reading Practice Tests
ACT® Science Practice Tests
ACT® Writing Practice Tests
ACT® Complete Simulated Practice Tests

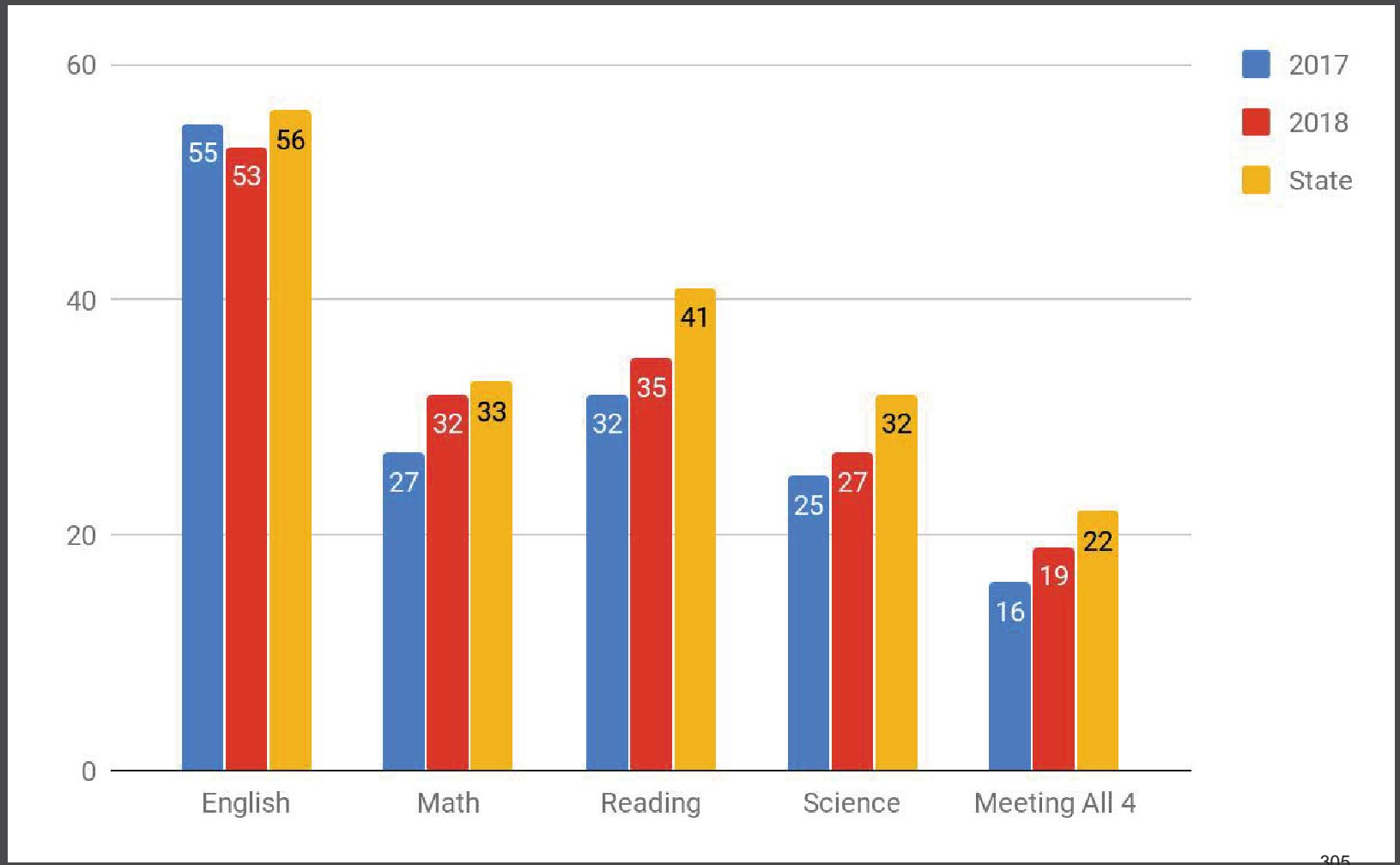
ACT® Test Preparation eBooks

ACT® Test Preparation eBooks

College Admissions Test Preparation

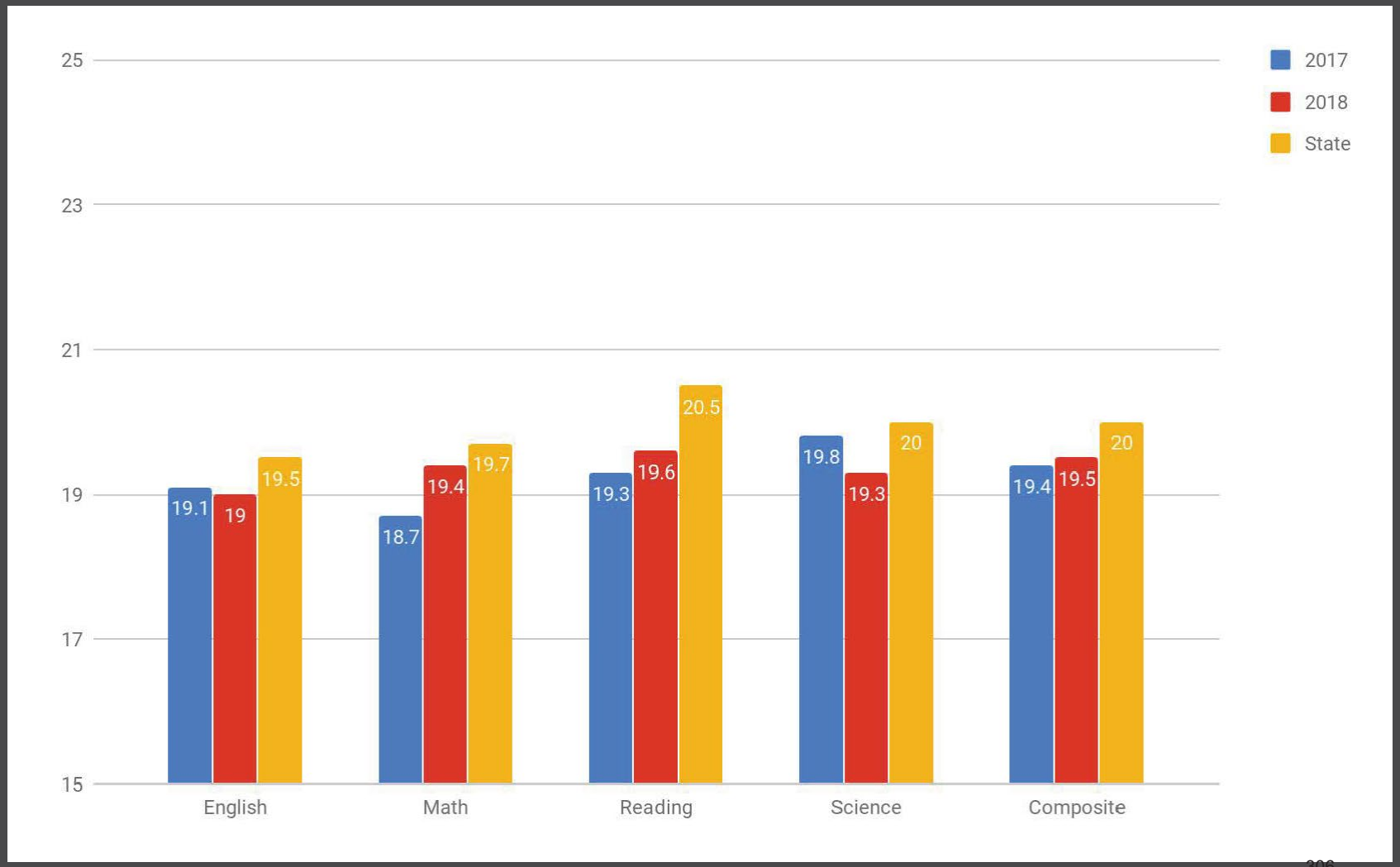
Prepare for important exams like the ACT®, SAT®, AP® Tests, and more.

PERCENT OF STUDENTS COLLEGE READY



AVERAGE ACT SCORES 2018

Note: This is only reflective of the students' most recent score, not their highest



ALSO NOTEWORTHY

- Increase in Junior Scores
  - 2016 Composite 19.3
  - 2018 Composite 20.3
  - 2016 College Readiness 14%
  - 2018 College Readiness 19%
- Prep for Junior ACT shows progress

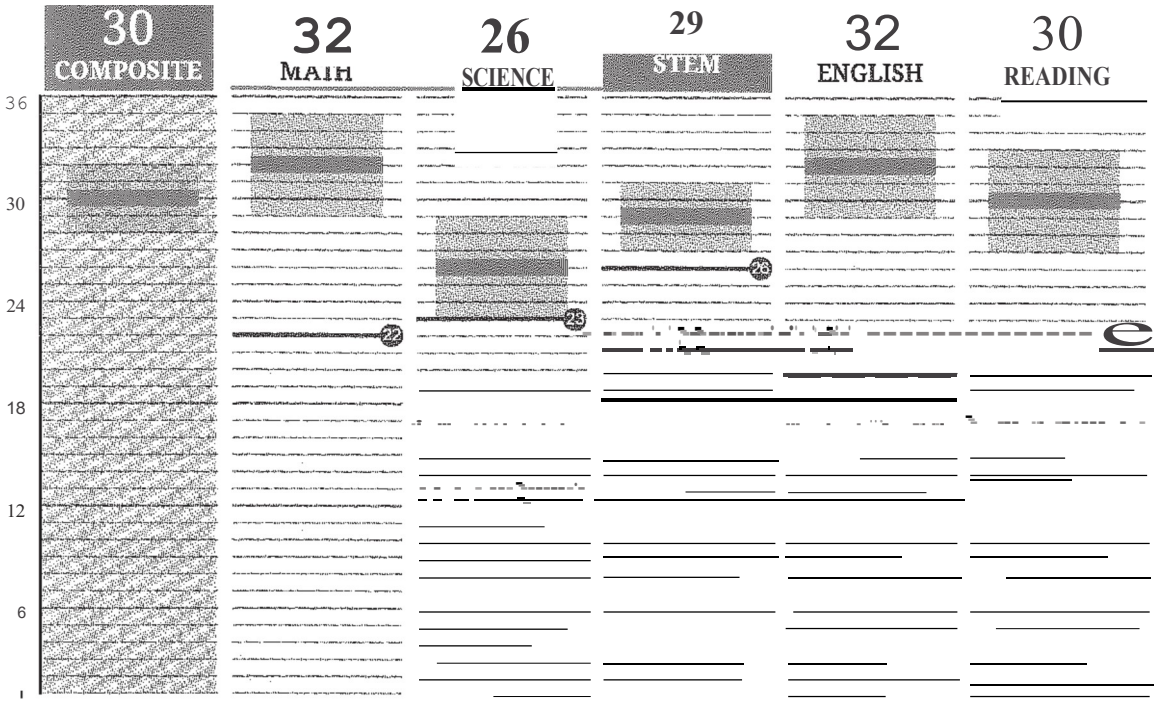
Test Date: *October 25, 2018*
SMITH-COTTON HIGH SCHOOi.. (Code: 263180)
Grade:11

PreACT®

Student Report

Your PreACT" Composite Score is 30

This graph visually represents your PreACT scores compared to the ACT Benchmark. When looking at this you can see where your score compares to the ACT College Readiness Benchmarks.



Your PreACT' Score

Your PreACT Score Range

ACT Readiness Benchmark

Your PreACT scores consist of different scores for each subject test (math, science, English, and reading) along with the average of all of your subject scores (the Composite score). The STEM score is the average of your malh and science scores only.

YourPreACT Score Range
Test scores are estimates of ycur educational development. Think of your true achievement on this test as being within a range as shown by the bands around you,- scores.

ACT College Readiness Benchmarks
ACT scores at or above the Benchmark mean that a student has at least a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in spe cific first-year college courses in the corresponding subject area.

Your Predicted ACT Composite Score Range is 31 - 33 -

The scores below predict your Mure performance ranges when lak ing the full ACT in a year's time assuming typical achievement growth.

31 - 33
COMPOSITE

US Rank

Composite	97%
Math	98%
Science	89%
STEM	96%
English	97%
Reading	92%

Your Detailed PreACT Results

The scores below represent your performance on reporting categories measured by the test. Reporting category desiynations are provided to help you to start to focus Of\ strengths and weaknesses. Categories with only a few items may be less representative of your overall achievement in that category.

MATH	CorrectJTo1elt	Pere.entCorrect
Preparing for Higher Math	19/21	90%
• Number & Quantity	3/3	100%
• Algebra	5/5	100%
• Functions	3/5	60%
• Geometry	5/5	100%
• Statistics & Probability	3/3	100%
Integrating Essential SkIlls	14/15	93%
Modeling	10/11	91%

SCIENCE		
Interpretation of Data	9/11	82%
Scientific Investigation	6/8	75%
Evaluation of Models, Inferences & Experimental Results	9/11	82%

ENGLISH	Co rrec:Ifr ota l	Percent Correct
Production of Writing	12/14	86%
Knowledge of Language	717	100%
Conventions of Standard English	23/24	96%

R£ADING		
Key Ideas & Details	14/15	93%
Craft & Structure	m	100%
Integration of Knowledge & Ideas	213	67%

Understanding Complex Texts

This indicator lets you know if you are understanding the central meaning of complex texts at a level that is needed lo succeed in college courses with higher reading demand.

Below Proficient

• **About the PreACT test and score scale**

The PreACT is shorter than the full ACT and is based on a subset of ACT test specifications. The PreACT is reported on the same 1 to 36 score scales as the ACT, but PreACT has a maximum score of 35.

l Math test questions can map to multiple reporting categories. so totals will exceed the number of questions o test.

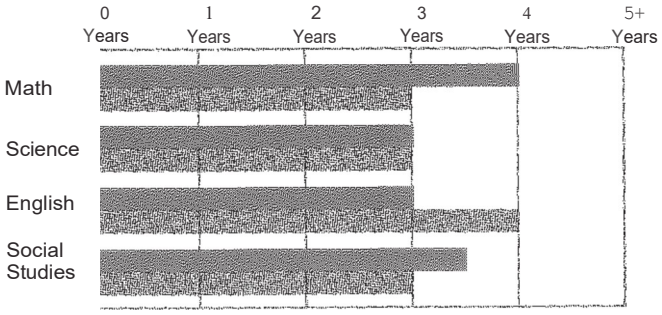
PreACT Composite Score: For each test we converted your number of correct answers into a 1 to 35 score. Your Composite score is the average of your scores on the four subject tests (math, science, English, and reading) rounded to the nearest whole numb.er. If you lett any test completely blank, that score is reported as two dashes and no Composite score is computed.

STEM: Science, Teclmology, Engineering, and Math.

US Ranks are for Fa ll 11lh

Your High School Course Plans Compared to Core

A college-preparatory **core** curriculum refers to students taking 4 years of English and 3 years each of math, social studies, and science.

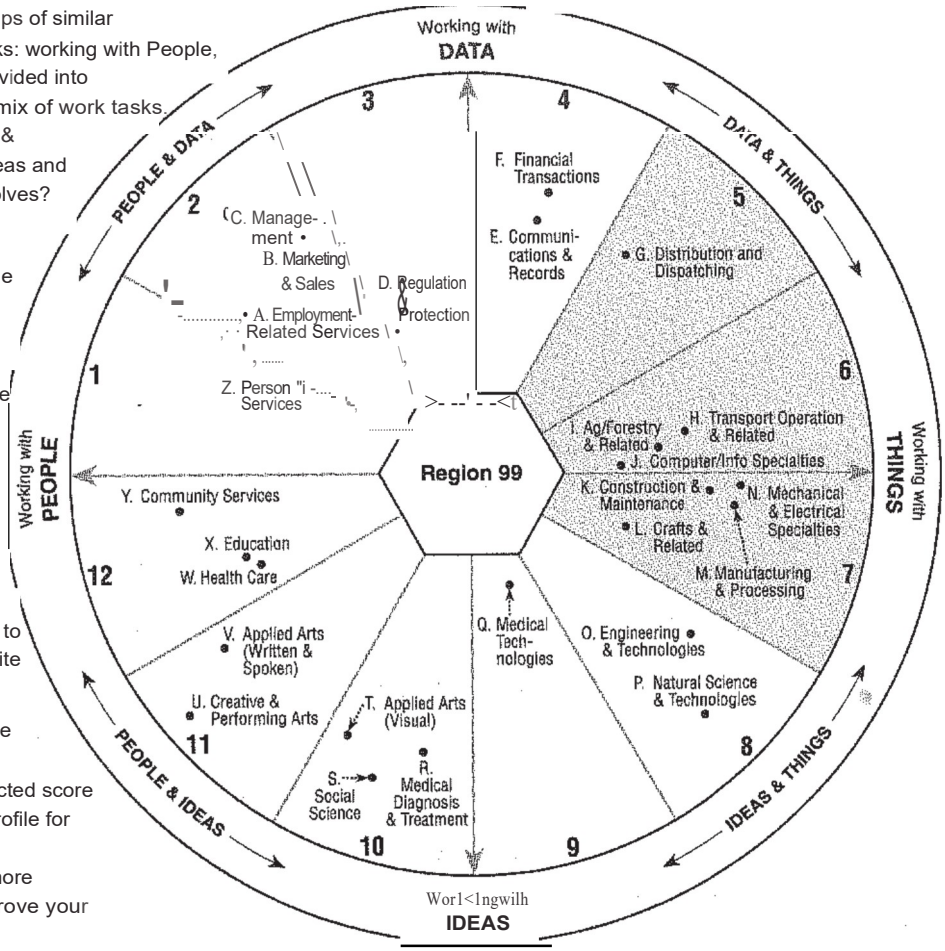


You !Ill Core II.

About Your Course Plans. Your plans fall short of the recommended courses. Conside r taking additional courses in English. (Most successful college students completed all of these recommended courses when they were in high school.) You may want to talk to your counselor or teacher to make sure you are getting the courses you need.

Your Education and Career Journey

The Career Map shows 26 Career Areas (groups of similar occupations) according to their basic work tasks: working with People, Things, Data, and Ideas. The Career Map is divided into 12 regions. Each region has its own unique mix of work tasks. For example, Career Area P (Natural Science & Technologies) mostly involves working with Ideas and Things. What do you t hink Career Area C involves?



Your Interests

Your interest inventory results are shown on the Career Map. The shaded regions show the kinds of work tasks you prefer and theCareer Areas you may like. Visit **www.act.org/collegeplanning** to find out more about occupations in these Career Areas.

On Track?

Your Pred icted ACT Composite Score range: 31 - 33

Profile for Success: You told us you prefer Career Area Q: Medical Technologies. Successful college students in majors related to this Career Area often have an ACT Composite Score in the range of 24-28.

Compare your Predicted ACT Composite Score range to your Profile for Success.

- You're on track for success if your predicted score range overlaps with, or is above, your Profile for Success score range.
- Improving your study skills and taking more challenging courses may help you improve your scores.

Your Interest-Career Fi_t

Do your interests fit the Career Area you prefer? You told us: **Medical** Technologies

We compared your Career Area to your interest inventory results. You are not very interested in the kinds of work done in this Career Area. Wo rkers are often more satisfied when their interests fit the kinds of work they do.

NextSteps

start Exploring! ACT provides free Information on hundreds of education and career options at **www.act.org/collegeplanning**.

ACT •Oo!ine

Practice! ACT Online **Prep** (www.act.org/theact/tes tprep) Is an onllne resource to help students prepare to take the ACT test, featuring real questions from previous tests.

r• T ·

Sign up now! Register for the ACT at www.act.org.

Test Date: *October 25, 2018*
SMITii-COTTON HIGH SCHOOL (Code: 263180)

Pre.ACT

Student Report

Your Item Response Analysis

Ask for your test booklet so you can review the questions and your answers. Ideas for Progress are based on your scores. The improvement suggestions provided are a sample of the Ideas for Progress for your subject scale score. Your particular profile of strengths and weaknesses will influence which suggestions are most relevant for you. More information can be found at ww•,1;.act or g.ls t andards/itieas forprogress.

MATII

Correctly Answered: 33 of 36
Omitted: 0 of 36
Incorrectly Answered: 3 of 36

Question	Correct Answer	Incorrect Response
1	E	
2	J	
3	C	
4	J	
5	B	
6	G	
7	D	
6	K	
9	E	
10	G	
11	E	
12	K	
13	D	
14	F	
15	C	
16	H	
17	C	
18	G	
19	D	
21	C	
22	G	
23	A	
24	G	
25	E	
26	K	
27	A	
28	H	F
29	B	
30	K	G
31	D	
32	4	
33	D	
34	F	G
35	B	
36	F	

Ideas for Progress

Number and Quantity

- recogn ize, identify, and apply basic properties of matrices

Algebra

- solve real-world and mathe matical problems that requ ire combining multiple algebraic concepts

Functions

- describe the relationship between exponents and logarithms

Geometry

- ma ke generalizations , draw conclusions based on conditional statements, and offer solutions that involve connecting mathemat ics with othe r content areas

Statistics and Probability

- create statistical models that involve planning , strategic manipulation, and/or integrating concepts

SCIENCE

Correctly Answered: 24 of 30
Omitted: **O** of 30
Inco rrectly Answered: 6 of 30

Que6tion ComlCt" Answer		Incorrect Response
	D	C
2	G	
3	A	
4	J	
5	C	
6	F	
7	A	
8	H	
9	C	
10	G	F
11	D	
12	H	
13	B	C
14	H	
15	D	
16	J	
17	C	
18		
19	B	
20	J	
21	D	
22	J	
23	A	D
24	J	G
25	C	
26	H	
27	A	
28	F	
29	D	A
30	G	

Ideas for Progress

Interpretation of Data

- utilize data sets from online sources to perform mathe matical analyses, and make predictions based on those analyses

Scientific Investigations

- generate the hypothesis for an exper iment that will requ ire mor e than one step .

Evaluation of Models

- re ad multiple experiments that explore the same question, and determine how the findings are consistent or inconsistent

A blank response is marked with a dash (-).
A response with more than one answer is marked with an asterisk (•).

ENGLISH

Correctly Answered: 42 of 45
Omitted; O of 45
Incorrectly Answered: 3 of 45

Question	Correct Answer	Incorrect Response
1	D	
2	G	
3	A	C
4	F	
5	B	
6	H	
7	D	
8	F	
9	D	
10	H	
11	A	
12	H	
13	D	
14	G	
15	B	
16	G	
17	B	
18	G	
19	A	
20	G	
21	C	
22	H	
23	C	
24	J	
25	A	

Question	Correct Answer	Incorrect Response
26	H	
27	A	
28	G	
29	C	
30	F	
31	C	
32	J	
33	B	
34	F	
35	B	
36	G	
37	C	
38	F	H
39	B	
40	J	
41	A	
42	F	
43	A	
44	J	G
45	C	

Ideas for Progress

Production of Writing

- write complex essays that indicate a heightened awareness of the purpos and audience
- revise or add intro ductory sentences or tran sitions based on an understanding of the logic and rhetorica l pu rpose of the paragraph and the essay as a whole

Knowledge of Language

- experiment with using academic and content-specific terms to provide more specificity and increase accuracy of content

Conventions of Standard Englls h Grammar, Usage, and Punctuation

- employ a variety of sentence structure s in drafts
- check drafts to ensure agre ement between verb and subject when a phrase between the two suggests a differe nt n umber for the verb
- find examples of colons and explain why the writer mos t likely chose the colon *over* other punctuation

READING

Correctly Answered : 23 of 25
Omitted: **O** of 25
Incorrectly Answered : 2 of 25

Question	Correct Answer	Incorrect Response
1	A	D
2	J	
3	B	
4	H	
5	D	
6	H	
7	A	
8	F	
9	C	
10	H	
11	A	
12	G	
13	C	
14	H	
15	D	

Question	Correct Answer	Incorrect Response
16	F	
17	A	D
18	G	
19	D	
20	H	
21	D	
22	J	
23	B	
24	G	
25	C	

Ideas for Progress

Key Ideas and Detail s

- synthesize informat ion, making valid generalizat ions or conclusions about people and situations
- locate and analyze ideas in a highly complex text and write a well-re asoned summary of the whole text
- read confiicting viewpoints of an event and use textual evidence td identify which viewpoint has the most reasonable explanations of causes and effects

Craft and Structure

- search for words or phrases tha t suggest the author's attitude toward his or he r subject, characte rs, or aud ience
- explain how some sentence constru ction s (e.g., using parallel structures , many or no conjunctions, purposeful redundancy) affect the meaning of the text
- determine the purpose of a complex text. evaluating the impact of literary devices (e.g., imagery, irony, symbolism) on the text's meaning

Integratior;t of Knowledge and Ideas

- determine the author's or narrator ' s position toward a specific topic, issue, or idea by noting key facts, claims, and details from the text
- ident ify faulty or overly simplistic assump tions or conclusions.that go bey ond the evidence presented in multiple informational texts

CORRECTING ERRORS ON YOUR REPORT

If you think there is an error in information other than your scores or you want to change information (e.g., address chimge) within 3 months of receiving your scores, write to:

ACT Student Services
PO Box 414
Iowa City, IA 522.43-0414

If an error is found to have been made, a corrected score report will be sent to you and all previous score recipients at no charge.

RETENTION POLICY

We keep regis tration records for 5 years, answer document$ for at least 1 year, and test scores indefinitely.

Sedalia Middle School

"Caught in the middle…of high expectations"

2205 S. Ingram
Sedalia, MO 65301

Telephone (660) 829-6500
Fax (660) 827-6112

Brendan Eisenmenger, Principal
Angela Meyer, Instructional Coach
Nicole Silvey, Special Education Coordinator
Lindsey Fish, Guidance Counselor

To: Mr. Triplett and the Board of Education

From: Smith-Cotton High School

Date: 10-30-18

Re: Donation

The Sedalia Middle School would like to thank Mr. and Mrs. Robert Hicks for donating $377.00 to pay for all current student outstanding lunch accounts at SMS.

We appreciate the generosity extended to SMS students.

Respectfully,

Brendan Eisenmenger